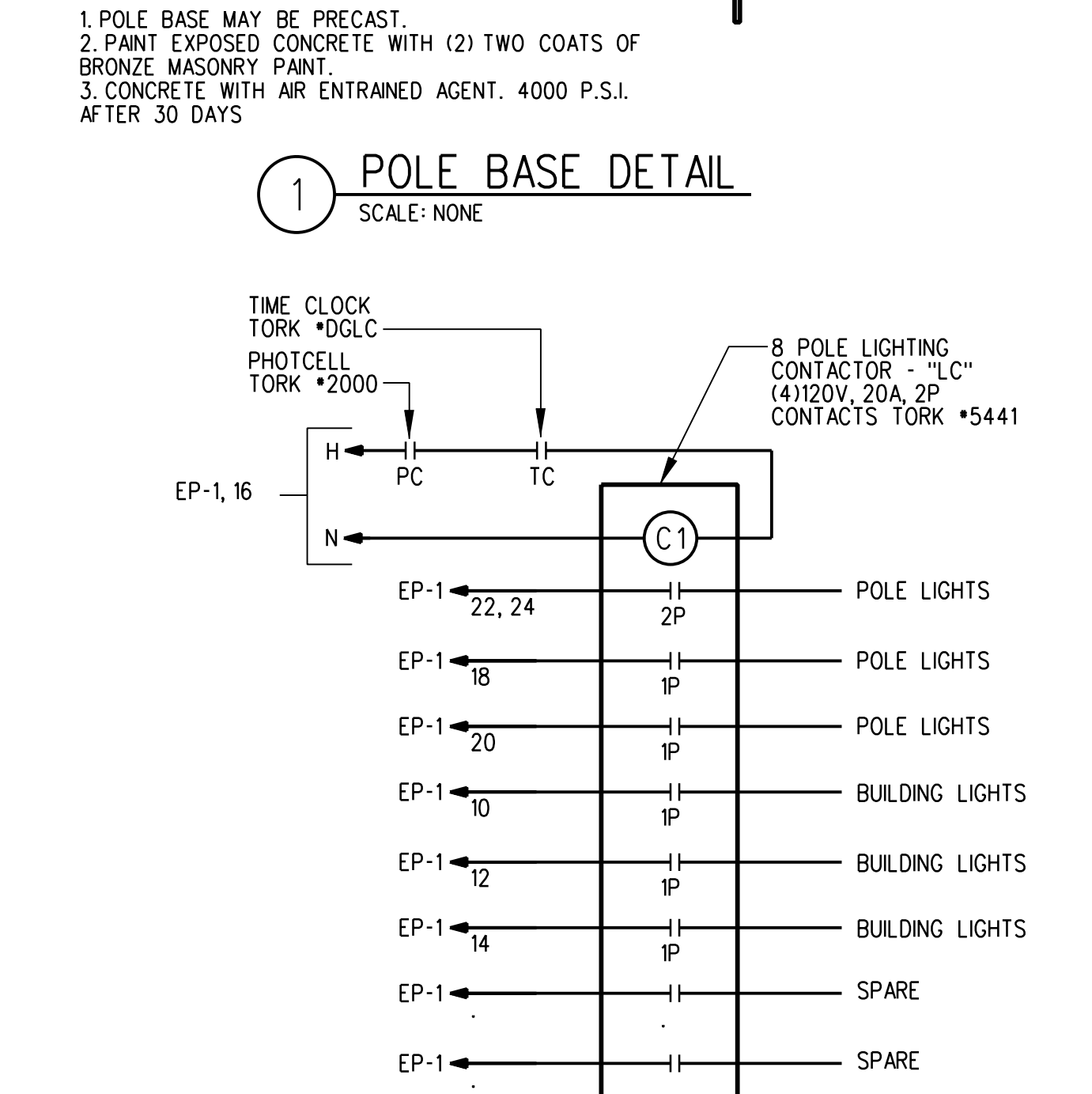
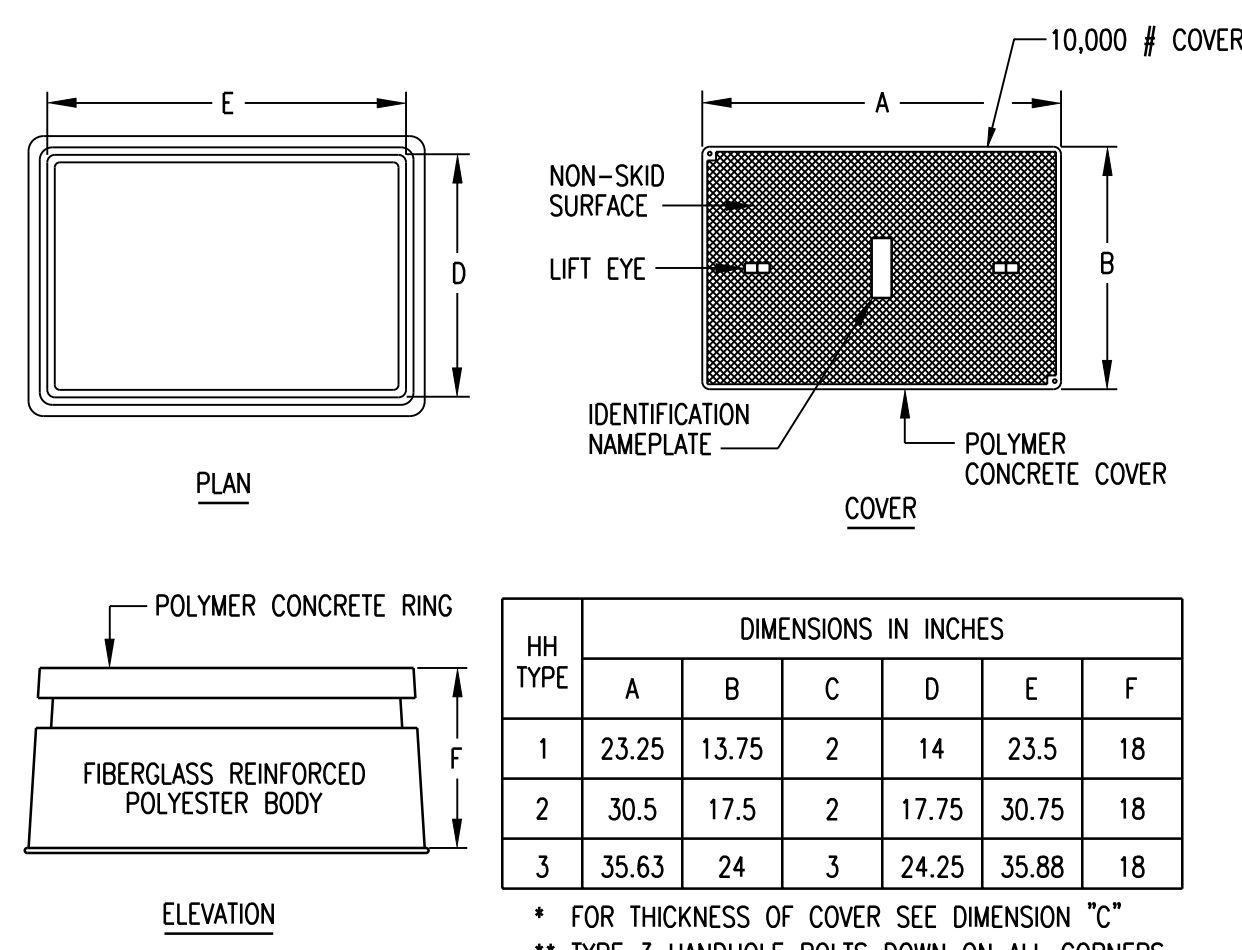


