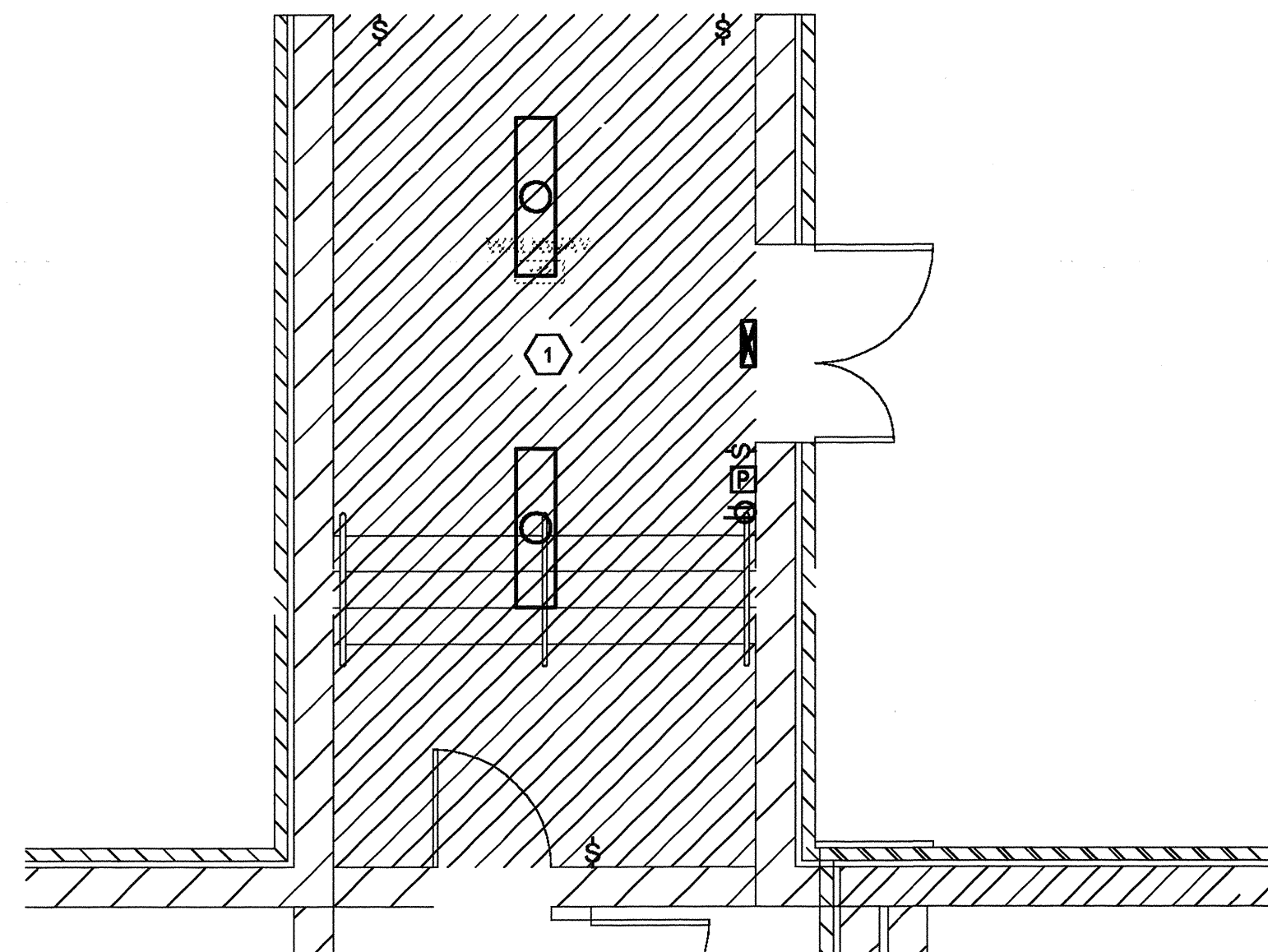


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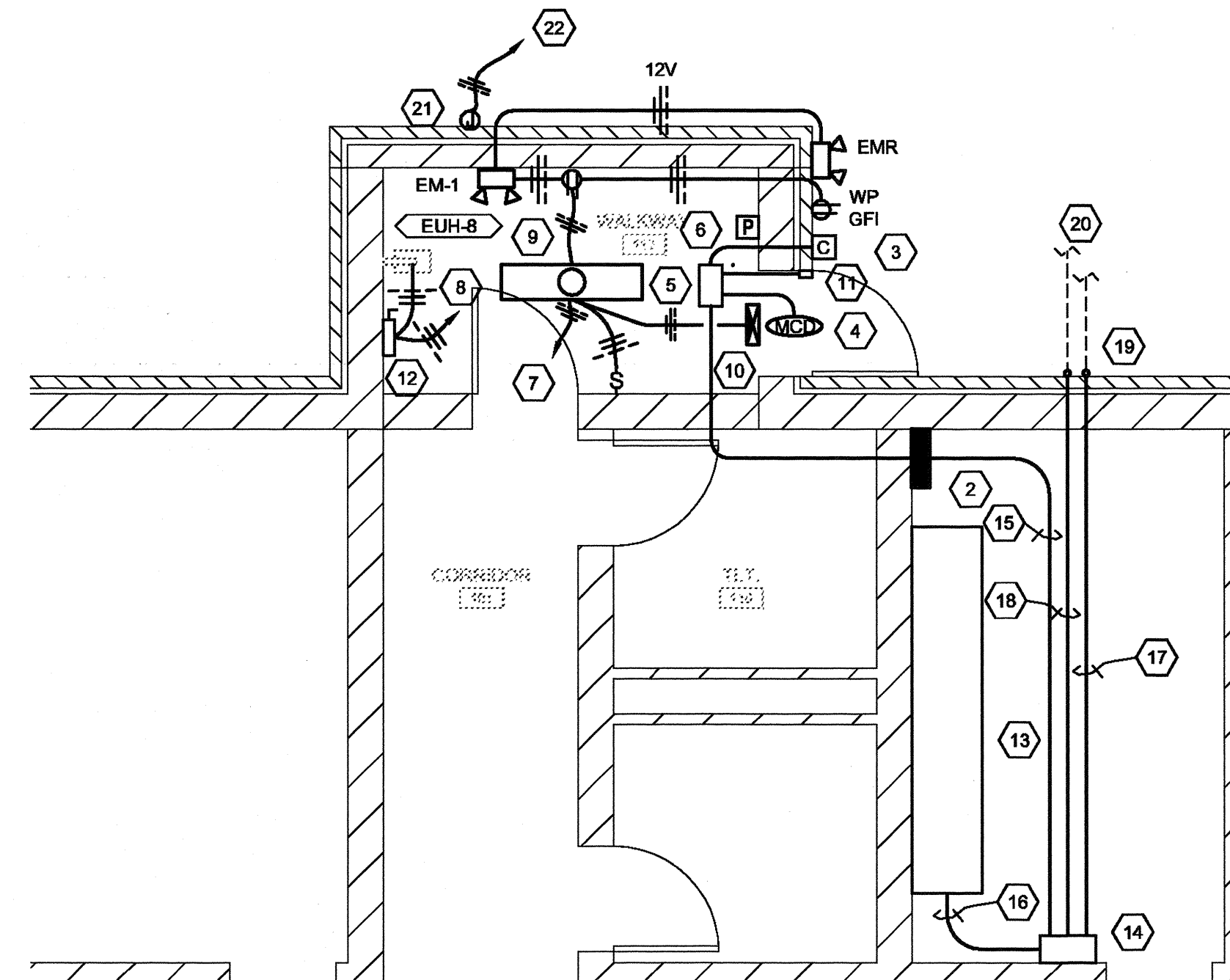
SHEET KEYNOTES:

1. REMOVE AND PROPERLY DISPOSE OF ALL ELECTRICAL EQUIPMENT, DEVICES, AND ASSOCIATED CONDUIT/WIRING WITHIN THIS ROOM WITH THE EXCEPTION OF LIGHT FIXTURES AND FIRE ALARM PULL STATION REFERENCED TO BE RELOCATED.
2. APPROXIMATE LOCATION OF EXISTING DSX SECURITY/ACCESS CONTROL SYSTEM. PROVIDE A NEW ETHERNET SWITCH MOUNTED WITHIN EXISTING CONTROL PANEL. PROVIDE A #24AWG 4PR CAT 6 CABLE ETHERNET SWITCH TO COMMUNICATIONS PORT OF SECURITY SYSTEM.
3. SECURITY SYSTEM CARD READER (MOUNT AT 42" AFF). PROVIDE CONDUIT/WIRING TO POWER SUPPLY MOUNTED ABOVE DOOR.
4. SECURITY SYSTEM DOOR CONTACT. COORDINATE MOUNTING WITH GENERAL CONTRACTOR. PROVIDE CONDUIT/WIRING TO POWER SUPPLY MOUNTED ABOVE DOOR.
5. POWER SUPPLY/DOOR CONTROLLER MOUNTED ABOVE DOOR. PROVIDE CONDUIT/WIRING BACK TO THE EXISTING DSX SECURITY/ACCESS CONTROL PANEL (KEYNOTE #2).
6. EXISTING FIRE ALARM PULL STATION TO BE RELOCATED TO THIS NEW LOCATION. PROVIDE CONDUIT/WIRING, AS REQUIRED.
7. CONNECT TO NEAREST EXISTING 120V LIGHTING CIRCUIT.
8. PROVIDE A 20A/2POLE BREAKER IN SPACE OF THE NEAREST 120/208V PANELBOARD WITH SPACE, FIELD VERIFY.
9. EXISTING LIGHT FIXTURE TO BE RELOCATED INTO NEW WALKWAY.
10. EXISTING EXIT SIGN TO BE RELOCATED ABOVE NEW DOOR.
11. ELECTRIC DOOR STRIKE (COORDINATE INSTALLATION WITH DOOR HARDWARE PROVIDER/INSTALLER). PROVIDE CONDUIT/WIRING TO POWER SUPPLY MOUNTED ABOVE DOOR.
12. 30A / 208V / 1-PHASE NON-FUSED DISCONNECT (NEMA 1 ENCLOSURE).
13. EXISTING CHEMICAL BUILDING PLC CABINET.
14. NEW WALL MOUNTED EQUIPMENT RACK (REFER TO PROJECT SPECIFICATIONS). RACK TO HOUSE A NEW FIBER OPTIC PATCH PANEL, REFER TO SHEET L-00-002 FOR ADDITIONAL INFORMATION.
15. PROVIDE A 2" CONDUIT WITH 24 STRAND 63.5/125 MICRON MM FIBER FROM THE FIBER OPTIC PATCH PANEL TO THE NEW ETHERNET SWITCH WITHIN THE SECURITY CONTROL PANEL.
16. PROVIDE A 2" CONDUIT WITH 24 STRAND 63.5/125 MICRON MM FIBER FROM THE FIBER OPTIC PATCH PANEL TO A NEW ETHERNET CONVERTER AND PROVIDE #24AWG 4PR CAT 6 CABLE TO THE EXISTING CONTROL NETWORK SWITCH (FIELD VERIFY EXISTING LOCATION).
17. 24-STRAND 63.5/125 MICRON MM FIBER IN 3" CONDUIT FROM THE FIBER OPTIC PATCH PANEL (KEYNOTE #14) TO THE FIBER OPTIC PATCH PANEL LOCATED WITHIN THE PT/GAC BUILDING (SEE SHEET E-06-401 FOR LOCATION). PROVIDE AN ADDITIONAL SPARE 3" CONDUIT WITH PULL STRING.
18. 24-STRAND 63.5/125 MICRON MM FIBER IN 3" CONDUIT FROM THE FIBER OPTIC PATCH PANEL (KEYNOTE #14) TO THE FIBER OPTIC PATCH PANEL LOCATED WITHIN THE EXISTING FILTER BUILDING (SEE SHEET E-08-105 FOR LOCATION). PROVIDE AN ADDITIONAL SPARE 3" CONDUIT WITH PULL STRING.
19. ROUTE CONDUIT DOWN WALL AND TRANSITION TO UNDERGROUND.
20. REFER TO SHEET E-02-102 FOR CONTINUATIONS.
21. PROVIDE 120V CONNECTION TO HEAT TRACE ON CHEMICAL FEED LINE. COORDINATE WITH DIVISION 15. REFER TO DETAIL ON SHEET E-10-501.
22. PROVIDE A NEW 30A/1P GFI TYPE BREAKER IN NEAREST 120/208V PANELBOARD WITH AVAILABLE SPACE. UTILIZE 2#10, 1#10 GND. IN 3/4" CONDUIT.



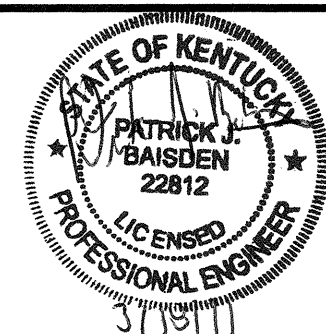
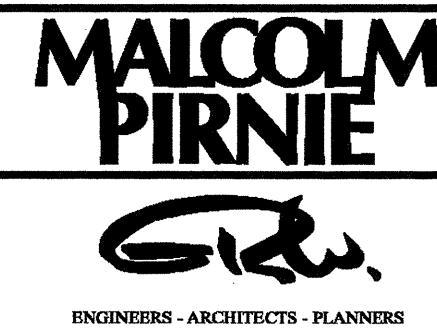
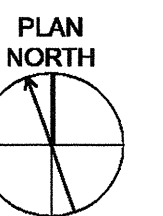
**CHEMICAL BUILDING WALKWAY -
ELECTRICAL DEMOLITION PLAN**

SCALE: 1/4"=1'-0"



**CHEMICAL BUILDING WALKWAY -
ELECTRICAL NEW WORK PLAN**

SCALE: 1/4"=1'-0"



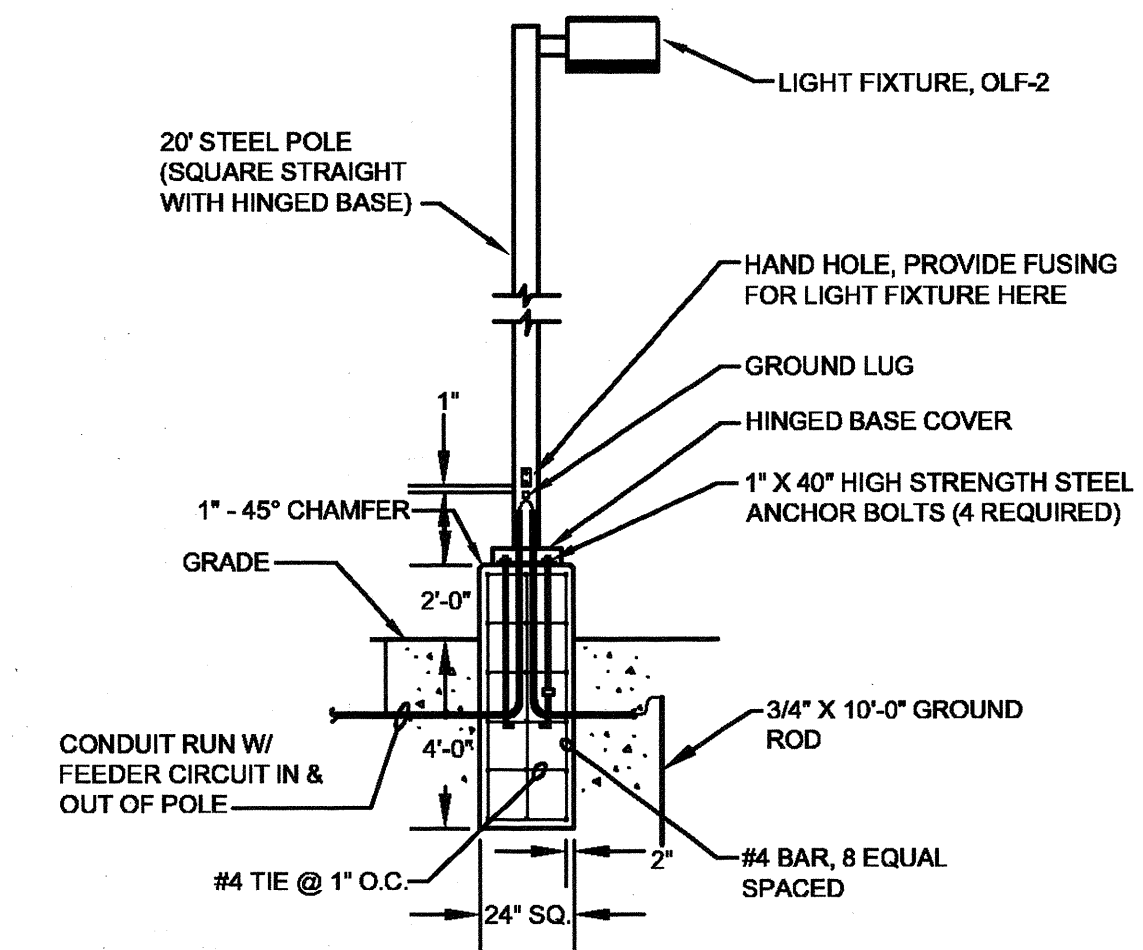
REVISIONS			
NO.	BY	DATE	REMARKS

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DWN: DLM
CKD: PJB

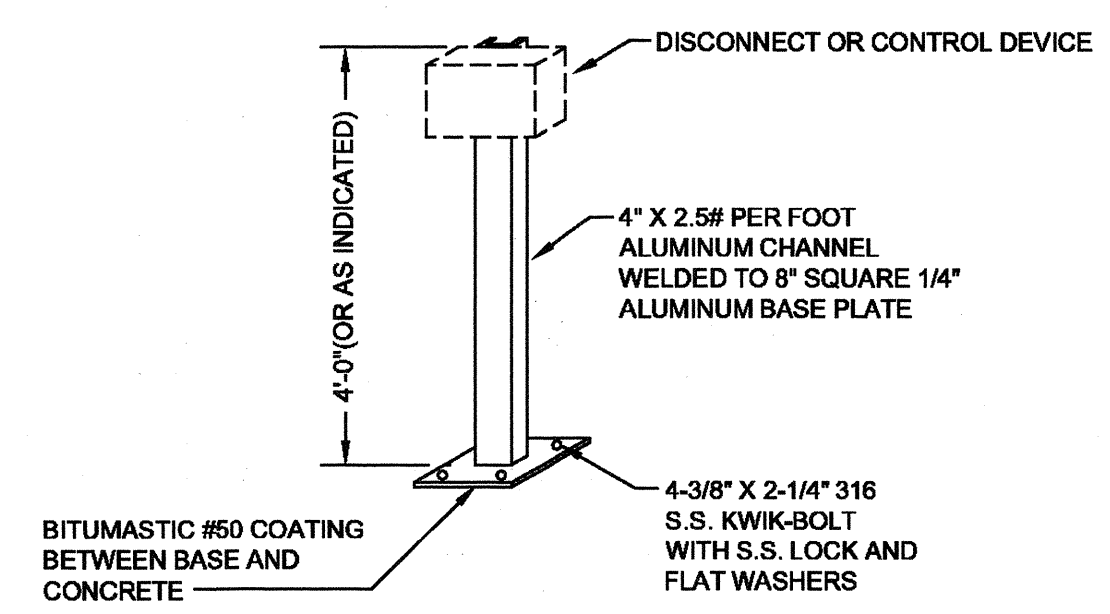
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
**ADVANCED TREATMENT
IMPROVEMENTS**

