

I. MATERIALS

A. ENCLOSURE

THE SINGLE DOOR PEDESTAL MOUNT ENCLOSURE SHALL BE 28" HIGH, 18" WIDE, AND 8 3/4" DEEP. THE CABINET AND DOOR SHALL BE MADE OF 14GA. TYPE 304 STAINLESS STEEL WITH A 14GA. STAINLESS STEEL CONTINUOUS WELDED HINGE. THE ENCLOSURE SHALL HAVE A NATURAL FINISH. A CLOSED CELL NEOPRENE GASKET SHALL BE AROUND THE ENTIRE DOOR FOR WATER INTEGRITY. THE FLANGE MOUNTING DISCONNECT OPERATOR SHALL BE STAINLESS STEEL FOR NEMA 4X APPLICATION, CAPABLE OF BEING LOCKED IN THE ON OR OFF POSITION WITH A DUAL COVER INTERLOCK MECHANISM. THE CABINET & DOOR SHALL HAVE AN EQUIPMENT GROUNDING LUG. THE ENCLOSURE SHALL MEET OR EXCEED THE REQUIREMENTS OF A NEMA 4X RATING AND SHALL BE UL LISTED AND LABELED FOR TYPE 4X.

THE BOTTOM SHALL BE REINFORCED, DOUBLE THICK AND SHALL BE PRE-DRILLED TO ACCEPT A 4" PEDESTAL ADAPTER WITH AN 6 1/2" BOLT CIRCLE. SEE SHEET 3.

B. CONTROL PANEL

- 1) 100 AMPERE, 3 POLE, 600 VOLT, SINGLE THROW SERVICE DISCONNECT SWITCH WITH PROVISION FOR 100 AMP CLASS "H" TIME DELAY FUSES, COPPER SHORTING BUS WITH LUG FOR #2 COPPER 7 STRAND.
- 2) NEMA RATED 100 AMPERE, 3 POLE, 600 VOLT, CONTACTOR WITH 120 VOLT OPERATING COIL, CONTROL TRANSFORMER, TYPE SBE, 480/120 VOLTS, 60 CYCLE, 0.2 KVA AND 2 AMP CONTROL FUSE HOLDER SHALL BE ON SECONDARY SIDE AND 1 AMP ON PRIMARY SIDE.
- 3) ALL FUSES SHALL BE TYPE H. (BLADE FUSES)
- 4) INTERNAL MOUNTED HAND, OFF, AUTO SELECTOR SWITCH.
- 5) INSULATED SOLID COPPER GROUND BUS CAPABLE OF TERMINATING THE SPECIFIED NUMBER AND SIZE WIRES.
- 6) TERMINAL BLOCK SHALL BE PROVIDED FOR PHOTOELECTRIC RELAY CONNECTION. BLOCK SHALL ACCEPT #10 COPPER WIRE .
- 7) THE CONDUCTORS BETWEEN THE FUSE DISCONNECT AND THE CONDUCTOR SHALL BE 7 STRAND MIN. COPPER #4, 600V TYPE THW OR XHHW-2. ALL OTHER CONDUCTORS SHALL BE 7 STRAND COPPER #12, 600V TYPE MTW.
- 8) CONTROLLER SHALL BE WIRED AS SHOWN ON MIS-195, SHEET 2.

- 9) THE MOUNTING PANEL SIZE SHALL BE 25" X 15".
- 10) THE CONTROLLER SHALL BE ASSEMBLED WITH STANDARD HARDWARE FOR EASE OF MAINTENANCE.
- 11) MANUFACTURER SHALL BE CENTRAL SYSTEMS & CONTROLS CORP. #20026031042, DEWSBURY MFG #60310422002 OR APPROVED EQUAL.
- 12) LIGHTNING/SURGE ARRESTOR SHALL BE INSTALLED INTERNALLY ON THE CONTROL PANEL
- 13) THE CONTROLLER SHALL BE FUSED ACCORDING TO THE LOAD AMPERAGE ON THE TABLE BELOW. FUSE REDUCERS SHALL BE USED IF NECESSARY.

