

ss:\projects\3010_stony_island_feeder - bbe\project work disciplines\traffic_signals\sheet\0160J12-sht-TSD-07.dgn 9:32:15 AM

PROVIDE SUFFICIENT MAST ARM RISE (3' MIN.) SO THAT MAST ARM REMAINS SLIGHTLY ABOVE HORIZONTAL WIND LOADED WITH A 5 SECTION SIGNAL AT THE FAR END AND A 3 SECTION SIGNAL APPROXIMATELY 10' FROM FAR END.

SEE DETAIL II
SEE DETAIL I

PROVIDE 1/2" - 1 1/2" DIA. OPENING IN BOTTOM OF MAST ARM APPROXIMATELY 3' FROM CLAMP. PROVIDE HANGING POINT IN OPENING FOR WIRE PROTECTION.

SEE "ARM DATA" TABLE

POLE SHAFT EXISTING IN PLACE OR PROVIDED BY OTHERS

INDICATES MAX. AND MIN. I. D. RANGE FOR WIRE CLAMP

0.00 - 0.00

I. D. TAG TO BE MARKED ON THE TOP OF THE POLE AS INDICATED, USING A "Grip-Mark" FASTENER.

DETAIL I
I. D. TAG

SIGNAL ARM ATTACHMENT DATA					
CLAMP RANGE	"A"	"B"	"C"	"D"	"E"
7.45" - 7.95"	7.25"	9.92"	10.80"	10.32"	1.00" X 7.50"
8.45" - 8.95"	9.00"	10.66"	13.06"	12.50"	1.00" X 8.00"
9.95" - 10.45"	10.25"	12.66"	15.30"	13.50"	1.25" X 8.50"

ARM DATA

CLAMP RANGE (INCHES)	POLE END (INCHES)	SIGNAL END (INCHES)	LENGTH (FEET)	GAUGE	WEIGHT (POUNDS)	TEST LOAD (POUNDS)	MAX. DEFLECTION (INCHES)
7.45-7.95	7.0	4.76	16	7	241	1700	6.5
7.45-7.95	7.0	4.20	20	7	214	1300	12.0
7.45-7.95	7.0	3.36	20	7	315	1000	24.0
8.45-8.95	8.0	3.80	30	7	409	1100	29.0
9.95-10.45	9.0	4.10	35	7	529	1200	36.0
9.95-10.45	9.0	3.40	40	7	559	1000	52.0
9.95-10.45	10.0	3.64	44	7		1200	51.0

NOTES:

- TRAFFIC SIGNAL ARM SHAFT ASTM DESIGNATION: A555 GRADE C, 60,000 PSI MINIMUM YIELD STRENGTH WITH A LINEAR TAPER -0.14"/FT.
- TRAFFIC SIGNAL ARM END CAP SECURED IN PLACE WITH 3 SET SCREWS AND 1 THRU ARM END BOLT. (PLATED HARDWARE)
- ALL THREADED FASTENERS TO BE GALVANIZED TO ASTM DESIGNATION: A153
- ALL VEHICULAR AND/OR PEDESTRIAN SIGNAL LIGHTS AND NECESSARY HARDWARE FOR ATTACHMENT TO BE FIELD LOCATED AND FURNISHED BY OTHERS.
- ALL ARM END CAPS AND ARM CLAMPS TO BE FULLY ASSEMBLED AND ATTACHED TO THE ARM PRIOR TO SHIPPING.
- ARM ASSEMBLY TO BE DEGREASED, CLEANED, CHEMICALLY PRETREATED, GIVEN AN EXTERIOR THERMOSETTING POLYESTER POWDER COAT, AND AN INTERIOR THERMOPLASTIC HYDRO-CARBON RESIN POWDER COAT. ALL PAINTING TO BE IN ACCORDANCE WITH SPECIFICATION 1454, SECTION B, PAINTING.
- MAST ARM SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION 1454, SECTION 9 WITH TEST VALUES AS SHOWN ON THE "ARM DATA" TABLE.
- HOLE IN CLAMP TO BE 4.0" (MIN.) - HOLE TO BE GRIND SMOOTH AND DEBURRED TO PROVIDE A SMOOTH WIRE ENTRY FROM POLE TO MAST ARM.

0.13" X 1.50" COTTER PIN (HOLE SET IN PLACE)

(4) SIZE "6" HEX HEAD BOLTS WITH (1) HEX NUTS & WASHERS

HOLE IN POLE FIELD DRILLED FOR 0.63" X 2" HEX BOLT

TYP.