ELECTRICAL
CHEMICAL BUILDING WALKWAY
ELECTRICAL PLANS AND SCHEMATICS
SCALE: AS NOTED

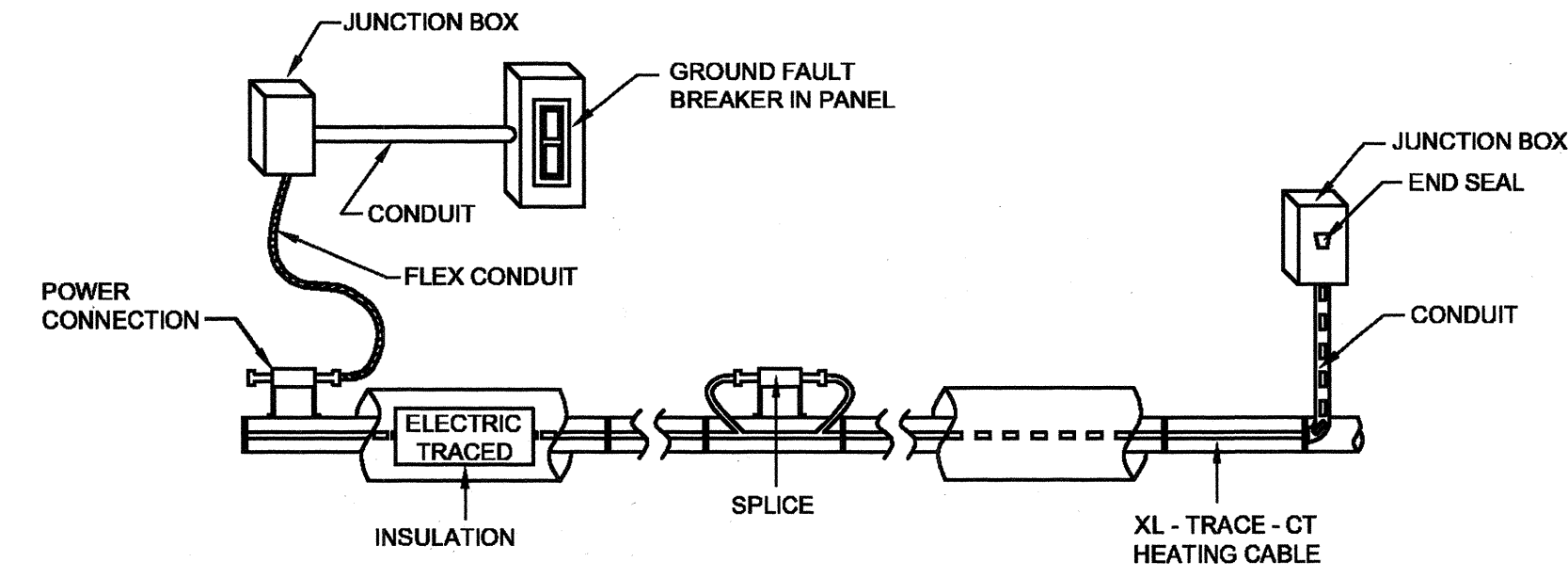
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: E-09-101
CAD REF. NO.: 3789-E-09-101



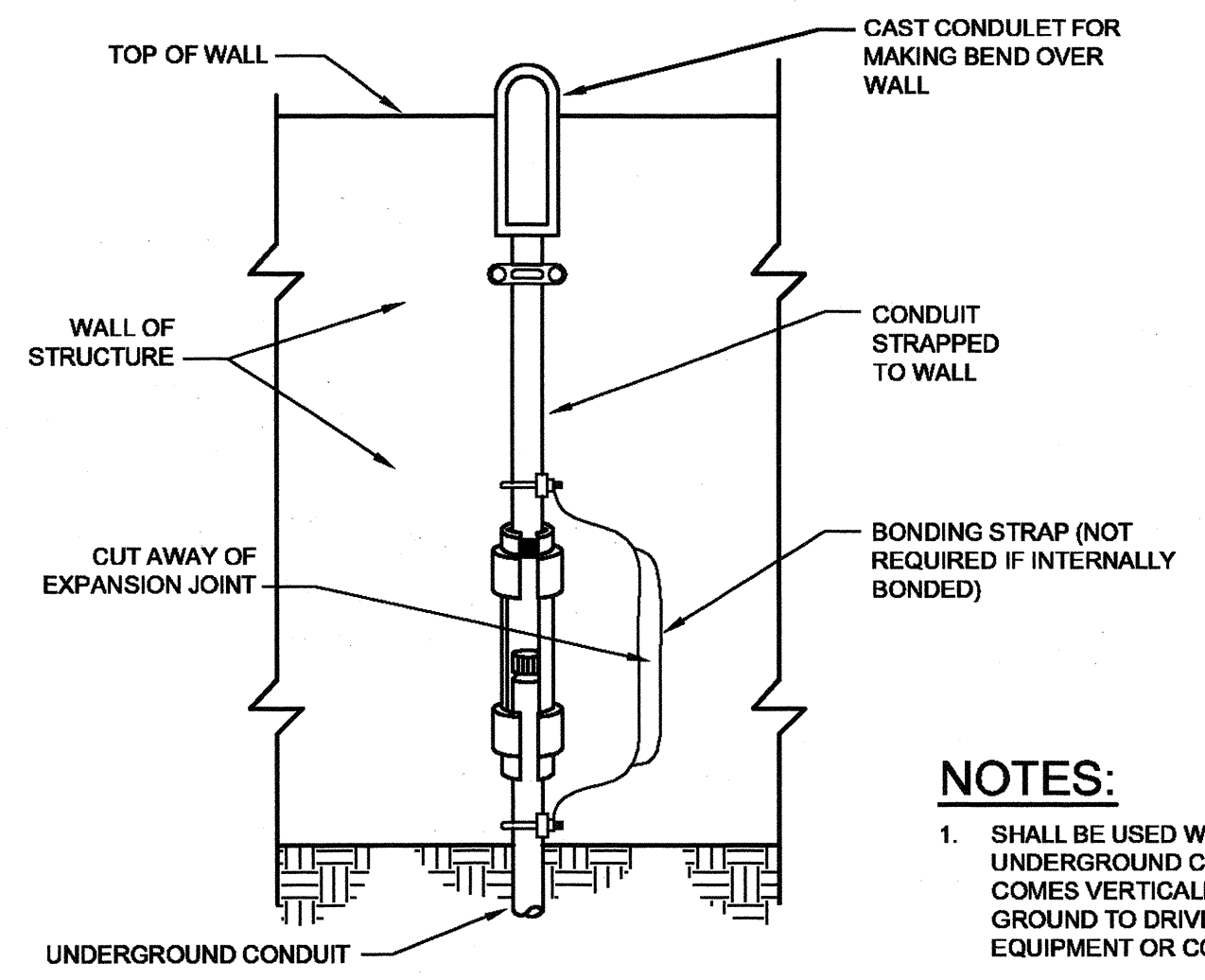
SITE LIGHT LIGHT FIXTURE MOUNTING DETAIL
NOT TO SCALE



EQUIPMENT SUPPORT BRACKET (SINGLE POST)
NOT TO SCALE

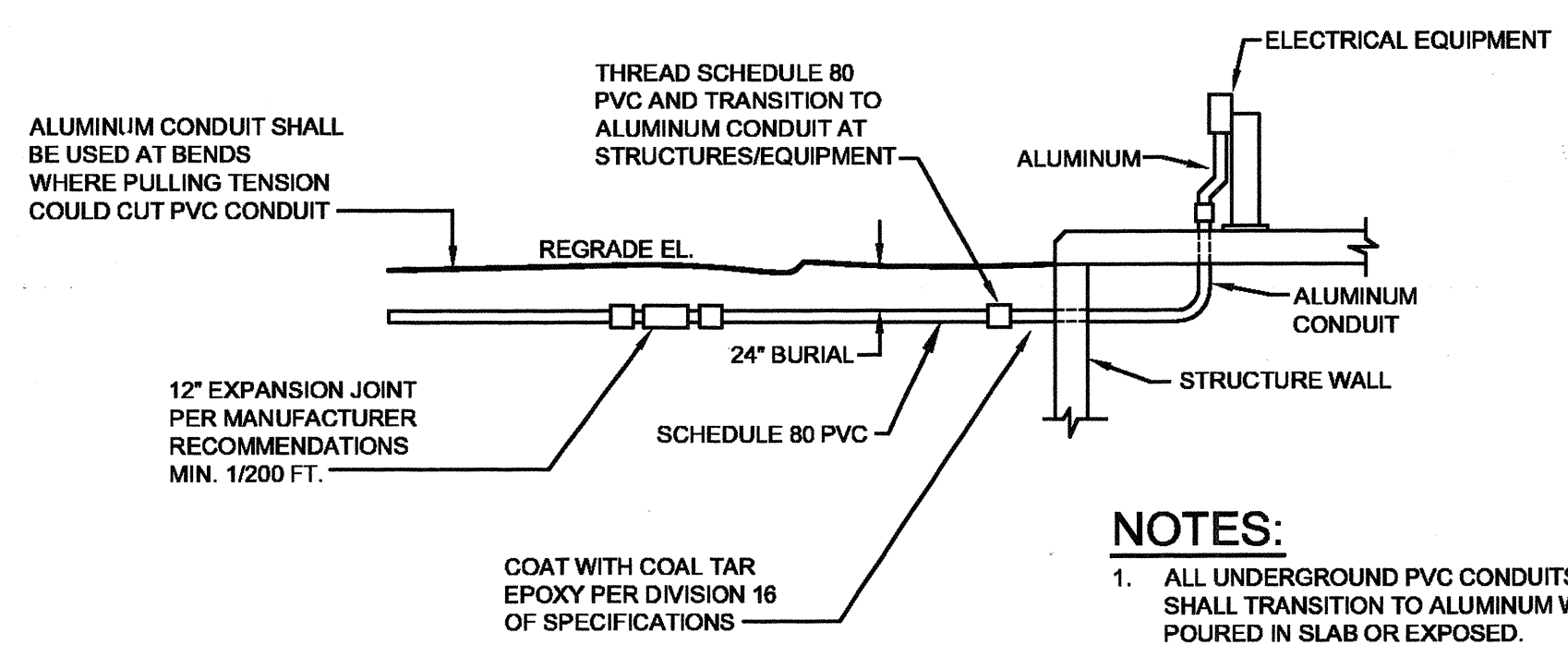


HEAT TRACING
NOT TO SCALE
• 3 SYSTEMS REQUIRED FOR CHEMICAL FEED LINES

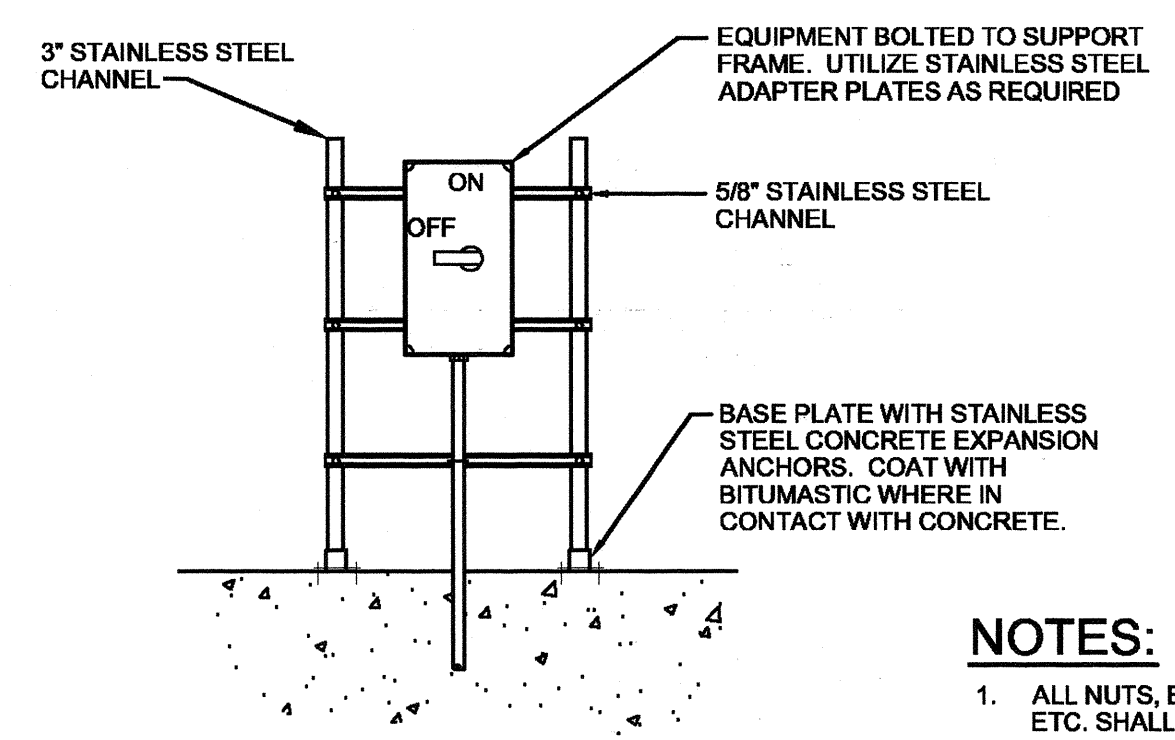


NOTES:
1. SHALL BE USED WHENEVER UNDERGROUND CONDUIT COMES VERTICALLY OUT OF GROUND TO DRIVEN EQUIPMENT OR CONTROLS.

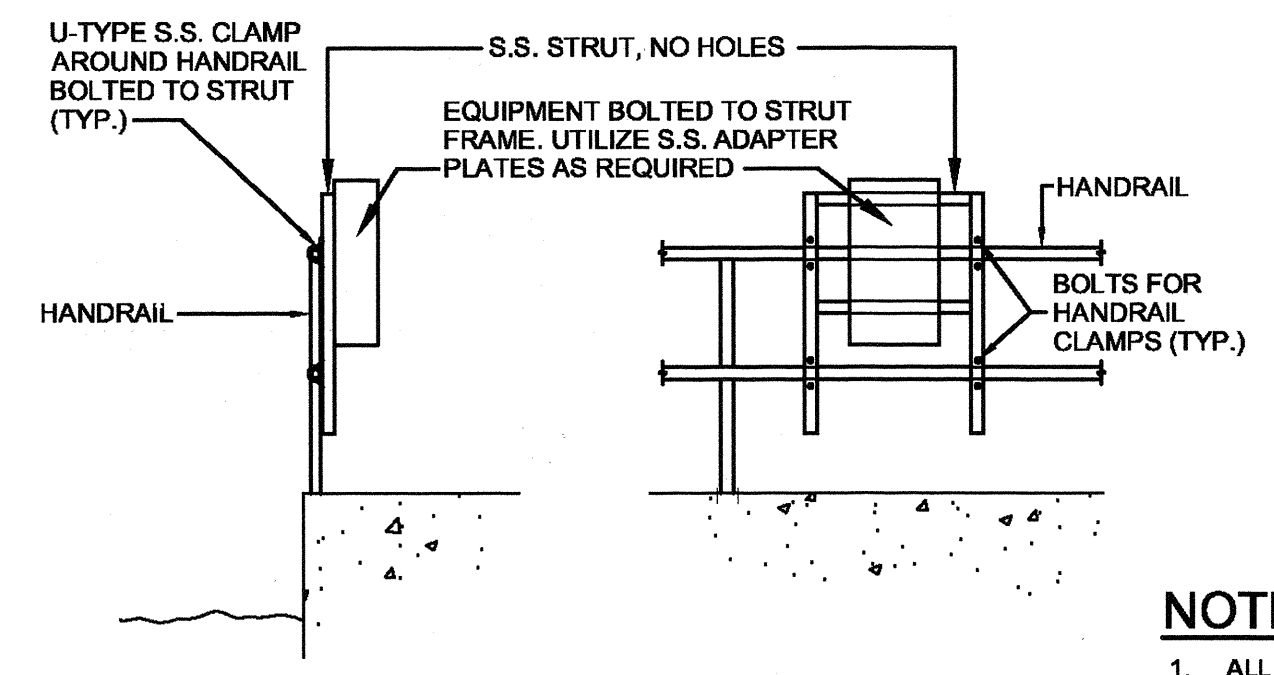
CONDUIT EXPANSION JOINT DETAIL
NOT TO SCALE



TYPICAL UNDERGROUND PVC CONDUIT TRANSITION TO ALUMINUM CONDUIT
NOT TO SCALE



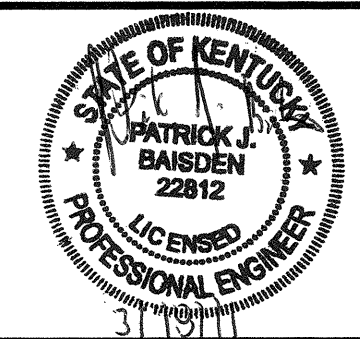
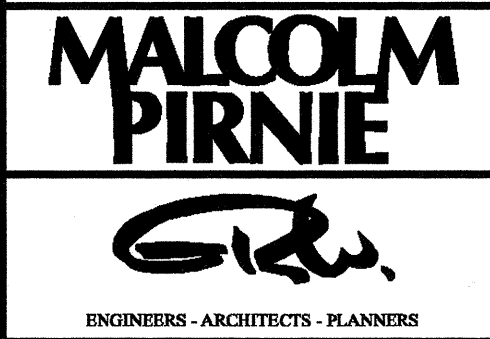
TYPICAL RACK MOUNTED ELECTRICAL EQUIPMENT
NOT TO SCALE



NOTES:
1. ALL NUTS, BOLTS, WASHERS, ETC. SHALL BE S.S.