LOAD AMPERAGE	FUSE SIZE
1-12	15 A
13-25	30 A
26-37	45 A
38-50	60 A
51-66	80 A
67-83	100 A

C. PEDESTAL

- 1) BREAKAWAY PEDESTAL BASE, 15" HIGH, 13.75" SQUARE AT BOTTOM, SHALL BE MADE OF CAST ALUMINUM, 8.5" SQUARE ALUMINUM ACCESS DOOR WITH STAINLESS STEEL TAMPER RESISTANT FASTENER. TOP TO BE THREADED, 4" NPT C.N.C., FOR FULL ENGAGEMENT OF GAUGED POLE THREAD. BOTTOM SHALL HAVE FOUR (4) EQUALLY SPACED ON 8" DIA. THRU 12-3/4" DIA. BOLT CIRCLE FOR 3/4" ANCHORAGE.
- 2) PEDESTAL POLE SHALL BE MADE OF 4-1/2" O.D. X 0.237" WALL X 24" LONG, SCH. 40, SPUN ALUMINUM. BOTTOM TO BE THREADED FOR FULL ENGAGEMENT OF GAUGED BASE THREAD.
- 3) 4" PEDESTAL ADAPTER SHALL BE MADE OF ALUMINUM AND BE SUPPLIED WITH STAINLESS STEEL HARDWARE. IT SHALL BE DESIGNED FOR POST TOP MOUNTING OF ENCLOSURE, WITH A 6 - 1/2" BOLT CIRCLE. MFG. CENTRAL SYSTEMS & CONTROLS CORP. #20026031050, DEWSBURY INC. #60310502002 OR APPROVED EQUAL.

MIS-604	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	CONTROLLER, 3 WIRE, 480V, PEDESTAL MOUNT		
	DRAWN BY: JOHN	DATE: 1/1/2018	
	APPROVED: <i>[Signature]</i>		
SCALE: NONE	SHEET: 1 OF 4	604	

