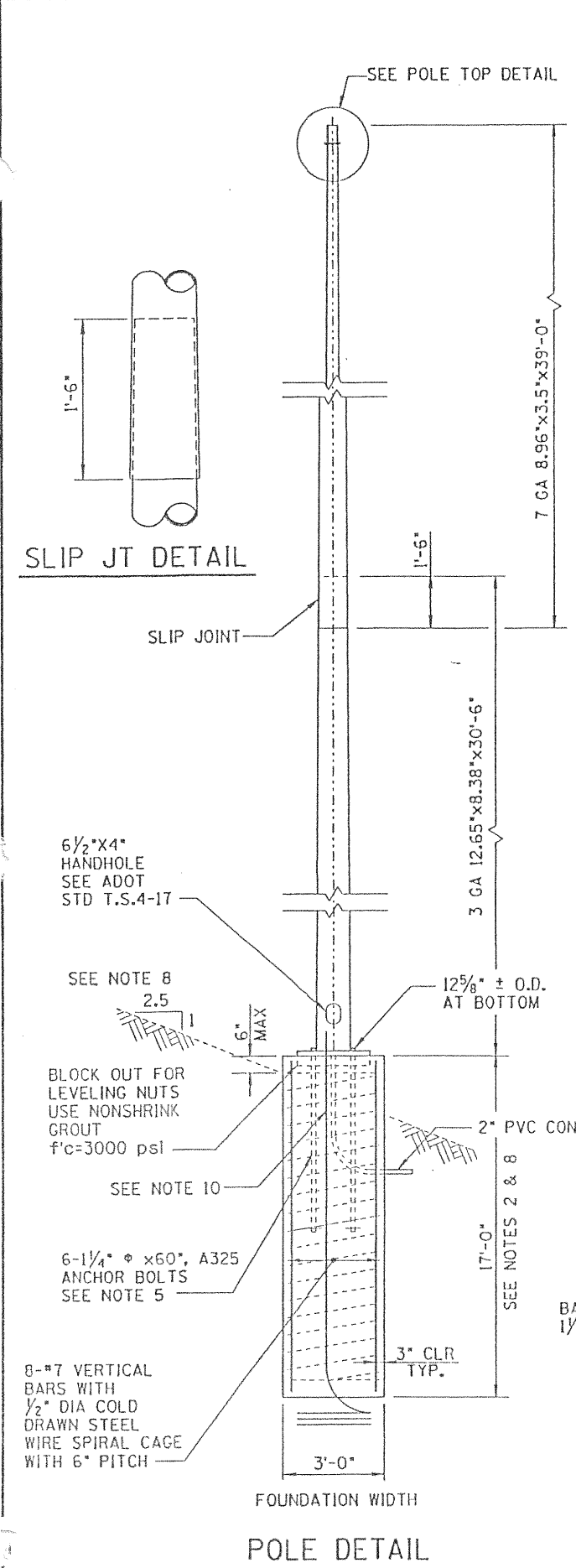
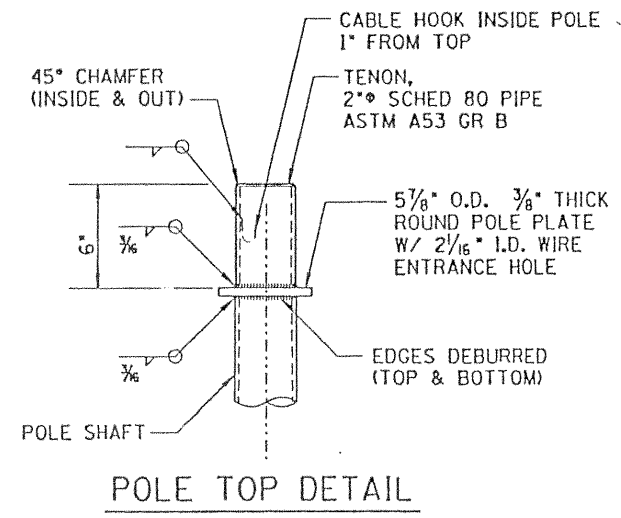


F.J.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RAM 600-1-515	302A-4	419	
		101L MA 045	302A-2		

