

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

| | | | | |
|---------------------|--------------|--------------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1) I | PEORIA | 89 | 1 |
| FED. ROAD DIST. NO. | ILLINOIS | CONTRACT NO. | 68883 | |

89 -1-88

D-94-049-09

INDEX OF SHEETS

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HIGHWAY STANDARDS
- * 79 DELETED

HIGHWAY STANDARDS

| | | |
|-----------|-----------|-----------|
| 000001-06 | 630301-06 | 701411-08 |
| 001001-02 | 631011-09 | 701421-06 |
| 001006- | 631031-11 | 701422-05 |
| 280001-07 | 635006-03 | 701426-05 |
| 420401-09 | 635011-02 | 701451-01 |
| 482001-02 | 701101-03 | 701901-02 |
| 482011-03 | 701106-02 | 780001-03 |
| 515001-03 | 701400-06 | |
| 609006-05 | 701401-07 | |
| 630001-10 | 701406-06 | |

PROJECT LIMITS

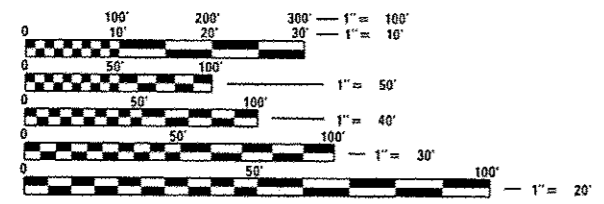
SN 072-0119 (E.B.) & SN 072-0120 (W.B.)
OVER F.A.I. RTE. 474
STA 135+08.73 TO STA 138+33.27

DESIGN DESIGNATION

MAXWELL ROAD CONNECTOR
OTHER PRINCIPAL CONNECTOR
ADT: 4,750 (2008); 5,191 (2021)
ADTT: 475 (2008); 519 (2021)
DHV: 779
DESIGN SPEED: 55 MPH
POSTED SPEED: 45 MPH

F.A.I. RTE. 474 - I-474

INTERSTATE
ADT: 31,000 (2009); 32,927 (2032)
ADTT: 3,410 (2009); 3,621 (2032)
DHV: 3,410 (2009); 3,621 (2032)
DESIGN SPEED: 65 MPH
POSTED SPEED: 65 MPH



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

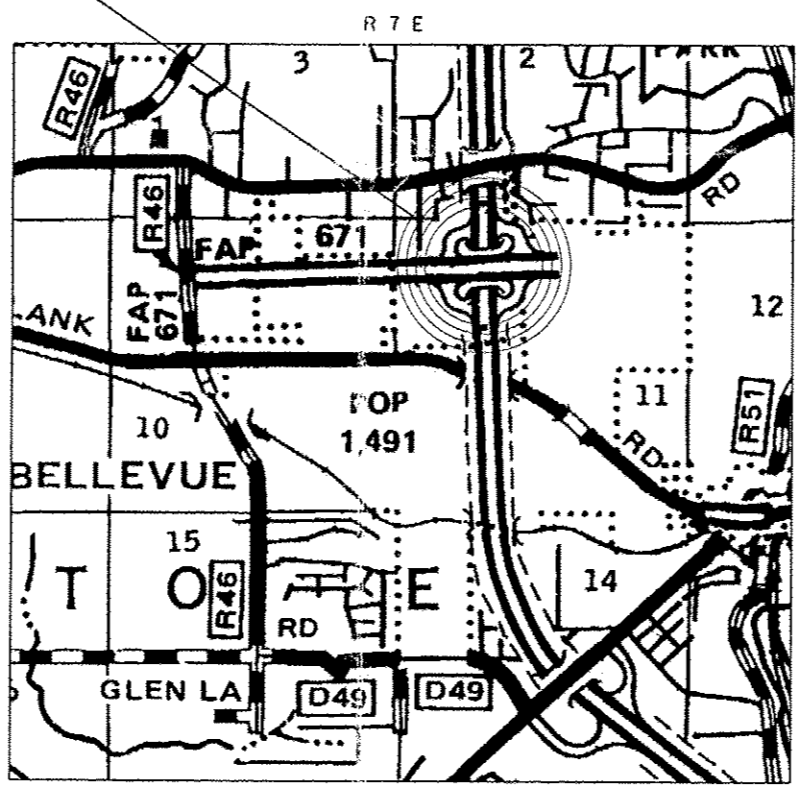
J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT MANAGER: NICHOLAS JACK (309) 671-3451

CONTRACT NO. 68883
CATALOG NO. 034227-00D

PROPOSED
HIGHWAY PLANS

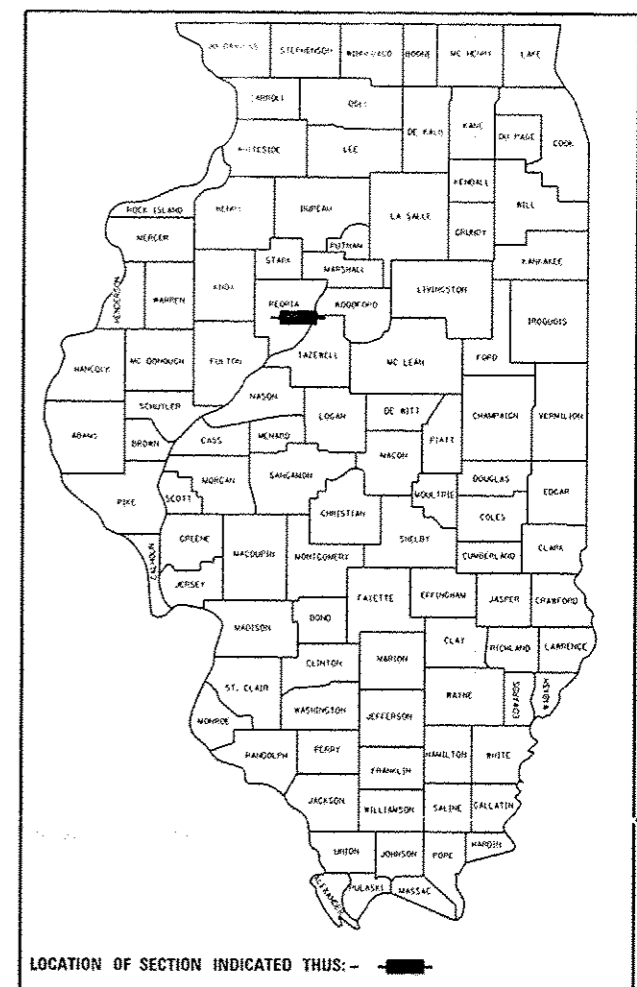
MAXWELL ROAD
SECTION (72-3HB-1) I, I-1
PROJECT IM-4747(104)
PEORIA COUNTY
JOB NO. C-94-070-09



GROSS LENGTH OF PROJECT = 324.54 FT = 0.061 MILE
NET LENGTH OF PROJECT = 324.54 FT = 0.061 MILE



NOT TO SCALE



LOCATION OF SECTION INDICATED THIS: - [thick black line]

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED *pre* 13 20 12

John P. Baranzelli, P.E.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
ENGINEER OF DESIGN AND ENVIRONMENT

Omur Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

GENERAL NOTES

105.07 UTILITIES - LOCATIONS / INFORMATION ON PLANS

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines and other utilities as shown on the plans are based on careful field investigation and the best information available, but they are not guaranteed. Unless elevations are shown --- all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

105.09A PLAN ELEVATIONS - U. S. G. S. MEAN SEA LEVEL DATUM

All elevations shown on the plans are established from U. S. G. S. mean sea level datum.

108.02 CRITICAL PATH WORK SCHEDULE REQUIREMENT

The Contractor will submit to the Engineer a satisfactory progress schedule and critical path schedule which shall show the proposed sequence of work at the time of the pre-construction conference.

107.00 COMMITMENTS

Commitments are not to be altered without the written approval of all parties to which the commitment was made.

204.00 ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc.) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- * BDE Form 2269 (Environmental Survey Request)
- * A location map showing the size limits and location of the use area
- * Signed property owner agreement form-D4 P10100
- * Color photographs depicting the use area
- * Borrow Area Entry Agreement form-D4 P10101

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

406.03 PAVEMENT STATIONING NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 3/4 inch (20mm) wide, 5 inches (125 mm) high and 5/8 inch (15 mm) deep.

The pavement station numbers shall be installed as specified herein:

Interval - 200 feet (English stationing) or 100 meters (metric stationing)

Bottom of Numbers - 6 inches (150 mm) from the inside edge of the pavement marking

Location:

- * 2, 3, & 5 Lane Pavements - right edge of pavement in direction of increasing stations
- * Multi-Lane Divided Roadways - outside edge of pavement in both directions
- * Ramps - along baseline edge of pavement

Position - stations shall be placed so they can be read from the adjacent shoulder

Format - English (Metric) pavement stations shall use this format "XXX (XX+X00)" where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

406.05 POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) RATES

| Surface Type | Estimated Truck Application Rate | Residual Rate |
|--------------------------|----------------------------------|---------------|
| Milled (HMA or PCC) | 0.08 gal/sy (0.00034 ton/sy) | 0.04 gal/sy |
| Existing Pavement | 0.05 gal/sy (0.00022 ton/sy) | 0.025 gal/sy |
| Fog Coat (between lifts) | 0.05 gal/sy (0.00022 ton/sy) | 0.025 gal/sy |

Note: Estimated truck application rate is used for estimating quantities.

406.10 HOT-MIX ASPHALT MIXTURE REQUIREMENTS

| | |
|--|------------------------|
| LOCATION: | IL MAXWELL ROAD CONN. |
| MIXTURE USE(S): | POLYMER SURFACE COURSE |
| ACPG: | SBS or SBR 70-22 |
| RAP% (MAX): ** | 10% |
| DESIGN AIR VOIDS: | 4.0 % @ N = 50 |
| MIXTURE COMPOSITION: (GRADATION MIXTURE) | IL 9.5 OR IL 12.5 |
| FRICITION AGGREGATE | MIXTURE "E" |

** IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO ADJUSTED BY THE MATERIALS ENGINEER

Notes: Individual lift thickness of each mix type will be no less than 3 times nominal maximum aggregate size and no more than 6 times nominal aggregate size.

406.18 BUTT JOINT CUTTING TIME RESTRICTION

Butt joints shall not be milled more than three (3) days prior to placement of the HMA surface course.

603.00 TAPER REMOVAL @ FRAME & GRATES ADJUSTED BY OTHERS

At locations where frames and grates have previously been adjusted by others and they are surrounded by hot-mix asphalt tapers, the Contractor for this contract shall remove and dispose of the hot-mix asphalt taper material prior to the placement of the hot-mix asphalt surface course. This work will not be paid for separately, but will be considered as included in the cost of the HOT-MIX ASPHALT SURFACE COURSE pay item.

670.00 ENGINEERS FIELD OFFICE

Add the following sentence to the end of paragraph 670.02 (i) and 670.04 (e):
All of the telephone lines provided shall have unpublished numbers.

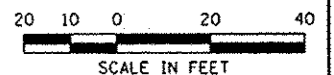
720.00 SIGNING

Sign locations may vary from the stations shown on the plans in accordance with directions from the Engineer at the time of construction. Sign locations may be adjusted in the field to avoid any found utilities.

All wood post locations shall be verified with the Bureau of Operations, Traffic Section, before installation.

COMMITMENTS

NONE



| USER TIME = 1.6 hrs. | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | | | GENERAL NOTES, COMMITMENTS AND MIXTURE DESIGNS | | | | | | | | | |
|-----------------------------|------------|-----------|---|--|--|--|---|--|-----------------------|--|------------------------------|--|--------------------|--|------------------------------|--|
| PLOT SCALE = 40,000 : 1 in. | DRAWN - | REVISED - | SCALE: 1" = 20' | | | | F.A.I. RTE. 474 | | SECTION (72-3HB-1), I | | COUNTY PEORIA | | TOTAL SHEETS 89 | | SHEET NO. 2 | |
| PLOT DATE = 12/14/2012 | CHECKED - | REVISED - | | | | | SHEET NO. 1 OF 1 SHEETS | | | | MAXWELL RD. CONN. OVER I-474 | | CONTRACT NO. 68883 | | FED. ROAD DIST. NO. ILLINOIS | |
| | DATE - | REVISED - | STA. TO STA. | | | | | | | | | | | | | |

SUMMARY OF QUANTITIES

| CODE NO | ITEM | UNIT | TOTAL | CONSTRUCTION CODE | | |
|----------|--|-------|-------|--------------------------|----------------------------------|----------------------------------|
| | | | | 90% FED 10% ST | | |
| | | | | ROADWAY 0004 URBAN | BRIDGE 0014 S. N. 072-0119 | BRIDGE 0014 S. N. 072-0120 |
| 28100105 | STONE RIPRAP, CLASS A3 | SO YD | 2 | | 2 | |
| 40600215 | POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) | TON | 0.5 | 0.5 | | |
| 40600300 | AGGREGATE (PRIME COAT) | TON | 5 | 5 | | |
| 40600982 | HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | TON | 141 | 141 | | |
| 40603560 | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N50 | TON | 366 | 366 | | |
| 42001430 | BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | SO YD | 142 | 142 | | |
| 44000100 | PAVEMENT REMOVAL | SO YD | 846 | 846 | | |
| 44000155 | HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2" | SO YD | 4361 | 4361 | | |
| 50101500 | REMOVAL OF EXISTING SUPERSTRUCTURES | EACH | 4 | | 2 | 2 |
| 50102400 | CONCRETE REMOVAL | CU YD | 55.9 | | 27.5 | 28.4 |
| 50104720 | REMOVAL OF EXISTING CONCRETE DECK | EACH | 2 | | 1 | 1 |
| 50157300 | PROTECTIVE SHIELD | SO YD | 1485 | | 735 | 750 |
| 50200100 | STRUCTURE EXCAVATION | CU YD | 139 | | 69 | 70 |
| 50300225 | CONCRETE STRUCTURES | CU YD | 122.4 | | 60.7 | 61.7 |

• SPECIALTY ITEM

14

SUMMARY OF QUANTITIES

| CODE NO | ITEM | UNIT | TOTAL | CONSTRUCTION CODE | | |
|----------|--|-------|---------|-------------------|------------------------|------------------------|
| | | | | ROADWAY | BRIDGE | BRIDGE |
| | | | | 0004 URBAN | 0014 S. N. 072-0119 | 0014 S. N. 072-0120 |
| 50300255 | CONCRETE SUPERSTRUCTURE | CU YD | 1295.5 | | 649.5 | 646.0 |
| 50300260 | BRIDGE DECK GROOVING | SQ YD | 3479 | | 1757 | 1722 |
| 50300300 | PROTECTIVE COAT | SQ YD | 4248 | | 2148 | 2100 |
| 50400805 | FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 36 IN. | FOOT | 893.5 | | 478 | 415.5 |
| 50500405 | FURNISHING AND ERECTING STRUCTURAL STEEL | POUND | 6980 | | 3490 | 3490 |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 7728 | | 3864 | 3864 |
| 50800205 | REINFORCEMENT BARS, EPOXY COATED | POUND | 249,370 | | 148,550 | 145820 |
| 50800515 | BAR SPLICERS | EACH | 206 | | 102 | 104 |
| 50800530 | MECHANICAL SPLICERS | EACH | 96 | | 48 | 48 |
| 51500100 | NAME PLATES | EACH | 2 | | 1 | 1 |
| 52000110 | PREFORMED JOINT STRIP SEAL | FOOT | 214 | | 106.5 | 107.5 |
| 52100010 | ELASTOMERIC BEARING ASSEMBLY, TYPE I | EACH | 32 | | 16 | 16 |
| 52100530 | ANCHOR BOLTS, 1 1/4" | EACH | 64 | | 32 | 32 |
| 60900240 | TYPE C INLET BOX, STANDARD 609006 | EACH | 4 | 4 | | |

• SPECIALTY ITEM

LAST CALLED * 4/25/2012 * 10:00 AM *
 PLOT SCALE * 40,000 * 1/4" *
 PLOT DATE * 12/14/2012 * 3:48:44 PM *

| | | |
|-------------------------------------|------------|-----------|
| USER NAME * kashbr | DESIGNED - | REVISED - |
| PLOT SCALE * 40,000 * 1/4" | DRAWN - | REVISED - |
| PLOT DATE * 12/14/2012 * 3:48:44 PM | CHECKED - | REVISED - |
| | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: 1" = 20' SHEET NO. 2 OF 6 SHEETS STA. TO STA.

| | | | | |
|------------------------------|-----------------------|---------------------------|--------------------|-------------|
| F.A.I. RTE. 474 | SECTION (72-3HB-1), 1 | COUNTY PEORIA | TOTAL SHEETS 89 | SHEET NO. 4 |
| MAXWELL RD, CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| FED. ROAD DIST. NO. | | ILLINOIS FED. AID PROJECT | | |

SUMMARY OF QUANTITIES

| CODE NO | ITEM | UNIT | TOTAL | CONSTRUCTION CODE | | |
|------------|--|--------|-------|-------------------|------------------------|------------------------|
| | | | | ROADWAY | BRIDGE | BRIDGE |
| | | | | 0004 URBAN | 0014 S. N. 072-0119 | 0014 S. N. 072-0120 |
| * 63100045 | TRAFFIC BARRIER TERMINAL, TYPE 2 | EACH | 1 | 1 | | |
| * 63100085 | TRAFFIC BARRIER TERMINAL, TYPE 6 | EACH | 2 | 2 | | |
| * 63100167 | TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT | EACH | 1 | 1 | | |
| 63200310 | GUARDRAIL REMOVAL | EACH | 153 | 153 | | |
| 66700205 | PERMANENT SURVEY MARKERS, TYPE 1 | EACH | 2 | | 1 | 1 |
| 67000400 | ENGINEER'S FIELD OFFICE, TYPE A | CAL MO | 12 | 12 | | |
| 67100100 | MOBILIZATION | L SUM | 1 | 1 | | |
| 70100800 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 | L SUM | 1 | 1 | | |
| 70100420 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701411 | EACH | 2 | 2 | | |
| 70100700 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701406 | L SUM | 1 | 1 | | |
| 70100820 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701451 | L SUM | 1 | 1 | | |
| 70103815 | TRAFFIC CONTROL SURVEILLANCE | CAL DA | 60 | 60 | | |
| 70106800 | CHANGEABLE MESSAGE SIGN | CAL MO | 72 | 72 | | |

* SPECIALTY ITEM

13

SUMMARY OF QUANTITIES

| CODE NO | ITEM | UNIT | TOTAL | CONSTRUCTION CODE | | |
|----------|---|-------|-------|-------------------|------------------------|------------------------|
| | | | | ROADWAY | BRIDGE | BRIDGE |
| | | | | 0004 URBAN | 0014 S. N. 072-0119 | 0014 S. N. 072-0120 |
| 70300100 | SHORT TERM PAVEMENT MARKING | FOOT | 504 | 504 | | |
| 70300220 | TEMPORARY PAVEMENT MARKING - LINE 4" | FOOT | 11921 | 11921 | | |
| 70300240 | TEMPORARY PAVEMENT MARKING - LINE 6" | FOOT | 67 | 67 | | |
| 70300260 | TEMPORARY PAVEMENT MARKING - LINE 12" | FOOT | 301 | 301 | | |
| 70301000 | WORK ZONE PAVEMENT MARKING REMOVAL | SQ FT | 4308 | 4308 | | |
| 72000200 | SIGN PANEL - TYPE 2 | SQ FT | 21 | 21 | | |
| 72000300 | SIGN PANEL - TYPE 3 | SQ FT | 253 | 253 | | |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQ FT | 6 | 6 | | |
| 73304000 | OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED | FOOT | 26 | | 26 | |
| 73502000 | RELOCATE GROUND MOUNTED SIGN SUPPORT | EACH | 2 | 2 | | |
| 73602000 | REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED | EACH | 1 | 1 | | |
| 78009004 | MODIFIED URETHANE PAVEMENT MARKING - LINE 4" | FOOT | 4991 | 4991 | | |
| 78009006 | MODIFIED URETHANE PAVEMENT MARKING - LINE 6" | FOOT | 67 | 67 | | |
| 78009012 | MODIFIED URETHANE PAVEMENT MARKING - LINE 12" | FOOT | 301 | 301 | | |

• SPECIALTY ITEM

14

SUMMARY OF QUANTITIES

| CODE NO | ITEM | UNIT | TOTAL | CONSTRUCTION CODE | | |
|----------|--|-------|-------|--------------------------|----------------------------------|----------------------------------|
| | | | | 90% FED 10% ST | | |
| | | | | ROADWAY 0004 URBAN | BRIDGE 0014 S. N. 072-0119 | BRIDGE 0014 S. N. 072-0120 |
| 78200410 | GUARDRAIL MARKERS, TYPE A | EACH | 2 | 2 | | |
| 78200520 | BARRIER WALL MARKERS, TYPE B | EACH | 48 | 48 | | |
| 78200530 | BARRIER WALL MARKERS, TYPE C | EACH | 48 | 48 | | |
| 78201000 | TERMINAL MARKER - DIRECT APPLIED | EACH | 1 | 1 | | |
| 78300100 | PAVEMENT MARKING REMOVAL | SO FT | 1997 | 1997 | | |
| X0324028 | GROUT FOR USE WITH RIPRAP | CU YD | 0.2 | | 0.2 | |
| X7010216 | TRAFFIC CONTROL AND PROTECTION (SPECIAL) | LSUM | 1 | 1 | | |
| Z0001002 | GUARDRAIL AGGREGATE EROSION CONTROL | TON | 18 | 18 | | |
| Z0001899 | JACK AND REMOVE EXISTING BEARINGS | EACH | 32 | | 16 | 16 |
| Z0004552 | APPROACH SLAB REMOVAL | SO YD | 234 | | 113 | 121 |
| Z0012754 | STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES) | SO FT | 91 | | 18 | 73 |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1 | 1 | | |

• SPECIALTY ITEM

12

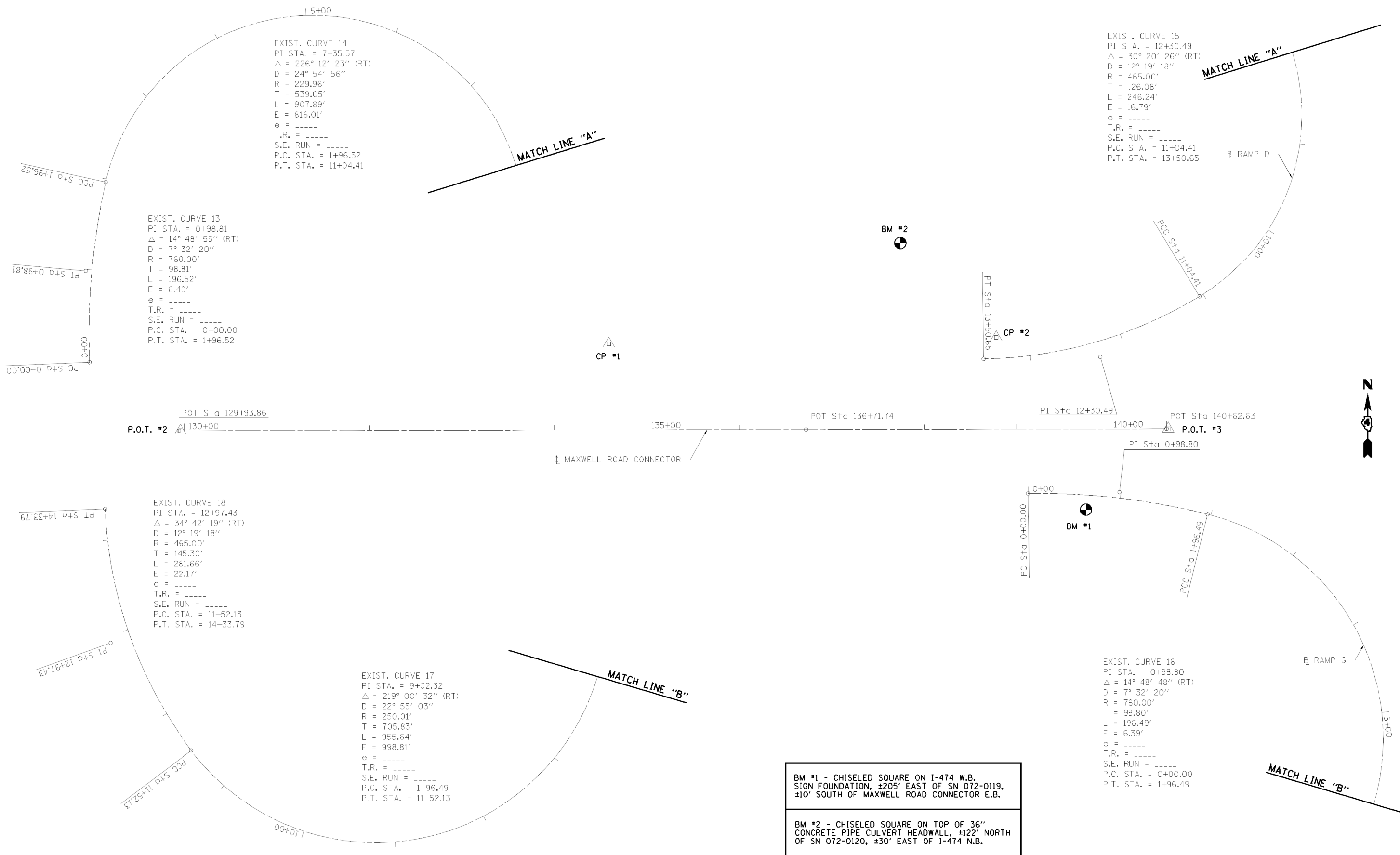
| PAVING | | | | | | | | | |
|-------------------------------|-----------|-------------------|---|------------------------|--|---|------------------|-------------------------------------|---------------------------------------|
| LOCATION | STATION | | POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) | AGGREGATE (PRIME COAT) | POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "E", N50 | BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) | PAVEMENT REMOVAL | HOT-MIX ASPHALT SURFACE REM. 1-1/2" | HOT-MIX ASPHALT SURFACE REM. BUTT JT. |
| | | | TON | TON | TON | SO YD | SO YD | SO YD | SO YD |
| MAXWELL ROAD CONNECTOR, E. B. | 131+00.00 | TO 131+30.00 | | | | | | | 36.7 |
| | 131+00.00 | TO 134+97.50 | 0.13 | 1.1 | 91.4 | 37 | | 1091.5 | |
| | 134+97.50 | TO 135+33.50 | | | | | 218.8 | | |
| | 138+08.75 | TO 138+44.75 | | | | | 202 | | |
| | 138+44.75 | TO 2+00 (Ramp G) | 0.15 | 1.2 | 102 | 34 | | 1214.4 | |
| | 1+70.00 | TO 2+00.00 | | | | | | | 33.7 |
| MAXWELL ROAD CONNECTOR, W. B. | 131+00.00 | TO 131+30.00 | | | | | | | 34 |
| | 131+00.00 | TO 134+98.82 | 0.13 | 1.1 | 91.7 | 37 | | 1087.6 | |
| | 134+98.82 | TO 134+34.82 | | | | | 203.2 | | |
| | 137+99.65 | TO 138+35.65 | | | | | 222 | | |
| | 138+35.65 | TO 11+04 (Ramp D) | 0.12 | 0.97 | 81.3 | 34 | | 967.7 | |
| | 10+70.00 | TO 11+00.00 | | | | | | | 36.7 |
| TOTAL | | | 0.5 | 5.0 | 366 | 142 | 846 | 4361 | 141 |

| PAVEMENT MARKING | | | | | | | | | | | | |
|-------------------------------|-----------|--------------|--------------|------------------------------------|--------|---------|--------------------------|-----------------------------|----------------------------|--------|---------|------------------------------------|
| LOCATION | STATION | | SIDE | MODIFIED URETHANE PAVEMENT MARKING | | | PAVEMENT MARKING REMOVAL | SHORT-TERM PAVEMENT MARKING | TEMPORARY PAVEMENT MARKING | | | WORK ZONE PAVEMENT MARKING REMOVAL |
| | | | | LINE | | | | | LINE | | | |
| | | | | 4 INCH | 6 INCH | 12 INCH | | | 4 INCH | 6 INCH | 12 INCH | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| STAGE I | | | | | | | | | | | | |
| MAXWELL ROAD CONNECTOR, E. B. | 131+03.55 | TO 139+20.08 | INSIDE | | | | | 32 | 809 | | | 270 |
| | | 134+58.35 | TO 139+12.08 | OUTSIDE | | | | 18 | 454 | | | 151 |
| MAXWELL ROAD CONNECTOR, W. B. | 130+97.81 | TO 138+64.35 | OUTSIDE | | | | | 32 | 806 | | | 269 |
| | | 134+20.24 | TO 138+64.35 | INSIDE | | | | 18 | 444 | | | 148 |
| RAMP G | 0+00.00 | TO 2+01.13 | OUTSIDE | | | | | 8 | 205 | | | 68 |
| | | 0+00.00 | TO 2+01.01 | INSIDE | | | | 8 | 209 | | | 70 |
| RAMP D | 13+50.65 | TO 11+04.36 | OUTSIDE | | | | | 10 | 260 | | | 87 |
| | | 13+50.65 | TO 11+01.55 | INSIDE | | | | 11 | 270 | | | 90 |
| STAGE II | | | | | | | | | | | | |
| MAXWELL ROAD CONNECTOR, E. B. | 131+16.55 | TO 139+12.08 | OUTSIDE | | | | | 32 | 796 | | | 265 |
| | | 131+16.57 | TO 139+12.08 | INSIDE | | | | 32 | 796 | | | 265 |
| MAXWELL ROAD CONNECTOR, W. B. | 130+96.95 | TO 138+64.35 | OUTSIDE | | | | | 31 | 768 | | | 256 |
| | | 130+96.87 | TO 138+64.35 | INSIDE | | | | 31 | 768 | | | 256 |
| RAMP G | 0+00.00 | TO 0+39.00 | OUTSIDE | | | | | 2 | 39 | | | 13 |
| | | 0+00.00 | TO 0+99.32 | INSIDE | | | | 4 | 101 | | | 34 |
| RAMP D | 13+50.65 | TO 12+49.85 | OUTSIDE | | | | | 4 | 101 | | | 34 |
| | | 13+50.65 | TO 12+50.04 | INSIDE | | | | 4 | 104 | | | 35 |
| FINAL CONFIGURATION | | | | | | | | | | | | |
| MAXWELL ROAD CONNECTOR, E. B. | 131+16.55 | TO 131+73.99 | CENTER | | 53 | | 27 | 53 | | 53 | | 27 |
| | | 131+16.55 | TO 139+12.08 | OUTSIDE | 796 | | 265 | 32 | 796 | | | 265 |
| | | 131+16.47 | TO 139+12.08 | INSIDE | 796 | | 212 | 212 | | | 212 | 477 |
| | | 131+73.99 | TO 139+12.08 | INSIDE | 739 | | 511 | 30 | 1535 | | | 246 |
| MAXWELL ROAD CONNECTOR, W. B. | 130+96.95 | TO 133+09.91 | CENTER | | 14 | | 7 | 14 | | 14 | | 7 |
| | | 130+96.95 | TO 138+64.35 | OUTSIDE | 768 | | 256 | 31 | 768 | | | 256 |
| | | 130+96.86 | TO 138+64.35 | INSIDE | 768 | | 256 | 31 | 768 | | | 256 |
| | RAMP G | 0+00.00 | TO 2+01.38 | OUTSIDE | 201 | | 67 | 8 | 201 | | | 67 |
| | | 0+00.00 | TO 2+01.38 | INSIDE | | 89 | 89 | | | 89 | 89 | |
| RAMP D | 0+00.00 | TO 2+01.38 | INSIDE | 414 | | 138 | 8 | 206 | | | 138 | |
| | | 13+50.65 | TO 0+11.00 | OUTSIDE | 250 | | 83 | 10 | 250 | | 83 | |
| | | 13+50.65 | TO 0+11.00 | INSIDE | 259 | | 86 | 10 | 259 | | 86 | |
| TOTAL | | | | 4991 | 67 | 301 | 1997 | 504 | 11921 | 67 | 301 | 4308 |

| DRAINAGE STRUCTURES | | | | |
|-------------------------------|-----------|-------|----|----------------------------------|
| LOCATION | STATION | | | TYPE C INLET BOX, STD. 609006 |
| | | | | SO FT |
| MAXWELL ROAD CONNECTOR, E. B. | 138+18.13 | 28.28 | RT | 1 |
| | 138+18.69 | 74.57 | RT | 1 |
| MAXWELL ROAD CONNECTOR, W. B. | 138+08.71 | 78.98 | LT | 1 |
| | 138+09.60 | 28.11 | LT | 1 |
| TOTAL | | | | 4 |

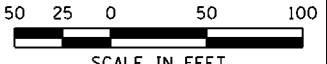
| BARRIER WALL MARKERS / GUARDRAIL & TERMINAL MARKERS | | | | | | | | | | | | |
|---|-----------|--------------|----------------|------------------------------|------------------------------|-------------------|------------------------------|------------------------------|-------------------------------------|-------------------------------------|---------------------------------|--------------------------|
| LOCATION | STATION | | DIRECTION SIDE | BARRIER WALL MARKERS, TYPE B | BARRIER WALL MARKERS, TYPE C | GUARDRAIL REMOVAL | TRAFFIC BARRIER TERM. TYPE 2 | TRAFFIC BARRIER TERM. TYPE 6 | TRAFFIC BARRIER TERM. TYPE 1 (SPL.) | GUARDRAIL AGGREGATE EROSION CONTROL | TERMINAL MARKERS DIRECT APPLIED | GUARDRAIL MARKERS TYPE A |
| | | | | EACH | EACH | EACH | EACH | EACH | EACH | TON | EACH | EACH |
| MAXWELL ROAD CONNECTOR, E. B. | 135+35.12 | TO 138+06.37 | INSIDE | 12 | 12 | | | | | | | |
| | 133+80.00 | TO 135+33.00 | INSIDE | | | 153 | | | | | | |
| | 134+87.00 | TO 135+33.00 | INSIDE | | | | | 1 | | | | |
| | 134+37.00 | TO 134+87.00 | INSIDE | | | | | | 1 | | | |
| | 134+37.00 | TO 153+33.00 | INSIDE | | | | | | | 18 | | |
| | 134+37.00 | TO 135+33.00 | INSIDE | | | | | | | | 1 | |
| | 135+36.41 | TO 138+07.59 | OUTSIDE | 12 | 12 | | | | | | | 2 |
| MAXWELL ROAD CONNECTOR, W. B. | 135+37.30 | TO 137+98.13 | INSIDE | 12 | 12 | | | | | | | |
| | 138+00.00 | TO 138+46.00 | INSIDE | | | | 1 | 1 | | | | |
| | 138+46.00 | TO 138+58.00 | INSIDE | | | | | | | | | |
| | 135+36.08 | TO 137+96.81 | OUTSIDE | 12 | 12 | | | | | | | |
| TOTAL | | | | 48 | 48 | 153 | 1 | 2 | 1 | 18 | 1 | 2 |

| SIGNING | | | | | | | | | |
|-------------------------------|-----------|---------|------------------------------|-----------------|-----------------|----------------------------------|----------------------------------|------------------------------|--------------------------------------|
| LOCATION | STATION | SIDE | LEGEND | SIGN PANEL | | OVERHEAD SIGN STRUCTURE - BRIDGE | REMOVE OVERHEAD SIGN STRUCTURE - | RELOCATE SIGN PANEL - TYPE 1 | RELOCATE GROUND MOUNTED SIGN SUPPORT |
| | | | | TYPE 2 SO FT | TYPE 3 SO FT | FOOT | EACH | SO FT | EACH |
| MAXWELL ROAD CONNECTOR, E. B. | 137+44.74 | OUTSIDE | EXIT 3A TO 116 FARMINGTON | 21 | 253 | 26 | 1 | | |
| | 139+38.74 | RIGHT | > | | | | | 3 | 1 |
| | 139+89.27 | RIGHT | > | | | | | 3 | 1 |
| TOTAL | | | | 21 | 253 | 26 | 1 | 6 | 2 |

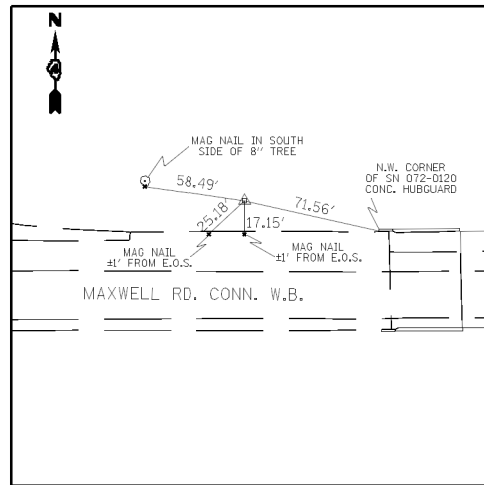


BM #1 - CHISELED SQUARE ON I-474 W.B. SIGN FOUNDATION, ±205' EAST OF SN 072-0119, ±10' SOUTH OF MAXWELL ROAD CONNECTOR E.B.

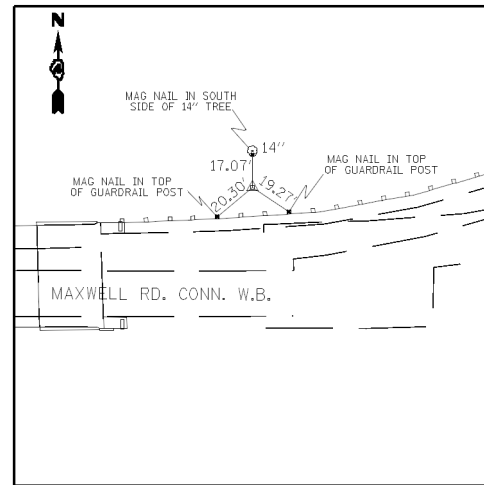
BM #2 - CHISELED SQUARE ON TOP OF 36" CONCRETE PIPE CULVERT HEADWALL, ±122' NORTH OF SN 072-0120, ±30' EAST OF I-474 N.B.



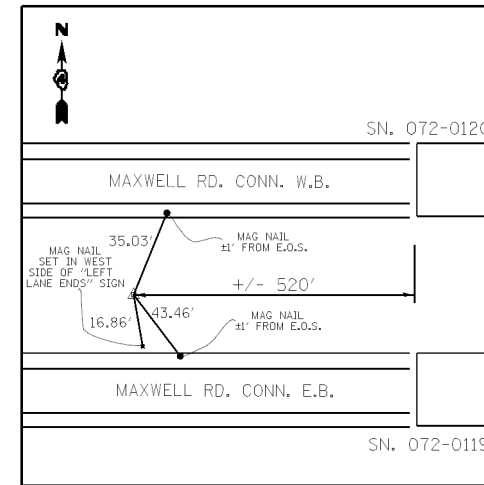
| | | | | | | | | | | |
|------------------------------|------------|-----------|---|---------------------------------------|-------------------------|---------------------------|---------------|--------|--------------------|-----------|
| USER NAME = keshbr | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ALIGNMENT, TIES AND BENCHMARKS | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| PLOT SCALE = 100.0000' / in. | DRAWN - | REVISED - | | MAXWELL ROAD CONNECTOR OVER I-474 | | 474 | (72-3HB-1), I | PEORIA | 89 | 10 |
| PLOT DATE = 12/14/2012 | CHECKED - | REVISED - | | SCALE: 1" = 50' | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA. | | CONTRACT NO. 68883 | |
| | DATE - | REVISED - | | | | ILLINOIS FED. AID PROJECT | | | | |



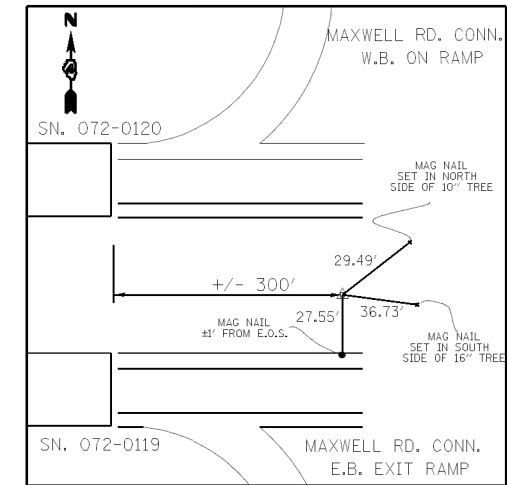
CP # 1
 SET 5/8" I.P. W/ CAP FLUSH
 1,467,158.127 N
 2,432,505.815 E
 ELEV. = 693.73



CP # 2
 SET 5/8" I.P. W/ CAP FLUSH
 1,467,164.926 N
 2,432,924.627 E
 ELEV. = 688.29

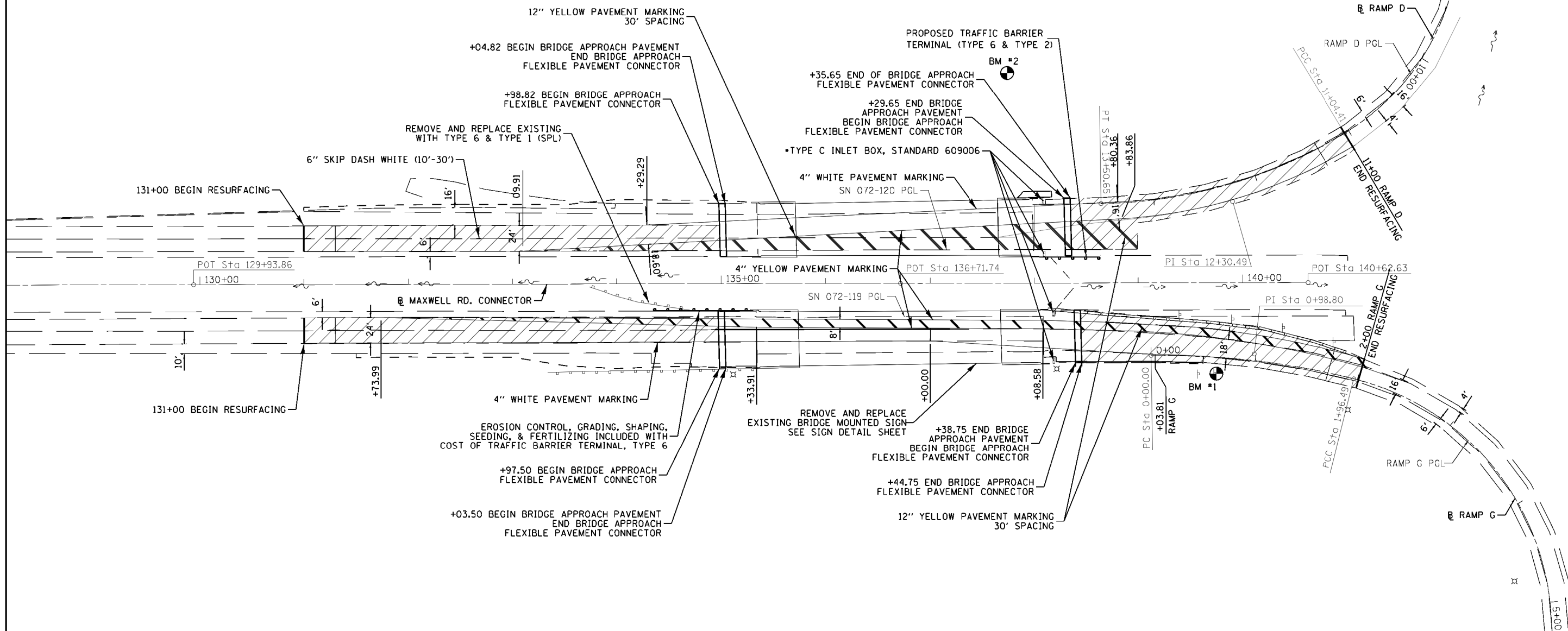


P.O.T. STA 129+95.53
 SET 5/8" I.P.
 1,467,064.051 N
 2,432,040.699 E



P.O.T. STA 140+64.30
 SET 5/8" I.P.
 1,467,066.170 N
 2,433,109.468 E

| | | | | | | | | | | | | |
|-------------------------------|------------|-----------|---|--|-------------------------|------------------------------|---------|--------------------|---------------|-----------|----|----|
| USER NAME = kresthbr | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | ALIGNMENT, TIES AND BENCHMARKS MAXWELL ROAD CONNECTOR OVER I-474 | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | |
| PLOT SCALE = 100,0000' / 1in. | DRAWN - | REVISED - | | SCALE: NONE | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA. | 474 | (72-3HB-1), I | PEORIA | 89 | 11 |
| PLOT DATE = 12/14/2012 | CHECKED - | REVISED - | | | | | | | | | | |
| | DATE - | REVISED - | | | | | | | | | | |
| | | | | | | MAXWELL RD. CONN. OVER I-474 | | CONTRACT NO. 68883 | | | | |
| | | | | | | ILLINOIS FED. AID PROJECT | | | | | | |

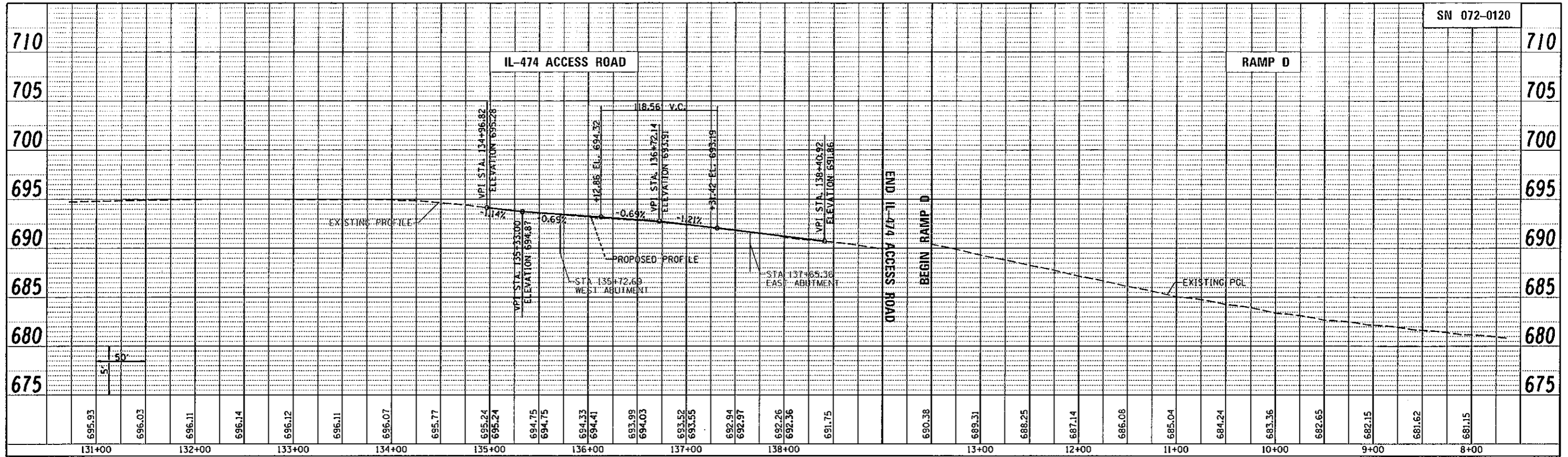


BITUMINOUS REMOVAL & REPLACEMENT (1.5")

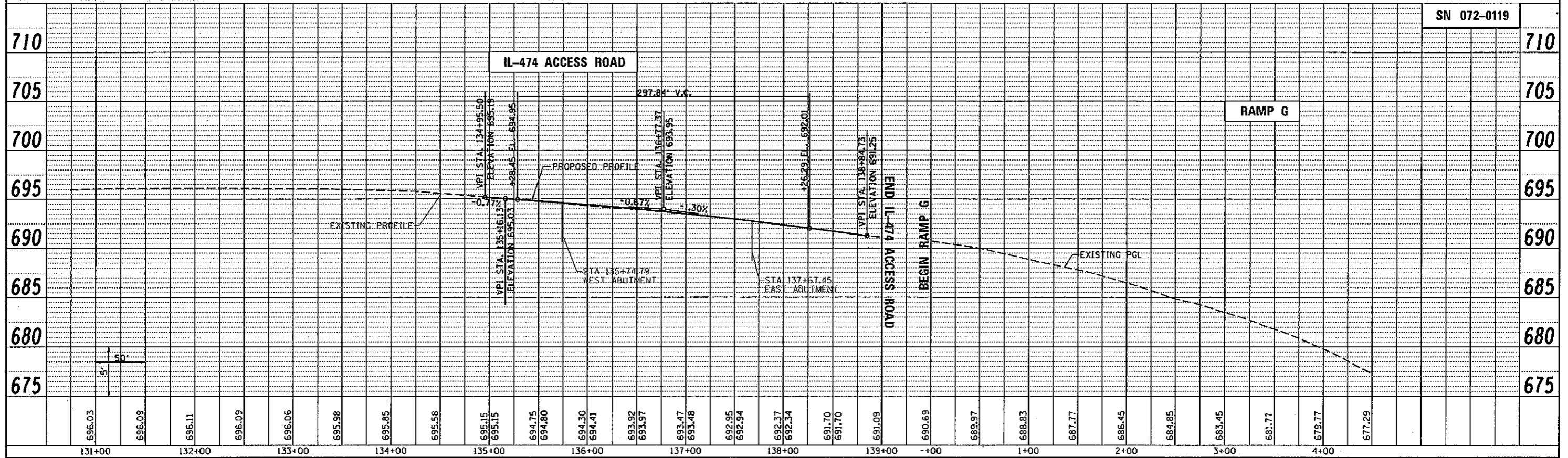
• CONTRACTOR TO RE-USE EXISTING BRIDGE APPROACH PAVEMENT DRAIN
OUTLET PIPES WHEN INSTALLING TYPE C INLET BOX, STANDARD 609006

| USER NAME = kas:thbr PLOT SCALE = 100.0000' / 1" = PLOT DATE = 12/14/2012 | DESIGNED - DRAWN - CEJ CHECKED - DATE - | REVISED - REVISED - 12/06/2012 REVISED - REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | PLAN MAXWELL ROAD CONNECTOR OVER I-474 SCALE: AS SHOWN SHEET NO. OF SHEETS STA. TO STA. | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="font-size: small;">F.A.I. RTE.</th> <th style="font-size: small;">SECTION</th> <th style="font-size: small;">COUNTY</th> <th style="font-size: small;">TOTAL SHEETS</th> <th style="font-size: small;">SHEET NO.</th> </tr> <tr> <td style="font-size: x-small;">474</td> <td style="font-size: x-small;">(72-3HB-1), I</td> <td style="font-size: x-small;">PEORIA</td> <td style="font-size: x-small;">89</td> <td style="font-size: x-small;">12</td> </tr> <tr> <td colspan="3" style="font-size: x-small;">MAXWELL RD. CONN. OVER I-474</td> <td colspan="2" style="font-size: x-small;">CONTRACT NO. 68883</td> </tr> <tr> <td colspan="5" style="font-size: x-small; text-align: right;">ILLINOIS FED. AID PROJECT</td> </tr> </table> | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | 474 | (72-3HB-1), I | PEORIA | 89 | 12 | MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | | ILLINOIS FED. AID PROJECT | | | | |
|---|--|---|---|--|--|-------------|---------|--------|--------------|-----------|-----|---------------|--------|----|----|------------------------------|--|--|--------------------|--|---------------------------|--|--|--|--|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | | | | | | | | | | | | | | | | | | | | |
| 474 | (72-3HB-1), I | PEORIA | 89 | 12 | | | | | | | | | | | | | | | | | | | | | |
| MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | | | | | | | | | | | | | | | | | | | | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | | | | | | | | | | | | | | | |

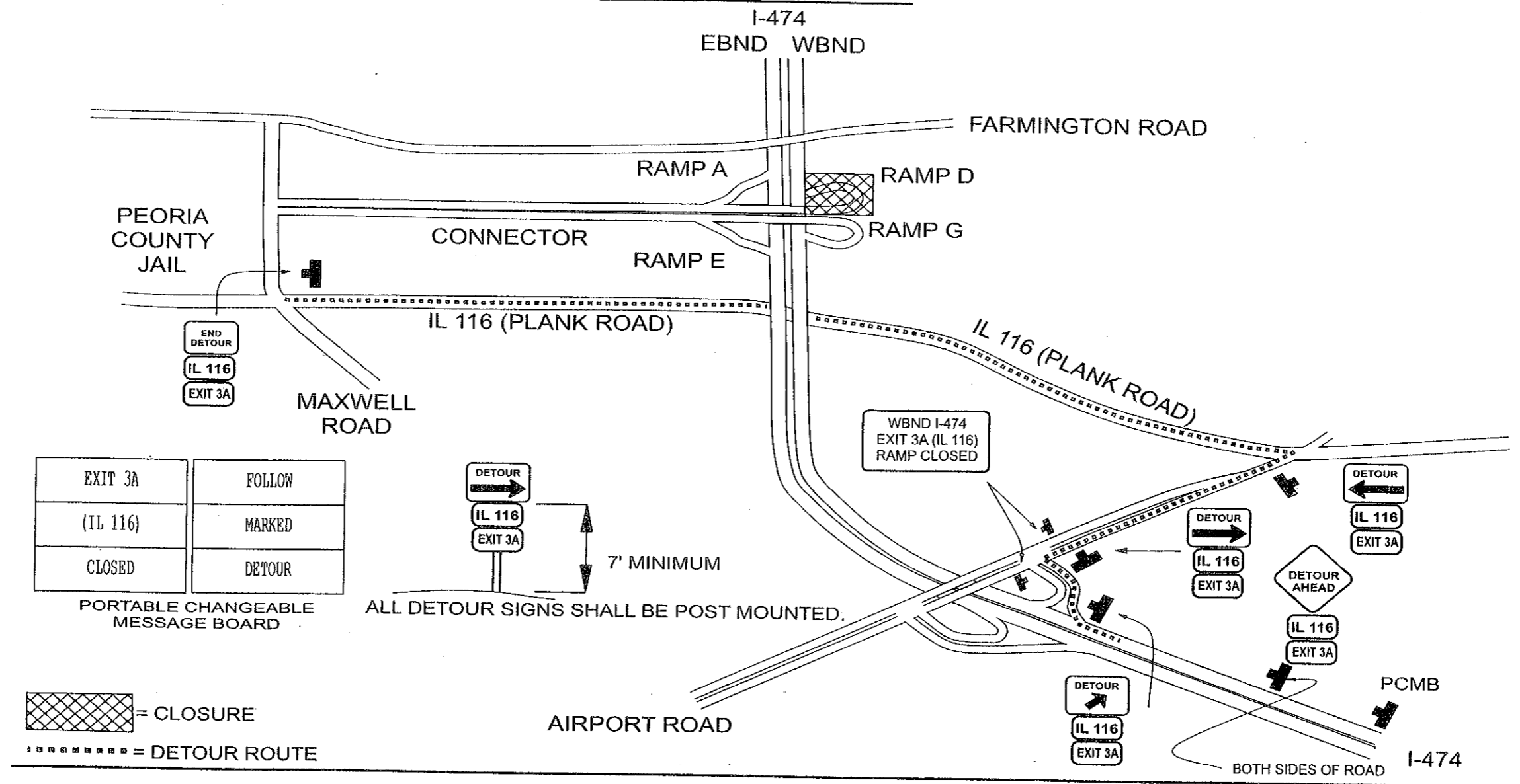
| | | | |
|------|-----------|----|------|
| PLAN | SUBMITTED | BY | DATE |
| | PLOTTED | | |
| | NOTED | | |
| | CHECKED | | |
| | NO. _____ | | |



| | | | |
|---------|-----------|----|------|
| PROFILE | SUBMITTED | BY | DATE |
| | PLOTTED | | |
| | NOTED | | |
| | CHECKED | | |
| | NO. _____ | | |



DETOUR RAMP D



| | |
|----------|--------|
| EXIT 3A | FOLLOW |
| (IL 116) | MARKED |
| CLOSED | DETOUR |

PORTABLE CHANGEABLE MESSAGE BOARD

DETOUR
IL 116
EXIT 3A

7' MINIMUM

ALL DETOUR SIGNS SHALL BE POST MOUNTED.

= CLOSURE

= DETOUR ROUTE

NOTES:

ALL DETOUR SIGNAGE SHALL BE A MINIMUM OF 7' ABOVE GROUND.

SIGNS SHALL BE PLACED A MINIMUM OF 250' PRIOR TO TURNS.

THIS DISTANCE SHALL BE 500' ON I-474. SIGNS MAY BE ADJUSTED IF THERE ARE CONFLICTS.

| | | | |
|---|---------------------|------------|-----------|
| FILE NAME : D:\68883-Sht-Closed-plan.dgn | USER NAME : jonesae | DESIGNED - | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - | REVISED - |
| | | | |

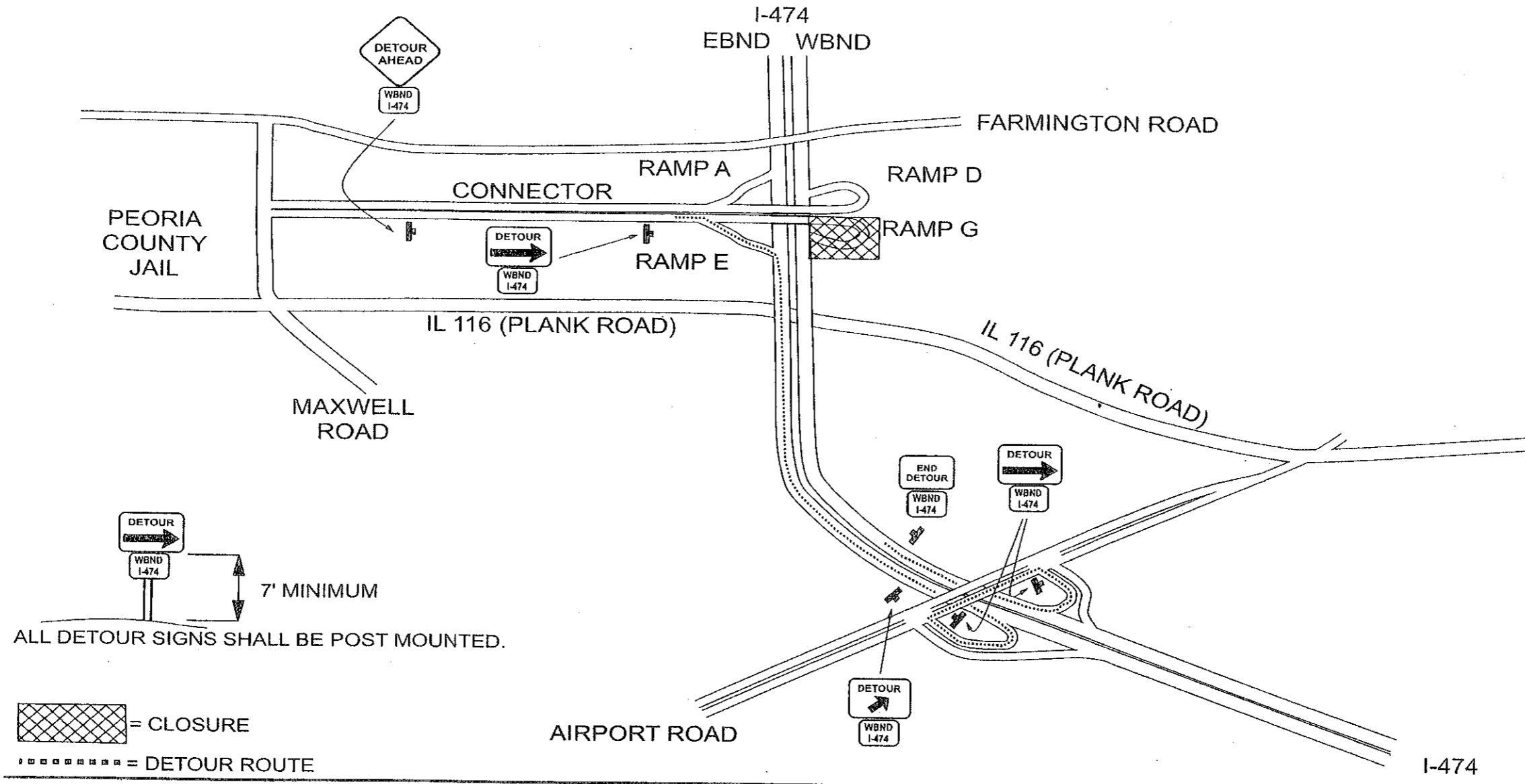
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION


DETOUR RAMP G

SCALE: SHEET OF SHEETS STA. TO STA.



| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|------------------------------|-----------------|--------|--------------------|-----------|
| 474 | 172-348-11L 1-1 | PEORIA | 89 | 14 |
| MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| ILLINOIS FED. AID PROJECT | | | | |

DETOUR RAMP G





 ALL DETOUR SIGNS SHALL BE POST MOUNTED.

 = CLOSURE
 = DETOUR ROUTE

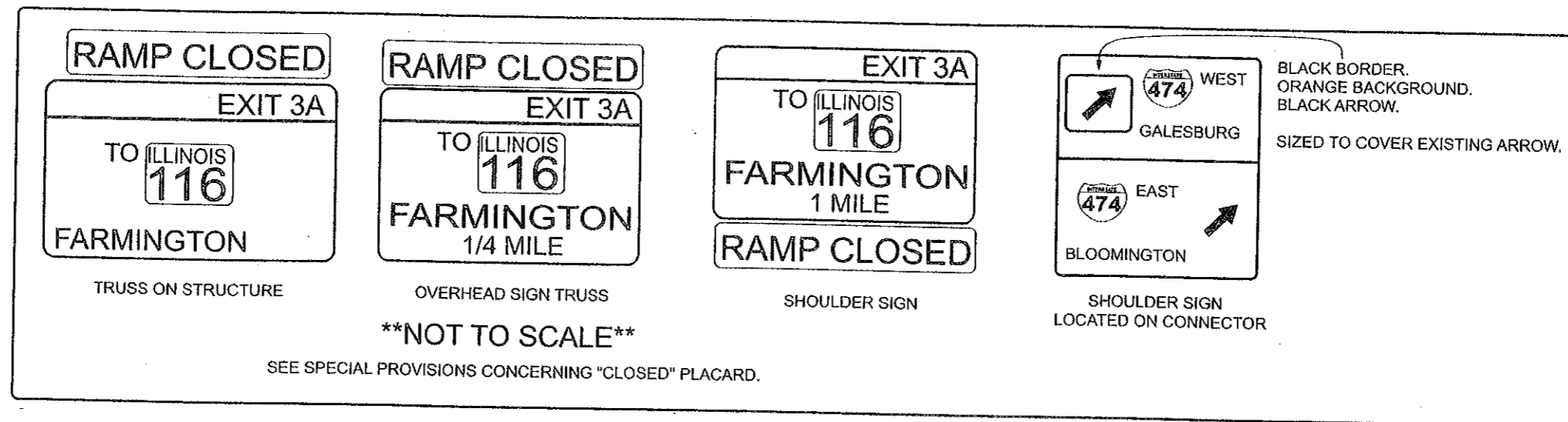
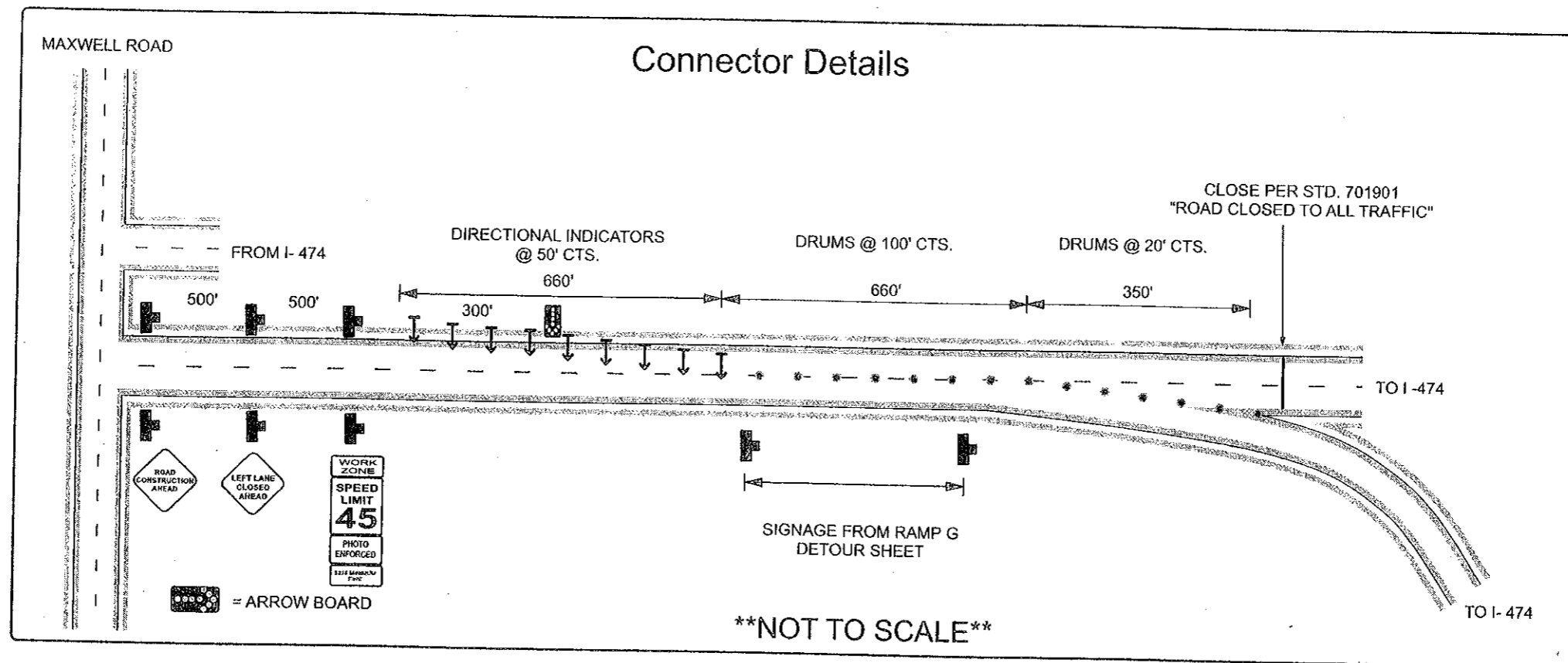
NOTES:
 ALL DETOUR SIGNAGE SHALL BE A MINIMUM OF 7' ABOVE GROUND.
 SIGNS SHALL BE PLACED A MINIMUM OF 250' PRIOR TO TURNS.
 THIS DISTANCE SHALL BE 500' ON I-474. SIGNS MAY BE ADJUSTED
 IF THERE ARE CONFLICTS.

| | | | |
|--|-------------------------------|------------|-----------|
| FILE NAME = 0468883-Sht-Closed-plan.dgn | USER NAME = jonesca | DESIGNED - | REVISED - |
| Default | PLOT SCALE = 1/16" = 1' / in. | DRAWN - | REVISED - |
| | PLOT DATE = 12/11/2012 | CHECKED - | REVISED - |
| | | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|----------------------|-------|-----------|--------------|
| DETOUR RAMP D | | | |
| SCALE: | SHEET | OF SHEETS | STA. TO STA. |

| | | | | |
|------------------------------|----------------|--------|--------------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-34B-II, J) | PEORIA | 89 | 15 |
| MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| ILLINOIS FED. AID PROJECT | | | | |



FILE NAME :
0460893-Shut-Closed-plan.dgn
Default

USER NAME : jonesoe
PLD1 SCALE : 116.0128 ' / in.
PLD1 DATE : 12/11/2012

| | |
|------------|-----------|
| DESIGNED - | REVISED - |
| DRAWN - | REVISED - |
| CHECKED - | REVISED - |
| DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONNECTOR DETAILS

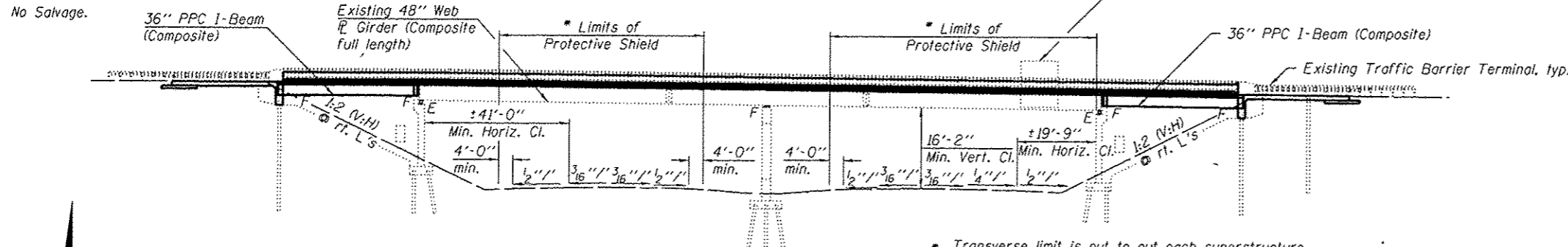
SCALE: SHEET OF SHEETS STA. TO STA.

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|------------------------------|---------------|--------|--------------------|-----------|
| 474 | (72-38B-1), 1 | PEORIA | 89 | 16 |
| MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| ILLINOIS FED. AID PROJECT | | | | |

Benchmark: Chiseled "□" on "I-474 W.B." sign foundation. ±205 ft. East of S.N. 072-0119 and ±10 ft. South of Maxwell Road Connector E.B., Elev. 690.98.

Existing Structures: S.N. 072-0119 (E.B.) & S.N. 072-0120 (W.B.) were constructed in 1978 under F.A.I. Rte. 474, Section 72-3HB-1. They consist of two span continuous plate girder and reinforced concrete deck superstructures supported on multi-column piers and vaulted abutments. The vaulted abutment approach spans consist of PPC I-beams supporting a concrete deck. The substructures are supported on steel H-piles. The structure lengths measure 276'-3" back to back of approach bents (E.B.), 265'-10" back to back of approach bents (W.B.), with a 1°22'00" right forward skew. The deck width varies from 53'-0 1/2" at the east approach bent to 55'-6" at the west approach bent (E.B.), 53'-5" at the west approach bent to 56'-2 3/4" at the east approach bent (W.B.). The deck also has a 1/2" min. bituminous wearing surface. The road will be closed and traffic detoured during construction.

No Salvage.



ELEVATION

- * Transverse limit is out to out each superstructure.
- ** Superelevation transition from 1/4" /' at Sta. 137+64.33 to 1/2" /' at 138+24.29 to meet existing pavement.

SCOPE OF WORK

1. Remove and replace existing concrete deck.
2. Make new deck composite over the full length.
3. Replace existing PPC I-Beams, Approach Bents, and Approach Slabs.
4. Replace existing rocker bearings with elastomeric bearings.
5. Remove and replace existing strip seal expansion joints.
6. Repair poor quality concrete on abutment faces.
7. Repair soil erosion near abutments.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS (NEW CONSTRUCTION)

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 fy = 36,000 psi (Structural Steel)

FIELD UNITS (EXIST. CONSTRUCTION)

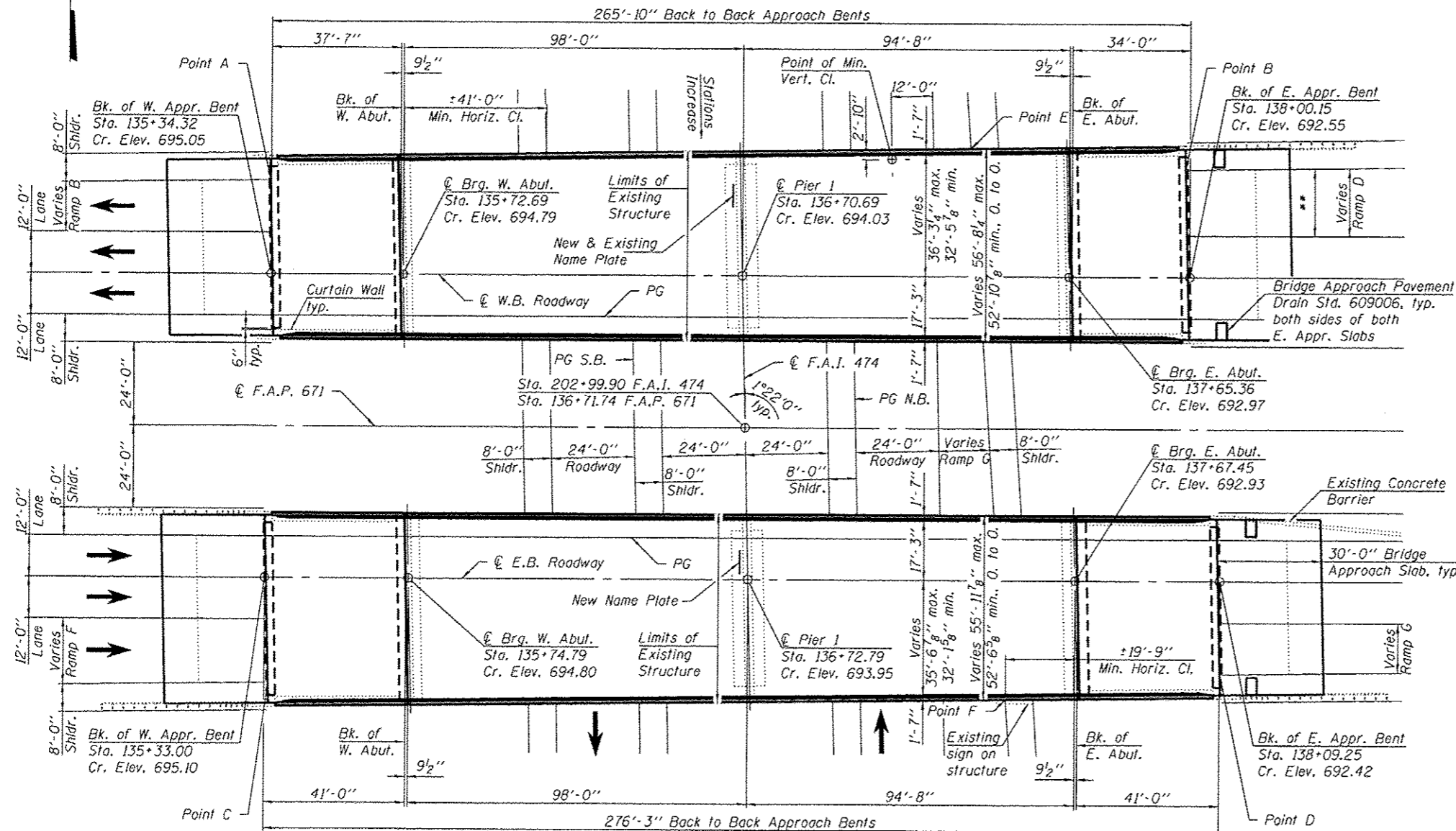
f'c = 1,200 psi (Slab)
 f'c = 1,400 psi (Substructure)
 fs = 20,000 psi (Reinforcement)
 fs = 20,000 psi (Structural Steel)

PRECAST PRESTRESSED UNITS (NEW CONSTRUCTION)

f'c = 6,000 psi
 f'ci = 5,000 psi
 fs = 270,000 psi (Strands)
 fsi = 201,960 psi (Strands)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Horizontal Bedrock Acceleration (A) = 0.0425g
 Site Coefficient (S) = 1.5



PLAN

Notes: Lane configuration of F.A.P. 671 per existing plans. Actual structures each carry one lane of traffic. F.A.I. 474 lane configuration shown as built.

STATION 202+99.90
 RE-BUILT 20 BY
 STATE OF ILLINOIS
 F.A.I. RTE. 474 SEC. (72-3HB-1).I
 LOADING HS20-44
 STRUCTURE NO. 072-0119 (E.B.)