I. MATERIALS

D. MISCELLANEOUS MATERIAL

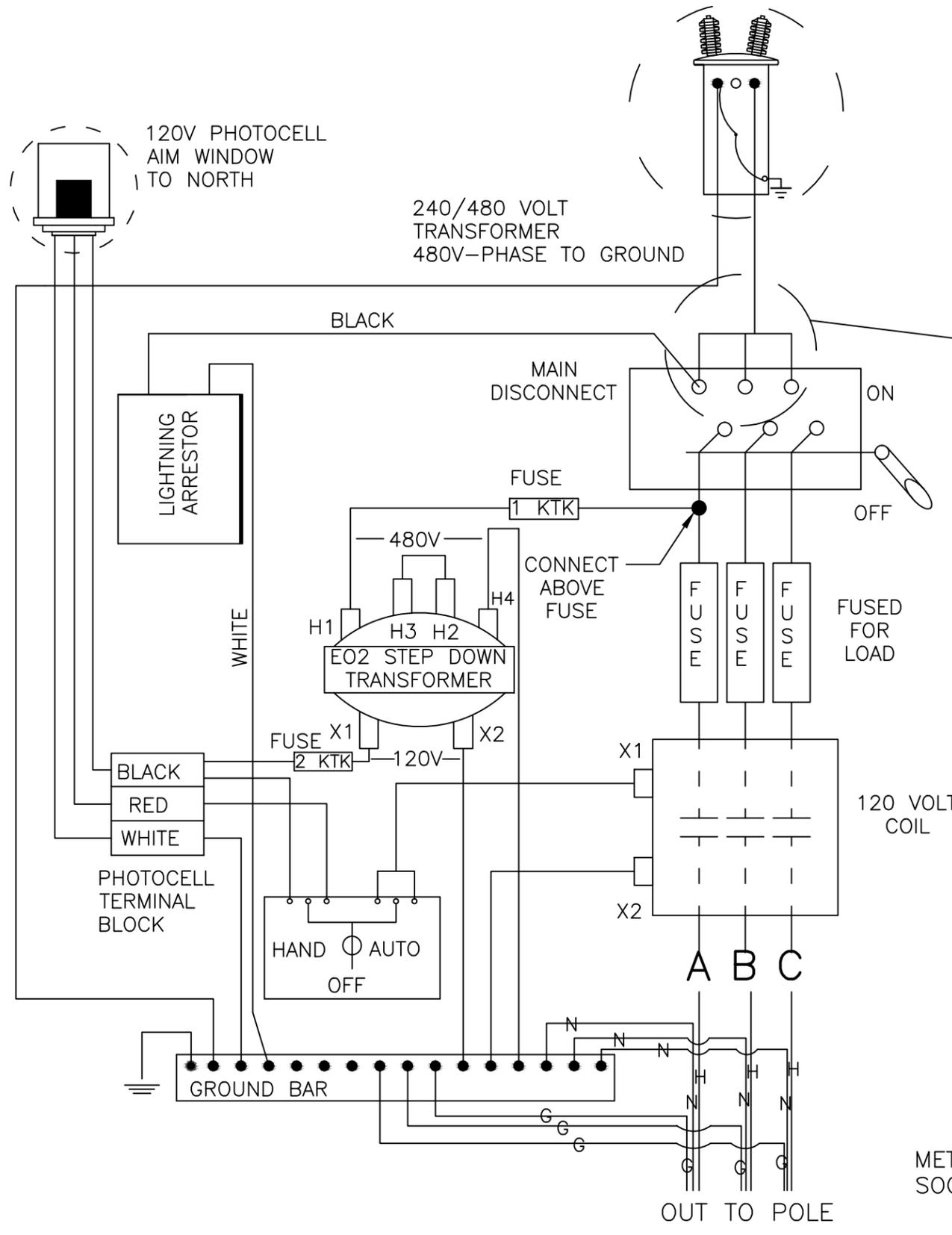
1. GROUND ROD _ THE GROUND ROD SHALL BE 1/2 X 10' COPPER CLAD.
2. GROUNDING ELECTRODE WIRE _ THE GROUNDING ELECTRODE WIRE SHALL BE #6 AWG BARE SOLID COPPER AND SHALL BE ATTACHED TO THE GROUND BAR. THE ENCLOSURE SHALL BE BONDED TO THE GROUNDING ELECTRODE SYSTEM WITH A #8 CONDUCTOR FROM THE GROUND BAR TO THE GROUNDING LUG OF THE ENCLOSURE.
3. PHOTOELECTRIC RELAY _ THE PHOTOELECTRIC RELAY SHALL BE CADMIUM SULPHITE WITH LOCKING TYPE RECEPTACLE, POLE MOUNTED 120 VOLT OPERATION. THE TURN ON AND OFF LEVELS SHALL BE ADJUSTABLE FROM 0.3 TO 6.0 FOOT CANDLES. CONTACTS SHALL BE RATED FOR A MINIMUM LOAD OF 1200 WATTS. THE PHOTOELECTRIC RELAY SHALL BE AN APPROVED EQUAL TO FISHER PIERCE #7760 MSS WITH ADAPTER #S476-71, LUMATROL OR TORK
4. POWER SERVICE
THE CONTRACTOR SHALL INSTALL TWO #4 5KV CABLES (MIS_14) FROM THE LINE TERMINALS OF THE CONTROL PANEL TO POWER COMPANY'S SERVICE TRANSFORMER POLE MOUNT OR PEDESTAL LEAVING 6 FT '+ OF CABLE COILED FOR CONNECTION BY THE POWER COMPANY. THE NEUTRAL CABLE SHALL BE CLEARLY MARKED WITH WHITE STRIPE AND WHITE TAPE.

SERVICE ENTRY CABLE-THE SERVICE ENTRY CABLE SHALL BE #4-5KV, 7 STRAND COPPER TYPE XHHW.
5. HARDWARE-ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL, BRASS OR HOT DIPPED GALVANIZED.
6. THE PHOTOELECTRIC CONTROL SHALL BE MOUNTED ON TOP OF THE CLOSEST POLE TO THE CONTROLLER. THE THREE CONTROL WIRES (#12AWG) SHALL BE INSTALLED IN THE SAME 2" CONDUIT FROM THE CONTROLLER TO THE MAIN LIGHTING CIRCUIT.