0.36" THICK PLATE

SEE NOTE 8

0.13" X 1.50" COTTER PIN (HOLE SET IN PLACE)

(4) SIZE "6" HEX HEAD BOLTS WITH (1) HEX NUTS & WASHERS

HOLE IN POLE FIELD DRILLED FOR 0.63" X 2" HEX BOLT

TYP.

0.36" THICK PLATE

SEE NOTE 8

870

STEEL TRAFFIC SIGNAL MAST ARM MONOTUBE

CITY OF CHICAGO

8/21/02 SUPERCEDES OWS #817 DRAWN 4/25/01

FIBER OPTIC PATCH PANEL FOR CITY OF CHICAGO TRAFFIC SIGNAL CONTROLLER

FIBER OPENINGS BOTH SIDES

FIBER CABLE GUIDES (TYP)

CONTINUOUS HINGE

THIS PANEL WAS SUPPLIED FOR C.B.D. INTERCONNECT AND IS TO BE THE STANDARD FOR ALL CITY INSTALLATIONS

FIBER OPTIC PATCH PANEL

CITY OF CHICAGO

871

8/21/02 SUPERCEDES OWS #817 DRAWN 4/25/01

ISOMETRIC VIEW OF STEEL CAGE

ELEVATION

NOTE: HOLE FOR FOUNDATION MUST BE AUGERED IN UNDISTURBED SOIL

NOTES:

- THIS FOUNDATION FOR TRAFFIC POLE WITH 36", 40", & 44" MONOTUBE
- CONCRETE MUST MEET DOT REQUIREMENTS FOR PORTLAND CEMENT CLASS S1 CONCRETE.
- REINFORCING BARS MUST MEET ASTM A-615 GRADE 60.

CODE	COMMODITY	SIZE	QUANTITY
05-1257-2940	REDI-MIX CONCRETE	CU. YD.	2.20
04-4001	ELBOW, LARGE RADIUS	2" X 2" X 3" X 4"	AS REQUIRED
31-8180-0360	ANCHOR ROD	1-1/2" X 40"	1
05-6084-0310	PRE-BEAR CAGE	20" DIA. X 8'-0"	1
05-7795	GROUND ROD	3/4" X 18'-0"	1
05-2092	GROUND BUSHING	2" X 1-1/2" X 3" X 4"	AS REQUIRED

8/21/02 SUPERCEDES OWS #817 DRAWN 4/25/01

FOUNDATION FOR 36" TRAFFIC SIGNAL POLE WITH 16" BOLT CIRCLE

CITY OF CHICAGO

8/21/02 SUPERCEDES OWS #817 DRAWN 4/25/01

COMPLETE COMMODITY CODE NO. 05-6610-5310M

CODE NO.	MATERIALS	SIZE	QUAN.
(1) 05-6610-5312	PRE-CAST HANDHOLE	36" X 36"	1
(2) 05-6610-5312	PRE-CAST ROOF	SEE DETAIL	1
05-9015-5470	STONE 1/2" CRUSHED	BAG	5
05-1452-9120	BRICK		24
02-4293-5024	FRAME, HANDLE	30"	1
02-4574-5024	COVER, MANHOLE	30"	1
09-7798-9312	GROUND ROD	3/4" X 12"	1
09-2636-3240	GROUND CLAMP		1
(1) 05-6082-5330	SONO TUBE	36"	1
(1) 05-5082-5342	SONO TUBE	48"	1
(1) 05-3267-2940	CONC. REDI-MIX	CU. YD.	1
(1) 20-5472-9630	REINFORCING BAR	#3 (3/8")	40'
(1) 20-5472-9630	REINFORCING BAR	#3 (3/8")	16'
(1) 20-5472-9640	REINFORCING BAR	#4 (1/2")	8'
(1) 57-0770-0000	(MESH 16" X 6")	36" X 11"	1

CONSTRUCTION NOTES:

- 1 - 8" BED OF STONE FOR DRAINAGE.
- 2 - ALL METALLIC CONDUITS ENTERING HANDHOLE SHALL EXTEND MIN. 1' & MAX. OF 3" INSIDE INNER WALL & BE EQUIPPED WITH AN APPROVED TYPE THREADED GROUNDING BUSHING.

DETAIL-ROOF & FLOOR OF HANDHOLE

8/21/02 SUPERCEDES OWS #817 DRAWN 4/25/01

871