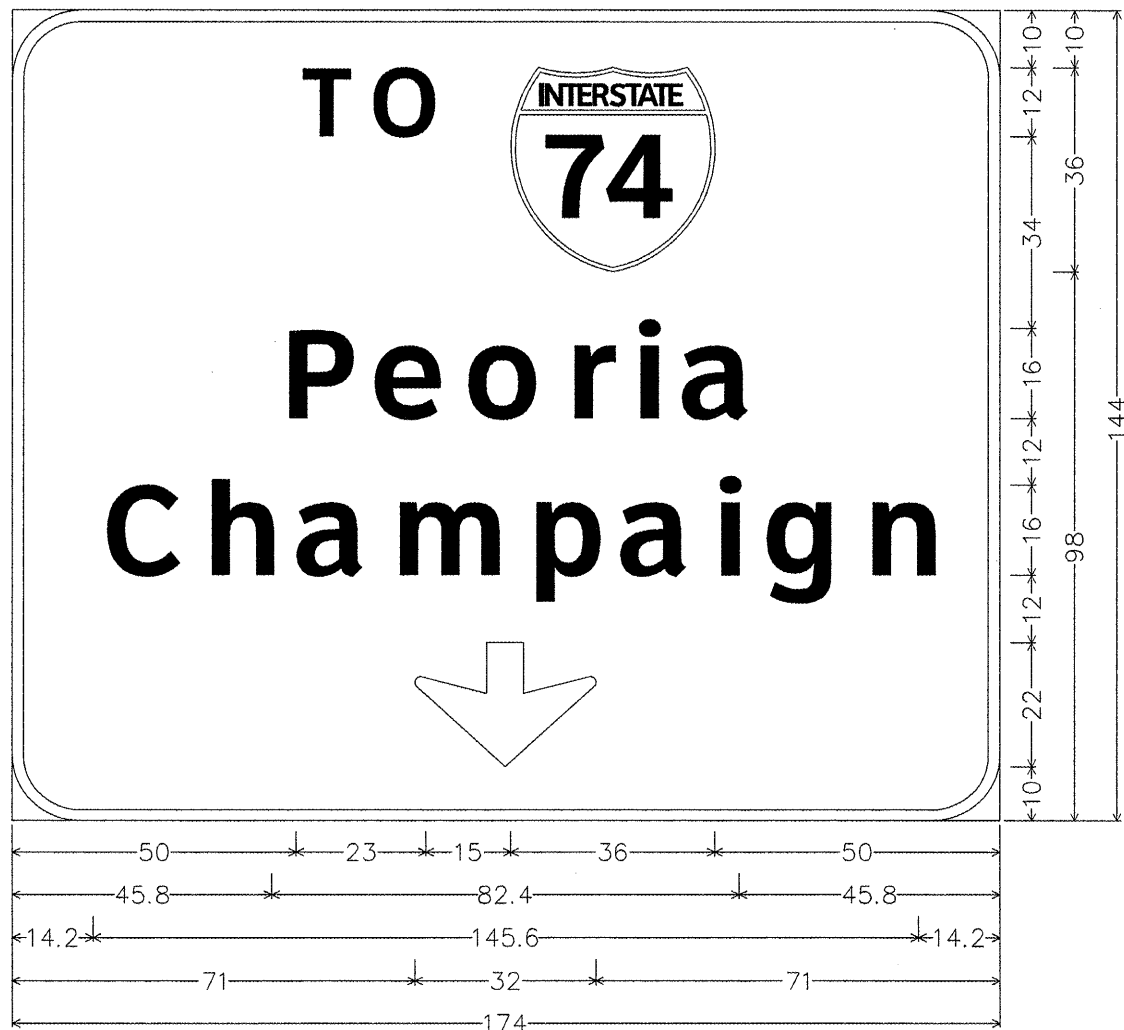


5-14 SB-C
5 S 057 I039 R000.50 - RIGHT SIGN



12.0" Radius, 2.0" Border, White on Green;
 [TO] ClearviewHwy-5-W; [Peoria] ClearviewHwy-5-W;
 [Champaign] ClearviewHwy-5-W; Down Arrow 22.0" 270°;
 Table of letter and object lefts.

| | | | | | | | | |
|------|------|------|------|-------|-------|-------|-------|-------|
| T | O | 74 | | | | | | |
| 50.0 | 61.8 | 88.0 | | | | | | |
| P | e | a | r | i | a | | | |
| 45.8 | 61.8 | 78.3 | 96.1 | 107.8 | 116.3 | | | |
| C | h | a | m | p | a | i | g | n |
| 14.2 | 32.1 | 48.3 | 65.3 | 89.4 | 105.4 | 122.1 | 130.9 | 148.6 |
| ↓ | | | | | | | | |
| 71.0 | | | | | | | | |

5-15 SB-A
5 S 057 I039 R001.00 - LEFT SIGN



12.0" Radius, 2.0" Border, White on Green;
 Symbol RA010; [Airport] ClearviewHwy-5-W;
 12.0" Radius, 2.0" Border, Black on Yellow;
 [KEEP LEFT] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | | |
|------|------|------|------|------|------|------|-------|
| 4 | | | | | | | |
| 42.5 | | | | | | | |
| A | i | r | p | o | r | t | |
| 13.4 | 32.6 | 42.1 | 54.1 | 70.5 | 88.3 | 98.7 | |
| K | E | E | P | L | E | F | T |
| 10.2 | 23.0 | 34.7 | 46.4 | 68.5 | 79.4 | 91.1 | 101.2 |

| | | | |
|---|------------------------|-----------------|-----------|
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| PLOT SCALE = 40.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/12/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

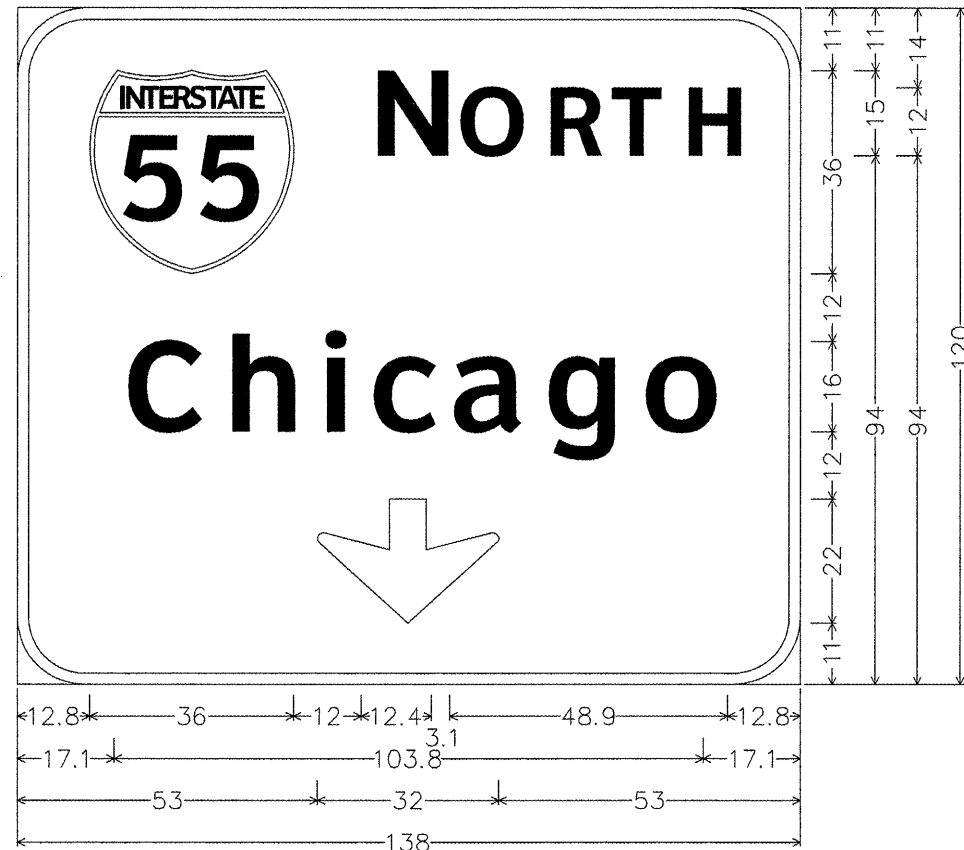
| | | | |
|--|--------------|--------|--------------|
| SIGNING DETAILS - MCLEAN COUNTY | | | |
| I-39 | | | |
| SCALE: | SHEET NO. OF | SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | •• | Various | 178 | 101 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS
 ••D-5 OVD SIN STR REPL 2012-06

5-15 SB-B

5 S 057 I039 R001.00 - MIDDLE SIGN

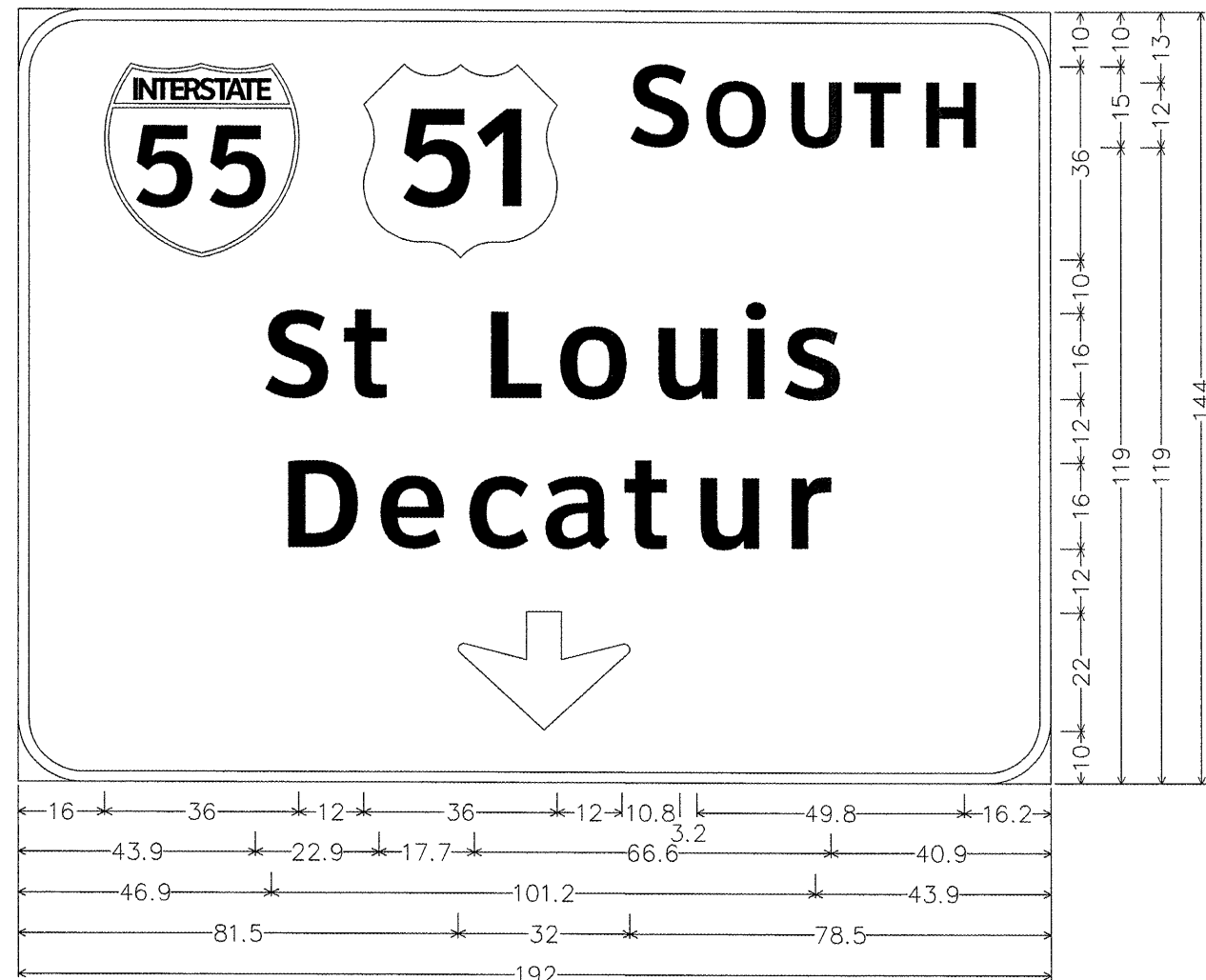


12.0" Radius, 2.0" Border, White on Green;
 [N ORTH] ClearviewHwy-5-W; [Chicago] ClearviewHwy-5-W;
 Down Arrow 22.0" 270};
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|------|-------|-------|-------|
| | N | O | R | T | H | |
| 12.8 | 60.8 | 76.3 | 91.8 | 103.7 | 116.0 | |
| C | h | i | c | a | g | o |
| 17.1 | 35.0 | 51.8 | 60.6 | 75.1 | 91.5 | 108.5 |
| | | | | | | |
| 53.0 | | | | | | |

5-15 SB-C

5 S 057 I039 R001.00 - RIGHT SIGN



12.0" Radius, 2.0" Border, White on Green;
 [S OUTH] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W; [Decatur] ClearviewHwy-5-W;
 Down Arrow 22.0" 270};
 Table of letter and object lefts.

| | | | | | | |
|------|------|-------|-------|-------|-------|-------|
| | | S | O | U | T | H |
| 16.0 | 64.0 | 112.0 | 126.0 | 141.5 | 154.3 | 166.6 |
| S | t | L | o | u | i | s |
| 43.9 | 58.9 | 84.5 | 98.2 | 116.0 | 132.6 | 140.8 |
| D | e | c | a | t | u | r |
| 46.9 | 64.8 | 81.3 | 95.8 | 111.1 | 123.8 | 140.8 |
| | | | | | | |
| 81.5 | | | | | | |

*VARIOUS
 **D-5 OVD SIN STR REPL 2012-06

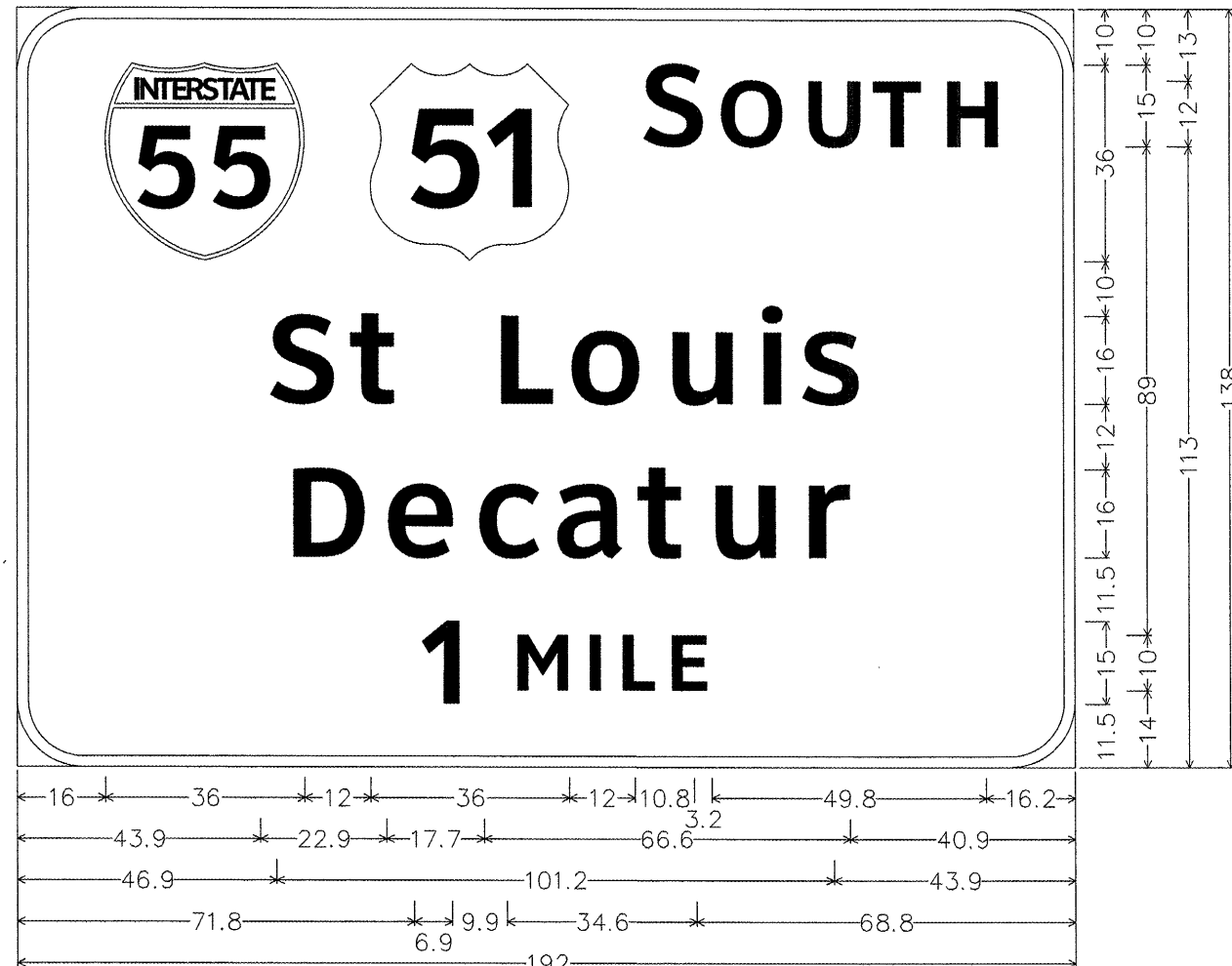
5-16 SBa-A
5 B 057 I039 R001.90 – LEFT SIGN
(BRIDGE MOUNT)



12.0" Radius, 2.0" Border, White on Green;
 [N ORTH] ClearviewHwy-5-W; [Chicago] ClearviewHwy-5-W;
 [1 MILE] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|------|-------|-------|-------|
| | N | O | R | T | H | |
| 12.8 | 60.8 | 76.3 | 91.8 | 103.7 | 116.0 | |
| C | h | i | c | a | g | o |
| 17.1 | 35.0 | 51.8 | 60.6 | 75.1 | 91.5 | 108.5 |
| 1 | M | I | L | E | | |
| 43.3 | 60.1 | 73.3 | 79.3 | 88.3 | | |

5-16 SBa-B
5 B 057 I039 R001.90 – RIGHT SIGN
(BRIDGE MOUNT)



12.0" Radius, 2.0" Border, White on Green;
 [S OUTH] ClearviewHwy-5-W; [St Louis] ClearviewHwy-5-W; [Decatur] ClearviewHwy-5-W;
 [1 MILE] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | |
|------|------|-------|-------|-------|-------|-------|
| | | S | O | U | T | H |
| 16.0 | 64.0 | 112.0 | 126.0 | 141.5 | 154.3 | 166.6 |
| S | t | L | o | u | i | s |
| 43.9 | 58.9 | 84.5 | 98.2 | 116.0 | 132.6 | 140.8 |
| D | e | c | a | t | u | r |
| 46.9 | 64.8 | 81.3 | 95.8 | 111.1 | 123.8 | 140.8 |
| 1 | M | I | L | E | | |
| 71.8 | 88.6 | 101.8 | 107.8 | 116.8 | | |

| | | | |
|---|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ce:\pwwork\pwwid\ceerlockjd\0266557\046179-shr-Sign-Details.dgn | | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000' / 1" | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

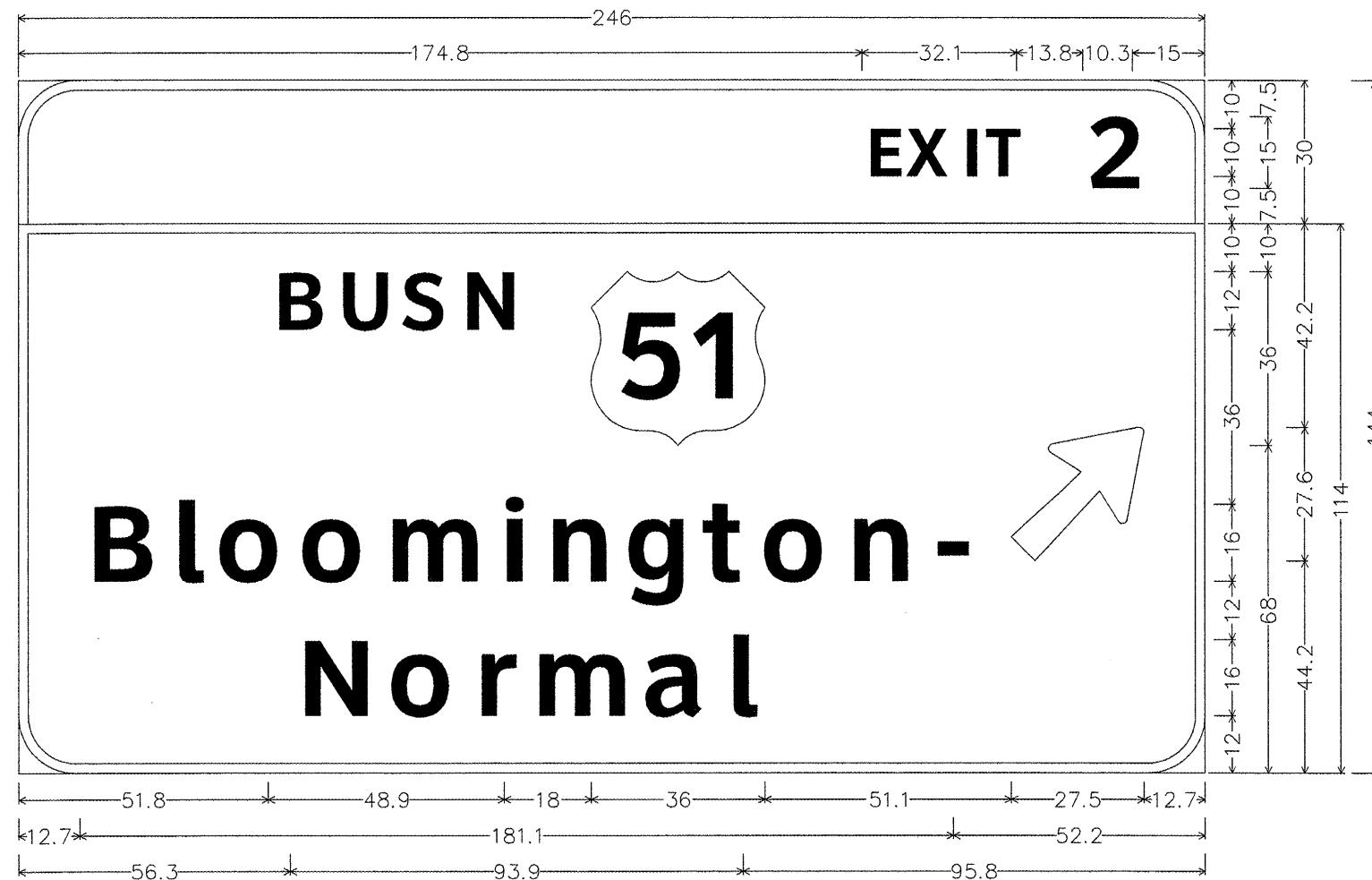
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|--|--------------|--------|--------------|
| SIGNING DETAILS – MCLEAN COUNTY | | | |
| I-39 | | | |
| SCALE: | SHEET NO. OF | SHEETS | STA. TO STA. |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 103 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS
 ••D-5 OVD SIN STR REPL 2012-06

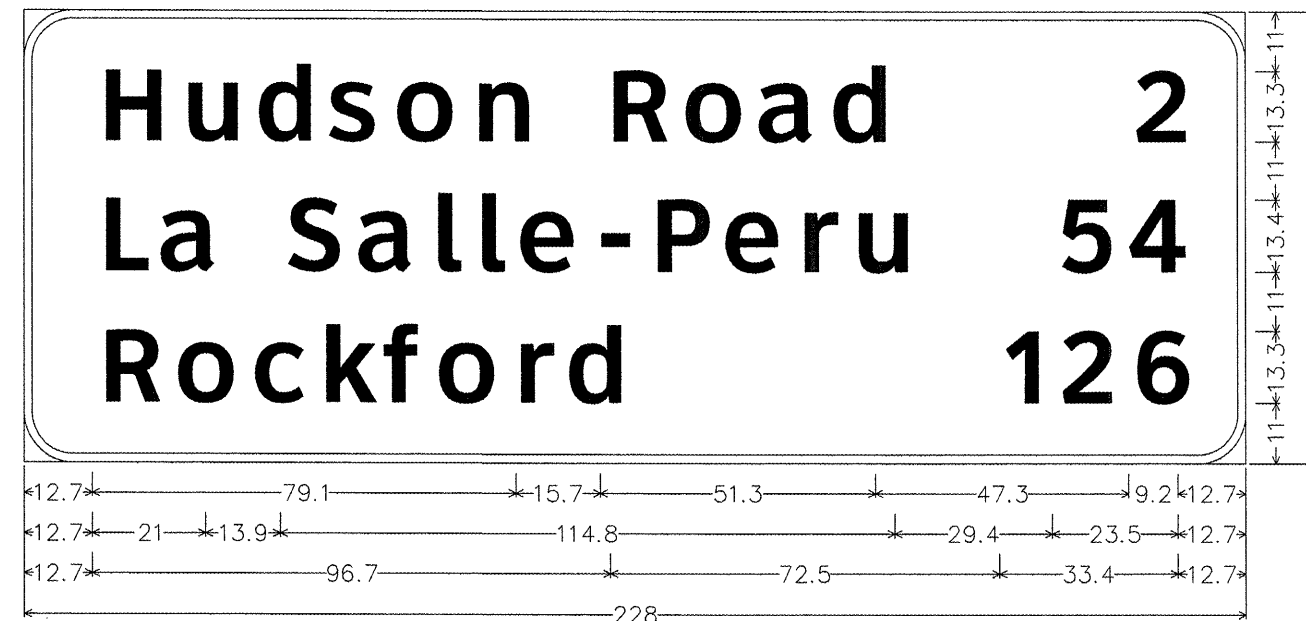
5-16 SBb
SB GROUND MOUNT AT STA. 197+85
AT START OF RAMP TAPER



12.0" Radius, 2.0" Border, White on Green;
 [EXIT 2] ClearviewHwy-5-W;
 12.0" Radius, 2.0" Border, White on Green;
 [BUSN] ClearviewHwy-5-W; [Bloomington-] ClearviewHwy-5-W; [Normal] ClearviewHwy-5-W; Arrow 160 - 35.0" 45°;
 Table of letter and object lefts.

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|----|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| E | X | I | T | 2 | 174.8 | 183.4 | 194.8 | 199.7 | 220.7 | | | | | | | | | | | | | | |
| B | U | S | N | 51 | ↗ | 51.8 | 65.1 | 78.3 | 90.8 | 118.7 | 205.8 | | | | | | | | | | | | |
| B | l | o | o | m | i | n | g | t | o | n | - | 12.7 | 30.3 | 39.5 | 56.7 | 74.5 | 98.3 | 107.8 | 124.3 | 140.4 | 152.4 | 170.2 | 187.6 |
| N | o | r | m | a | l | 56.3 | 75.1 | 92.9 | 105.0 | 128.1 | 145.1 | | | | | | | | | | | | |

5-16 NB
NB GROUND MOUNT AT STA. 200+30



9.0" Radius, 1.5" Border, White on Green;
 [Hudson Road] ClearviewHwy-5-W; [2] ClearviewHwy-5-W; [La Salle-Peru] ClearviewHwy-5-W;
 [54] ClearviewHwy-5-W; [Rockford] ClearviewHwy-5-W; [126] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| H | u | d | s | o | n | R | o | a | d | 2 | 12.7 | 28.1 | 41.8 | 55.4 | 67.7 | 82.5 | 107.5 | 121.5 | 135.5 | 149.2 | 206.1 | | | | | | |
| L | a | S | a | l | l | e | - | P | e | r | u | 5 | 4 | 12.7 | 23.8 | 47.6 | 60.7 | 74.8 | 83.0 | 90.7 | 105.2 | 115.7 | 129.0 | 143.3 | 153.3 | 191.8 | 204.8 |
| R | o | c | k | f | o | r | d | 1 | 2 | 6 | 12.7 | 26.7 | 41.0 | 53.8 | 65.6 | 75.4 | 90.3 | 99.8 | 181.9 | 192.3 | 205.7 | | | | | | |

| | | | |
|---|-------------------------|-----------------|-----------|
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| PLOT SCALE = 40.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

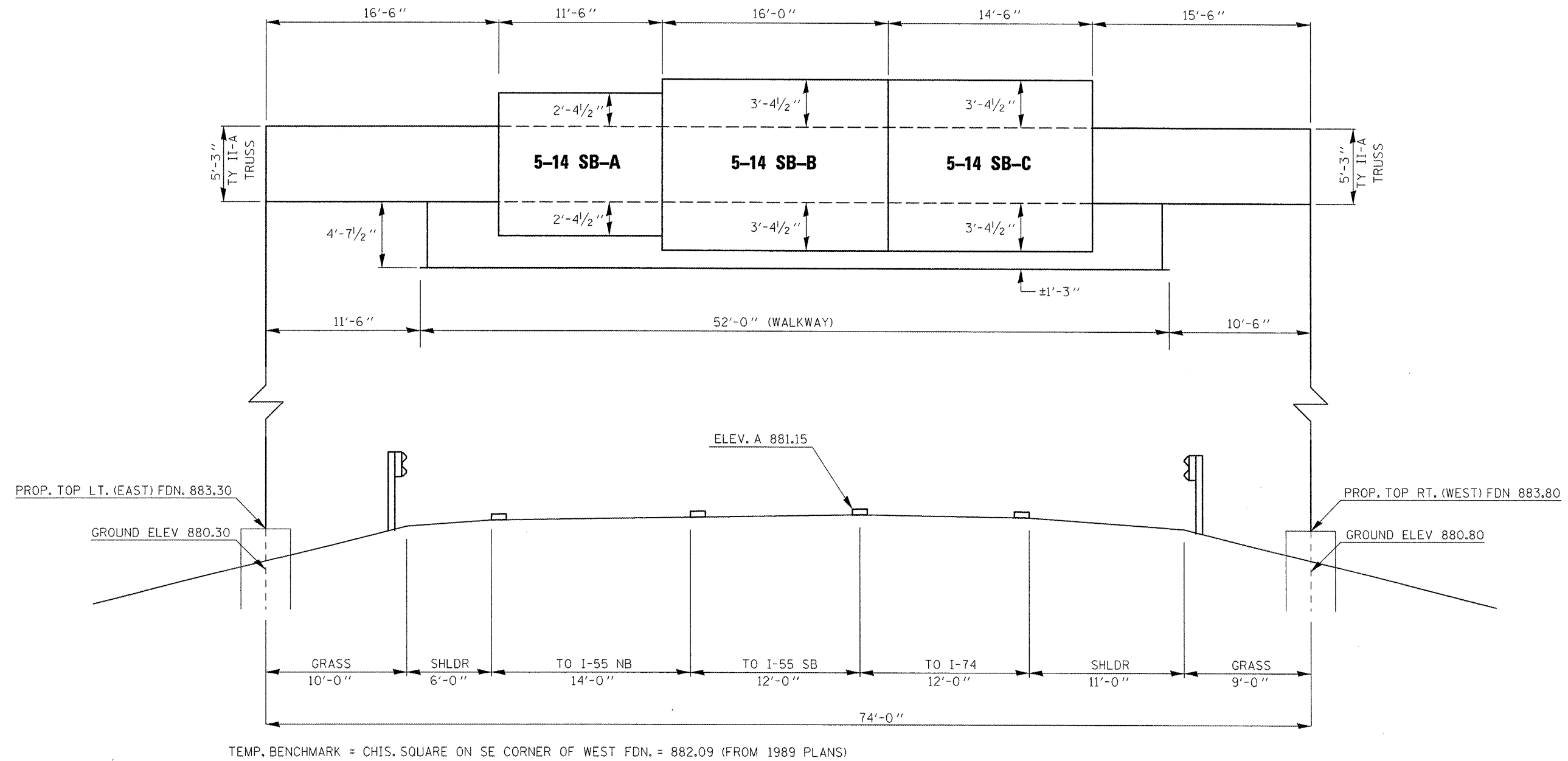
| | | | |
|---------------------------------|---------------------|------|---------|
| SIGNING DETAILS - MCLEAN COUNTY | | | |
| I-39 | | | |
| SCALE: | SHEET NO. OF SHEETS | STA. | TO STA. |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 104 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS
 ••D-5 OVD SIN STR REPL 2012-06

SIGN TRUSS MOUNTING DETAIL

5 S 057 I039 R000.50



TEMP. BENCHMARK = CHIS. SQUARE ON SE CORNER OF WEST FDN. = 882.09 (FROM 1989 PLANS)

•VARIOUS COUNTIES
 ••D-5 OVD SIN STR REPL 2012-06

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
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| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

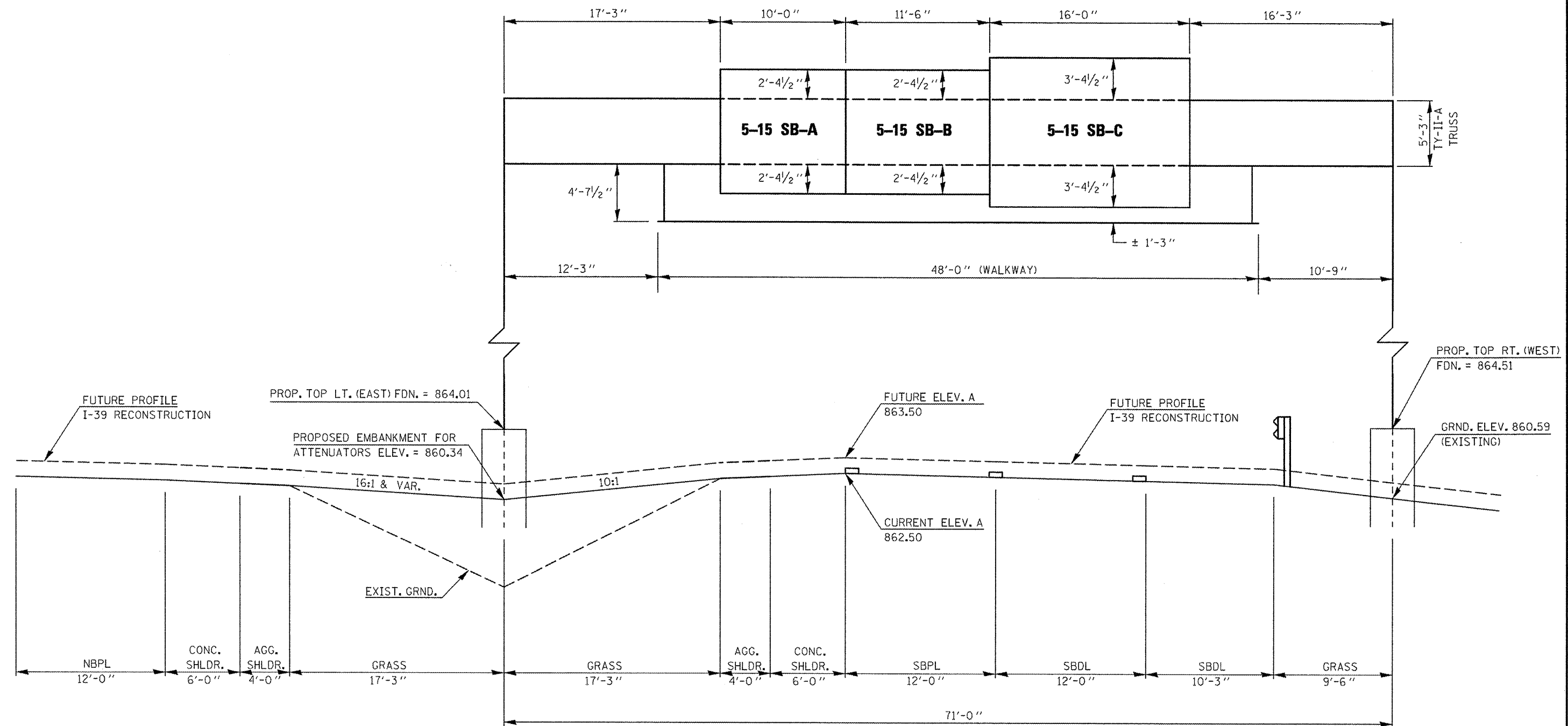
SIGN TRUSS MOUNTING DETAILS
I-39

SCALE: SHEET NO. 1 OF 24 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| • | •• | Various | 178 | 105 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SIGN TRUSS MOUNTING DETAIL

5 S 057 1039 R001.00



TEMP. BENCHMARK = CHIS. SQUARE ON NE CORNER OF WEST (RT.) FDN. = 866.00 (FROM 1989 PLANS)

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

| | | | |
|---|------------------------|-----------------|-----------|
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| PLOT SCALE = 40.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/27/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

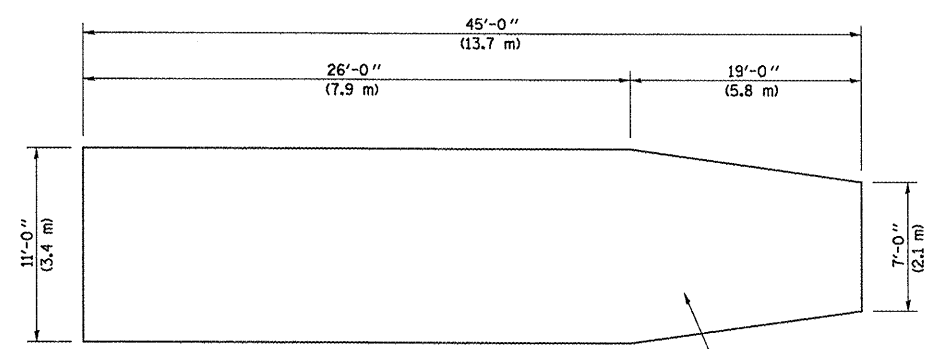
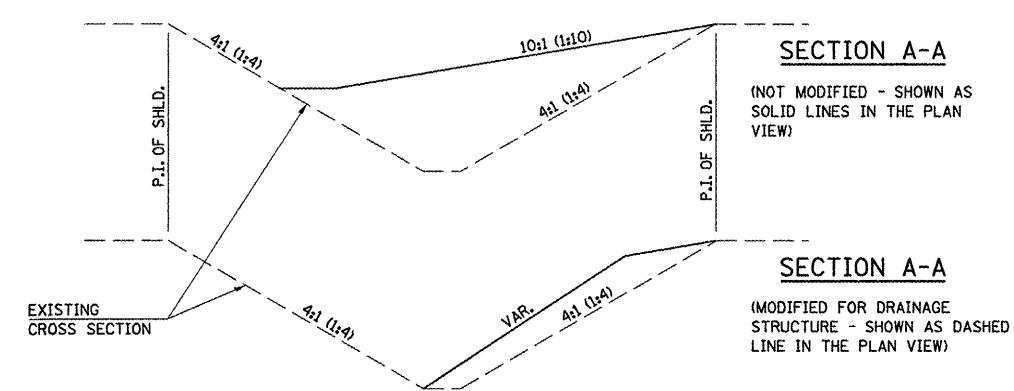
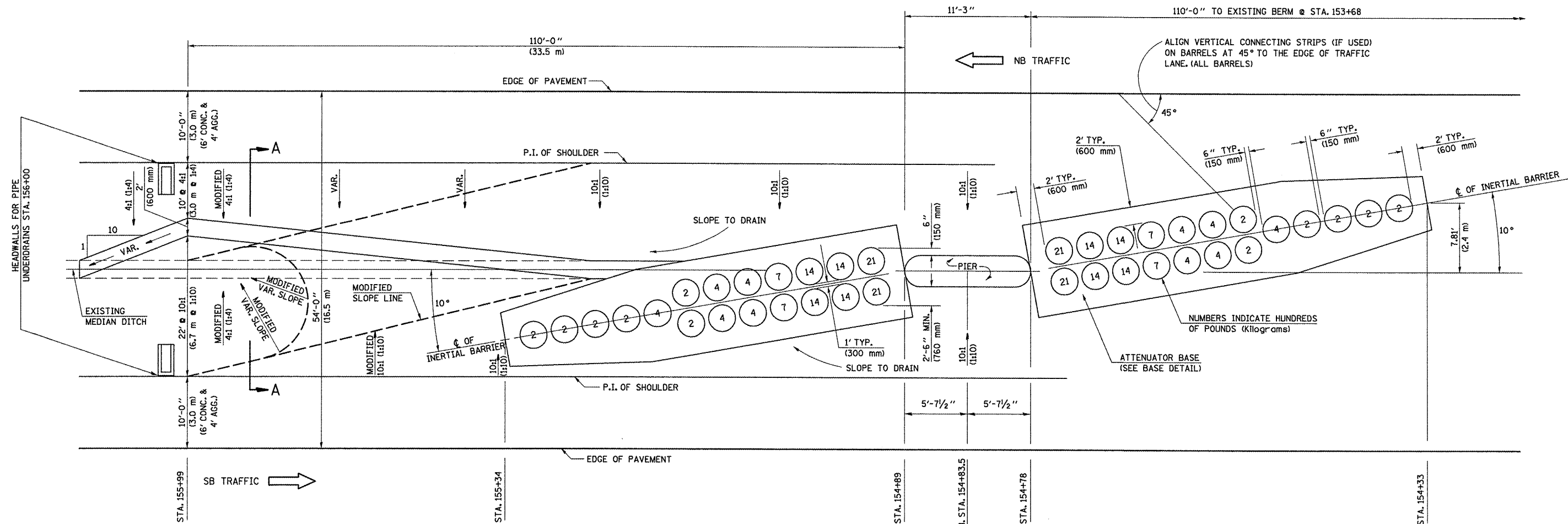
SIGN TRUSS MOUNTING DETAILS
I-39

SCALE: SHEET NO. 2 OF 24 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 106 |
| CONTRACT NO. 46179 | | | | |
| (ILLINOIS) FED. AID PROJECT | | | | |

5 S 057 I039 R001.00

70 MPH (110 km/h) DESIGN - 54' (16.5 m) MEDIAN



GENERAL NOTES

- ALL 10:1 (1:10) SLOPES SHOWN ON THIS DETAIL SHALL BE CONSTRUCTED 10:1 (1:10) OR FLATTER.
- ANY EXISTING DRAINAGE STRUCTURES LOCATED WITHIN THE 80' (24.4 m) WORKING AREA SHALL BE MODIFIED OR LEFT IN PLACE AS SHOWN ON THE PLANS. WHERE THE EXISTING DRAINAGE STRUCTURES ARE TO REMAIN IN PLACE, THE SLOPES ARE TO BE CONSTRUCTED AS SHOWN AS MODIFIED SLOPES ON THIS DETAIL AND AS DIRECTED BY THE ENGINEER.
- THE SLOPES AS SHOWN ON THIS DETAIL SHALL APPLY TO BOTH ENDS OF THE BRIDGE PIERS.
- THE LENGTH X WIDTH OF MODULE LAYOUT IS 41.0' x 7.0' : 19 MODULES - 14,400 LBS. (12.5 m x 2.1 m : 19 MODULES - 6532 kg).

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

| | | | |
|-------------------------------------|------------------------|------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - | REVISED - |
| c:\pwork\pwork\ceerlockjd\0266557\d | 46179-shr-deta1s.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000' / in. | CHECKED - | REVISOR - | REVISOR - |
| PLOT DATE = 10/7/2011 | DATE - | DATE - | DATE - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

IMPACT ATTENUATORS (NON-REDIRECTIVE) TEST LEVEL 3

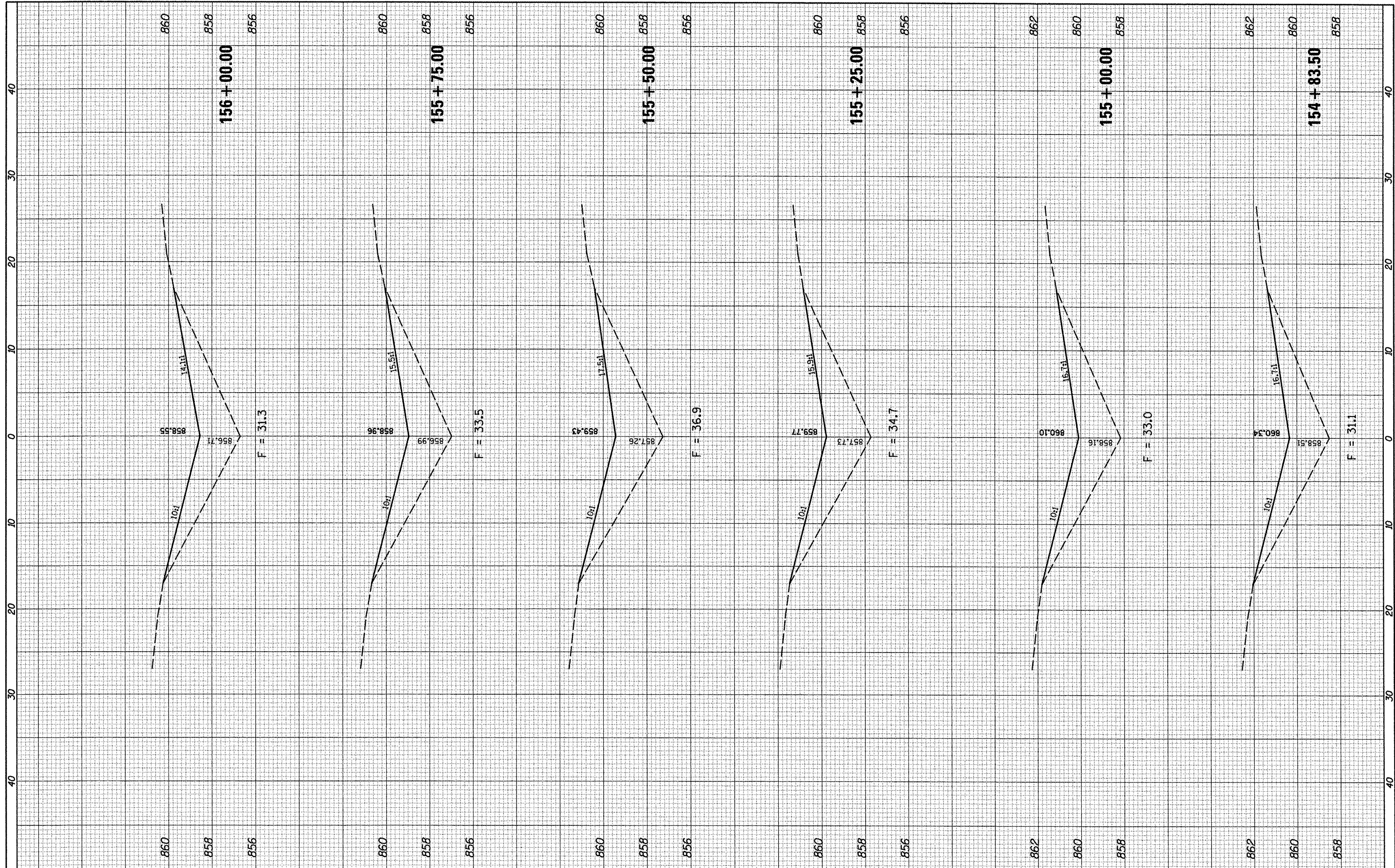
SCALE: SHEET NO. 3 OF 24 SHEETS STA. TO STA.

| | | | | |
|--|---------|---------|--------------------|-----------|
| DISTRICT 5 DETAIL NO. Z0030150B | | | | |
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 107 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

FINAL SURVEY
 SURVEYED BY _____ DATE _____
 NOTE BOOK NO. _____
 TEMPLATE AREAS CHECKED _____

ORIGINAL SURVEY
 SURVEYED BY _____ DATE _____
 NOTE BOOK NO. _____
 TEMPLATE AREAS CHECKED _____



FILE NAME = c:\pwwork\p1d0\cearlockjd\0266587\0546179
 USER NAME = ceerlockjd
 PLOT SCALE = 10.0000' / in.
 PLOT DATE = 10/7/2011

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

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

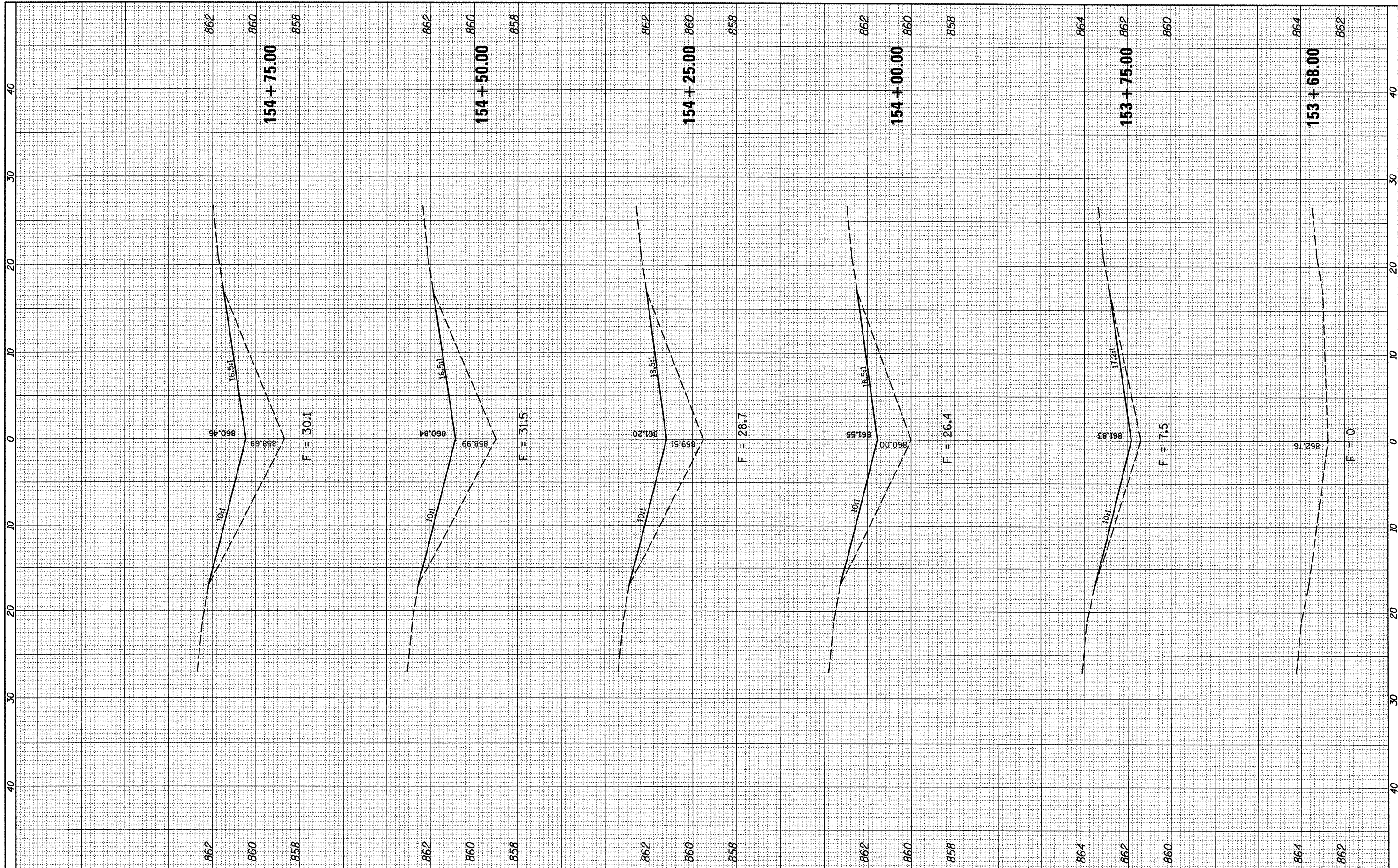
**5 S 057 1039 R001.00
 X-SECTIONS FOR ATTENUATOR PADS**

SCALE: SHEET NO. OF SHEETS STA. 154+83.50 STA. 156+00.00

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|---------|---------------------------|-----------|
| . | .. | Various | 178 | 108 |
| CONTRACT NO. 46179 | | | ILLINOIS FED. AID PROJECT | |

| | | | |
|---------------|---------------|----|------|
| FINAL SURVEY | SURVEYED | BY | DATE |
| NOTE BOOK NO. | TEMPLATE | | |
| | AREAS CHECKED | | |

| | | | |
|-----------------|---------------|----|------|
| ORIGINAL SURVEY | SURVEYED | BY | DATE |
| NOTE BOOK NO. | TEMPLATE | | |
| | AREAS CHECKED | | |



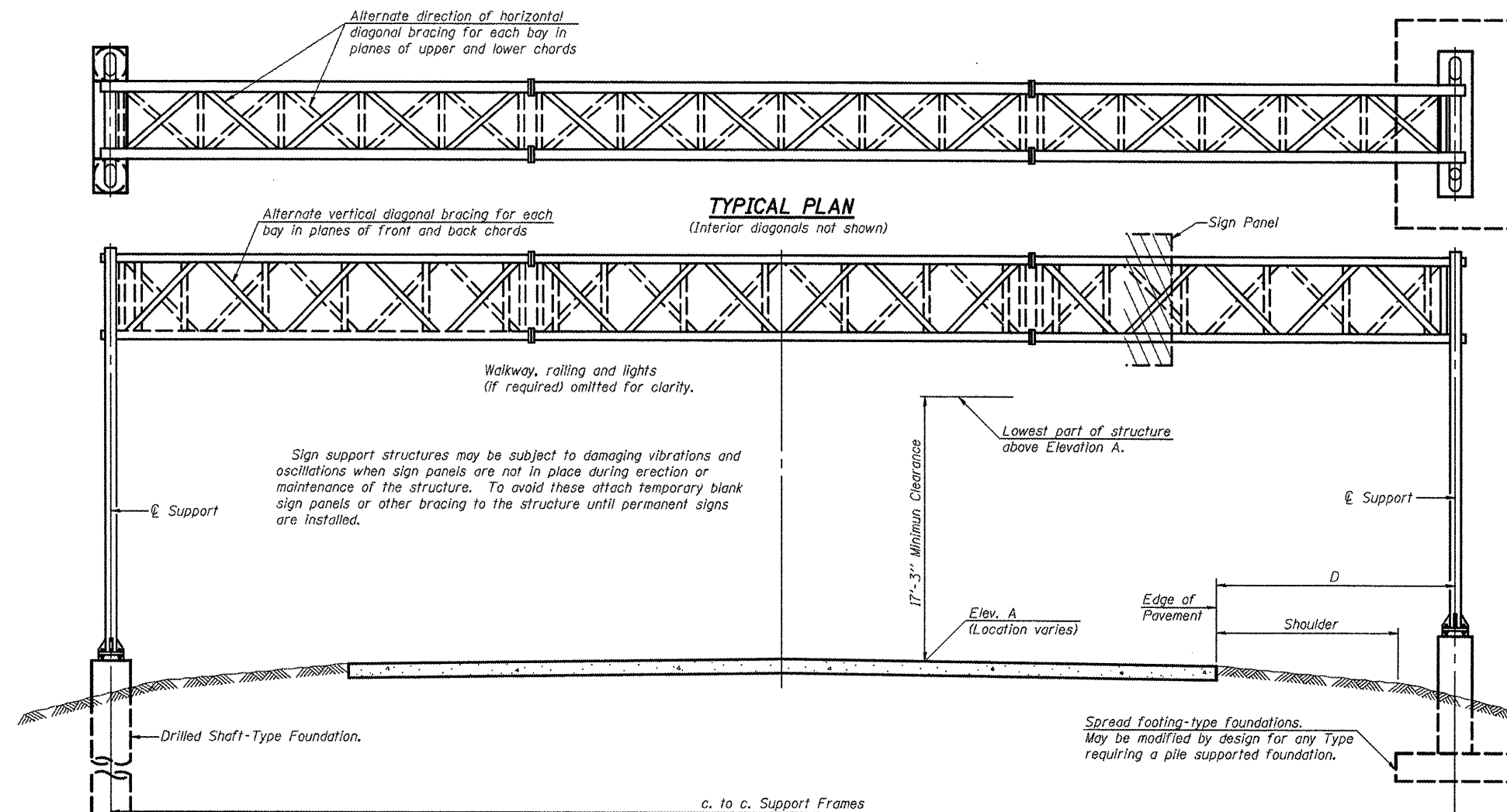
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| PLOT SCALE = 10.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**5 S 057 I039 R001.00
X-SECTIONS FOR ATTENUATOR PADS**

SCALE: SHEET NO. OF SHEETS STA. 153+68100 STA. 154+75.00

| | | | | |
|--------------------|---------|---------|---------------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| . | .. | Various | 178 | 109 |
| CONTRACT NO. 46179 | | | ILLINOIS FED. AID PROJECT | |



GENERAL NOTES

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

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.

DESIGN STRESSES:
Field Units
f_c = 3,500 p.s.i.
f_y = 60,000 p.s.i. (reinforcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specifications.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. 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 or Gr. 50W*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M11. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

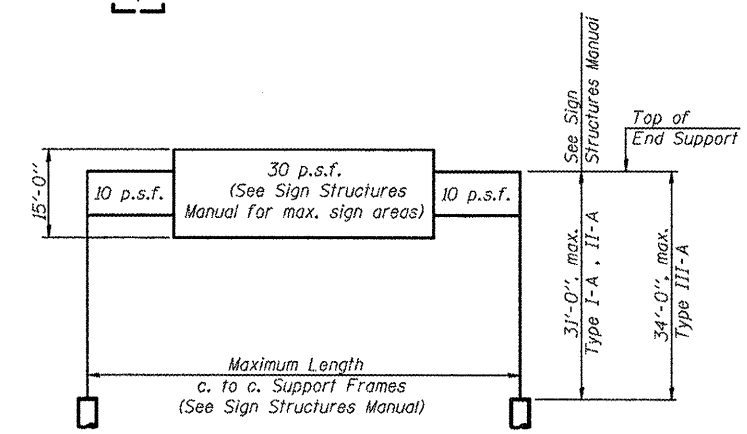
FOUNDATIONS: The contract unit price for Concrete Foundations and Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

TYPICAL ELEVATION
(Looking at Face of Signs**)

Elev. A = Elevation at point of minimum clearance to sign, walkway support or truss.

| Structure Number | Station | Design Truss Type | c. to c. Supports | Elev. A | Dim. D | Height of Tallest Sign **** | Total Sign Area |
|----------------------|----------|-------------------|-------------------|--|--------|-----------------------------|-----------------|
| 5 S 057 1039 R000.50 | 126+18 | II-A | 74'-0" | 881.15 | *** | 12'-0" | 481.0 |
| 5 S 057 1039 R001.00 | 154+83.5 | II-A | 71'-0" | 862.50 (CURRENT) | *** | 12'-0" | 407.0 |
| | | | | 863.50 (FUTURE I-39 RECONSTRUCTION) | | | |

- ** Looking upstation for structures with signs both sides.
- *** See Sign Truss Mounting Details
- **** End support height based on 15'-0" sign height or tallest sign whichever is greater per OS-A-6
- * If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.



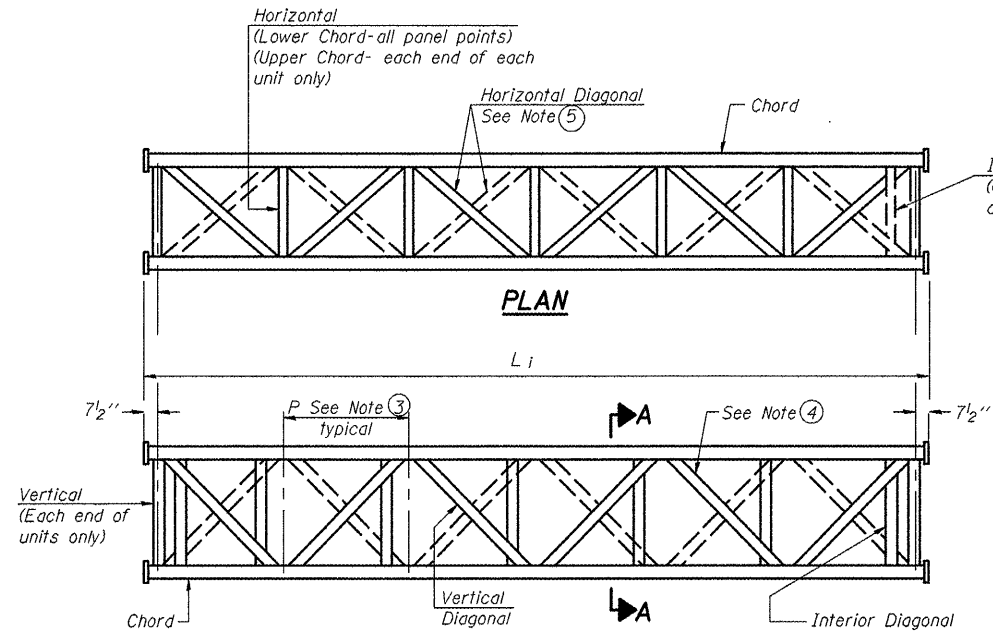
DESIGN WIND LOADING DIAGRAM

Parameters shown are basis for I.D.O.T. Standards and Sign Manual Tables. Installations not within dimensional limits shown require special analysis for all components.

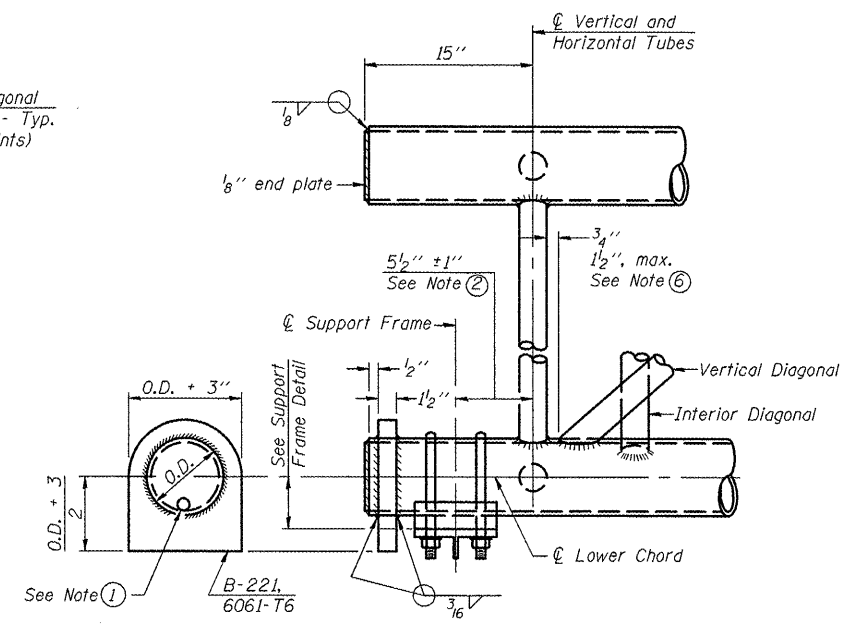
TOTAL BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|----------|-------|
| OVERHEAD SIGN STRUCTURE SPAN TYPE I-A | Foot | |
| OVERHEAD SIGN STRUCTURE SPAN TYPE II-A | Foot | |
| OVERHEAD SIGN STRUCTURE SPAN TYPE III-A | Foot | |
| OVERHEAD SIGN STRUCTURE WALKWAY TYPE A | Foot | |
| CONCRETE FOUNDATIONS | Cu. Yds. | |
| DRILLED SHAFT CONCRETE FOUNDATIONS | Cu. Yds. | |

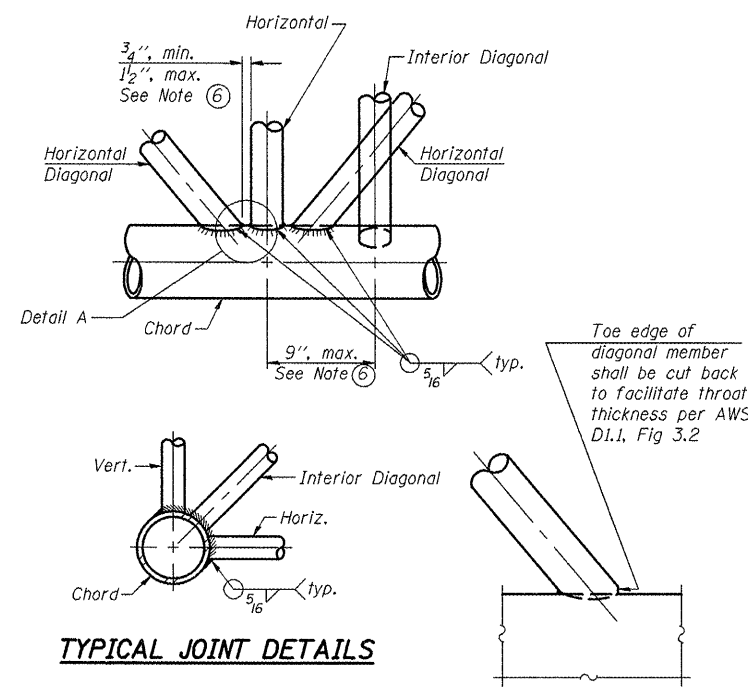
OS-A-1 1-20-11



**ELEVATION
TYPICAL INTERIOR UNIT**
Even number of panels/interior unit required.

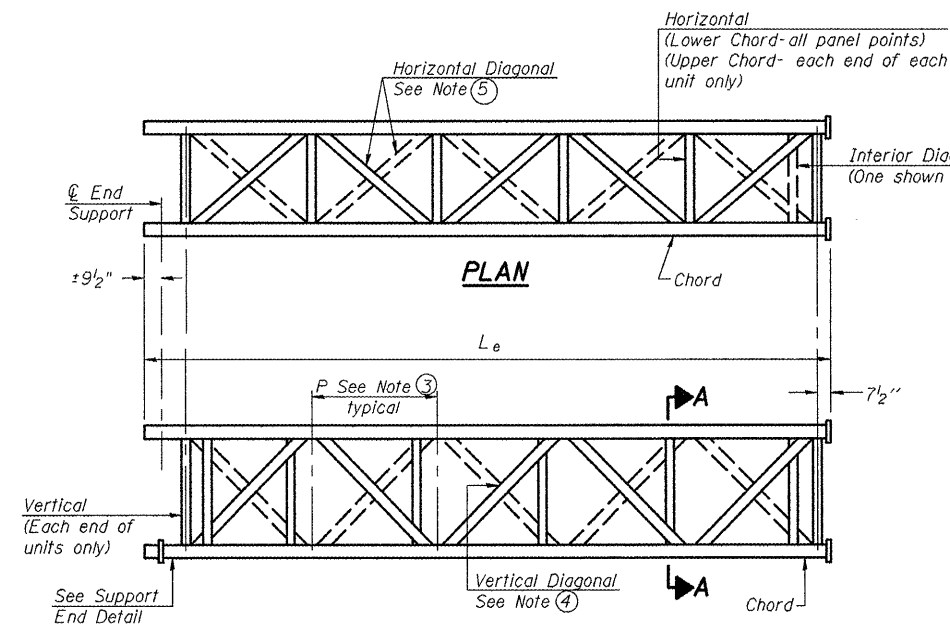


SUPPORT END DETAIL FOR EXTERIOR UNIT

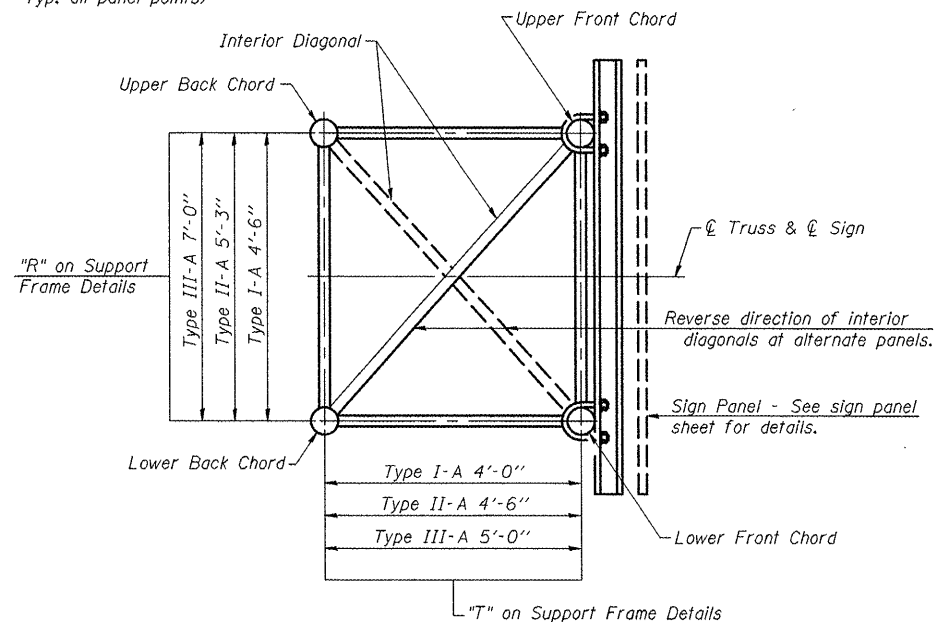


TYPICAL JOINT DETAILS

DETAIL A



**ELEVATION
TYPICAL EXTERIOR UNIT**
Even or odd number of panels/exterior units allowed.



SECTION A-A

- ① Contractor may alternatively use standard aluminum drive-fit cap to close end. 1/2" ϕ drain hole in end plate/drive-fit cap. (Typ. at ends of all chords)
- ② 5 1/2" end dimension may vary by $\pm 1"$ to provide uniform panel spacing (P).
- ③ Panel spacing (P) shall be uniform for entire truss and between 4'-0" and 5'-0" for Type I-A or 4'-0" and 5'-6" for Types II-A and III-A.
- ④ Vertical Diagonals in front and back face shall alternate.
- ⑤ Hidden lines show wind bracing alternates direction between planes of top and bottom chords.
- ⑥ All diagonals shall be detailed for minimum offset from the panel point based on the following. Offset shall be such as to provide a 3/4" minimum to 1 1/2" maximum clearance between any diagonal and any horizontal or vertical member, and to provide clearance for U-bolt connections of signs or walkway brackets.

OS-A-2

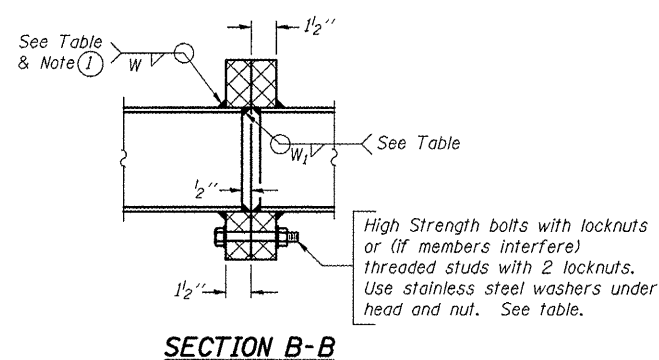
1-20-11

| | | | | | | | | | | |
|---|----------------------------|----------------|-----------|---|--|---------------------------|--------------------------|---------|--------------|-----------|
| FILE NAME = | USER NAME = ceer-lock_jd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ca:\pw\work\pvidot\ceer-lock_jd\0266557-0546179-shr-details.dgn | PLOT SCALE = 40.0000' / 1" | DRAWN - | REVISED - | | | • | •• | Various | 178 | 111 |
| PLOT DATE = 10/7/2011 | DATE = 04/26/11 | CHECKED - | REVISED - | | | CONTRACT NO. 46179 | | | | |
| | | REVISIONS | | | | ILLINOIS FED. AID PROJECT | | | | |
| | | | | | | SCALE: | SHEET NO. 6 OF 24 SHEETS | STA. | TO STA. | |

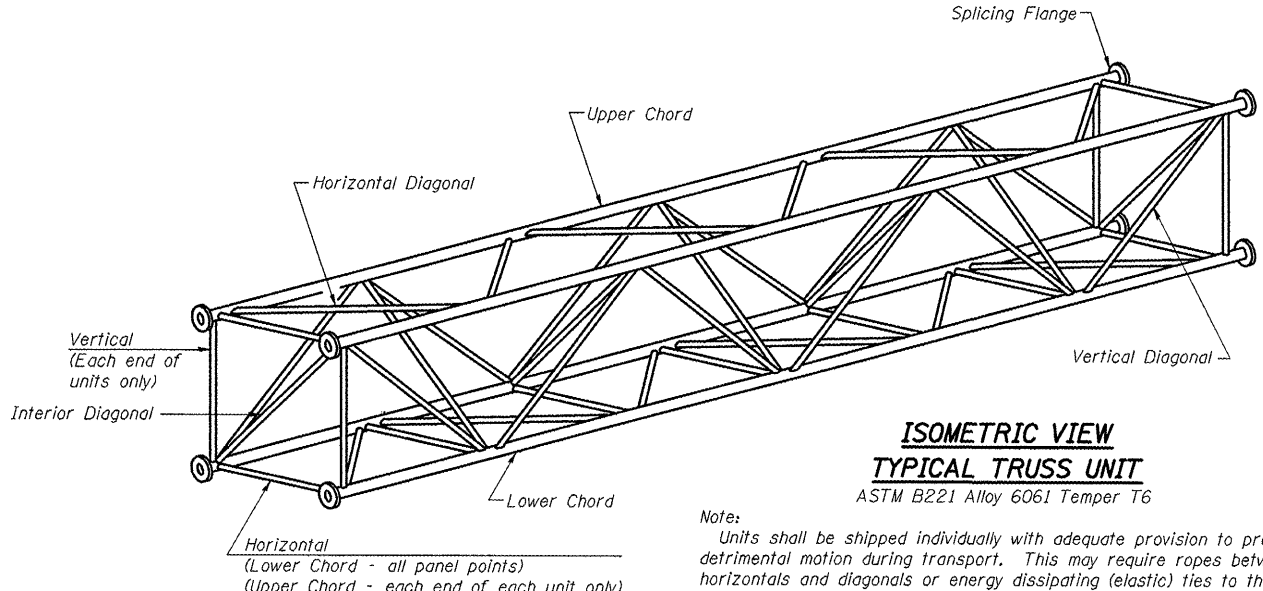
•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06

TRUSS UNIT TABLE

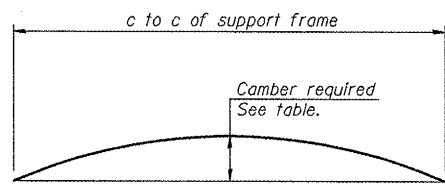
| Structure Number | Station | Design Truss Type | Exterior Units (2) | | | Interior Unit | | | | Upper & Lower Chord | | Verticals; Horizontals; Vertical, Horizontal, and Interior Diagonals | | Camber at Midspan | Splicing Flange | | | | | | | |
|----------------------|----------|-------------------|---------------------|-----------------------------|----------------|---------------|---------------------|-----------------------------|----------------|---------------------|-------|--|-------|-------------------|-----------------|------|------------|----------------|--------|---------|--|--|
| | | | No. Panels per Unit | Unit Lgth.(L _e) | Panel Lgth.(P) | No. Req'd. | No. Panels per Unit | Unit Lgth.(L _i) | Panel Lgth.(P) | O.D. | Wall | O.D. | Wall | | Bolts | | Weld Sizes | | | | | |
| | | | | | | | | | | | | | | | No./Splice | Dia. | W | W ₁ | A | B | | |
| 5 S 057 1039 R000.50 | 126+18 | II-A | 7 | 37'-9" | 5'-1 1/2" | 0 | - | - | - | 5 1/2" | 5/16" | 3" | 5/16" | 1 1/2" | 6 | 7/8" | 3/8" | 1/4" | 9 1/4" | 12 1/4" | | |
| 5 S 057 1039 R001.00 | 154+83.5 | II-A | 7 | 36'-3 1/2" | 4'-11" | 0 | - | - | - | 5 1/2" | 5/16" | 3" | 5/16" | 1 1/2" | 6 | 7/8" | 3/8" | 1/4" | 9 1/4" | 12 1/4" | | |
| | | | | | | | | | | | | | | | | | | | | | | |
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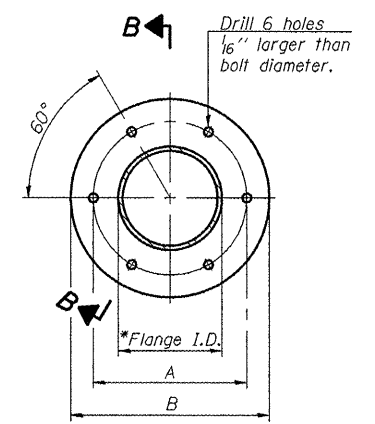
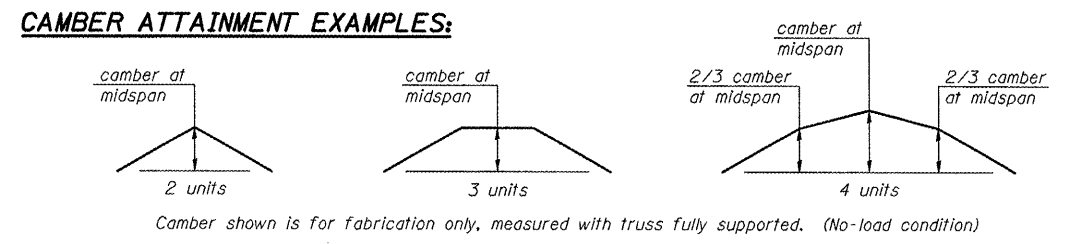
① Splicing Flanges shall be attached to each truss unit with the truss shop assembled to camber shown. Truss units shall be in proper alignment and flange surfaces shall be shop bolted into full contact before welding. Sufficient external welds or tacks shall be made to secure flanges until remaining welds are made after disassembly. Adjacent flanges shall be "match marked" to insure proper field assembly.