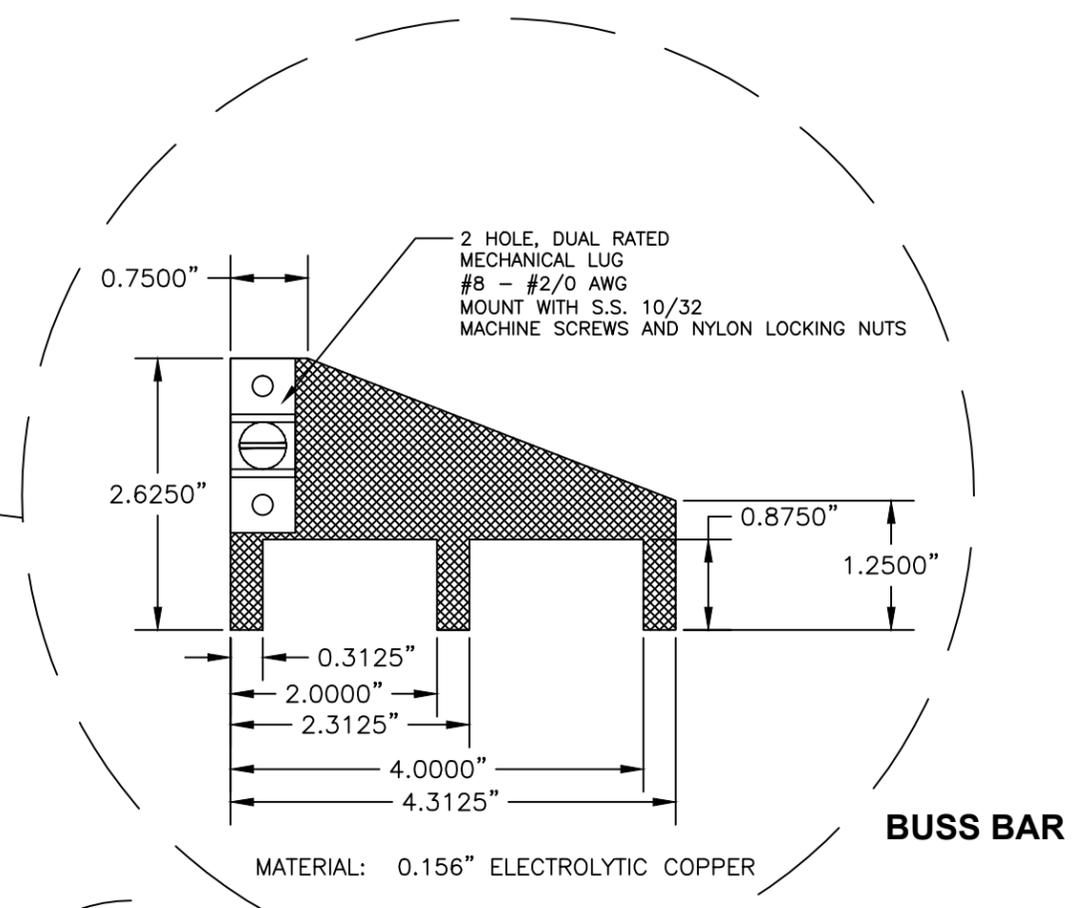
III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS-604	EACH	CONTROLLER, 3 WIRE, 480V, PEDESTAL MOUNT

