

1 SITE PLAN - ELECTRICAL
E-1 SCALE: 1" = 10' - 0"

GENERAL NOTES:

- PROVIDE GREEN EQUIPMENT GROUNDING CONDUCTOR IN ALL RACEWAYS. SEE THE SPECIFICATIONS.
- COORDINATE THE ELECTRICAL SERVICE WITH GEORGIA POWER, CONTACT GREG MCCRANIE, DISTRIBUTION ENGINEER, 912-267-5127.
- WHERE CONDUCTOR SIZE IS SHOWN FOR CIRCUIT, IT SHALL BE MAINTAINED FOR ENTIRE CIRCUIT.
- ALL CONDUITS INSTALLED EXPOSED ABOVE GRADE SHALL BE ALUMINUM RIGID CONDUIT (ARC) CONDUIT, ALL CONDUITS INSTALLED BELOW GRADE AND WHERE NOTED SHALL BE SCH. 80 PVC. MINIMUM BURIAL DEPTH TO BE 24". PROVIDE DETECTABLE WARNING TAPE 12" BELOW FINISH GRADE, DIRECTLY ABOVE CONDUITS.
- SEAL ALL CONDUITS ENTERING PANELS WITH DUCT SEAL.
- CIRCUIT BREAKER AND SWITCH OPERATING HANDLES SHALL BE A MAXIMUM OF 66" ABOVE FINISHED GRADE. LOCATE CONTROL PANEL, SERVICE BREAKER, AND SURGE PROTECTION DEVICE WHERE INDICATED.
- POSITION ELECTRICAL EQUIPMENT FOR BEST ACCESS TO ELECTRICAL EQUIPMENT.
- ENCLOSED CIRCUIT BREAKER SHALL BE U.L. APPROVED FOR USE AS SERVICE ENTRANCE EQUIPMENT, WITH INSULATED BONDED NEUTRAL, - BOND GROUNDING ELECTRODE CONDUCTOR AND NEUTRAL, PROVIDE SEPARATE MECHANICAL LUG TERMINATIONS FOR EACH CONDUCTOR, CONNECT EQUIPMENT GROUNDING CONDUCTOR WITH MECHANICAL LUG ATTACHED TO ENCLOSURE.
- ALL ATTACHMENT HARDWARE SHALL BE STAINLESS STEEL, PROVIDE 316 STAINLESS STEEL 1 3/4" X 1 3/8" CHANNEL (B-LINE B22 OR EQUAL), CONDUIT PIPE CLAMPS, NUTS, BOLTS AND WASHERS.
- APPLY TWO COATS OF 3M SCOTCHRAP PIPE PRIMER AND TWO OVERLAPPING LAYERS OF 3M SCOTCHRAP 51 TAPE, APPLY FROM THE BOTTOM OF THE STRUCTURAL SUPPORT OR CONDUIT TO 6" ABOVE GRADE, APPLY TWO COATS OF 3M SCOTCHRAP PIPE PRIMER TO THE INTERIOR OF THE VERTICAL FRAME MEMBERS FOR 12" UP FROM THE BOTTOM.
- THE SURGE PROTECTION DEVICE SHALL BE INTERNAL/INTEGRAL TO THE PANEL, PROVIDE SQUARE D IMA SERIES, OR EQUAL BY GE/ABB OR EATON. SEE ONE-LINE 1/E-3 FOR REQUIRED CHARACTERISTICS.

TANK LIGHTING SPECIFICATIONS

PROVIDE TANK LIGHTING SYSTEM AS SPECIFIED AND AS NOTED ON THE DRAWINGS. THE LIGHTING SYSTEM SHALL BE BY TGS SPORTS AND WE-EF LIGHTING, PROVIDED THROUGH SESCO, CONTACT MONIQUE NORMAN (770) 449-7045 OR RUTH HUDSON (512) 657-7697.

EQUIVALENT SYSTEMS ARE ACCEPTABLE SUBJECT TO THE ENGINEER'S REVIEW.