TYPICAL HANDRAIL MOUNTED ELECTRICAL EQUIPMENT
NOT TO SCALE

User: JBOND Spec: PIRNIE STANDARD File: J:\3789-NKWD TAYLOR MILLWORKING DRAWINGS\DESIGN DRAWINGS\ELE-10-01.DWG Scale: 1:38 SavedDate: 11/22/2010 Time: 13:18 Plot Date: Bond: Jeff: 3/10/2011 09:31 : Layout: E-10-501



REVISIONS			
NO.	BY	DATE	REMARKS

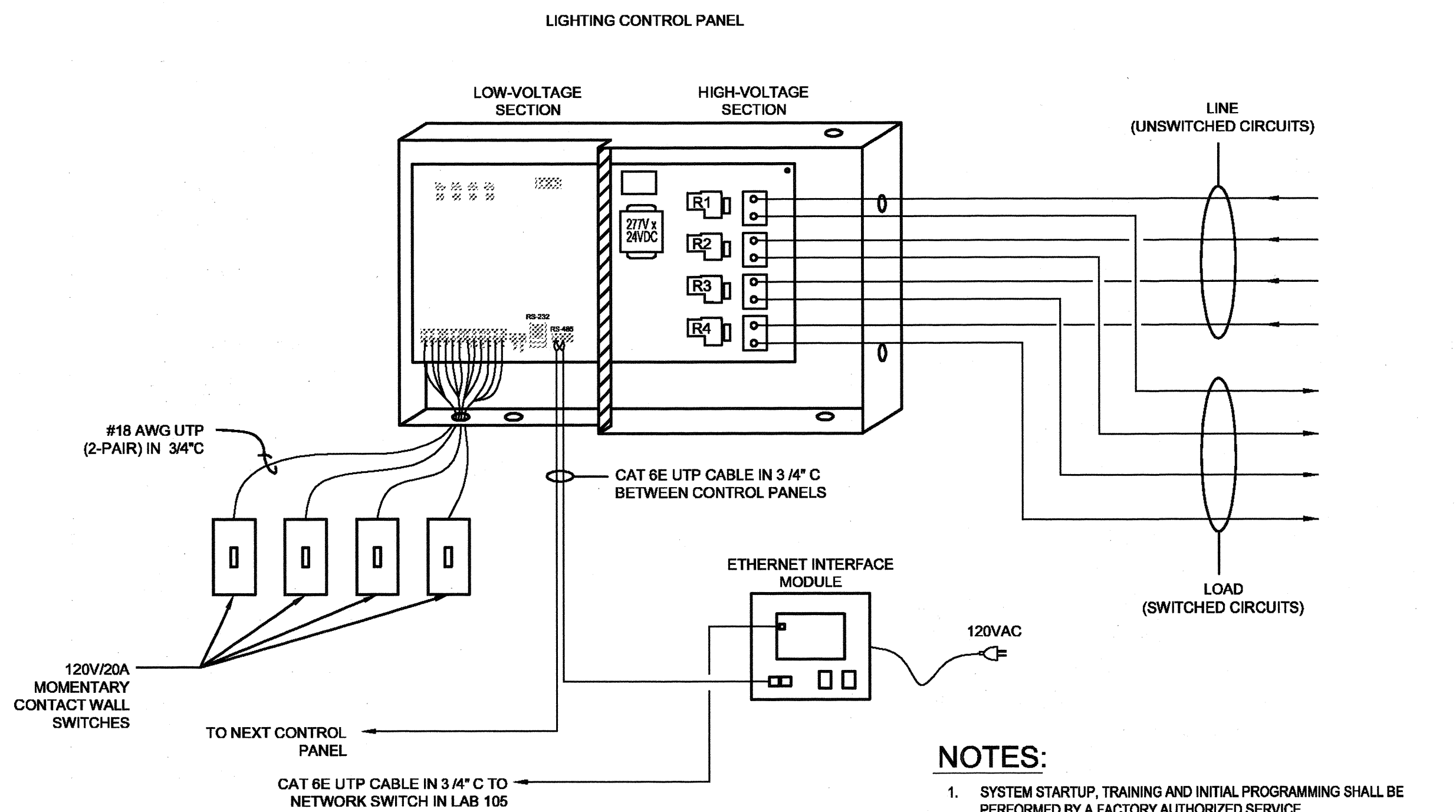
DES: PJB
DWN: DLM
CKD: PJB

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

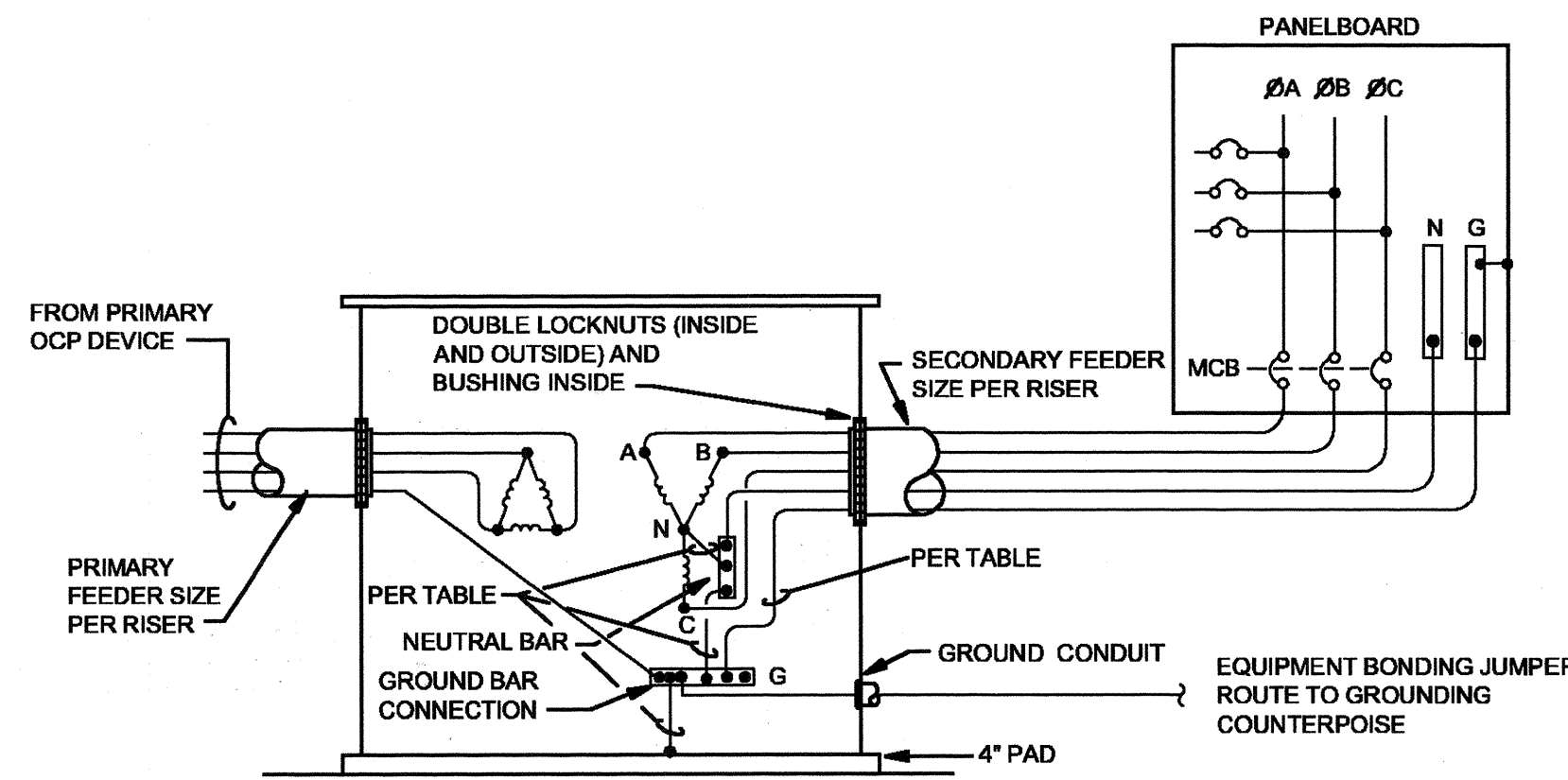
ELECTRICAL
ELECTRICAL DETAILS I

SCALE: NOT TO SCALE

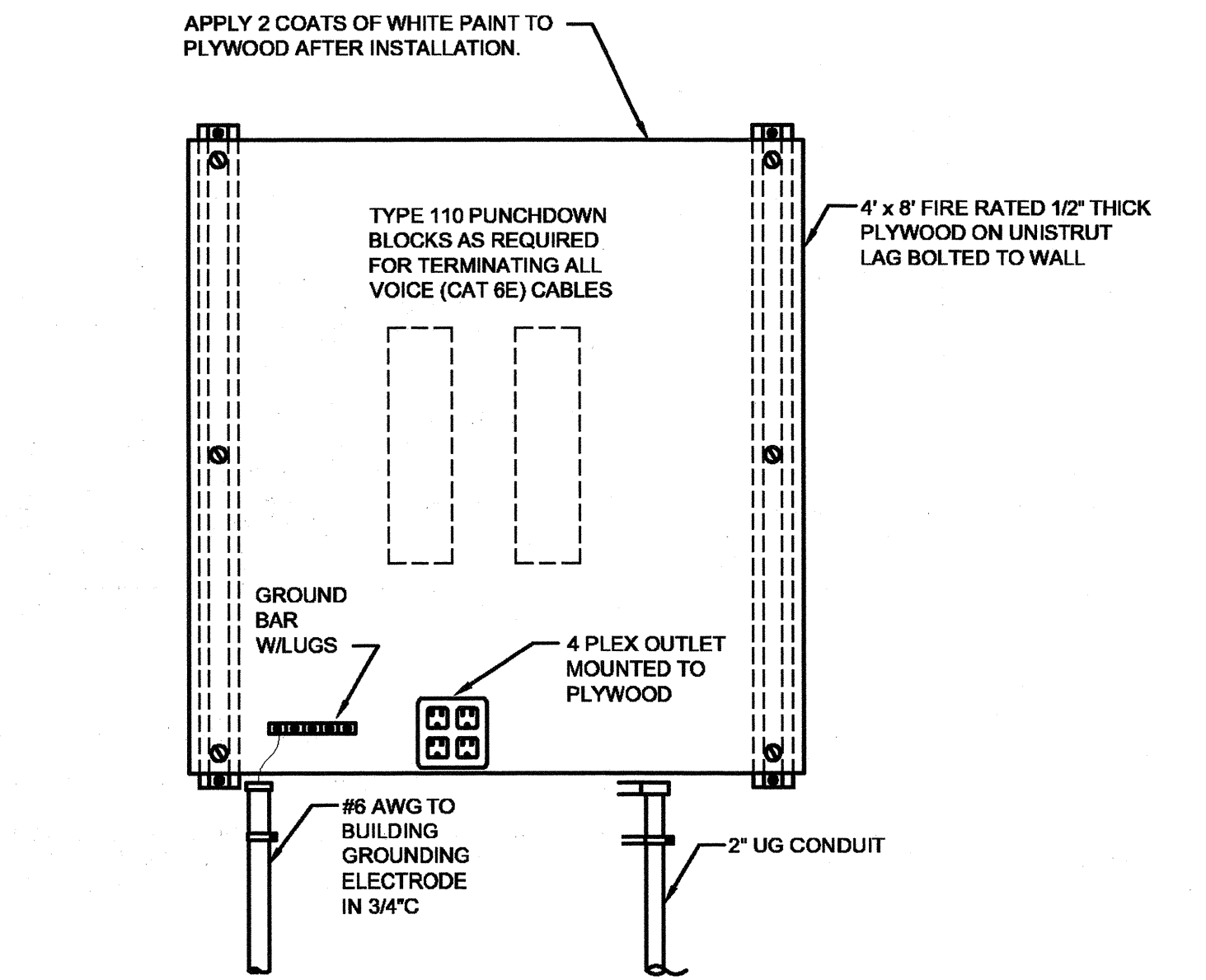
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DATE: MARCH, 2011
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CAD REF. NO.: 3789-E-10-501



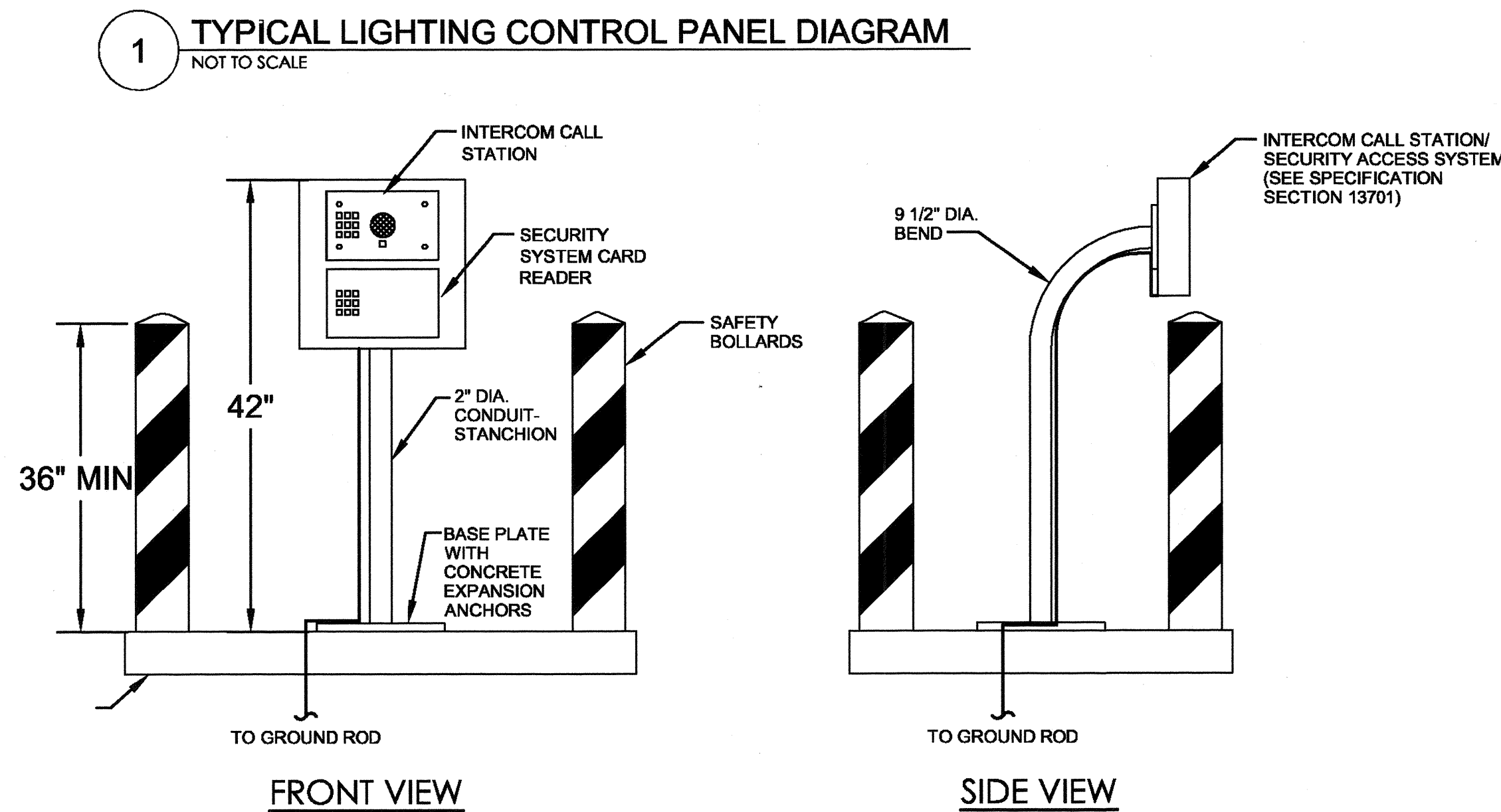
- NOTES:**
1. SYSTEM STARTUP, TRAINING AND INITIAL PROGRAMMING SHALL BE PERFORMED BY A FACTORY AUTHORIZED SERVICE REPRESENTATIVE.
 2. DETAIL IS FOR A 4 RELAY LIGHTING CONTROL PANEL. CONTRACTOR SHALL REFER TO PROJECT DRAWINGS FOR SPECIFIC NUMBER OF RELAYS REQUIRED FOR EACH LIGHTING CONTROL PANEL.



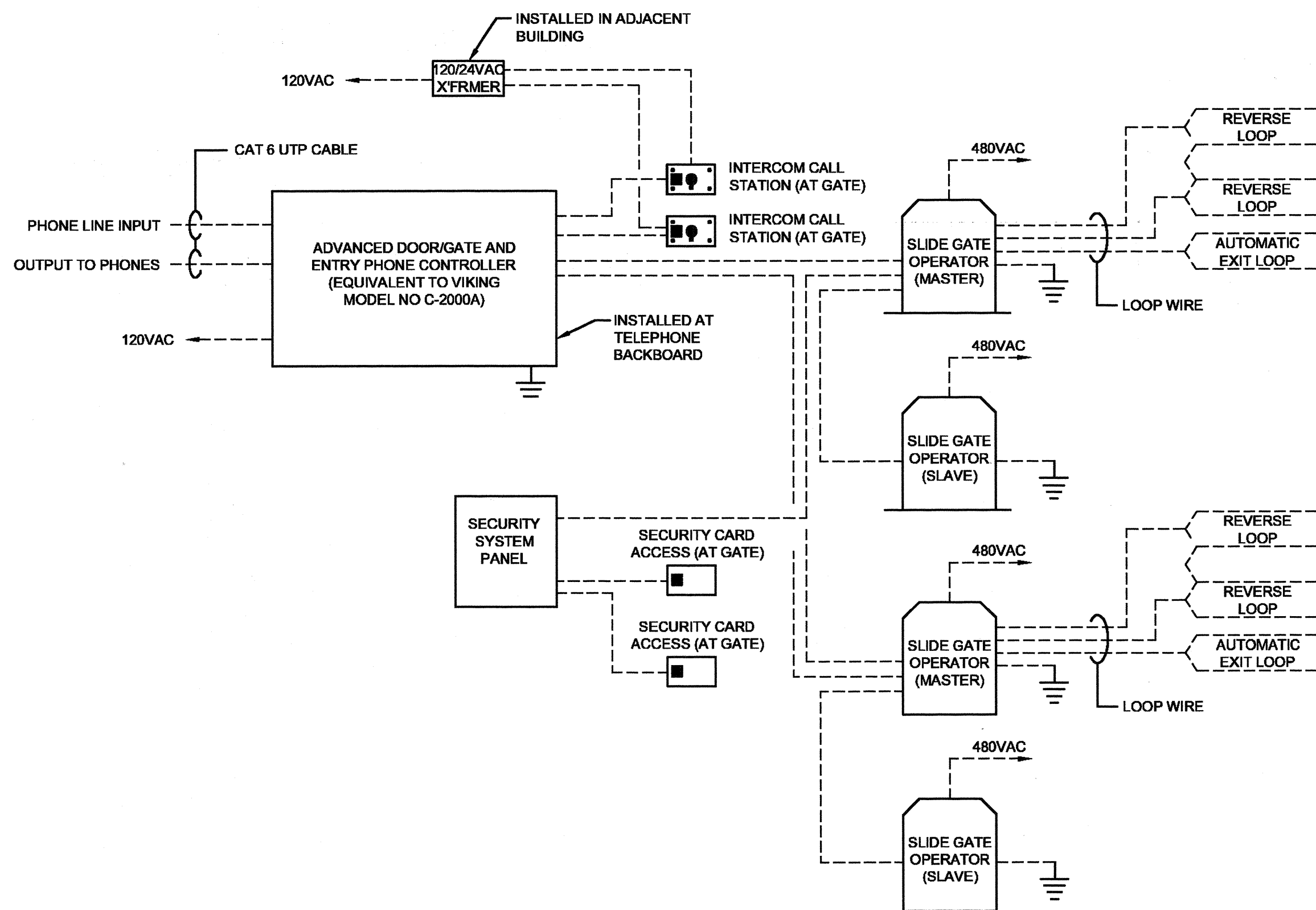
- NOTES:**
1. DETAIL IS FOR 3-PHASE DRY-TYPE TRANSFORMERS WITH PRIMARY 480-VOLTS DELTA AND SECONDARY 208/120-VOLT WYE.
 2. BOND JUMPER AND GROUNDING ELECTRODE CONDUCTOR SHALL BE SIZED PER TABLE 250.66 OF NEC 2010.
 3. BOND JUMPER AND REQUIRED GROUNDING ELECTRODE CONDUCTOR SHALL BE SAME SIZE. IF THE SECONDARY FEEDER CONDUCTORS ARE GREATER THAN 1100 MCM COPPER OR 1750 MCM ALUMINUM, THE BOND JUMPER SHALL BE INCREASED IN SIZE TO 12.5 PERCENT OF THE CROSS-SECTIONAL AREA OF THE SECONDARY PHASE CONDUCTOR.