**1 POLE BASE DETAIL**  
SCALE: NONE



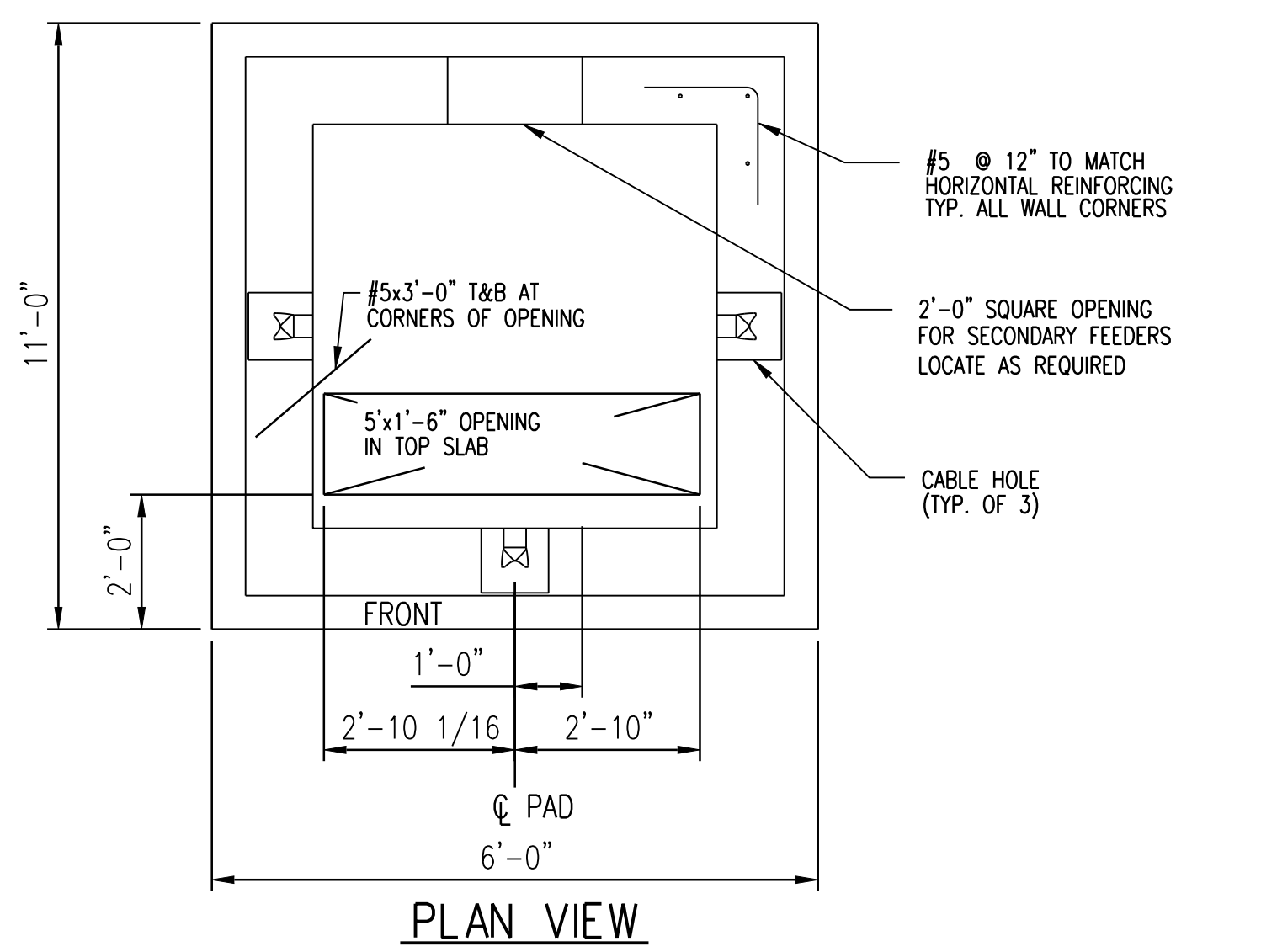
**2 LIGHTING CONTACTOR "LC" DETAIL (EXTERIOR LIGHTING)**  
SCALE: NONE

PROVIDE BODINE GTD20 BYPASS