

GENERAL NOTES

75'-105' ALUMINUM OVERHEAD SIGN SUPPORT

SPECIFICATIONS: All References to the Standard Specifications are to the Current Edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction. All References to the AASHTO Specifications are to the 2002 Edition of the AASHTO Standard Specifications for Highway Bridges.

DESIGN: Designed in accordance with the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals published by AASHTO, 2000 with wind velocity to 80 MPH.

SUPERELEVATION OF ROADWAY: The Contractor shall allow for differences in elevations across the full shoulder width as shown on the Roadway Plans in maintaining the required 18 foot minimum vertical clearance to the bottom of the lowest part of the sign or support. Sign shall to be centered over the lane or lanes to which it applies unless shown otherwise.

CONCRETE: Class "A" Concrete is to be used throughout.

BEVELED EDGES: All exposed concrete edges are to be beveled $\frac{3}{4}$ " unless otherwise shown.

REINFORCEMENT: Dimensions from face of concrete to bars are clear except as otherwise shown. Dimensions for bar spacings are distances center to center of bars.

SHOP DRAWINGS: The contractor shall submit detailed Shop Drawings to the Division of Construction for review prior to fabrication in accordance with the specifications. The Roadway Cross Section developed by the contractor is to accompany the Shop Drawings. The Shop Drawings and Roadway Cross Section will also be forwarded to the engineer for review.

FABRICATION: The aluminum sign support shall be fabricated in accordance with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

MILL TEST REPORTS: Notarized test reports in triplicate shall be furnished to the Department of Highways stating that the materials used conform to the specifications.

FOOTINGS: All footings shall be poured against undisturbed earth and are to transfer no more than 1 1/2 Tons Per Square Foot Bearing Pressure to the soil under any design loading conditions.

VERTICAL DIMENSIONS: Vertical Dimensions HR and HL shall not exceed 27 feet and the combined Dimensions (HR + FR) or (HL + FL) shall not exceed 36 feet.

MATERIAL SPECIFICATIONS: The following ASTM designations shall govern all materials used.

| ASTM | MATERIAL |
|---------|---|
| B221-08 | Extruded Tube, Aluminum Alloy 6061-T6511 |
| B241-02 | Pipe, Aluminum 6061-T6 |
| B308-02 | Structural Shapes, Aluminum Alloy 6061-T6 |
| B221-08 | Extruded Bar, Rod and Shapes, Aluminum Alloy 6061-6511 |
| B209-07 | Sheet and Plate, Aluminum Alloy 6061-T651 |
| A320-08 | Stainless Steel Hardware, Nuts, Bolts, Washers and Screws |
| B766-86 | Class 12, Cadmium Coating for ASTM A36 Anchor Bolts, Nuts and Washers |
| B26-05 | Sand Mold Casting, Aluminum Alloy 356.0-T6 |
| B108-08 | Permanent Mold Casting, Aluminum Alloy 356.0-T6 |

ROADWAY CROSS SECTION: The Contractor shall take field measurements at each Sign location and develop a cross section showing the Sign Footing Heights and elevations, Sign Clearance above the Roadway and Column Heights. These cross sections shall be submitted to the Engineer for approval before ordering any Sign components. This cost is included in the unit price bid for "Roadway Cross Section". A copy of these cross sections shall also accompany the Shop Drawings.

MAXIMUM SIGN AREA: Designed for a sign area of 700 sq. ft.

FABRICATOR CERTIFICATION: The fabricator shall be AISC Certified for SBR (Certified Bridge Fabricator - Simple).

