

CITY OF GREENVILLE
GREENVILLE, NORTH CAROLINA

PUBLIC WORKS SITE LIGHTING
PHASE 1

WORK ORDER NO. 7
TEG PROJECT NO. 20180157

ISSUE FOR CONSTRUCTION
NOVEMBER 1, 2019

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PROJECT NOTES

- 1. THIS PROJECT REQUIRES THE INSTALLATION OF:
• CONCRETE FOUNDATION & POLE MOUNTED AREA LIGHTING FIXTURES
• UNDERGROUND CONDUITS VIA OPEN CUT TRENCH
• UNDERGROUND CONDUITS VIA DIRECTIONAL BORE
• GROUND MOUNTED PULL BOXES
• ZOBVAC CIRCUITING FROM NEARBY BUILDING'S POWER PANEL TO OUTSIDE LIGHT POLE LOCATION
• CONCRETE PAVEMENT REMOVABLE AND REPLACEMENT
• LANDSCAPE REMOVABLE AND REPLACEMENT
2. CONTRACTOR SHALL PROVIDE POLE FOUNDATIONS, LIGHT FIXTURES, LIGHT POLES, PULL BOXES, ELECTRICAL POWER CIRCUITING, ETC. AS CALLED OUT IN THIS DRAWING PACKAGE FOR THE INSTALLATION OF THE SITE LIGHTING.
4. PROJECT REQUIRES THE INSTALLATION OF UNDERGROUND CONDUITS VIA DIRECTIONAL BORING AT LOCATIONS INDICATED ON THE DRAWINGS. CUTTING ASPHALT OR CONCRETE IN ANY AREA IS NOT PERMITTED. TRENCHING IS ALLOWED IN ALL OTHER AREAS.
6. AT EACH GROUND MOUNTED PULL BOX, PROVIDE MINIMUM OF 1'-0" DEPTH OF #57 STONE BELOW BOTTOM OF GROUND MOUNTED PULL BOX. EXTEND STONE MINIMUM OF 1'-0" BEYOND ALL SIDES OF PULL BOX.
7. PROVIDE AND INSTALLED CONDUIT SEALS AT ALL GROUND MOUNTED PULL BOXES. SEE MISCELLANEOUS EQUIPMENT SCHEDULE.
8. ALL WIRING SPLICES SHALL BE WITHIN EACH LIGHTING FIXTURE HAND HOLE. WIRE SPLICING INSIDE GROUND MOUNTED PULL BOX IS NOT ALLOWED. PROVIDE MINIMUM 2'-0" OF UNSPLICED WIRE LOOPED IN GROUND MOUNTED PULL BOX.
9. EC SHALL ROUTE WIRE AND CONDUIT OF INDICATED SIZE TO THE BASE OF EACH LIGHTING FIXTURE POLE AS INDICATED. EC SHALL ROUTE 2 #10, 1 #10 GND FROM THE BASE OF THE POLE TO EACH POLE MOUNTED LIGHT FIXTURE. EC SHALL PROVIDE AND INSTALLED FUSE HOLDERS AND 5A TIME DELAY FUSE IN EACH UNGROUNDED CONDUIT AND WITHIN HAND HOLE FOR EACH POLE MOUNTED FIXTURE. KEEP SPLICES TO A MINIMUM AND ACCESSIBLE TO THE HAND HOLE. PROVIDE TWO NEW SPARE FUSES PER INSTALLED LIGHT FIXTURE AND TURN OVER TO OWNER.
10. AT A MINIMUM, THE FOLLOWING SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL:
A. PANELBOARD, CIRCUIT BREAKERS, ENCLOSURE, ETC.
B. CONDUITS: RMC/MC/EMT/PVC CONDUITS, FITTINGS, GLUE ETC.
C. DIRECTIONAL BORE CONDUIT, INNER DUCT, PULL STRING, ETC.
D. OUTLET DEVICES: BOXES, RECEPTACLES, SWITCHES, COVER PLATES, ETC.
E. LIGHTING FIXTURES, MOTION DETECTOR, CONTROL DEVICES, POLE, PHOTOCCELL, ETC.
F. WIRE
G. PULL/JUNCTION BOX, ETC
H. PULL STRING, TRACER WIRE, WARNING TAPE, ETC.
I. MOUNTING SUPPORTS, UNISTRUT SUPPORTS, ETC.
J. GROUND MOUNTED PULL BOX
K. LANDSCAPING: PLANTS/SEED/SOD/MULCH
L. PAINT
M. CONCRETE MIX
N. REBAR
O. GROUND ROD
P. FUSE HOLDER, FUSES, ETC.
Q. MISC., ETC.