THE SYSTEM SHALL BE COMPLETE INCLUDING ALL FIXTURES WITH MOUNTING ACCESSORIES, POLES AND WIRING, RELAY PANEL, AND PHOTO CELL. FIXTURES.

INCLUDE IN PROJECT FOR FACTORY STARTUP, AIMING, AND DEMONSTRATION OF OPERATION TO OWNER AND ENGINEER.

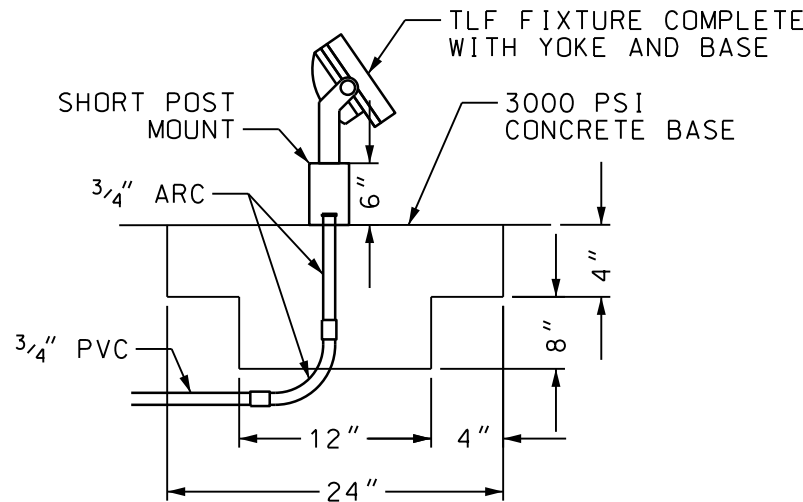
LIGHTING FIXTURES TO BE RATED 120V EACH, AND 5 YR WARRANTY:

TLB: TWO TGS SPORTS TRITON G2 FIXTURES MOUNTED ON A DUAL BULLHORN SLIPFITTER ON A 40 FT MTG. HEIGHT DIRECT BURIAL FIBERGLASS POLE (5000°C/400W/52,000LM EA), DARK BRONZE POLE: WISCONSON LIGHTING LAB - PL-RTFD040-8553-7-FL-FP-DB BULL HORN: WISCONSON LIGHTING LAB - NP/VA-B-BLH-R24-2-FP-DB FIXTURES: TGS SPORTS - SPL2-400-50-U-D0-6-80CRI-LG-SF

TLF: MARINE GRADE, DIE-CAST ALUMINUM ALLOY FIXTURE WITH INTEGRAL DRIVER, WALL WASH DISTRIBUTION, 4000°K, 112W/9982LM, WITH SHORT POST EM, DARK BRONZE FIXTURES: WE-EF LIGHTING - FLC240 LED-RAL8019

LEGEND

- HOME RUN, CIRCUIT AS NOTED, SLASH MARKS INDICATE MORE THAN 2 CONDUCTORS. PROVIDE GROUND CONDUCTOR (NOT SHOWN) IN ALL CONDUITS.
- EXPOSED RACEWAY
- 3/4"C W/ ONE 16 AWG T.S. PAIR CABLE (BELDEN 5240F1)
- UNDERGROUND RACEWAY
- WALL MOUNTED LED FIXTURE & OUTLET BOX
- OBSTRUCTION LIGHTS - SEE NOTE G12
- BATTERY POWERED EMERGENCY LIGHT
- SWITCH, 48" AFF
- THREE-WAY SWITCH, 48" AFF
- RECEPTACLE, 48" AFF. NUMERICAL NUMBER ADJACENT TO DEVICE INDICATES BRANCH CIRCUIT NUMBER.
- 20 AMP RECEPTACLE, 48" AFF. NUMBER ADJACENT TO DEVICE INDICATES BRANCH CIRCUIT NUMBER.



2 GROUND MOUNTED FIXTURE DETAIL
E-1 SCALE: NONE

G12.PROVIDE OBSTRUCTION LIGHTING ON TANK IN ACCORDANCE WITH FAA AC 70/7460-1K.