3 COMMUNICATION BACKBOARD DETAIL
NOT TO SCALE



4 PEDESTAL MOUNT FOR SECURITY ACCESS SYSTEM
NOT TO SCALE

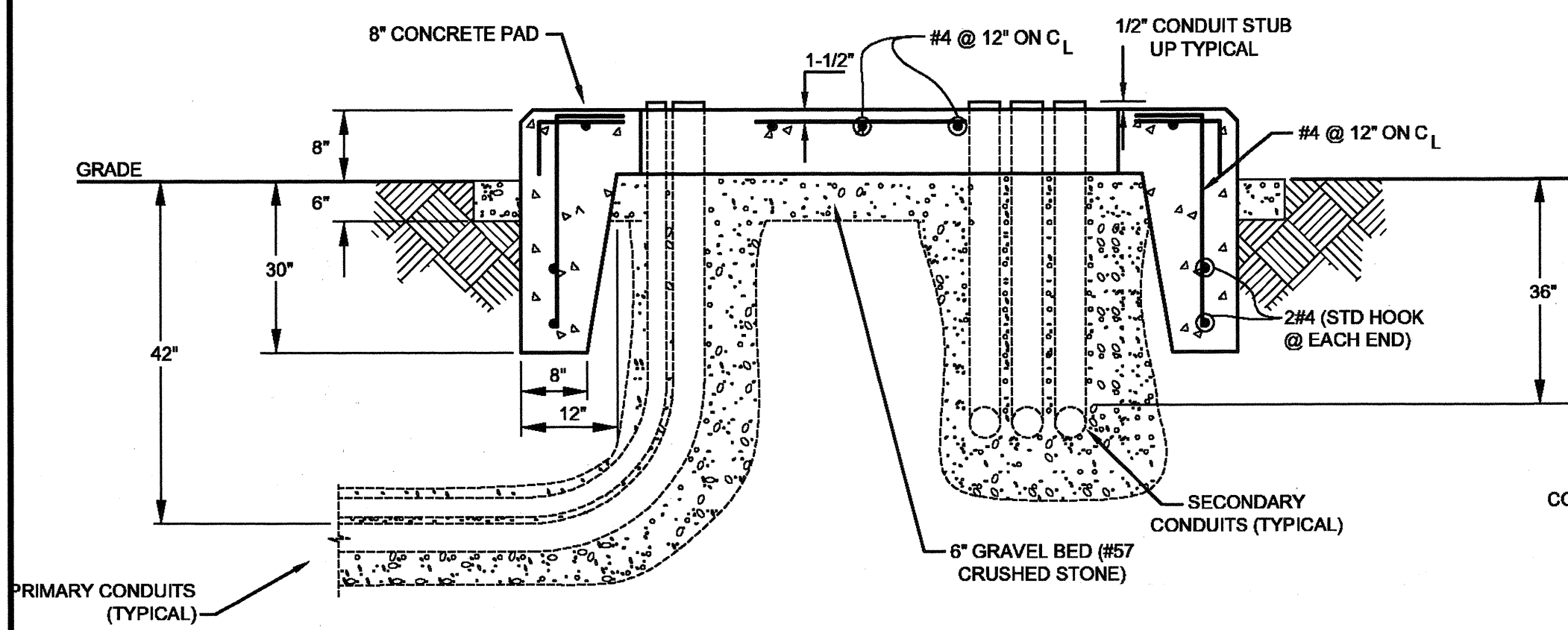


5 INTERCOM/SECURITY ACCESS RISER DIAGRAM (TYPICAL OF 2)
NOT TO SCALE

- NOTES:**
1. PROVIDE SURGE SUPPRESSION ON ALL PHONE IN AND PHONE OUT LINES.
 2. PROVIDE SURGE SUPPRESSION ON ALL LOW VOLTAGE POWER WIRING.
 3. PROVIDE 3/4" x 10' DRIVEN GROUND ROD AT EACH GATE LOCATION. GROUND EACH GATE OPERATOR AND INTERCOM/SECURITY PEDESTAL TO COMMON GROUND ROD WITH #12 AWG BARE COPPER WIRE IN 3/4" C.
 4. INSTALL ALL REVERSE AND AUTOMATIC EXIT LOOP WIRE. ROUTE IN PVC CONDUIT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
 5. PROVIDE 120V/20A CIRCUIT TO INTERCOM CALL STATION TRANSFORMER. MOUNT TRANSFORMER INSIDE ELECTRICAL ROOM IN BUILDING NEAREST THE TERMINAL LOCATION.
 6. PROVIDE AND INSTALL ALL CONDUIT/WIRING FOR BETWEEN OPERATORS, INTERCOM STATIONS, CONTROLLER, AND SECURITY SYSTEM PANEL AS REQUIRED.
 7. REFER TO SPECIFICATION SECTION 13701 FOR INTERCOM CALL STATION.
 8. REFER TO SPECIFICATION SECTION 02821 FOR SLIDE GATE.
 9. TYPICAL OF TWO (2) SYSTEMS. PT/GAC BUILDING - TWO ENTRY POINTS W/ TWO INTERCOM/SECURITY PEDESTALS. FILTER BUILDING - ONE ENTRY POINT W/ ONE INTERCOM/SECURITY PEDESTAL.

REVISIONS		REMARKS
NO.	BY	DATE

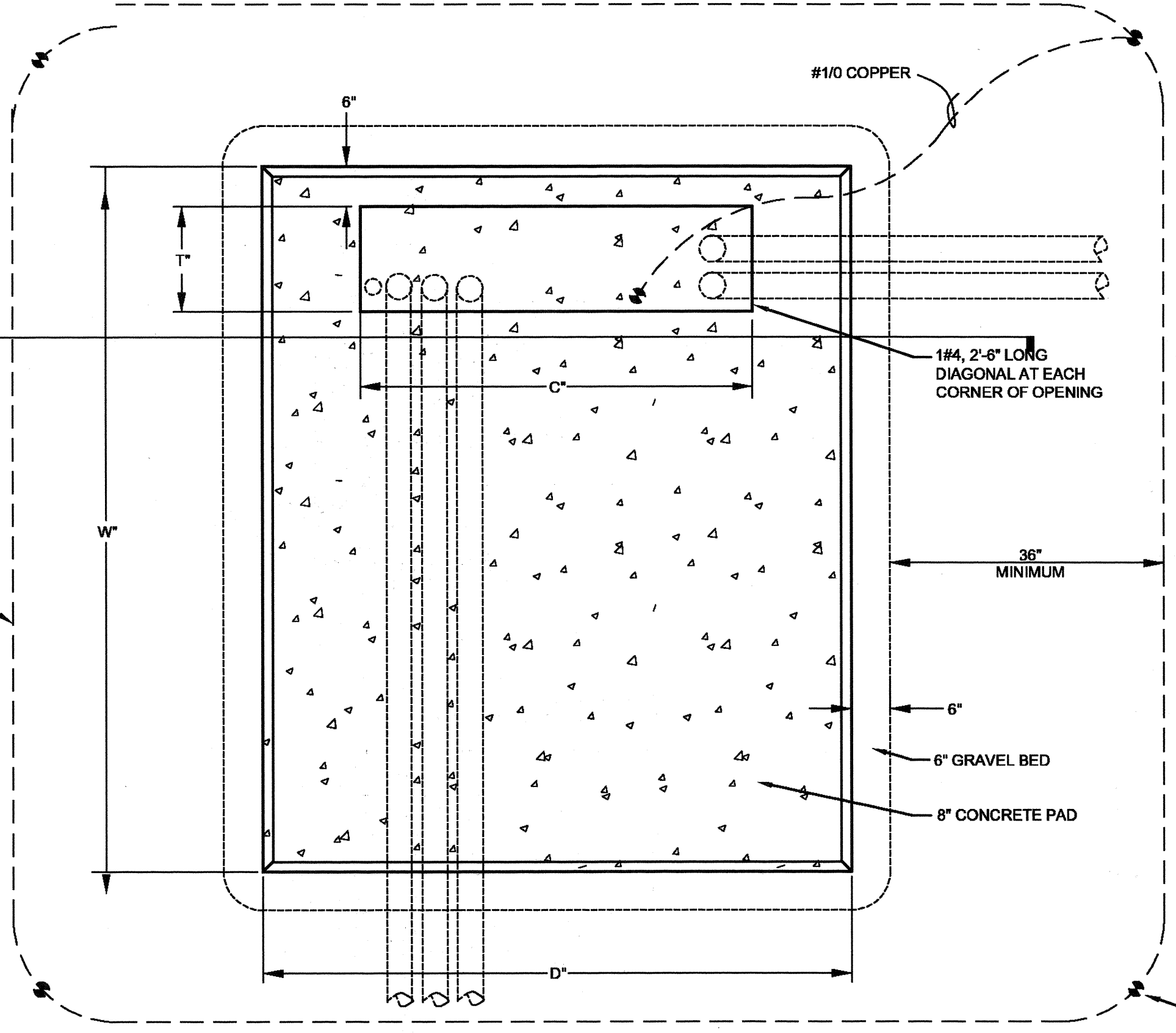
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1 SECTION
NOT TO SCALE

TRANSFORMER PAD FOUNDATION DIMENSIONS

KVA	W	D	C	T
75	5'-0"	7'-6"	4'-6"	16"
112	5'-0"	7'-6"	4'-6"	16"
150	5'-0"	7'-6"	4'-6"	16"
225	7'-0"	7'-6"	4'-6"	16"
300	7'-0"	7'-6"	4'-6"	16"
500	8'-0"	8'-0"	4'-6"	16"
750	9'-0"	9'-0"	5'-0"	16"
1000	9'-5"	7'-6"	3'-6"	16"
1500	9'-5"	7'-10"	3'-6"	16"



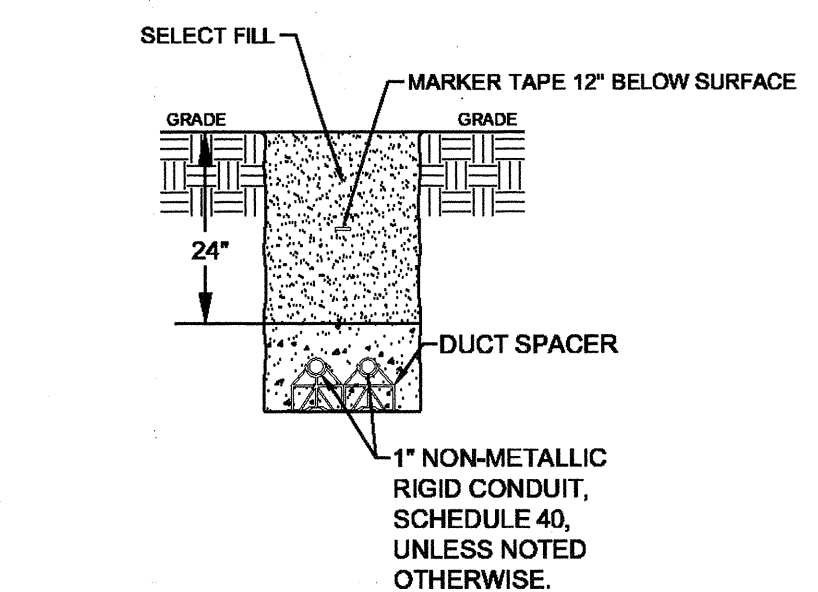
2 TRANSFORMER PAD DETAIL
NOT TO SCALE

TRANSFORMER PAD NOTES:

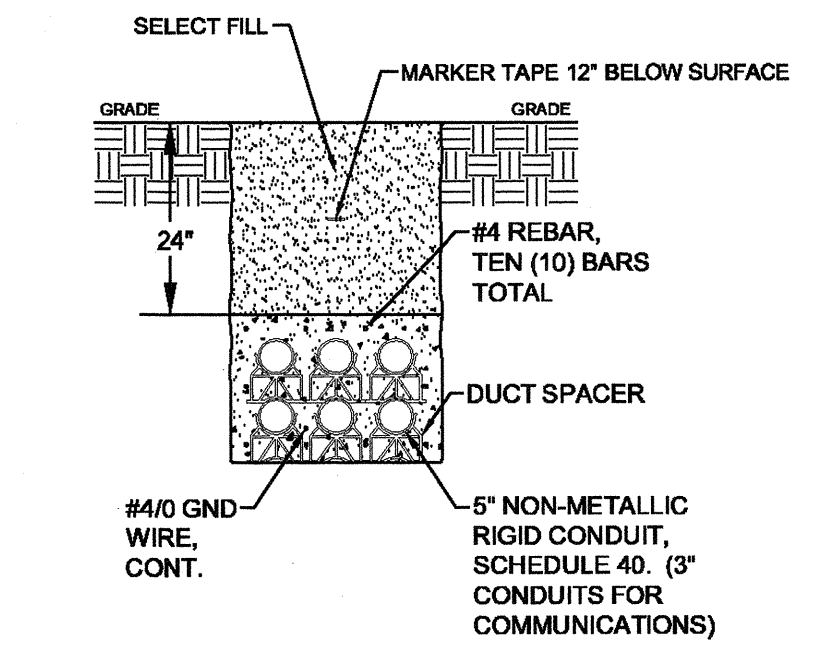
- TRANSFORMER PAD DETAIL ON THIS SHEET IS ASSOCIATED WITH THE TEMPORARY DUKE ENERGY SERVICE FOR THE PT/GAC BUILDING. SEE SHEET E-02-102 FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL COORDINATE WITH DUKE ENERGY ANY REQUIREMENTS FOR SECONDARY ROUGH-IN AND FINAL TRANSFORMER/TRANSFORMER PAD LOCATION ON SITE.
- TRANSFORMER PAD WILL BE A SOLID BLOCK OF CONCRETE WITH DIMENSIONS AS SHOWN, REINFORCED WITH STEEL RODS OR EQUIVALENT, ALL OF WHICH SHALL BE SOLIDLY WELDED TOGETHER FOR A FIRM AND STRUCTURAL FOUNDATION. PAD SHALL BE POURED ENTIRELY ON SITE, USING CONCRETE OF 1-2-4 MIX OR 3000 P.S.I. STRENGTH (6 BAG MIX). TOP OUTSIDE EDGES OF PAD WILL HAVE 1/2" BEVEL, AND ALL SURFACES WILL BE TROWLED TO A SEMI-SMOOTH FINISH. POURING OR PLACING OF THE PAD WILL BE DONE AFTER THE NECESSARY CONDUITS ARE IN PLACE AND GROUND HAS BEEN MECHANICALLY TAMPED.
- COORDINATE PAD DIMENSIONS WITH DUKE ENERGY PRIOR TO FORMING AND MAKE NECESSARY MODIFICATIONS TO SUIT UTILITY CO..
- CAP BOTH ENDS OF SPARE PRIMARY DUCT.
- ANCHOR TRANSFORMER TO PAD WITH 3/8" DIAMETER STAINLESS STEEL ANCHOR BOLTS.
- ALL GROUNDING CONNECTIONS EXTERNAL TO TRANSFORMER ENCLOSURE SHALL BE EXOTHERMIC WELD.
- DIMENSIONS ARE INTENDED TO BE 12" LARGER THAN TRANSFORMER IN BOTH DIRECTIONS.
- DISCONNECT X/O BOND FROM TRANSFORMER NEUTRAL TO FRAME.

PULL BOX NOTES:

- CONCRETE: 28 DAY COMPRESSIVE STRENGTH $f_c = 4,500$ PSI.
- REINFORCING: ASTM A-615, GRADE 60.
- JOINT SEALANT: BUTYL RUBBER SS-S-00210.
- DESIGNED FOR MAXIMUM SOIL COVER OF 5'-0" ABOVE BOX.
- SUPPORTS AN H20 LOADING AS INDICATED BY AASHTO.

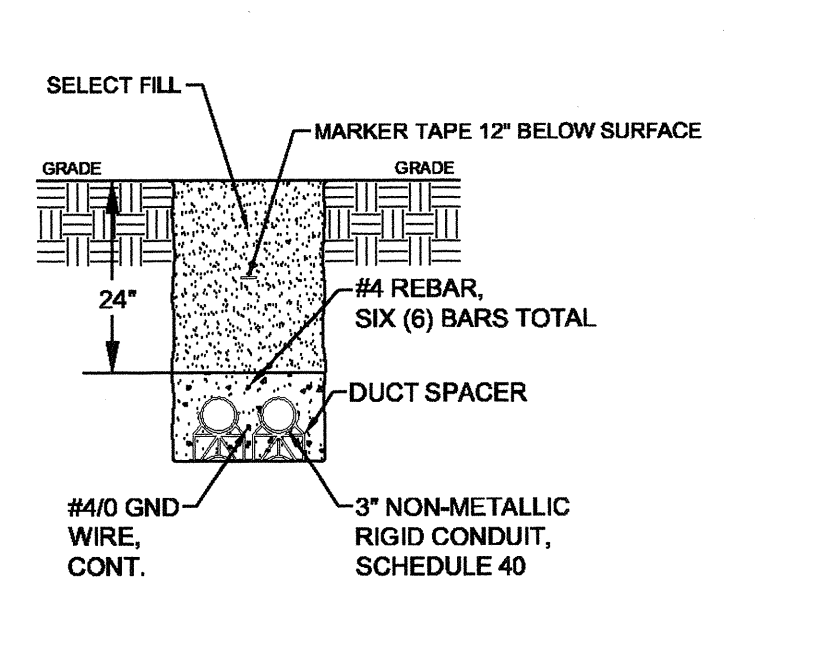


3 UG LIGHTING DUCTBANK DETAIL
SCALE: 1/2"=1'-0"



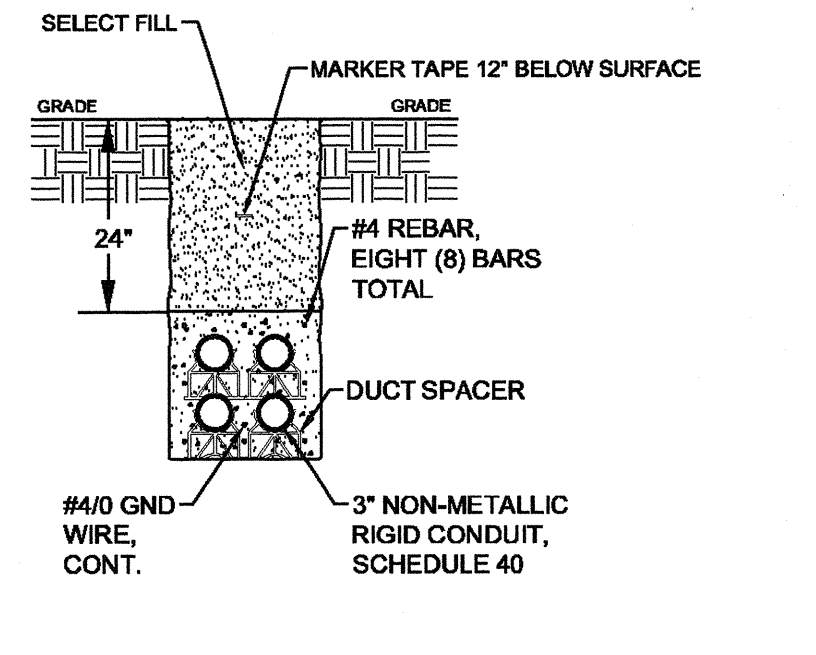
4 UG ELECTRICAL DUCTBANK DETAIL
SCALE: 1/2"=1'-0"

SAME DETAIL FOR COMMUNICATIONS DUCTBANKS CONTAINING SIX (6) 3" CONDUITS.