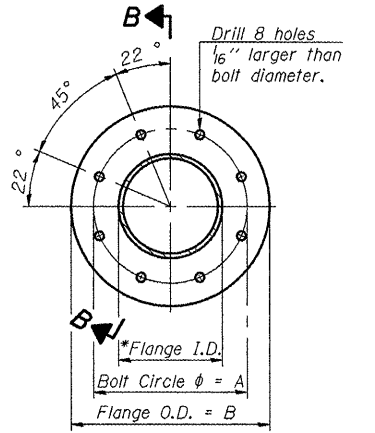
Note: Units shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The Contractor is responsible for maintaining the configuration and protection of the units.



Camber curve shown is theoretical. Actual camber attained by slope changes at splices between units.



TRUSS TYPES I-A, II-A, & III-A



TRUSS TYPES II-A & III-A
SPLICING FLANGES

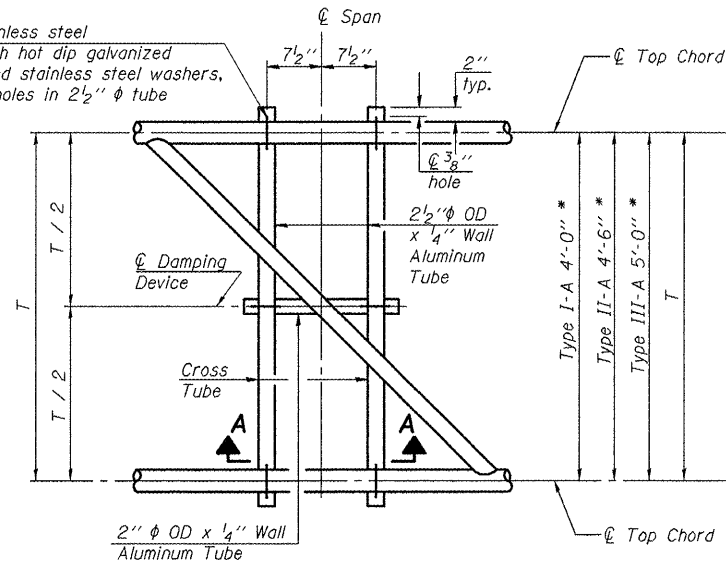
ASTM B221, Alloy 6061-T6
or ASTM B209, Alloy 6061-T651
*To fit O.D. of Chord with maximum gap of 1/16"

OS4-A-2 1-20-11

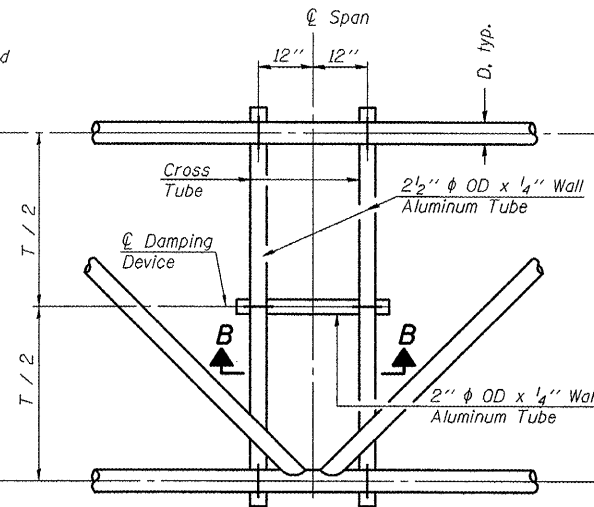
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|---|--------------------------|----------------|---------------------------|---|--|--------------------------|---------|---------|--------------|-----------|
| FILE NAME = | USER NAME = ceer-lock_jd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | OVERHEAD SIGN STRUCTURES - ALUMINUM TRUSS DETAILS FOR TRUSS TYPES I-A, II-A AND III-A | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ce:\pwwork\pwwork\ceer-lock_jd\0266557\02666179-shr-details.dgn | DRAWN - | REVISED - | • | | | •• | Various | 178 | 112 | |
| PLOT SCALE = 40.0000' / 1in. | CHECKED - | REVISED - | CONTRACT NO. 46179 | | | | | | | |
| PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - | ILLINOIS FED. AID PROJECT | | | | | | | |
| | | | | | SCALE: | SHEET NO. 7 OF 24 SHEETS | STA. | TO STA. | | |

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

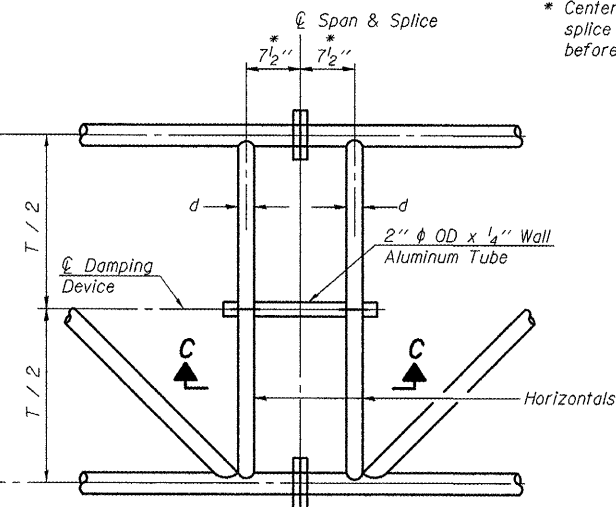
5/16" φ stainless steel
U-bolt with hot dip galvanized
locknuts and stainless steel washers,
typ. 3/8" φ holes in 2 1/2" φ tube



PLAN DETAIL "A"
℄ Span between Panel Points

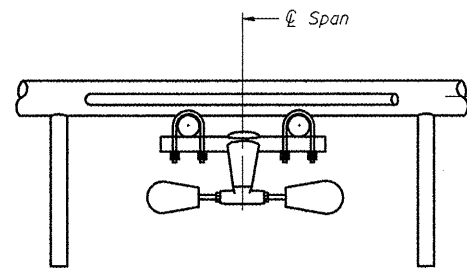


PLAN DETAIL "B"
℄ Span at Panel Point

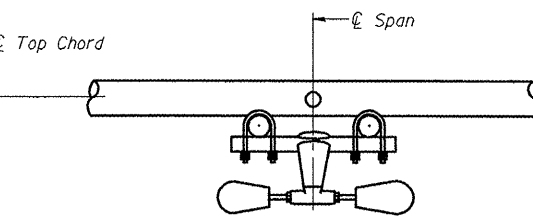


PLAN DETAIL "C"
℄ Span at ℄ Chord Splice

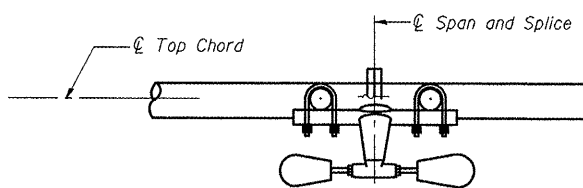
* Center of horizontal to center of
splice dimension may vary. Verify
before drilling holes in mounting tube.



SECTION A-A



SECTION B-B



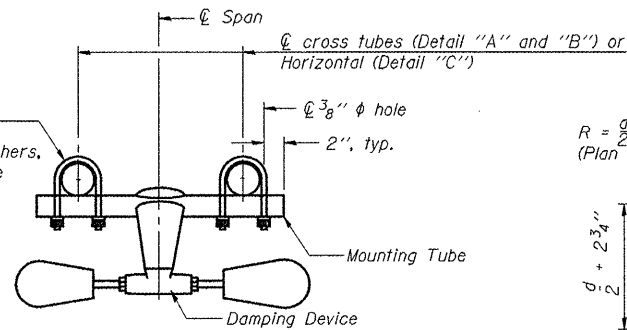
SECTION C-C

NOTES

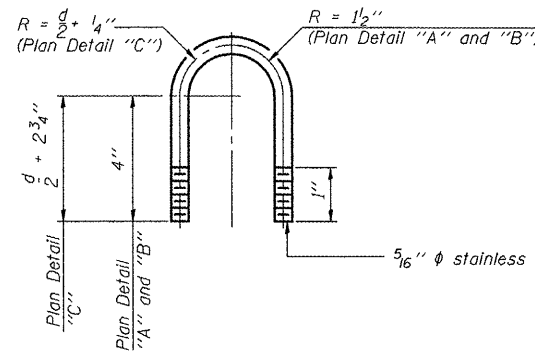
Damper: One damper per truss. (31 lbs. minimum Stockbridge-Type Aluminum - 29" minimum between ends of weights) Cost included in Overhead Sign Structure...

Materials: Materials: Aluminum tubes shall be ASTM B221 alloy 6061 temper T6. Cost included in Overhead Sign Structure...

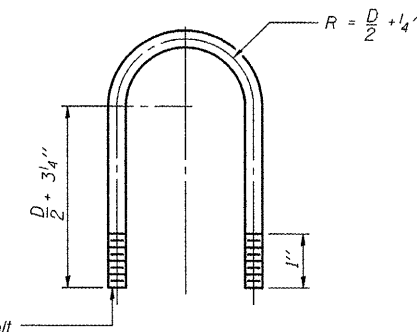
5/16" φ stainless steel
U-bolt with hot dip galvanized
locknuts and stainless steel washers,
typ. 3/8" φ holes in mounting tube



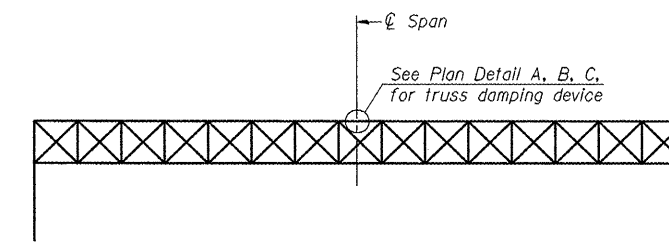
**TRUSS DAMPING
DEVICE CONNECTION DETAIL**
(Typical)



**DAMPING DEVICE MOUNTING
TUBE U-BOLT DETAIL**
(Typical)



**TOP CHORD TO CROSS TUBE
U-BOLT DETAIL**
(Typical - Detail "A" and "B")



ELEVATION
Aluminum Overhead
Sign Truss

OS-A-D 1-20-11

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ct:\pwwork\pwwork\ceerlockjd\0266557.D | 46179-shr-details.dgn | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

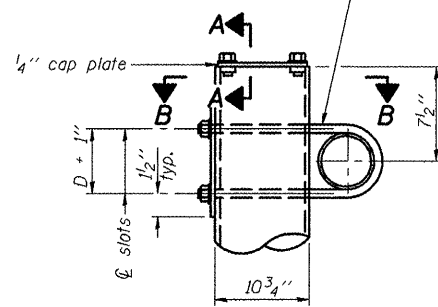
OVERHEAD SIGN STRUCTURE
DAMPING DEVICE

SCALE: SHEET NO. 8 OF 24 SHEETS STA. TO STA.

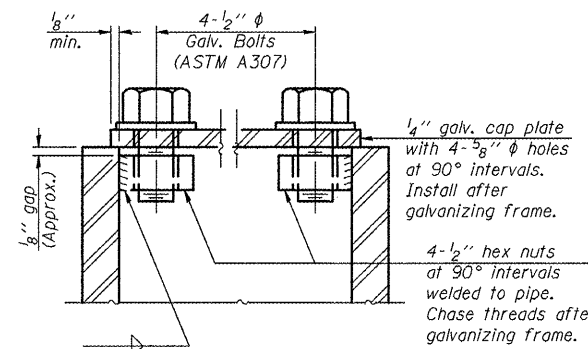
| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 113 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06

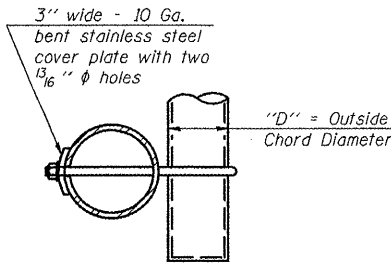
3/4" φ stainless steel U-bolt.
Provide two washers and two hexagon locknuts. (4)
1 3/16" x 2" slots on 10" φ pipe.
(4 slots required per pipe)



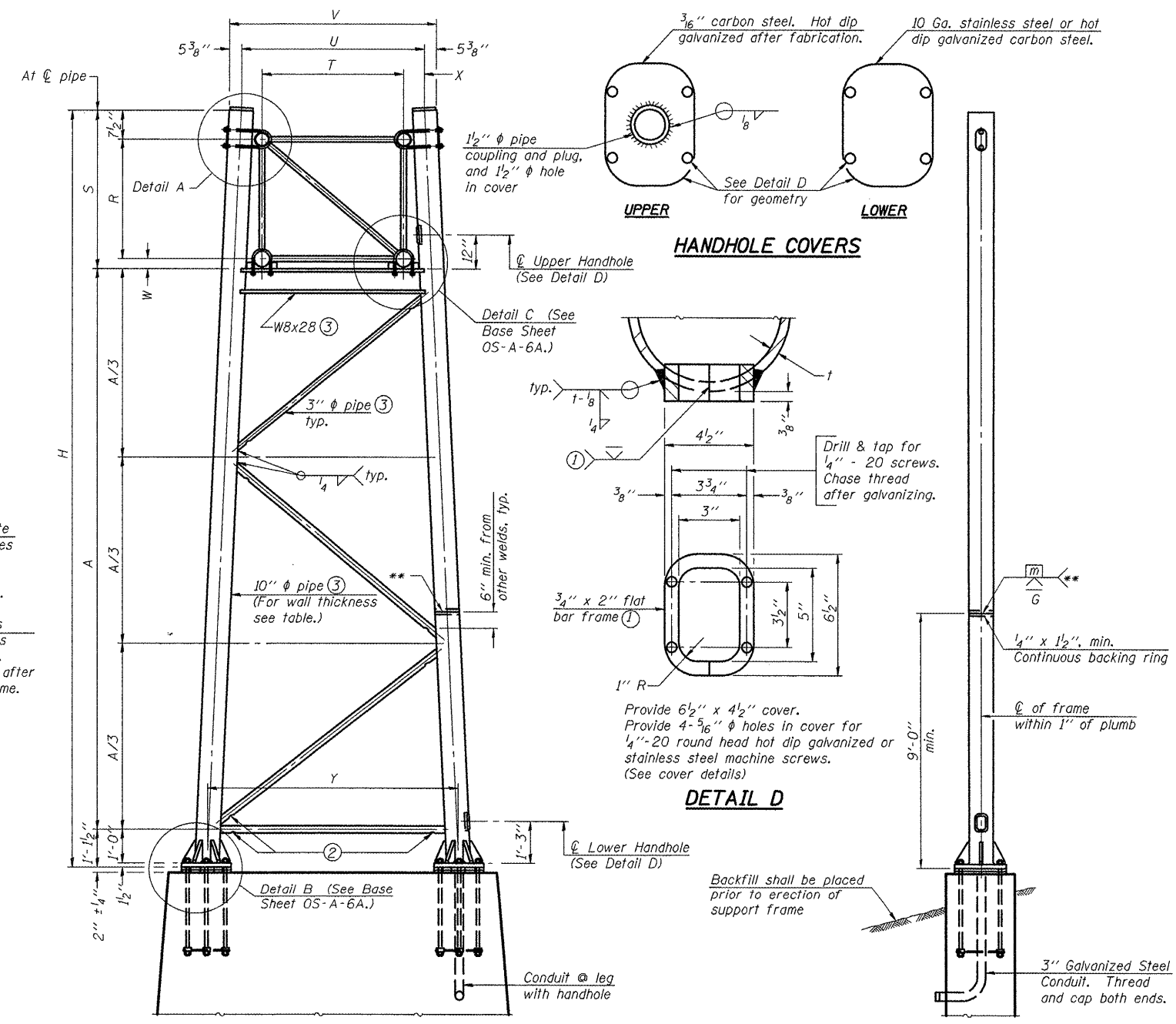
DETAIL A



SECTION A-A
As an alternate to bolts, may use galvanized drive-fit caps installed after galvanizing frame.



SECTION B-B



For Foundation Details, see base sheet OS-F3 (Spread Footing) or OS4-F3 (Drilled Shaft).

SIDE ELEVATION

| Truss Type | Dimensions | | | | | | | |
|------------|------------|-----------|-------|-------|------------|--------|--------|-------|
| | R | S | T | U | V | W | X | Y |
| I-A | 4'-6" | 5'-5 1/2" | 4'-0" | 5'-6" | 6'-4 3/4" | 4" | 9" | 8'-3" |
| II-A (5) | 5'-3" | 6'-3 3/4" | 4'-6" | 6'-1" | 6'-11 3/4" | 4 3/4" | 9 1/2" | 8'-3" |

10" φ PIPE TRUSS SUPPORT FRAME

** One butt welded joint is allowed only on one post per support frame. If used, weld procedure must be pre-approved by Engineer and joint shall receive 100% RT or UT (tension criteria) at Contractor's expense.

Support Design Loads: See Base Sheet OS-A-1 for design and loading criteria.
Load combinations checked include deadload plus:
a) 100% wind normal to sign, 20% parallel to sign
b) 60% wind normal to sign, 30% parallel to sign

- In lieu of fabricated handhole frame as shown, may cut from 2" plate (rolling direction vertical). All cut faces to be ground to ANSI Roughness of 500 μin or less.
- Galvanizing vent holes of adequate size shall be provided on underside at each end of bracing pipes. Alternately, holes may be provided in wall of pipe column. All vent holes shall be drilled and de-burred, typ.
- Steel pipe, plate, carbon steel handhole covers and rolled sections shall be hot dip galvanized after fabrication. Painting is not permitted. See Base Sheet OS-A-1.
- See General Notes for fasteners.
- Dimensions shown are based on selection criteria in the Sign Structures Manual. Nonstandard applications must have dimensions verified or amended as appropriate.
- "H" based on 15'-0" or actual sign height, whichever is greater.

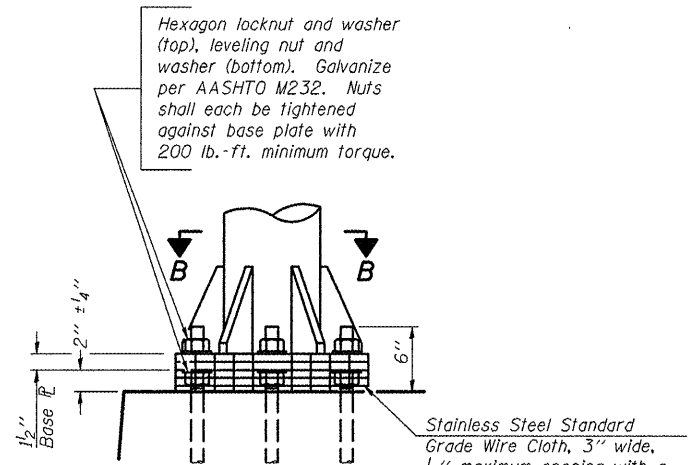
END ELEVATION

| Structure Number | Station | Support | | Truss Type | Pipe Wall Thickness | H (6) | A |
|----------------------|----------|---------|-------|------------|---------------------|-------------|--------|
| | | Left | Right | | | | |
| 5 S 057 1039 R000.50 | 126+18 | EAST | | II-A | 0.365(Std.) | 27'-10 3/4" | 20'-6" |
| | | | WEST | | 0.365(Std.) | 27'-4 3/4" | 20'-0" |
| 5 S 057 1039 R001.00 | 154+83.5 | EAST | | II-A | 0.365(Std.) | 29'-4 3/4" | 22'-0" |
| | | | WEST | | 0.365(Std.) | 28'-10 3/4" | 21'-6" |

OS-A-6

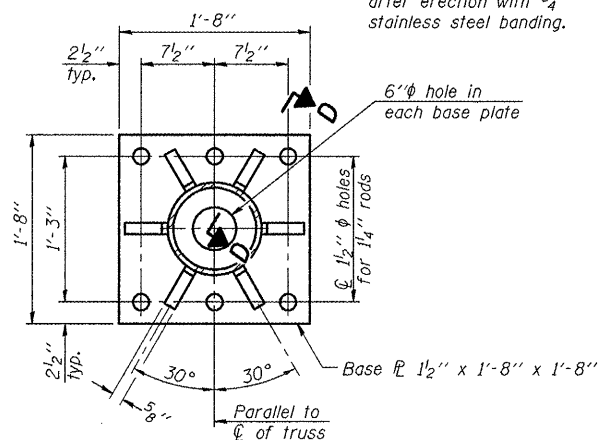
1-20-11

•VARIOUS COUNTIES
••0-5 OVD SIN STR REPL 2012-06

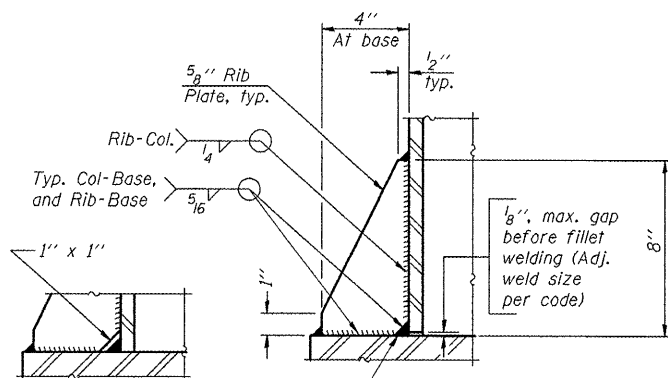


DETAIL B

Ribs shall be cut to fit slope of pipe.
 Stainless Steel Standard Grade Wire Cloth, 3" wide, 1/4" maximum opening with a minimum wire diameter of AWG. No. 16 with a minimum 2" lap. Secure to base plate after erection with 3/4" stainless steel banding.



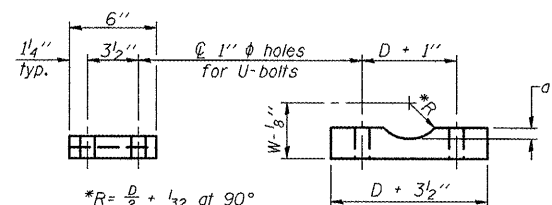
SECTION B-B



SECTION D-D

** Alternate detail if welding col. to base plate first, then snip inside corner of ribs. Terminate weld on rib 1/4" from snip.

No snip req'd. at rib inside corner if placed before col. to base plate welding.

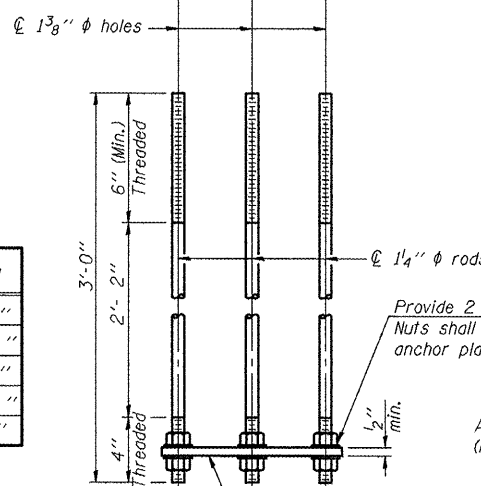
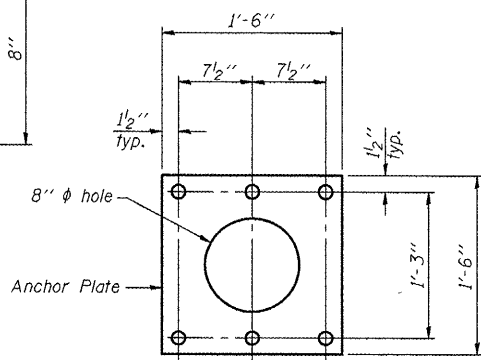


$R = \frac{D}{2} + \frac{1}{32}$ at 90°
 D = Outside Diameter of Chord.
 For W, see Base Sheet OS-A-6.

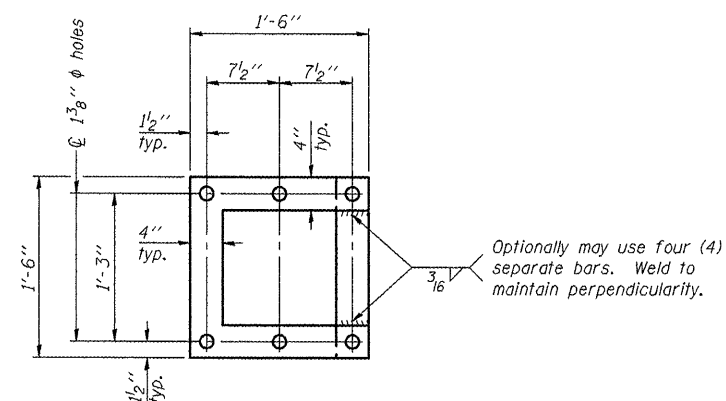
SADDLE SHIM DETAIL

ASTM B26 Alloy 356-F
 or
 ASTM B209 Alloy 6061-T651
 (4 required per sign truss)

| Truss Chord Nominal Dia. | a |
|--------------------------|----------|
| 5" | 3 1/4" |
| 5 1/2" | 13 1/16" |
| 6" | 7 7/8" |
| 6 1/2" | 15 1/16" |
| 7" | 1" |

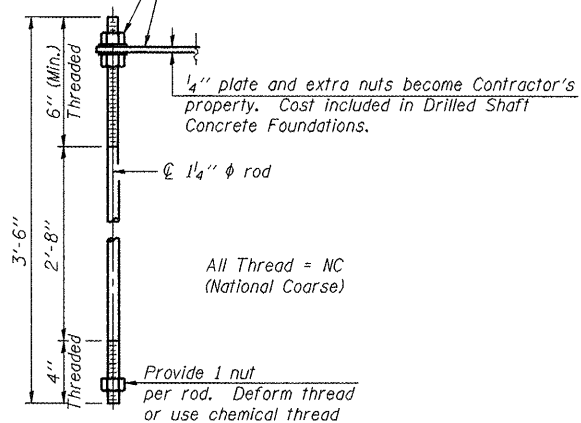


ANCHOR ROD DETAIL
 Spread Footing Foundation



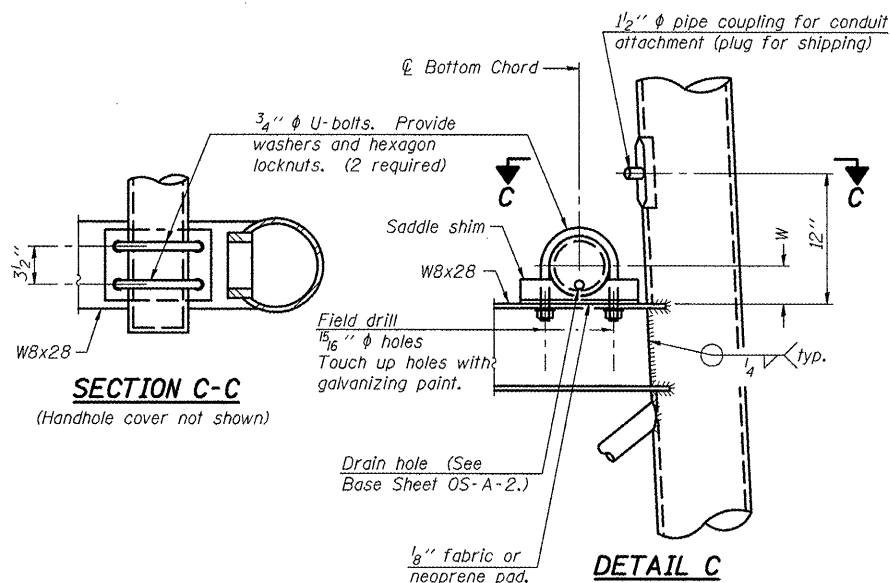
POSITIONING PLATE(S)

At each location, provide 1/4" thick positioning plate(s) and six (6) additional nuts to be used with leveling nuts to maintain anchor bolts position during concrete placement.



ANCHOR ROD DETAIL
 Drilled Shaft Foundation

Anchor rods shall conform to ASTM F1554 Grade 105. Galvanize upper 12" minimum per AASHTO M232. No welding shall be permitted on rods.



SECTION C-C
 (Handhole cover not shown)

DETAIL C

10" Ø PIPE SUPPORT FRAME DETAILS

OS-A-6A 1-20-11

| | | | |
|---|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| c:\pwwork\pwwork\ceerlockjd\0266557.dwg | 046179-shd-details.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000" / 1" | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

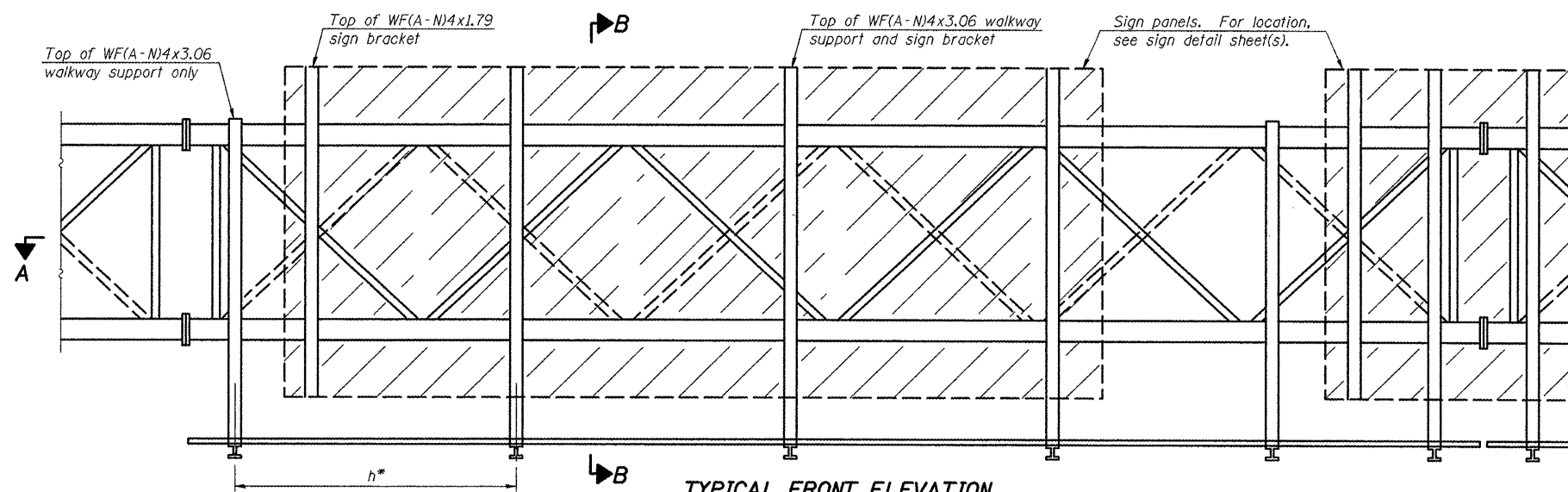
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 SUPPORT FRAME DETAILS - ALUMINUM TRUSS

SCALE: SHEET NO. 10 OF 24 SHEETS STA. TO STA.

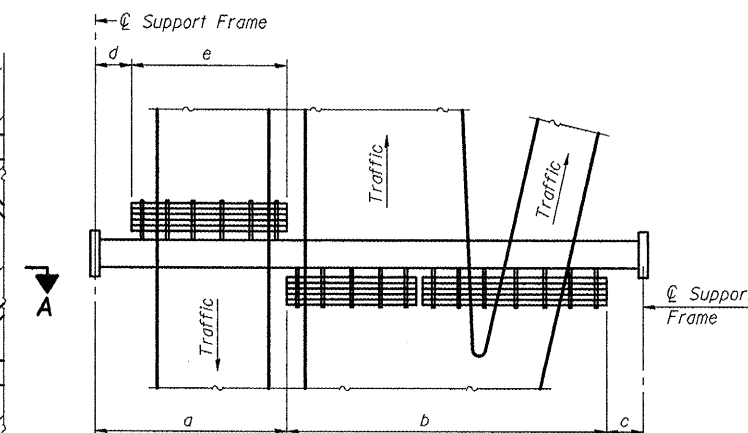
| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 115 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS COUNTIES
 ••D-5 OVD SIN STR REPL 2012-06



TYPICAL FRONT ELEVATION

With lights and handrail omitted for clarity.
For Section B-B, see Base Sheet OS-A-10.



PLAN WALKWAY AND HANDRAIL SKETCH
(Road plan beneath truss varies)

BRACKET TABLE

| WF(A-N)4x1.79 or WF(A-N)4x3.06 ASTM B308, Alloy 6061-T6 | | |
|--|--------------------------|--------------------------------|
| Sign Width | | Number Brackets Required |
| Greater Than | Less Than or Equal To | |
| | 8'-0" | 2 |
| 8'-0" | 14'-0" | 3 |
| 14'-0" | 20'-0" | 4 |
| 20'-0" | 26'-0" | 5 |
| 26'-0" | 32'-0" | 6 |

Notes:

* Space walkway brackets WF(A-N)4x3.06 and sign brackets WF(A-N)4x1.79 for efficiency and within limits shown:

f = 12" maximum, 4" minimum (End of sign to center of nearest bracket)

g = 12" maximum, 4" minimum (End of walkway grating to center of nearest support bracket)

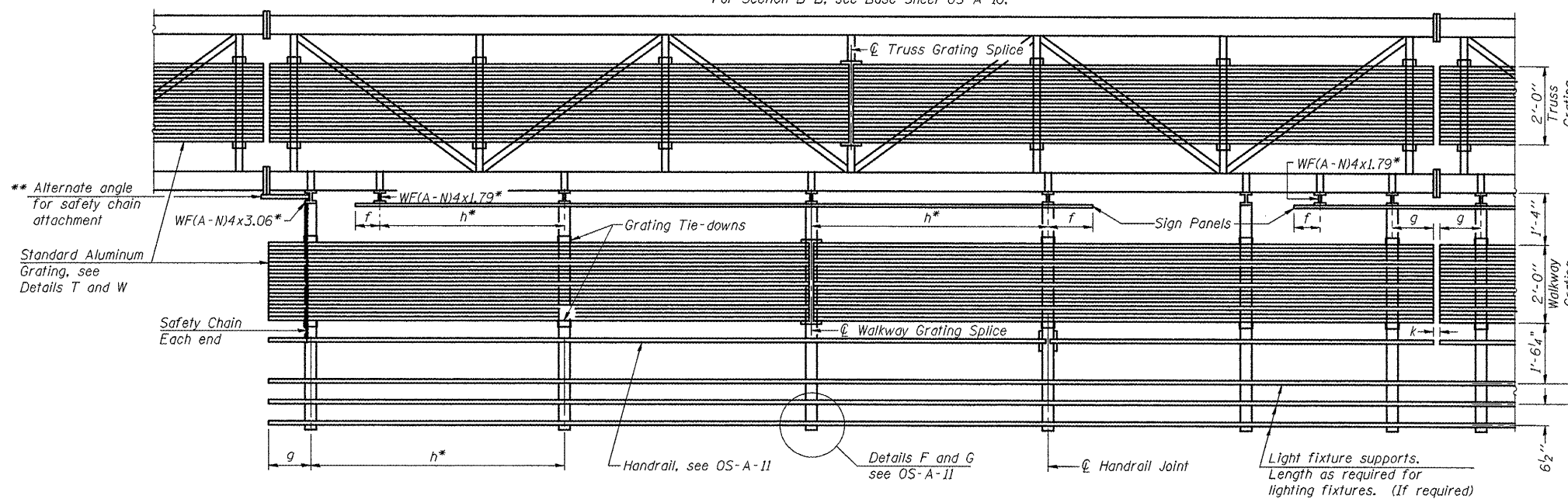
h = 6'-0" maximum (center to center of sign and/or walkway support brackets, WF(A-N)4x1.79 or WF(A-N)4x3.06)

k = 2" maximum gap between adjacent walkway grating sections and handrail ends

** If walkway bracket at safety chain location is behind sign, add angle to bracket, see Alternate Safety Chain Attachment on Base Sheet OS-A-11.

For Details T and W, Section B-B and Grating Splice Details see Base Sheet OS-A-10.

For Handrail Details see Base Sheet OS-A-11.



SECTION A-A

Handrail and walkway shall span a minimum of three brackets between splices and/or gap joints.
Place all sign and walkway brackets as close to panel points as practical.
Handrail joints, grating, and light support splices placed as needed.

| Structure Number | Station | a | b | c | d | e | Walkway Grating and Handrail Lengths |
|---|----------|--------|--------|--------|---|---|--------------------------------------|
| 5 S 057 1039 R000.50 | 126+18 | 11'-6" | 52'-0" | 10'-6" | — | — | 52'-0" |
| 5 S 057 1039 R001.00 | 154+83.5 | 12'-3" | 48'-0" | 10'-9" | — | — | 48'-0" |
| See also "Sign Truss Mounting Details" Sheets 105 & 106 | | | | | | | |

Truss grating to facilitate inspection shall run full length (center to center of support frames) ±12" on overhead trusses.
Cost of truss grating is included in "Overhead Sign Structure".

Walkway and Truss Grating width dimensions are nominal and may vary ±1/2" based on available standard widths.

OS-A-9

1-20-11

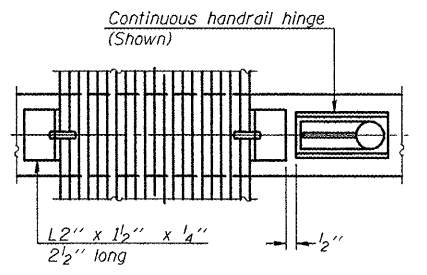
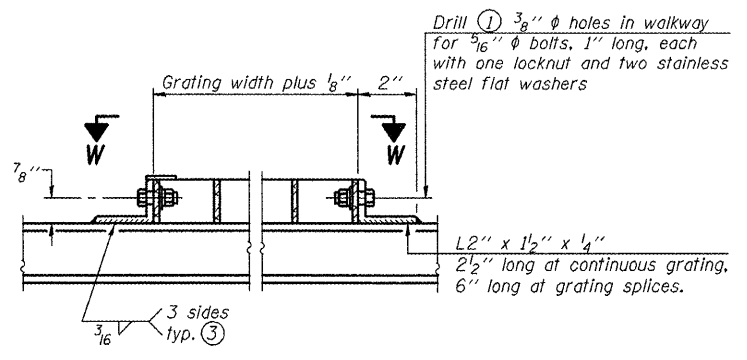
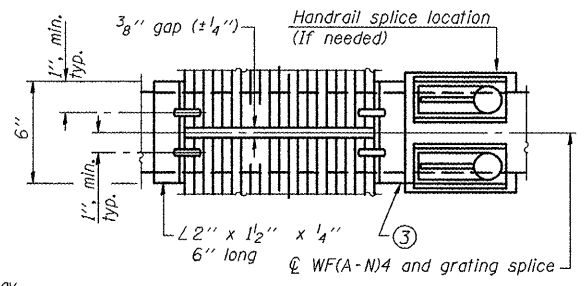
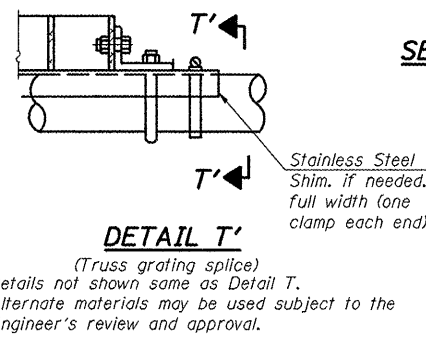
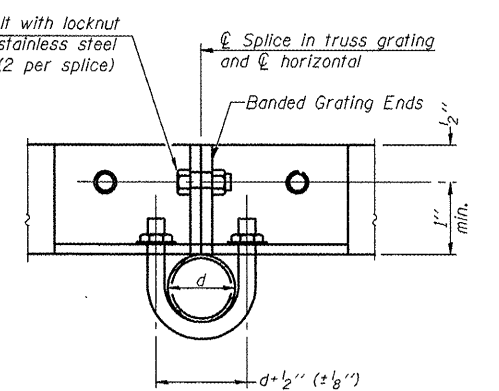
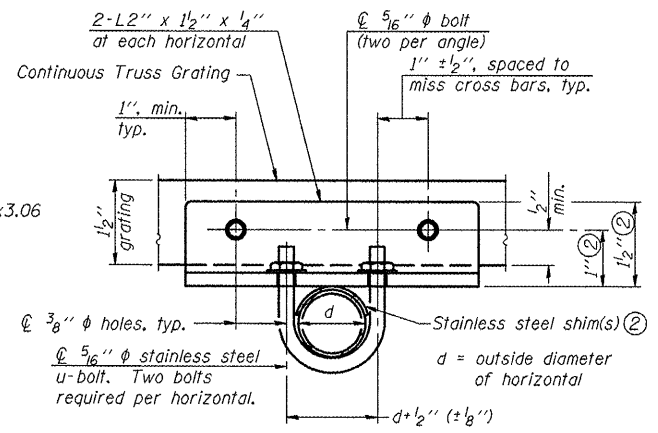
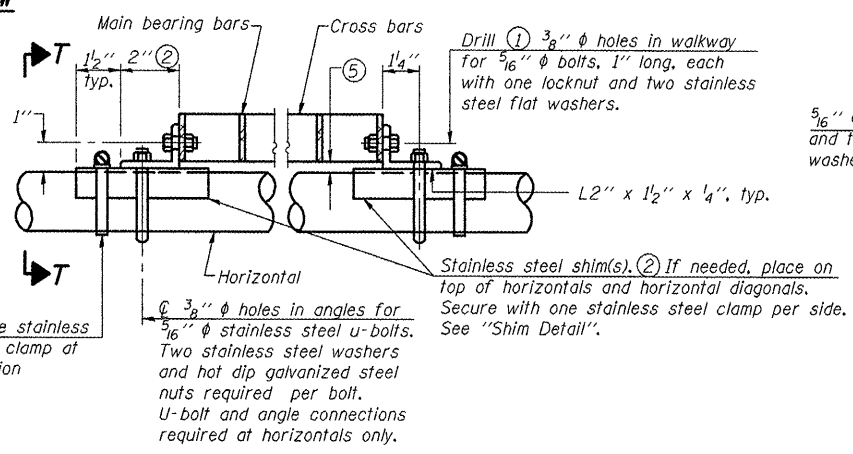
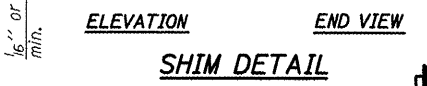
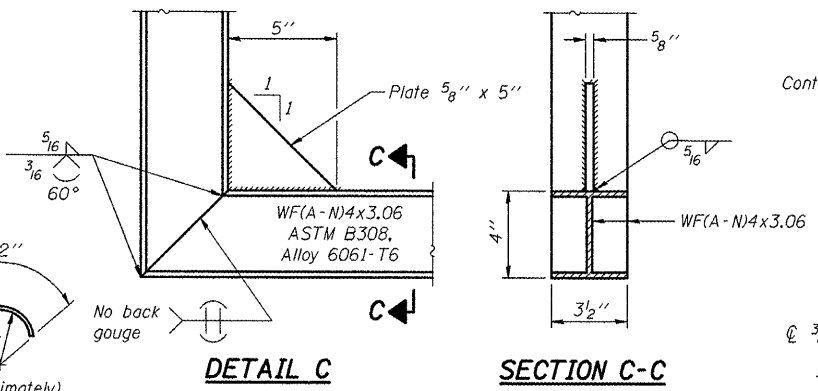
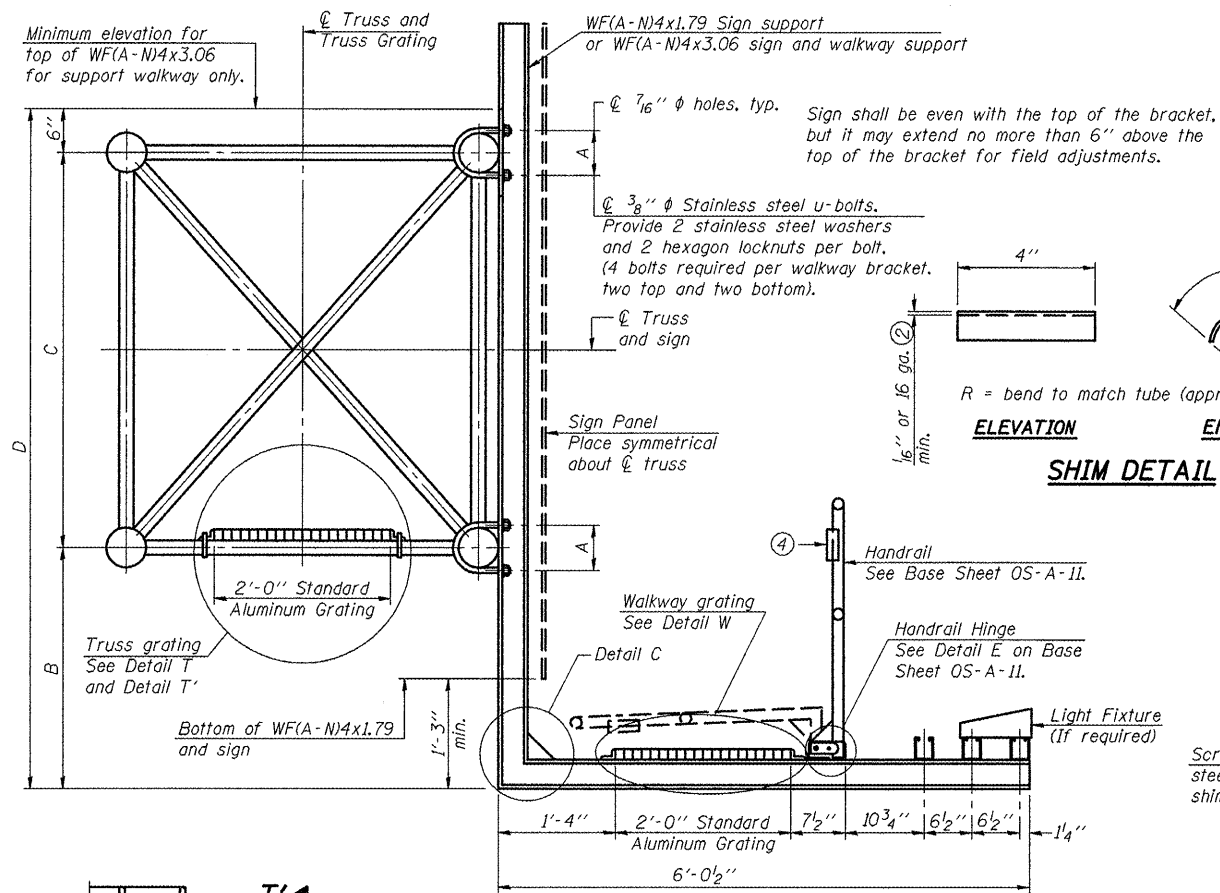
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| PLOT SCALE = 40.0000' / in. | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
ALUMINUM WALKWAY DETAILS**

SCALE: SHEET NO. 11 OF 24 SHEETS STA. TO STA.

| *VARIOUS COUNTIES | | | |
|--------------------------------|---------|---------|--------------------|
| **D-5 OVD SIN STR REPL 2012-06 | | | |
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS NO. |
| * | ** | Various | 178 116 |
| | | | CONTRACT NO. 46179 |
| ILLINOIS FED. AID PROJECT | | | |



SPECIFICATIONS FOR STANDARD ALUMINUM GRATING

Main Bearing Bars shall be 3/16" x 1/2" on 1 3/16" centers and conform to ASTM B221 Alloy 6061-T6.
 Cross bars shall be 3/16" x 1/2" on 4" centers and conform to ASTM B221 Alloy 6063-T5 or 6061-T6.

OR

Aluminum Grating with modified "T" sections for main bearing bars shall meet the following requirements:
 Main bars shall conform to ASTM B221 Alloy 6061-T6 and have a minimum section modulus equal to 0.0705 in.³ per bar, a depth of 1 1/2", spaced on 1 3/16" centers.
 Cross bars shall conform to ASTM B221 Alloy 6063-T5 or T-42 and spaced on 4" centers.

| Structure Number | Station | A | ⓐ B | C | ⓐ D* |
|--|----------|---|-----------|-------|-------------------|
| 5 S 057 1039 R000.50 | 126+18 | | 4'-7 1/2" | 5'-3" | 10'-4 1/2" & VAR. |
| 5 S 057 1039 R001.00 | 154+83.5 | | 4'-7 1/2" | 5'-3" | 10'-4 1/2" & VAR. |
| * See also "Sign Truss Mounting Details" Sheets 105 & 106 for the information needed to determine the variable walkway support & sign support lengths. | | | | | |

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment.
- Stainless steel shims shall be placed as shown in Detail T if needed to compensate for alignment variations between horizontal and diagonal pipes beyond adjustment provided by angles. Thicker shims may be used subject to shims performing properly.
- If Handrail Joint present, weld angle to WF(A-N)4 and 1/4" extension bars. (See Base Sheet OS-A-11.)
- 1/8" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Tube to grating gap may vary from 0 to 1/2", max. to align walkway, allow for camber, etc.
- Based on actual height of tallest sign given on OS-A-1.

OS-A-10

1-20-11

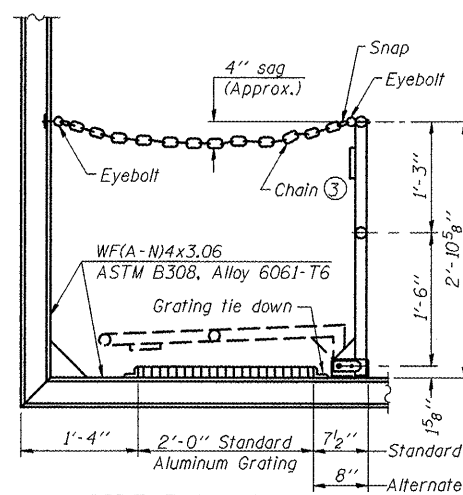
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| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

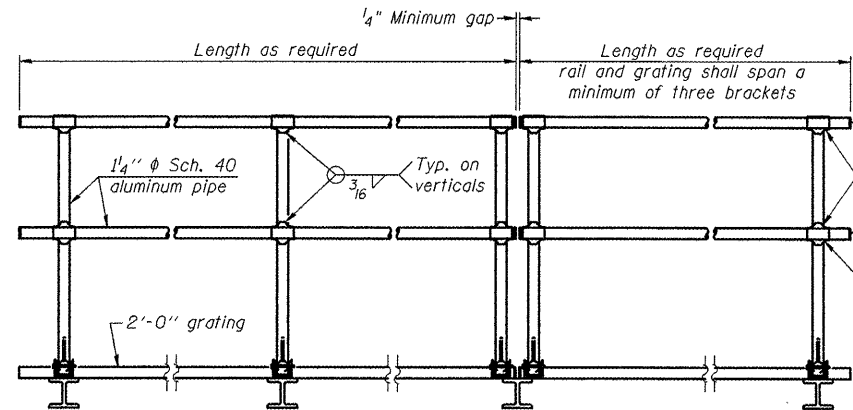
ALUMINUM SIGN STRUCTURES
 ALUMINUM WALKWAY DETAILS
 SCALE: SHEET NO. 12 OF 24 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. R.F.E. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | Various | 178 | 117 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS COUNTIES
 ••D-5 OVD SIN STR REPL 2012-06



SIDE ELEVATION
(Showing safety chain w/o sign)

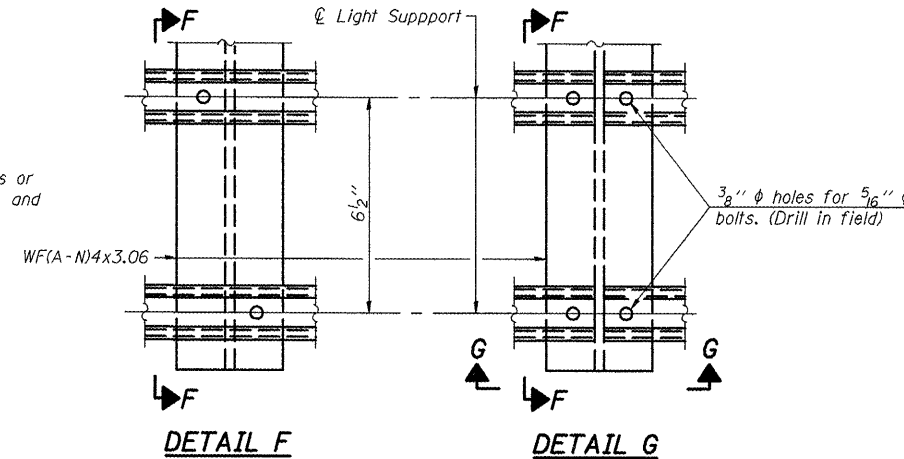


FRONT ELEVATION

HANDRAIL DETAILS

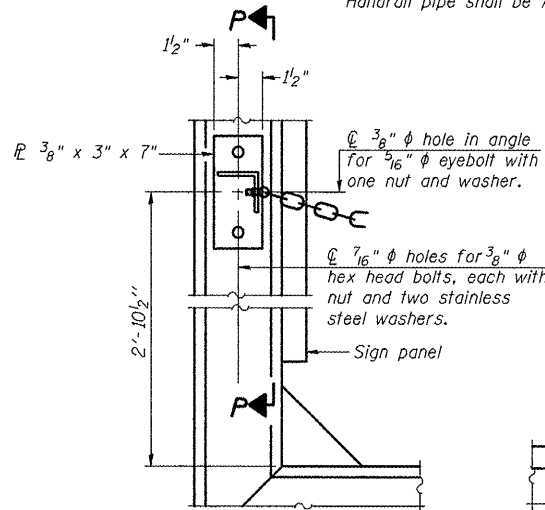
Handrail pipe shall be ASTM B241 or B429, Alloy 6063-T6 or Alloy 6061-T6.

- ① Install standard force-fit end caps or weld 1/8" end plates with 1/8" c.f.w. and grind smooth. (All rail ends)
- ② Horizontal handrail member shall be continuous thru fitting. Provide 1/16" hole in fitting for 3/8" bolt. Field drill 1/16" hole in horizontal rail member. Provide locknut and two stainless steel washers for bolt. (Use 5/16" eyebolts in 1/16" holes on top rail at ends only.)



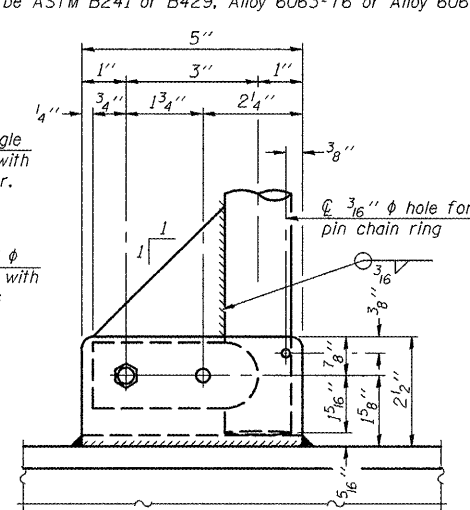
DETAIL F

DETAIL G

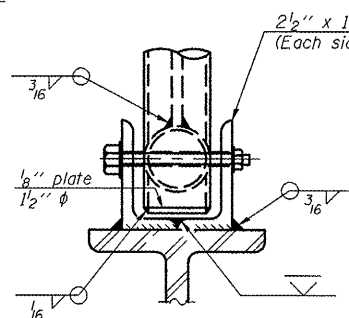


ALTERNATE SAFETY CHAIN ATTACHMENT
(With Sign Present)

Items not shown same as "Side Elevation" of "Handrail Details"

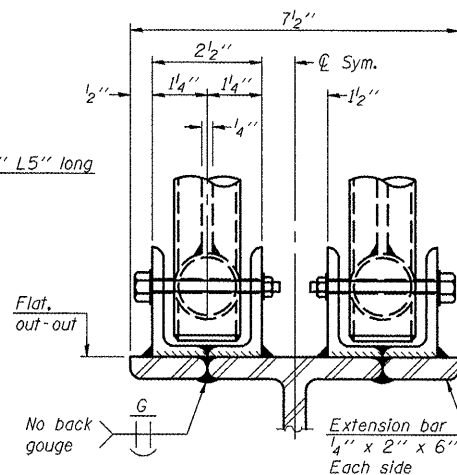


SIDE ELEVATION

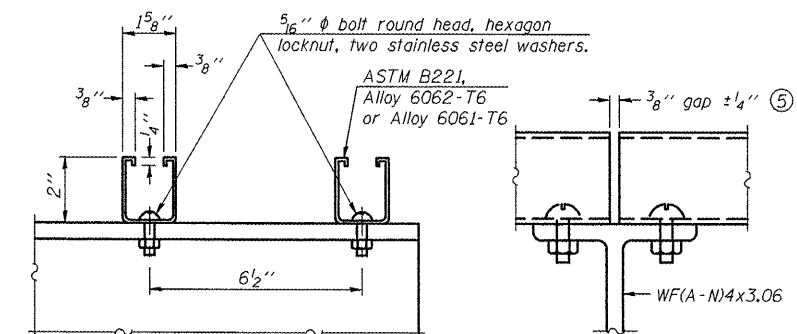


FRONT ELEVATION

See "Elevation" at right for dimensions.



ELEVATION AT HANDRAIL JOINT

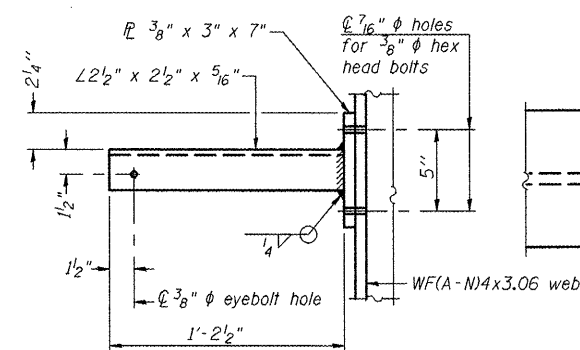


SECTION F-F

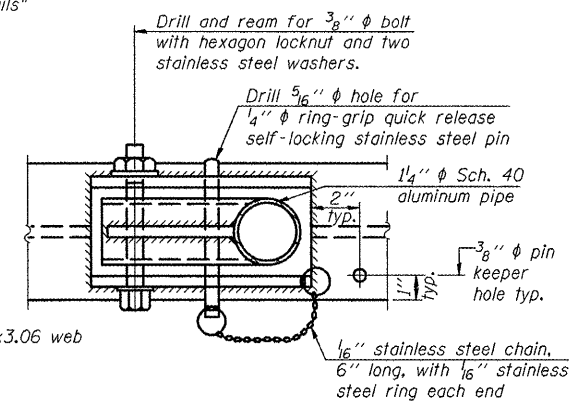
SECTION G-G

LIGHTING FIXTURE MOUNTS (IF REQUIRED)

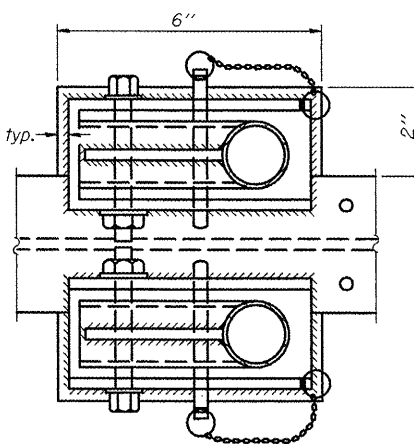
- ⑤ Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.



SECTION P-P

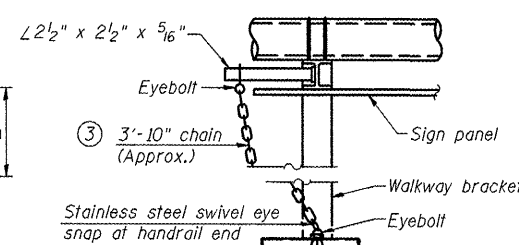


PLAN DETAIL E HANDRAIL HINGE



PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"

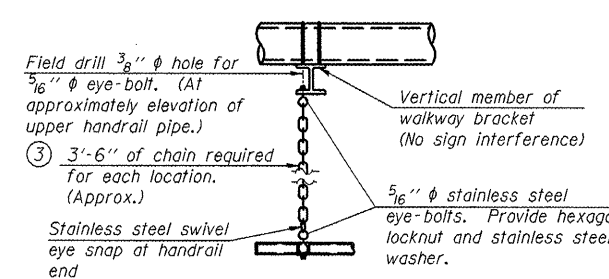


ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)

- ③ 3/16" Type 304L stainless steel chain, approximately 12 links per foot.

- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



SAFETY CHAIN

One required for each end of each walkway.

OS-A-11

1-20-11

| | | | |
|---|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ca:\pw\work\p\dot\ceerlockjd\0266557\046179-shr-details.dgn | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
ALUMINUM HANDRAIL DETAILS

SCALE: SHEET NO. 13 OF 24 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 118 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06

BAR LIST - EACH FOUNDATION

| Bar | Number | Size | Length | Shape |
|--|--------|------|-----------|-------|
| v4(E) | 24 | #9 | F less 5" | — |
| #4 bar spiral (E) - see Side Elevation | | | | |

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Q_u) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

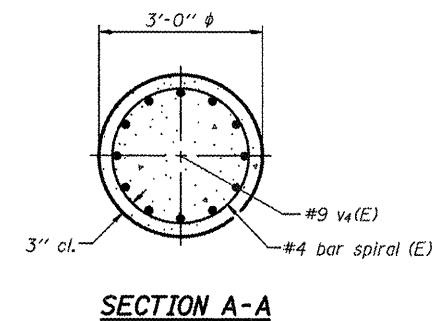
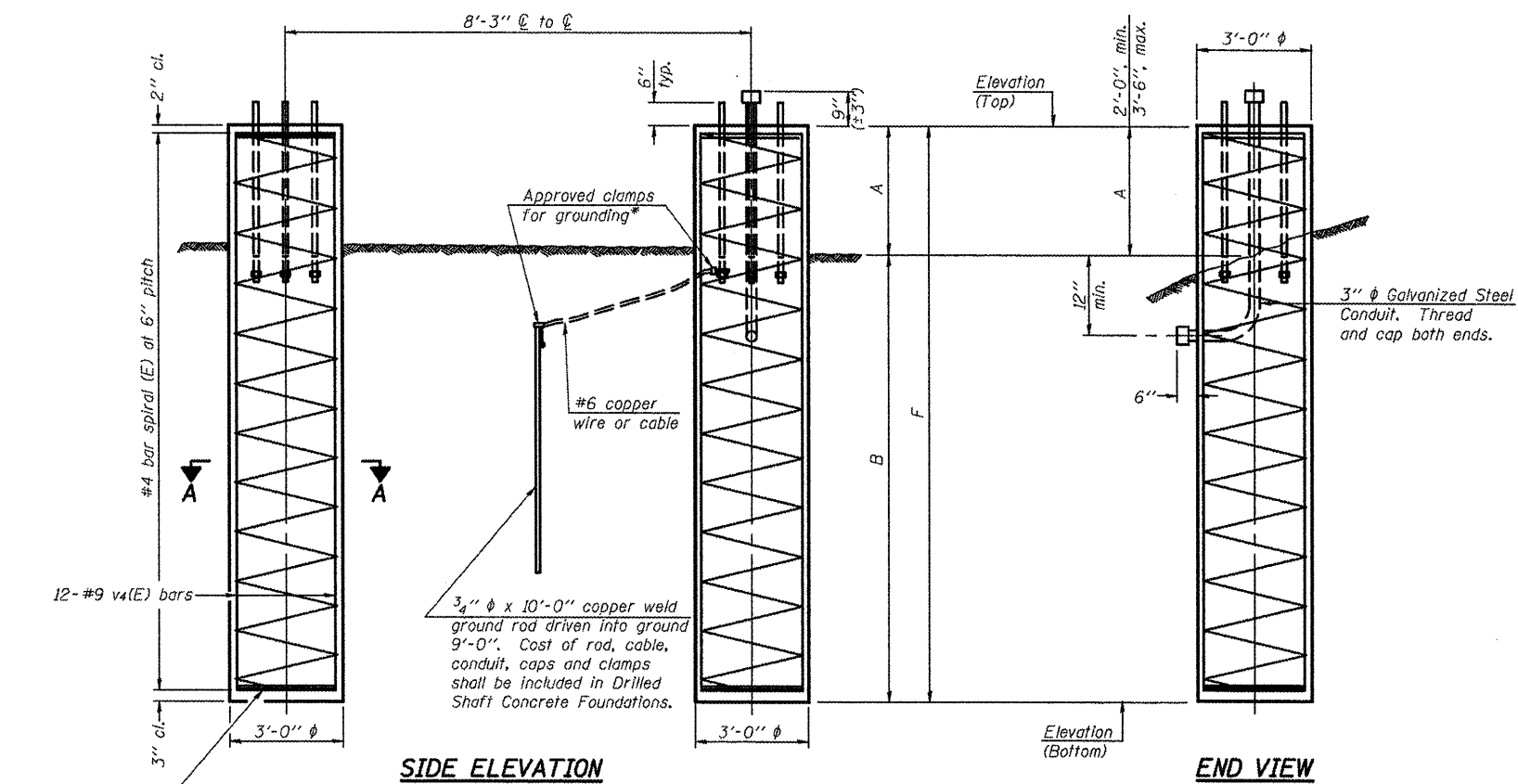
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

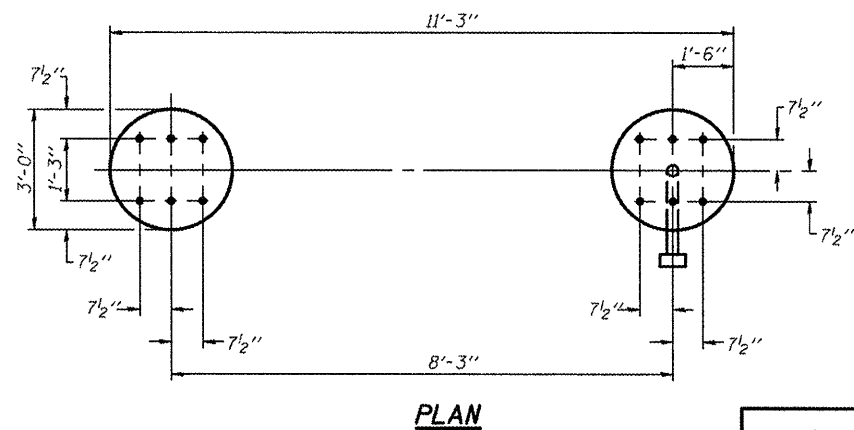
Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



3 hoops minimum top and bottom



For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

DETAILS FOR 10" Ø SUPPORT FRAME TYPE I-A or II-A TRUSS

| Structure Number | Station | Left Foundation | | | | | Right Foundation | | | | | Class DS Concrete (Cu. Yds.) |
|----------------------|----------|--|------------------|-------|--------|--------|------------------|------------------|--------|--------|--------|------------------------------|
| | | Elevation Top | Elevation Bottom | A | B | F | Elevation Top | Elevation Bottom | A | B | F | |
| 5 S 057 1039 R000.50 | 126+18 | 883.30 | 862.80 | 3'-0" | 17'-6" | 20'-6" | 883.80 | 883.30 | 3'-0" | 17'-6" | 20'-6" | 21.5 |
| 5 S 057 1039 R001.00 | 154+83.5 | SEE BASE SHEET OS4-MED MEDIAN SUPPORT FOUNDATION DETAILS | | | | | 864.51 | 843.09 | 3'-11" | 17'-6" | 21'-5" | 11.3 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

(WILL BE 2'-11" AFTER FUTURE I-39 RECONSTRUCTION)

OS4-F3 1-20-11

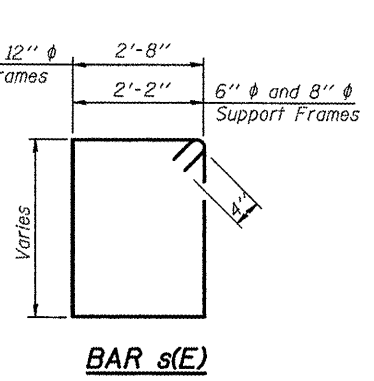
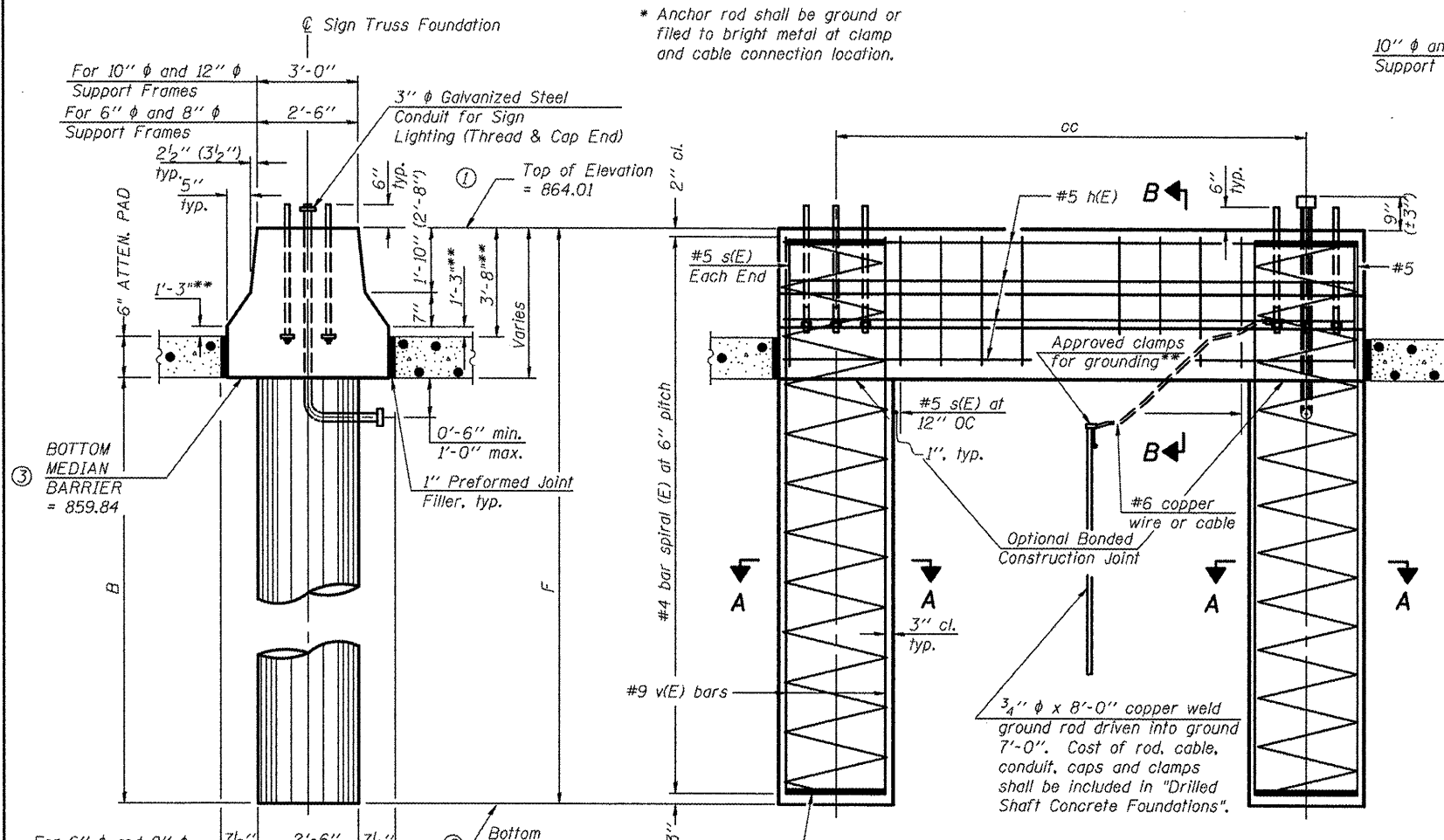
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

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| PLOT SCALE = 40.0000' / 1" | | CHECKED - | REVISED - |
| PLOT DATE = 10/27/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 119 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

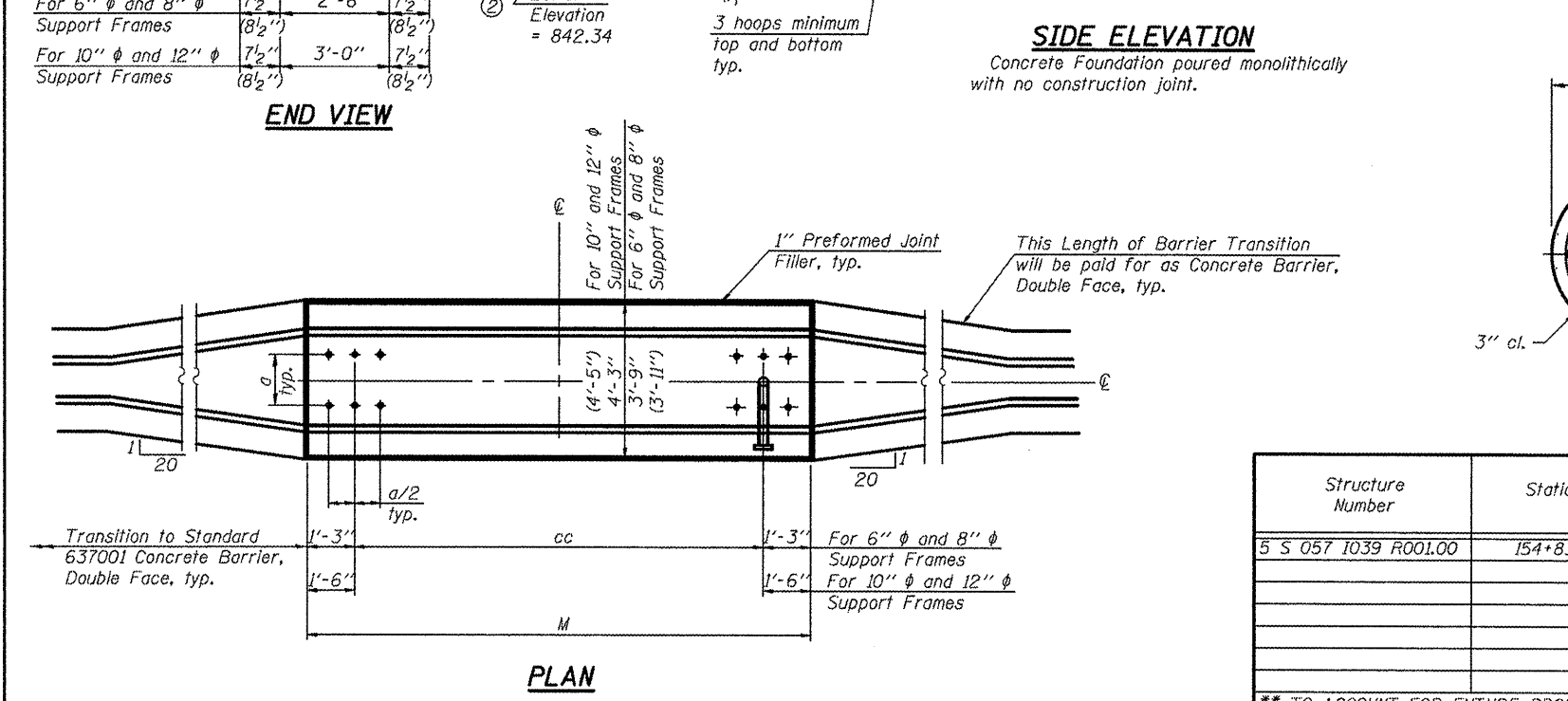


BAR LIST - EACH FOUNDATION

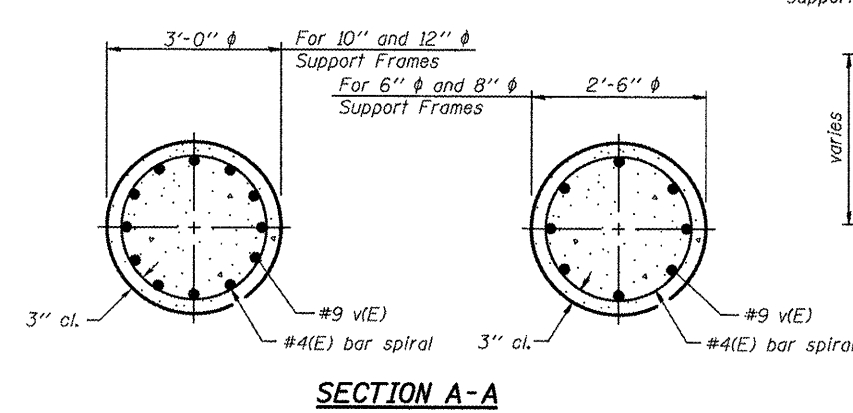
| Pipe Support Frames | cc | M | a | a/2 |
|---------------------|--------|----|--------------|-----|
| h(E) | 10 | #5 | M less 4" | |
| s(E) | Varies | #5 | Varies | |
| v(E) | 16 | #9 | F less 0'-5" | |
| v(E) | 24 | #9 | F less 0'-5" | |

#4(E) bar spiral - see Side Elevation

NOTES:
 The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.
 If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.
 No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.
 Concrete shall be placed monolithically, without construction joints.
 Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.
 A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



All dimensions in parenthesis are for 42" high barrier.



| Structure Number | Station | Left Foundation | | | | Right Foundation | | | | Class DS Concrete (Cu. Yds.) |
|----------------------|----------|-----------------|------------------|--------|--------|---|------------------|---|---|------------------------------|
| | | Elevation Top | Elevation Bottom | B | F | Elevation Top | Elevation Bottom | B | F | |
| 5 S 057 1039 R001.00 | 154+83.5 | (1) 864.01 | (2) 842.34 | 17'-6" | 21'-8" | SEE BASE SHEET 054-F3 DRILLED SHAFT DETAILS | | | | 15.7 |
| | | | | | | | | | | |
| | | | | | | | | | | |

** TO ACCOUNT FOR FUTURE PROFILE CHANGE WITH I-39 RECONSTRUCTION, CONSTRUCT PARAPET WITH A 3'-8" HEIGHT. BASE PORTION OF PARAPET SHALL BE 1'-3" TALL (1'-9" TALL WHEN INCLUDING 6" AT THE ATTENUATOR PAD).