ELECTRICAL GENERAL NOTES - CONTINUED

- 20. UNDERGROUND CONDUITS SHALL BE PVC SCHEDULE 80 ONLY.
21. UNDERGROUND DIRECTIONAL BORING CONDUIT (POWER): UNDERGROUND DIRECTIONAL BORING CONDUIT SHALL BE HDPE, GRAY IN COLOR. 2 INCH IN DIAMETER AND SMALLER SHALL BE SCHEDULE 40. LARGER THAN 2 INCH IN DIAMETER SHALL BE SCHEDULE 80. DIRECTION BORE SHALL BE 8' TO 10' BELOW GRADE TO PASS BENEATH ALL EXISTING UTILITIES. MAINTAIN A MINIMUM OF 3'-0" CLEARANCE BELOW EXISTING UTILITIES.
22. UNDERGROUND PVC CONDUITS SHALL BE INSTALLED AT A MINIMUM OF 36" BELOW FINISHED GRADE WITH DETECTABLE BURIAL TAPE. CHANGE FROM PVC TO RIGID GALVANIZED STEEL CONDUIT WITHIN 1'-6" FROM TURNING UP AT ANY LOCATION. ALL EXCAVATION (DIGGING, TRENCHING, BACK FILLING, ETC.) SHALL BE PROVIDED BY CONTRACTOR. BOND RIGID GALVANIZED STEEL CONDUIT TO GROUND.
23. WHERE CONDITIONS ALLOW, ALL UNDERGROUND CONDUITS AND UTILITIES SHALL HAVE METALIZED WARNING TAPE INSTALLED ABOVE THE CONDUIT THAT IDENTIFIES THE SPECIFIC SYSTEM BURIED BELOW. TAPE SHALL CONSIST OF A MINIMUM 3.5 MIL SOLID FOIL CORE ENCASED IN A PROTECTIVE PLASTIC JACKET (TOTAL THICKNESS 5.5 MILS) AND BE 6" WIDE WITH BLACK LETTERING IMPRINTED ON A COLOR CODED BACKGROUND THAT CONFORMS TO APWA COLOR CODE SPECIFICATIONS. WARNING TAPE SHALL BE INSTALLED 18" ABOVE THE PIPE AND IN NO CASE LESS THAN 6" BELOW GRADE.
24. ALL NON-METALLIC CONDUIT INSTALLED UNDERGROUND SHALL HAVE A TRACER WIRE INSTALLED INSIDE EACH CONDUIT. THE TRACER WIRE SHALL BE #12 COPPER-CLAD STEEL REINFORCED SINGLE CONDUCTOR WIRE INSULATED WITH ORANGE COLORED HDPE INSULATION (30 MILS) EQUAL TO COPPERHEAD INDUSTRIES BRAND. THE TRACER WIRE SHALL BE CONTINUOUS ALONG THE ENTIRE LENGTH OF THE CONDUIT AND SHALL TERMINATE WITH WATERPROOF CONNECTORS. PROVIDE 48" OF EXCESS TRACER WIRE IN EACH PULL BOX OR CONDUIT END.
25. ELECTRICAL CONTRACTOR SHALL LOCATE ELECTRICAL CONDUITS OUTSIDE THE DRIP LINE OF EXISTING TREES TO THE GREATEST EXTEND POSSIBLE.
26. EMT CONDUIT COUPLINGS, CONNECTORS, AND FITTINGS SHALL BE STEEL HEXAGONAL COMPRESSION TYPE ONLY. SET SCREW COUPLINGS, CONNECTORS, AND FITTINGS SHALL NOT BE ALLOWED.
27. WHERE INSTALLING CONDUITS, BOXES, EQUIPMENT, ETC., IN WET OR DAMP LOCATIONS, INSTALL CONDUITS, BOXES, EQUIPMENT, ETC. AT A MINIMUM OF 1/4-INCH FROM THE MOUNTING SURFACE WITH CLAMP BACKS OR STRUT.
28. EXISTING CONDITIONS THAT ARE NOT INDICATED TO BE DEMOLISHED, BUT ARE DAMAGED AS A RESULT OF THE WORK SHALL BE REPAIRED OR REPLACED BY THE EC TO MATCH EXISTING ADJACENT CONDITIONS.
29. THE EC SHALL KEEP THE CONSTRUCTION AREA AND SURROUNDING AREAS FREE FROM THE ACCUMULATION OF WASTE MATERIALS AND DEBRIS CAUSED BY THE WORK.
30. EC SHALL VERIFY EXISTING CONDITIONS PRIOR TO EXECUTION OF THE WORK. SOME OR ALL INFORMATION ABOUT EXISTING CONDITIONS SHOWN ON THE DRAWINGS MAY BE BASED SOLELY ON EXISTING RECORD DRAWINGS AND MAY OR MAY NOT HAVE BEEN VERIFIED BY THE ARCHITECT OR ENGINEER.
31. UNLESS NOTED OTHERWISE, DEMOLISH AND REMOVE FROM THE PROJECT SITE ALL EQUIPMENT, DUCTWORK, PIPING, CONDUIT, ETC. AS INDICATED ON THE DEMOLITION DRAWINGS OR OTHER DRAWINGS. ALL SYSTEMS SHALL BE DEMOLISHED BACK TO THE SOURCE AND CAPPED APPROPRIATELY.
32. EXISTING EQUIPMENT OR DEVICES THAT ARE INDICATED TO BE REMOVED AND TURNED OVER TO OWNER SHALL BE REMOVED WITH DUE CARE AND DILIGENCE, CLEANED AND TURNED OVER TO THE OWNER.
33. ALL MATERIALS SHALL BE NEW AND SHALL BEAR THE 3RD PARTY LISTED APPROVAL FOR THEIR INSTALLED APPLICATION.
34. FOR ALL ELECTRICAL CIRCUITS, EC SHALL IDENTIFY THE CIRCUIT NUMBER IN THE DESIGNATED PANEL, SHALL MARK THE CIRCUIT NUMBER ON THE DRAWINGS, AND SHALL TURN OVER THE MARKED UP DRAWINGS TO OWNER. EC SHALL UPDATE THE PANEL SCHEDULES UPON COMPLETION OF CONSTRUCTION. IN THE EVENT THE PANEL(S) DO NOT HAVE ADEQUATE SPARE CIRCUITS OR CAPACITY, EC SHALL NOTIFY OWNER FOR RESOLUTION OF ISSUE.
35. NEW AND EXISTING PANEL SCHEDULES SHALL BE UPDATED (TYPED-ONLY) UPON COMPLETION OF THE WORK TO ACCURATELY INDICATE INSTALLED CONDITIONS.
36. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING UNDERGROUND UTILITIES. CONTRACTOR SHALL COORDINATE LOCATING EXISTING UNDERGROUND UTILITIES WITH OWNER, OWNER'S ON-SITE ENGINEER, AND NC ONE CALL (811) PRIOR TO ANY WORK.
37. EC SHALL BE LICENSED IN NC, AND SHALL INSTALL ALL ELECTRICAL EQUIPMENT, WIRING, DEVICES, ETC. AS PER NEC, AND OTHER APPLICABLE STATE AND LOCAL CODES.
38. PRIOR TO CONTACTING THE LOCAL INSPECTOR, IT IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO CONTACT THE DESIGNER REPRESENTATIVE TO SCHEDULE THE REQUIRED ROUGH-IN AND FINAL INSPECTIONS. NO WORK WILL BE COVERED UP UNTIL AFTER THE INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE DESIGN FIRM REPRESENTATIVE AND OWNER REPRESENTATIVE.
39. CONTRACTOR IS RESPONSIBLE FOR ALL SITE WORK. THIS SHALL INCLUDE BUT NOT LIMITED TO ALL SITE DEMO, BUSH AND TREE REMOVAL, TRENCHING, CONCRETE PAD DEMO AND INSTALLATION, FINAL GRADING AND GRASS RESEEDING/RESEEDING, BUSH AND TREE REPLANTING.
40. CONTRACTOR SHALL DOCUMENT THE DEPTHS OF ALL DIRECTIONAL DRILLS CONDUITS AT A MAXIMUM OF 20 FEET INTERVALS & MAINTAIN A COMPREHENSIVE (DEPTH AND HORIZONTAL LOCATIONS) FIELD "AS-BUILTS" FOR ALL INSTALLATIONS AND SUBMIT TO THE ENGINEER.
41. CONTRACTOR SHALL PROVIDE CIRCUIT IDENTIFICATION LABELS AT EACH POLE MOUNTED LIGHTING FIXTURE POLE LOCATION & AT EACH GROUND MOUNTED PULL BOX LOCATION. LABELS SHALL BE INSTALLED ON THE OUTSIDE OF EACH LIGHT FIXTURE POLE, INSIDE EACH LIGHT FIXTURE POLE BASE AT THE HAND HOLE, & INSIDE EACH PULL BOX. WHERE MORE THAN ONE SET OF CIRCUITS ARE SHARED IN A CONDUIT/PULLBOX, SEPARATE EACH CIRCUIT SET & PROVIDE A SEPARATE LABELS FOR EACH CIRCUIT SET. LABEL & ATTACHMENT SHALL BE SUITABLE FOR THE ENVIRONMENT INSTALLED. LABEL INFORMATION SHALL INCLUDE 1) BUILDING FED FROM, 2) PANEL ID, 3) CIRCUIT NUMBER(S), & 4) LOAD DESCRIPTION. FOR EXAMPLE:
LINE 1: FED FROM BUILDING 'F'
LINE 2: PANEL 'CS'
LINE 3: CIRCUIT 24
LINE 4: AREA POLE LIGHT (WEST)

ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes 2/C (2 CONDUCTOR), A (AMPS), AFF (ABOVE FINISHED FLOOR), AFG (ABOVE FINISHED GRADE), BKR (BREAKER), BOC (BOTTOM OF CONDUIT), C (CONDUIT), EC (ELECTRICAL CONTRACTOR), EMT (ELECTRICAL METALLIC TUBING), ETR (EXISTING TO REMAIN), EX (EXISTING), FMC (FLEXIBLE METAL CONDUIT), FT (FEET), GND (GROUND), GFCI (GROUND FAULT CIRCUIT INTERRUPTER), HP (HORSE POWER), HZ (HERTZ), IMC (INTERMEDIATE METAL CONDUIT), IN (INCHES), IU (IN USE), ISO GND (ISOLATED GROUND), LPMC (LIQUID FLEXIBLE METAL CONDUIT), LTS (LIGHTS), N (NEUTRAL), NTS (NOT TO SCALE), PH (PHASE), RL (RELOCATED), RMC (RIGID METAL CONDUIT), TWSH (TWISTED SHIELDED), TYP (TYPICAL), UNO (UNLESS NOTED OTHERWISE), VA (VOLT AMPS), VAC (VOLTS AC), WP (WEATHER PROOF)

LEGEND

Legend symbols and descriptions: Junction box/device box with cover, Device as indicated, Area pole mounted light fixture, Electrical panel surface mounted, Electrical panel flush mounted, Reference to enlarged plan, Note number.

ELECTRICAL LOAD SUMMARY

Table for Electrical Load Summary: Building 'F' - Panel 'CS' - (E2.1). Rows include Electrical VA Load, Connected Load - Added (624 VA), Connected Load - Existing to be Demolished (0 VA), and Net Building Load (624 VA).