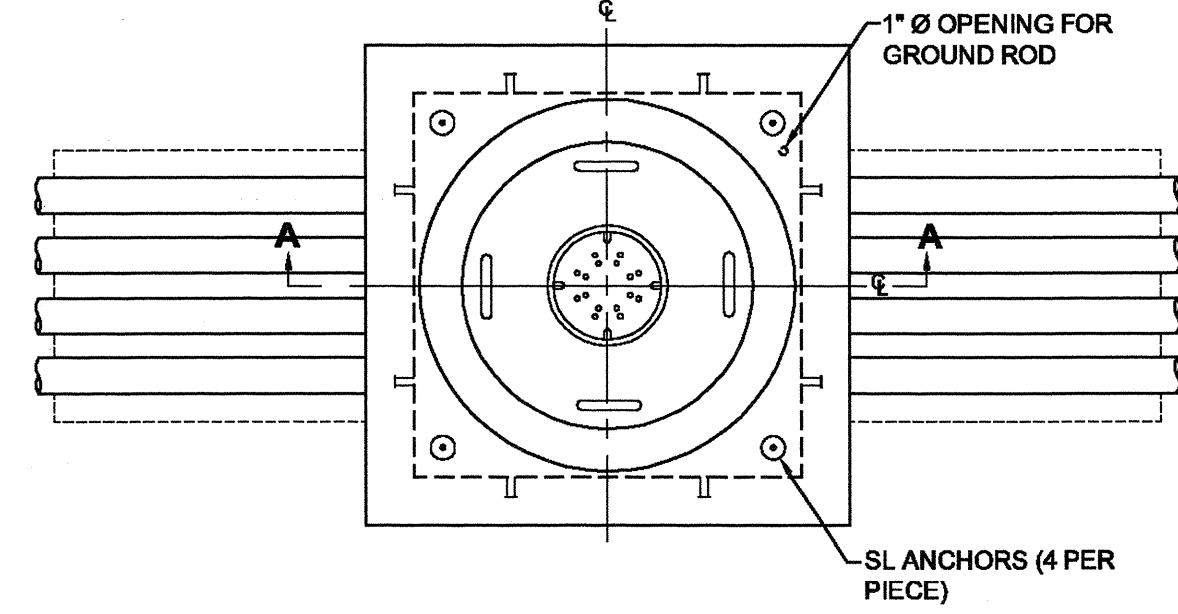
5 UG COMMUNICATIONS DUCTBANK DETAIL
SCALE: 1/2"=1'-0"

TYPICAL FOR TWO (2) 3" CONDUITS.

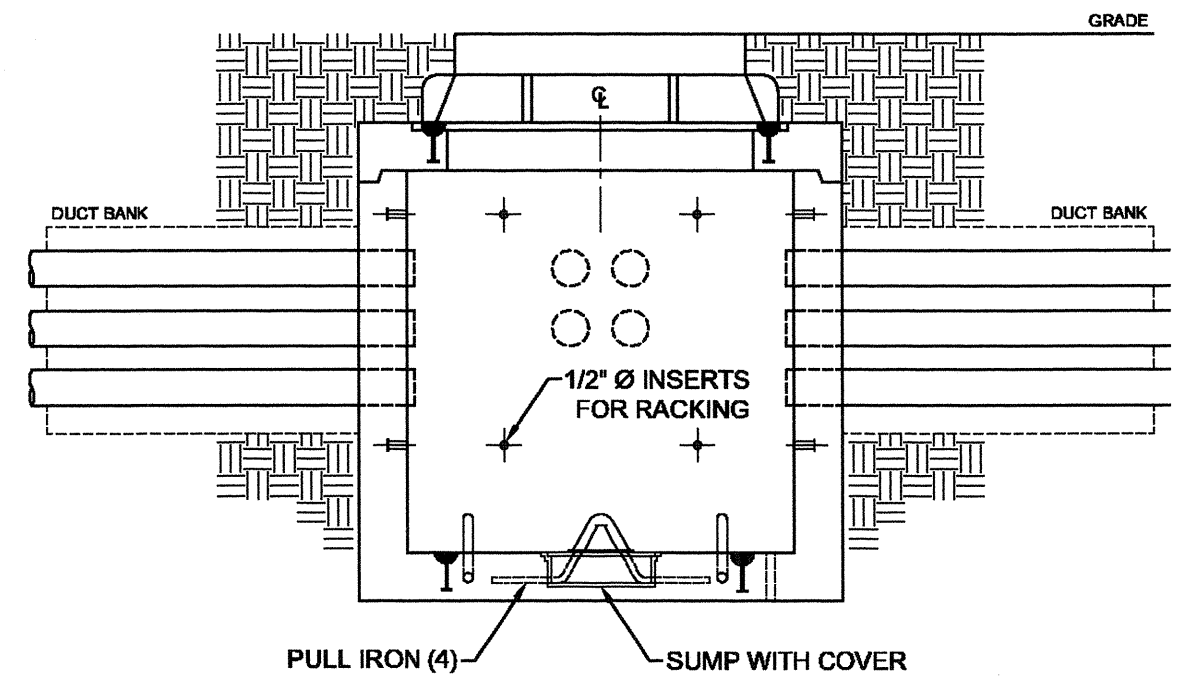


6 UG COMMUNICATIONS DUCTBANK DETAIL
SCALE: 1/2"=1'-0"

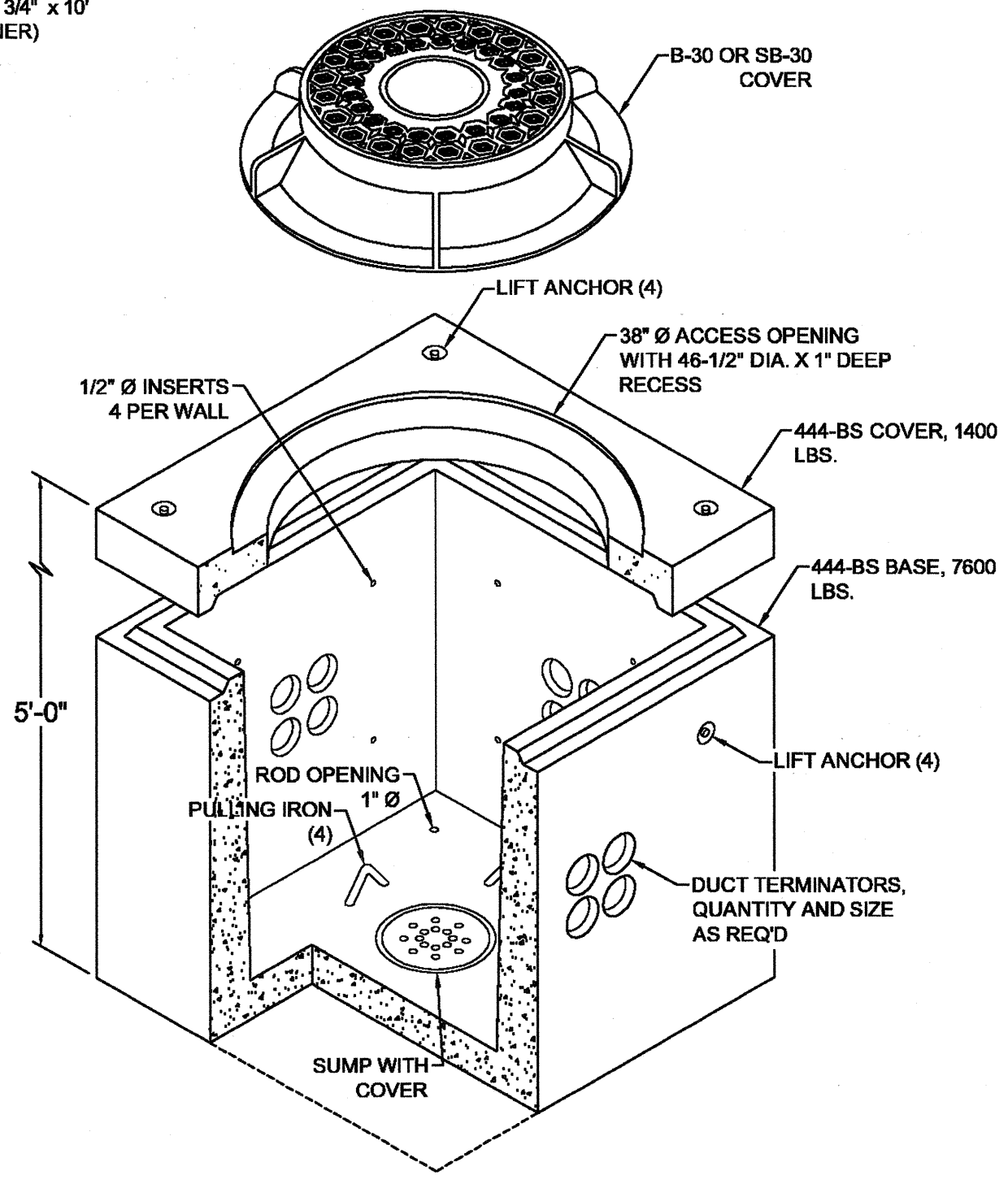
TYPICAL FOR FOUR (4) 3" CONDUITS.



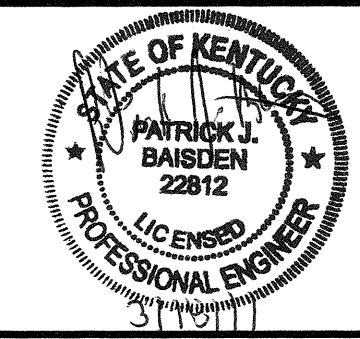
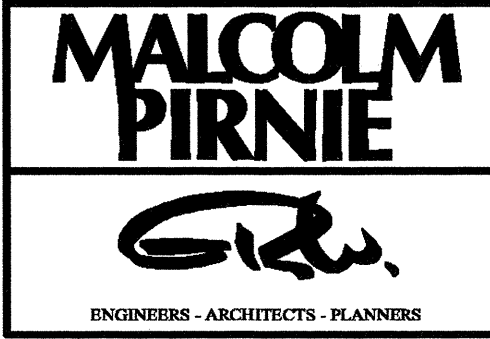
7 PULLBOX PLAN VIEW
SCALE: 1/2"=1'-0"



8 PULLBOX SECTION A-A
SCALE: 1/2"=1'-0"



9 PULLBOX ISOMETRIC VIEW
SCALE: 1/2"=1'-0"



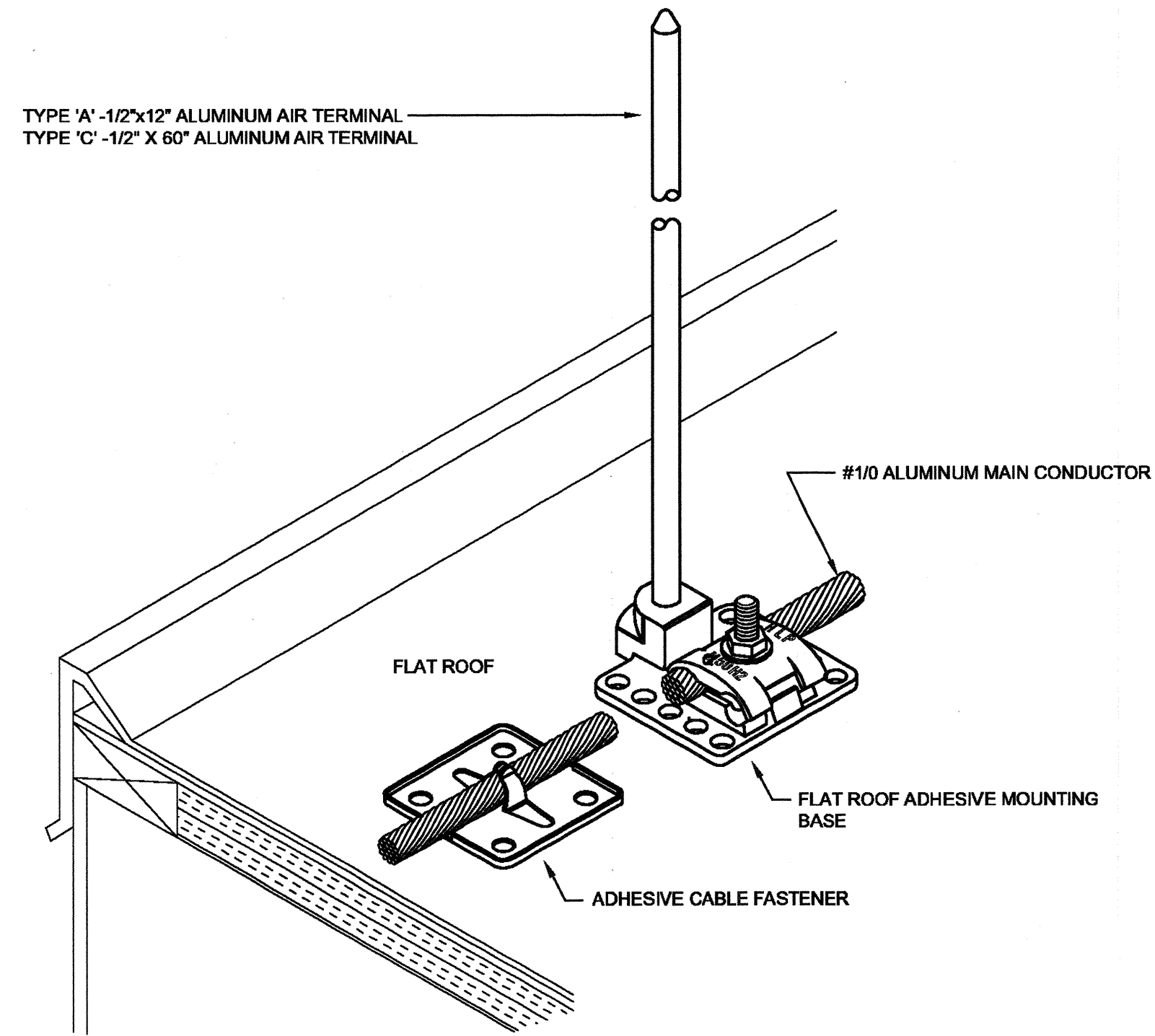
NO.		BY	DATE	REVISIONS	REMARKS

DES: PJB
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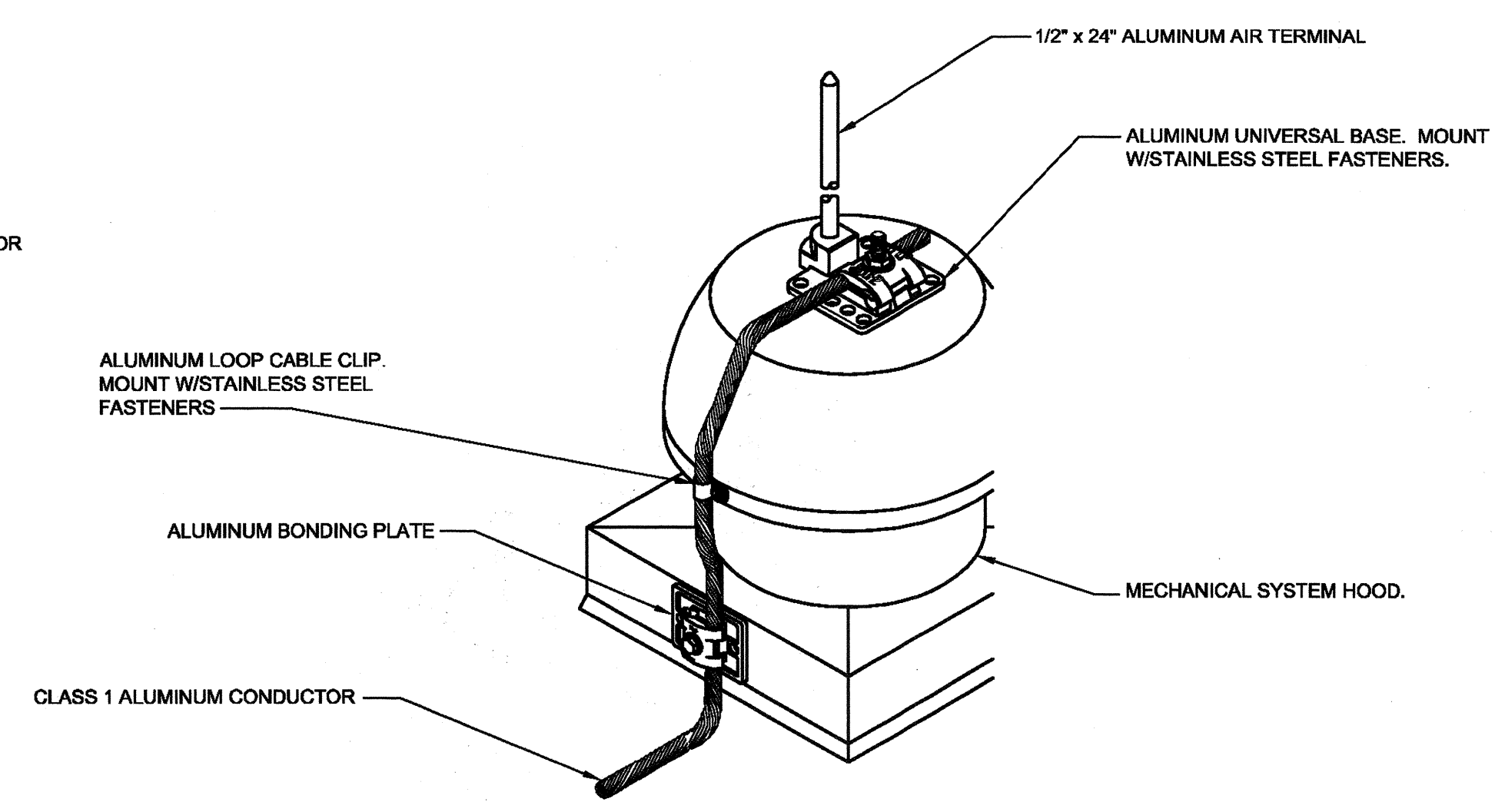
NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ELECTRICAL
ELECTRICAL DETAILS III
SCALE: NOT TO SCALE