FILE NAME: U:\Bridges\Pro\Sign\2017\75-105truss.dgn

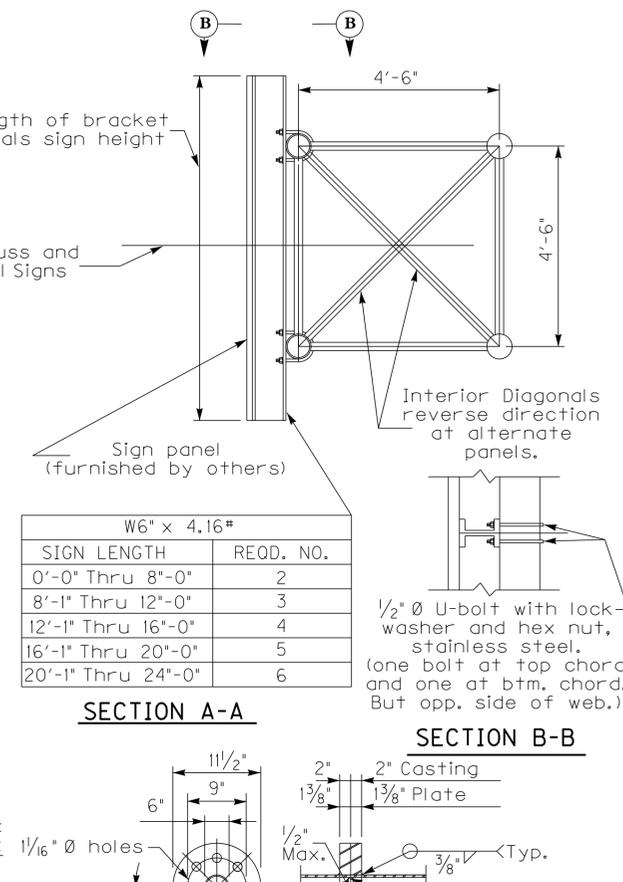
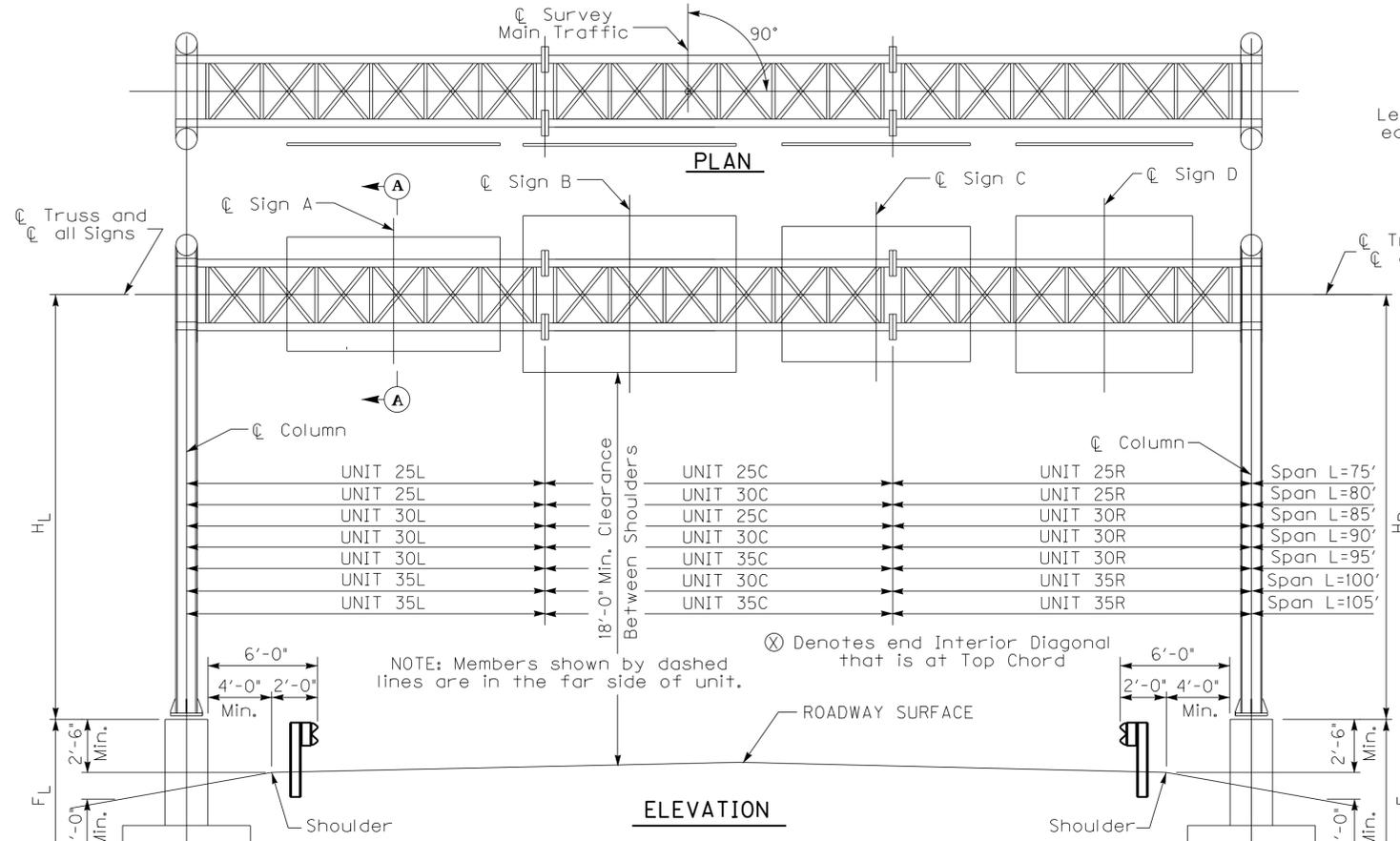
USERNAME: eugene.kilgore