ELECTRICAL LOAD SUMMARY

Table for Electrical Load Summary: Building 'C' - Panel Transit Bus 'A' - (E2.2). Rows include Electrical VA Load, Connected Load - Added (3,432 VA), Connected Load - Existing to be Demolished (0 VA), and Net Building Load (3,432 VA).

ELECTRICAL LOAD SUMMARY

Table for Electrical Load Summary: Building 'D' - Panel 'DB' - (E2.3). Rows include Electrical VA Load, Connected Load - Added (3,120 VA), Connected Load - Existing to be Demolished (0 VA), and Net Building Load (3,120 VA).

ELECTRICAL LOAD SUMMARY

Table for Electrical Load Summary: Building 'C' - Panel 'A' - (E2.4). Rows include Electrical VA Load, Connected Load - Added (3,120 VA), Connected Load - Existing to be Demolished (0 VA), and Net Building Load (3,120 VA).

ELECTRICAL GENERAL NOTES

- 1. EC SHALL VISIT THE PROJECT SITE PRIOR TO SUBMITTING A BID TO EXAMINE THE EXISTING CONDITIONS AND THE EXTENT AND NATURE OF THE WORK REQUIRED. ANY DIFFICULTIES IN COMPLYING WITH THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER PRIOR TO SUBMITTING A BID.
2. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT, AND PERFORM ALL OPERATIONS NECESSARY FOR THE INSTALLATION OF COMPLETE ELECTRICAL WORK WITHIN THE INTENT OF, AND AS INDICATED ON, THE DRAWINGS AND AS HEREIN SPECIFIED.
3. CONTRACTOR'S QUALIFICATIONS: IT IS ASSUMED THE CONTRACTOR HAS HAD SUFFICIENT GENERAL KNOWLEDGE AND EXPERIENCE TO ANTICIPATE THE NEEDS OF CONSTRUCTION OF THIS NATURE. THE CONTRACTOR SHALL PROVIDE ALL ITEMS REQUIRED TO COMPLETE THE CONSTRUCTION IN ACCORDANCE WITH REASONABLE INTERPRETATION OF THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
4. THE DESIGN CONTAINED IN THE CONTRACT DOCUMENTS IS BASED ON EQUIPMENT BY SPECIFIC MANUFACTURERS. SUBSTITUTION REQUESTS BY THE EC MAY ONLY BE MADE PRIOR TO SUBMITTING A BID AND WILL BE REVIEWED AT THE DISCRETION OF THE ENGINEER. WHEN ANY EQUIPMENT IS PROVIDED BY MANUFACTURERS OTHER THAN THOSE SPECIFIED, THE EC SHALL BE RESPONSIBLE FOR VERIFYING THAT SUCH EQUIPMENT WILL MEET THE DESIGN INTENT (DIMENSIONS, CAPACITIES, ELECTRICAL REQUIREMENTS, ETC.). ANY ADDITIONAL COSTS ASSOCIATED WITH PROVIDING SUCH EQUIPMENT, INCLUDING BUT NOT LIMITED TO INCREASING THE CAPACITY OF ELECTRICAL SERVICES (DISCONNECTS, BREAKERS, WIRING, CONDUIT, ETC.), INCREASING HOUSEKEEPING PAD SIZES, PROVIDING ADDITIONAL STRUCTURAL SUPPORT OR INSTALLATION OF EQUIPMENT IN DIFFERENT LOCATIONS THAN INDICATED ON THE DRAWINGS SHALL BE INCLUDED IN THE EC'S BID.
5. EC SHALL OBTAIN FOR ALL PERMITS, INSPECTIONS, TESTS, ETC. AS REQUIRED FOR PROPER EXECUTION AND COMPLETION OF THE WORK. PERMITS WILL BE AT NO COST FROM THE CITY.
6. EC SHALL COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES. NO ALLOWANCES WILL BE MADE ON THE EC'S BEHALF FOR FAILURE TO COORDINATE WITH OTHER TRADES. ANY COORDINATION CONFLICTS WHICH ARISE SHALL BE IMMEDIATELY REPORTED TO THE GC AND OWNER'S REPRESENTATIVE.
7. EC SHALL BE RESPONSIBLE FOR ALL SAW-CUTS, CORE-DRILLS, AND PENETRATIONS. EC SHALL PATCH FLOORS, WALLS, PARTITIONS, CEILINGS, ROOFS, AND OTHER SURFACES AS REQUIRED TO RESTORE TO INITIAL CONDITIONS FOR CONDUIT OR OTHER INSTALLATIONS.
8. EC SHALL SEAL ALL PENETRATIONS THROUGH NEW AND EXISTING WALLS, FLOORS, ROOFS, CHASES, ETC. DUE TO ANY DEMOLITION OR NEW WORK IN ORDER TO MAINTAIN THE INTEGRITY OF THE SYSTEM (SMOKE RATED, SMOKE PARTITIONS, FIRE RATED, ETC.).
9. WHERE AN EXISTING DEVICE IS TO BE REMOVED: EC SHALL PATCH AND PAINT WALLS, CEILING, FLOOR, ETC. TO MATCH ADJACENT SURFACE AND TEXTURE. REPLACE CEILING TILE WITH NEW TO MATCH EXISTING.
10. EC SHALL PROVIDE APPROPRIATE SEALING WITH APPROVED MATERIAL WHERE RACEWAY PASSES FROM INTERIOR TO EXTERIOR OF A BUILDING.
11. EC SHALL PROVIDE AND INSTALL ALL PHENOLIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT & DEVICES. LABEL SHALL INDICATE PANEL AND CIRCUIT NUMBER SUPPLYING POWER TO THE DEVICE. EC SHALL PROVIDE REQUIRED SIGNS FOR PANELS, SWITCHGEAR, STARTERS, VFDs, AND ETC. NAMEPLATES TO BE MECHANICALLY SECURED WITH NON-FERROUS FASTENERS.
12. ALL AFF DIMENSIONS ARE REFERENCED TO CENTER OF EQUIPMENT/DEVICE UNO.
13. UPON MODIFICATION OR CONNECTION TO EXISTING SYSTEMS, POWER AND/OR SECONDARY SYSTEMS SHALL NOT BE INTERRUPTED WITHOUT PRIOR CONSENT OF OWNER AND A DEFINITE UNDERSTANDING OF THE DURATION OF THE OUTAGE.
14. ALL CONDUCTORS SHALL BE INSULATED COPPER UNLESS NOTED OTHERWISE. CONDUCTORS #10 AND SMALLER SHALL BE SOLID; CONDUCTOR #8 AWG AND LARGER SHALL BE STRANDED. ALL CONDUCTORS SHALL BE THWN-2 OR XHHW-2, 90° C RATED.
15. ALL 208Y/120V POWER WIRING INSULATION SHALL BE COLOR CODED (NO EXCEPTIONS). PHASE A-BLACK; PHASE B-RED; PHASE C-BLUE; NEUTRAL-WHITE; TRAVELERS-PURPLE; AND GROUNDING CONDUCTORS-GREEN. COLOR CODED TAPE NOT ALLOWED.
16. ALL 480Y/277V POWER WIRING INSULATION SHALL BE COLOR CODED (NO EXCEPTIONS). PHASE A-BROWN; PHASE B-ORANGE; PHASE C-YELLOW; NEUTRAL-GRAY; TRAVELERS-PURPLE; AND GROUNDING CONDUCTORS-GREEN. COLOR CODED TAPE NOT ALLOWED.
17. INSIDE CONDUITS SHALL BE EMT, IMC, OR RMC. CONNECTIONS TO VIBRATING EQUIPMENT SHALL BE LFMC.
18. OUTSIDE ABOVE GROUND CONDUITS SHALL BE RMC. CONNECTIONS TO VIBRATING EQUIPMENT SHALL BE LFMC.
19. CONDUITS MOUNTED 8'-0" AFF OR LESS. WHERE SUBJECT TO PHYSICAL DAMAGE, THE PORTION OF CONDUIT MOUNTED BELOW 8'-0" AFF SHALL BE RMC.