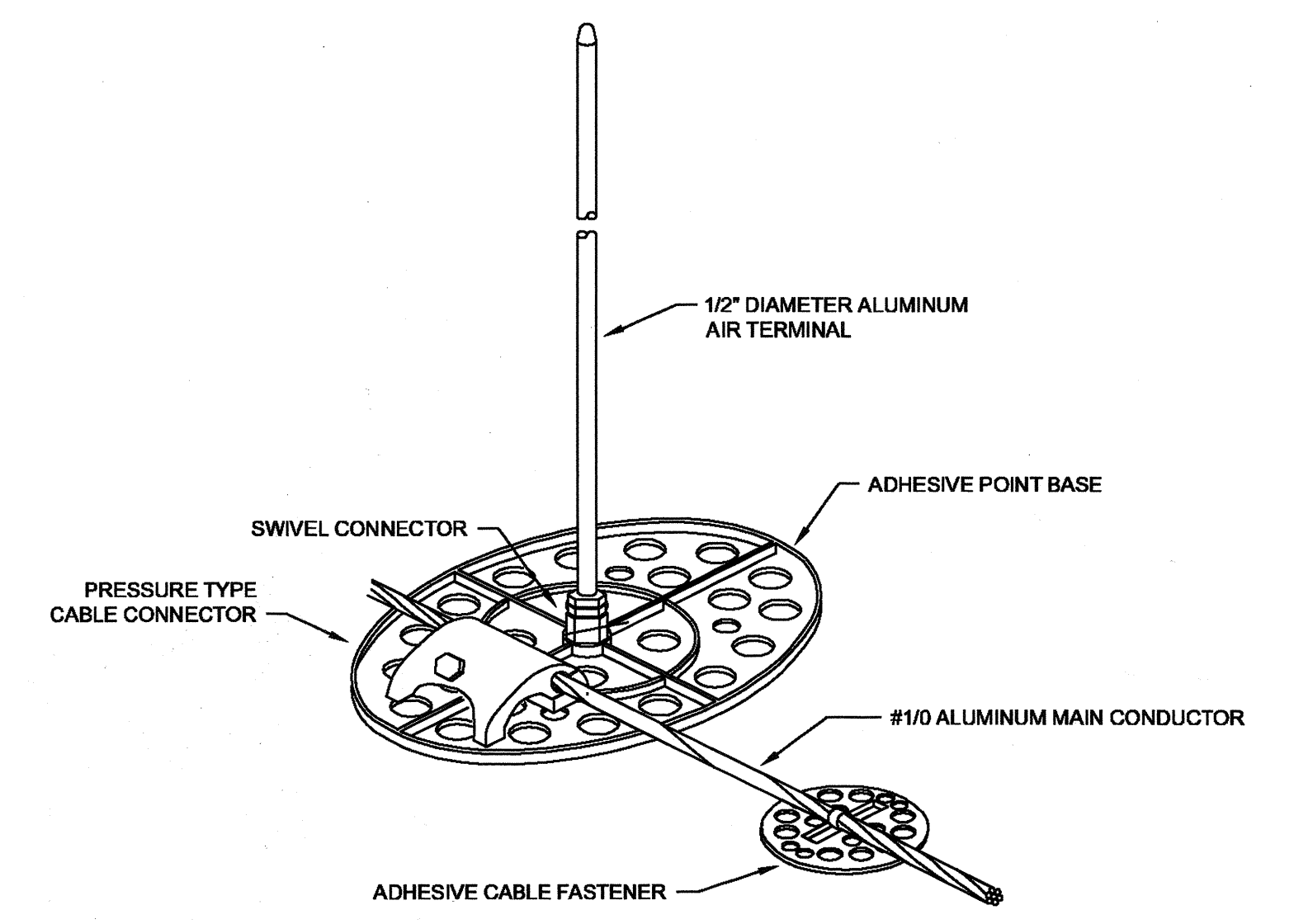
ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: E-10-503
CAD REF. NO.: 3789-E-10-503



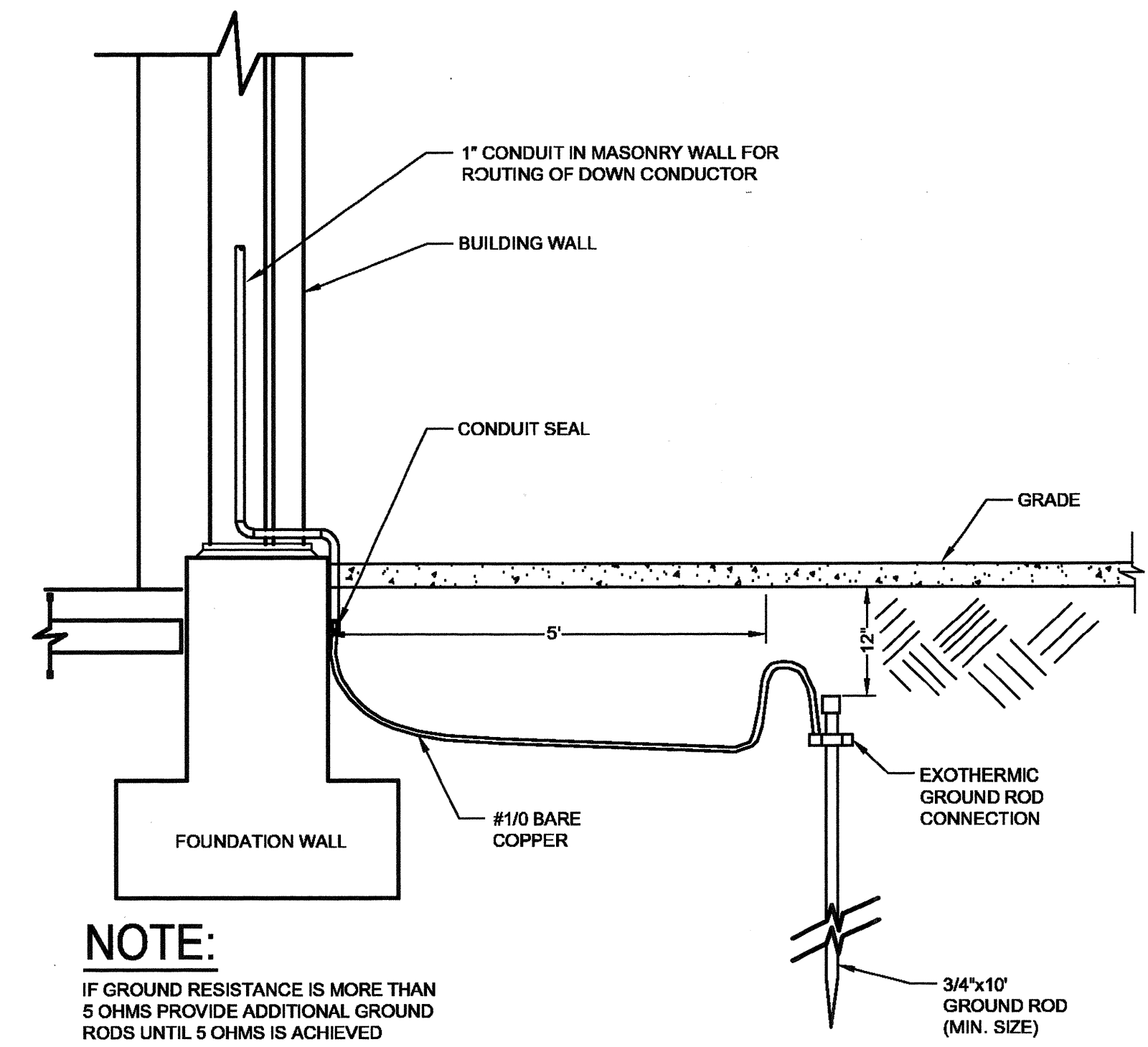
1 TYPICAL TYPE 'A' AND 'C' AIR TERMINAL DETAIL
NOT TO SCALE



2 MECHANICAL SYSTEM AIR TERMINAL "B" DETAIL
NOT TO SCALE

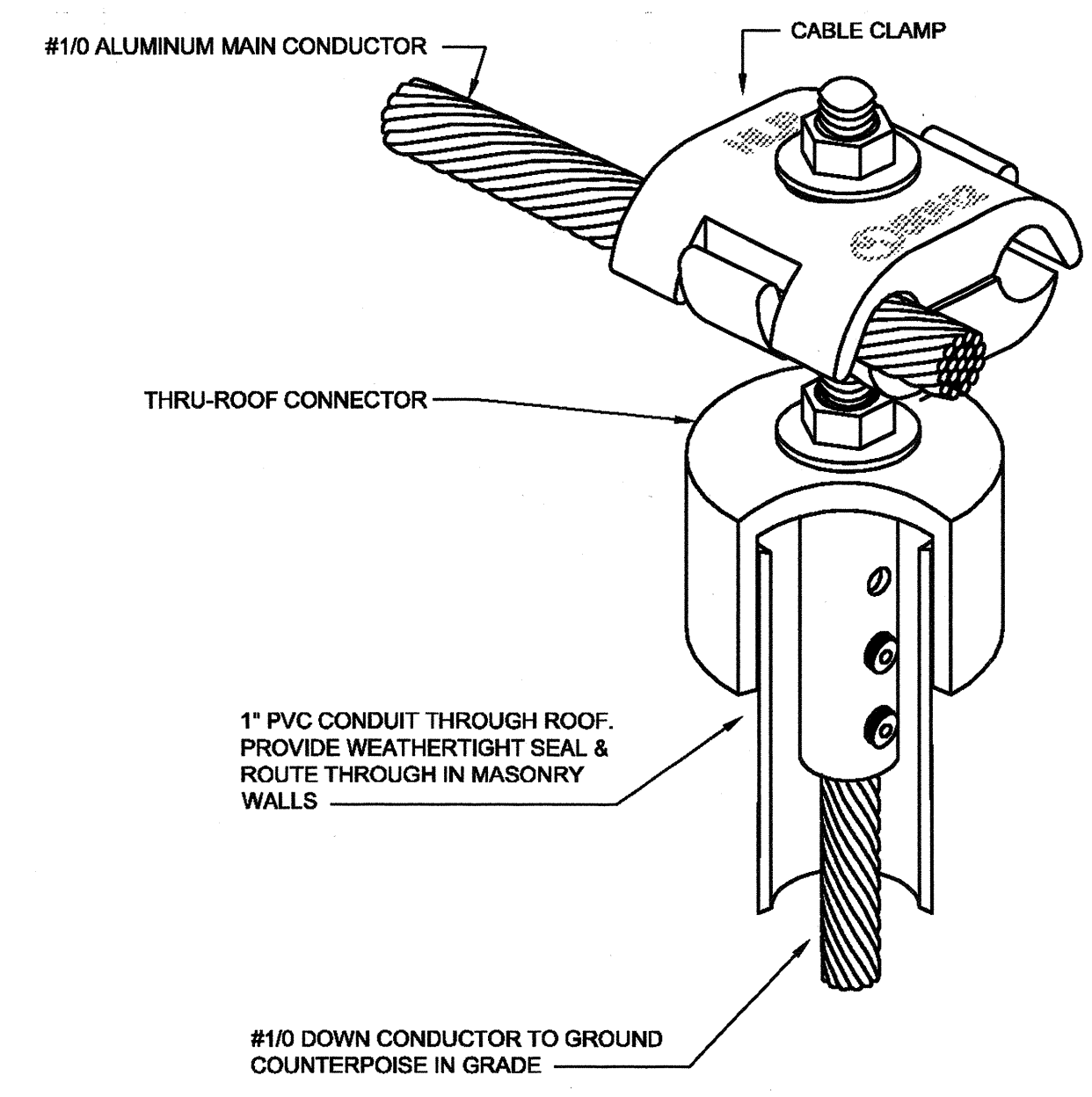


3 TYPICAL TYPE 'D' AIR TERMINAL DETAIL
NOT TO SCALE

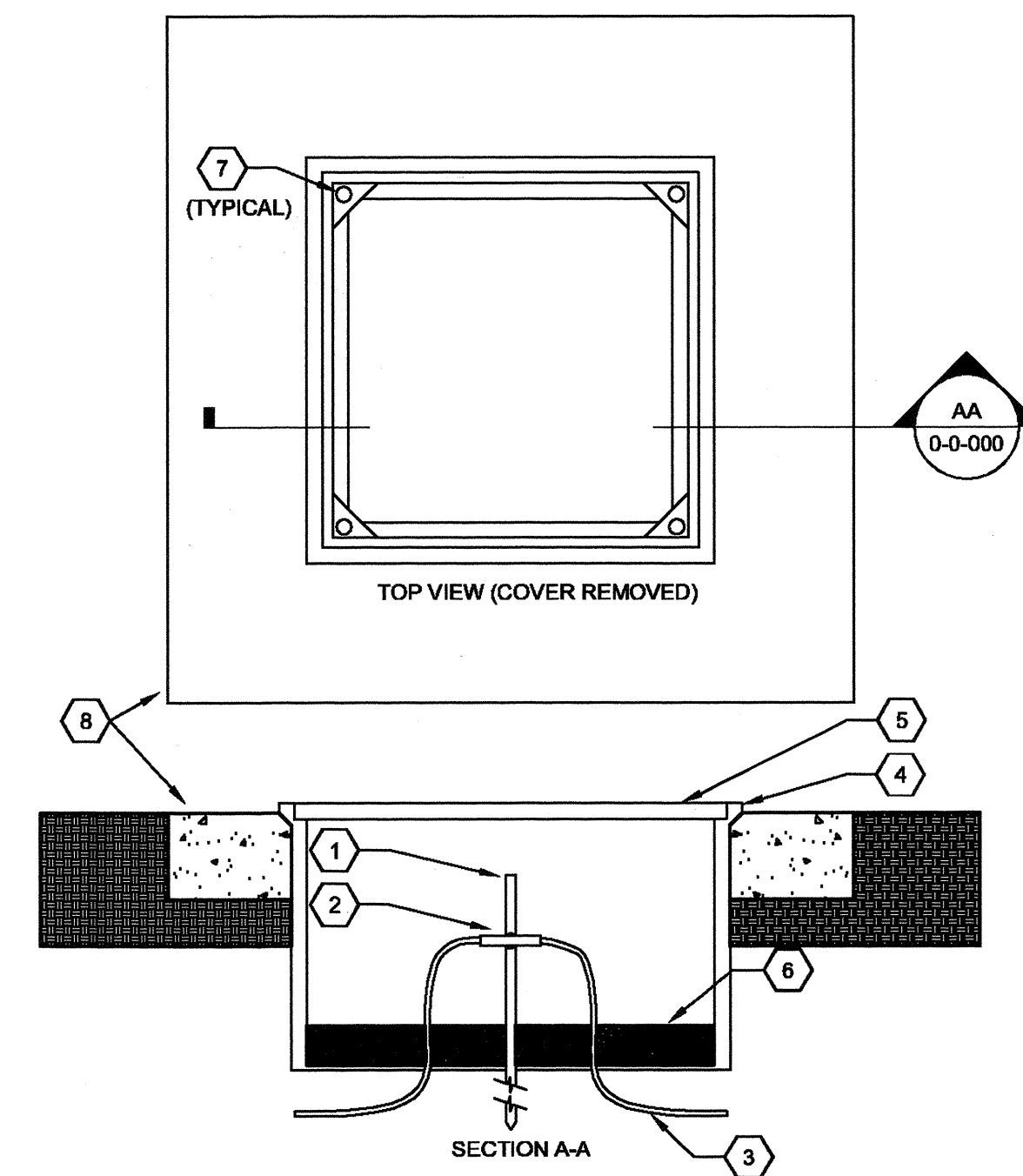


NOTE:
IF GROUND RESISTANCE IS MORE THAN 5 OHMS PROVIDE ADDITIONAL GROUND RODS UNTIL 5 OHMS IS ACHIEVED

4 GROUND ROD INSTALLATION DETAIL
NOT TO SCALE



5 ROOF PENETRATION DETAIL
NOT TO SCALE



MATERIAL LIST

1. GROUND ROD
2. WELD
3. GROUNDING CONDUCTOR BARE COPPER
4. POLYMER CONCRETE FIBERGLASS REINFORCED BOX
5. COVER FOR ABOVE BOX
6. GRAVEL OR CRUSHED STONE
7. TAMPERPROOF FASTENERS FOR LID
8. 3000 PSI CONCRETE IAW MANUFACTURER RECOMMENDATIONS

6 GROUND ROD TEST WELL DETAIL
NOT TO SCALE

• ONE REQUIRED AT EACH BUILDING WHERE MAIN GROUNDING ELECTRODE CONDUCTOR GOES TO SERVICE EQUIPMENT.

