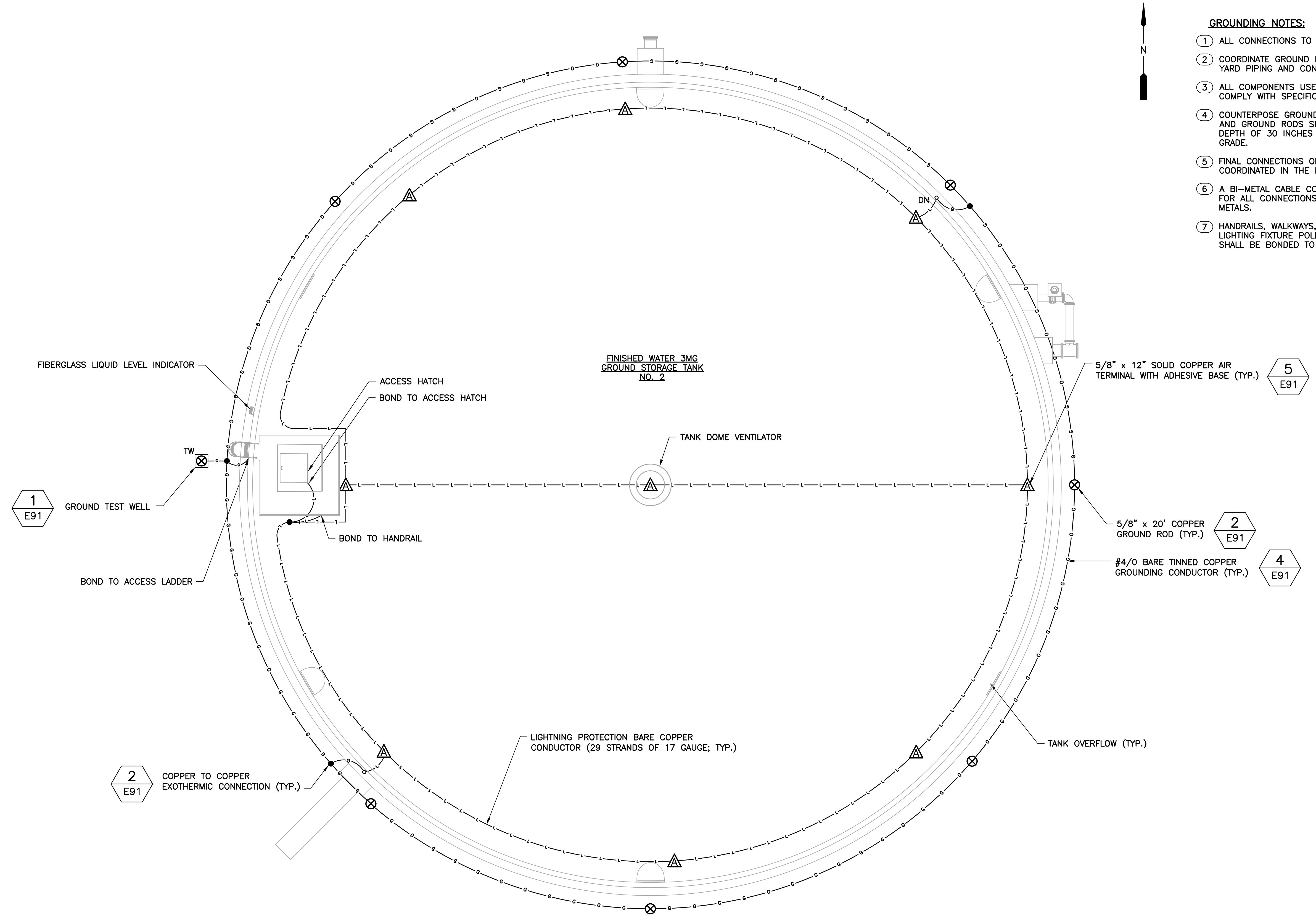


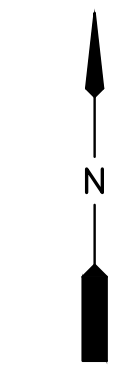
PLAN SYMBOLS	PLAN SYMBOLS (CONTINUED)	CONTROL DIAGRAM SYMBOLS	ABBREVIATIONS	NOTES
	<p>SINGLE LINE DIAGRAM SYMBOLS</p>		<p>ABBREVIATIONS</p> <p>A AMPERES AFF ABOVE FINISHED FLOOR AHU AIR HANDLING UNIT AHF ACTIVE HARMONIC FILTER AIC AMPS INTERRUPTING CURRENT BCP BACKUP CONTROL PANEL BKR BREAKER BLDG BUILDING CDTCP CARBON DIOXIDE TANK CONTROL PANEL CDCP CARBON DIOXIDE CONTROL PANEL CDIP CARBON DIOXIDE INTERFACE PANEL CP CONTROL PANEL CPT CONTROL POWER TRANSFORMER CSIP CAMERA SYSTEM INTERFACE PANEL CSP CHEMICAL SCRUBBER PANEL CT CURRENT TRANSFORMER CU CONDENSING UNIT DIS DISSOLUTION & INJECTION SKID EFF EFFLUENT ELEC ELECTRICAL EM EMERGENCY ENCL ENCLOSURE ETM ELAPSED TIME METER EWH ELECTRIC WATER HEATER EXH EXHAUST FAAP FIRE ALARM ANNUNCIATOR PANEL FACP FIRE ALARM CONTROL PANEL FPP FIBER PATCH PANEL FTC FLOAT CABLE TERMINATION CABINET FVNR FULL VOLTAGE NON-REVERSING GENERATOR CONTROL PANEL GCP GROUND FAULT RECEPTACLE GFI GROUND FAULT INTERRUPTER GND GROUND GRS GALVANIZED RIGID STEEL GST GROUND STORAGE TANK HCP HEATER CONTROL PANEL HOA HAND-OFF-AUTOMATIC HOR HAND-OFF-REMOTE HP HORSEPOWER HSP HIGH SERVICE PUMP IWH INSTANTANEOUS WATER HEATER JB JUNCTION BOX KVA KILO VOLT-AMPERES KW KILOWATT LCP LOCAL CONTROL PANEL LP LOOP NUMBER LTG LIGHTING MAX MAXIMUM MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER MCP MOTOR CIRCUIT PROTECTOR MFR MANUFACTURER MIN MINIMUM MLO MAIN LUGS ONLY MMS MANUAL MOTOR STARTER MTD MOUNTED MTS MANUAL TRANSFER SWITCH MXCP MIXER CONTROL PANEL N NEUTRAL NEC NATIONAL ELECTRICAL CODE NEM NETWORK ETHERNET MODULE NF NANOFILTRATION NIP NETWORK INTERFACE PANEL NSR NETWORK SERVER RACK NTS NOT TO SCALE ODP ODOR CONTROL PANEL OEU OCALA ELECTRIC UTILITY OH OVERHEAD P POLE PCP PROCESS CONTROL PANEL PM PHASE MONITOR RO REVERSE OSMOSIS SC SURGE CAPACITOR SH SHIELDED SS STAINLESS STEEL SSIP SECURITY SYSTEM INTERFACE PANEL SSS SOLID STATE STARTER SSNR SECURITY SYSTEM NETWORK RACK STR STARTER SW SWITCH SWBD SWITCHBOARD TC TERMINATION CABINET TCU TOWN & COUNTRY UTILITIES TYP TYPICAL UG UNDERGROUND UPS UNINTERRUPTIBLE POWER SUPPLY V VOLT VFD VARIABLE FREQUENCY DEVICE W WATT w/ WITH WCP WATER CONTROL PANEL WP WEATHERPROOF XFMR TRANSFORMER</p>	<p>NOTES</p> <ol style="list-style-type: none"> ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ALL NEW ELECTRICAL WORK INDICATED. ELECTRICAL CONTRACTOR SHALL VISIT JOB SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING ELECTRICAL INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. EXISTING CONDITIONS OF ELECTRICAL EQUIPMENT, LIGHT FIXTURES, ETC... THAT ARE PART OF THE FINAL SYSTEM SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO SUBMITTING HIS BID. ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2017 FLORIDA BUILDING CODE, THE 2014 NATIONAL ELECTRICAL CODE AND SHALL COMPLY WITH ALL LOCAL RULES AND ORDINANCES. MINIMUM WIRE SIZE SHALL BE #12 A.W.G. EXCLUDING CONTROL WIRING, UNLESS OTHERWISE NOTED. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS NECESSARY FOR THE EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER. ELECTRICAL SYSTEM SHALL BE COMPLETE AND EFFECTIVELY GROUNDED AS REQUIRED BY THE LATEST EDITION OF THE N.E.C. OR LOCAL CODES. ALL CONDUITS SHALL HAVE A BOND WIRE SIZED PER TABLE 250-122 OF THE NATIONAL ELECTRIC CODE. ALL MATERIALS SHALL BE NEW AND BEAR UNDERWRITERS' LABELS WHERE APPLICABLE. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTED BY ENGINEER/OWNER. CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN TWO YEARS FROM DATE OF ACCEPTANCE. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF THE OEU. REFER TO SPECIFICATION SECTION 26 05 00 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED OF HIS WORK. ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS W/ TYPE WRITTEN DIRECTORIES (NEW & EXISTING). ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. DO NOT SCALE THE ELECTRICAL DRAWINGS. REFER TO THE MECHANICAL DRAWINGS & THE APPROVED MANUFACTURER'S SHOP DRAWINGS FOR THE EXACT LOCATION OF ALL EQUIPMENT. NON-SHADED TEXT DENOTES NEW EQUIPMENT, STRUCTURES AND WORK. <i>SHADED AND SLANTED</i> TEXT DENOTES EXISTING EQUIPMENT OR STRUCTURES. ALL CONTROL PANELS SHALL BE U.L. LISTED AND SHALL COMPLY WITH ARTICLE 409 OF THE NEC. ALL EMPTY CONDUITS SHALL BE INSTALLED WITH PULL STRING. THE PLANS REFLECT SYSTEM VOLTAGE DROPS AS PER F.B.C. ENERGY CONSERVATION 2020, SEVENTH C405.6.3. THE CONDUCTORS FOR FEEDERS AND BRANCH CIRCUITS COMBINED ARE SIZED FOR A MAXIMUM OF 5 PERCENT VOLTAGE DROP TOTAL. <p style="text-align: right;">10620 GRIFFIN ROAD, SUITE 202 COOPER CITY, FLORIDA 33328 PHONE: (954) 448-7930 C.O.A. NO. 6783 Stephen E. Bailey, P.E. Florida P.E. No. 42461</p> <p style="text-align: center;">BID SET</p>