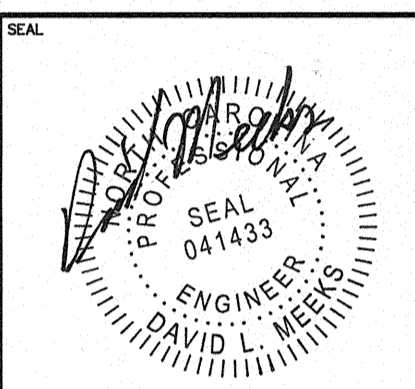
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SEAL



BY: DLM

Revision table with columns: REV, DATE, DESCRIPTION. Entry: 0, 11-01-19, ISSUE FOR CONSTRUCTION

PROJECT NO. 20180157

CLIENT PROJECT NO.

PROJECT TITLE

CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE

ELECTRICAL
LEAD SHEET

DRAWING NO.

E0.1



PLAN NORTH



Engineering Architecture
Surveying Technology

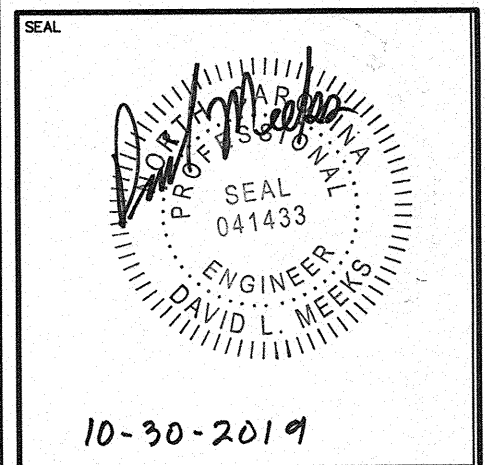
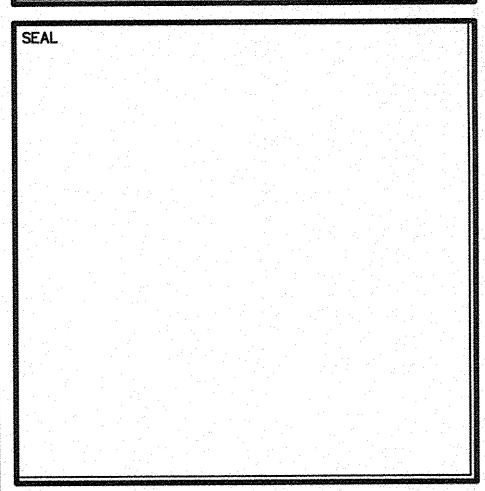
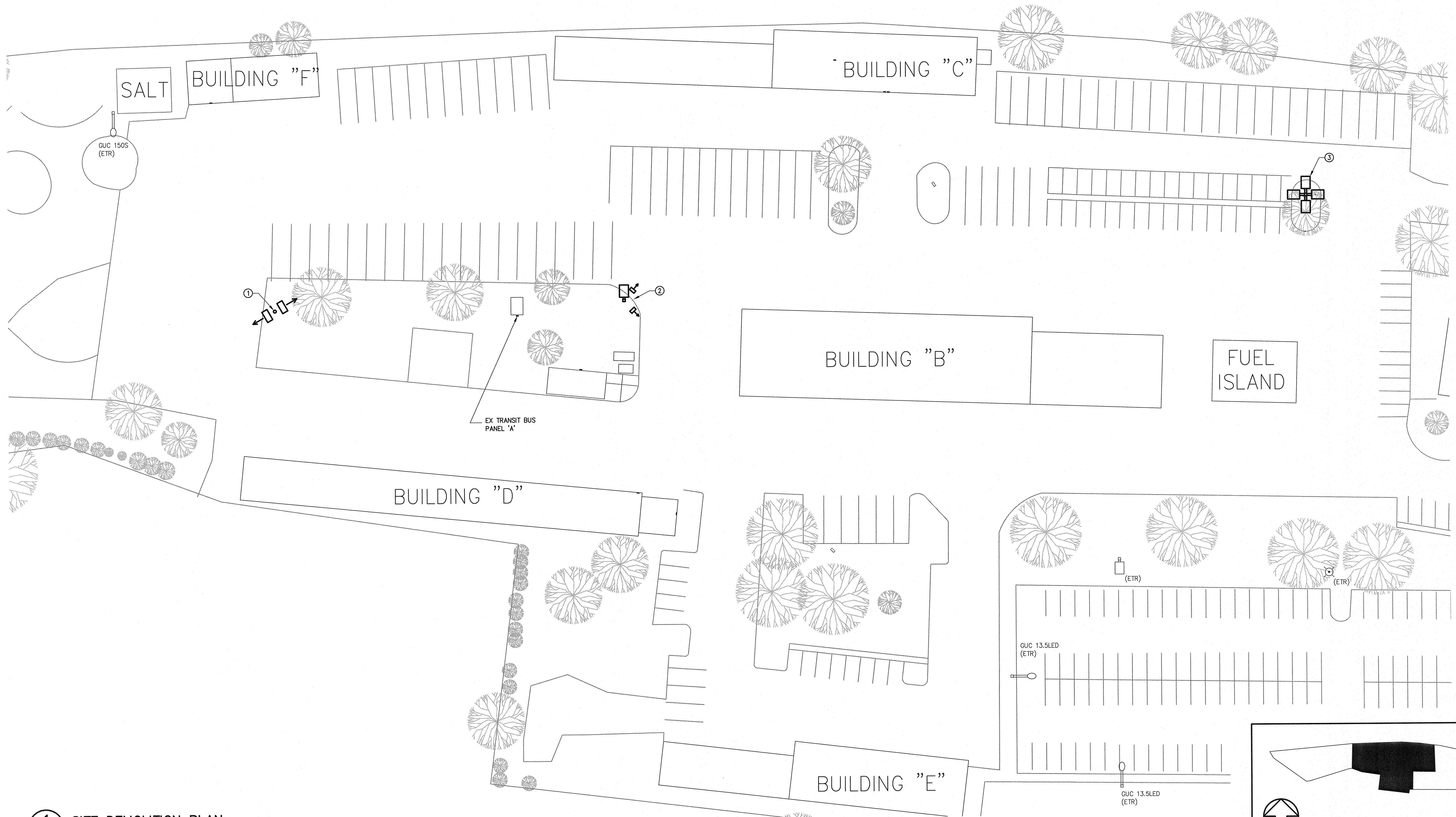
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NOTES

- ① DEMO POLE AREA LIGHTING FIXTURE, POLE FOUNDATION AND CIRCUITING BACK TO SOURCE. LIGHTING FIXTURE IS FED FROM TRANS BUS PANEL 'A' CIRCUIT #22. BACK FILL HOLE & RESEED TO RESTORE BACK TO ADJACENT AREA.
- ② DEMO POLE AREA LIGHTING FIXTURE, POLE FOUNDATION AND CIRCUITING BACK TO SOURCE. LIGHTING FIXTURE IS FED FROM TRANS BUS PANEL 'A' CIRCUITS #5 & 7. A NEW LIGHTING FIXTURE, POLE, & FOUNDATION WILL BE GOING BACK IN SAME LOCATION. SEE E1/2.2.
- ③ DEMO POLE AREA LIGHTING FIXTURE, POLE FOUNDATION AND CIRCUITING BACK TO SOURCE. LIGHTING FIXTURE FED FROM PANEL 'D' IN BUILDING 'B'. A NEW LIGHTING FIXTURE, POLE, & FOUNDATION WILL BE GOING BACK IN SAME LOCATION. SEE E1/2.4.



REV	DATE	DESCRIPTION
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TEG PROJECT NO. 20180157

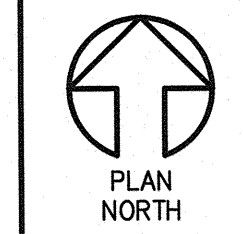
CLIENT PROJECT NO.