Located Name Plate as shown in Plan View. Cost included with Name Plates.

STATION 202+99.90
 RE-BUILT 20 BY
 STATE OF ILLINOIS
 F.A.I. RTE. 474 SEC. (72-3HB-1).I
 LOADING HS20-44
 STRUCTURE NO. 072-0120 (W.B.)

Locate Name Plate next to existing Name Plate. Cost included with Name Plates.

NAME PLATE
 See Std. 515001

TABLE OF ROADWAY STATIONS AND OFFSETS

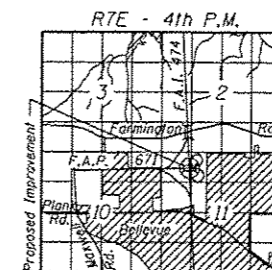
| Point | Station | Offset |
|-------|-----------|-------------|
| A | 135+34.17 | 71'-2 1/2" |
| B | 137+98.91 | 75'-0 5/8" |
| C | 135+34.22 | 74'-4 1/4" |
| D | 138+09.39 | 70'-10 3/8" |
| E | 202+20.50 | 66'-11" |
| F | 203+80.17 | 73'-10 1/2" |

APPROVED
 For Structural Adequacy Only

Eric Lagemann
 Engineer of Bridges & Structures



Eric Lagemann 1/17/13
 License Expires 11/30/2014 Date

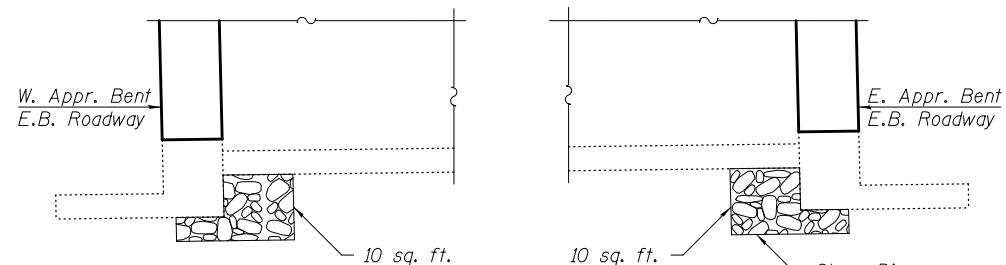


LOCATION SKETCH

GENERAL PLAN & ELEVATION
 MAXWELL ROAD CONNECTOR OVER I-474
 F.A.I. RTE. 474 - SECTION (72-3HB-1).I

PEORIA COUNTY
 STATION 202+99.90
 STRUCTURE NO. 072-0119 (E.B.)
 STRUCTURE NO. 072-0120 (W.B.)

| | | | | | | | | | | | | | |
|-----------------------|-----------------------|-----------------------|------------------------------|---|------------------------------------|--|--|--------------------------|----------------------|--------------------|-----------------|---------------------------|--|
| FILE NAME : #FILE# | USER NAME : elagemann | DESIGNED K.A. KLUES | REVISIONS - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIFRIN INC. ENGINEERS | GENERAL PLAN & ELEVATION | | F.A.I. RTE. 474 | SECTION (72-3HB-1).I | COUNTY PEORIA | TOTAL SHEETS 88 | SHEET NO. 17 | |
| | PLOT SCALE : | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | | SHEET NO. 1 OF 62 SHEETS | | CONTRACT NO. 68883 | | ILLINOIS FED. AID PROJECT | |
| | PLOT DATE : 1/17/2013 | DRAWN K.A. KLUES | | | | | | | | | | | |
| | | CHECKED E.M. LAGEMANN | | | | | | | | | | | |



PLAN OF RIPRAP

Stone Riprap
Class A3,
grouted, typ.
See Special
Provision.

INDEX OF SHEETS

- 1 General Plan & Elevation
- 2 General Data
- 3-13 Top of Slab Elevations
- 14 Top of West Approach Slab Elevations (E.B.)
- 15 Top of East Approach Slab Elevations (E.B.)
- 16 Top of West Approach Slab Elevations (W.B.)
- 17 Top of East Approach Slab Elevations (W.B.)
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- 19-21 Superstructure Details - Span 1 (E.B.)
- 22-24 Superstructure Details - Spans 2 & 3 (E.B.)
- 25-27 Superstructure Details - Span 4 (E.B.)
- 28-30 Superstructure Details - Span 1 (W.B.)
- 31-33 Superstructure Details - Spans 2 & 3 (W.B.)
- 34-36 Superstructure Details - Span 4 (W.B.)
- 37-38 West Approach Slab Details (E.B.)
- 39-40 East Approach Slab Details (E.B.)
- 41-42 West Approach Slab Details (W.B.)
- 43-44 East Approach Slab Details (W.B.)
- 45 Expansion Joint Details
- 46 Framing Plan - Span 1
- 47 Framing Plan - Spans 2 & 3
- 48 Framing Plan - Span 4
- 49 Structural Steel Details - Spans 2 & 3
- 50-51 PPC I-Beam Details - Span 1 (W.B.)
- 52-53 PPC I-Beam Details - Spans 1 & 4 (E.B.)
- 54-55 PPC I-Beam Details - Span 4 (W.B.)
- 56 Expansion Bearing Details
- 57 West Approach Bent (E.B.)
- 58 East Approach Bent (E.B.)
- 59 West Approach Bent (W.B.)
- 60 East Approach Bent (W.B.)
- 61 Abutment Repair Details
- 62 Bar Splicer Assembly & Mechanical Splicer Details

GENERAL NOTES

No field welding is permitted except as specified in the contract documents. Reinforcement bars designated (E) shall be epoxy coated. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that cannot be removed by grinding 1/4 inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Slipforming of the parapets is not allowed. Fasteners shall be high strength bolts. Bolts 3/4 in. dia., open holes 13/16 in. dia., unless otherwise noted.

Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

If the analysis submitted by the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

All new structural steel shall be shop painted with an inorganic zinc rich primer per AASHTO M 300, Type 1.

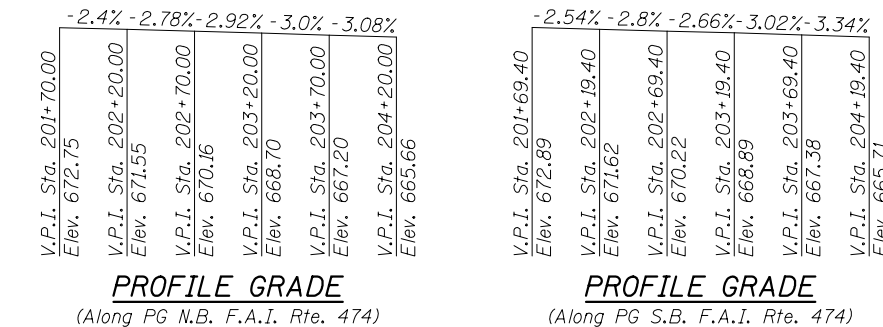
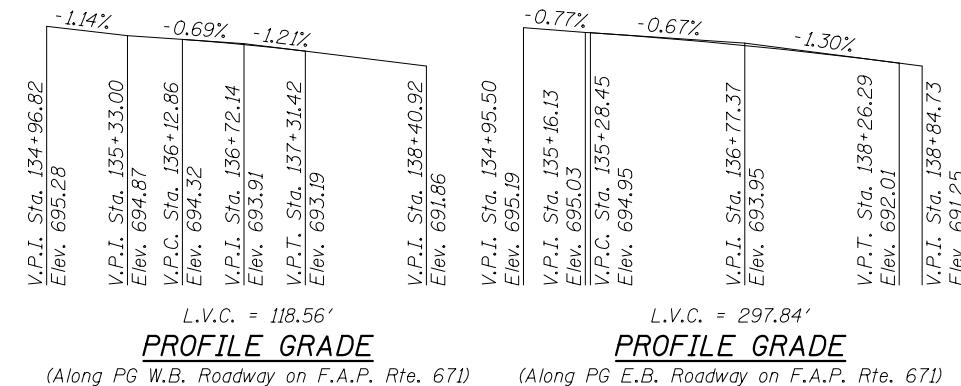
Field painting of structural steel shall be done under a separate painting contract.

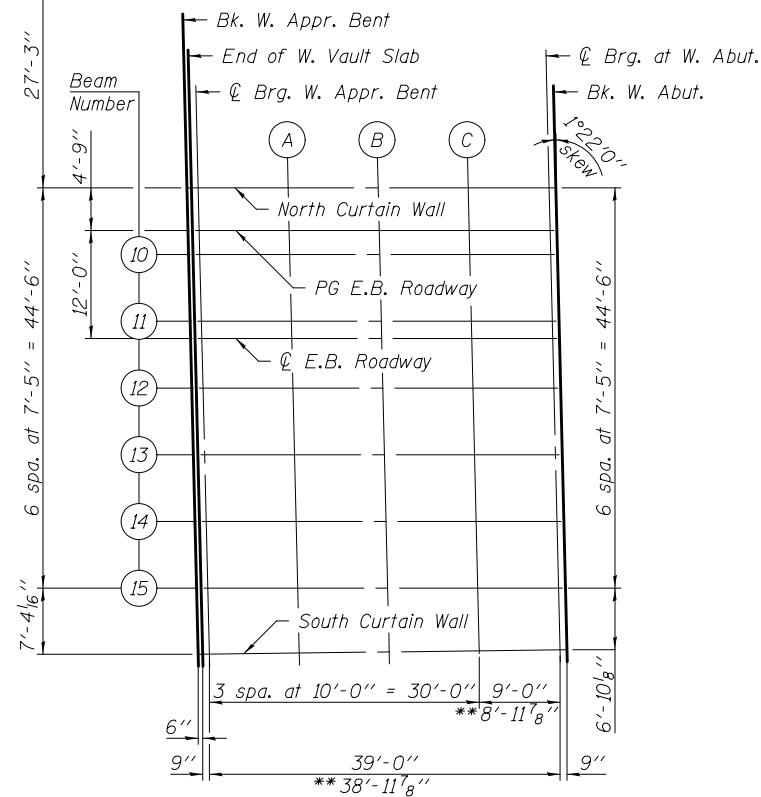
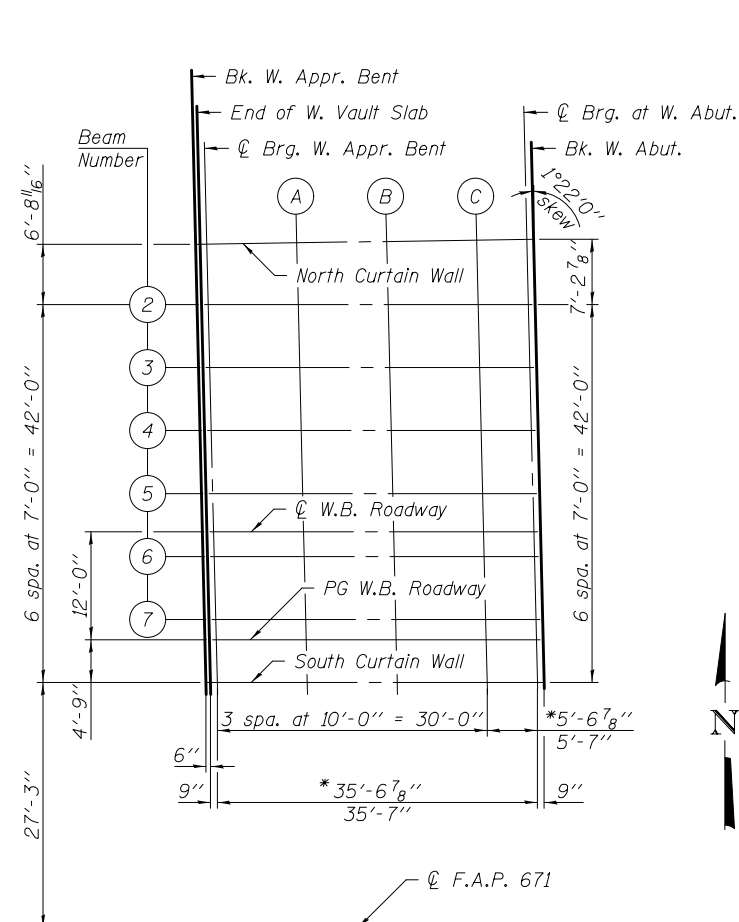
Layout of riprap may be varied to suit ground conditions in the field as directed by the Engineer.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

TOTAL BILL OF MATERIAL

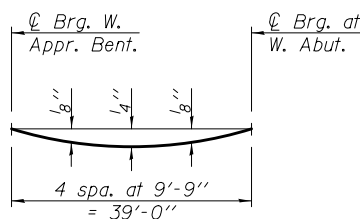
| ITEM | UNIT | SUPER | SUB | TOTAL |
|---|---------|---------|--------|---------|
| Stone Riprap, Class A3 | Sq. Yd. | | 2 | 2 |
| Removal of Existing Superstructures | Each | 4 | | 4 |
| Concrete Removal | Cu. Yd. | | 55.9 | 55.9 |
| Removal of Existing Concrete Deck | Each | 2 | | 2 |
| Protective Shield | Sq. Yd. | 1,485 | | 1,485 |
| Structure Excavation | Cu. Yd. | | 139 | 139 |
| Concrete Structures | Cu. Yd. | | 122.4 | 122.4 |
| Concrete Superstructure | Cu. Yd. | 1,295.5 | | 1,295.5 |
| Bridge Deck Grooving | Sq. Yd. | 3,479 | | 3,479 |
| Protective Coat | Sq. Yd. | 4,248 | | 4,248 |
| Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36 in. | Foot | 893.5 | | 893.5 |
| Furnishing and Erecting Structural Steel | Pound | 6,980 | | 6,980 |
| Stud Shear Connectors | Each | 7,728 | | 7,728 |
| Reinforcement Bars, Epoxy Coated | Pound | 275,750 | 18,620 | 294,370 |
| Mechanical Splicers | | | 96 | 96 |
| Preformed Joint Strip Seal | Foot | 214.0 | | 214.0 |
| Elastomeric Bearing Assembly, Type I | Each | 32 | | 32 |
| Anchor Bolts, 1/4" | Each | 64 | | 64 |
| Jack and Remove Existing Bearings | Each | 32 | | 32 |
| Approach Slab Removal | Sq. Yd. | 234 | | 234 |
| Structural Repair of Concrete (Depth Equal to or Less than 5 inches.) | Sq. Ft. | | 91 | 91 |
| Grout for Use with Riprap | Cu. Yd. | | 0.2 | 0.2 |
| Name Plates | Each | 2 | | 2 |
| Bar Splicers | Each | 206 | | 206 |





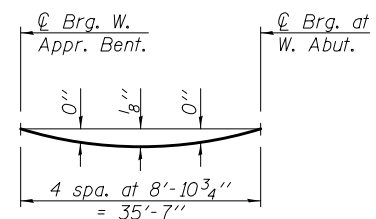
PLAN

* North Curtain Wall - W.B. only
 ** South Curtain Wall - E.B. only

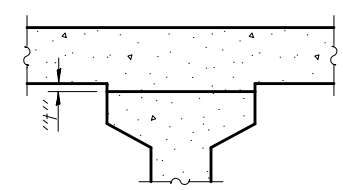


E.B. DEAD LOAD DEFLECTION DIAGRAM
 (Includes weight of concrete, excluding beams.)

Note:
 The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheets 4 and 5 of 62.



W.B. DEAD LOAD DEFLECTION DIAGRAM
 (Includes weight of concrete only, excluding beams.)



To determine "t": Elevations of the top flanges of the existing beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS

NORTH CURTAIN WALL - W.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.56 | -43.96 | 694.45 | 694.45 |
| End of W. Vault Slab | 135+34.06 | -43.96 | 694.45 | 694.45 |
| C Brg. W. Appr. Bent | 135+34.81 | -43.97 | 694.44 | 694.44 |
| A | 135+44.81 | -44.12 | 694.37 | 694.37 |
| B | 135+54.80 | -44.26 | 694.30 | 694.30 |
| C | 135+64.79 | -44.41 | 694.23 | 694.23 |
| C Brg. at W. Abut. | 135+70.37 | -44.49 | 694.19 | 694.19 |
| Bk. W. Abut. | 135+71.14 | -44.50 | 694.18 | 694.18 |

BEAM 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.72 | -37.25 | 694.59 | 694.59 |
| End of W. Vault Slab | 135+34.22 | -37.25 | 694.59 | 694.59 |
| C Brg. W. Appr. Bent | 135+34.97 | -37.25 | 694.58 | 694.58 |
| A | 135+44.97 | -37.25 | 694.51 | 694.52 |
| B | 135+54.97 | -37.25 | 694.44 | 694.45 |
| C | 135+64.97 | -37.25 | 694.38 | 694.38 |
| C Brg. at W. Abut. | 135+70.56 | -37.25 | 694.34 | 694.34 |
| Bk. W. Abut. | 135+71.30 | -37.25 | 694.33 | 694.33 |

BEAM 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.89 | -30.25 | 694.74 | 694.74 |
| End of W. Vault Slab | 135+34.39 | -30.25 | 694.73 | 694.73 |
| C Brg. W. Appr. Bent | 135+35.14 | -30.25 | 694.73 | 694.73 |
| A | 135+45.14 | -30.25 | 694.66 | 694.67 |
| B | 135+55.14 | -30.25 | 694.59 | 694.60 |
| C | 135+65.14 | -30.25 | 694.52 | 694.53 |
| C Brg. at W. Abut. | 135+70.72 | -30.25 | 694.48 | 694.48 |
| Bk. W. Abut. | 135+71.47 | -30.25 | 694.48 | 694.48 |

BEAM 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.06 | -23.25 | 694.88 | 694.88 |
| End of W. Vault Slab | 135+34.56 | -23.25 | 694.87 | 694.87 |
| C Brg. W. Appr. Bent | 135+35.31 | -23.25 | 694.87 | 694.87 |
| A | 135+45.31 | -23.25 | 694.80 | 694.81 |
| B | 135+55.31 | -23.25 | 694.73 | 694.74 |
| C | 135+65.31 | -23.25 | 694.66 | 694.67 |
| C Brg. at W. Abut. | 135+70.89 | -23.25 | 694.62 | 694.62 |
| Bk. W. Abut. | 135+71.64 | -23.25 | 694.62 | 694.62 |

Notes:
 Negative offset denotes an offset to the left of Profile Grade.
 Offset for North Curtain Wall - W.B., South Curtain Wall - W.B., and Beams 2 thru 7 are based off of PG W.B. Roadway.
 Offset for North Curtain Wall - E.B., South Curtain Wall - E.B., and Beams 10 thru 15 are based off of PG E.B. Roadway.

BEAM 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.22 | -16.25 | 694.99 | 694.99 |
| End of W. Vault Slab | 135+34.72 | -16.25 | 694.98 | 694.98 |
| ⊙ Brg. W. Appr. Bent | 135+35.47 | -16.25 | 694.98 | 694.98 |
| A | 135+45.47 | -16.25 | 694.91 | 694.92 |
| B | 135+55.47 | -16.25 | 694.84 | 694.85 |
| C | 135+65.47 | -16.25 | 694.77 | 694.77 |
| ⊙ Brg. at W. Abut. | 135+71.06 | -16.25 | 694.73 | 694.73 |
| Bk. W. Abut. | 135+71.80 | -16.25 | 694.73 | 694.73 |

⊙ W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.32 | -12.00 | 695.05 | 695.05 |
| End of W. Vault Slab | 135+34.82 | -12.00 | 695.05 | 695.05 |
| ⊙ Brg. W. Appr. Bent | 135+35.57 | -12.00 | 695.04 | 695.04 |
| A | 135+45.57 | -12.00 | 694.97 | 694.98 |
| B | 135+55.57 | -12.00 | 694.90 | 694.91 |
| C | 135+65.57 | -12.00 | 694.84 | 694.84 |
| ⊙ Brg. at W. Abut. | 135+71.16 | -12.00 | 694.80 | 694.80 |
| Bk. W. Abut. | 135+71.90 | -12.00 | 694.79 | 694.79 |

BEAM 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.39 | -9.25 | 695.01 | 695.01 |
| End of W. Vault Slab | 135+34.89 | -9.25 | 695.00 | 695.00 |
| ⊙ Brg. W. Appr. Bent | 135+35.64 | -9.25 | 695.00 | 695.00 |
| A | 135+45.64 | -9.25 | 694.93 | 694.94 |
| B | 135+55.64 | -9.25 | 694.86 | 694.87 |
| C | 135+65.64 | -9.25 | 694.79 | 694.80 |
| ⊙ Brg. at W. Abut. | 135+71.22 | -9.25 | 694.75 | 694.75 |
| Bk. W. Abut. | 135+71.97 | -9.25 | 694.75 | 694.75 |

BEAM 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.56 | -2.25 | 694.90 | 694.90 |
| End of W. Vault Slab | 135+35.06 | -2.25 | 694.89 | 694.89 |
| ⊙ Brg. W. Appr. Bent | 135+35.81 | -2.25 | 694.89 | 694.89 |
| A | 135+45.81 | -2.25 | 694.82 | 694.83 |
| B | 135+55.81 | -2.25 | 694.75 | 694.76 |
| C | 135+65.81 | -2.25 | 694.68 | 694.69 |
| ⊙ Brg. at W. Abut. | 135+71.39 | -2.25 | 694.64 | 694.64 |
| Bk. W. Abut. | 135+72.14 | -2.25 | 694.64 | 694.64 |

PG W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.61 | 0.00 | 694.86 | 694.86 |
| End of W. Vault Slab | 135+35.11 | 0.00 | 694.86 | 694.86 |
| ⊙ Brg. W. Appr. Bent | 135+35.86 | 0.00 | 694.85 | 694.85 |
| A | 135+45.86 | 0.00 | 694.78 | 694.79 |
| B | 135+55.86 | 0.00 | 694.71 | 694.72 |
| C | 135+65.86 | 0.00 | 694.65 | 694.65 |
| ⊙ Brg. at W. Abut. | 135+71.44 | 0.00 | 694.61 | 694.61 |
| Bk. W. Abut. | 135+72.19 | 0.00 | 694.60 | 694.60 |

SOUTH CURTAIN WALL - W.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+34.72 | 4.75 | 694.76 | 694.76 |
| End of W. Vault Slab | 135+35.22 | 4.75 | 694.76 | 694.76 |
| ⊙ Brg. W. Appr. Bent | 135+35.97 | 4.75 | 694.75 | 694.75 |
| A | 135+45.97 | 4.75 | 694.68 | 694.68 |
| B | 135+55.97 | 4.75 | 694.62 | 694.62 |
| C | 135+65.97 | 4.75 | 694.55 | 694.55 |
| ⊙ Brg. at W. Abut. | 135+71.56 | 4.75 | 694.51 | 694.51 |
| Bk. W. Abut. | 135+72.30 | 4.75 | 694.50 | 694.50 |

NORTH CURTAIN WALL - E.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+32.60 | -4.75 | 694.82 | 694.82 |
| End of W. Vault Slab | 135+33.10 | -4.75 | 694.82 | 694.82 |
| ⊙ Brg. W. Appr. Bent | 135+33.85 | -4.75 | 694.81 | 694.81 |
| A | 135+43.85 | -4.75 | 694.74 | 694.74 |
| B | 135+53.85 | -4.75 | 694.67 | 694.67 |
| C | 135+63.85 | -4.75 | 694.60 | 694.60 |
| ⊙ Brg. at W. Abut. | 135+72.85 | -4.75 | 694.53 | 694.53 |
| Bk. W. Abut. | 135+73.60 | -4.75 | 694.52 | 694.52 |

PG E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+32.71 | 0.00 | 694.92 | 694.92 |
| End of W. Vault Slab | 135+33.21 | 0.00 | 694.92 | 694.92 |
| ⊙ Brg. W. Appr. Bent | 135+33.96 | 0.00 | 694.91 | 694.91 |
| A | 135+43.96 | 0.00 | 694.84 | 694.85 |
| B | 135+53.96 | 0.00 | 694.77 | 694.78 |
| C | 135+63.96 | 0.00 | 694.70 | 694.70 |
| ⊙ Brg. at W. Abut. | 135+72.96 | 0.00 | 694.63 | 694.63 |
| Bk. W. Abut. | 135+73.71 | 0.00 | 694.62 | 694.62 |

BEAM 10

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+32.77 | 2.67 | 694.96 | 694.96 |
| End of W. Vault Slab | 135+33.27 | 2.67 | 694.96 | 694.96 |
| ⊘ Brg. W. Appr. Bent | 135+34.02 | 2.67 | 694.95 | 694.95 |
| A | 135+44.02 | 2.67 | 694.88 | 694.89 |
| B | 135+54.02 | 2.67 | 694.81 | 694.83 |
| C | 135+64.02 | 2.67 | 694.74 | 694.75 |
| ⊘ Brg. at W. Abut. | 135+73.02 | 2.67 | 694.67 | 694.67 |
| Bk. W. Abut. | 135+73.77 | 2.67 | 694.66 | 694.66 |

BEAM 11

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+32.95 | 10.08 | 695.07 | 695.07 |
| End of W. Vault Slab | 135+33.45 | 10.08 | 695.07 | 695.07 |
| ⊘ Brg. W. Appr. Bent | 135+34.20 | 10.08 | 695.07 | 695.07 |
| A | 135+44.20 | 10.08 | 695.00 | 695.01 |
| B | 135+54.20 | 10.08 | 694.93 | 694.94 |
| C | 135+64.20 | 10.08 | 694.85 | 694.86 |
| ⊘ Brg. at W. Abut. | 135+73.20 | 10.08 | 694.78 | 694.78 |
| Bk. W. Abut. | 135+73.95 | 10.08 | 694.78 | 694.78 |

⊘ E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.00 | 12.00 | 695.10 | 695.10 |
| End of W. Vault Slab | 135+33.50 | 12.00 | 695.10 | 695.10 |
| ⊘ Brg. W. Appr. Bent | 135+34.25 | 12.00 | 695.10 | 695.10 |
| A | 135+44.25 | 12.00 | 695.03 | 695.04 |
| B | 135+54.25 | 12.00 | 694.96 | 694.97 |
| C | 135+64.25 | 12.00 | 694.88 | 694.89 |
| ⊘ Brg. at W. Abut. | 135+73.25 | 12.00 | 694.81 | 694.81 |
| Bk. W. Abut. | 135+74.00 | 12.00 | 694.81 | 694.81 |

BEAM 12

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.13 | 17.50 | 695.02 | 695.02 |
| End of W. Vault Slab | 135+33.63 | 17.50 | 695.01 | 695.01 |
| ⊘ Brg. W. Appr. Bent | 135+34.38 | 17.50 | 695.01 | 695.01 |
| A | 135+44.38 | 17.50 | 694.94 | 694.95 |
| B | 135+54.38 | 17.50 | 694.87 | 694.88 |
| C | 135+64.38 | 17.50 | 694.79 | 694.81 |
| ⊘ Brg. at W. Abut. | 135+73.38 | 17.50 | 694.73 | 694.73 |
| Bk. W. Abut. | 135+74.13 | 17.50 | 694.72 | 694.72 |

BEAM 13

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.30 | 24.92 | 694.90 | 694.90 |
| End of W. Vault Slab | 135+33.80 | 24.92 | 694.89 | 694.89 |
| ⊘ Brg. W. Appr. Bent | 135+34.55 | 24.92 | 694.89 | 694.89 |
| A | 135+44.55 | 24.92 | 694.82 | 694.83 |
| B | 135+54.55 | 24.92 | 694.75 | 694.76 |
| C | 135+64.55 | 24.92 | 694.67 | 694.68 |
| ⊘ Brg. at W. Abut. | 135+73.55 | 24.92 | 694.60 | 694.60 |
| Bk. W. Abut. | 135+74.30 | 24.92 | 694.60 | 694.60 |

BEAM 14

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.48 | 32.33 | 694.74 | 694.74 |
| End of W. Vault Slab | 135+33.98 | 32.33 | 694.74 | 694.74 |
| ⊘ Brg. W. Appr. Bent | 135+34.73 | 32.33 | 694.73 | 694.73 |
| A | 135+44.73 | 32.33 | 694.66 | 694.67 |
| B | 135+54.73 | 32.33 | 694.59 | 694.61 |
| C | 135+64.73 | 32.33 | 694.52 | 694.53 |
| ⊘ Brg. at W. Abut. | 135+73.73 | 32.33 | 694.45 | 694.45 |
| Bk. W. Abut. | 135+74.48 | 32.33 | 694.44 | 694.44 |

BEAM 15

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.66 | 39.75 | 694.58 | 694.58 |
| End of W. Vault Slab | 135+34.16 | 39.75 | 694.58 | 694.58 |
| ⊘ Brg. W. Appr. Bent | 135+34.91 | 39.75 | 694.58 | 694.58 |
| A | 135+44.91 | 39.75 | 694.51 | 694.52 |
| B | 135+54.91 | 39.75 | 694.43 | 694.45 |
| C | 135+64.91 | 39.75 | 694.36 | 694.37 |
| ⊘ Brg. at W. Abut. | 135+73.91 | 39.75 | 694.29 | 694.29 |
| Bk. W. Abut. | 135+74.66 | 39.75 | 694.29 | 694.29 |

SOUTH CURTAIN WALL - E.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. of W. Appr. Bent | 135+33.83 | 47.10 | 694.43 | 694.43 |
| End of W. Vault Slab | 135+34.33 | 47.10 | 694.43 | 694.43 |
| ⊘ Brg. W. Appr. Bent | 135+35.08 | 47.09 | 694.42 | 694.42 |
| A | 135+45.08 | 46.96 | 694.36 | 694.36 |
| B | 135+55.08 | 46.83 | 694.29 | 694.29 |
| C | 135+65.08 | 46.71 | 694.22 | 694.22 |
| ⊘ Brg. at W. Abut. | 135+74.07 | 46.59 | 694.15 | 694.15 |
| Bk. W. Abut. | 135+74.82 | 46.58 | 694.14 | 694.14 |

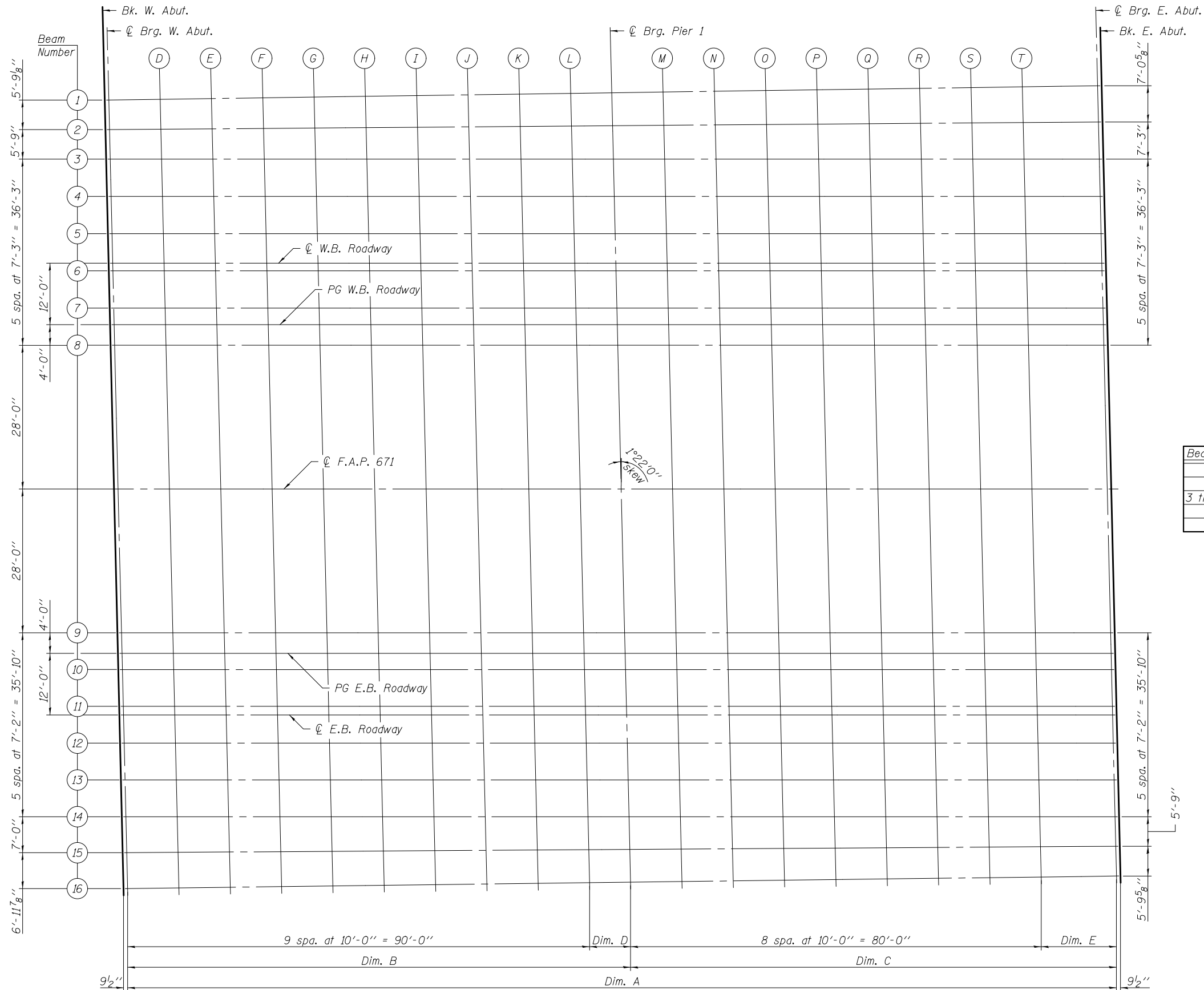
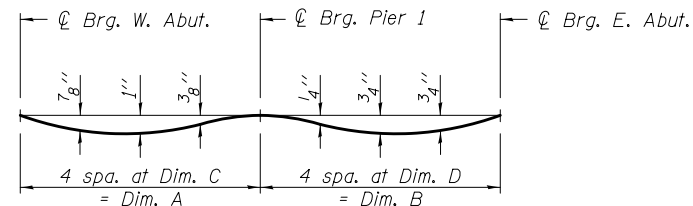


TABLE OF VARIABLE DIMENSIONS

| Beam No. | Dim. A | Dim. B | Dim. C | Dim. D | Dim. E |
|-----------|--------------------------------------|--|---------------------------------------|---------------------------------------|--------------------------------------|
| 1 | 192'-7 ¹ / ₂ " | 97'-11 ³ / ₄ " | 94'-7 ³ / ₄ " | 7'-11 ³ / ₄ " | 14'-7 ³ / ₄ " |
| 2 | 192'-7 ⁵ / ₈ " | 97'-11 ¹³ / ₁₆ " | 94'-7 ¹³ / ₁₆ " | 7'-11 ¹³ / ₁₆ " | 14'-7 ³ / ₁₆ " |
| 3 thru 14 | 192'-8" | 98'-0" | 94'-8" | 8'-0" | 14'-8" |
| 15 | 192'-7 ⁵ / ₈ " | 97'-11 ¹³ / ₁₆ " | 94'-7 ¹³ / ₁₆ " | 7'-11 ¹³ / ₁₆ " | 14'-7 ³ / ₁₆ " |
| 16 | 192'-7 ¹ / ₂ " | 97'-11 ³ / ₄ " | 94'-7 ³ / ₄ " | 7'-11 ³ / ₄ " | 14'-7 ³ / ₄ " |

PLAN

| | | | | | | | | | | | |
|-----------------------|------------------------------|------------------------------------|----------------------------|---|--|--|---------------------------|---------|--------|-----------------|--------------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | TOP OF SLAB ELEVATIONS STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | CHECKED <i>E.M. LAGEMANN</i> | REVISOR <i>Del. Staging (IDOT)</i> | 474 | | | | (72-3HB-1),I | PEORIA | 88 | 22 | |
| PLOT SCALE = | DRAWN <i>K.A. KLUES</i> | REVISOR - | CONTRACT NO. 68883 | | | | | | | | |
| PLOT DATE = *DATE* | CHECKED <i>E.M. LAGEMANN</i> | REVISOR - | SHEET NO. 6 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | | |



DEAD LOAD DEFLECTION DIAGRAM

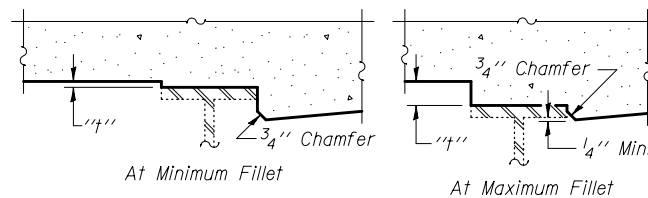
(Includes weight of concrete only.)

Note:

The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheets 8 thru 10 of 62.

TABLE OF VARIABLE DIMENSIONS

| Beam No. | Dim. A | Dim. B | Dim. C | Dim. D |
|-----------|---------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|
| 1 | 97'-11 ³ / ₄ " | 94'-7 ³ / ₄ " | 24'-5 ⁵ / ₁₆ " | 23'-7 ⁵ / ₁₆ " |
| 2 | 97'-11 ³ / ₁₆ " | 94'-7 ³ / ₁₆ " | ±24'-5 ⁵ / ₁₆ " | ±23'-7 ⁵ / ₁₆ " |
| 3 thru 14 | 98'-0" | 94'-8" | 24'-6" | 23'-8" |
| 15 | 97'-11 ³ / ₁₆ " | 94'-7 ³ / ₁₆ " | ±24'-5 ⁵ / ₁₆ " | ±23'-7 ⁵ / ₁₆ " |
| 16 | 97'-11 ³ / ₄ " | 94'-7 ³ / ₄ " | 24'-5 ⁵ / ₁₆ " | 23'-7 ⁵ / ₁₆ " |



To determine "t": Elevations of the top flanges of the existing beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

Notes:

Negative offset denotes an offset to the left of Profile Grade. Offsets for Beams 1 thru 8 are based off of PG W.B. Roadway. Offsets for Beams 9 thru 16 are based off of PG E.B. Roadway.

BEAM 1

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.14 | -43.75 | 694.20 | 694.20 |
| ⊕ Brg. W. Abut. | 135+71.94 | -43.76 | 694.19 | 694.19 |
| D | 135+81.93 | -43.91 | 694.12 | 694.15 |
| E | 135+91.93 | -44.05 | 694.05 | 694.11 |
| F | 136+01.93 | -44.20 | 693.98 | 694.05 |
| G | 136+11.93 | -44.34 | 693.90 | 693.99 |
| H | 136+21.93 | -44.49 | 693.83 | 693.91 |
| I | 136+31.93 | -44.63 | 693.75 | 693.81 |
| J | 136+41.93 | -44.77 | 693.67 | 693.71 |
| K | 136+51.93 | -44.92 | 693.58 | 693.60 |
| L | 136+61.93 | -45.06 | 693.49 | 693.49 |
| ⊕ Brg. Pier 1 | 136+69.90 | -45.18 | 693.41 | 693.41 |
| M | 136+79.90 | -45.33 | 693.31 | 693.32 |
| N | 136+89.90 | -45.47 | 693.21 | 693.23 |
| O | 136+99.90 | -45.62 | 693.10 | 693.14 |
| P | 137+09.90 | -45.76 | 692.99 | 693.04 |
| Q | 137+19.90 | -45.91 | 692.87 | 692.94 |
| R | 137+29.90 | -46.05 | 692.75 | 692.82 |
| S | 137+39.90 | -46.19 | 692.63 | 692.69 |
| T | 137+49.90 | -46.34 | 692.50 | 692.54 |
| ⊕ Brg. E. Abut. | 137+64.54 | -46.55 | 692.32 | 692.32 |
| Bk. E. Abut. | 137+65.33 | -46.56 | 692.30 | 692.30 |

BEAM 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.28 | -37.99 | 694.32 | 694.32 |
| ⊕ Brg. W. Abut. | 135+72.07 | -38.00 | 694.31 | 694.31 |
| D | 135+82.07 | -38.08 | 694.24 | 694.27 |
| E | 135+92.07 | -38.16 | 694.17 | 694.23 |
| F | 136+02.07 | -38.23 | 694.10 | 694.18 |
| G | 136+12.07 | -38.31 | 694.03 | 694.11 |
| H | 136+22.07 | -38.39 | 693.95 | 694.03 |
| I | 136+32.07 | -38.47 | 693.88 | 693.94 |
| J | 136+42.07 | -38.55 | 693.80 | 693.84 |
| K | 136+52.07 | -38.62 | 693.71 | 693.73 |
| L | 136+62.07 | -38.70 | 693.62 | 693.63 |
| ⊕ Brg. Pier 1 | 136+70.05 | -38.76 | 693.55 | 693.55 |
| M | 136+80.05 | -38.84 | 693.45 | 693.45 |
| N | 136+90.05 | -38.92 | 693.34 | 693.36 |
| O | 137+00.05 | -39.00 | 693.24 | 693.27 |
| P | 137+10.05 | -39.07 | 693.13 | 693.18 |
| Q | 137+20.05 | -39.15 | 693.01 | 693.08 |
| R | 137+30.05 | -39.23 | 692.89 | 692.96 |
| S | 137+40.05 | -39.31 | 692.77 | 692.83 |
| T | 137+50.05 | -39.39 | 692.65 | 692.69 |
| ⊕ Brg. E. Abut. | 137+64.70 | -39.50 | 692.47 | 692.47 |
| Bk. E. Abut. | 137+65.50 | -39.51 | 692.45 | 692.45 |

BEAM 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.42 | -32.25 | 694.44 | 694.44 |
| ⊕ Brg. W. Abut. | 135+72.21 | -32.25 | 694.43 | 694.43 |
| D | 135+82.21 | -32.25 | 694.36 | 694.40 |
| E | 135+92.21 | -32.25 | 694.29 | 694.36 |
| F | 136+02.21 | -32.25 | 694.22 | 694.30 |
| G | 136+12.21 | -32.25 | 694.15 | 694.24 |
| H | 136+22.21 | -32.25 | 694.08 | 694.16 |
| I | 136+32.21 | -32.25 | 694.01 | 694.07 |
| J | 136+42.21 | -32.25 | 693.93 | 693.97 |
| K | 136+52.21 | -32.25 | 693.84 | 693.86 |
| L | 136+62.21 | -32.25 | 693.75 | 693.76 |
| ⊕ Brg. Pier 1 | 136+70.21 | -32.25 | 693.68 | 693.68 |
| M | 136+80.21 | -32.25 | 693.58 | 693.59 |
| N | 136+90.21 | -32.25 | 693.48 | 693.50 |
| O | 137+00.21 | -32.25 | 693.38 | 693.41 |
| P | 137+10.21 | -32.25 | 693.27 | 693.32 |
| Q | 137+20.21 | -32.25 | 693.15 | 693.22 |
| R | 137+30.21 | -32.25 | 693.04 | 693.11 |
| S | 137+40.21 | -32.25 | 692.91 | 692.98 |
| T | 137+50.21 | -32.25 | 692.79 | 692.84 |
| ⊕ Brg. E. Abut. | 137+64.88 | -32.25 | 692.61 | 692.61 |
| Bk. E. Abut. | 137+65.67 | -32.25 | 692.60 | 692.60 |

BEAM 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.59 | -25.00 | 694.59 | 694.59 |
| ⊕ Brg. W. Abut. | 135+72.38 | -25.00 | 694.58 | 694.58 |
| D | 135+82.38 | -25.00 | 694.51 | 694.55 |
| E | 135+92.38 | -25.00 | 694.44 | 694.51 |
| F | 136+02.38 | -25.00 | 694.37 | 694.46 |
| G | 136+12.38 | -25.00 | 694.30 | 694.40 |
| H | 136+22.38 | -25.00 | 694.23 | 694.32 |
| I | 136+32.38 | -25.00 | 694.16 | 694.22 |
| J | 136+42.38 | -25.00 | 694.08 | 694.12 |
| K | 136+52.38 | -25.00 | 693.99 | 694.01 |
| L | 136+62.38 | -25.00 | 693.90 | 693.91 |
| ⊕ Brg. Pier 1 | 136+70.38 | -25.00 | 693.83 | 693.83 |
| M | 136+80.38 | -25.00 | 693.73 | 693.74 |
| N | 136+90.38 | -25.00 | 693.63 | 693.65 |
| O | 137+00.38 | -25.00 | 693.53 | 693.57 |
| P | 137+10.38 | -25.00 | 693.42 | 693.48 |
| Q | 137+20.38 | -25.00 | 693.30 | 693.37 |
| R | 137+30.38 | -25.00 | 693.18 | 693.26 |
| S | 137+40.38 | -25.00 | 693.06 | 693.13 |
| T | 137+50.38 | -25.00 | 692.94 | 692.99 |
| ⊕ Brg. E. Abut. | 137+65.05 | -25.00 | 692.76 | 692.76 |
| Bk. E. Abut. | 137+65.84 | -25.00 | 692.75 | 692.75 |

BEAM 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.76 | -17.75 | 694.70 | 694.70 |
| ⊕ Brg. W. Abut. | 135+72.56 | -17.75 | 694.70 | 694.70 |
| D | 135+82.56 | -17.75 | 694.63 | 694.66 |
| E | 135+92.56 | -17.75 | 694.56 | 694.62 |
| F | 136+02.56 | -17.75 | 694.49 | 694.58 |
| G | 136+12.56 | -17.75 | 694.42 | 694.51 |
| H | 136+22.56 | -17.75 | 694.35 | 694.43 |
| I | 136+32.56 | -17.75 | 694.27 | 694.34 |
| J | 136+42.56 | -17.75 | 694.19 | 694.24 |
| K | 136+52.56 | -17.75 | 694.11 | 694.13 |
| L | 136+62.56 | -17.75 | 694.02 | 694.03 |
| ⊕ Brg. Pier 1 | 136+70.56 | -17.75 | 693.95 | 693.95 |
| M | 136+80.56 | -17.75 | 693.85 | 693.85 |
| N | 136+90.56 | -17.75 | 693.75 | 693.77 |
| O | 137+00.56 | -17.75 | 693.64 | 693.68 |
| P | 137+10.56 | -17.75 | 693.53 | 693.59 |
| Q | 137+20.56 | -17.75 | 693.42 | 693.49 |
| R | 137+30.56 | -17.75 | 693.30 | 693.37 |
| S | 137+40.56 | -17.75 | 693.18 | 693.24 |
| T | 137+50.56 | -17.75 | 693.06 | 693.10 |
| ⊕ Brg. E. Abut. | 137+65.22 | -17.75 | 692.88 | 692.88 |
| Bk. E. Abut. | 137+66.01 | -17.75 | 692.87 | 692.87 |

⊕ W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.90 | -12.00 | 694.79 | 694.79 |
| ⊕ Brg. W. Abut. | 135+72.69 | -12.00 | 694.79 | 694.79 |
| D | 135+82.69 | -12.00 | 694.72 | 694.73 |
| E | 135+92.69 | -12.00 | 694.65 | 694.68 |
| F | 136+02.69 | -12.00 | 694.58 | 694.61 |
| G | 136+12.69 | -12.00 | 694.51 | 694.55 |
| H | 136+22.69 | -12.00 | 694.44 | 694.47 |
| I | 136+32.69 | -12.00 | 694.36 | 694.39 |
| J | 136+42.69 | -12.00 | 694.28 | 694.30 |
| K | 136+52.69 | -12.00 | 694.20 | 694.21 |
| L | 136+62.69 | -12.00 | 694.11 | 694.11 |
| ⊕ Brg. Pier 1 | 136+70.69 | -12.00 | 694.03 | 694.03 |
| M | 136+80.69 | -12.00 | 693.94 | 693.94 |
| N | 136+90.69 | -12.00 | 693.84 | 693.84 |
| O | 137+00.69 | -12.00 | 693.73 | 693.75 |
| P | 137+10.69 | -12.00 | 693.62 | 693.65 |
| Q | 137+20.69 | -12.00 | 693.51 | 693.54 |
| R | 137+30.69 | -12.00 | 693.39 | 693.42 |
| S | 137+40.69 | -12.00 | 693.27 | 693.29 |
| T | 137+50.69 | -12.00 | 693.15 | 693.16 |
| ⊕ Brg. E. Abut. | 137+65.36 | -12.00 | 692.97 | 692.97 |
| Bk. E. Abut. | 137+66.15 | -12.00 | 692.96 | 692.96 |

BEAM 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+71.94 | -10.50 | 694.77 | 694.77 |
| ⊕ Brg. W. Abut. | 135+72.73 | -10.50 | 694.76 | 694.76 |
| D | 135+82.73 | -10.50 | 694.69 | 694.73 |
| E | 135+92.73 | -10.50 | 694.62 | 694.69 |
| F | 136+02.73 | -10.50 | 694.56 | 694.64 |
| G | 136+12.73 | -10.50 | 694.49 | 694.58 |
| H | 136+22.73 | -10.50 | 694.41 | 694.50 |
| I | 136+32.73 | -10.50 | 694.34 | 694.41 |
| J | 136+42.73 | -10.50 | 694.26 | 694.30 |
| K | 136+52.73 | -10.50 | 694.17 | 694.20 |
| L | 136+62.73 | -10.50 | 694.08 | 694.09 |
| ⊕ Brg. Pier 1 | 136+70.73 | -10.50 | 694.01 | 694.01 |
| M | 136+80.73 | -10.50 | 693.91 | 693.92 |
| N | 136+90.73 | -10.50 | 693.81 | 693.83 |
| O | 137+00.73 | -10.50 | 693.71 | 693.75 |
| P | 137+10.73 | -10.50 | 693.60 | 693.66 |
| Q | 137+20.73 | -10.50 | 693.48 | 693.56 |
| R | 137+30.73 | -10.50 | 693.37 | 693.44 |
| S | 137+40.73 | -10.50 | 693.24 | 693.31 |
| T | 137+50.73 | -10.50 | 693.12 | 693.17 |
| ⊕ Brg. E. Abut. | 137+65.40 | -10.50 | 692.95 | 692.95 |
| Bk. E. Abut. | 137+66.19 | -10.50 | 692.94 | 692.94 |

BEAM 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+72.11 | -3.25 | 694.65 | 694.65 |
| ⊕ Brg. W. Abut. | 135+72.90 | -3.25 | 694.65 | 694.65 |
| D | 135+82.90 | -3.25 | 694.58 | 694.61 |
| E | 135+92.90 | -3.25 | 694.51 | 694.57 |
| F | 136+02.90 | -3.25 | 694.44 | 694.53 |
| G | 136+12.90 | -3.25 | 694.37 | 694.46 |
| H | 136+22.90 | -3.25 | 694.30 | 694.38 |
| I | 136+32.90 | -3.25 | 694.22 | 694.29 |
| J | 136+42.90 | -3.25 | 694.14 | 694.19 |
| K | 136+52.90 | -3.25 | 694.06 | 694.08 |
| L | 136+62.90 | -3.25 | 693.97 | 693.98 |
| ⊕ Brg. Pier 1 | 136+70.90 | -3.25 | 693.90 | 693.90 |
| M | 136+80.90 | -3.25 | 693.80 | 693.80 |
| N | 136+90.90 | -3.25 | 693.70 | 693.72 |
| O | 137+00.90 | -3.25 | 693.59 | 693.63 |
| P | 137+10.90 | -3.25 | 693.48 | 693.54 |
| Q | 137+20.90 | -3.25 | 693.37 | 693.44 |
| R | 137+30.90 | -3.25 | 693.25 | 693.32 |
| S | 137+40.90 | -3.25 | 693.13 | 693.19 |
| T | 137+50.90 | -3.25 | 693.01 | 693.05 |
| ⊕ Brg. E. Abut. | 137+65.57 | -3.25 | 692.83 | 692.83 |
| Bk. E. Abut. | 137+66.36 | -3.25 | 692.82 | 692.82 |

PG W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+72.19 | 0.00 | 694.60 | 694.60 |
| ⊕ Brg. W. Abut. | 135+72.98 | 0.00 | 694.60 | 694.60 |
| D | 135+82.98 | 0.00 | 694.53 | 694.57 |
| E | 135+92.98 | 0.00 | 694.46 | 694.53 |
| F | 136+02.98 | 0.00 | 694.39 | 694.48 |
| G | 136+12.98 | 0.00 | 694.32 | 694.42 |
| H | 136+22.98 | 0.00 | 694.25 | 694.34 |
| I | 136+32.98 | 0.00 | 694.17 | 694.25 |
| J | 136+42.98 | 0.00 | 694.09 | 694.14 |
| K | 136+52.98 | 0.00 | 694.01 | 694.03 |
| L | 136+62.98 | 0.00 | 693.92 | 693.92 |
| ⊕ Brg. Pier 1 | 136+70.98 | 0.00 | 693.84 | 693.84 |
| M | 136+80.98 | 0.00 | 693.75 | 693.75 |
| N | 136+90.98 | 0.00 | 693.65 | 693.67 |
| O | 137+00.98 | 0.00 | 693.54 | 693.58 |
| P | 137+10.98 | 0.00 | 693.43 | 693.49 |
| Q | 137+20.98 | 0.00 | 693.32 | 693.39 |
| R | 137+30.98 | 0.00 | 693.20 | 693.28 |
| S | 137+40.98 | 0.00 | 693.08 | 693.15 |
| T | 137+50.98 | 0.00 | 692.96 | 693.00 |
| ⊕ Brg. E. Abut. | 137+65.65 | 0.00 | 692.78 | 692.78 |
| Bk. E. Abut. | 137+66.44 | 0.00 | 692.77 | 692.77 |

BEAM 8

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+72.28 | 4.00 | 694.52 | 694.52 |
| ⊕ Brg. W. Abut. | 135+73.08 | 4.00 | 694.51 | 694.51 |
| D | 135+83.08 | 4.00 | 694.44 | 694.48 |
| E | 135+93.08 | 4.00 | 694.37 | 694.44 |
| F | 136+03.08 | 4.00 | 694.31 | 694.39 |
| G | 136+13.08 | 4.00 | 694.23 | 694.32 |
| H | 136+23.08 | 4.00 | 694.16 | 694.25 |
| I | 136+33.08 | 4.00 | 694.09 | 694.15 |
| J | 136+43.08 | 4.00 | 694.01 | 694.05 |
| K | 136+53.08 | 4.00 | 693.92 | 693.94 |
| L | 136+63.08 | 4.00 | 693.83 | 693.84 |
| ⊕ Brg. Pier 1 | 136+71.08 | 4.00 | 693.76 | 693.76 |
| M | 136+81.08 | 4.00 | 693.66 | 693.67 |
| N | 136+91.08 | 4.00 | 693.56 | 693.58 |
| O | 137+01.08 | 4.00 | 693.46 | 693.49 |
| P | 137+11.08 | 4.00 | 693.35 | 693.40 |
| Q | 137+21.08 | 4.00 | 693.23 | 693.30 |
| R | 137+31.08 | 4.00 | 693.11 | 693.19 |
| S | 137+41.08 | 4.00 | 692.99 | 693.06 |
| T | 137+51.08 | 4.00 | 692.87 | 692.91 |
| ⊕ Brg. E. Abut. | 137+65.74 | 4.00 | 692.69 | 692.69 |
| Bk. E. Abut. | 137+66.53 | 4.00 | 692.68 | 692.68 |

BEAM 9

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+73.61 | -4.00 | 694.54 | 694.54 |
| ⊕ Brg. W. Abut. | 135+74.40 | -4.00 | 694.53 | 694.53 |
| D | 135+84.40 | -4.00 | 694.46 | 694.49 |
| E | 135+94.40 | -4.00 | 694.38 | 694.44 |
| F | 136+04.40 | -4.00 | 694.29 | 694.38 |
| G | 136+14.40 | -4.00 | 694.21 | 694.30 |
| H | 136+24.40 | -4.00 | 694.12 | 694.21 |
| I | 136+34.40 | -4.00 | 694.04 | 694.10 |
| J | 136+44.40 | -4.00 | 693.95 | 693.99 |
| K | 136+54.40 | -4.00 | 693.85 | 693.87 |
| L | 136+64.40 | -4.00 | 693.76 | 693.76 |
| ⊕ Brg. Pier 1 | 136+72.40 | -4.00 | 693.68 | 693.68 |
| M | 136+82.40 | -4.00 | 693.58 | 693.59 |
| N | 136+92.40 | -4.00 | 693.48 | 693.50 |
| O | 137+02.40 | -4.00 | 693.38 | 693.42 |
| P | 137+12.40 | -4.00 | 693.27 | 693.33 |
| Q | 137+22.40 | -4.00 | 693.17 | 693.24 |
| R | 137+32.40 | -4.00 | 693.06 | 693.13 |
| S | 137+42.40 | -4.00 | 692.95 | 693.01 |
| T | 137+52.40 | -4.00 | 692.83 | 692.88 |
| ⊕ Brg. E. Abut. | 137+67.07 | -4.00 | 692.66 | 692.66 |
| Bk. E. Abut. | 137+67.86 | -4.00 | 692.65 | 692.65 |

PG E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+73.71 | 0.00 | 694.62 | 694.62 |
| ⊕ Brg. W. Abut. | 135+74.50 | 0.00 | 694.62 | 694.62 |
| D | 135+84.50 | 0.00 | 694.54 | 694.58 |
| E | 135+94.50 | 0.00 | 694.46 | 694.53 |
| F | 136+04.50 | 0.00 | 694.38 | 694.47 |
| G | 136+14.50 | 0.00 | 694.29 | 694.39 |
| H | 136+24.50 | 0.00 | 694.21 | 694.30 |
| I | 136+34.50 | 0.00 | 694.12 | 694.19 |
| J | 136+44.50 | 0.00 | 694.03 | 694.08 |
| K | 136+54.50 | 0.00 | 693.94 | 693.96 |
| L | 136+64.50 | 0.00 | 693.84 | 693.85 |
| ⊕ Brg. Pier 1 | 136+72.50 | 0.00 | 693.76 | 693.76 |
| M | 136+82.50 | 0.00 | 693.66 | 693.67 |
| N | 136+92.50 | 0.00 | 693.56 | 693.58 |
| O | 137+02.50 | 0.00 | 693.46 | 693.50 |
| P | 137+12.50 | 0.00 | 693.36 | 693.42 |
| Q | 137+22.50 | 0.00 | 693.25 | 693.33 |
| R | 137+32.50 | 0.00 | 693.14 | 693.22 |
| S | 137+42.50 | 0.00 | 693.03 | 693.10 |
| T | 137+52.50 | 0.00 | 692.92 | 692.96 |
| ⊕ Brg. E. Abut. | 137+67.17 | 0.00 | 692.75 | 692.75 |
| Bk. E. Abut. | 137+67.96 | 0.00 | 692.74 | 692.74 |

BEAM 10

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+73.78 | 3.17 | 694.67 | 694.67 |
| ⊕ Brg. W. Abut. | 135+74.58 | 3.17 | 694.67 | 694.67 |
| D | 135+84.58 | 3.17 | 694.59 | 694.62 |
| E | 135+94.58 | 3.17 | 694.51 | 694.57 |
| F | 136+04.58 | 3.17 | 694.43 | 694.51 |
| G | 136+14.58 | 3.17 | 694.34 | 694.43 |
| H | 136+24.58 | 3.17 | 694.26 | 694.34 |
| I | 136+34.58 | 3.17 | 694.17 | 694.24 |
| J | 136+44.58 | 3.17 | 694.08 | 694.12 |
| K | 136+54.58 | 3.17 | 693.98 | 694.01 |
| L | 136+64.58 | 3.17 | 693.89 | 693.90 |
| ⊕ Brg. Pier 1 | 136+72.58 | 3.17 | 693.81 | 693.81 |
| M | 136+82.58 | 3.17 | 693.71 | 693.72 |
| N | 136+92.58 | 3.17 | 693.61 | 693.63 |
| O | 137+02.58 | 3.17 | 693.51 | 693.55 |
| P | 137+12.58 | 3.17 | 693.41 | 693.46 |
| Q | 137+22.58 | 3.17 | 693.30 | 693.37 |
| R | 137+32.58 | 3.17 | 693.19 | 693.26 |
| S | 137+42.58 | 3.17 | 693.08 | 693.14 |
| T | 137+52.58 | 3.17 | 692.96 | 693.01 |
| ⊕ Brg. E. Abut. | 137+67.24 | 3.17 | 692.79 | 692.79 |
| Bk. E. Abut. | 137+68.03 | 3.17 | 692.78 | 692.78 |

BEAM 11

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+73.95 | 10.33 | 694.78 | 694.78 |
| ⊕ Brg. W. Abut. | 135+74.75 | 10.33 | 694.78 | 694.78 |
| D | 135+84.75 | 10.33 | 694.70 | 694.73 |
| E | 135+94.75 | 10.33 | 694.62 | 694.68 |
| F | 136+04.75 | 10.33 | 694.54 | 694.62 |
| G | 136+14.75 | 10.33 | 694.45 | 694.54 |
| H | 136+24.75 | 10.33 | 694.37 | 694.45 |
| I | 136+34.75 | 10.33 | 694.28 | 694.35 |
| J | 136+44.75 | 10.33 | 694.19 | 694.23 |
| K | 136+54.75 | 10.33 | 694.09 | 694.12 |
| L | 136+64.75 | 10.33 | 694.00 | 694.01 |
| ⊕ Brg. Pier 1 | 136+72.75 | 10.33 | 693.92 | 693.92 |
| M | 136+82.75 | 10.33 | 693.82 | 693.83 |
| N | 136+92.75 | 10.33 | 693.72 | 693.74 |
| O | 137+02.75 | 10.33 | 693.62 | 693.66 |
| P | 137+12.75 | 10.33 | 693.52 | 693.57 |
| Q | 137+22.75 | 10.33 | 693.41 | 693.48 |
| R | 137+32.75 | 10.33 | 693.30 | 693.37 |
| S | 137+42.75 | 10.33 | 693.19 | 693.25 |
| T | 137+52.75 | 10.33 | 693.07 | 693.12 |
| ⊕ Brg. E. Abut. | 137+67.41 | 10.33 | 692.90 | 692.90 |
| Bk. E. Abut. | 137+68.20 | 10.33 | 692.89 | 692.89 |

⊕ E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+73.99 | 12.00 | 694.81 | 694.81 |
| ⊕ Brg. W. Abut. | 135+74.79 | 12.00 | 694.80 | 694.80 |
| D | 135+84.79 | 12.00 | 694.72 | 694.74 |
| E | 135+94.79 | 12.00 | 694.64 | 694.67 |
| F | 136+04.79 | 12.00 | 694.56 | 694.60 |
| G | 136+14.79 | 12.00 | 694.48 | 694.52 |
| H | 136+24.79 | 12.00 | 694.39 | 694.43 |
| I | 136+34.79 | 12.00 | 694.30 | 694.34 |
| J | 136+44.79 | 12.00 | 694.21 | 694.23 |
| K | 136+54.79 | 12.00 | 694.12 | 694.13 |
| L | 136+64.79 | 12.00 | 694.03 | 694.03 |
| ⊕ Brg. Pier 1 | 136+72.79 | 12.00 | 693.95 | 693.95 |
| M | 136+82.79 | 12.00 | 693.85 | 693.85 |
| N | 136+92.79 | 12.00 | 693.75 | 693.76 |
| O | 137+02.79 | 12.00 | 693.65 | 693.66 |
| P | 137+12.79 | 12.00 | 693.54 | 693.57 |
| Q | 137+22.79 | 12.00 | 693.43 | 693.47 |
| R | 137+32.79 | 12.00 | 693.32 | 693.36 |
| S | 137+42.79 | 12.00 | 693.21 | 693.24 |
| T | 137+52.79 | 12.00 | 693.10 | 693.12 |
| ⊕ Brg. E. Abut. | 137+67.45 | 12.00 | 692.93 | 692.93 |
| Bk. E. Abut. | 137+68.24 | 12.00 | 692.92 | 692.92 |

BEAM 12

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+74.13 | 17.50 | 694.72 | 694.72 |
| ⊙ Brg. W. Abut. | 135+74.92 | 17.50 | 694.72 | 694.72 |
| D | 135+84.92 | 17.50 | 694.64 | 694.67 |
| E | 135+94.92 | 17.50 | 694.56 | 694.62 |
| F | 136+04.92 | 17.50 | 694.48 | 694.56 |
| G | 136+14.92 | 17.50 | 694.39 | 694.48 |
| H | 136+24.92 | 17.50 | 694.30 | 694.39 |
| I | 136+34.92 | 17.50 | 694.22 | 694.28 |
| J | 136+44.92 | 17.50 | 694.13 | 694.17 |
| K | 136+54.92 | 17.50 | 694.03 | 694.06 |
| L | 136+64.92 | 17.50 | 693.94 | 693.94 |
| ⊙ Brg. Pier 1 | 136+72.92 | 17.50 | 693.86 | 693.86 |
| M | 136+82.92 | 17.50 | 693.76 | 693.77 |
| N | 136+92.92 | 17.50 | 693.66 | 693.68 |
| O | 137+02.92 | 17.50 | 693.56 | 693.60 |
| P | 137+12.92 | 17.50 | 693.45 | 693.51 |
| Q | 137+22.92 | 17.50 | 693.35 | 693.42 |
| R | 137+32.92 | 17.50 | 693.24 | 693.31 |
| S | 137+42.92 | 17.50 | 693.13 | 693.19 |
| T | 137+52.92 | 17.50 | 693.01 | 693.06 |
| ⊙ Brg. E. Abut. | 137+67.58 | 17.50 | 692.84 | 692.84 |
| Bk. E. Abut. | 137+68.38 | 17.50 | 692.83 | 692.83 |

BEAM 13

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+74.30 | 24.67 | 694.60 | 694.60 |
| ⊙ Brg. W. Abut. | 135+75.09 | 24.67 | 694.60 | 694.60 |
| D | 135+85.09 | 24.67 | 694.52 | 694.56 |
| E | 135+95.09 | 24.67 | 694.44 | 694.51 |
| F | 136+05.09 | 24.67 | 694.36 | 694.44 |
| G | 136+15.09 | 24.67 | 694.27 | 694.36 |
| H | 136+25.09 | 24.67 | 694.19 | 694.27 |
| I | 136+35.09 | 24.67 | 694.10 | 694.17 |
| J | 136+45.09 | 24.67 | 694.01 | 694.05 |
| K | 136+55.09 | 24.67 | 693.92 | 693.94 |
| L | 136+65.09 | 24.67 | 693.82 | 693.83 |
| ⊙ Brg. Pier 1 | 136+73.09 | 24.67 | 693.74 | 693.74 |
| M | 136+83.09 | 24.67 | 693.64 | 693.65 |
| N | 136+93.09 | 24.67 | 693.54 | 693.56 |
| O | 137+03.09 | 24.67 | 693.44 | 693.48 |
| P | 137+13.09 | 24.67 | 693.34 | 693.39 |
| Q | 137+23.09 | 24.67 | 693.23 | 693.30 |
| R | 137+33.09 | 24.67 | 693.12 | 693.19 |
| S | 137+43.09 | 24.67 | 693.01 | 693.07 |
| T | 137+53.09 | 24.67 | 692.90 | 692.94 |
| ⊙ Brg. E. Abut. | 137+67.76 | 24.67 | 692.72 | 692.72 |
| Bk. E. Abut. | 137+68.55 | 24.67 | 692.72 | 692.72 |

BEAM 14

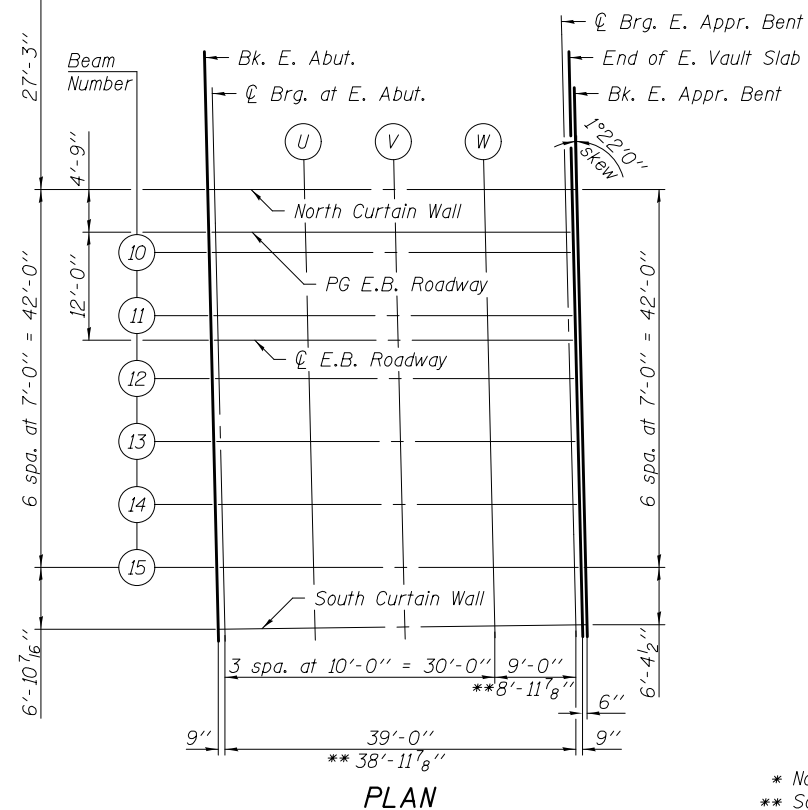
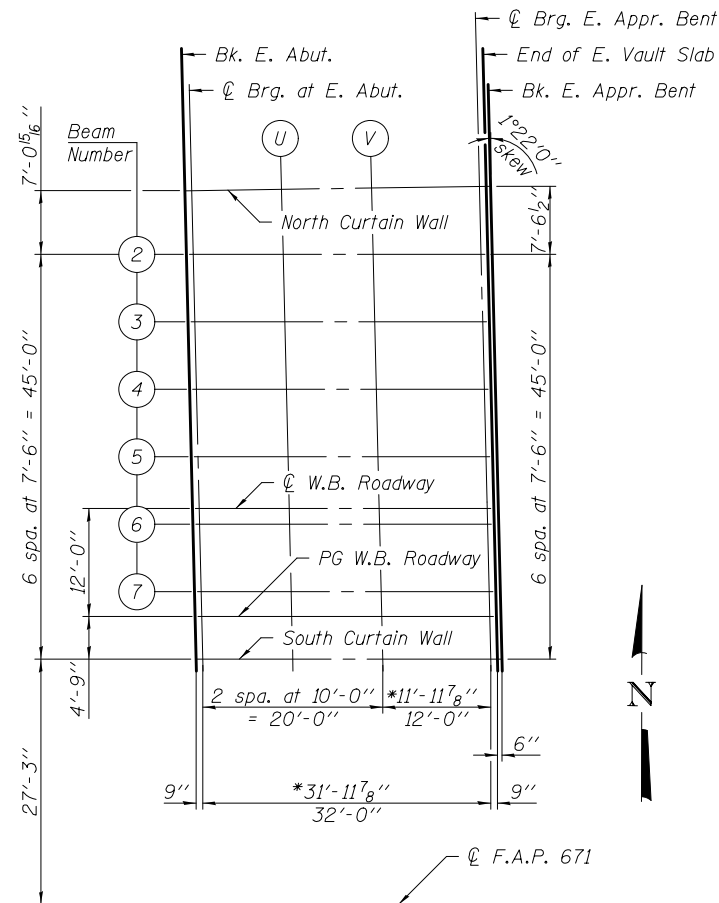
| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+74.47 | 31.83 | 694.45 | 694.45 |
| ⊙ Brg. W. Abut. | 135+75.26 | 31.83 | 694.45 | 694.45 |
| D | 135+85.26 | 31.83 | 694.37 | 694.40 |
| E | 135+95.26 | 31.83 | 694.29 | 694.35 |
| F | 136+05.26 | 31.83 | 694.21 | 694.29 |
| G | 136+15.26 | 31.83 | 694.12 | 694.21 |
| H | 136+25.26 | 31.83 | 694.04 | 694.12 |
| I | 136+35.26 | 31.83 | 693.95 | 694.01 |
| J | 136+45.26 | 31.83 | 693.86 | 693.90 |
| K | 136+55.26 | 31.83 | 693.76 | 693.79 |
| L | 136+65.26 | 31.83 | 693.67 | 693.68 |
| ⊙ Brg. Pier 1 | 136+73.26 | 31.83 | 693.59 | 693.59 |
| M | 136+83.26 | 31.83 | 693.49 | 693.50 |
| N | 136+93.26 | 31.83 | 693.39 | 693.41 |
| O | 137+03.26 | 31.83 | 693.29 | 693.33 |
| P | 137+13.26 | 31.83 | 693.19 | 693.24 |
| Q | 137+23.26 | 31.83 | 693.08 | 693.15 |
| R | 137+33.26 | 31.83 | 692.97 | 693.04 |
| S | 137+43.26 | 31.83 | 692.86 | 692.92 |
| T | 137+53.26 | 31.83 | 692.74 | 692.78 |
| ⊙ Brg. E. Abut. | 137+67.93 | 31.83 | 692.57 | 692.57 |
| Bk. E. Abut. | 137+68.72 | 31.83 | 692.56 | 692.56 |

BEAM 15

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+74.63 | 38.84 | 694.31 | 694.31 |
| ⊙ Brg. W. Abut. | 135+75.43 | 38.83 | 694.30 | 694.30 |
| D | 135+85.43 | 38.77 | 694.22 | 694.26 |
| E | 135+95.43 | 38.70 | 694.15 | 694.20 |
| F | 136+05.43 | 38.64 | 694.06 | 694.14 |
| G | 136+15.43 | 38.57 | 693.98 | 694.06 |
| H | 136+25.43 | 38.51 | 693.90 | 693.97 |
| I | 136+35.43 | 38.44 | 693.81 | 693.87 |
| J | 136+45.42 | 38.38 | 693.72 | 693.76 |
| K | 136+55.42 | 38.31 | 693.63 | 693.65 |
| L | 136+65.42 | 38.25 | 693.53 | 693.54 |
| ⊙ Brg. Pier 1 | 136+73.41 | 38.20 | 693.46 | 693.46 |
| M | 136+83.41 | 38.13 | 693.36 | 693.37 |
| N | 136+93.41 | 38.07 | 693.26 | 693.28 |
| O | 137+03.41 | 38.00 | 693.16 | 693.20 |
| P | 137+13.41 | 37.94 | 693.06 | 693.11 |
| Q | 137+23.41 | 37.87 | 692.95 | 693.01 |
| R | 137+33.41 | 37.81 | 692.84 | 692.91 |
| S | 137+43.41 | 37.74 | 692.73 | 692.79 |
| T | 137+53.41 | 37.68 | 692.62 | 692.66 |
| ⊙ Brg. E. Abut. | 137+68.06 | 37.58 | 692.45 | 692.45 |
| Bk. E. Abut. | 137+68.85 | 37.58 | 692.44 | 692.44 |

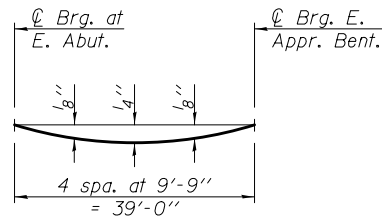
BEAM 16

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|-----------------|-----------|--------|------------------------------|--|
| Bk. W. Abut. | 135+74.80 | 45.83 | 694.16 | 694.16 |
| ⊙ Brg. W. Abut. | 135+75.59 | 45.82 | 694.15 | 694.15 |
| D | 135+85.59 | 45.70 | 694.08 | 694.11 |
| E | 135+95.59 | 45.57 | 694.00 | 694.06 |
| F | 136+05.59 | 45.44 | 693.92 | 694.00 |
| G | 136+15.59 | 45.32 | 693.84 | 693.92 |
| H | 136+25.59 | 45.19 | 693.76 | 693.83 |
| I | 136+35.59 | 45.06 | 693.67 | 693.73 |
| J | 136+45.59 | 44.94 | 693.58 | 693.62 |
| K | 136+55.59 | 44.81 | 693.49 | 693.51 |
| L | 136+65.59 | 44.68 | 693.40 | 693.40 |
| ⊙ Brg. Pier 1 | 136+73.56 | 44.58 | 693.32 | 693.32 |
| M | 136+83.56 | 44.46 | 693.23 | 693.23 |
| N | 136+93.56 | 44.33 | 693.13 | 693.15 |
| O | 137+03.56 | 44.20 | 693.03 | 693.07 |
| P | 137+13.56 | 44.08 | 692.93 | 692.98 |
| Q | 137+23.56 | 43.95 | 692.82 | 692.89 |
| R | 137+33.56 | 43.82 | 692.72 | 692.78 |
| S | 137+43.56 | 43.70 | 692.61 | 692.67 |
| T | 137+53.56 | 43.57 | 692.50 | 692.54 |
| ⊙ Brg. E. Abut. | 137+68.20 | 43.39 | 692.33 | 692.33 |
| Bk. E. Abut. | 137+68.99 | 43.38 | 692.32 | 692.32 |



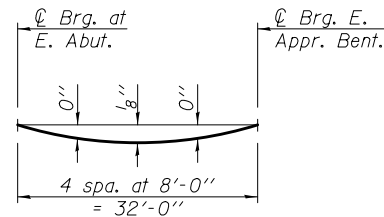
E.B. DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams.)