<p>© 2024 KIMLEY-HORN AND ASSOCIATES, INC. 1700 SE 17TH STREET, SUITE 200, OCALA, FL 34471 PHONE: 352-438-3000 WWW.KIMLEY-HORN.COM REGISTRY NO. 35106</p>	<p>ELECTRICAL NOTES, SYMBOLS & ABBREVIATIONS</p> <p>PREPARED FOR CITY OF OCALA, FLORIDA</p>
<p>KHA PROJECT 14237 048</p> <p>DATE MARCH 2025</p> <p>SCALE: AS SHOWN</p> <p>DESIGNED BY: DD</p> <p>DRAWN BY: RRM</p> <p>CHECKED BY: SEB</p>	<p>LICENSED PROFESSIONAL: STEPHEN E. BAILEY, P.E. FL LICENSE NUMBER 42461</p>
<p>ELECTRICAL NOTES, SYMBOLS & ABBREVIATIONS</p> <p>SHEET NUMBER E01</p>	

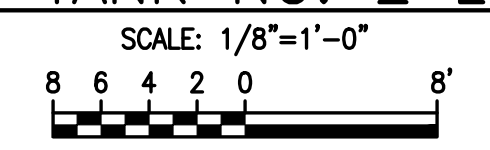
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- GROUNDING NOTES:**
- ① ALL CONNECTIONS TO BE EXOTHERMIC PROCESS.
 - ② COORDINATE GROUND ROD LOCATIONS WITH YARD PIPING AND CONDUIT LAYOUT.
 - ③ ALL COMPONENTS USED IN INSTALLATION SHALL COMPLY WITH SPECIFICATION SECTION 26 05 26.
 - ④ COUNTERPOSE GROUND SYSTEM CONDUCTORS AND GROUND RODS SHALL MAINTAIN A BURIED DEPTH OF 30 INCHES FROM TOP TO FINISHED GRADE.
 - ⑤ FINAL CONNECTIONS OF GROUND SYSTEM TO BE COORDINATED IN THE FIELD WITH THE ENGINEER.
 - ⑥ A BI-METAL CABLE CONNECTOR SHALL BE USED FOR ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
 - ⑦ HANDRAILS, WALKWAYS, EQUIPMENT RACKS, LIGHTING FIXTURE POLES, AND PIPE SUPPORTS SHALL BE BONDED TO THE GROUNDING SYSTEM.