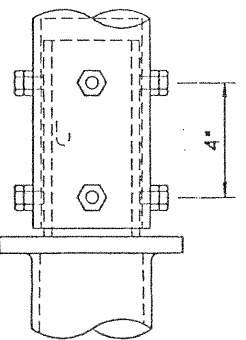


FOUNDATION WIDTH  
POLE DETAIL

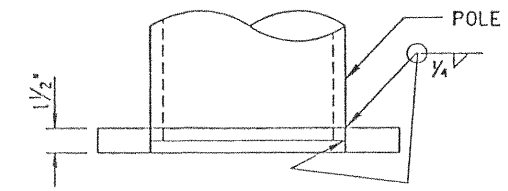


POLE TOP DETAIL

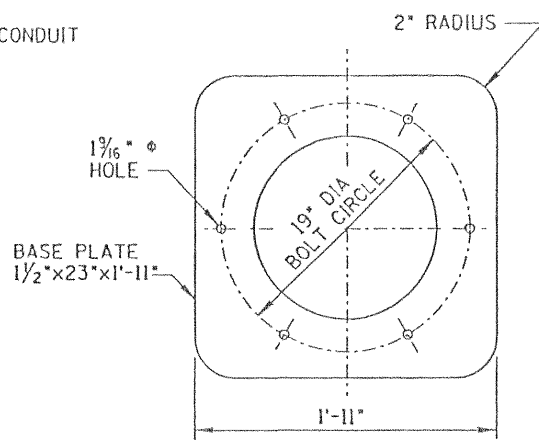
INSTALL AND ORIENT ARM BRACKET OVER POLE TENON AND FIRMLY TIGHTEN THE FOUR SLOTTED SET SCREWS (2 PER ROW). USE THE THIRD HOLE AS A GUIDE TO DRILL ONE 3/16" DIA HOLE AT EACH ROW. INSTALL AND TIGHTEN 2 - 3/8" DIA SELF TAPPING SCREWS. TIGHTEN SET SCREWS. INSTALL LOCK NUTS OVER SET SCREWS. ALL SCREWS AND LOCK NUTS SHALL BE CADMIUM PLATED.