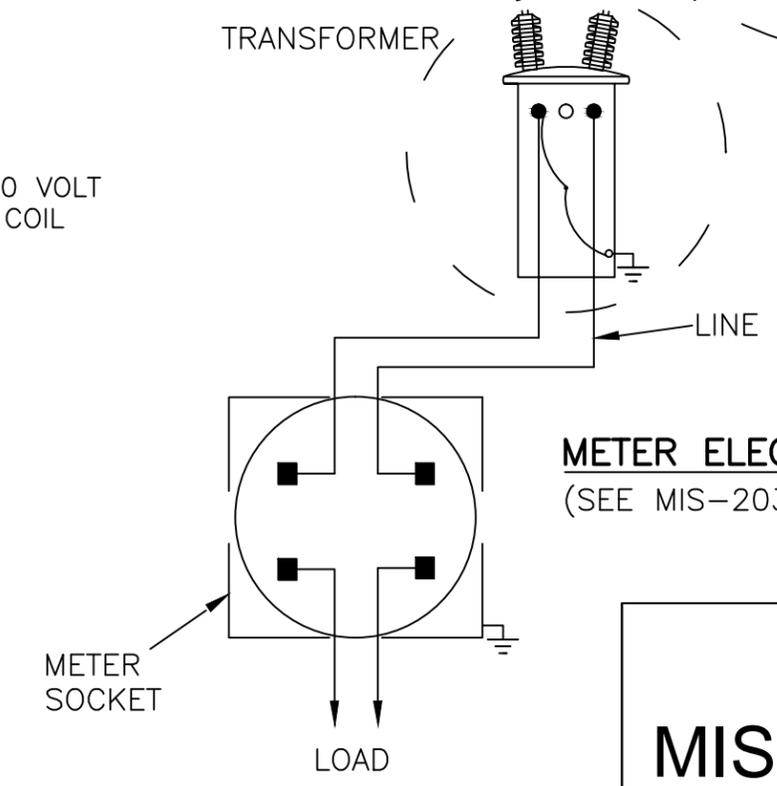
MIS-604	DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER CITY OF COLUMBUS, OHIO		
	CONTROLLER, 3 WIRE, 480V, PEDESTAL MOUNT		
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SCALE: NONE	SHEET: 2 OF 4	604	