FINISHED WATER 3MG GROUND STORAGE TANK NO. 2 LIGHTNING PROTECTION/GROUNDING PLAN

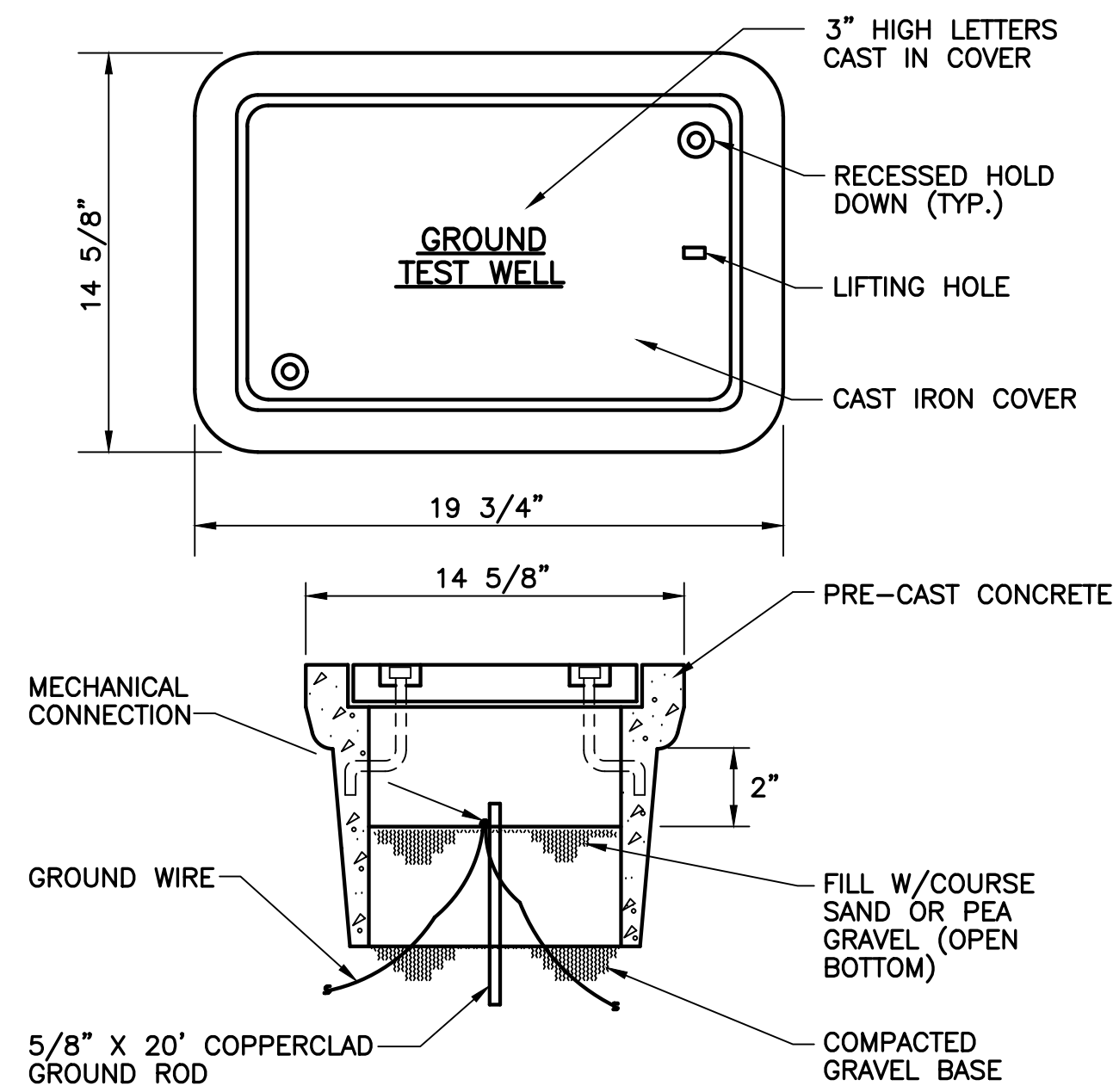


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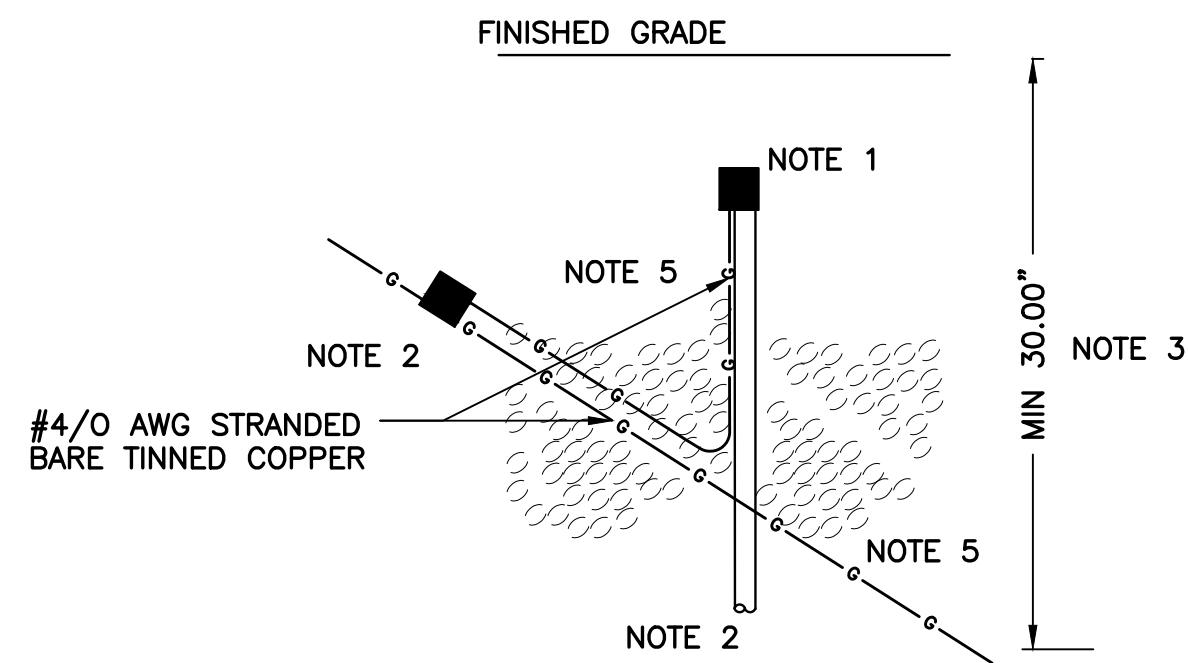


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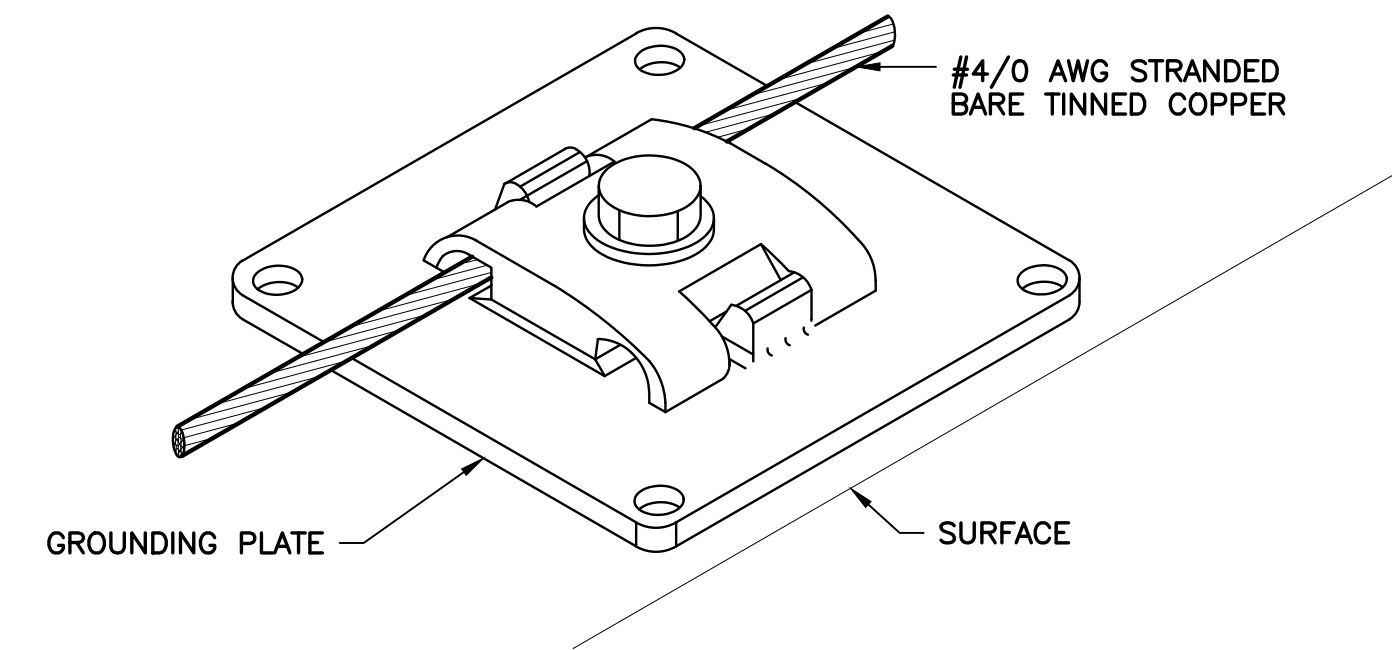
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KHA PROJECT 14237 048		DATE MARCH 2025		SCALE: AS SHOWN		DESIGNED BY: DD	
KHA PROFESSIONAL: STEPHEN E. BAILEY, P.E.		FL LICENSE NUMBER 42461		DRAWN BY: RRM		CHECKED BY: SEB	
OCALA WATER TREATMENT PLANT 2				FINISHED WATER GST NO. 2 LIGHTNING PROTECTION & GROUNDING PLAN			
PREPARED FOR CITY OF OCALA, FLORIDA				SHEET NUMBER E77			