RELAY FOR BUILDING LIGHTS (GENERATOR OPERATED). PROVIDE 25 AMPERE CIRCUIT BREAKERS FOR BRANCH CIRCUITS.



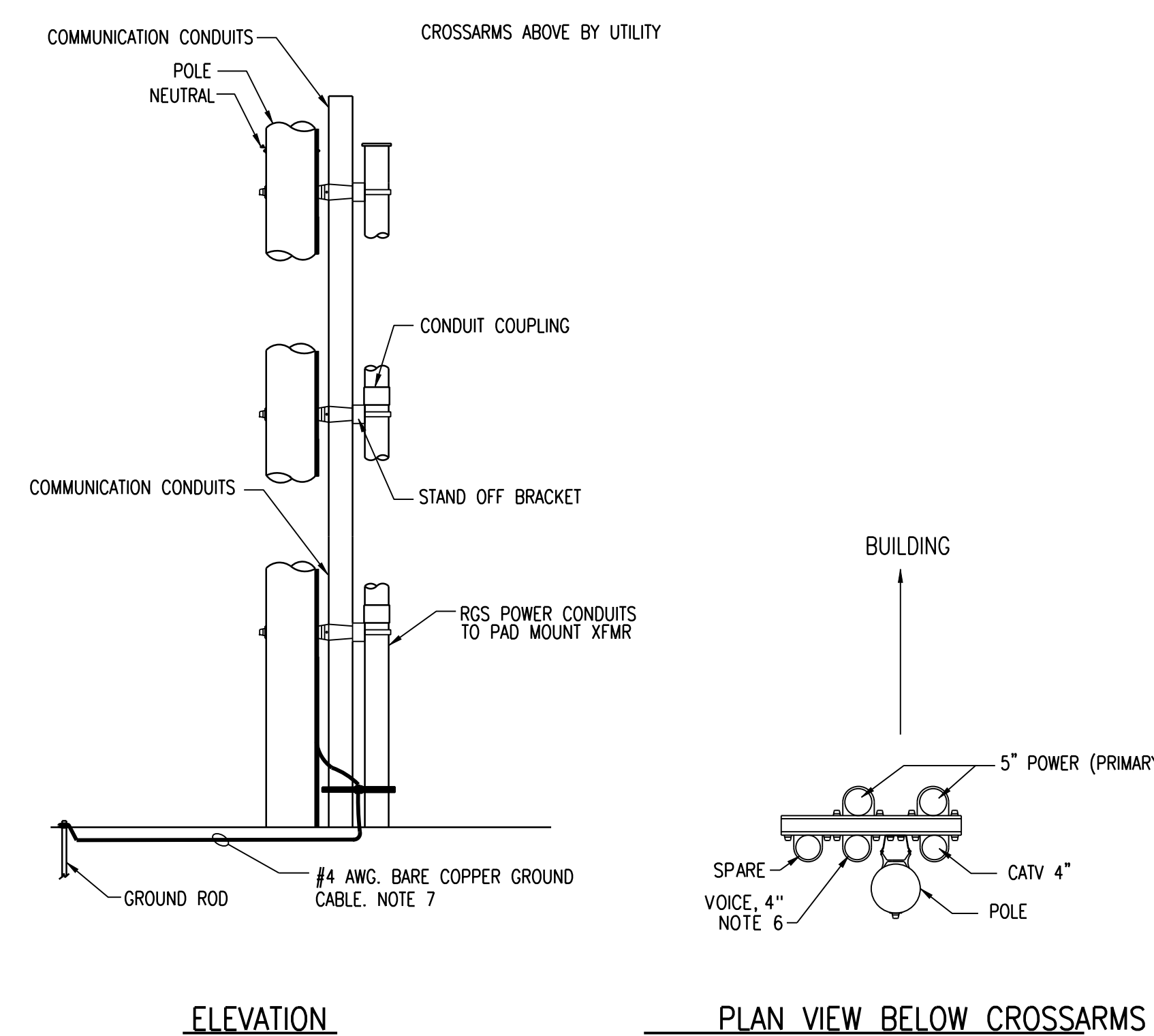
NOTES:  
1. PROVIDE TYPE 3 HANDHOLE.