GROUND 480V STREET LIGHTING CONTROLLER

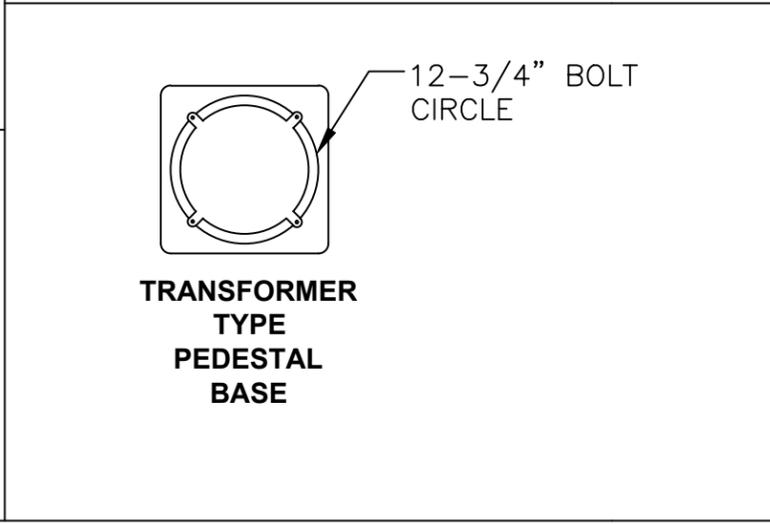
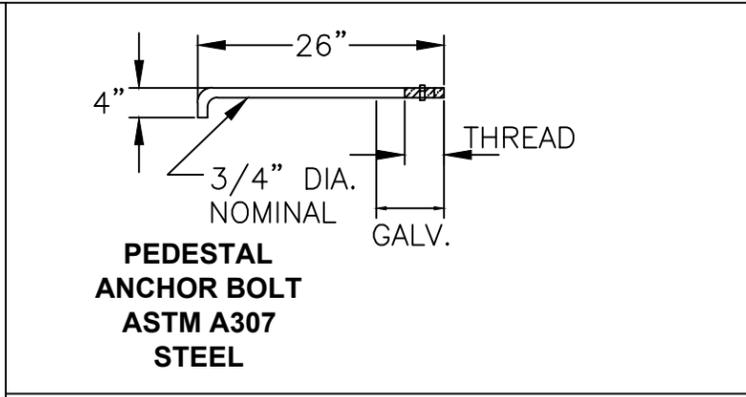
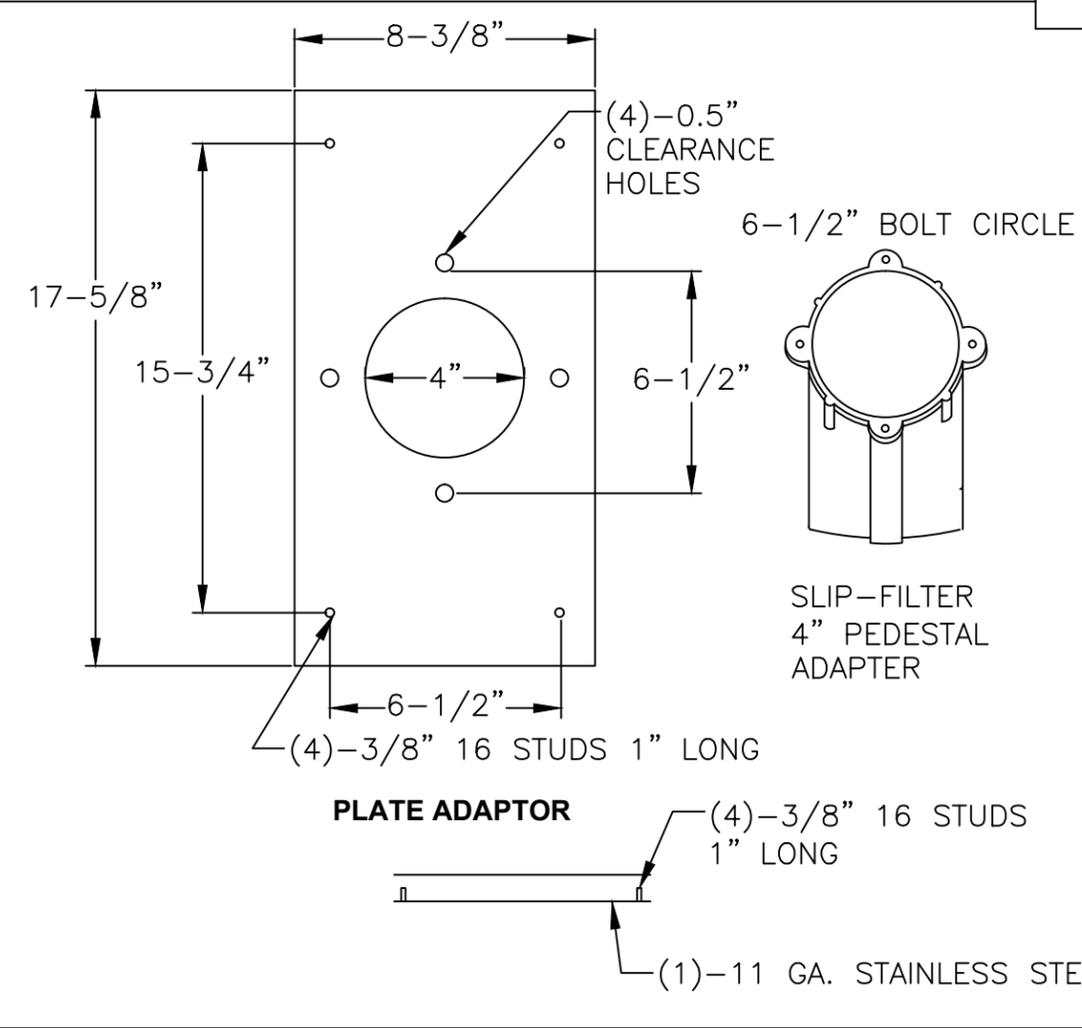
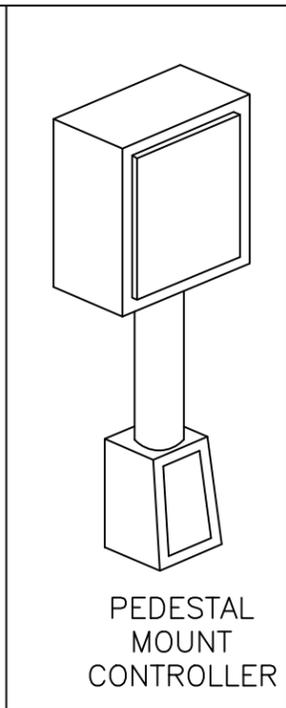