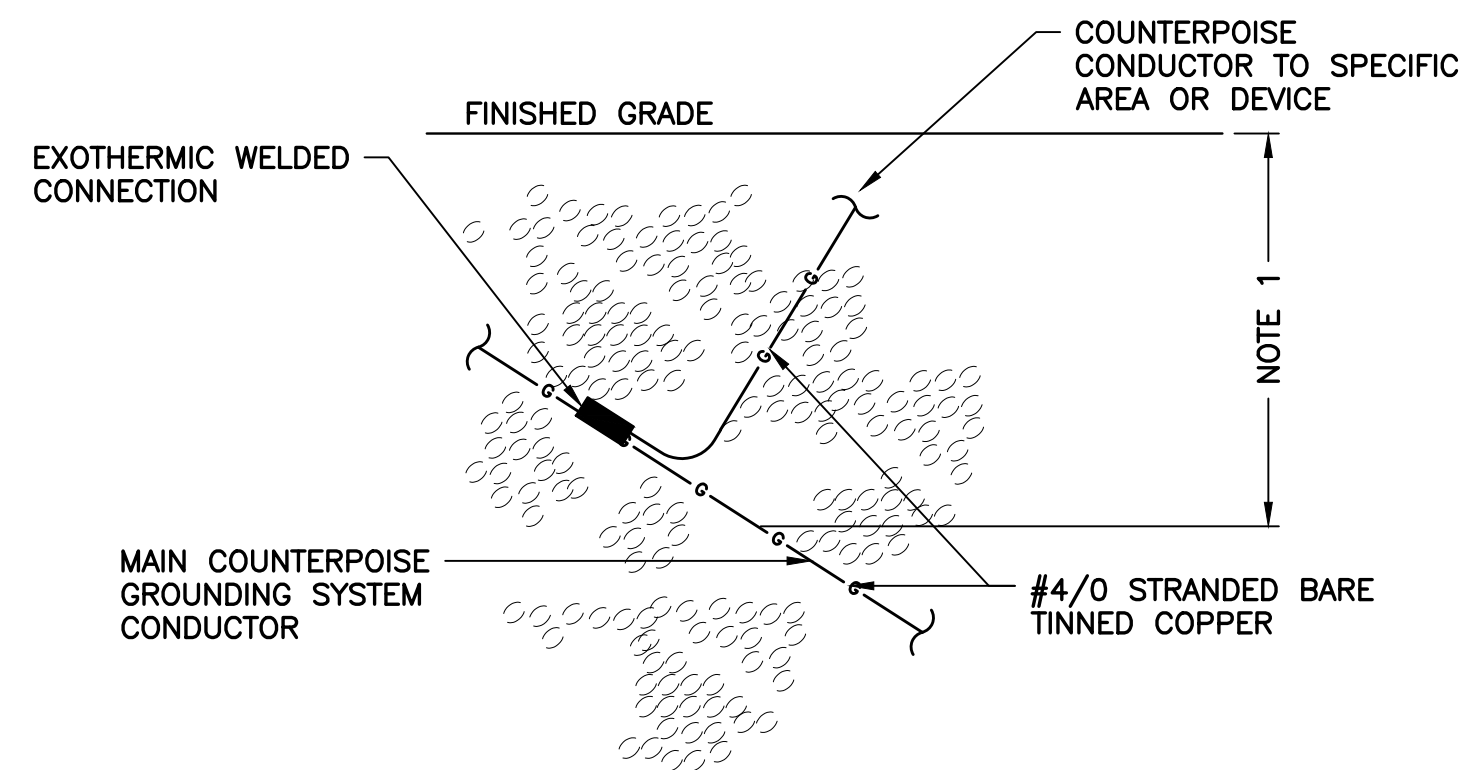
1
TYP. GROUND TEST WELL
N.T.S.