PROJECT TITLE
CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE
ELECTRICAL
SITE DEMOLITION PLAN

DRAWING NO. E1.1

1 SITE DEMOLITION PLAN
E1.1 1/32"=1'-0"



KEY PLAN
NTS

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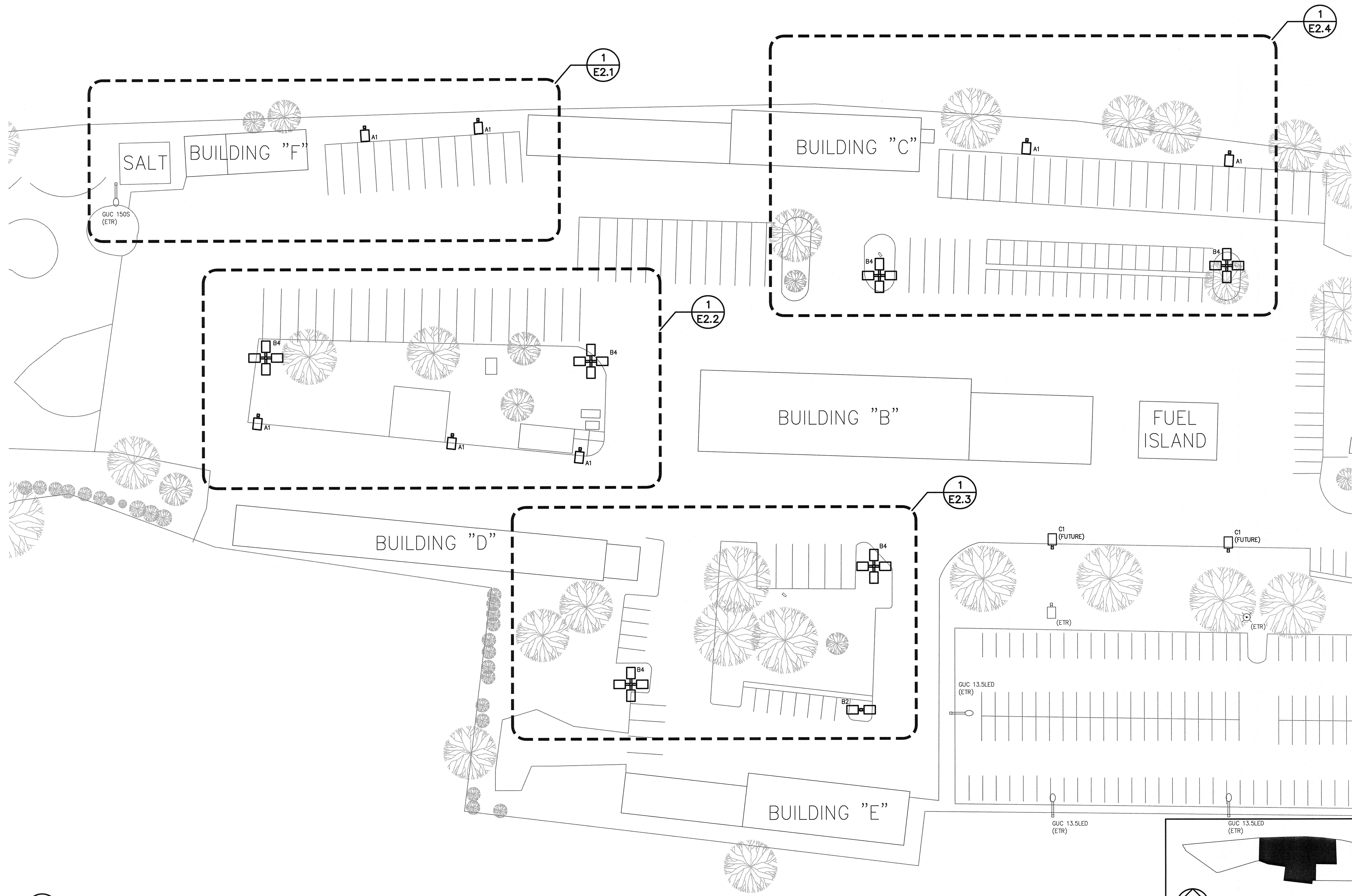


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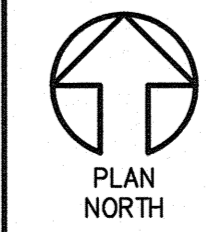
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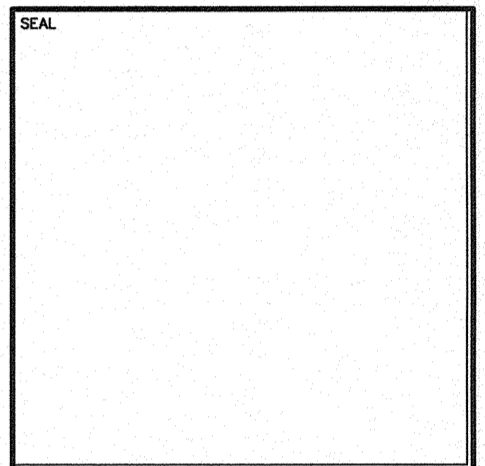
1
E2.2

1
E2.3

1
E1.0 SITE PLAN
1/32"=1'-0"



KEY PLAN
NTS



10-30-2019

REV	DATE	DESCRIPTION	BY	CHK
0	11-01-19	ISSUE FOR CONSTRUCTION		

TED PROJECT NO. 20180157

CLIENT PROJECT NO.

PROJECT TITLE
CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE
ELECTRICAL
SITE PLAN

DRAWING NO.
E2.0

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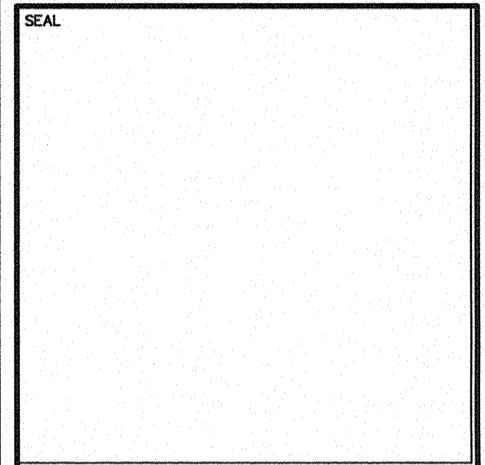
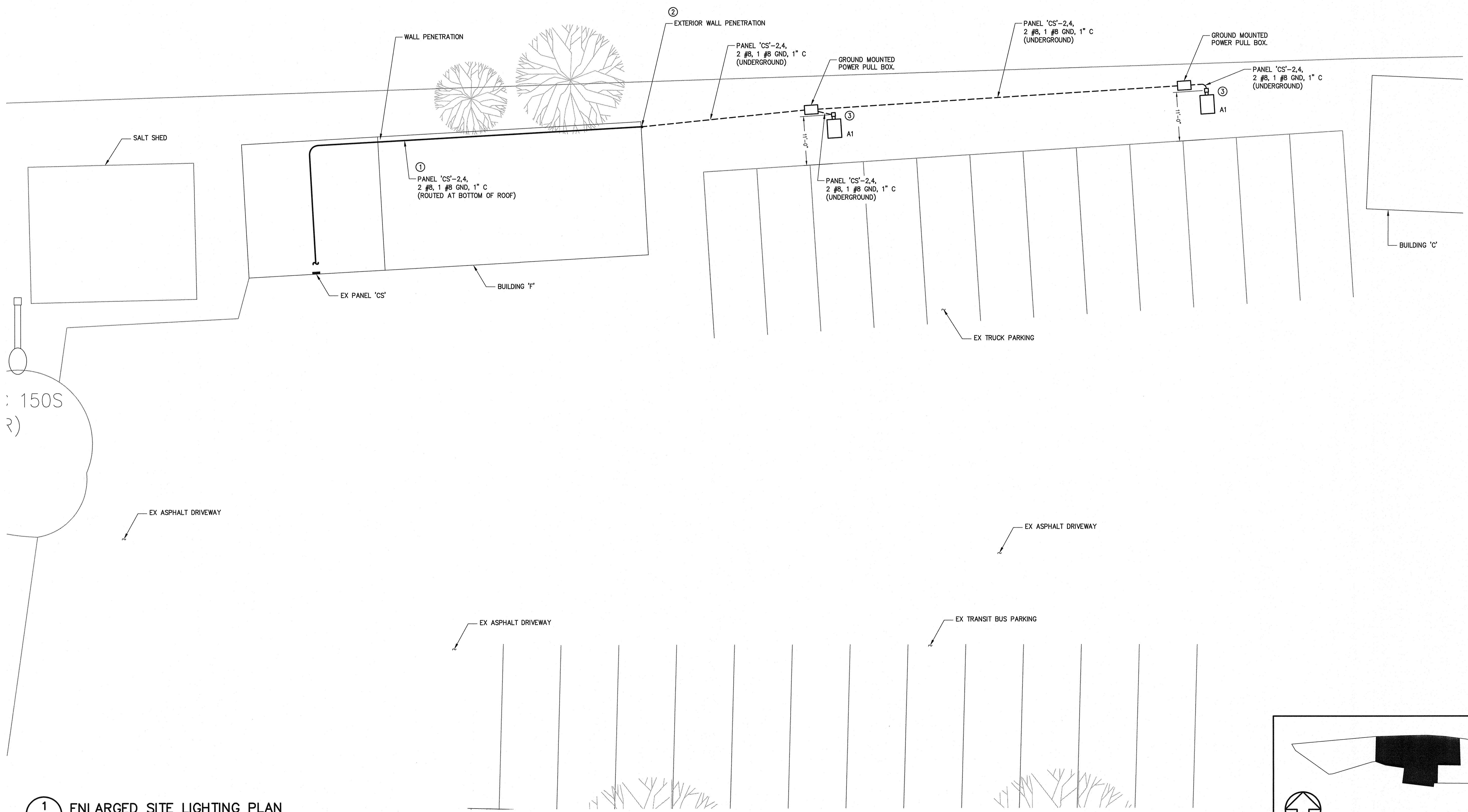
- NOTES**
- OPEN CEILING AREA. WHERE CONDITIONS ALLOW, ROUTE CONDUIT TIGHT TO BOTTOM SIDE OF THE ROOF DECKING SUPPORT STRUCTURE.
 - PENETRATE & EXTEND CONDUIT THRU EXTERIOR WALL. EXTEND CONDUIT DOWN EXTERIOR WALL TO BELOW GROUND.
 - LOCATE POLE BASE CENTERED BETWEEN TRUCK PARKING SPACES AS INDICATED.