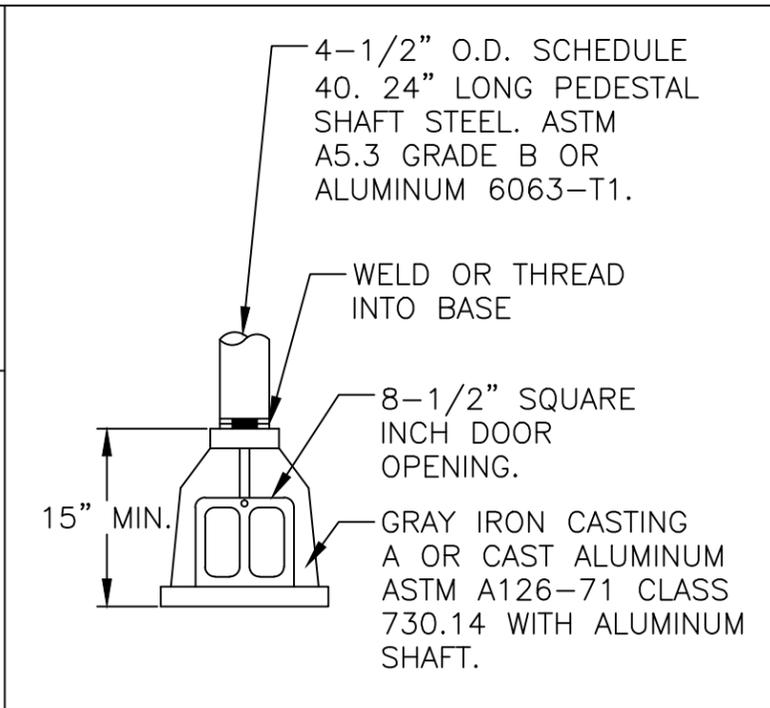
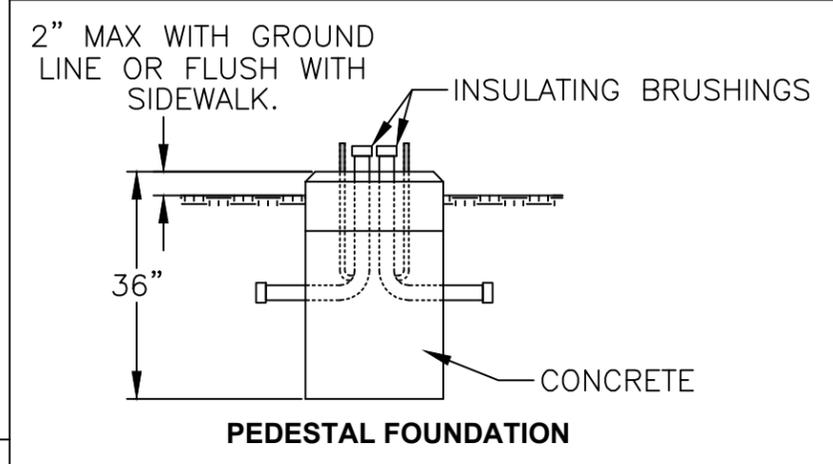
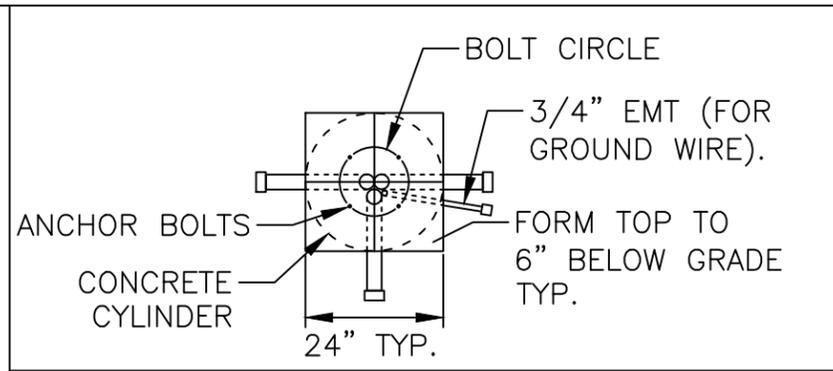
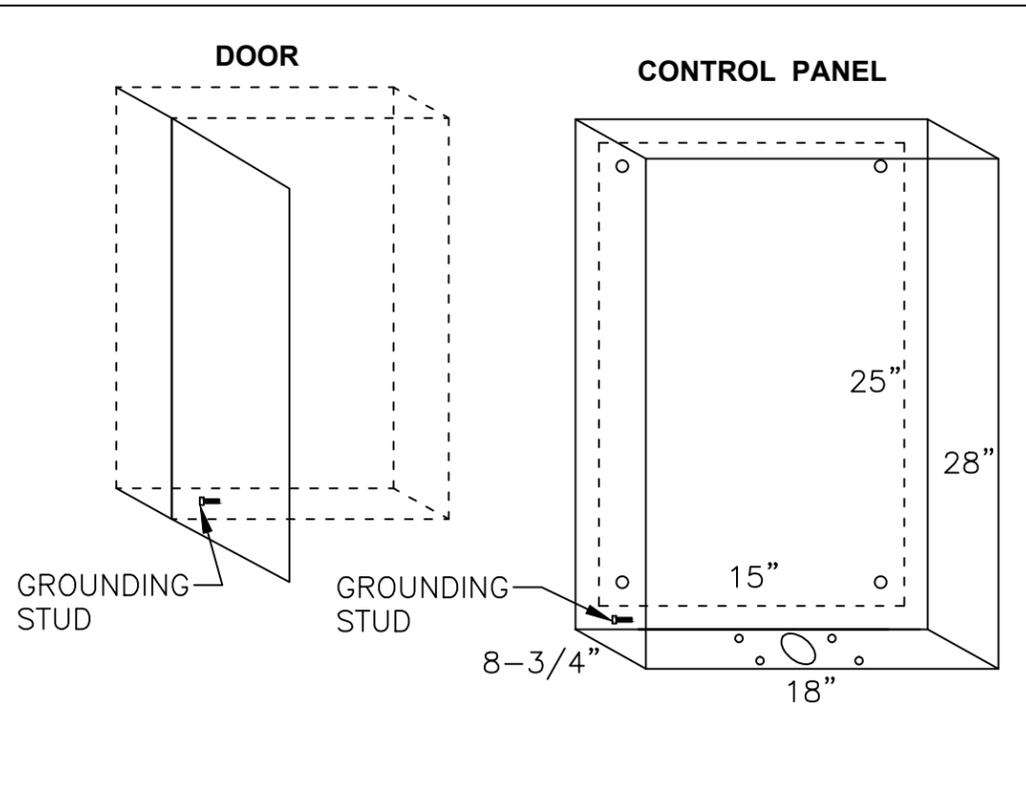