OS4-MED

1-20-11

| | | | |
|--------------------------|-----------------------|-----------------|-----------|
| FILE NAME = | USER NAME = oerlockjd | DESIGNED - JAL | REVISED - |
| 46179-shr-detailed.dgn | | DRAWN - | REVISED - |
| PLT SCALE = 1/8" = 1'-0" | | CHECKED - | REVISED - |
| PLT DATE = 10/27/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN STRUCTURES
 MEDIAN SUPPORT FOUNDATION DETAILS

| | | | | |
|-----------|---------|---------|--------------|--------------------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 120 |
| | | | | CONTRACT NO. 46179 |

ILLINOIS FED. AID PROJECT

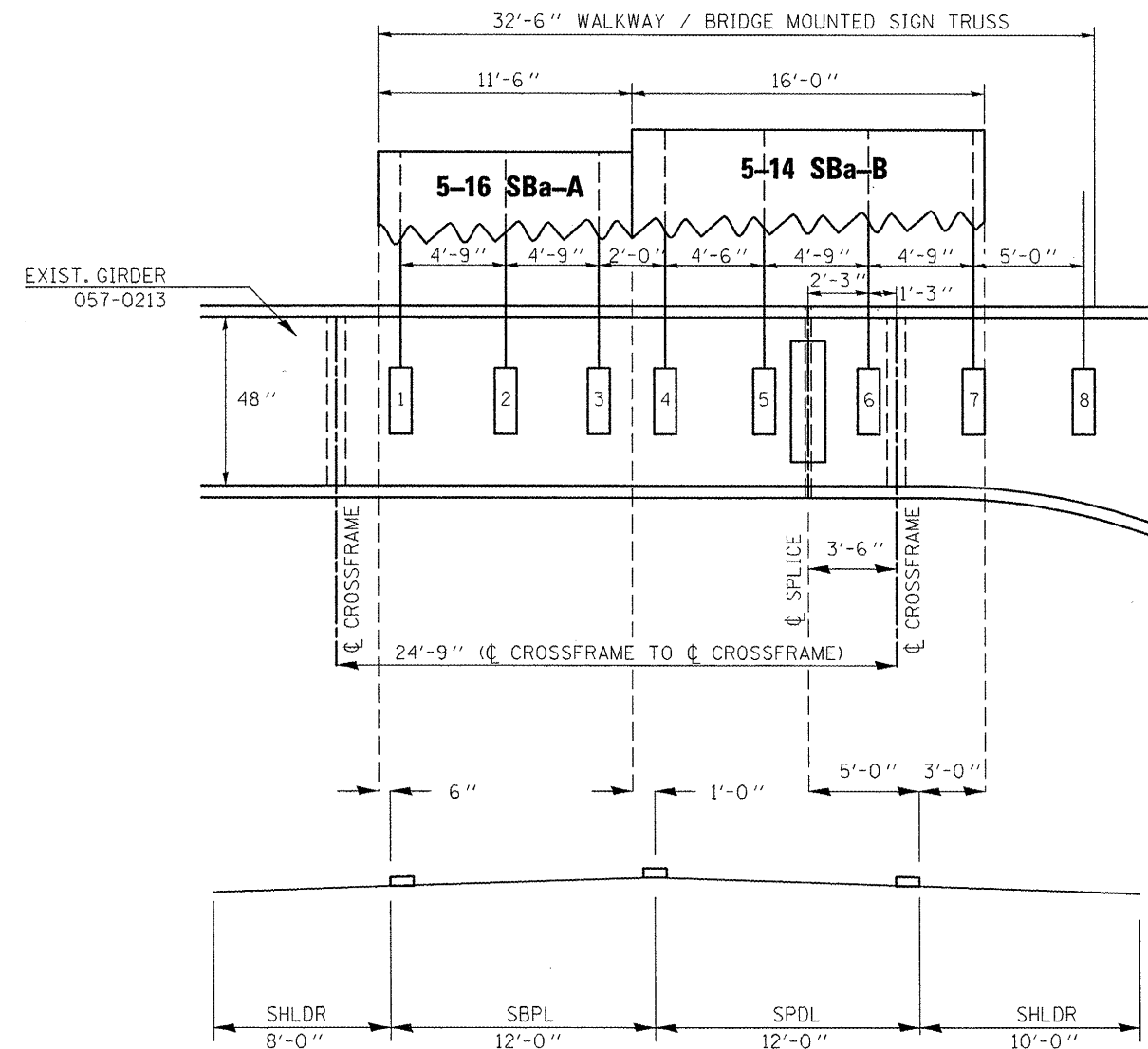
SIGN TRUSS MOUNTING DETAIL

5 B 057 I039 R001.90

NEW TRUSS BRIDGE MOUNTED TO STRUCTURE 057-0213

NOTE

For mounting accuracy, Contractor shall start by laying out the location for Bracket #6 between the splice plate and the cross-frame diaphragm. Bracket #6 shall be 2'-3" (27") from the centerline of the splice and 1'-3" (15") from the centerline of the cross-framing. All other brackets are to be laid out from Bracket #6 using the dimensions shown in the Sign Truss Mounting Detail for 5 B 057 I039 R001.90.



| | | | |
|---|------------------------|----------------|-----------|
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| PLOT SCALE = 40.0000' / in. | CHECKED - | REVISED - | REVISED - |
| PLOT DATE = 10/7/2011 | DATE = 04/26/11 | REVISED - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGN TRUSS MOUNTING DETAILS
I-39

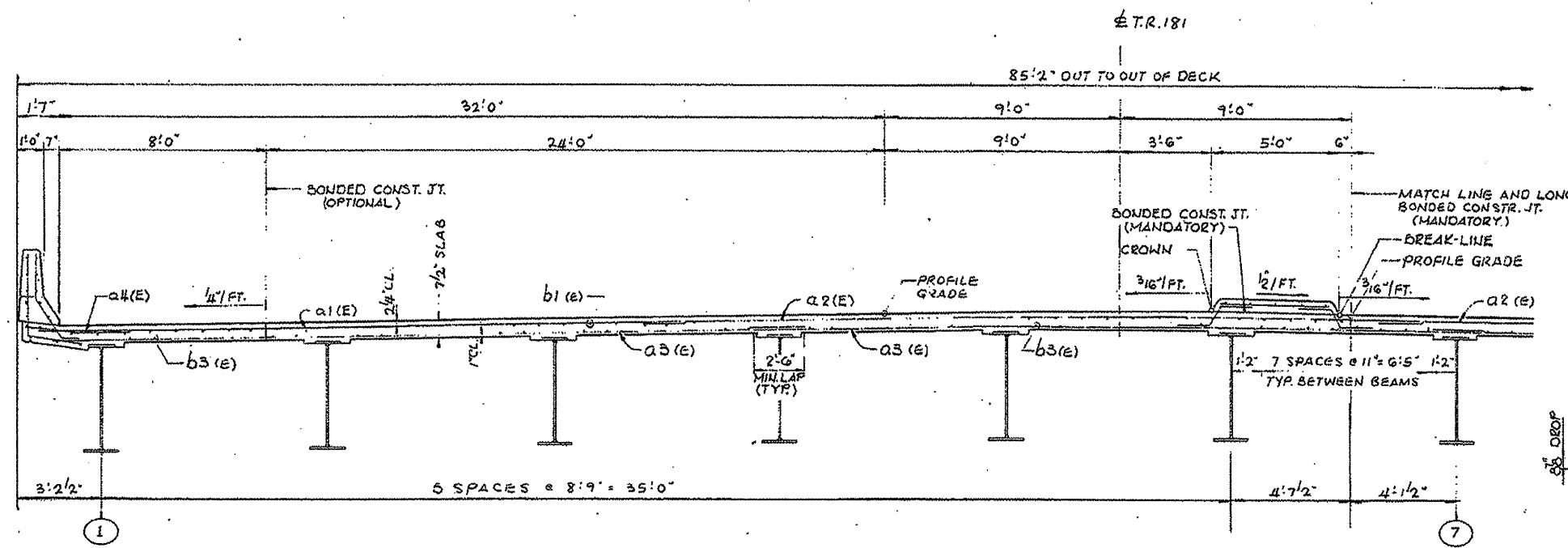
SCALE: SHEET NO. 4 OF 24 SHEETS STA. TO STA.

| | | | |
|---------------------------|---------|-------------------------------|---------------|
| •VARIOUS COUNTIES | | •D-5 OVD SIN STR REPL 2012-06 | |
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS |
| • | •• | Various | 178 |
| | | | SHEET NO. 121 |
| CONTRACT NO. 46179 | | | |
| ILLINOIS FED. AID PROJECT | | | |

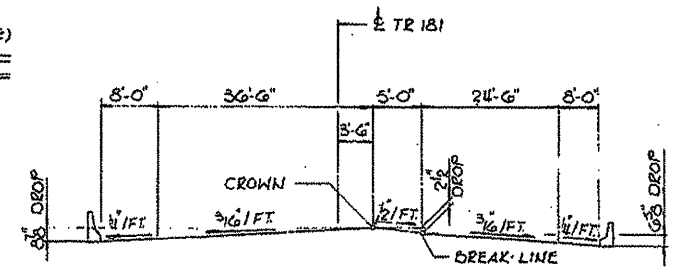
057-0213 EXISTING INFORMATION ONLY

| | | | | |
|---------------------|----------|---------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| FAP 412 | 57-2HB-1 | MCLEAN | | 22A |
| STA. | TO STA. | | | |
| F.H.W.A. REG. NO. 4 | ILLINOIS | PROJECT | | |

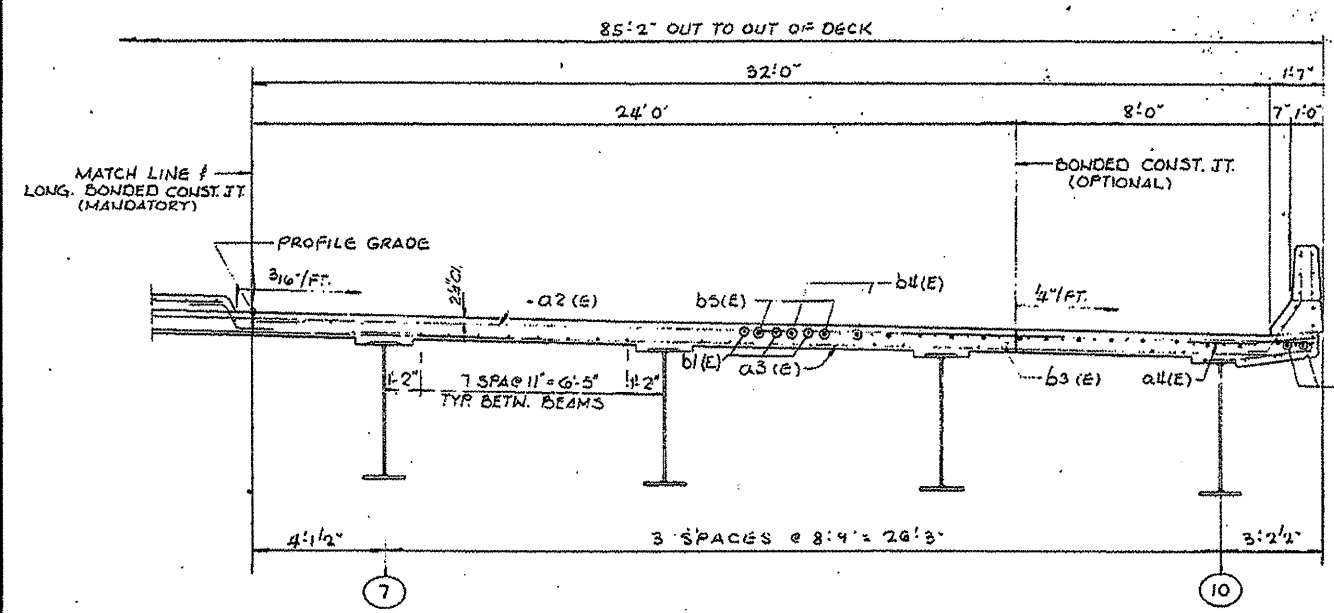
SHEET 5 OF 20



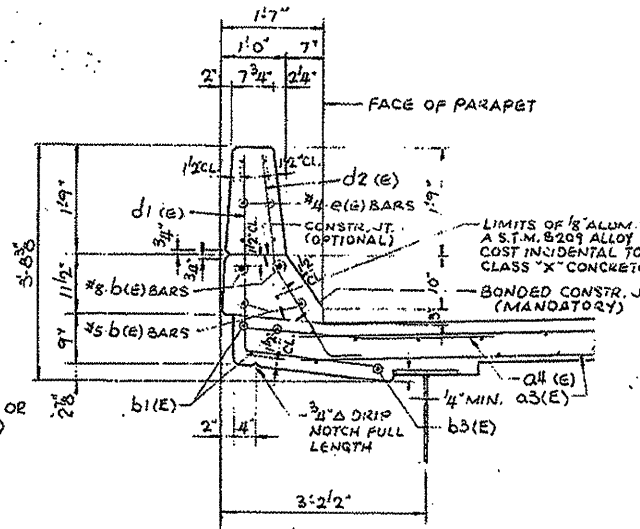
PART SECTION A-A
(MID-SPAN)



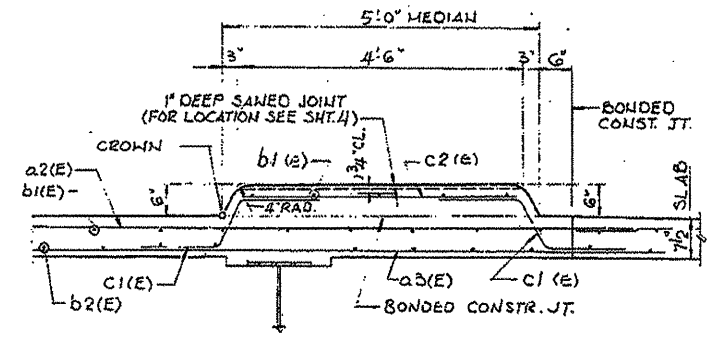
TYPICAL SCHEMATIC CROSS-SECTION
(SHOWING DECK CROSS SLOPES)



PART SECTION A-A
(FRONT WALL)



PARAPET DETAIL



MEDIAN DETAIL

DECK CROSS SECTION DETAILS

TR. 181 OVER F.A.P. ROUTE 412
 F.A.P. ROUTE 412-SEC. 57
 MCLEAN COUNTY
 STATION 178+52.88
 STRUCTURE NUMBER 057-0213

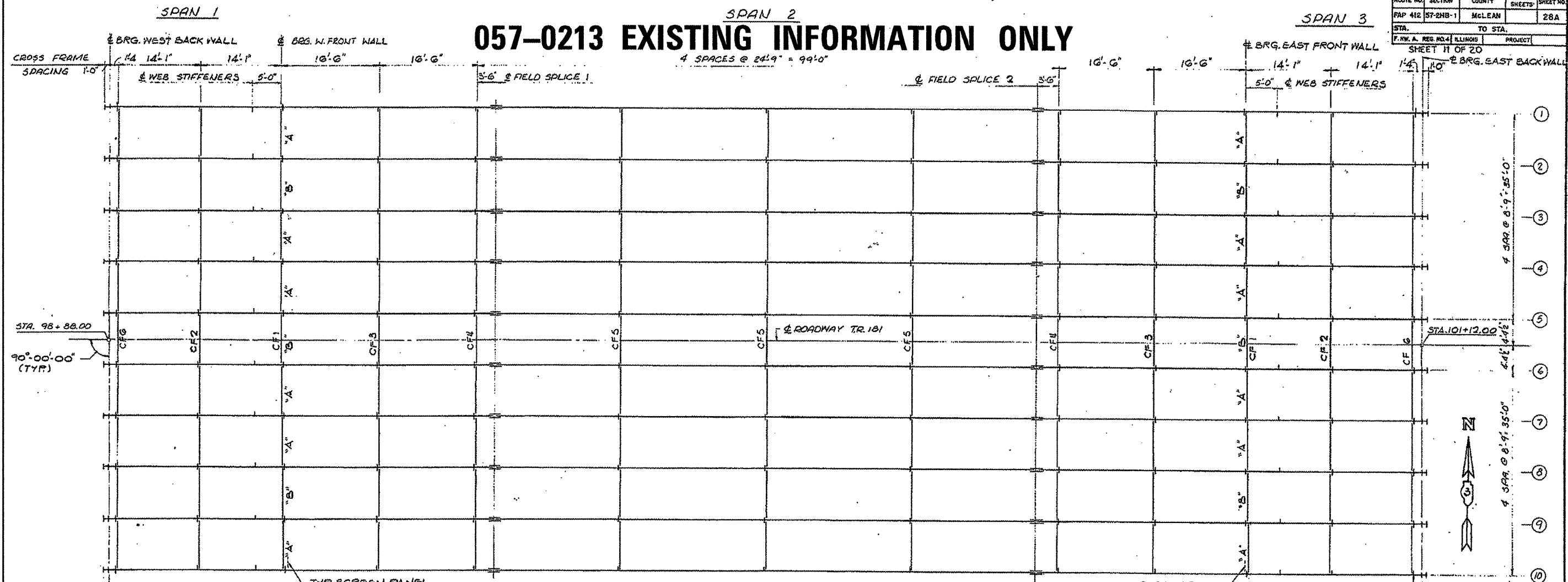


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| alpv-work\pudat\ceo-lockjd\0266557 | 46179-sht-details.dgn | DRAWN - | REVISED - | | | SCALE: | SHEET NO. 20 OF 24 SHEETS | STA. | TO STA. | Various | 178 122 |
| | PLOT SCALE = 40,0000 / in. | CHECKED - | REVISED - | | | | | | | | CONTRACT NO. 46179 |
| | PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - | | | | | | | | ILLINOIS FED. AID PROJECT |

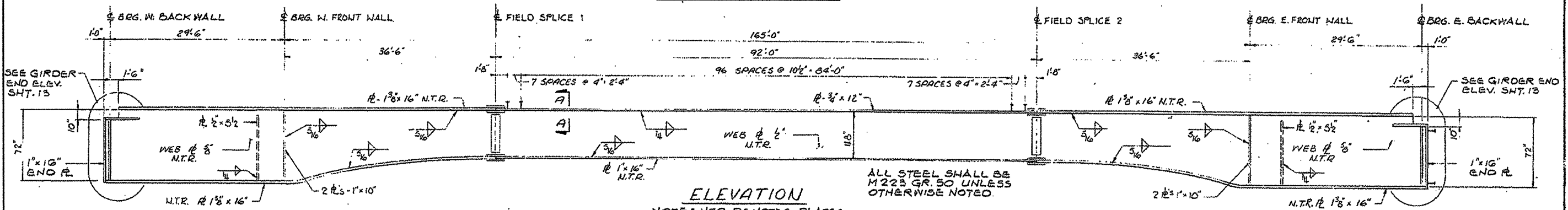
•VARIOUS COUNTIES
 •D-5 OVD SIN STR REPL 2012-06

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|----------|--------|--------------|-----------|
| FAP 412 | 57-2HB-1 | McLEAN | 178 | 123 |

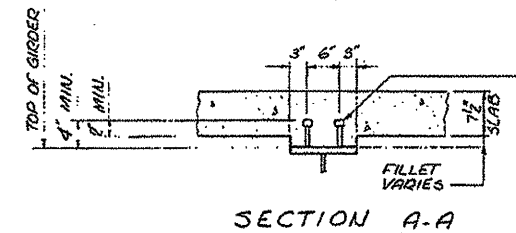
057-0213 EXISTING INFORMATION ONLY



FRAMING PLAN



ELEVATION



SECTION A-A

NOTE: N.T.R. DENOTES PLATES TO WHICH NOTCH TOUGHNESS REQUIREMENTS ARE APPLICABLE.

NOTE: FOR HAUNCH DETAILS SEE SHEET 12.

NOTE "P"
 "A" DENOTES PERMANENT SCREEN PANEL.
 "B" DENOTES ACCESSIBLE SCREEN PANEL.
 SCREEN PANELS TO BE LOCATED AT FRONT FACE OF CF1 ONLY.

FRAMING PLAN AND GIRDER ELEVATION

TR. 181 OVER FAP ROUTE 412
 F.A.P. ROUTE 412-SEC. 57-2HB-1
 McLEAN COUNTY
 STATION 178+52.88
 STRUCTURE NUMBER 057-0213



| | | | |
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| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

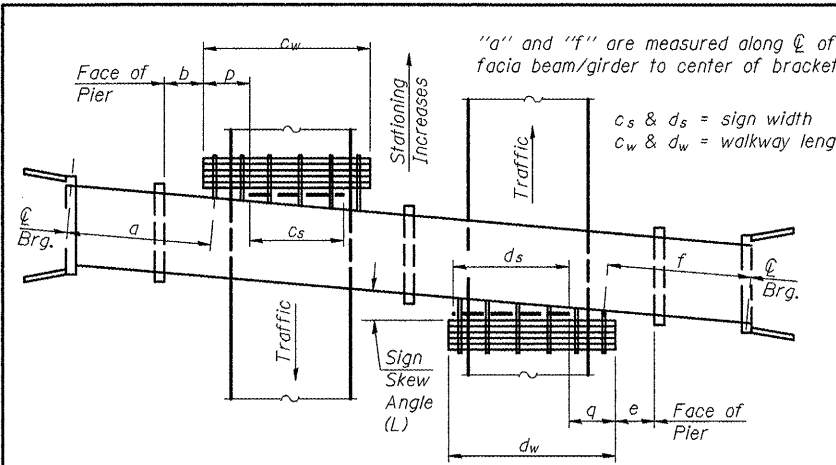
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 FOR INFORMATION ONLY

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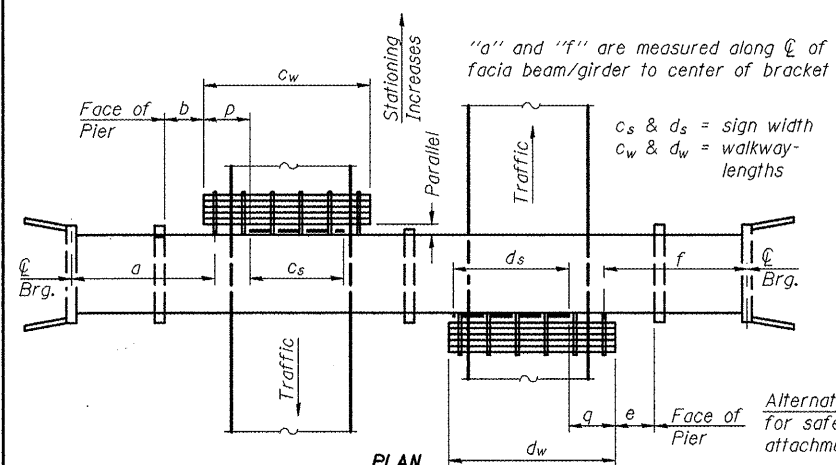
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|---------|---------|--------------------|-----------|
| | ** | Various | 178 | 123 |
| | | | CONTRACT NO. 46179 | |

•VARIOUS COUNTIES
 •D-5 OVD SIN STR REPL 2012-06

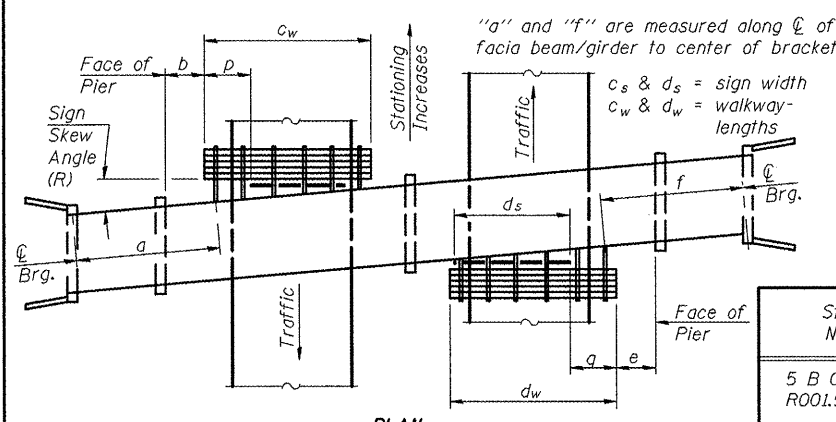
ILLINOIS FED. AID PROJECT



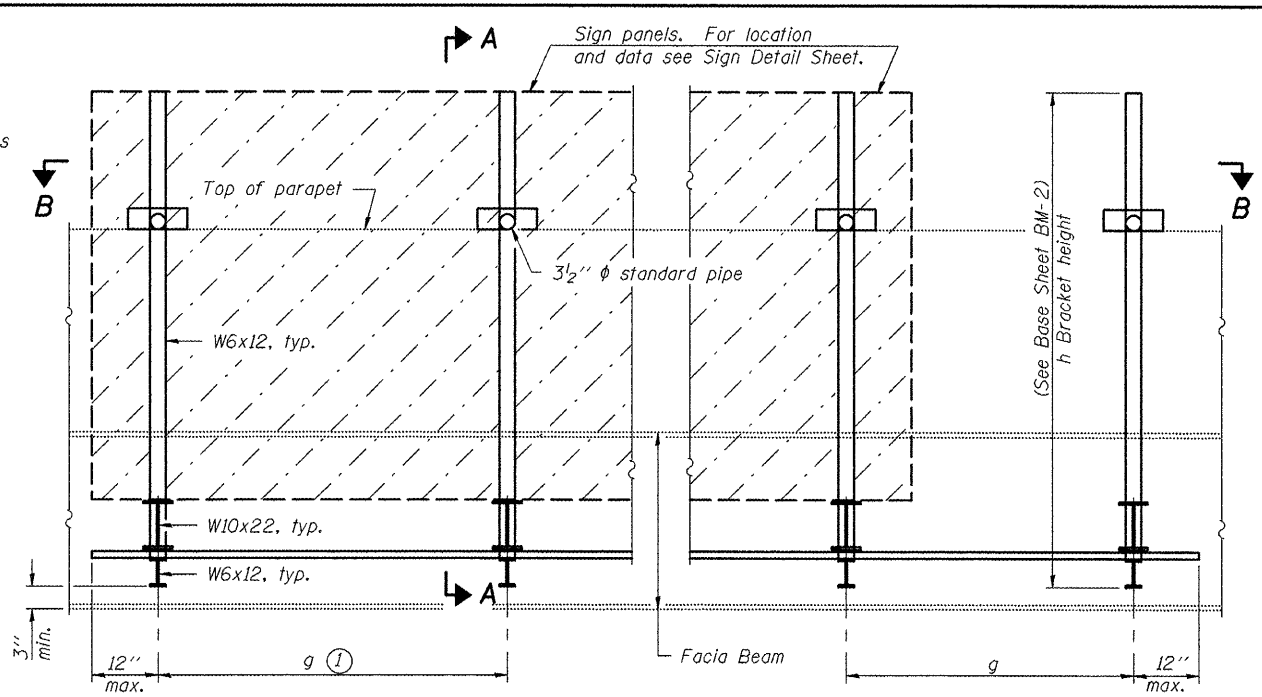
PLAN
(Left Sign Skew > 15°)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



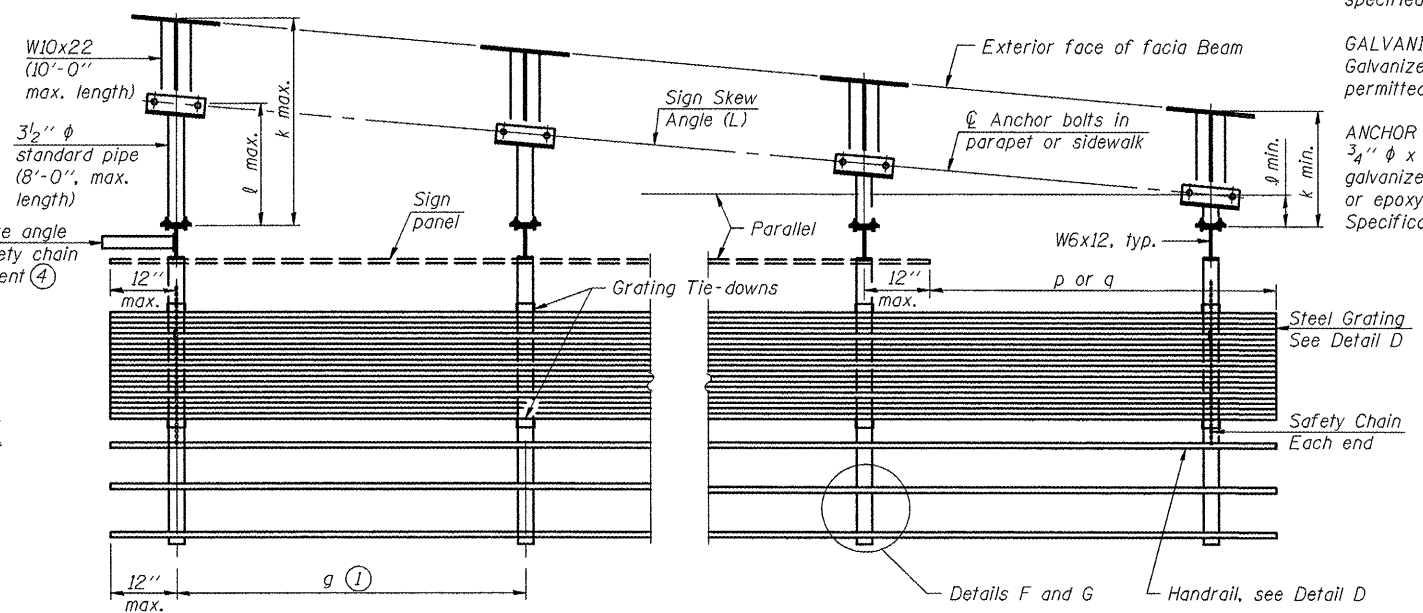
PLAN
(For Sign Skew ≤ 15°, all brackets constant)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



PLAN
(Right Sign Skew > 15°)
WALKWAY AND HANDRAIL SKETCH
(Road plan beneath structure varies.)



TYPICAL FRONT ELEVATION
(With lights, safety chain and handrail omitted for clarity.)



SECTION B-B
(Shown: Left Sign Skew > 15°)

| 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) |
|----------------------|----------------------------|----------------|-------------------------|--|---|---|----------------|----------------|----------------|----------------|---|---|---|-------------------------|---|---|---|
| 5 B 057 1039 R001.90 | 0 | 178+53 | 057-0213 | SEE SIGN TRUSS MOUNTING DETAIL SHEET 121 | | | | | | | | | | 8 | | | 32'-6" |
| | | | | | | | | | | | | | | | | | SB ONLY |
| | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | |

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.

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 ≤ 6'-0", max. Spacing shall be uniform if possible but may vary ±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 |
|--|------|

BM-1 1-20-11

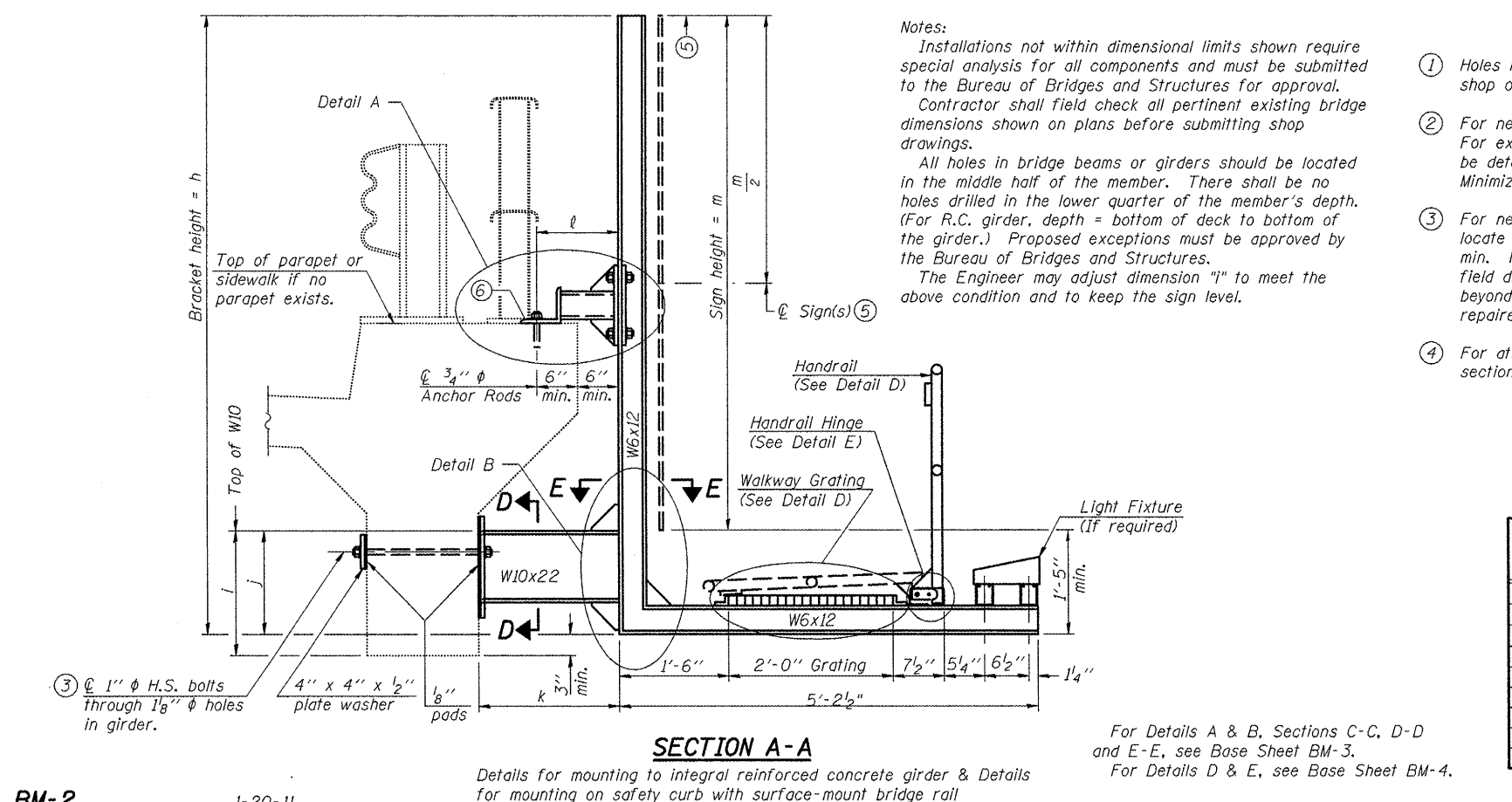
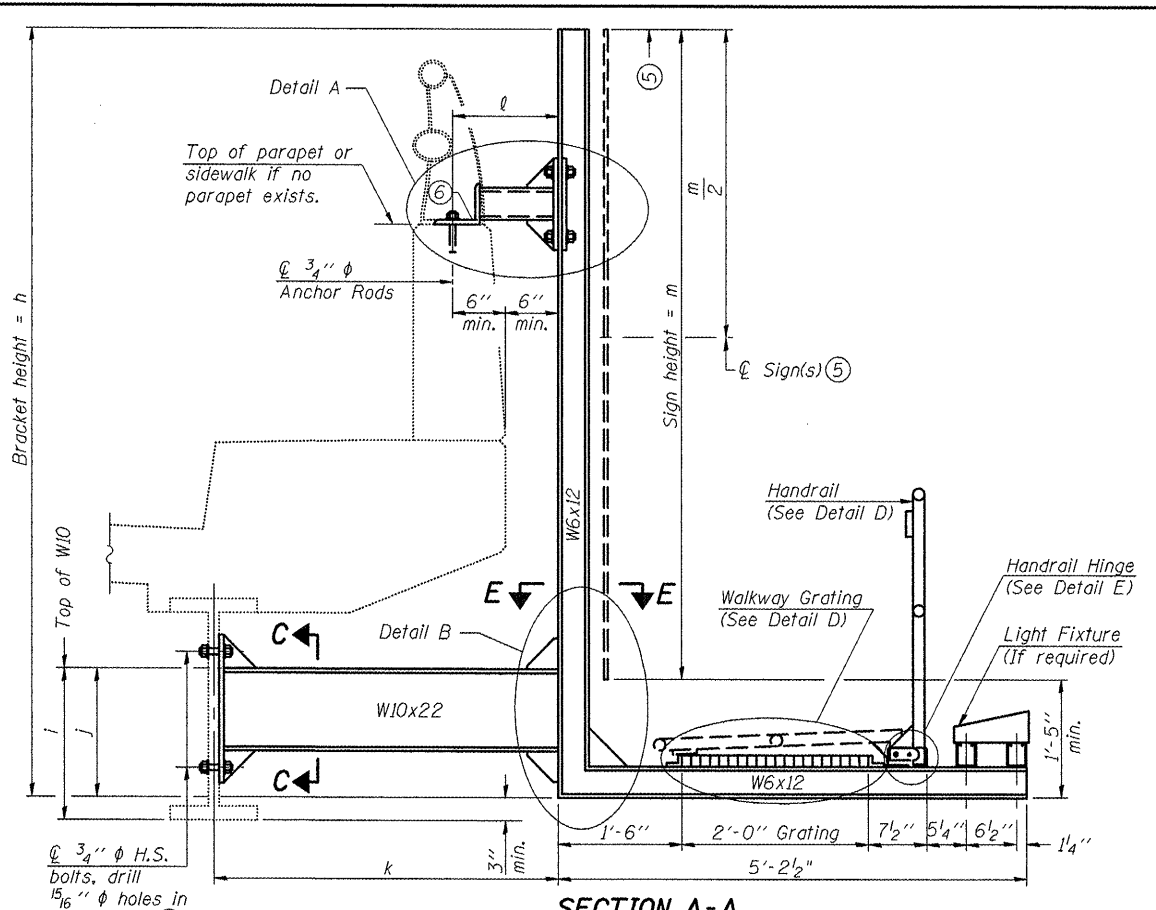
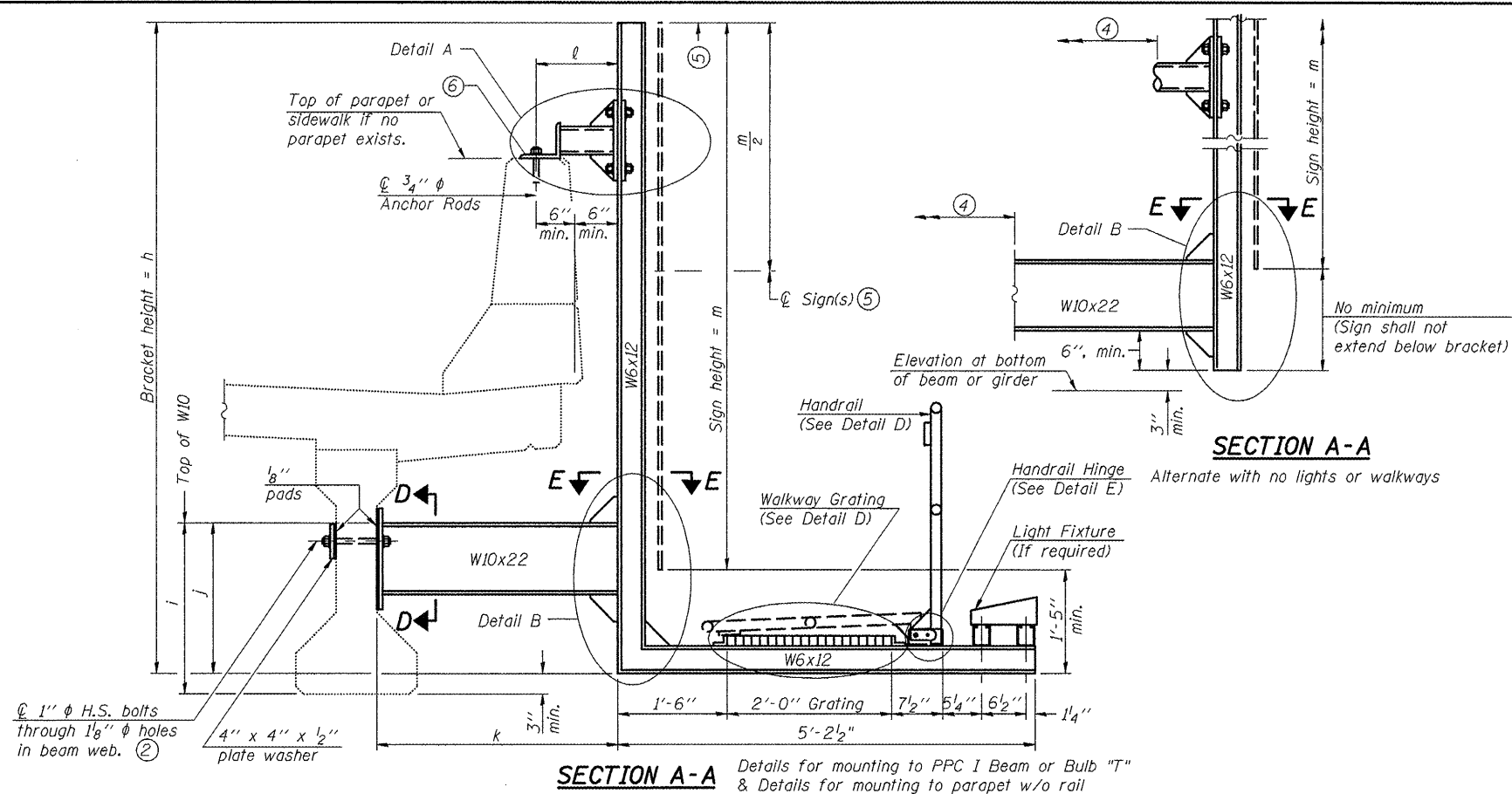
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| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE MOUNT SIGN STRUCTURES
GENERAL PLAN AND ELEVATION

SCALE: SHEET NO. 16 OF 24 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | Various | 178 | 124 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |



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.

- 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.) |
|--|---------|--------------------------|-----|-----|----------------------|---------------------|-----------------|
| 5 B 057 1039 R001.90 | 178+53 | 11'-0" & 13'-0" & 10'-0" | 30" | 24" | 4'-2 1/2" | 17 1/8" | 9'-6" & 11'-6" |
| BRACKET HEIGHT h FOR BRACKETS #1, #2, & #3= 11'-0" | | | | | | | |
| #4, #5, #6, & #7 = 13'-0" | | | | | | | |
| #8 = 10'-0" | | | | | | | |

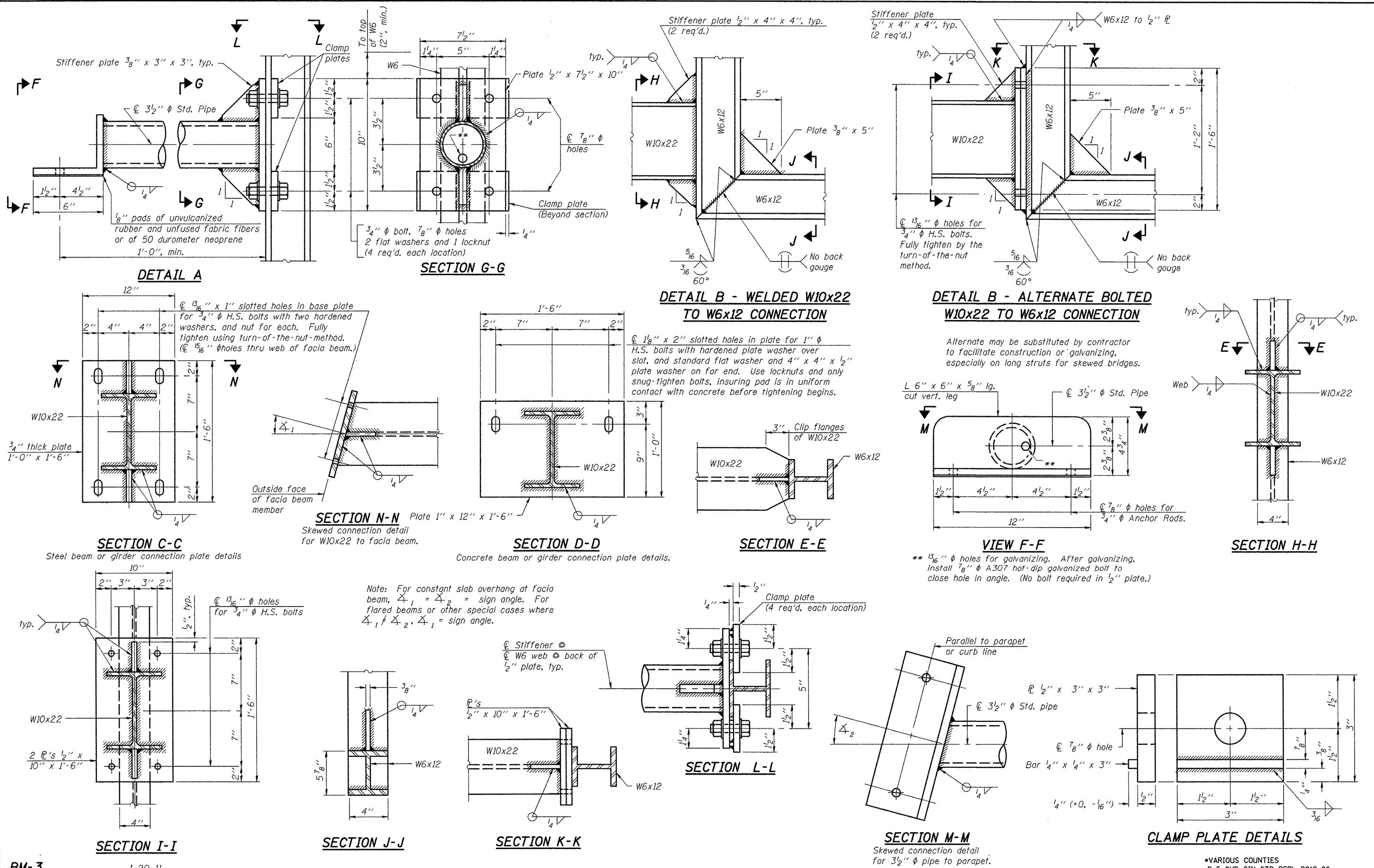
BM-2 1-20-11

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| | PLOT SCALE = 40.0000' / 1" | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

| | | |
|--|---------------------------|--------------|
| BRIDGE MOUNT SIGN STRUCTURES WALKWAY AND CONNECTION DETAILS | | |
| SCALE: | SHEET NO. 17 OF 24 SHEETS | STA. TO STA. |

| | | | |
|--|---------|---------|--------------------|
| •VARIOUS COUNTIES •D-5 OVD SIN STR REPL 2012-06 | | | |
| F.A. R.T.E. | SECTION | COUNTY | TOTAL SHEET NO. |
| | .. | Various | 178 |
| | | | CONTRACT NO. 46179 |
| ILLINOIS FED. AID PROJECT | | | |



BM-3 1-20-11

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| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

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| PLOT DATE = 10/7/2011 | |

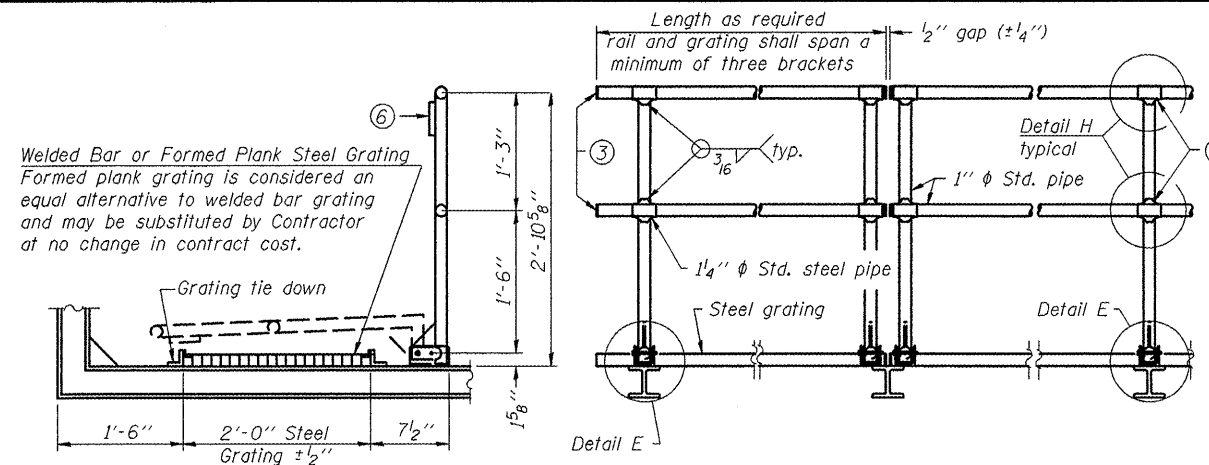
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE MOUNT SIGN STRUCTURES
CONNECTION DETAILS

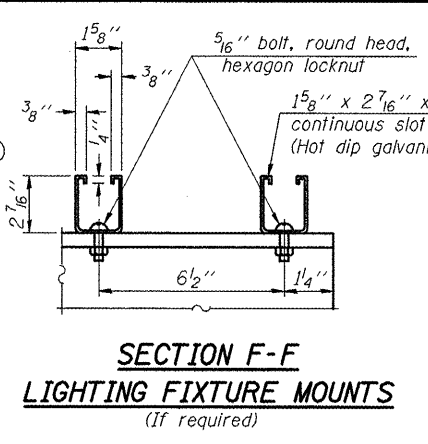
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| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 126 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

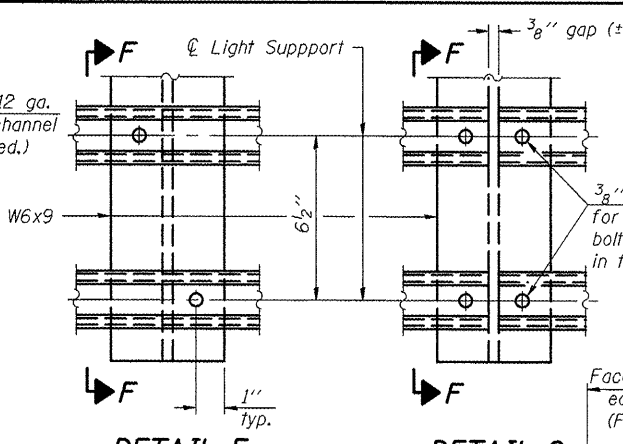
•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06



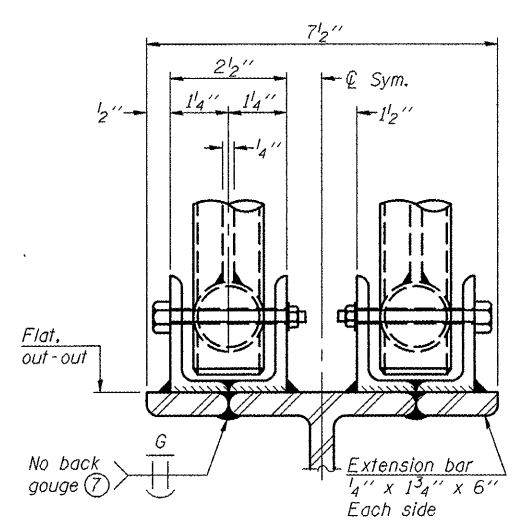
SIDE ELEVATION DETAIL D HANDRAIL FRONT ELEVATION



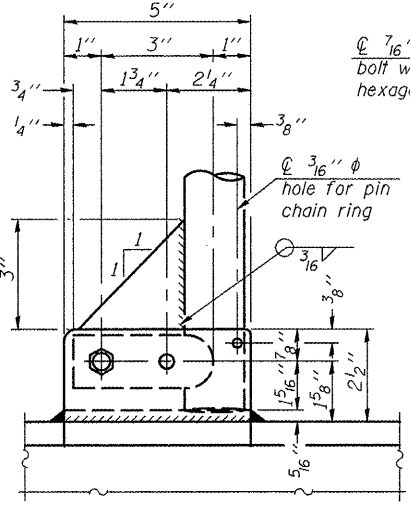
SECTION F-F LIGHTING FIXTURE MOUNTS (If required)



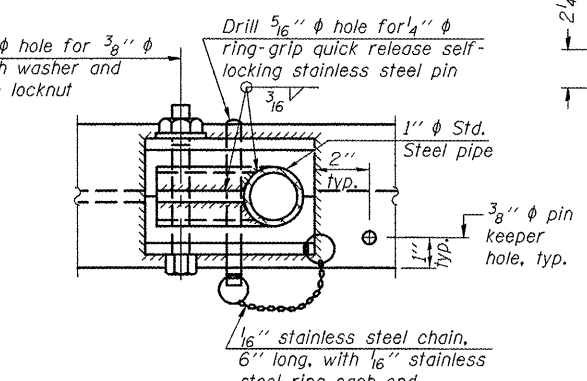
DETAIL F DETAIL G DETAIL H



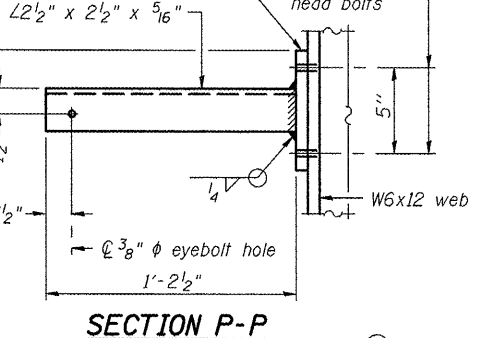
ELEVATION AT HANDRAIL JOINT
(Details not shown same as "FRONT ELEVATION")



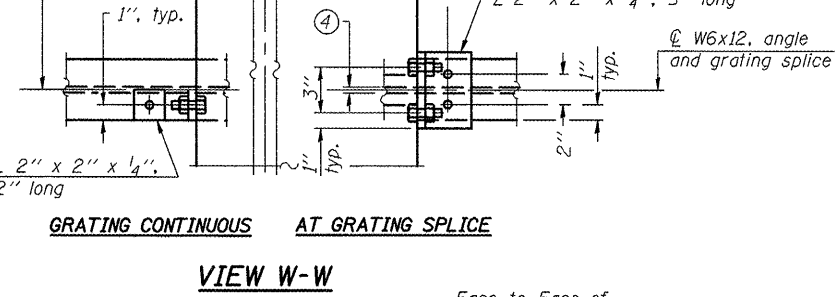
SIDE ELEVATION



PLAN AT SINGLE HANDRAIL HINGE

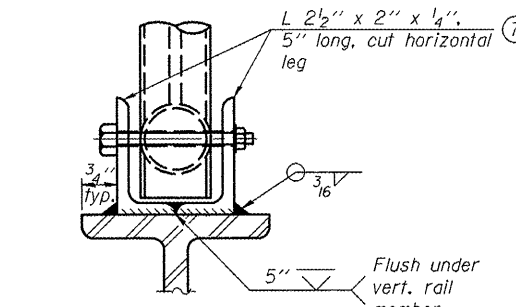


SECTION P-P

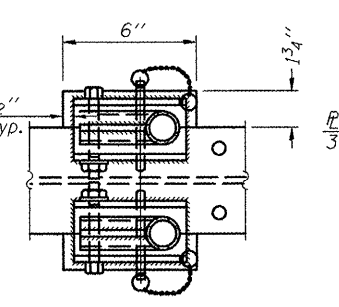


GRATING CONTINUOUS AT GRATING SPLICE

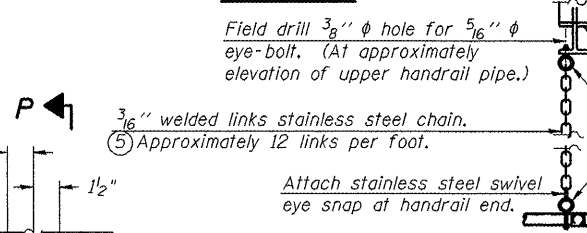
VIEW W-W



FRONT ELEVATION
(See above Elevations for dimensions.)

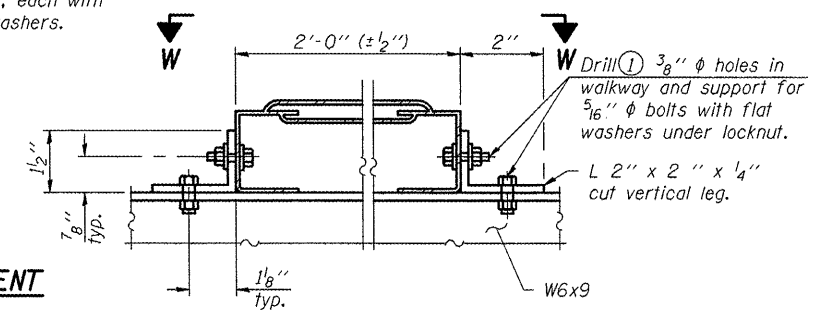


PLAN AT HANDRAIL JOINT
(For Details, see Elevations.)



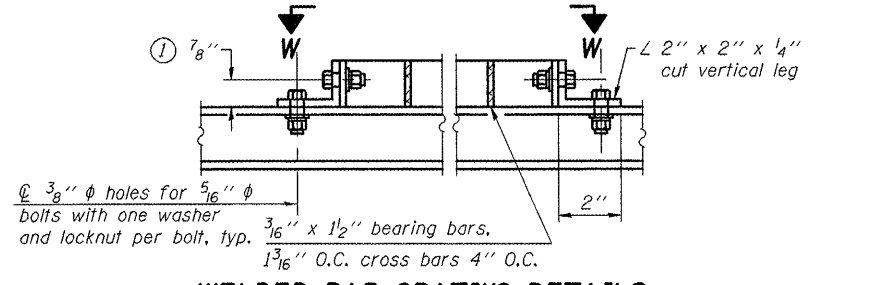
SAFETY CHAIN ATTACHMENT

SAFETY CHAIN
One (1) required for each end of each walkway.

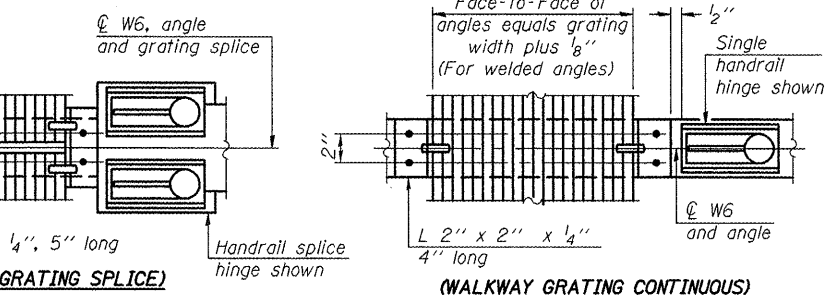


ALTERNATE FORMED PLANK GRATING DETAILS

Plank Grating: nominal depth = 2 1/2" (±1/2"); perforated or expanded steel sheet with a non-skid surface (non-serrated) concentrated load capacity = 500 lbs. with 6'-0" clear span.



WELDED BAR GRATING DETAILS



PLAN

NOTES

- Drilling holes in grating may be done in shop or field, based on Contractor's preference and subject to accurate alignment. Field drilled holes must be touched up with galvanized paint.
- Horizontal rail member shall be continuous thru 1 1/4" pipe. Provide 7/16" hole in 1 1/4" pipe for 3/8" bolt. Field drill 7/16" hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" holes on top rail at ends only.)
- Install standard force-fit end caps or weld 1/2" end plates with 1/2" c.f.w. and grind smooth. (All rail ends.)
- 3/8" (±1/4") gap between grating panels at splice.
- Chain to be type 304L stainless steel suitable for prolonged exterior exposure. Approximately 3'-6" long chain per location. Maximum sag with handrail erected = 4".
- 1/2" x 1/2" x 2" welded to handrail posts to protect locations that contact grating.
- Extrusions may be used in lieu of details shown, with approval by Engineer.
- Field cut ends of light support channels shall be free of burrs or hazardous projections and coated with zinc-rich primer or equivalent.

BM-4

1-20-11

| | |
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| FILE NAME = | USER NAME = cearlackjd |
| ci:\pwork\p\midot\cearlackjd\0226557\0246179-sht-detail.dgn | |
| PLOT SCALE = 48.0000' / 1" | |
| PLOT DATE = 10/7/2011 | |

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| DESIGNED - JAL | REVISED - |
| DRAWN - | REVISED - |
| CHECKED - | REVISED - |
| DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE MOUNT SIGN STRUCTURES
WALKWAY DETAILS

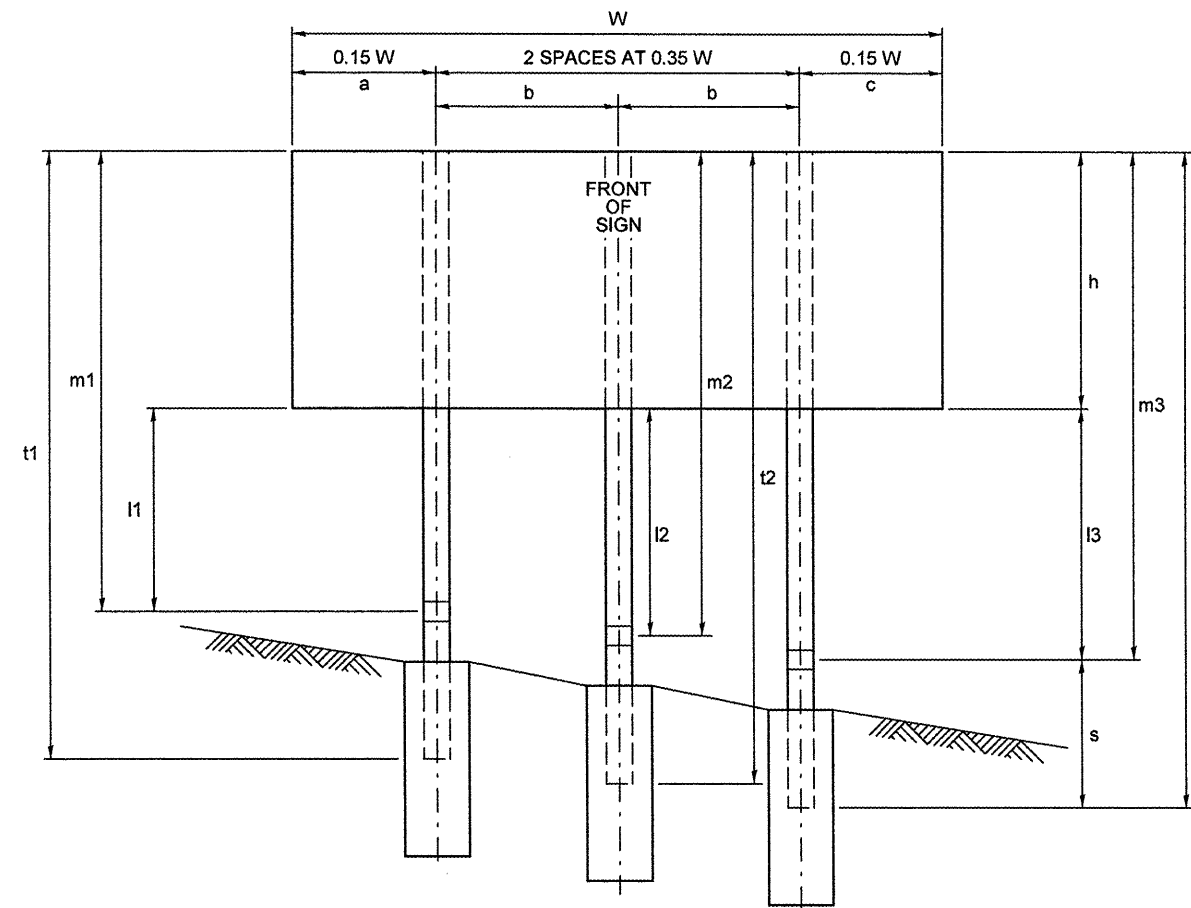
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| | | | | |
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| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | 178 | 127 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

BREAK AWAY GROUND MOUNT SIGNAGE LAYOUT MCLEAN COUNTY - I-39

| Location No. | Structure No. | Mounting OFFSET to the near edge of sign | Mounting HEIGHT to the bottom edge of sign | Sign Size W x h ft | Sign Width W ft | 0.15W a ft | 0.35W b ft | 0.35W b ft | 0.15W c ft | Clear Height CH ft | Sign Height h ft | leg 1 l1 ft | leg 2 l2 ft | leg 3 l3 ft | main post 1 m1 ft | main post 2 m2 ft | main post 3 m3 ft | stub post s ft | Total post 1 t1 ft | Total post 2 t2 ft | Total post 3 t3 ft | Post Type | Nominal wt. lbs/ft | Total Weight (both posts) lbs | Total Concrete cu. yds. |
|--------------|----------------------|---|---|--------------------|-----------------|------------|------------|------------|------------|--------------------|------------------|-------------|-------------|-------------|-------------------|-------------------|-------------------|----------------|--------------------|--------------------|--------------------|-----------|--------------------|-------------------------------|-------------------------|
| 5-16 SBb | 5 S 057 I039 R001.90 | 31 feet from white stripe / edge of pavement Straddle ditch with posts #2 & #3 | 7 feet from white stripe / edge of pavement | 20.5' x 12.0' | 20.5 | 3.0 | 7.25 | 7.25 | 3.0 | 12.0 | 12.0 | 11.0 | 12.0 | 12.0 | 23.0 | 24.0 | 24.0 | 3.5 | 26.5 | 27.5 | 27.5 | W14 x 38 | 38.0 | 3097.0 | 6.27 |
| 5-16 NB | 5 S 057 I039 R001.90 | 30 feet from white stripe / edge of pavement | 7 feet from white stripe / edge of pavement | 19.0' x 7.0' | 19.0 | 2.75 | 6.75 | 6.75 | 2.75 | 13.5 | 7.0 | 11.0 | 12.25 | 13.5 | 18.0 | 19.25 | 20.5 | 3.0 | 21.0 | 22.25 | 23.5 | W10 x 22 | 22.0 | 1468.5 | 3.54 |

| Location No. | Structure No. | Station - Proposed Location |
|--------------|----------------------|---|
| 5-16 SBb | 5 S 057 I039 R001.90 | The proposed breakaway ground mount is to be moved 220' north of the existing simple span (from Sta. 195+65 to Sta. 197+85). Proposed ground mount location is at the beginning of the ramp taper. |
| 5-16 NB | 5 S 057 I039 R001.90 | The proposed breakaway ground mount is to be moved 465' north of the existing simple span (from Sta. 195+65 to Sta. 200+30). |



CH = Clear Height = the greater of l1 or l2

| | | | |
|---|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| c:\pr-work\p1dot\ceerlockjd\0266557\046179-sh1-detailed.dgn | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

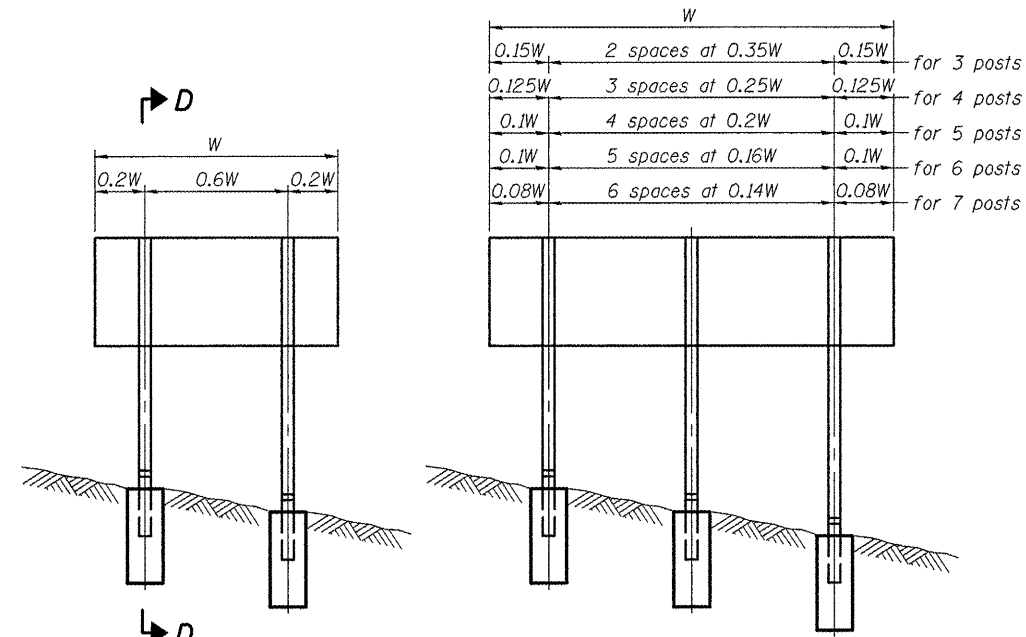
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BREAK AWAY GROUND MOUNT SIGNAGE LAYOUT
MCLEAN COUNTY - I-39**

SCALE: SHEET NO. 22 OF 24 SHEETS STA. TO STA.