**6 HANDHOLE DETAILS**  
SCALE: NONE



**3 TRANSFORMER PAD**  
SCALE: NONE

NOTES:  
1. PLACE CONCRETE PAD ON GRAVEL AND PROVIDE ADEQUATE DRAINAGE AWAY FROM PAD. REINFORCE AS SHOWN.  
2. "FRONT" DENOTES THE SIDE ON WHICH THE TRANSFORMER ACCESS DOOR SHALL BE LOCATED. THE PAD MUST BE INSTALLED SO THAT THE FRONT IS READILY ACCESSIBLE.  
3. PROVIDE 8" X 12" CONDUIT HOLES AS REQUIRED. LINE UP WITH TRENCHES. HOLES MAY EXTEND TO BOTTOM OF WALLS.  
4. COORDINATE PAD DIMENSIONS WITH TRANSFORMER.  
5. PRECAST PAD OF EQUAL CONSTRUCTION IS ACCEPTABLE.



**7 RISER POLE P1 - BRACKET DETAIL**  
SCALE: NONE

NOTES:  
1. PROVIDE STANDOFF BRACKETS AS INDICATED.  
2. CONDUIT SHALL BE RGS CONDUIT ONLY.  
3. TOP CONDUIT SECTIONS LONGER THAN 24" SHALL BE SUPPORTED.  
4. LOWEST BRACKET SHALL BE MINIMUM OF 8' ABOVE FINISHED GRADE.  
5. ONE BRACKET SHALL BE USED TO SUPPORT EACH 10' SECTION OF CONDUIT WITH THE BRACKET PLACED JUST BELOW THE RISER CONDUIT COUPLING.  
6. LOCATION FOR COMMUNICATION CONDUITS: 1 SPARE  
7. GROUND RGS RISERS TO GROUND ROD, PIPE CLAMP AND EXTEND #4 AWG CONDUCTOR UP RISER POLE TO NEUTRAL. BOND GUY WIRE TO SYSTEM NEUTRAL. PROVIDE A YELLOW PVC U GUARD FOR THE GROUND WIRE.