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 041433
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 DAVID L. WEEB
 10-30-2019

REV	DATE	DESCRIPTION
0	11-01-19	ISSUE FOR CONSTRUCTION

PROJECT NO. 20180157
 CLIENT PROJECT NO.
 PROJECT TITLE
 CITY OF GREENVILLE
 PUBLIC WORKS
 SITE LIGHTING
 (PHASE 1)
 DRAWING TITLE
 ELECTRICAL
 ENLARGED SITE
 LIGHTING PLAN
 BUILDING 'F' EAST

1
E2.1 ENLARGED SITE LIGHTING PLAN
 3/32"=1'-0" - BUILDING 'F' EAST

PLAN NORTH
KEY PLAN
 NTS

DRAWING NO.
E2.1



PLAN NORTH

- NOTES**
- LOCATE NEW POLE LIGHTING BASE IN SAME LOCATION AS EXISTING.
 - LOCATED CENTER OF LIGHTING FIXTURE POLE BASE 4'-6" BEHIND BACK OF CURB.
 - DEMO & REPLACE EXISTING CONCRETE FOR INSTALLATION OF NEW POLE LIGHTING & CONDUIT.

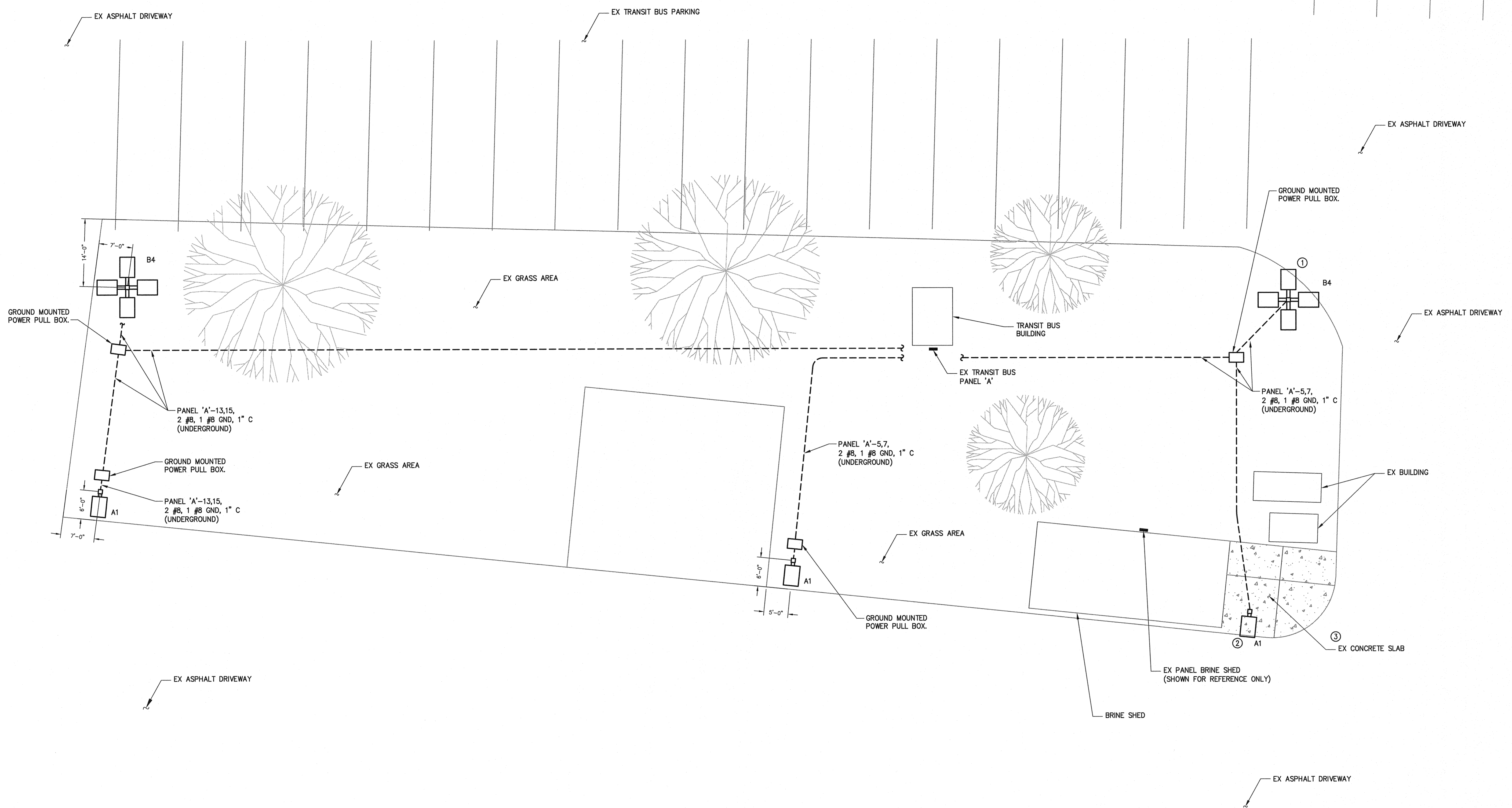
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SEAL

PROFESSIONAL ENGINEER
DAVID L. HEEBS
041433

10-30-2019

REV	DATE	DESCRIPTION
0	11-01-19	ISSUE FOR CONSTRUCTION

TED PROJECT NO. 20180157

CLIENT PROJECT NO.