User: BOND Spec: PIRNIE STANDARD File: J:\3768-NKWD TAYLOR MILL WORKING DRAWINGS\DESIGN DRAWINGS\ELEC\3768-E-10-504.DWG Scale: 1:38 Saved Date: 1/16/2010 Time: 16:58 Plot Date: Bond, Jeff, 3/10/2011, 08:32 Layout: E-10-504

MALCOLM PIRNIE
ENGINEERS - ARCHITECTS - PLANNERS

STATE OF KENTUCKY
PATRICK J. BAIRDEN
22812
LICENSED PROFESSIONAL ENGINEER

REVISIONS			
NO.	BY	DATE	REMARKS

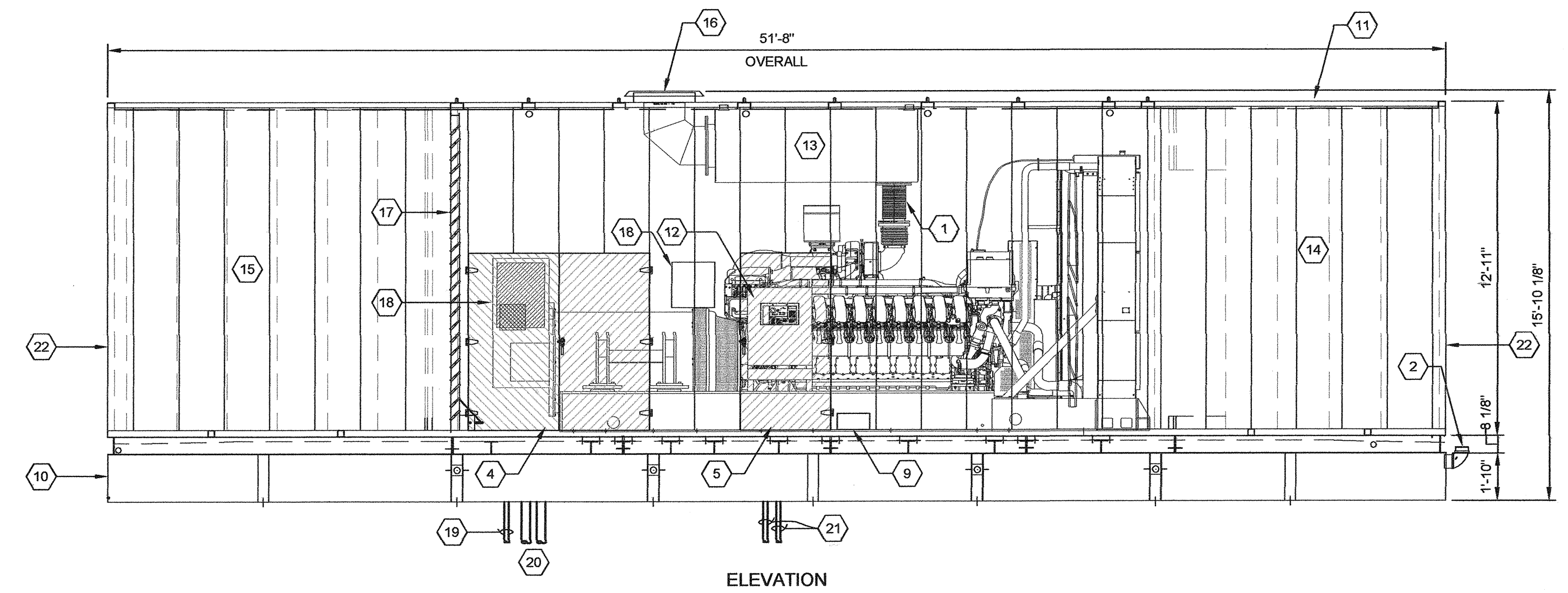
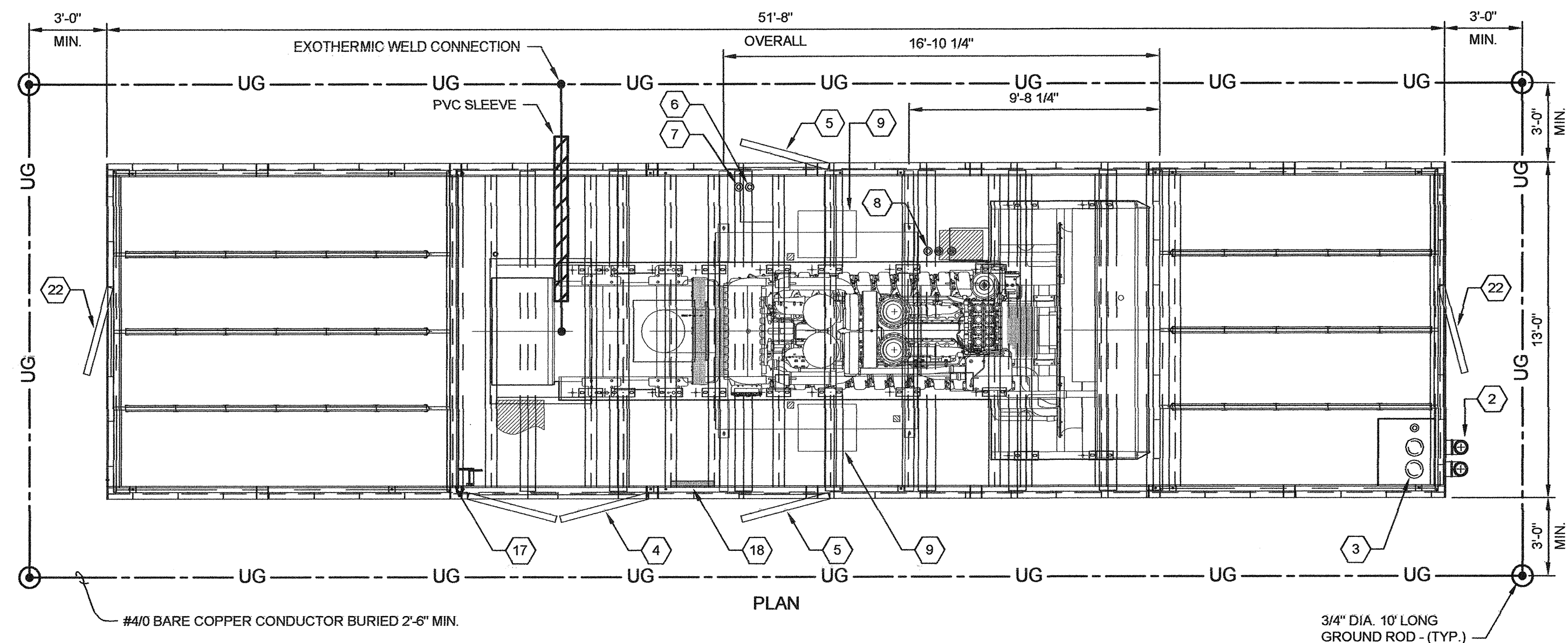
DES PJB
DWN DLM
CKD PJB

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ELECTRICAL
ELECTRICAL DETAILS IV
SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: E-10-504
CAD REF. NO.: 3789-E-10-504

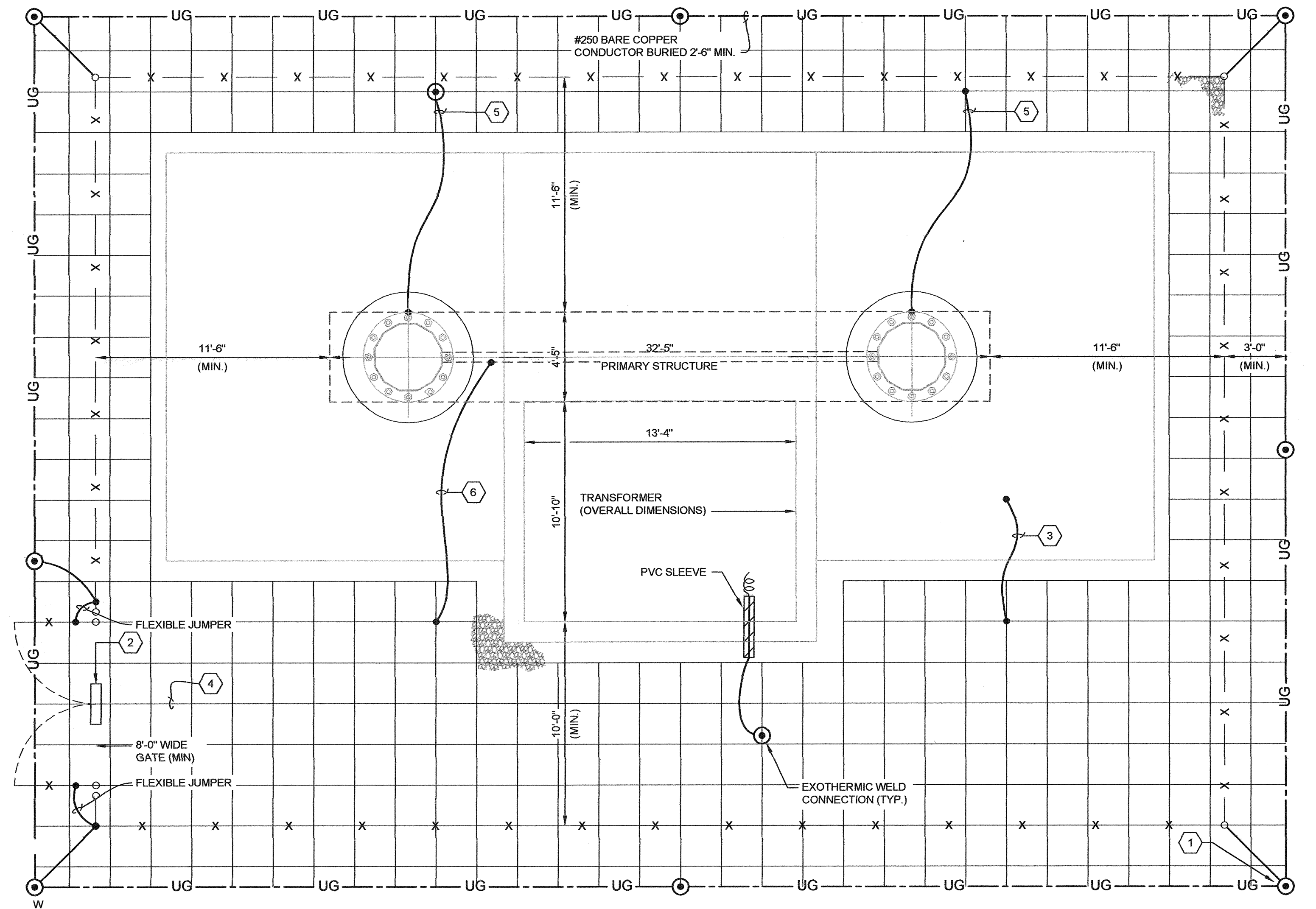
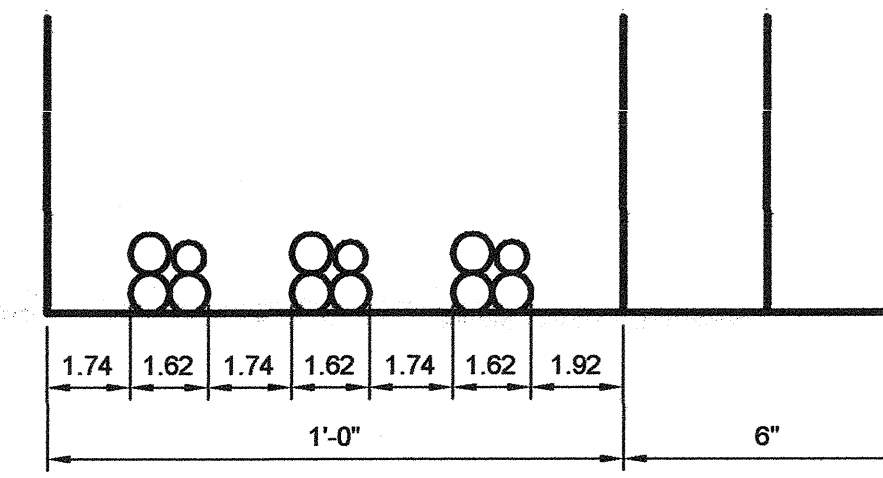
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KEYNOTES:

- | | |
|---|--|
| 1. FLEXIBLE EXHAUST CONNECTION. | 12. GENERATOR CONTROL PANEL. |
| 2. EMERGENCY PRESSURE RELIEF VENT. | 13. INTERNAL SUPER CRITICAL SILENCER. |
| 3. NORMAL VENT WITH RISER AND MUSHROOM CAP. | 14. AIR DISCHARGE PLENUM. |
| 4. DOUBLE DOOR. | 15. AIR INTAKE PLENUM. |
| 5. SINGLE DOOR (TYP. BOTH SIDES) | 16. RAIN CAP ON EXHAUST. |
| 6. LOCKABLE/SEALED FILL CAP WITH RISER. | 17. MOTORIZED INTAKE LOUVERS. |
| 7. MECHANICAL FUEL GAUGE. | 18. DISTRIBUTION PANELBOARD. |
| 8. LOW LEVEL SWITCH. | 19. THREE PHASE FEEDER TO PANELBOARD. |
| 9. BATTERY RACK. | 20. 2400V POWER CONDUITS TO SWITCHGEAR. |
| 10. 7000 GALLON SUB-BASE FUEL TANK. | 21. CONTROL CONDUIT TO PLC AND PARALLELING GEAR. |
| 11. SOUND ATTENUATED WEATHER ENCLOSURE. | 22. SINGLE DOOR (TYP. BOTH ENDS). |

1 STANDBY GENERATOR
NOT TO SCALE



KEYNOTES:

- GROUND ROD 3/4" DIAMETER, AT LEAST 10' LONG (TYPICAL). ADD ADDITIONAL GROUND RODS IF REQUIRED TO ACHIEVE THE REQUIRED RESISTANCE.
- PROVIDE SAFETY SIGNS ON EACH SIDE OF THE FENCE AND ON THE DOOR.
- TIE REBARS WITH GROUND MAT.
- 24" X 24" WIRE MAT CONSISTS OF COPPER CLAD STEEL WIRES #6AWG BURIED 18" DEEP.
- BOND PRIMARY STRUCTURE STEEL TO GROUND MAT.
- BOND SURGE ARRESTORS AND SWITCHES TO GROUND MAT.

GENERAL NOTES:

- LEAVE 5'-0" OF GROUNDING CONDUCTOR PIGTAIL FOR CONNECTION TO TRANSFORMER.
- COORDINATE THE PAD DIMENSIONS WITH THE UTILITY AND THE TRANSFORMER MANUFACTURER AND MAKE NECESSARY MODIFICATIONS TO SUIT.
- TRANSFORMER PAD SHOWN IS 12" LARGER THAN THE TRANSFORMER DIMENSIONS IN BOTH DIRECTIONS.
- GROUND EVERY OTHER FENCE POLE.

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REVISIONS			
NO.	BY	DATE	REMARKS

DES: TMH
DWN: TEW
CKD: TMH

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ELECTRICAL
ELECTRICAL DETAILS V

SCALE: NOT TO SCALE

ISSUED STATUS: BID SET

DATE: MARCH, 2011

SHEET: E-10-505

CAD REF. NO.: CDP-E-10-505

GENERAL NOTES:

OTHER ARRANGEMENTS OF BUS CONDUCTORS MAY BE USED PROVIDED THE SIDES ARE MOUNTED PARALLEL TO THE BOTTOM OF ENCLOSURE, AND THE REQUIRED CLEARANCES AND ACCESSIBILITY ARE RETAINED FOR REPLACEMENT OF THE TRANSFORMERS AS NECESSARY.

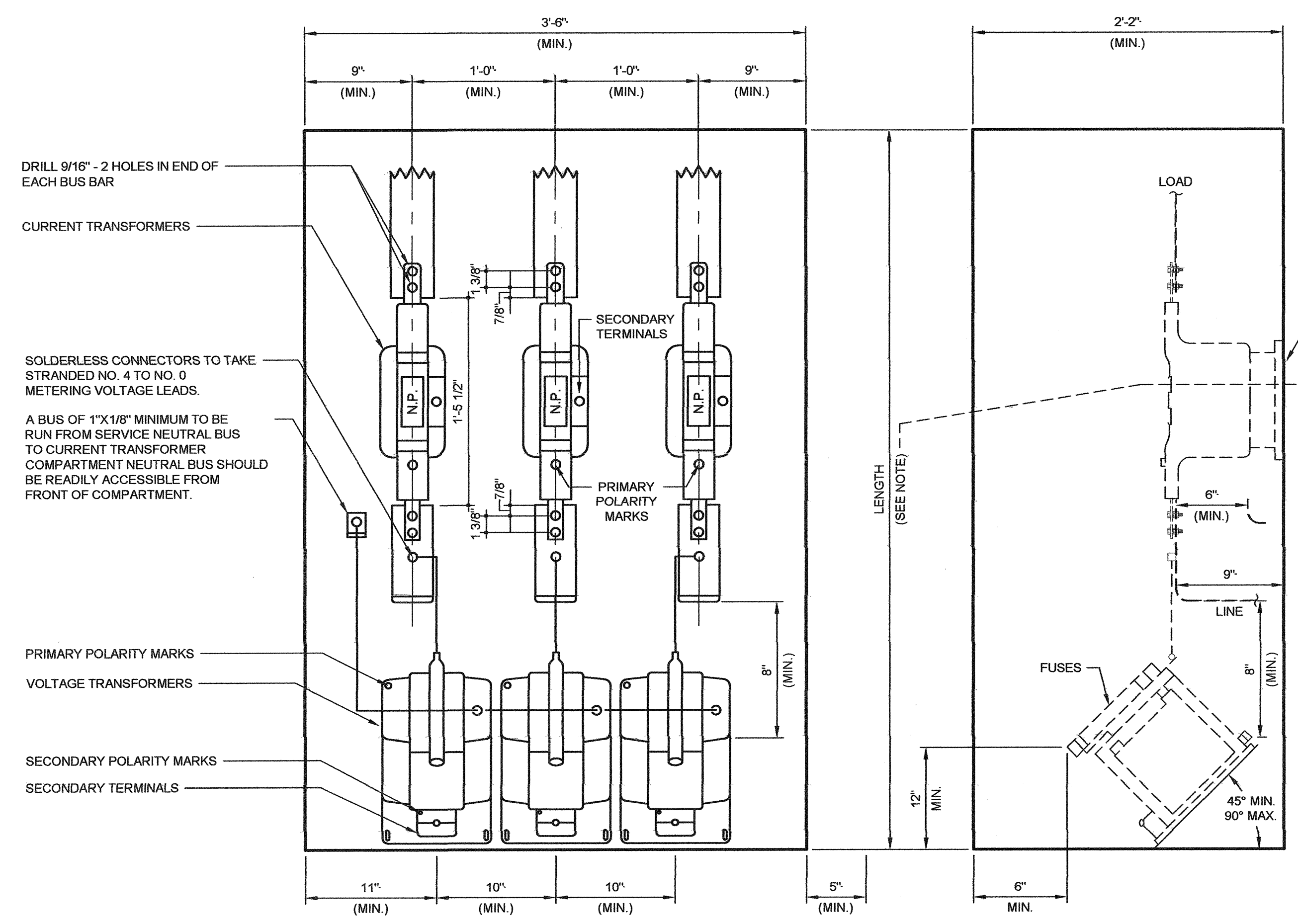
A BUS TAP CONNECTION MUST BE BROUGHT INTO ENCLOSURE FOR METERING CONNECTIONS.

SEE SECTION 300-20 OF THE NATIONAL ELECTRICAL CODE FOR PROVISIONS REGARDING INDUCTION HEATING.