**TRANSFORMER**

**EARTHWORK:**

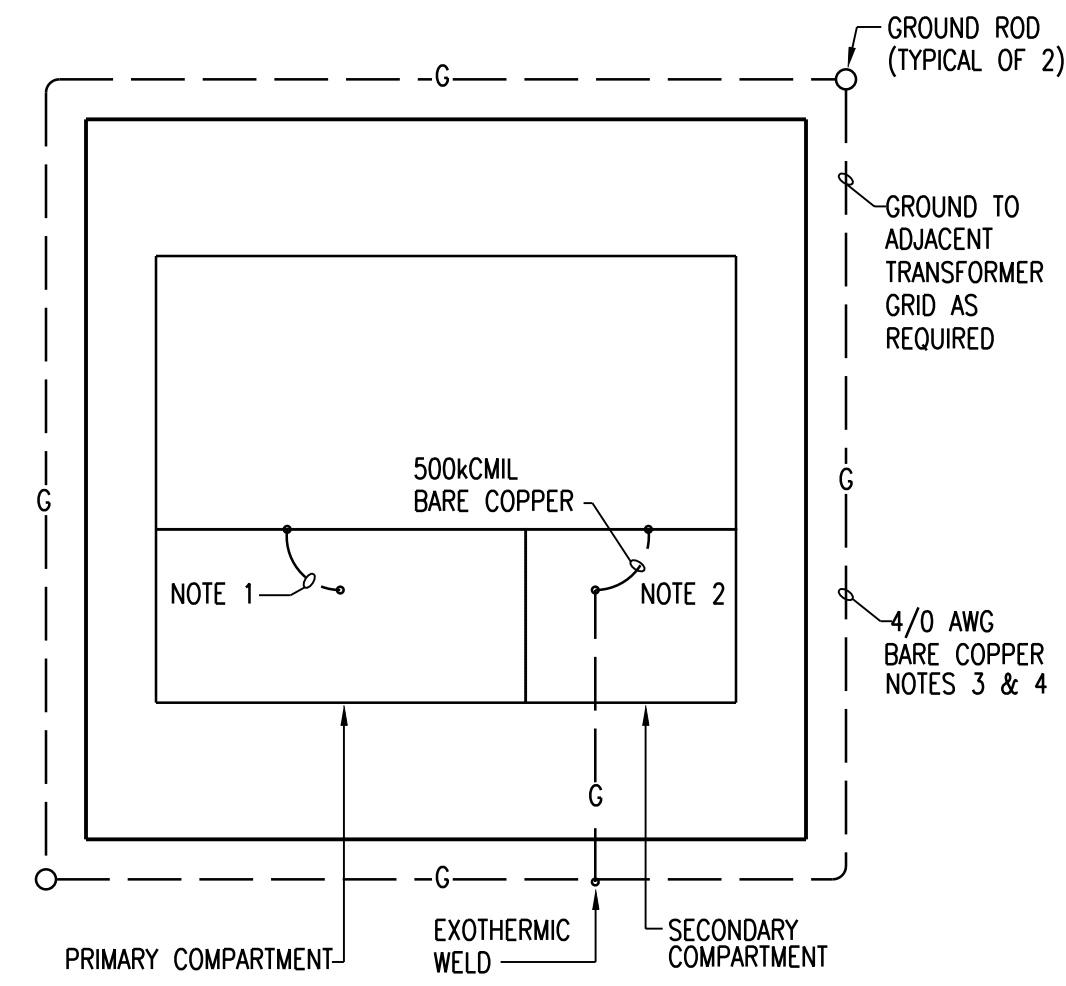
- GRAVEL SHALL BE CRUSHED GRAVEL AS SPECIFIED IN THE MAINE STANDARDS SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION. COMPACT TO 95% OF ASTM A 1557 MAXIMUM DENSITY.
- BACKFILL SHALL BE CRUSHED GRANULAR BACKFILL GRAVEL AS DEFINED IN MAINE DOT STANDARD SPECIFICATION. COMPACT TO 90% OF ASTM A 1557 MAXIMUM DENSITY. NATIVE SOIL MAY BE USED AS PROVIDED IT MEETS MAINE STANDARD SPECIFICATION.
- SAND SHALL MEET THE REQUIREMENTS FOR MORTAR IN THE MAINE STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.

**CONCRETE:**

- ALL CONCRETE WORK AND REINFORCING DETAILS SHALL CONFORM TO LATEST ACI STANDARDS - ACI 318 AND ACI 315.
- ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 40000 PSI.
- AIR ENTRAINMENT SHALL BE 6% +/- 1%.
- DESIGN MIXES SHALL BE PREPARED IN ACCORDANCE WITH ACI 301. READY-MIX CONCRETE SHALL CONFORM TO ASTM C94. CALCIUM CHLORIDE IS NOT PERMITTED.
- ALL CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE 3/4" CHAMFER.
- REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60, DEFORMED BARS, F<sub>y</sub>=60,000 PSI.
- MINIMUM CONCRETE COVER FOR REINFORCEMENT, UNLESS OTHERWISE INDICATED, SHALL BE AS FOLLOWS:  
FOOTINGS, FOUNDATION, AND OTHER CONCRETE CAST AGAINST EARTH (3" MIN).  
CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND (2" MIN).