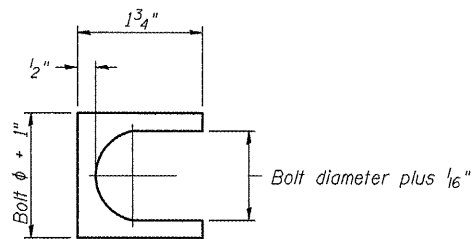
| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 128 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06



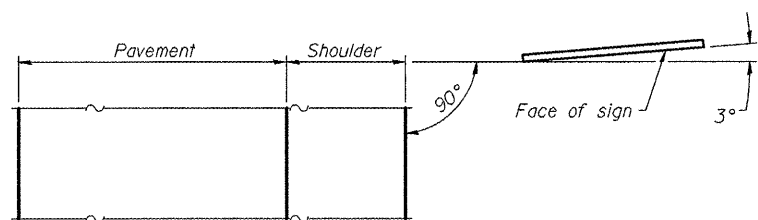
ELEVATION

| W | Spacing | Number of posts |
|--------|-------------------|-----------------|
| 0.15W | 2 spaces at 0.35W | for 3 posts |
| 0.125W | 3 spaces at 0.25W | for 4 posts |
| 0.1W | 4 spaces at 0.2W | for 5 posts |
| 0.1W | 5 spaces at 0.16W | for 6 posts |
| 0.08W | 6 spaces at 0.14W | for 7 posts |

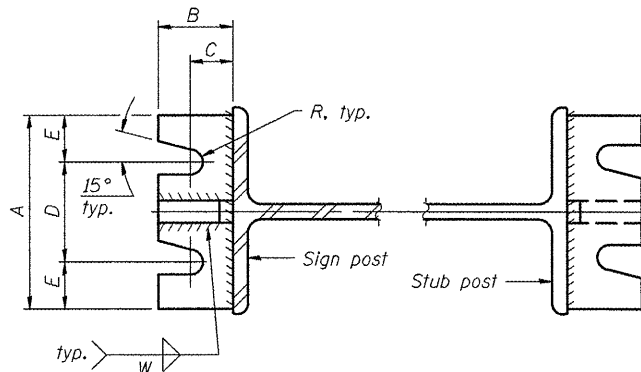


SHIM DETAIL

Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.

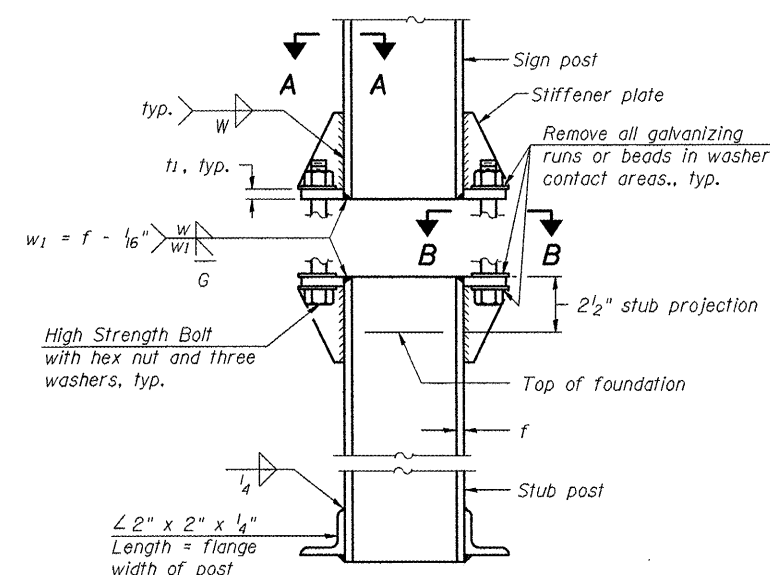


LOCATION SKETCH

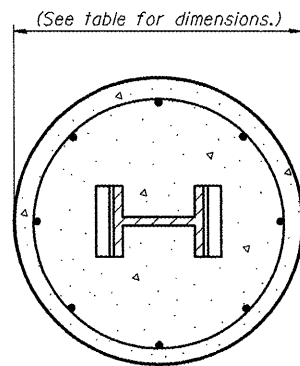


SECTION A-A

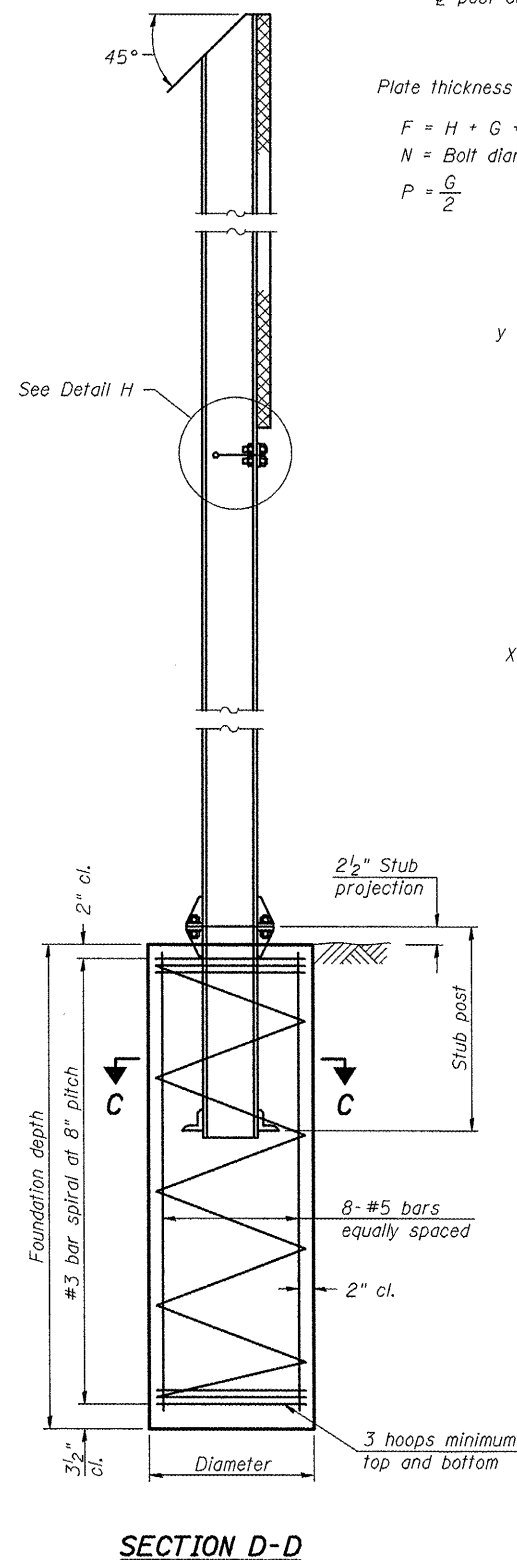
SECTION B-B



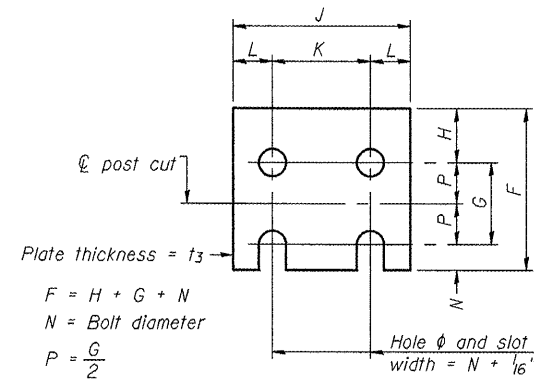
**ELEVATION
SIGN POST & STUB POST**



SECTION C-C



SECTION D-D



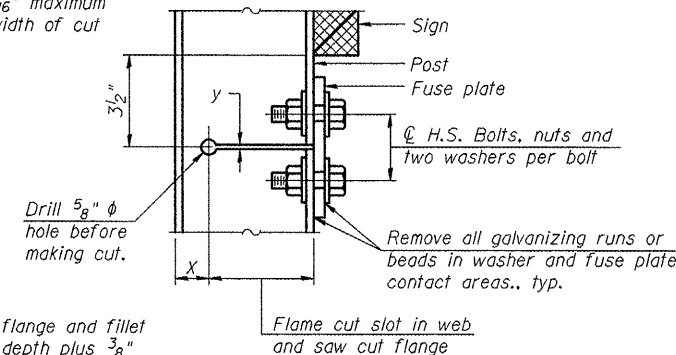
FUSE PLATE DETAIL

(Install with notches down.)

Plate thickness = t_3
 $F = H + G + N$
 $N = \text{Bolt diameter}$
 $P = \frac{G}{2}$

| FUSE PLATE DATA | | |
|-------------------|--------|--------|
| N = Bolt Diameter | G | H |
| 1/2" | 2" | 1 1/8" |
| 5/8" | 2 1/4" | 1 1/4" |
| 3/4" | 2 1/2" | 1 3/8" |
| 7/8" | 2 3/4" | 1 1/2" |
| 1" | 3" | 1 5/8" |
| 1 1/8" | 3 1/4" | 1 3/4" |
| 1 1/4" | 3 1/2" | 1 7/8" |

$y = 3/16"$ maximum width of cut



DETAIL H

Plate thickness = t_2

STIFFENER PLATE DETAIL

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
 Structural steel - 20,000 p.s.i.
 Reinforcing steel - 20,000 p.s.i.
 Concrete - 1,400 p.s.i.
 Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.

•VARIOUS COUNTIES
 •D-5 OVD SIN STR REPL 2012-06

BAW-A-1

1-20-11

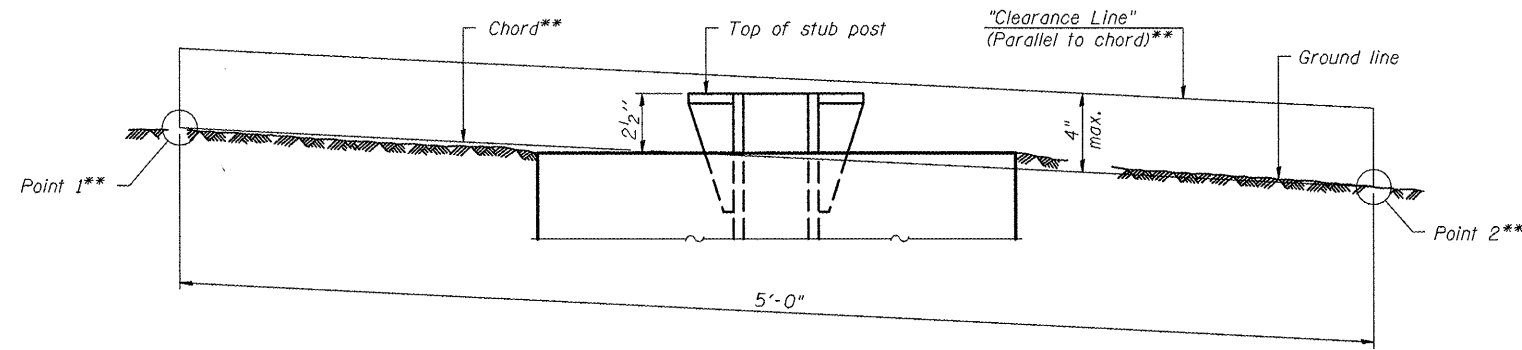
(Sheet 1 of 2)

| | | | | | | | | | | | |
|--|-------------------------|----------------|-----------|---|---|---------------------------|---------|--------------------|--------------|-----------|-----|
| FILE NAME = c:\p\work\p\pidat\cearlock\48266557\046179-sht-details.dgn | USER NAME = cearlock_jd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | BREAK-AWAY WIDE FLANGE STEEL SIGN POST DETAILS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| PLOT SCALE = 48.0000' / 1in. | CHECKED - | REVISED - | SCALE: | | | SHEET NO. 23 OF 24 SHEETS | STA. | TO STA. | Various | 178 | 129 |
| PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - | | | | | | CONTRACT NO. 46179 | | | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |

| POST | CONCRETE FOUNDATION TABLE | | | | | | | POST TO STUB POST CONNECTION DATA | | | | | | | | FUSE PLATE DATA | | | | | | |
|--------|---------------------------|-----------------|------------------------|----------------------|----------------------|--------------------|----------|-----------------------------------|---------------|--------|--------|--------|--------|--------|----------------|-----------------|--------|-------|--------|--------|--------|----------------|
| | Foundation | | | Reinforcement | | | | Stub Post Length | Bolt Size | A | B | C | D | E | t ₁ | t ₂ | R | W | J | K | L | t ₃ |
| | Diameter | * Minimum Depth | Concrete (1) cu. yds.) | Vertical Bars Length | Bar Spirals Diameter | Bar Spirals Length | lbs. (2) | | | | | | | | | | | | | | | |
| W6x9 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-3" | 5/8" x 3/4" | 6" | 2 1/4" | 1 1/4" | 3 1/2" | 1 1/4" | 3/4" | 1/2" | 1 1/2" | 1/4" | 4" | 2 1/4" | 7/8" | 1/4" |
| W6x15 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-6" | 5/8" x 3/4" | 6" | 2 1/4" | 1 1/4" | 3 1/2" | 1 1/4" | 3/4" | 1/2" | 1 1/2" | 1/4" | 6" | 3 1/2" | 1 1/4" | 3/8" |
| W8x18 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-6" | 3/4" x 3 3/4" | 6" | 2 1/2" | 1 3/8" | 3 1/4" | 1 3/8" | 1" | 1/2" | 1 3/2" | 5/16" | 5 1/4" | 2 3/4" | 1 1/4" | 3/8" |
| W10x22 | 2'-6" | 6'-6" | 1.18 | 6'-3" | 2'-2 1/2" | 105'-0" | 92 | 3'-0" | 3/4" x 3 3/4" | 6" | 2 1/2" | 1 3/8" | 3 1/4" | 1 3/8" | 1" | 1/2" | 1 3/2" | 5/16" | 5 3/4" | 2 3/4" | 1 1/2" | 1/2" |
| W10x26 | 2'-6" | 7'-0" | 1.27 | 6'-9" | 2'-2 1/2" | 112'-0" | 98 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 5 3/4" | 2 3/4" | 1 1/2" | 5/8" |
| W12x26 | 2'-6" | 7'-9" | 1.41 | 7'-6" | 2'-2 1/2" | 119'-0" | 107 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 6 1/2" | 3 1/2" | 1 1/2" | 5/8" |
| W14x30 | 3'-0" | 7'-3" | 1.90 | 7'-0" | 2'-8 1/2" | 145'-0" | 113 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 6 3/4" | 3 1/2" | 1 5/8" | 1/2" |
| W14x38 | 3'-0" | 8'-0" | 2.09 | 7'-9" | 2'-8 1/2" | 153'-0" | 122 | 3'-6" | 1" x 4 1/2" | 7 1/2" | 3" | 1 3/4" | 4" | 1 3/4" | 1 1/4" | 3/4" | 11/32" | 3/8" | 6 3/4" | 3 1/2" | 1 5/8" | 1/2" |
| W16x45 | 3'-0" | 8'-6" | 2.23 | 8'-3" | 2'-8 1/2" | 162'-0" | 130 | 3'-6" | 1" x 4 1/2" | 7 1/2" | 3" | 1 3/4" | 4" | 1 3/4" | 1 1/4" | 3/4" | 11/32" | 3/8" | 7" | 3 1/2" | 1 3/4" | 1/2" |

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

| POST | FUSE PLATE BOLT SIZE | | | | | | | | | | | | | | | | | | | | |
|--------|----------------------|---------------|---------------|---------------|-----------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | Sign Height | | | | | | | | | | | | | | | | | | | | |
| | 4'-0" | 5'-0" | 6'-0" | 7'-0" | 8'-0" | 9'-0" | 10'-0" | 11'-0" | 12'-0" | 13'-0" | 14'-0" | 15'-0" | 16'-0" | 17'-0" | 18'-0" | 19'-0" | 20'-0" | 21'-0" | 22'-0" | 23'-0" | 24'-0" |
| W6x9 | 1/2" x 1 1/2" | 1/2" x 1 1/2" | 1/2" x 1 1/2" | 1/2" x 1 1/2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W6x15 | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W8x18 | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| W10x22 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | --- | --- | --- | --- | --- | --- | --- | |
| W10x26 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | --- | --- | --- | --- | --- | --- | |
| W12x26 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | --- | --- | --- | --- | --- | --- | |
| W14x30 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | --- | --- | --- | --- | --- | |
| W14x38 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 7/8" x 2 1/2" | 7/8" x 2 1/2" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" |
| W16x45 | --- | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 7/8" x 2 1/2" | 7/8" x 2 1/2" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" | 1" x 2 3/4" |



**ELEVATION
GROUND LINE & STUB POST**

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

Note: All necessary excavation or drilling, backfilling, disposal of material, formwork, and furnishing and placing all materials including Class DS Concrete and reinforcing steel shall be included in the pay item for "Concrete Foundations".

BAW-A-2

1-20-11

(Sheet 2 of 2)

| | | | | | | | | | | | | |
|---|------------------------|-----------------|-----------|---|--|--------------------|---------------------------|---------|--------------|---------------------------|--|--|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | BREAK-AWAY WIDE FLANGE STEEL SIGN POST TABLES | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | | |
| c:\pwwork\pwwork\ceerlockjd\0266557\0266557.dwg | 46179-shd-details.dgn | DRAWN - | REVISED - | | | • | ** | Various | 178 | 130 | | |
| PLOT SCALE = 40,0000' / in. | | CHECKED - | REVISED - | | | CONTRACT NO. 46179 | | | | | | |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - | | | SCALE: | SHEET NO. 24 OF 24 SHEETS | STA. | TO STA. | ILLINOIS FED. AID PROJECT | | |
| *VARIOUS COUNTIES **D-5 OVD SIN STR REPL 2012-06 | | | | | | | | | | | | |

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|--------------------------|---------|--------|--------------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 73P-42 | * | MCLEAN | 33 | 26 |
| SHEET NO. 1 SHEETS 10 | | | | |

GENERAL NOTES

SPECIFICATIONS:
DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals - dated January, 1985
CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, (dated July 1, 1988), Supplemental Specifications for Road and Bridge Construction, Standard Specifications for Traffic Control Items (dated Feb. 1, 1984) and Special Provisions.

MINIMUM CLEARANCE: Vertical Roadway Clearance = 17'-3" (All Obstructions)

LOADING~80 MPH WIND VELOCITY PLUS 30% GUST FACTOR.
WIND LOADING: 35 psf normal to Sign Panel Area as shown below in Wind Loading Diagram plus 48 psf normal to exposed frame members for Structures #1 thru #7. For Structures #8 and #9 see Wind Loading Diagram 'B' for Structure #10 See Wind Load Diagram 'C'.
WALKWAY LOADING: Dead Load plus 500# concentrated Live Load

MATERIALS:
REINFORCEMENT BARS shall conform to the requirements of AASHTO M31, M42 or M53, Grade 60.
CLASS X CONCRETE shall be used throughout.
STRUCTURAL STEEL All material for structural chords, verticals, horizontals or chord splices shall conform to either ASTM A500, Grade C, AASHTO M222 or AASHTO M223, Grade 50 and shall meet the longitudinal CVN requirements of 15 ft lbs. at 40° F.
Posts, columns and column braces shall conform to AASHTO M222 or M223, Grade 50, and shall meet the longitudinal CVN requirements of 15 ft lbs. at 40° F. (including all base flanges and connection flanges.)
HIGH STRENGTH BOLTS shall conform to the requirements of AASHTO M164.
STRUCTURAL SHAPES and PLATES shall conform to the requirements of AASHTO M223, Grade 50, or M222, unless otherwise specified.

PAINTING: The zinc-silicate and vinyl paint system shall be used for shop and field painting of all structural steel. Exterior surfaces of all structural steel that are painted with the high-build vinyl paint shall receive one coat of vinyl enamel. Paint system, including field coat, for the walkway gratings may be done in the shop or just prior to erection. Chords and verticals will require painting on exterior surfaces only.

WELDING: All welding shall be in accordance with Article 507.04(s) of the Standard Specifications for Road and Bridge Construction, and as per ANSI/AASHTO/AWS D1.5-88

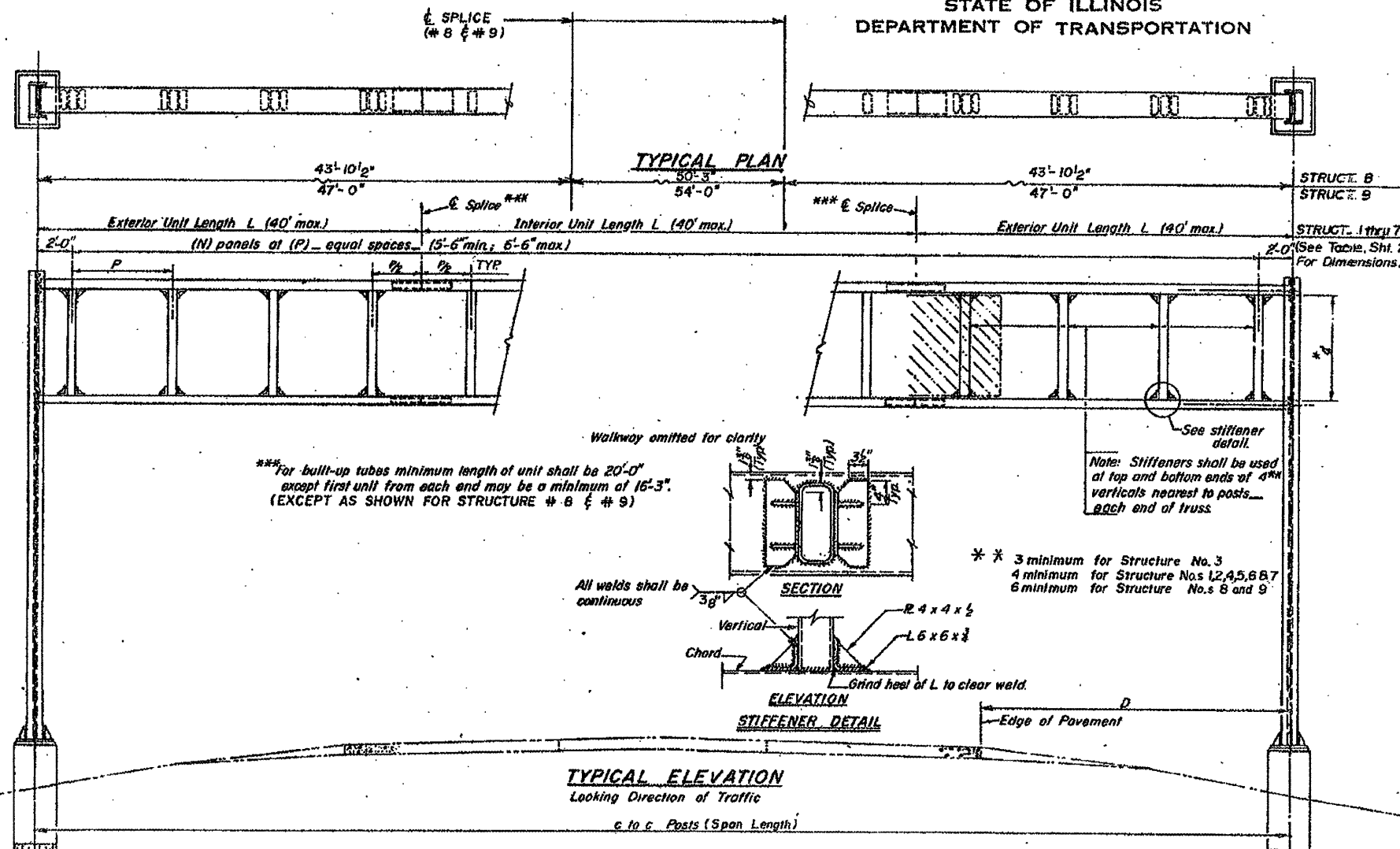
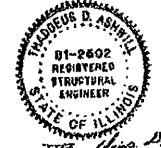
TOTAL BILL OF MATERIAL

| | | |
|---|----------|--------|
| OVERHEAD SIGN STRUCTURE - SPAN (SPECIAL) | Lin. Ft. | 997.42 |
| OVERHEAD SIGN STRUCTURE WALKWAY - TYPE S | Lin. Ft. | 614.0 |
| DRILLED SHAFT CONCRETE FOUNDATIONS | Cu. Yds. | 163.4 |
| CLASS X CONCRETE | Cu. Yds. | 63.4 |
| STRUCTURE EXCAVATION | Cu. Yds. | 125 |
| REINFORCEMENT BARS | Lbs. | 15,570 |
| CONCRETE PILES | L.F. | 420 |
| TEST PILES - CONCRETE | EA | 2 |
| OVERHEAD SIGN STRUCTURE - TRUSS (SPECIAL) | Lin. Ft. | 163 |

OVERHEAD SIGN STRUCTURES GENERAL PLAN & ELEVATION

F.A.P. ROUTE 412 / F.A.I. ROUTE 55
MCLEAN COUNTY

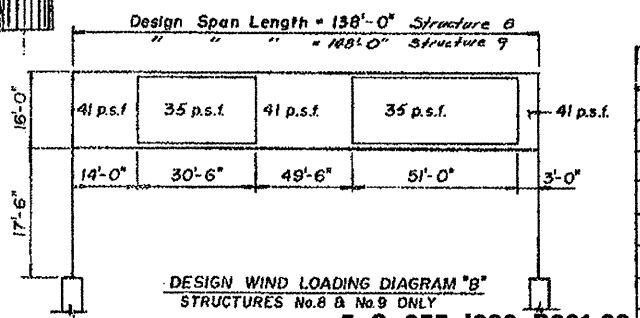
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06



*** For built-up tubes minimum length of unit shall be 20'-0" except first unit from each end may be a minimum of 16'-3" (EXCEPT AS SHOWN FOR STRUCTURE # 8 & # 9)

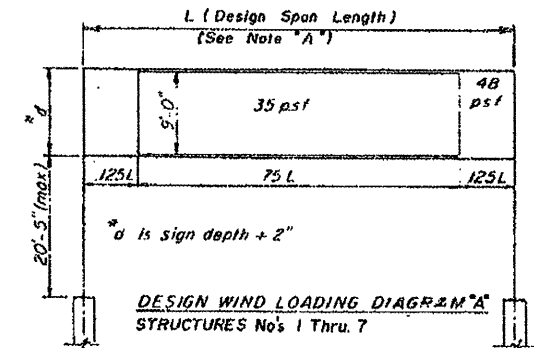
Note: Stiffeners shall be used at top and bottom ends of verticals nearest to posts - each end of truss

* * 3 minimum for Structure No. 3
4 minimum for Structure Nos. 1, 2, 4, 5, 6, 7
6 minimum for Structure Nos. 8 and 9



DESIGN WIND LOADING DIAGRAM "B"
STRUCTURES No. 8 & No. 9 ONLY

| Structure No. | Station | c to c Posts | Elev. A | Dim. D |
|---------------|----------------------|--------------|---------|--------|
| 1 | 261+81.25 (EA I-55) | 110'-1" | 852.14 | 42'-1" |
| 2 | 262+100.00 (EA I-55) | 110'-1" | 852.14 | 42'-1" |
| 3 | 282+100.00 (EA I-55) | 85'-3" | 844.57 | 17'-3" |
| 4 | 312+00.00 (EA I-55) | 98'-0" | 804.82 | 42'-0" |
| 5 | 338+40.00 (EA I-55) | 98'-0" | 796.50 | 42'-0" |
| 6 | 364+80.00 (EA I-55) | 98'-0" | 791.80 | 42'-0" |
| 7 | 237+20.00 (EA I-55) | 112'-0" | 841.64 | 18'-3" |
| 8 | 152+89.00 (EAP 412) | 138'-0" | 866.25 | 18'-0" |
| 9 | 194+20.00 (EAP 412) | 148'-0" | 826.02 | 13'-0" |



NOTE "A": DESIGN SPAN LENGTHS HAVE BEEN MODIFIED AS REQUIRED TO PROVIDE ACTUAL WIND LOADINGS AS PER DIAGRAM ABOVE

| | |
|----------|----------|
| DESIGNED | EXAMINED |
| CHECKED | PASSED |
| DRAWN | APPROVED |
| CHECKED | |

5 S 057 1039 R001.00
5 S 057 1039 R001.90

OS-S-1 SPECIAL

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ca:\pwwork\pwwork\ceerlockjd\0266957.dgn | 46179-shr-details.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000 / 1 in. | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS
FOR INFORMATION ONLY

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
|--------|---------------------|--------------|

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| . | ** | Various | 178 | 131 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

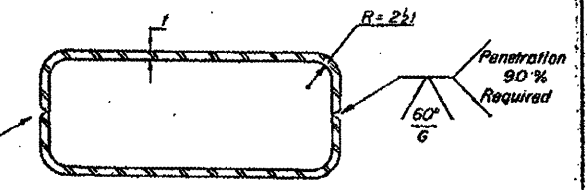
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|------------|------|-------|-----------|
| DESIGNER | DATE | SCALE | SHEET NO. |
| M. C. LEAN | 03 | 27 | 2 |

SHEET NO 2
SHEETS 10

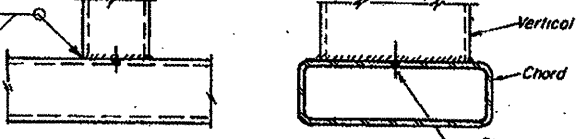
M67-ESG, 57-35G

| Design Span | Comber of Centerline | Chord | Vertical | Post | C-C Chords |
|-------------|----------------------|------------------------|-----------------------|---------|------------|
| 0 to 70' | 4" | TS14x6x $\frac{3}{8}$ | TS10x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 71 to 80' | 4" | TS14x6x $\frac{3}{8}$ | TS10x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 81 to 90' | 6" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 91 to 100' | 6" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 101 to 110' | 6" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 111 to 124' | 6" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | *d+6" |
| 138' | 8" | TS20x12x $\frac{1}{2}$ | TS16x8x $\frac{3}{8}$ | W27x178 | *d+12" |
| 148' | 8" | TS20x12x $\frac{1}{2}$ | TS16x8x $\frac{3}{8}$ | W27x178 | *d+12" |

*d is sign depth + 2"

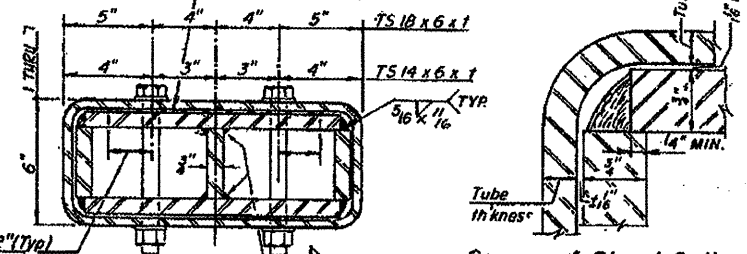


ALTERNATE BUILT-UP TUBE
Width, depth and thickness shall be as indicated for TS members indicated in table.

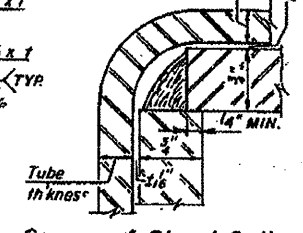


TYPICAL CONNECTION
Chord to Vertical
See also, Sheet OS-S-1 SPECIAL

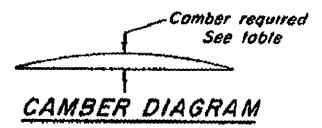
Provide $\frac{1}{8}$ " and $\frac{1}{4}$ " thick shim plates each side of each joint for maximum clearance each side. 10" x 1-4" long for TS14x6x $\frac{3}{8}$ 12" x 1-4" long for TS18x6x $\frac{3}{8}$



SECTION THRU SPLICE
SEE NOTE A, SHT. 1

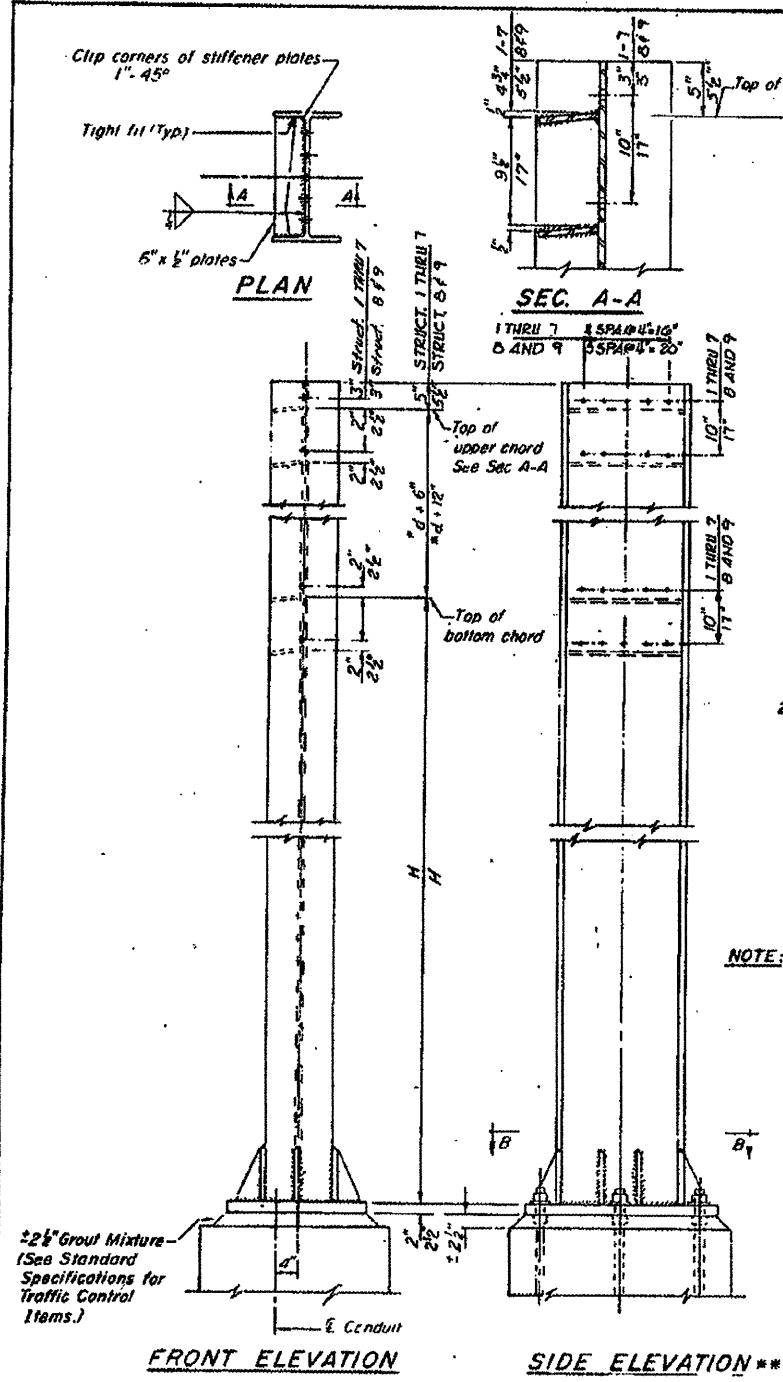


Corner of Chord Splice



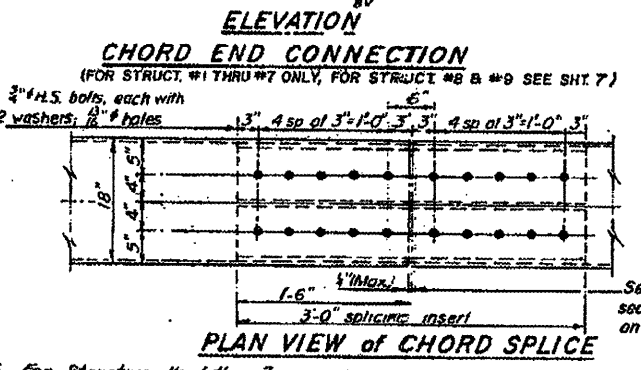
CAMBER DIAGRAM
Camber required See table

| Structure No | Station | Span | *d | Comber at E | Exterior Unit Lgth (L) | Interior Unit Lgth (L) | No. of Panels (N) | Panel Lgth (P) | Chord Size | Vertical Size | Post Size | L.H. Post Dim H | R.H. Post Dim H |
|--------------|--------------------|---------|--------|-------------|-------------------------|-------------------------|-------------------|-----------------------|------------------------|-----------------------|-----------|-----------------|-----------------|
| 1 | 261+81.25 (FAI-55) | 110'-1" | 14'-8" | 6" | 36'-3 $\frac{1}{2}$ " | 37'-6" | 19 | 5'-7" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 20'-1" | 20'-1" |
| 2 | 262+00.0 (FAI-55) | 110'-1" | 12'-8" | 6" | 36'-3 $\frac{1}{2}$ " | 37'-6" | 19 | 5'-7" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 20'-1" | 15'-4" |
| 3 | 282+00.0 (FAI-55) | 85'-3" | 12'-2" | 6" | 28'-1 $\frac{1}{2}$ " | 29'-0" | 13 | 6'-3" | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 20'-1" | 20'-1" |
| 4 | 312+00.0 (FAI-55) | 98'-0" | 12'-8" | 6" | 32'-3 $\frac{3}{4}$ " | 33'-4 $\frac{1}{2}$ " | 16 | 5'-10 $\frac{1}{2}$ " | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 19'-3" | 19'-3" |
| 5 | 338+40.0 (FAI-55) | 98'-0" | 12'-8" | 6" | 32'-3 $\frac{3}{4}$ " | 33'-4 $\frac{1}{2}$ " | 16 | 5'-10 $\frac{1}{2}$ " | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 20'-2" | 21'-0" |
| 6 | 364+80.0 (FAI-55) | 98'-0" | 12'-8" | 6" | 32'-3 $\frac{3}{4}$ " | 33'-4 $\frac{1}{2}$ " | 16 | 5'-10 $\frac{1}{2}$ " | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 20'-4" | 20'-4" |
| 7 | 237+20.0 (FAI-55) | 112'-0" | 12'-8" | 6" | 37'-9" | 36'-6" | 20 | 5'-4 $\frac{3}{4}$ " | TS18x6x $\frac{3}{8}$ | TS14x6x $\frac{3}{8}$ | W24x104 | 18'-0" | 18'-0" |
| 8 | 152+89.0 (EAP-412) | 138'-0" | 12'-8" | 8" | (SEE ELEVATION SHEET 1) | (SEE ELEVATION SHEET 1) | 24 | 5'-7" | TS20x12x $\frac{1}{2}$ | TS16x8x $\frac{3}{8}$ | W27x178 | 19'-5" | 19'-5" |
| 9 | 194+20.0 (EAP-412) | 148'-0" | 14'-8" | 8" | (SEE ELEVATION SHEET 1) | (SEE ELEVATION SHEET 1) | 24 | 6'-0" | TS20x12x $\frac{1}{2}$ | TS16x8x $\frac{3}{8}$ | W27x178 | 20'-2" | 20'-2" |

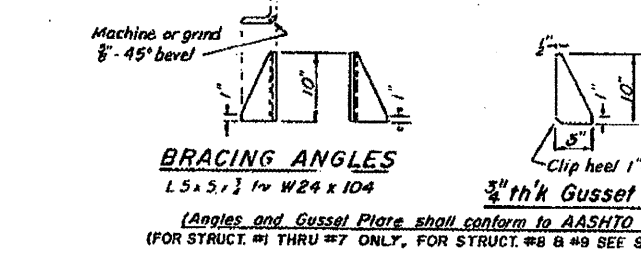


POST
W24x104
OR
W27x178 (STRUCTURE # 8 & # 9)

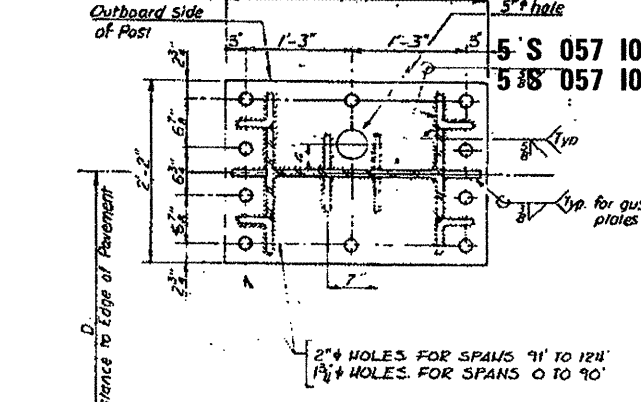
** DETAILS FOR STRUCTURES 1 THRU 7 SHOWN; 8 AND 9 ARE SIMILAR EXCEPT AS NOTED.



PLAN VIEW OF CHORD SPLICE
NOTE: For Structure No. 1 thru 7, For Structure No. 8, 9 & 10 See Sht. No. 6.



BRACING ANGLES
L5x5x $\frac{1}{2}$ for W24x104
(Angles and Gusset Plate shall conform to AASHTO M-183) (FOR STRUCT. #1 THRU #7 ONLY, FOR STRUCT. #8 & #9 SEE SHT. 1)



SEC. B-B
DETAIL SHOWN IS FOR STRUCTURES #1 THRU #7 ONLY (FOR STRUCTURES #8 AND #9 SEE SECTION F-F SHT. 7)

| | | |
|----------|----------|--|
| DESIGNED | EXAMINED | 19 |
| CHECKED | PASSED | ENGINEER OF BRIDGE DESIGN |
| DRAWN | APPROVED | ENGINEER OF BRIDGE AND TRAFFIC CONTROL |
| CHECKED | | DIRECTOR OF HIGHWAYS |

OS-S-2 SPECIAL

OVERHEAD SIGN STRUCTURES
POST and CHORD DETAILS

F.A.P. ROUTE 412 / F.A.I. ROUTE 55

McLEAN COUNTY

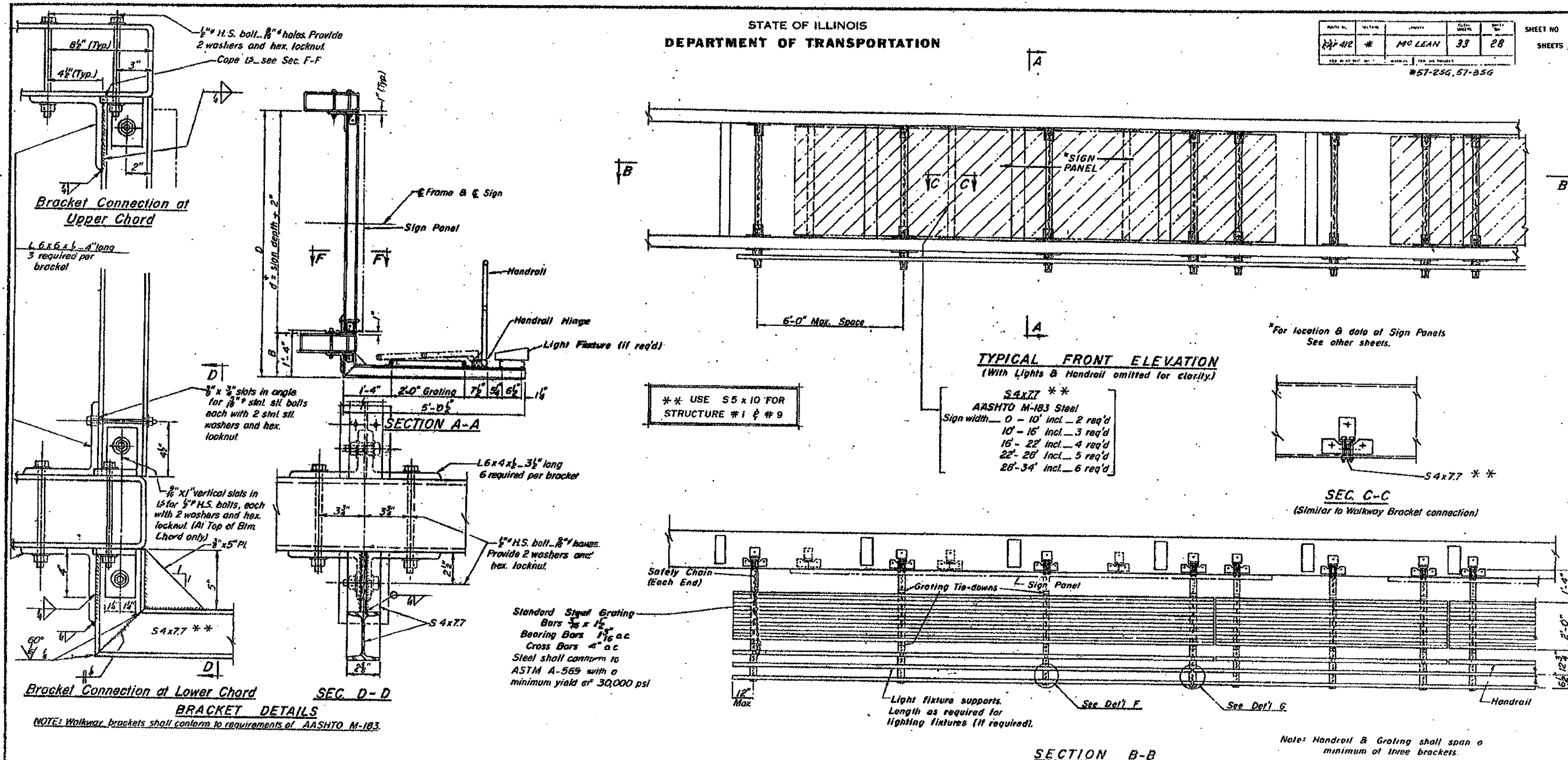
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | |
|--|------------------------|-----------------|-----------|------------------------------|----------------------|---------------------|--------------|---------|--------------|---------------------------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS | AS-BUILTS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | TOTAL SHEET NO. |
| os:\pwr\work\pilot\ceerlockjd\0266557\046179-sht-details.dgn | | DRAWN - | REVISED - | DEPARTMENT OF TRANSPORTATION | FOR INFORMATION ONLY | | ** | Various | 178 | 132 |
| PLOT SCALE = 40.0000' / in. | | CHECKED - | REVISED - | | | SCALE: | | | | CONTRACT NO. 46179 |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - | | | SHEET NO. OF SHEETS | STA. TO STA. | | | ILLINOIS FED. AID PROJECT |

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|-----------------|-----|-----------|-----------|
| DATE | BY | PROJECT | SHEET NO. |
| 2/1/12 | JAL | MCLEAN 33 | 28 |
| SHEETS 10 | | | |
| *57-256, 57-256 | | | |



BRACKET DETAILS
 NOTE: Walkway brackets shall conform to requirements of AASHTO M-183.

| Structure Number | Station | E | D | W |
|------------------|-------------------------|-------|---------|--------|
| 1 | 261+81.25 (E.A. I-55) | 1'-2" | 15'-11" | 14'-8" |
| 2 | 262+00.00 (E.A. I-55) | 1'-3" | 13'-11" | 12'-8" |
| 3 | 282+00.00 (E.A. I-55) | 1'-3" | 13'-5" | 12'-2" |
| 4 | 312+00.00 (E.A. I-55) | 1'-3" | 13'-11" | 12'-8" |
| 5 | 338+40.00 (E.A. I-55) | 1'-3" | 13'-11" | 12'-8" |
| 6 | 364+80.00 (E.A. I-55) | 1'-3" | 13'-11" | 12'-8" |
| 7 | 237+20.00 (E.A. I-55) | 1'-3" | 13'-11" | 12'-8" |
| 8 | 152+89.00 (E.A. P. 412) | 1'-3" | 14'-5" | 12'-8" |
| 9 | 194+20.00 (E.A. P. 412) | 1'-3" | 16'-5" | 14'-8" |
| 10 | 126+43.90 (E.A. P. 412) | 1'-3" | 116'-5" | 12'-8" |

*d = sign depth + 2"

**OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS**

F.A.P. ROUTE 412 / F.A.I. ROUTE 55
MCLEAN COUNTY

*VARIOUS COUNTIES
*AD-5 OVD. SIGN STR. REPL. 2012-06

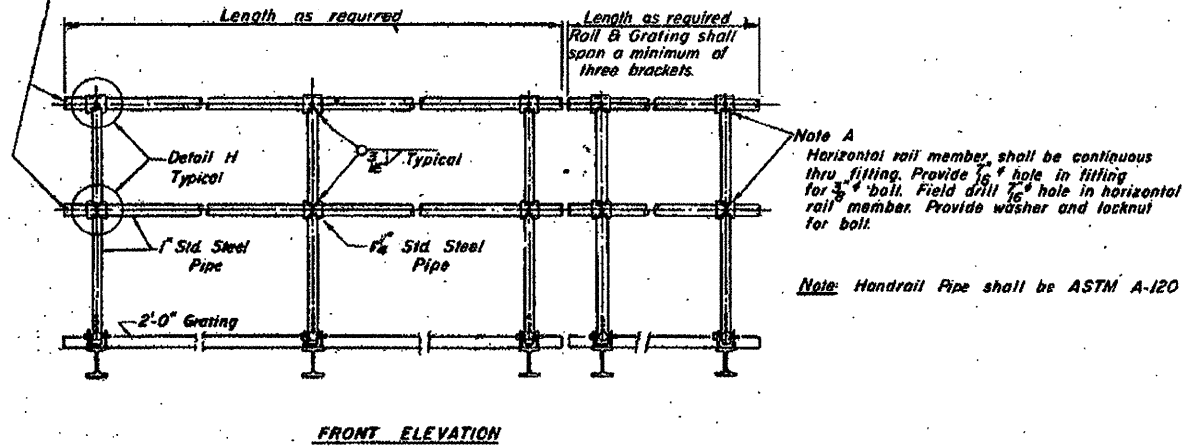
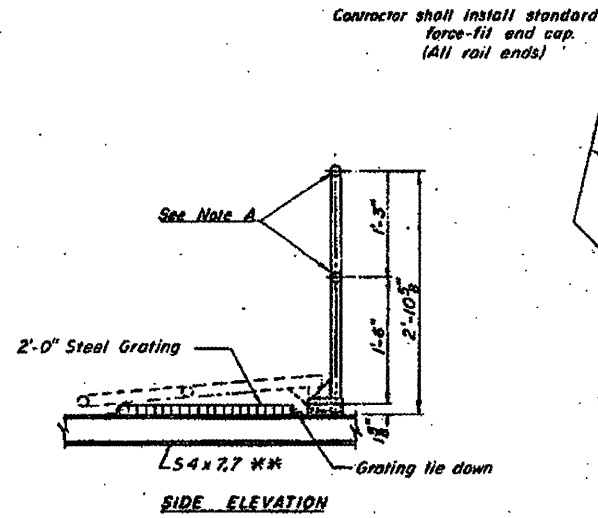
DESIGNED: 5 S 057 1039 R001.00
 CHECKED: 5 S 057 1039 R001.90
 DRAWN: Wm. M. Best
 APPROVED: 5 S 057 1039 R000.50
 DIRECTOR OF HIGHWAYS

OS-S-3-SPECIAL

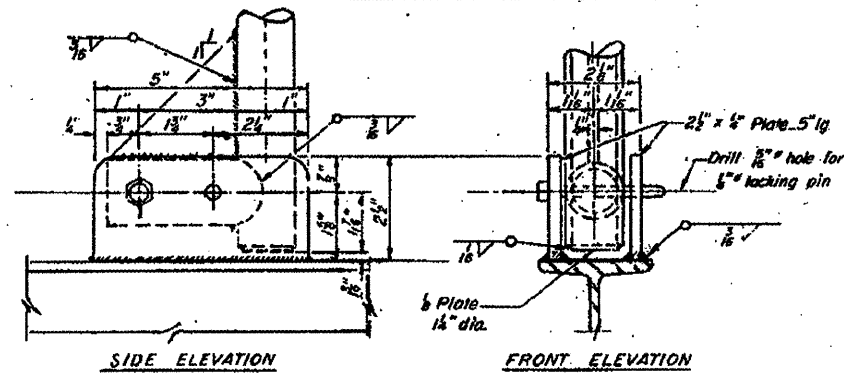
EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

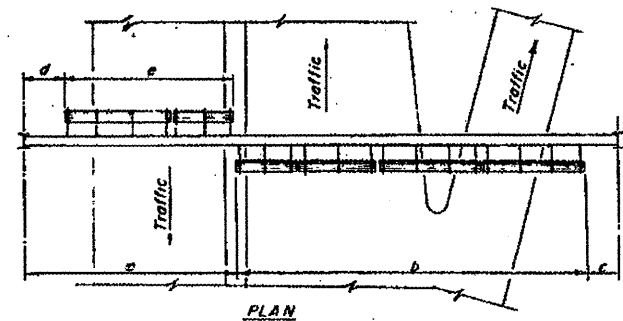
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|--------------------------|---------|--------|--------------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 122-0-112 | * | MCLEAN | 33 | 29 |
| SHEET NO. 4 SHEETS 10 | | | | |



TYPICAL HANDRAIL DETAIL

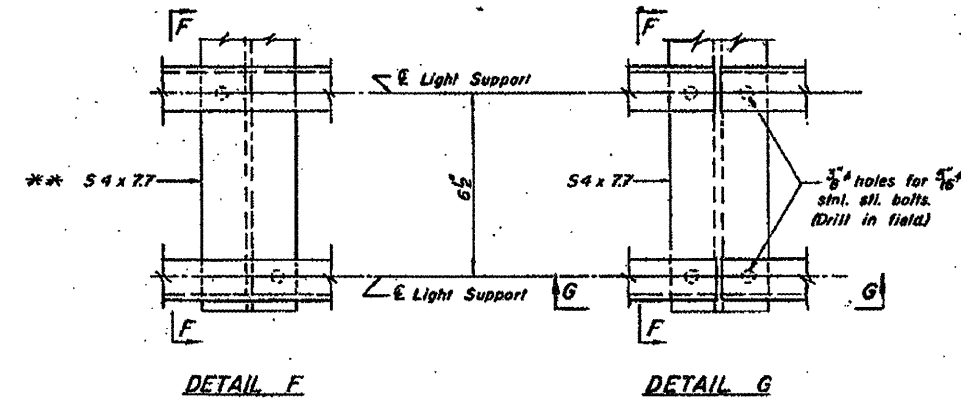
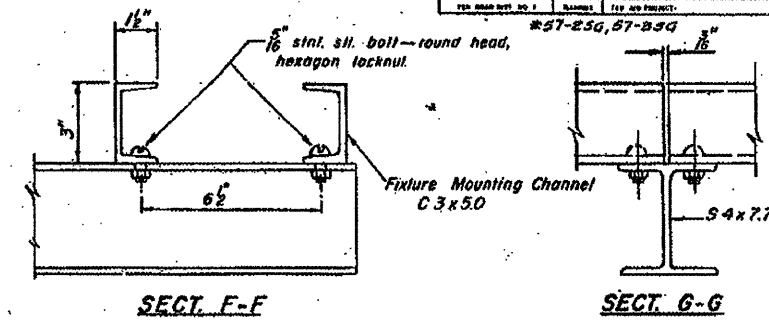


GRATING TIE DOWN
2 Req'd per Walkway Bracket

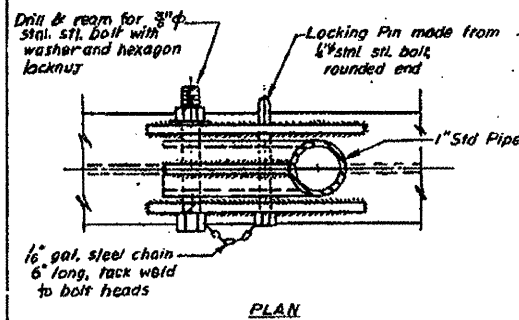


WALKWAY AND HANDRAIL SKETCH

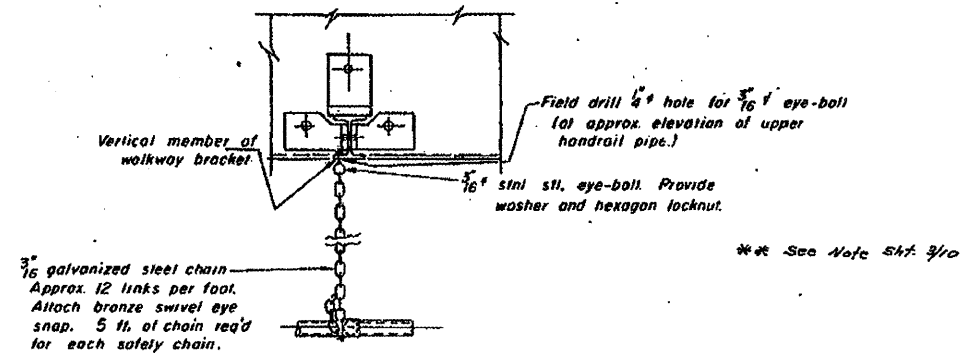
Note - Road Plan shown beneath truss just typical.



LIGHTING FIXTURE MOUNTS (IF REQ'D.)

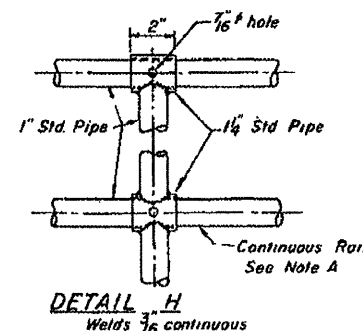


DETAILS OF HANDRAIL HINGE



SAFETY CHAIN
One (1) required for each end of each walkway.

Note: All bolts, nuts, and washers shall be stainless steel, conforming to ASTM A193, Class 1, Grade BB.



OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS

F.A.P. ROUTE 412/ F.A.I. ROUTE 65
MCLEAN COUNTY

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

| Structure Number | Station | a | b | c | d | e | Grating & Handrail Lengths |
|------------------|-------------------------|---------|--------|--------|-------|--------|----------------------------|
| 1 | 261+81.25 (F.A.I. 55) | 26'-0" | 54'-0" | 30'-1" | - | - | 54'-0" |
| 2 | 262+00.00 (F.A.I. 55) | 28'-0" | 50'-0" | 32'-1" | - | - | 50'-0" |
| 3 | 282+00.00 (F.A.I. 55) | 7'-0" | 46'-0" | 32'-3" | - | - | 46'-0" |
| 4 | 312+00.00 (F.A.I. 55) | 24'-0" | 50'-0" | 24'-0" | - | - | 50'-0" |
| 5 | 336+40.00 (F.A.I. 55) | 32'-0" | 34'-0" | 32'-0" | - | - | 34'-0" |
| 6 | 364+30.00 (F.A.I. 55) | 32'-0" | 48'-0" | 18'-0" | - | - | 48'-0" |
| 7 | 237+20.00 (F.A.I. 55) | 35'-0" | 70'-0" | 7'-0" | - | - | 70'-0" |
| 8 | 1152+89.00 (F.A.P. 412) | 91'-0" | 40'-0" | 7'-0" | 8'-0" | 40'-0" | 80'-0" |
| 9 | 1194+20.00 (F.A.P. 412) | 94'-0" | 52'-0" | 2'-0" | 7'-0" | 40'-0" | 92'-0" |
| 10 | 126+43.51 (F.A.P. 412) | 111'-0" | 50'-0" | 8'-0" | 8'-0" | 40'-0" | 90'-0" |

| | |
|------------------|--|
| DESIGNED | |
| CHECKED | |
| DRAWN BY M. Best | |
| CHECKED | |

| | |
|-----------------------------|----------------------|
| EXAMINED | |
| ENGINEER OF BRIDGE | 5 S 057 1039 R001.00 |
| PASSED | |
| ENGINEER OF PROCS AND STRUC | 5 S 057 1039 R001.90 |
| APPROVED | |
| DIRECTOR OF HIGHWAYS | 5 S 057 1039 R000.50 |

OS-S-4-SPECIAL

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
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| PLOT SCALE = 40.0000' / 1" | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS
FOR INFORMATION ONLY

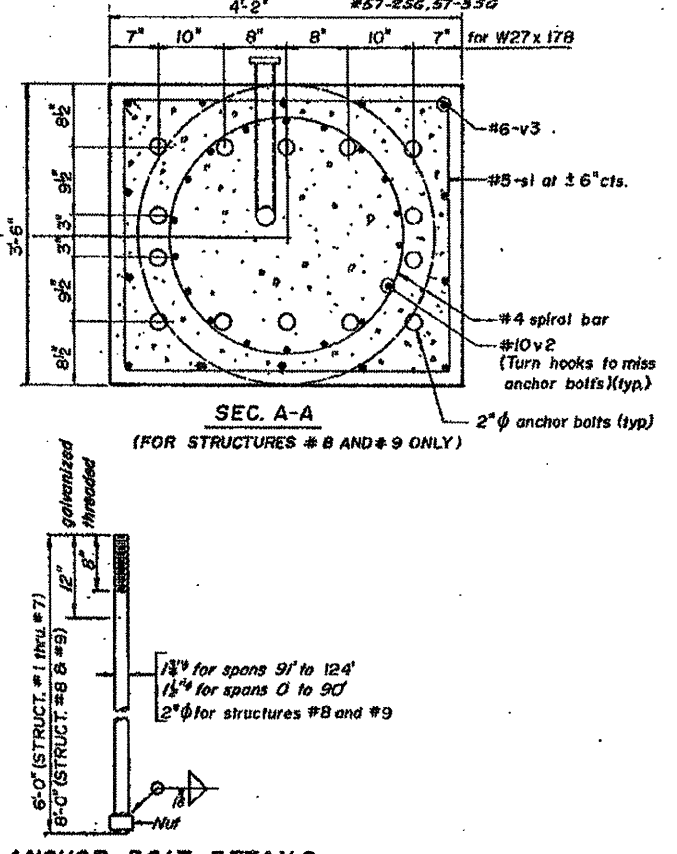
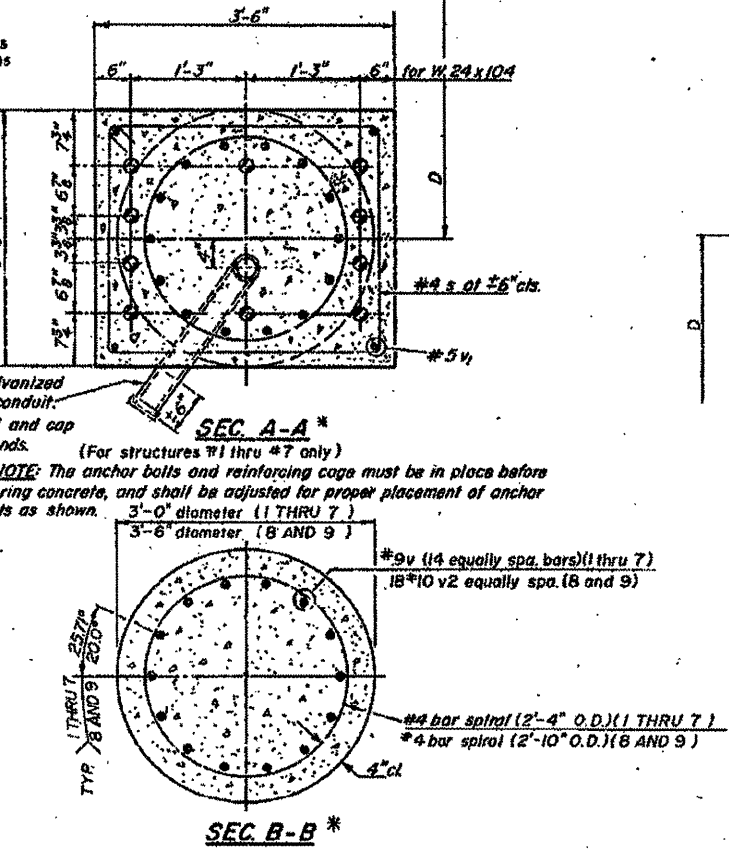
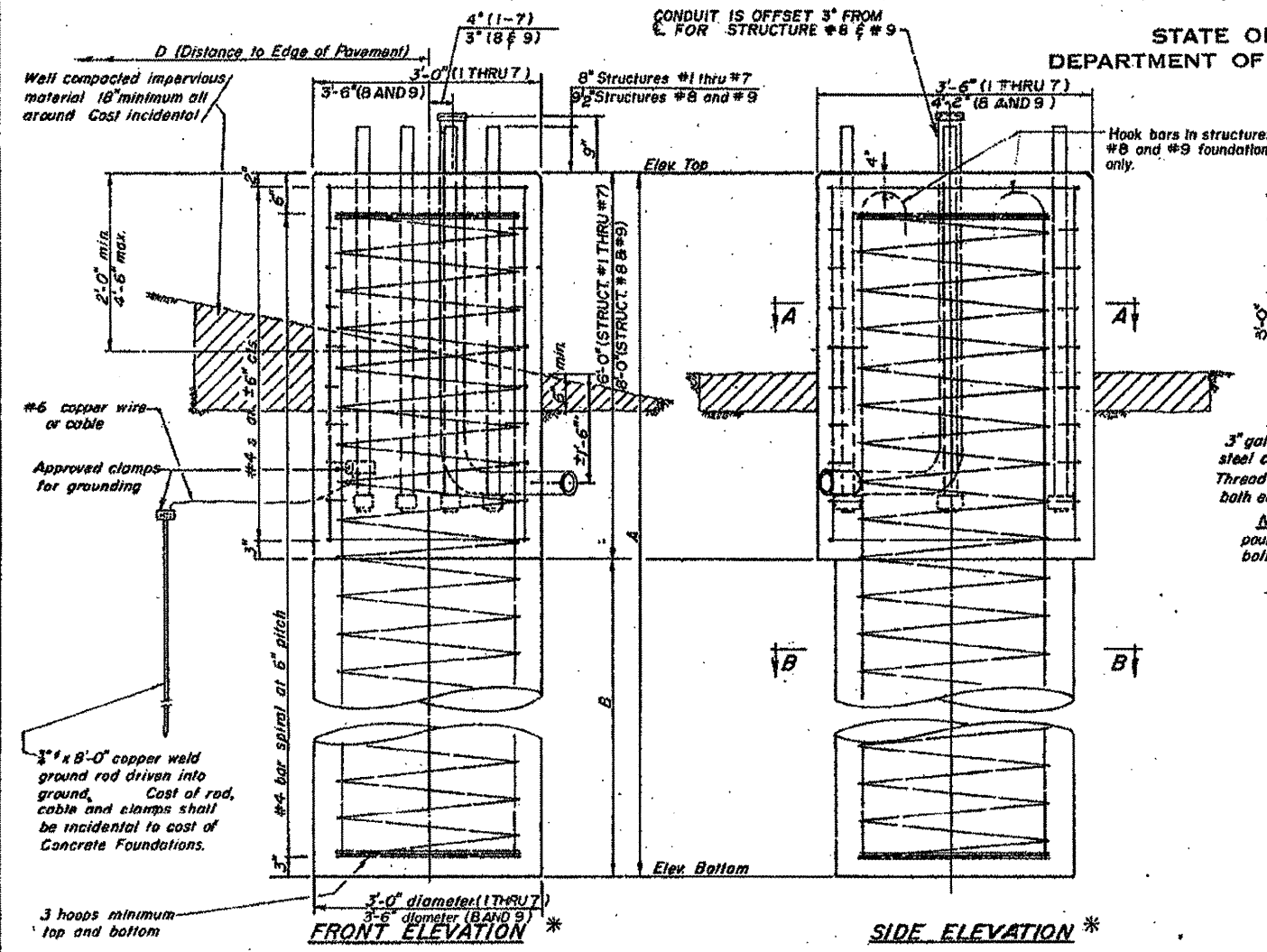
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 134 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | |
|--------------------------|---------|--------|--------------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 194-20 | # | MCLEAN | 33 | 30 |
| SHEET NO. 5 SHEETS 10 | | | | |



NOTE: The anchor bolts and reinforcing cage must be in place before pouring concrete, and shall be adjusted for proper placement of anchor bolts as shown.

ANCHOR BOLT DETAILS
(ASTM A-576 $f_y = 55,000$ psi.)
Galvanize upper 12" in accordance with AASHTO M 232.
Provide 3 nuts and 1 sq. fl. washer 1/2" x 4" x 4" for each anchor bolt ASTM A-576

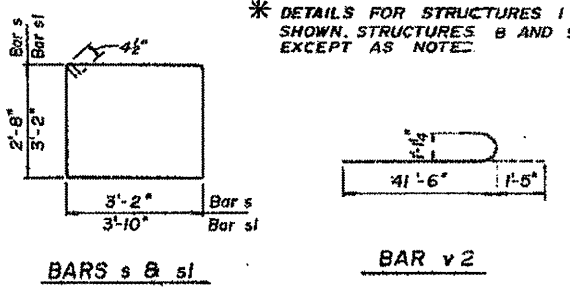
BAR LIST - EACH FOUNDATION

| STRUCTURE No's 1 thru 7 | | | | |
|-------------------------|----|------|----------|-------|
| Bar | No | Size | Length | Shape |
| s | 12 | #4 | 11'-9" | □ |
| v | 14 | #9 | B(5'-7") | □ |
| v2 | 4 | #5 | 5'-3" | □ |

#4 bar spiral - See Front Elevation

| STRUCTURE No's 8 and 9 ONLY | | | | |
|-----------------------------|----|------|---------|-------|
| Bar | No | Size | Length | Shape |
| sl | 16 | #5 | 14'-9" | □ |
| v2 | 18 | #10 | 42'-11" | □ |
| v3 | 4 | #6 | 10'-0" | □ |

#4 Bar spiral - See front elevation



| Span | B (min.) |
|----------------------|----------|
| 70' | 15' |
| 80' | 15' |
| 90' | 16' |
| 100' | 17' |
| 110' | 5 S#057 |
| 124' | 5 S#057 |
| Structures #8 and #9 | 35' |

| Structure No | Station | B | Anchor Bolt Size | Left Foundation | | Right Foundation | | Class X Concrete | | |
|--------------|-----------------------|-----|------------------|-----------------|------------|------------------|------------|------------------|-----|------|
| | | | | Elev. Top | Elev. Btm. | Elev. Top | Elev. Btm. | | | |
| 1 | 261+81.25(F.A.I.-55) | 20' | 1 1/2" φ | 850.70 | 824.70 | 26' | 850.70 | 824.70 | 26' | 15.1 |
| 2 | 262+00.00(F.A.I.-55) | 18' | 1 1/2" φ | 850.70 | 826.70 | 24' | 855.50 | 834.50 | 24' | 14.1 |
| 3 | 282+00.00(F.A.I.-55) | 16' | 1 1/2" φ | 843.50 | 821.50 | 22' | 843.50 | 821.50 | 22' | 13.0 |
| 4 | 312+00.00(F.A.I.-55) | 17' | 1 1/2" φ | 804.57 | 781.57 | 23' | 804.57 | 781.57 | 23' | 13.6 |
| 5 | 338+40.00(F.A.I.-55) | 17' | 1 1/2" φ | 795.00 | 772.00 | 23' | 794.20 | 771.20 | 23' | 13.6 |
| 6 | 364+80.00(F.A.I.-55) | 17' | 1 1/2" φ | 790.00 | 767.00 | 23' | 790.00 | 767.00 | 23' | 13.6 |
| 7 | 237+20.00(F.A.I.-55) | 20' | 1 1/2" φ | 842.30 | 816.30 | 26' | 842.30 | 816.30 | 26' | 15.2 |
| 8 | 152+89.00(F.A.P. 412) | 35' | 2" φ | 866.00 | 823.00 | 43' | 866.00 | 823.00 | 43' | 32.6 |
| 9 | 194+20.00(F.A.P. 412) | 35' | 2" φ | 825.00 | 782.00 | 43' | 825.00 | 782.00 | 43' | 32.6 |

| | |
|----------|----------|
| DESIGNED | EXAMINED |
| CHECKED | PASSED |
| DRAWN | APPROVED |
| CHECKED | |

NOTES:
The foundation details shown are for Average Cohesive Soil Conditions (stiff clays, sandy clays) and with minimum $Q_u = 1.0$ Tons/Sq. Ft. "Qu" being the average value of hand penetrometer readings at various depths of the shaft as determined by the Engineer at time of drilling operations or previous soil investigation.