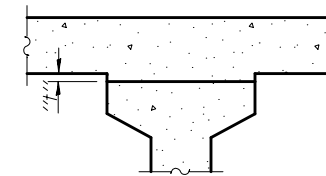


W.B. DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams.)



Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below and on sheets 12 and 13 of 62.



To determine "t": Elevations of the top flanges of the existing beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted For Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS

NORTH CURTAIN WALL - W.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+65.31 | -47.32 | 692.29 | 692.29 |
| C Brg. at E. Abut. | 137+66.06 | -47.33 | 692.27 | 692.27 |
| U | 137+76.06 | -47.47 | 692.07 | 692.07 |
| V | 137+86.06 | -47.62 | 691.86 | 691.86 |
| C Brg. E. Appr. Bent | 137+98.06 | -47.79 | 691.61 | 691.61 |
| End of E. Vault Slab | 137+98.80 | -47.80 | 691.60 | 691.60 |
| Bk. of E. Appr. Bent | 137+99.30 | -47.81 | 691.59 | 691.59 |

BEAM 2

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+65.48 | -40.25 | 692.44 | 692.44 |
| C Brg. at E. Abut. | 137+66.23 | -40.25 | 692.42 | 692.42 |
| U | 137+76.23 | -40.25 | 692.24 | 692.25 |
| V | 137+86.23 | -40.25 | 692.07 | 692.07 |
| C Brg. E. Appr. Bent | 137+98.23 | -40.25 | 691.85 | 691.85 |
| End of E. Vault Slab | 137+98.98 | -40.25 | 691.84 | 691.84 |
| Bk. of E. Appr. Bent | 137+99.48 | -40.25 | 691.83 | 691.83 |

BEAM 3

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+65.66 | -32.75 | 692.59 | 692.59 |
| C Brg. at E. Abut. | 137+66.41 | -32.75 | 692.58 | 692.58 |
| U | 137+76.41 | -32.75 | 692.43 | 692.43 |
| V | 137+86.41 | -32.75 | 692.28 | 692.28 |
| C Brg. E. Appr. Bent | 137+98.41 | -32.75 | 692.10 | 692.10 |
| End of E. Vault Slab | 137+99.16 | -32.75 | 692.08 | 692.08 |
| Bk. of E. Appr. Bent | 137+99.66 | -32.75 | 692.08 | 692.08 |

BEAM 4

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+65.84 | -25.25 | 692.75 | 692.75 |
| C Brg. at E. Abut. | 137+66.59 | -25.25 | 692.74 | 692.74 |
| U | 137+76.59 | -25.25 | 692.61 | 692.62 |
| V | 137+86.59 | -25.25 | 692.49 | 692.50 |
| C Brg. E. Appr. Bent | 137+98.59 | -25.25 | 692.34 | 692.34 |
| End of E. Vault Slab | 137+99.34 | -25.25 | 692.33 | 692.33 |
| Bk. of E. Appr. Bent | 137+99.84 | -25.25 | 692.32 | 692.32 |

* North Curtain Wall - W.B. only
** South Curtain Wall - E.B. only

Notes:
Negative offset denotes an offset to the left of Profile Grade.
Offset for North Curtain Wall - W.B., South Curtain Wall - W.B., and Beams 2 thru 7 are based off of PG W.B. Roadway.
Offset for North Curtain Wall - E.B., South Curtain Wall - E.B., and Beams 10 thru 15 are based off of PG E.B. Roadway.

| | | | |
|--------------------|-----------------------|-------------------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | CHECKED E.M. LAGEMANN | REVISIONS Del. Staging (IDOT) | |
| PLOT SCALE = | DRAWN K.A. KLUES | REVISIONS - | |
| PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISIONS - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOP OF SLAB ELEVATIONS
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 27 |
| CONTRACT NO. 68883 | | | | |
| SHEET NO. 11 OF 62 SHEETS | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

BEAM 5

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.02 | -17.75 | 692.87 | 692.87 |
| ⊙ Brg. at E. Abut. | 137+66.77 | -17.75 | 692.86 | 692.86 |
| U | 137+76.77 | -17.75 | 692.74 | 692.75 |
| V | 137+86.77 | -17.75 | 692.62 | 692.63 |
| ⊙ Brg. E. Appr. Bent | 137+98.77 | -17.75 | 692.48 | 692.48 |
| End of E. Vault Slab | 137+99.52 | -17.75 | 692.47 | 692.47 |
| Bk. of E. Appr. Bent | 138+00.02 | -17.75 | 692.46 | 692.46 |

⊙ W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.15 | -12.00 | 692.96 | 692.96 |
| ⊙ Brg. at E. Abut. | 137+66.90 | -12.00 | 692.95 | 692.95 |
| U | 137+76.90 | -12.00 | 692.83 | 692.83 |
| V | 137+86.90 | -12.00 | 692.71 | 692.71 |
| ⊙ Brg. E. Appr. Bent | 137+98.90 | -12.00 | 692.56 | 692.56 |
| End of E. Vault Slab | 137+99.65 | -12.00 | 692.55 | 692.55 |
| Bk. of E. Appr. Bent | 138+00.15 | -12.00 | 692.55 | 692.55 |

BEAM 6

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.20 | -10.25 | 692.93 | 692.93 |
| ⊙ Brg. at E. Abut. | 137+66.95 | -10.25 | 692.92 | 692.92 |
| U | 137+76.95 | -10.25 | 692.80 | 692.81 |
| V | 137+86.95 | -10.25 | 692.68 | 692.69 |
| ⊙ Brg. E. Appr. Bent | 137+98.95 | -10.25 | 692.54 | 692.54 |
| End of E. Vault Slab | 137+99.70 | -10.25 | 692.53 | 692.53 |
| Bk. of E. Appr. Bent | 138+00.20 | -10.25 | 692.52 | 692.52 |

BEAM 7

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.37 | -2.75 | 692.81 | 692.81 |
| ⊙ Brg. at E. Abut. | 137+67.12 | -2.75 | 692.80 | 692.80 |
| U | 137+77.12 | -2.75 | 692.68 | 692.69 |
| V | 137+87.12 | -2.75 | 692.56 | 692.57 |
| ⊙ Brg. E. Appr. Bent | 137+99.12 | -2.75 | 692.42 | 692.42 |
| End of E. Vault Slab | 137+99.87 | -2.75 | 692.41 | 692.41 |
| Bk. of E. Appr. Bent | 138+00.37 | -2.75 | 692.40 | 692.40 |

PG W.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.44 | 0.00 | 692.77 | 692.77 |
| ⊙ Brg. at E. Abut. | 137+67.19 | 0.00 | 692.76 | 692.76 |
| U | 137+77.19 | 0.00 | 692.64 | 692.64 |
| V | 137+87.19 | 0.00 | 692.52 | 692.52 |
| ⊙ Brg. E. Appr. Bent | 137+99.19 | 0.00 | 692.37 | 692.37 |
| End of E. Vault Slab | 137+99.94 | 0.00 | 692.36 | 692.36 |
| Bk. of E. Appr. Bent | 138+00.44 | 0.00 | 692.36 | 692.36 |

SOUTH CURTAIN WALL - W.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+66.55 | 4.75 | 692.67 | 692.67 |
| ⊙ Brg. at E. Abut. | 137+67.30 | 4.75 | 692.66 | 692.66 |
| U | 137+77.30 | 4.75 | 692.54 | 692.54 |
| V | 137+87.30 | 4.75 | 692.42 | 692.42 |
| ⊙ Brg. E. Appr. Bent | 137+99.30 | 4.75 | 692.27 | 692.27 |
| End of E. Vault Slab | 138+00.05 | 4.75 | 692.26 | 692.26 |
| Bk. of E. Appr. Bent | 138+00.55 | 4.75 | 692.26 | 692.26 |

NORTH CURTAIN WALL - E.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+67.85 | -4.75 | 692.64 | 692.64 |
| ⊙ Brg. at E. Abut. | 137+68.60 | -4.75 | 692.63 | 692.63 |
| U | 137+78.60 | -4.75 | 692.51 | 692.51 |
| V | 137+88.60 | -4.75 | 692.39 | 692.39 |
| W | 137+98.60 | -4.75 | 692.27 | 692.27 |
| ⊙ Brg. E. Appr. Bent | 138+07.60 | -4.75 | 692.15 | 692.15 |
| End of E. Vault Slab | 138+08.35 | -4.75 | 692.14 | 692.14 |
| Bk. of E. Appr. Bent | 138+08.85 | -4.75 | 692.14 | 692.14 |

PG E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+67.96 | 0.00 | 692.74 | 692.74 |
| ⊙ Brg. at E. Abut. | 137+68.71 | 0.00 | 692.73 | 692.73 |
| U | 137+78.71 | 0.00 | 692.61 | 692.62 |
| V | 137+88.71 | 0.00 | 692.49 | 692.50 |
| W | 137+98.71 | 0.00 | 692.36 | 692.37 |
| ⊙ Brg. E. Appr. Bent | 138+07.71 | 0.00 | 692.25 | 692.25 |
| End of E. Vault Slab | 138+08.46 | 0.00 | 692.24 | 692.24 |
| Bk. of E. Appr. Bent | 138+08.96 | 0.00 | 692.24 | 692.24 |

BEAM 10

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.01 | 2.25 | 692.77 | 692.77 |
| ⊘ Brg. at E. Abut. | 137+68.76 | 2.25 | 692.76 | 692.76 |
| U | 137+78.76 | 2.25 | 692.64 | 692.65 |
| V | 137+88.76 | 2.25 | 692.52 | 692.54 |
| W | 137+98.76 | 2.25 | 692.40 | 692.41 |
| ⊘ Brg. E. Appr. Bent | 138+07.76 | 2.25 | 692.29 | 692.29 |
| End of E. Vault Slab | 138+08.51 | 2.25 | 692.28 | 692.28 |
| Bk. of E. Appr. Bent | 138+09.01 | 2.25 | 692.27 | 692.27 |

BEAM 11

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.18 | 9.25 | 692.88 | 692.88 |
| ⊘ Brg. at E. Abut. | 137+68.93 | 9.25 | 692.87 | 692.87 |
| U | 137+78.93 | 9.25 | 692.75 | 692.76 |
| V | 137+88.93 | 9.25 | 692.63 | 692.64 |
| W | 137+98.93 | 9.25 | 692.51 | 692.52 |
| ⊘ Brg. E. Appr. Bent | 138+07.93 | 9.25 | 692.39 | 692.39 |
| End of E. Vault Slab | 138+08.68 | 9.25 | 692.38 | 692.38 |
| Bk. of E. Appr. Bent | 138+09.18 | 9.25 | 692.38 | 692.38 |

⊘ E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.25 | 12.00 | 692.92 | 692.92 |
| ⊘ Brg. at E. Abut. | 137+69.00 | 12.00 | 692.91 | 692.91 |
| U | 137+79.00 | 12.00 | 692.79 | 692.80 |
| V | 137+89.00 | 12.00 | 692.67 | 692.68 |
| W | 137+99.00 | 12.00 | 692.55 | 692.56 |
| ⊘ Brg. E. Appr. Bent | 138+08.00 | 12.00 | 692.44 | 692.44 |
| End of E. Vault Slab | 138+08.75 | 12.00 | 692.43 | 692.43 |
| Bk. of E. Appr. Bent | 138+09.25 | 12.00 | 692.42 | 692.42 |

BEAM 12

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.35 | 16.25 | 692.85 | 692.85 |
| ⊘ Brg. at E. Abut. | 137+69.10 | 16.25 | 692.84 | 692.84 |
| U | 137+79.10 | 16.25 | 692.73 | 692.74 |
| V | 137+89.10 | 16.25 | 692.60 | 692.62 |
| W | 137+99.10 | 16.25 | 692.48 | 692.49 |
| ⊘ Brg. E. Appr. Bent | 138+08.10 | 16.25 | 692.37 | 692.37 |
| End of E. Vault Slab | 138+08.85 | 16.25 | 692.36 | 692.36 |
| Bk. of E. Appr. Bent | 138+09.35 | 16.25 | 692.35 | 692.35 |

BEAM 13

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.51 | 23.25 | 692.74 | 692.74 |
| ⊘ Brg. at E. Abut. | 137+69.26 | 23.25 | 692.73 | 692.73 |
| U | 137+79.26 | 23.25 | 692.61 | 692.62 |
| V | 137+89.26 | 23.25 | 692.49 | 692.51 |
| W | 137+99.26 | 23.25 | 692.37 | 692.38 |
| ⊘ Brg. E. Appr. Bent | 138+08.26 | 23.25 | 692.26 | 692.26 |
| End of E. Vault Slab | 138+09.01 | 23.25 | 692.25 | 692.25 |
| Bk. of E. Appr. Bent | 138+09.51 | 23.25 | 692.24 | 692.24 |

BEAM 14

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.68 | 30.25 | 692.60 | 692.60 |
| ⊘ Brg. at E. Abut. | 137+69.43 | 30.25 | 692.59 | 692.59 |
| U | 137+79.43 | 30.25 | 692.47 | 692.48 |
| V | 137+89.43 | 30.25 | 692.35 | 692.36 |
| W | 137+99.43 | 30.25 | 692.23 | 692.23 |
| ⊘ Brg. E. Appr. Bent | 138+08.43 | 30.25 | 692.11 | 692.11 |
| End of E. Vault Slab | 138+09.18 | 30.25 | 692.10 | 692.10 |
| Bk. of E. Appr. Bent | 138+09.68 | 30.25 | 692.10 | 692.10 |

BEAM 15

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+68.85 | 37.25 | 692.45 | 692.45 |
| ⊘ Brg. at E. Abut. | 137+69.60 | 37.25 | 692.44 | 692.44 |
| U | 137+79.60 | 37.25 | 692.32 | 692.33 |
| V | 137+89.60 | 37.25 | 692.20 | 692.21 |
| W | 137+99.60 | 37.25 | 692.08 | 692.09 |
| ⊘ Brg. E. Appr. Bent | 138+08.60 | 37.25 | 691.96 | 691.96 |
| End of E. Vault Slab | 138+09.35 | 37.25 | 691.96 | 691.96 |
| Bk. of E. Appr. Bent | 138+09.85 | 37.25 | 691.95 | 691.95 |

SOUTH CURTAIN WALL - E.B.

| Location | Station | Offset | Theoretical Grade Elevations | Theoretical Grade Elevations Adjusted For Dead Load Deflection |
|----------------------|-----------|--------|------------------------------|--|
| Bk. E. Abut. | 137+69.01 | 44.13 | 692.30 | 692.30 |
| ⊘ Brg. at E. Abut. | 137+69.76 | 44.12 | 692.30 | 692.30 |
| U | 137+79.76 | 43.99 | 692.18 | 692.18 |
| V | 137+89.76 | 43.87 | 692.06 | 692.06 |
| W | 137+99.76 | 43.74 | 691.94 | 691.94 |
| ⊘ Brg. E. Appr. Bent | 138+08.75 | 43.63 | 691.83 | 691.83 |
| End of E. Vault Slab | 138+09.50 | 43.62 | 691.82 | 691.82 |
| Bk. of E. Appr. Bent | 138+10.00 | 43.61 | 691.81 | 691.81 |

NORTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+03.07 | -6.00 | 695.01 |
| A | 135+13.07 | -6.00 | 694.93 |
| B | 135+23.07 | -6.00 | 694.86 |
| End W. Vault Slab | 135+33.07 | -6.00 | 694.79 |

NORTH EDGE OF PAVEMENT & PG

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+03.21 | 0.00 | 695.13 |
| A | 135+13.21 | 0.00 | 695.05 |
| B | 135+23.21 | 0.00 | 694.98 |
| End W. Vault Slab | 135+33.21 | 0.00 | 694.92 |

☉ E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+03.50 | 12.00 | 695.32 |
| A | 135+13.50 | 12.00 | 695.24 |
| B | 135+23.50 | 12.00 | 695.17 |
| End W. Vault Slab | 135+33.50 | 12.00 | 695.10 |

NORTH EDGE OF RAMP

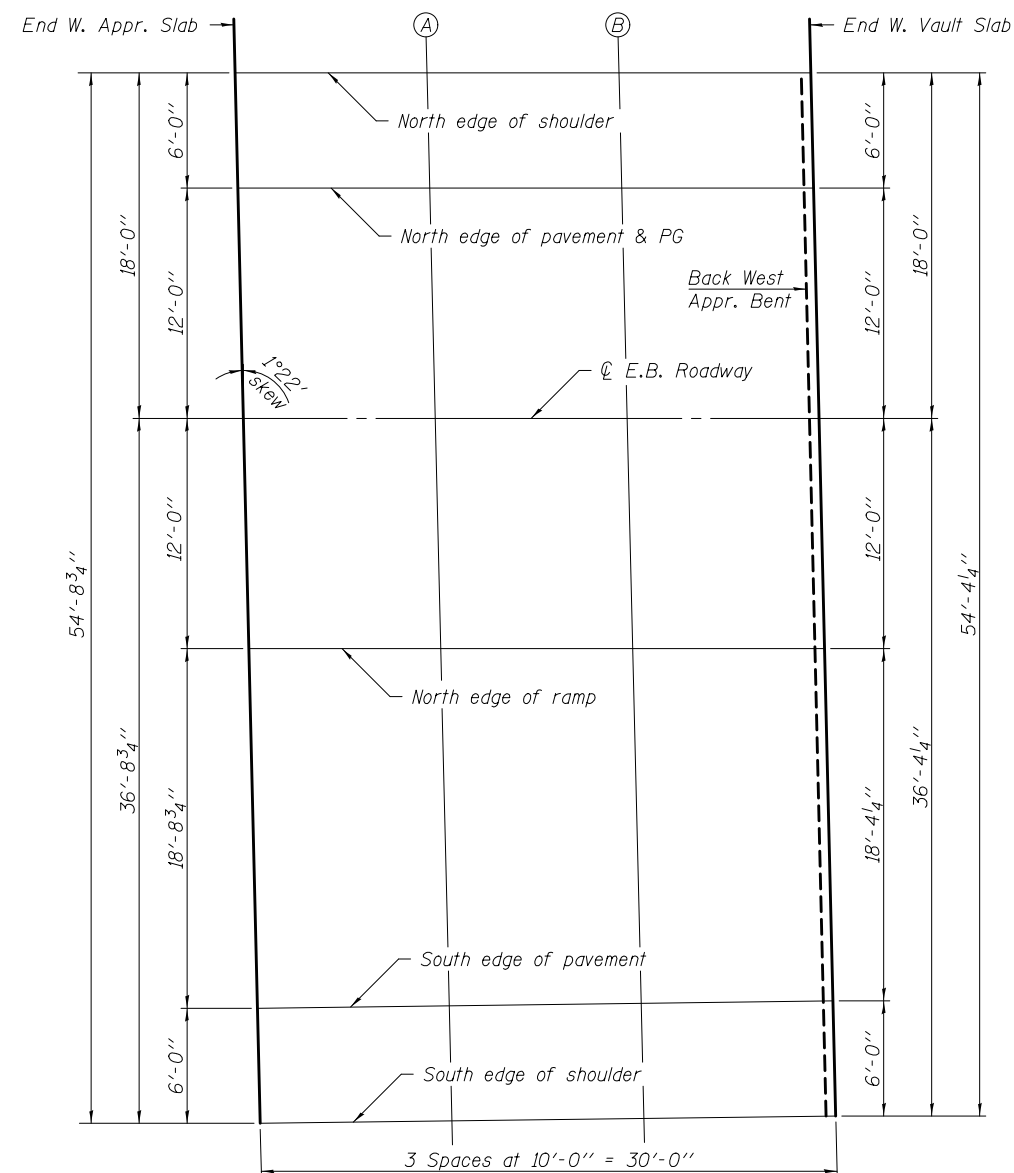
| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+03.78 | 24.00 | 695.13 |
| A | 135+13.78 | 24.00 | 695.05 |
| B | 135+23.78 | 24.00 | 694.98 |
| End W. Vault Slab | 135+33.78 | 24.00 | 694.91 |

SOUTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.23 | 42.73 | 694.73 |
| A | 135+14.23 | 42.60 | 694.66 |
| B | 135+24.22 | 42.48 | 694.59 |
| End W. Vault Slab | 135+34.22 | 42.35 | 694.53 |

SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.37 | 48.73 | 694.61 |
| A | 135+14.37 | 48.60 | 694.53 |
| B | 135+24.37 | 48.48 | 694.46 |
| End W. Vault Slab | 135+34.36 | 48.35 | 694.40 |



PLAN

Note:
All offsets based off of PG E.B. Roadway. Negative offset denotes an offset to the left of Profile Grade.

| | | | |
|--------------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**



**TOP OF WEST APPROACH SLAB ELEVATIONS (E.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)**

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 30 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

NORTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+08.32 | -6.00 | 692.12 |
| A | 138+18.32 | -6.00 | 691.99 |
| B | 138+28.32 | -6.00 | 691.86 |
| End E. Appr. Slab | 138+38.32 | -6.00 | 691.73 |

NORTH EDGE OF PAVEMENT & PG

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+08.46 | 0.00 | 692.24 |
| A | 138+18.46 | 0.00 | 692.12 |
| B | 138+28.46 | 0.00 | 691.99 |
| End E. Appr. Slab | 138+38.46 | 0.00 | 691.86 |

☉ E.B. ROADWAY

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+08.75 | 12.00 | 692.43 |
| A | 138+18.75 | 12.00 | 692.30 |
| B | 138+28.75 | 12.00 | 692.17 |
| End E. Appr. Slab | 138+38.75 | 12.00 | 692.04 |

NORTH EDGE OF RAMP

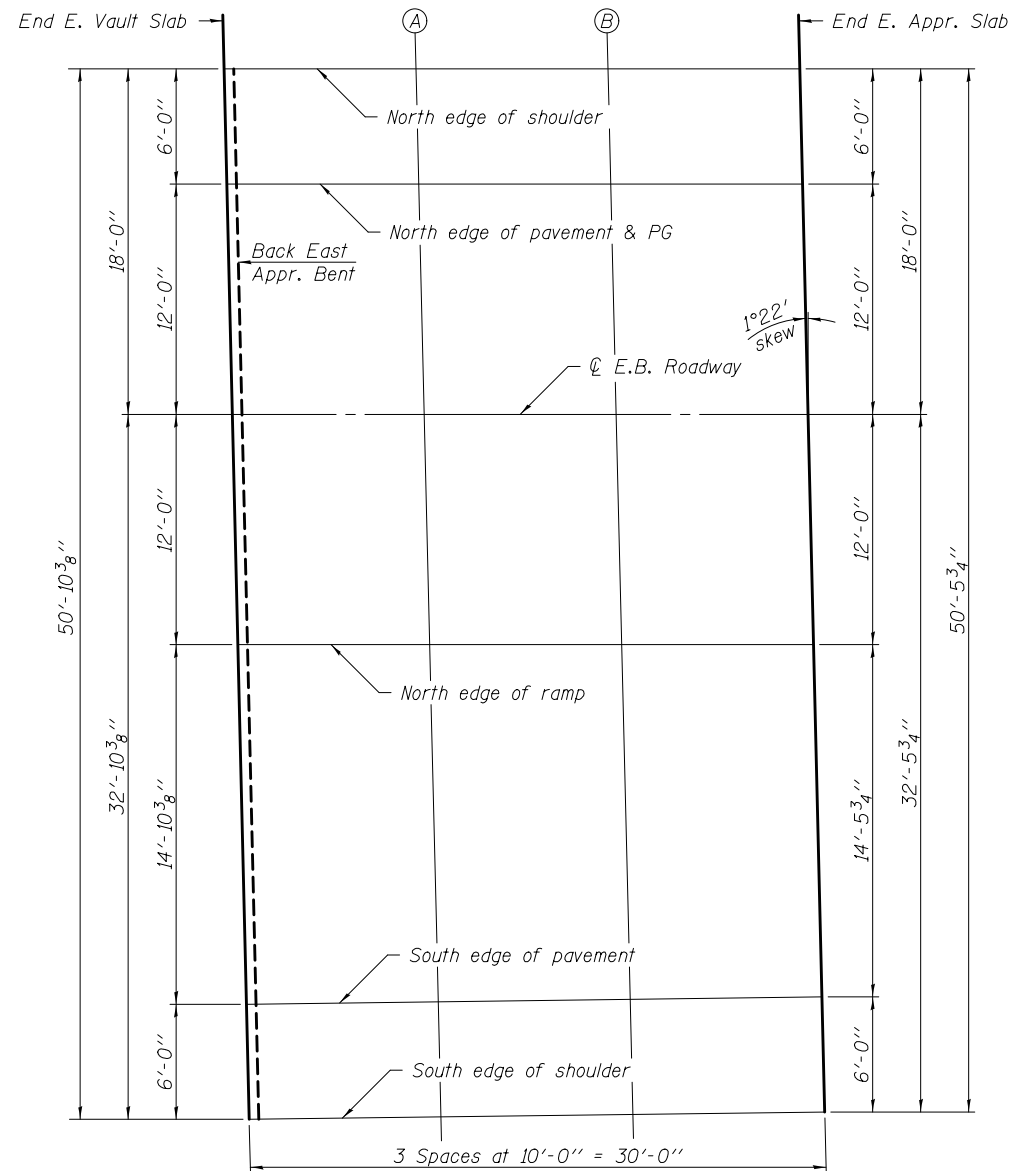
| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+09.03 | 24.00 | 692.24 |
| A | 138+19.03 | 24.00 | 692.11 |
| B | 138+29.03 | 24.00 | 691.98 |
| End E. Appr. Slab | 138+39.03 | 24.00 | 691.85 |

SOUTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+09.39 | 38.86 | 691.92 |
| A | 138+19.38 | 38.74 | 691.80 |
| B | 138+29.38 | 38.61 | 691.67 |
| End E. Appr. Slab | 138+39.38 | 38.48 | 691.54 |

SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+09.53 | 44.86 | 691.79 |
| A | 138+19.53 | 44.74 | 691.67 |
| B | 138+29.52 | 44.61 | 691.54 |
| End E. Appr. Slab | 138+39.52 | 44.48 | 691.42 |



PLAN

Note:
All offsets based off of PG E.B. Roadway. Negative offset denotes an offset to the left of Profile Grade.

NORTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.04 | -44.85 | 694.76 |
| A | 135+14.03 | -44.98 | 694.65 |
| B | 135+24.03 | -45.11 | 694.53 |
| End W. Vault Slab | 135+34.04 | -45.24 | 694.42 |

NORTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.18 | -38.85 | 694.89 |
| A | 135+14.18 | -38.98 | 694.77 |
| B | 135+24.18 | -39.11 | 694.65 |
| End W. Vault Slab | 135+34.17 | -39.24 | 694.54 |

SOUTH EDGE OF RAMP

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.54 | -24.00 | 695.19 |
| A | 135+14.54 | -24.00 | 695.08 |
| B | 135+24.54 | -24.00 | 694.96 |
| End W. Vault Slab | 135+34.54 | -24.00 | 694.86 |

W.B. ROADWAY

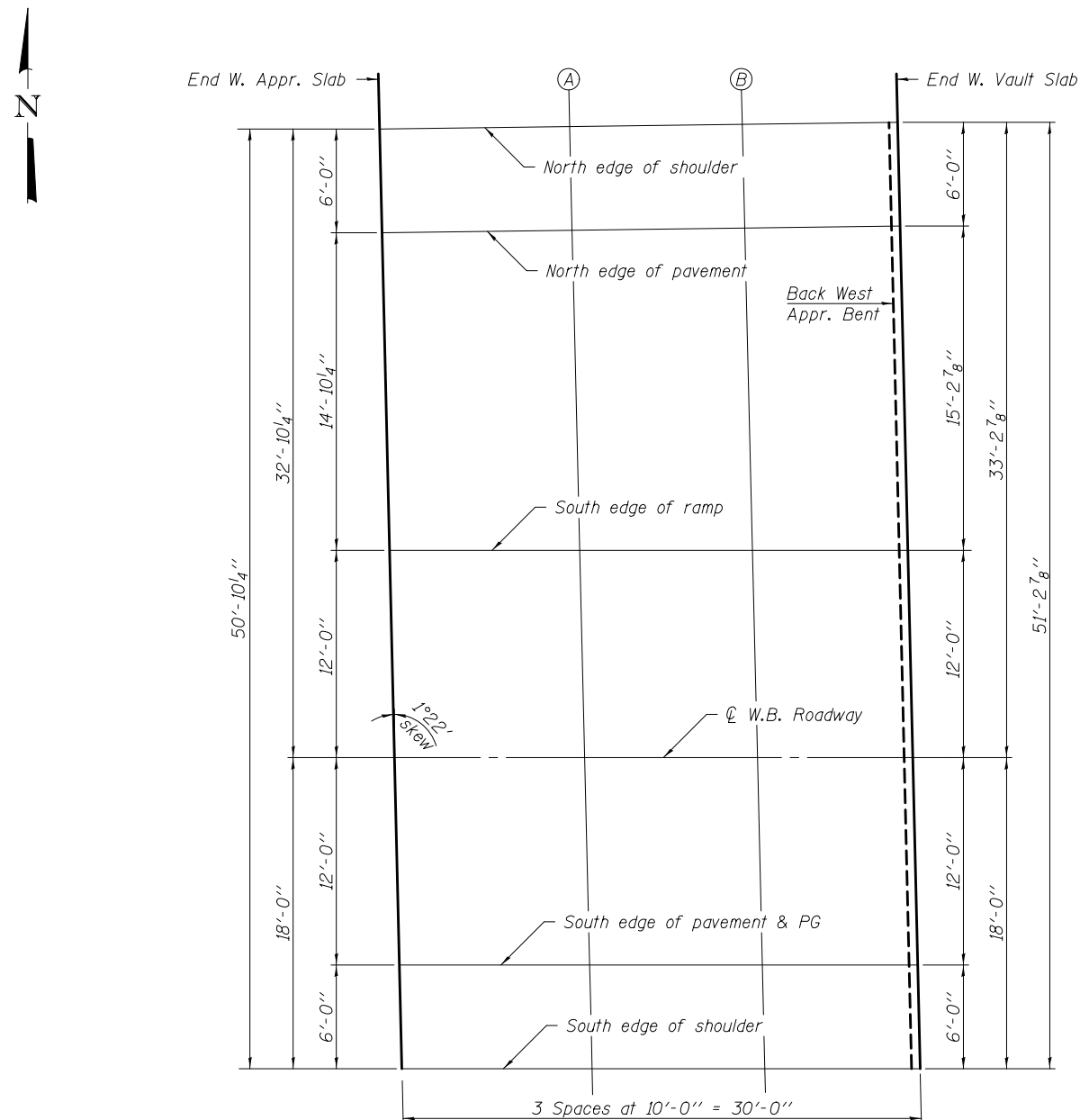
| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+04.82 | -12.00 | 695.38 |
| A | 135+14.82 | -12.00 | 695.26 |
| B | 135+24.82 | -12.00 | 695.15 |
| End W. Vault Slab | 135+34.82 | -12.00 | 695.04 |

SOUTH EDGE OF PAVEMENT & PG

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+05.11 | 0.00 | 695.19 |
| A | 135+15.11 | 0.00 | 695.07 |
| B | 135+25.11 | 0.00 | 694.96 |
| End W. Vault Slab | 135+35.11 | 0.00 | 694.86 |

SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End W. Appr. Slab | 135+05.25 | 6.00 | 695.06 |
| A | 135+15.25 | 6.00 | 694.95 |
| B | 135+25.25 | 6.00 | 694.84 |
| End W. Vault Slab | 135+35.25 | 6.00 | 694.73 |



PLAN

Note:
All offsets based off of PG W.B. Roadway. Negative offset denotes an offset to the left of Profile Grade.

NORTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 137+98.77 | -49.06 | 691.56 |
| A | 138+08.77 | -49.21 | 691.34 |
| B | 138+18.76 | -49.35 | 691.13 |
| End E. Appr. Slab | 138+28.76 | -49.50 | 690.95 |

NORTH EDGE OF PAVEMENT

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 137+98.91 | -43.06 | 691.75 |
| A | 138+08.91 | -43.21 | 691.56 |
| B | 138+18.91 | -43.35 | 691.36 |
| End E. Appr. Slab | 138+28.90 | -43.50 | 691.20 |

SOUTH EDGE OF RAMP

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 137+99.37 | -24.00 | 692.37 |
| A | 138+09.37 | -24.00 | 692.25 |
| B | 138+19.37 | -24.00 | 692.13 |
| End E. Appr. Slab | 138+29.37 | -24.00 | 692.01 |

☉ W.B. ROADWAY

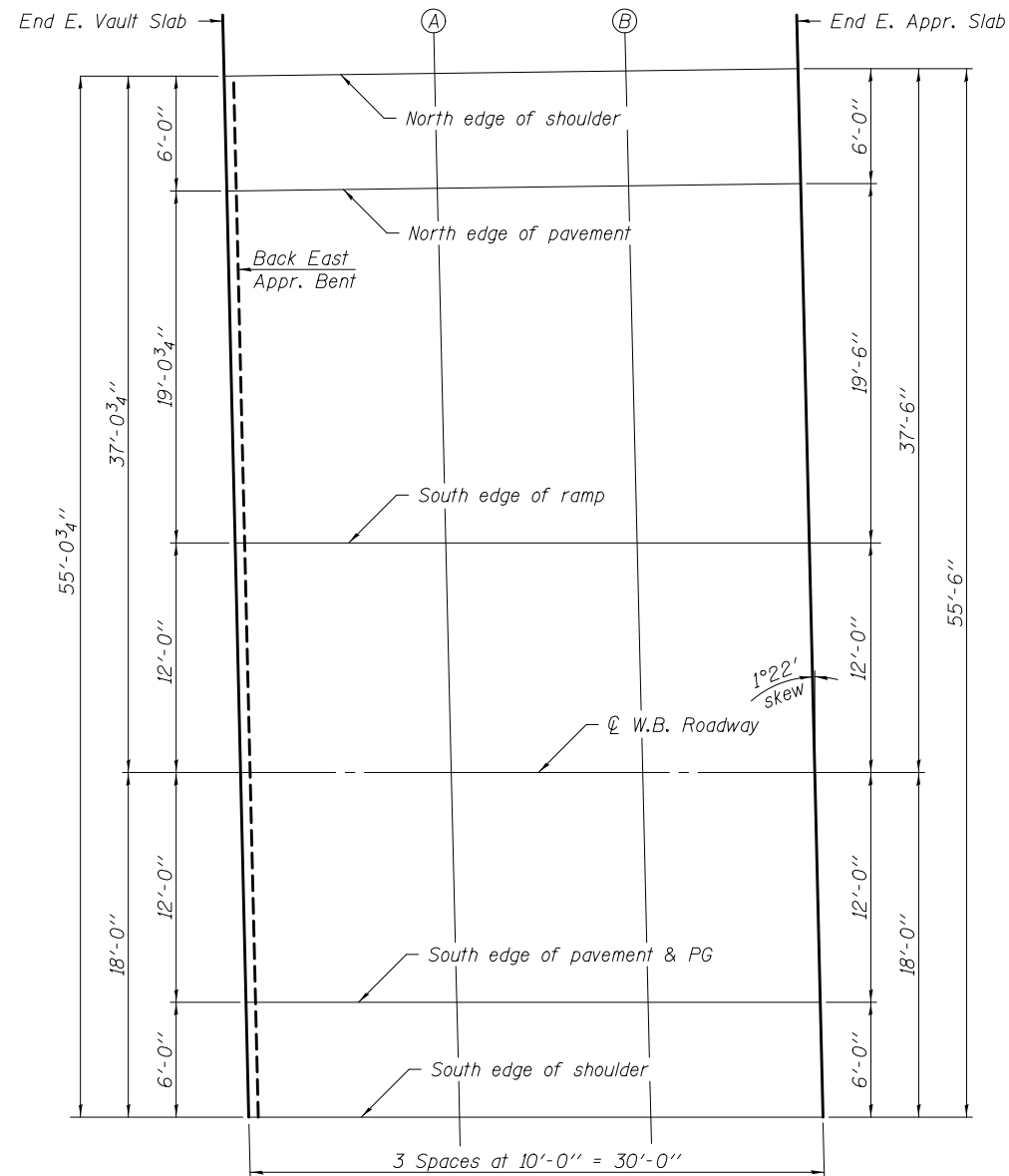
| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 137+99.65 | -12.00 | 692.55 |
| A | 138+09.65 | -12.00 | 692.43 |
| B | 138+19.65 | -12.00 | 692.31 |
| End E. Appr. Slab | 138+29.65 | -12.00 | 692.19 |

SOUTH EDGE OF PAVEMENT & PG

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 137+99.94 | 0.00 | 692.36 |
| A | 138+09.94 | 0.00 | 692.24 |
| B | 138+19.94 | 0.00 | 692.12 |
| End E. Appr. Slab | 138+29.94 | 0.00 | 692.00 |

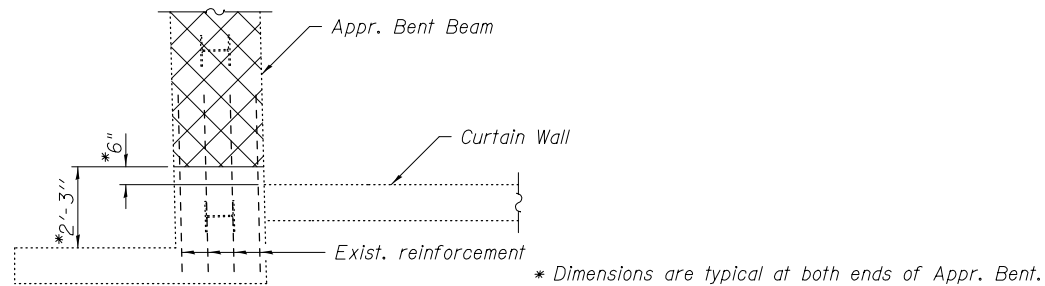
SOUTH EDGE OF SHOULDER

| Location | Station | Offset | Theoretical Grade Elevations |
|-------------------|-----------|--------|------------------------------|
| End E. Vault Slab | 138+00.08 | 6.00 | 692.24 |
| A | 138+10.08 | 6.00 | 692.12 |
| B | 138+20.08 | 6.00 | 691.99 |
| End E. Appr. Slab | 138+30.08 | 6.00 | 691.87 |

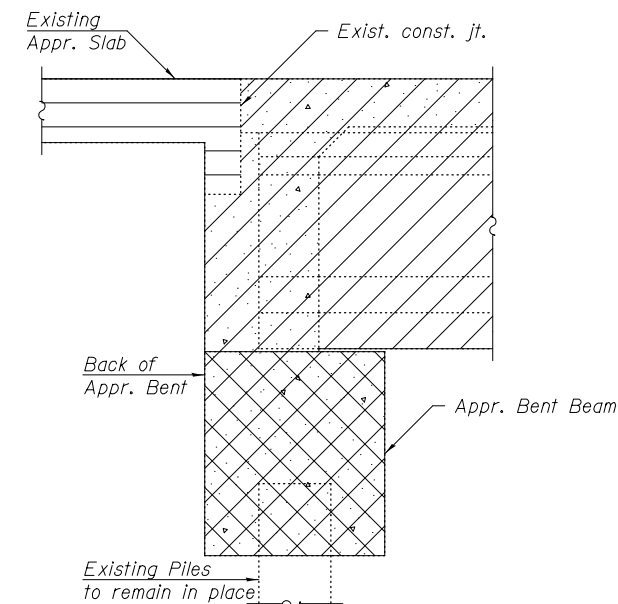


PLAN

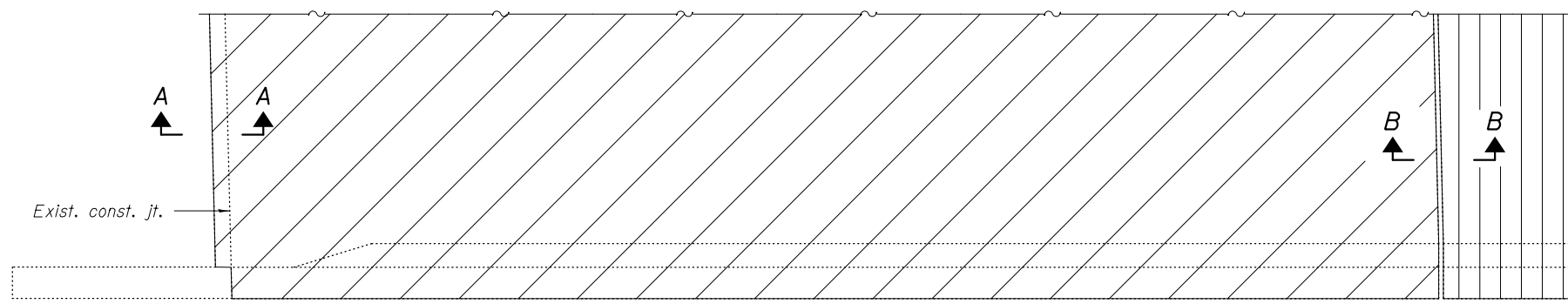
Note:
All offsets based off of PG W.B. Roadway. Negative offset denotes an offset to the left of Profile Grade.



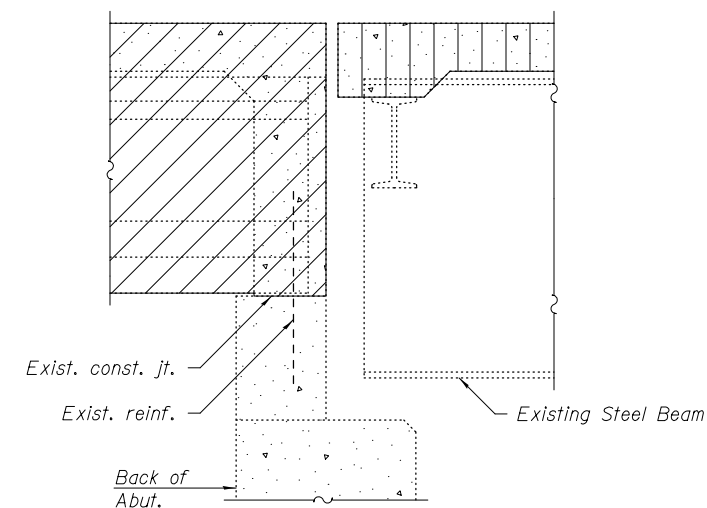
PARTIAL PLAN
(Showing substructure removal at approach bent)



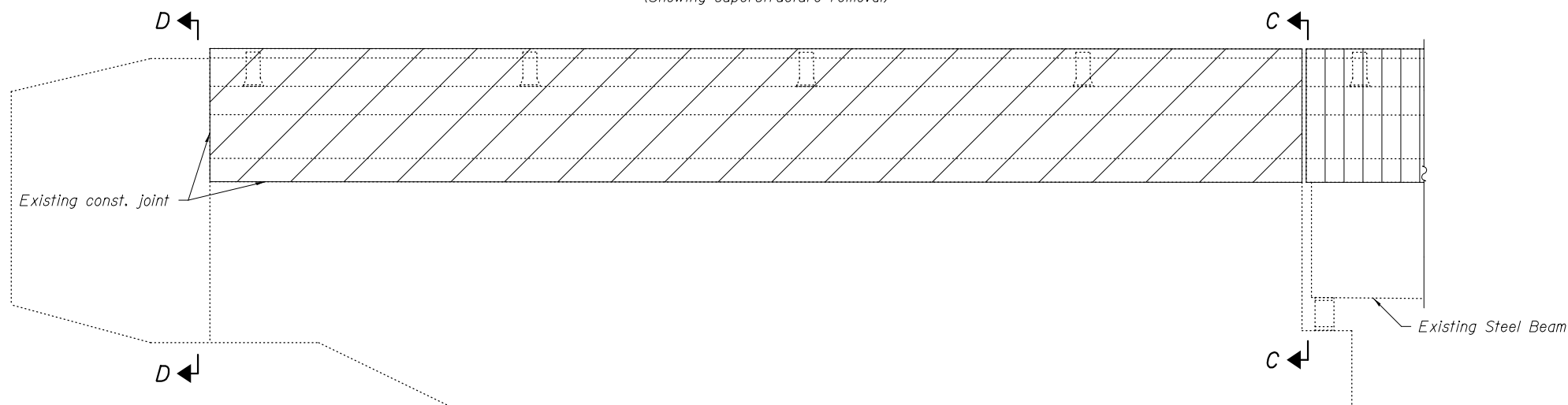
SECTION A-A



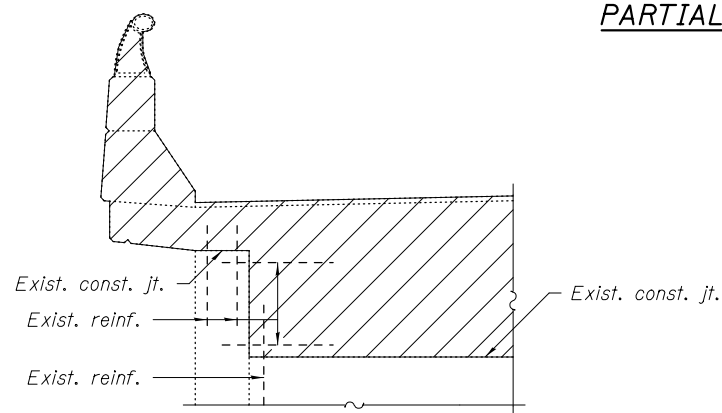
PARTIAL PLAN
(Showing superstructure removal)



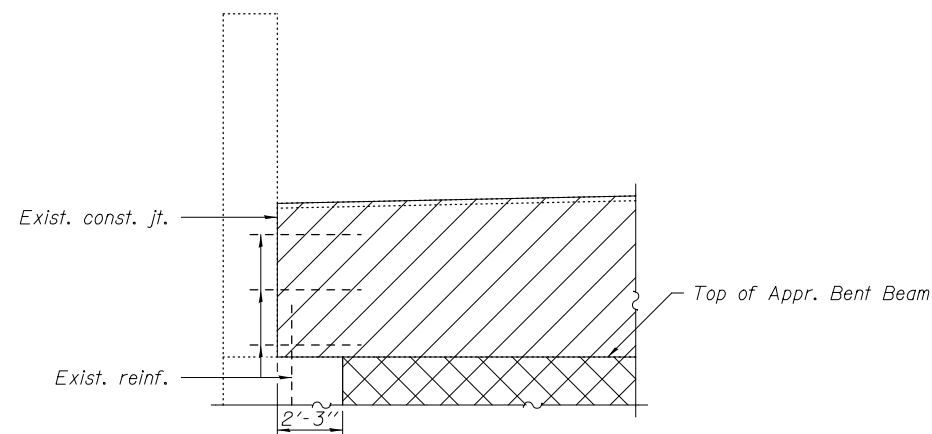
SECTION B-B



PARTIAL ELEVATION



PARTIAL SECTION C-C



PARTIAL SECTION D-D

- Denotes "Removal of Existing Superstructures".
- Denotes "Concrete Removal".
- Denotes "Removal of Existing Concrete Deck".
- Denotes "Approach Slab Removal".

Note:
Details typical at all abutments.

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | | DRAWN K.A. KLUES | REVISED - |
| | | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORNER &
SHIRIN, INC.
ENGINEERS

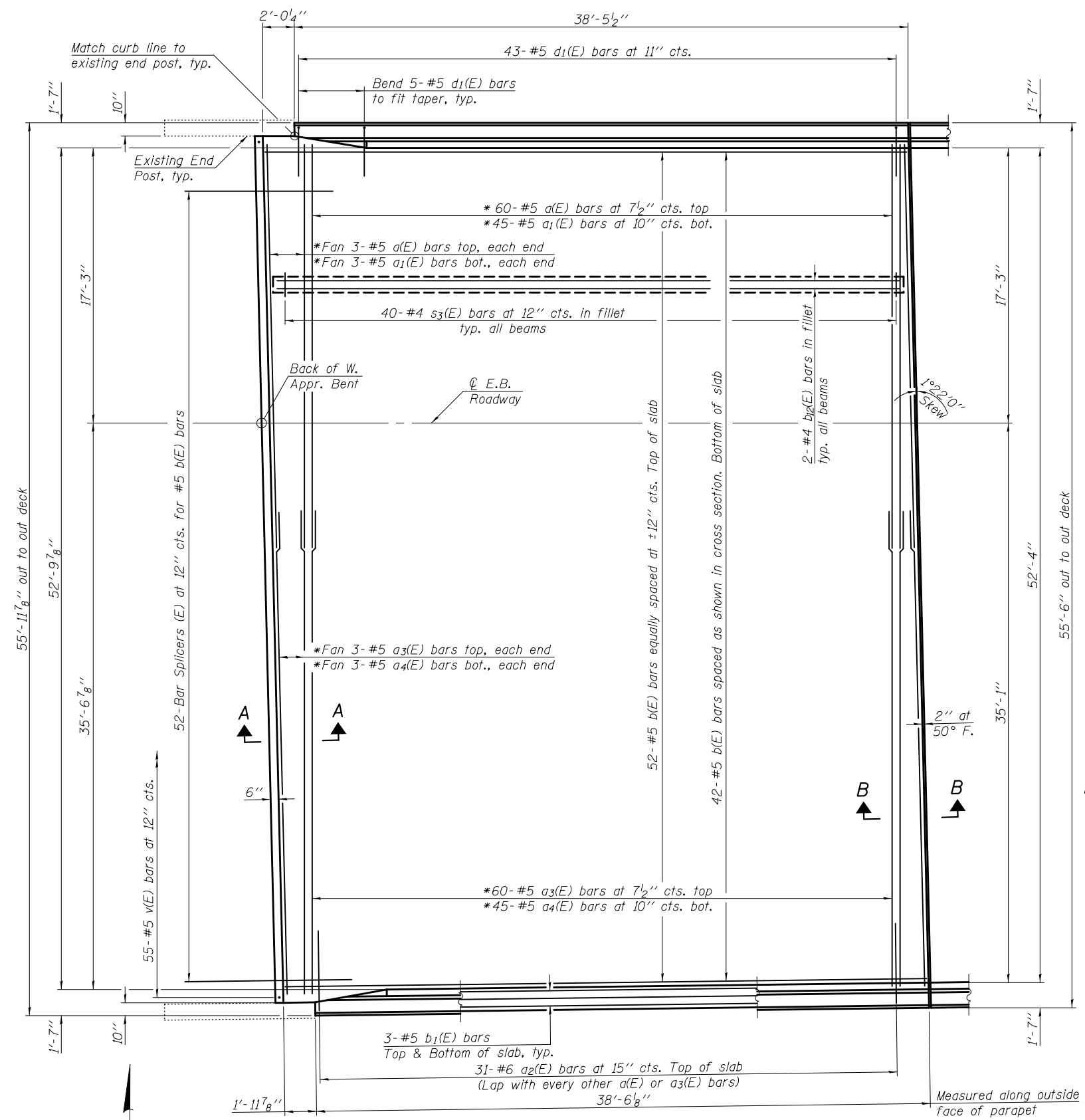
REMOVAL DETAILS
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|--------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 34 |
| CONTRACT NO. 68883 | | | | |

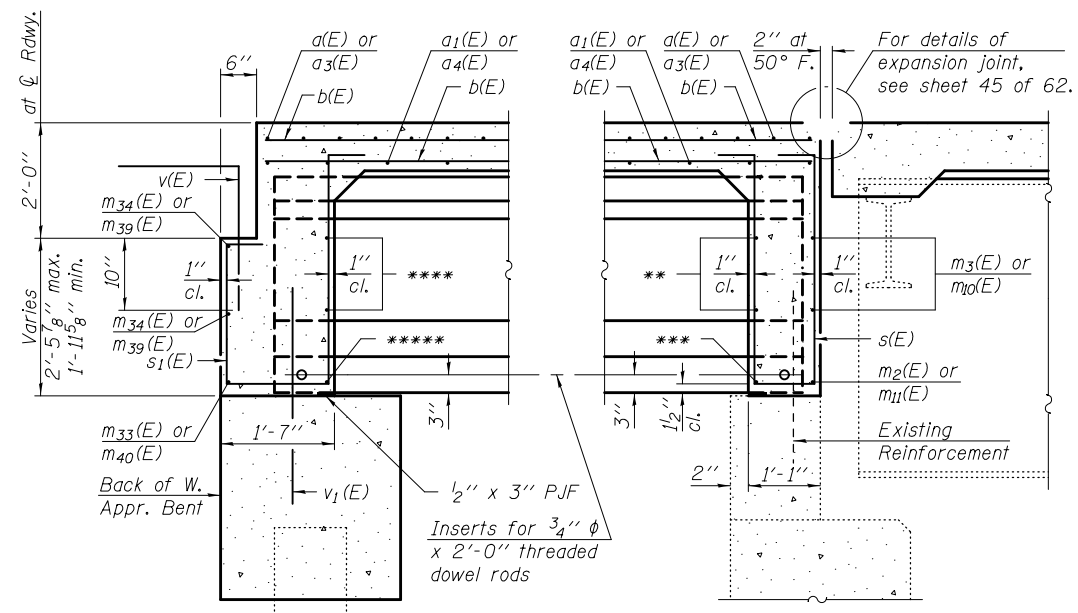
SHEET NO. 18 OF 62 SHEETS

ILLINOIS FED. AID PROJECT

*Increase bar lap to provide 1/2" min. clearance to existing end post or edge of slab.



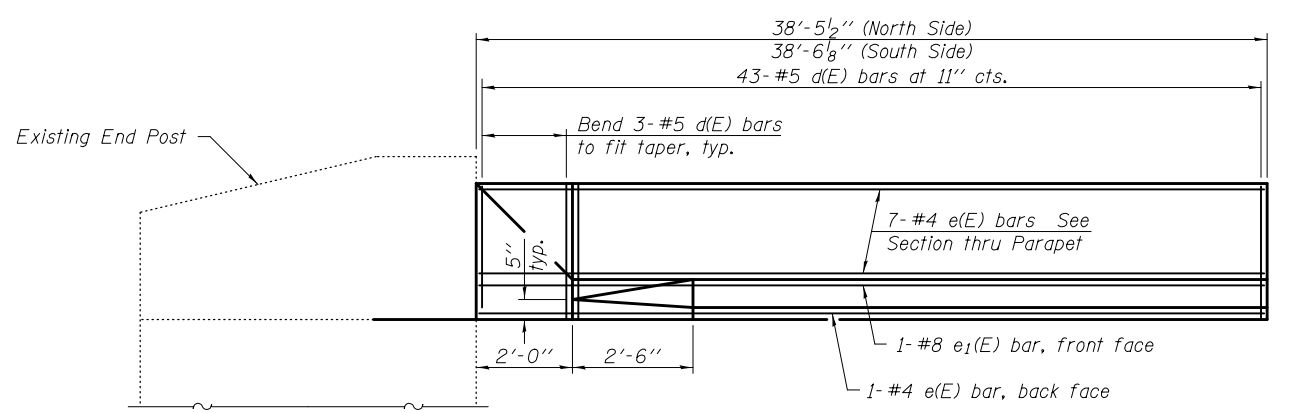
PLAN



SECTION A-A

SECTION B-B

**m(E), m4(E), or m8(E)
 ***m1(E), m5(E), or m9(E)
 ****m(E), m35(E), or m37(E)
 *****m1(E), m36(E), or m38(E)



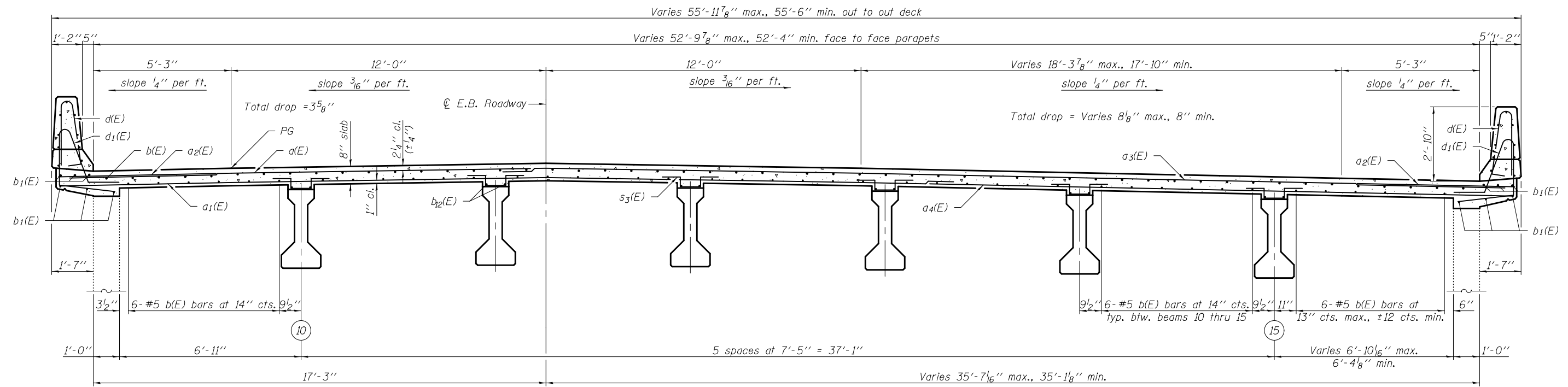
INSIDE ELEVATION OF PARAPET

Note: Bend e(E) & e1(E) bars in field to fit taper.

Notes:
 For Cross Section and Parapet Details, see sheet 20 of 62.
 For diaphragm details and Bill of Materials, see sheet 21 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".

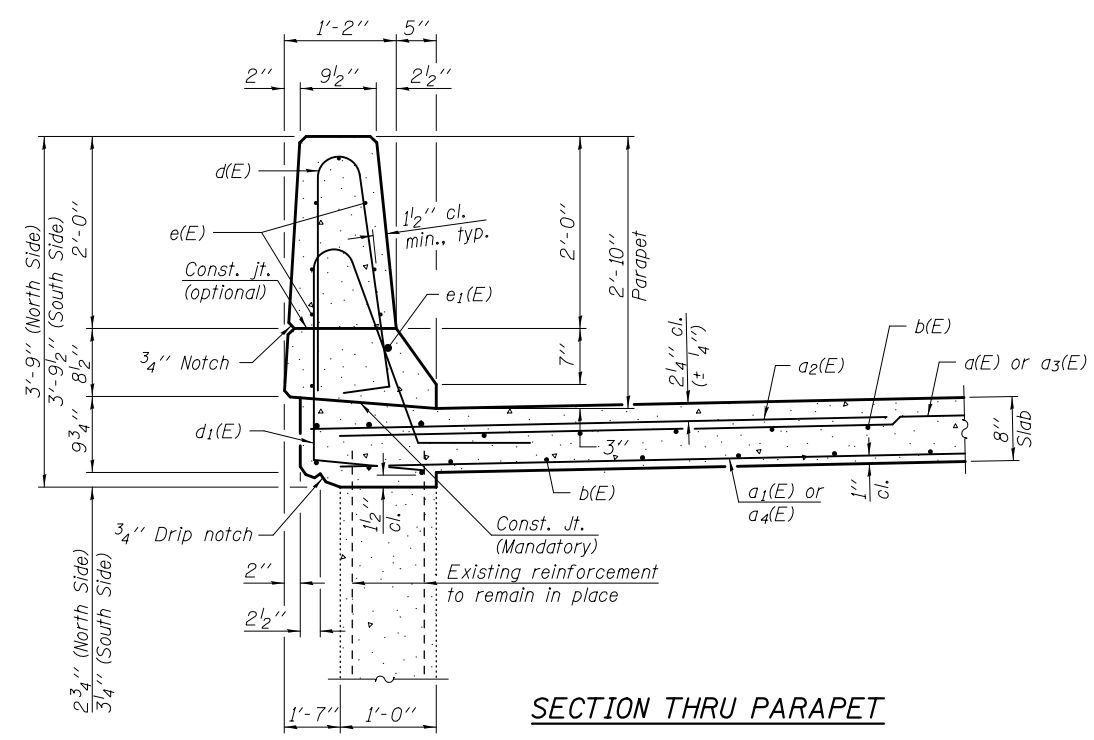
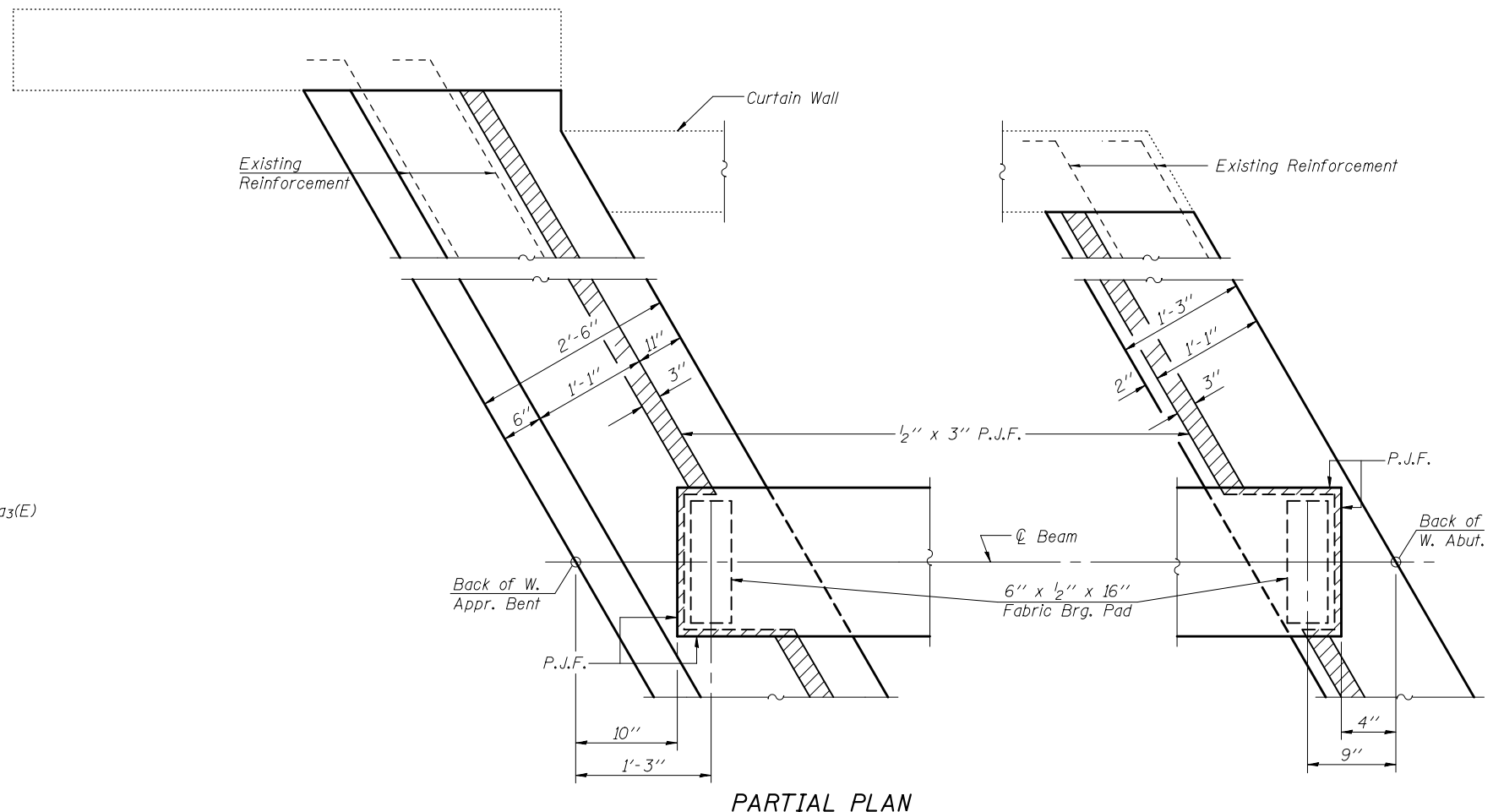
MIN. BAR LAP
 #5 bar = 3'-3"

| | | | | | | | | | | | |
|---------------------------|--------------------|-----------------------|----------------------------|---|--------------------------------------|--|----------------|--------------------|--------|-----------------|--------------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC ENGINEERS | SUPERSTRUCTURE DETAILS - SPAN 1 (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 35 |
| | | PLOT SCALE = | DRAWN K.A. KLUES | | | | REVISED - | CONTRACT NO. 68883 | | | |
| | | PLOT DATE = *DATE* | CHECKED E.M. LAGEMANN | REVISED - | SHEET NO. 19 OF 62 SHEETS | | | | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |



CROSS SECTION
(Looking East)

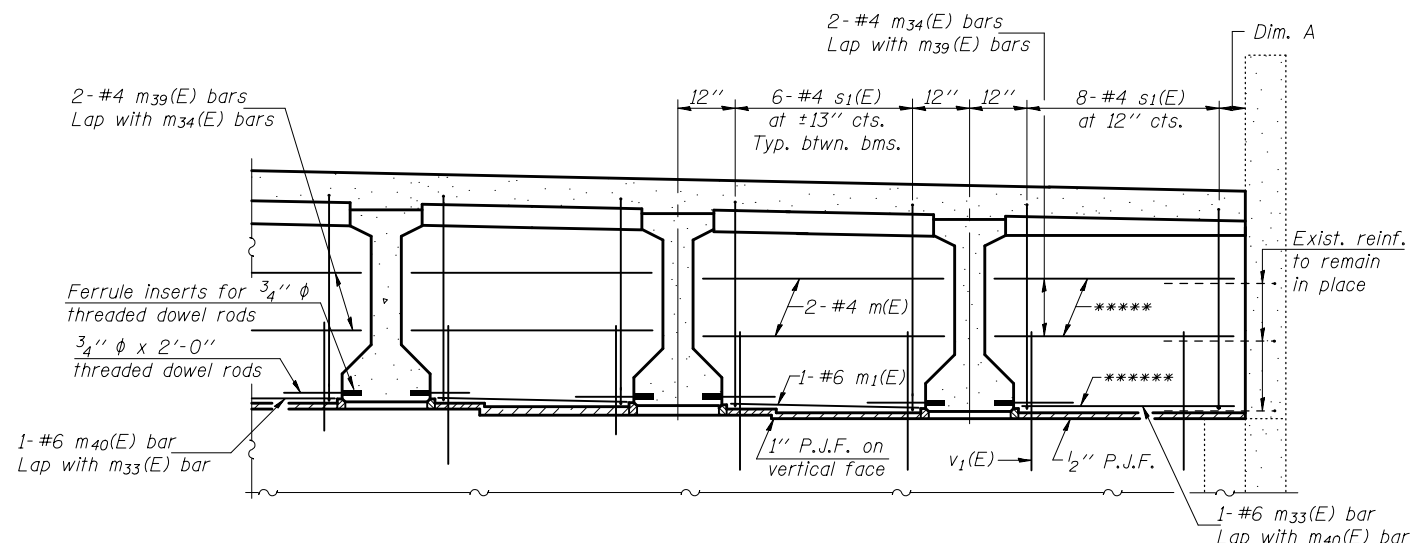
Notes:
 For Plan, see sheet 19 of 62.
 For Removal Details, see sheet 18 of 62.
 For Diaphragm details, bar bending diagrams, and Bill of Material, see sheet 21 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".



SECTION THRU PARAPET

| | | | | | | | | | | | |
|---------------------------|--------------------|-----------------------|----------------------------|---|--|--|--------------------|--------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER# | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | SUPERSTRUCTURE DETAILS - SPAN 1 (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE# | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 36 |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| PLOT DATE = #DATE# | | CHECKED E.M. LAGEMANN | REVISED - | SHEET NO. 20 OF 62 SHEETS | | | | | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |

Dim. A = 7'4" (South end), 8" (North end)

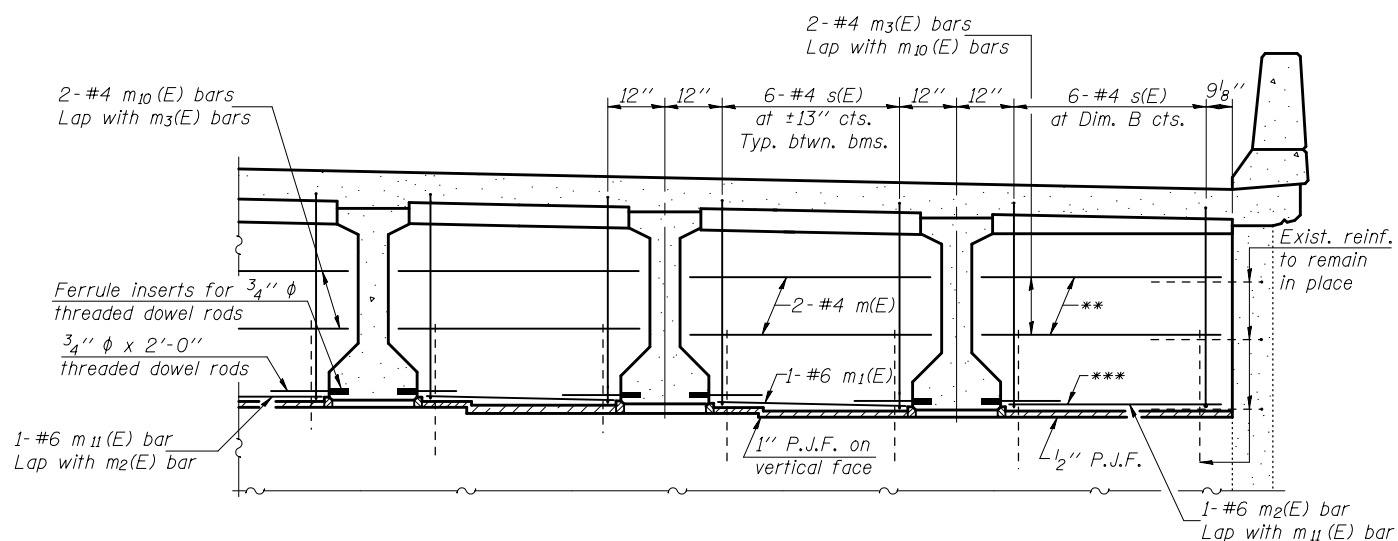


DIAPHRAGM AT APPROACH BENT

For location of m(E), m1(E), and m33(E) thru m40(E) bars, see Section A-A on sheet 19 of 62.

- *****2-#4 m35(E) bars (South end)
- 2-#4 m37(E) bars (North end)
- *****1-#6 m36(E) bar (South end)
- 1-#6 m38(E) bar (North end)

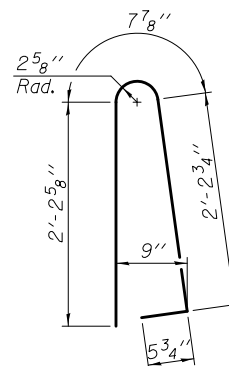
Dim. B = 11" (South end), ±12'1/2" (North end)



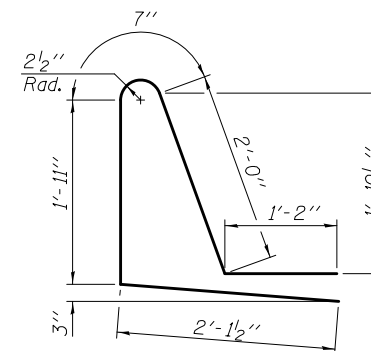
DIAPHRAGM AT ABUTMENT

For location of m(E) thru m5(E) and m8(E) thru m11(E) bars, see Section B-B on sheet 19 of 62.