TANK TOP BEACONS SHALL BE CROUSE-HINDS 12004-D1CWFH409, L865/L864 GENERAL USE LED DUAL BEACON, MEDIUM INTENSITY, PROVIDE DUAL FIXTURE MOUNT WITH TWO BEACONS. TANK SIDE BEACONS: 12004-RTO-CR27-001 L-810 LED OBSTRUCTION LIGHTS W/INTEGRAL IR

PROVIDE OBSTRUCTION LIGHTING CONTROL PANEL, CROUSE-HINDS OLC429CM-X-1RW-##-1M-WBU-N4; PROVIDE WITH LIGHTNING ARRESTOR, ALTERNATING FEATURE (FOR TANK BEACONS) AND AUXILIARY CONTACTS FOR ALARM ANNUNCIATION TO SCADA SYSTEM, PROVIDE PHOTO ELECTRIC CONTROLLER, CROUSE-HINDS 52010, AND ALARM INDICATING LIGHT, CROUSE-HINDS 12010-001-R.

ALL CONDUIT FOR BEACONS AND OBSTRUCTION LIGHTS, EXPOSED ON THE INTERIOR OF THE TANK, SHALL BE ALUMINUM. COORDINATE WITH THE TANK CONTRACTOR FOR MOUNTING POINTS TO SECURE CONDUIT TO THE TANK STRUCTURE. COORDINATE CONDUIT SUCH THAT IT DOES NOT PASS THROUGH ANY OF THE LOGO/SIGNS PAINTED ON THE TANK. PAINT ALL EXPOSED EXTERIOR CONDUIT TO MATCH THE TANK FINISH.

G13.ALL WIRING FOR TANK OBSTRUCTION LIGHTS SHALL BE INSTALLED IN CONDUIT, EXTEND TO CAST WP JUNCTION BOX AT TOP OF TANK. EXTEND CIRCUIT SHOWN FROM PANEL T. DEMONSTRATE OPERATION OF LIGHTS.

G14.PROVIDE NEMA 1 PAINTED STEEL ENCLOSURE FOR OBSTRUCTION LIGHT CONTROL PANEL. MOUNT ENCLOSURE ON WALL.

G15.THE SCADA SYSTEM SHALL BE PROVIDED BY ELECTRIC MACHINE CONTROL, TRUSSVILLE AL. CONTACT BRIAN THOMASON, VP SALES & MARKETING, 205-661-3998. PROVIDE CONDUIT AND CONDUCTORS AS SHOWN IN RISERS.

G16.PROVIDE FREEZE PROTECTION HEAT TRACING ON ALL EXPOSED TUBING, SPECIFICALLY FOR THE PRESSURE TRANSDUCER. FURNISH PRODUCTS OF JMP OR APPROVED EQUAL; PROVIDE 5-FLX-1-0J (5W/FT) HEATING CABLE, PCA-COM TRACE PLUS KIT, B4X-15140 THERMOSTAT, AL-20L ALUMINUM TAPE, AND ALL NECESSARY COMPONENTS FOR A COMPLETE SYSTEM. PROVIDE ARMAFLEX INSULATION ON ALL PIPING WITH HEAT TAPE. CONNECT TO CIRCUIT T-10.

G17.THE TANK SCADA PANEL SHALL MONITOR THE TANK LEVEL, ALARM CONDITIONS FROM THE OBSTRUCTION LIGHTING SYSTEM AND DOOR CONTACTS.

G18.THE TANK GROUND RING SHALL BE 4/0 BARE COPPER STRANDED CONDUCTOR, TERMINATIONS TO GROUND RODS AND TANK STEEL SHALL BE EXOTHERMIC WELD. THE CONDUCTOR SHALL BE INSTALLED 30" BELOW FINISH GRADE, EXTEND 4/0 COPPER BONDING CONNECTIONS TO THE TANK STEEL AT EACH QUADRANT, THE TANK STRUCTURAL STEEL REINFORCING, THE BOTTOM OF THE STEEL TANKBOWL, AND THE STEEL WATER PIPE.