**OVERHEAD SIGN STRUCTURES
FOUNDATION DETAILS**

F.A.P. ROUTE 412 / F.A.I. ROUTE 55

MCLEAN COUNTY

| | | | |
|---------------------------------------|---------------------|------------|-----------|
| FILE NAME = | USER NAME = | DESIGNED - | REVISED - |
| of:\work\p\p\1\c\cear-jack.j\0226557\ | cear-jack.j | JAL | |
| PLOT SCALE = 40.0000' / 1" | 46179-shr-det01.dgn | DRAWN - | REVISED - |
| PLOT DATE = 10/7/2011 | | CHECKED - | REVISED - |
| | | DATE - | REVISED - |
| | | 04/26/11 | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

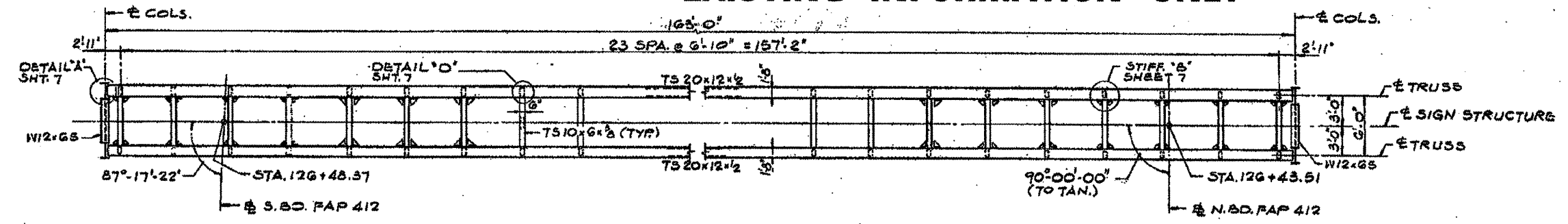
AS-BUILTS
FOR INFORMATION ONLY
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| | | | | |
|---|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | ** | Various | 178 | 135 |
| CONTRACT NO. 46179 ILLINOIS FED. AID PROJECT | | | | |

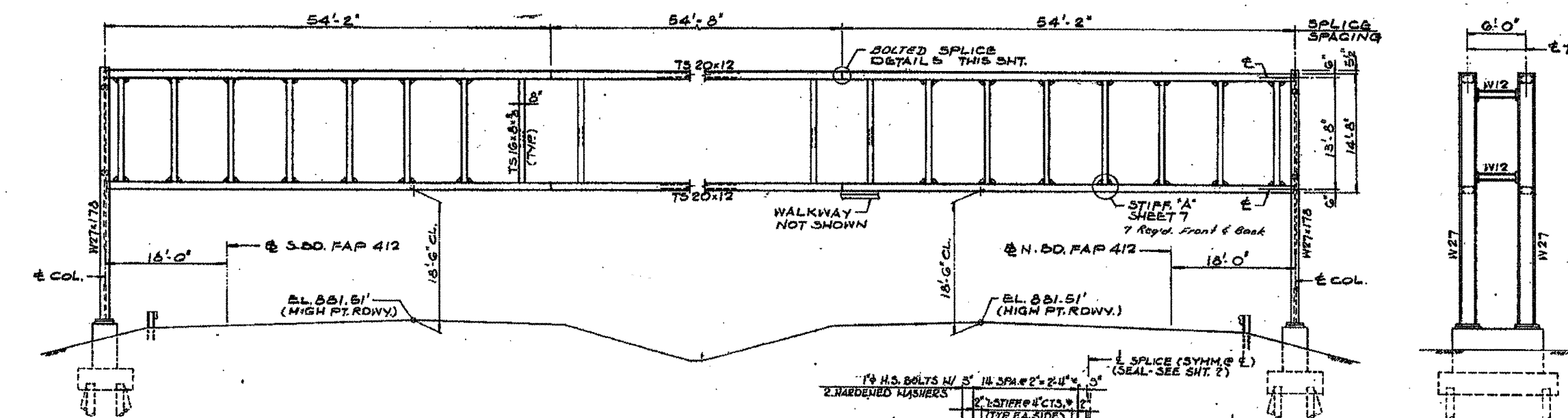
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

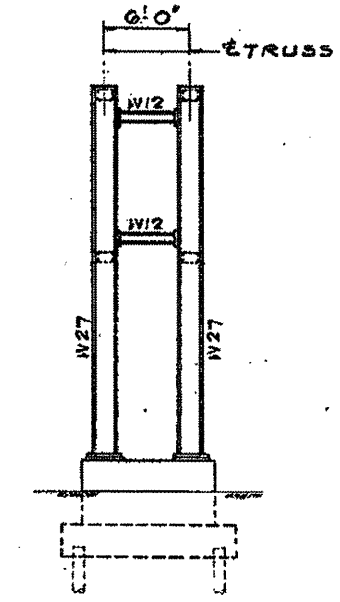
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|------------------------------|---------|---------|--------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| FAP 412 | 4 | MCLEAN | 33 | 31 |
| STA. TO STA. | | PROJECT | | |
| F. H. A. REG. NO. 4 ILLINOIS | | PROJECT | | |
| # 57-259, 57-354 | | 6 OF 10 | | |



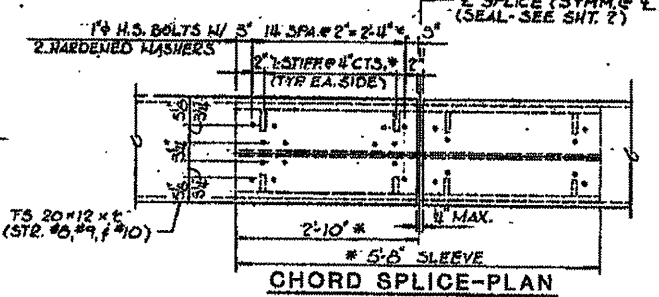
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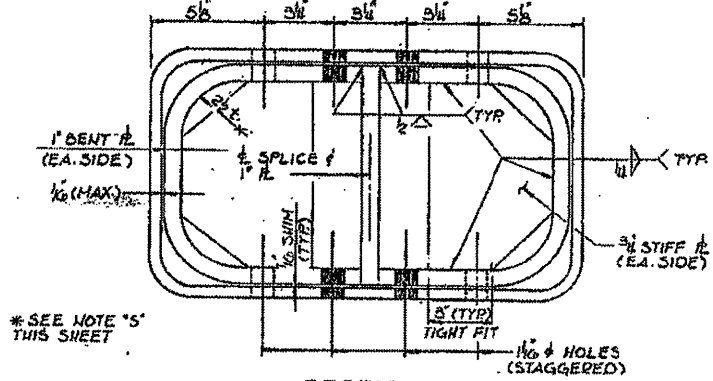
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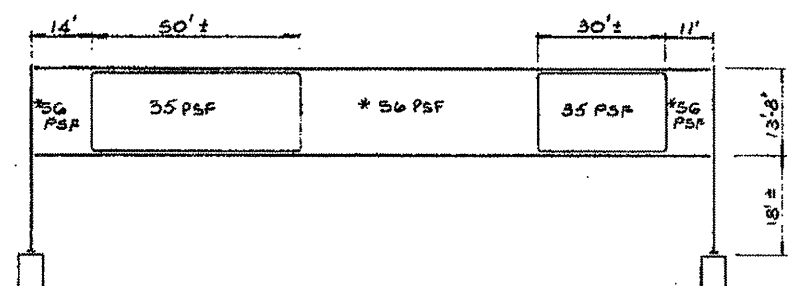
END VIEW



CHORD SPLICE-PLAN



SECTION BOLTED SPLICE DETAILS



DESIGN WIND LOADING DIAGRAM C
* TOTAL LOAD FOR FRONT AND BACK MEMBERS.

BOLTED SPLICE NOTES

NOTE "S" FOR STRUCTURE #8, USE IN SPACES AT 1-3/4" WITH 1" DIAMETER HIGH-STRENGTH BOLTS AND 7 STIFFENERS AT 3-1/2" FOR 3'-0" SLEEVE.

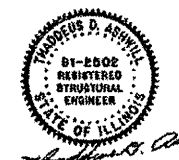
NOTE: THE BOLTED SPLICE SHALL BE LOCATED AS SHOWN ON SHEETS 1 AND 6 OF 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALTERNATE SIGN PANEL SUPPORT DETAILS (SEE SHEET 3) TO THE ENGINEER FOR HIS APPROVAL WHERE BOLTED SPLICE LOCATIONS OCCUR.

NOTES:

ALL STRUCTURAL STEEL SHALL BE AASHTO M225 GR. 50 UNLESS OTHERWISE NOTED AS PER GENERAL NOTES.

FOR GENERAL NOTES SEE SHT. 1

SEE SHEETS 3 & 4 FOR WALKWAY LOCATIONS AND DETAILS.



5 S 057 1039 R000.50

SIGN STRUCTURE # 10
GENERAL PLAN & DETAILS
F.A.P. ROUTE 412-SEC. 57-2SG
MCLEAN COUNTY 57-3SG
STATION 126+43.61
STRUCTURE NUMBER # 10



| | | | |
|--|--------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = cear-lock_jd | DESIGNED - JAL | REVISED - |
| \\pwwork\pwwork\cear-lock_jd\026655710 | 46179-shr-details.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/27/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

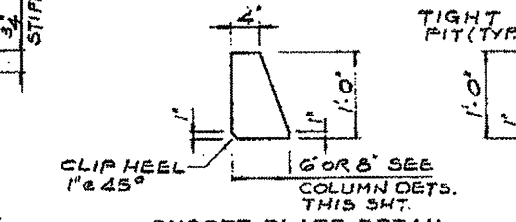
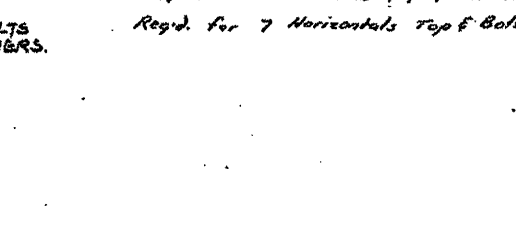
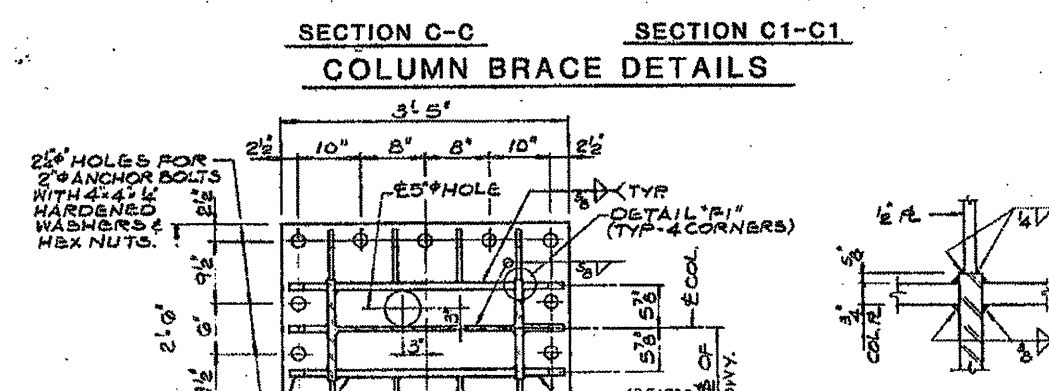
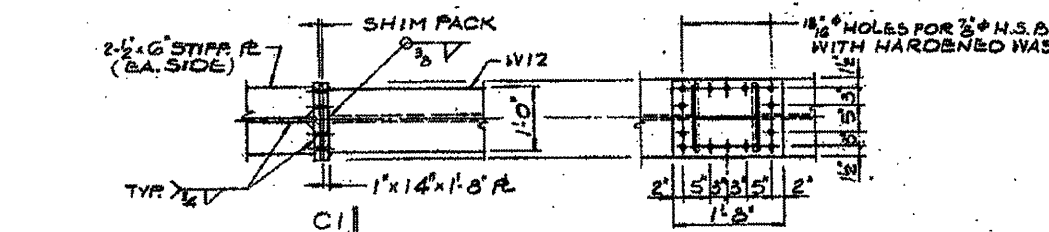
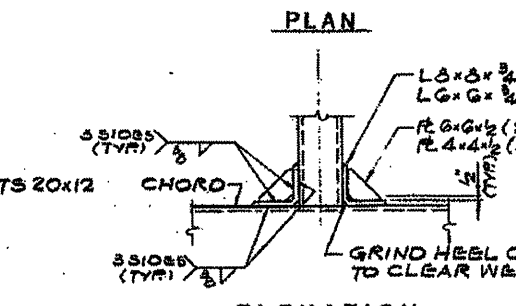
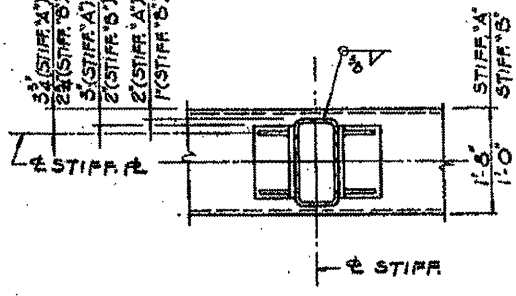
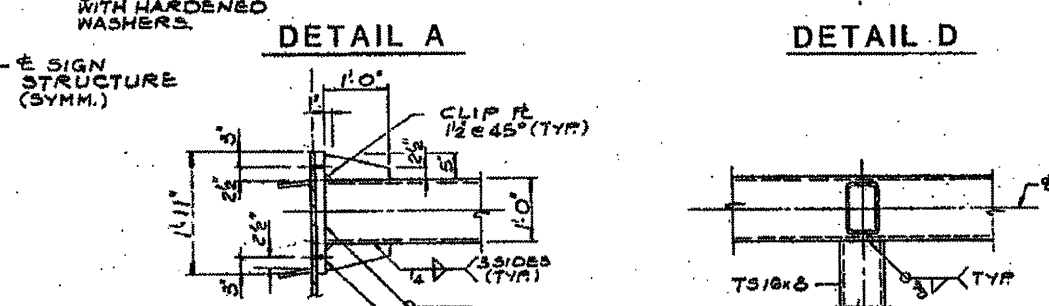
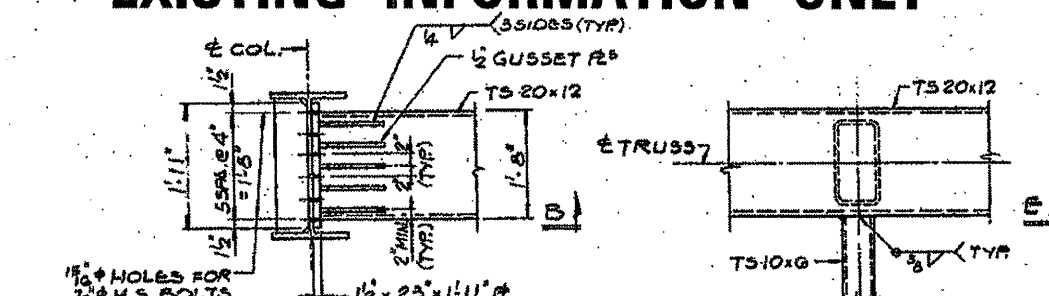
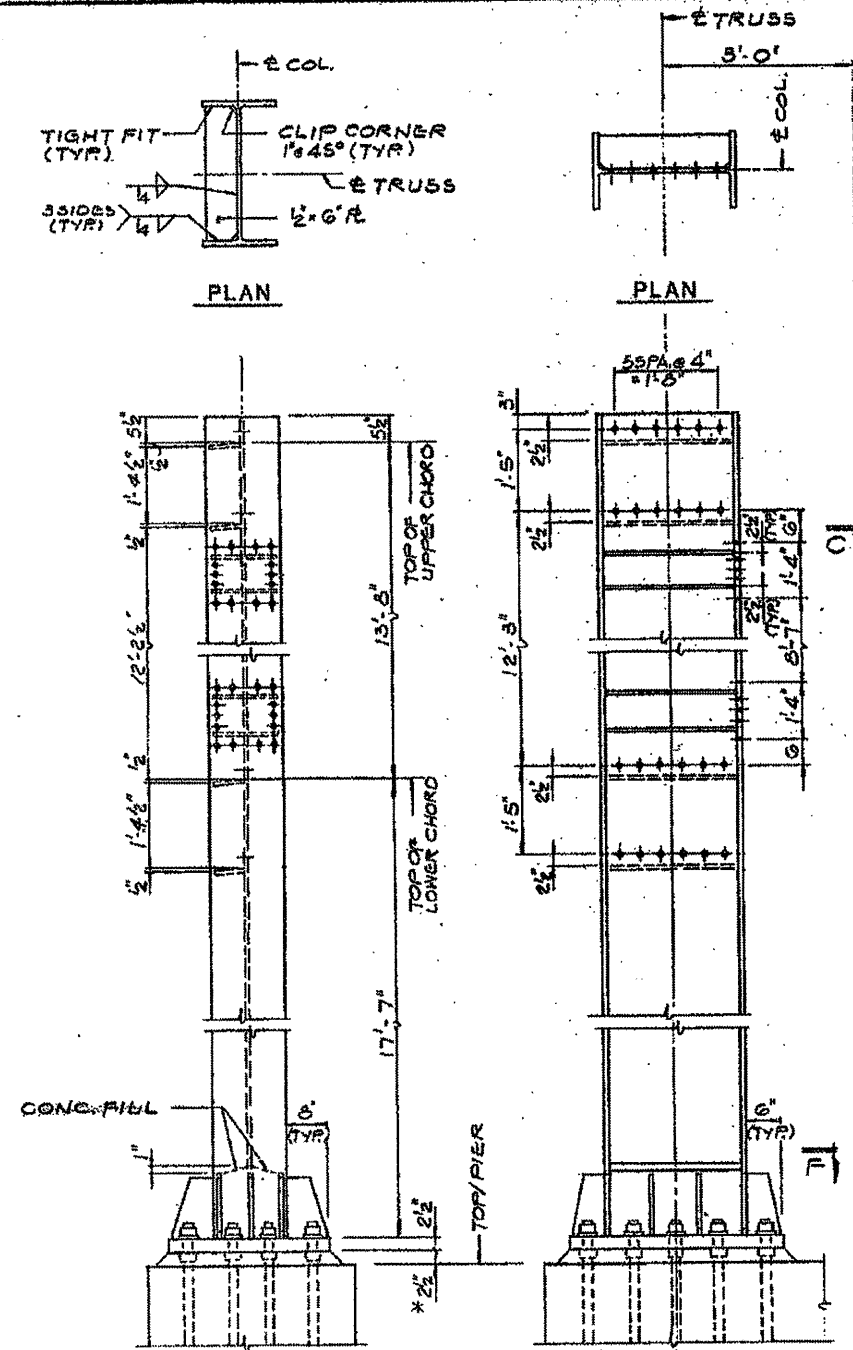
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| AS-BUILTS FOR INFORMATION ONLY | |
| SCALE: | SHEET NO. OF SHEETS STA. TO STA. |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| . | ** | Various | 178 | 136 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

| | | | | |
|-------------------|------------------|--------|------------------|-----------|
| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| FAPR2 | * | MCLEAN | 33 | 32 |
| STA. | TO STA. | | | |
| F.W.E.A. REG. NO. | ILLINOIS PROJECT | | | |
| | | | + 57-254, 57-354 | |
| | | | 7 OF 10 | |



* GROUT MIXTURE (SEE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.)

W27x178 COL. (4 REQ'D.)

COLUMN DETAILS

2 1/2" HOLES FOR 2" ANCHOR BOLTS WITH HARDENED WASHERS & HEX NUTS.

BASE PL. 26" x 30" x 3-5" (4 REQ'D.)

BASE PLATE DETAIL
(STRUCTURE #8 AND #9 SIMILAR)

5 S 057 1039 R000.50

SIGN STRUCTURE # 10
STEEL DETAILS
F.A.P. ROUTE 412-SEC. 57-2SG
MCLEAN COUNTY 57-3SG
STATION 126+43.51
STRUCTURE NUMBER # 10



| | | | |
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| PLT SCALE = 48.0000 / in. | | CHECKED - | REVISED - |
| PLT DATE = 10/27/2011 | | DATE - 04/26/11 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

| | | | |
|-----------------------------------|---------------------|------|---------|
| AS-BUILTS FOR INFORMATION ONLY | | | |
| SCALE: | SHEET NO. OF SHEETS | STA. | TO STA. |

| | | | | |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 137 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

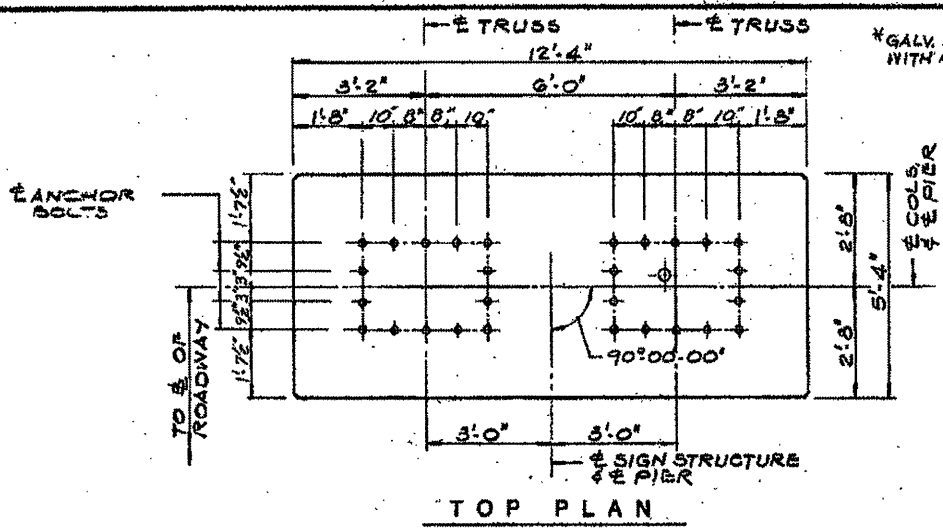
EXISTING INFORMATION ONLY

| ROUTE NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|----------------------------|---------|--------|--------------|-----------|
| 57-254 | 1039 | McLEAN | 33 | 33 |
| PROJECT: STATION 126+43.51 | | | | |

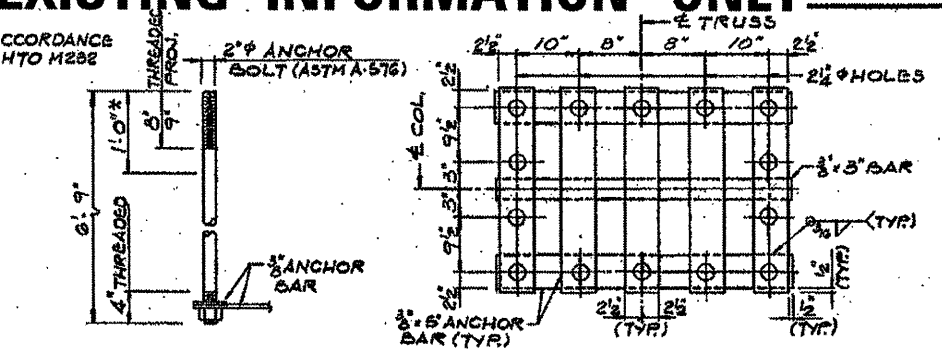
BILL OF MATERIAL (TOTAL)

| MARK | NO. | SIZE | LENGTH | SHAPE |
|-------------------------|----------|--------|--------|-------|
| S1 | 32 | 8 | 4'0" | — |
| W1 | 136 | 9 | 11'-1" | C |
| S1 | 40 | 6 | 25'-4" | □ |
| S2 | 48 | 6 | 6'-0" | — |
| S3 | 48 | 6 | 6'-9" | — |
| E1 | 100 | 9 | 11'-1" | C |
| W1 | 90 | 9 | 16'-3" | C |
| TOTALS FOR TWO FOOTINGS | | | | |
| ITEM | UNIT | AMT. | | |
| REINFORCING BARS | LSB. | 15,570 | | |
| CLASS 'X' CONCRETE | CU. YDS. | 834 | | |
| CONCRETE PILES | LIN. FT. | 420 | | |
| TEST PILE CONCRETE | EA. | 2 | | |
| STRUCTURE EXCAV. | CU. YDS. | 125 | | |

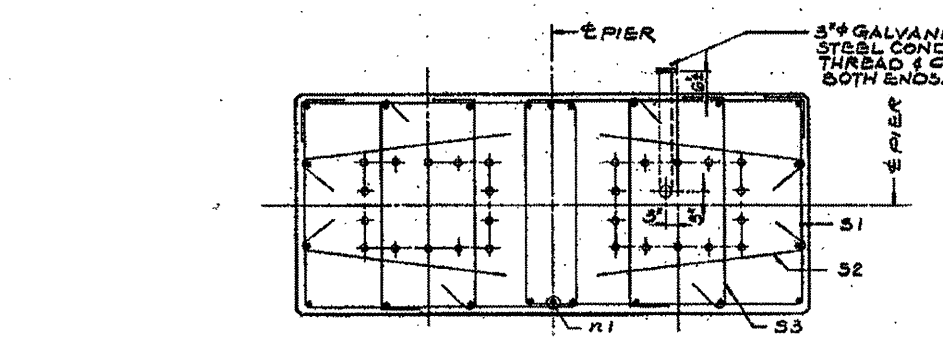
NOTES:
 ALL BAR DIMENSIONS ARE OUT TO OUT.
 ALL CHAMBERS TO BE 3/4"
 ← INDICATES DIRECTION OF PILE BATTER.



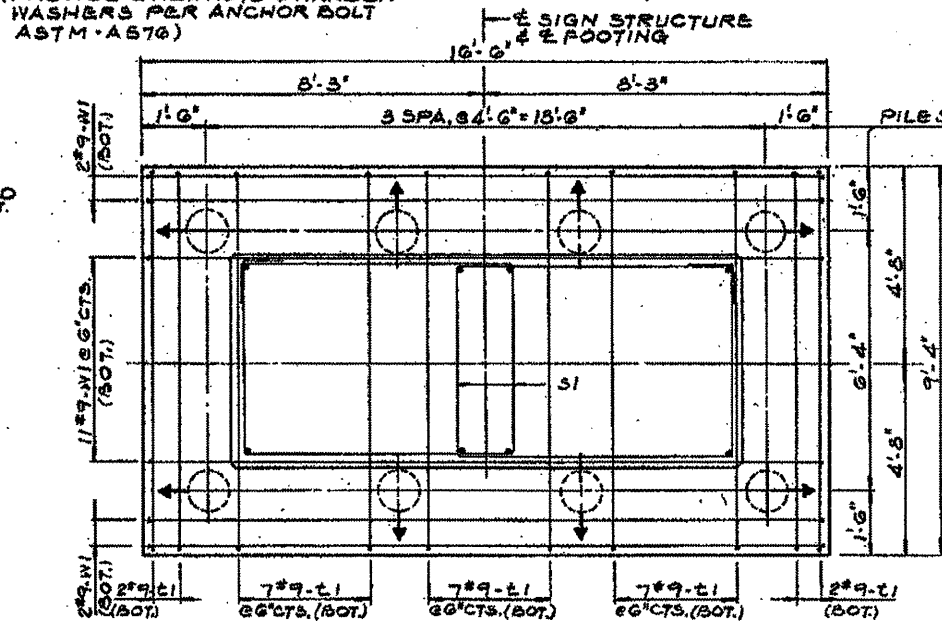
TOP PLAN



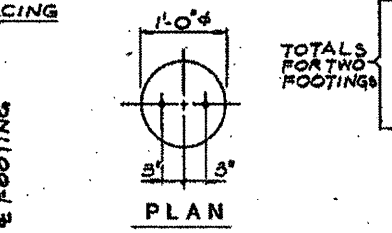
ANCHOR BOLT DETAIL (PROVIDE 2 HEX NUTS & HARDEN WASHERS PER ANCHOR BOLT ASTM A576)
 ANCHOR BAR DETAIL



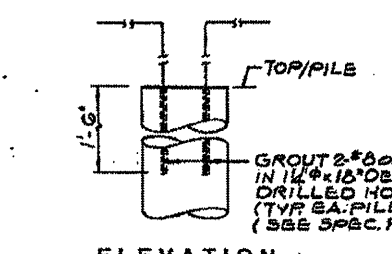
SECTION A-A



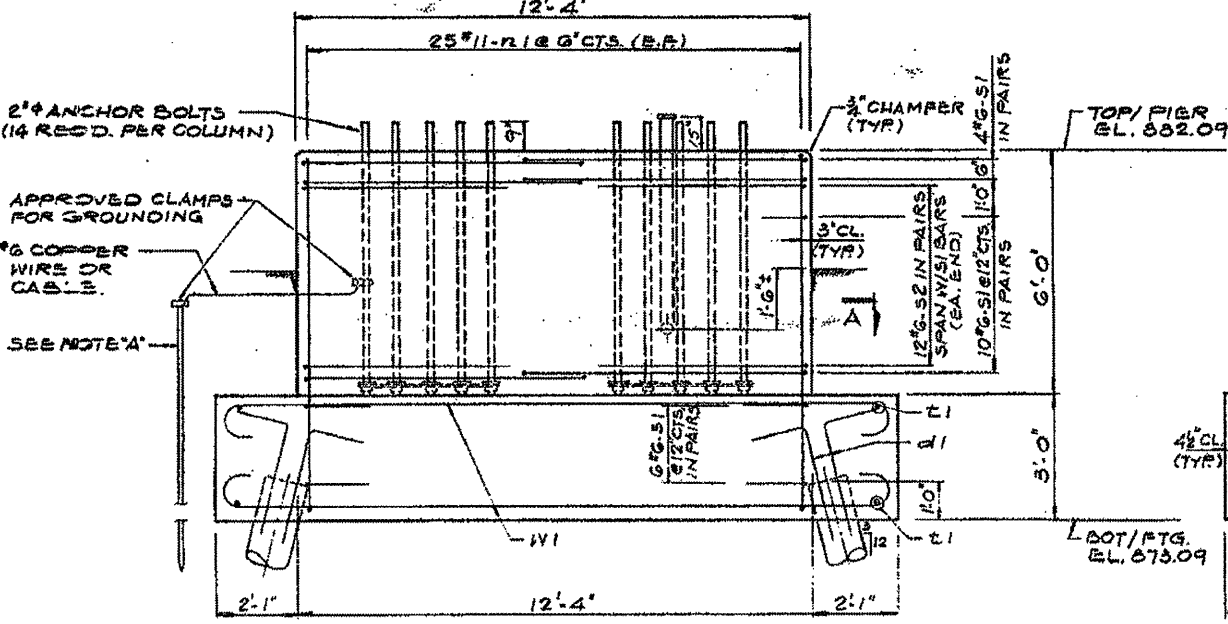
FOOTING PLAN



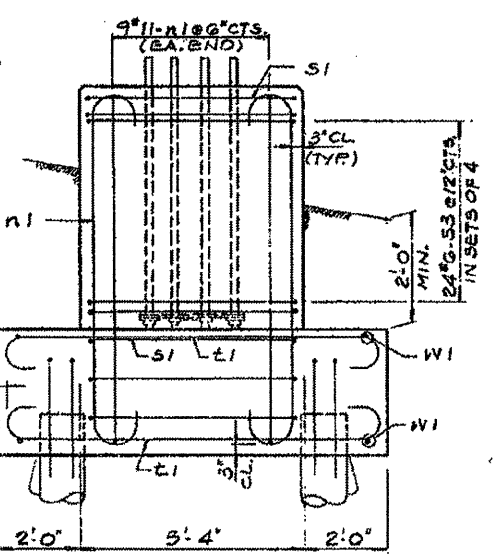
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ELEVATION PILE DETAILS



ELEVATION

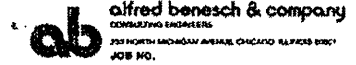


END VIEW

NOTE:
 3/4" x 8'0" COPPER WELD GROUND ROD DRIVEN INTO GROUND. COST OF ROD, CABLE & CLAMPS SHALL BE INCIDENTAL TO COST OF CLASS 'X' CONCRETE.

DESIGN NOTES:
 fc = 3500 PSI
 fy = 60,000 KSI
 STRUCT. STL. M185

PILE DATA: (2 THIS)
 TYPE — CONCRETE
 CAPACITY — 35 TON
 EST. LENGTH — 30 FT
 NO. REQ'D — 10 **
 (** INCLUDES 2 TEST PILES ONE PER FOOTING)



5 S 057 1039 R000.50
SIGN STRUCTURE # 10
FOOTING DETAILS
 F.A.P. ROUTE 412-SEC. 57-2SG
 McLEAN COUNTY 57-3SG
 STATION 126+43.51
 STRUCTURE NUMBER # 10

| | | | |
|---|------------------------|-----------------|-----------|
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| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

AS-BUILTS
 FOR INFORMATION ONLY

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|--------------------|---------|---------|--------------|-----------|
| | | Various | 178 | 138 |
| CONTRACT NO. 46179 | | | | |

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

Date 12/14/88

ROUTE FAI Rt. 39 DESCRIPTION Sign Truss - 0.5 Miles North of I-55 LOGGED BY K. Whittington

SECTION 57-2 LOCATION SEC., TWP., RNG. GPS:

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 5 S 057 1039 R000.50 Station 126+49 BORING NO. 1 Sign Structure Station 126+56 Offset 87.0 ft Lt. Ground Surface Elev. 880.4 ft

Table with columns for Soil Description, Depth (ft), and blow counts (D, B, U, M). Includes soil types like SILTY CLAY LOAM, SILTY CLAY, SILT LOAM, and SAND & GRAVEL.

3/3/2011 1:51:18 PM S:\SOILS\BORING LOGS\057-MAST ARMS FAI 55.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available. The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 12/13/88

ROUTE FAI Rt. 39 DESCRIPTION Sign Truss - 0.5 Miles North of I-55 LOGGED BY K. Whittington

SECTION 57-2 LOCATION SEC., TWP., RNG. GPS:

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 5 S 057 1039 R000.50 Station 126+49 BORING NO. 2 Sign Structure Station 126+56 Offset 98.0 ft Rt. Ground Surface Elev. 877.2 ft

Table with columns for Soil Description, Depth (ft), and blow counts (D, B, U, M). Includes soil types like SILTY CLAY TILL, SILTY CLAY, SILT LOAM TILL, and SILT LOAM TILL.

3/3/2011 1:51:18 PM S:\SOILS\BORING LOGS\057-MAST ARMS FAI 55.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available. The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

*VARIOUS COUNTIES **D-5 OVD SIN STR REPL 2012-06

Form containing project details, user information, and sheet numbering. Includes fields for FILE NAME, USER NAME, DESIGNED, DRAWN, CHECKED, DATE, and SHEET NO.



SOIL BORING LOG

Page 1 of 1

Date 12/12/88

ROUTE FAI Rt. 39 DESCRIPTION Sign Truss - 1.0 Mile North of I-55 LOGGED BY K. Whittington
 SECTION 57-2 LOCATION SEC. , TWP. , RNG. GPS:
 COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

| STRUCT. NO. Station | D E P T H | B L O W S | U C S Qu | M O I S T % | Soil Description | | | | D E P T H | B L O W S | U C S Qu | M O I S T % |
|-----------------------------------|-----------------------|-----------------------|-------------------|----------------------------|--|------------------|--|----|-----------------------|-----------------------|-------------------|----------------------------|
| | | | | | Surface Water Elev. | Stream Bed Elev. | Groundwater Elev.: First Encounter Upon Completion After _____ Hrs. | ft | | | | |
| 5 S 057 1039 R001.00 152+94 | | | | | Very Stiff Brown SILTY CLAY LOAM TILL | | | | | | | |
| | | 25 | 3.5 P | 14 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 21 | 5.5 S | 16 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 19 | 4.0 P | 16 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 20 | 2.5 P | 24 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 4 | 0.4 P | 25 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 4 | | 29 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 5 | 0.4 B | 22 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 8 | 1.7 B | 16 | | | | | | | | |
| | | | | | | | | | | | | |

3/3/2011 1:51:20 PM S:\SOILS\BORING LOGS\057-MAST ARMS FAI 55.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 1 of 1

Date 12/12/88

ROUTE FAI Rt. 39 DESCRIPTION Sign Truss - 1.0 Mile North of I-55 LOGGED BY K. Whittington
 SECTION 57-2 LOCATION SEC. , TWP. , RNG. GPS:
 COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

| STRUCT. NO. Station | D E P T H | B L O W S | U C S Qu | M O I S T % | Soil Description | | | | D E P T H | B L O W S | U C S Qu | M O I S T % |
|-----------------------------------|-----------------------|-----------------------|-------------------|----------------------------|---|------------------|--|----|-----------------------|-----------------------|-------------------|----------------------------|
| | | | | | Surface Water Elev. | Stream Bed Elev. | Groundwater Elev.: First Encounter Upon Completion After _____ Hrs. | ft | | | | |
| 5 S 057 1039 R001.00 152+94 | | | | | Very Stiff Brown SILTY CLAY LOAM TILL (FILL) | | | | | | | |
| | | | | | | | | | | | | |
| | | 20 | 2.7 P | 15 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 35 | 2.7 P | 15 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 24 | 3.0 P | 13 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 29 | 3.5 P | 11 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 24 | 2.0 P | 27 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 10 | 1.0 P | 25 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 5 | 0.6 B | 23 | | | | | | | | |
| | | | | | | | | | | | | |
| | | 6 | 1.2 B | 17 | | | | | | | | |
| | | | | | | | | | | | | |

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An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

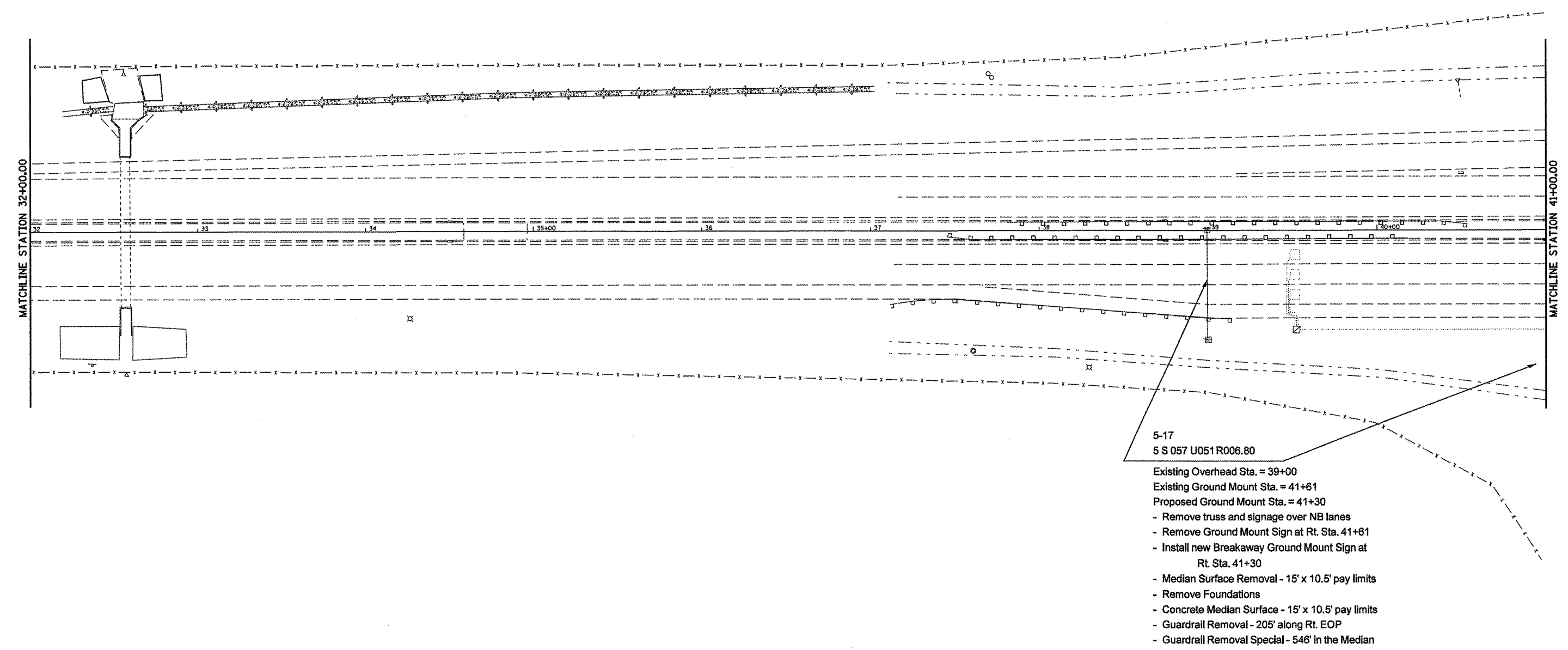
BBS, from 137 (Rev. 8-99)

*VARIOUS COUNTIES
 **D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | | |
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| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SOIL BORING LOGS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
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| PLGT DATE = 10/7/2011 | DATE - | CHECKED - | REVISED - | | | CONTRACT NO. 46179 | | | | | |
| | | DATE - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

MCLEAN COUNTY – U.S. 51 BUSINESS

OVERVIEW OF PROPOSED WORK



| | | | |
|--|-----------------------------------|-----------------|-----------|
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| ce:\pwwork\pwwork\ceerlookjd\0266557\0 | 46179-shr-plan-US Bus 51.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 60,0000' / 1" = 1/8" | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 05/02/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MCLEAN COUNTY – U.S. 51 BUSINESS
OVERVIEW OF PROPOSED WORK

SCALE: 1" = 30' SHEET NO. 2 OF 7 SHEETS STA. 32+00.00 TO STA. 41+00.00

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 142 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

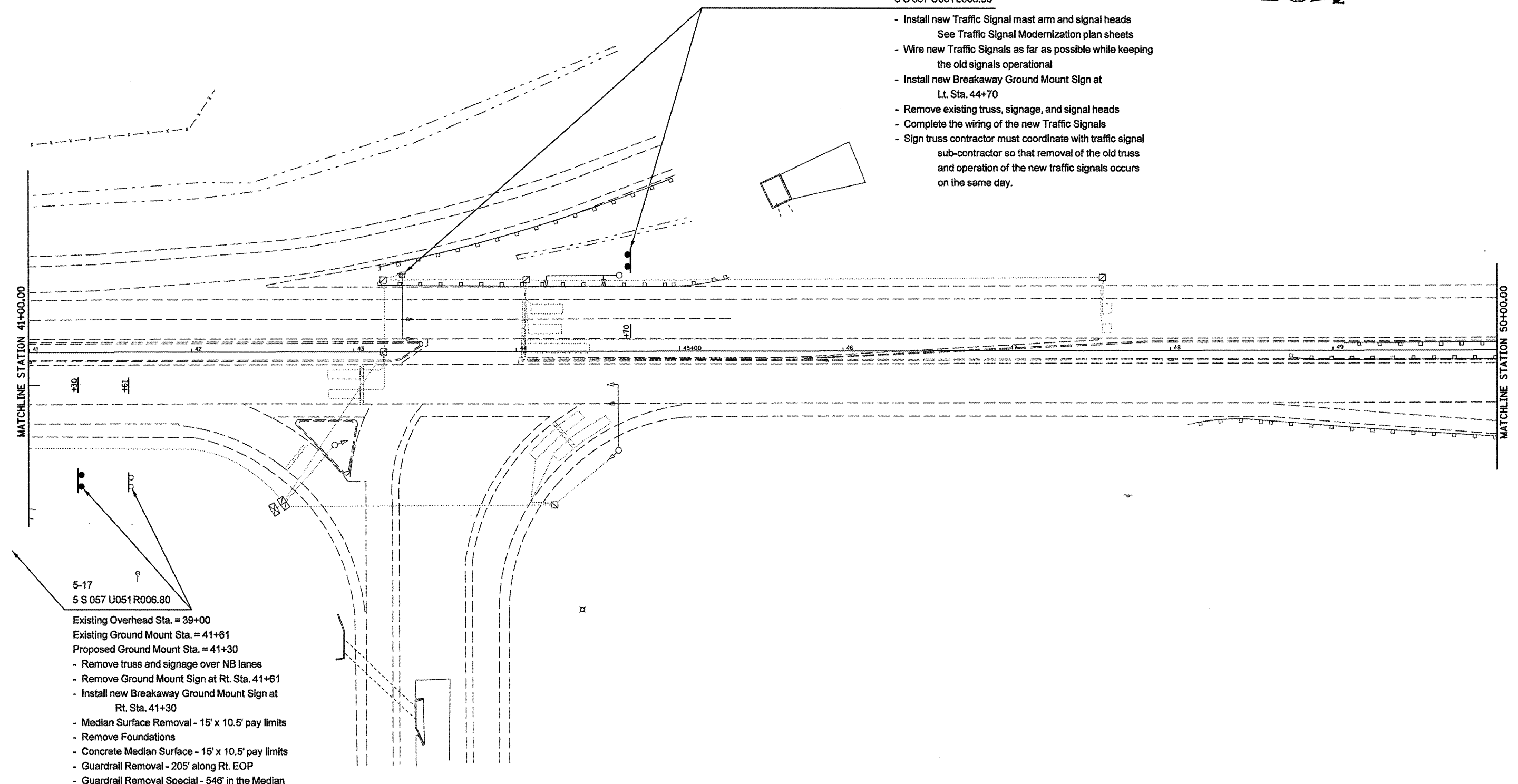
MCLEAN COUNTY – U.S. 51 BUSINESS

OVERVIEW OF PROPOSED WORK

5-18
5 C 057 U051 L006.90



- Install new Traffic Signal mast arm and signal heads
See Traffic Signal Modernization plan sheets
- Wire new Traffic Signals as far as possible while keeping the old signals operational
- Install new Breakaway Ground Mount Sign at Lt. Sta. 44+70
- Remove existing truss, signage, and signal heads
- Complete the wiring of the new Traffic Signals
- Sign truss contractor must coordinate with traffic signal sub-contractor so that removal of the old truss and operation of the new traffic signals occurs on the same day.



- 5-17
5 S 057 U051 R006.80
- Existing Overhead Sta. = 39+00
Existing Ground Mount Sta. = 41+61
Proposed Ground Mount Sta. = 41+30
- Remove truss and signage over NB lanes
 - Remove Ground Mount Sign at Rt. Sta. 41+61
 - Install new Breakaway Ground Mount Sign at Rt. Sta. 41+30
 - Median Surface Removal - 15' x 10.5' pay limits
 - Remove Foundations
 - Concrete Median Surface - 15' x 10.5' pay limits
 - Guardrail Removal - 205' along Rt. EOP
 - Guardrail Removal Special - 548' in the Median

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

| | | | |
|---|------------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceer-lock.jd | DESIGNED - JAL | REVISED - |
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| | PLOT SCALE = 60.0000' / 1" = | CHECKED - | REVISED - |
| | PLOT DATE = 10/27/2011 | DATE - 05/02/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MCLEAN COUNTY – U.S. 51 BUSINESS
OVERVIEW OF PROPOSED WORK

SCALE: 1" = 30' SHEET NO. 3 OF 7 SHEETS STA. 41+00.00 TO STA. 50+00.00

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 143 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

MCLEAN COUNTY – U.S. 51 BUSINESS

OVERVIEW OF PROPOSED WORK

5-19
5 C 057 U051 L007.30

- Install new Traffic Signal mast arm and signal heads
See Traffic Signal Modernization plan sheets
- Wire new Traffic Signals as far as possible while keeping the old signals operational
- Install new Breakaway Ground Mount Sign at Lt. Sta. 58+40
- Remove existing truss, signage, and signal heads
- Complete the wiring of the new Traffic Signals
- Sign truss contractor must coordinate with traffic signal sub-contractor so that removal of the old truss and operation of the new traffic signals occurs on the same day.

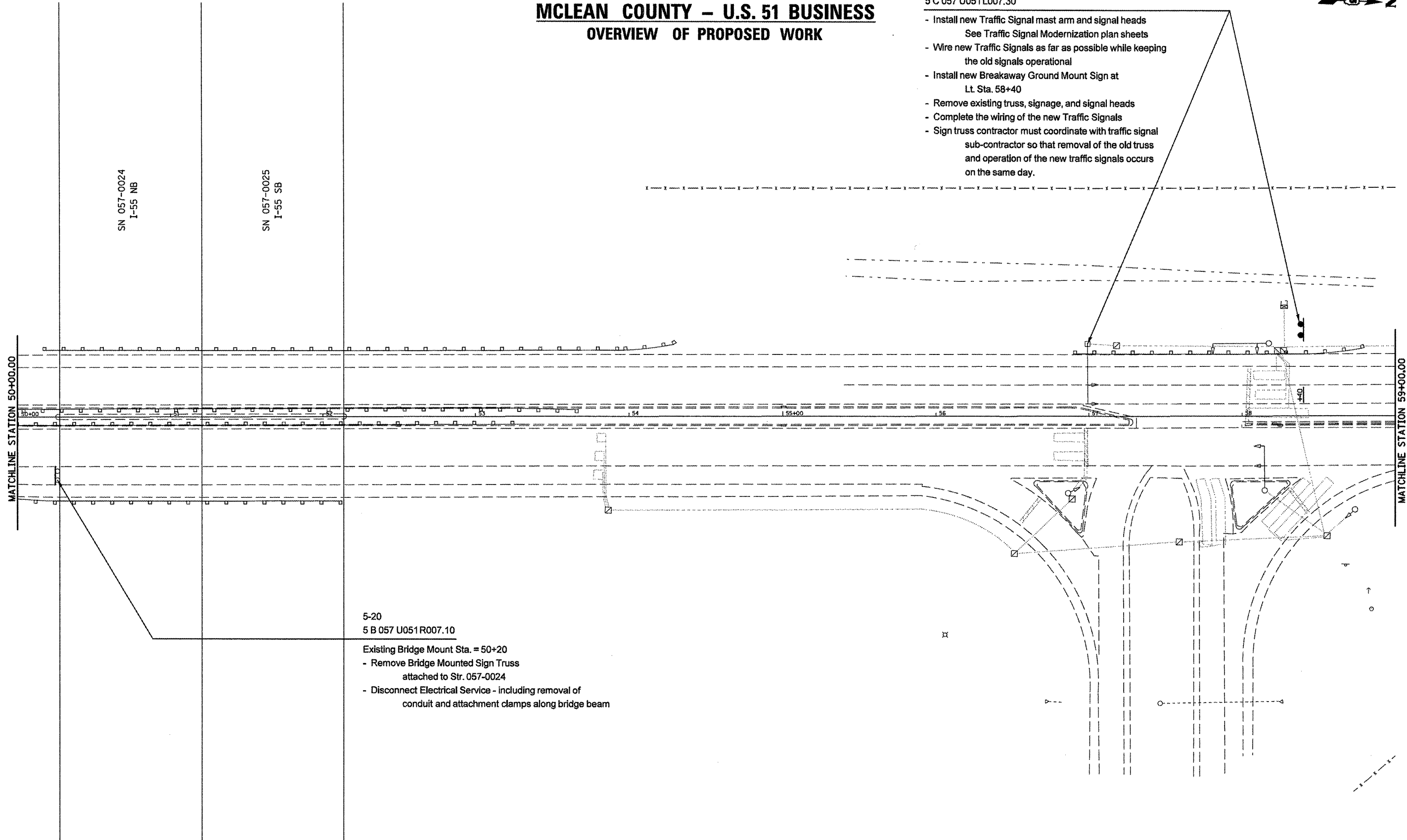


SN 057-0024
I-55 NB

SN 057-0025
I-55 SB

MATCHLINE STATION 50+00.00

MATCHLINE STATION 59+00.00



5-20
5 B 057 U051 R007.10

- Existing Bridge Mount Sta. = 50+20
- Remove Bridge Mounted Sign Truss attached to Str. 057-0024
 - Disconnect Electrical Service - including removal of conduit and attachment clamps along bridge beam

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

| | | | |
|--|-----------------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ct:\pwwork\pwwork\ceerlockjd\0266557\0 | 46179+str-repl-1051-51 Bus Sl.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 60.0000' / 1" = | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 05/02/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MCLEAN COUNTY – U.S. 51 BUSINESS
OVERVIEW OF PROPOSED WORK

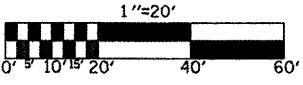
SCALE: 1" = 30' SHEET NO. 4 OF 7 SHEETS STA. 50+00.00 TO STA. 59+00.00

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| • | •• | Various | 178 | 144 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

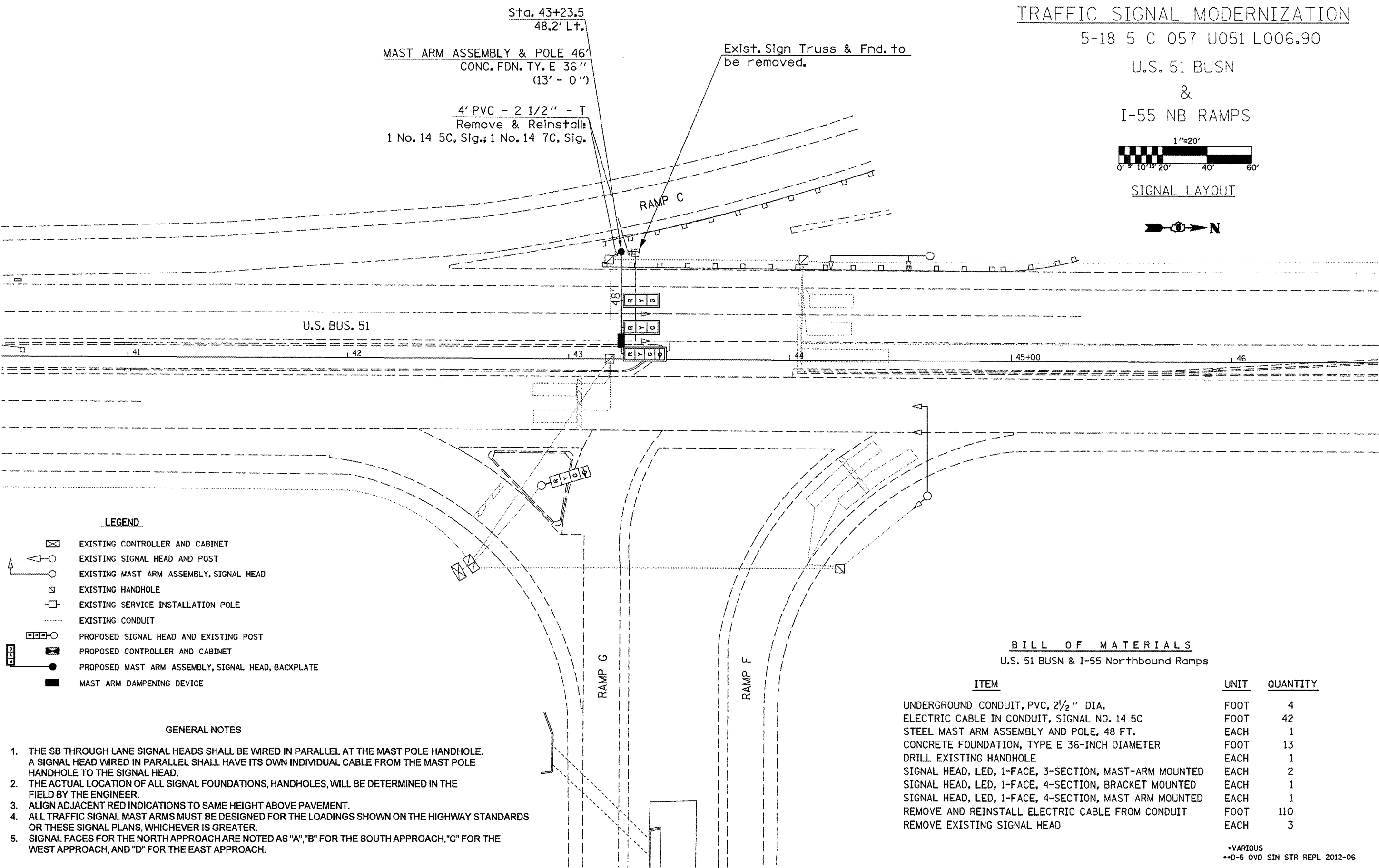
TRAFFIC SIGNAL MODERNIZATION

5-18 5 C 057 U051 L006.90

U.S. 51 BUSN
&
I-55 NB RAMPS



SIGNAL LAYOUT



LEGEND

- EXISTING CONTROLLER AND CABINET
- EXISTING SIGNAL HEAD AND POST
- EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD
- EXISTING HANDHOLE
- EXISTING SERVICE INSTALLATION POLE
- EXISTING CONDUIT
- PROPOSED SIGNAL HEAD AND EXISTING POST
- PROPOSED CONTROLLER AND CABINET
- PROPOSED MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- MAST ARM DAMPENING DEVICE

GENERAL NOTES

1. THE SB THROUGH LANE SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE. A SIGNAL HEAD WIRED IN PARALLEL SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE TO THE SIGNAL HEAD.
2. THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
4. ALL TRAFFIC SIGNAL MAST ARMS MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.
5. SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A", "B" FOR THE SOUTH APPROACH, "C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.

BILL OF MATERIALS

U.S. 51 BUSN & I-55 Northbound Ramps

| ITEM | UNIT | QUANTITY |
|---|------|----------|
| UNDERGROUND CONDUIT, PVC, 2 1/2" DIA. | FOOT | 4 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 42 |
| STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1 |
| CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 13 |
| DRILL EXISTING HANDHOLE | EACH | 1 |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 2 |
| SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED | EACH | 1 |
| SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 1 |
| REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT | FOOT | 110 |
| REMOVE EXISTING SIGNAL HEAD | EACH | 3 |

*VARIOUS
**D-5 OVD SIN STR REPL 2012-06

| | | | |
|---|-----------------------------|------------|-----------|
| FILE NAME = | USER NAME = ceorlockjd | DESIGNED - | REVISED - |
| ct:\pwwork\pwt\dot\ceorlockjd\0286538\0 | 46179-sht-trf-fic.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 40.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

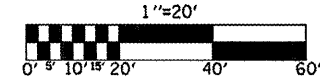
MCLEAN COUNTY - U.S. 51 BUSINESS
TRAFFIC SIGNAL MODERNIZATION - 5 C 057 U051 L006.90

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 145 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

TRAFFIC SIGNAL MODERNIZATION

5-19 5 C 057 U051 L007.30

U.S. 51 BUSN
&
I-55 SB RAMPS



SIGNAL LAYOUT



Sta. 56+91
48.4' LT.
MAST ARM ASSEMBLY & POLE 46'
CONC. FDN. TY. E 36"
(13' - 0")

Exist. Sign Truss & Fnd. to
be removed.

25' PVC - 2 1/2" - T
2 No. 14 5C, Sig.; 1 No. 14 7C, Sig.

Exist. PVC - 2" - 102'

Pull: 1 No. 14 5C, Sig.; 1 No. 14 7C, Sig.
Add: 2 No. 14 5C, Sig.; 1 No. 14 7C, Sig.

Exist. PVC - 2" - 26'

Pull: 1 No. 14 5C, Sig.; 1 No. 14 7C, Sig.
Add: 2 No. 14 5C, Sig.; 1 No. 14 7C, Sig.

Exist. PVC - 2" - 17'

Pull: 1 No. 14 5C, Sig.; 1 No. 14 7C, Sig.

LEGEND

- EXISTING CONTROLLER AND CABINET
- EXISTING SIGNAL HEAD AND POST
- EXISTING MAST ARM ASSEMBLY, SIGNAL HEAD
- EXISTING HANDHOLE
- EXISTING SERVICE INSTALLATION POLE
- EXISTING CONDUIT
- PROPOSED SIGNAL HEAD AND EXISTING POST
- PROPOSED CONTROLLER AND CABINET
- PROPOSED MAST ARM ASSEMBLY, SIGNAL HEAD, BACKPLATE
- MAST ARM DAMPENING DEVICE

GENERAL NOTES

1. THE SB THROUGH LANE SIGNAL HEADS SHALL BE WIRED IN PARALLEL AT THE MAST POLE HANDHOLE. A SIGNAL HEAD WIRED IN PARALLEL SHALL HAVE ITS OWN INDIVIDUAL CABLE FROM THE MAST POLE HANDHOLE SPLICE TO THE SIGNAL HEAD.
2. THE ACTUAL LOCATION OF ALL SIGNAL FOUNDATIONS, HANDHOLES, WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
3. ALIGN ADJACENT RED INDICATIONS TO SAME HEIGHT ABOVE PAVEMENT.
4. ALL TRAFFIC SIGNAL MAST ARMS MUST BE DESIGNED FOR THE LOADINGS SHOWN ON THE HIGHWAY STANDARDS OR THESE SIGNAL PLANS, WHICHEVER IS GREATER.
5. SIGNAL FACES FOR THE NORTH APPROACH ARE NOTED AS "A", "B" FOR THE SOUTH APPROACH, "C" FOR THE WEST APPROACH, AND "D" FOR THE EAST APPROACH.
6. THE EXISTING SIGNAL HEADS SHALL REMAIN WITH THE SIGN STRUCTURE AND BE SCRAPPED UPON IT'S REMOVAL.

BILL OF MATERIALS

U.S. 51 BUSN & I-55 Southbound Ramps

| ITEM | UNIT | QUANTITY |
|---|------|----------|
| UNDERGROUND CONDUIT, PVC, 2 1/2" DIA. | FOOT | 25 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 458 |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 248 |
| STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1 |
| CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 13 |
| DRILL EXISTING HANDHOLE | EACH | 1 |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED | EACH | 2 |
| SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED | EACH | 1 |
| SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 1 |
| REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 259 |
| REMOVE EXISTING SIGNAL HEAD | EACH | 3 |

•VARIOUS
••D-5 OVD SIN STR REPL 2012-06

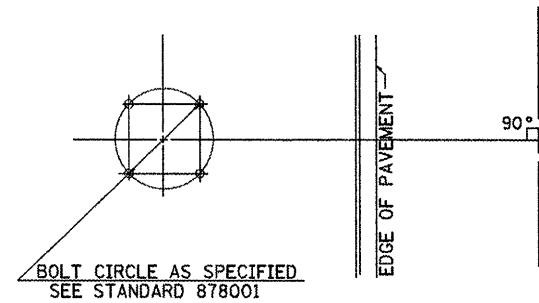
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| PLOT SCALE = 40.0000' / 1" = | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MCLEAN COUNTY - U.S. 51 BUSINESS
TRAFFIC SIGNAL MODERNIZATION - 5 C 057 U051 L007.30

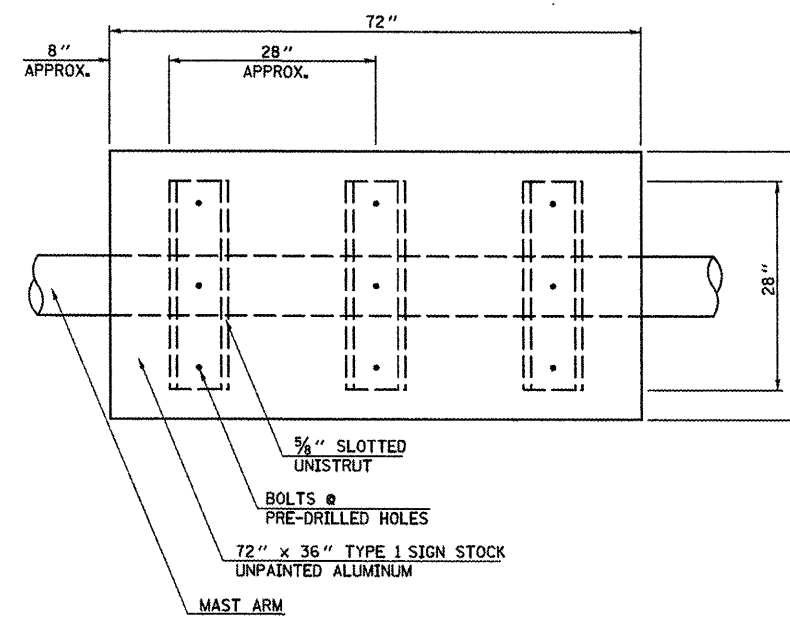
SCALE: SHEET NO. OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| • | •• | Various | 178 | 146 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

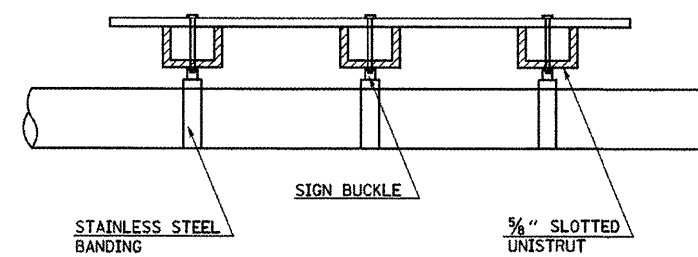


**DETAIL OF MAST ARM FOUNDATION
BOLT PATTERN**

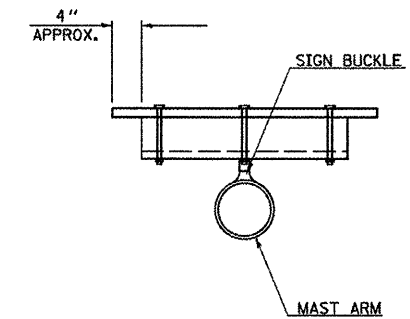
MAST ARM DAMPENING DEVICE MOUNTING DETAIL



PLAN VIEW



ELEVATION



CROSS SECTION

NOTE: PAINT ENDS OF UNISTRUT WITH
SPRAY ON GALVANIZED PAINT

•VARIOUS
••D-5 OVD SIN STR REPL 2012-06

| | | | |
|---|----------------------------|------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - | REVISED - |
| ct:\pw-work\pwr\d01\ceerlockjd\0266539\046179-shd-tr0ffac.dgn | | DRAWN - | REVISED - |
| | PLOT SCALE = 40.0000' / 1" | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MCLEAN COUNTY - U.S. 51 BUSINESS
TRAFFIC SIGNAL MODERNIZATION**

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
|--------|---------------------|--------------|

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| • | •• | Various | 178 | 147 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SCHEDULE OF QUANTITIES

MCLEAN COUNTY – U.S. 51 BUSN. – INDIVIDUAL LOCATIONS

| Location No. | 5-17 | | | |
|----------------|--|-------|----------|--|
| Structure No. | 5 S 057 U051R006.80 | | | |
| County / Route | MCLEAN CO. - NB US 51 Business between Raab Rd. and I-55 | | | |
| Scope of Work | This overhead sign truss is to be removed & replaced with a breakaway ground mount at Sta. 41+30. The existing ground mount at Sta. 41+61 is also to be removed. | | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY | |
| 60618320 | CONCRETE MEDIAN SURFACE, 6 INCH | SQFT | 158.00 | |
| 63200310 | GUARDRAIL REMOVAL | FOOT | 205.00 | |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.14 | |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 115.00 | |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 362.75 | |
| 72700100 | STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY | POUND | 979.00 | |
| 73400100 | CONCRETE FOUNDATIONS | CUYD | 2.36 | |
| 73600100 | REMOVE OVERHEAD SIGN STRUCTURE - SPAN | EACH | 1.00 | |
| 73700100 | REMOVE GROUND MOUNTED SIGN SUPPORT | EACH | 2.00 | |
| 73700200 | REMOVE CONCRETE FOUNDATION - GROUND MOUNT | EACH | 2.00 | |
| 73700300 | REMOVE CONCRETE FOUNDATION - OVERHEAD | EACH | 2.00 | |
| X4403800 | MEDIAN SURFACE REMOVAL | SQFT | 158.00 | |
| X6320100 | GUARDRAIL REMOVAL SPECIAL | FOOT | 546.00 | |
| X8040310 | ELECTRICAL SERVICE DISCONNECT | EACH | 1.00 | |

Remove overhead truss at Sta. 39+00 and also remove existing ground mount at Sta. 41+61

| Location No. | 5-18 | | | |
|----------------|--|-------|----------|--|
| Structure No. | 5 C 057 U051L006.90 | | | |
| County / Route | MCLEAN CO. - SB US 51 Business between I-55 and Raab Rd. | | | |
| Scope of Work | This overhead cantilever is to be removed & replaced with a breakaway ground mount at Sta. 44+70 and a new traffic signal mast arm at Sta. 43+23.5 | | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY | |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.14 | |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 66.00 | |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 78.00 | |
| 72700100 | STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY | POUND | 495.00 | |
| 73400100 | CONCRETE FOUNDATIONS | CUYD | 1.40 | |
| 73600200 | REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER | EACH | 1.00 | |
| 73700300 | REMOVE CONCRETE FOUNDATION - OVERHEAD | EACH | 1.00 | |
| 81028360 | UNDERGROUND CONDUIT, PVC, 2 1/2" DIA. | FOOT | 4.00 | |
| 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 42.00 | |
| 87700280 | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1.00 | |
| 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 13.00 | |
| 87900200 | DRILL EXISTING HANDHOLE | EACH | 1.00 | |
| 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED | EACH | 2.00 | |
| 88030070 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED | EACH | 1.00 | |
| 88030080 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 1.00 | |
| 89502350 | REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT | FOOT | 110.00 | |
| X8040310 | ELECTRICAL SERVICE DISCONNECT | EACH | 1.00 | |
| X8950305 | REMOVE EXISTING SIGNAL HEAD | EACH | 3.00 | |

Removal of the old truss and final wiring / operation of the new traffic signals must be coordinated to occur on the same day.

| Location No. | 5-19 | | | |
|----------------|--|-------|----------|--|
| Structure No. | 5 C 057 U051L007.30 | | | |
| County / Route | MCLEAN CO. - SB US 51 Business between Northtown Rd. and I-55 | | | |
| Scope of Work | This overhead cantilever is to be removed & replaced with a breakaway ground mount at Sta. 58+40 and a new traffic signal mast arm at Sta. 56+91 | | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY | |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.14 | |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 115.00 | |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 221.25 | |
| 72700100 | STRUCTURAL STEEL SIGN SUPPORT - BREAKAWAY | POUND | 948.00 | |
| 73400100 | CONCRETE FOUNDATIONS | CUYD | 2.36 | |
| 73600200 | REMOVE OVERHEAD SIGN STRUCTURE - CANTILEVER | EACH | 1.00 | |
| 73700300 | REMOVE CONCRETE FOUNDATION - OVERHEAD | EACH | 1.00 | |
| 81028360 | UNDERGROUND CONDUIT, PVC, 2 1/2" DIA. | FOOT | 25.00 | |
| 87301245 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C | FOOT | 458.00 | |
| 87301255 | ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C | FOOT | 248.00 | |
| 87700280 | STEEL MAST ARM ASSEMBLY AND POLE, 48 FT. | EACH | 1.00 | |
| 87800415 | CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER | FOOT | 13.00 | |
| 87900200 | DRILL EXISTING HANDHOLE | EACH | 1.00 | |
| 88030020 | SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED | EACH | 2.00 | |
| 88030070 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED | EACH | 1.00 | |
| 88030080 | SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED | EACH | 1.00 | |
| 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT | FOOT | 259.00 | |
| X8040310 | ELECTRICAL SERVICE DISCONNECT | EACH | 1.00 | |
| X8950305 | REMOVE EXISTING SIGNAL HEAD | EACH | 3.00 | |

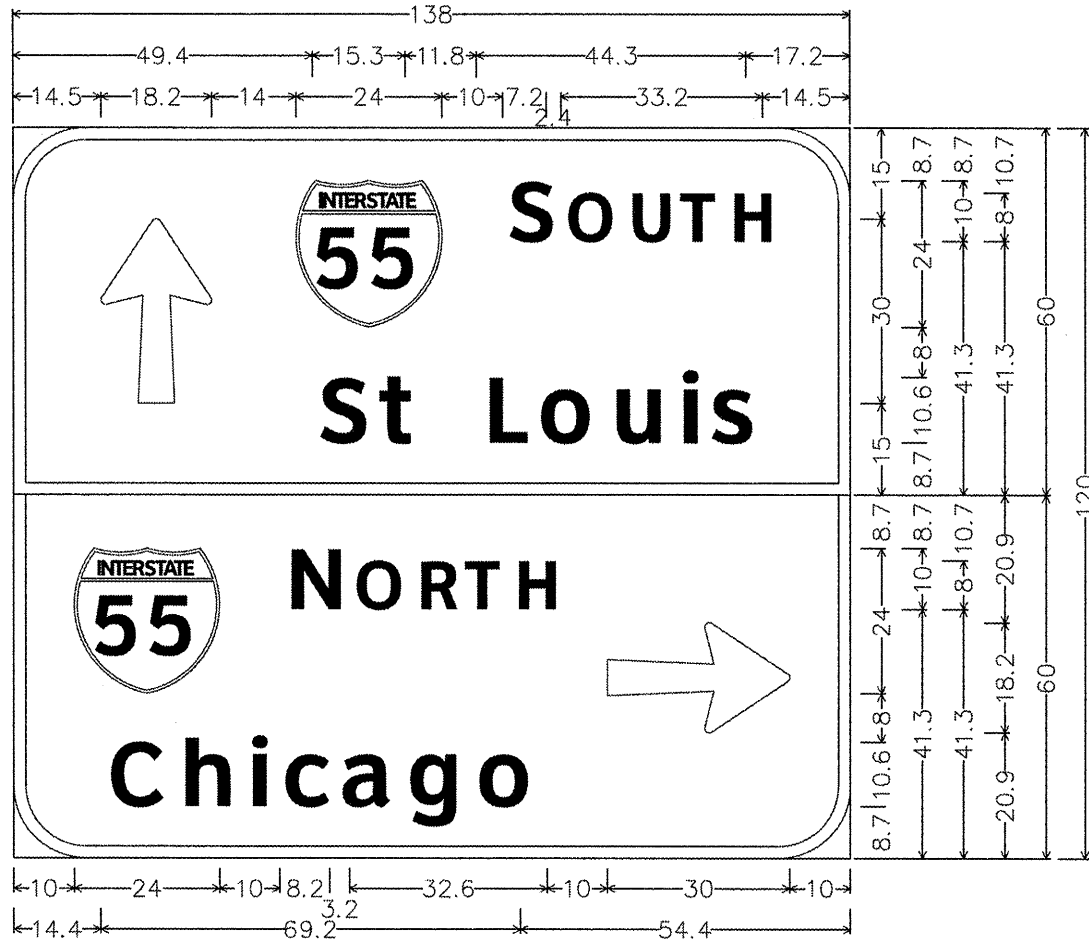
Removal of the old truss and final wiring / operation of the new traffic signals must be coordinated to occur on the same day.

| Location No. | 5-20 | | | |
|----------------|---|-------|----------|--|
| Structure No. | 5 B 057 U051R007.10 | | | |
| County / Route | MCLEAN CO. - NB US 51 Business under I-55 bridge 057-0024 | | | |
| Scope of Work | This bridge mounted truss is to be removed. | | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY | |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.14 | |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 84.00 | |
| 73602000 | REMOVE OVERHEAD SIGN STRUCTURE - BRIDGE MOUNTED | EACH | 1.00 | |
| X8040310 | ELECTRICAL SERVICE DISCONNECT | EACH | 1.00 | |

Electric Service Disconnect shall also include removal of all conduit and attachment clamps along the bottom flange of the fascia beam.

