

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
..	52	12
STA. TO STA.		FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT		
		FAI 55/70	CONTRACT# 76973	
		DIST 8 ITS 2006-2		
		MADISON & ST. CLAIR & CITY OF ST. LOUIS, MO		

NOTES:

- 1) POLE TUBE ASTM A572, GR. 50 MIN.
- 2) BASE PLATE ASTM A572, GR. 50.
- 3) HANDHOLE FRAME ASTM A500, GR B TUBING.
- 4) HANDHOLE COVER ASTM A36 MIN.
- 5) ANCHOR BOLTS ASTM F1554, GR. 55, TOP H.D. GALVANIZED TO ASTM A153.
- 6) ANCHOR NUTS ASTM A563, GR. DH or A194, GR. 2H, H.D. GALVANIZED TO ASTM A153.
- 7) ANCHOR WASHERS ASTM F436, TYPE 1, H.D. GALVANIZED TO ASTM A153.
- 8) TOP PLATE ASTM A572, GR. 50.
- 9) TENON ASTM A53, GR. B PIPE.
- 10) TENON SLEEVE ASTM A512 OR A513.
- 11) WELDING AWS D1.1.
- 12) FINISH H.D. GALVANIZED TO ASTM A123.
- 13) POLE CAP CAST ALUMINUM OR GALVANIZED STEEL.
- 14) VALUE STRUCTURES, INC., IS CERTIFIED BY A.I.S.C. FOR CONVENTIONAL STEEL BUILDING STRUCTURES, SIMPLE STEEL CONVENTIONAL STEEL BUILDING STRUCTURES, SIMPLE STEEL BRIDGES, WITH FRACTURE CRITICAL ENDORSEMENT.

DESIGN NOTE:

CCTV POLES AND ANCHORAGE ARE ALL DESIGNED TO ACCEPT MAXIMUM LOADING FROM CAMERAS, STATIONARY ARMS AND LOWERING DEVICES. THE COMBINATION OF CAMERA AND LOWERING DEVICE ASSEMBLY OF 3.0 SQ. FT. EPA AND 130 LBS DEADLOAD RESULTING IN THE LARGEST AREA AND WEIGHT FOR POLE DESIGN TO THE FOLLOWING LOADING CASES; ALL PER AASHTO 2001 STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS, 4TH EDITION.

LOAD CASE 1
80 MPH AASHTO

LOAD CASE 2
30 MPH SUSTAINED WIND FOR MAXIMUM HORIZONTAL DEFLECTION @ POLE TOP NOT TO EXCEED 1".

SEE TOP TENON AND PLATE DETAILS

10mm (3/8") DIA. ROD FOR WIRE TIE OFF @ 180*, FROM TENON SLOT 3mm (1/8") FILLET WELD ALL AROUND.

NEW RADAR VEHICLE DETECTOR (SEE RADAR VEHICLES DETECTOR DETAIL)

152mm (6") DIA. O.D. x 6mm (1/4") WALL MECHANICAL TUBING, 305mm (12") LONG

SLOT CUT IN TENON WALL @ 90* FOR CABLE AND PULLEY ACCESS

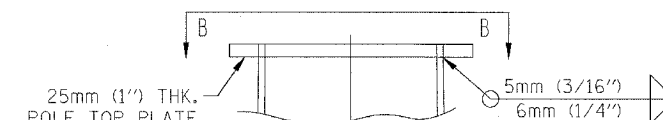
10mm (3/8") THK. TENON PLATE

TOP TENON DETAIL

(8) 0.81" x 2.57" SLOTS, FOR (4) 19mm x 70mm (3/4" x 2 3/4") HEX BOLTS W/ FLAT WASHER, LOCK WASHER, AND HEAVY HEX NUT FOR EACH TENON ASSEMBLY.

0.38" DIA. ROD FOR WIRE TIE OFF @ 180*, FROM TENON SLOT 3mm (1/8") FILLET WELD ALL AROUND.

TENON PLATE DETAIL



POLE TOP DETAIL

(45'-0") OVERALL POLE HEIGHT SECTION A

JB 18"x18"x10" ALUMINUM SHEET METAL

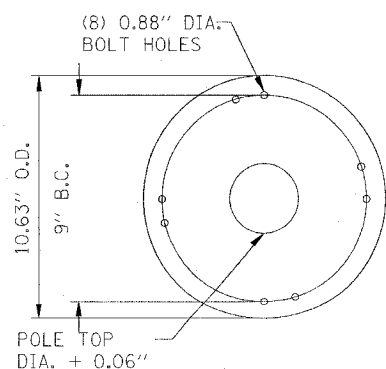
SEE HANDHOLE DETAIL

20' TO EDGE OF PAVEMENT EOP

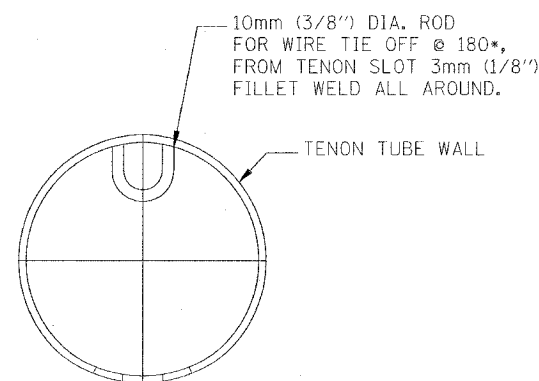
SEE BASE PLATE DETAIL

SEE FOUNDATION AND BREAKAWAY COUPLING DETAIL

WIND VELOCITY: 30 MPH W/NO GUST
1" MAXIMUM POLE TOP DEFLECTION



SECTION B-B TOP PLATE DETAIL



SECTION A-A WIRE TIE OFF ORIENTATION DETAIL

PLOT DATE = 5/23/2006
 FILE NAME = c:\projects\ad1680\electrical\isp\in1680.dgn
 PLOT SCALE = 100:1540 7/ IN.
 REFERENCE = #REF#

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 POLE MOUNTED CCTV DETAIL WITH
 CAMERA LOWERING DEVICE (SHEET 2 OF 3)
 FAI 55/70
 SECTION DIST 8 ITS 2006-2
 MADISON AND ST. CLAIR COUNTY
 AND ST. LOUIS, MO
 DATE 5/23/2006