- **2-#4 m4(E) bars (South end)
- 2-#4 m8(E) bars (North end)
- ***1-#6 m5(E) bar (South end)
- 1-#6 m9(E) bar (North end)



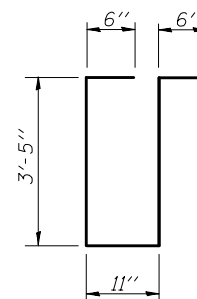
BAR d(E)



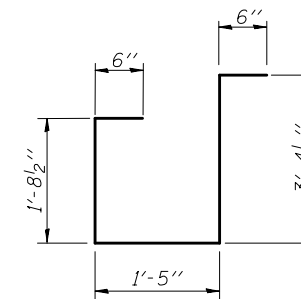
BAR d1(E)

MIN. BAR LAPS

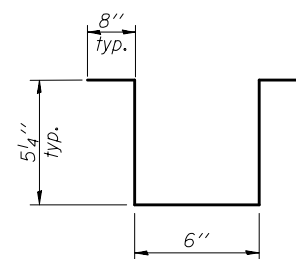
- #4 bar = 2'-7"
- #6 bar = 3'-10"



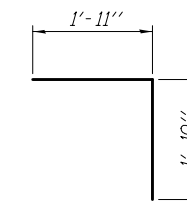
BAR s(E)



BAR s1(E)



BAR s3(E)



BAR v(E)

**ONE APPROACH SLAB
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| a(E) | 66 | #5 | 21'-0" | — |
| a1(E) | 51 | #5 | 34'-0" | — |
| a2(E) | 62 | #6 | 6'-0" | — |
| a3(E) | 66 | #5 | 37'-1" | — |
| a4(E) | 51 | #5 | 24'-1" | — |
| b(E) | 94 | #5 | 40'-2" | — |
| b1(E) | 12 | #5 | 38'-2" | — |
| b2(E) | 12 | #4 | 39'-7" | — |
| d(E) | 86 | #5 | 5'-7" | U |
| d1(E) | 86 | #5 | 7'-9" | U |
| e(E) | 16 | #4 | 38'-2" | — |
| e1(E) | 2 | #8 | 38'-2" | — |
| m(E) | 20 | #4 | 6'-7" | — |
| m1(E) | 10 | #6 | 5'-7" | — |
| m2(E) | 1 | #6 | 29'-0" | — |
| m3(E) | 2 | #4 | 28'-3" | — |
| m4(E) | 2 | #4 | 5'-9" | — |
| m5(E) | 1 | #6 | 5'-3" | — |
| m8(E) | 2 | #4 | 6'-4" | — |
| m9(E) | 1 | #6 | 5'-9" | — |
| m10(E) | 2 | #4 | 24'-5" | — |
| m11(E) | 1 | #6 | 24'-11" | — |
| m33(E) | 1 | #6 | 26'-9" | — |
| m34(E) | 2 | #4 | 26'-9" | — |
| m35(E) | 2 | #4 | 8'-1" | — |
| m36(E) | 1 | #6 | 7'-7" | — |
| m37(E) | 2 | #4 | 8'-2" | — |
| m38(E) | 1 | #6 | 7'-8" | — |
| m39(E) | 2 | #4 | 29'-10" | — |
| m40(E) | 1 | #6 | 31'-1" | — |
| s(E) | 42 | #4 | 8'-9" | U |
| s1(E) | 46 | #4 | 7'-6" | U |
| s3(E) | 240 | #4 | 2'-9" | U |
| v(E) | 55 | #5 | 3'-9" | └ |
| Reinforcement Bars, Epoxy Coated | | | Pound | 15,880 |
| Concrete Superstructure | | | Cu. Yd. | 83.5 |

| | | | |
|--------------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - |

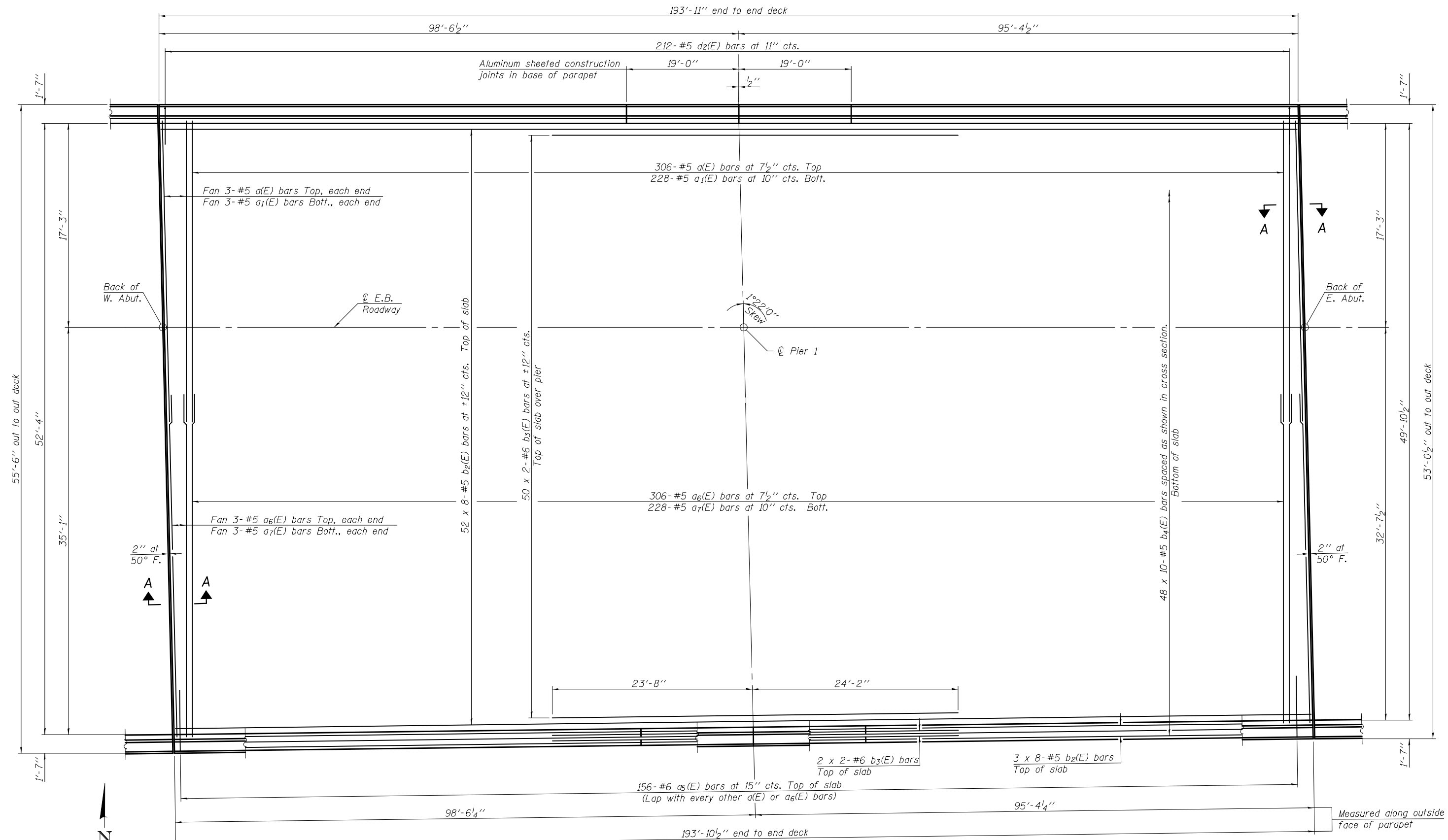
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**HORNER &
SHIRIN, INC.
ENGINEERS**

**SUPERSTRUCTURE DETAILS - SPAN 1 (E.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)**

SHEET NO. 21 OF 62 SHEETS

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 37 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PLAN

MINIMUM BAR LAP

#5 bar = 3'-3"
 #6 bar = 3'-10"

Notes:
 For Cross Section and Inside Elevation of Parapet, see sheet 23 of 62.
 For Bill of Material, Section A-A, and details, see sheet 24 of 62.
 For Removal Details, see sheet 18 of 62.
 Bars indicated thus 52 x 8-#5 etc. indicates 52 lines of bars with 8 lengths per line.

| | | | |
|-------------|--------------------|------------------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED <i>E.M. LAGEMANN</i> | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN <i>K.A. KLUES</i> | REVISED - |
| | PLOT DATE = #DATE* | CHECKED <i>E.M. LAGEMANN</i> | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

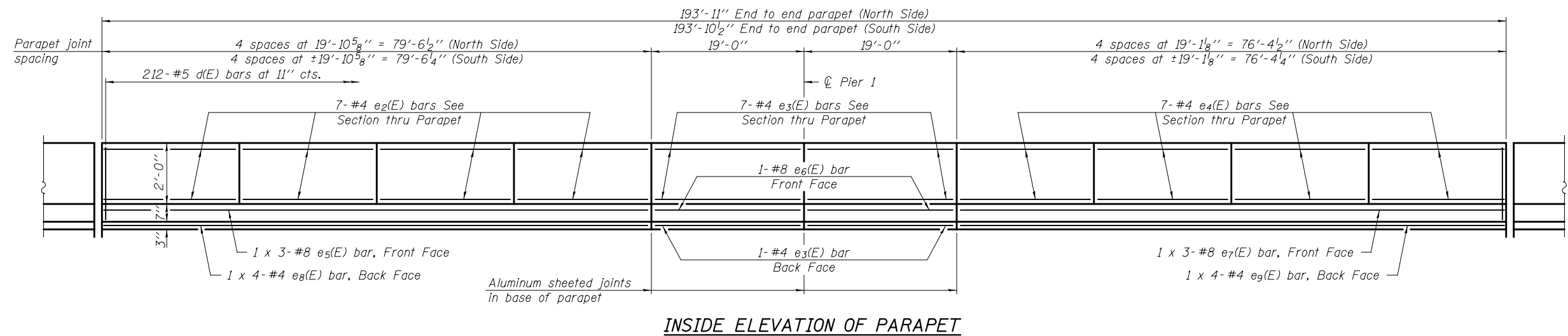
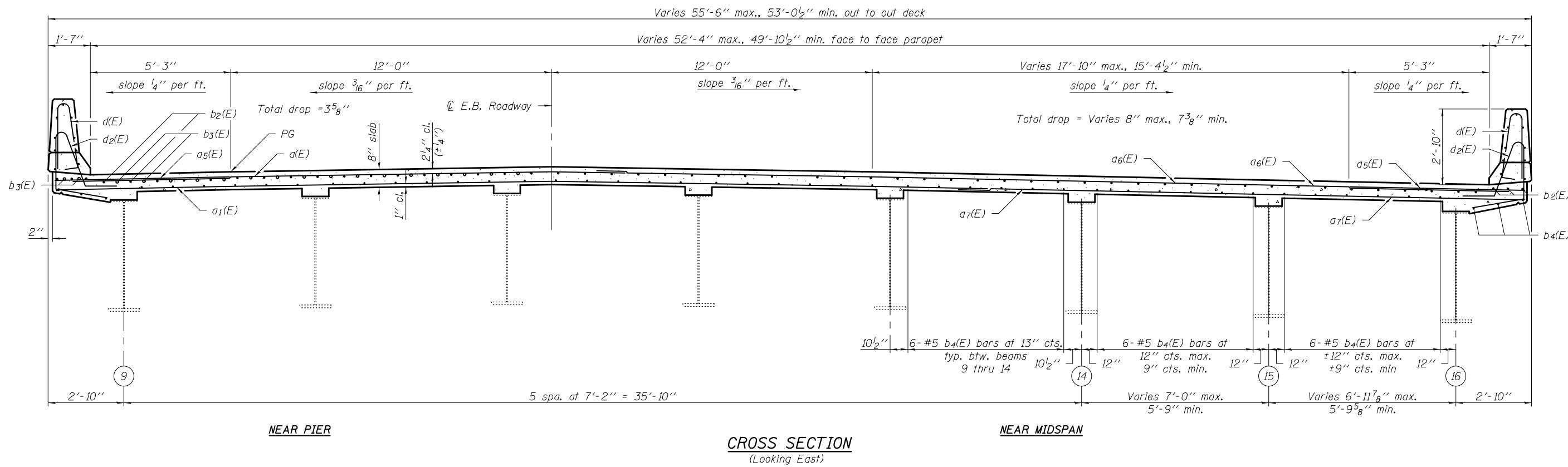


**SUPERSTRUCTURE DETAILS - SPANS 2 & 3 (E.B.)
 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)**

| | | | | |
|--------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 38 |
| CONTRACT NO. 68883 | | | | |

SHEET NO. 22 OF 62 SHEETS

ILLINOIS FED. AID PROJECT

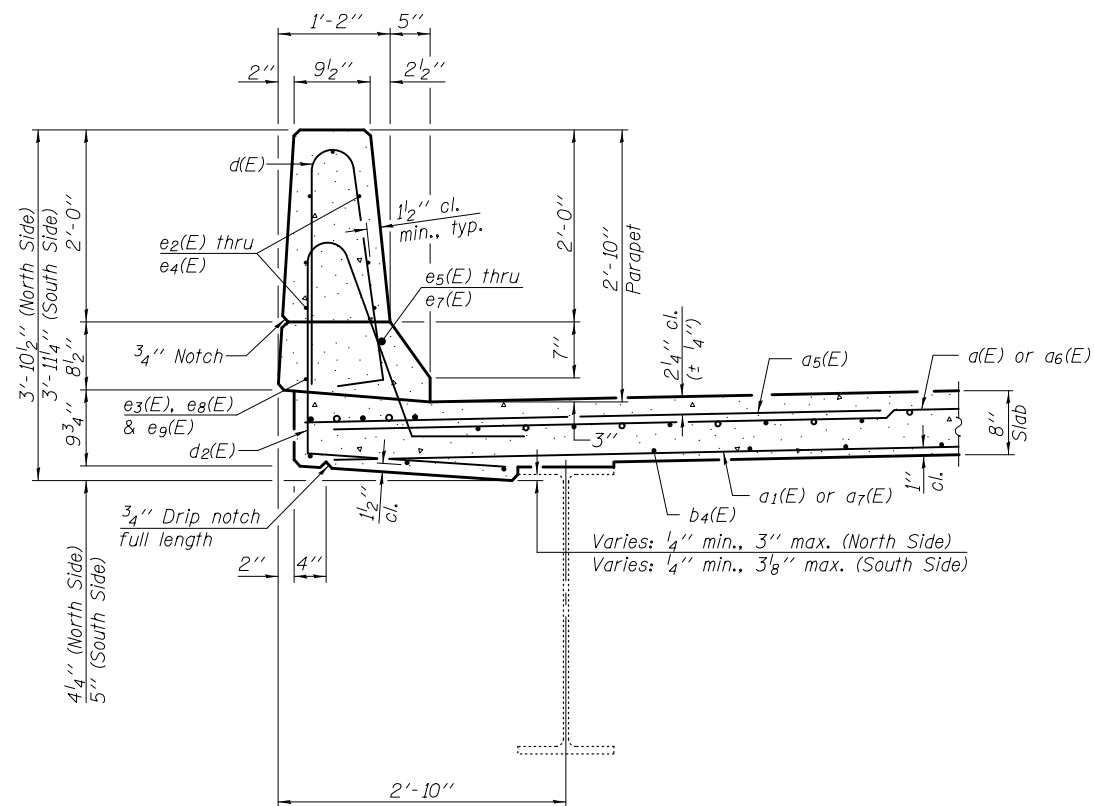


Notes:
 For Plan, see sheet 22 of 62.
 For Section Thru Parapet and parapet details, see sheet 24 of 62.
 For Bill of Material, see sheet 24 of 62.
 For Removal Details, see sheet 18 of 62.
 Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

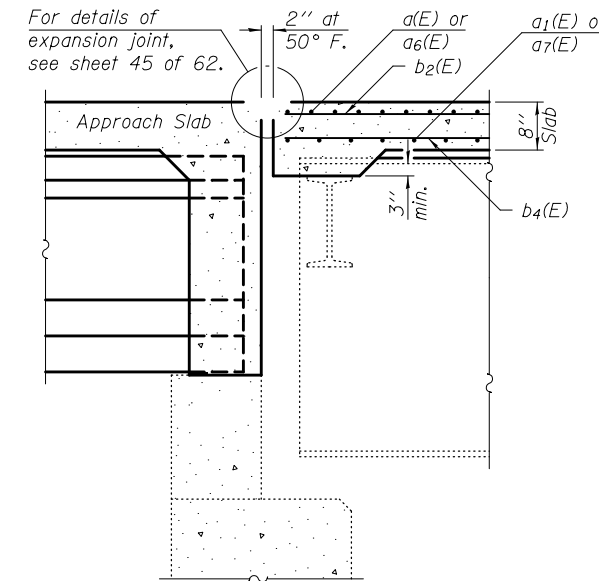
MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"

| | | | | | | | | | | | |
|-----------------------|------------------------------|------------------------------------|----------------------------|---|--|---|--------------------|---------------------------|--------|--------------|-----------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | SUPERSTRUCTURE DETAILS - SPANS 2 & 3 (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | CHECKED <i>E.M. LAGEMANN</i> | REVISOR <i>Del. Staging (IDOT)</i> | 474 | | | | (72-3HB-1),I | PEORIA | 88 | 39 | |
| | PLOT SCALE = | DRAWN <i>K.A. KLUES</i> | REVISOR - | | | | CONTRACT NO. 68883 | | | | |
| | PLOT DATE = *DATE* | CHECKED <i>E.M. LAGEMANN</i> | REVISOR - | SHEET NO. 23 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | |

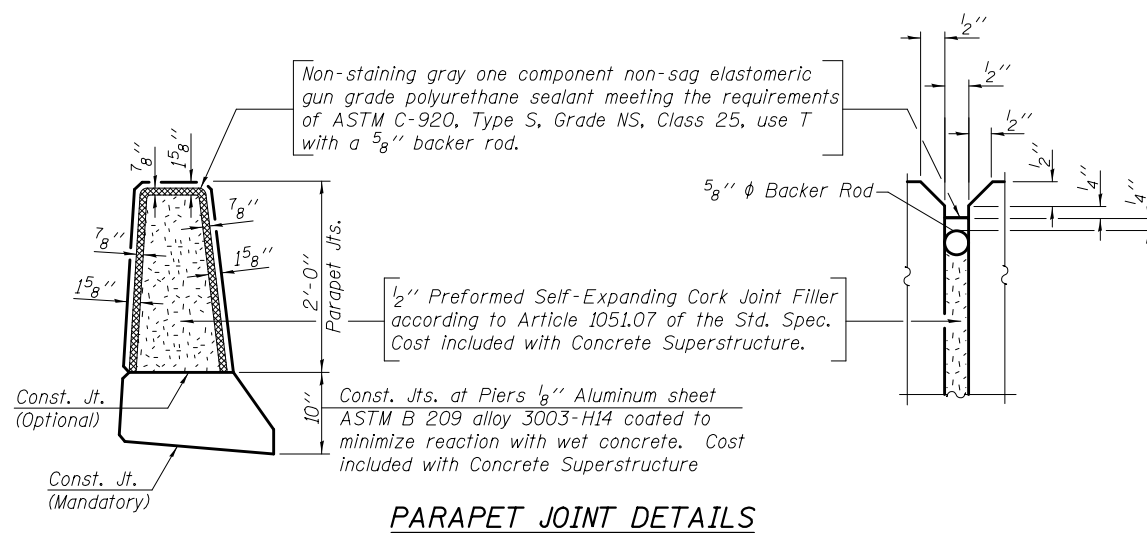
Notes:
 For Plan, see sheet 22 of 62.
 For Cross Section and Inside Elevation of Parapet, see sheet 23 of 62.
 For bar d(E) diagram, see sheet 21 of 62.
 For Removal Details, see sheet 18 of 62.



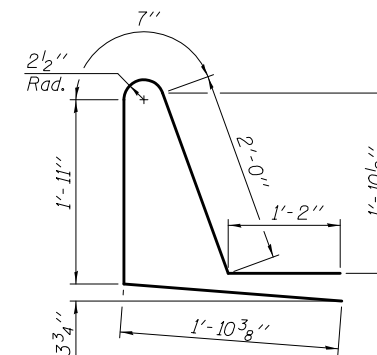
SECTION THRU PARAPET



SECTION A-A



PARAPET JOINT DETAILS



BAR d2(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|----------|---------|-------|
| a(E) | 312 | #5 | 21'-0" | — |
| a1(E) | 234 | #5 | 34'-0" | — |
| a5(E) | 312 | #6 | 6'-6" | — |
| a6(E) | 312 | #5 | 37'-1" | — |
| a7(E) | 234 | #5 | 24'-1" | — |
| b2(E) | 464 | #5 | 27'-1" | — |
| b3(E) | 108 | #6 | 25'-10" | — |
| b4(E) | 480 | #5 | 22'-4" | — |
| d(E) | 424 | #5 | 5'-7" | ⌋ |
| d2(E) | 424 | #5 | 7'-7" | ⌋ |
| e2(E) | 56 | #4 | 19'-8" | — |
| e3(E) | 32 | #4 | 18'-9" | — |
| e4(E) | 56 | #4 | 18'-10" | — |
| e5(E) | 6 | #8 | 29'-11" | — |
| e6(E) | 4 | #8 | 18'-9" | — |
| e7(E) | 6 | #8 | 28'-10" | — |
| e8(E) | 8 | #4 | 21'-4" | — |
| e9(E) | 8 | #4 | 20'-7" | — |
| Reinforcement Bars, Epoxy Coated | | Pound | 73,630 | |
| Concrete Superstructure | | Cu. Yds. | 323.1 | |

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| *FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

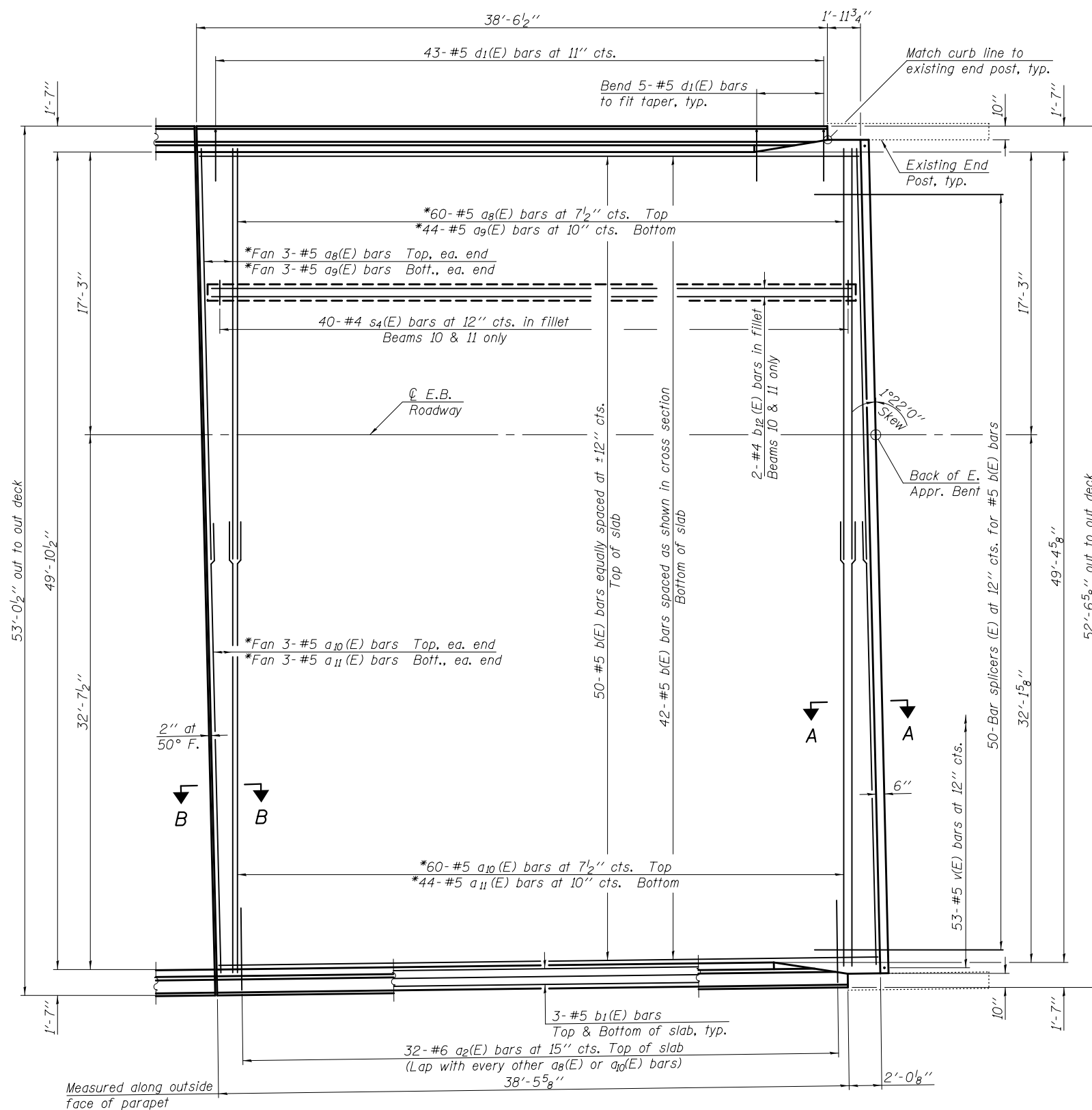
HORNER & SHIRIN, INC.
ENGINEERS

SUPERSTRUCTURE DETAILS - SPANS 2 & 3 (E.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

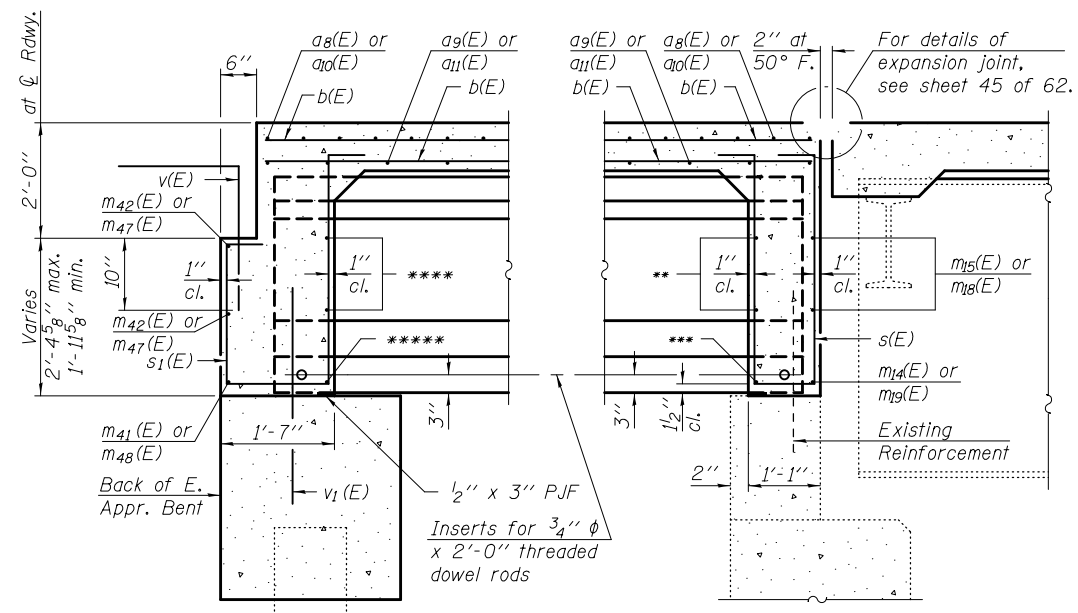
| | | | | |
|---------------------------|---------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1), I | PEORIA | 88 | 40 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. 24 OF 62 SHEETS

*Increase bar lap to provide 1/2" min. clearance to existing end post or edge of slab.



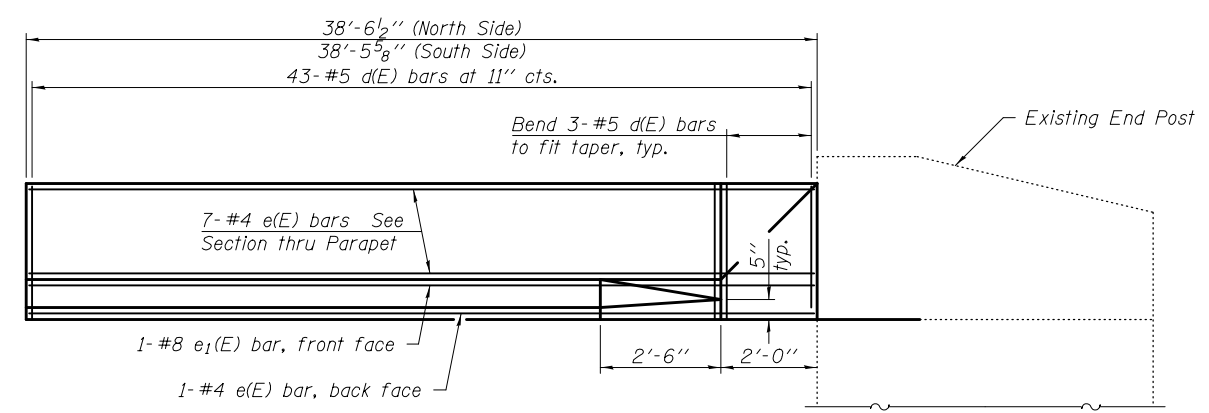
PLAN



SECTION A-A

SECTION B-B

**m4(E), m12(E), or m20(E)
 ***m5(E), m13(E), or m21(E)
 ****m12(E), m43(E), or m45(E)
 *****m13(E), m44(E), or m46(E)



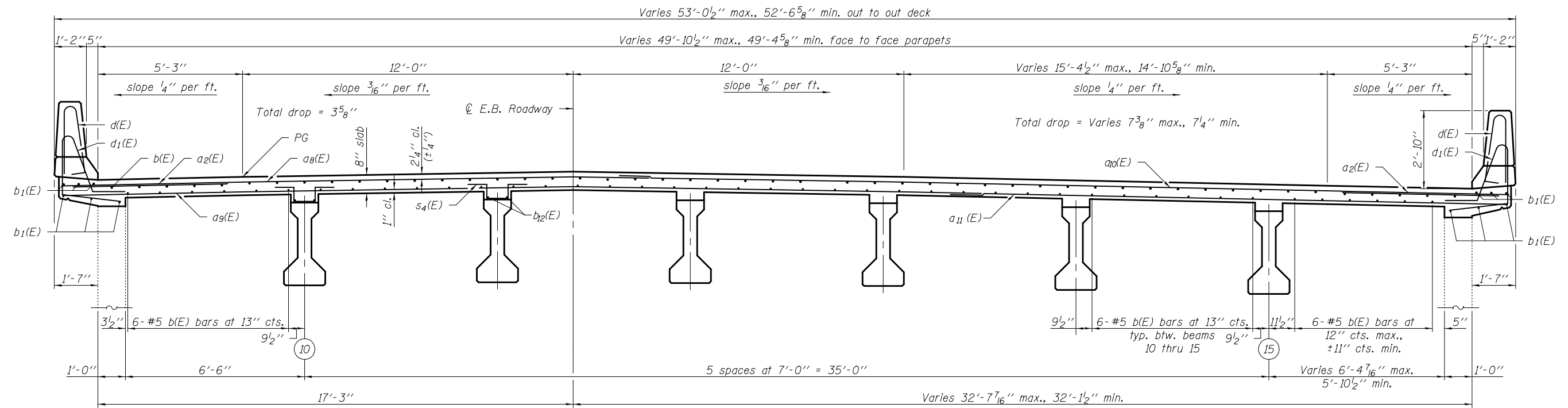
INSIDE ELEVATION OF PARAPET

Note: Bend e(E) & e1(E) bars in field to fit taper.

Notes:
 For Cross Section and Parapet Details, see sheet 26 of 62.
 For diaphragm details and Bill of Materials, see sheet 27 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".

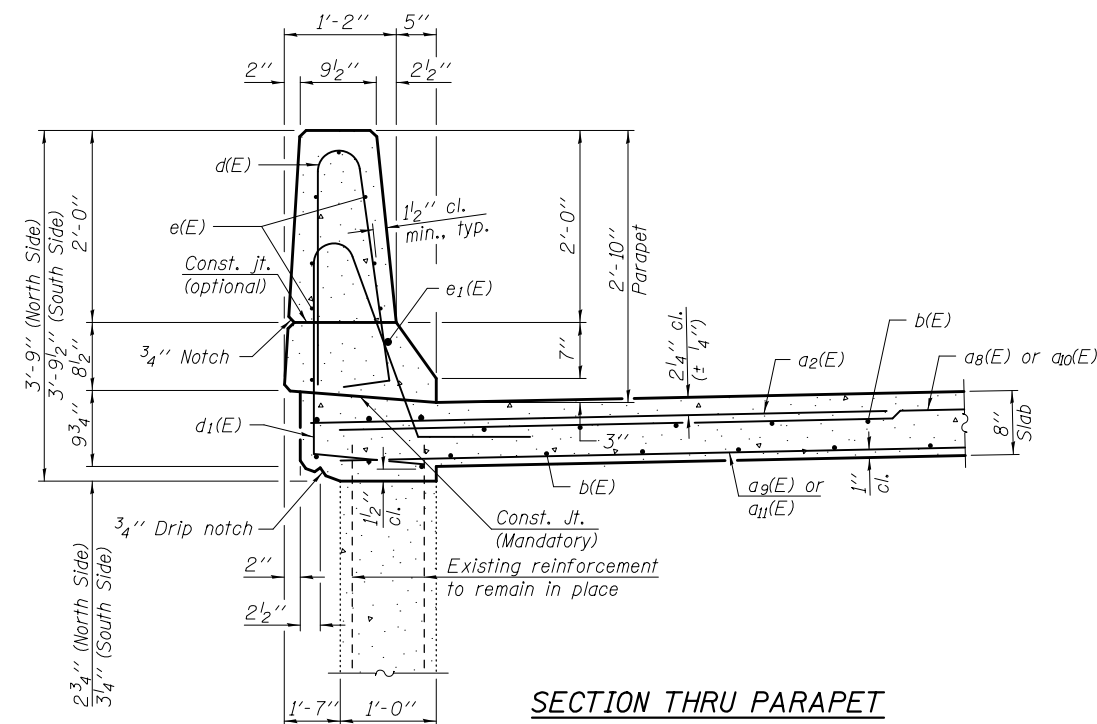
MIN. BAR LAP
 #5 bar = 3'-3"

| | | | | | | | | | | | |
|--------------------|-----------------------|---------------------|----------------------------|---|---------------------------------------|--|---------------------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | SUPERSTRUCTURE DETAILS - SPAN 4 (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| #FILE* | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | 474 | | | | (72-3HB-1),I | PEORIA | 88 | 41 | |
| PLOT SCALE = | DRAWN K.A. KLUES | REVISOR - | CONTRACT NO. 68883 | | | | | | | | |
| PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISOR - | SHEET NO. 25 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | | |

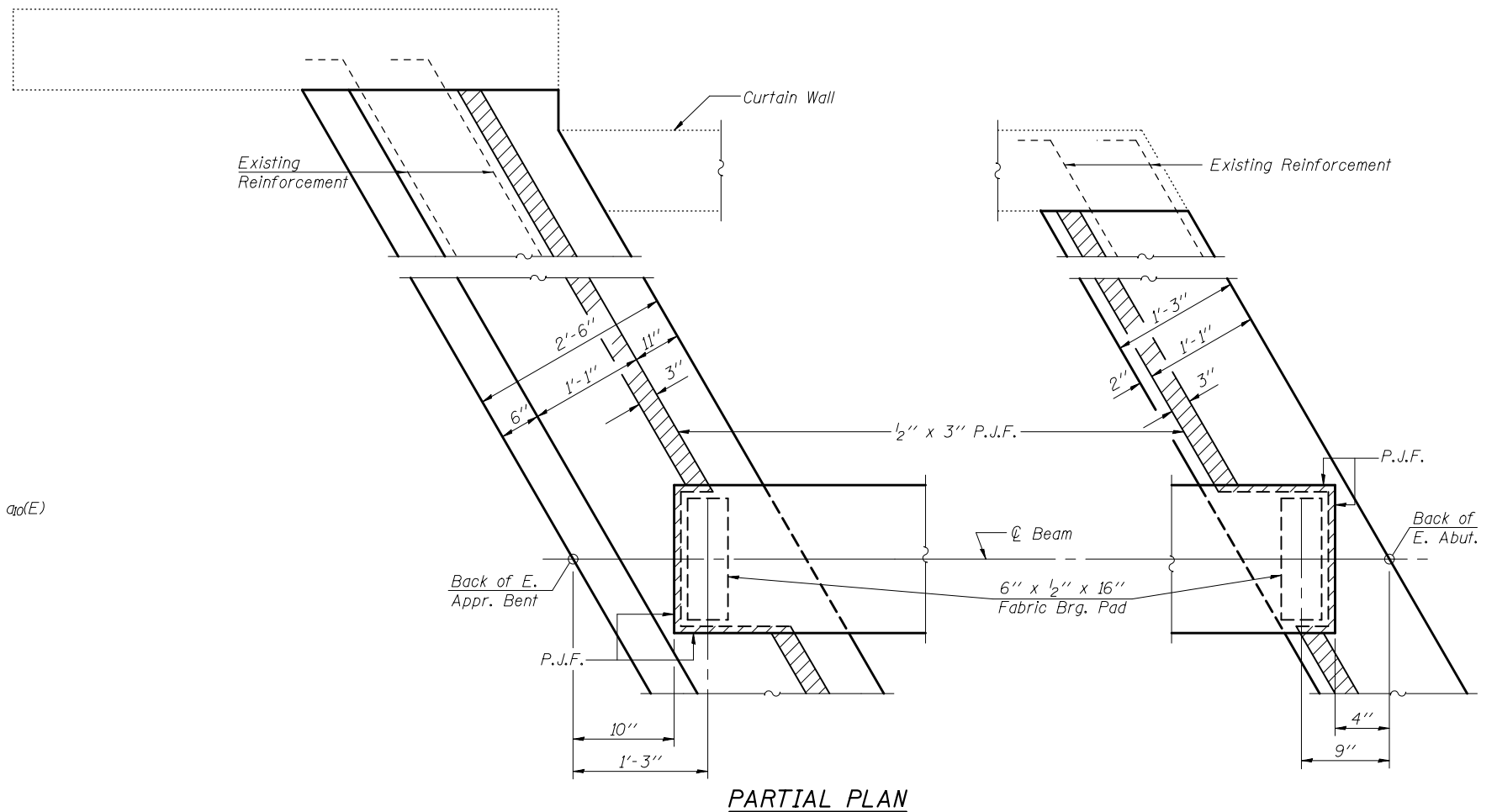


CROSS SECTION
(Looking East)

Notes:
 For Plan, see sheet 25 of 62.
 For bar bending diagrams, see sheets 21 & 27 of 62.
 For diaphragm details and Bill of Material, see sheet 27 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".



SECTION THRU PARAPET



PARTIAL PLAN

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER# | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE# | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE# | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

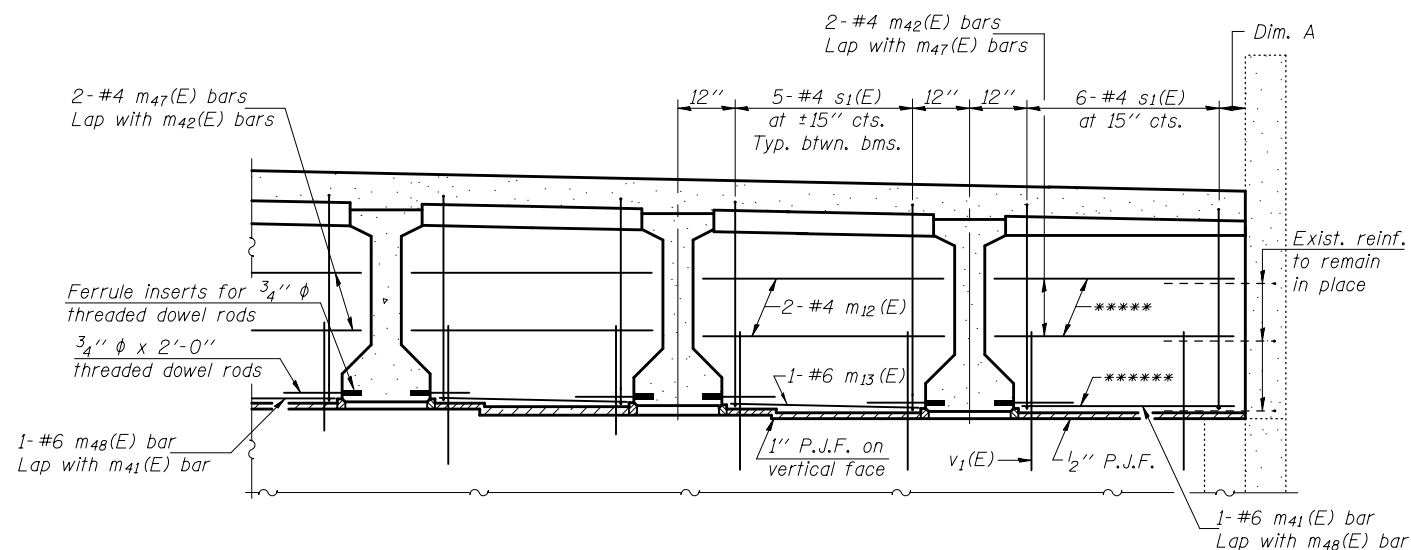
HORNER & SHIRIN, INC.
ENGINEERS

SUPERSTRUCTURE DETAILS - SPAN 4 (E.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

SHEET NO. 26 OF 62 SHEETS

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 42 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

Dim. A = ±4³/₈" (South end), 12" (North end)

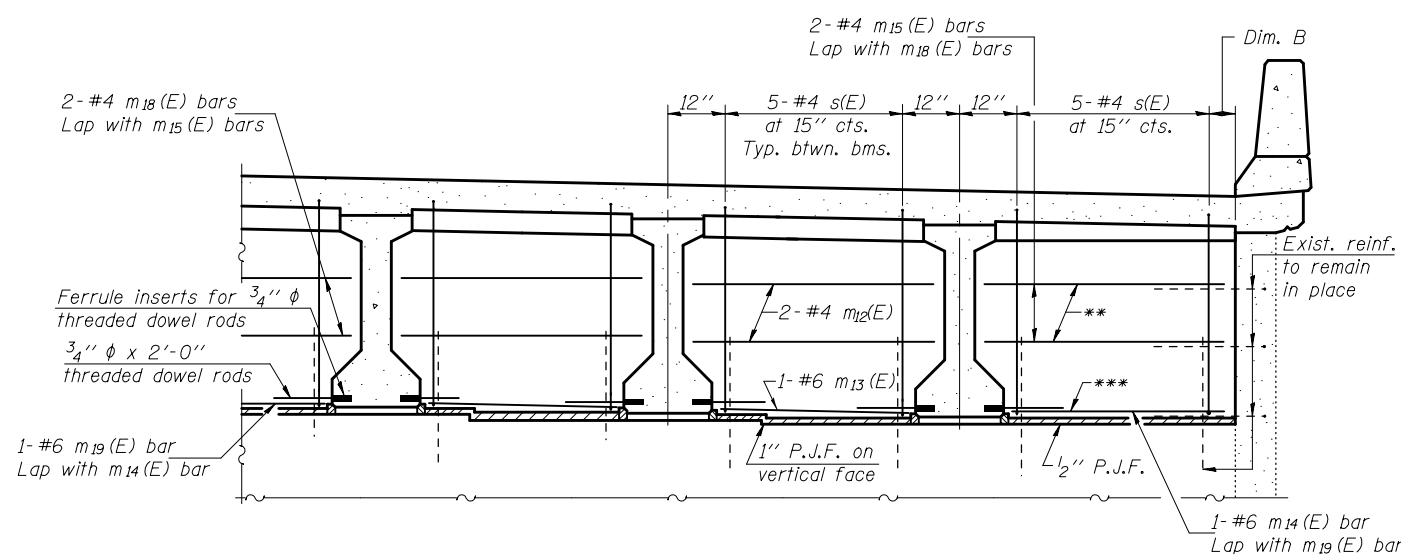


DIAPHRAGM AT APPROACH BENT

For location of m12(E), m13(E), and m41(E) thru m48(E) bars, see Section A-A on sheet 25 of 62.

*****2-#4 m43(E) bars (South end)
2-#4 m45(E) bars (North end)
*****1-#6 m44(E) bar (South end)
1-#6 m46(E) bar (North end)

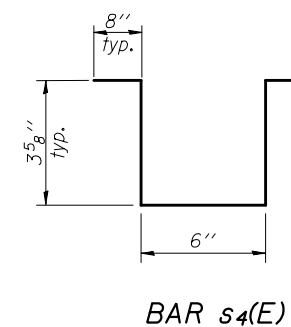
Dim. B = 4³/₈" (South end), 6" (North end)



DIAPHRAGM AT ABUTMENT

For location of m4(E), m5(E), m12(E) thru m15(E), and m18(E) thru m21(E) bars, see Section A-A on sheet 25 of 62.

**2-#4 m4(E) bars (South end)
2-#4 m20(E) bars (North end)
***1-#6 m5(E) bar (South end)
1-#6 m21(E) bar (North end)



MIN. BAR LAPS

#4 bar = 2'-7"
#6 bar = 3'-10"

**ONE APPROACH SLAB
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| a2(E) | 64 | #6 | 6'-0" | — |
| a8(E) | 66 | #5 | 22'-0" | — |
| a9(E) | 50 | #5 | 34'-7" | — |
| a0(E) | 66 | #5 | 33'-7" | — |
| a1(E) | 50 | #5 | 21'-2" | — |
| b(E) | 92 | #5 | 40'-2" | — |
| b1(E) | 12 | #5 | 38'-2" | — |
| b2(E) | 4 | #4 | 39'-7" | — |
| d(E) | 86 | #5 | 5'-7" | ⌋ |
| d1(E) | 86 | #5 | 7'-9" | ⌋ |
| e(E) | 16 | #4 | 38'-2" | — |
| e1(E) | 2 | #8 | 38'-2" | — |
| m4(E) | 2 | #4 | 5'-9" | — |
| m5(E) | 1 | #6 | 5'-3" | — |
| m2(E) | 20 | #4 | 6'-2" | — |
| m3(E) | 10 | #6 | 5'-2" | — |
| m4(E) | 1 | #6 | 27'-7" | — |
| m5(E) | 2 | #4 | 26'-3" | — |
| m8(E) | 2 | #4 | 23'-11" | — |
| m9(E) | 1 | #6 | 23'-9" | — |
| m20(E) | 2 | #4 | 5'-11" | — |
| m21(E) | 1 | #6 | 5'-5" | — |
| m41(E) | 1 | #6 | 25'-6" | — |
| m42(E) | 2 | #4 | 25'-6" | — |
| m43(E) | 2 | #4 | 7'-1" | — |
| m44(E) | 1 | #6 | 6'-7" | — |
| m45(E) | 2 | #4 | 7'-9" | — |
| m46(E) | 1 | #6 | 7'-3" | — |
| m47(E) | 2 | #4 | 27'-8" | — |
| m48(E) | 1 | #6 | 28'-11" | — |
| s(E) | 35 | #4 | 8'-9" | ⌋ |
| s1(E) | 37 | #4 | 7'-6" | ⌋ |
| s4(E) | 80 | #4 | 2'-6" | ⌋ |
| v(E) | 53 | #5 | 3'-9" | ⌋ |
| Reinforcement Bars, Epoxy Coated | | Pound | 14,820 | |
| Concrete Superstructure | | Cu. Yd. | 79.2 | |

| | | | |
|--------------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - |

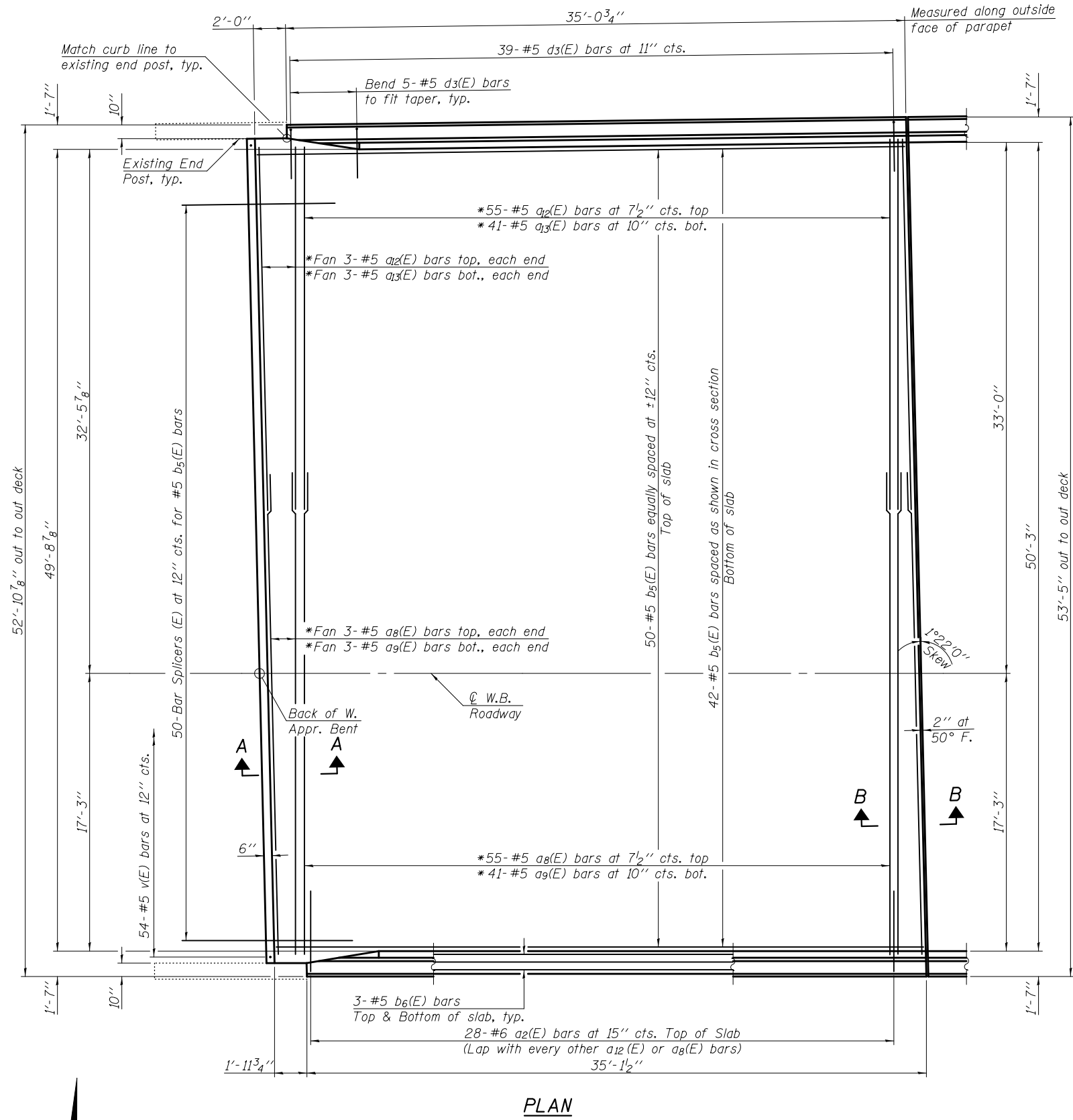
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORNER &
SHIRIN, INC.
ENGINEERS

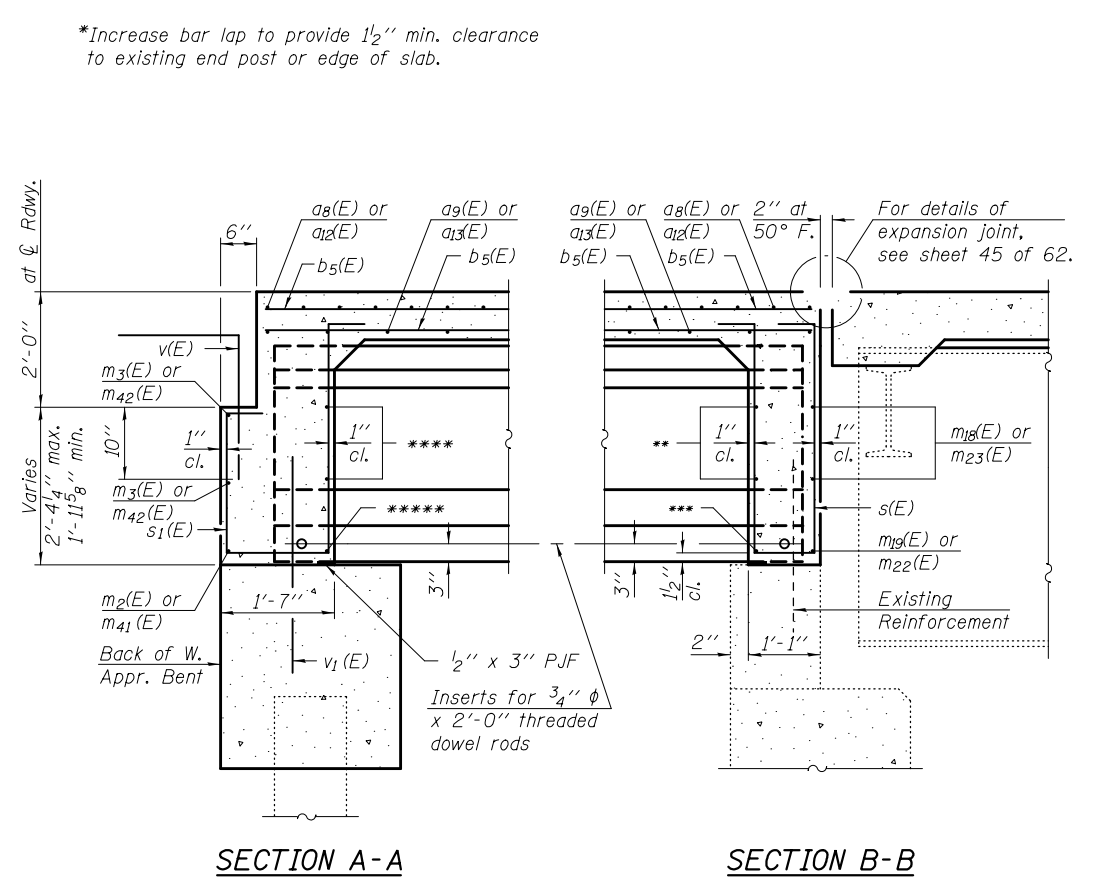
SUPERSTRUCTURE DETAILS - SPAN 4 (E.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 43 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. 27 OF 62 SHEETS



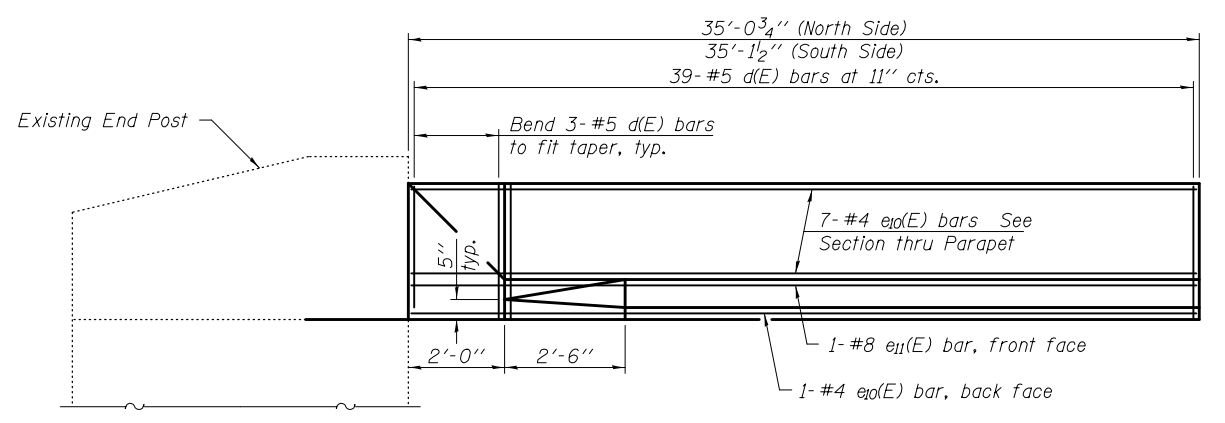
PLAN



SECTION A-A

SECTION B-B

- ** m12(E) or m20(E)
- *** m13(E), m21(E), or m24(E)
- **** m12(E), m45(E), or m49(E)
- ***** m13(E), m46(E), or m50(E)



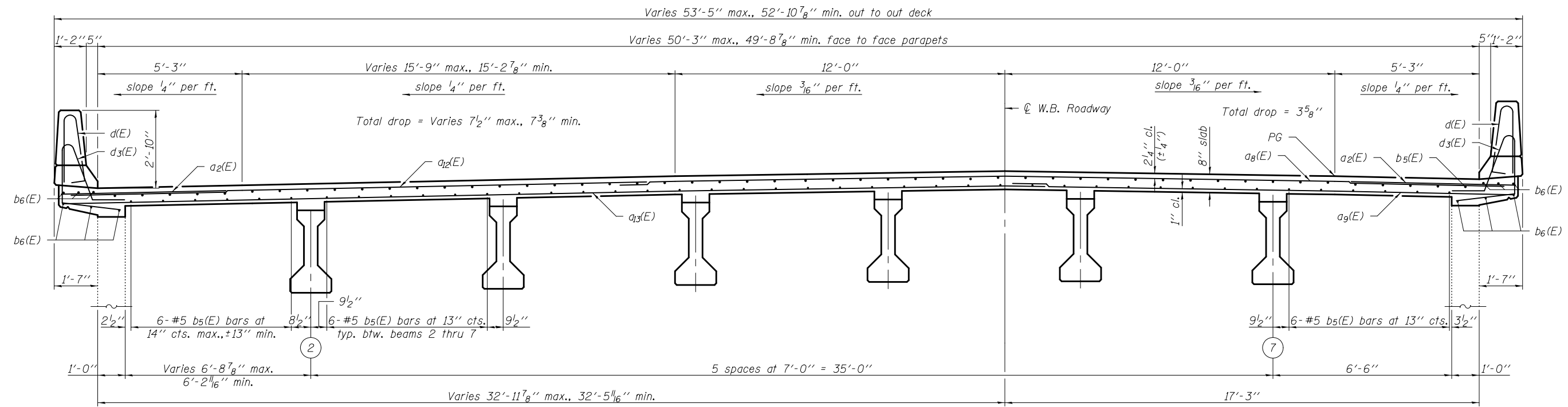
INSIDE ELEVATION OF PARAPET

Note: Bend e10(E) & e11(E) bars in field to fit taper.

MIN. BAR LAP
#5 bar = 3'-3"

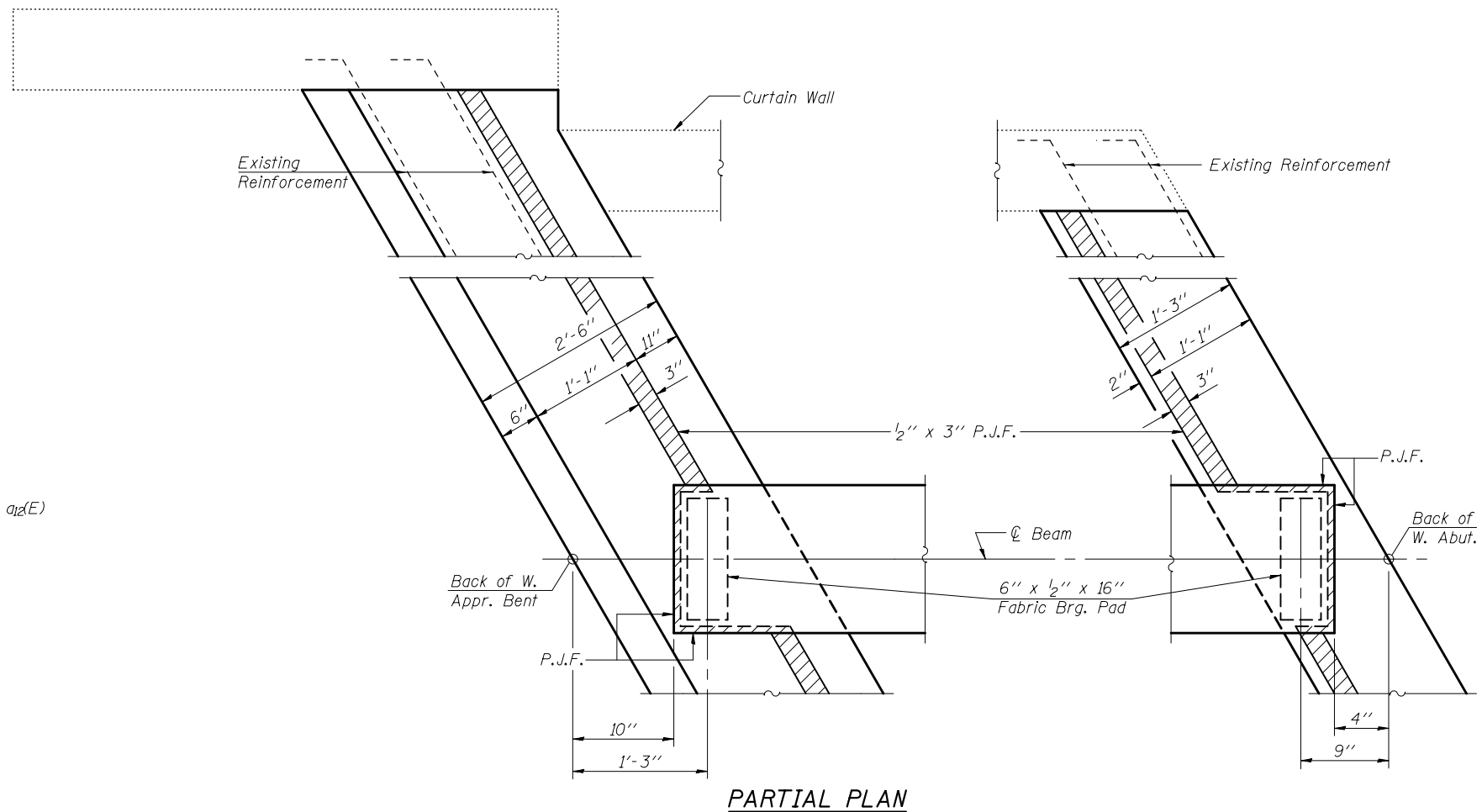
Notes:
For Cross Section and Parapet Details, see sheet 29 of 62.
For diaphragm details and Bill of Materials, see sheet 30 of 62.
For Removal Details, see sheet 18 of 62.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".

| | | | | | | | | | | | |
|--------------------|-----------------------|---------------------|----------------------------|---|--|--|---------------------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | SUPERSTRUCTURE DETAILS - SPAN 1 (W.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| #FILE* | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | 474 | | | | (72-3HB-1),I | PEORIA | 88 | 44 | |
| PLOT SCALE = | DRAWN K.A. KLUES | REVISIED - | CONTRACT NO. 68883 | | | | | | | | |
| PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISIED - | SHEET NO. 28 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | | |

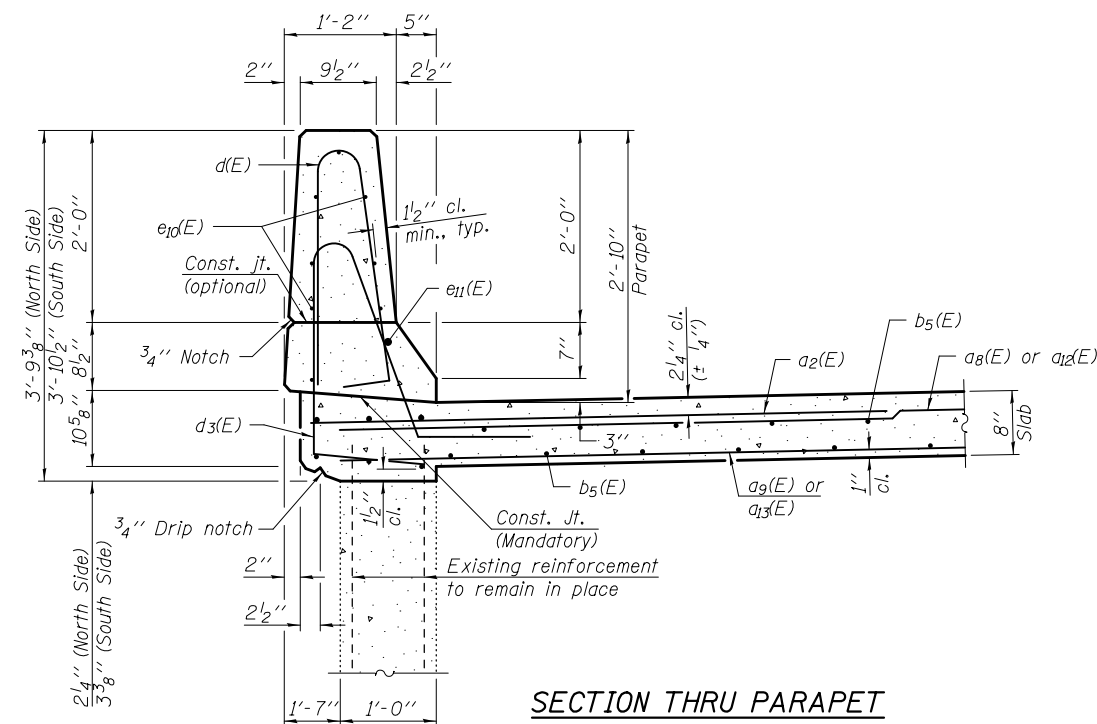


CROSS SECTION
(Looking East)

Notes:
 For Plan, see sheet 28 of 62.
 For bar bending diagrams, see sheets 21 & 30 of 62.
 For diaphragm details and Bill of Material, see sheet 30 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".



PARTIAL PLAN



SECTION THRU PARAPET

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| *FILE# | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORNER & SHIRIN, INC.
ENGINEERS

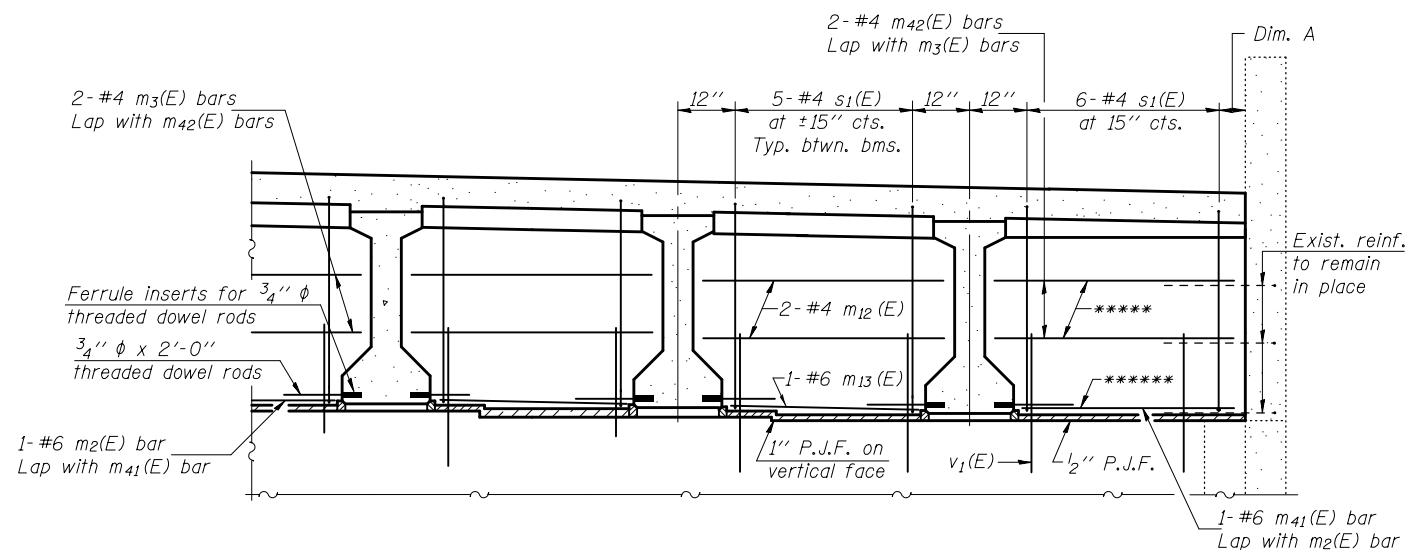
SUPERSTRUCTURE DETAILS - SPAN 1 (W.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|--------------------|---------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1), I | PEORIA | 88 | 45 |
| CONTRACT NO. 68883 | | | | |

SHEET NO. 29 OF 62 SHEETS

ILLINOIS FED. AID PROJECT

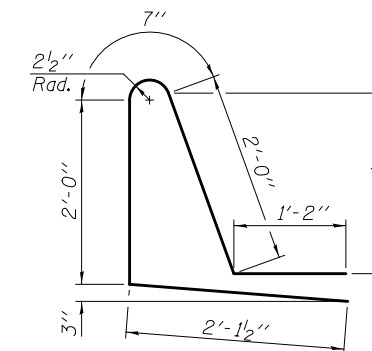
Dim. A = 8³/₄" (North end), 12" (South end)



DIAPHRAGM AT APPROACH BENT

For location of m₂(E), m₃(E), m₁₂(E), m₁₃(E), m₄₁(E), m₄₂(E), m₄₅(E), m₄₆(E), m₄₉(E), and m₅₀(E) bars, see Section A-A on sheet 28 of 62.

*****2-#4 m₄₉(E) bars (North end)
 2-#4 m₄₅(E) bars (South end)
 *****1-#6 m₅₀(E) bar (North end)
 1-#6 m₄₆(E) bar (South end)



BAR d3(E)

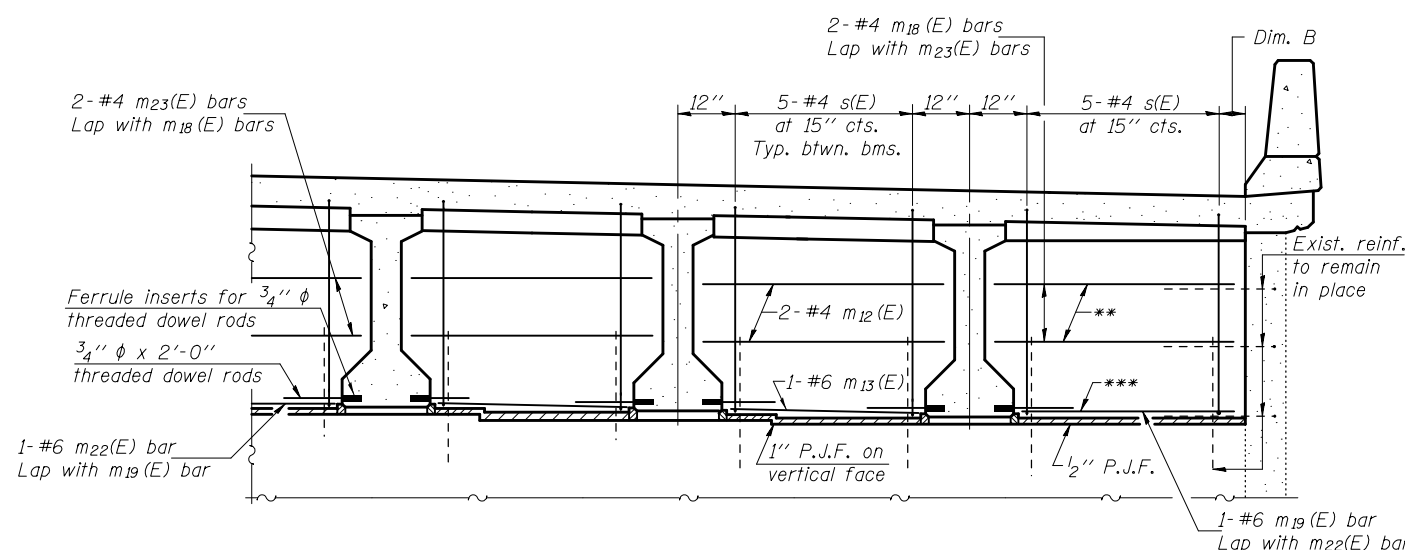
MIN. BAR LAPS

#4 bar = 2'-7"
 #6 bar = 3'-10"

**ONE APPROACH SLAB
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|---------|-------|
| a ₂ (E) | 56 | #6 | 6'-0" | — |
| a ₈ (E) | 61 | #5 | 22'-0" | — |
| a ₉ (E) | 47 | #5 | 34'-7" | — |
| a ₂ (E) | 61 | #5 | 34'-0" | — |
| a ₃ (E) | 47 | #5 | 21'-5" | — |
| b ₅ (E) | 92 | #5 | 36'-10" | — |
| b ₆ (E) | 12 | #5 | 34'-10" | — |
| d(E) | 78 | #5 | 5'-7" | ⌒ |
| d ₃ (E) | 78 | #5 | 7'-11" | ⌒ |
| e ₁₀ (E) | 16 | #4 | 34'-10" | — |
| e ₁₁ (E) | 2 | #8 | 34'-10" | — |
| m ₂ (E) | 1 | #6 | 29'-0" | — |
| m ₃ (E) | 2 | #4 | 28'-3" | — |
| m ₁₂ (E) | 22 | #4 | 6'-2" | — |
| m ₁₃ (E) | 10 | #6 | 5'-2" | — |
| m ₁₈ (E) | 2 | #4 | 23'-11" | — |
| m ₁₉ (E) | 1 | #6 | 23'-9" | — |
| m ₂₀ (E) | 2 | #4 | 5'-11" | — |
| m ₂₁ (E) | 1 | #6 | 5'-5" | — |
| m ₂₂ (E) | 1 | #6 | 28'-0" | — |
| m ₂₃ (E) | 2 | #4 | 26'-7" | — |
| m ₂₄ (E) | 1 | #6 | 5'-8" | — |
| m ₄₁ (E) | 1 | #6 | 25'-9" | — |
| m ₄₂ (E) | 2 | #4 | 25'-3" | — |
| m ₄₅ (E) | 2 | #4 | 7'-9" | — |
| m ₄₆ (E) | 1 | #6 | 7'-3" | — |
| m ₄₉ (E) | 2 | #4 | 7'-6" | — |
| m ₅₀ (E) | 1 | #6 | 7'-0" | — |
| s(E) | 35 | #4 | 8'-9" | ⌒ |
| s ₁ (E) | 37 | #4 | 7'-6" | ⌒ |
| v(E) | 54 | #5 | 3'-9" | ⌒ |
| Reinforcement Bars, Epoxy Coated | | Pound | 13,570 | |
| Concrete Superstructure | | Cu. Yd. | 74.1 | |

Dim. B = 8⁷/₈" (North end), 6" (South end)



DIAPHRAGM AT ABUTMENT

For location of m₁₂(E) & m₁₃(E) and m₁₈(E) thru m₂₄(E) bars, see Section B-B on sheet 28 of 62.

**2-#4 m₁₂(E) bars (North end)
 2-#4 m₂₀(E) bars (South end)
 ***1-#6 m₂₄(E) bar (North end)
 1-#6 m₂₁(E) bar (South end)

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



SUPERSTRUCTURE DETAILS - SPAN 1 (W.B.)
 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 46 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



PLAN

MINIMUM BAR LAP

#5 bar = 3'-3"
 #6 bar = 3'-10"

Notes:
 For Cross Section and Inside Elevation of Parapet, see sheet 32 of 62.
 For Bill of Material, Section A-A, and details, see sheet 33 of 62.
 For Removal Details, see sheet 18 of 62.
 Bars indicated thus 52 x 8-#5 etc. indicates 52 lines of bars with 8 lengths per line.