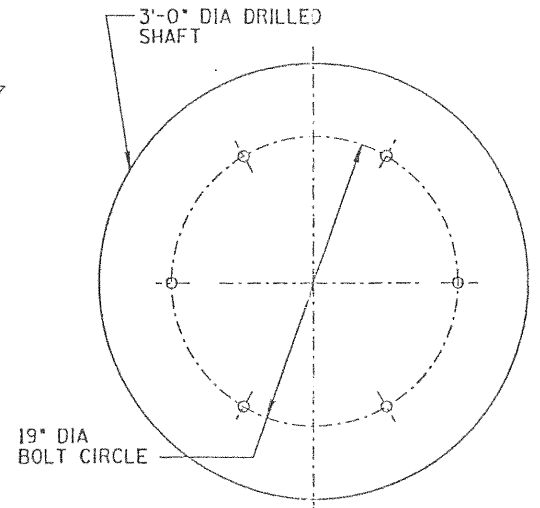
MOUNTING DETAIL



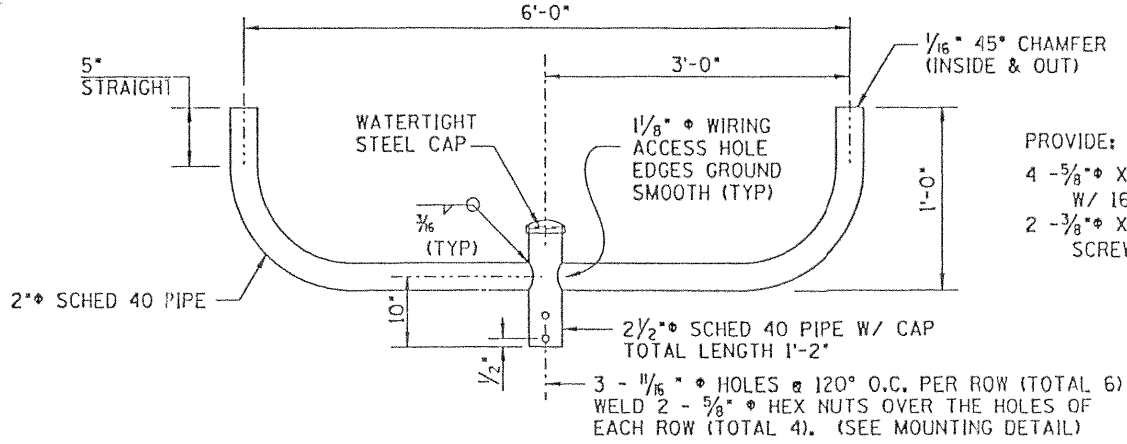
ELEVATION



BASE PLATE DETAIL  
ASTM A36



USE TEMPLATE TO LOCATE BOLTS  
FOUNDATION PLAN



MOUNTING BRACKET DETAIL

ASTM A53 GR B

PROVIDE:  
4 - 5/8" X 1 1/2" LG SLOTTED SCREWS  
W/ 16 UNC THREAD  
2 - 3/8" X 3/8" LG HEX HEAD SELF TAPPING SCREWS

NOTES:

- Construction - Arizona Department of Transportation Standard Specifications for Road and Bridge Construction, 1990 edition, and the ADOT 1985 Traffic Signals & Lighting Standard Drawings.
- Analysis and design - AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 1994. Uniform Building Code 1991, Section 2907, nonconstrained condition. Design allowable soil lateral bearing pressure is 150 psf per foot of depth below natural grade.
- Design loads are:  
Luminaire weight = 100 lb. each  
Luminaire projected area = 6.1 sq. ft. each  
Design wind speed = 80 MPH  
Gust factor = 1.3
- The pole shall conform to the dimensions shown on this drawing with regard to pole height, mounting base bolt pattern, pole base diameter, pole top diameter, foundation diameter, and mast arm mounting requirements.
- Each anchor bolt shall have four heavy hex nuts, two flat washers and one anchor plate. For anchor plate, see Std Dwg TS 4-20, Detail 'A'.
- Pole shaft shall be fabricated from steel conforming to ASTM A-595 Grade A with Fy=55 ksi min. Silicon content shall not exceed 0.04%. Taper 0.14 in /foot. Base plate and other steel hardware shall conform to ASTM A-36 unless noted otherwise.
- Pole shaft and arm shall be hot dip galvanized per ASTM A-123. Hardware shall be hot dip galvanized per ASTM A-153. Cold galvanized process shall not be allowed
- Foundation:  
Contractor shall verify location of existing utility lines prior to excavation. The foundation hole shall be augered and class "S" ( 3,000 PSI ) concrete poured against undisturbed earth or compacted fill. The exposed portion of the concrete foundation shall be formed. Reinforcing steel shall conform to ASTM A615 Gr.60 Spiral shall conform to AASHTO M32, Gr.60 Use blockout for leveling nuts. Use nonshrink grout to fill blockout. Foundation concrete shall reach 75% of its specified 28 day strength before erecting the pole.  
NOTE: Unstable soil, man made noncompacted fill, grade sloping more than 2.5 horiz to 1 vert or partial embedment may require deeper foundation. In this case, the Contractor shall utilize the services of a professional structural engineer registered in the State of Arizona to verify the pole foundation and submit complete calculations and shop drawings for ADOT Structures Section.
- Conduit shall project a minimum of 2" above the foundation. Maximum projection shall be 4".
- A 25' coil of No. 4 AWG bare copper conductor shall be installed before the concrete is poured. The conductor shall be connected to pole grounding screw in the hand hole.
- See Special Provisions for additional requirements.

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DESIGN	A. Wojakiewicz	7/96	TRAFFIC OPERATIONS SERVICES
DRAWN	T. Union	7/96	
CHECKED	A. Marshteyn	7/96	68 FT LIGHTING POLE ON EMBANKMENT
DESIGNED BY	PARSONS BRINCKERHOFF		
PROJECT NO.	RAM 600-1-515	LOCATION	PIMA, MCDONALD DR - THOMAS RD
			DWG NO. T-111.11