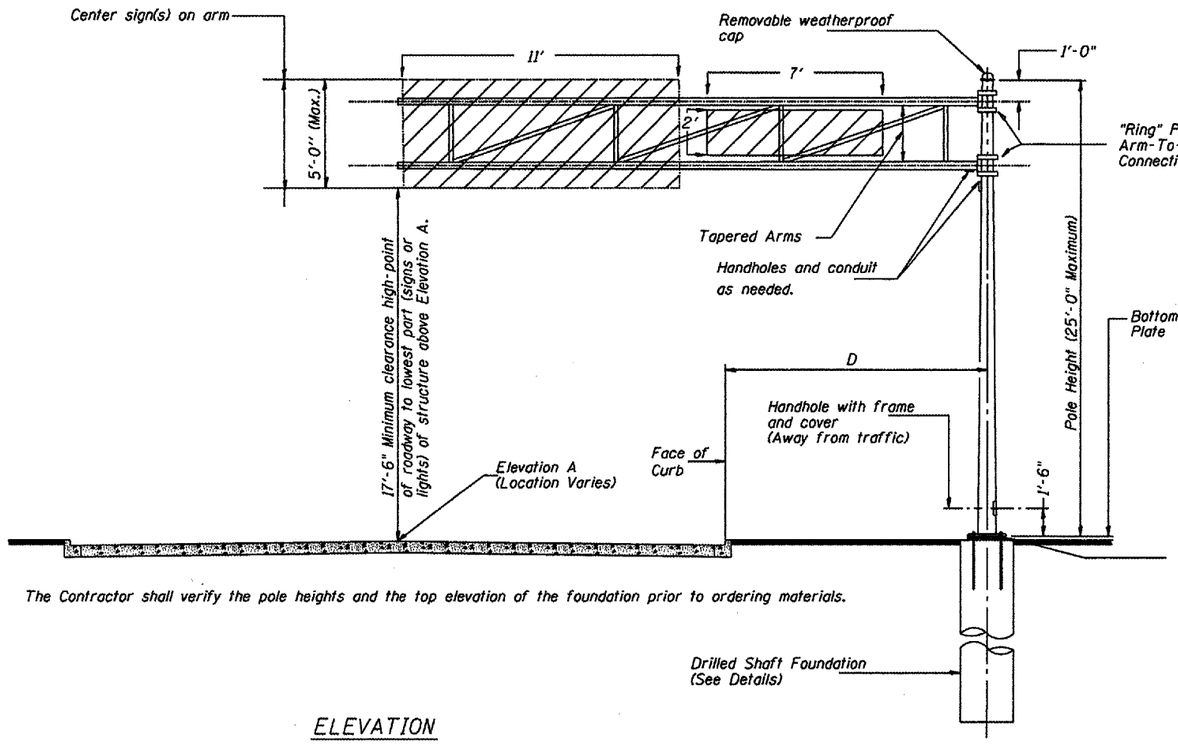
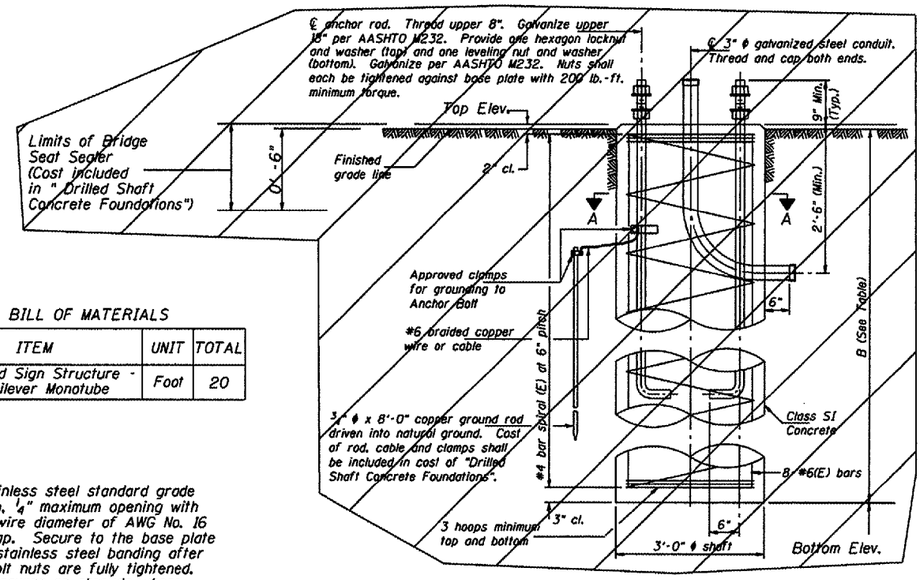



The Contractor shall verify the pole heights and the top elevation of the foundation prior to ordering materials.