DATE: 12-APR-2017

SHEET LOCATION:

| | | | |
|---------------------------------------|-------------|------------|-------------|
| DATE: | | CHECKED BY | |
| DESIGNED BY: Standard Sheet *** | | | |
| DETAILED BY: | | | |
| Commonwealth of Kentucky | | | |
| DEPARTMENT OF HIGHWAYS | | | |
| COUNTY | | | |
| ROUTE | ITEM NUMBER | | |
| 75'-105' OVERHEAD SIGN SUPPORT | | | |
| PREPARED BY | | | SHEET NO. |
| Division of Structural Design | | | |
| | | | DRAWING NO. |

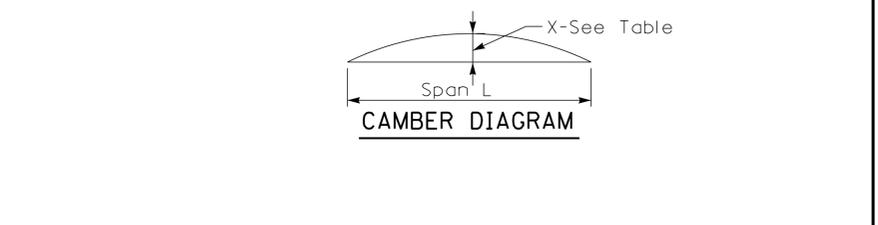
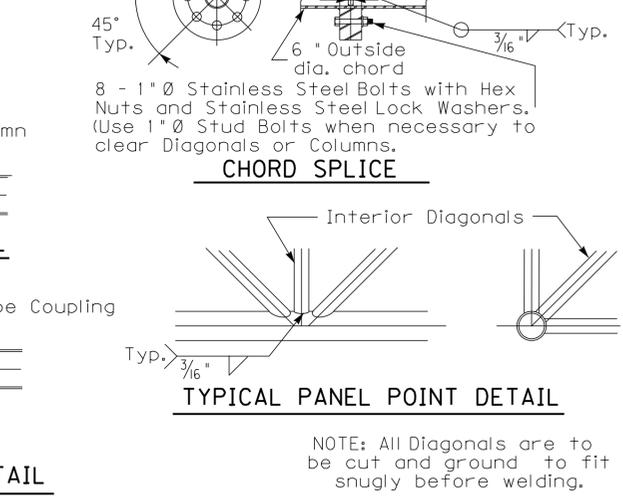
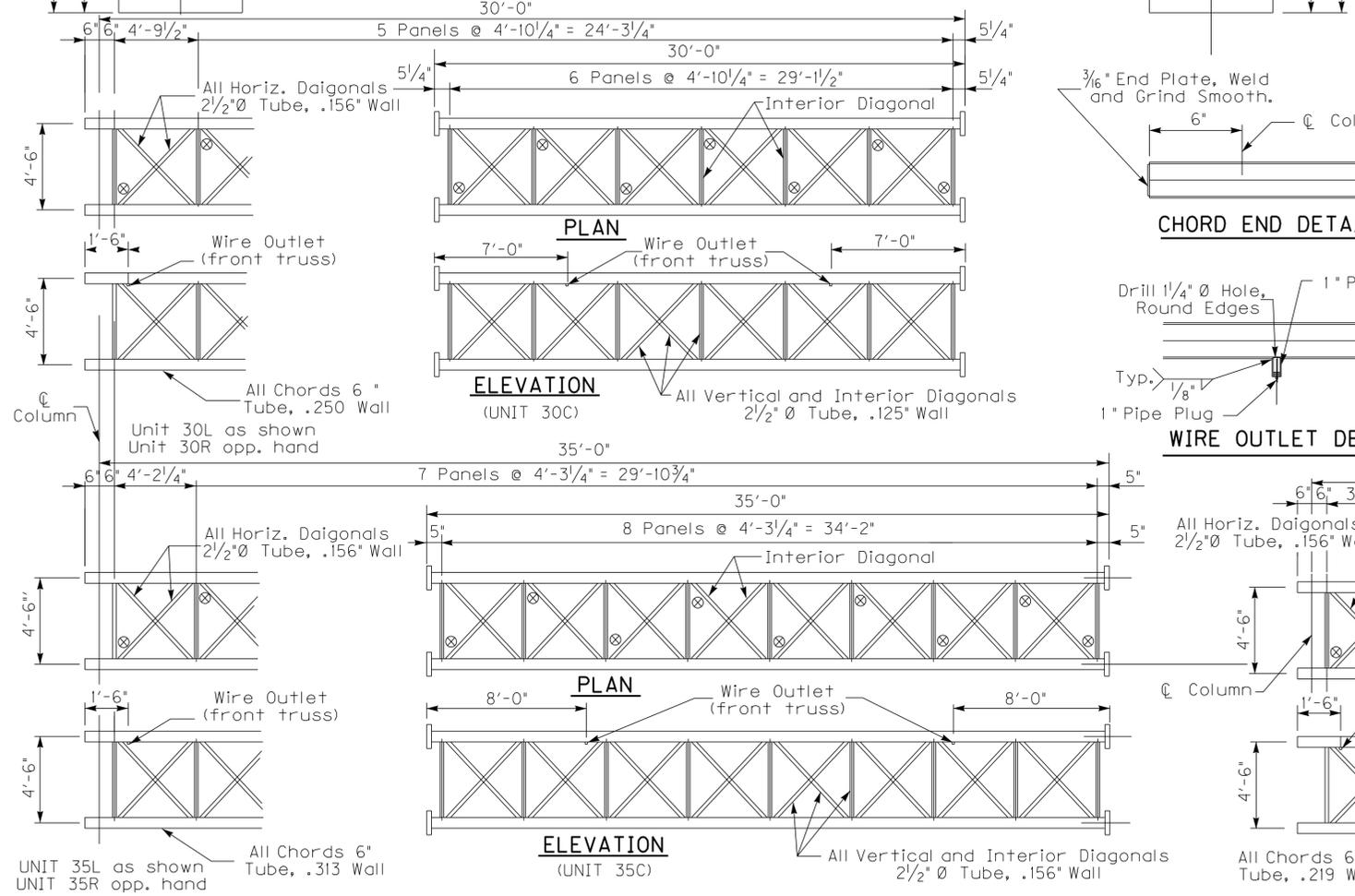
FILE NAME: U:\Bridges\Pro\Sign\2017\75-105truss.dgn
 USERNAME: eugene.kilgore
 DATE: 12-APR-2017
 SHEET LOCATION:



| Support No. | STATION | SPAN | | SUPPORT HEIGHT | | FOOTING HEIGHT | |
|--------------|---------|--------------------|--------|--------------------|----------------|--------------------|----------------|
| | | L | | H _L | H _R | F _L | F _R |
| Total Area** | SIGN A | | SIGN B | | SIGN C | | |
| | I.D. | Horiz. Vert. Area* | I.D. | Horiz. Vert. Area* | I.D. | Horiz. Vert. Area* | |
| | | SIGN D | | | | | |
| | I.D. | Horiz. Vert. Area* | I.D. | Horiz. Vert. Area* | I.D. | Horiz. Vert. Area* | |

* Area includes Exit Number Signs that are not shown.
 ** Total Area includes the sum of all of the signs on the structure and shall not exceed 700 square feet.

