TUBULAR FRAME

Post & Drilled Shaft

Elbow Post

SD 9.52

PRIOR DISTRIBUTION DATE

DATE

PLAN AND ELEVATION

STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION

(1 of 5)

04/19

0.875

1.125

111'-142'

4F

TUBULAR FRAME

SD 9.52

APPROVED

DYNAMIC MESSAGE SIGN

For Sign Support Details see SD 9.20 (4 of 5)

71'-110'

0.625

1.280

12!0

DRAWING NO.

D. EBERHART

GROUP MANAGER

RECOMMENDED FOR APPROVAL

STANDARDS ENGINEER

BRIDGE GROUP STANDARD DRAWING

ARIZONA DEPARTMENT OF TRANSPORTATION

INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION

Note to Designer:

Professional engineer. Contents within the inner border line shall not be altered.

Competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

For Foundation Details see SD 9.20 (2 of 5)

For General Notes see SD 9.20 (1 of 5)

Provide electrical grounding at pole foundations per ADOT Standard Specification Section 132-3.03.

For Frame and Hand hole Details see SD 9.20 (3 of 5)

For Sign Support Details see SD 9.20 (4 of 5)

For Underhead Light Details see SD 9.20 (5 of 5)

Wind Loading: 90 MPH Velocity

Maximum Height: 50'-0 from average surrounding terrain to the top of the mast arm (Regardless of Altitude).

The Tubular Overhead has been designed for site conditions which are level and neither elevated above the average surrounding terrain by more than the 50'-0 height shown nor supported on a bridge.

Maximum difference between post heights for an individual frame = 5'-0.

Additional sign attachment to the tubular frame is not allowed.

For Standard pipe mast arms with lengths greater than 60'-0 an optional field splice will be permitted at the third points of mast arms to facilitate hauling operations. All additional field splices in the Mas Arm proposed by the fabricator will not be allowed.

The Optional Shop Splice may not be used when the splice location is less than 5'-0 above the top base plate. Shop splice of pipe sections (other than shown) are not permitted without prior approval.

Drill and top for 1½" chase nipples and plug with recessed pipe plugs. Place perpendicular to sign panel axes and away from approaching traffic.

Install nipples on shoulder posts only.

Before any portion of the tubular frame is assembled in its final position, the contractor shall demonstrate to the Engineer by preassembly or other approved methods that the assembled length of the frame in the no load condition is equal to (±inch) the field measured length between foundations.

For a shop fabricated tubular frame, the no load length shall be determined by calculating the length of the frame section (not including the field bolted splice) from 22 Min Vertical to the top of the base plate.

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