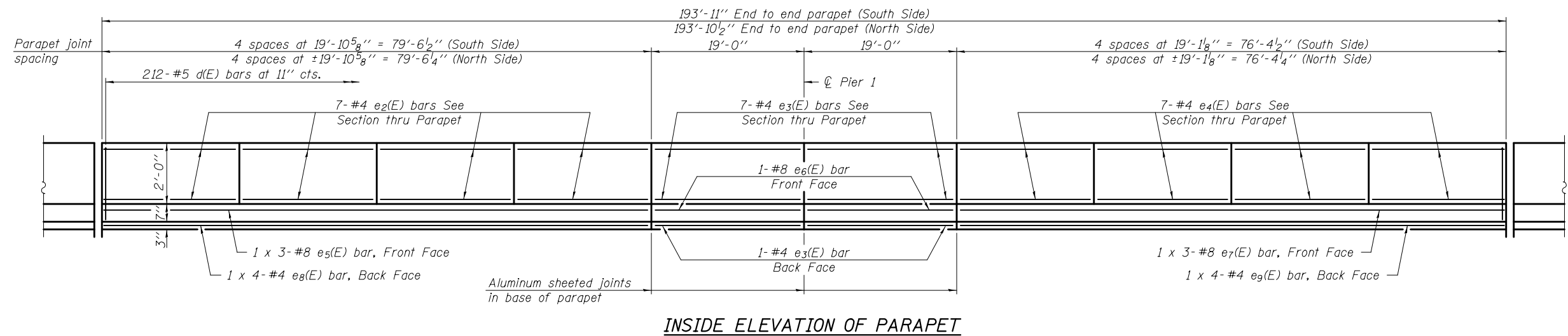
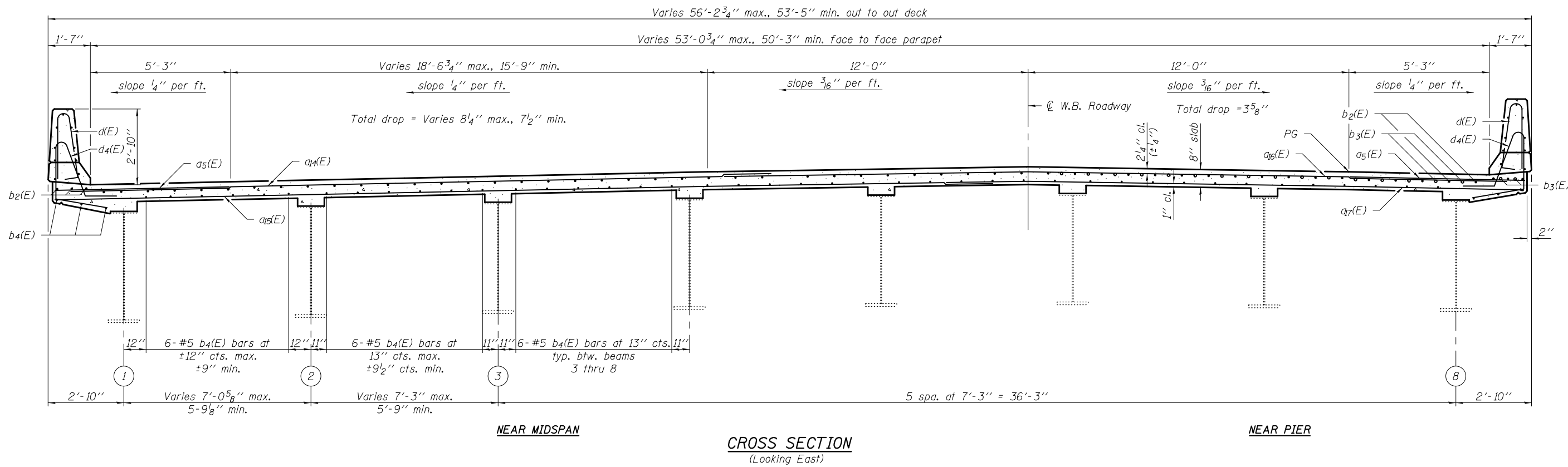
| | | | |
|-------------|--------------------|------------------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED <i>E.M. LAGEMANN</i> | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN <i>K.A. KLUES</i> | REVISED - |
| | PLOT DATE = #DATE* | CHECKED <i>E.M. LAGEMANN</i> | REVISED - |

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**



**SUPERSTRUCTURE DETAILS – SPANS 2 & 3 (W.B.)
 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)**

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 47 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

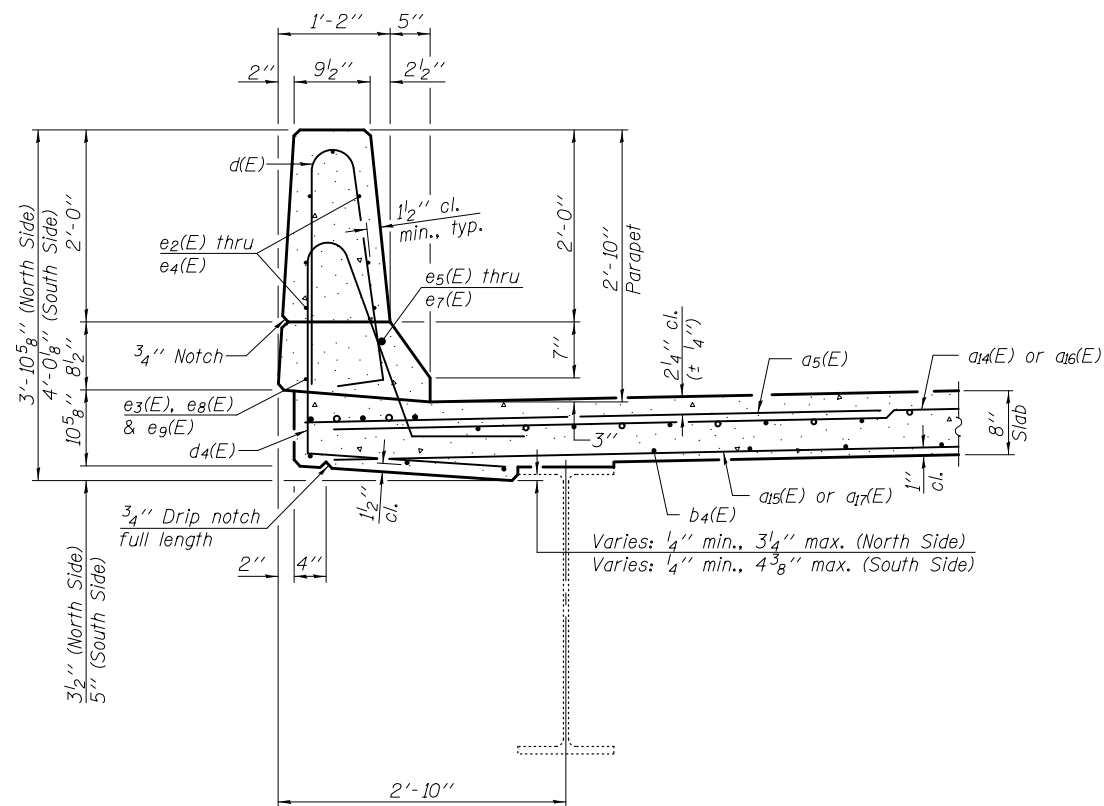


Notes:
 For Plan, see sheet 31 of 62.
 For Section thru Parapet and parapet details, see sheet 33 of 62.
 For Bill of Material, see sheet 33 of 62.
 For Removal Details, see sheet 18 of 62.
 Bars indicated thus 1 x 3-#8 etc. indicates 1 line of bars with 3 lengths per line.

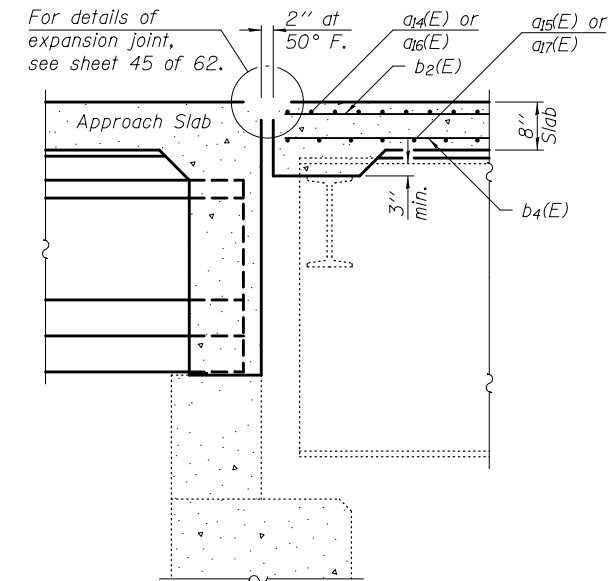
MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-0"
 #8 bar = 5'-2"

| | | | | | | | | | | | |
|-----------------------|--------------------|------------------------------|---|---|--|---|--------------------|-------------------------|------------------|---------------------------|-----------------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS Del. Staging (IDOT) | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | SUPERSTRUCTURE DETAILS – SPANS 2 & 3 (W.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. 474 | SECTION (72-3HB-1),I | COUNTY PEORIA | TOTAL SHEETS 88 | SHEET NO. 48 |
| | | CHECKED <i>E.M. LAGEMANN</i> | | | | | | | | CONTRACT NO. 68883 | |
| | | DRAWN <i>K.A. KLUES</i> | REVISED - | | | | | | | ILLINOIS FED. AID PROJECT | |
| | | CHECKED <i>E.M. LAGEMANN</i> | REVISED - | | | | | | | SHEET NO. 32 OF 62 SHEETS | |

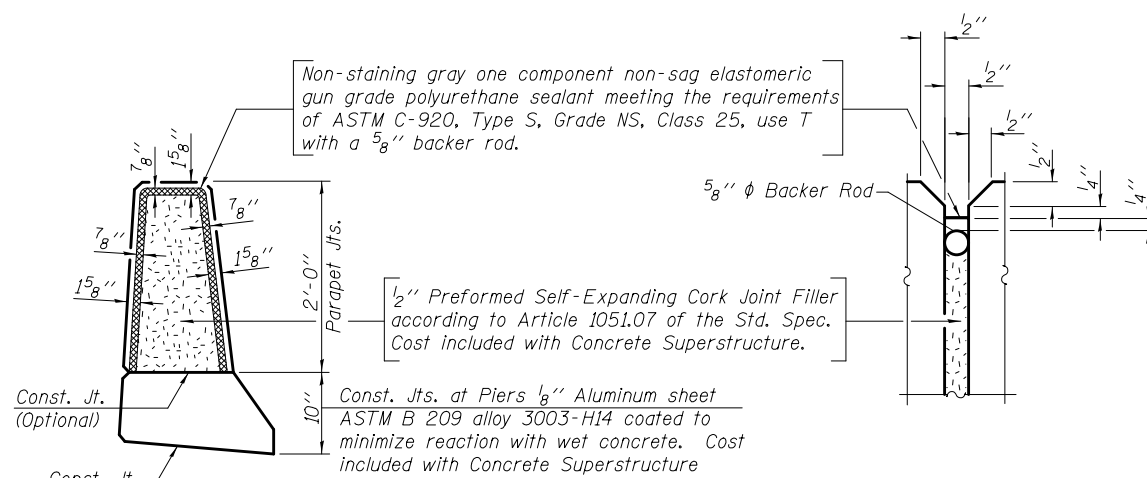
Notes:
 For Plan, see sheet 31 of 62.
 For Cross Section and Parapet, see sheet 32 of 62.
 For bar d(E) diagram, see sheet 21 of 62.
 For Removal Details, see sheet 18 of 62.



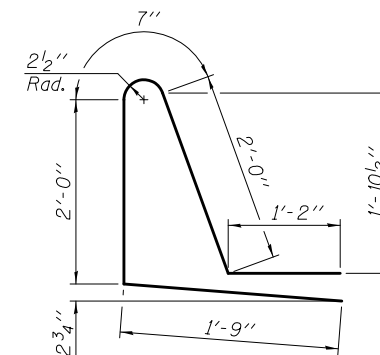
SECTION THRU PARAPET



SECTION A-A



PARAPET JOINT DETAILS



BAR d4(E)

**SUPERSTRUCTURE
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|----------|---------|-------|
| a5(E) | 312 | #6 | 6'-6" | — |
| a14(E) | 312 | #5 | 26'-0" | — |
| a5(E) | 234 | #5 | 37'-3" | — |
| a16(E) | 312 | #5 | 32'-10" | — |
| a7(E) | 234 | #5 | 21'-7" | — |
| b2(E) | 464 | #5 | 27'-1" | — |
| b3(E) | 108 | #6 | 25'-10" | — |
| b4(E) | 480 | #5 | 22'-4" | — |
| d(E) | 424 | #5 | 5'-7" | ⌋ |
| d4(E) | 424 | #5 | 7'-6" | ⌋ |
| e2(E) | 56 | #4 | 19'-8" | — |
| e3(E) | 32 | #4 | 18'-9" | — |
| e4(E) | 56 | #4 | 18'-10" | — |
| e5(E) | 6 | #8 | 29'-11" | — |
| e6(E) | 4 | #8 | 18'-9" | — |
| e7(E) | 6 | #8 | 28'-10" | — |
| e8(E) | 8 | #4 | 21'-4" | — |
| e9(E) | 8 | #4 | 20'-7" | — |
| Reinforcement Bars, Epoxy Coated | | Pound | 74,020 | |
| Concrete Superstructure | | Cu. Yds. | 330.6 | |

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| *FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

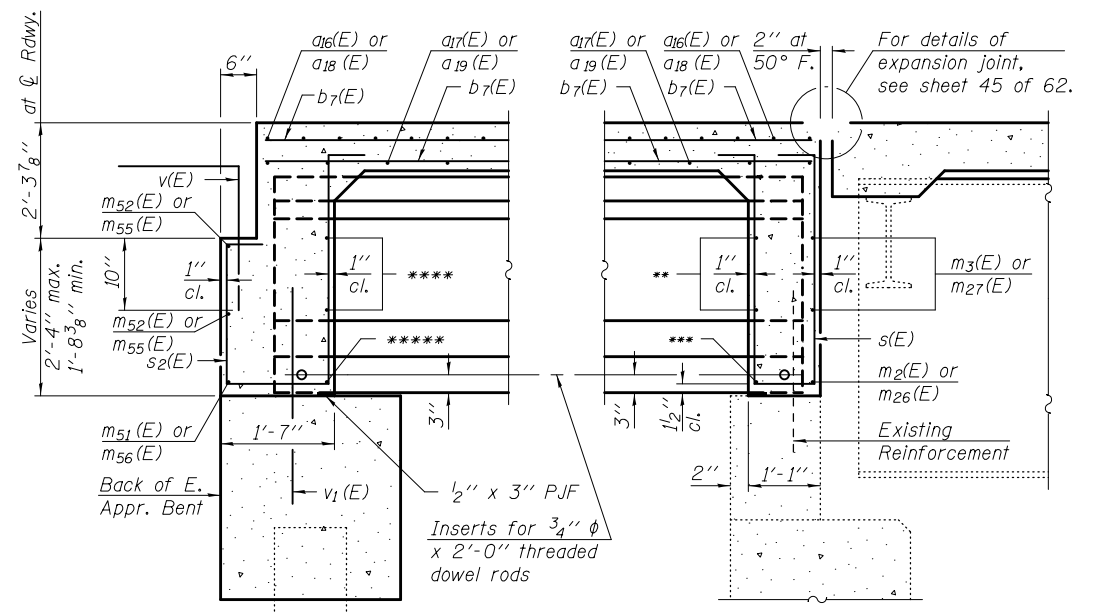
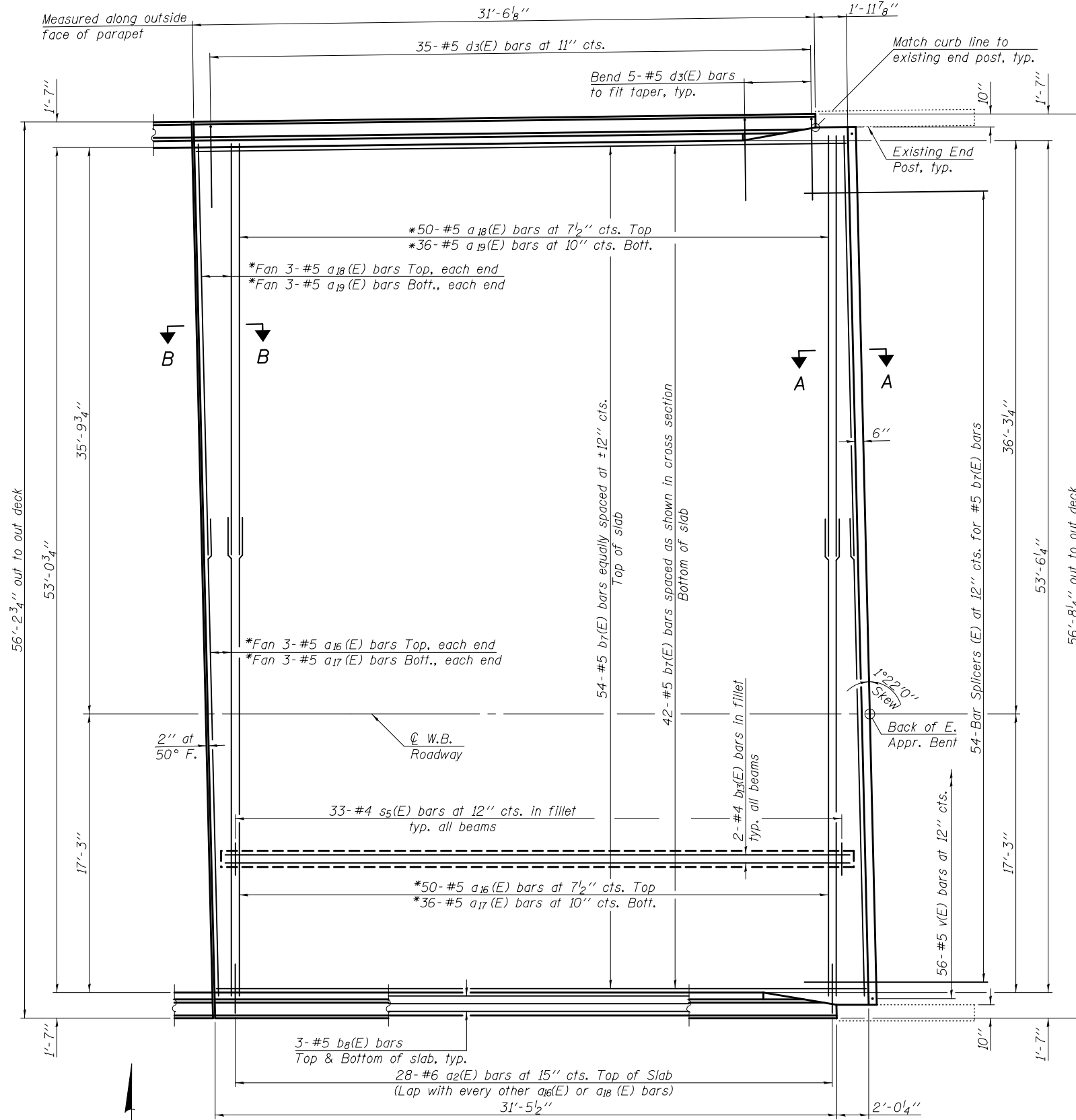
HORNER &
 SHIRIN, INC
 ENGINEERS

SUPERSTRUCTURE DETAILS – SPANS 2 & 3 (W.B.)
 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

SHEET NO. 33 OF 62 SHEETS

| | | | | |
|---------------------------|---------------|--------|--------------|--------------------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1), I | PEORIA | 88 | 49 |
| | | | | CONTRACT NO. 68883 |
| ILLINOIS FED. AID PROJECT | | | | |

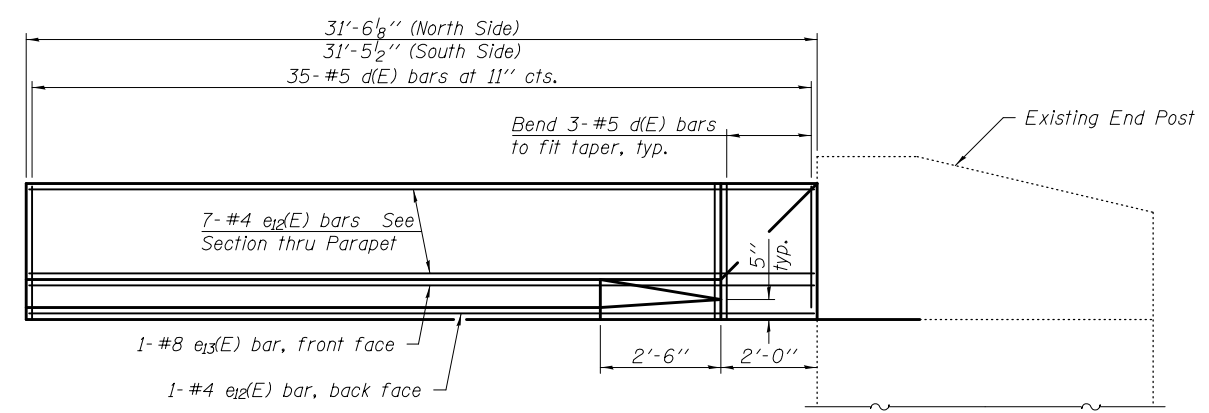
*Increase bar lap to provide 1/2" min. clearance to existing end post or edge of slab.



SECTION A-A

SECTION B-B

**m25(E), m28(E), or m31(E)
 ***m21(E), m24(E), or m32(E)
 ****m25(E), or m53(E)
 *****m24(E), or m54(E)



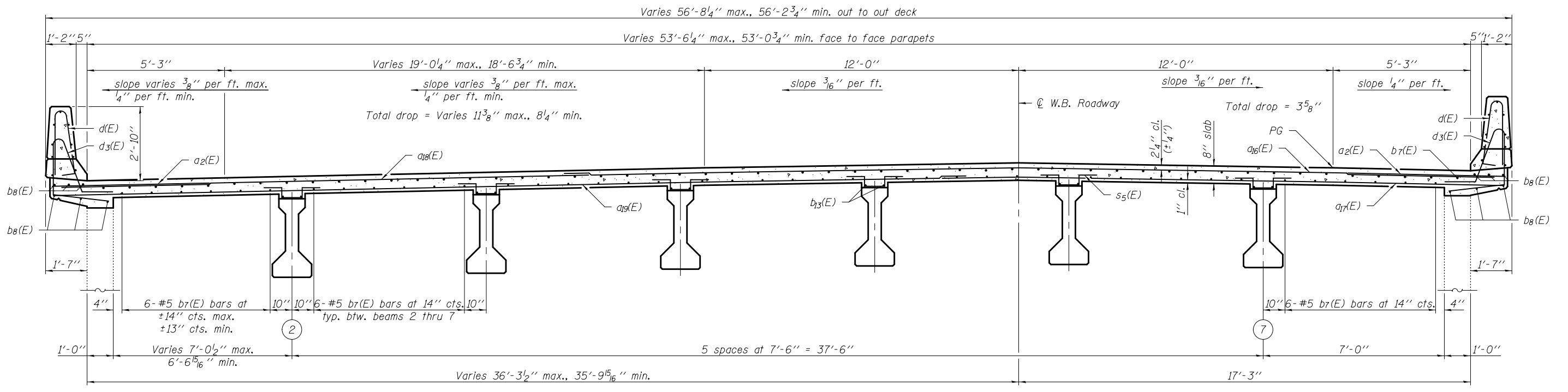
INSIDE ELEVATION OF PARAPET

Note: Bend e12(E) & e13(E) bars in field to fit taper.

Notes:
 For Cross Section and Parapet Details, see sheet 35 of 62.
 For diaphragm details and Bill of Materials, see sheet 36 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".

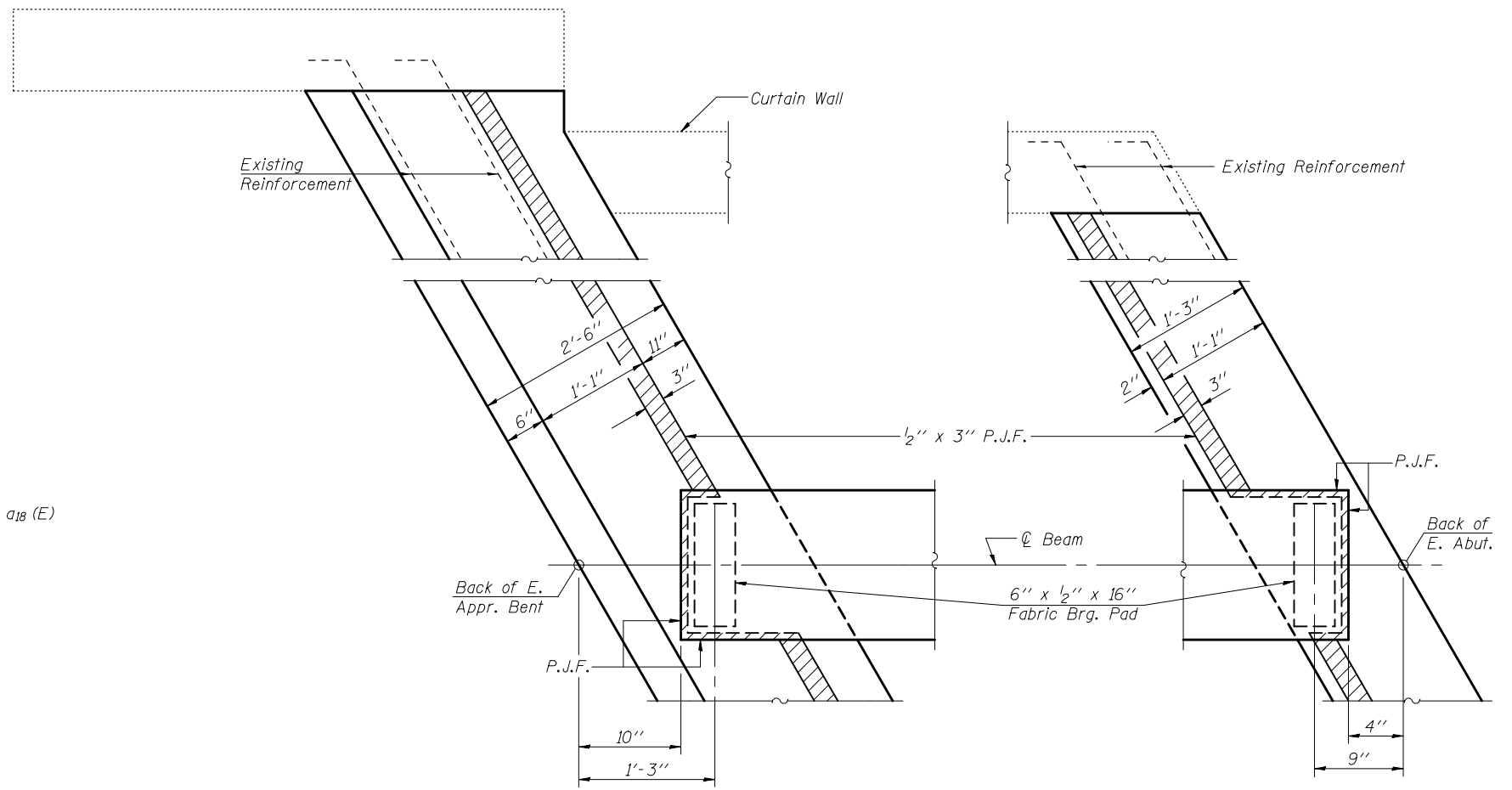
MIN. BAR LAP
 #5 bar = 3'-3"

| | | | | | | | | | | | |
|-----------------------|-----------------------|---------------------|----------------------------|---|--------------------------------------|--|---------------------------|---------|--------|-----------------|--------------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC ENGINEERS | SUPERSTRUCTURE DETAILS - SPAN 4 (W.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | 474 | | | | (72-3HB-1),I | PEORIA | 88 | 50 | |
| PLOT SCALE = | DRAWN K.A. KLUES | REVISIED - | CONTRACT NO. 68883 | | | | | | | | |
| PLOT DATE = *DATE* | CHECKED E.M. LAGEMANN | REVISIED - | SHEET NO. 34 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | | |

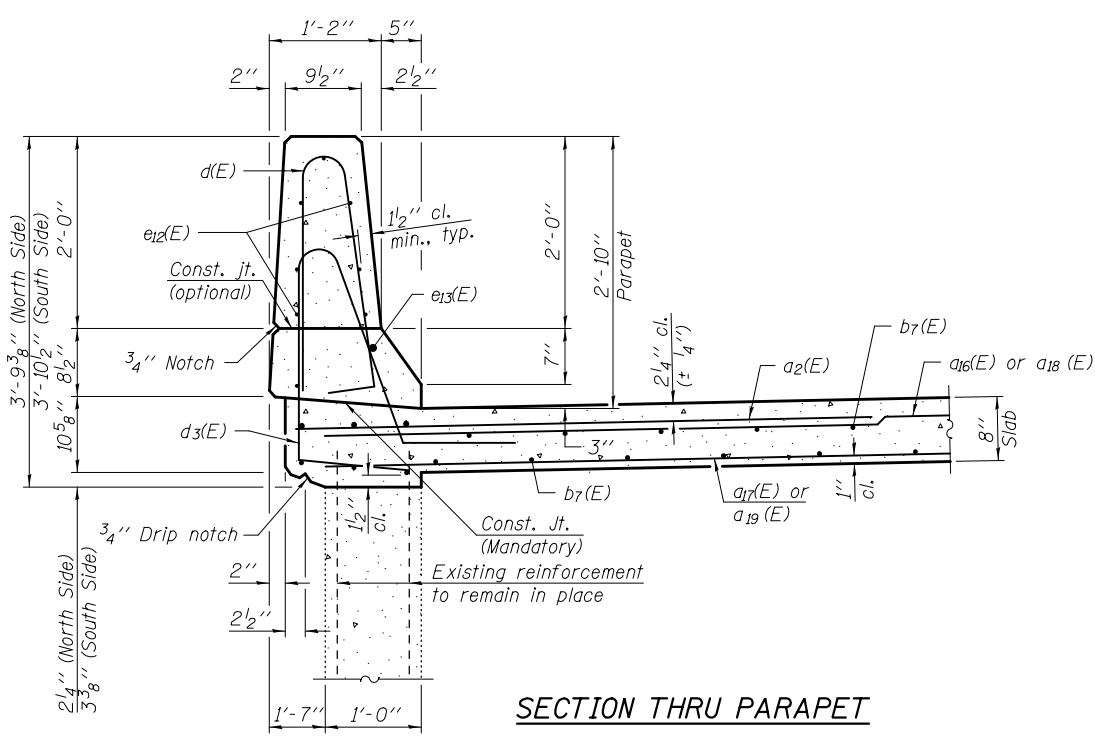


CROSS SECTION
(Looking East)

Notes:
 For Plan, see sheet 34 of 62.
 For bar bending diagrams, see sheets 21 & 36 of 62.
 For diaphragm details and Bill of Material, see sheet 36 of 62.
 For Removal Details, see sheet 18 of 62.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with "Removal of Existing Superstructures".
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with "Removal of Existing Superstructures".



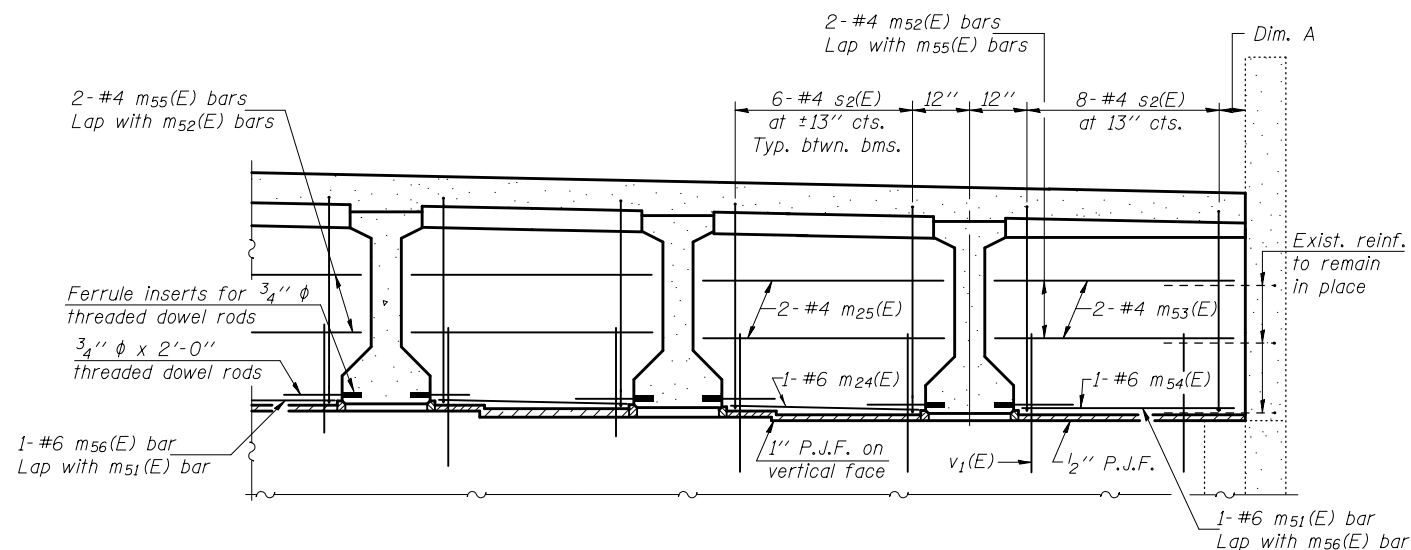
PARTIAL PLAN



SECTION THRU PARAPET

| | | | | | | | | | | | |
|--------------------|--------------------|-----------------------|----------------------------|---|--|--|--------------------|---------------------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER# | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | SUPERSTRUCTURE DETAILS - SPAN 4 (W.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE# | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 51 |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| PLOT DATE = #DATE# | | CHECKED E.M. LAGEMANN | REVISED - | SHEET NO. 35 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | |

Dim. A = 2 1/2" (North end), 2" (South end)



DIAPHRAGM AT APPROACH BENT

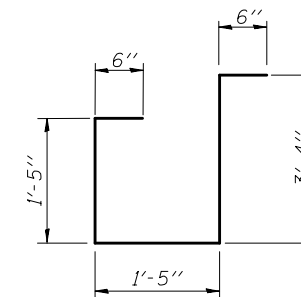
For location of m24(E), m25(E), and m51(E) thru m56(E) bars, see Section A-A on sheet 34 of 62.

MIN. BAR LAPS

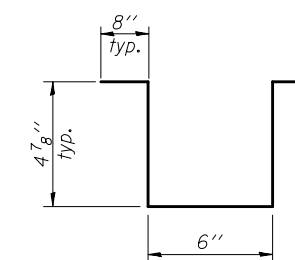
#4 bar = 2'-7"
#6 bar = 3'-10"

**ONE APPROACH SLAB
BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|---------|--------|-------|
| a2(E) | 56 | #6 | 6'-0" | — |
| a6(E) | 56 | #5 | 33'-3" | — |
| a7(E) | 42 | #5 | 22'-0" | — |
| a18(E) | 56 | #5 | 26'-1" | — |
| a19(E) | 42 | #5 | 37'-3" | — |
| b7(E) | 96 | #5 | 33'-3" | — |
| b8(E) | 12 | #5 | 31'-3" | — |
| b13(E) | 12 | #4 | 32'-7" | — |
| d(E) | 70 | #5 | 5'-7" | ⌋ |
| d3(E) | 70 | #5 | 7'-11" | ⌋ |
| e12(E) | 16 | #4 | 31'-3" | — |
| e13(E) | 2 | #8 | 31'-3" | — |
| m2(E) | 1 | #6 | 29'-0" | — |
| m3(E) | 2 | #4 | 28'-3" | — |
| m21(E) | 1 | #6 | 5'-5" | — |
| m24(E) | 10 | #6 | 5'-8" | — |
| m25(E) | 20 | #4 | 6'-8" | — |
| m26(E) | 1 | #6 | 25'-7" | — |
| m27(E) | 2 | #4 | 25'-1" | — |
| m28(E) | 2 | #4 | 6'-0" | — |
| m31(E) | 2 | #4 | 6'-5" | — |
| m32(E) | 1 | #6 | 5'-11" | — |
| m51(E) | 1 | #6 | 31'-0" | — |
| m52(E) | 2 | #4 | 30'-3" | — |
| m53(E) | 4 | #4 | 8'-3" | — |
| m54(E) | 2 | #6 | 7'-9" | — |
| m55(E) | 2 | #4 | 27'-1" | — |
| m56(E) | 1 | #6 | 27'-7" | — |
| s(E) | 42 | #4 | 8'-9" | ⌋ |
| s2(E) | 46 | #4 | 7'-2" | ⌋ |
| s5(E) | 198 | #4 | 2'-8" | ⌋ |
| v(E) | 56 | #5 | 3'-9" | ⌋ |
| Reinforcement Bars, Epoxy Coated | | Pound | 13,640 | |
| Concrete Superstructure | | Cu. Yd. | 72.7 | |

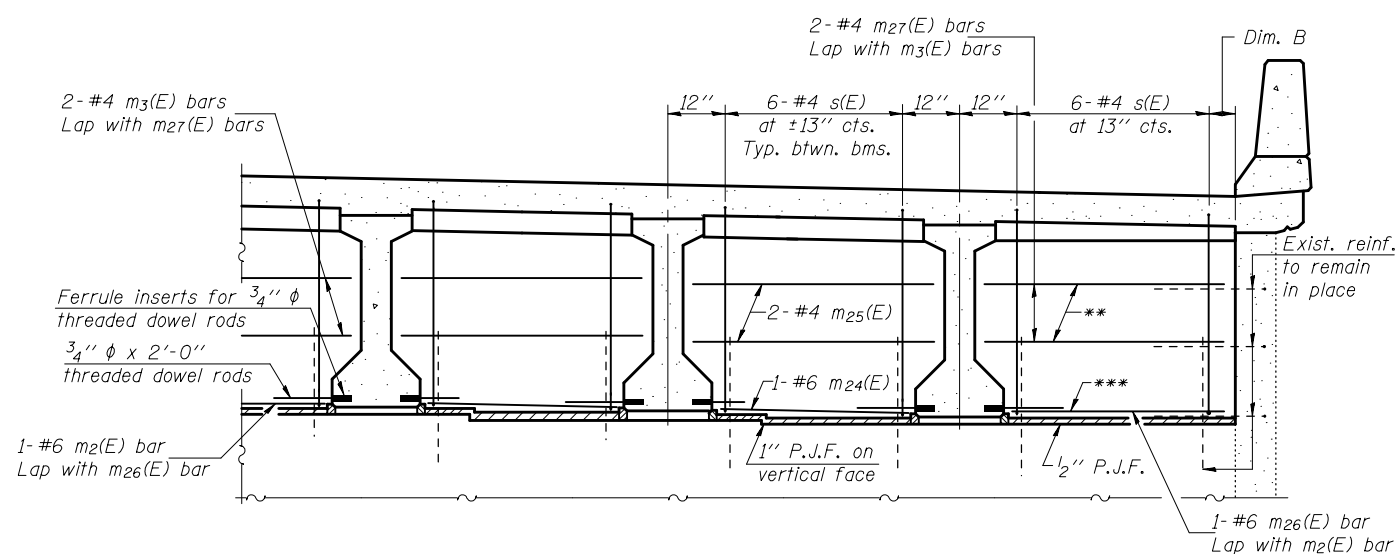


BAR s2(E)



BAR s5(E)

Dim. B = ±2" (North end), 7" (South end)



DIAPHRAGM AT ABUTMENT

For location of m2(E), m3(E), m24(E) thru m28(E), m31(E) & m32(E) bars, see Section B-B on sheet 34 of 62.

**2-#4 m28(E) bars (North end)
2-#4 m31(E) bars (South end)
***1-#6 m21(E) bar (North end)
1-#6 m32(E) bar (South end)

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

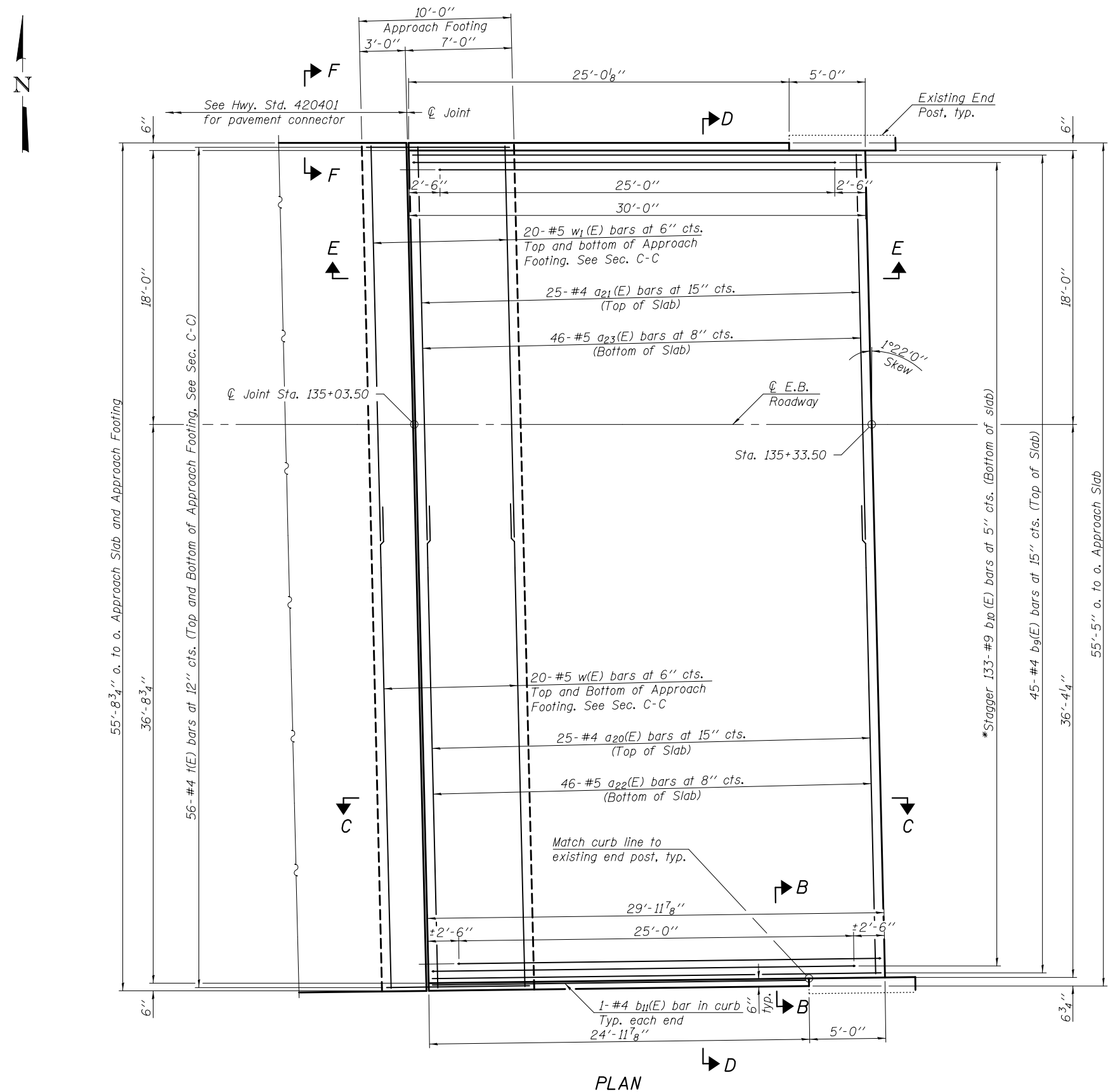
HORNER &
SHIRIN, INC.
ENGINEERS

SUPERSTRUCTURE DETAILS - SPAN 4 (W.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

| | | | | |
|---------------------------|---------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1), I | PEORIA | 88 | 52 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SHEET NO. 36 OF 62 SHEETS

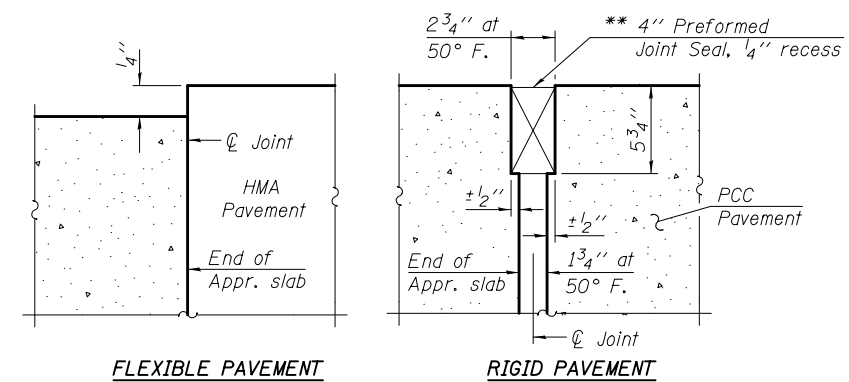
Notes:
 See sheet 38 of 62 for Sections C-C & D-D and View E-E.
 $a_{20}(E)$, $a_{21}(E)$, $a_{22}(E)$, and $a_{23}(E)$ bar spacings measured along \varnothing Rdwy.
 Increase lap $a_{20}(E)$, $a_{21}(E)$, $a_{22}(E)$, and $a_{23}(E)$ bars to fit end post and taper.



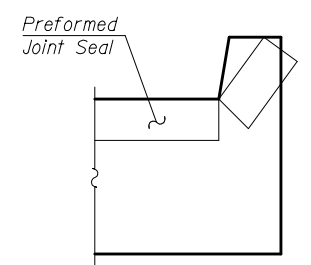
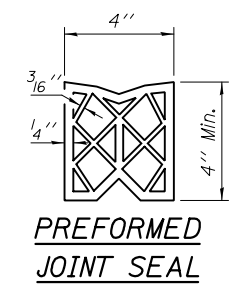
PLAN

* Tilt #9 $b_{10}(E)$ bars as required to maintain clearance.

** Cost included with Concrete Superstructure.

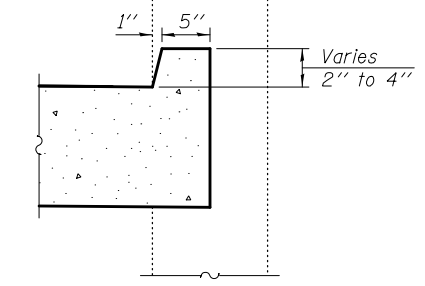


DETAIL A



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

MIN. BAR LAPS

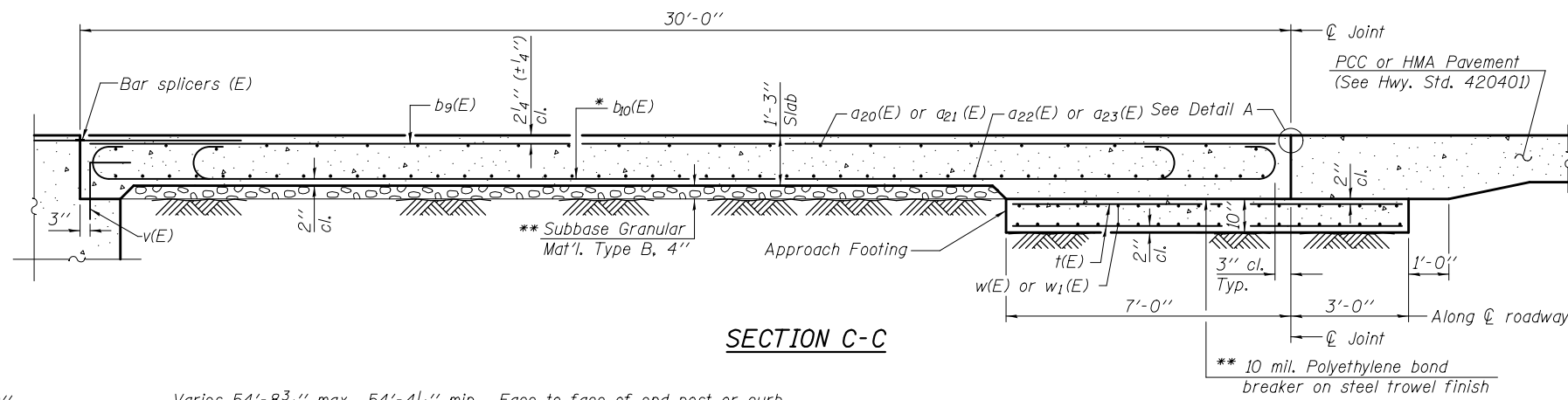
#4 bar = 2'-7"
 #5 bar = 3'-3"

(Sheet 1 of 2)

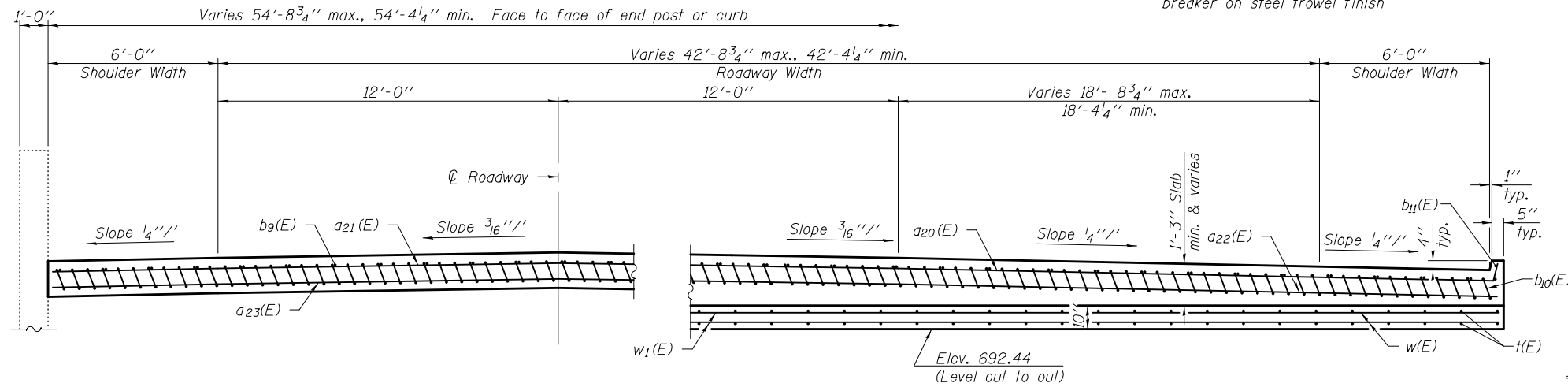
| | | | | | | | | | | | |
|--------------------|--------------------|-----------------------|----------------------------|---|--|---|--------------------|---------------------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | WEST APPROACH SLAB DETAILS (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 53 |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - | SHEET NO. 37 OF 62 SHEETS | | | | ILLINOIS FED. AID PROJECT | | | |

Notes:

See sheet 37 of 62 for Detail A and View B-B.
 Approach slab and curb concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 21 of 62.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 For bar splicer details, see sheet 62 of 62.
 Cost of excavation for approach footing included with Concrete Structures.



SECTION C-C



NEAR ABUTMENT

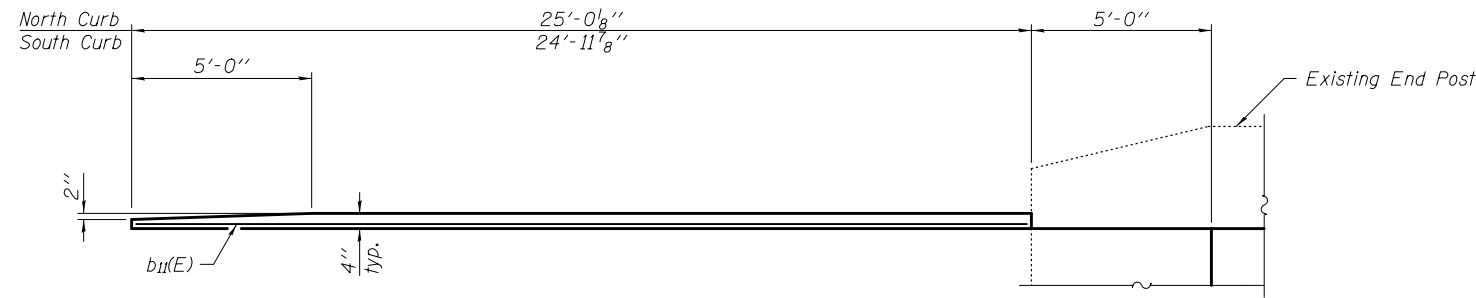
SECTION D-D

(See Plan for dimensions not shown)
 (Looking East)

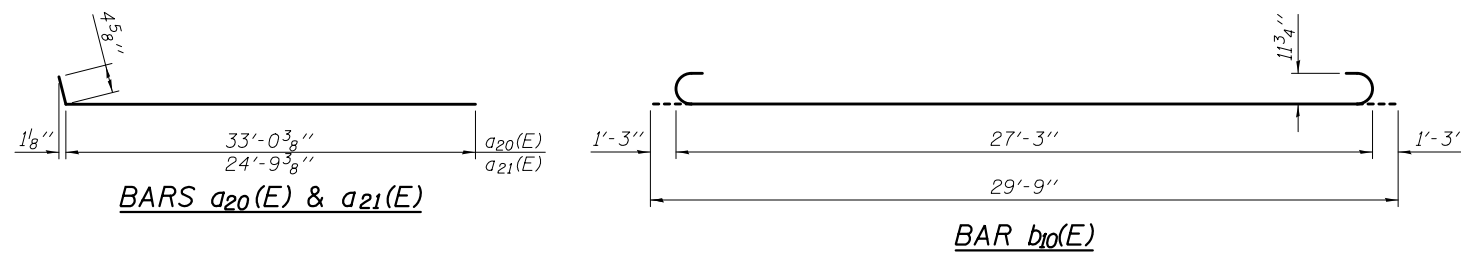
AT APPROACH FOOTING

* Tilt #9 b10(E) bars as required to maintain clearance.

** Cost included with Concrete Superstructure.



VIEW E-E



BARS a20(E) & a21(E)

BAR b10(E)

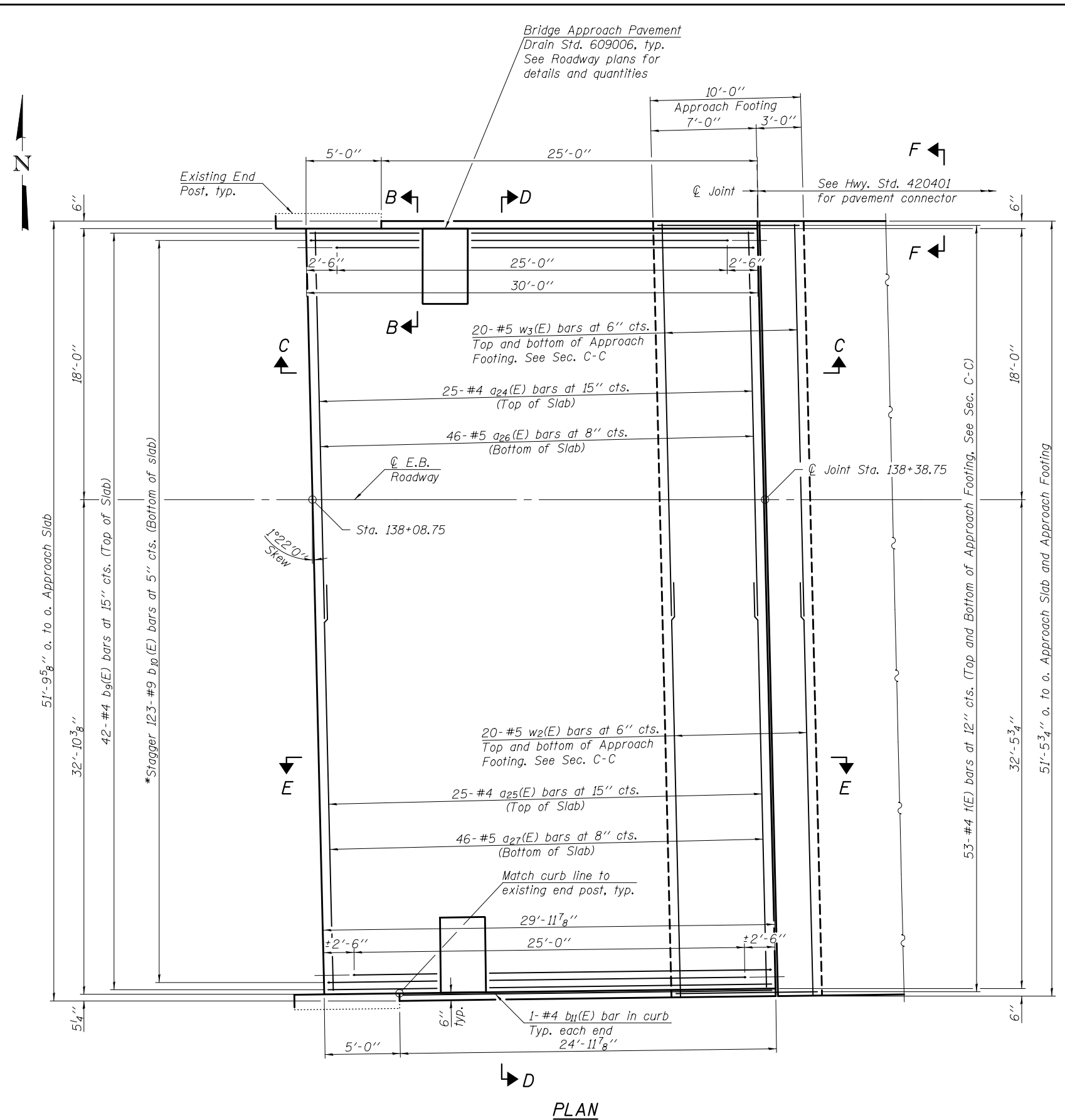
**ONE APPROACH
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| a20(E) | 25 | #4 | 33'-5" | ┌───┐ |
| a21(E) | 25 | #4 | 25'-2" | ┌───┐ |
| a22(E) | 46 | #5 | 24'-11" | ┌───┐ |
| a23(E) | 46 | #5 | 33'-9" | ┌───┐ |
| b9(E) | 45 | #4 | 29'-8" | ┌───┐ |
| b10(E) | 133 | #9 | 29'-9" | ┌───┐ |
| b11(E) | 2 | #4 | 24'-9" | ┌───┐ |
| t(E) | 56 | #4 | 9'-8" | ┌───┐ |
| w(E) | 40 | #5 | 31'-4" | ┌───┐ |
| w1(E) | 40 | #5 | 27'-4" | ┌───┐ |
| Concrete Superstructure | | | Cu. Yd. | 85.8 |
| Concrete Structures | | | Cu. Yd. | 17.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 20,980 |

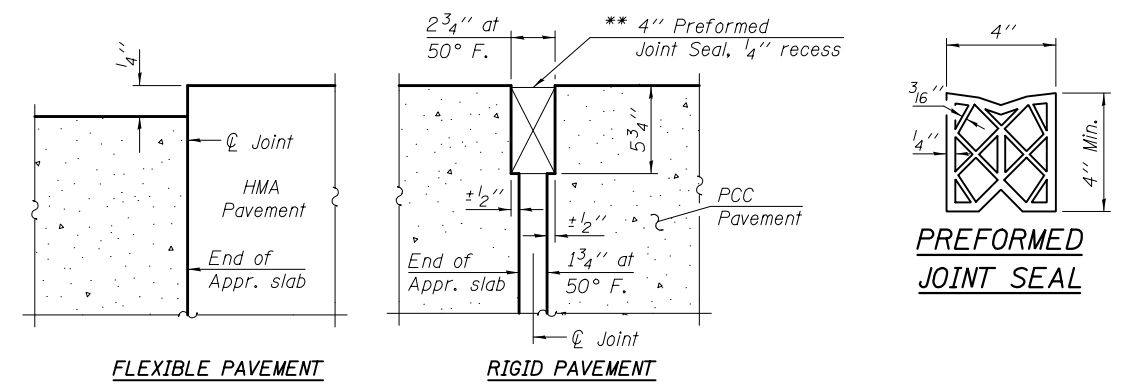
(Sheet 2 of 2)

Notes:
 See sheet 40 of 62 for Sections C-C & D-D and View E-E.
 a₂₄(E), a₂₅(E), a₂₆(E), and a₂₇(E) bar spacings measured along \varnothing Rdwy.
 Increase lap a₂₄(E), a₂₅(E), a₂₆(E), and a₂₇(E) bars to fit end post and taper.

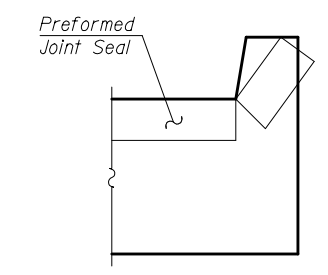
** Cost included with Concrete Superstructure.



* Tilt #9 b₁₀(E) bars as required to maintain clearance.

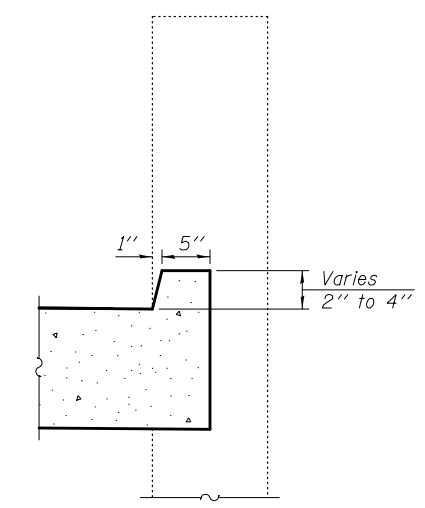


DETAIL A



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

MIN. BAR LAPS

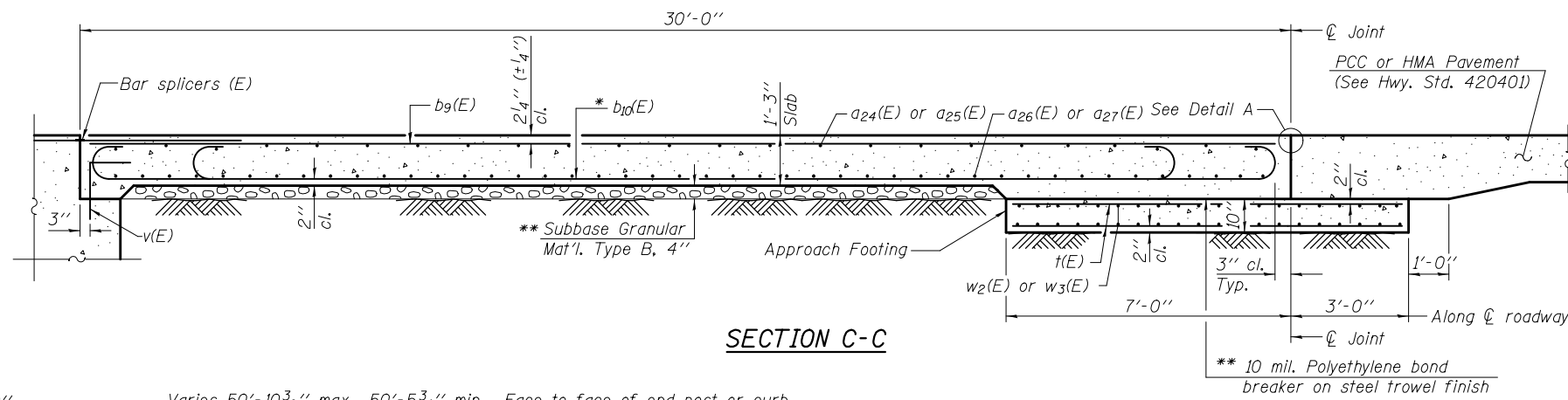
#4 bar = 2'-7"
 #5 bar = 3'-3"

(Sheet 1 of 2)

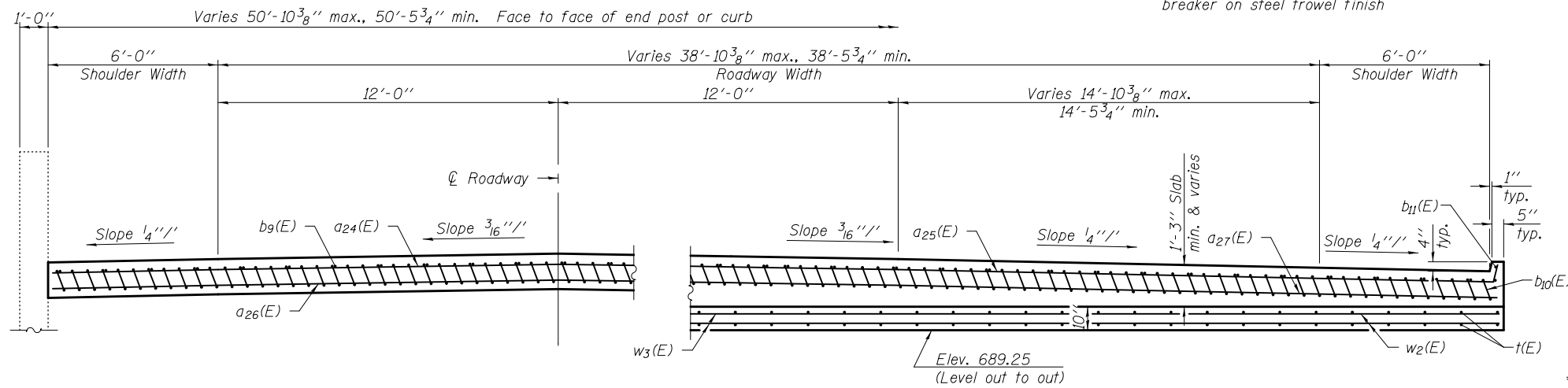
| | | | | | | | | | | | |
|--------------------|--------------------|-----------------------|----------------------------|---|--|---|---------------------------|--------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | EAST APPROACH SLAB DETAILS (E.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 55 |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - | | | | ILLINOIS FED. AID PROJECT | | | | |
| | | | | | | SHEET NO. 39 OF 62 SHEETS | | | | | |

Notes:

See sheet 39 of 62 for Detail A and View B-B.
 Approach slab and curb concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 21 of 62.
 For b₁₀(E) bar details, see sheet 38 of 62.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 62 of 62.
 Cost of excavation for approach footing included with Concrete Structures.



SECTION C-C



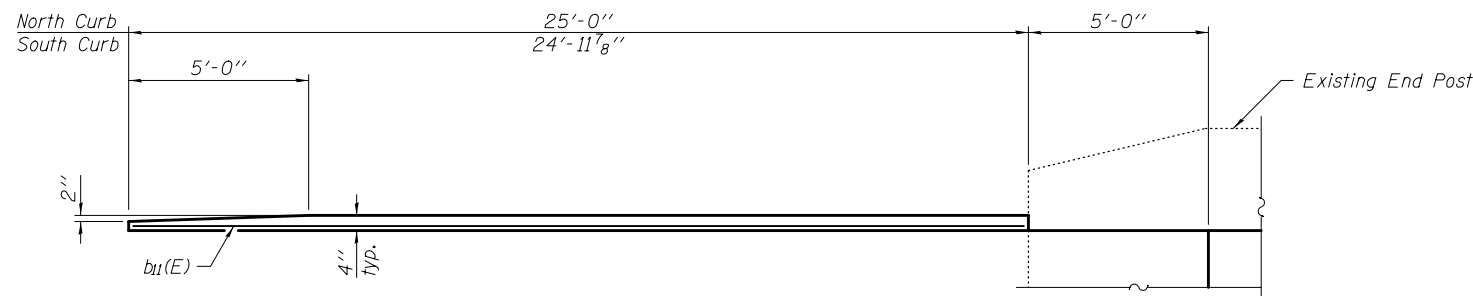
NEAR ABUTMENT

SECTION D-D
 (See Plan for dimensions not shown)
 (Looking East)

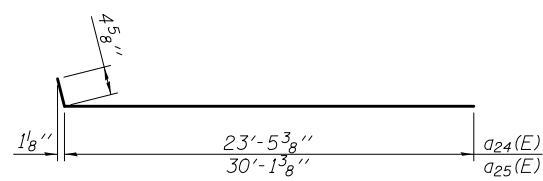
AT APPROACH FOOTING

* Tilt #9 b₁₀(E) bars as required to maintain clearance.

** Cost included with Concrete Superstructure.



VIEW E-E



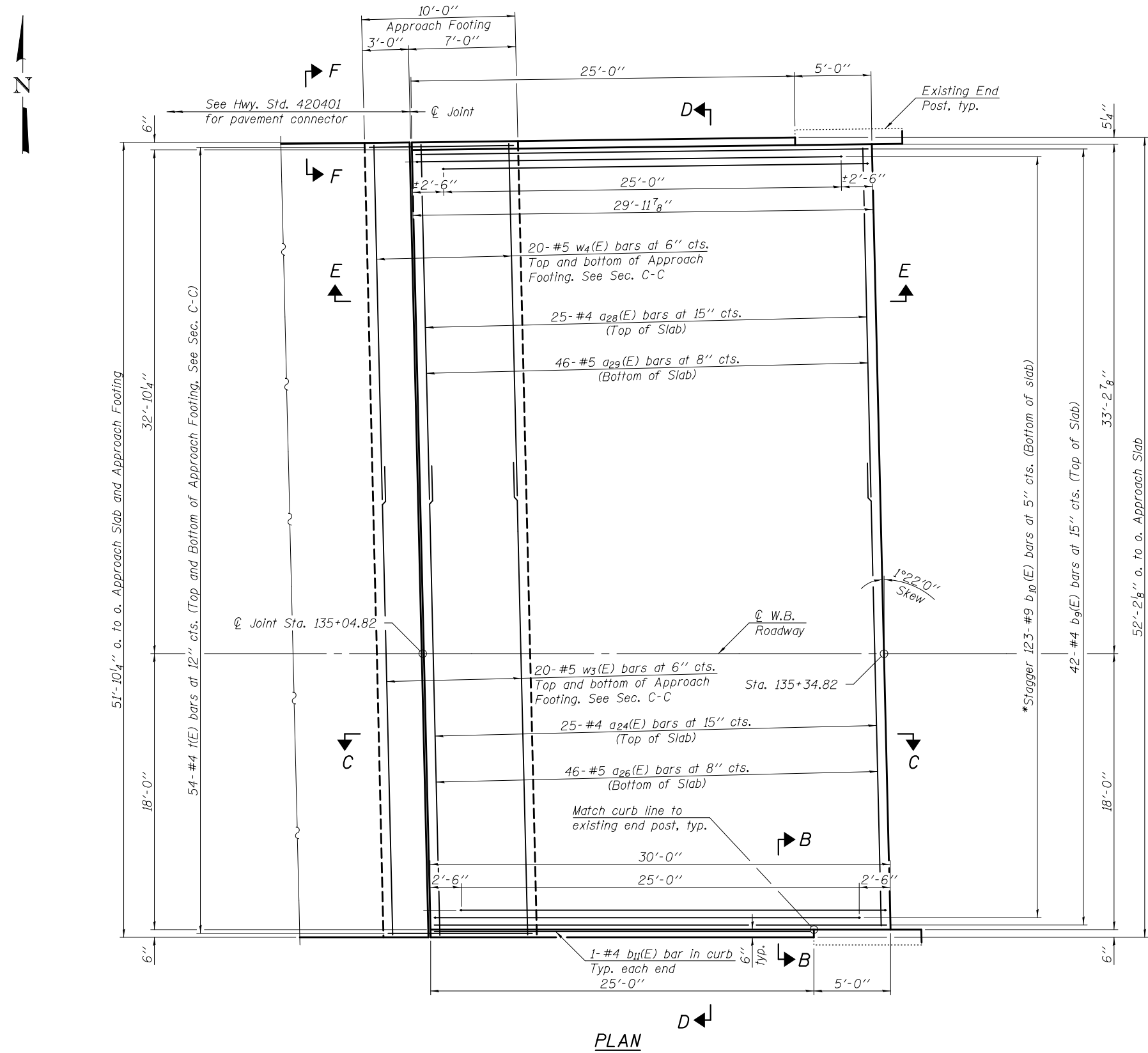
BARS a₂₄(E) & a₂₅(E)

**ONE APPROACH
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| a ₂₄ (E) | 25 | #4 | 23'-10" | ┌───┐ |
| a ₂₅ (E) | 25 | #4 | 30'-6" | ┌───┐ |
| a ₂₆ (E) | 46 | #5 | 32'-9" | ┌───┐ |
| a ₂₇ (E) | 46 | #5 | 21'-8" | ┌───┐ |
| b ₉ (E) | 42 | #4 | 29'-8" | ┌───┐ |
| b ₁₀ (E) | 123 | #9 | 29'-9" | ┌───┐ |
| b ₁₁ (E) | 2 | #4 | 24'-9" | ┌───┐ |
| t(E) | 53 | #4 | 9'-8" | ┌───┐ |
| w ₂ (E) | 40 | #5 | 28'-5" | ┌───┐ |
| w ₃ (E) | 40 | #5 | 26'-0" | ┌───┐ |
| Concrete Superstructure | | | Cu. Yd. | 77.9 |
| Concrete Structures | | | Cu. Yd. | 15.9 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 19,440 |

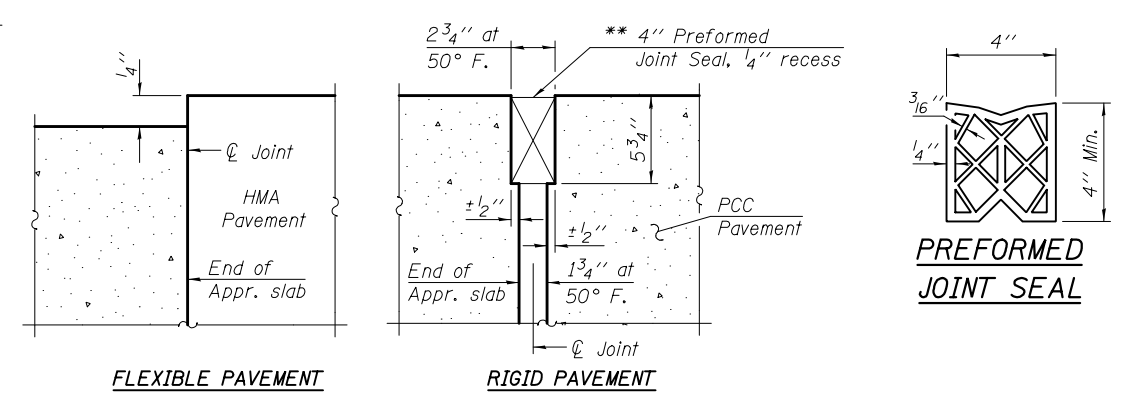
(Sheet 2 of 2)

Notes:
 See sheet 42 of 62 for Sections C-C & D-D and View E-E.
 a₂₄(E), a₂₆(E), a₂₈(E), and a₂₉(E) bar spacings measured along \varnothing Rdwy.
 Increase lap a₂₄(E), a₂₆(E), a₂₈(E), and a₂₉(E) bars to fit end post and taper.

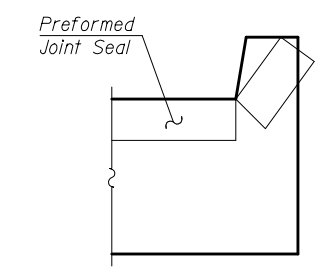


PLAN
 * Tilt #9 b₁₀(E) bars as required to maintain clearance.

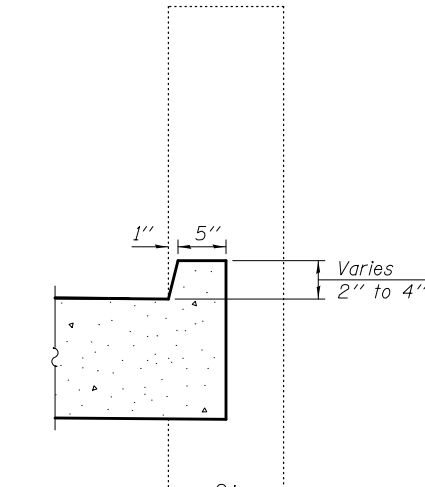
** Cost included with Concrete Superstructure.