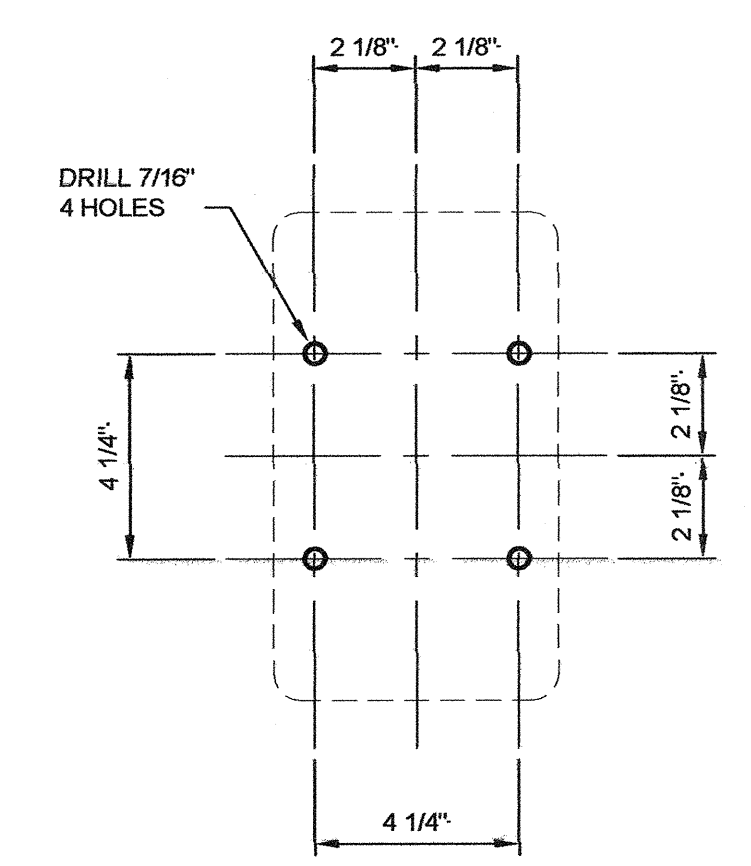
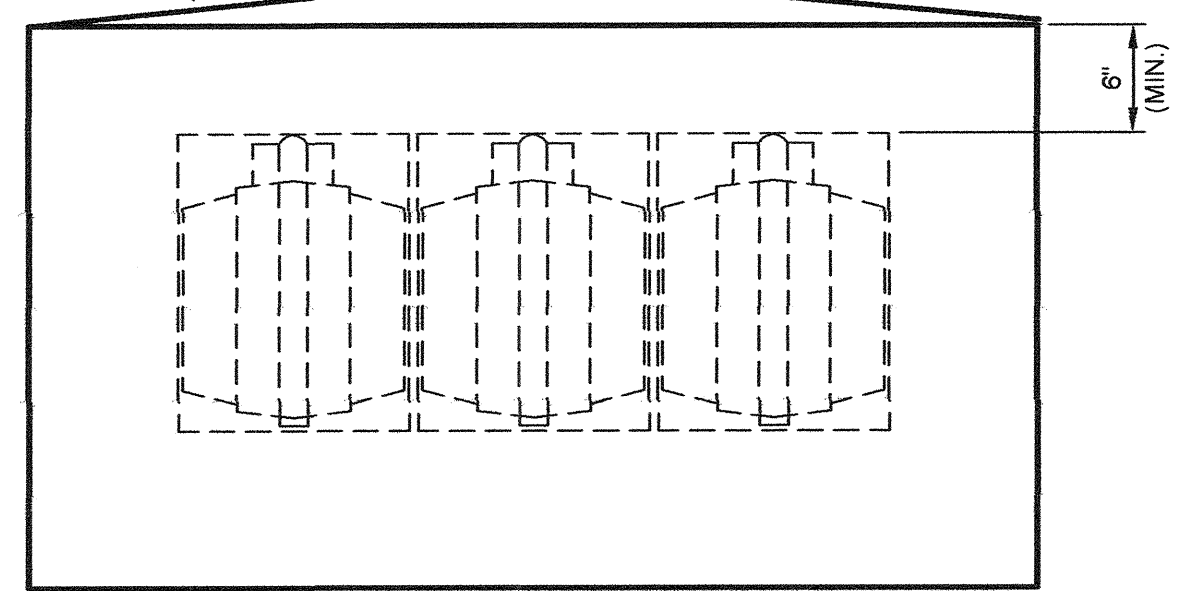
ENCLOSURE, BUS BARS, AND SOLDERLESS CONNECTORS FURNISHED AND INSTALLED BY CONTRACTOR. CURRENT AND VOLTAGE TRANSFORMERS ARE FURNISHED BY POWER COMPANY AND INSTALLED BY CONTRACTOR. THE CONTRACTOR SHALL FURNISH JUMPERS AND MAKE THE PRIMARY CONNECTIONS TO THE VOLTAGE TRANSFORMERS.

DEFINITE LENGTH IS NOT SHOWN BECAUSE OF VARYING REQUIREMENTS FOR BUSSING.

SEE DRAWING E-00-601 AND E-05-104 FOR ADDITIONAL INFORMATION.

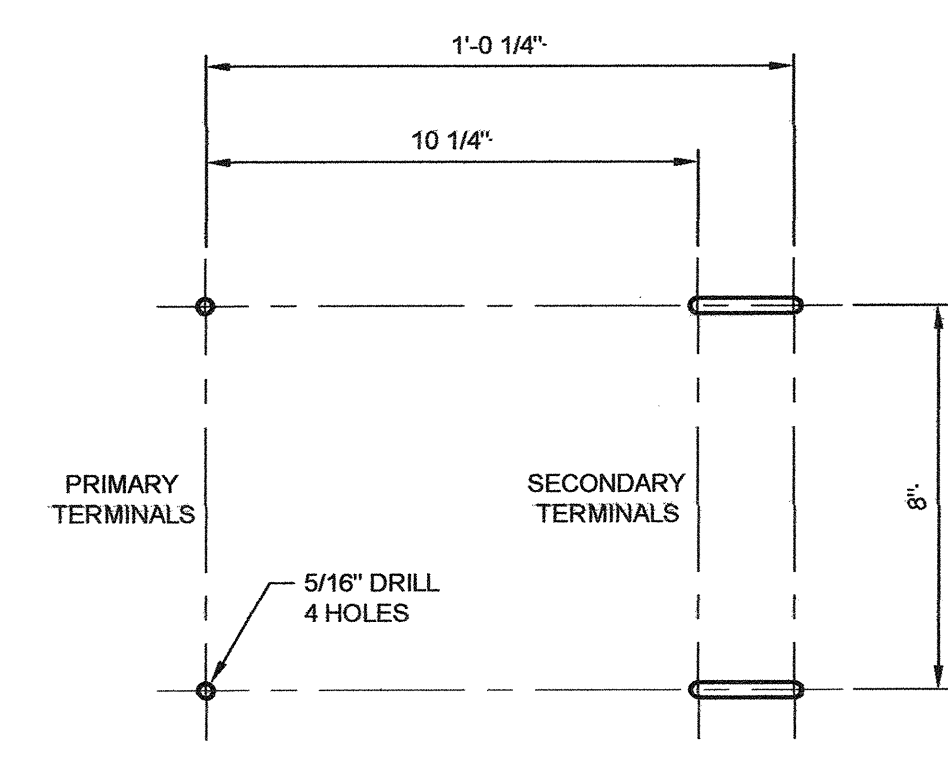


A COMPLETE INSTRUMENT TRANSFORMER ENCLOSURE WITH SEALABLE HINGED DOORS SHALL BE PROVIDED BY CONTRACTOR. ENCLOSURE SHALL BE EQUIPPED WITH A VAULT TYPE HANDLE WITH A THREE-POINT CATCH AND AT LEAST A 1/2-INCH DIAMETER OPENING FOR A PAD-LOCK OR SEE DUKE ENERGY DRAWING NO. 20045-B FOR SEALING REQUIREMENT OPTIONS. IF SIDES, TOPS, BOTTOM OR BACK OF ENCLOSURE ARE REMOVABLE AND ACCESSIBLE, FACILITIES SHALL BE PROVIDED FOR SEALING THEM WITH PAD-LOCKS SEALS. A SIGN PRINTED IN RED, WITH THE WORDING "DANGER-HIGH-VOLTAGE", SHALL BE PAINTED ON OR PERMANENTLY ATTACHED TO THE OUTSIDE OF ONE OF THE DOORS OF THE INSTRUMENT TRANSFORMER COMPARTMENT.



DETAIL OF DRILLING FOR CURRENT TRANSFORMER BASE TO TAKE G.E. TYPE JKM-5 AND WEST TYPE CT-15 CURRENT TRANSFORMER

NOT TO SCALE



DETAIL OF DRILLING FOR VOLTAGE TRANSFORMERS

NOT TO SCALE

CURRENT/VOLTAGE TRANSFORMER CABINET

SPACE REQUIREMENTS FOR CURRENT AND VOLTAGE TRANSFORMERS (42" WIDE)

User: TOW Spec: PIRNIE STANDARD File: I:\PROJECTS\10010 - NWWD TAYLOR MILL WTP\ACAD\INFO_EXCHANGE_PUBLIC_FOLDER\ELEC-CDP\CDP-E-10-506.DWG Scale: 1:1 Saved Date: 3/16/2011 Time: 1:34 PM Plot Date: Tom Weber: 3/16/2011 1:34 PM Layout: E-10-506

0 1/2 1

DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

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3/16/11

REVISIONS			
NO.	BY	DATE	REMARKS

DES SKD

DWN TEW

CKD TMH

NORTHERN KENTUCKY WATER DISTRICT

TAYLOR MILL WATER TREATMENT PLANT

ADVANCED TREATMENT IMPROVEMENTS

ELECTRICAL

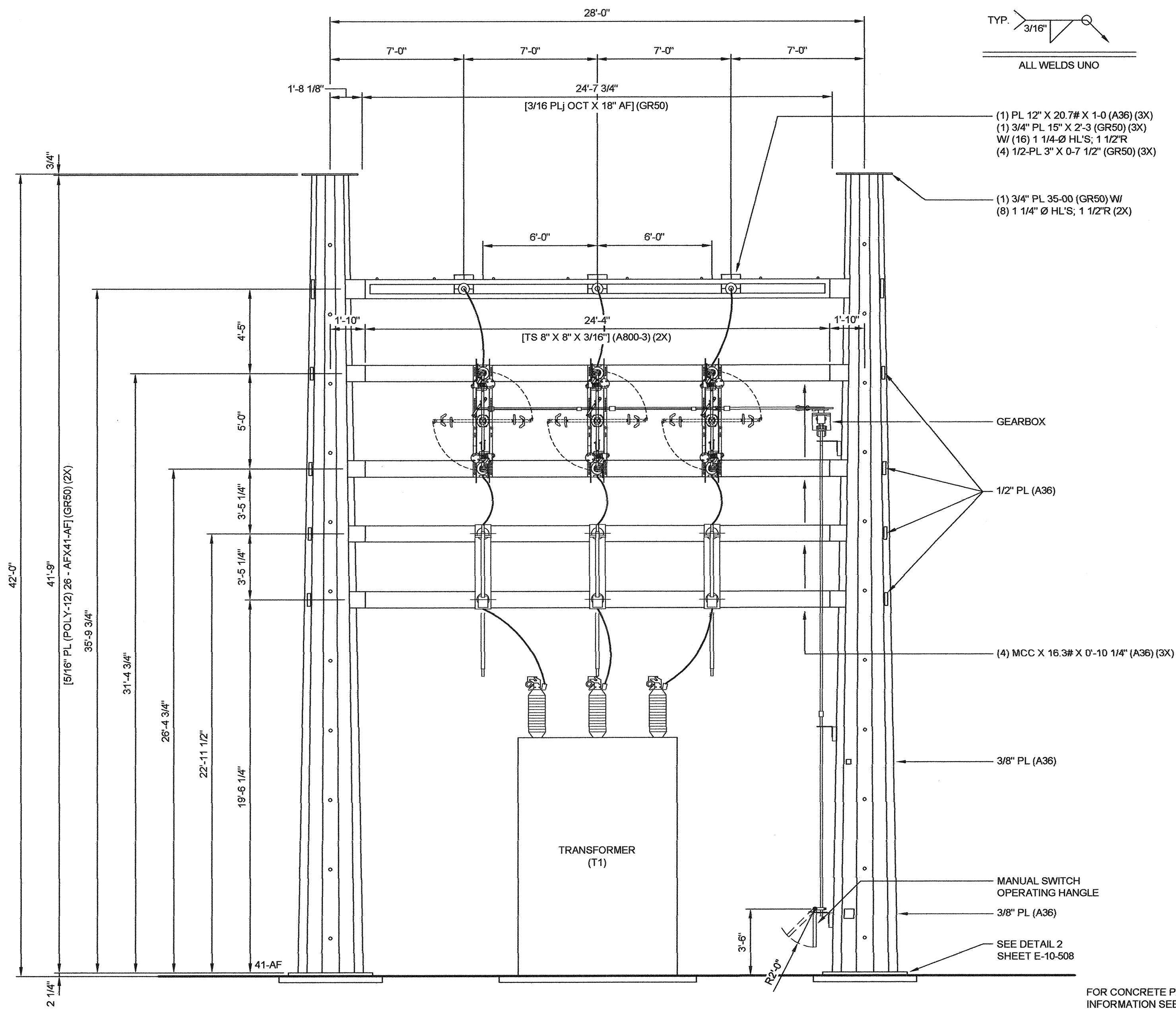
ELECTRICAL DETAILS VI

SCALE: NOT TO SCALE

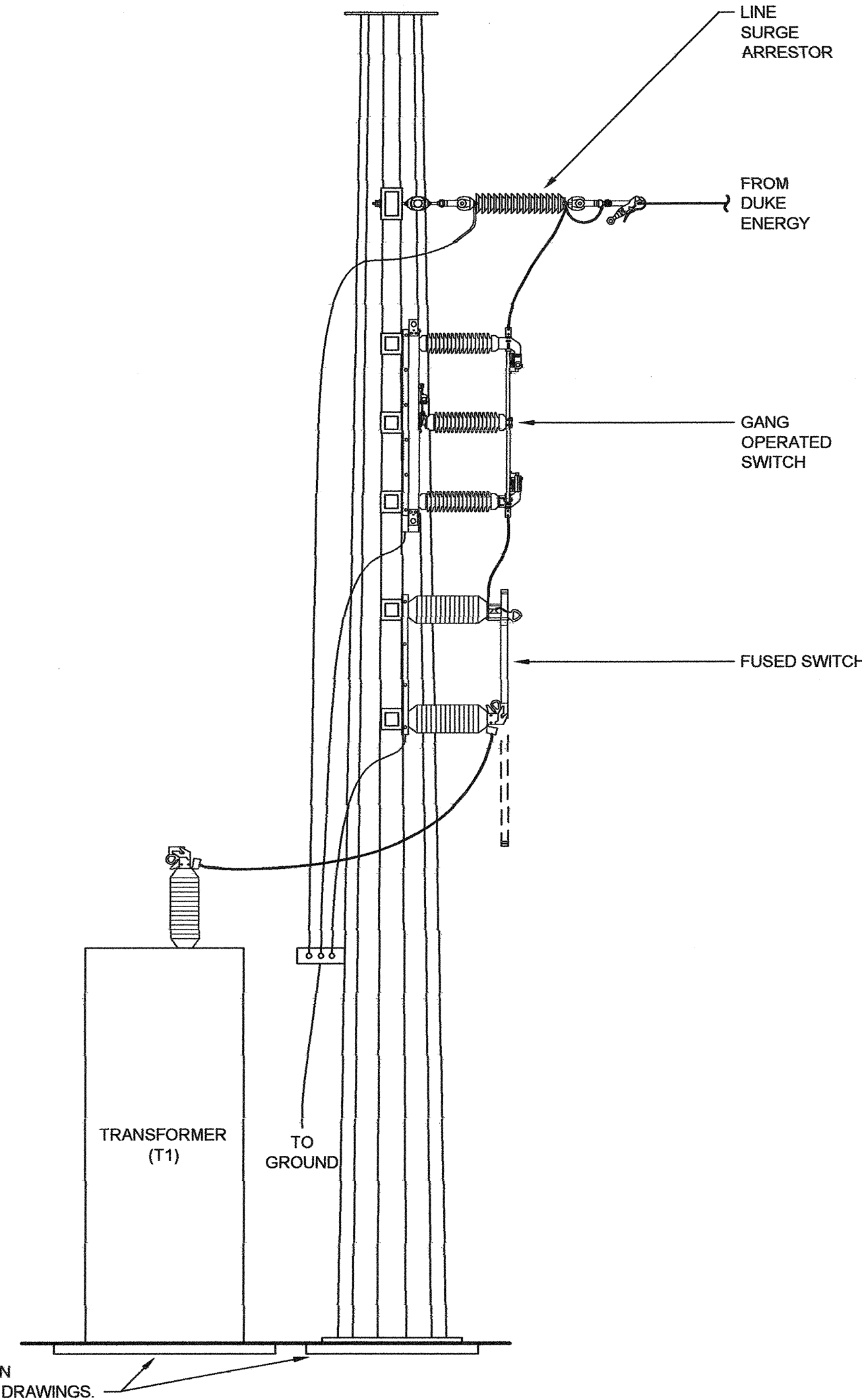
ISSUED STATUS:	BID SET
DATE:	MARCH, 2011
SHEET:	E-10-506
CAD REF. NO.:	CDP-E-10-506

MATERIAL: A-572 GR50; A-500 GRB UNO
FINISH: HDG 1A-123

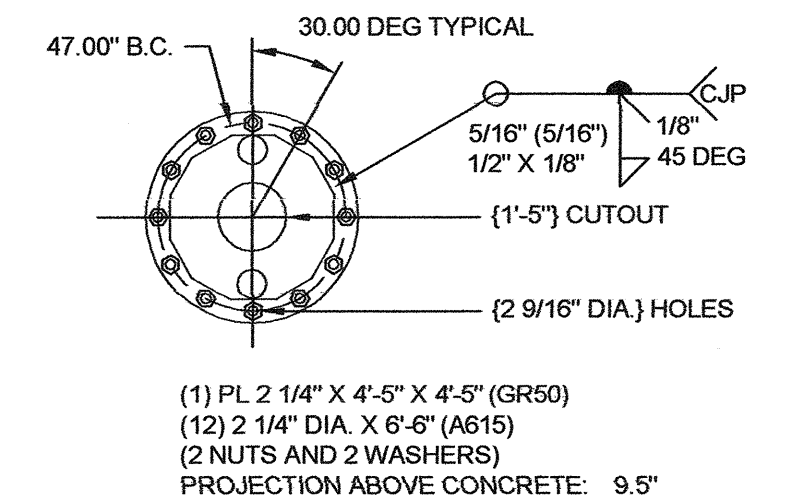
TYP. ALL WELDS UNO



SOUTH ELEVATION



WEST ELEVATION



PRIMARY STRUCTURE
BASE MOUNTING DETAIL

2 NOT TO SCALE

69 KV PRIMARY STRUCTURE
(BASE BID - DELETE FOR ALT. 2)

1 NOT TO SCALE

0 1/2 1
DRAWING IS NOT TO SCALE IF THIS DOES NOT MEASURE 1 INCH.

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cdpengineers

Michelle Howlett
STATE OF KENTUCKY
T. MICHELLE HOWLETT
19856
LICENSED PROFESSIONAL ENGINEER
3/19/11

REVISIONS			
NO.	BY	DATE	REMARKS

DES: TMH
DWN: TEW
CKD: TMH

NORTHERN KENTUCKY WATER DISTRICT
TAYLOR MILL WATER TREATMENT PLANT
ADVANCED TREATMENT IMPROVEMENTS

ELECTRICAL
ELECTRICAL DETAILS VII

SCALE: NOT TO SCALE

ISSUED STATUS: BID SET
DATE: MARCH, 2011
SHEET: E-10-507
CAD REF. NO.: CDP-E-10-507

User: TOM SPEC/PINIE STANDARD File: P:\PROJECTS\10010 - NWWD TAYLOR MILL WTP\ACAD\INFO_EXCHANGE_PUBLIC_FOLDER\ELEC-CDP\CDP-E-10-507.DWG Scale: 1:1 Saved Date: 3/15/2011 Time: 17:38 Plot Date: Tom Weber: 3/16/2011 12:54 Layout: E-10-507