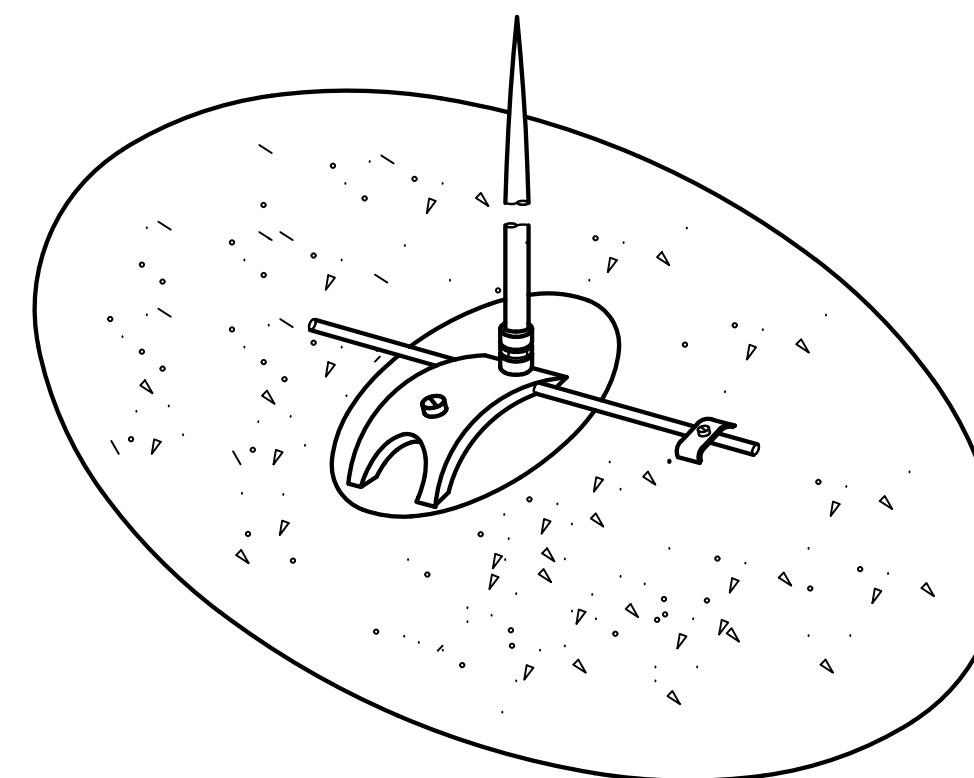
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TYP. COUNTERPOISE GROUND ROD CONNECTION DETAIL
NOT TO SCALE



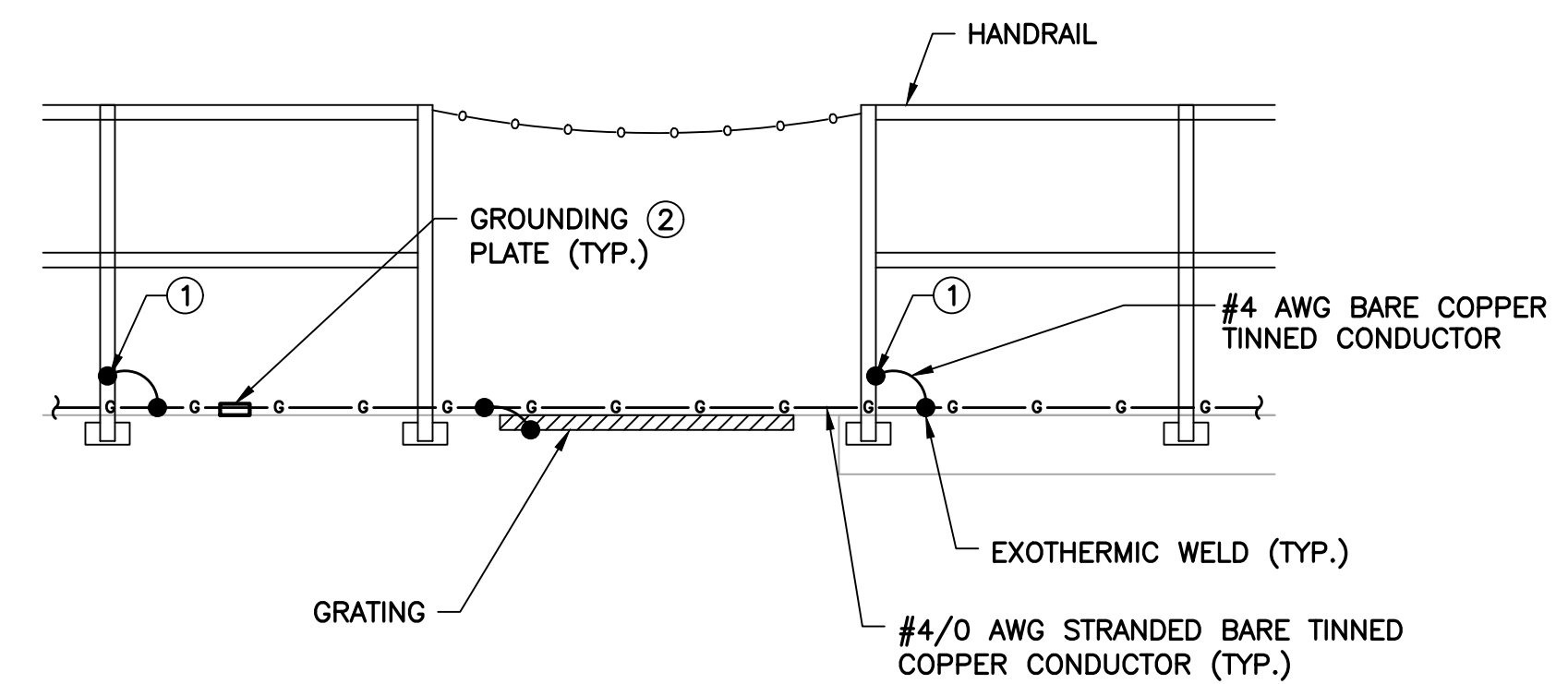
3
TYP. GROUNDING PLATE DETAIL
NOT TO SCALE