PROJECT TITLE
CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE
ELECTRICAL
ENLARGED SITE
LIGHTING PLAN
BUS TRANSIT AREA

DRAWING NO.
E2.2

1 ENLARGED SITE LIGHTING PLAN
E2.2 3/32"=1'-0" - BUS TRANSIT AREA

KEY PLAN
PLAN NORTH
NTS

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PLAN NORTH

NOTES

- ① ROUTE CONDUITS ABOVE LAY-IN CEILING. WHERE CONDITIONS ALLOW, KEEP CONDUITS TIGHT TO BOTTOM OF CEILING.
- ② PENETRATE & EXTEND CONDUIT THRU EXTERIOR WALL. EXTEND CONDUIT DOWN EXTERIOR WALL TO BELOW GROUND.
- ③ LOCATE POLE BASE CENTERED IN PARKING SPACE & CENTERED IN GRASS ISLAND.
- ④ LOCATE POLE BASE CENTERED IN GRASS ISLAND.

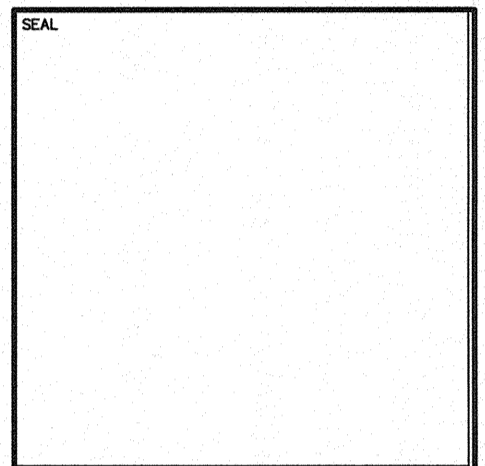
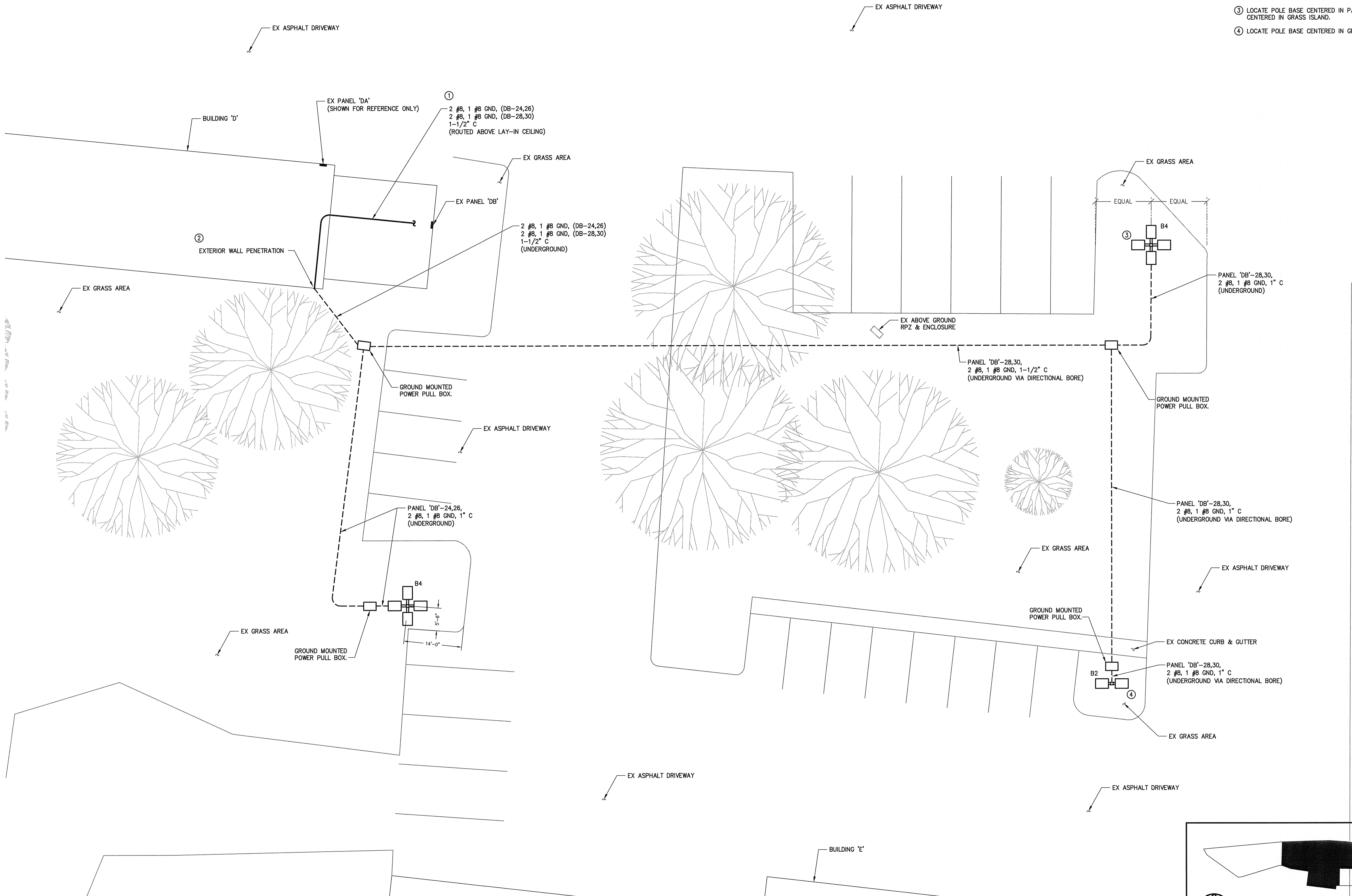


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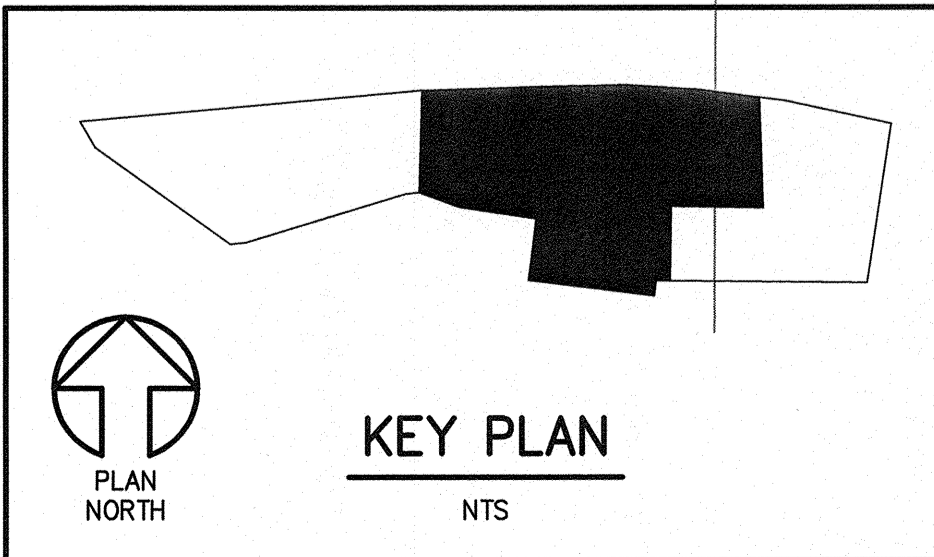
PROJECT TITLE
CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE
ELECTRICAL
ENLARGED SITE
LIGHTING PLAN
BUILDING 'D' EAST

DRAWING NO.