• VARIOUS
 •• D-5 OVD SIN STR REPL 2012-06

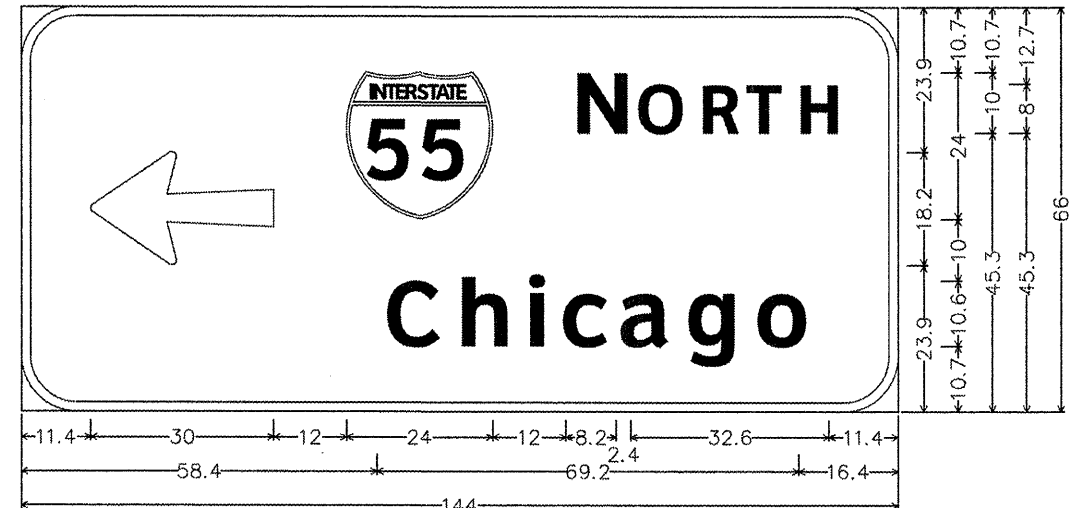
5-17
5 S 057 U051 R006.80



12.0" Radius, 2.0" Border, White on Green;
 Arrow 133 - 30.0" 90°; [SOUTH] ClearviewHwy-5-W;
 [St Louis] ClearviewHwy-5-W;
 12.0" Radius, 2.0" Border, White on Green;
 [NORTH] ClearviewHwy-5-W; [Chicago] ClearviewHwy-5-W;
 Arrow 133 - 30.0" 0°;
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|------|-------|-------|-------|
| ↑ | 55 | S | O | U | T | H |
| 14.5 | 46.7 | 80.7 | 90.3 | 100.6 | 109.2 | 117.4 |
| S | t | L | o | u | i | s |
| 49.4 | 59.4 | 76.5 | 85.6 | 97.4 | 108.5 | 114.0 |
| 55 | N | O | R | T | H | ⇒ |
| 10.0 | 44.0 | 55.4 | 65.7 | 73.7 | 81.9 | 98.0 |
| C | h | i | c | a | g | o |
| 14.4 | 26.3 | 37.5 | 43.4 | 53.1 | 64.0 | 75.4 |

5-18
5 C 057 U051 L006.90



9.0" Radius, 1.5" Border, White on Green;
 Arrow 133 - 30.0" 180°; [NORTH] ClearviewHwy-5-W; [Chicago] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|-------|-------|-------|-------|
| ← | 55 | N | O | R | T | H |
| 11.4 | 53.4 | 89.4 | 100.0 | 110.3 | 118.3 | 126.5 |
| C | h | i | c | a | g | o |
| 58.4 | 70.3 | 81.5 | 87.4 | 97.1 | 108.0 | 119.4 |

•VARIOUS
 ••D-5 OVD SIN STR REPL 2012-06

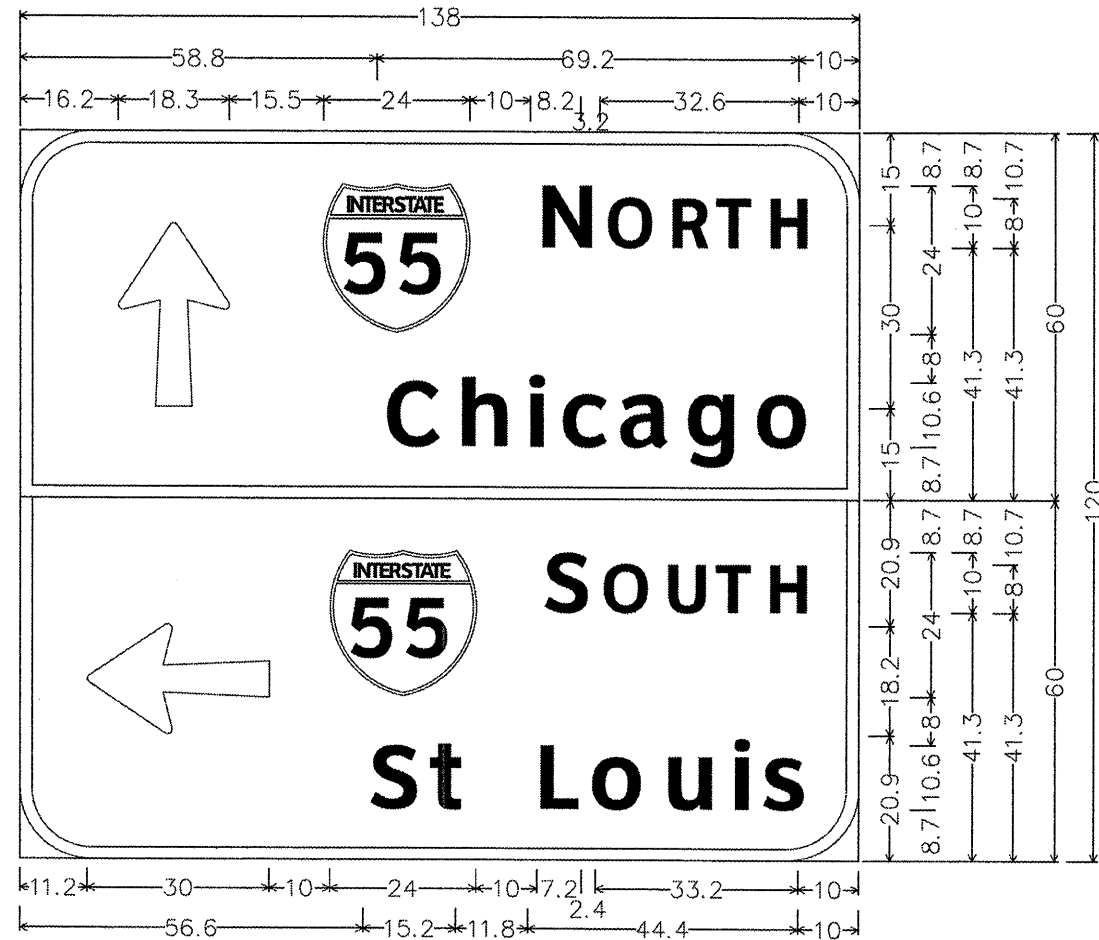
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|---|-----------------------------|-----------------|-----------|
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| er\pwwork\pwwork\ceerlookjd\4026557\046179-sht-Sign-Details.dgn | | DRAWN - | REVISED - |
| | PLLOT SCALE = 40.0000' / 1" | CHECKED - | REVISED - |
| | PLLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|--|--------------|--------|--------------|
| SIGNING DETAILS - MCLEAN COUNTY | | | |
| U.S. 51 BUSINESS | | | |
| SCALE: | SHEET NO. OF | SHEETS | STA. TO STA. |

| | | | | |
|-----------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| • | •• | Various | 178 | 149 |
| CONTRACT NO. 46179 | | | | |
| [ILLINOIS] FED. AID PROJECT | | | | |

5-19
5 C 057 U051 L007.30



12.0" Radius, 2.0" Border, White on Green;
 Arrow 133 - 30.0" 90°; [N ORTH] ClearviewHwy-5-W;
 [Chicago] ClearviewHwy-5-W;
 12.0" Radius, 2.0" Border, White on Green;
 Arrow 133 - 30.0" 180°; [S OUTH] ClearviewHwy-5-W;
 [St Louis] ClearviewHwy-5-W;
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|------|-------|-------|-------|
| ↑ | 55 | N | O | R | T | H |
| 16.2 | 50.0 | 84.0 | 95.4 | 105.7 | 113.7 | 121.9 |
| C | h | i | c | a | g | o |
| 58.8 | 70.7 | 81.9 | 87.8 | 97.4 | 108.4 | 119.7 |
| ← | 55 | S | O | U | T | H |
| 11.2 | 51.2 | 85.2 | 94.8 | 105.1 | 113.7 | 121.9 |
| S | t | L | o | u | i | s |
| 56.6 | 66.6 | 83.6 | 92.7 | 104.6 | 115.7 | 121.2 |

| | | | |
|---------------------------------------|------------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| c:\pwwork\pwwork\ceerlockjd\0826557\0 | 46179-sig-5ign-Details.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 48.0000" / 1" = | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS - MCLEAN COUNTY
U.S. 51 BUSINESS

SCALE: SHEET NO. OF SHEETS STA. TO STA.

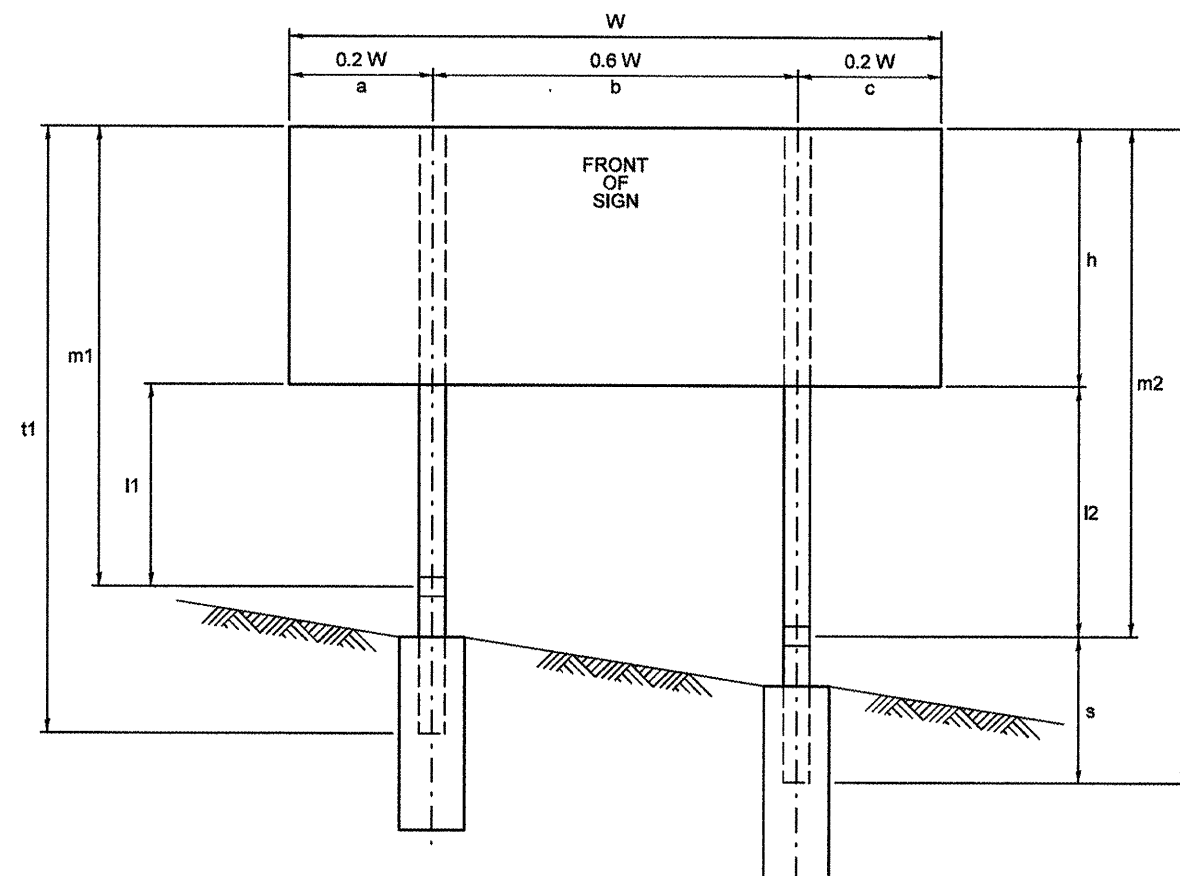
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|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 150 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS
 **D-5 OVD SIN STR REPL 2012-06

BREAK AWAY GROUND MOUNT SIGNAGE LAYOUT MCLEAN COUNTY – US 51 BUSN.

| Location No. | Structure No. | Mounting OFFSET to the near edge of sign | Mounting HEIGHT to the bottom edge of sign | Sign Size W x h ft | Sign Width W ft | 0.2W a ft | 0.6W b ft | 0.2W c ft | Clear Height CH ft | Sign Height h ft | leg 1 l1 ft | leg 2 l2 ft | main post 1 m1 ft | main post 2 m2 ft | stub post s ft | Total post 1 t1 ft | Total post 2 t2 ft | Post Type | Nominal wt. lbs/ft | Total Weight (both posts) lbs | Total Concrete cu. yds. |
|--------------|----------------------|---|---|--------------------|-----------------|-----------|-----------|-----------|--------------------|------------------|-------------|-------------|-------------------|-------------------|----------------|--------------------|--------------------|-----------|--------------------|-------------------------------|-------------------------|
| 5-17 | 5 S 057 U051 R006.80 | 29 feet from edge of pavement = 21 feet from edge of shoulder | 7 feet from white stripe / edge of pavement | 11.5' x 10.0' | 11.5 | 2.3 | 6.9 | 2.3 | 9.5 | 10.0 | 9.0 | 9.5 | 19.0 | 19.5 | 3.0 | 22.0 | 22.5 | W10 x 22 | 22.0 | 979.0 | 2.36 |
| 5-18 | 5 C 057 U051 L006.90 | 18 feet from edge of pavement = 10 feet from edge of shoulder | 7 feet from white stripe / edge of pavement | 12.0' x 5.5' | 12.0 | 2.4 | 7.2 | 2.4 | 9.0 | 5.5 | 8.0 | 9.0 | 13.5 | 14.5 | 2.5 | 16.0 | 17.0 | W6 x 15 | 15.0 | 495.0 | 1.40 |
| 5-19 | 5 C 057 U051 L007.30 | 18 feet from edge of pavement = 10 feet from edge of shoulder | 7 feet from white stripe / edge of pavement | 11.5' x 10.0' | 11.5 | 2.3 | 6.9 | 2.3 | 9.0 | 10.0 | 8.0 | 9.0 | 18.0 | 19.0 | 3.0 | 21.0 | 22.0 | W10 x 22 | 22.0 | 946.0 | 2.36 |

| Location No. | Structure No. | Station - Proposed Location |
|--------------|----------------------|--|
| 5-17 | 5 S 057 U051 R006.80 | The proposed breakaway ground mount is to be at Sta. 41+30. This is 230' north of the existing simple span to be removed (Sta. 39+00). This is also 31' south of the existing ground mount to be removed (Sta. 41+61). |
| 5-18 | 5 C 057 U051 L006.90 | The proposed breakaway ground mount is to be at Sta. 44+70. This is 140' north of the existing simple span to be removed (43+30). |
| 5-19 | 5 C 057 U051 L007.30 | The proposed breakaway ground mount is to be at Sta. 58+40. This is 140' north of the existing simple span to be removed (57+00). |



CH = Clear Height = the greater of l1 or l2

| | | | |
|---|------------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceer-lock.jd | DESIGNED - JAL | REVISED - |
| et\pwwork\pwwork\ceer-lock.jd\0266557.D | 46179-shit-details.dgn | DRAWN - | REVISED - |
| | PLDT SCALE = 48,0000 ' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - |

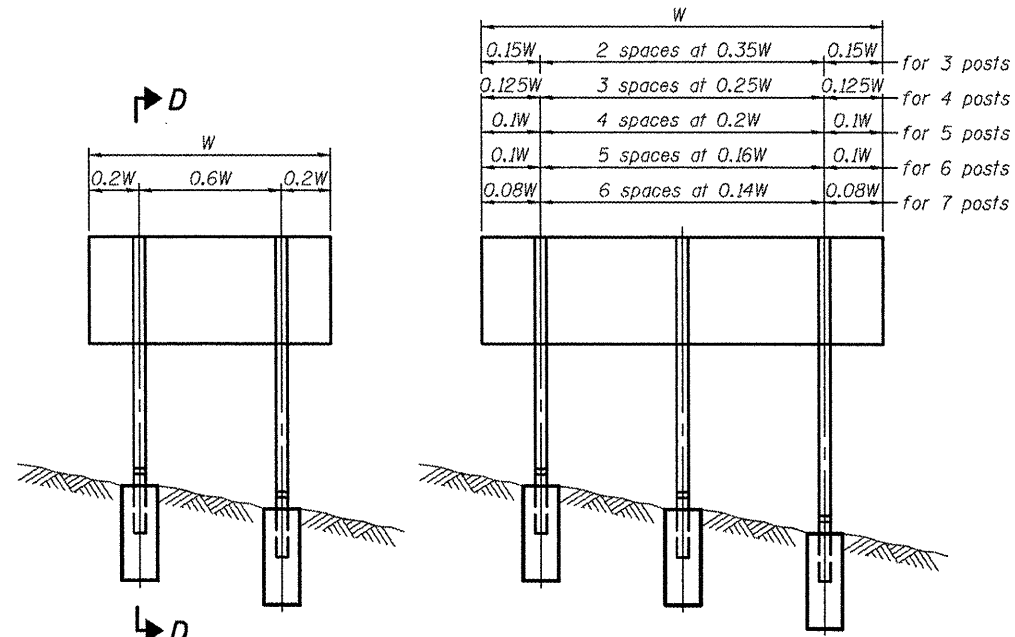
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BREAK AWAY GROUND MOUNT SIGNAGE LAYOUT
MCLEAN COUNTY – US 51 BUSN.**

SCALE: SHEET NO. 12 OF 12 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 151 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

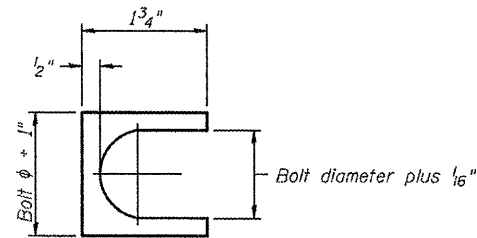
•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06



| W | | |
|--------|-------------------|--------|
| 0.15W | 2 spaces at 0.35W | 0.15W |
| 0.125W | 3 spaces at 0.25W | 0.125W |
| 0.1W | 4 spaces at 0.2W | 0.1W |
| 0.1W | 5 spaces at 0.16W | 0.1W |
| 0.08W | 6 spaces at 0.14W | 0.08W |

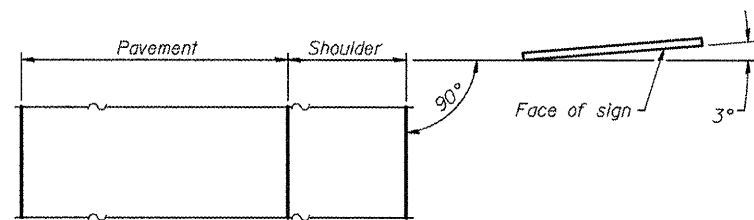
for 3 posts
for 4 posts
for 5 posts
for 6 posts
for 7 posts

ELEVATION

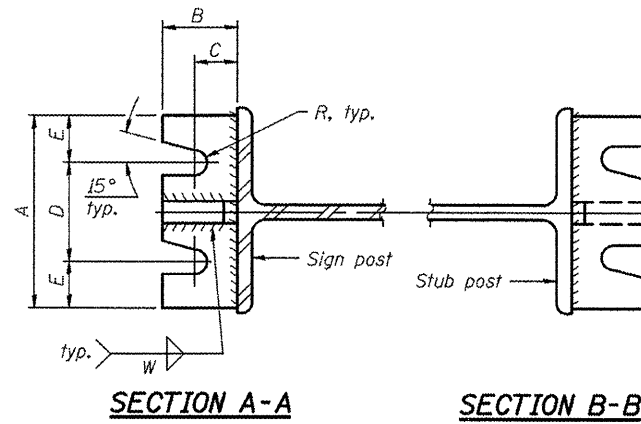


SHIM DETAIL

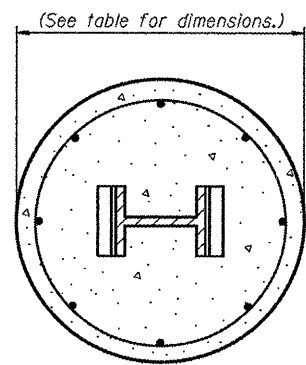
Furnish two 0.01" thick and two 0.03" thick stainless steel or brass (ASTM B36) shims per post.



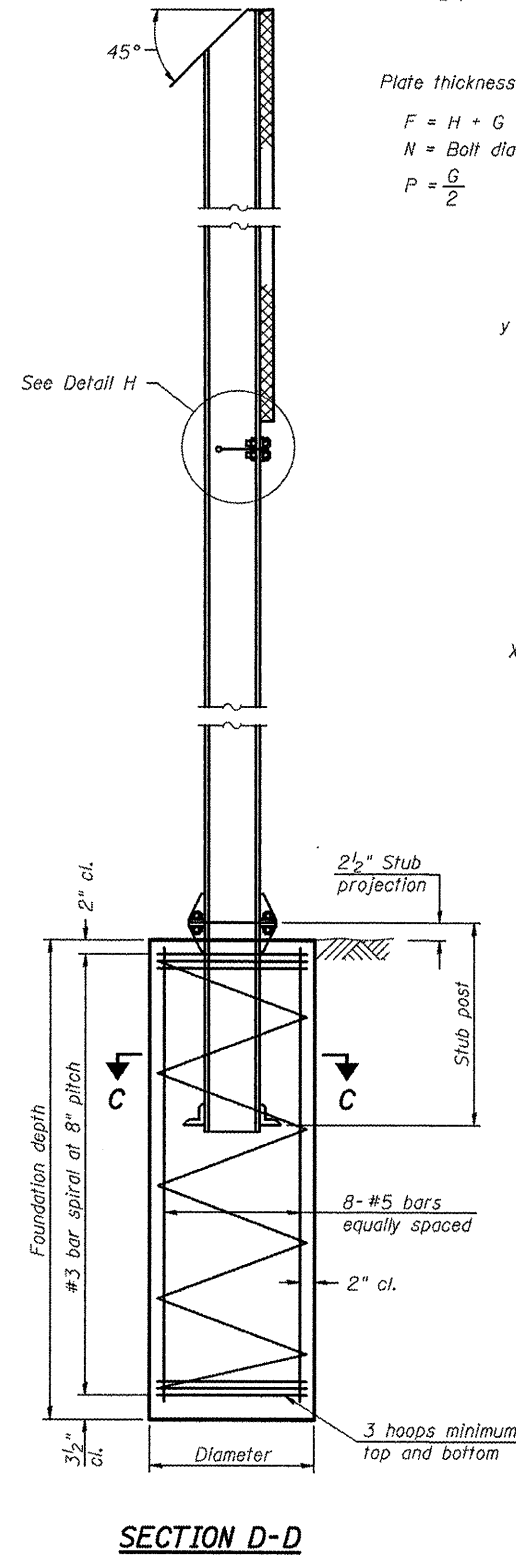
LOCATION SKETCH



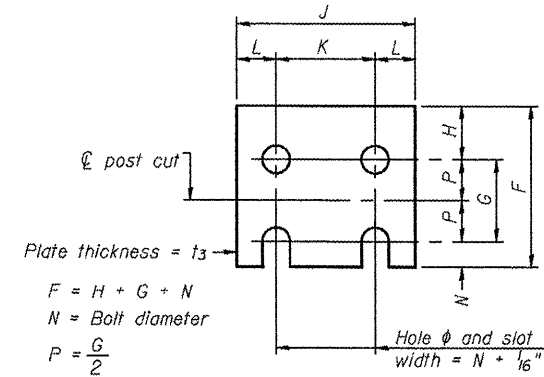
SECTION A-A SECTION B-B



SECTION C-C



SECTION D-D

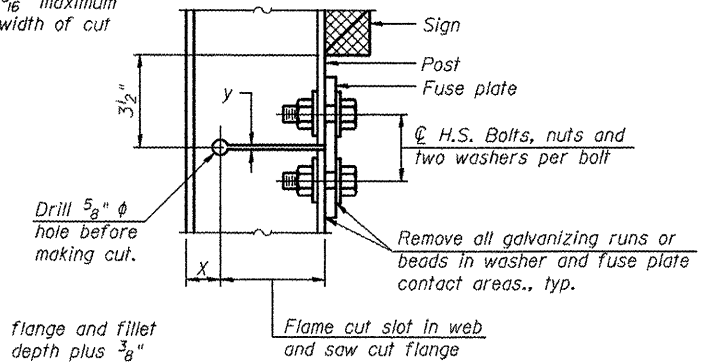


FUSE PLATE DETAIL
(Install with notches down.)

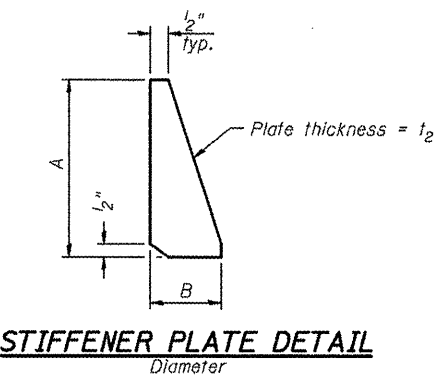
Plate thickness = t_3
 $F = H + G + N$
 $N = \text{Bolt diameter}$
 $P = \frac{G}{2}$

| FUSE PLATE DATA | | |
|-------------------|--------|--------|
| N = Bolt Diameter | G | H |
| 1/2" | 2" | 1 1/8" |
| 5/8" | 2 1/4" | 1 1/4" |
| 3/4" | 2 1/2" | 1 3/8" |
| 7/8" | 2 3/4" | 1 1/2" |
| 1" | 3" | 1 5/8" |
| 1 1/8" | 3 1/4" | 1 3/4" |
| 1 1/4" | 3 1/2" | 1 7/8" |

$y = \frac{3}{16}$ " maximum width of cut



DETAIL H



STIFFENER PLATE DETAIL

GENERAL NOTES

Posts shall be plumbed by using shims with post-to-stub post connection bolts snug tight only. Final tightening of all High Strength Bolts shall be in accordance with Article 727.05 and threads at the junction of the bolt and nut shall be burred or center punched to prevent the nut from loosening.

LOADING: 80 m.p.h. wind with 30% gust factor, normal to sign.

DESIGN STRESSES:
 Structural steel - 20,000 p.s.i.
 Reinforcing steel - 20,000 p.s.i.
 Concrete - 1,400 p.s.i.
 Footing soil pressure - 2,000 p.s.f.

After fabrication, the post, fuse plate and upper 6", min. of the stub post shall be hot-dip galvanized in accordance with AASHTO M111. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M232.

Work this sheet with Base Sheet BAW-A-2.
 *VARIOUS COUNTIES
 **0-5 OVD SIN STR REPL 2012-06

BAW-A-1

1-20-11

(Sheet 1 of 2)

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ce:\pwwork\pwwork\ceerlockjd\0266557\0266557.dgn | 46179-shit-details.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 48.0000' / in. | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BREAK-AWAY WIDE FLANGE
 STEEL SIGN POST DETAILS

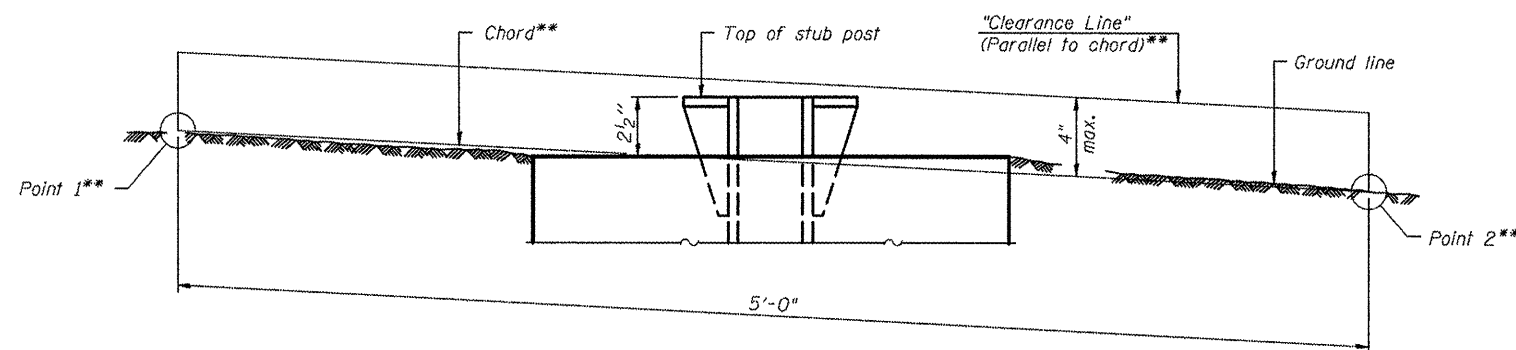
SCALE: SHEET NO. 1 OF 2 SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------------|-----------|
| * | ** | Various | 178 | 152 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

| POST | CONCRETE FOUNDATION TABLE | | | | | | | POST TO STUB POST CONNECTION DATA | | | | | | | | | | FUSE PLATE DATA | | | | |
|--------|---------------------------|-----------------|------------------------|----------------------|----------------------|--------------------|------------------|-----------------------------------|-------------|--------|--------|--------|--------|----------------|----------------|------|--------|-----------------|--------|--------|----------------|----------|
| | Foundation | | | Reinforcement | | | Stub Post Length | Bolt Size | A | B | C | D | E | t ₁ | t ₂ | R | W | J | K | L | t ₃ | |
| | Diameter | * Minimum Depth | Concrete (1) cu. yds.) | Vertical Bars Length | Bar Spirals Diameter | Bar Spirals Length | | | | | | | | | | | | | | | | lbs. (2) |
| W6x9 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-3" | 5/8" x 3/4" | 6" | 2 1/4" | 1 1/4" | 3 1/2" | 1 1/4" | 3/4" | 1/2" | 1 1/2" | 1 1/4" | 4" | 2 1/4" | 7/8" | 1/4" |
| W6x15 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-6" | 5/8" x 3/4" | 6" | 2 1/4" | 1 1/4" | 3 1/2" | 1 1/4" | 3/4" | 1/2" | 1 1/2" | 1 1/4" | 6" | 3 1/2" | 1 1/4" | 3/8" |
| W8x18 | 2'-0" | 6'-0" | 0.70 | 5'-9" | 1'-8 1/2" | 79'-0" | 78 | 2'-6" | 3/4" x 3/4" | 6" | 2 1/2" | 1 3/8" | 3 1/4" | 1 3/8" | 1" | 1/2" | 1 1/2" | 5/16" | 5 1/4" | 2 3/4" | 1 1/4" | 3/8" |
| W10x22 | 2'-6" | 6'-6" | 1.18 | 6'-3" | 2'-2 1/2" | 105'-0" | 92 | 3'-0" | 3/4" x 3/4" | 6" | 2 1/2" | 1 3/8" | 3 1/4" | 1 3/8" | 1" | 1/2" | 1 1/2" | 5/16" | 5 3/4" | 2 3/4" | 1 1/2" | 1/2" |
| W10x26 | 2'-6" | 7'-0" | 1.27 | 6'-9" | 2'-2 1/2" | 112'-0" | 98 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 5 3/4" | 2 3/4" | 1 1/2" | 5/8" |
| W12x26 | 2'-6" | 7'-9" | 1.41 | 7'-6" | 2'-2 1/2" | 119'-0" | 107 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 6 1/2" | 3 1/2" | 1 1/2" | 5/8" |
| W14x30 | 3'-0" | 7'-3" | 1.90 | 7'-0" | 2'-8 1/2" | 145'-0" | 113 | 3'-0" | 7/8" x 4" | 7" | 2 3/4" | 1 1/2" | 4" | 1 1/2" | 1" | 3/4" | 5/32" | 3/8" | 6 3/4" | 3 1/2" | 1 5/8" | 1/2" |
| W14x38 | 3'-0" | 8'-0" | 2.09 | 7'-9" | 2'-8 1/2" | 153'-0" | 122 | 3'-6" | 1" x 4 1/2" | 7 1/2" | 3" | 1 3/4" | 4" | 1 3/4" | 1 1/4" | 3/4" | 11/32" | 3/8" | 6 3/4" | 3 1/2" | 1 5/8" | 1/2" |
| W16x45 | 3'-0" | 8'-6" | 2.23 | 8'-3" | 2'-8 1/2" | 162'-0" | 130 | 3'-6" | 1" x 4 1/2" | 7 1/2" | 3" | 1 3/4" | 4" | 1 3/4" | 1 1/4" | 3/4" | 11/32" | 3/8" | 7" | 3 1/2" | 1 3/4" | 1/2" |

*Dimensional changes required for varying site conditions shall be approved by the Engineer.

| POST | FUSE PLATE BOLT SIZE | | | | | | | | | | | | | | | | | | | | | |
|--------|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | Sign Height | | | | | | | | | | | | | | | | | | | | | |
| | 4'-0" | 5'-0" | 6'-0" | 7'-0" | 8'-0" | 9'-0" | 10'-0" | 11'-0" | 12'-0" | 13'-0" | 14'-0" | 15'-0" | 16'-0" | 17'-0" | 18'-0" | 19'-0" | 20'-0" | 21'-0" | 22'-0" | 23'-0" | 24'-0" | |
| W6x9 | 1/2" x 1 1/2" | 1/2" x 1 1/2" | 1/2" x 1 1/2" | 1/2" x 1 1/2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| W6x15 | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| W8x18 | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 1/2" x 1 3/4" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | 3/4" x 2" | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |
| W10x22 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | --- | --- | --- | --- | --- | --- | --- | --- | |
| W10x26 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | --- | --- | --- | --- | --- | --- | --- | |
| W12x26 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | --- | --- | --- | --- | --- | --- | |
| W14x30 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2" | 5/8" x 2" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | 3/4" x 2 1/4" | --- | --- | --- | --- | --- | |
| W14x38 | 1/2" x 2" | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" |
| W16x45 | --- | 1/2" x 2" | 1/2" x 2" | 5/8" x 2 1/4" | 5/8" x 2 1/4" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" | 3/4" x 2 1/2" |



**ELEVATION
GROUND LINE & STUB POST**

** For all "Point 1" and "Point 2" locations, "Clearance Line" must be at or above top of stub post.

- ① Quantity includes all concrete necessary for one foundation.
- ② Includes reinforcement bars and spiral hooping for one foundation.

Note: All necessary excavation or drilling, backfilling, disposal of material, formwork, and furnishing and placing all materials including Class DS Concrete and reinforcing steel shall be included in the pay item for "Concrete Foundations".

BAW-A-2

1-20-11

(Sheet 2 of 2)

•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06

| | | | |
|--|-----------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceeer-lock_jd | DESIGNED - JAL | REVISED - |
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| | PLBT SCALE = 40.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BREAK-AWAY WIDE FLANGE
STEEL SIGN POST TABLES

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 153 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SCALE: SHEET NO. 2 OF 2 SHEETS STA. TO STA.

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* FAP 412, F.A.I.-55, FAP 46 (I.S. RYE, 51)
* 57-4 (HRR-4, YBR, 13), 62R, L, SC & TS

| | | | | |
|-------------|---------|--------|--------------|-----------|
| PROJECT NO. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 46179 | SHR-DET | MCLEAN | 319 | 123 |

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, dated January, 1975

CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, (dated October 1, 1983); Supplemental Specifications for Road and Bridge Construction, Standard Specifications for Traffic Control Items (dated Feb 1, 1997) and Special Provisions.

MINIMUM CLEARANCE: Vertical Roadway Clearance = 17'-3" (All Obstructions)

LOADING--80 MPH WIND VELOCITY PLUS 30% GUST FACTOR
WIND LOADING: 35 psf normal to Sign Panel Area as shown below in Wind Loading Diagram plus 48 psf normal to exposed frame members.

WALKWAY LOADING: Dead Load plus 500# concentrated Live Load

MATERIALS:

REINFORCEMENT BARS shall conform to the requirements of AASHTO M31 or M53, Grade 60.

CLASS X CONCRETE shall be used throughout.

STRUCTURAL STEEL: All material for structural chords, verticals, or chord splices shall conform to either ASTM A500, Grade C, AASHTO M222 or AASHTO M223, Grade 50 and shall meet the longitudinal CVN requirements of 15 ft lbs. at 40° F.

Posts shall conform to AASHTO M222 or M223, Grade 50, and shall meet the longitudinal CVN requirements of 15 ft lbs. at 40° F.

HIGH STRENGTH BOLTS shall conform to the requirements of AASHTO M164.

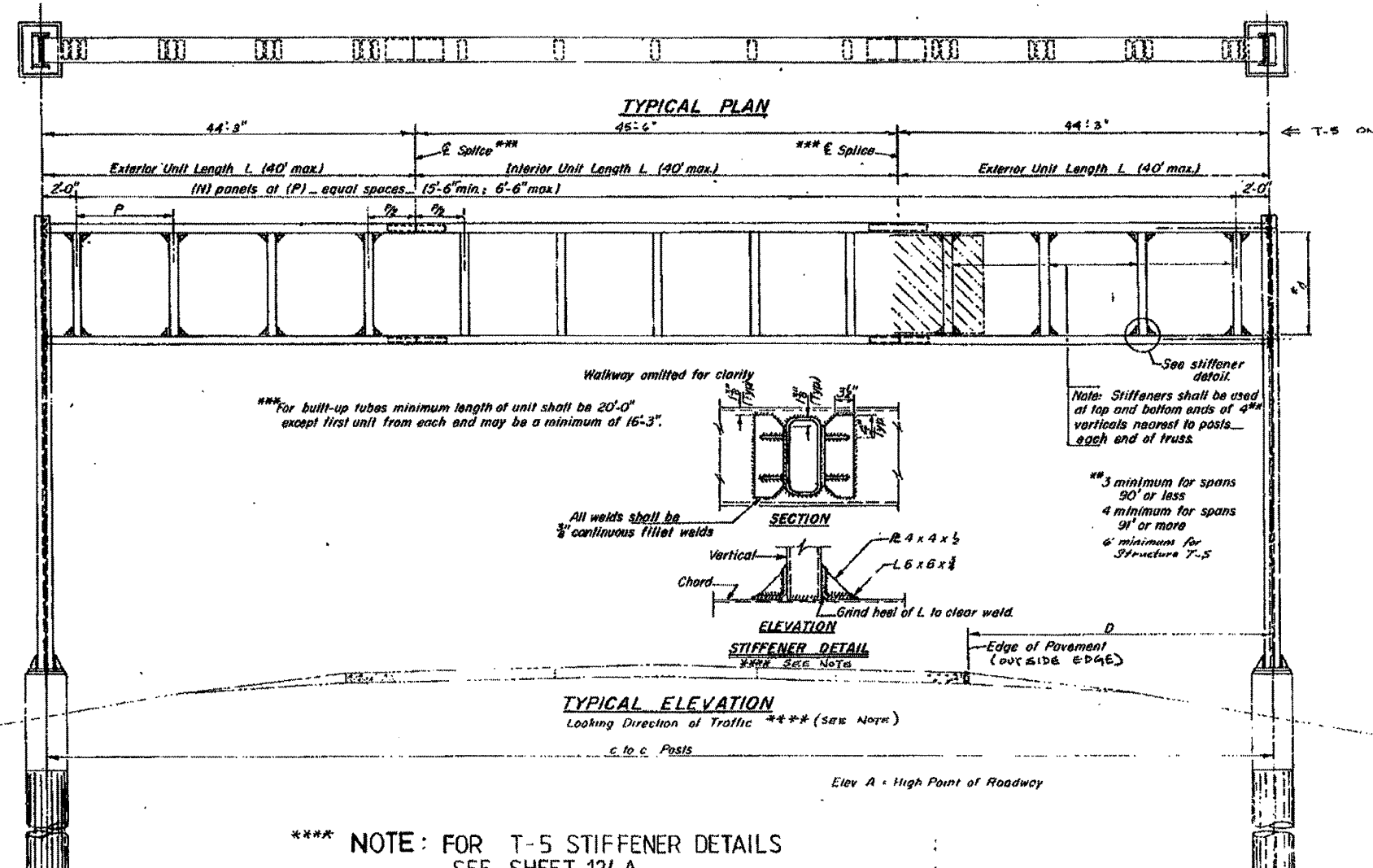
STRUCTURAL SHAPES and PLATES shall conform to the requirements of AASHTO M223, Grade 50, or M222, unless otherwise specified.

PAINTING: The zinc-silicates and vinyl paint system shall be used for shop and field painting of all structural steel. Exterior surfaces of all structural steel that are painted with the high-build vinyl paint shall receive one coat of vinyl enamel. Paint system, including first coat, for the walkway gratings may be done in the shop or just prior to erection. Chords and verticals will require painting on exterior surfaces only.

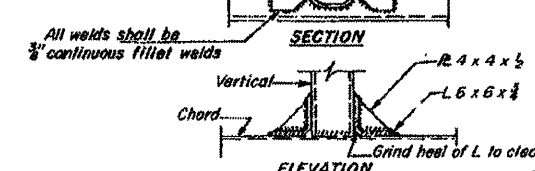
WELDING: All welding shall be in accordance with Article 507.04(s) of the Standard Specifications for Road and Bridge Construction.

TOTAL BILL OF MATERIAL

| | | |
|--|--------|-------|
| OVERHEAD SIGN STRUCTURE_SPAN (SPECIAL) | Lin Ft | 629 |
| OVERHEAD SIGN STRUCTURE WALKWAY_TYPE S | Lin Ft | 415 |
| DRILLED SHAFT CONCRETE FOUNDATIONS | Cu Yds | 115.0 |



*** For built-up tubes minimum length of unit shall be 20'-0" except first unit from each end may be a minimum of 16'-3".

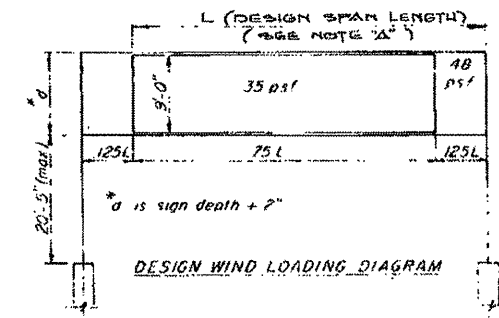


Note: Stiffeners shall be used at top and bottom ends of 4" verticals nearest to posts each end of truss.

3" minimum for spans 90' or less
4" minimum for spans 91' or more
6" minimum for Structure T-5

**** NOTE: FOR T-5 STIFFENER DETAILS SEE SHEET 124 A

| Structure No | Station | c to c Posts | Elev A | Dim. D |
|--------------|----------------------|--------------|--------|--------|
| T1 | 155+20.0 (F.A.I.-55) | 98'-0" | 840.03 | 42'-0" |
| T2 | 151+60.0 (F.A.I.-55) | 98'-0" | 859.29 | 42'-0" |
| T3 | 168+00.0 (F.A.I.-55) | 74'-0" | 874.31 | 18'-0" |
| T4 | 184+00.0 (F.A.I.-55) | 61'-6" | 874.58 | 14'-1" |
| T5 | 200+00.0 (F.A.I.-55) | 134'-0" | 870.24 | 12'-0" |
| T6 | 210+00.0 (F.A.I.-55) | 97'-4" | 862.90 | 16'-9" |
| T7 | 37+00.0 (U.S.51) | 66'-4" | 841.73 | 22'-0" |



NOTE 'A'
DESIGN SPAN LENGTHS MAY BE MODIFIED AS REQUIRED TO PROVIDE ACTUAL WIND LOADINGS AS PER STANDARD SPECIFICATIONS.

OVERHEAD SIGN STRUCTURES GENERAL PLAN & ELEVATION

F.A.I.-55 AND U.S. RT.51
F.A.P.412
McLEAN COUNTY

| | | |
|----------|----------|--------------------------------|
| DESIGNED | EXAMINED | 1P |
| CHECKED | PASSED | DESIGNER'S SIGNATURE |
| DRAWN | APPROVED | ENGINEER'S SIGNATURE AND STAMP |
| CHECKED | | |

5 S-5-1 SPECIAL

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | | |
|-----------------------------|------------------------|-----------------|-----------|---|-----------------------------------|---------------------------|---------------------|--------------|--------------------|-----------|--|
| FILE NAME = | USER NAME = ceerlookjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | AS-BUILTS FOR INFORMATION ONLY | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| 46179-shr-det | 46179-shr-det | DRAWN - | REVISED - | | | * | ** | Various | 178 | 154 | |
| PLOT SCALE = 48,0000' / in. | | CHECKED - | REVISED - | | | SCALE: | SHEET NO. OF SHEETS | STA. TO STA. | CONTRACT NO. 46179 | | |
| PLOT DATE = 9/21/2011 | | DATE - 04/26/11 | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

EXISTING INFORMATION ONLY

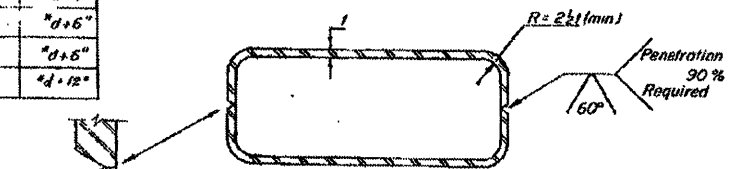
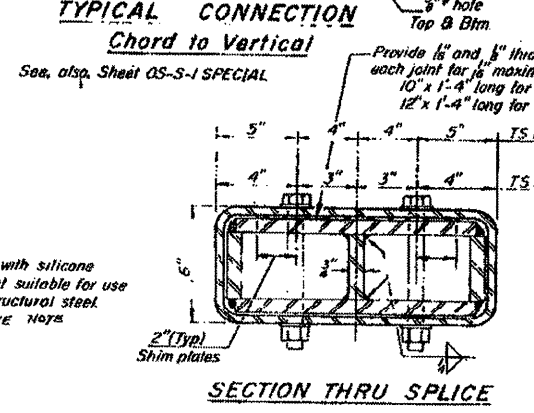
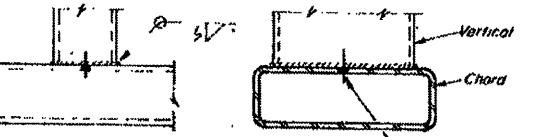
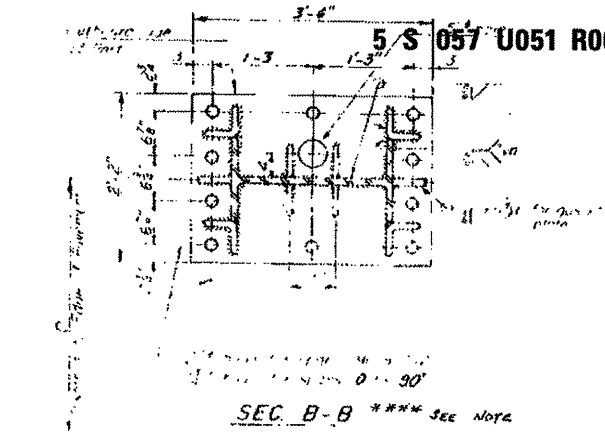
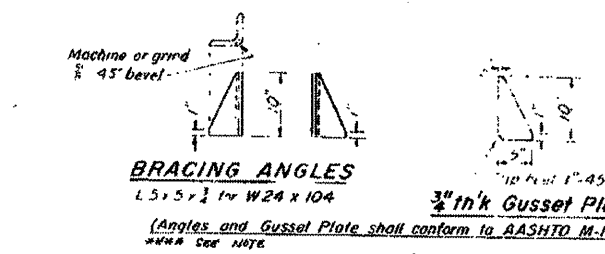
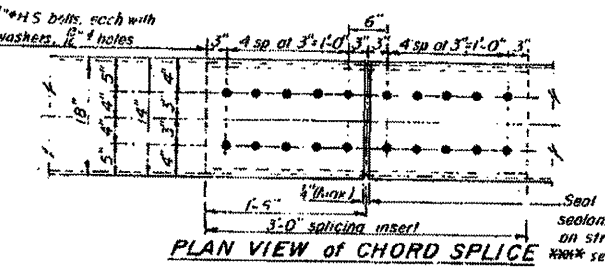
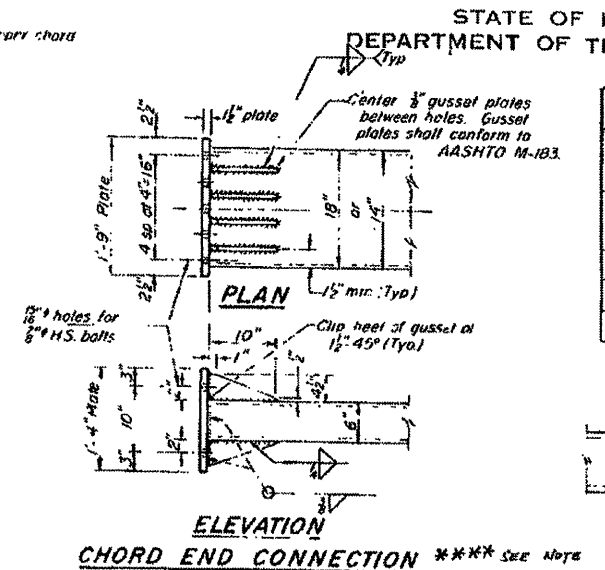
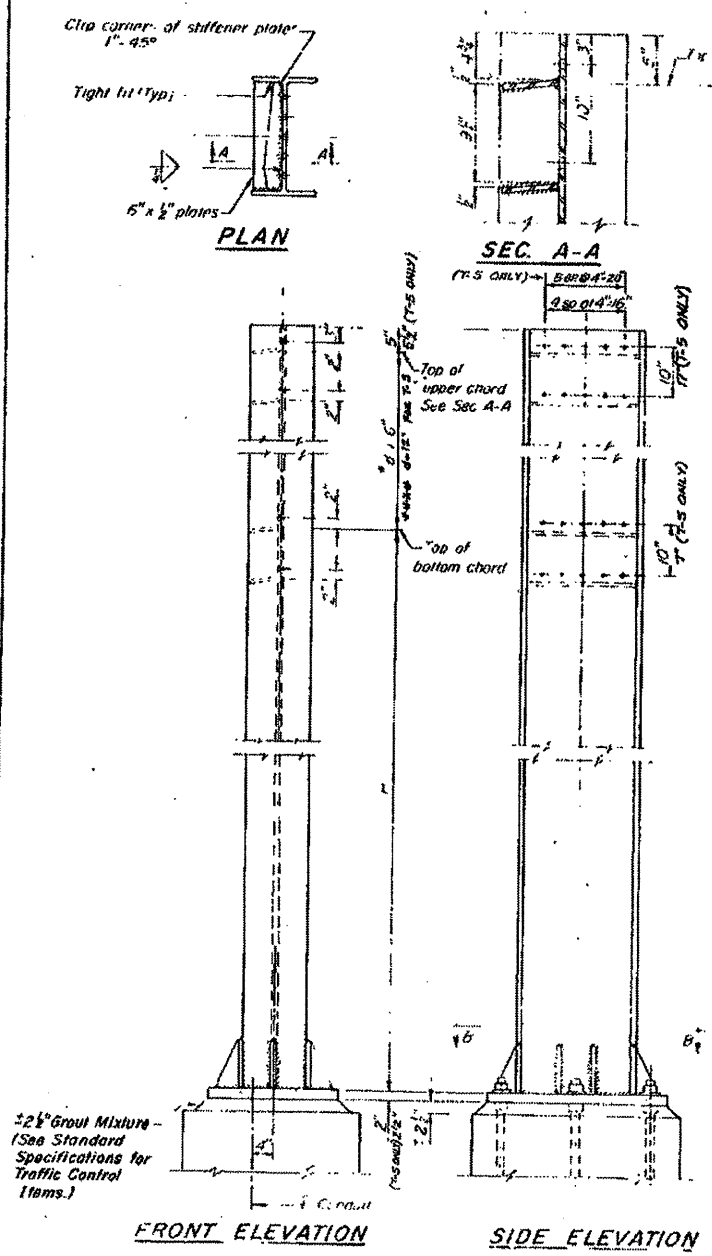
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|--------|-----|-----|
| McLEAN | 319 | 124 |
|--------|-----|-----|

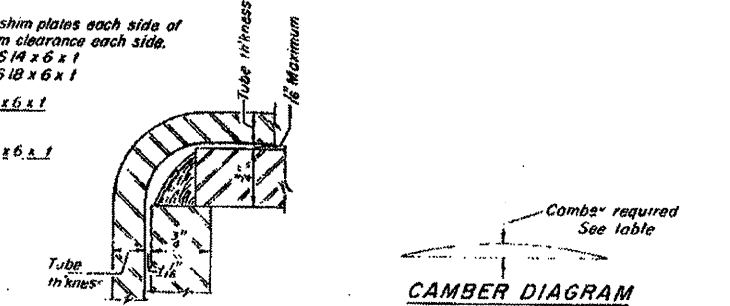
FAP 412, F.A.I.-55, FAP 46 (I.L.S. D.T.E. 31)
37-4 (HBR-4, YBR, 1R3, G2R, L, SG & TS)

| Span | Camber of Centerline | Chord | Vertical | Post | C-C (h rds) |
|--------------|----------------------|-----------------|----------------|-----------|-------------|
| 0' to 70' | 4" | TS14 x 6 x 3/8 | TS10 x 6 x 3/8 | W24 x 104 | "d+6" |
| 71' to 80' | 4" | TS14 x 6 x 3/8 | TS10 x 6 x 3/8 | W24 x 104 | "d+6" |
| 81' to 90' | 6" | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | "d+6" |
| 91' to 100' | 6" | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | "d+6" |
| 101' to 110' | 6" | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | "d+6" |
| 111' to 124' | 6" | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | "d+6" |
| 124' | 6" | TS20 x 12 x 3/8 | TS14 x 6 x 3/8 | W27 x 178 | "d+12" |

*d is sign depth + 2"



Width, depth and thickness shall be as indicated for TS members indicated in table.



| Structure No | Span | Chamber of E | Exterior Unit Lgth (L) | Interior Unit Lgth (L) | No. of Panels (N) | Panel Lgth (P) | Chord Size | Vertical Size | Post Size | L.H. Post Dim. H | R.H. Post Dim. H | | |
|--------------|-------------------|--------------|------------------------|------------------------|-------------------|----------------|------------|---------------|-----------------|------------------|------------------|----------|----------|
| T1 | 155+20.0 (FAI-55) | 98.10 | 14.5 | 6 | 34.15 1/2 | 29.1 1/2 | 10 | 5.10 1/2 | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | 20.10 | 20.10 |
| T2 | 151+60.0 (FAI-55) | 98.10 | 14.5 | 6 | 34.15 1/2 | 29.1 1/2 | 10 | 5.10 1/2 | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | 20.10 | 20.10 |
| T3 | 108+00.0 (FAI-55) | 74.10 | 12.5 | 4 | 22.5 | 29.1 1/2 | 12 | 5.10 | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | 19.10 | 19.10 |
| T4 | 184+00.0 (FAI-55) | 61.0 | 13.0 | 6 | 18.4 1/2 | 28.1 1/2 | 10 | 5.9 | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | 18.1 1/2 | 18.1 1/2 |
| T5 | 205+00.0 (FAI-55) | 134.0 | 14.0 | 6 | 44.3 | 45.6 | 20 | 6.6 | TS20 x 12 x 3/8 | TS16 x 6 x 3/8 | W27 x 178 | 20.5 1/2 | 18.1 1/2 |
| T6 | 210+00.0 (FAI-55) | 97.14 | 13.0 | 6 | 34.1 | 29.1 1/2 | 10 | 5.10 | TS18 x 6 x 3/8 | TS14 x 6 x 3/8 | W24 x 104 | 18.10 | 18.10 |
| T7 | 27+00.0 (US-51) | 66.14 | 8.5 | 4 | 21.10 | 22.1 1/2 | 11 | 5.5 | TS14 x 6 x 3/8 | TS10 x 6 x 3/8 | W24 x 104 | 16.10 | 19.10 |

*** NOTE: SEE SHEET # 124A FOR STRUCTURE # 1-5 DETAILS!

OVERHEAD SIGN STRUCTURES
POST and CHORD DETAILS
F.A.I.-55 AND U.S. RT.51
F.A.P.412
McLEAN COUNTY

POST
W24 x 104
OR
W27 x 178 (STR *F-5 ONLY)

DESIGNED - JAL
DRAWN -
CHECKED -
DATE - 04/26/11

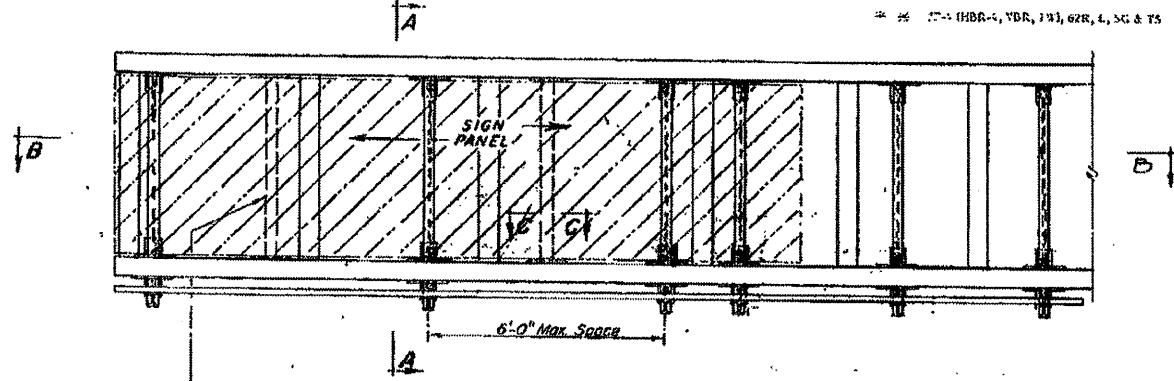
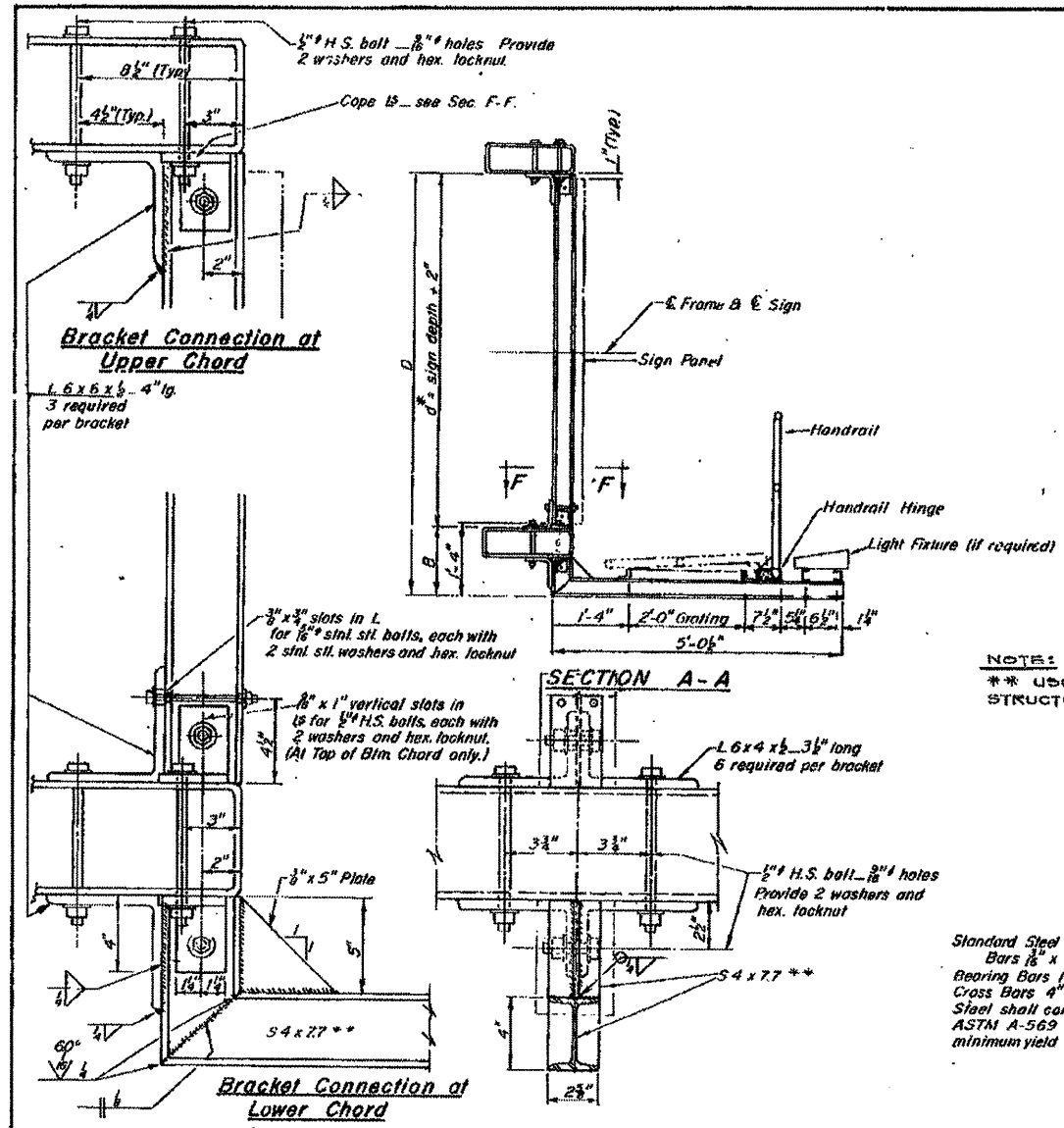
CS-5-2 SPECIAL

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|--------------|--------|-----------|-----|
| PROJECT NO. | 319 | SHEET NO. | 125 |
| CONTRACT NO. | McLEAN | SHEETS | |

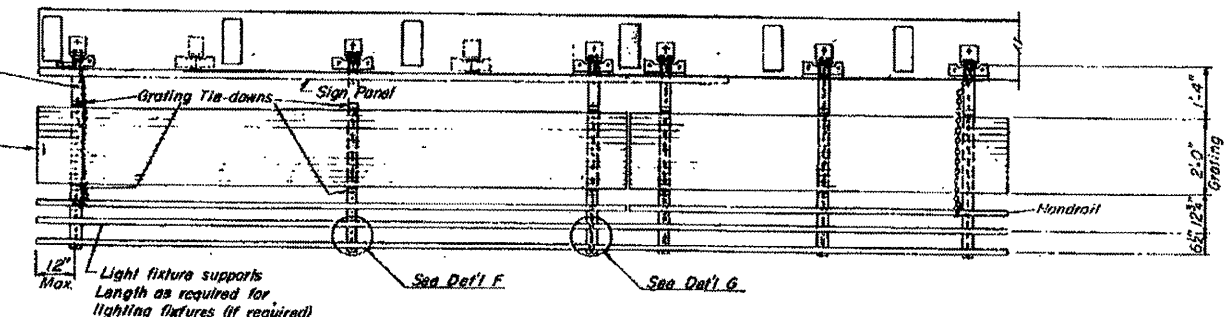
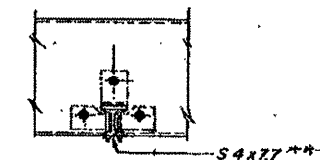
* FAP 412, F.A.I.-55, FAP 46 (U.S. RTE. 51)
** I-HBR-4, VDR, 101, 62R, L, SC & TS



NOTE:
** USE 55K10 FOR STRUCTURE #1, #2, #4 AND #6.

54x77**
AASHTO M-183 Steel
Sign width - 0-10' incl. - 2 req'd
10-16' incl. - 3 req'd
16-22' incl. - 4 req'd
22-28' incl. - 5 req'd
28-34' incl. - 6 req'd.

For location and date of Sign Panel See other sheets.

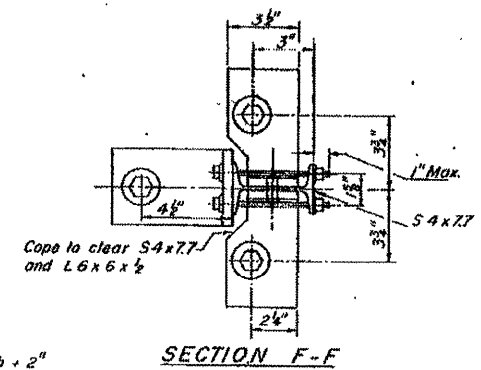


Note: Handrail and Grating shall span a minimum of three (3) brackets.