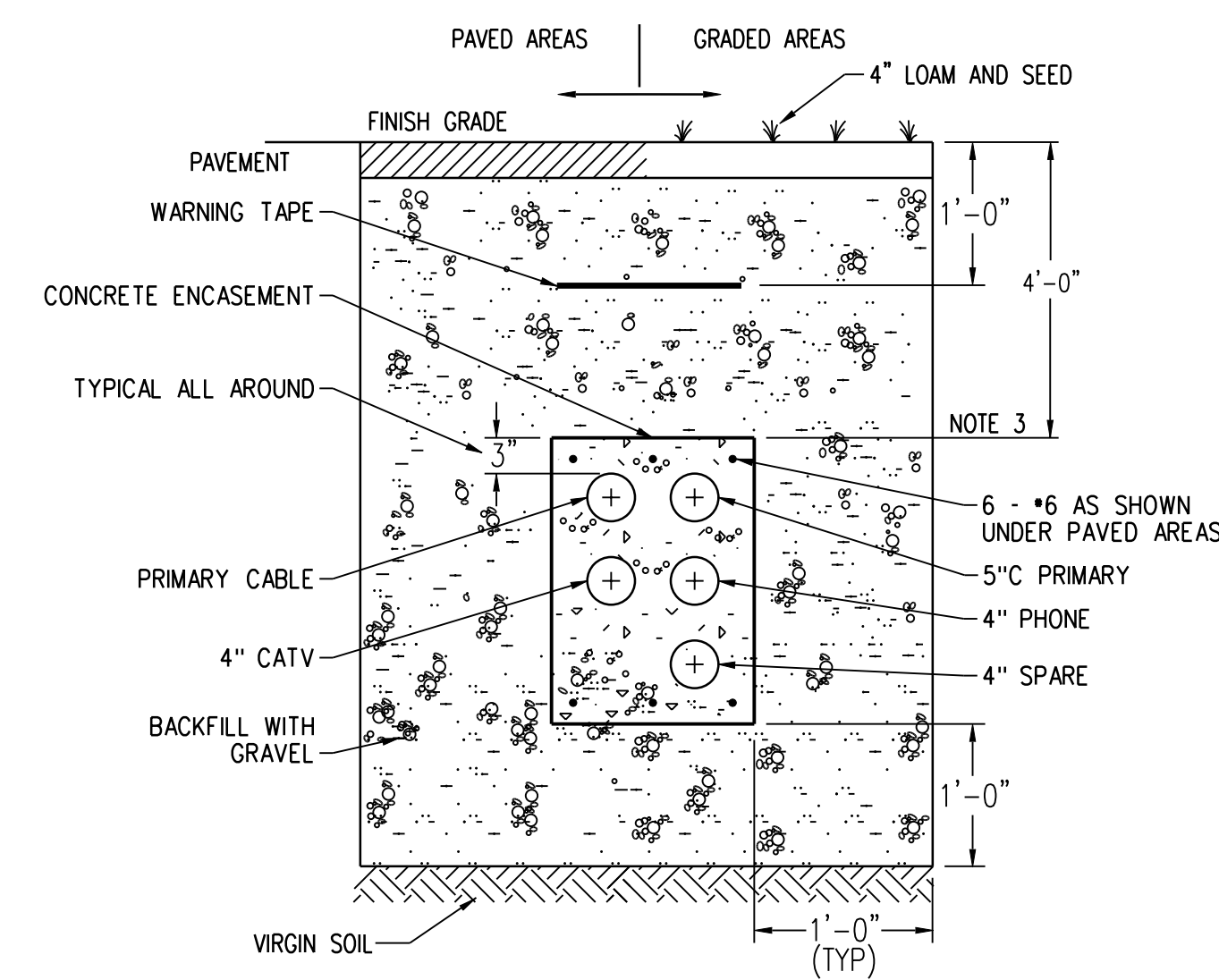
**ELECTRICAL:**

- BOND PRIMARY NEUTRAL TO ENCLOSURE AND LIGHTING ARRESTER SHIELDS.
- BOND GROUND STRAP FROM TRANSFORMER TANK TO NEUTRAL LUG (XO BUSHING) AND GROUND GRID.
- GROUND CONNECTIONS AND CABLE SIZES SHALL COMPLY WITH NEC ARTICLE 250.
- ALL GROUNDING CABLE SHALL BE BURIED AT A DEPTH OF 30". PROTECT CABLES IN 1" RIGID GALVANIZED STEEL CONDUIT ABOVE GRADE AND TO 24" BELOW GRADE.
- CONDUIT SHALL BE ROUTED THROUGH OPENING IN PAD TO PRIMARY AND SECONDARY COMPARTMENTS AND SURROUNDED WITH SAND.
- BOND NEUTRAL TO GROUND BUS IN SWITCHBOARDS USING 4/0 BARE COPPER WIRE OR STRAP PROVIDED BY MANUFACTURER.
- BOND NEUTRAL TO BUILDING STEEL AT SWITCHBOARDS.
- DO NOT TIE TRANSFORMER GRID TO BUILDING STEEL (PARALLEL PATH TO SWITCHBOARDS).