DETAIL A



VIEW F-F
 Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

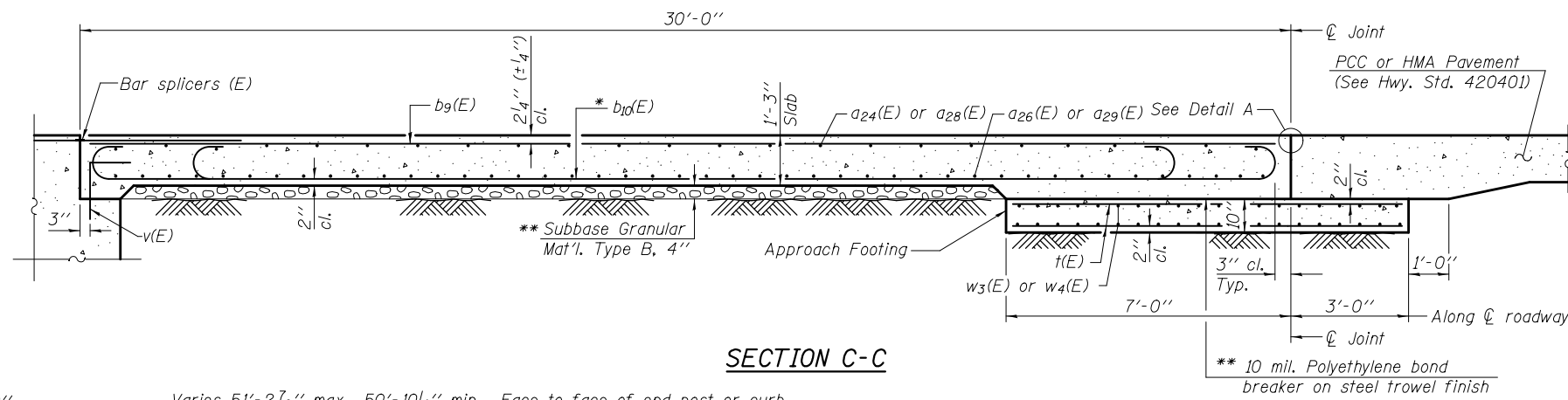
MIN. BAR LAPS
 #4 bar = 2'-7"
 #5 bar = 3'-3"

(Sheet 1 of 2)

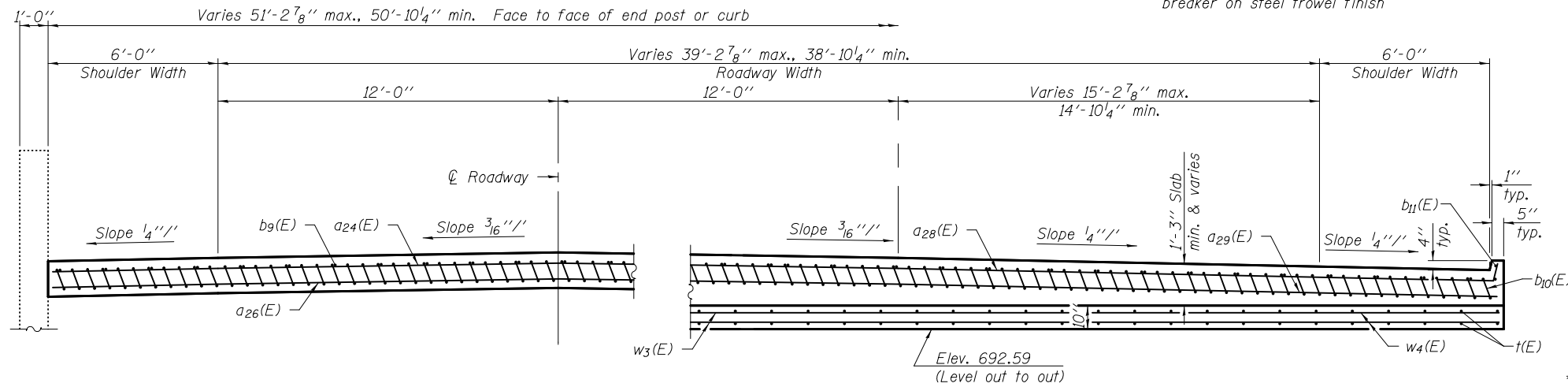
| | | | | | | | | | | | |
|---------------------------|--------------------|-----------------------|----------------------------|---|--|---|---------------------------|--------------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC. ENGINEERS | WEST APPROACH SLAB DETAILS (W.B.) STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. R.T.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 57 |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - | | | | SHEET NO. 41 OF 62 SHEETS | | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |

Notes:

See sheet 41 of 62 for Detail A and View B-B.
 Approach slab and curb concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 21 of 62.
 For b₁₀(E) bar details, see sheet 38 of 62.
 For a₂₄(E) bar details, see sheet 40 of 62.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 62 of 62.
 Cost of excavation for approach footing included with Concrete Structures.



SECTION C-C



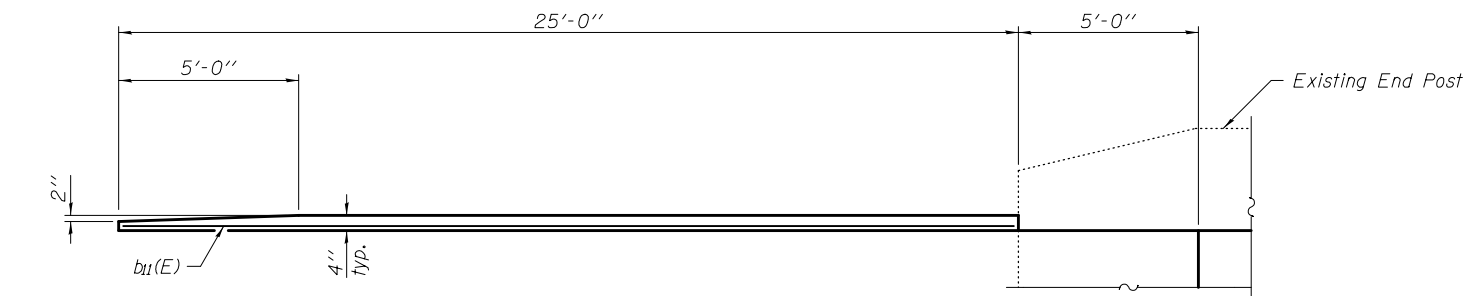
NEAR ABUTMENT

SECTION D-D
 (See Plan for dimensions not shown)
 (Looking West)

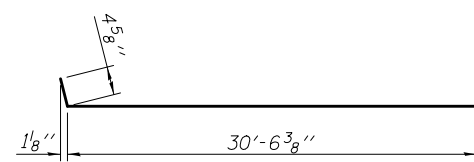
AT APPROACH FOOTING

* Tilt #9 b₁₀(E) bars as required to maintain clearance.

** Cost included with Concrete Superstructure.



VIEW E-E



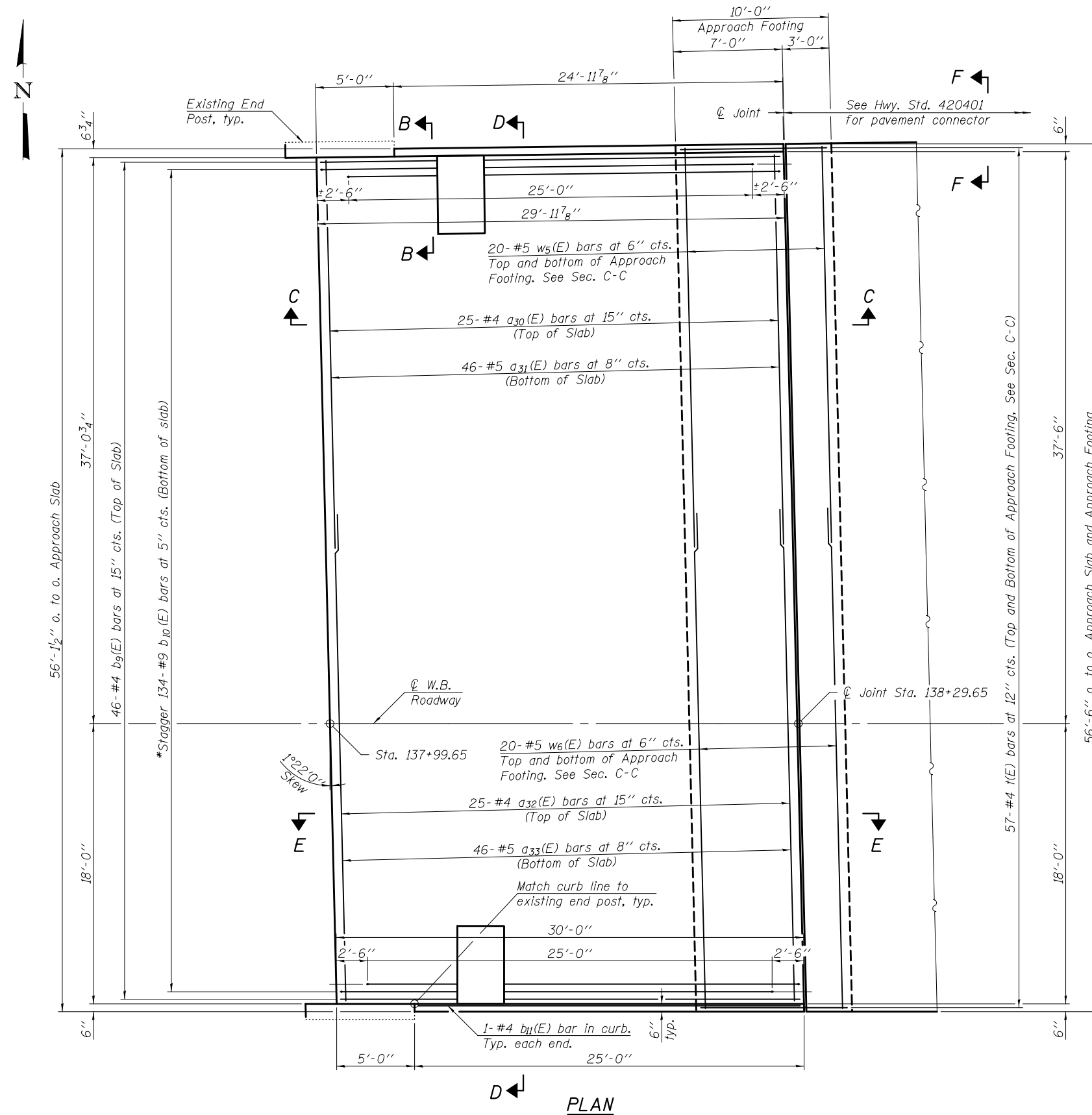
BAR a₂₈(E)

ONE APPROACH
 BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|--------|
| a ₂₄ (E) | 25 | #4 | 23'-10" | U |
| a ₂₆ (E) | 46 | #5 | 32'-9" | — |
| a ₂₈ (E) | 25 | #4 | 30'-11" | U |
| a ₂₉ (E) | 46 | #5 | 22'-1" | — |
| b ₉ (E) | 42 | #4 | 29'-8" | — |
| b ₁₀ (E) | 123 | #9 | 29'-9" | U |
| b ₁₁ (E) | 2 | #4 | 24'-9" | — |
| t(E) | 54 | #4 | 9'-8" | — |
| w ₃ (E) | 40 | #5 | 29'-5" | — |
| w ₄ (E) | 40 | #5 | 25'-4" | — |
| Concrete Superstructure | | | Cu. Yd. | 79.4 |
| Concrete Structures | | | Cu. Yd. | 16.0 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 19,490 |

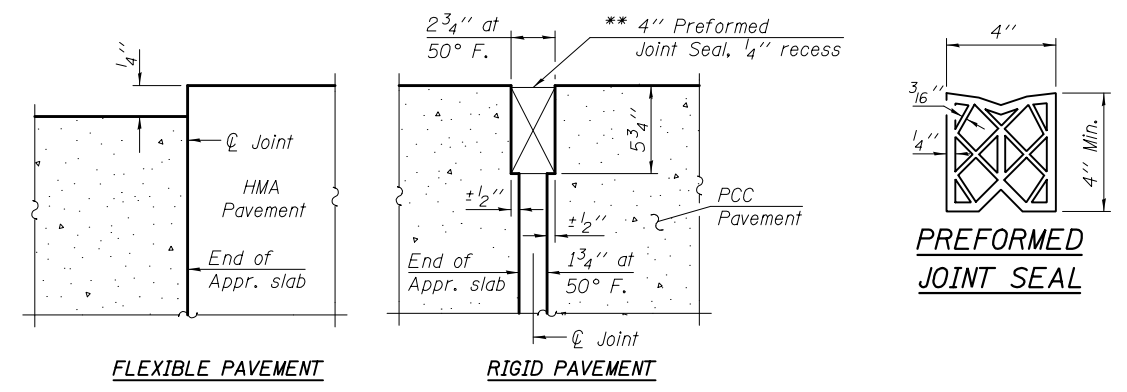
(Sheet 2 of 2)

Notes:
 See sheet 44 of 62 for Sections C-C & D-D and View E-E.
 $a_{30}(E)$, $a_{31}(E)$, $a_{32}(E)$, and $a_{33}(E)$ bar spacings measured along C Rdwy.
 Increase lap $a_{30}(E)$, $a_{31}(E)$, $a_{32}(E)$, and $a_{33}(E)$ bars to fit end post and taper.

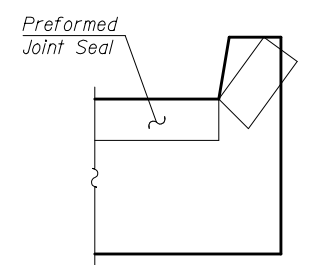


* Tilt #9 $b_{10}(E)$ bars as required to maintain clearance.

** Cost included with Concrete Superstructure.

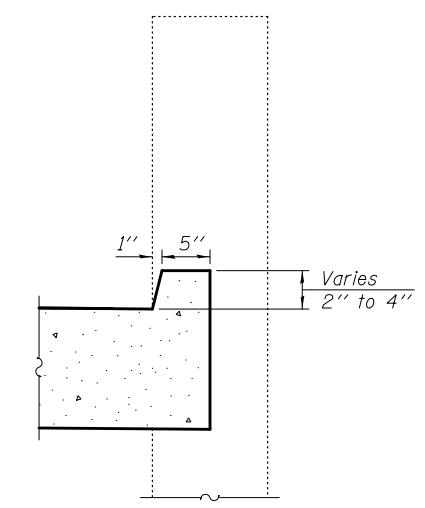


DETAIL A



VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



VIEW B-B

MIN. BAR LAPS

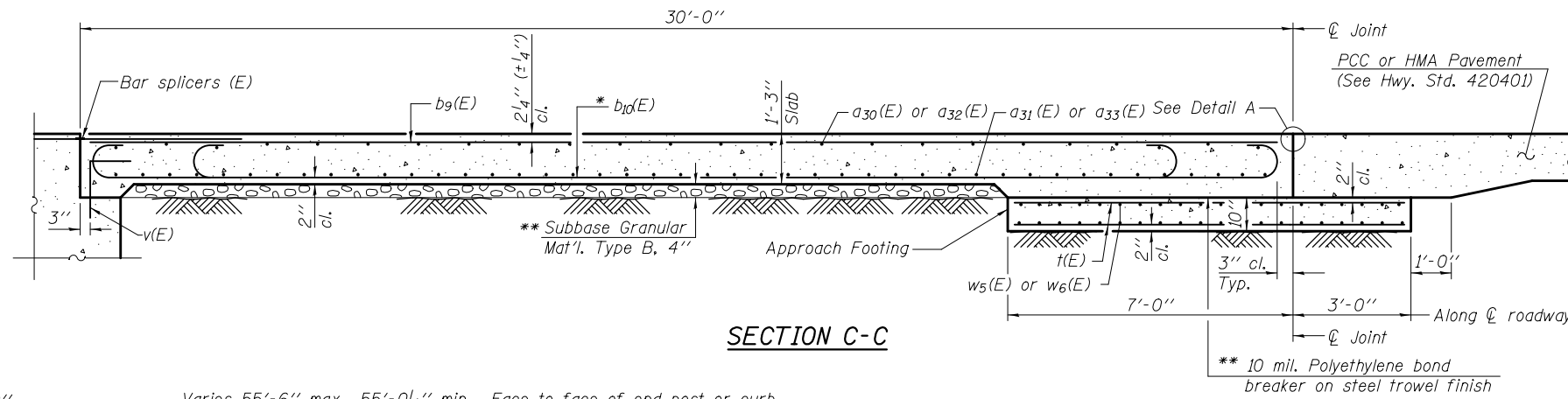
#4 bar = 2'-7"
 #5 bar = 3'-3"

(Sheet 1 of 2)

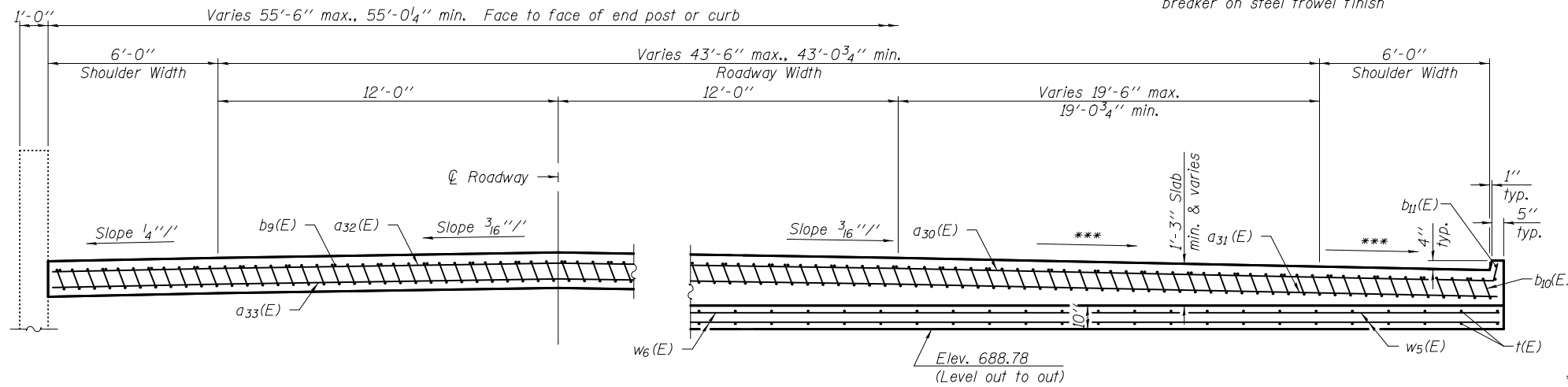
| | | | | | | | | | | | | |
|--------------------|--------------------|-----------------------|----------------------------|---|--|-----------------------------------|--------------|-------------|---------|--------|--------------|-----------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | EAST APPROACH SLAB DETAILS (W.B.) | | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| *FILE# | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) | | | 474 | (72-3HB-1),I | PEORIA | 88 | 59 | | |
| PLOT SCALE = | | DRAWN K.A. KLUES | REVISED - | | | CONTRACT NO. 68883 | | | | | | |
| PLOT DATE = #DATE* | | CHECKED E.M. LAGEMANN | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | | |
| | | | | | | SHEET NO. 43 OF 62 SHEETS | | | | | | |

Notes:

See sheet 43 of 62 for Detail A and View B-B.
 Approach slab and curb concrete shall be paid for as Concrete Superstructure.
 Approach footing concrete shall be paid for as Concrete Structures.
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
 For v(E) bar details, see sheet 21 of 62.
 For b₁₀(E) bar details, see sheet 38 of 62.
 The approach footing maximum applied service bearing pressure (Q_{max}) = 2.0 ksf.
 For bar splicer details, see sheet 62 of 62.
 Cost of excavation for approach footing included with Concrete Structures.



SECTION C-C

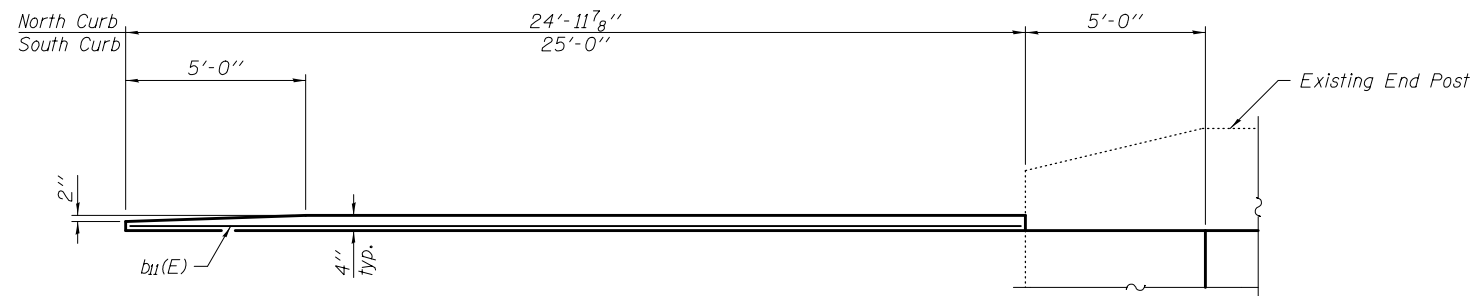


NEAR ABUTMENT

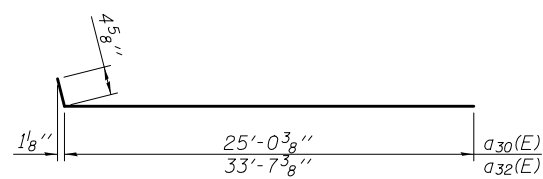
SECTION D-D
 (See Plan for dimensions not shown)
 (Looking West)

AT APPROACH FOOTING

- * Tilt #9 b₁₀(E) bars as required to maintain clearance.
- ** Cost included with Concrete Superstructure.
- *** Slope varies 3/8"/ft max., 1/4"/ft min.



VIEW E-E

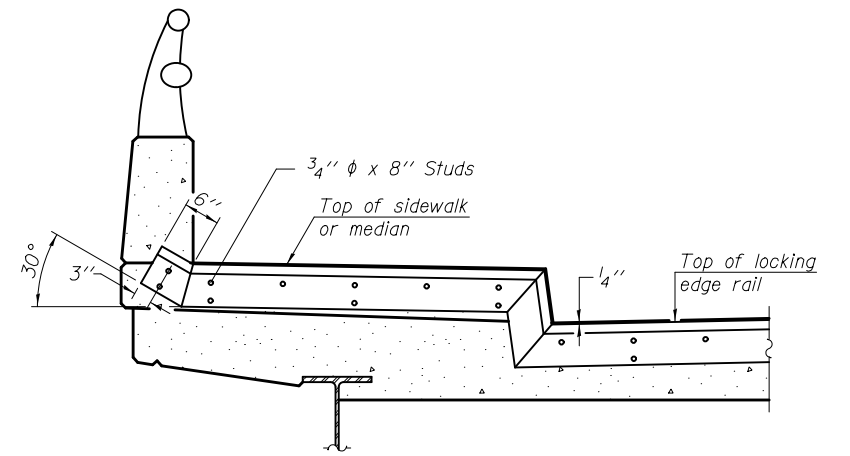
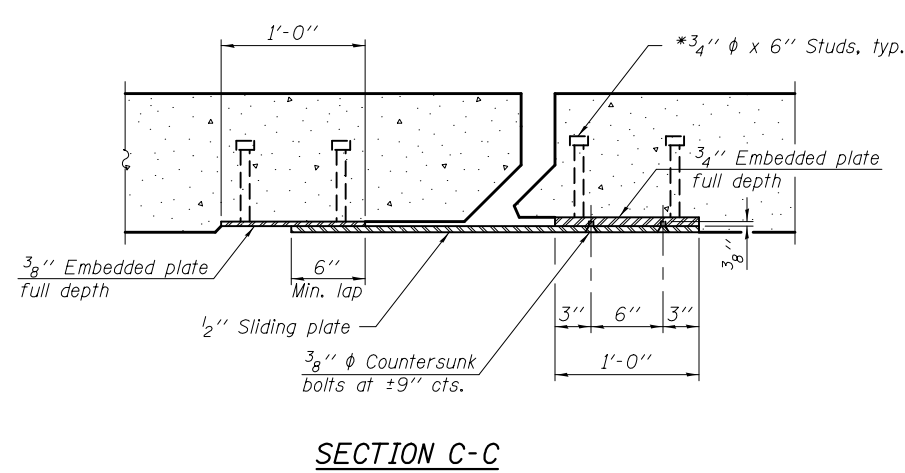
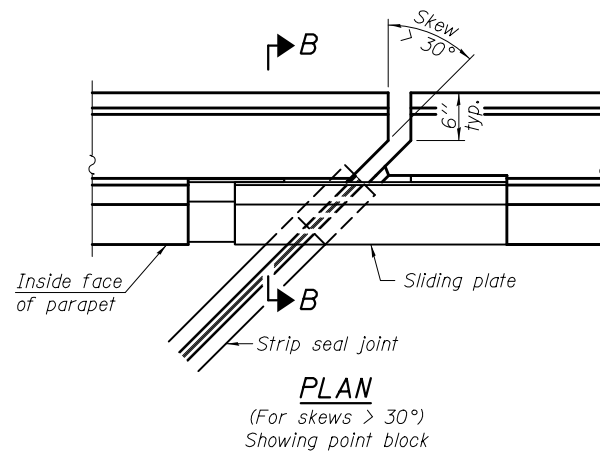
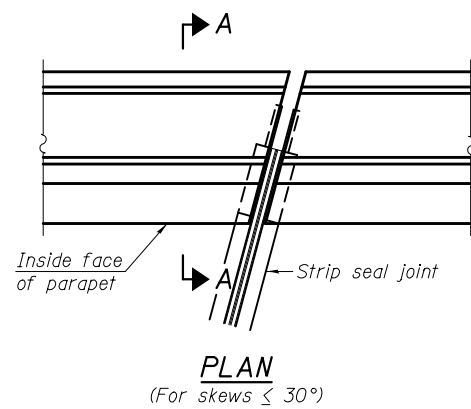


BARS a₃₀(E) & a₃₂(E)

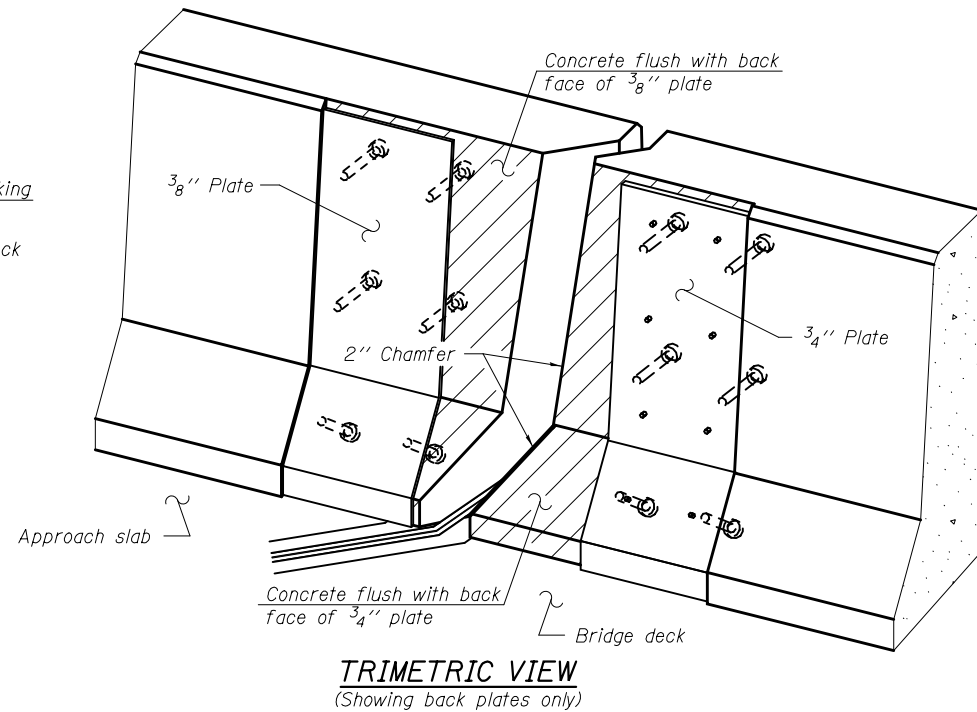
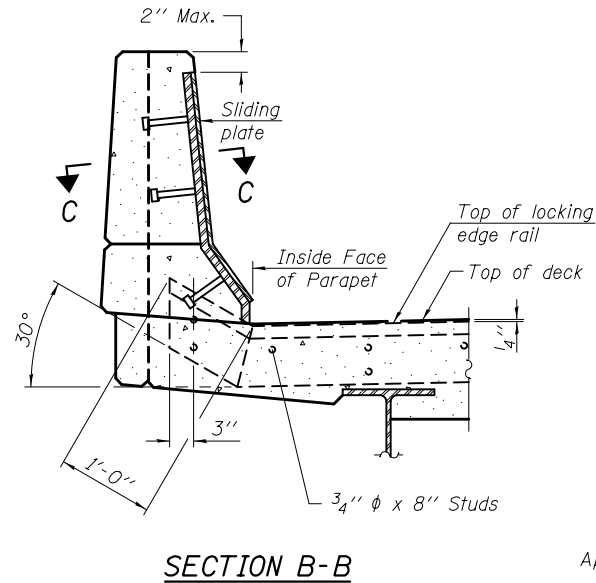
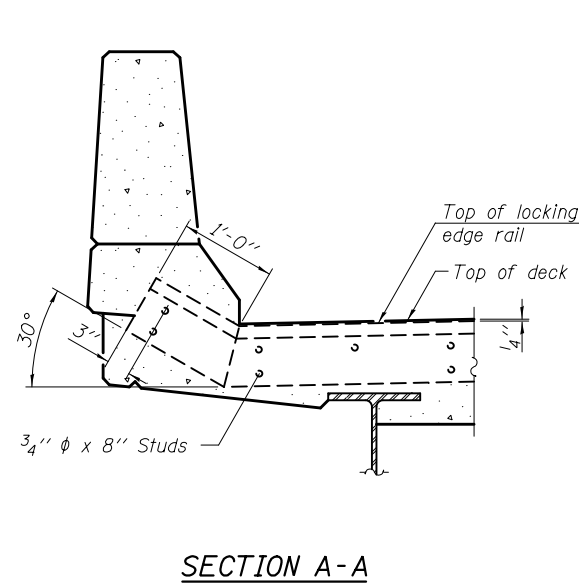
**ONE APPROACH
 BILL OF MATERIAL**

| Bar | No. | Size | Length | Shape |
|-------------------------------------|-----|------|---------|--------|
| a ₃₀ (E) | 25 | #4 | 25'-5" | ┌───┐ |
| a ₃₁ (E) | 46 | #5 | 34'-6" | ┌───┐ |
| a ₃₂ (E) | 25 | #4 | 34'-0" | ┌───┐ |
| a ₃₃ (E) | 46 | #5 | 24'-11" | ┌───┐ |
| b ₉ (E) | 46 | #4 | 29'-8" | ┌───┐ |
| b ₁₀ (E) | 134 | #9 | 29'-9" | ┌───┐ |
| b ₁₁ (E) | 2 | #4 | 24'-9" | ┌───┐ |
| t(E) | 57 | #4 | 9'-8" | ┌───┐ |
| w ₅ (E) | 40 | #5 | 31'-6" | ┌───┐ |
| w ₆ (E) | 40 | #5 | 27'-11" | ┌───┐ |
| Concrete Superstructure | | | Cu. Yd. | 89.2 |
| Concrete Structures | | | Cu. Yd. | 17.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 21,190 |

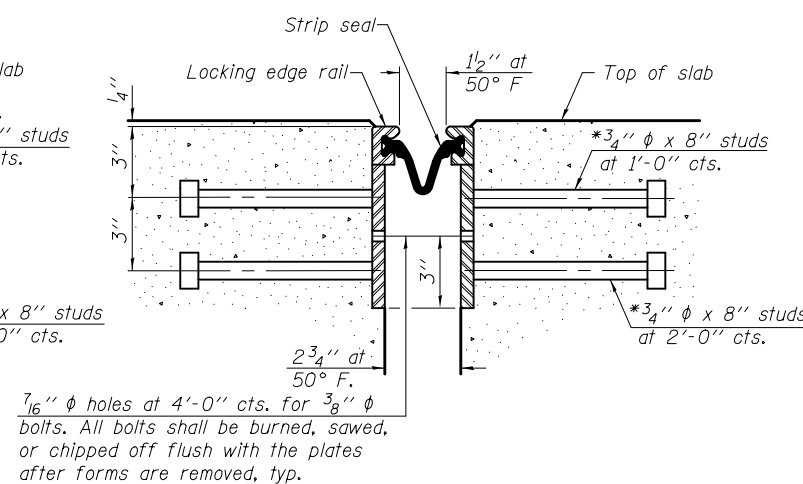
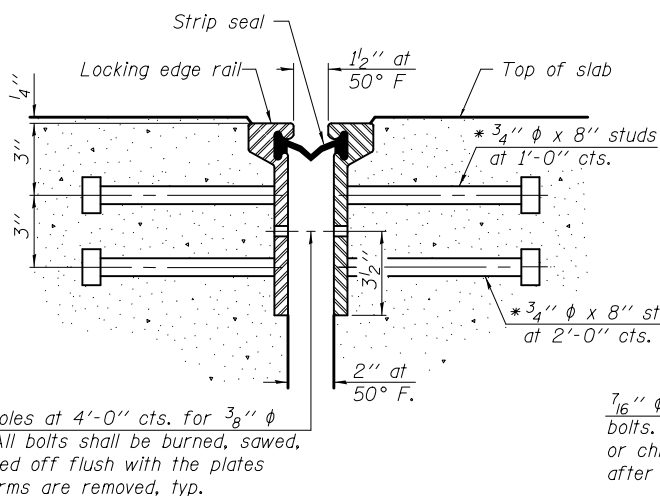
(Sheet 2 of 2)



TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN
 Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

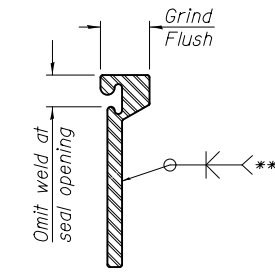
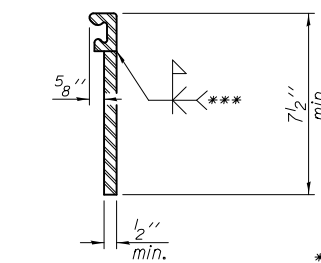
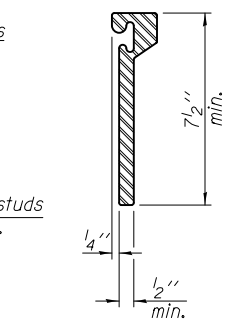


Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.
 The manufacturer's recommended installation methods shall be followed.
 The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.
 Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

7/16" phi holes at 4'-0" cts. for 3/8" phi bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.



*** Back gouge not required if complete joint penetration is verified by mock-up.

SECTION THRU ROLLED RAIL JOINT

SECTION THRU WELDED RAIL JOINT

ROLLED EXTRUDED RAIL WELDED RAIL

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.
 Rolled rail shown, welded rail similar.

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

LOCKING EDGE RAILS

BILL OF MATERIAL

| Item | Unit | Total |
|----------------------------|------|-------|
| Preformed Joint Strip Seal | Foot | 214.0 |

EJ-SSJ

1-27-12

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
| FILE NAME = | USER NAME = #USER* | DESIGNED K.A. KLUES | REVISED - 12/17/12 DHC/JKS |
| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN C.A. BUETTNER | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

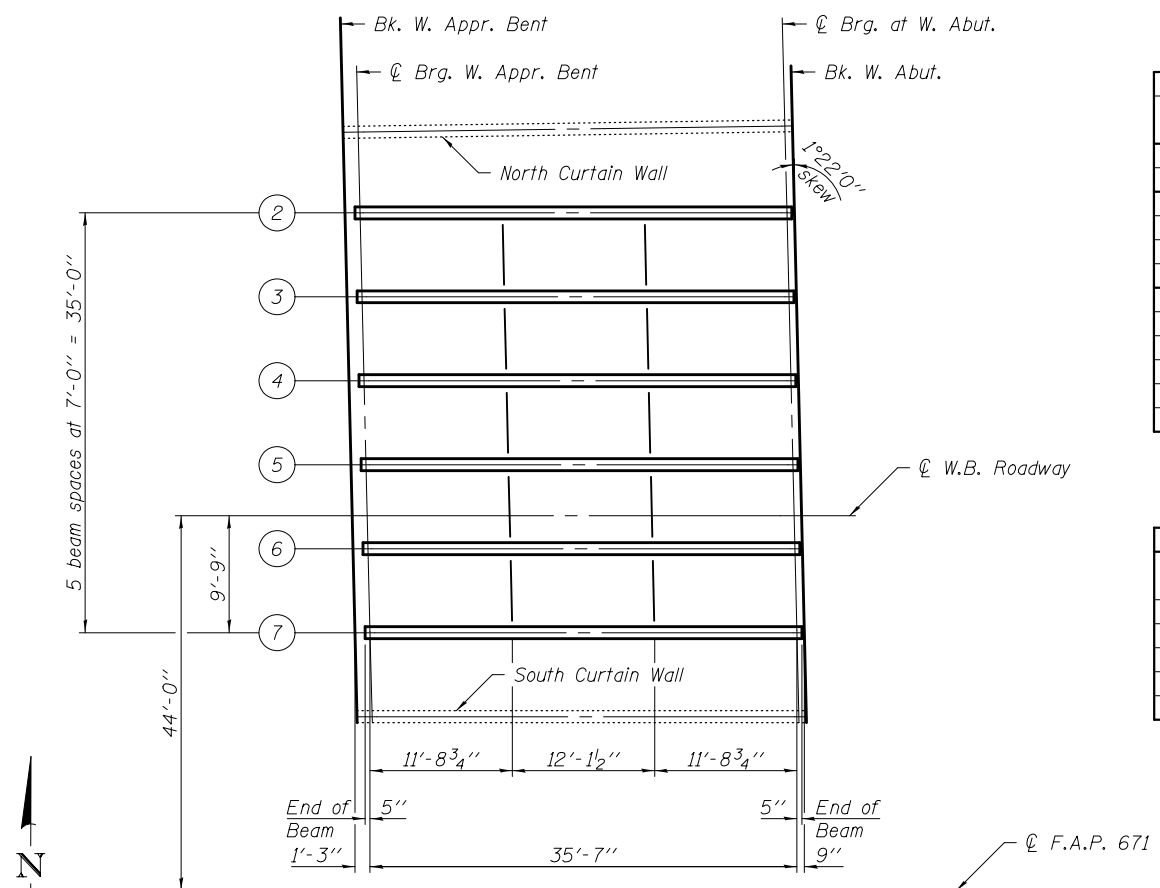
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

HORNER &
 SHIRIN, INC
 ENGINEERS

EXPANSION JOINT DETAILS
 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

SHEET NO. 45 OF 62 SHEETS

| | | | | |
|---------------------------|--------------|--------|--------------|-----------|
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 474 | (72-3HB-1),I | PEORIA | 88 | 61 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



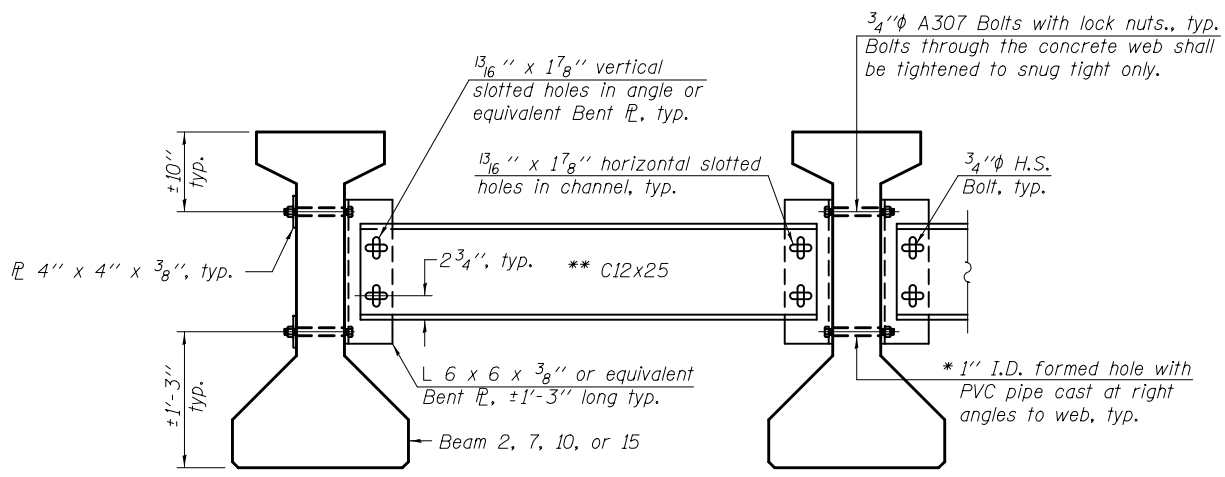
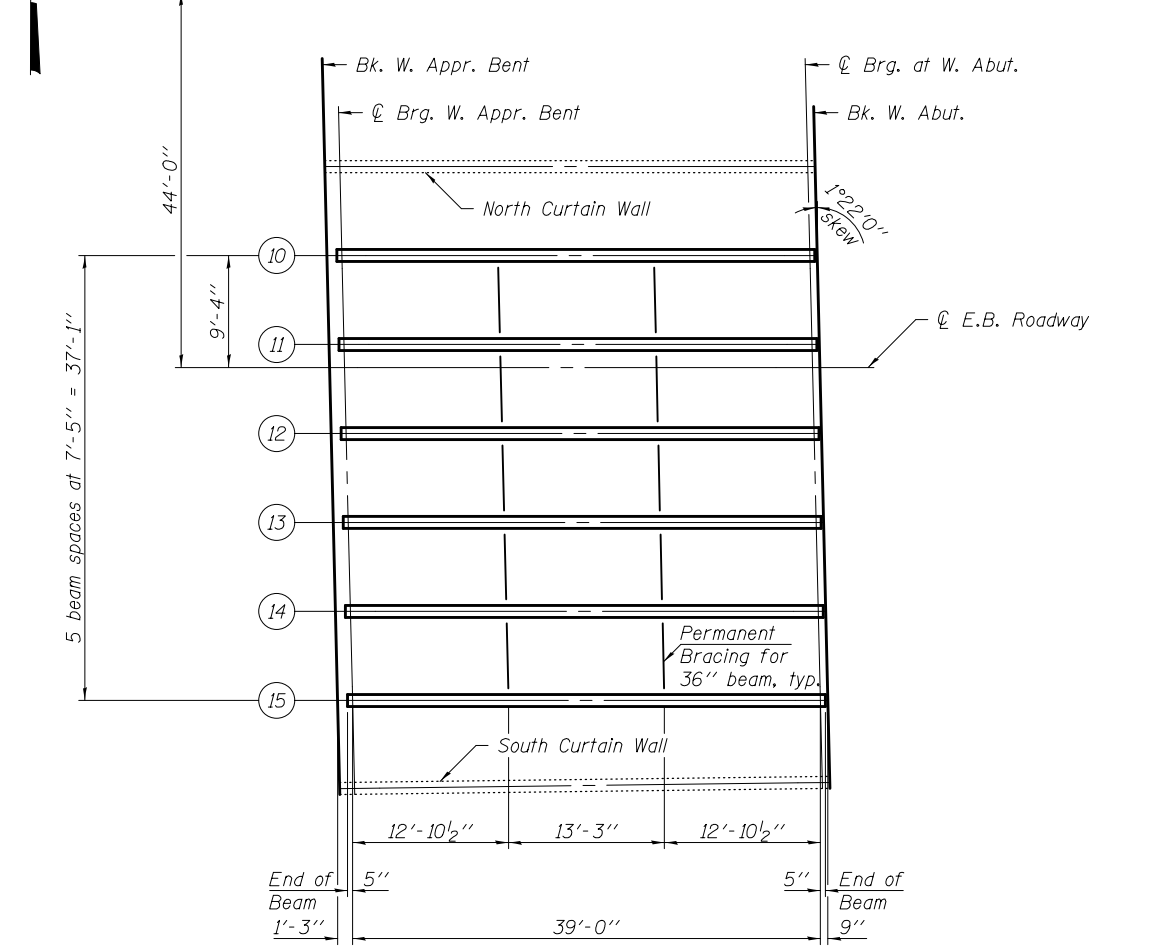
| INTERIOR BEAM MOMENT TABLE | | |
|----------------------------|--------------------|---------|
| W.B. Span 1 | 0.5 Span | |
| I | (in ⁴) | 48,648 |
| I' | (in ⁴) | 179,112 |
| S_b | (in ³) | 3,165 |
| S_b' | (in ³) | 5,991 |
| S_t | (in ³) | 2,358 |
| S_t' | (in ³) | 29,344 |
| Q | (k/') | 1.118 |
| M_Q | ('k) | 177 |
| s_Q | (k/') | 0.177 |
| $M_s Q$ | ('k) | 28 |
| M_L | ('k) | 229 |
| M_I | ('k) | 69 |

| INTERIOR BEAM MOMENT TABLE | | |
|----------------------------|--------------------|---------|
| E.B. Span 1 | 0.5 Span | |
| I | (in ⁴) | 48,648 |
| I' | (in ⁴) | 182,288 |
| S_b | (in ³) | 3,165 |
| S_b' | (in ³) | 6,028 |
| S_t | (in ³) | 2,358 |
| S_t' | (in ³) | 31,640 |
| Q | (k/') | 1.157 |
| M_Q | ('k) | 220 |
| s_Q | (k/') | 0.184 |
| $M_s Q$ | ('k) | 35 |
| M_L | ('k) | 285 |
| M_I | ('k) | 85 |

| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|-------|------|
| W.B. Span 1 | Abut. | |
| R_Q | (k) | 19.8 |
| $R_s Q$ | (k) | 3.1 |
| R_L | (k) | 33.8 |
| R_I | (k) | 10.1 |
| R_{Total} | (k) | 66.8 |

| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|-------|------|
| E.B. Span 1 | Abut. | |
| R_Q | (k) | 22.6 |
| $R_s Q$ | (k) | 3.6 |
| R_L | (k) | 36.9 |
| R_I | (k) | 11.1 |
| R_{Total} | (k) | 74.2 |

I : Non-composite moment of inertia of beam section (in⁴).
 I' : Composite moment of inertia of beam section (in⁴).
 S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_t : Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_t' : Composite section modulus for the top fiber of the prestressed beam (in³).
 Q : Un-factored non-composite dead load (kips/ft.).
 M_Q : Un-factored moment due to non-composite dead load conservatively taken at 0.5 of the span (kip-ft.).
 s_Q : Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s Q$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_L : Un-factored live load moment on the composite section (kip-ft.).
 M_I : Un-factored moment due to impact on the composite section (kip-ft.).

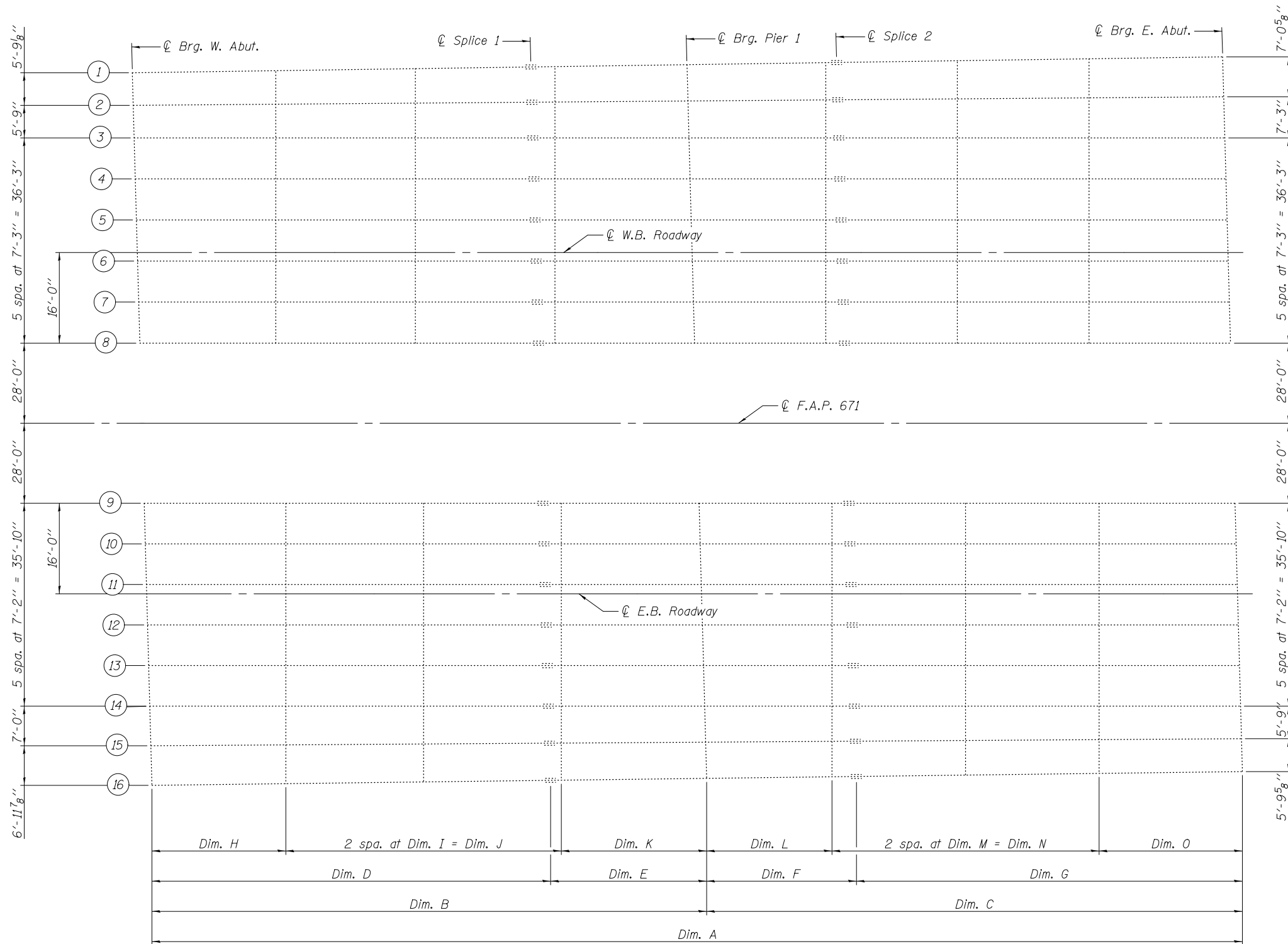


Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
 Two hardened washers are required for each set of oversized holes.
 All holes shall be 1 5/16" ϕ unless otherwise noted.
 5/16" x 3" x 3" plate washers are required over all slotted holes.
 All bolts shall be galvanized according to AASHTO M232.
 Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
 Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate C12x30 channels are permitted to facilitate material acquisition.

**PERMANENT BRACING DETAILS FOR
36" PPC I-BEAMS**

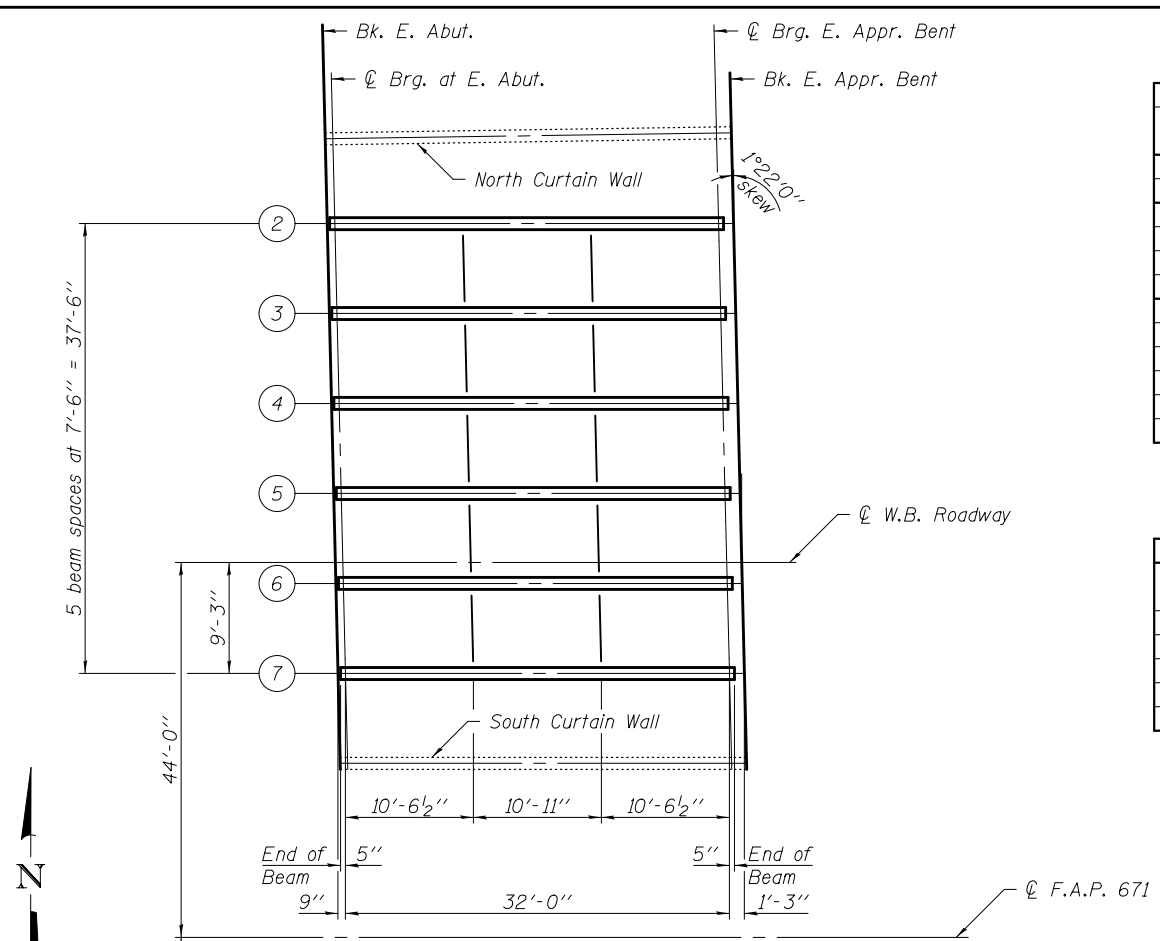
Notes:
 For W.B. Span 1 beam details, see sheets 50 & 51 of 62.
 For E.B. Span 1 beam details, see sheets 52 & 53 of 62.



EXISTING FRAMING PLAN - SPANS 2 & 3

Note: For Table of Variable Dimensions and Reaction and Moment Tables, see sheet 49 of 62.

| | | | | | | | | | | | |
|-----------------------|--------------------|------------------------------|---|---|---|--|--------------------|---------------------------|--------|--------------|-----------|
| FILE NAME = *FILE* | USER NAME = *USER* | DESIGNED <i>K.A. KLUES</i> | REVISED - 12/17/12 DHC/JKS Del. Staging (IDOT) | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | HORNER & SHIRIN, INC ENGINEERS | FRAMING PLAN - SPANS 2 & 3 STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.) | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | PLOT SCALE = | CHECKED <i>E.M. LAGEMANN</i> | REVISED - | | | | 474 | (72-3HB-1),I | PEORIA | 88 | 63 |
| | PLOT DATE = *DATE* | DRAWN <i>C.A. BUETTNER</i> | REVISED - | | | | CONTRACT NO. 68883 | | | | |
| | | | | | | SHEET NO. 47 OF 62 SHEETS | | ILLINOIS FED. AID PROJECT | | | |



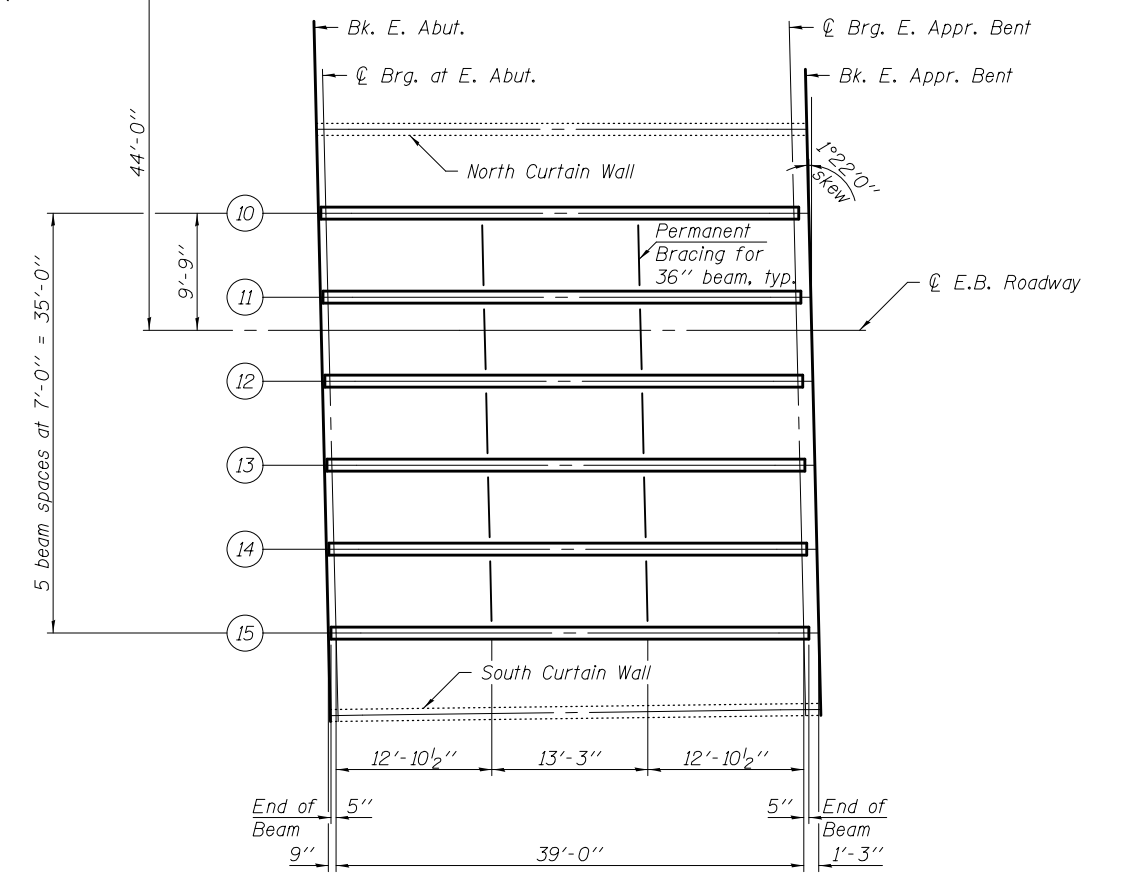
| INTERIOR BEAM MOMENT TABLE | | |
|----------------------------|--------------------|----------|
| | W.B. Span 4 | 0.5 Span |
| I | (in ⁴) | 48,648 |
| I' | (in ⁴) | 182,899 |
| S_b | (in ³) | 3,165 |
| S_b' | (in ³) | 6,035 |
| S_t | (in ³) | 2,358 |
| S_t' | (in ³) | 32,113 |
| Q | (k/') | 1.172 |
| M_Q | ('k) | 150 |
| s_Q | (k/') | 0.188 |
| $M_s Q$ | ('k) | 24 |
| M_t | ('k) | 202 |
| M_I | ('k) | 61 |

| INTERIOR BEAM MOMENT TABLE | | |
|----------------------------|--------------------|----------|
| | E.B. Span 4 | 0.5 Span |
| I | (in ⁴) | 48,648 |
| I' | (in ⁴) | 179,112 |
| S_b | (in ³) | 3,165 |
| S_b' | (in ³) | 5,991 |
| S_t | (in ³) | 2,358 |
| S_t' | (in ³) | 29,344 |
| Q | (k/') | 1.115 |
| M_Q | ('k) | 212 |
| s_Q | (k/') | 0.174 |
| $M_s Q$ | ('k) | 33 |
| M_t | ('k) | 268 |
| M_I | ('k) | 81 |

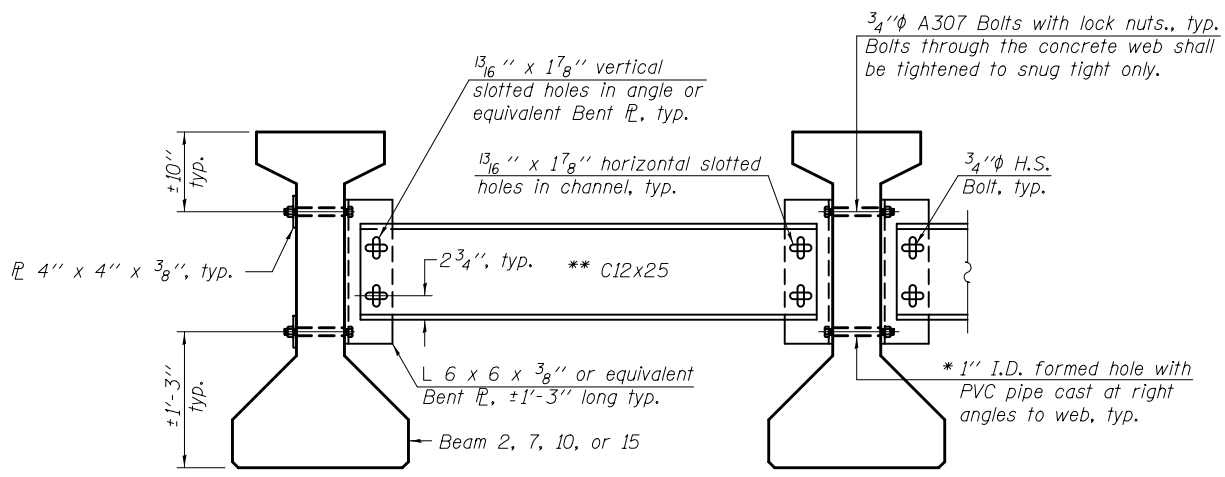
| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|-------------|-------|
| | W.B. Span 4 | Abut. |
| R_Q | (k) | 18.7 |
| $R_s Q$ | (k) | 3.0 |
| R_t | (k) | 34.8 |
| R_I | (k) | 10.4 |
| R_{Total} | (k) | 66.9 |

| INTERIOR BEAM REACTION TABLE | | |
|------------------------------|-------------|-------|
| | E.B. Span 4 | Abut. |
| R_Q | (k) | 21.7 |
| $R_s Q$ | (k) | 3.4 |
| R_t | (k) | 34.8 |
| R_I | (k) | 10.5 |
| R_{Total} | (k) | 70.4 |

I : Non-composite moment of inertia of beam section (in⁴).
 I' : Composite moment of inertia of beam section (in⁴).
 S_b : Non-composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_b' : Composite section modulus for the bottom fiber of the prestressed beam (in³).
 S_t : Non-composite section modulus for the top fiber of the prestressed beam (in³).
 S_t' : Composite section modulus for the top fiber of the prestressed beam (in³).
 Q : Un-factored non-composite dead load (kips/ft.).
 M_Q : Un-factored moment due to non-composite dead load conservatively taken at 0.5 of the span (kip-ft.).
 s_Q : Un-factored long-term composite (superimposed) dead load (kips/ft.).
 $M_s Q$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
 M_t : Un-factored live load moment on the composite section (kip-ft.).
 M_I : Un-factored moment due to impact on the composite section (kip-ft.).



FRAMING PLAN - SPAN 4

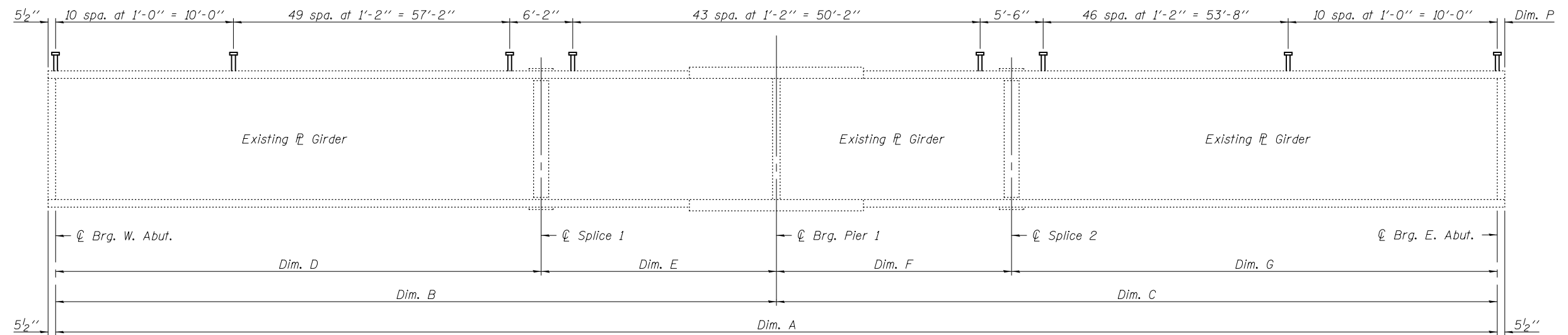


Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
 Two hardened washers are required for each set of oversized holes.
 All holes shall be 1/16" unless otherwise noted.
 5/16" x 3" x 3" plate washers are required over all slotted holes.
 All bolts shall be galvanized according to AASHTO M232.
 Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
 Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete I-Beams.

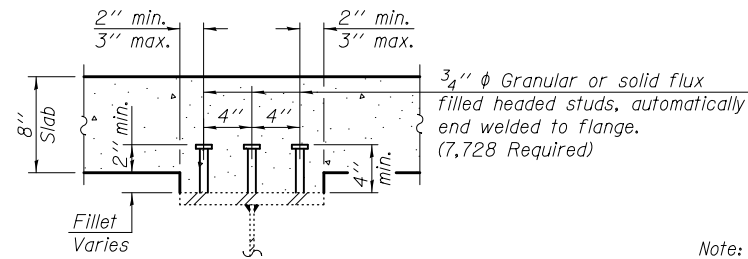
* Fabricator shall locate to miss strands within permissible tolerances.
 ** Alternate C12x30 channels are permitted to facilitate material acquisition.

PERMANENT BRACING DETAILS FOR 36" PPC I-BEAMS

Notes:
 For W.B. Span 4 beam details, see sheets 54 & 55 of 62.
 For E.B. Span 4 beam details, see sheets 52 & 53 of 62.



EXISTING BEAM ELEVATION



SHEAR CONNECTOR DETAIL

| | W. Abut. | Pier 1 | E. Abut. |
|------------------------|----------|--------|----------|
| R _l (k) | 43.5 | 152.5 | 40.6 |
| R _t (k) | 41.7 | 68.6 | 41.6 |
| R _i (k) | 9.4 | 15.5 | 9.5 |
| R _{Total} (k) | 94.6 | 236.6 | 91.7 |

Note: The values in the "Interior Girder Reaction Table" and the "Interior Girder Moment Table" are controlled by the W.B. Structure.

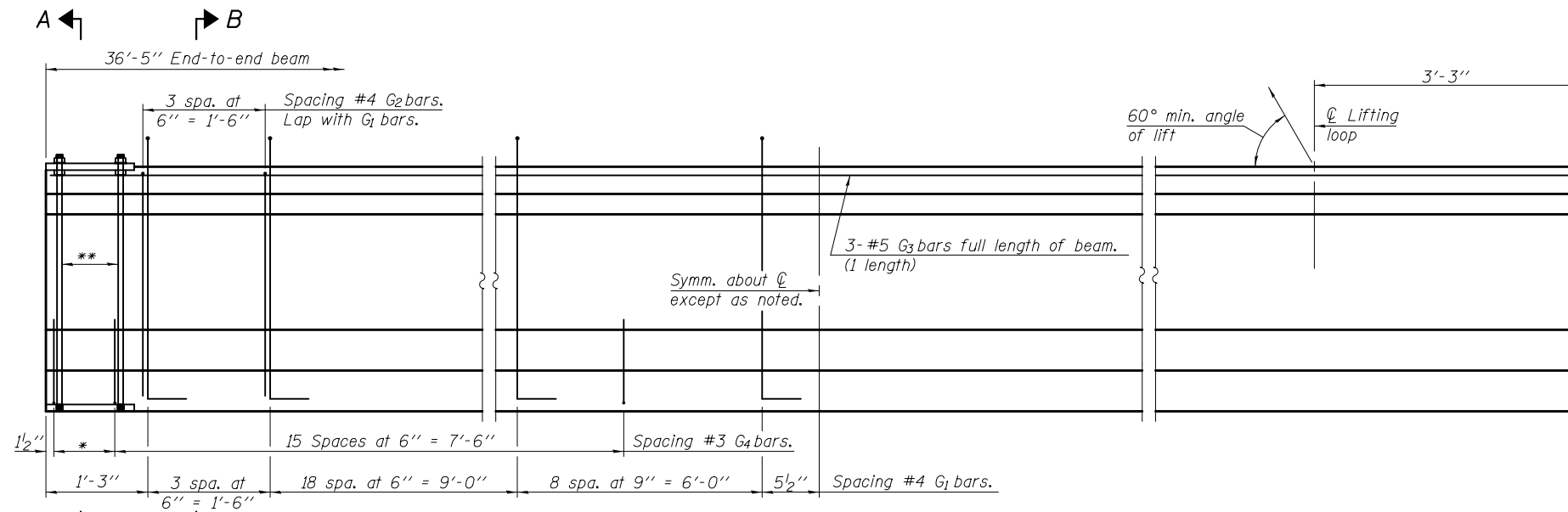
| | 0.4 Sp. 2 | Pier 1 | 0.6 Sp. 3 |
|---|-----------|--------|-----------|
| I _s (in ⁴) | 19,684 | 42,004 | 18,884 |
| I _c (n) (in ⁴) | 55,946 | 48,280 | 52,846 |
| I _c (3n) (in ⁴) | 39,962 | 48,280 | 38,048 |
| S _s (in ³) | 935 | 1,608 | 871 |
| S _c (n) (in ³) | 1,336 | 2,041 | 1,249 |
| S _c (3n) (in ³) | 1,220 | 2,041 | 1,140 |
| Q (k/') | 0.956 | 0.954 | 0.952 |
| M _l (k) | 582 | 1,299 | 504 |
| s _l (k/') | 0.270 | 0.270 | 0.270 |
| M _s (k) | 177 | 346 | 156 |
| M _t (k) | 781 | 760 | 748 |
| M _{im} (k) | 175 | 172 | 170 |
| ⁵ / ₃ [M _t + i] (k) | 1,594 | 1,553 | 1,531 |
| M _a (k) | 3,060 | 4,157 | 2,849 |
| * M _u (k) | 4,481 | 5,066 | 4,219 |
| f _s non-comp (ksi) | 7.48 | 9.70 | 6.94 |
| f _s comp (ksi) | 1.74 | 2.03 | 1.64 |
| f _s ⁵ / ₃ [M _t + M _i] (ksi) | 14.31 | 9.13 | 14.71 |
| f _s (Overload) (ksi) | 23.53 | 20.85 | 23.29 |
| ** f _s (Total) (ksi) | 30.59 | 27.12 | 30.29 |
| VR (k) | 48 | 55 | 47 |

* Compact section
** Braced non-compact and partially braced section

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads (in.⁴ and in.³).
I_c(n), S_c(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total and Overload) due to short-term composite live loads (in.⁴ and in.³).
I_c(3n), S_c(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s(Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
Q: Un-factored non-composite dead load (kips/ft.).
M_l: Un-factored moment due to non-composite dead load (kip-ft.).
s_l: Un-factored long-term composite (superimposed) dead load (kips/ft.).
M_s: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_t: Un-factored live load moment (kip-ft.).
M_i: Un-factored moment due to impact (kip-ft.).
M_a: Factored design moment (kip-ft.).
1.3 [M_l + M_s + ⁵/₃ (M_t + M_i)]
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi).
M_l + M_s + ⁵/₃ (M_t + M_i)
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
1.3 [M_l + M_s + ⁵/₃ (M_t + M_i)]
VR: Maximum impact shear range within the composite portion of the span for stud shear connector design (kips).

TABLE OF VARIABLE DIMENSIONS

| Beam No. | Dim. A | Dim. B | Dim. C | Dim. D | Dim. E | Dim. F | Dim. G | Dim. H | Dim. I | Dim. J | Dim. K | Dim. L | Dim. M | Dim. N | Dim. O | Dim. P |
|----------|-------------|---------------|--------------|------------|--------------|--------------|--------------|--------------|--------|--------|--------------|--------------|--------|--------|---------------|--------|
| 1 | 192'-7 1/2" | 97'-11 3/4" | 94'-7 3/4" | 70'-2 1/6" | 27'-8 15/16" | 28'-2 15/16" | 66'-4 13/16" | 25'-1 11/16" | 24'-8" | 49'-4" | 23'-5 15/16" | 24'-4 1/8" | 23'-3" | 46'-6" | 23'-9 9/16" | 5" |
| 2 | 192'-7 5/8" | 97'-11 13/16" | 94'-7 13/16" | 70'-2 1/8" | 27'-8 15/16" | 28'-2 15/16" | 66'-4 1/8" | 25'-0 1/16" | 24'-8" | 49'-4" | 23'-7 3/4" | 24'-2 1/4" | 23'-3" | 46'-6" | 23'-11 9/16" | 5 1/8" |
| 3 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-10 3/8" | 24'-8" | 49'-4" | 23'-9 5/8" | 24'-0 3/8" | 23'-3" | 46'-6" | 24'-1 9/8" | 5 1/2" |
| 4 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-8 5/16" | 24'-8" | 49'-4" | 23'-11 1/16" | 23'-10 5/16" | 23'-3" | 46'-6" | 24'-3 1/16" | 5 1/2" |
| 5 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-6 1/4" | 24'-8" | 49'-4" | 24'-1 3/4" | 23'-8 1/4" | 23'-3" | 46'-6" | 24'-5 3/4" | 5 1/2" |
| 6 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-4 1/8" | 24'-8" | 49'-4" | 24'-3 7/8" | 23'-6 3/8" | 23'-3" | 46'-6" | 24'-7 1/8" | 5 1/2" |
| 7 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-2 1/16" | 24'-8" | 49'-4" | 24'-5 15/16" | 23'-4 1/16" | 23'-3" | 46'-6" | 24'-9 15/16" | 5 1/2" |
| 8 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-0" | 24'-8" | 49'-4" | 24'-8" | 23'-2" | 23'-3" | 46'-6" | 25'-0" | 5 1/2" |
| 9 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 25'-0" | 24'-4" | 48'-8" | 24'-4" | 23'-6" | 23'-7" | 47'-2" | 24'-0" | 5 1/2" |
| 10 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-9 15/16" | 24'-4" | 48'-8" | 24'-6 1/16" | 23'-3 15/16" | 23'-7" | 47'-2" | 24'-2 1/16" | 5 1/2" |
| 11 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-7 7/8" | 24'-4" | 48'-8" | 24'-8 9/8" | 23'-1 7/8" | 23'-7" | 47'-2" | 24'-4 9/8" | 5 1/2" |
| 12 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-5 7/8" | 24'-4" | 48'-8" | 24'-10 8/8" | 22'-11 7/8" | 23'-7" | 47'-2" | 24'-6 7/8" | 5 1/2" |
| 13 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-3 13/16" | 24'-4" | 48'-8" | 25'-0 3/16" | 22'-9 13/16" | 23'-7" | 47'-2" | 24'-8 3/16" | 5 1/2" |
| 14 | 192'-8" | 98'-0" | 94'-8" | 70'-3" | 27'-9" | 28'-3" | 66'-5" | 24'-1 3/4" | 24'-4" | 48'-8" | 25'-2 1/4" | 22'-7 3/4" | 23'-7" | 47'-2" | 24'-10 1/4" | 5 1/2" |
| 15 | 192'-7 5/8" | 97'-11 13/16" | 94'-7 13/16" | 70'-2 1/8" | 27'-8 15/16" | 28'-2 15/16" | 66'-4 1/8" | 23'-11 3/16" | 24'-4" | 48'-8" | 25'-4 1/16" | 22'-5 15/16" | 23'-7" | 47'-2" | 24'-11 15/16" | 5 1/8" |
| 16 | 192'-7 1/2" | 97'-11 3/4" | 94'-7 3/4" | 70'-2 1/6" | 27'-8 15/16" | 28'-2 15/16" | 66'-4 13/16" | 23'-9 11/16" | 24'-4" | 48'-8" | 25'-5 15/16" | 22'-4 1/16" | 23'-7" | 47'-2" | 25'-1 9/16" | 5" |



A ← → B

36'-5" End-to-end beam

3 spa. at 6" = 1'-6" Spacing #4 G₂ bars. Lap with G₁ bars.

3-#5 G₃ bars full length of beam. (1 length)

Symm. about CL except as noted.