## ELEVATION

Looking at face of signs.



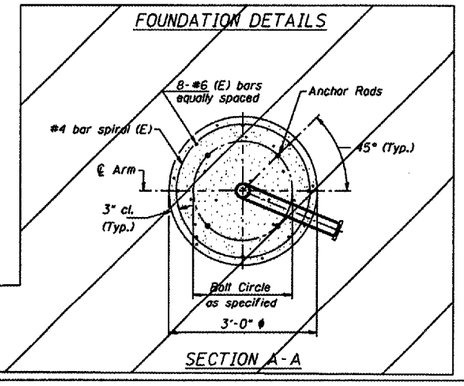

### BILL OF MATERIALS

| ITEM | UNIT | TOTAL |
|---|---|---|
| Overhead Sign Structure - Cantilever Monotube | Foot | 20 |

±2½" stainless steel standard grade wire cloth, ¼" maximum opening with minimum wire diameter of AWG No. 16 with 2" lap. Secure to the base plate with ¾" stainless steel banding after anchor bolt nuts are fully tightened. Add bolt covers or shrouds where applicable.

New monotube cantilever to be installed on existing concrete foundation with existing anchor bolts. The Contractor shall provide new anchor bolt nuts and washers as necessary. The Contractor and the Engineer shall field verify the existing anchor bolt dimensions, anchor bolt pattern and pole height prior to ordering materials and fabrication of the support.

| Structure Number | Station | Elev. A (Feet) | Length (Feet) | Foundation | | Total Sign Area | Design Sign Area | D (Feet) | Qu (Actual) | Dimension (Feet) | | Class SI Concrete (Cu. Yds.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Top Elev. (Feet) | Bottom Elev. (Feet) | | | | | B | B (Actual) | |
| 2M098S078R018.05 | N/A | | 20 | | | 69 SQ FT | 100 SQ FT | N/A | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |




## GENERAL NOTES

DESIGN: 1994 AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

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 meet Charpy V-notch (CVN) energy of 15 lb.-ft. at 40° F. 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 conforming to ASTM A193, Grade B8 or B8M, Class 1.

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

FOUNDATIONS: The contract unit price for "Concrete Foundations" or "Drilled Shaft Concrete Foundations" shall include: All necessary excavation or drilling (except in rock); backfilling with excavated material; disposal of unsuitable or surplus material; formwork; and furnishing and placing the Class SI Concrete, reinforcement bars, conduit, anchor bolts, nuts, washers and ground rods complete in place.

The foundation details shown are based on common cohesive soil conditions (silty or sandy clay) with an average Qu ≥ 1.25 ton/sq. ft. and minimum Qu = 1.0 ton/sq. ft. for all strata within the "B" portion of the foundation. "Qu", the soil's unconfined compressive strength, shall be determined by the Engineer from either hand penetrometer readings during construction or previous soil investigations at the site. For lower soil strengths or different soil types, the Engineer shall review pertinent data and determine any required revisions to the diameter, depth, reinforcement or configuration of the foundation. If changes are required by the Engineer, or if dimension "B" is increased more than 12" by the Contractor, "as-built" plans shall be prepared by the Resident Engineer and submitted to the Engineer and District Bureau of Operations for future reference. Actual "B", "Elevation Bottom", and average "Qu" values shall also be entered in the table on this sheet for permanent 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 Engineers' written permission. Excavations shall be dewatered before concrete placement if directed by the Engineer at no additional cost.

Concrete shall be placed monolithically, without construction joints.

| | |
|---|---|
| DESIGNED | |
| CHECKED | |
| DRAWN | |
| CHECKED | |

Revised 3/24/05

20

EXAMINED

ENGINEER OF STRUCTURAL SERVICES

PASSED

ENGINEER OF BRIDGES AND STRUCTURES

# OVERHEAD SIGN STRUCTURE CANTILEVER MONOTUBE

District 2
Truss Repair & Replacement