A registered professional engineer licensed to practice in the Commonwealth of Kentucky shall fill out the chart above based on the design cross section at the locations where the truss is to be erected, the actual signs to be used on the truss, and the instructions herein. The engineer's name is to appear in the "Checked By" box (***) of the title block on each sheet. The engineer is responsible for verifying the information based on the contractor's submitted cross sections and for reviewing the fabricator's shop drawings in detail.



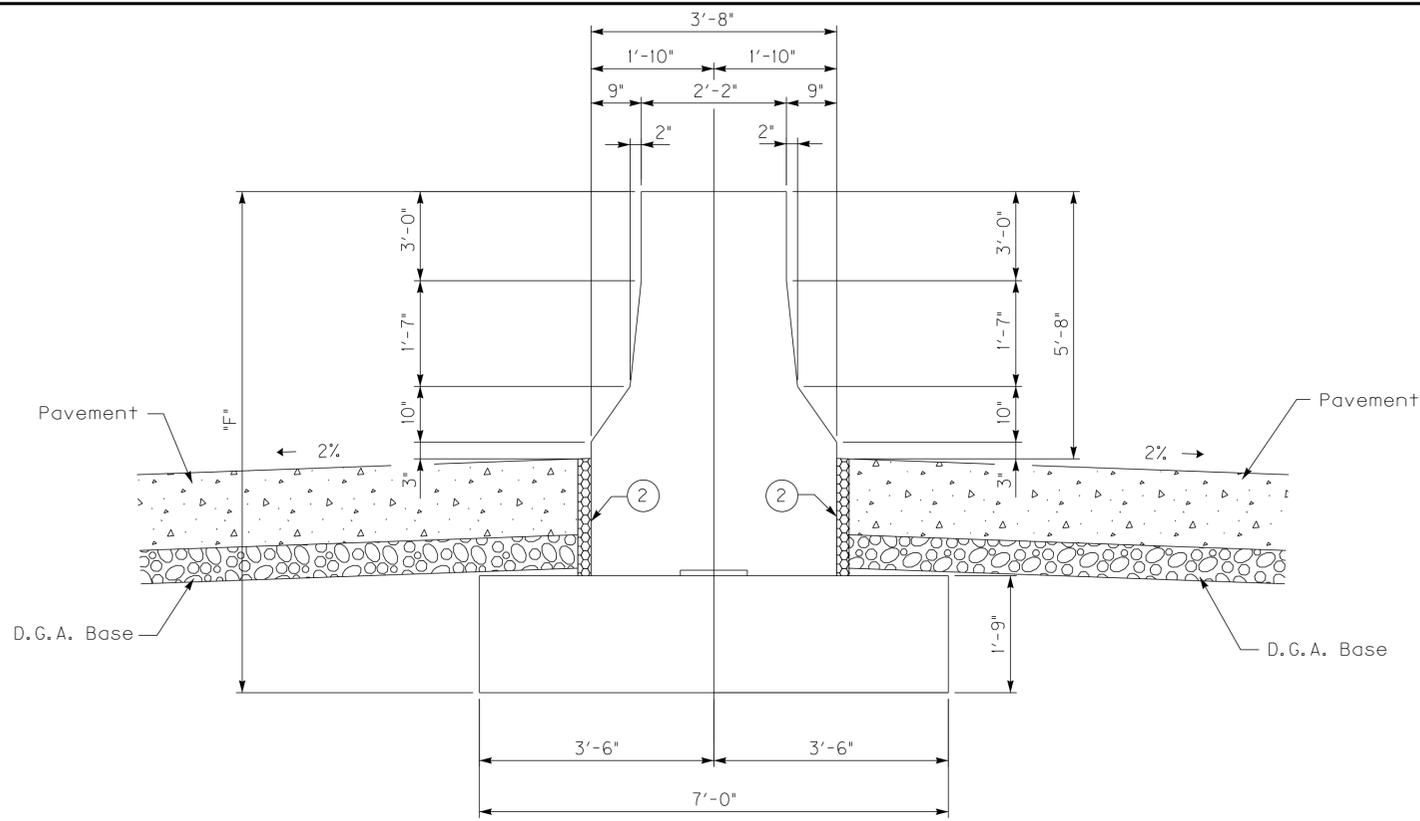
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|--|-------------|-------------|--|
| DATE: | | CHECKED BY | |
| DESIGNED BY: Standard Sheet *** | | | |
| DETAILED BY: | | | |
| Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS | | | |
| COUNTY | | | |
| ROUTE | ITEM NUMBER | | |
| 75'-105' OVERHEAD SIGN SUPPORT | | | |
| PREPARED BY | | SHEET NO. | |
| Division of Structural Design | | | |
| | | DRAWING NO. | |