15 Spaces at 6" = 7'-6" Spacing #3 G₄ bars.

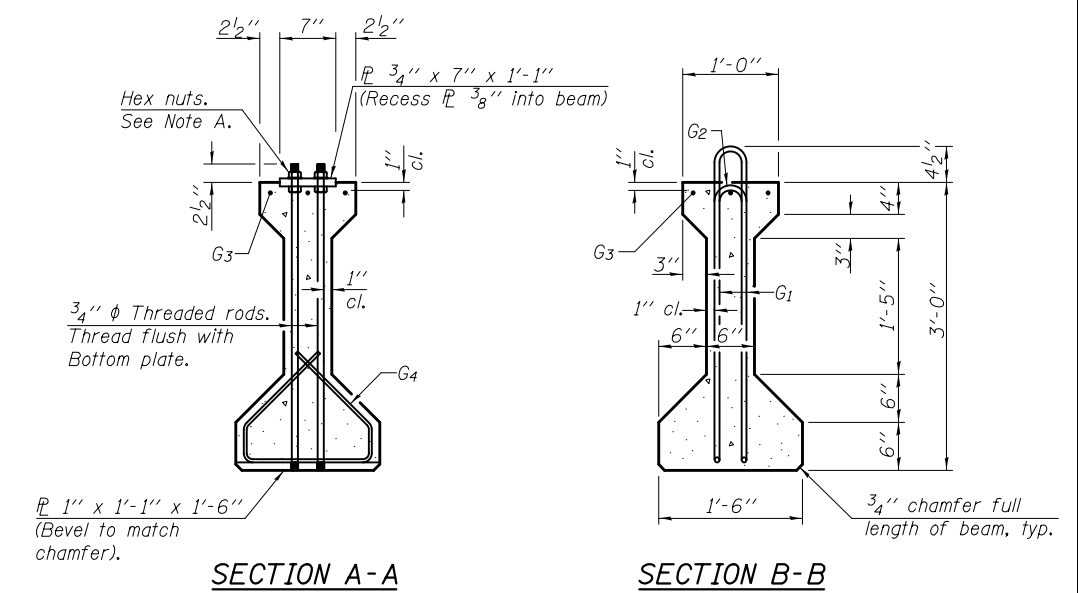
1'-3" 3 spa. at 6" = 1'-6" 18 spa. at 6" = 9'-0" 8 spa. at 9" = 6'-0" 5 1/2" Spacing #4 G₁ bars.

* 3 spaces at 3" = 9".

** 4-3/4" φ threaded dowel rods at 3" cts., Each Face

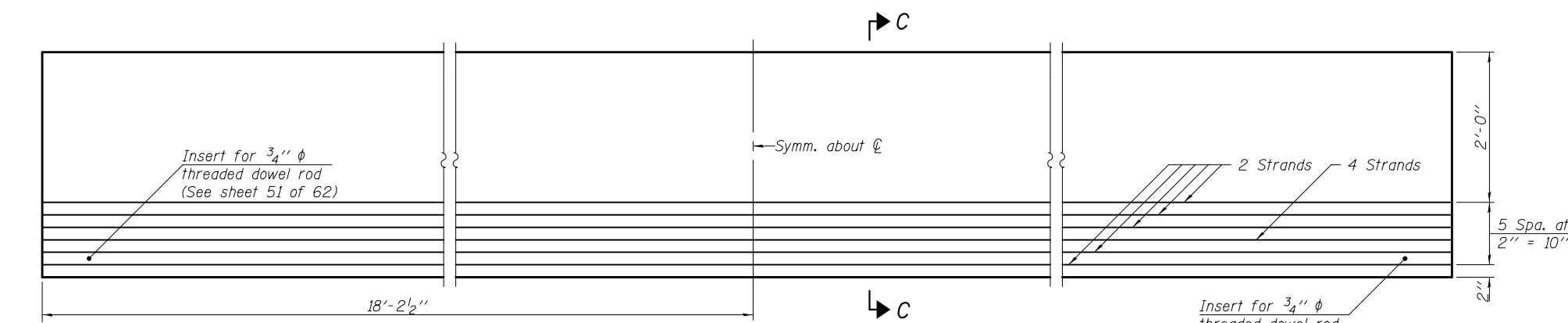
ELEVATION OF BEAM
(Showing reinforcement & dimensions)

Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

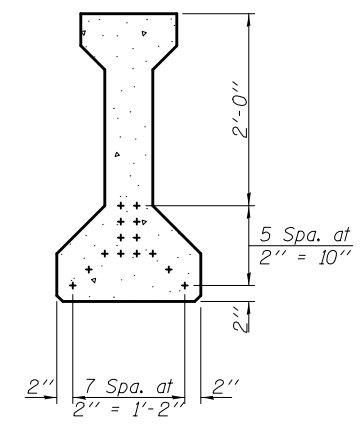


SECTION A-A

SECTION B-B



ELEVATION OF BEAM
(Showing prestressing steel)



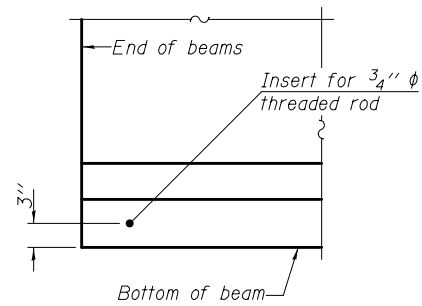
SECTION C-C

*****BAR LIST
ONE BEAM ONLY**

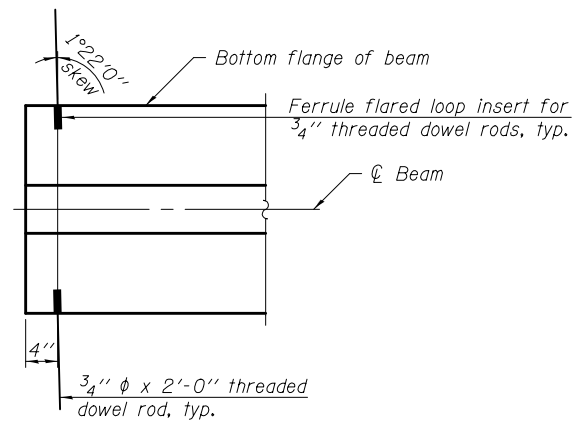
| Bar | No. | Size | Length | Shape |
|----------------|-----|------|--------|-------|
| G ₁ | 60 | #4 | 7'-5" | ⊏ |
| G ₂ | 8 | #4 | 5'-8" | ⊏ |
| G ₃ | 3 | #5 | 36'-3" | — |
| G ₄ | 38 | #3 | 4'-1" | ⊏ |

***For information only

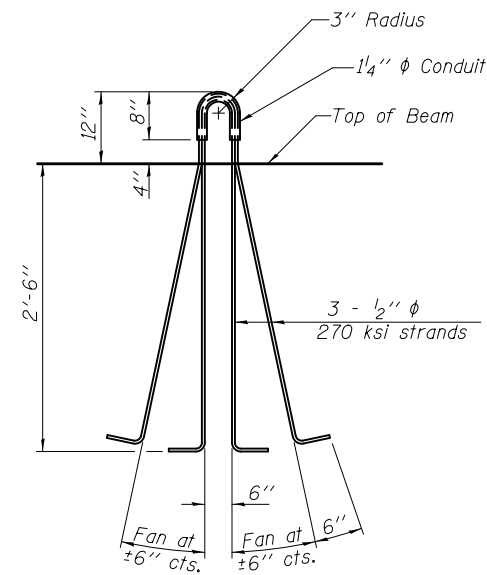
Notes:
See sheet 51 of 62 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.



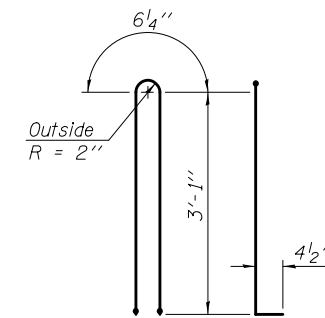
ELEVATION OF BEAM AT END



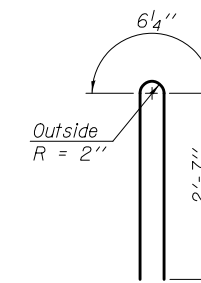
PLAN OF BEAM AT END



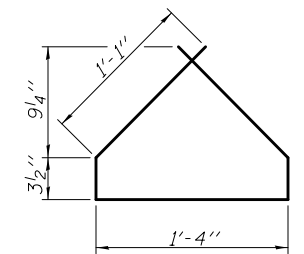
LIFTING LOOP DETAIL



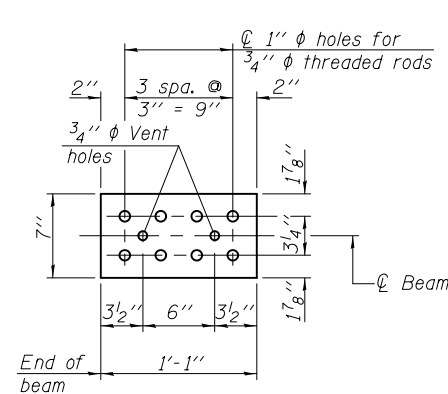
BAR G1



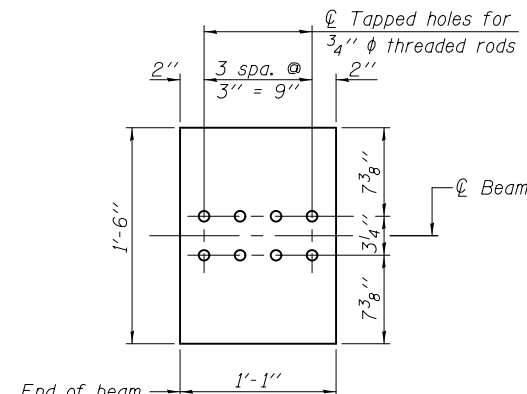
BAR G2



BAR G4



TOP PLATE



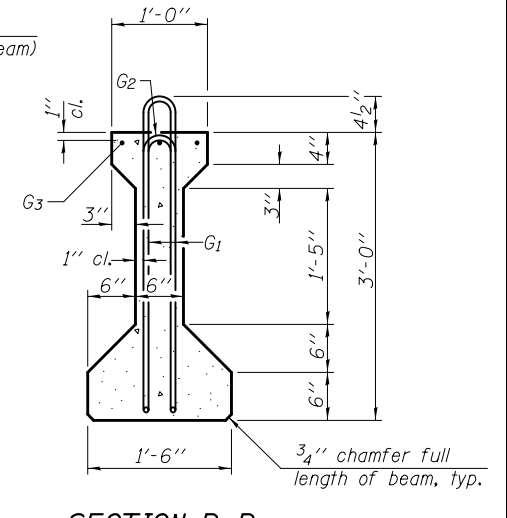
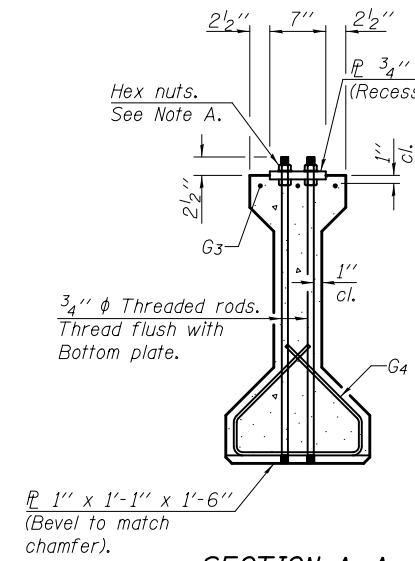
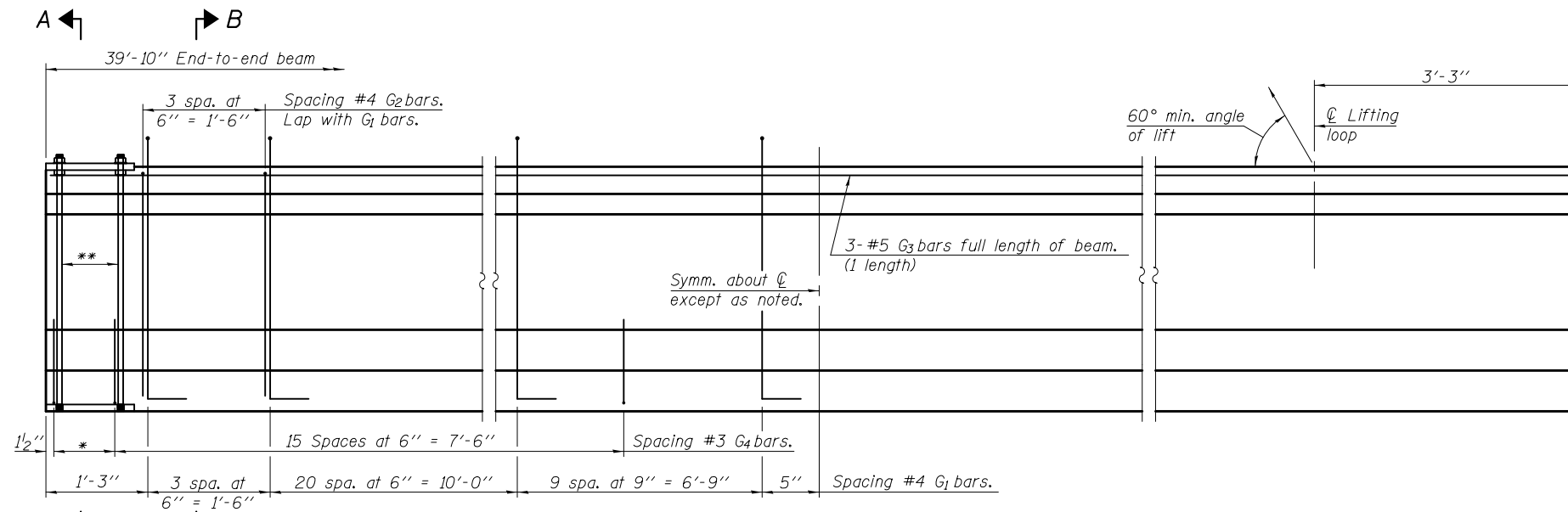
BOTTOM PLATE

NOTES

Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized. Threaded rods shall be ASTM F 1554 Grade 55.

BILL OF MATERIAL

| Item | Unit | Total |
|---|------|-------|
| Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36" | Ft. | 218.5 |



A ← → B

* 3 spaces at 3" = 9".
 ** 4-3/4" φ threaded dowel rods at 3" cts., Each Face

ELEVATION OF BEAM
 (Showing reinforcement & dimensions)

Note A:
 Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

SECTION A-A

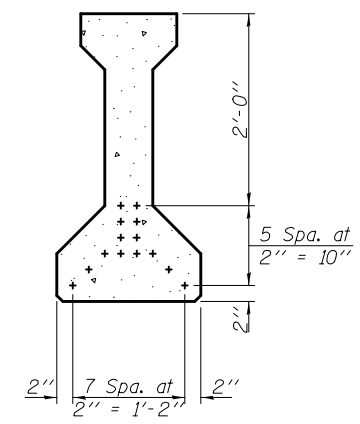
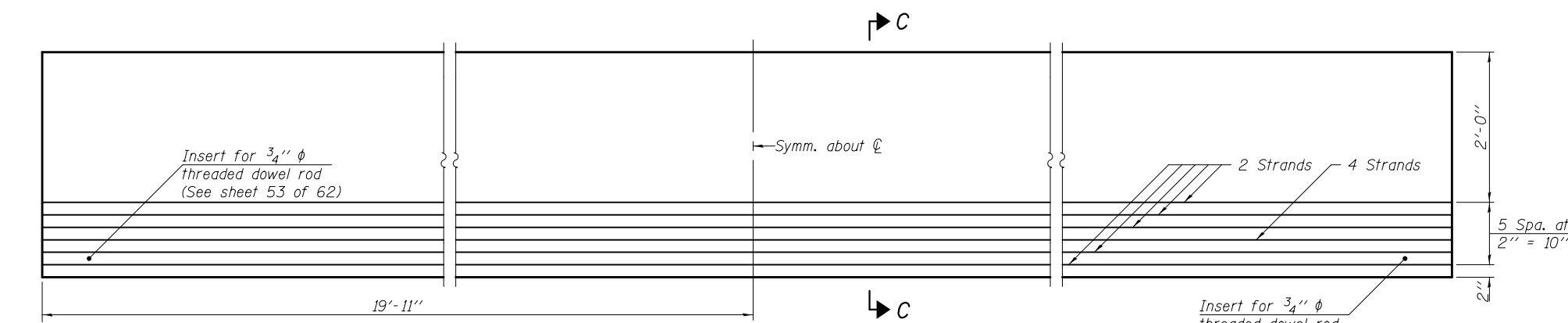
SECTION B-B

*****BAR LIST
 ONE BEAM ONLY**

| Bar | No. | Size | Length | Shape |
|----------------|-----|------|--------|-------|
| G ₁ | 66 | #4 | 7'-5" | ⊏ |
| G ₂ | 8 | #4 | 5'-8" | ⊏ |
| G ₃ | 3 | #5 | 39'-8" | — |
| G ₄ | 38 | #3 | 4'-1" | ⊏ |

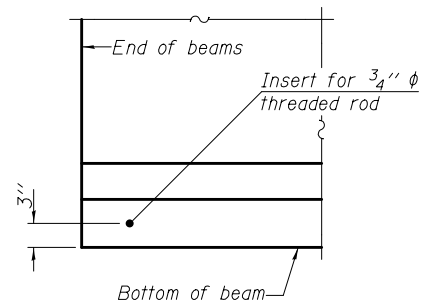
***For information only

Notes:
 See sheet 53 of 62 for additional details and Bill of Material.
 Required release strength, f'ci, shall be 5,000 psi.

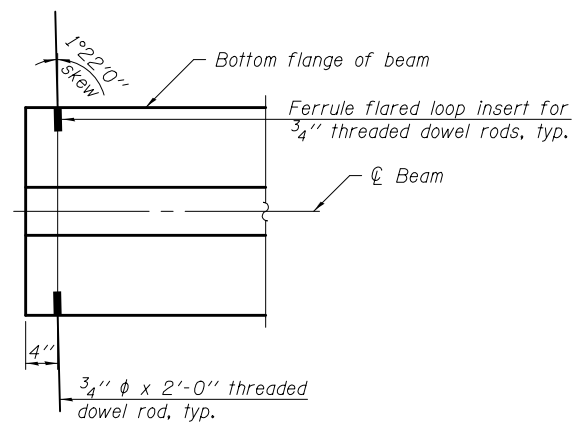


ELEVATION OF BEAM
 (Showing prestressing steel)

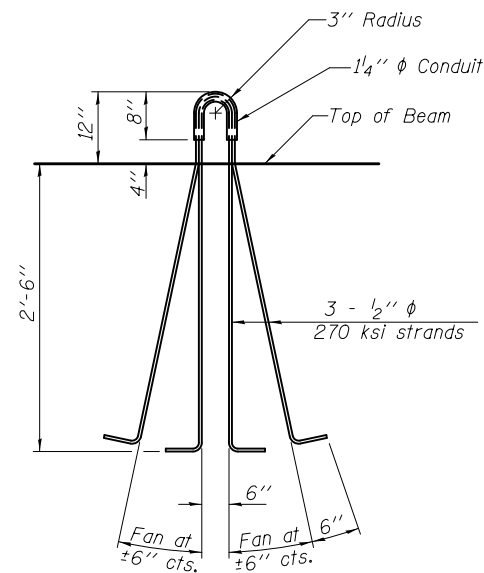
SECTION C-C



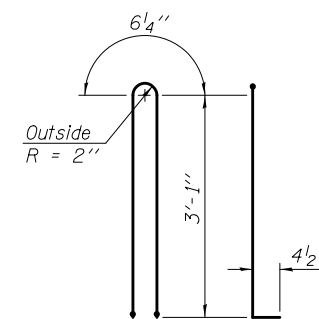
ELEVATION OF BEAM AT END



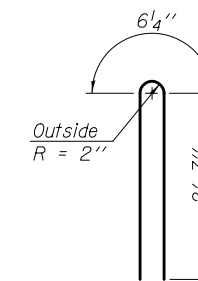
PLAN OF BEAM AT END



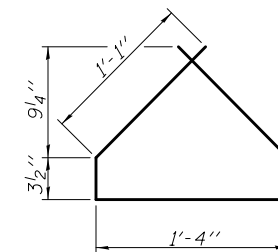
LIFTING LOOP DETAIL



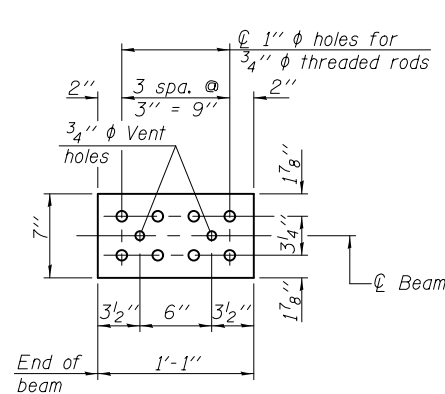
BAR G1



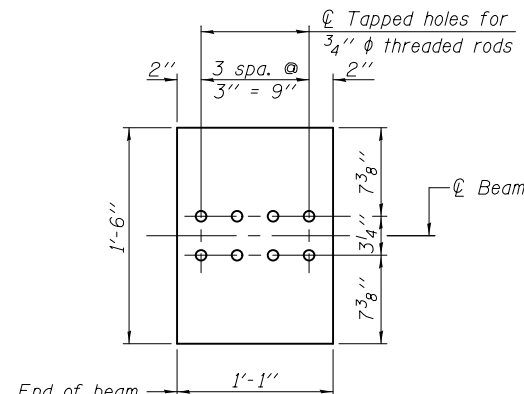
BAR G2



BAR G4



TOP PLATE



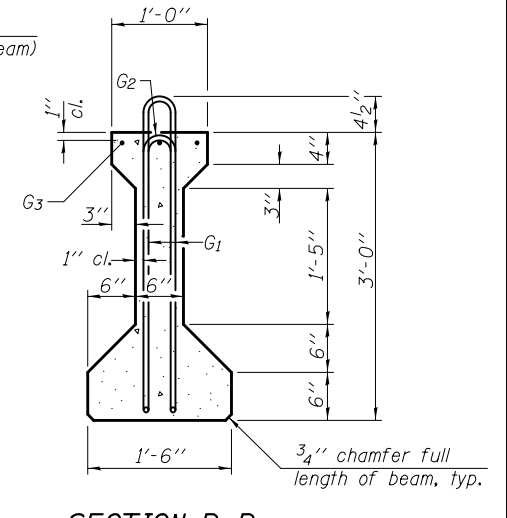
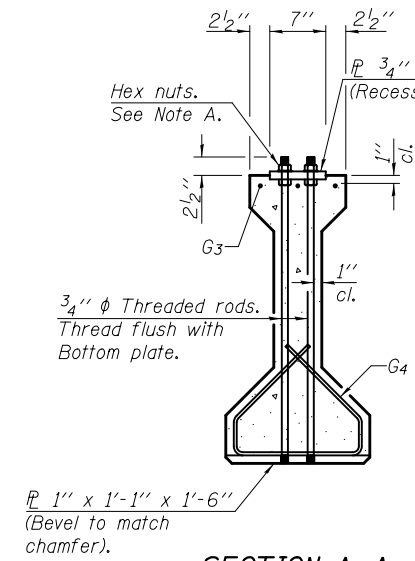
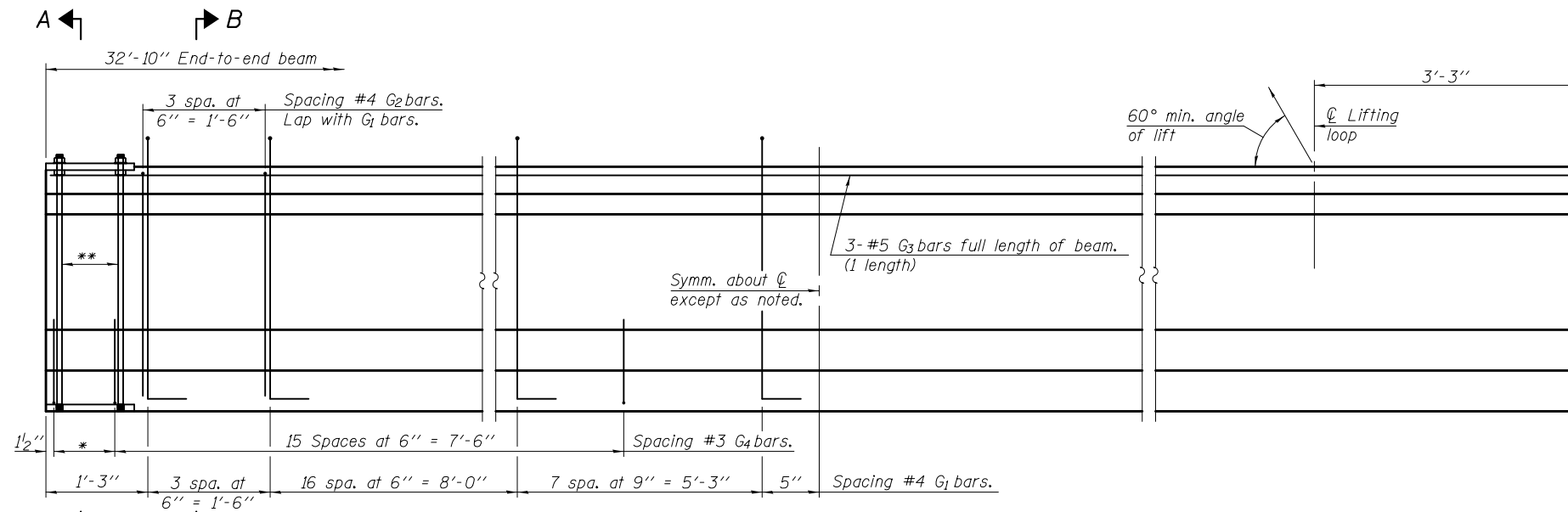
BOTTOM PLATE

NOTES

Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
 A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized.
 Threaded rods shall be ASTM F 1554 Grade 55.

BILL OF MATERIAL

| Item | Unit | Total |
|---|------|-------|
| Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36" | Ft. | 478.0 |



ELEVATION OF BEAM
(Showing reinforcement & dimensions)

* 3 spaces at 3" = 9".
** 4-3/4" φ threaded dowel rods at 3" cts., Each Face

Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.

SECTION A-A

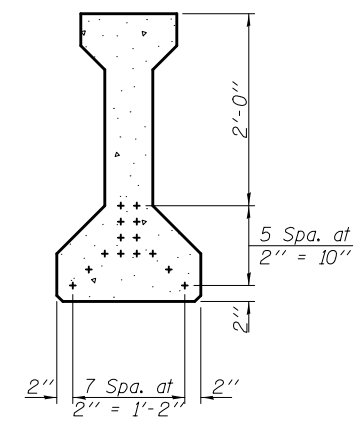
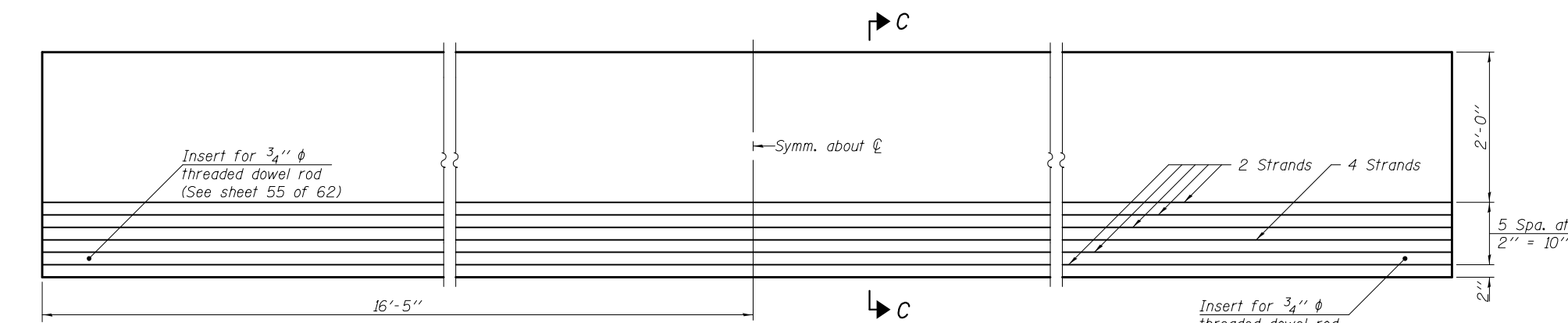
SECTION B-B

*****BAR LIST
ONE BEAM ONLY**

| Bar | No. | Size | Length | Shape |
|----------------|-----|------|--------|-------|
| G ₁ | 54 | #4 | 7'-5" | ⊏ |
| G ₂ | 8 | #4 | 5'-8" | ⊏ |
| G ₃ | 3 | #5 | 32'-8" | — |
| G ₄ | 38 | #3 | 4'-1" | ⊏ |

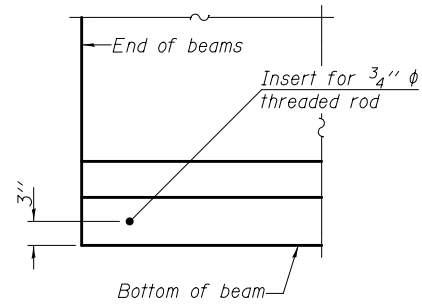
***For information only

Notes:
See sheet 55 of 62 for additional details and Bill of Material.
Required release strength, f'ci, shall be 5,000 psi.

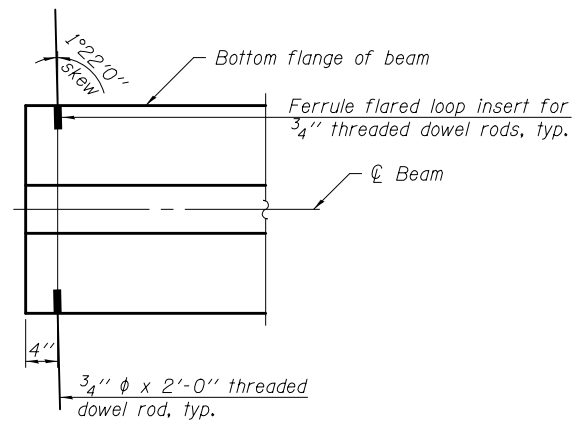


SECTION C-C

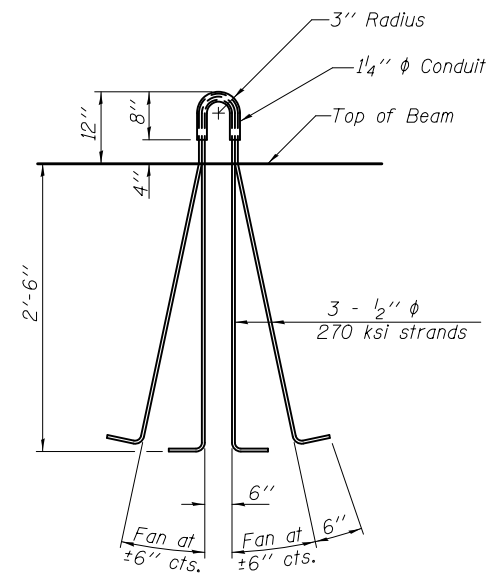
ELEVATION OF BEAM
(Showing prestressing steel)



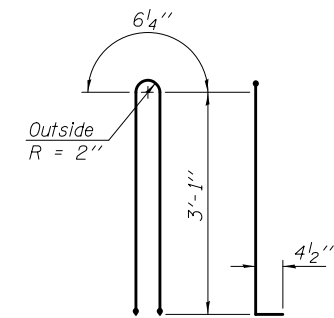
ELEVATION OF BEAM AT END



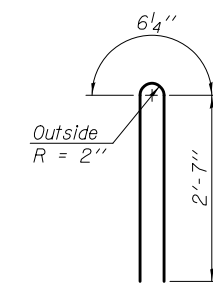
PLAN OF BEAM AT END



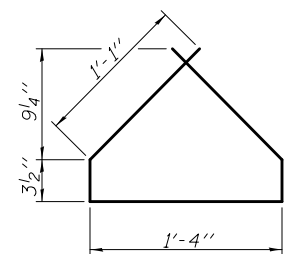
LIFTING LOOP DETAIL



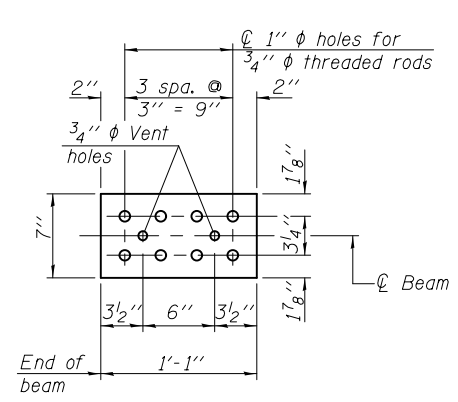
BAR G1



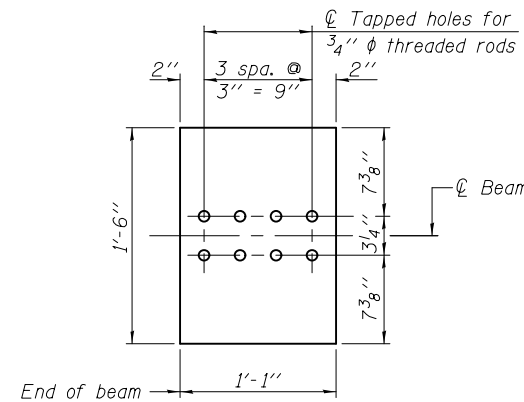
BAR G2



BAR G4



TOP PLATE



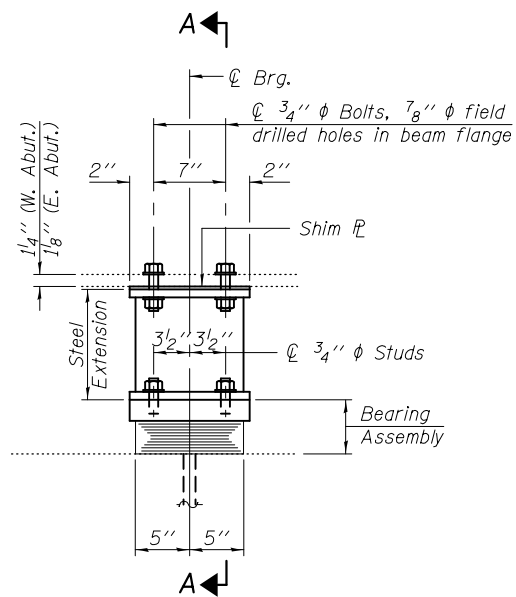
BOTTOM PLATE

NOTES

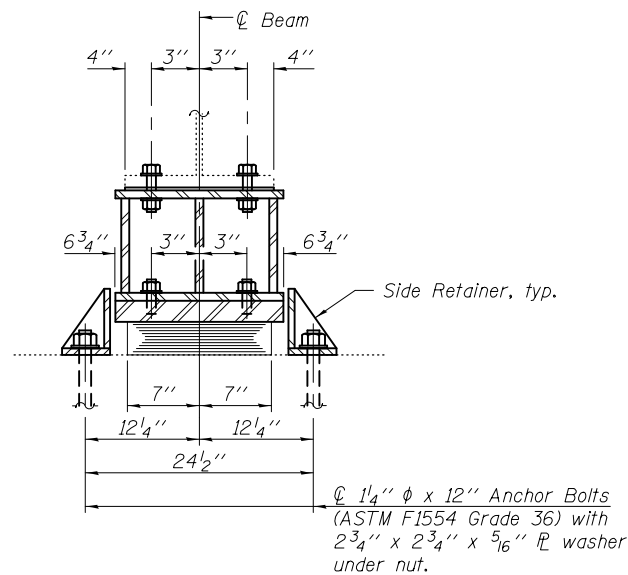
Inserts for 3/4" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. A minimum 2 1/2" ϕ lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50. The bottom plates shall be galvanized according to AASHTO M111. Top plates and threaded rods need not be galvanized. Threaded rods shall be ASTM F 1554 Grade 55.

BILL OF MATERIAL

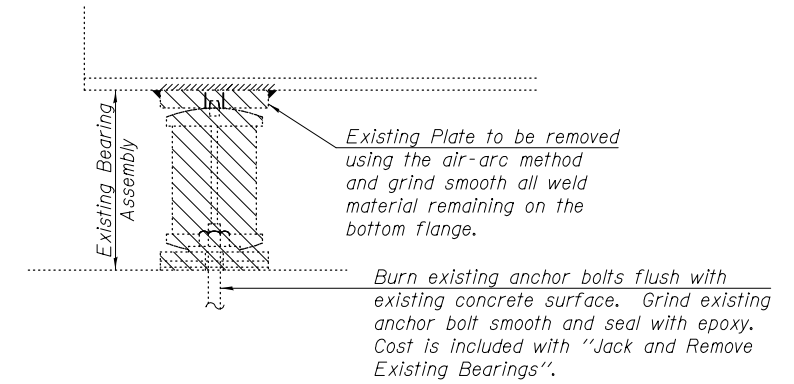
| Item | Unit | Total |
|---|------|-------|
| Furnishing and Erecting Precast Prestressed Concrete I-Beams, 36" | Ft. | 197.0 |



ELEVATION AT ABUTS.

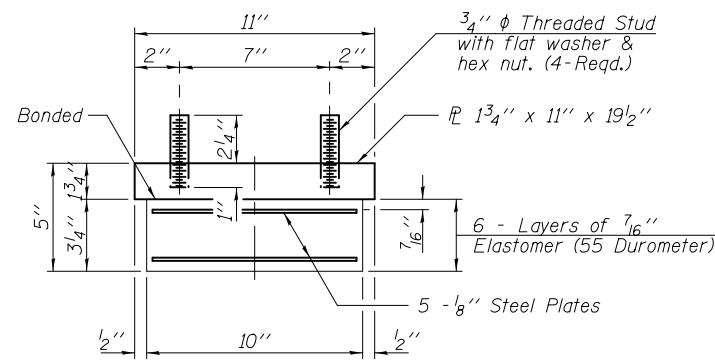


SECTION A-A



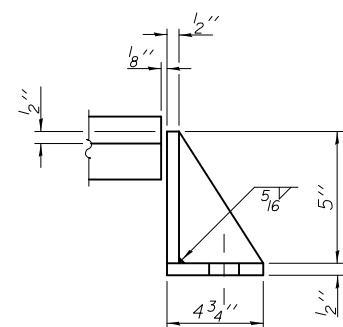
EXISTING BEARING REMOVAL DETAIL

TYPE I ELASTOMERIC EXP. BRG.



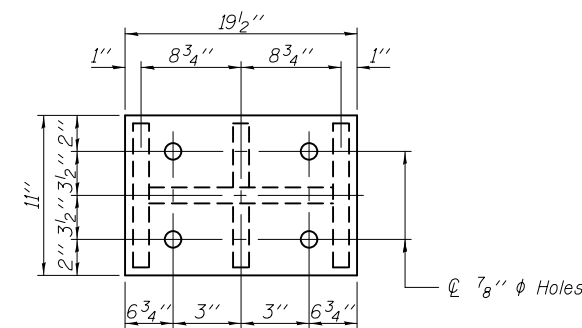
BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.

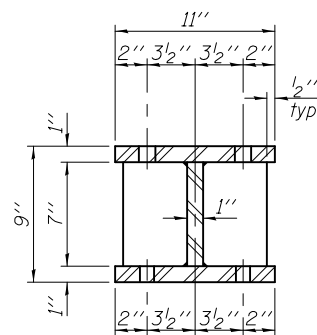


SIDE RETAINER

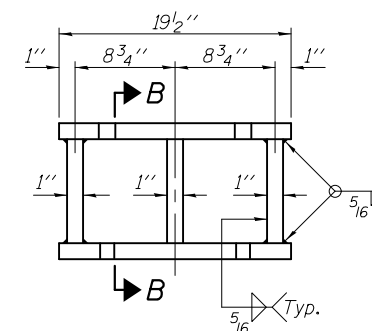
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN TOP AND BOTTOM PLATE



SECTION B-B

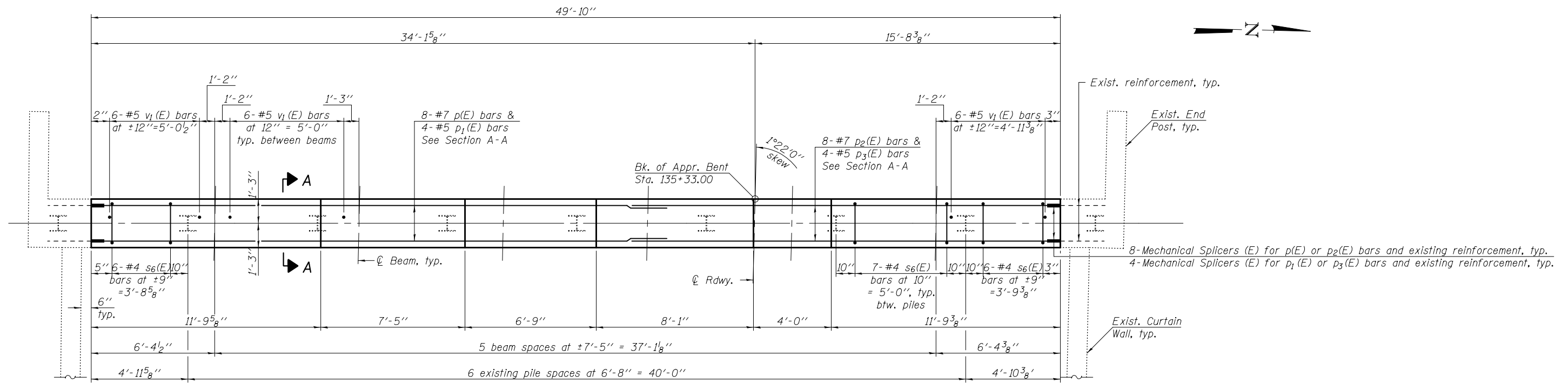


STEEL EXTENSION DETAIL

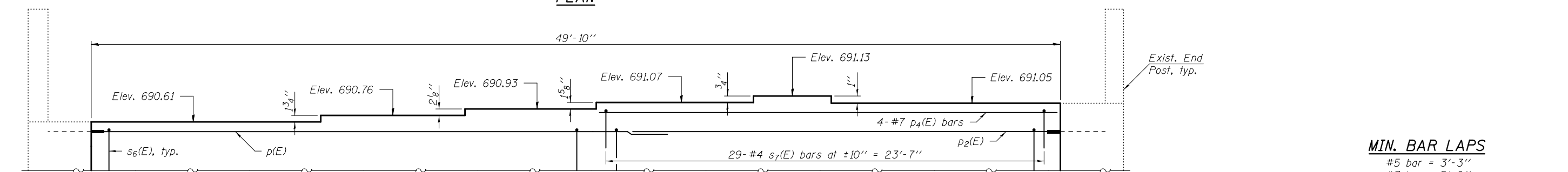
Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Side retainers and other steel members required for the bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.
Steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Minimum jack capacity = 50 Tons.
Existing bearings shall be removed and replaced after the deck has been removed.
Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
For beam reactions, see sheet 49 of 62.

BILL OF MATERIAL
TWO STRUCTURES

| Item | Unit | Total |
|--|-------|-------|
| Furnishing and Erecting Structural Steel | Pound | 6,980 |
| Jack and Remove Existing Bearing | Each | 32 |
| Elastomeric Bearing Assembly, Type I | Each | 32 |
| Anchor Bolts, 1 1/4" | Each | 64 |

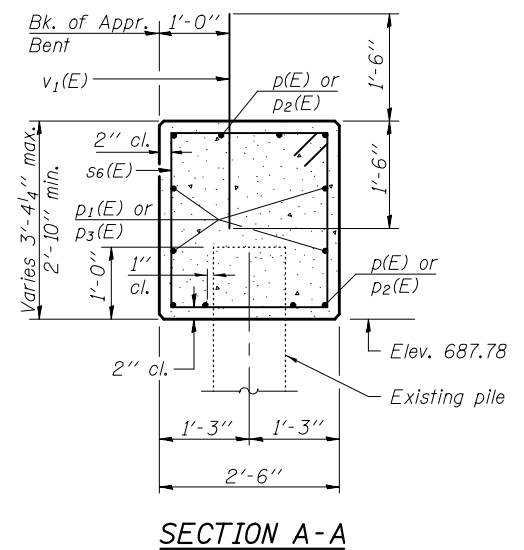


PLAN

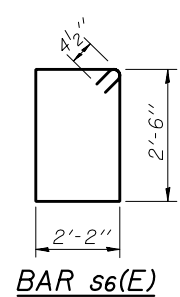


APPROACH BENT STEP DETAIL
(Looking West)

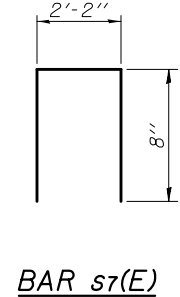
MIN. BAR LAPS
#5 bar = 3'-3"
#7 bar = 5'-2"



SECTION A-A



BAR s6(E)

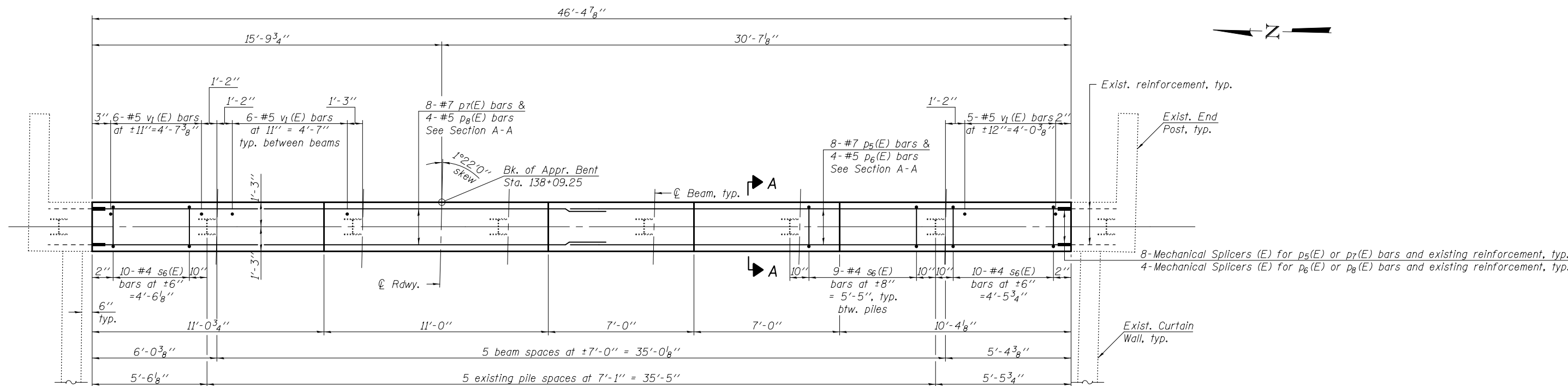


BAR s7(E)

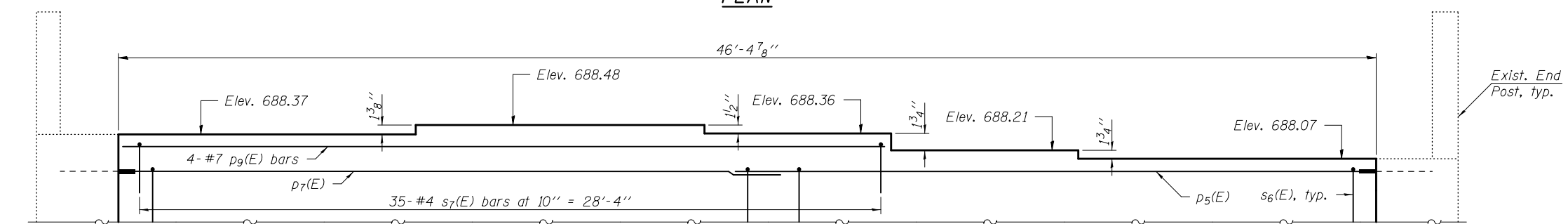
Notes:
Four steps monolithically with cap.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
Any reinforcement bars that are damaged during concrete removal operations shall be repaired using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
Existing piles to remain in place. Regions of piles to be embedded in new concrete shall be blast cleaned and incorporated into the new construction. Any damage to existing piles shall be repaired as directed by the Engineer. Cost included with Concrete Removal.
The Contractor shall cut the existing reinforcement and bars p(E) thru p3(E) to meet the manufacturer's specifications for the mechanical bar splicers.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| p(E) | 8 | #7 | 28'-5" | — |
| p1(E) | 4 | #5 | 27'-9" | — |
| p2(E) | 8 | #7 | 26'-4" | — |
| p3(E) | 4 | #5 | 25'-0" | — |
| p4(E) | 4 | #7 | 23'-7" | — |
| s6(E) | 54 | #4 | 10'-1" | □ |
| s7(E) | 29 | #4 | 3'-6" | □ |
| v1(E) | 42 | #5 | 3'-0" | — |
| Structure Excavation | | | Cu. Yd. | 36 |
| Concrete Structures | | | Cu. Yd. | 14.4 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1,870 |

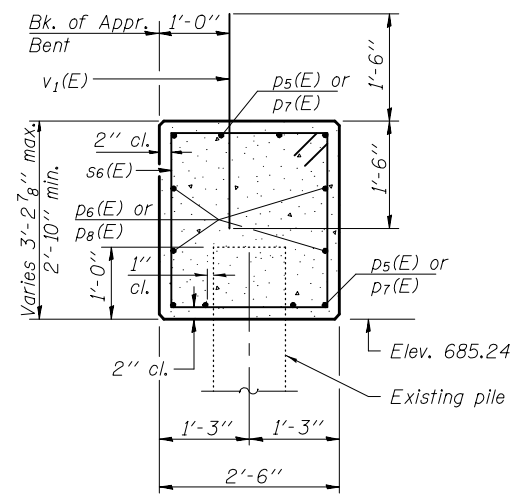


PLAN



APPROACH BENT STEP DETAIL
(Looking East)

MIN. BAR LAPS
 #5 bar = 3'-3"
 #7 bar = 5'-2"

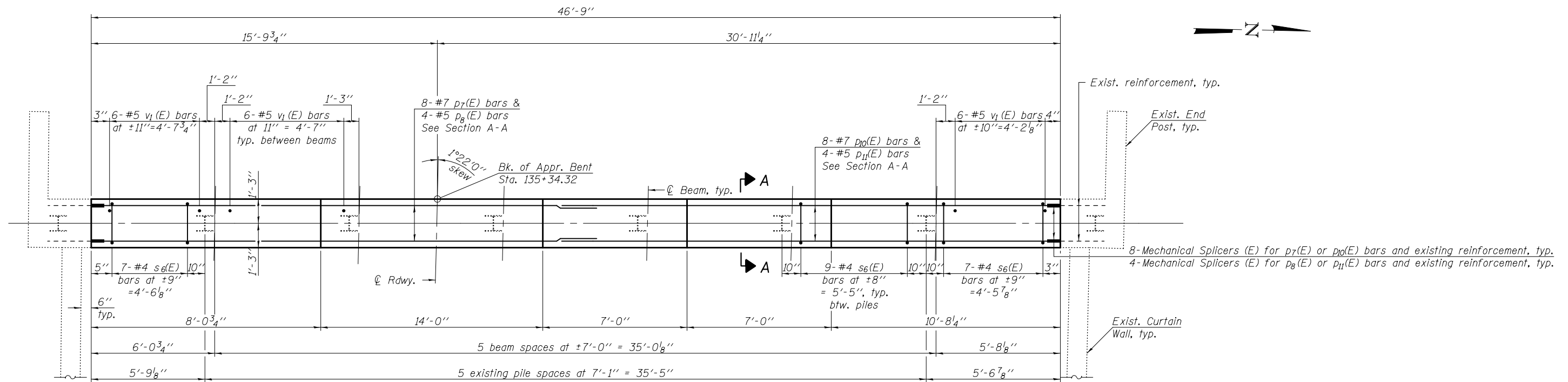


SECTION A-A

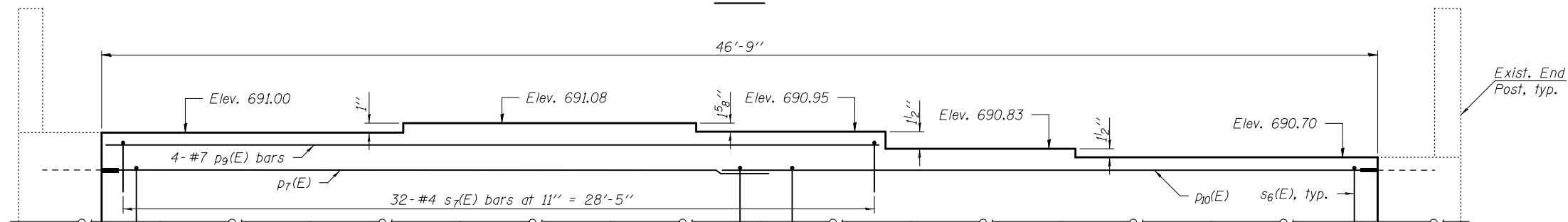
Notes:
 Pour steps monolithically with cap.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 Existing piles to remain in place. Regions of piles to be embedded in new concrete shall be blast cleaned and incorporated into the new construction. Any damage to existing piles shall be repaired as directed by the Engineer. Cost included with Concrete Removal.
 The Contractor shall cut the existing reinforcement and bars p₅(E) thru p₈(E) to meet the manufacturer's specifications for the mechanical bar splicers.
 For bars s₆(E) and s₇(E) bending diagrams, see sheet 57 of 62.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| p ₅ (E) | 8 | #7 | 25'-6" | — |
| p ₆ (E) | 4 | #5 | 24'-7" | — |
| p ₇ (E) | 8 | #7 | 25'-9" | — |
| p ₈ (E) | 4 | #5 | 24'-9" | — |
| p ₉ (E) | 4 | #7 | 28'-9" | — |
| s ₆ (E) | 65 | #4 | 10'-1" | □ |
| s ₇ (E) | 35 | #4 | 3'-6" | □ |
| v ₁ (E) | 41 | #5 | 3'-0" | — |
| Structure Excavation | | | Cu. Yd. | 33 |
| Concrete Structures | | | Cu. Yd. | 13.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1,930 |

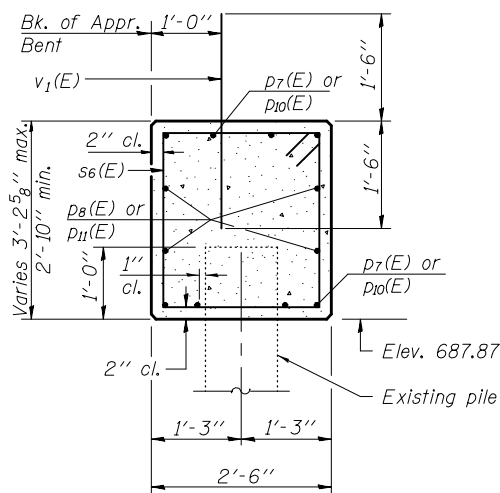


PLAN



APPROACH BENT STEP DETAIL
(Looking West)

MIN. BAR LAPS
 #5 bar = 3'-3"
 #7 bar = 5'-2"



SECTION A-A

Notes:
 Pour steps monolithically with cap.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 Existing piles to remain in place. Regions of piles to be embedded in new concrete shall be blast cleaned and incorporated into the new construction. Any damage to existing piles shall be repaired as directed by the Engineer. Cost included with Concrete Removal.
 The Contractor shall cut the existing reinforcement and bars p7(E) thru p11(E) to meet the manufacturer's specifications for the mechanical bar splicers.
 For bars s6(E) and s7(E) bending diagrams, see sheet 57 of 62.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| p7(E) | 8 | #7 | 25'-9" | — |
| p8(E) | 4 | #5 | 24'-9" | — |
| p9(E) | 4 | #7 | 28'-9" | — |
| p10(E) | 8 | #7 | 25'-10" | — |
| p11(E) | 4 | #5 | 24'-11" | — |
| s6(E) | 59 | #4 | 10'-1" | □ |
| s7(E) | 32 | #4 | 3'-6" | □ |
| v1(E) | 42 | #5 | 3'-0" | — |
| Structure Excavation | | | Cu. Yd. | 33 |
| Concrete Structures | | | Cu. Yd. | 13.2 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 1,890 |

| | | | |
|-------------|--------------------|-----------------------|----------------------------|
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| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

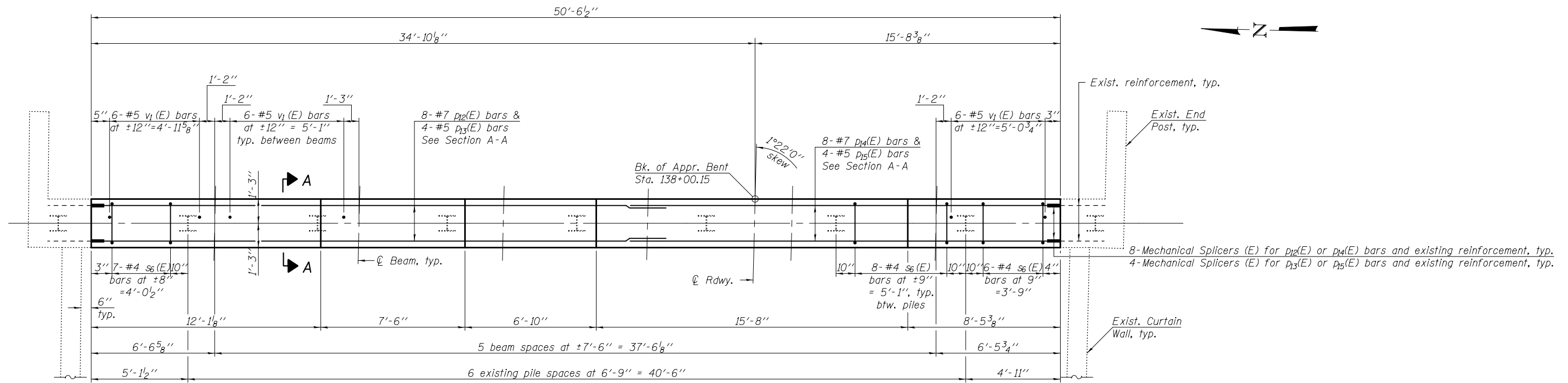
HORNER & SHIRIN, INC.
ENGINEERS

WEST APPROACH BENT (W.B.)
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)

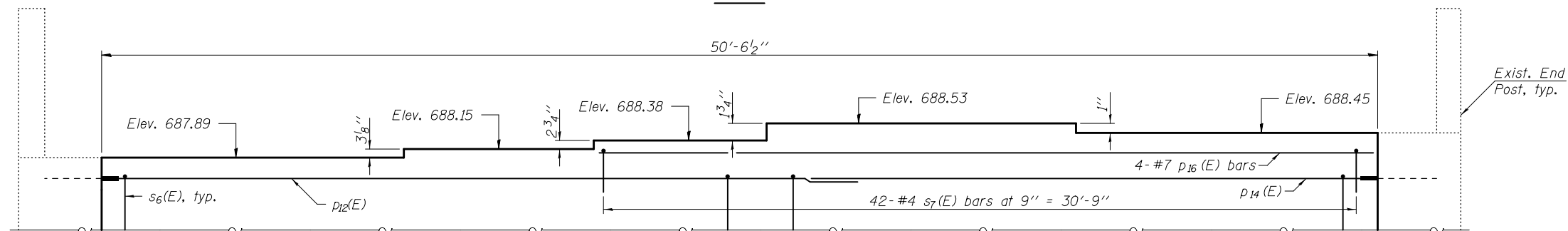
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------------|--------|--------------|-----------|
| 474 | (72-3HB-1), I | PEORIA | 88 | 75 |
| CONTRACT NO. 68883 | | | | |

SHEET NO. 59 OF 62 SHEETS

ILLINOIS FED. AID PROJECT

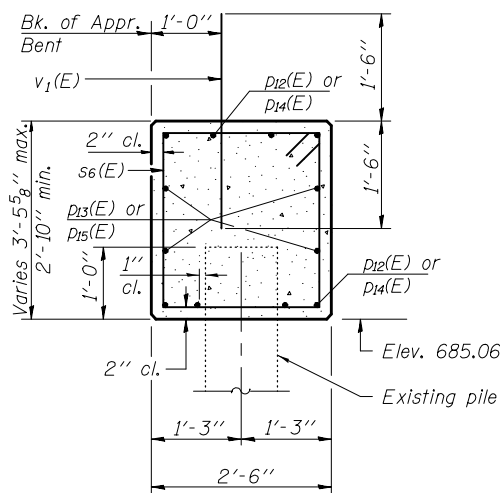


PLAN



APPROACH BENT STEP DETAIL
(Looking East)

MIN. BAR LAPS
 #5 bar = 3'-3"
 #7 bar = 5'-2"



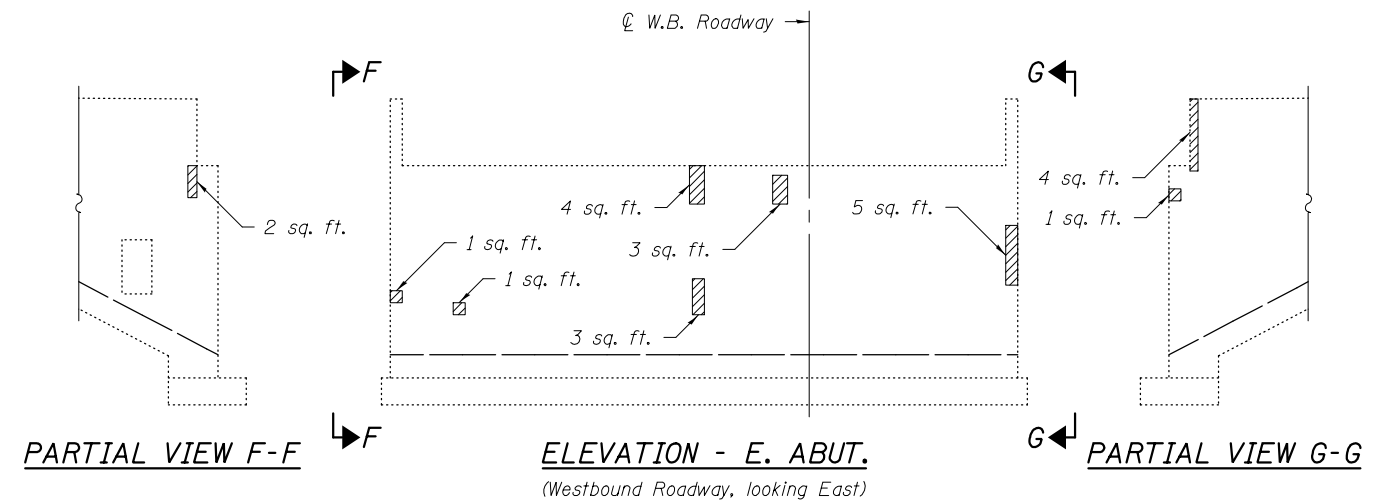
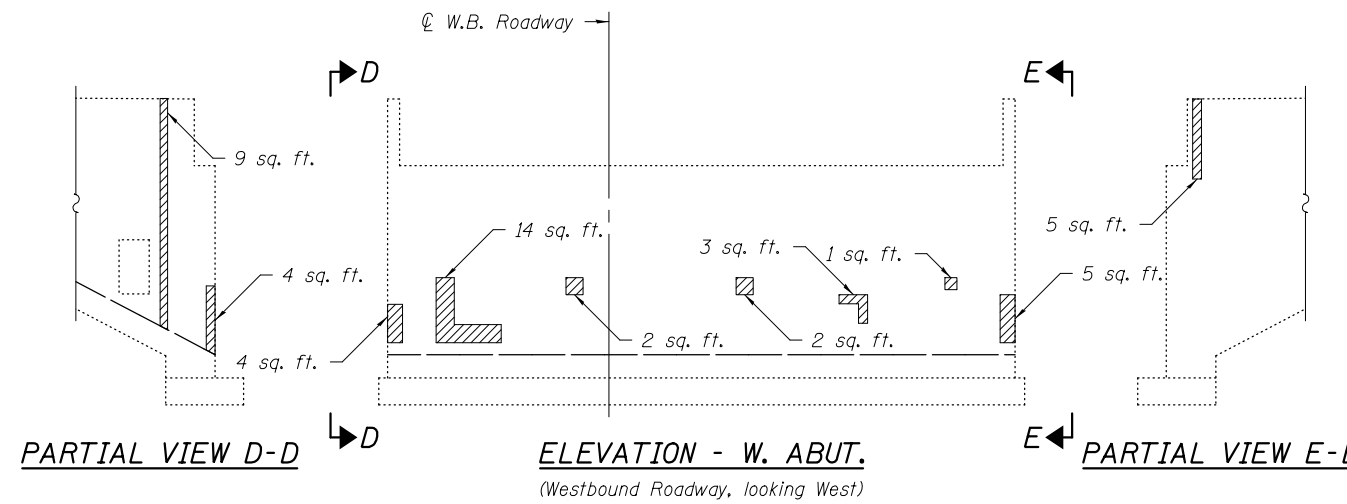
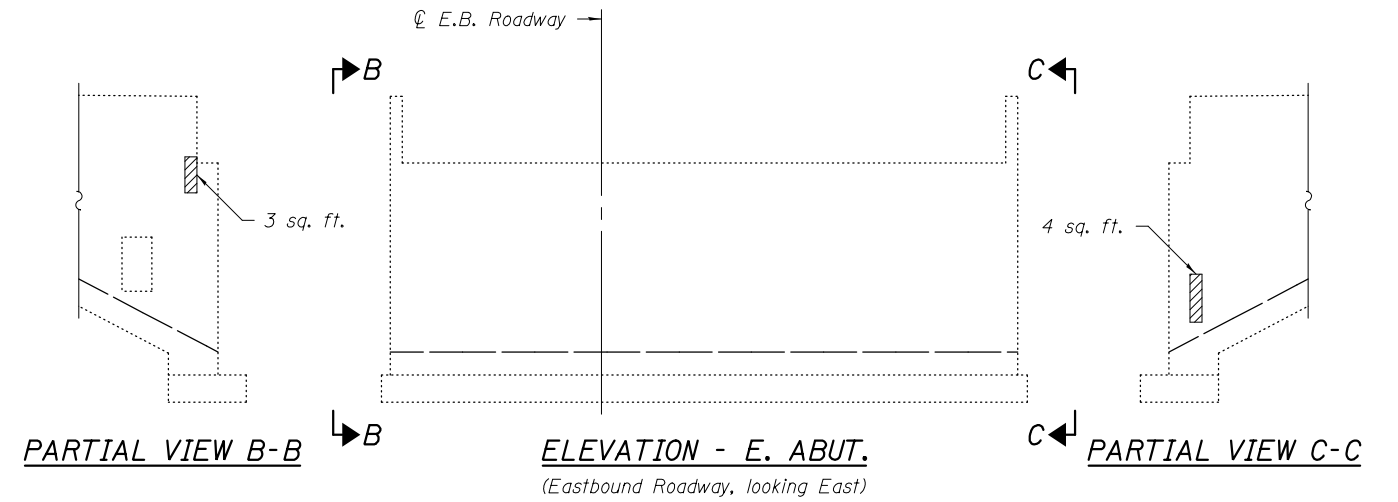
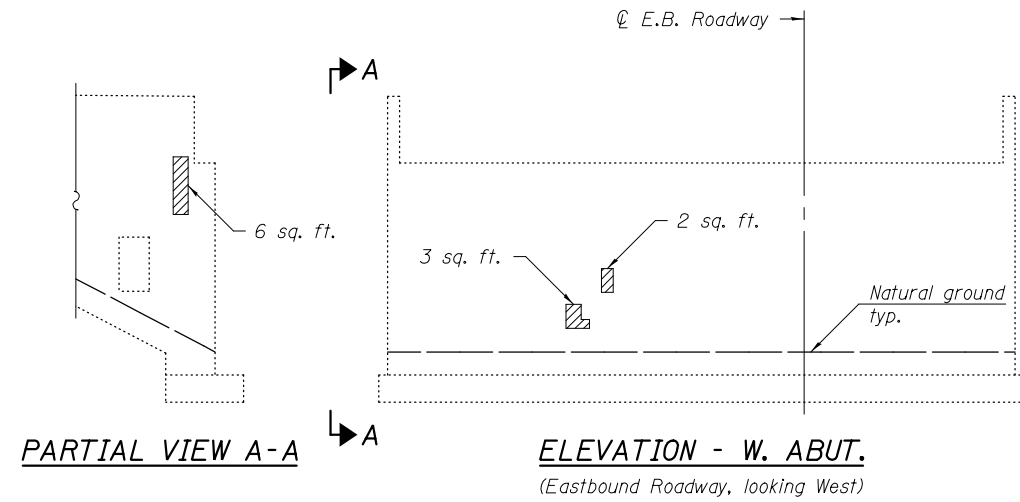
SECTION A-A


Notes:

Pour steps monolithically with cap.
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired using an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 Existing piles to remain in place. Regions of piles to be embedded in new concrete shall be blast cleaned and incorporated into the new construction. Any damage to existing piles shall be repaired as directed by the Engineer. Cost included with Concrete Removal.
 The Contractor shall cut the existing reinforcement and bars p₁₂(E) thru p₁₅(E) to meet the manufacturer's specifications for the mechanical bar splicers.
 For bars s₆(E) and s₇(E) bending diagrams, see sheet 57 of 62.

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|----------------------------------|-----|------|---------|-------|
| p ₁₂ (E) | 8 | #7 | 29'-1" | — |
| p ₁₃ (E) | 4 | #5 | 28'-2" | — |
| p ₁₄ (E) | 8 | #7 | 26'-4" | — |
| p ₁₅ (E) | 4 | #5 | 25'-4" | — |
| p ₁₆ (E) | 4 | #7 | 30'-7" | — |
| s ₆ (E) | 61 | #4 | 10'-1" | □ |
| s ₇ (E) | 42 | #4 | 3'-6" | □ |
| v ₁ (E) | 42 | #5 | 3'-0" | — |
| Structure Excavation | | | Cu. Yd. | 37 |
| Concrete Structures | | | Cu. Yd. | 15.1 |
| Reinforcement Bars, Epoxy Coated | | | Pound | 2,020 |



 Denotes Structural Repair of Concrete

Notes:
Structural Repair of Concrete shall occur during its respective stage construction and prior to replacement of bearings.
See Special Provision for Structural Repair of Concrete.

BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|---------|-------|
| Structural Repair of Concrete (Depth Equal to or less than 5") | Sq. Ft. | 91 |

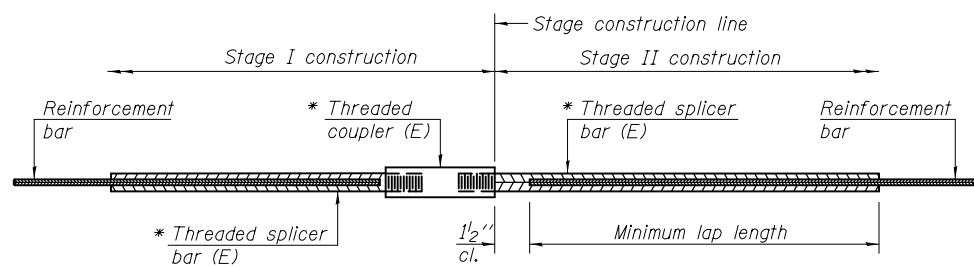
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| #FILE* | | CHECKED E.M. LAGEMANN | Del. Staging (IDOT) |
| | PLOT SCALE = | DRAWN K.A. KLUES | REVISED - |
| | PLOT DATE = #DATE* | CHECKED E.M. LAGEMANN | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORNER &
SHIRIN, INC.
ENGINEERS

ABUTMENT REPAIR DETAILS
STRUCTURE NOS. 072-0119 (E.B.) & 072-0120 (W.B.)
SHEET NO. 61 OF 62 SHEETS

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|--------------|--------|--------------|-----------|
| 474 | (72-3HB-1),I | PEORIA | 88 | 77 |
| CONTRACT NO. 68883 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |



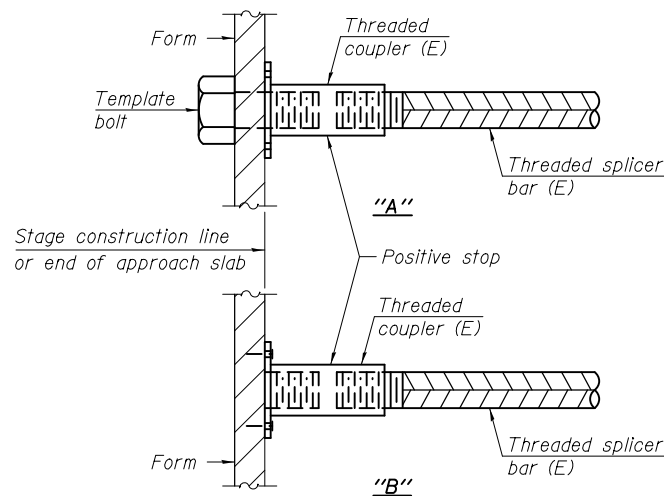
STANDARD BAR SPLICER ASSEMBLY

| Minimum Lap Lengths | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|
| Bar size to be spliced | Table 1 | Table 2 | Table 3 | Table 4 | Table 5 | Table 6 |
| 3, 4 | 1'-5" | 1'-11" | 2'-1" | 2'-4" | 2'-7" | 2'-11" |
| 5 | 1'-9" | 2'-5" | 2'-7" | 2'-11" | 3'-3" | 3'-8" |
| 6 | 2'-1" | 2'-11" | 3'-1" | 3'-6" | 3'-10" | 4'-5" |
| 7 | 2'-9" | 3'-10" | 4'-2" | 4'-8" | 5'-2" | 5'-10" |
| 8 | 3'-8" | 5'-1" | 5'-5" | 6'-2" | 6'-9" | 7'-8" |
| 9 | 4'-7" | 6'-5" | 6'-10" | 7'-9" | 8'-7" | 9'-8" |

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

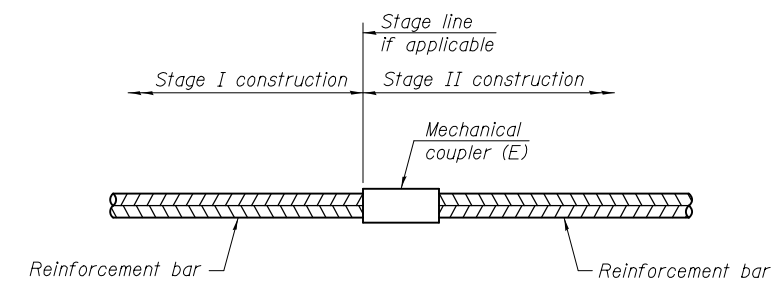
Threaded splicer bar length = min. lap length + 1/2" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.



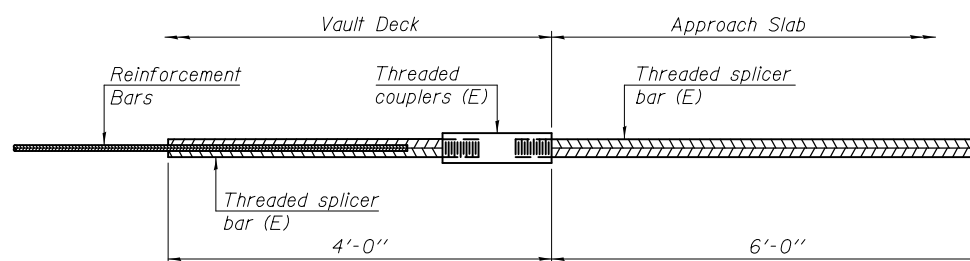
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

| Location | Bar size | No. assemblies required |
|--------------------|----------|-------------------------|
| E.B. W. Appr. Bent | #7 | 16 |
| E.B. W. Appr. Bent | #5 | 8 |
| E.B. E. Appr. Bent | #7 | 16 |
| E.B. E. Appr. Bent | #5 | 8 |
| W.B. W. Appr. Bent | #7 | 16 |
| W.B. W. Appr. Bent | #5 | 8 |
| W.B. E. Appr. Bent | #7 | 16 |
| W.B. E. Appr. Bent | #5 | 8 |



BAR SPLICER ASSEMBLY FOR #5 BAR ON VAULTED ABUTMENTS

No. required = 206

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications") (2)

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

MINIMUM CLEARANCE: 3" greater than bridge members at all locations. (All Obstructions)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 Structural Welding Code (Steel) and the Standard Specifications.

MATERIALS: All Structural Steel Pipe shall be ASTM A53 Grade B with a minimum yield of 35,000 p.s.i., or A500 Grade B or C with a minimum yield of 46,000 p.s.i. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53.