G19.EXTEND CONDUIT AND CONDUCTORS FOR AREA NEAR DOOR HEADERS TO SCADA PANEL. CONNECT ALL DOORS IN THE STRUCTURE IN PARALLEL. PROVIDE BOX WITH BLANK COVER AND CONDUIT AND CONDUCTORS TO SCADA PANEL.

- PROVIDE A 8-POLE ELECTRICALLY HELD LIGHTING CONTACTOR FOR CONTROL OF THE TANK LIGHTING SYSTEM, FURNISH A SQUARE D LG80 CONTACTOR WITH AUXILIARY CONTACTS FOR ANNUNCIATION TO THE SCADA SYSTEM. FURNISH WITH A 120V COIL, H-O-A SWITCH AND NAMEPLATE.
- THE PHOTOCCELL FOR THE TANK LIGHTING SYSTEM SHALL BE MOUNTED ON THE EQUIPMENT RACK AT THE SERVICE DISCONNECT.
- FIBERGLASS POLES TO BE NOMINAL 40 FT MOUNTING HEIGHT, SET IN GROUND 6 FT FOR 40 FT MOUNTING HEIGHT, PROVIDE TENON MOUNT WITH DUAL BULLHORN MOUNT FOR FIXTURE TENON, POLE TO BE DARK BRONZE, RATED FOR 140 MPH WITH FIXTURES AND MOUNT, THE POLES SHALL BE LOCATED 90°APART, 70' FROM THE TANK SHAFT CENTER.
- THE TANK SHAFT LIGHTING SHALL BE MOUNTED ON A CONCRETE FOUNDATION WITH MANUFACTURER FURNISHED STANCHION, THE FIXTURES SHALL BE LOCATED 45°APART, 25' FROM THE TANK CENTER/8' FROM THE TANK SHAFT EXTERIOR.

- GROUND
- BREAKER
- GROUND ROD LOCATION - 3/4" X 20 FT COPPERCLAD
- FLEX CONNECTION, 18" MAX
- PANELBOARD
- EQUIPMENT AS NOTED
- JUNCTION BOX
- PHOTOCCELL, 2000 W/600VA(LED), FAILED CLOSED, TORK MODEL 2129. MOUNT TO SIDE OF BUILDING, AIM AWAY FROM ARTIFICIAL LIGHTS
- PRESSURE TRANSMITTER. SEE SPECIFICATIONS.
- SURGE PROTECTION DEVICE. SEE ONE-LINE, 1/E-3
- GROUND FAULT INTERRUPTING TYPE 'WR' W/ "WHILE-IN-USE" COVER
- WEATHER PROOF
- SCADA ANTENNA ON POST
- DOOR CONTACT. SEE NOTE G19.

GEORGIA
Professional Engineer
20 May 2024
REGISTERED
CHARLES B. COBB

BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION

BRUNSWICK-GLYNN JOINT WATER & SEWER COMMISSION PLANNING & CONSTRUCTION DIVISION

1703 Gloucester Street
Brunswick, Georgia 31520
(912) 261-7110 Phone
(912) 261-7178 Fax
www.bgjwsc.org

FILE NO.:	DATE:	SCALE:	DRAWN BY:
PROJ. #2213	MAY 20, 2024	AS SHOWN	LC

EXIT 42 750,000 GALLON ELEVATED STORAGE TANK
GLYNN COUNTY, GEORGIA
BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION

ELECTRICAL SITE PLAN

COMMENTS:

REVISIONS

OF

E-1

E:\BGCJWSC Exit 42 Elevated Tank - 24033.00\CADD\E1.dgn

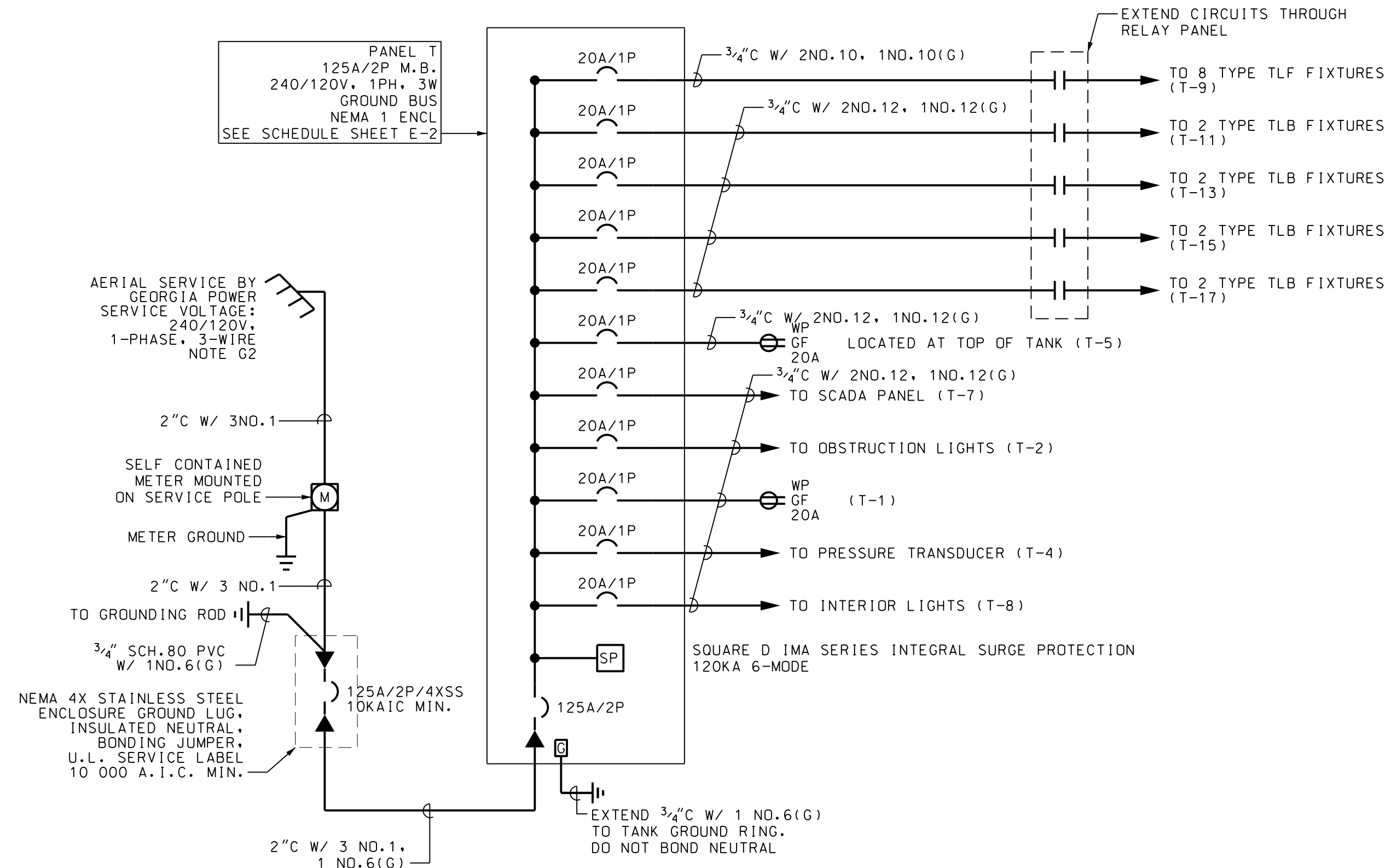


3 TANK GROUND LEVEL PLAN - POWER

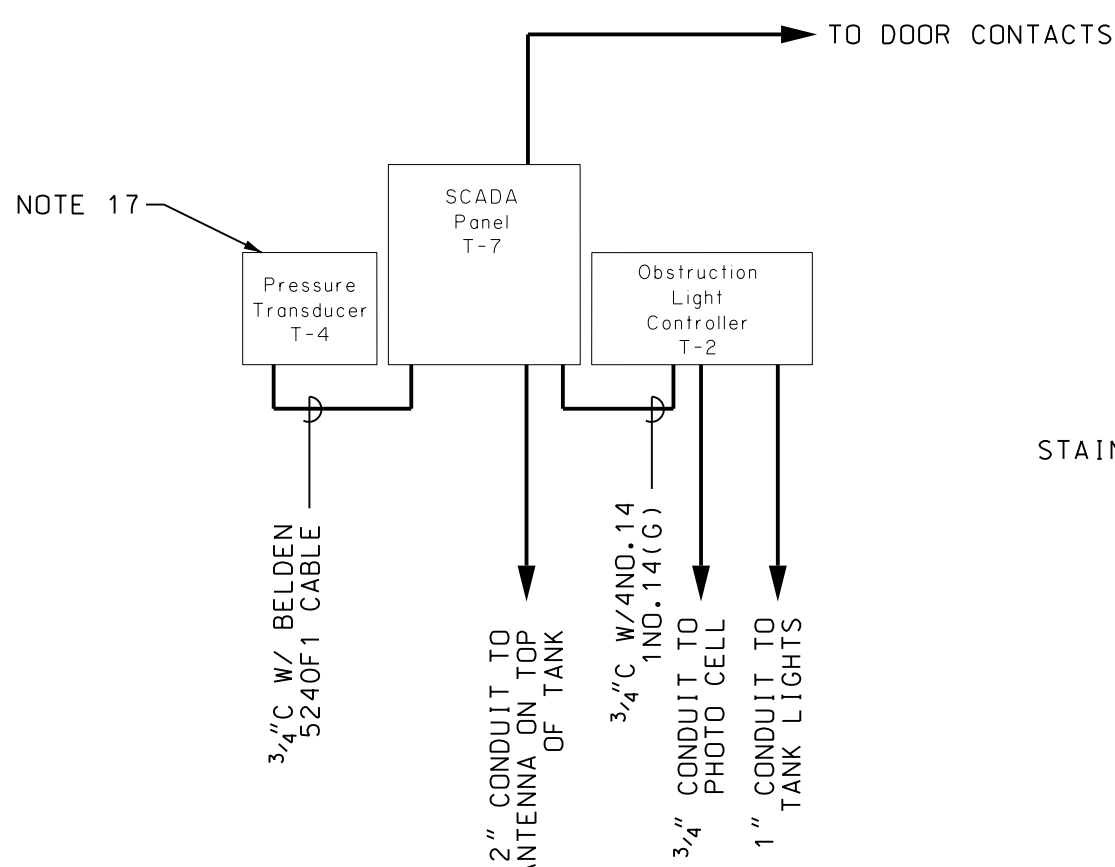


2 TANK GROUND LEVEL PLAN - LIGHTING
E-2 SCALE: 1/4" = 1' - 0"





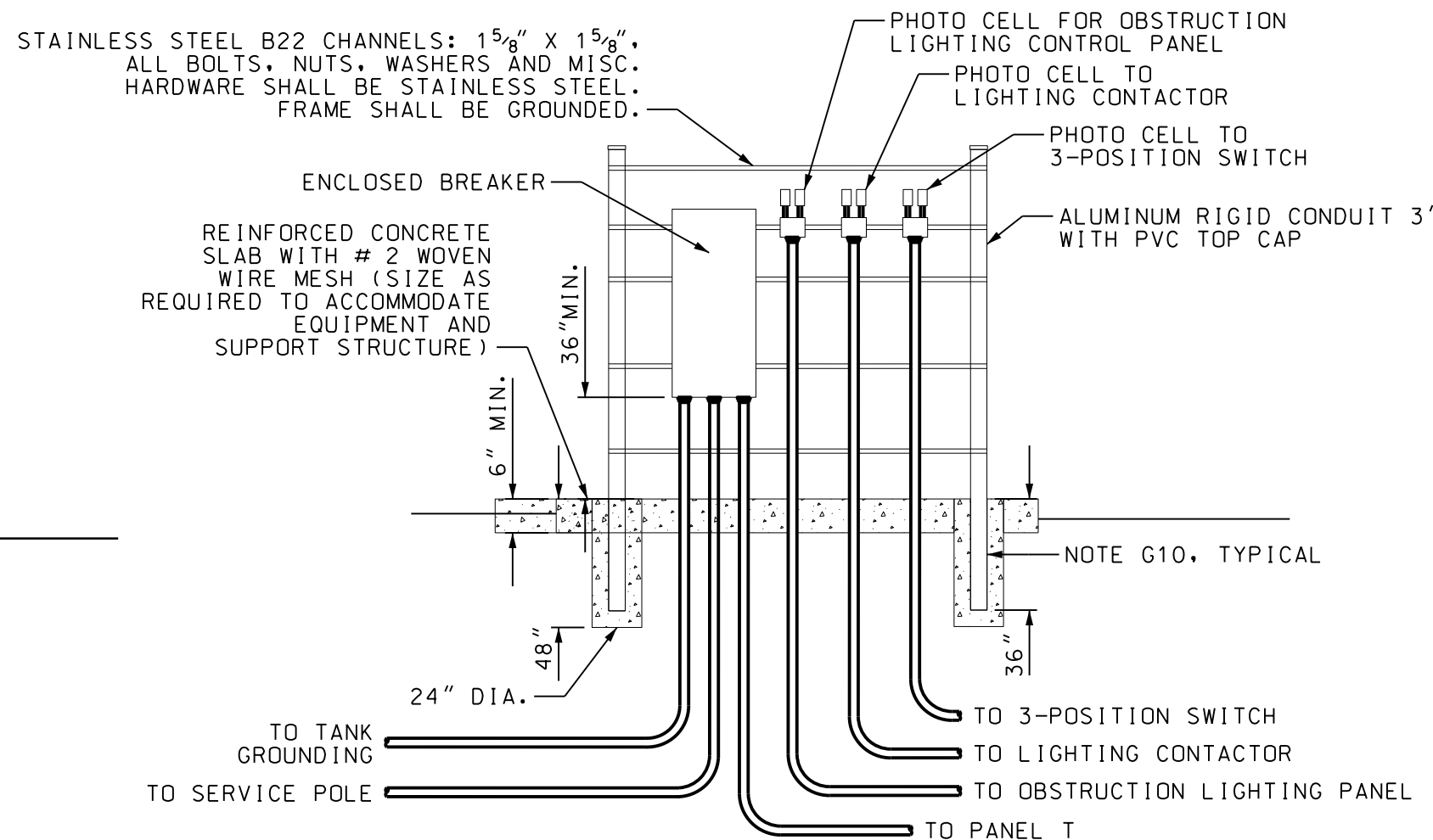