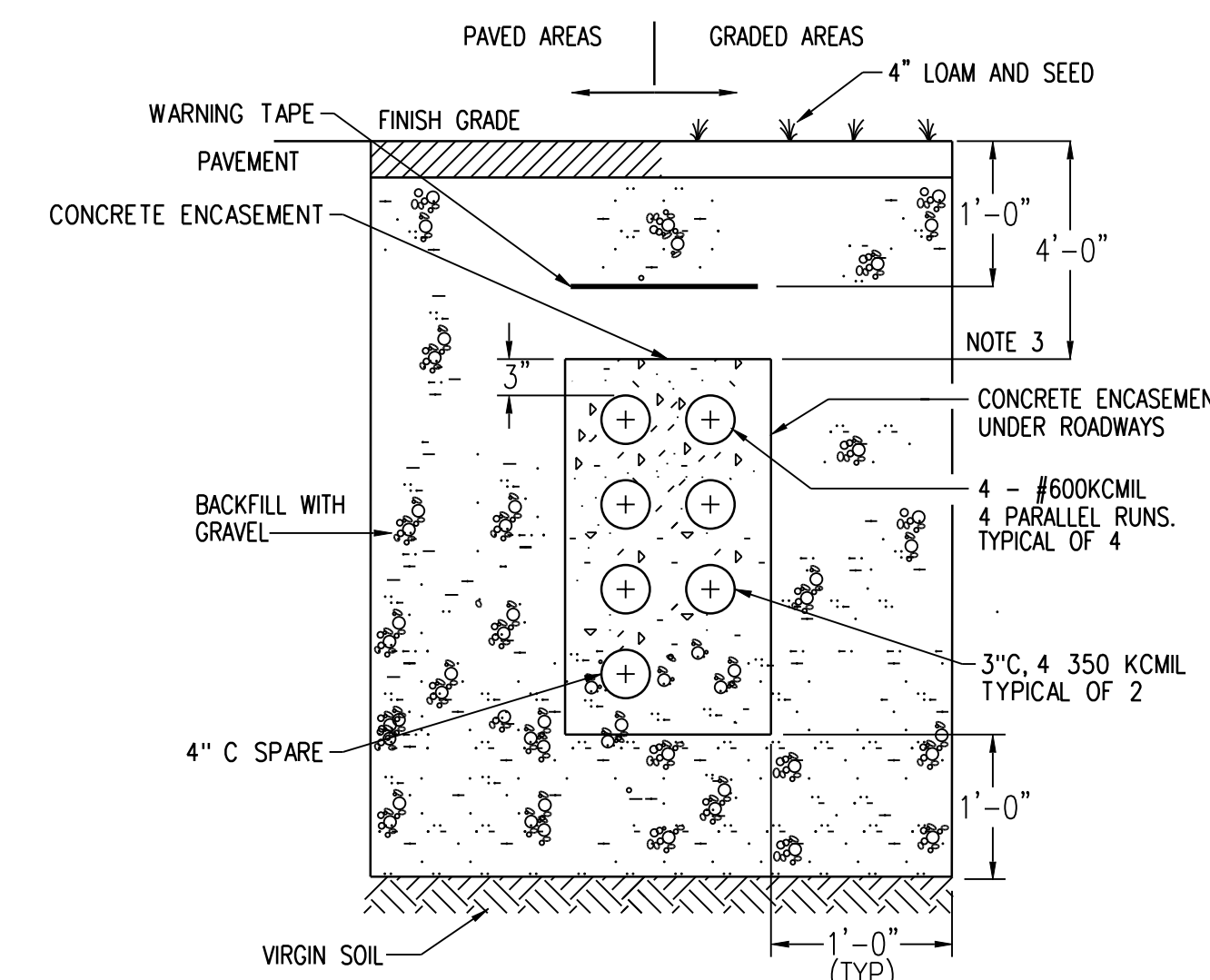
**8 TRANSFORMER GROUNDING**  
SCALE: NONE

REFER TO ELECTRICAL NOTES 1-8 THIS DRAWING.