FILE NAME: U:\Bridges\Pro\Sign\2017\75-105truss.dgn

USERNAME: eugene.kilgore

DATE: 12-APR-2017

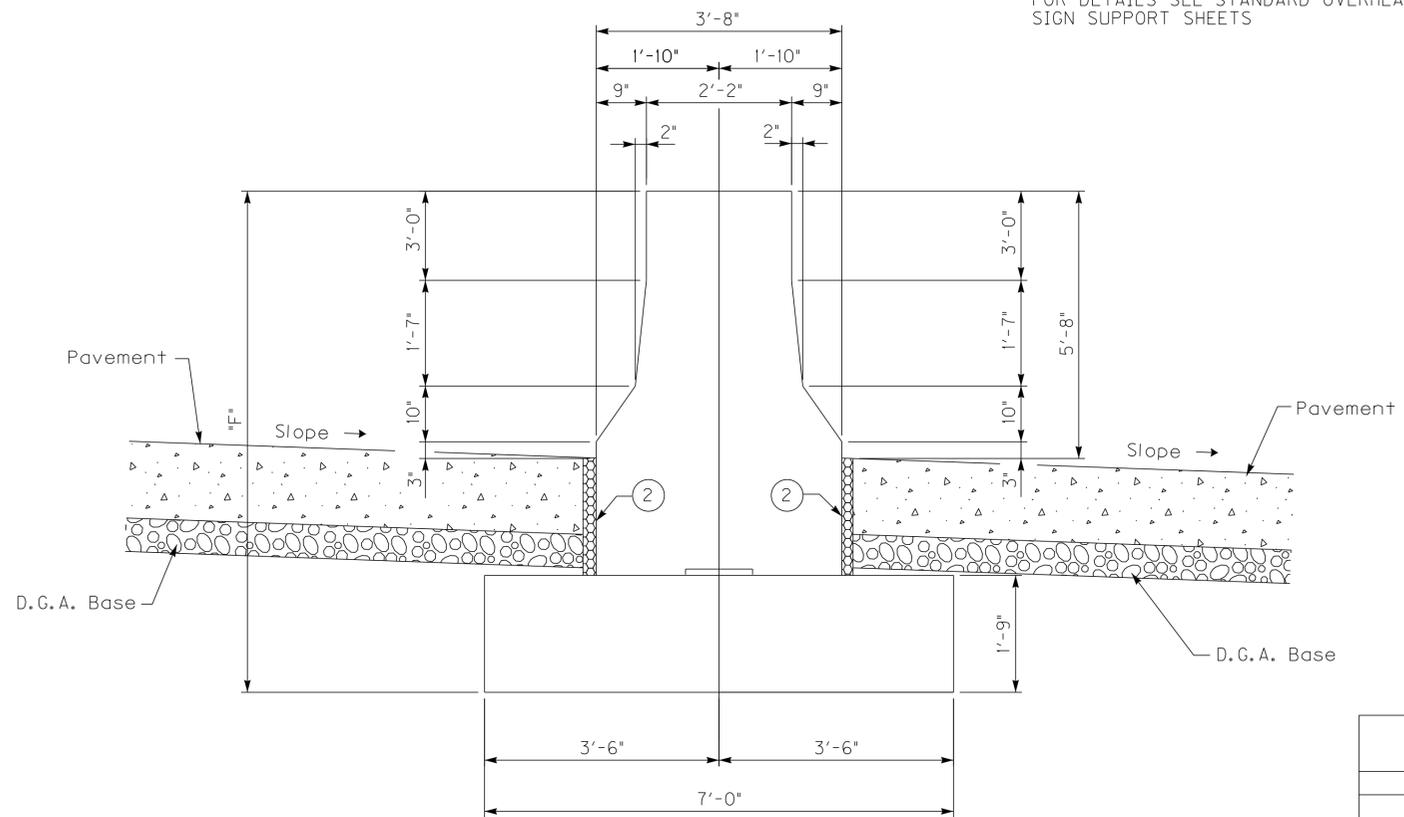
