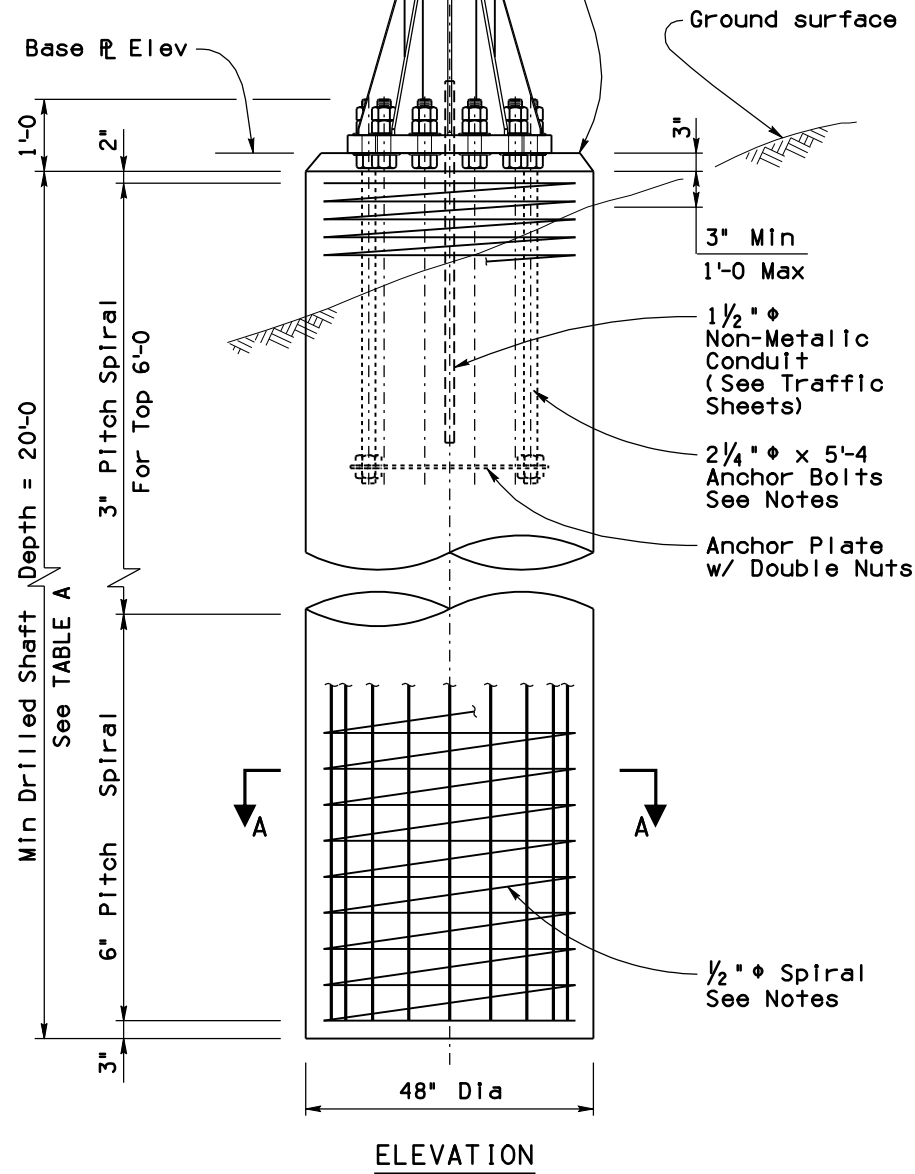


NOTE:

Provide 2 Hardened Steel washers, 2 Hex nuts and one Leveling nut for each bolt. At final position of post, all top and bottom nuts of anchor bolts shall be snug tightened against base plate

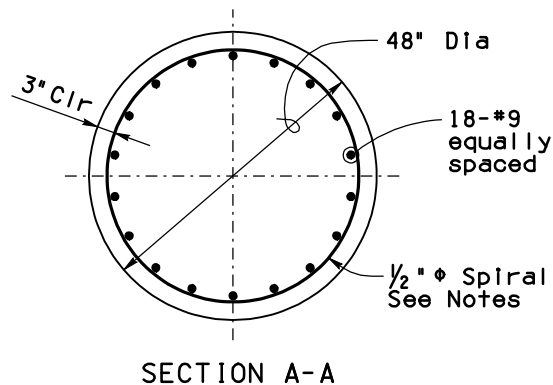
Space to be filled with non-shrink grout after tubular structure is permanently erected



ELEVATION

| TABLE A | |
|-----------|------|
| Max Slope | ' X' |
| 8:1 | 0' |
| 6:1 | 1' |
| 4:1 | 2' |
| 2:1 | 4' |
| 1 1/2:1 | 5' |
| 1:1 | 8' |

Drilled Shaft Depth shall be adjusted for ground slope. Add value of 'X' in TABLE A to the Min Drilled Shaft Depth to obtain the total length of shaft



DRILLED SHAFT DETAILS

NOTES:

All anchor bolts shall conform to ASTM F1554 Grade 55 Specifications. The upper 1'-2" and lower 6" shall be threaded. The upper 1'-8" shall be galvanized in accordance with the requirements of ASTM A153.

Provide bolt template during installation of anchor bolts. The bolt template shall be fabricated of 1/4" thick (Min) steel plate, similar to anchor plate details, and shall be match drilled to each base plate.