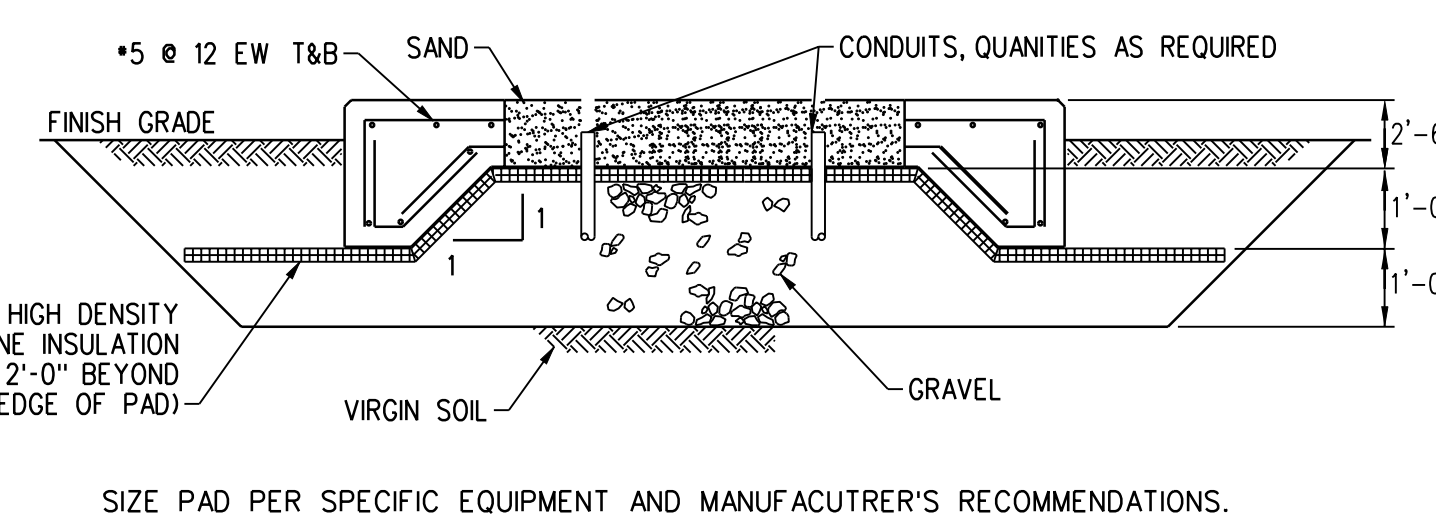
**4 UTILITY ELECTRICAL DUCT BANK SECTION**  
SCALE: NONE

NOTES:  
1. CONDUITS SHALL BE CONCRETE ENCASED.  
2. PROVIDE PULL ROPE IN SPARE CONDUIT. CAP AT TERMINATIONS TO STOP ENTRANCE OF WATER.  
3. TOP OF DUCT BANK 4'-0" BELOW GRADE FOR INTERCONNECTION OF TRANSFORMERS. 4'-0" ALL OTHER AREAS.  
4. VERIFY CONDUCTOR SIZE WITH ENGINEER BEFORE INSTALLATION.  
5. PROVIDE QUANTITY OF CONDUITS AS INDICATED ON SITE PLAN.  
6. SEE SHEET E1.0



**5 SECONDARY ELECTRICAL DUCT BANK SECTION**  
SCALE: NONE

NOTES:  
1. USE RIGID STEEL GALVANIZED LONG SWEEPS AND RIGID STEEL GALVANIZED CONDUIT FROM DUCT BANKS INTO EQUIPMENT PADS.  
2. SITE LIGHTING CONDUIT 30" BELOW GRADE. CONCRETE ENCASED UNDER ROADWAYS. OTHER SITE CONDUITS SIMILAR BUT SMALLER TRENCH AND CONDUIT SIZES AS INDICATED.



**8 EQUIPMENT PAD**  
SCALE: NONE

**NOTES:**

- PROVIDE STANDOFF BRACKETS AS INDICATED.
- CONDUIT SHALL BE RGS CONDUIT ONLY.
- TOP CONDUIT SECTIONS LONGER THAN 24" SHALL BE SUPPORTED.
- LOWEST BRACKET SHALL BE MINIMUM OF 8' ABOVE FINISHED GRADE.
- ONE BRACKET SHALL BE USED TO SUPPORT EACH 10' SECTION OF CONDUIT WITH THE BRACKET PLACED JUST BELOW THE RISER CONDUIT COUPLING.
- LOCATION FOR COMMUNICATION CONDUITS.
- GROUND RGS RISERS TO GROUND ROD, PIPE CLAMP AND EXTEND #4 AWG CONDUCTOR UP RISER POLE TO NEUTRAL. BOND GUY WIRE TO SYSTEM NEUTRAL. PROVIDE A YELLOW PVC U GUARD FOR THE GROUND WIRE.

**UTILITY COORDINATION NOTES:**

- A TELEPHONE CABLE WILL BE INSTALLED TO THE MECHANICAL ROOM BY THE UTILITY (VERIZON). PROVIDE CONDUIT AS INDICATED ON DRAWINGS. VERIZON WILL TERMINATE PAIRS AT THE EQUIPMENT INSIDE THE MECHANICAL ROOM.
- A CATV CABLE SHALL BE INSTALLED TO THE MECHANICAL ROOM BY ADELPHI. ADELPHI WILL INSTALL TERMINATIONS FOR CATV HOMERUNS.
- PROVIDE METER AT THE BUILDING. EXTEND THE SECONDARY FEEDER TO SWITCHBOARD.
- NEW OH LINE, TRANSFORMER AND POLE SHALL BE PROVIDED BY UTILITY (CMP).
- COORDINATE INSTALLATION WITH ALL UTILITY REGULATIONS.