BRACKET DETAILS
NOTE: Walkway brackets shall conform to requirements of AASHTO M-183

Standard Steel Grating
Bars 1/2" x 1"
Rear Bars 1/2" o.c.
Cross Bars 4" o.c.
Steel shall conform to ASTM A-569 with a minimum yield of 30,000 psi

| Structure Number | Station | B | D | d |
|------------------|----------------------|-----|-------|------|
| T1 | 155+20.0 (F.A.I.-55) | 115 | 15+11 | 14+5 |
| T2 | 15+60.0 (F.A.I.-55) | 115 | 15+11 | 14+5 |
| T3 | 165+00.0 (F.A.I.-55) | 115 | 15+11 | 12+5 |
| T4 | 184+00.0 (F.A.I.-55) | 115 | 14+11 | 13+5 |
| T5 | 205+00.0 (F.A.I.-55) | 115 | 15+3 | 14+0 |
| T6 | 210+00.0 (F.A.I.-55) | 115 | 15+5 | 14+2 |
| T7 | 27+00.0 (U.S.-51) | 115 | 9+11 | 8+5 |



OVERHEAD SIGN STRUCTURES-CANTILEVER STEEL WALKWAY DETAILS

F.A.I.-55 AND U.S. RT.51
F.A.P.412
McLEAN COUNTY

| | | |
|----------|----------|------|
| DESIGNER | DESIGNED | DATE |
| CHECKER | CHECKED | DATE |
| DRAWN | DRAWN | DATE |
| CHECKER | CHECKED | DATE |

5 S 057 U051 R006.80

OS -S-3- SPECIAL

| | | | |
|----------------------------------|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = cearlockjd | DESIGNED - JAL | REVISED - |
| c:\pwork\pwork\cearlockjd\266557 | 46179-shr-detals.dgn | DRAWN - | REVISED - |
| PLT SCALE = 48.0000 / 1" | CHECKED - | DATE - 04/26/11 | REVISED - |
| PLT DATE = 9/21/2011 | DATE - | REVISED - | |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
| | | |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 156 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

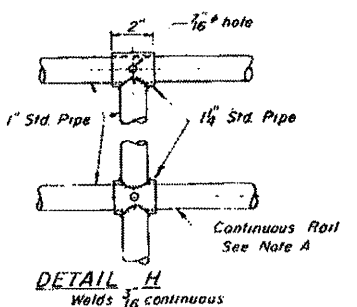
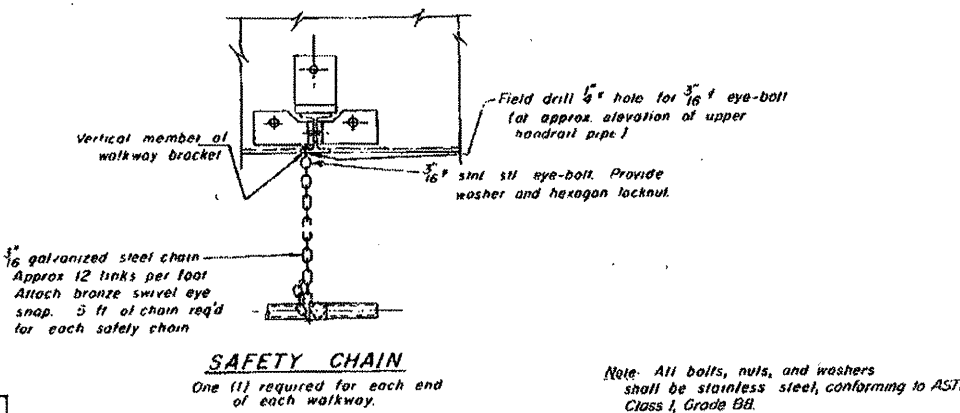
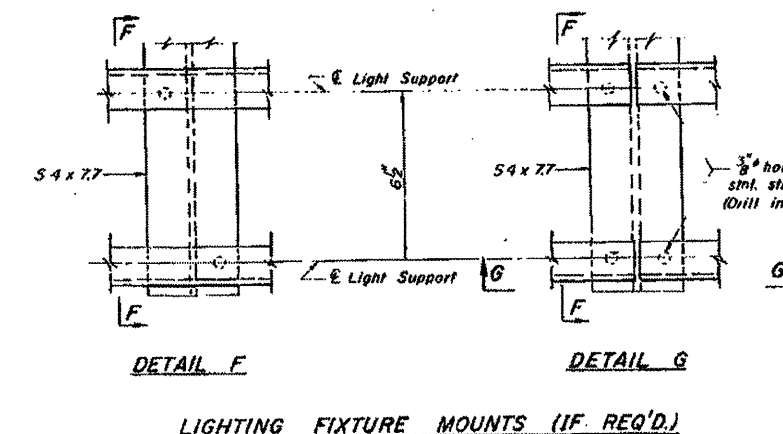
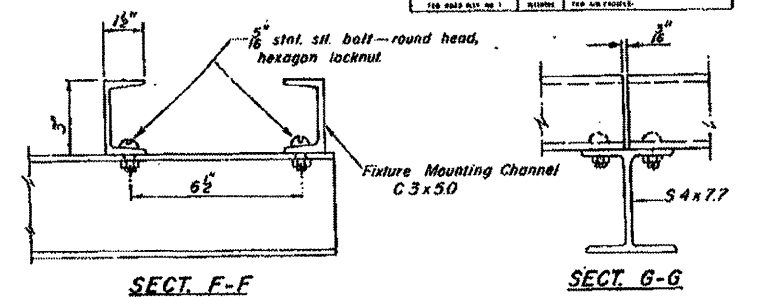
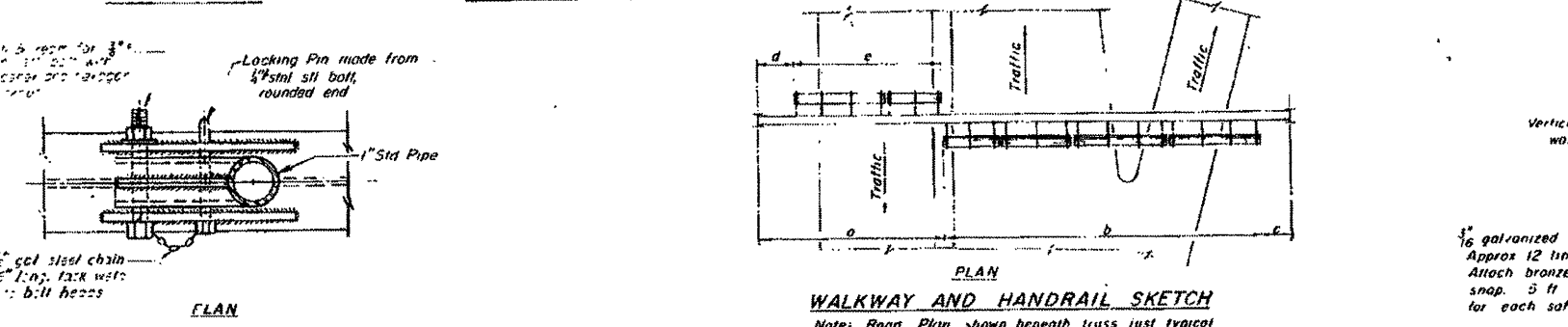
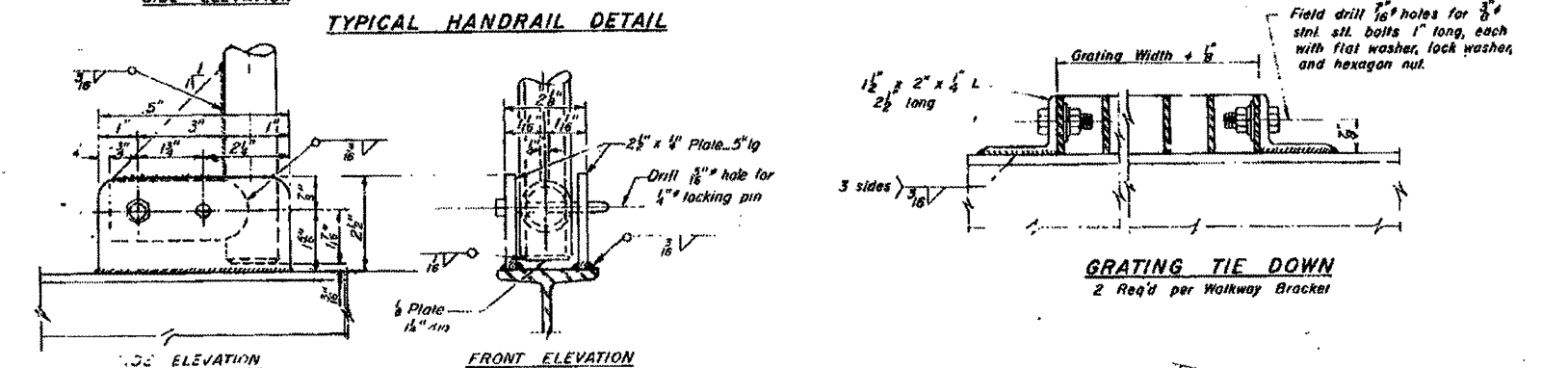
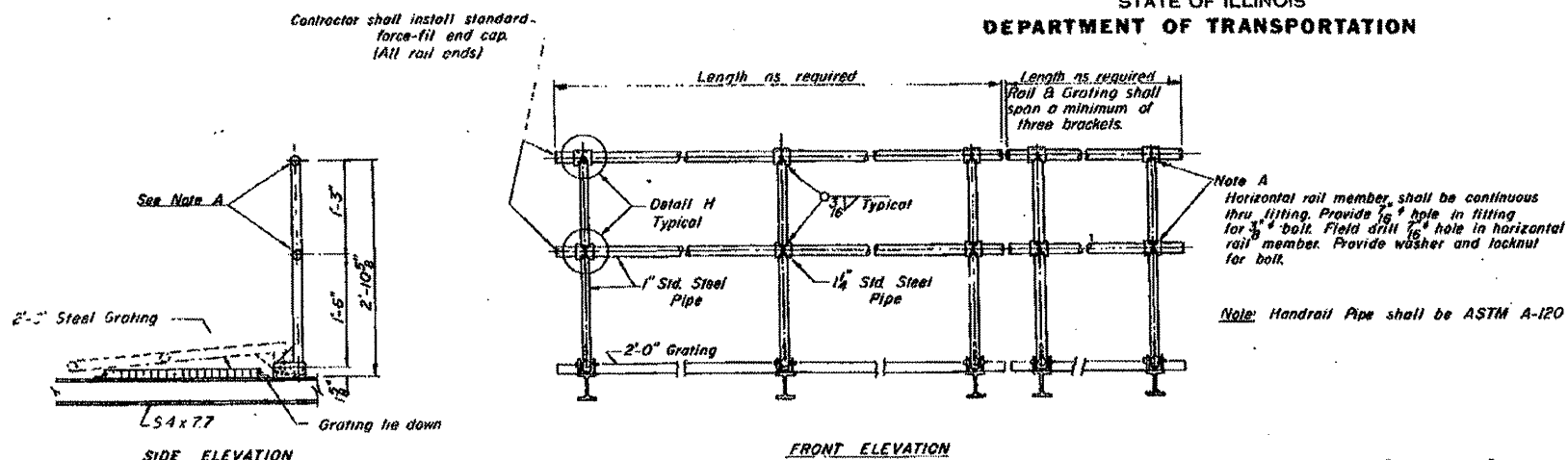
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* FAP 412, FAL-55, FAP 66 (U.S. RTE. 51)
* * 37-A (HBR-4, VBR, 1W), 62R, L, SG & TS

| | | | |
|--------------|---------|------------|-----------|
| PROJECT NO. | SECTION | DATE | SHEET NO. |
| # # # McLEAN | 319 | 126 | |
| DRAWN BY | | CHECKED BY | |
| DATE | | DATE | |



OVERHEAD SIGN STRUCTURES
STEEL WALKWAY DETAILS

F.A.I.-55 AND U.S. RT.51

F.A.P.412

McLEAN COUNTY

| Structure Number | Station | a | b | c | d | e | Grating & Handrail Lengths |
|------------------|---------------------|------|-------|------|---|---|----------------------------|
| T1 | 155+20.0 (R.A.1-50) | 17:0 | 55:0 | 22:0 | | | 55:0 |
| T2 | 151+60.0 (R.A.1-50) | 19:0 | 50:0 | 29:0 | | | 50:0 |
| T3 | 168+00.0 (R.A.1-50) | 18:0 | 56:0 | 0:0 | | | 56:0 |
| T4 | 184+00.0 (R.A.1-50) | 6:0 | 47:0 | 8:0 | | | 47:0 |
| T5 | 209+00.0 (R.A.1-50) | 20:0 | 101:0 | 3:0 | | | 101:0 |
| T6 | 210+00.0 (R.A.1-50) | 28:0 | 22:0 | 7:4 | | | 22:0 |
| T7 | 29+00.0 (U.S. 51) | 8:0 | 44:0 | 14:4 | | | 44:0 |

DESIGNED: _____ EXAMINED: _____

CHECKED: _____ PASSED: _____

DRAWN BY: _____ APPROVED: _____

CHECKED: _____

5 S 057 U051 R006.80

OS-5-4-SPECIAL

| | | | |
|---|------------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| os\pwwork\pwwork\ceerlockjd\46179-ahs-detail.edgn | 46179-ahs-detail.edgn | DRAWN - | REVISED - |
| | PLDT SCALE = 40:0000 1/4 in. | CHECKED - | REVISED - |
| | PLDT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
| | | |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 157 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

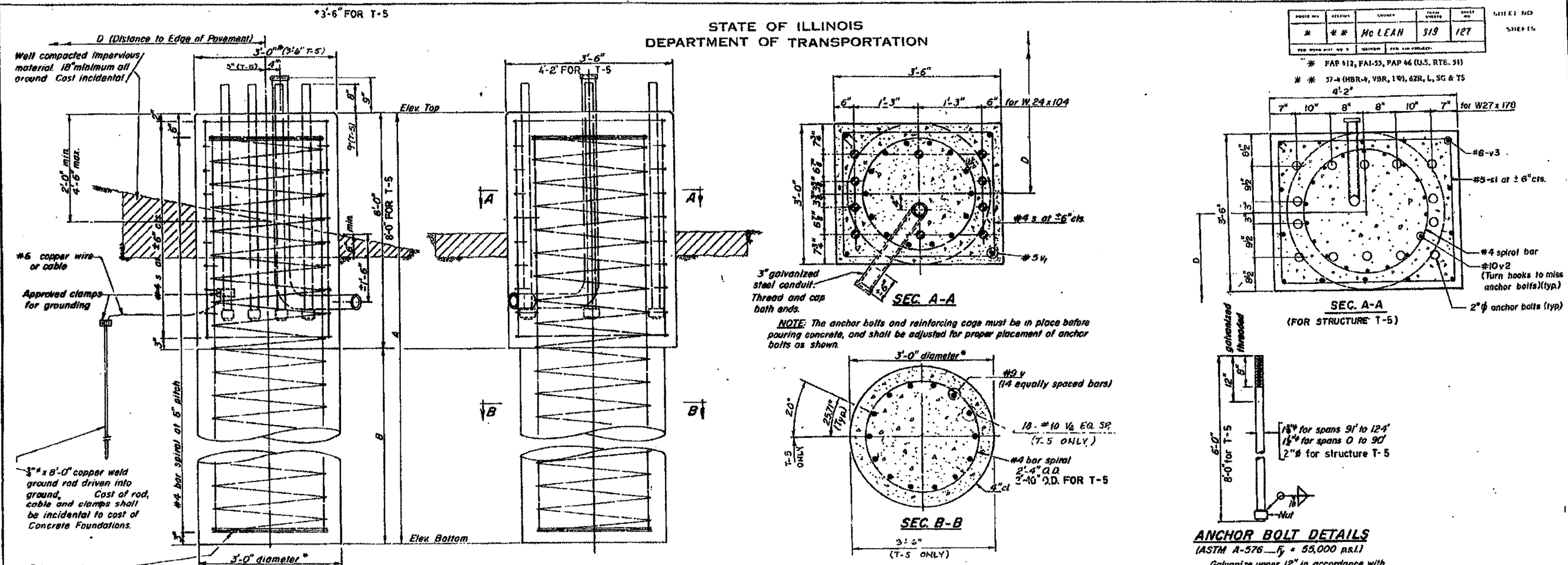
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|-------------|---------|--------|------|-----------|--------------|
| PROJECT NO. | SECTION | COUNTY | DATE | SHEET NO. | TOTAL SHEETS |
| # # # | McLEAN | 319 | 127 | 15 | 172 |

* FAP 412, FAI-55, PAP 46 (U.S. RTE. 51)
* 37-A (HBR-4, VBR, 1W, 4ZR, L, SG & TS)



NOTE: The anchor bolts and reinforcing cage must be in place before pouring concrete, and shall be adjusted for proper placement of anchor bolts as shown.

ANCHOR BOLT DETAILS

(ASTM A-576 - $f_y = 55,000$ psi)
Galvanize upper 12" in accordance with AASHTO M 232.
Provide 3 nuts and 1 washer for each anchor bolt.

BAR LIST - STRUCTURE T-5 FOUNDATION

| Bar No. | Size | Length | Shape |
|---------|------|---------|-------|
| v1 | #8 | 14'-9" | U |
| v2 | #10 | 42'-11" | U |
| v3 | #8 | 10'-0" | U |

DEPTH TABLE

| Span | B (min.) |
|------|----------|
| 70' | 15' |
| 80' | 15' |
| 90' | 16' |
| 100' | 18' |
| 110' | 20' |
| 124' | 20' |
| 134' | 35' |

NOTE: STANDARD CONCRETE MEDIAN BARRIER TO TRANSITION TO MATCH SIGN SUPPORT FOUNDATION. (25 FT. MIN. TRANSITION LENGTH.)

NOTES:

DRILLED SHAFT FOUNDATION DETAILS

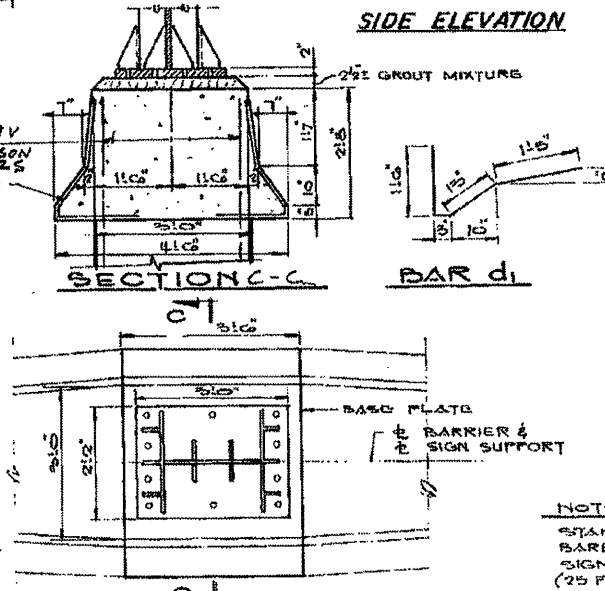
The foundation details shown are for Average Cohesive Soil Conditions (clay, sandy clay) and with minimum $Q_u = 1.0$ Tons/Sq. Ft. " Q_u " being the average value of hand penetrometer readings at various depths of the shaft as determined by the Engineer at time of drilling operations or previous soil investigation.

BAR LIST - EACH FOUNDATION

| Bar | No. | Size | Length | Shape |
|-----|-----|------|-----------|-------|
| s | 12 | #8 | 11'-9" | U |
| v | 14 | #9 | B+(5'-7") | U |
| w | 4 | #5 | 5'-3" | U |
| d1 | 8 | #4 | 4'-6" | U |

* d1 BAR FOR STRUCTURES T4 AND T5 @ BARRIER SUPPORT.

BARRIER DETAIL & SUPPORT



| | |
|----------|----------|
| DESIGNED | EXAMINED |
| CHECKED | PASSED |
| DRAWN | APPROVED |
| CHECKED | |

CS-5-5 - SPECIAL

OVERHEAD SIGN STRUCTURES FOUNDATION DETAILS

F.A.I.-55 AND U.S. RT.51
F.A.P. 412
McLEAN COUNTY

| | | | |
|--|-----------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceeerlookjd | DESIGNED - JAL | REVISED - |
| ai:\p\work\p\dot\1\ceerlook_jd\0268557\0 | 46179-sin-1-detailed.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 48.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS
FOR INFORMATION ONLY

SCALE: SHEET NO. OF SHEETS STA. TO STA.

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|---------|---------|--------------|-----------|
| . | ** | Various | 178 | 158 |

CONTRACT NO. 46179
ILLINOIS FED. AID PROJECT

* VARIOUS COUNTIES
** D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* FAP 412, F.A.I.-55, FAP 46 (M.S. RTE. 51)
* * 57-4 OMR-4, VBR, 1V, 62R, 1, 5C & TS

| | | | | | |
|-----------|--|---------|--------|--------------|-----------|
| SHEET NO. | | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | | McLEAN | 319 | 128 |
| SHEETS | | | | | |

GENERAL NOTES

SPECIFICATIONS:

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals - dated January, 1975.

CONSTRUCTION: Standard Specifications for Road and Bridge Construction, State of Illinois, (dated October 1, 1983); Supplemental Specifications for Road and Bridge Construction; Standard Specifications for Traffic Control Items (dated Feb. 1, 1984) and Special Provisions.

MINIMUM CLEARANCE: Vertical Roadway Clearance = 17'-3" (All Obstructions)

LOADING: 80 MPH WIND VELOCITY PLUS 30% GUST FACTOR
WIND LOADING: 35 psf normal to Sign Panel Area as shown below in Wind Loading Diagram plus 48 psf normal to exposed frame members.

WALKWAY LOADING: Dead Load plus 500# concentrated Live Load.

MATERIALS:

REINFORCEMENT BARS shall conform to the requirements of AASHTO M31 or M53, Grade 60.

CLASS X CONCRETE shall be used throughout.

STRUCTURAL STEEL. All material for structural chords, verticals, or chord splices shall conform to either ASTM A500, Grade C, AASHTO M222 or AASHTO M223, Grade 50 and shall meet the longitudinal CVN requirements of 15 ft. lbs. at 40° F.

All material for the posts shall conform to AASHTO M222 or M223, Grade 50 and shall meet the longitudinal CVN requirements of 15 ft. lbs. at 40° F.

HIGH STRENGTH BOLTS shall conform to the requirements of AASHTO M164.

STRUCTURAL SHAPES and PLATES shall conform to the requirements of AASHTO M223, Grade 50, or M222, unless otherwise specified.

PAINTING: The zinc-silicate and vinyl paint system shall be used for shop and field painting of all structural steel. Exterior surfaces of all structural steel that are painted with the high-build vinyl paint shall receive one coat of vinyl enamel. Paint system, including field coat, for the walkway gratings may be done in the shop or just prior to erection. Chords, verticals and posts will require painting on exterior surfaces only.

WELDING: All welding shall be in accordance with Article 507.04(s) of the Standard Specifications for Road and Bridge Construction.

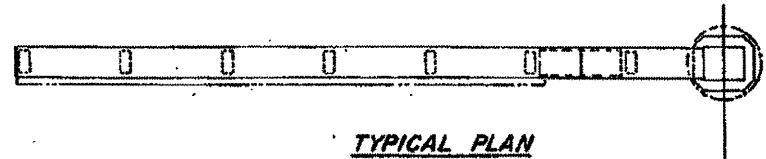
THE SIGNAL HEADS TO BE MOUNTED ON THE CANTILEVER SIGN STRUCTURE SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD 2071-1, WITH A VERTICAL TUBE OF SUFFICIENT LENGTH FOR CONNECTION TO BOTH THE TOP AND BOTTOM CHORDS OF THE SIGN SUPPORT.

TOTAL BILL OF MATERIAL

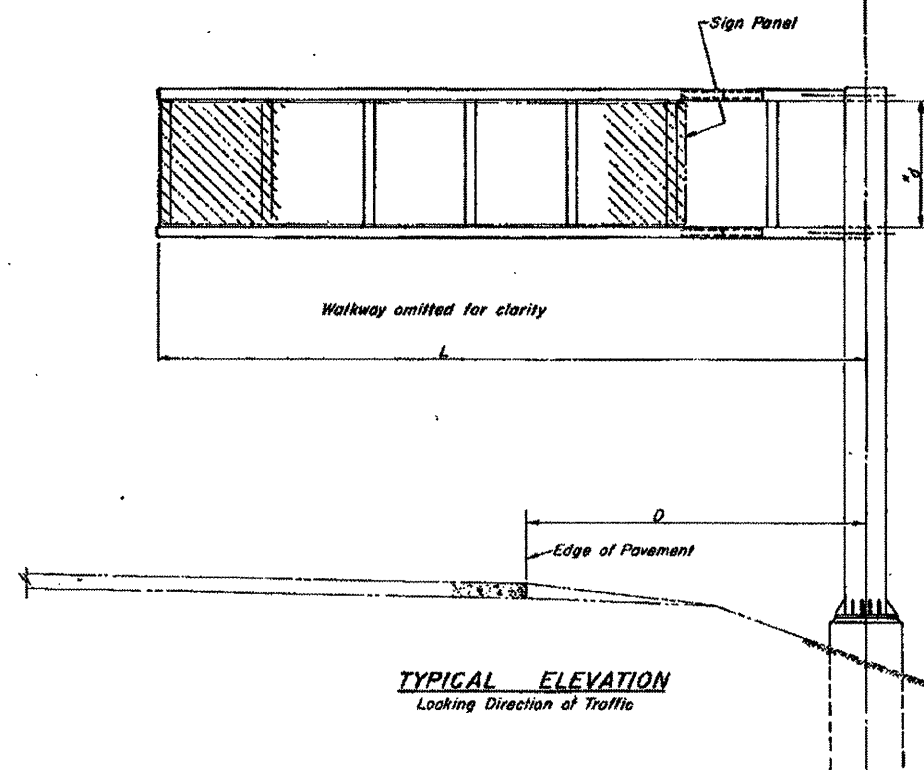
| | | |
|--|----------|--------|
| OVERHEAD SIGN STRUCTURE - CANTILEVER (SPECIAL) | Lin. Ft. | 143.00 |
| OVERHEAD SIGN STRUCTURE WALKWAY - TYPE S | Lin. Ft. | 115.00 |
| DRILLED SHAFT CONCRETE FOUNDATIONS | Cu. Yds. | 37.2 |
| | | |
| | | |

OVERHEAD SIGN STRUCTURES - CANTILEVER GENERAL PLAN & ELEVATION

F.A.I.-55 AND U.S. RT.51
F.A.P.412
McLEAN COUNTY

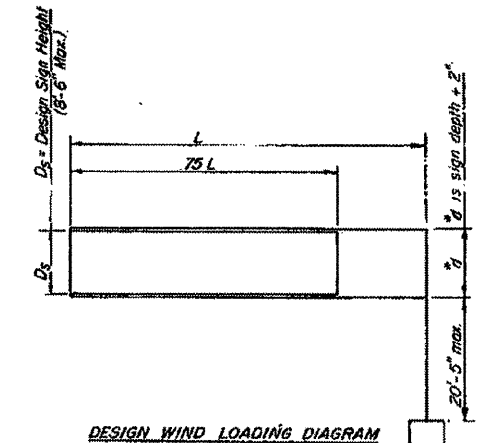


5 C 057 U051 L006.90
5 C 057 U051 L007.30



| Structure No. | Station | Elev. A | Dim. D | D ₂ | D ₃ |
|---------------|----------------------|---------|--------|----------------|----------------|
| C1 | 195+50.0 (F.A.I.-55) | 875.54 | 17'10" | 8'6" | 11'-2" |
| C2 | 45+50.0 (U.S. 51) | 844.50 | 15'-6" | 8'6" | 8'-6" |
| C3 | 57+00.0 (U.S. 51) | 865.02 | 15'-0" | 7'6" | 8'-6" |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Elev. A = Elevation of Highest Point of Roadway under Sign.



| Structure No. | Station | L | % d | Camber | No. of Panels (N) | Panel Lgth (F) | Chord Size | Vertical Size |
|---------------|----------------------|---------|--------|--------|-------------------|----------------|-------------|---------------|
| C1 | 195+50.0 (F.A.I.-55) | 33'-11" | 11'-2" | 4" | 7 | 4'-5" | T8 18x6x1/2 | T8 14x6x1/2 |
| C2 | 45+50.0 (U.S. 51) | 33'-7" | 8'-6" | 10'-2" | 11 | 4'-5" | T8 18x6x1/2 | T8 14x6x1/2 |
| C3 | 57+00.0 (U.S. 51) | 33'-7" | 8'-6" | 10'-2" | 11 | 4'-5" | T8 18x6x1/2 | T8 14x6x1/2 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

5 C 057 U051 L006.90
5 C 057 U051 L007.30

| | |
|----------|----------|
| DESIGNED | EXAMINED |
| CHECKED | PASSED |
| DRAWN | APPROVED |
| CHECKED | |

OSC-S-1-SPECIAL

| | | | |
|-------------|-------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceer-lockjd | DESIGNED - JAL | REVISED - |
| | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AS-BUILTS
FOR INFORMATION ONLY

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | Various | 178 | 159 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

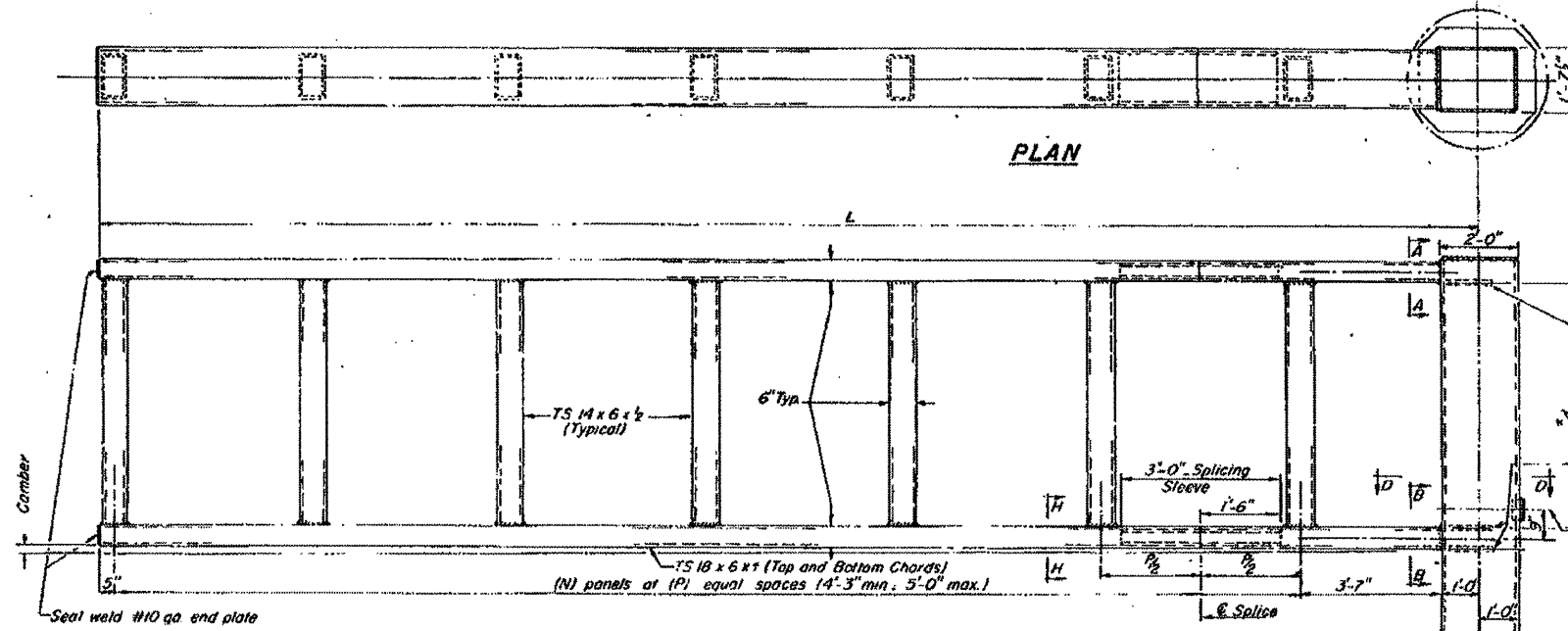
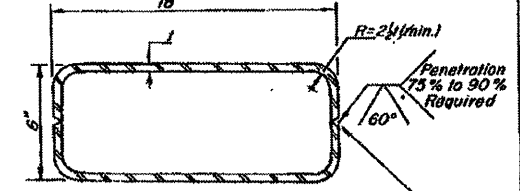
EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

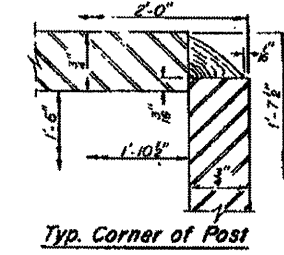
| DATE | BY | COUNTY | SHEET NO. | SHEET TOTAL |
|------|----|--------|-----------|-------------|
| * | * | McLEAN | 919 | 129 |

* FAP 412, FAI-55, FAP 46 (U.S. RTE. 51)
* * 57.0 (N&R-4, VBR, 1W, 62R, L, SG & TS)

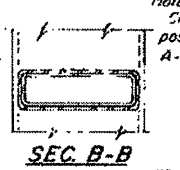
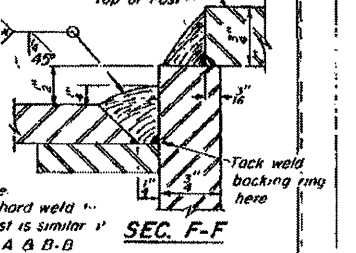
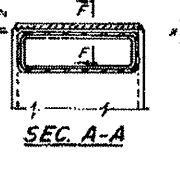
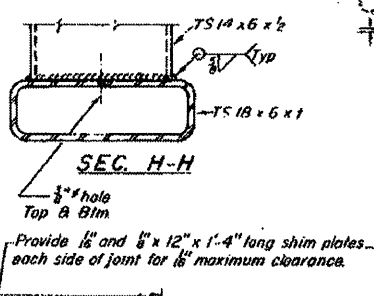
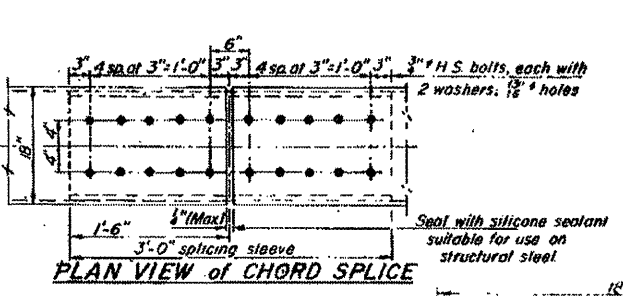
| L | Comber | Chord | Vertical | C-C Chords |
|------------|---------|-----------------|-----------------|------------|
| 0' to 35' | 3 1/2" | TS 18 x 6 x 1/2 | TS 14 x 6 x 1/2 | "d + 6" |
| 36' to 40' | 4" | TS 18 x 6 x 1/2 | TS 14 x 6 x 1/2 | "d + 6" |
| 41' to 45' | 5 1/2" | TS 18 x 6 x 1/2 | TS 14 x 6 x 1/2 | "d + 6" |
| 46' to 50' | 9" | TS 18 x 6 x 1/2 | TS 14 x 6 x 1/2 | "d + 6" |
| 51' to 55' | 10 1/2" | TS 18 x 6 x 1/2 | TS 14 x 6 x 1/2 | "d + 6" |



*d is sign depth + 2"



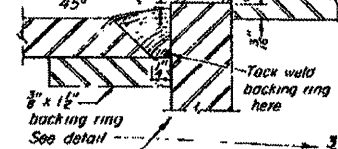
ALTERNATE BUILT-UP TUBE



* Pinch tack weld for backing ring, inside groove joint. Clean tack weld before welding. Ultrasonic test flat surfaces and use magnetic particle or dye penetrant tests in areas having radii.

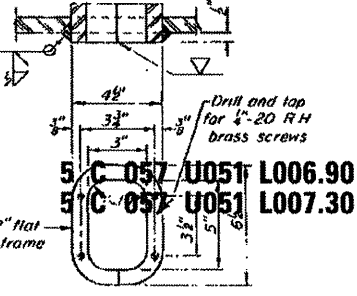
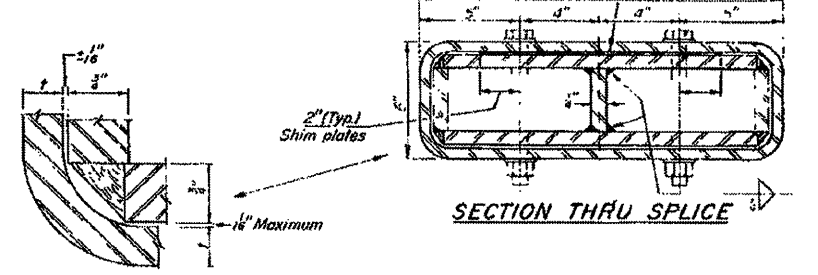
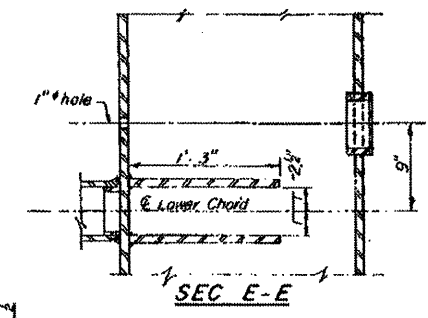
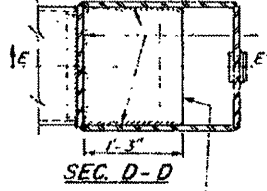
stiffener plate 1-3" x 1-6"

Handhole per Detail D

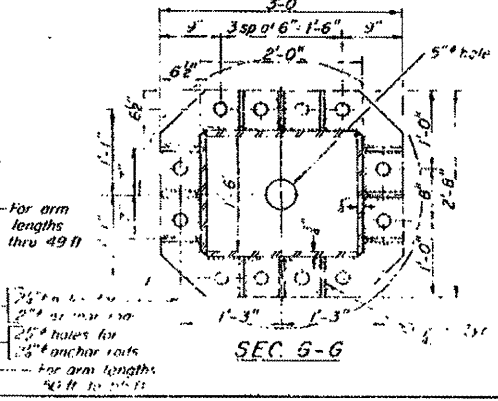
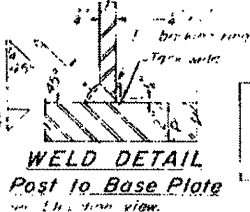


8" x 12" Backing Ring

Maximum clearance between backing ring and chord shall be 1/2" all around



| Structure No | Station | Dim H |
|--------------|---------------------|------------|
| C1 | 198+00.0 (N.A. 150) | 17'11 1/2" |
| C2 | 48+00.0 (U.S. 51) | 16'1 1/2" |
| C3 | 87+00.0 (U.S. 51) | 17' 5" |



ELEVATION

| | | |
|----------|----------|---------------------------|
| DESIGNED | EXAMINED | 10 |
| CHECKED | PASSED | ENGINEER OF BRIDGE DESIGN |
| DRAWN | APPROVED | ENGINEER OF STRUCTURAL |
| CHECKED | | |

OSC-S-2- SPECIAL

OVERHEAD SIGN STRUCTURES - CANTILEVER FRAME and POST DETAILS

FAI-55 AND U.S. RT. 51
F.A.P. 412
McLEAN COUNTY

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

| | | | |
|--|-------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlock_jd | DESIGNED - JAL | REVISED - |
| ca:\pwwork\pwwork\ceerlock_jd\0226655710 | 46179-shr-detaile.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 40.0000 / 1" | | CHECKED - | REVISED - |
| PLOT DATE = 9/21/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SCALE | SHEET NO. OF SHEETS | STA. TO STA. |
|-------|---------------------|--------------|
| | | |

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 160 |

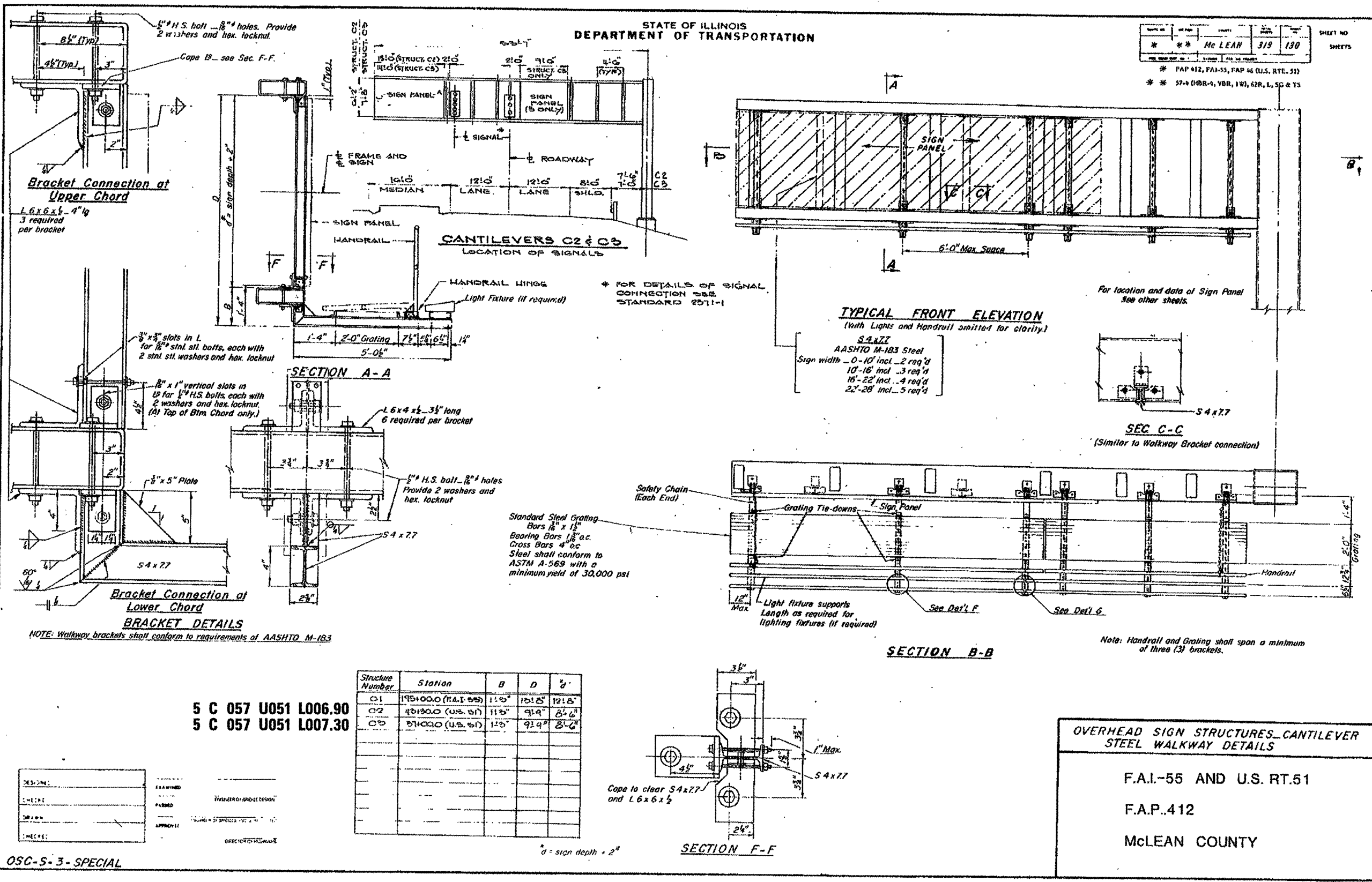
CONTRACT NO. 46179
ILLINOIS FED. AID PROJECT

EXISTING INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|---|--------|-----|
| PROJECT NO. | 319 | 130 |
| DESIGNER | McLEAN | |
| * FAP 412, FAI-55, FAP 46 (U.S. RTE. 51) | | |
| ** 57-4 (HBR-4, YBR, 1W), 62R, L, 5G & TS | | |

SHEET NO.
SHEETS



| Structure Number | Station | B | D | d |
|------------------|----------------------|-------|-------|-------|
| C1 | 195+00.0 (F.A.I. 55) | 11'0" | 10'5" | 12'5" |
| C2 | 43130.0 (U.S. 51) | 11'5" | 9'9" | 8'6" |
| C3 | 57400.0 (U.S. 51) | 12'0" | 9'9" | 8'6" |

| | |
|-----------|----------|
| DESIGNED: | JAL |
| CHECKED: | |
| DATE: | 04/26/11 |

OSC-S-3-SPECIAL

5 C 057 U051 L006.90
5 C 057 U051 L007.30

| | | | |
|--|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| PROJECT WORK \pvt\dot\ceerlockjd\0286557 | 46179-shr-detaile.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 48.0000 / 1 in. | | CHECKED - | REVISED - |
| PLOT DATE = 9/21/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
| | | |

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 161 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

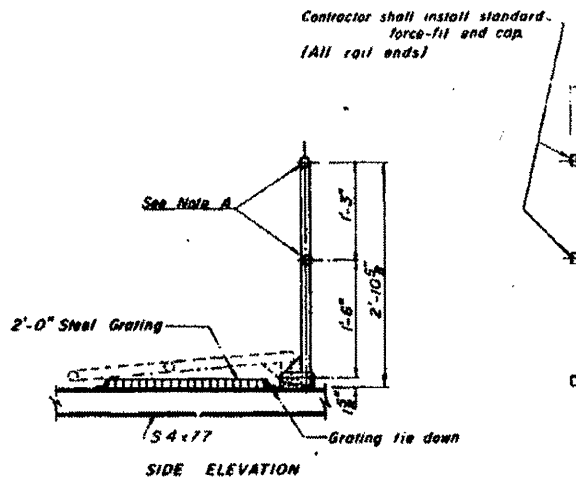
*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

EXISTING INFORMATION ONLY

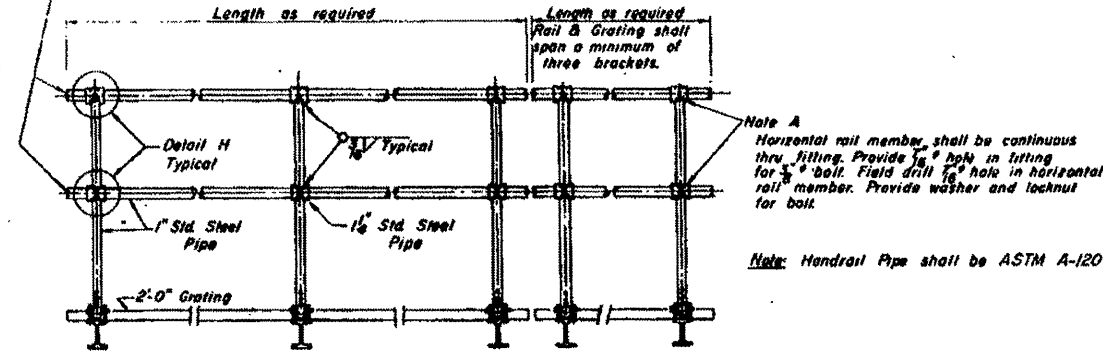
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* FAP 417, FAI-55, FAP 46 (U.S. PTE. 51)
* * 27-A (HBR-4, VBR, 107, 62R, 1, SC & TS)

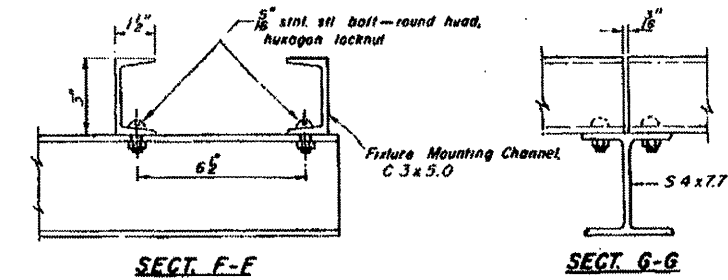
| SHEET NO. | SHEETS |
|-----------|------------|
| ** McLEAN | 319 131 |



TYPICAL HANDRAIL DETAIL

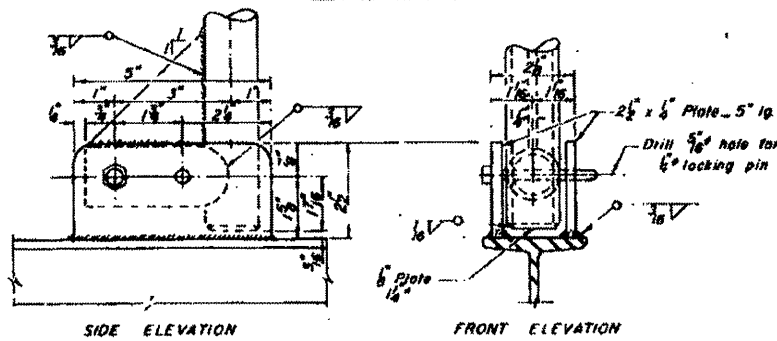


FRONT ELEVATION



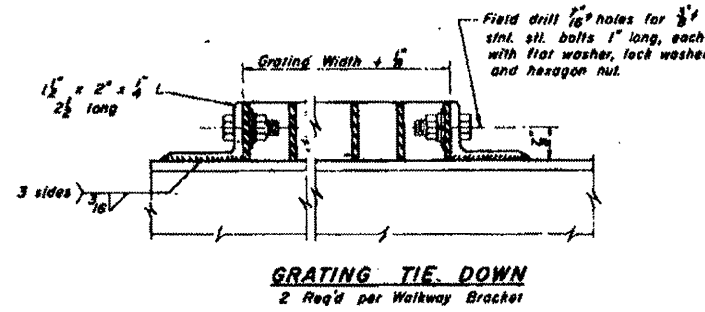
SECT. F-F

SECT. G-G

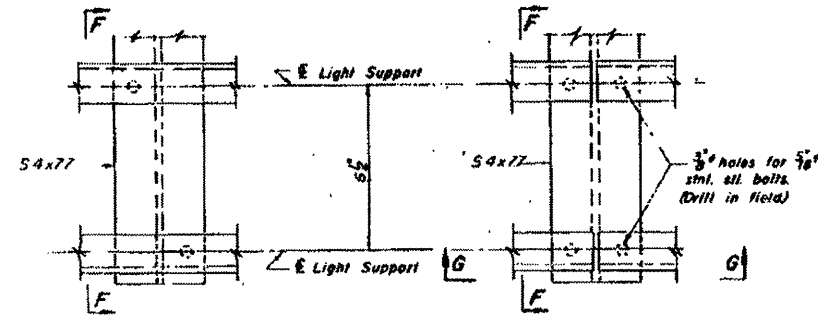


SIDE ELEVATION

FRONT ELEVATION



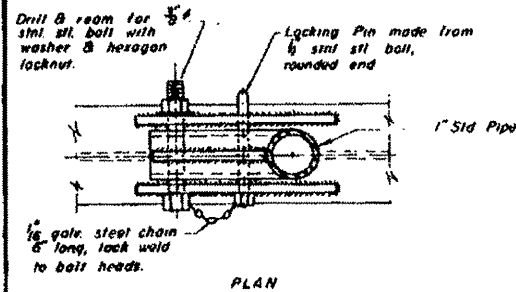
GRATING TIE-DOWN
2 Req'd per Walkway Bracket



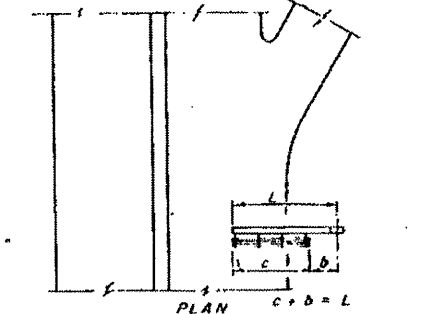
DETAIL F

DETAIL G

LIGHTING FIXTURE MOUNTS (IF REQ'D.)

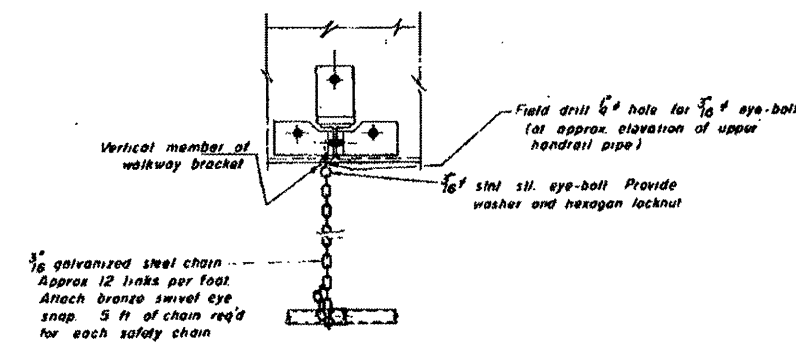


DETAILS OF HANDRAIL HINGE



WALKWAY AND HANDRAIL SKETCH

Note Road Plan shown merely typical



SAFETY CHAIN

One (1) required for each end of each walkway

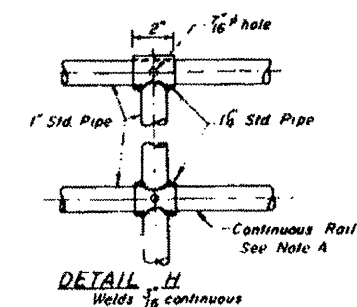
Note: All bolts, nuts, and washers shall be stainless steel conforming to ASTM A193, Class 1, Grade B8.

5 C 057 U051 L006.90
5 C 057 U051 L007.30

| | |
|-------------------|----------------------|
| DESIGNED | DRAWN |
| CHECKED | PLANNED |
| DRAWN BY: M. J... | APPROVED |
| CHECKED | DIRECTOR OF HIGHWAYS |

OSC-S-4-SPECIAL

| Structure Number | Station | b | c | Grating & Handrail Lengths |
|------------------|--------------------|------|------|----------------------------|
| C1 | 195+00.0 (FAI-55) | 1211 | 2250 | 2510" |
| C2 | 195+80.0 (U.S. 51) | 717 | 4610 | 4610" |
| C3 | 51+00.0 (U.S. 51) | 717 | 4610 | 4610" |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |



DETAIL H
Welds 1/8" continuous

**CANTILEVER SIGN STRUCTURES
STEEL WALKWAY DETAILS**

F.A.I.-55 AND U.S. RT.51

F.A.P.412

MCLEAN COUNTY

•VARIOUS COUNTIES
•D-5 OVD SIN STR REPL 2012-06

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|-----------------------------|---------|---------|--------------|-----------|
| | | | | |
| | | Various | 178 | 162 |
| CONTRACT NO. 46179 | | | | |
| (ILLINOIS) FED. AID PROJECT | | | | |

EXISTING INFORMATION ONLY

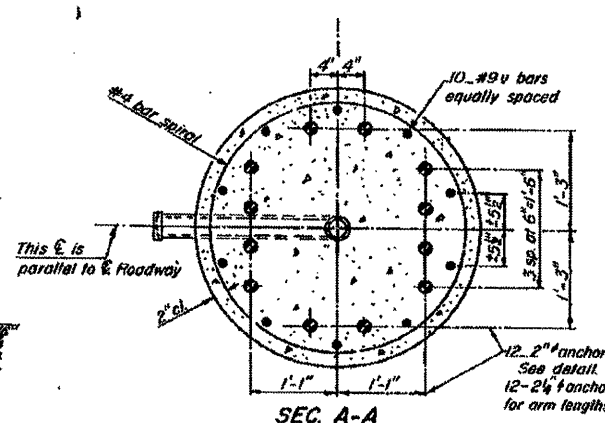
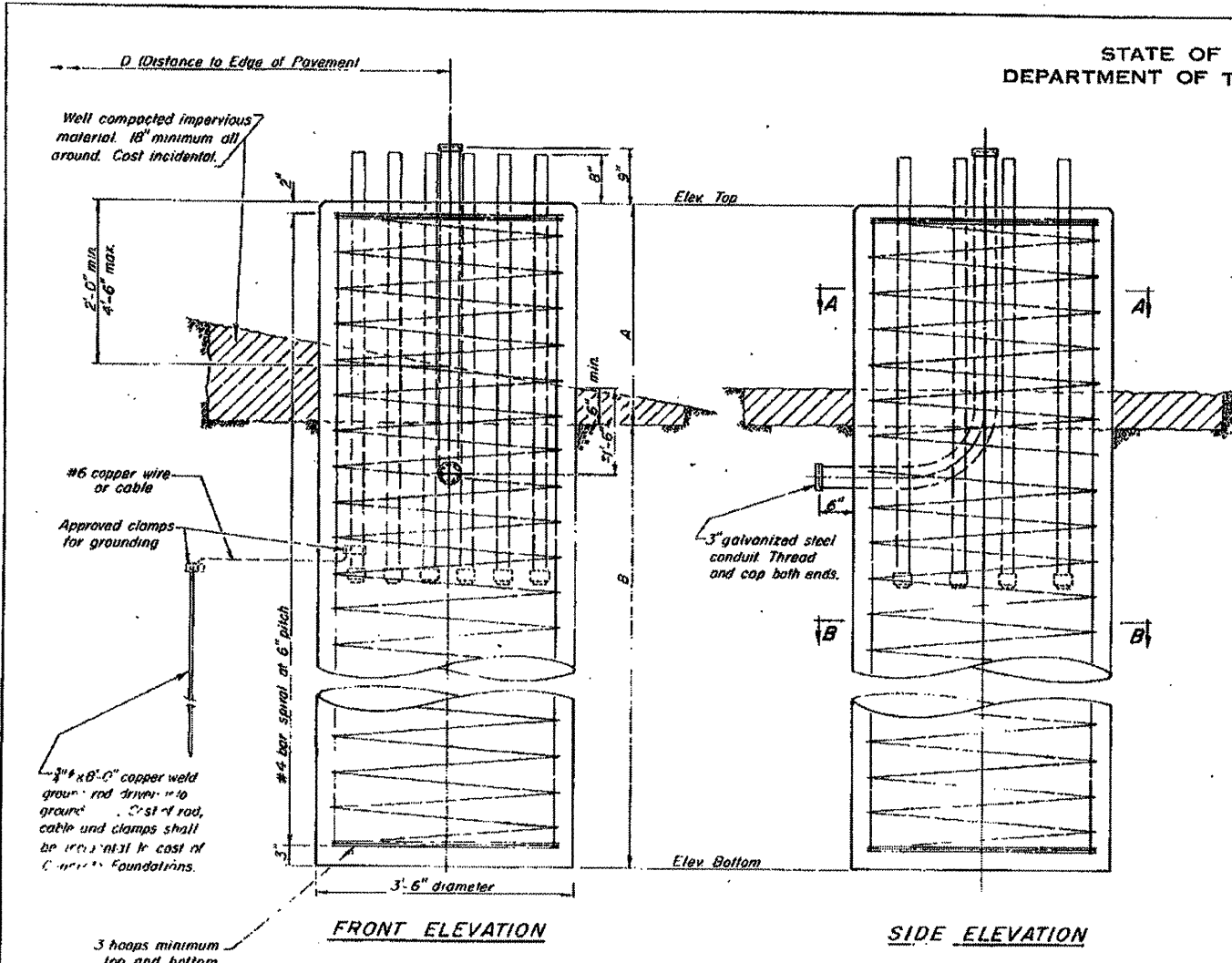
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | | | |
|------|----|----------|---------|-------|-----------|
| DATE | BY | ENGINEER | CHECKED | SCALE | SHEET NO. |
| * | ** | McLEAN | 319 | 132 | SHLETS |

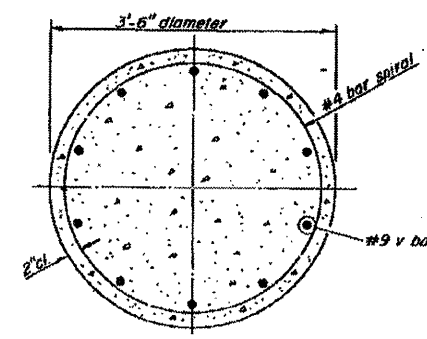
* PAP 412, FAI-55, FAP 46 (U.S. RTE. 51)
* * 57-0 (HBR-4, VBR, 1W, 62R, L, SG & TS)

NOTES:

The foundation details shown are for Average Cohesive Soil Conditions (stiff clays, sandy clays) and with a minimum $Q_u = 10$ Tons/Sq. Ft. " Q_u " being the average value of hand penetrometer readings at various depths of the shaft as determined by the Engineer at time of drilling operations or previous soil investigation.



SEC. A-A
NOTE: The anchor bolts and reinforcing cage must be in place before pouring concrete, and shall be adjusted for proper placement of anchor bolts as shown.

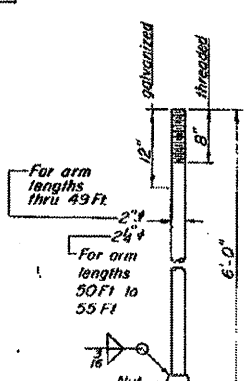


SEC. B-B

DEPTH TABLE

| L | B (Min) |
|-----|---------|
| 35' | 17" |
| 40' | 20" |
| 45' | 25" |

L: DESIGN ARM LENGTH



ANCHOR BOLT DETAILS
(ASTM A-576 - $F_y = 55,000$ psi)
Galvanize upper 12" in accordance with AASHTO M-232
Provide 3 nuts and 1 washer for each anchor bolt

BAR LIST - EACH FOUNDATION

| Bar | No | Size | Lgth | Shape |
|-----|----|------|--------|-------|
| v | 10 | #9 | A+B-5" | - |

#4 bar spiral - see Front Elevation

| | | |
|----------|----------|-------------------------------------|
| DESIGNED | EXAMINED | 19 |
| CHECKED | PAKUPP | ENGINEER OF BRIDGE DESIGN |
| DRAWN | APPROVED | INSPECTOR OF BRIDGES AND STRUCTURES |
| CHECKED | | SUPERVISOR OF BRIDGES |

OSC-S-5-SPECIAL

**OVERHEAD SIGN STRUCTURES - CANTILEVER
DRILLED SHAFT CONCRETE FOUNDATION**

F.A.I.-55 AND U.S. RT.51
F.A.P.412
McLEAN COUNTY

| | | | | | | | | | | |
|--------------------------------------|-----------------------------|-----------------|-----------|---|-----------------------------------|--------------|---------|---------|--------------------|--------------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | AS-BUILTS FOR INFORMATION ONLY | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| et\pwwork\pwwork\ceerlockjd\02665570 | 46179-shv-de-tos1adgn | DRAWN - | REVISED - | | | * | ** | Various | 178 | 163 |
| | PLOT SCALE = 48,0000' / in. | CHECKED - | REVISED - | | SCALE: | | | | | |
| | PLOT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - | | SHEET NO. OF SHEETS | STA. | TO STA. | 163 | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | |



SOIL BORING LOG

Date 9/6/57

ROUTE FAI Rt. 55 & US Rt. 51 DESCRIPTION FAI 55 over US 51 LOGGED BY D3
 SECTION _____ LOCATION SEC. , TWP. , RNG. GPS:
 COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

| STRUCT. NO. Station | D E P T H | B L O W S | U C S Qu | M O I S T % | Surface Water Elev. _____ ft | Stream Bed Elev. _____ ft | Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After 24 Hrs. <u>842.8</u> ft | D E P T H | B L O W S | U C S Qu | M O I S T % |
|------------------------|-----------------------|-----------------------|-------------------|----------------------------|------------------------------|---------------------------|---|-----------------------|-----------------------|-------------------|----------------------------|
| | | | | | | | | | | | |
| | | | | | | | VERY STIFF GRAY SILTY CLAY - TRACE OF SMALL GRAVEL (GLACIAL TILL) (continued) | | | | |
| | | 4 | | | | | | | 9 | 2.2 | |
| | | 5 | | | | | | | 10 | | |
| | | 6 | 2.5 | | | | | | 8 | 2.2 | |
| | | 7 | | | | | | | 10 | | |
| | | 8 | 3.8 | | | | | | 8 | 2.2 | |
| | | 12 | | | | | | | 10 | | |
| | | 14 | 4.8 | | | | | | 8 | 1.8 | |
| | | 16 | | | | | | | 10 | | |
| | | 12 | 3.5 | | | | | | 8 | 1.8 | |
| | | 14 | | | | | | | 10 | | |
| | | 9 | 2.1 | | | | | | 10 | 2.6 | |
| | | 12 | | | | | | | 12 | | |
| | | 10 | 2.3 | | | | | | 10 | 2.5 | |
| | | 12 | | | | | | | 12 | | |
| | | 8 | 2.6 | | | | | | 12 | 2.8 | |
| | | 10 | | | | | | | 13 | | |

4/11/2011 10:42:52 AM S:\SOILS\BORING LOGS\WAST ARMS FAI 55 AT 057-0024_25.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Date 9/6/57

ROUTE FAI Rt. 55 & US Rt. 51 DESCRIPTION FAI 55 over US 51 LOGGED BY D3
 SECTION _____ LOCATION SEC. , TWP. , RNG. GPS:
 COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

| STRUCT. NO. Station | D E P T H | B L O W S | U C S Qu | M O I S T % | Surface Water Elev. _____ ft | Stream Bed Elev. _____ ft | Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After 24 Hrs. <u>842.8</u> ft | D E P T H | B L O W S | U C S Qu | M O I S T % |
|------------------------|-----------------------|-----------------------|-------------------|----------------------------|------------------------------|---------------------------|---|-----------------------|-----------------------|-------------------|----------------------------|
| | | | | | | | | | | | |
| | | | | | | | VERY STIFF GRAY SILTY CLAY - TRACE OF SMALL GRAVEL (GLACIAL TILL) (continued) | | | | |
| | | 10 | 2.5 | | | | | | | | |
| | | 12 | | | | | | | | | |
| | | 12 | 3.1 | | | | | | | | |
| | | 14 | | | | | | | | | |
| | | 13 | 3.2 | | | | | | | | |
| | | 16 | | | | | | | | | |
| | | | | | | | Soil Boring for Sign Truss 5 C 057 U051 L006.90 & 5 C 057 U051 R006.80 End of Boring | | | | |

4/11/2011 10:42:53 AM S:\SOILS\BORING LOGS\WAST ARMS FAI 55 AT 057-0024_25.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

*VARIOUS COUNTIES
 **D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | | | |
|---|------------------------|------------|-----------|---|-------------------------|--------|------|---------------------------|---------|---------|-----------------|--------------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SOIL BORING LOGS | | | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| crhpw_worke\pwsdot\ceerlockjd\0266557.D | 046179-shr-blog.dgn | DRAWN - | REVISED - | | | | | * | ** | Various | 178 | 164 |
| PLOT SCALE = 40,0000 ' / in. | | CHECKED - | REVISED - | | | | | CONTRACT NO. 46179 | | | | |
| PLOT DATE = 9/21/2011 | | DATE - | REVISED - | | | | | ILLINOIS FED. AID PROJECT | | | | |
| | | | | SCALE: | SHEET NO. OF | SHEETS | STA. | TO STA. | | | | |



SOIL BORING LOG

Page 1 of 2

Date 9/10/57

ROUTE FAI Rt. 55 & US Rt. 51 DESCRIPTION FAI 55 over US 51 LOGGED BY D3

SECTION _____ LOCATION SEC. , TWP. , RNG. GPS:

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

STRUCT. NO. 057-0025
 Station _____
 BORING NO. 5 Center Pier
 Station 199+22
 Offset 100.0 ft Rt.
 Ground Surface Elev. 855.5 ft (ft) (/6") (tsf) (%)

| DEPTH (ft) | SOIL DESCRIPTION | DEPTH (ft) | SOIL DESCRIPTION |
|------------|---|------------|------------------|
| 855.5 | BLACK LOAM | | |
| 854.5 | VERY STIFF BROWN SANDY CLAY - TRACE OF SMALL GRAVEL (GLACIAL TILL) | 10 | 1.7 |
| | | 9 | |
| | | 10 | 1.8 |
| | | -5 | 9 |
| | | 10 | 1.7 |
| | | 12 | 2.8 |
| | | 15 | 4.0 |
| | | 21 | |
| 845.0 | VERY STIFF GRAY SILTY CLAY - TRACE OF SMALL GRAVEL (GLACIAL TILL) | 10 | 1.9 |
| | | 14 | |
| | | 8 | 2.1 |
| | | 9 | |
| | | 11 | 2.2 |
| | | 11 | 2.2 |
| | | 15 | 4.5 |
| | | 9 | 2.0 |
| | | 11 | |
| | | 8 | 2.8 |
| | | 9 | |
| | | 15 | 4.5 |
| | | 25 | |
| | | 819.0 | |
| | VERY STIFF GRAY SILTY CLAY - SOME SMALL TO MEDIUM GRAVEL (GLACIAL TILL) | 11 | 2.2 |
| | | 10 | |
| | | 15 | 4.5 |
| | | 25 | |

4/11/2011 10:42:51 AM S:\SOILS\BORING LOGS\MAST ARMS FAI 55 AT 057-0024_25.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



SOIL BORING LOG

Page 2 of 2

Date 9/10/57

ROUTE FAI Rt. 55 & US Rt. 51 DESCRIPTION FAI 55 over US 51 LOGGED BY D3

SECTION _____ LOCATION SEC. , TWP. , RNG. GPS:

COUNTY McLean DRILLING METHOD Hollow Stem Auger HAMMER TYPE _____

STRUCT. NO. 057-0025
 Station _____
 BORING NO. 5 Center Pier
 Station 199+22
 Offset 100.0 ft Rt.
 Ground Surface Elev. 855.5 ft (ft) (/6") (tsf) (%)

| DEPTH (ft) | SOIL DESCRIPTION | DEPTH (ft) | SOIL DESCRIPTION |
|------------|---|------------|------------------|
| 855.5 | VERY STIFF GRAY SILTY CLAY - SOME SMALL TO MEDIUM GRAVEL (GLACIAL TILL) (continued) | | |
| 814.0 | | 11 | 3.2 |
| | | 18 | |
| | | 11 | 3.2 |
| | | -45 | 18 |
| | | 13 | 3.0 |
| | | 17 | |
| | | 12 | 3.0 |
| | | 17 | |
| 805.5 | Soil Boring for Sign Truss 5 C 057 U057 L007.30 End of Boring | | |
| | | 12 | 3.0 |
| | | 17 | |
| | | -55 | |
| | | -60 | |

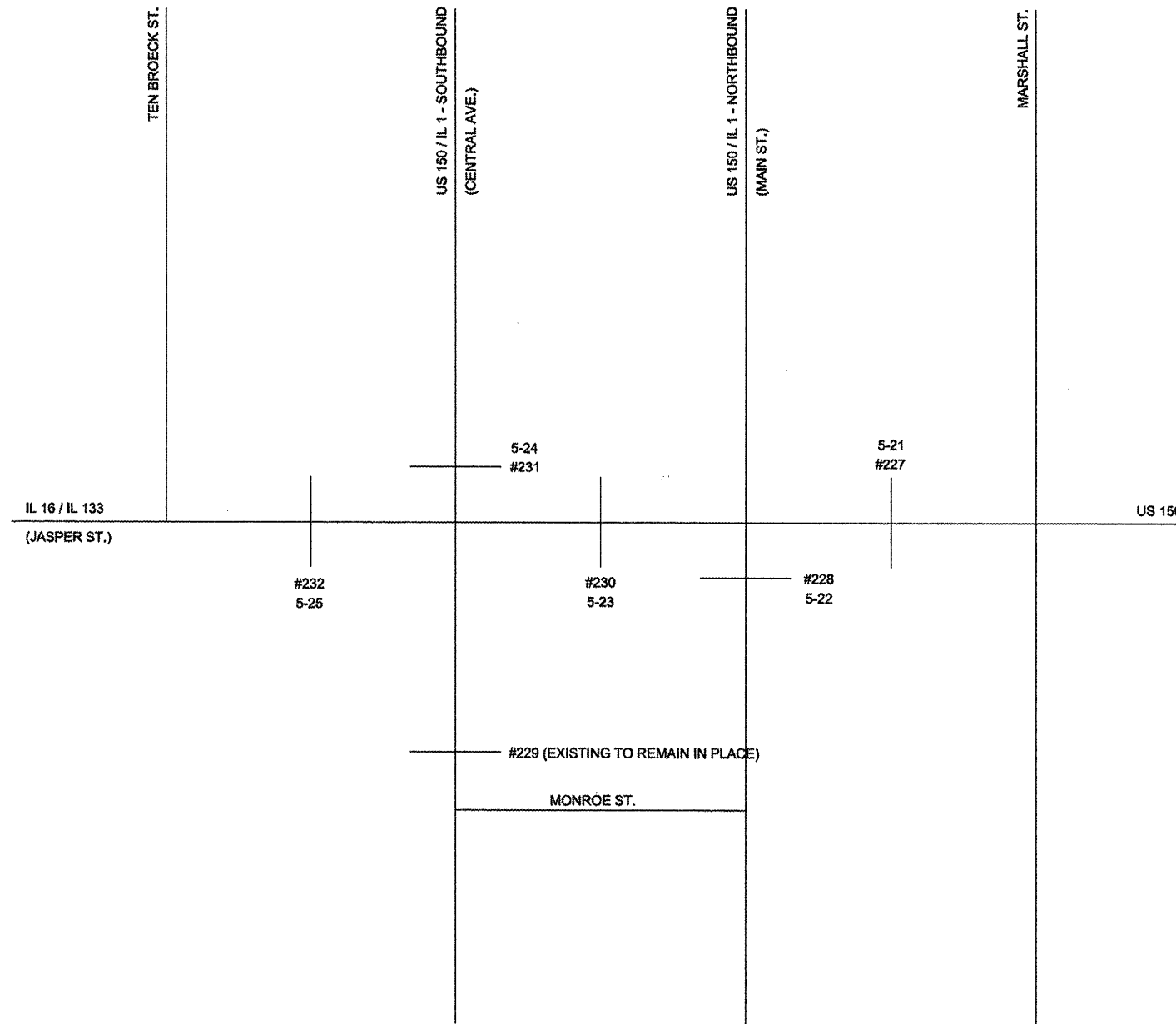
4/11/2011 10:42:51 AM S:\SOILS\BORING LOGS\MAST ARMS FAI 55 AT 057-0024_25.GPJ

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available.
 The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrator)
 The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

| | | | | | | | | | | | |
|--------------------------------------|-------------------------|------------|-----------|---|-------------------------|---------------------------|---------|---------|-----------------|--------------|--|
| FILE NAME = | USER NAME = ceer-lockjd | DESIGNED - | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SOIL BORING LOGS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| at:\pwork\pstdot\ceer-lockjd\286557\ | 46179-ahv-blog.dgn | DRAWN - | REVISED - | | | • | ** | Various | 178 | 165 | |
| PLOT SCALE = 40.0000' / 1" | | CHECKED - | REVISED - | | | CONTRACT NO. 46179 | | | | | |
| PLOT DATE = 9/21/2011 | | DATE - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

EDGAR COUNTY MONOTUBES LOCATION MAP



*VARIOUS
**D-5 OVD SIN STR REPL 2012-06

| | | | |
|---|------------------------------|-----------------|-----------|
| FILE NAME = ct:\pw_work\pwsdot\ceer-lockj\d0266557.D | USER NAME = ceer-lockj | DESIGNED - JAL | REVISED - |
| | 46179-shr-Edgar_map.dgn | DRAWN - | REVISED - |
| | PLDT SCALE = 40,0000 ' / in. | CHECKED - | REVISED - |
| | PLDT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - |

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EDGAR COUNTY - MONOTUBES
LOCATION MAP**

| | | |
|--------|---------------------|--------------|
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. |
|--------|---------------------|--------------|

| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---------------------------|---------|---------|--------------|-----------|
| * | ** | Various | 178 | 166 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

SCHEDULE OF QUANTITIES
EDGAR COUNTY MONOTUBES – INDIVIDUAL LOCATIONS

| Location No. | 5-21 | | |
|----------------|---|-------|----------|
| Structure No. | Monotube #227 | | |
| County / Route | EDGAR CO. - Jasper St. / US 150 just East of Main St. (IL 1 NB) | | |
| Scope of Work | This overhead monotube structure is being replaced on existing foundations. | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY |
| 70102622 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502 | L SUM | 0.50 |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 163.75 |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 151.50 |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQFT | 7.00 |
| 72400720 | RELOCATE SIGN PANEL - TYPE 2 | SQFT | 12.00 |
| 73303000 | OVERHEAD SIGN STRUCTURE - MONOTUBE | FOOT | 59.90 |
| 73601100 | REMOVE OVERHEAD SIGN STRUCTURE, MONOTUBE - SPAN | EACH | 1.00 |
| X7330070 | OVERHEAD SIGN SUPPORT GROUT REPAIR | EACH | 2.00 |

| Location No. | 5-23 | | |
|----------------|---|-------|----------|
| Structure No. | Monotube #230 | | |
| County / Route | EDGAR CO. - Jasper St. between Central Ave. (IL 1 SB) & Main St. (IL 1 NB) | | |
| Scope of Work | This overhead monotube structure is being replaced on existing foundations. | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY |
| 70102632 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701602 | L SUM | 1.00 |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 195.75 |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 186.00 |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQFT | 30.75 |
| 73303000 | OVERHEAD SIGN STRUCTURE - MONOTUBE | FOOT | 51.90 |
| 73601100 | REMOVE OVERHEAD SIGN STRUCTURE, MONOTUBE - SPAN | EACH | 1.00 |
| X7330070 | OVERHEAD SIGN SUPPORT GROUT REPAIR | EACH | 2.00 |

| Location No. | 5-22 | | |
|----------------|---|-------|----------|
| Structure No. | Monotube #228 | | |
| County / Route | EDGAR CO. - Main St. / IL 1 NB just South of Jasper St. (IL 16 / IL 133 / US 150) | | |
| Scope of Work | This overhead monotube structure is being replaced on existing foundations. | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.15 |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 164.25 |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 144.00 |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQFT | 31.56 |
| 73303000 | OVERHEAD SIGN STRUCTURE - MONOTUBE | FOOT | 43.10 |
| 73601100 | REMOVE OVERHEAD SIGN STRUCTURE, MONOTUBE - SPAN | EACH | 1.00 |
| X7330070 | OVERHEAD SIGN SUPPORT GROUT REPAIR | EACH | 2.00 |

| Location No. | 5-24 | | |
|----------------|--|-------|----------|
| Structure No. | Monotube #231 | | |
| County / Route | EDGAR CO. - Central Ave. / IL 1 SB just North of Jasper St. (IL 16 / IL 133) | | |
| Scope of Work | This overhead monotube structure is being replaced on existing foundations. | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY |
| 70102630 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701601 | L SUM | 0.15 |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 139.50 |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 120.00 |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQFT | 12.00 |
| 73303000 | OVERHEAD SIGN STRUCTURE - MONOTUBE | FOOT | 43.90 |
| 73601100 | REMOVE OVERHEAD SIGN STRUCTURE, MONOTUBE - SPAN | EACH | 1.00 |
| X7330070 | OVERHEAD SIGN SUPPORT GROUT REPAIR | EACH | 2.00 |

Note: The Contractor shall be aware that the end supports are infested with bees.