4
TYP. COUNTERPOISE CONDUCTOR CONNECTION DETAIL
NOT TO SCALE



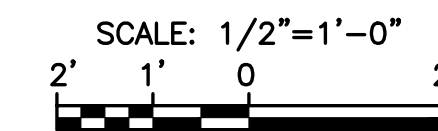
5
TYP. AIR TERMINAL DETAILS
N.T.S.



NOTES:

- #4 BARE TINNED COPPER CONDUCTOR TO COMPRESSION LUG MECHANICALLY CONNECTED TO RAIL, COAT CONNECTION BETWEEN LUG AND RAIL WITH CONDUCTIVE ANTI-CORROSION COMPOUND. NO ALUMINUM COMPONENTS ALLOWED. PROVIDE AN EXOTHERMIC WELD FROM #4 TO #4/0. NO MECHANICAL CONNECTION ALLOWED.
- ALL EXPOSED GROUND CONDUCTORS INSTALLED ALONG SURFACE OF HANDRAIL SHALL BE SECURED USING GROUNDING PLATE. SEE DETAIL THIS SHEET.

6
TYP. HANDRAIL/GRATING GROUNDING DETAIL



- LEGEND:**
- ▲ - 5/8" X 12" SOLID COPPER AIR TERMINAL WITH ADHESIVE BASE.
 - - CADWELD
 - ⊗ - 5/8" X 20'-0" (MIN) COPPER GROUNDING ROD (TYP)

LIGHTNING PROTECTION INSTALLATION NOTES:

- INSTALLATION SHALL COMPLY IN ALL RESPECTS TO L.P.I. CODE 175. INSTALLATION SHALL BE MADE BY OR UNDER THE SUPERVISION OF AN L.P.I. CERTIFIED MASTER INSTALLER. COMPLETED INSTALLATION TO RECEIVE SYSTEM CERTIFICATION INCLUDING SUBMITTAL OF FORMS L.P.I. 175-A AND 175-B.
- ALL MATERIALS SHALL BE UNDERWRITERS LABORATORIES APPROVED WITH "A" LABEL ON EACH AIR TERMINAL AND "B" LABEL AT 10'-0" ALONG ALL MAIN CONDUCTORS. COMPLETED INSTALLATION AS SHOWN SHALL BEAR U.L. MASTER LABEL "C" AS PER U.L. CODE 96A.
- INTERCONNECT LIGHTNING PROTECTION GROUND TO ELECTRIC, TELEPHONE, AND OTHER BUILDING GROUND SYSTEMS AS SHOWN OR AS REQUIRED BY CODES.
- ALL CABLE TO CABLE, CABLE TO LUG & CABLE TO GROUND ROD CONNECTIONS SHALL BE MADE WITH CADWELD.

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LICENSED PROFESSIONAL:
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KHA PROJECT
142371048
DATE
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SCALE: AS SHOWN
DESIGNED BY: DD
DRAWN BY: RRM
CHECKED BY: SEB

OCALA WATER
TREATMENT PLANT 2
PREPARED FOR
CITY OF OCALA, FLORIDA

ELECTRICAL DETAILS -
SHEET 4

SHEET NUMBER
E91

No.	Revisions	By	Date