1 ONE-LINE DIAGRAM
E-3 SCALE: NONE



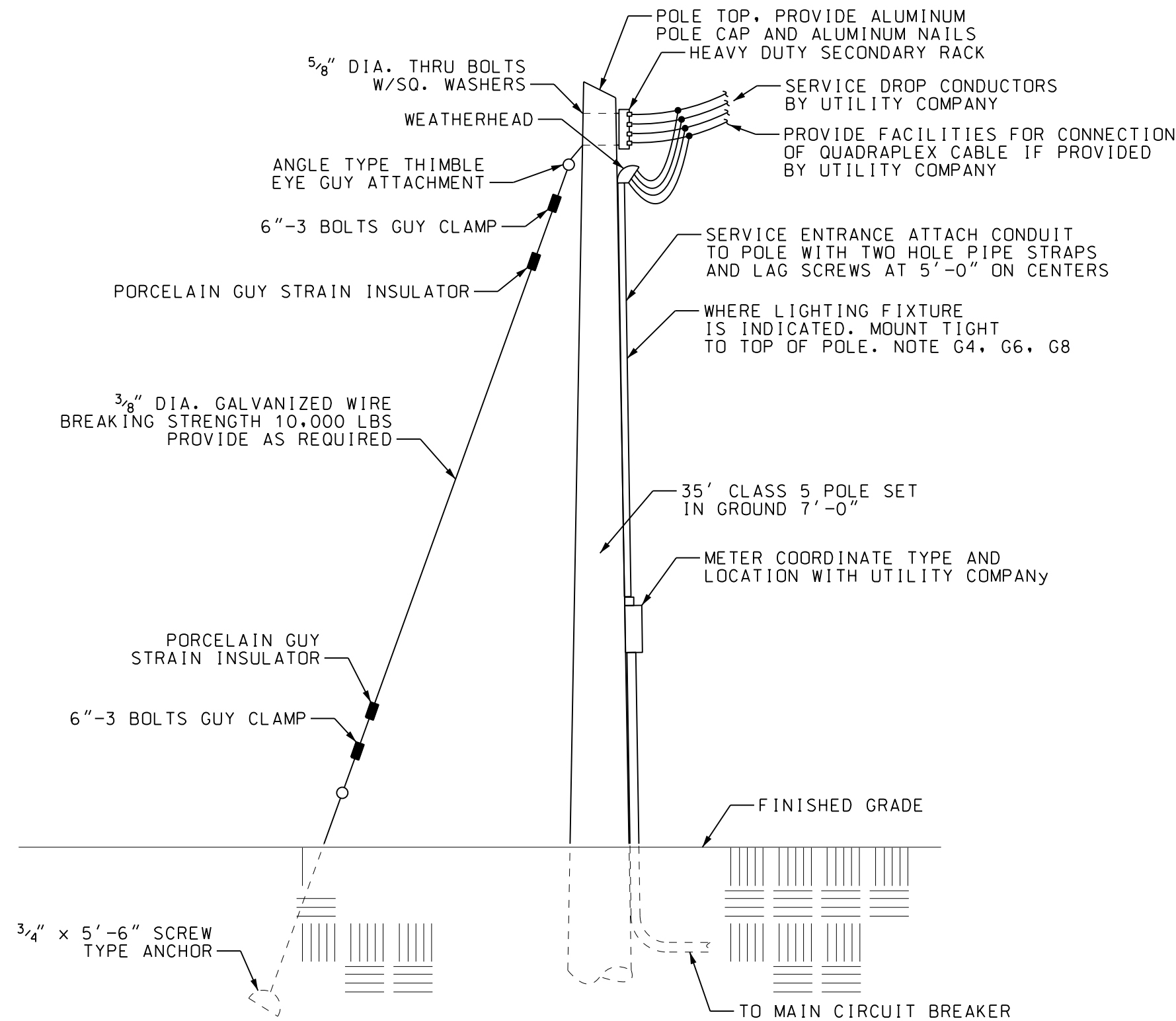
NOTES - SCADA RISER DIAGRAM

- A. OMITTED.
- B. PROVIDE WIRING FOR SCADA INCLUDE FOLLOWING POINTS:
- | TYPE POINT | DESCRIPTION |
|------------|----------------------------------|
| A1 | PRESSURE |
| D1 | OBSTRUCTION LIGHT CONTROLLER (2) |
| D1 | DOOR CONTACTS |

2 SCADA RISER DIAGRAM
E-3 SCALE: NOT TO SCALE



3 DISCONNECT FRAME ELEVATION
E-3 SCALE: NOT TO SCALE



4 SERVICE POLE
E-3 SCALE: NONE

GEORGIA
Professional Engineer
No. 032192
20 May 2024
CHARLES B. COBB

BRUNSWICK-GLYNN
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Brunswick, Georgia 31520
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E-3

OF

EXIT 42 750,000 GALLON ELEVATED STORAGE TANK
GLYNN COUNTY, GEORGIA
BRUNSWICK-GLYNN COUNTY JOINT WATER & SEWER COMMISSION

ONE-LINE DIAGRAM & ELECTRICAL DETAILS

REVISIONS

NO.	DATE	COMMENTS