•VARIOUS COUNTIES
 ••D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | |
|------------------------------------|------------------------|----------------|-----------|---|---|-----------------------------|---------|---------|--------------|-----------|
| FILE NAME = | USER NAME = ceerlookjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SCHEDULE OF QUANTITIES EDGAR COUNTY MONOTUBES – INDIVIDUAL LOCATIONS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ed:\pwork\pwork\ceerlookjd\286557\ | 46179-shr-detailed.dgn | DRAWN - | REVISED - | | | * | ** | Various | 178 | 167 |
| PLOT SCALE = 48.0000' / 1" = | CHECKED - | REVISED - | REVISED - | | | CONTRACT NO. 46179 | | | | |
| PLOT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - | REVISED - | | | [ILLINOIS] FED. AID PROJECT | | | | |
| | | | | SCALE: | SHEET NO. OF SHEETS | STA. TO STA. | | | | |

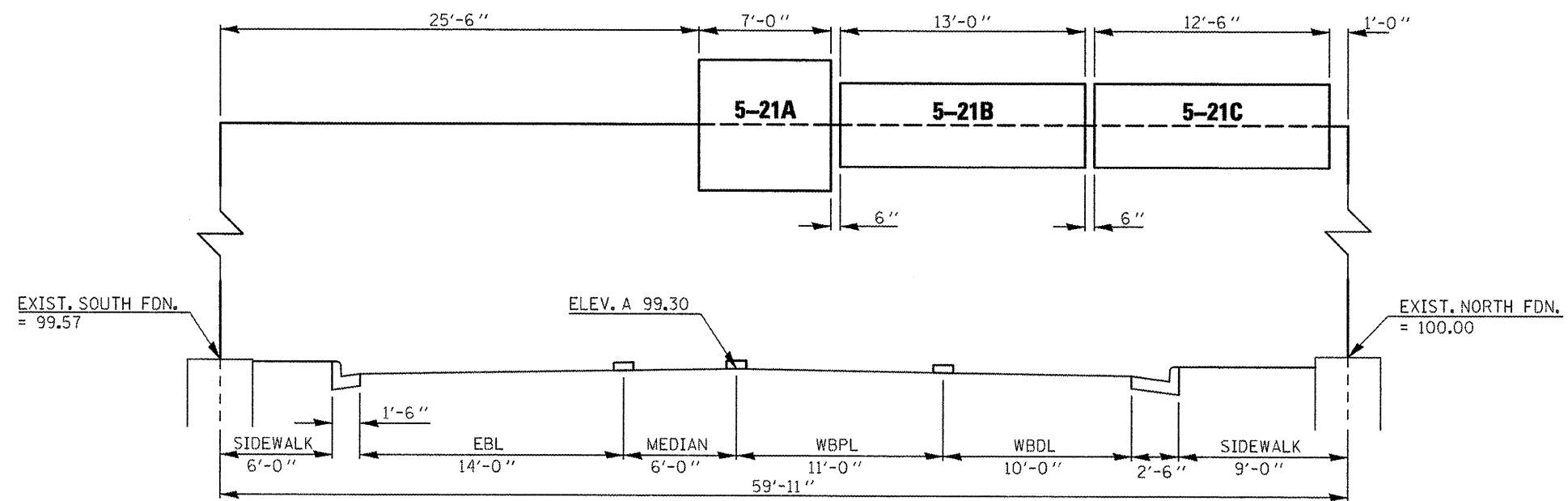
SCHEDULE OF QUANTITIES

EDGAR COUNTY MONOTUBES – INDIVIDUAL LOCATIONS

| | | | |
|----------------|---|-------|----------|
| Location No. | 5-25 | | |
| Structure No. | Monotube #232 | | |
| County / Route | EDGAR CO. - Jasper St. / IL 16 / IL 133 just West of Central Ave. (IL 1SB) | | |
| Scope of Work | This overhead monotube structure is being replaced on existing foundations. | | |
| | | | |
| CODE NUMBER | PAY ITEM | UNIT | QUANTITY |
| | | | |
| 70102622 | TRAFFIC CONTROL AND PROTECTION, STANDARD 701502 | L SUM | 0.50 |
| 72000300 | SIGN PANEL - TYPE 3 | SQFT | 108.00 |
| 72400330 | REMOVE SIGN PANEL - TYPE 3 | SQFT | 117.00 |
| 72400710 | RELOCATE SIGN PANEL - TYPE 1 | SQFT | 18.00 |
| 72400720 | RELOCATE SIGN PANEL - TYPE 2 | SQFT | 12.00 |
| 73303000 | OVERHEAD SIGN STRUCTURE - MONOTUBE | FOOT | 54.00 |
| 73601100 | REMOVE OVERHEAD SIGN STRUCTURE, MONOTUBE - SPAN | EACH | 1.00 |
| X7330070 | OVERHEAD SIGN SUPPORT GROUT REPAIR | EACH | 2.00 |

MONOTUBE MOUNTING DETAILS

MONOTUBE #227



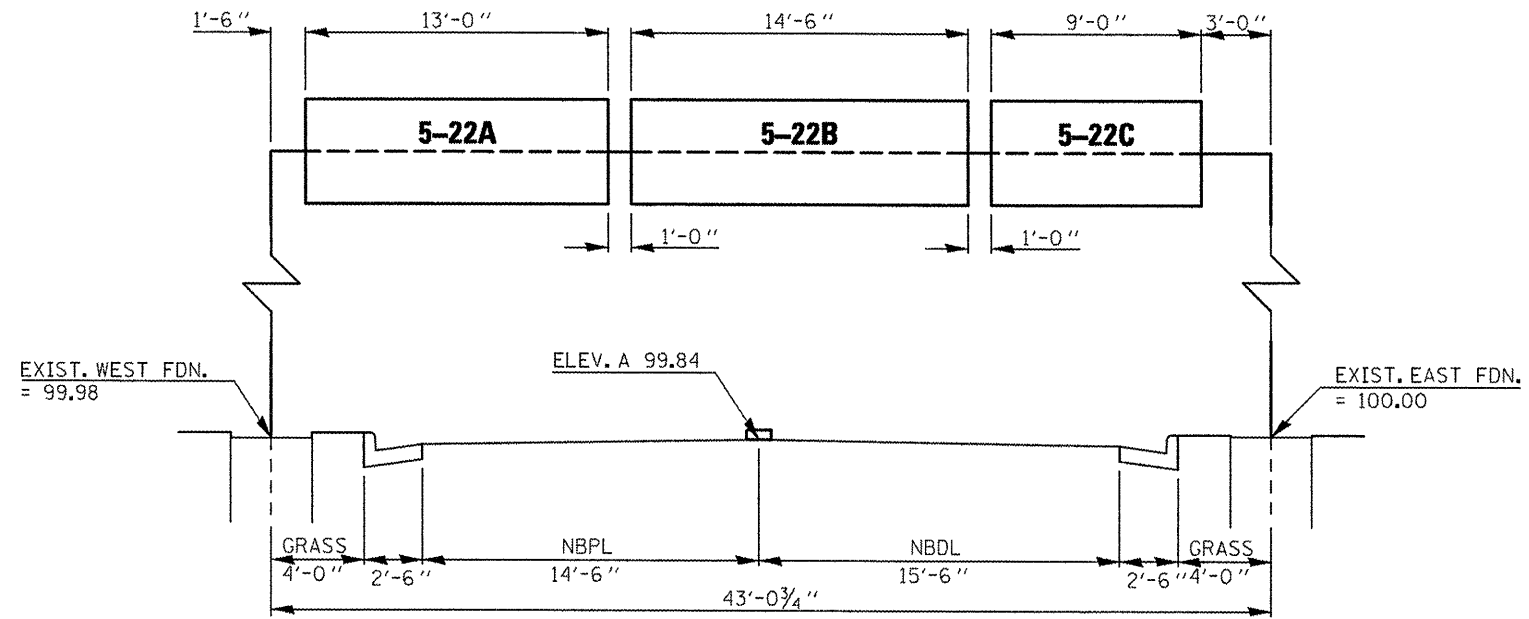
LOOKING WEST

| | | | | | | | | | | |
|---|------------------------------|-----------------|-----------|---|---|--------------|---------|---------|--------------|-----------|
| FILE NAME = | USER NAME = ceer-lockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SCHEDULE OF QUANTITIES EDGAR COUNTY MONOTUBES – INDIVIDUAL LOCATIONS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ct:\pwwork\pwwork\ceer-lockjd\0286557\0 | 46179-shs-de-totls.dgn | DRAWN - | REVISED - | | | * | ** | Various | 178 | 168 |
| | PLOT SCALE = 48.0000' / 1" = | CHECKED - | REVISED - | | | | | | | |
| | PLOT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - | | | | | | | |
| CONTRACT NO. 46179 | | | | | | | | | | |

•VARIOUS COUNTIES
••D-5 DVD SIN STR REPL 2012-06

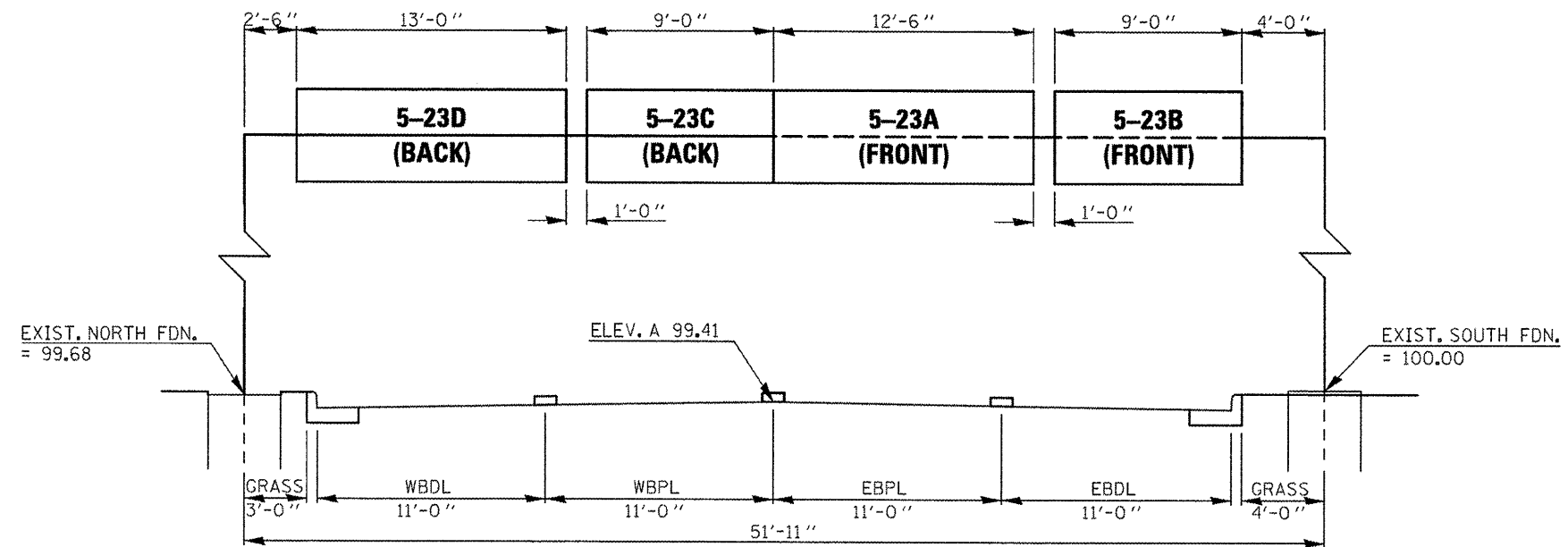
ILLINOIS FED. AID PROJECT

MONOTUBE MOUNTING DETAILS MONOTUBE #228



LOOKING NORTH

MONOTUBE #230



LOOKING EAST

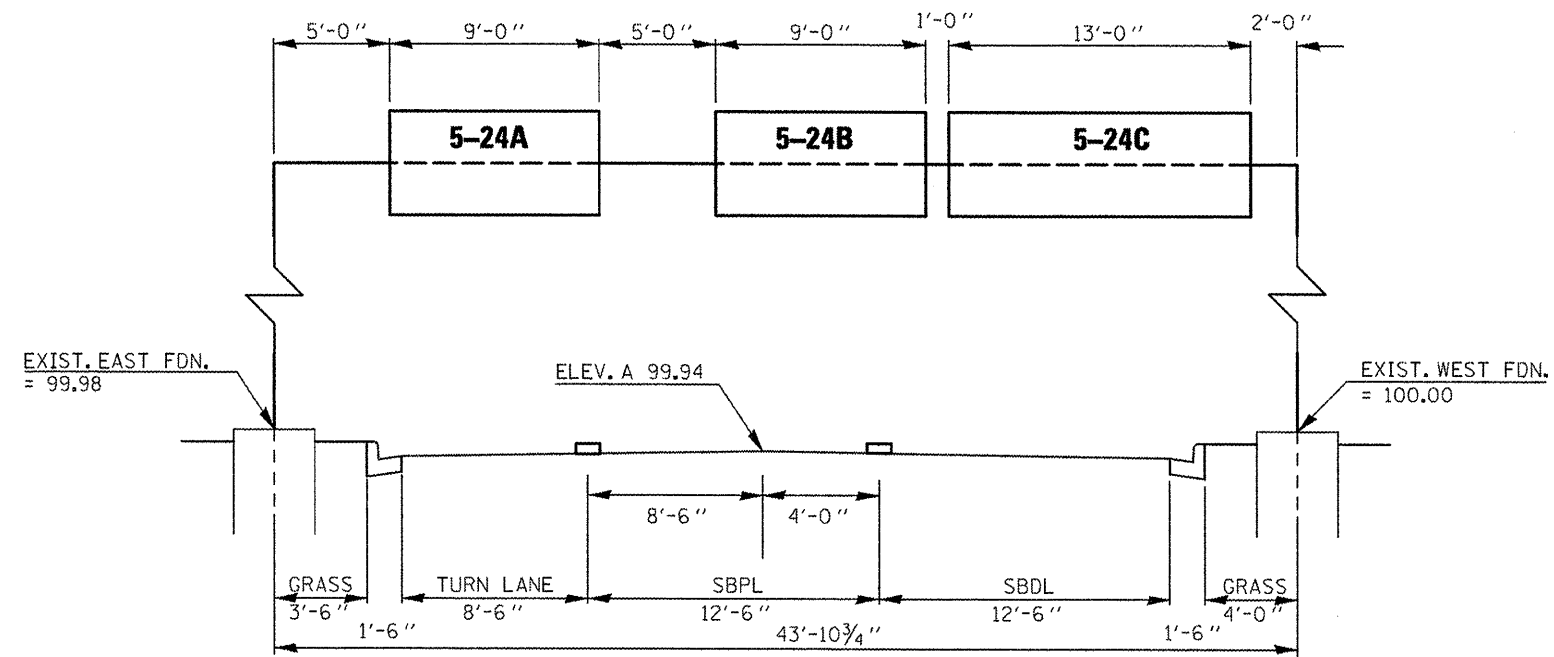
| | | | | | | | | | | | |
|---------------------------------------|----------------------------|-----------------|-----------|---|---|--------------|---------|---------------------|--------------|--------------|--|
| FILE NAME = | USER NAME = cwerlockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | EDGAR COUNTY MONOTUBE MOUNTING DETAILS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| cf:\pwwork\pwwork\cwerlockjd\0286557\ | 546179-shit-details.dgn | DRAWN - | REVISED - | | | * | ** | Various | 178 | 169 | |
| | PLT SCALE = 48.0000' / in. | CHECKED - | REVISED - | | | | | | | | |
| | PLT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - | | | | | | | | |
| | | | | | | SCALE: | | SHEET NO. OF SHEETS | | STA. TO STA. | |
| ILLINOIS FED. AID PROJECT | | | | | | | | | | | |

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

CONTRACT NO. 46179

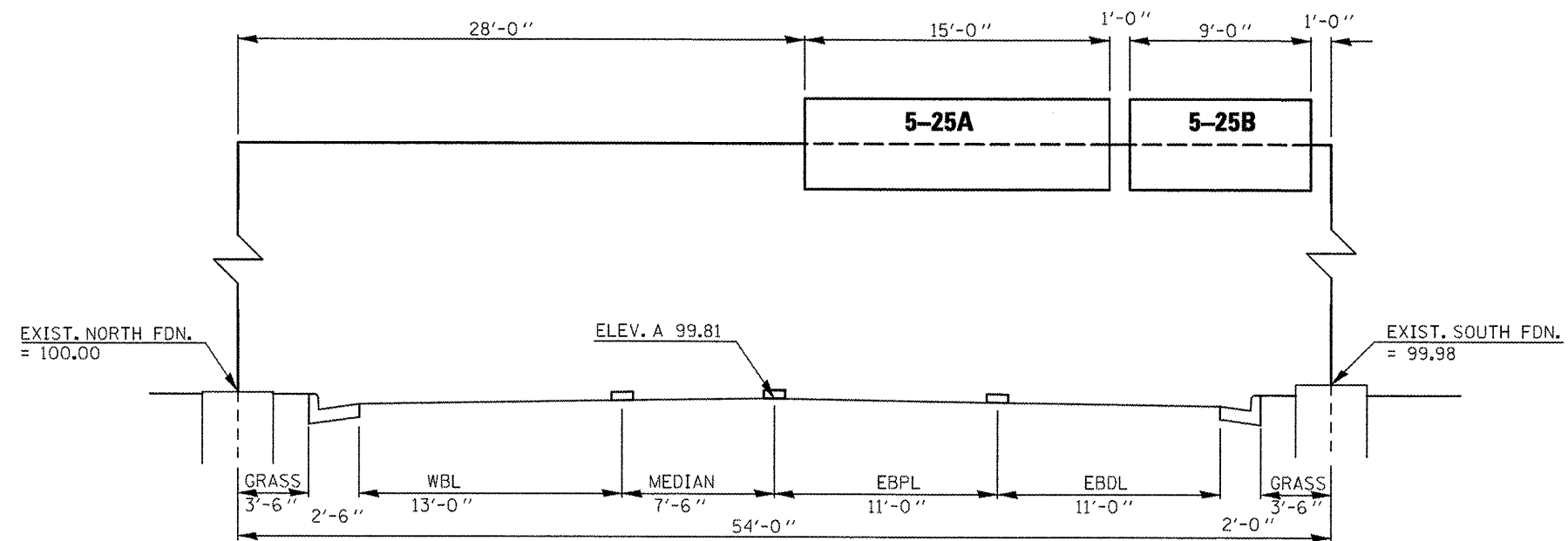
MONOTUBE MOUNTING DETAILS

MONOTUBE #231



LOOKING SOUTH

MONOTUBE #232

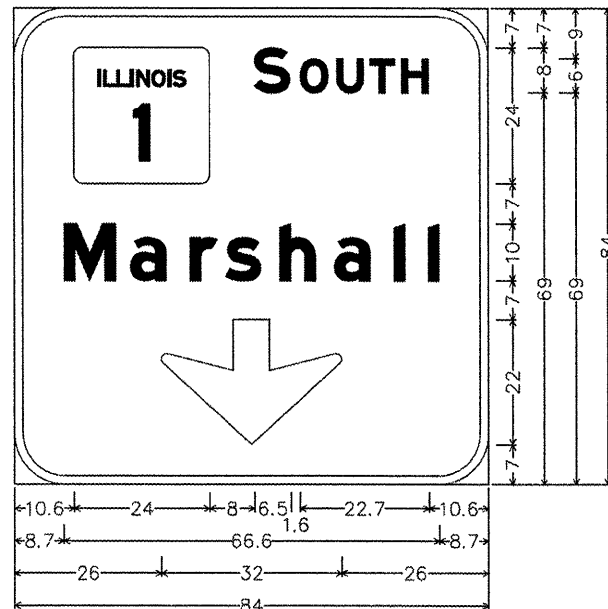


LOOKING EAST

| | | | | | | | | | | | |
|-----------------------------|-----------------------|-----------------|-----------|---|---|---------------------------|---------|---------|-----------------|--------------|--|
| FILE NAME = | USER NAME = cwrlookjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | EDGAR COUNTY MONOTUBE MOUNTING DETAILS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| 46179-strc-deta1.dgn | | DRAWN - | REVISED - | | | * | ** | Various | 178 | 170 | |
| PLOT SCALE = 40.0000' / in. | | CHECKED - | REVISED - | | | CONTRACT NO. 46179 | | | | | |
| PLOT DATE = 9/21/2011 | | DATE - 04/26/11 | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | | |

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

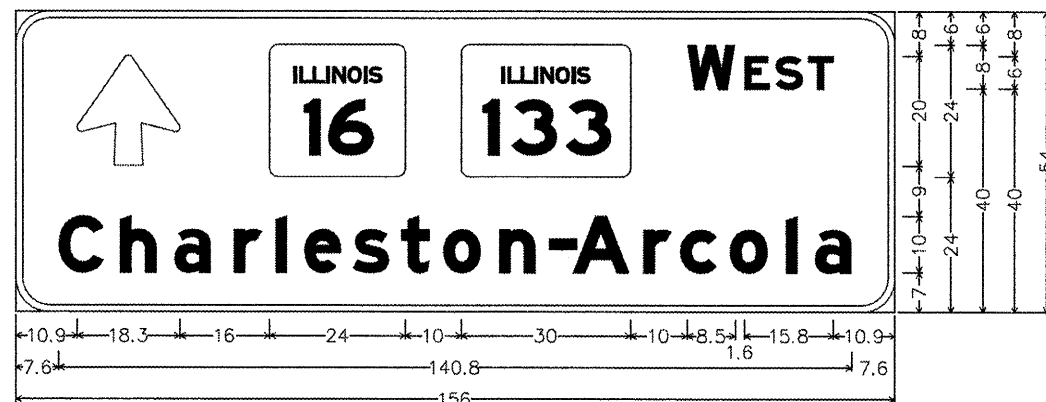
5-21 A
MONOTUBE #227 - LEFT SIGN



9.0" Radius, 1.5" Border, White on Green;
[S OUTH] T2000HWYEMOD;
[Marshall] T2000HWYEMOD; Down Arrow 22.0" 270°;
Table of letter and object lefts.

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| S | O | U | T | H | | | |
| 10.6 | 42.6 | 50.7 | 57.2 | 63.1 | 68.6 | | |
| M | a | r | s | h | a | l | l |
| 8.7 | 20.5 | 31.0 | 37.3 | 47.0 | 56.7 | 67.2 | 73.3 |
| ↓ | | | | | | | |
| 26.0 | | | | | | | |

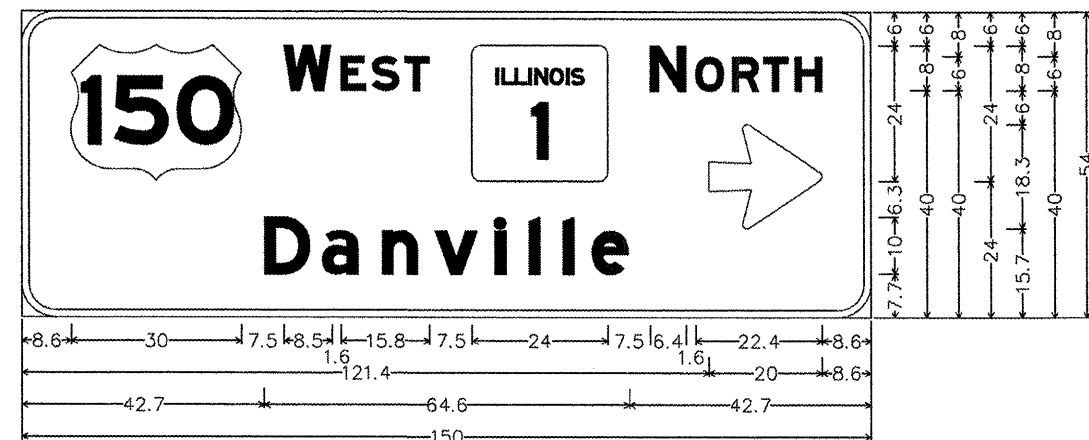
5-21 B
MONOTUBE #227 - MIDDLE SIGN



6.0" Radius, 1.3" Border, White on Green;
Arrow 133 - 20.0" 90°; [W EST] T2000HWYEMOD; [Charleston-Arcola] T2000HWYEMOD;
Table of letter and object lefts.

| | | | | | | | | | | | | | | | | |
|------|------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|
| ↑ | ↓ | W | E | S | T | | | | | | | | | | | |
| 10.9 | 45.2 | 79.2 | 119.2 | 129.3 | 134.8 | 140.6 | | | | | | | | | | |
| C | h | a | r | l | e | s | t | o | n | - | A | r | c | o | l | a |
| 7.6 | 18.6 | 28.2 | 38.8 | 46.2 | 51.3 | 59.9 | 68.5 | 76.0 | 86.0 | 94.8 | 99.0 | 111.5 | 118.0 | 126.8 | 136.7 | 141.8 |

5-21 C
MONOTUBE #227 - RIGHT SIGN



6.0" Radius, 1.3" Border, White on Green;
[W EST] T2000HWYEMOD; [N ORTH] T2000HWYEMOD; Arrow 133 - 20.0" 0°;
[Danville] T2000HWYEMOD;
Table of letter and object lefts.

| | | | | | | | | | | |
|-------|------|------|------|------|------|-------|-------|-------|-------|-------|
| W | E | S | T | N | O | R | T | H | | |
| 8.6 | 46.1 | 56.2 | 61.8 | 67.5 | 79.5 | 111.0 | 119.0 | 125.5 | 131.0 | 136.6 |
| ↓ | | | | | | | | | | |
| 121.4 | | | | | | | | | | |
| D | a | n | v | i | l | e | | | | |
| 42.7 | 52.8 | 63.4 | 72.9 | 83.5 | 89.5 | 95.5 | 100.7 | | | |

| | | | |
|---|---------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| cr:\pw_work\pwt\d01\ceerlockjd\0226657\046179-shv-Sign-Detail.dgn | 46179-shv-Sign-Detail.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 1/8" = 1'-0" | | CHECKED - | REVISED - |
| PLOT DATE = 10/7/2011 | | DATE - 07/08/11 | REVISED - |

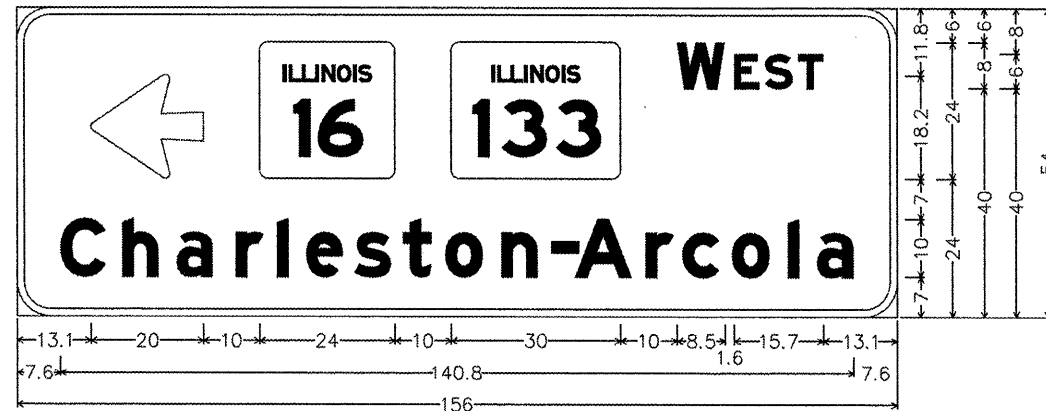
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS - EDGAR COUNTY
SCALE: SHEET NO. 1 OF 5 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 171 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS
**D-5 OVD SIN STR REPL 2012-06

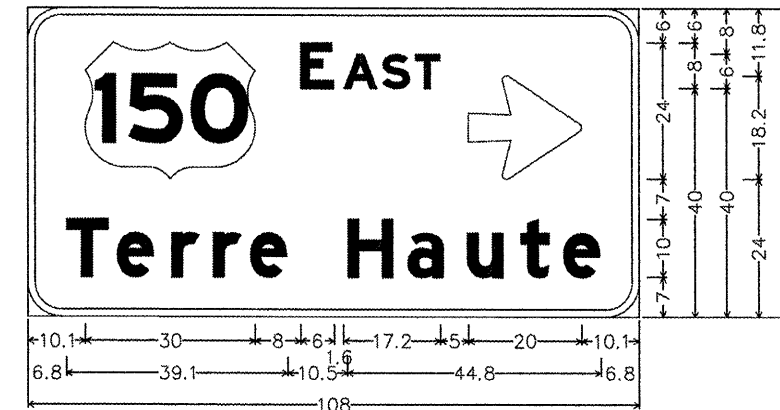
5-22 A
MONOTUBE #228 - LEFT SIGN



6.0" Radius, 1.3" Border, White on Green;
Arrow 133 - 20.0" 180°; [W EST] T2000HWYEMOD; [Charleston-Arcola] T2000HWYEMOD;
Table of letter and object lefts.

| | | | | | | | | | | | | | | | | |
|------|------|------|-------|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|
| ← | W | E | S | T | | | | | | | | | | | | |
| 13.1 | 43.1 | 77.1 | 117.1 | 127.2 | | | | | | | | | | | | |
| 13.1 | 43.1 | 77.1 | 117.1 | 127.2 | | | | | | | | | | | | |
| C | h | a | r | c | h | e | s | t | - | A | r | c | o | l | a | |
| 7.6 | 18.6 | 28.2 | 38.8 | 46.2 | 51.3 | 59.9 | 68.5 | 76.0 | 86.0 | 94.8 | 99.0 | 111.5 | 118.0 | 126.8 | 136.7 | 141.8 |

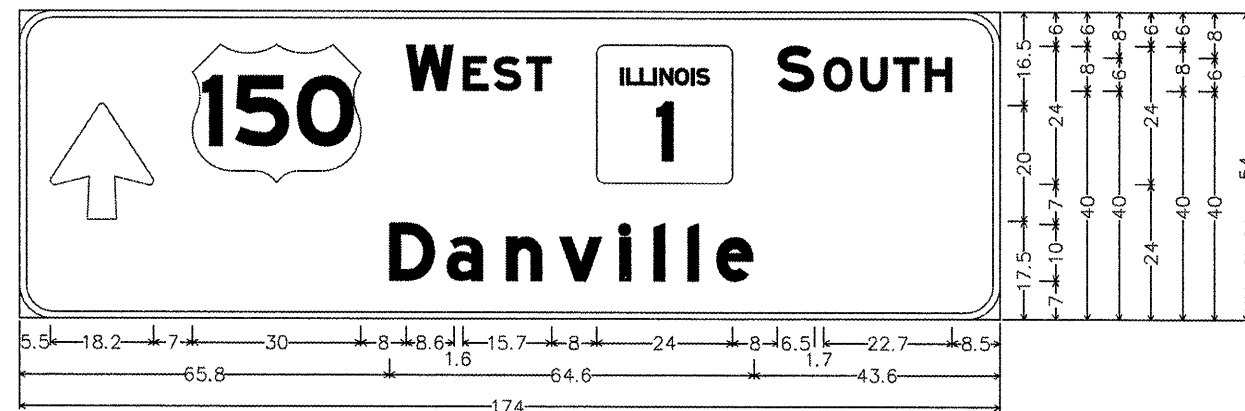
5-22 C
MONOTUBE #228 - RIGHT SIGN



6.0" Radius, 1.3" Border, White on Green;
[E AST] T2000HWYEMOD; Arrow 133 - 20.0" 0°;
[Terre Haute] T2000HWYEMOD;
Table of letter and object lefts.

| | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|
| E | A | S | T | → | | | | | |
| 10.1 | 48.1 | 55.7 | 62.6 | 68.4 | | | | | |
| 10.1 | 48.1 | 55.7 | 62.6 | 68.4 | | | | | |
| T | e | r | r | e | H | a | u | t | e |
| 6.8 | 15.7 | 25.3 | 32.7 | 39.2 | 56.4 | 67.0 | 77.6 | 87.0 | 94.6 |

5-22 B
MONOTUBE #228 - MIDDLE SIGN



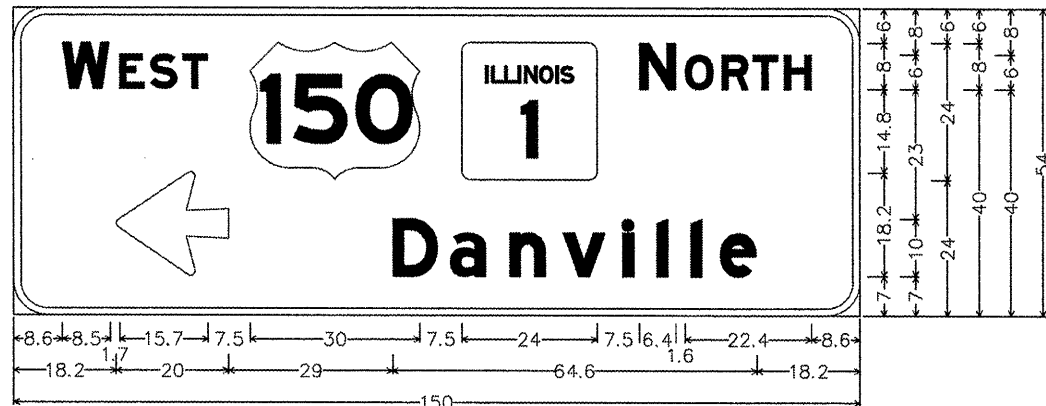
6.0" Radius, 1.3" Border, White on Green;
Arrow 133 - 20.0" 90°; [W EST] T2000HWYEMOD; [S OUTH] T2000HWYEMOD; [Danville] T2000HWYEMOD;
Table of letter and object lefts.

| | | | | | | | | | | |
|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| ↑ | W | E | S | T | I | S | O | U | T | H |
| 5.5 | 30.7 | 68.7 | 78.9 | 84.4 | 90.2 | 102.6 | 134.6 | 142.8 | 149.2 | 155.1 |
| 5.5 | 30.7 | 68.7 | 78.9 | 84.4 | 90.2 | 102.6 | 134.6 | 142.8 | 149.2 | 155.1 |
| D | a | n | v | i | l | e | | | | |
| 65.8 | 76.0 | 86.6 | 96.0 | 106.6 | 112.6 | 118.6 | 123.8 | | | |

*VARIOUS
**D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | | | | |
|--|------------------------------|-----------------|-----------|---|---------------------------------------|-------------------------|------|--------------|---------|--------|-----------------|--------------|-----|
| FILE NAME = | USER NAME = ceer-lockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | SIGNING DETAILS - EDGAR COUNTY | | | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. | |
| et:\pwwork\pictdo\ceer-lockjd\266557-0 | 46179-shr-Sign-Data1s.dgn | DRAWN - | REVISED - | | SCALE: | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA. | • | • | Various | 178 | 172 |
| | PLOT SCALE = 48.0000' / 1" = | CHECKED - | REVISED - | | CONTRACT NO. 46179 | | | | | | | | |
| | PLOT DATE = 10/7/2011 | DATE - 07/08/11 | REVISED - | | ILLINOIS FED. AID PROJECT | | | | | | | | |

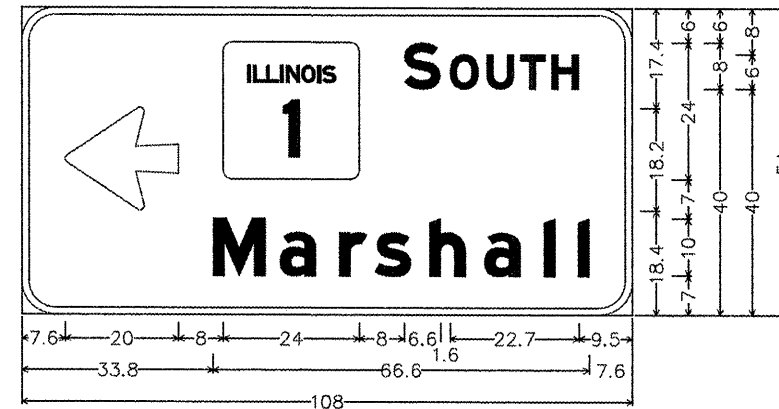
5-23 A
MONOTUBE #230 - LEFT SIGN EB



6.0" Radius, 1.3" Border, White on Green;
 [W EST] T2000HWYEMOD; [N ORTH] T2000HWYEMOD; Arrow 133 - 20.0" 180°;
 [Danville] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | | | | | |
|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| W | E | S | T | 150 | N | O | R | T | H | |
| 8.6 | 18.8 | 24.3 | 30.0 | 42.0 | 79.5 | 111.0 | 119.0 | 125.5 | 131.0 | 136.8 |
| 18.2 | 67.2 | 77.3 | 87.9 | 97.4 | 108.0 | 114.0 | 120.0 | 125.2 | | |

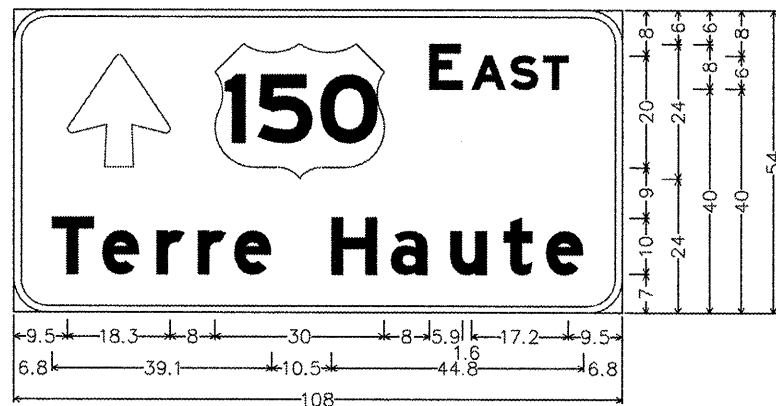
5-23 C
MONOTUBE #230 - LEFT SIGN WB



6.0" Radius, 1.3" Border, White on Green;
 Arrow 133 - 20.0" 180°; [S OUTH] T2000HWYEMOD;
 [Marshall] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | | |
|------|----------|------|------|------|------|------|------|
| ← | ILLINOIS | S | O | U | T | H | |
| 7.6 | 35.6 | 67.6 | 75.8 | 82.3 | 88.2 | 93.7 | |
| 33.8 | 45.6 | 56.1 | 62.4 | 72.1 | 81.8 | 92.3 | 98.3 |

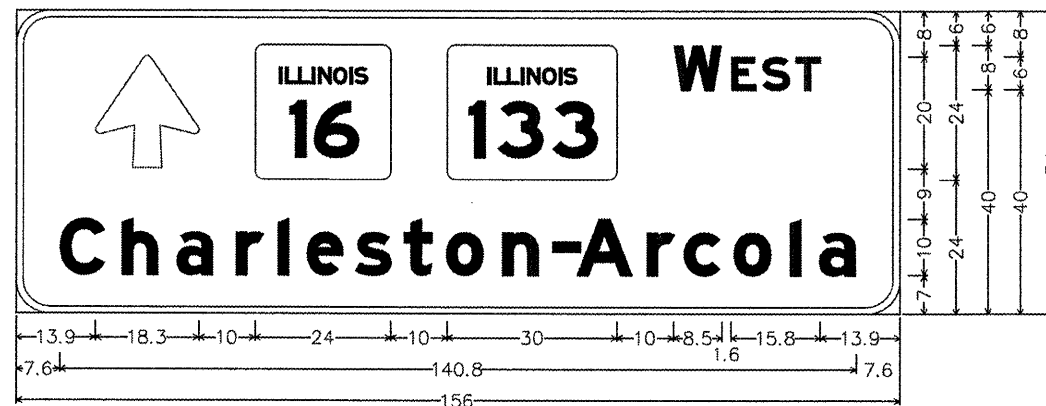
5-23 B
MONOTUBE #230 - RIGHT SIGN EB



6.0" Radius, 1.3" Border, White on Green;
 Arrow 133 - 20.0" 90°; [E AST] T2000HWYEMOD;
 [Terre Haute] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|------|
| ↑ | 150 | E | A | S | T | | | | |
| 9.5 | 35.8 | 73.8 | 81.3 | 88.3 | 94.0 | | | | |
| 6.8 | 15.7 | 25.3 | 32.7 | 39.2 | 56.4 | 67.0 | 77.6 | 87.0 | 94.6 |

5-23 D
MONOTUBE #230 - RIGHT SIGN WB



6.0" Radius, 1.3" Border, White on Green;
 Arrow 133 - 20.0" 90°; [W EST] T2000HWYEMOD; [Charleston-Arcola] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | | | | | | | | | | | |
|------|----------|------|----------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|
| ↑ | ILLINOIS | 16 | ILLINOIS | 133 | WEST | | | | | | | | | | | |
| 13.9 | 42.2 | 76.2 | 116.2 | 126.3 | 131.8 | 137.6 | | | | | | | | | | |
| 7.6 | 18.6 | 28.2 | 38.8 | 46.2 | 51.3 | 59.9 | 68.5 | 76.0 | 86.0 | 94.8 | 99.0 | 111.5 | 118.0 | 126.8 | 136.7 | 141.8 |

| | | | |
|---|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - |
| ceerlockjd\work\p1\ceerlockjd\2011\08\08\46179-shv-Sign_Details.dgn | | DRAWN - | REVISED - |
| | | CHECKED - | REVISED - |
| | | DATE - 07/08/11 | REVISED - |

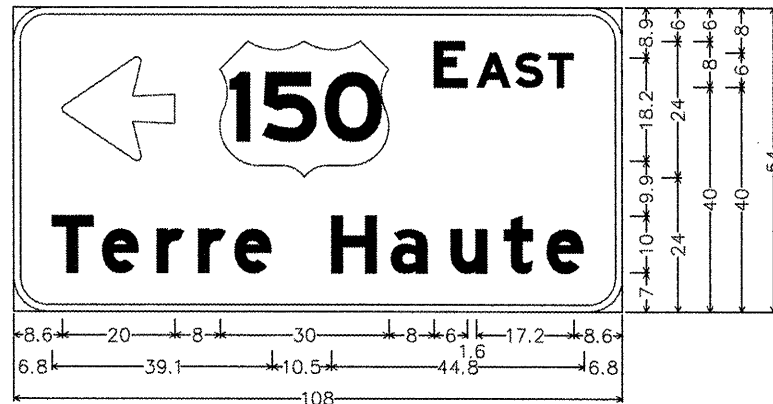
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS - EDGAR COUNTY
 SCALE: SHEET NO. 3 OF 5 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | | Various | 178 | 173 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS
 **D-5 OVD SIN STR REPL 2012-06

5-24 A
MONOTUBE #231 - LEFT SIGN

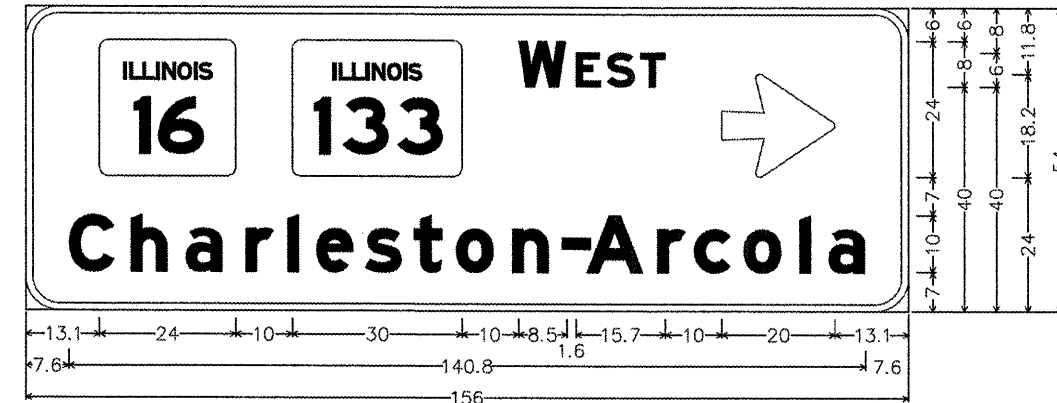


6.0" Radius, 1.3" Border, White on Green;
Arrow 133 - 20.0" 180°; [E AST] T2000HWYEMOD;
[Terre Haute] T2000HWYEMOD;

Table of letter and object lefts.

| | | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|------|
| ← | 150 | E | A | S | T | | | | |
| 8.6 | 36.6 | 74.6 | 82.2 | 89.1 | 94.9 | | | | |
| T | e | r | r | e | H | a | u | t | e |
| 6.8 | 15.7 | 25.3 | 32.7 | 39.2 | 56.4 | 67.0 | 77.6 | 87.0 | 94.6 |

5-24 C
MONOTUBE #231- RIGHT SIGN

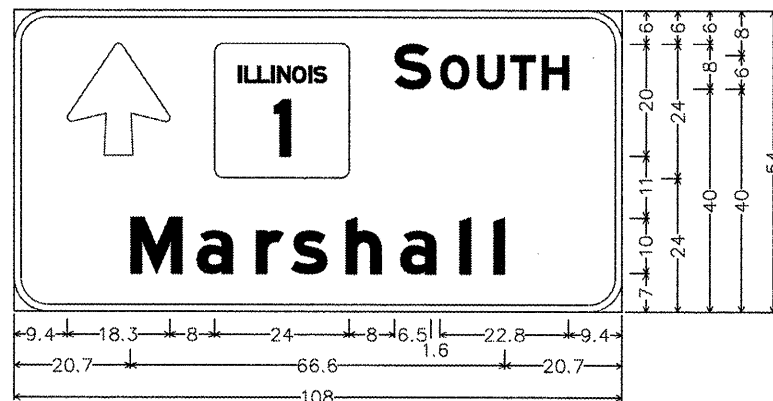


6.0" Radius, 1.3" Border, White on Green;
[W EST] T2000HWYEMOD; Arrow 133 - 20.0" 0°; [Charleston-Arcola] T2000HWYEMOD;

Table of letter and object lefts.

| | | | | | | | | | | | | | | | | |
|------|------|------|------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|
| ← | 16 | 133 | W | E | S | T | → | | | | | | | | | |
| 13.1 | 47.1 | 87.1 | 97.2 | 102.7 | 108.5 | 122.9 | | | | | | | | | | |
| C | h | a | r | l | e | s | t | o | n | - | A | r | c | o | l | a |
| 7.6 | 18.6 | 28.2 | 38.8 | 46.2 | 51.3 | 59.9 | 68.5 | 76.0 | 86.0 | 94.8 | 99.0 | 111.5 | 118.0 | 126.8 | 136.7 | 141.8 |

5-24 B
MONOTUBE #231 - MIDDLE SIGN



6.0" Radius, 1.3" Border, White on Green;
Arrow 133 - 20.0" 90°; [S OUTH] T2000HWYEMOD;

[Marshall] T2000HWYEMOD;

Table of letter and object lefts.

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| ↑ | 1 | S | O | U | T | H | |
| 9.4 | 35.7 | 67.7 | 75.8 | 82.3 | 88.2 | 93.7 | |
| M | a | r | s | h | a | l | l |
| 20.7 | 32.5 | 43.0 | 49.3 | 59.0 | 68.7 | 79.2 | 85.3 |

| | | | |
|--------------------------------------|-----------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceer1ackjd | DESIGNED - JAL | REVISED - |
| et\pwwork\pwwork\ceer1ackjd\0266557\ | 46179-shs-Sign-Details.dgn | DRAWN - | REVISED - |
| | PLOT SCALE = 40.0000' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 07/08/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

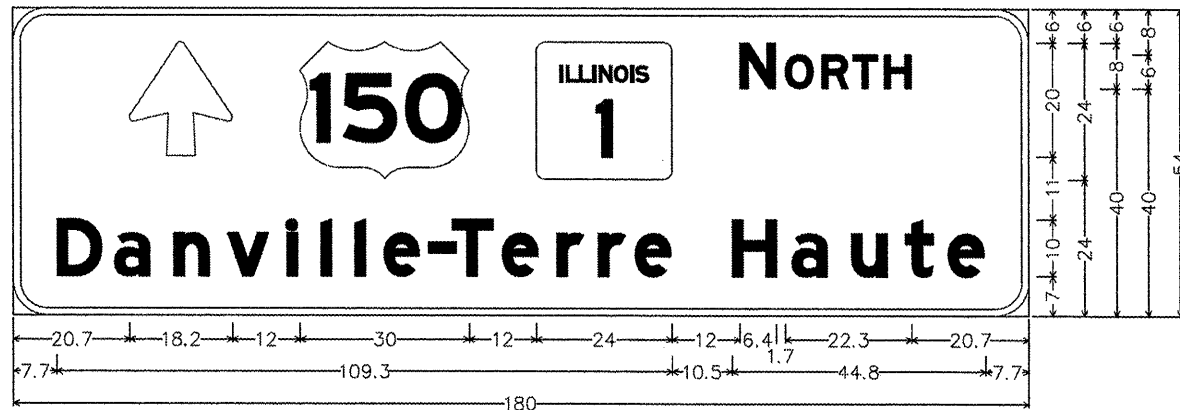
SIGNING DETAILS - EDGAR COUNTY

SCALE: SHEET NO. 4 OF 5 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| . | ** | Various | 178 | 174 |
| | | | CONTRACT NO. 46179 | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS
**D-5 OVD SIN STR REPL 2012-06

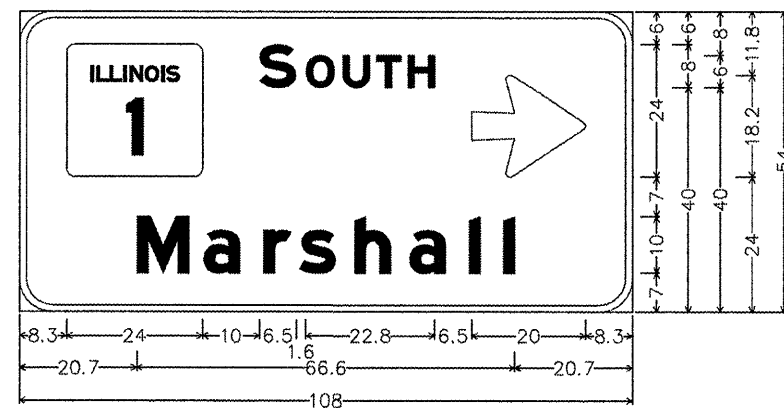
5-25 A
MONOTUBE #232 - LEFT SIGN



6.0" Radius, 1.3" Border, White on Green;
 Arrow 133 - 20.0" 90°; [N ORTH] T2000HWYEMOD; [Danville-Terre Haute] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | | | | | | | | | | | | |
|------|------|------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| ↑ | 150 | N | O | R | T | H | | | | | | | | | | | |
| 20.7 | 50.9 | 92.9 | 128.9 | 137.0 | 143.5 | 149.0 | | | | | | | | | | | |
| D | a | n | v | i | l | e | - | T | e | r | r | e | H | a | u | t | e |
| 7.7 | 17.8 | 28.4 | 37.9 | 48.5 | 54.5 | 60.5 | 65.7 | 73.6 | 77.8 | 86.7 | 96.4 | 103.8 | 110.3 | 127.5 | 138.1 | 148.7 | 158.1 |

5-25 B
MONOTUBE #232 - RIGHT SIGN



6.0" Radius, 1.3" Border, White on Green;
 [S OUTH] T2000HWYEMOD; Arrow 133 - 20.0" 0°;
 [Marshall] T2000HWYEMOD;
 Table of letter and object lefts.

| | | | | | | |
|------|------|------|------|------|------|------|
| ↑ | S | O | U | T | H | → |
| 8.3 | 42.3 | 50.4 | 56.9 | 62.8 | 68.4 | 79.7 |
| M | a | r | s | h | a | l |
| 20.7 | 32.5 | 43.0 | 49.3 | 59.0 | 68.7 | 79.2 |

| | | | |
|--|----------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceer-lock_jd | DESIGNED - JAL | REVISED - |
| es:\pwwork\pwwork\ceer-lock_jd\2266557\0 | 46179-shr-Sign-Details.dgn | DRAWN - | REVISED - |
| | PLGT SCALE = 48.0000' / 1" | CHECKED - | REVISED - |
| | PLOT DATE = 10/7/2011 | DATE - 07/08/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIGNING DETAILS - EDGAR COUNTY

SCALE: SHEET NO. 5 OF 5 SHEETS STA. TO STA.

| | | | | |
|---------------------------|---------|---------|--------------|-----------|
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| * | ** | Various | 178 | 175 |
| CONTRACT NO. 46179 | | | | |
| ILLINOIS FED. AID PROJECT | | | | |

*VARIOUS
 **D-5 OVD SIN STR REPL 2012-06

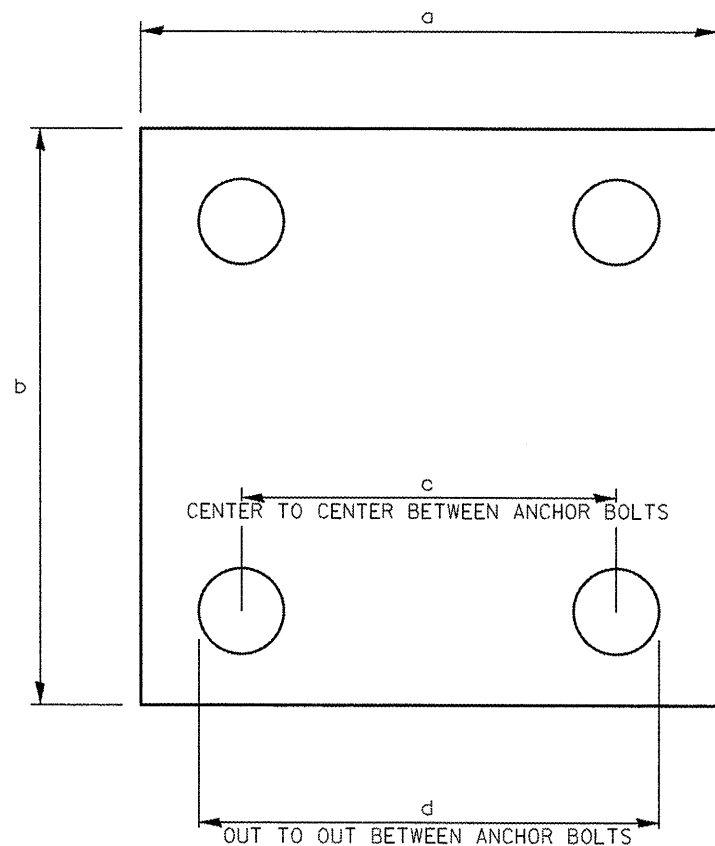
EXISTING MONOTUBE BASE PLATE AND ANCHOR BOLT CIRCLE DIMENSIONS

| Location No. | Monotube No. | Existing Anchor Bolt Size* inches | Existing Nut Size inches | a inches | b inches | c* center-to-center variable between bolts inches | d* out-to-out variable between bolts inches | Existing End Support Dia. inches | Existing Base Plate Thickness inches |
|--------------|--------------|--------------------------------------|-----------------------------|-------------|-------------|--|--|-------------------------------------|---|
| 5-21 | 227 | 1 1/2" | 2 3/8" | 14" | 14" | 9 3/8" - 9 5/8" | 10 7/8" - 11 1/8" | 10" | 1 1/2" |
| 5-22 | 228 | 1 1/2" | 2 3/8" | 15.5" | 15.5" | 10 3/8" - 10 5/8" | 11 7/8" - 12 1/8" | 10" | 1 13/16" |
| 5-23 | 230 | 1 3/4" | 2 3/4" | 17" | 17" | 11 1/8" - 11 3/4" | 12 7/8" - 13 1/2" | 12" | 2" |
| 5-24 | 231 | 1 1/2" | 2 3/8" | 15.5" | 15.5" | 10 3/8" - 10 5/8" | 11 7/8" - 12 1/8" | 10" | 1 13/16" |
| 5-25 | 232 | 1 1/2" | 2 3/8" | 15.5" | 15.5" | 10 3/8" - 10 5/8" | 11 7/8" - 12 1/8" | 10" | 1 13/16" |

* See Note #2

* See Note #2

* See Note #2

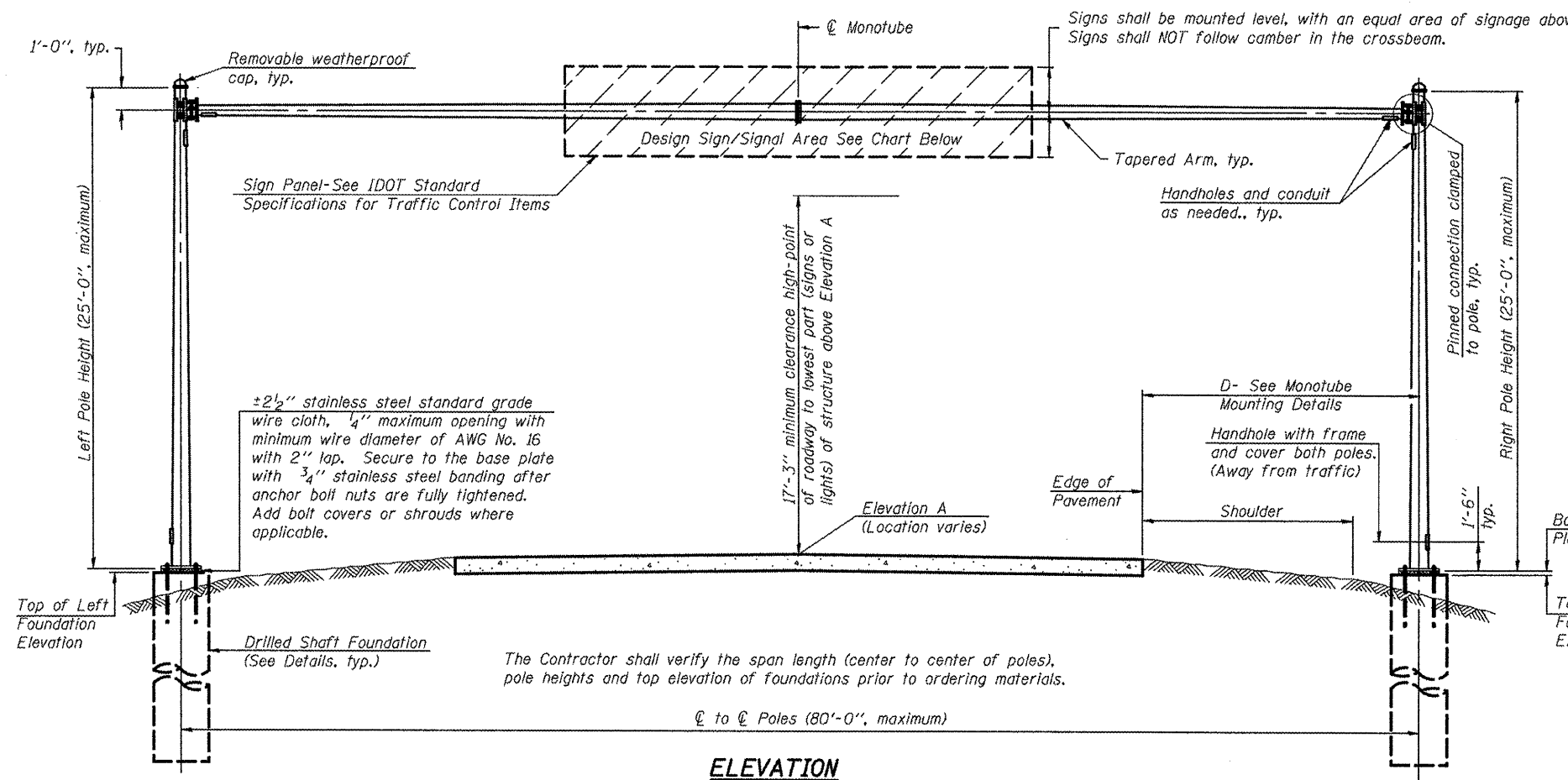


NOTES:

1. New End Supports to be installed on existing concrete foundations with existing anchor bolts.
2. The Contractor shall field measure the existing bolt circle patterns for each end support at each monotube location. Variations exist in the as-built center to center measurements from anchor bolt to anchor bolt. The Contractor shall provide accurate field measured bolt circle dimensions to the fabricator prior to the fabrication of the new end supports.
3. The fabricator, when sizing end column diameters, shall ensure sufficient space between the outside wall of the end column and sides of the anchor bolts to allow for the washer and locknut to sit flush against the base plate without touching the welded connection between the end column and the base plate.
4. Removing all grout between the base plate and the foundation, cleaning and painting the exposed anchor bolts, and installing a stainless steel screen will be paid for under "Overhead Sign Support Grout Repair".
5. The Contractor shall furnish and install new anchor rod locknuts, leveling nuts, and washers. Anchor rod nuts and washers shall be galvanized per Article 1094.02, Article 1006.09, and AASHTO M232.

•VARIOUS COUNTIES
••D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | |
|-------------------------------------|------------------------|----------------|-----------|---|--|---------------------------|---------|---------|-----------------|--------------|
| FILE NAME = | USER NAME = ceerlockjd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | MONOTUBE SIGN STRUCTURE EXISTING BASEPLATE AND ANCHOR BOLT CIRCLE DETAILS | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| 01\pwork\pedit\ceerlockjd\0266557\0 | 046179-shr-deta1.dgn | DRAWN - | REVISED - | | | * | ** | Various | 178 | 176 |
| PLOT SCALE = 48.0000' / in. | CHECKED - | REVISED - | REVISED - | | | CONTRACT NO. 46179 | | | | |
| PLOT DATE = 9/21/2011 | DATE - 04/26/11 | REVISED - | REVISED - | | | ILLINOIS FED. AID PROJECT | | | | |
| | | | | SCALE: | SHEET NO. OF SHEETS | STA. | TO STA. | | | |



Signs shall be mounted level, with an equal area of signage above & below the crossbeam.
Signs shall NOT follow camber in the crossbeam.

GENERAL NOTES

DESIGN: Current (at time of letting) AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals (Fatigue Category II - natural wind gust only).

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Recurring Special Provisions. ("Standard Specifications") All references to "Mast Arm Assembly and Pole" are applicable, unless otherwise noted.

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

ANCHOR RODS: Shall conform to ASTM F1554 Grade 105. No welding shall be permitted on rods.

FASTENERS: All connection bolts shall be High Strength Bolts M164, Galvanize M232 (A153), Type 3, or stainless steel heavy hex conforming to ASTM A193, Grade B8 or B8M, Class 1. U-bolts shall be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished, or an equivalent material acceptable to the Engineer. Nuts for stainless steel bolts shall be stainless steel conforming to ASTM A194, Grade 8 (AISI Type 304) or Grade 8F (AISI Type 303). All nuts shall be "locknuts" with nylon or steel inserts and semifinished hexagonal heads equivalent to the finished heavy hex series of the American National Standard. Washers for stainless steel bolts shall be stainless steel conforming to ASTM A240, Type 302 or 304.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

CAMBER: Minimum AASHTO camber = L / 1000 + dead load camber.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

BILL OF MATERIAL

| ITEM | UNIT | TOTAL |
|---|----------|-------|
| OVERHEAD SIGN STRUCTURE MONOTUBE SINGLE | Foot | |
| DRILLED SHAFT CONCRETE FOUNDATIONS | Cu. Yds. | |

ELEVATION

Looking at face of signs.
Looking upstation for structures with signs both sides.

SIGN STRUCTURE DESIGN PARAMETERS

| Location No. | Monotube No. | Station | Span Length Center to Center Poles | Design Sign Area (sqft) | Left Column / Foundation | Right Column / Foundation | Proposed End Column Diameter Left & Right (inches) | Proposed End Support Height H Left Pole | Proposed End Support Height H Right Pole | Proposed Cross Beam Dia. (inches) | Proposed End Support & Cross Beam Wall Thickness* |
|--------------|--------------|---------|------------------------------------|-------------------------|--------------------------|---------------------------|--|---|--|-----------------------------------|---|
| 5-21 | 227 | 1411+20 | 59' - 11" (59.92') | 200 | South | North | 10 | 21' - 5" | 21' - 0" | 10.5 | TBD* |
| 5-22 | 228 | 8+20 | 43' - 0 3/4" (43.06') | 200 | West | East | 10 | 21' - 4" | 21' - 4" | 10.5 | TBD* |
| 5-23 | 230 | 1407+75 | 51' - 11" (51.92') | 220 | North | South | 12 | 21' - 2" | 20' - 10" | 10.5 - 12.5 | TBD* |
| 5-24 | 231 | 11+95 | 43' - 10 3/4" (43.90') | 200 | East | West | 10 | 21' - 5" | 21' - 5" | 10.5 | TBD* |
| 5-25 | 232 | 1403+80 | 54' - 0" (54.00') | 200 | North | South | 10 | 21' - 3" | 21' - 3" | 10.5 | TBD* |

* Wall thicknesses to be determined by the manufacturer. Wall thickness for both the end columns and cross beams must be a minimum of 3 gage.

SIGN STRUCTURE DESIGN ELEVATION

| Location No. | Monotube No. | Station | Actual Sign Area incl. Ty I & Ty II (sqft) | Elevation A | Left Column / Foundation | Right Column / Foundation | Existing / Proposed Elevation Left Fdn. | Existing / Proposed Elevation Right Fdn. | Leveling Nut / Gap Height Left | Leveling Nut / Gap Height Right | Existing Elevation Bottom of Base Plate Left | Existing Elevation Bottom of Base Plate Right | Required Vertical Clearance | Fudge Factor use 3" | 1/2 Height of Tallest Sign | Additional Fudge Factor use 12" ** | Distance from Center of cross beam to top of Column - typ. | Proposed End Support Height H Left Pole | Proposed End Support Height H Right Pole | Proposed Elevation Top of End Support Left Pole | Proposed Elevation Top of End Support Right Pole |
|--------------|--------------|---------|--|-------------|--------------------------|---------------------------|---|--|--------------------------------|---------------------------------|--|---|-----------------------------|---------------------|----------------------------|------------------------------------|--|---|--|---|--|
| 5-21 | 227 | 1411+20 | 182.75 | 99.30 | South | North | 99.57 | 100.00 | 4" | 4" | 99.903 | 100.333 | 17' - 3" | 3" | 3' - 6" | 0" | 12" *** | 21' - 5" | 21' - 0" | 121.32 | 121.33 |
| 5-22 | 228 | 8+20 | 164.25 | 99.84 | West | East | 99.98 | 100.00 | 3 3/4" | 3 3/4" | 100.292 | 100.312 | 17' - 3" | 3" | 2' - 3" | 12" ** | 12" *** | 21' - 4" | 21' - 4" | 121.63 | 121.64 |
| 5-23 | 230 | 1407+75 | 195.75 | 99.41 | North | South | 99.68 | 100.00 | 4" | 3 3/4" | 100.013 | 100.312 | 17' - 3" | 3" | 2' - 3" | 12" ** | 12" *** | 21' - 2" | 20' - 10" | 121.18 | 121.15 |
| 5-24 | 231 | 11+95 | 139.5 | 99.94 | East | West | 99.98 | 100.00 | 4" | 3 3/4" | 100.313 | 100.312 | 17' - 3" | 3" | 2' - 3" | 12" ** | 12" *** | 21' - 5" | 21' - 5" | 121.73 | 121.73 |
| 5-25 | 232 | 1403+80 | 133 | 99.81 | North | South | 100.00 | 99.98 | 3 1/2" | 3 1/2" | 100.292 | 100.272 | 17' - 3" | 3" | 2' - 3" | 12" ** | 12" *** | 21' - 3" | 21' - 3" | 121.54 | 121.52 |

** Proposed signage at #228, 230, 231, and 232 is very short. The addition fudge factor is to ensure adequate vertical clearance in the event of any required signage changes in the future. (While future increases in total signage area may not be allowed, overall signage dimensions could change.)

*** May be field adjusted during erection if necessary to avoid utilities while still maintaining minimum 17'-3" vertical clearance.

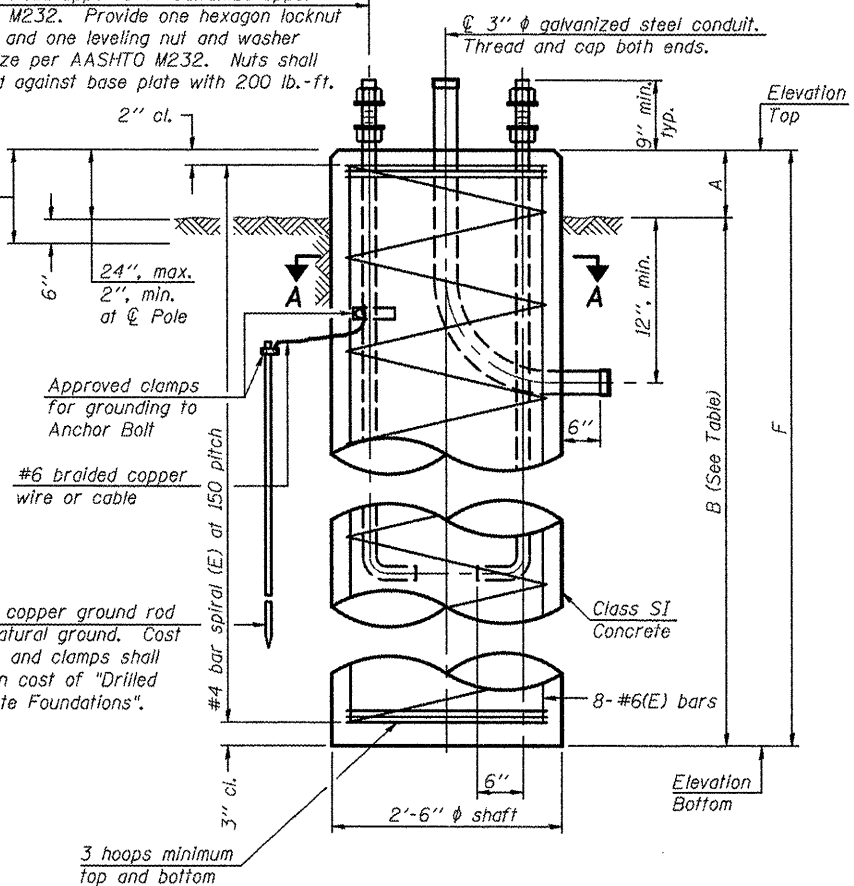
MONOTUBE - 1 9-15-11

*VARIOUS COUNTIES
**D-5 OVD SIN STR REPL 2012-06

| | | | | | | | | | | |
|---|-------------------------------|----------------|-----------|---|--------------------------------|---------------------------|---------|---------|--------------|-----------|
| FILE NAME = | USER NAME = ceer-lock_jd | DESIGNED - JAL | REVISED - | STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION | MONOTUBE SIGN STRUCTURE | F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| ct:\pwwork\pwwork\ceer-lock_jd\046179-shs-details.dgn | PLLOT SCALE = 48.0000' / 1" = | CHECKED - | REVISED - | | | * | ** | Various | 178 | 177 |
| PLLOT DATE = 9/21/2011 | DATE = 04/26/11 | REVISED - | REVISED - | | | CONTRACT NO. 46179 | | | | |
| | | | | | | ILLINOIS FED. AID PROJECT | | | | |

⊘ anchor rod. Thread upper 8". Galvanize upper 18" per AASHTO M232. Provide one hexagon locknut and washer (top) and one leveling nut and washer (bottom). Galvanize per AASHTO M232. Nuts shall each be tightened against base plate with 200 lb.-ft. torque.

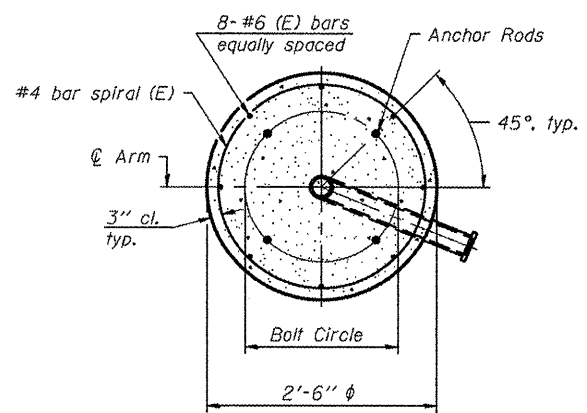
Limits of Bridge Seat Sealer (Cost included in "Drilled Shaft Concrete Foundations")



3/4" x 8'-0" copper ground rod driven into natural ground. Cost of rod, cable and clamps shall be included in cost of "Drilled Shaft Concrete Foundations".

FOUNDATION DETAILS

Typical, except conduit may only be required at one foundation. Provide conduit openings both poles.



SECTION A-A

| Span (Ft.) | B (Ft.) |
|----------------|---------|
| Span ≤ 45 | 9 |
| 45 < Span ≤ 65 | 10 |
| 65 < Span ≤ 80 | 11 |

FOUNDATIONS:

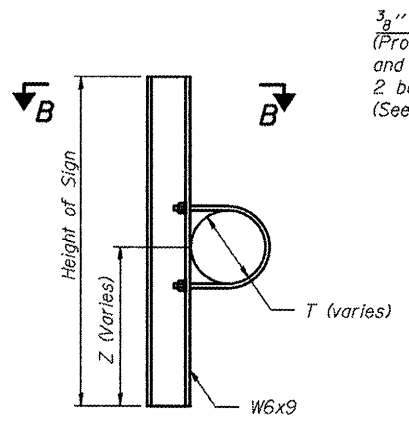
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

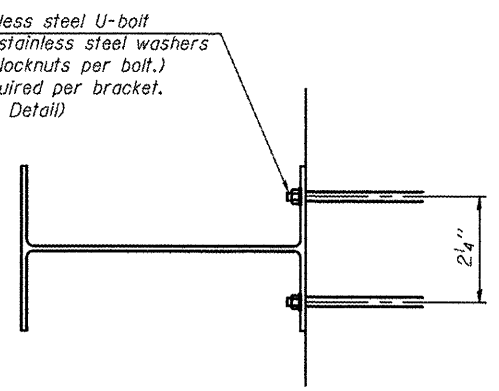
Concrete shall be placed monolithically, without construction joints. Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Bridge Seat Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.

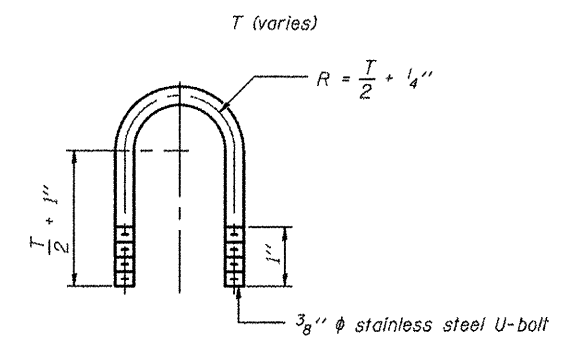


SIGN MOUNTING BRACKET
(Minimum 2 Brackets Each Sign)

Z - Variable - Signs Should be Mounted Level, and not Follow the Camber in the Crossbeam



SECTION B-B
6'-0" maximum spacing.
2'-0" maximum sign overhang beyond end bracket.



U-BOLT DETAIL
(Typical)

MONOTUBE - 2 9-15-11

| | | | |
|---------------------------------------|------------------------|-----------------|-----------|
| FILE NAME = | USER NAME = ceo-lookjd | DESIGNED - JAL | REVISED - |
| ct\pw_wor\p\tdot\ceo-lookjd\0266557\0 | 46179-shr-detailed.dgn | DRAWN - | REVISED - |
| PLOT SCALE = 48.0000' / in. | | CHECKED - | REVISED - |
| PLOT DATE = 9/21/2011 | | DATE - 04/26/11 | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| | | | |
|---|---------------------|--------------|--|
| MONOTUBE SIGN STRUCTURE FOUNDATION AND SIGN BRACKETS | | | |
| SCALE: | SHEET NO. OF SHEETS | STA. TO STA. | |

| | | | |
|---|---------|---------|--------------|
| *VARIOUS COUNTIES **D-5 OVD SIN STR REPL 2012-06 | | | |
| F.A. RTE. | SECTION | COUNTY | TOTAL SHEETS |
| * | ** | Various | 178 |
| | | | 178 |
| CONTRACT NO. 46179 | | | |
| ILLINOIS FED. AID PROJECT | | | |