All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 (M183, M223 Gr. 50).

HIGH STRENGTH BOLTS: All bolts, washers, nuts and locknuts shall satisfy the requirements of ASTM designation A307 unless noted as "H.S." which shall require AASHTO M164 (A325), ASTM A449, or approved alternate. All fasteners shall be hot dip galvanized per AASHTO M232 unless otherwise specified.

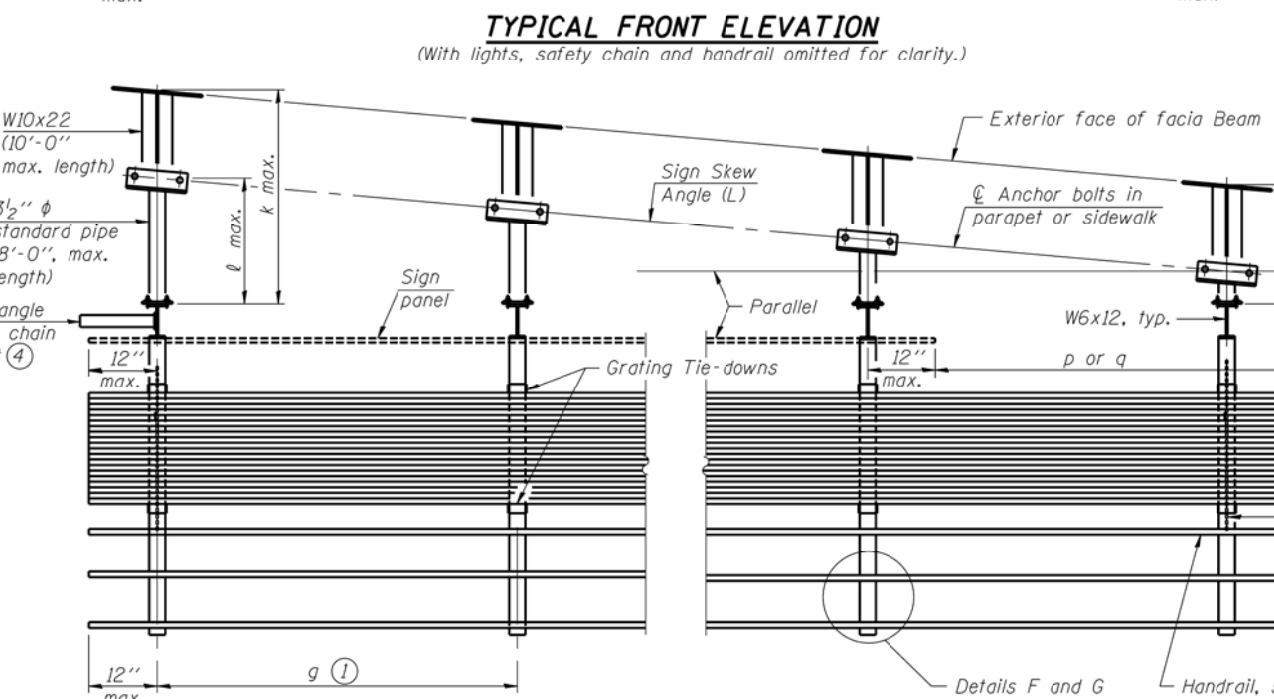
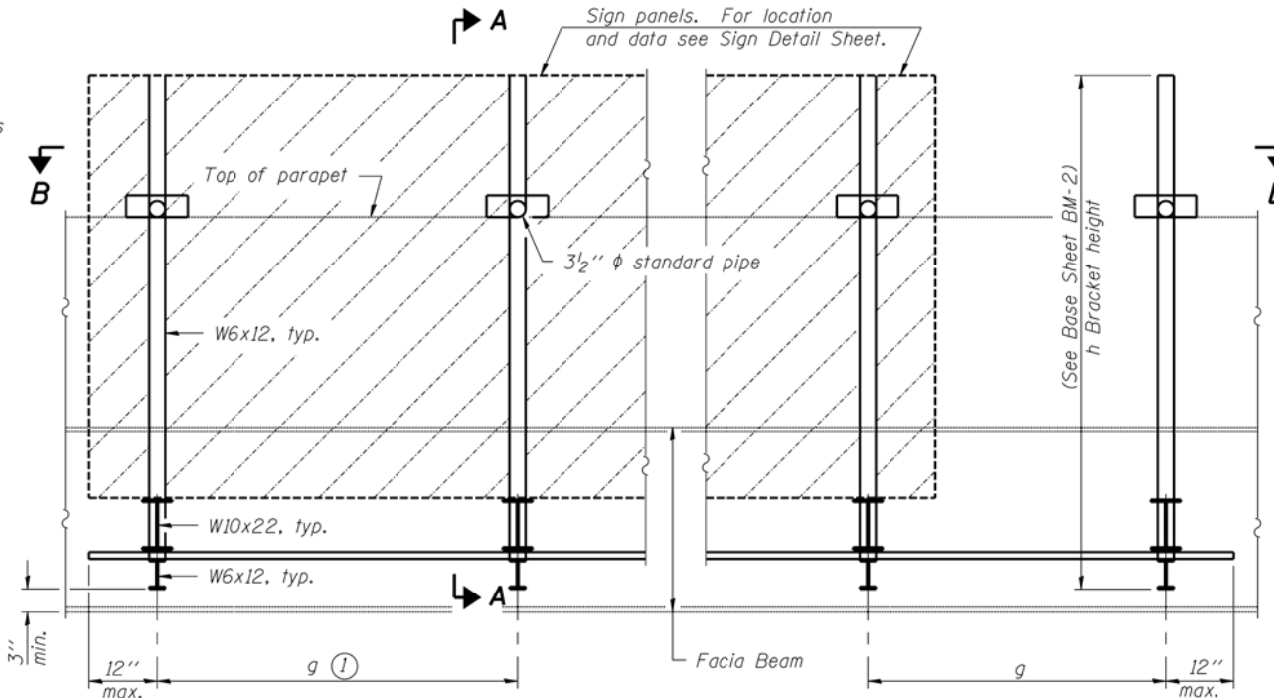
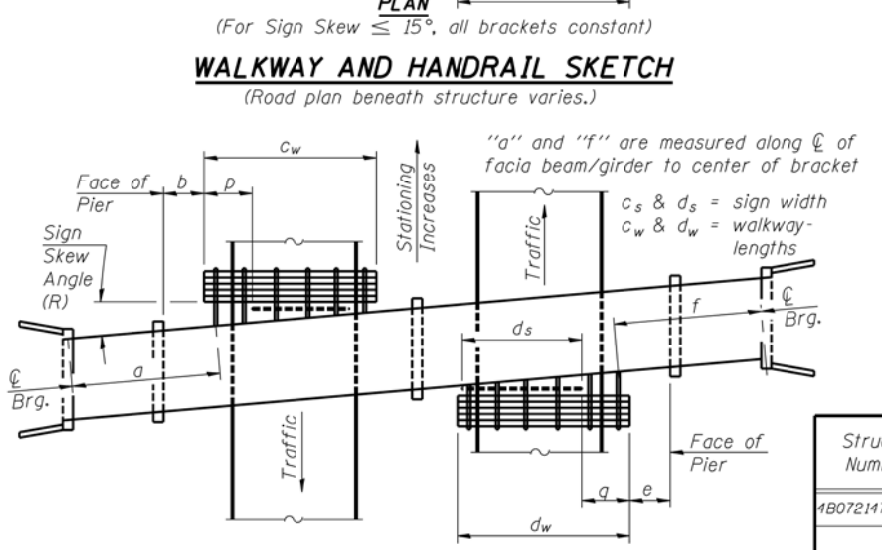
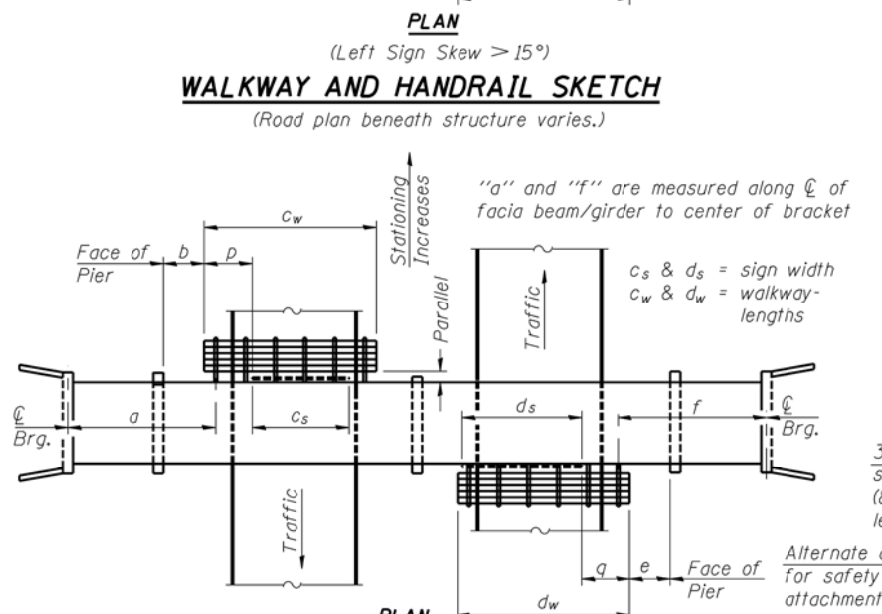
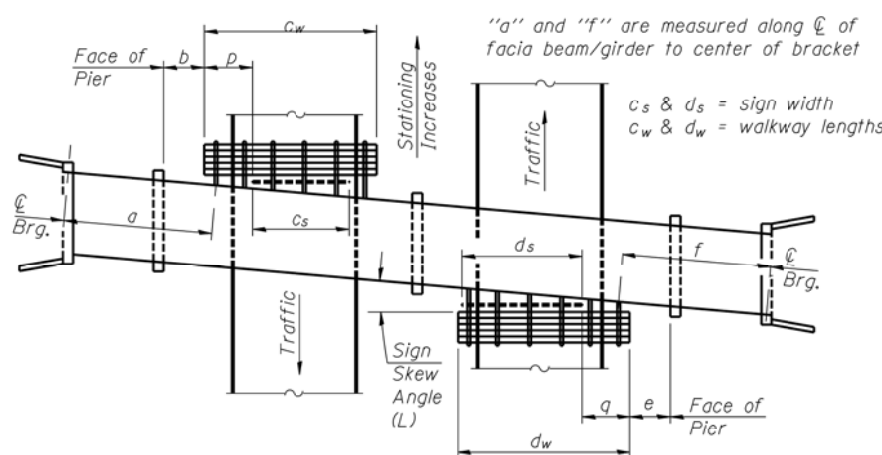
GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: All-threaded rod shall conform to ASTM F1554 Grade 105, 3/4" ϕ x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

- (1) Bracket spacing $g \leq 6'-0"$, max. Spacing shall be uniform if possible but may vary $\pm 6"$ to miss existing obstruction (rail post, light poles, web stiffeners, splice plates, etc.). Adjust bracket lengths accordingly on skewed structures.
- (2) Any design modifications shall be based on the current version of applicable specifications and submitted for the Engineer's approval.
- (3) Unit price includes grating, handrail, brackets, supports, anchor bolts, fasteners, fabrication, delivery, erection, field drilling and other necessary items. Limits of payment are based on grating length (c_w , d_w) unless otherwise specified. For Safety Chain Details and Details D, F and G, see Base Sheet BM-4.
- (4) If walkway bracket at safety chain location is behind sign, add angle to bracket. See detail on Base Sheet BM-4.

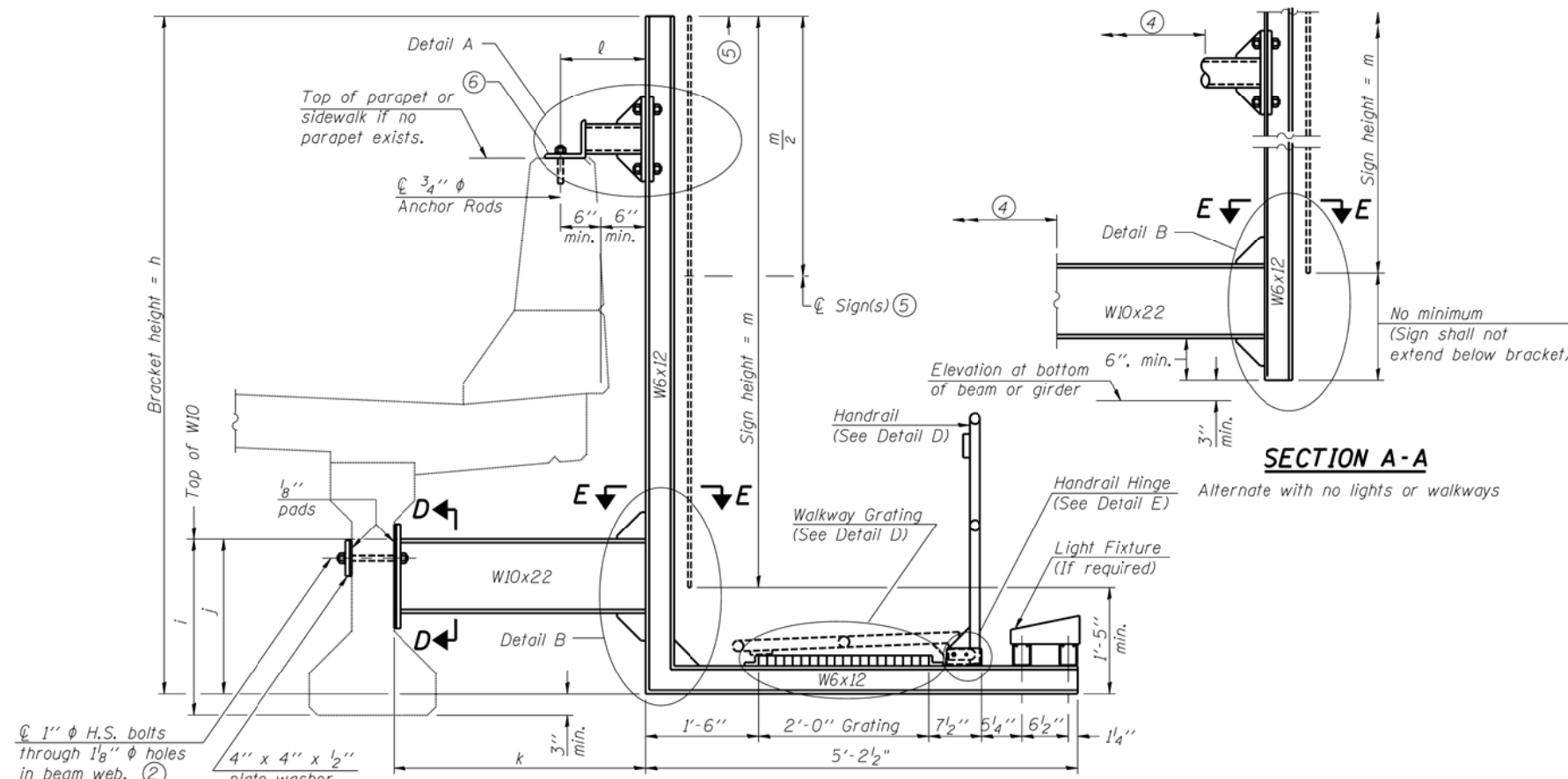
TOTAL BILL OF MATERIAL

| | | |
|--|------|------|
| (3) OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED | Foot | 26.0 |
|--|------|------|



| Structure Number | Sign Skew Angle (L) or (R) | Bridge Station | Bridge Structure Number | Contract Route Designation | a | b | c _s | c _w | d _s | d _w | e | f | g | No. of Brackets (Total) | p | q | Total Grating/Hndrl. Lengths (c _w + d _w) |
|------------------|----------------------------|----------------|-------------------------|----------------------------|--------|---|----------------|----------------|----------------|----------------|---|---|-------|-------------------------|-------|---|---|
| 180721474L003.40 | 0° | 137-41 | 072-0119 | FA1 474 | 13'-9" | - | 23'-0" | 26'-0" | - | - | - | - | 6'-0" | 5 | 3'-0" | - | 26'-0" |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |

Dimensions a, b, e, f & g may vary as approved by the Engineer, see (1).
When $c_w < c_s$ and/or $d_w < d_s$, use alternate brackets without walkway supports where applicable, see (3).



SECTION A-A Details for mounting to PPC I Beam or Bulb "T" & Details for mounting to parapet w/o rail

② 1" φ H.S. bolts through 1 1/8" φ holes in beam web.

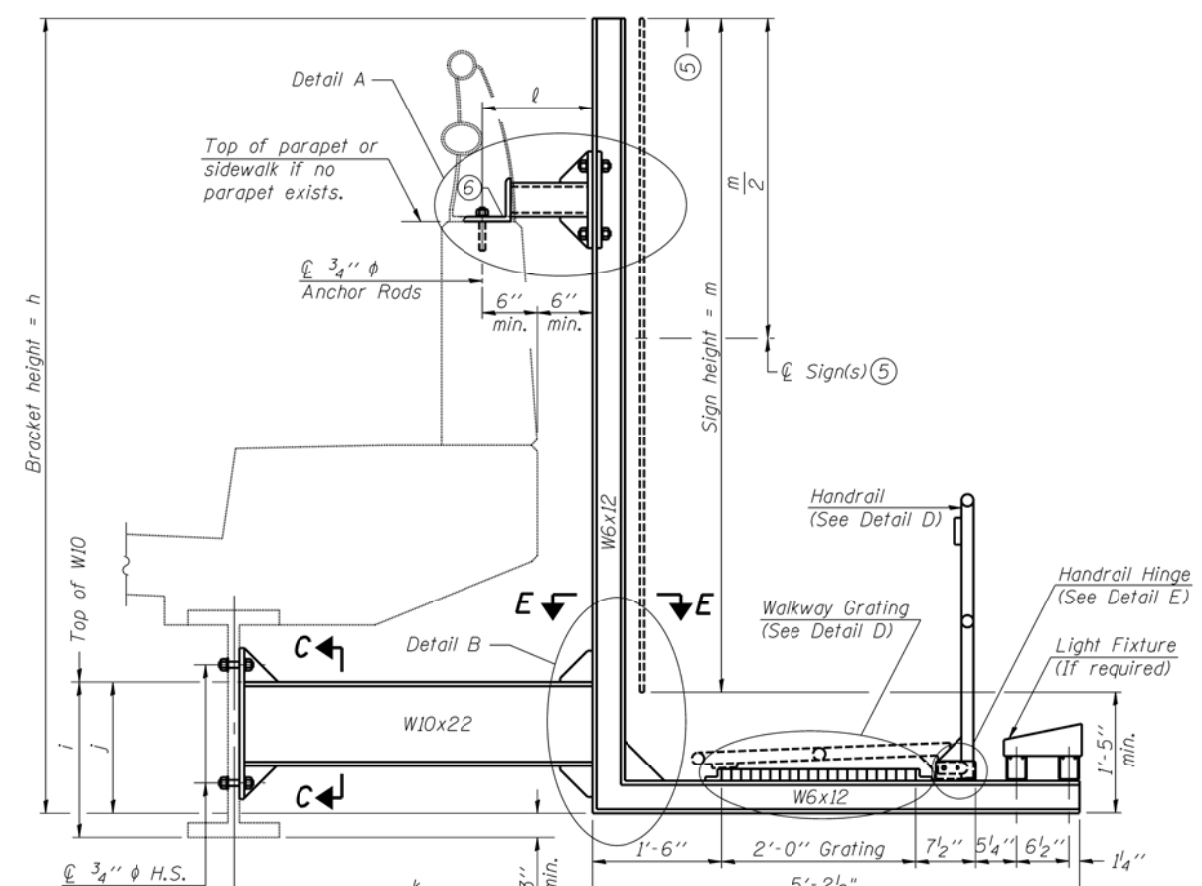
③ 1" φ H.S. bolts through 1 1/8" φ holes in girder.

BM-2 1-20-11

Details for mounting to integral reinforced concrete girder & Details for mounting on safety curb with surface-mount bridge rail

Notes:
 Installations not within dimensional limits shown require special analysis for all components and must be submitted to the Bureau of Bridges and Structures for approval. Contractor shall field check all pertinent existing bridge dimensions shown on plans before submitting shop drawings.
 All holes in bridge beams or girders should be located in the middle half of the member. There shall be no holes drilled in the lower quarter of the member's depth. (For R.C. girder, depth = bottom of deck to bottom of the girder.) Proposed exceptions must be approved by the Bureau of Bridges and Structures.
 The Engineer may adjust dimension "i" to meet the above condition and to keep the sign level.

For Details A & B, Sections C-C, D-D and E-E, see Base Sheet BM-3.
 For Details D & E, see Base Sheet BM-4.



SECTION A-A Details for mounting to steel beam or girder & Details for mounting with existing parapet mounted rail

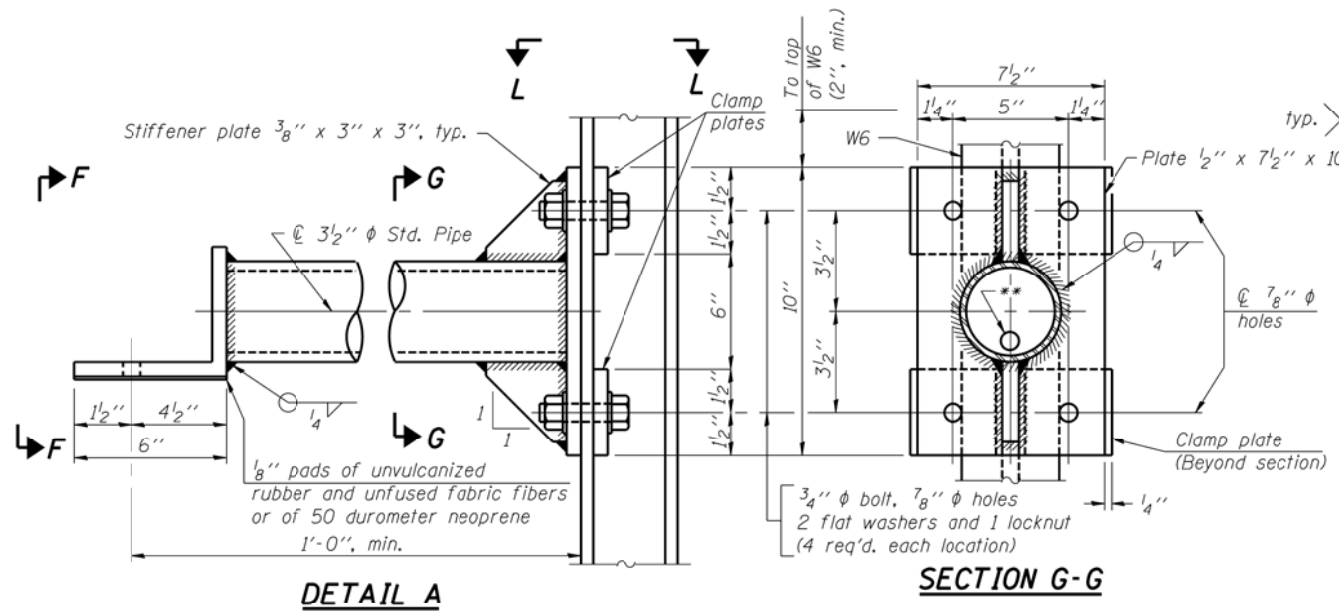
- ① Holes in new steel members may be drilled in the fabrication shop or in the field. Field drill existing members.
- ② For new PPC I beams, holes shall be formed during casting. For existing PPC I beams, prestressing strand locations shall be determined and spaced to miss strands by 6", min. Minimize spalling during field drilling of existing beams.
- ③ For new construction, form holes. For existing RC beams, locate primary reinforcement and space holes to miss by 6", min. Minimize spalling and concrete fracturing/damage during field drilling of existing concrete. Spalls over 1/4" deep or beyond the coverage of the 4x4 plate washer shall be repaired with epoxy mortar before installing washer.
- ④ For attachment details of 3/2" pipe and W10x22, see other sections as applicable.
- ⑤ Sign shall not extend more than 6" above top of bracket, and this dimension may vary to keep sign level if bridge is on grade or vertical curve. Multiple signs of various heights shall share a common horizontal centerline and use equal bracket heights. If no sign is attached to a W6x12 vertical (bracket only supporting walkway), dimension h shall be the same as an adjacent bracket with a sign attached, unless Engineer specifically directs shorter brackets due to locational restraints on future uses. (See Detail A for minimum bracket height.)
- ⑥ For bridge mounted sign structures installed on new bridges with railing, during design, bracket spacing must be coordinated with railing post spacing and the Contractor must install upper brackets prior to railing installation. For bridge mounted sign structures installed on existing bridges with railing, during design, brackets spacing must be coordinated with railing post spacing and the Contractor must temporarily remove sections of railing to facilitate upper bracket installation. If it is determined during design that existing railings can't be removed, alternate upper connection details must be developed for the contract plans and approved by the Bureau of Bridges and Structures.

| Structure Number | Station | h | i | j | k max. (10'-0" max.) | l max. (8'-0" max.) | m (15'-0" max.) |
|------------------|---------|---------|-------|-------|----------------------|---------------------|-----------------|
| 4B0721474L003.40 | 137+41 | 14'-11" | 2'-7" | 2'-4" | 3'-4" | 1'-0" | 13'-6" |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

BRIDGE MOUNT SIGN STRUCTURES
 WALKWAY AND CONNECTION DETAILS

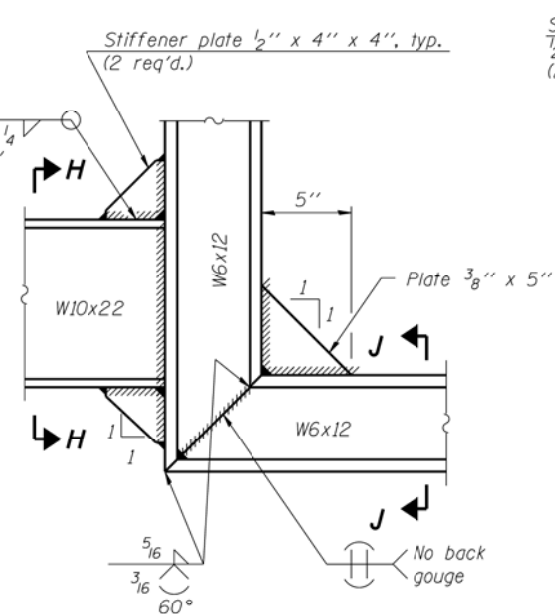
SHEET NO. 2 OF 4 SHEETS

F.A.I. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
 474 (72-3HB-1),1 PEORIA 89 82
 CONTRACT NO. 68883
 ILLINOIS FED. AID PROJECT

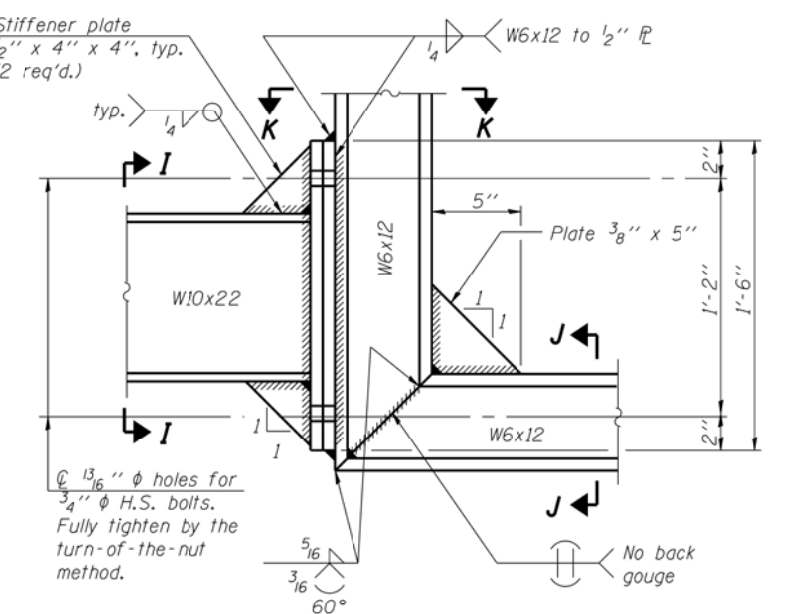


DETAIL A

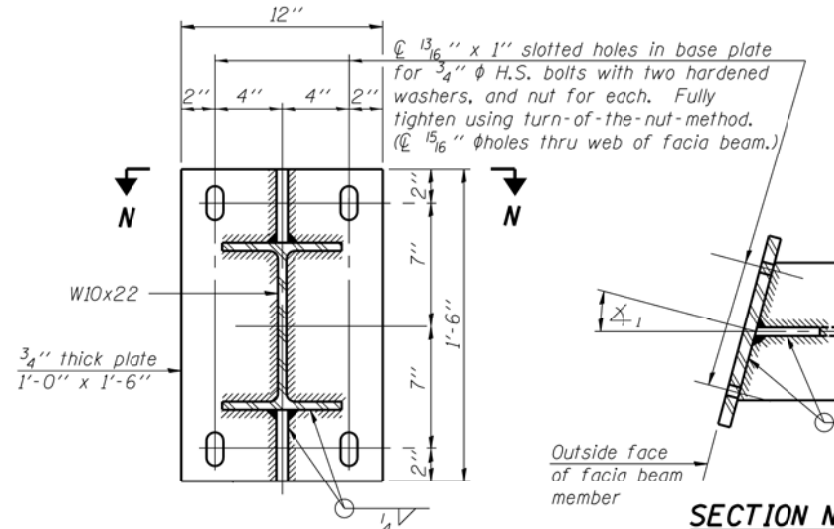
SECTION G-G



DETAIL B - WELDED W10x22 TO W6x12 CONNECTION

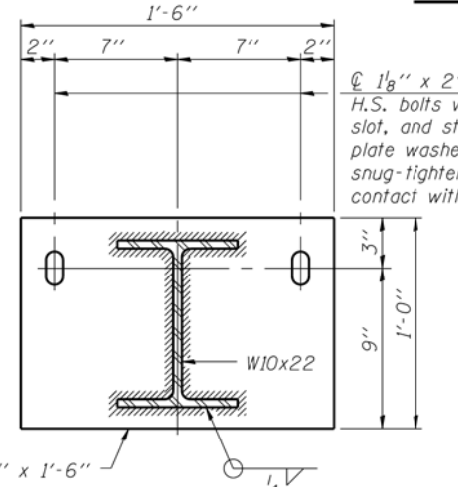


DETAIL B - ALTERNATE BOLTED W10x22 TO W6x12 CONNECTION

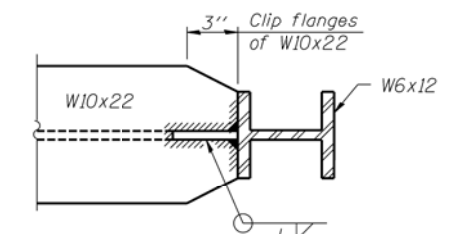


SECTION N-N

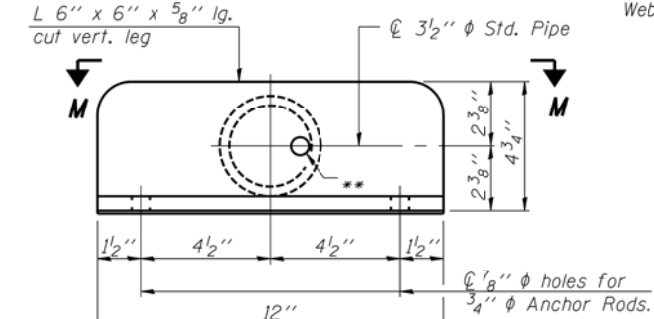
SECTION C-C



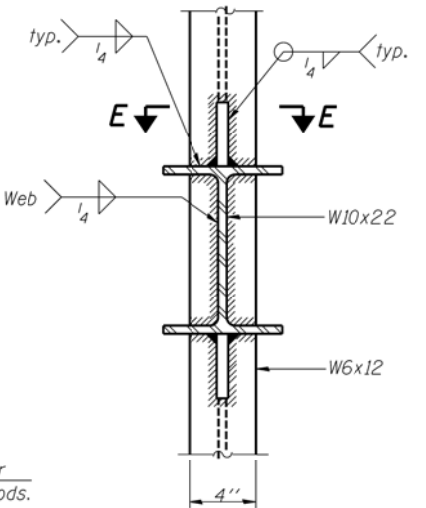
SECTION D-D



SECTION E-E



VIEW F-F

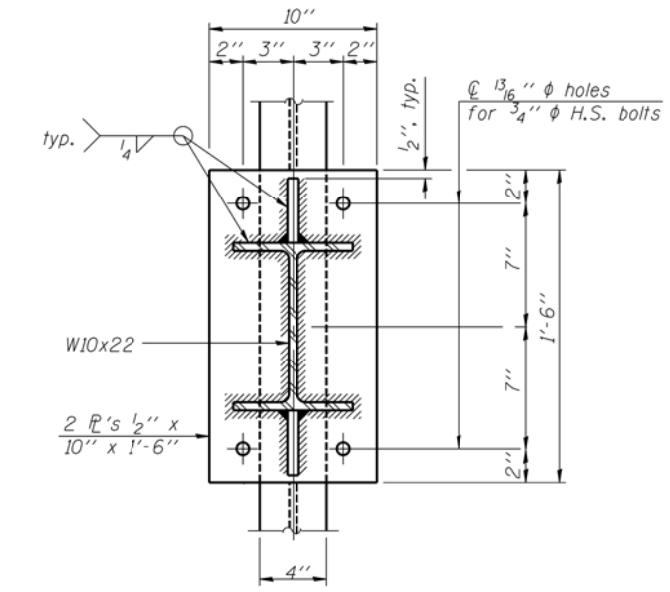


SECTION H-H

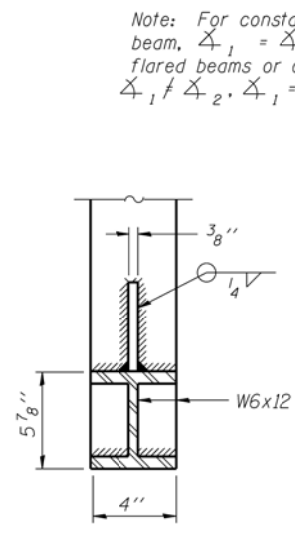
SECTION C-C
Steel beam or girder connection plate details

SECTION D-D
Concrete beam or girder connection plate details.

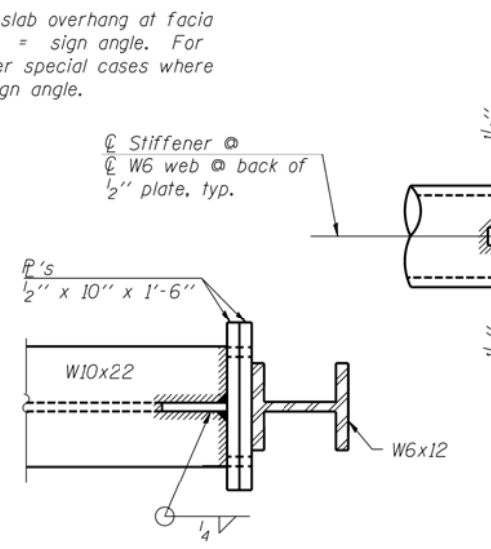
** 13/16 inch phi holes for galvanizing. After galvanizing, install 7/8 inch phi A307 hot-dip galvanized bolt to close hole in angle. (No bolt required in 1/2 inch plate.)



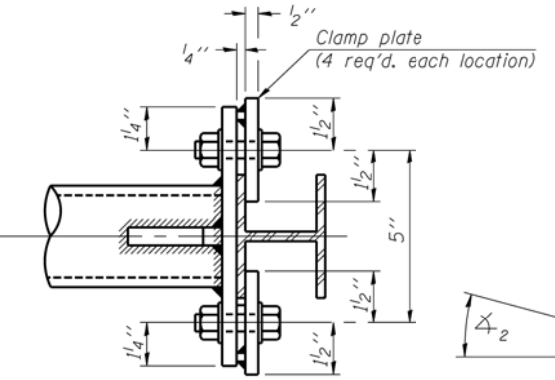
SECTION I-I



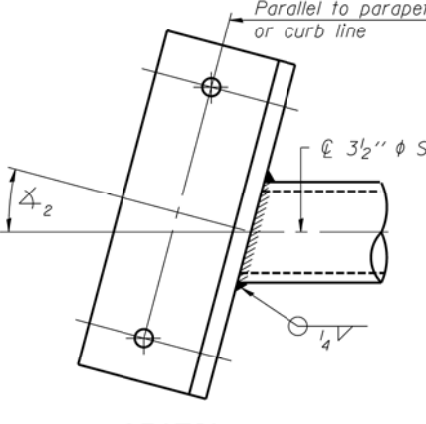
SECTION J-J



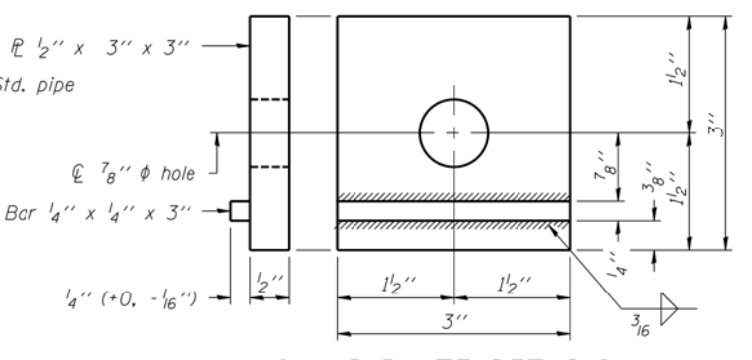
SECTION K-K



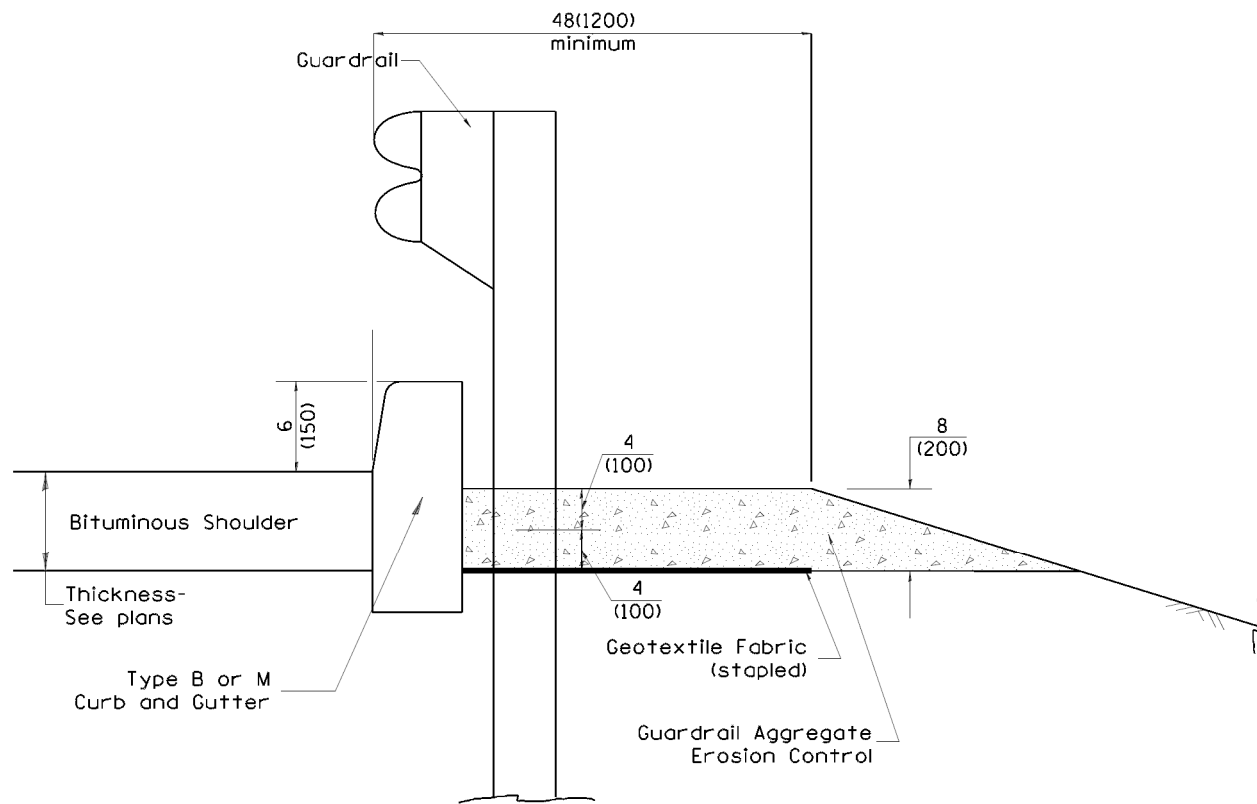
SECTION L-L



SECTION M-M



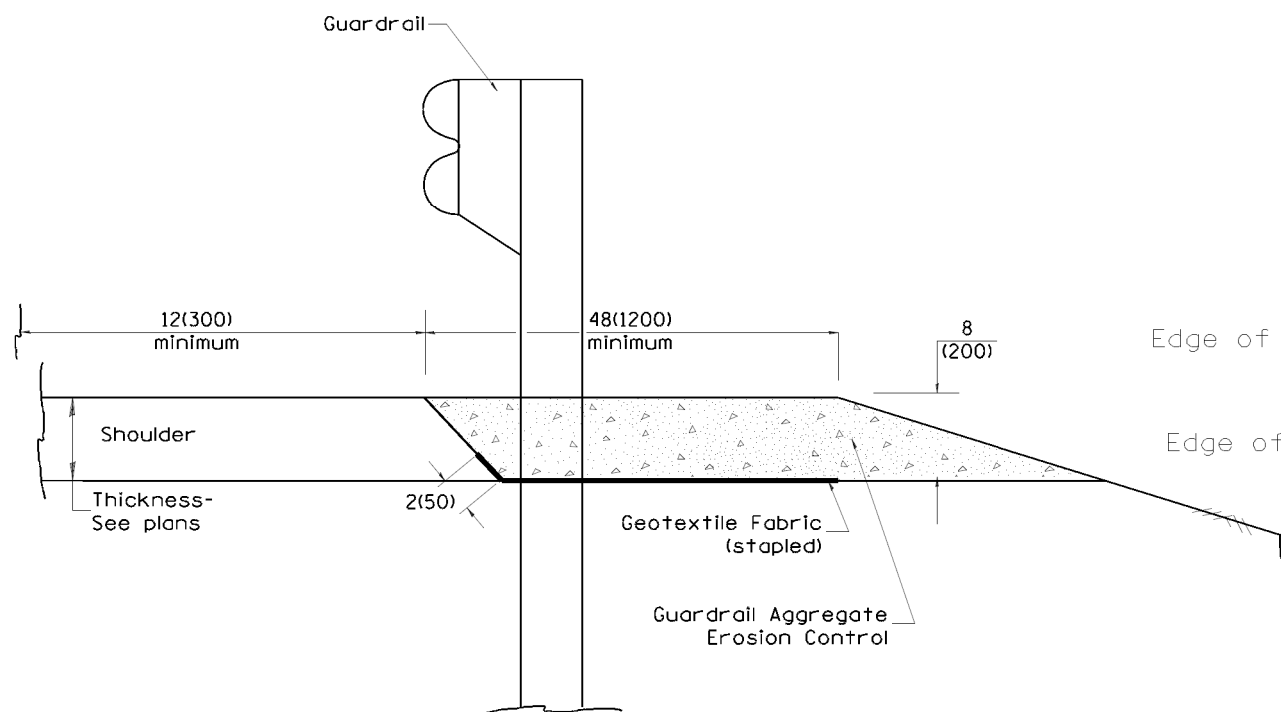
CLAMP PLATE DETAILS



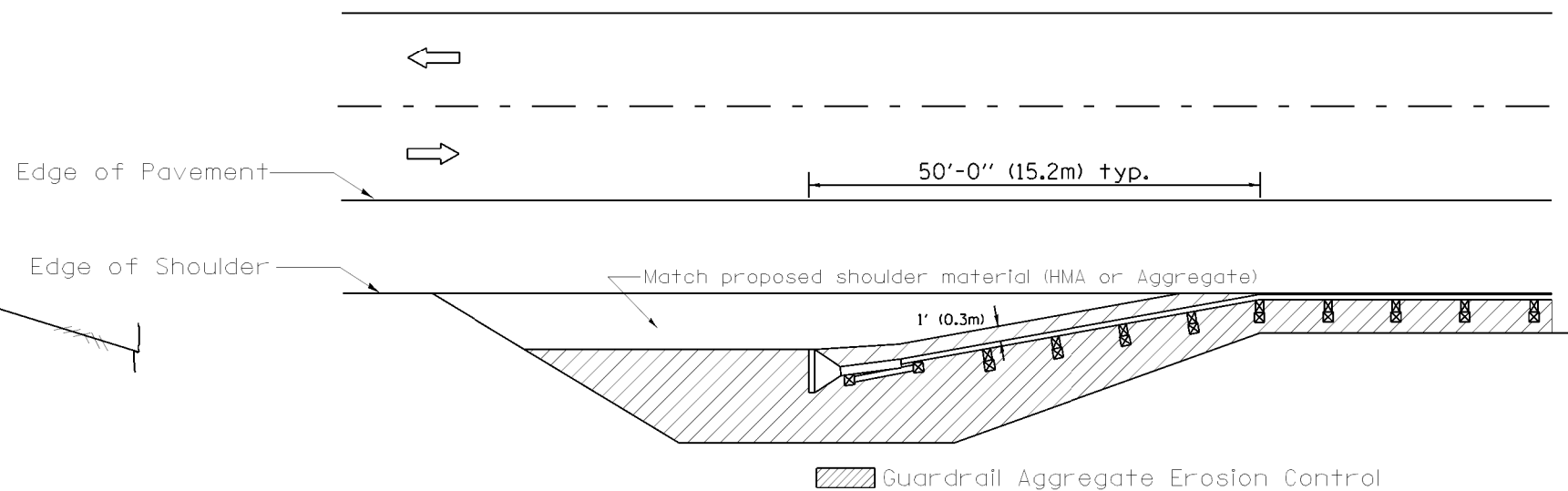
TYPICAL SECTION WITH EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.
2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.
3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.
5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.
6. Materials shall meet the following requirements:
 - A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.
 - B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



TYPICAL SECTION WITHOUT EROSION CONTROL CURB



All dimensions are in inches (millimeters) unless otherwise noted.

| | | | | | |
|----------|-------------------------------------|------|---------|--------------------------------|------|
| 01-01-97 | RENUM. C-22.01, NEW REVISION BOX | T.P. | 3-7-11 | Added Detail showing plan view | R.D. |
| 03-01-97 | CORRECT STD. NUMBERS IN NOTES PG. 2 | J.A. | 8-10-12 | Revised curb "B" and aggregate | R.D. |
| 11-03-00 | CORRECTION TO NOTES | M.A. | | | |
| 10-16-06 | REVISED TO 2007 SPEC. | M.A. | | | |

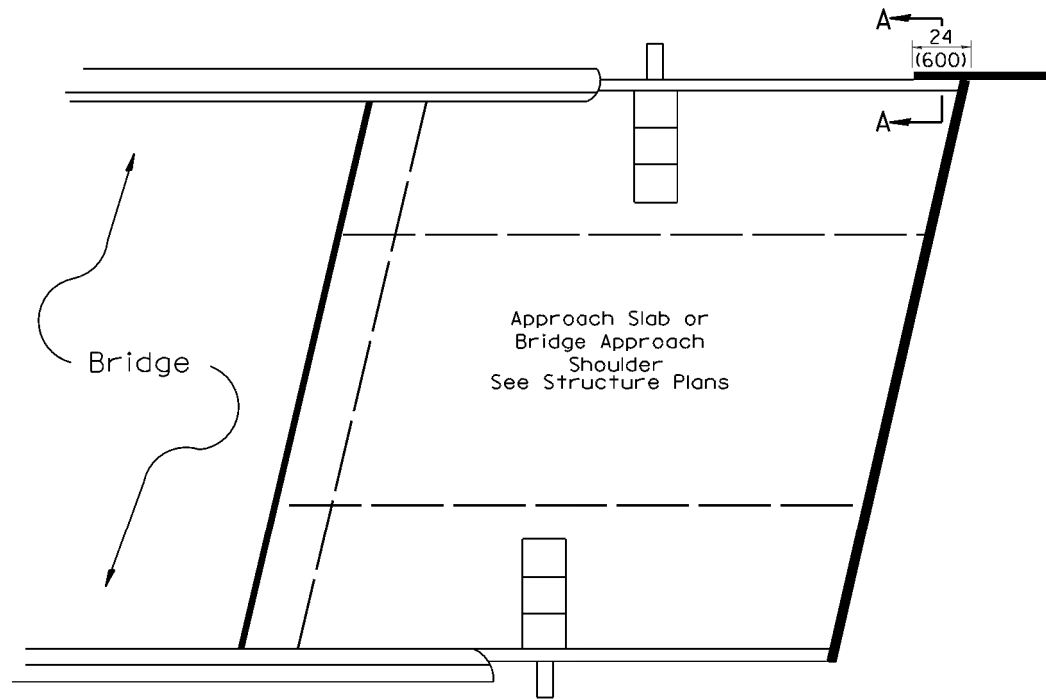
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GUARDRAIL EROSION CONTROL TREATMENTS

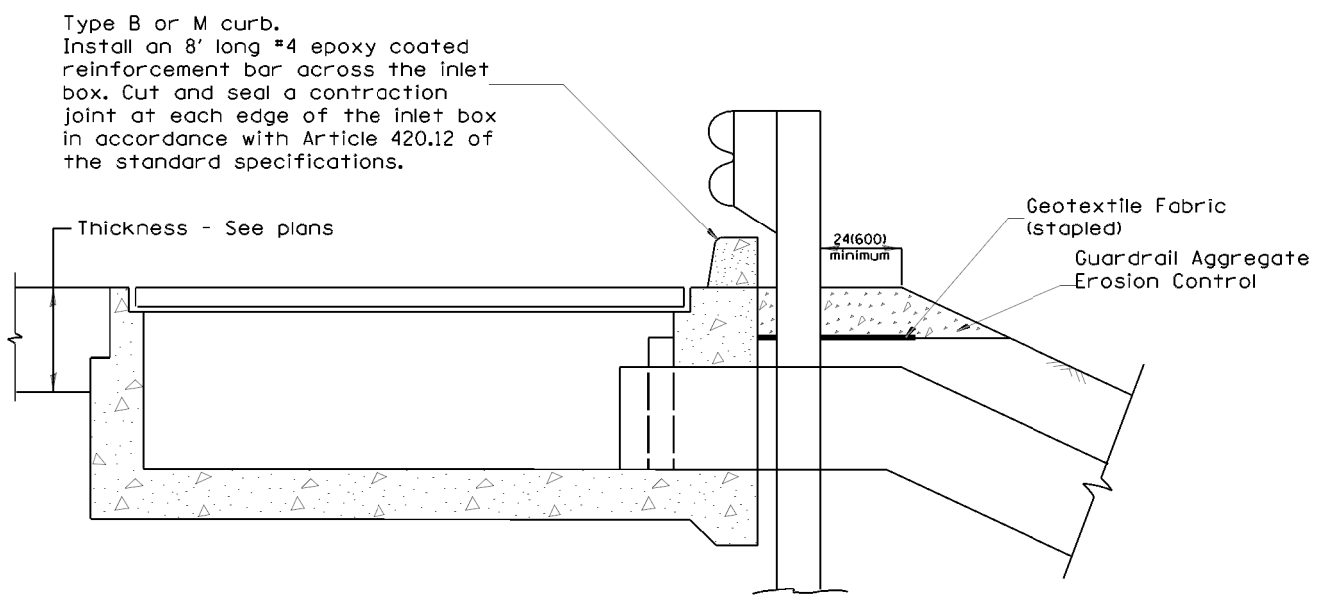
NOT TO SCALE

SHT. 1 OF 2
CADD STD. 630101-D4

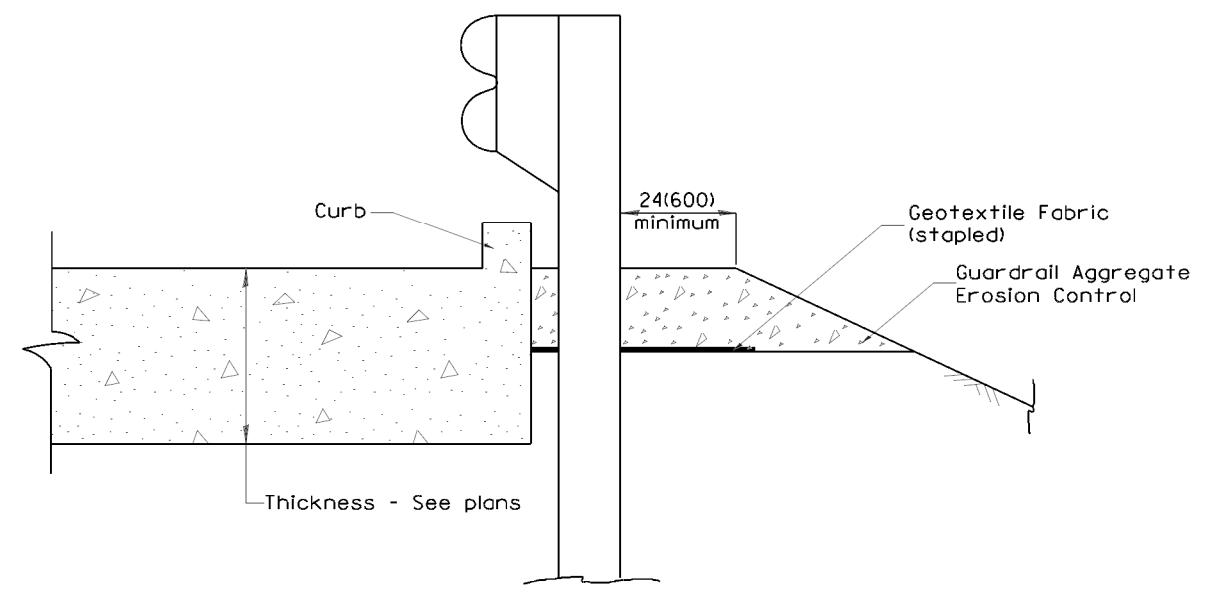
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|------------------|--------|--------------|-----------|
| 474 | (72-3HB-1)I, 1-1 | PEORIA | 89 | 85 |
| MAXWELL RD. CONN. OVER I-474 CONTRACT NO. 68883 | | | | |
| FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT | | | | |



PLAN VIEW
APPROACH SLAB OR BRIDGE APPROACH SHOULDER
 (STANDARD 609001 or 609006)



TYPICAL SECTION AT INLETS
TYPE E & F (STANDARD 610001)



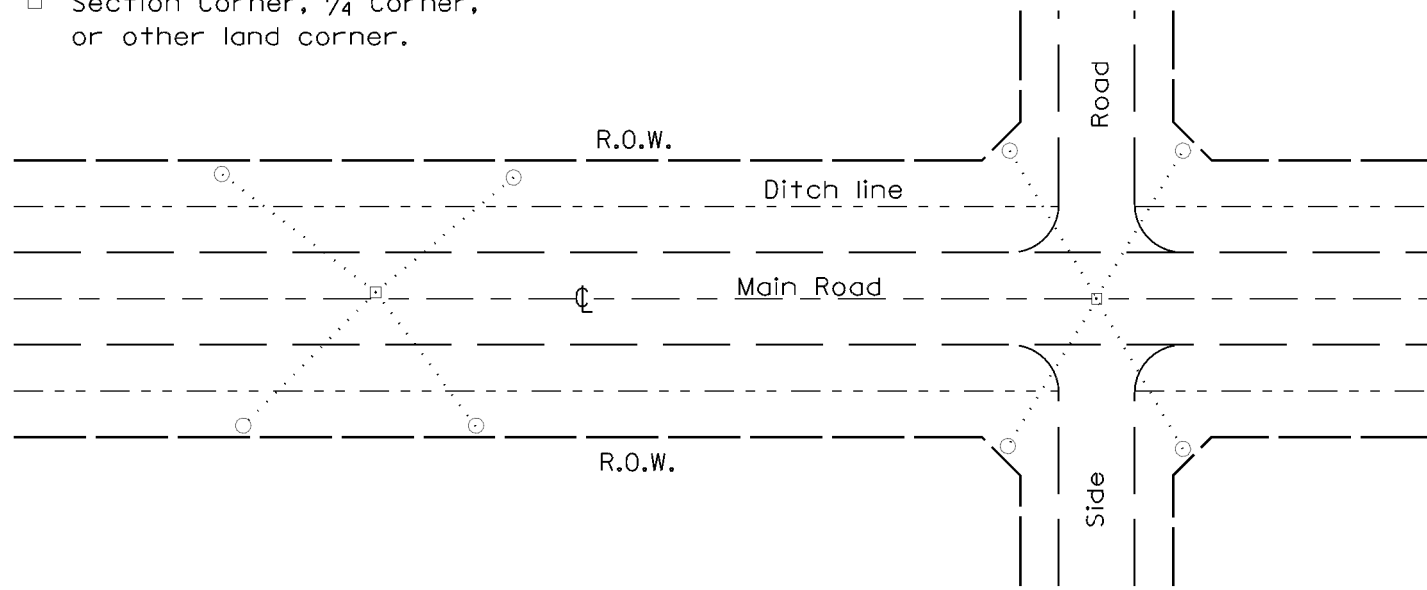
SECTION A-A
TYPICAL SECTION WITH BRIDGE APPROACH CURB

All dimensions are in inches (millimeters) unless otherwise noted.

| | | | | | | | | | |
|---|------------------|--------|--------------|---|--|---|--|------------------------------------|--|
| | | | | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | | GUARDRAIL EROSION CONTROL TREATMENTS | | SHT. 2 OF 2 CADD STD. 630101-D4 | |
| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | | | | |
| 474 | (72-3HB-1)I, 1-1 | PEORIA | 89 | 86 | | | | | |
| MAXWELL RD. CONN. OVER I-474 | | | | CONTRACT NO. 68883 | | | | | |
| FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT | | | | | | | | | |

PERMANENT SURVEY TIES

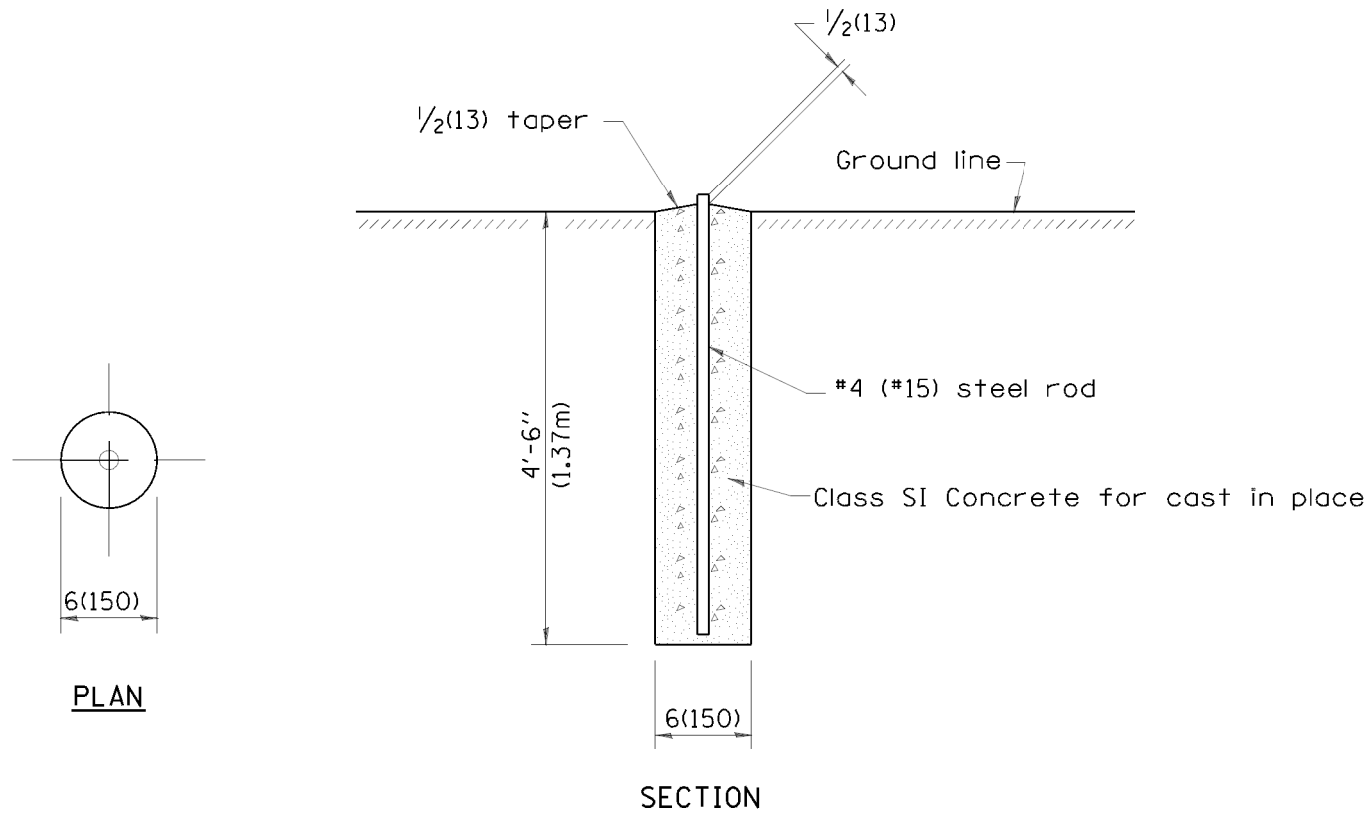
- Permanent Survey Tie
- Section Corner, 1/4 Corner, or other land corner.



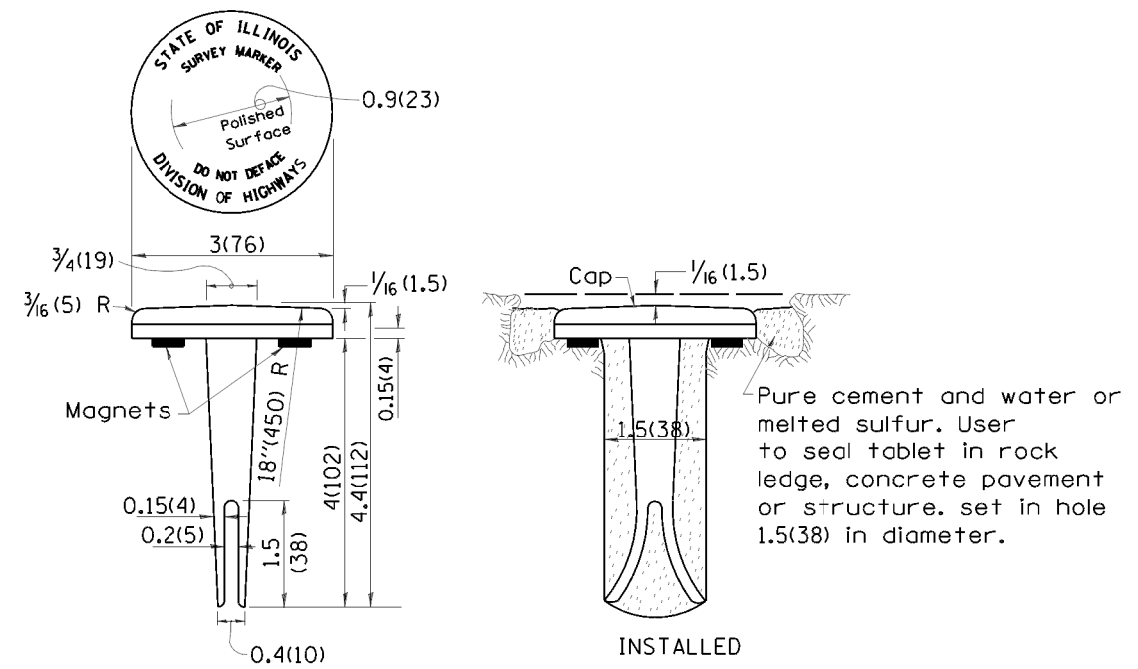
TYPICAL APPLICATION

GENERAL NOTES

1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats for recordation.
4. All documentation shall be performed by a PLS



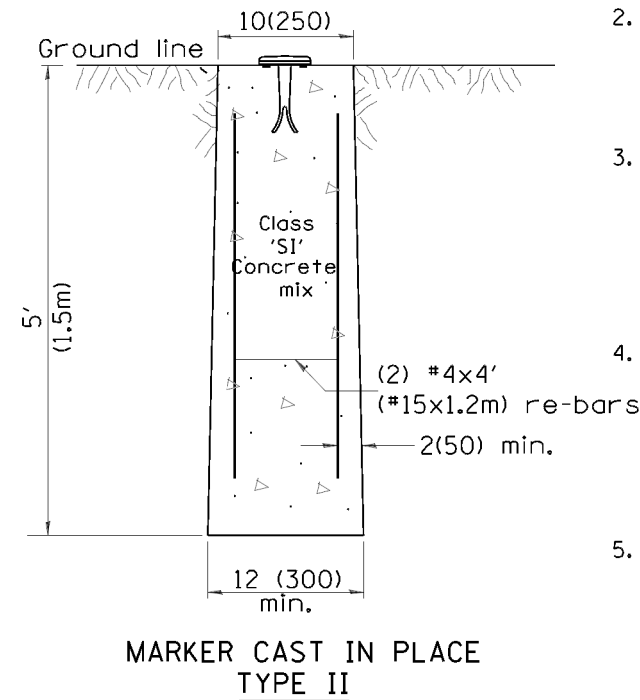
PERMANENT SURVEY MARKERS



TYPE I

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.



MARKER CAST IN PLACE TYPE II

All dimensions are in inches (millimeters) unless otherwise noted.

| | | | | | |
|----------|--|------|----------|-------------------------|------|
| 01-01-97 | RENUM. D-3.01, NEW REVISION BOX, REVISED | T.P. | 10-16-06 | REVISED TO 2007 SPEC. | M.A. |
| | TITLE BOX, ADD DESIGNER NOTE | | 01-04-11 | REVISED FOR CORRECTIONS | R.D. |
| 07-07-98 | ADD DESIGNER NOTE | J.A. | | | |
| 05-24-06 | REMOVED GEN. NOTE UNDER TIES | M.A. | | | |

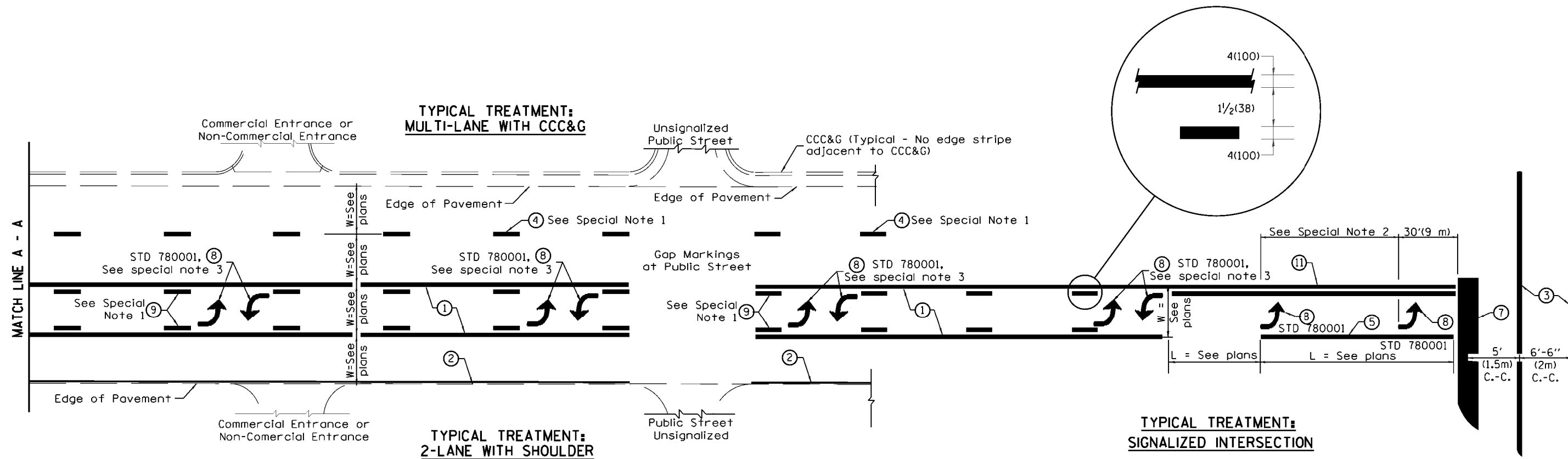
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PERMANENT SURVEY TIE &
PERMANENT SURVEY MARKERS TY.I - TY.II**

NOT TO SCALE

CADD STD. 667101-D4

| F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|------------------|--------|--------------------|-----------|
| 474 | (72-3HB-1)I, I-1 | PEORIA | 89 | 87 |
| MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT | | | | |



FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

- ① 4(100) Solid (Yellow)
- ② 4(100) Solid (White)
- ③ 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
2-8(200) Crosswalk @ 6'-5" (2m)min C.-C. (White) (When traffic signals are present.)
- ④ 6(150) Skip-Dash (White) (See Special Note 1)
- ⑤ 8(200) Solid (White)
- ⑥ 12(300) Diagonal (White) (Item ⑥ is shown on Std. 780001)
- ⑦ 24(600) Stop Bar (White)
- ⑧ Letters & Arrows (See Std. 780001 and Special Notes 2 & 3)
- ⑨ 4(100) Skip-Dash (Yellow) (See Special Note 1)
- ⑩ 12(300) Diagonal (Yellow) (See Table A)
- ⑪ 4(100) Double Solid (Yellow) (See Table A)

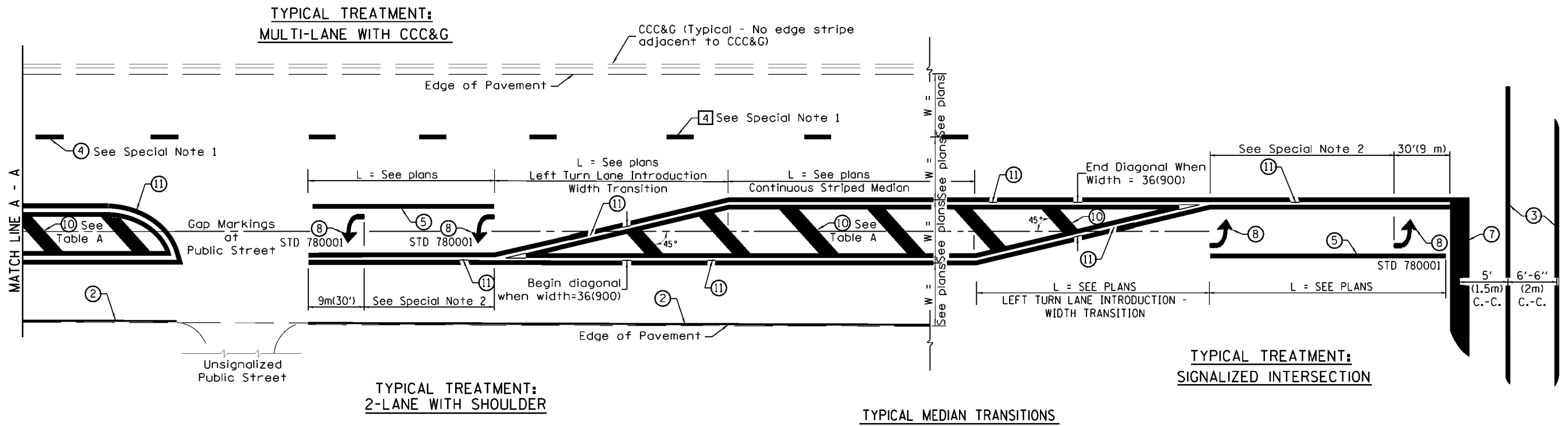
SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversely across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
 - A. A minimum of two (2) arrows is required.
 - B. The maximum spacing between arrows is 80' (24 m).
 - C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
 - A. A minimum of two (2) arrow pairs is required.
 - B. The maximum spacing between arrow pairs is 200' (61 m).
 - C. Arrow pairs shall be evenly spaced if three (3) or more are required.
 - D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

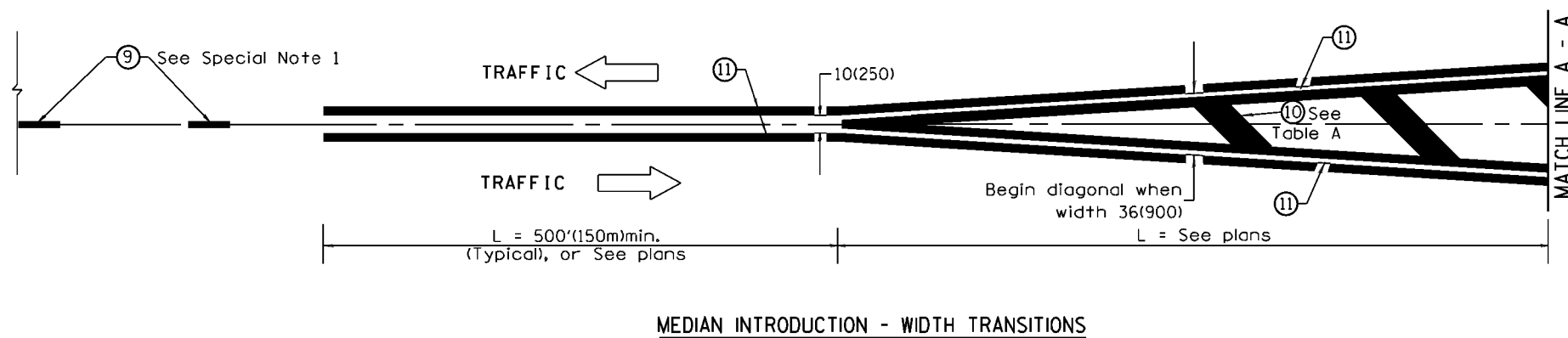
| | | | | | | | | | | | | | |
|----------|----------------------------------|------|----------|-----------------------|---|----------------------------------|--------------|------------------------------------|---|-----------------|--------|--------------------|-----------|
| 01-01-97 | RENUM. F-8.03, NEW REVISION BOX | T.P. | 10-16-06 | REVISED TO 2007 SPEC. | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | TYPICAL PAVEMENT MARKINGS | NOT TO SCALE | SHT. 1 OF 2 CADD STD. 780001-D4 | F.A.I. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 02-07-97 | ADD BI DIRECTIONAL DIMENSION | J.A. | | | | | | | 474 | (72-3HB-1)I,1-1 | PEORIA | 89 | 88 |
| 10-97 | CORRECT BI DIRECTIONAL DIMENSION | J.A. | | | | | | | MAXWELL RD. CONN. OVER I-474 | | | CONTRACT NO. 68883 | |
| 08-02 | ADD CROSSWALK DMNS. WITH T.S. | M.A. | | | | | | | FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT | | | | |



FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE

TABLE A
RECOMMENDED SPACING BETWEEN DIAGONAL LINES

| SPEED LIMIT RANGE | INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions) | |
|----------------------------|---|----------|
| | CONTINUOUS | |
| Less Than 30 mph (50 km/h) | 50' (15m) | 15' (5m) |
| 30 - 45 mph (50 - 70 km/h) | 75' (23m) | 20' (6m) |
| Over 45 mph (70 km/h) | 150' (46m) | 30' (9m) |



All dimensions are in inches (millimeters) unless otherwise noted.