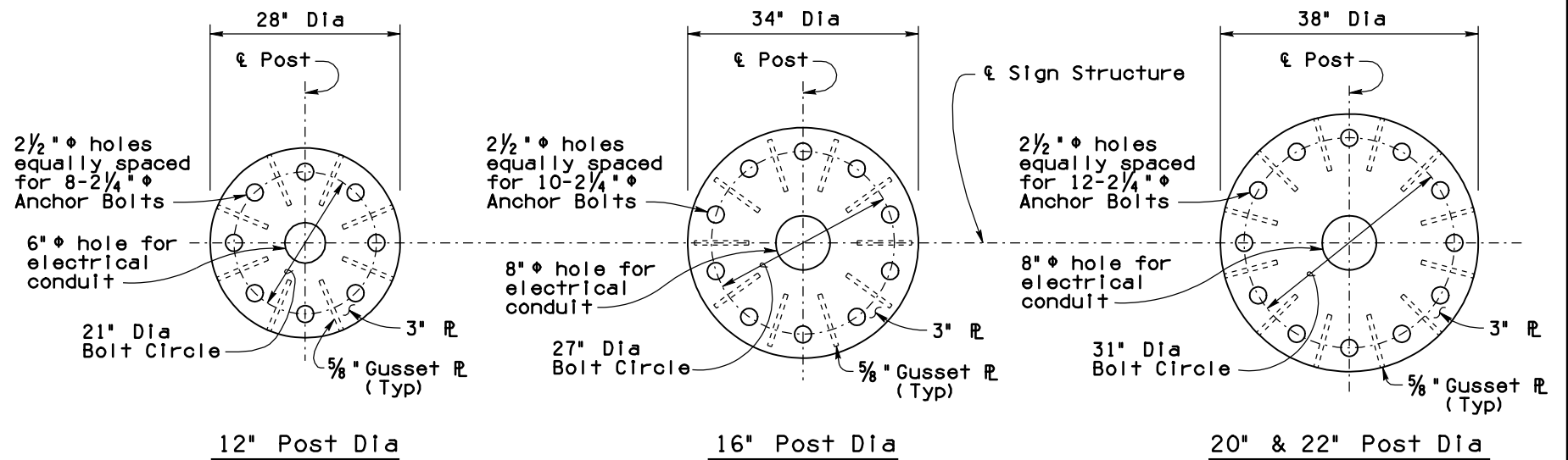
Drilled shaft concrete shall be class 'S' and shall be placed within undisturbed material or compacted embankment. Top of drilled shaft shall be formed to 1'-0" below ground surface.

Compacted backfill shall be in place prior to erecting post.

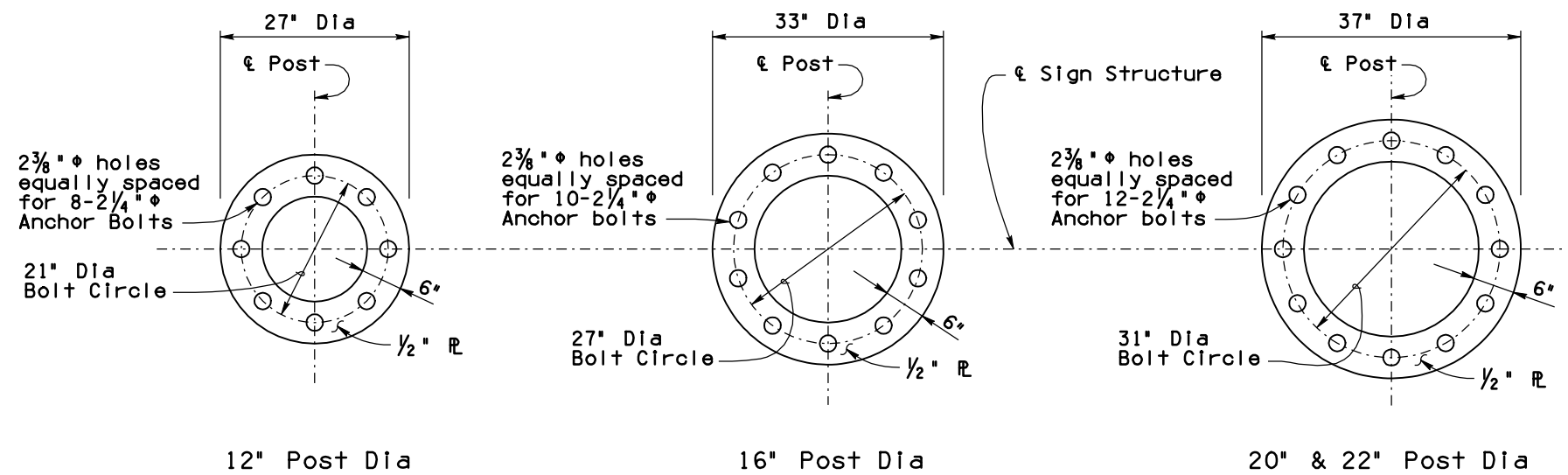
1/2" diameter spiral shall be cold drawn steel wire conforming to AASHTO M336 except Min Tensile Strength = 60,000 psi. Lap 1 1/2 turns at top and bottom of spiral.

NOTE:

Gusset plates shall be placed perpendicular to base plate and post face and centered between anchor bolt holes



BASE PLATE DETAILS



ANCHOR PLATE DETAILS

STANDARDS ENGINEER
A. ALZUBI
RECOMMENDED FOR APPROVAL
GROUP MANAGER
D. EBERHART
APPROVED
STANDARDS COMMITTEE APPROVED FOR DISTRIBUTION
DATE: 04/19

ARIZONA DEPARTMENT OF TRANSPORTATION
INFRASTRUCTURE DELIVERY AND OPERATIONS DIVISION
BRIDGE GROUP STANDARD DRAWING

TUBULAR SIGN STRUCTURES
TUBULAR FRAME
FOUNDATION DETAILS

DRAWING NO.
SD 9.20
(2 of 5)

Note to Designer: The information presented in this Standard Drawing has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without 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.

03/11

PRIOR DISTRIBUTION DATE