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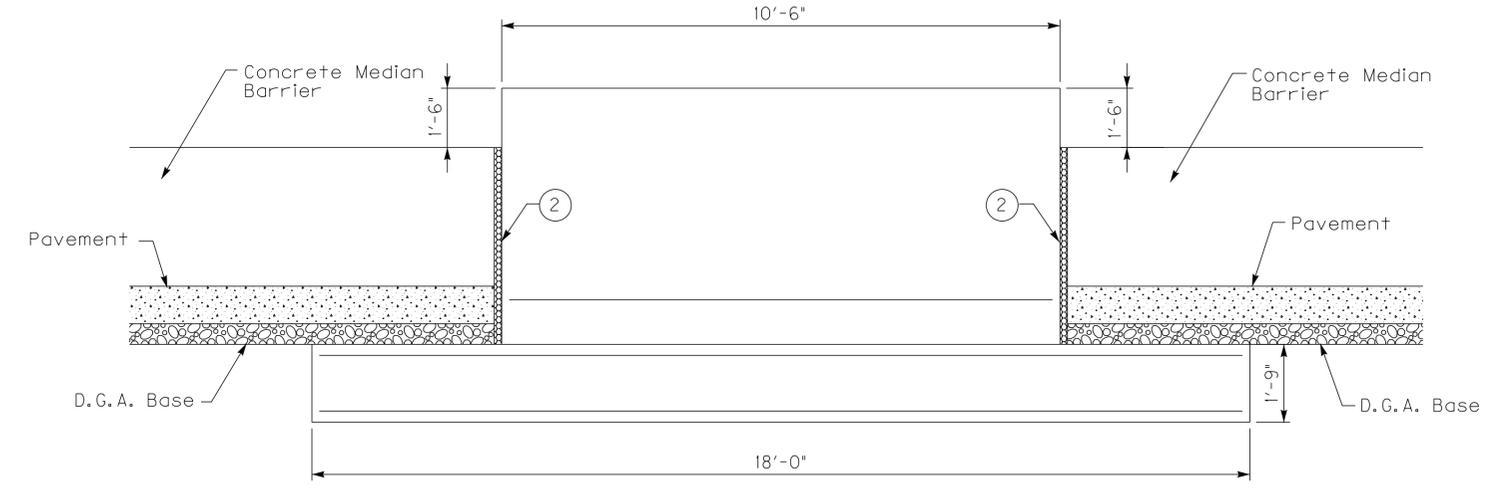
END VIEW TANGENT SECTION