BUSS BAR



METER ELECTRICAL CONNECTIONS (IF REQUIRED)
(SEE MIS-203)

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SCALE: NONE	SHEET: 3 OF 4	604	



NOTES:

1. THE SIZE AND ORIENTATION OF A CONDUIT ELBOWS SHALL BE 3' FOR DIRECTIONAL DRILLING AND 2" FOR OPEN TRENCH, 3/4" EMT SHALL BE INSTALLED IN EACH FOUNDATION
2. THE SIZE, NUMBER AND LOCATION OF ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
3. PEDESTALS SHALL BE PROVIDED WITH A METHOD OF SECURELY ATTACHING A NO. 4 AWG INSULATED COOPER GROUNDING CABLE TO THE PEDESTAL OR ANCHOR BOLT. NO CABLES OR CONNECTION SHALL BE EXTERNAL TO THE PEDESTAL
4. THE PEDESTAL BASE SHALL SET ON THE FOUNDATION TOP WITHOUT GROUTING. PERFORMED FILLERS OR LEVELING NUTS UNDER THE BASE. STEEL SHIMS MAY BE USED UNDER THE BASE FOR LEVELING THE INSTALLATION.
5. STAINLESS STEEL HARDWARE SHALL BE SUPPLIED FOR FASTENING OF ENCLOSURE.
6. BOTTOM OF ENCLOSURE SHALL BE REINFORCED, DOUBLE THICK

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APPROVED: <i>Amy R. Wilk</i>			
SCALE: NONE	SHEET: 4 OF 4	604	