NOTES:
 ① VARIES WITH RATE OF SUPERELEVATION
 ② 1/2" PRE-MOLD EXPANSION MATERIAL

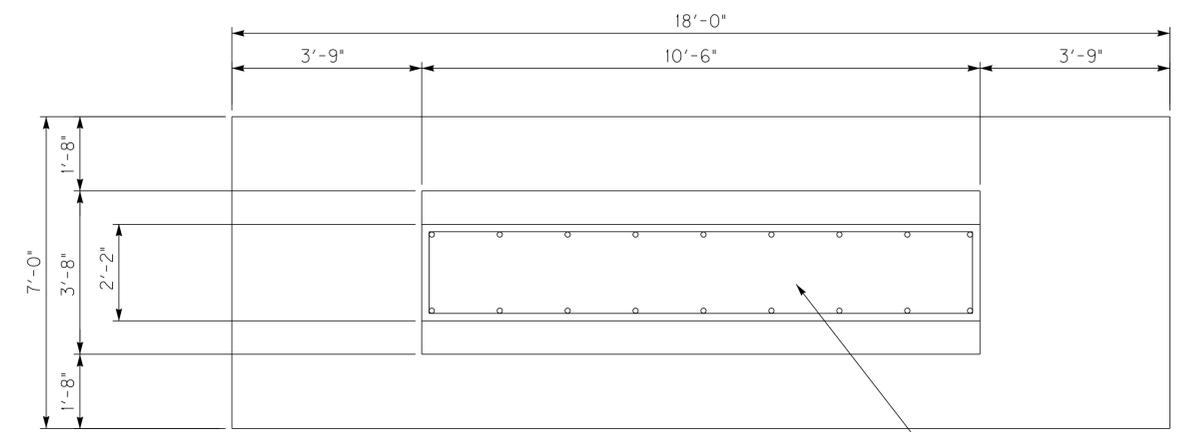
NOTE:
 FOR DETAILS SEE STANDARD OVERHEAD
 SIGN SUPPORT SHEETS



END VIEW SUPERELEVATED SECTION

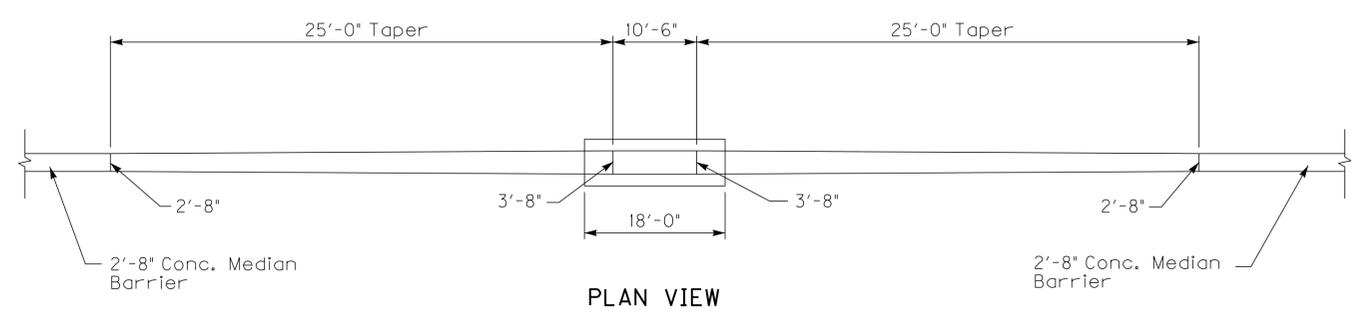


SIDE VIEW



SIDE VIEW

See Footing Plan
 for Reinforcement



PLAN VIEW

* Approx. estimate is for
 information only. Tabulated
 F shall be verified by the
 Engineer in the field.

| * ESTIMATE OF QUANTITIES FOR MEDIAN FOOTING | | |
|--|-----------------|--|
| | Conc. Class "A" | |
| F=8'-0" | 14.3 cu.yds. | |
| 1' of additional Pedestal height | 1.4 cu.yds. | |

MEDIAN BARRIER FOOTING

| | |
|--|-------------|
| DATE: | CHECKED BY |
| DESIGNED BY: Standard Sheet *** | |
| DETAILED BY: | |
| Commonwealth of Kentucky DEPARTMENT OF HIGHWAYS | |
| COUNTY | |
| ROUTE | ITEM NUMBER |
| 75'-105' OVERHEAD SIGN SUPPORT | |
| PREPARED BY Division of Structural Design | SHEET NO. |
| | DRAWING NO. |