E2.3

1
E2.3 ENLARGED SITE LIGHTING PLAN
3/32"=1'-0" - BUILDING 'D' EAST



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PLAN NORTH

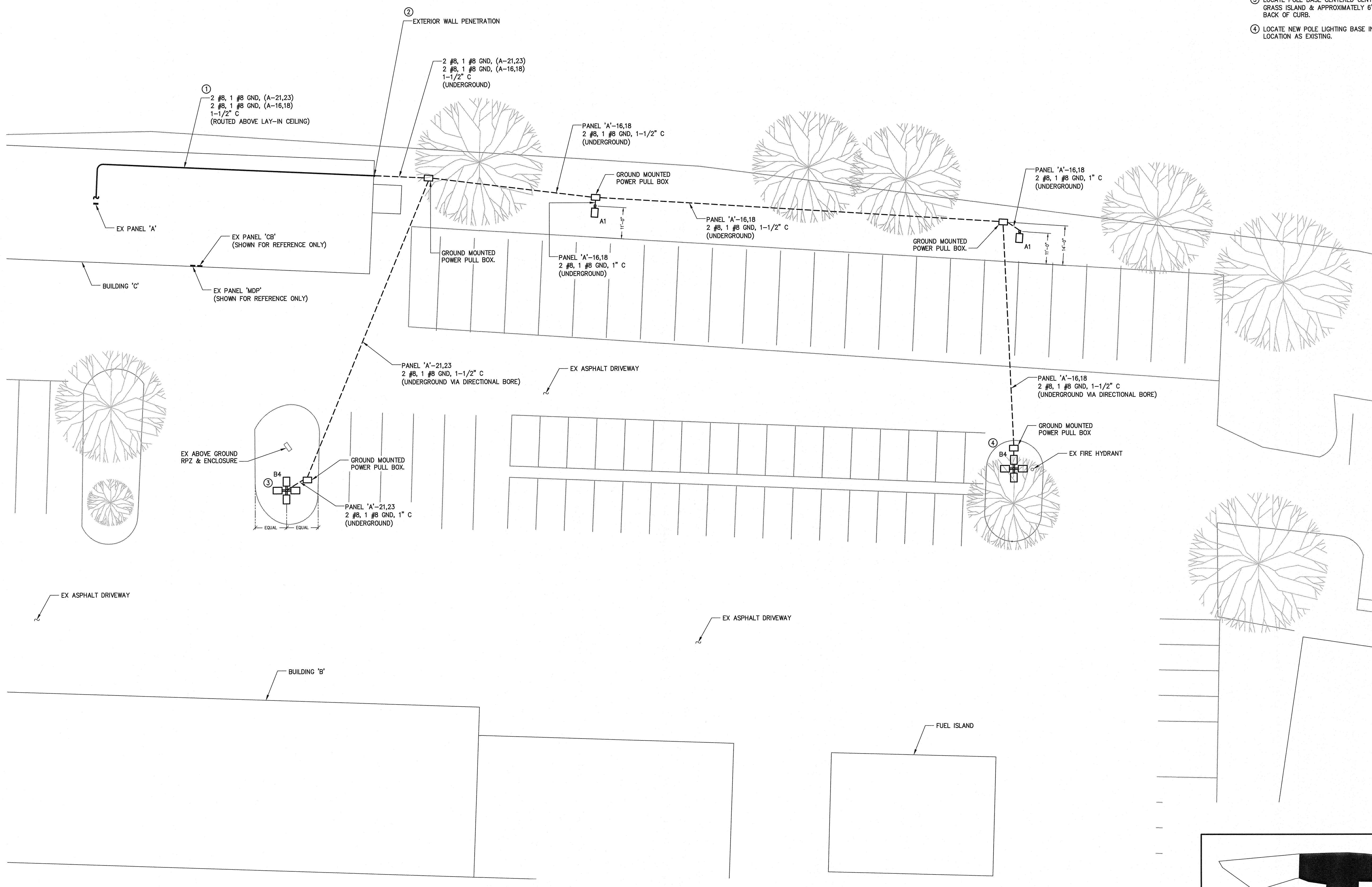
- NOTES**
- ROUTE CONDUITS ABOVE LAY-IN CEILING. WHERE CONDITIONS ALLOW, KEEP CONDUITS TIGHT TO BOTTOM OF CEILING.
 - PENETRATE & EXTEND CONDUIT THRU EXTERIOR WALL. EXTEND CONDUIT DOWN EXTERIOR WALL TO BELOW GROUND.
 - LOCATE POLE BASE CENTERED CENTERED IN GRASS ISLAND & APPROXIMATELY 6'-0" FROM BACK OF CURB.
 - LOCATE NEW POLE LIGHTING BASE IN SAME LOCATION AS EXISTING.

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PROFESSIONAL SEAL
 ENGINEER
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 041433
 10-30-2019

REV	DATE	DESCRIPTION
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TED PROJECT NO. 20180157
 CLIENT PROJECT NO.
 PROJECT TITLE
 CITY OF GREENVILLE
 PUBLIC WORKS
 SITE LIGHTING
 (PHASE 1)

DRAWING NO.
E2.4

1
E2.4 ENLARGED SITE LIGHTING PLAN
 1/16"=1'-0" - BUILDING C EAST

KEY PLAN
 NTS

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EXISTING - BUILDING 'D'

PANELBOARD DB		VOLTAGE: <input checked="" type="checkbox"/> 208/120V., 1 PHASE, 3 WIRE						
MOUNTING: <input type="checkbox"/> FLUSH <input checked="" type="checkbox"/> SURFACE	MAIN: <input checked="" type="checkbox"/> LUGS ONLY <input type="checkbox"/> MAIN BREAKER	BUS: <u>225</u> A TRIP: <u>NA</u> A	FRAME: <u> </u> A <input checked="" type="checkbox"/> TOP <input type="checkbox"/> BOTTOM					
COVER: <input checked="" type="checkbox"/> DOOR WITH LOCK <input type="checkbox"/> DOOR WITHOUT LOCK		<input type="checkbox"/> WITH HINGABLE COVER <input checked="" type="checkbox"/> WITHOUT HINGABLE COVER						
ALL BRANCH BREAKERS 20A 1 POLE UNLESS NOTED OTHERWISE U/L LISTED BREAKER INTERRUPTING CAPACITY: <u>10,000</u> A RMS. SYM. MIN.								
DESCRIPTION	LOAD	CKT NO.	CKT NO.	DESCRIPTION	LOAD	PHASE LOAD (AMPS)		
						L1	L2	L3
PANEL DA		1	2	RECP.				
		3	4	RECP.				
		5	6	RECP.				
LIGHTS		7	8	RECP. WATER COOLER				
HOT BOX, RECP BACK FLOW		9	10	SPARE				
? SPARE		11	12	SPARE				
? SPARE		13	14	SPARE				
? SPARE		15	16	SPARE				
WATER HEATER, ATTIC		17	18	SPARE				
FURNACE UNIT #1		19	20	SPARE				
FURNACE UNIT #2		21	22	SPARE				
AC COMPRESSOR UNIT #1		23	24	AREA POLE LIGHT (SOUTH) ~	6.0			
		25	26		6.0			
AC COMPRESSOR UNIT #2		27	28	AREA POLE LIGHT (EAST) ~	9.0			
		29	30		9.0			

PANELBOARD LOCATION: BUILDING D OFFICE
 MANUFACTURER: GENERAL ELECTRIC
 MODEL/CAT. NO.: AQF3302MTX
 FEED: _____

KEY: MULTIPOLE BREAKER GFI BREAKER LOCKOFF ATTACH SWITCH DUTY PADLOCK ATTACH HACR HID RATED ARC FAULT

(EXISTING PANELBOARD SHOWN FOR REFERENCE ONLY, CIRCUITS HAVE NOT BEEN FIELD VERIFIED)
 + NEW LOAD ADDED TO EXISTING CIRCUIT BREAKER
 * EXISTING SPARE CIRCUIT BREAKER TO BE USED
 ~ NEW CIRCUIT BREAKER IN EXISTING SPACE
 ^ NEW CIRCUIT BREAKER, EXISTING CIRCUIT BREAKER TO BE REMOVED

EXISTING - TRANSIT BUS SHED

PANELBOARD TRANSIT BUS PANEL A		VOLTAGE: <input checked="" type="checkbox"/> 208/120V., 1 PHASE, 3 WIRE						
MOUNTING: <input type="checkbox"/> FLUSH <input checked="" type="checkbox"/> SURFACE	MAIN: <input checked="" type="checkbox"/> LUGS ONLY <input type="checkbox"/> MAIN BREAKER	BUS: <u> </u> A TRIP: <u>NA</u> A	FRAME: <u> </u> A <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM					
COVER: <input checked="" type="checkbox"/> DOOR WITH LOCK <input type="checkbox"/> DOOR WITHOUT LOCK		<input type="checkbox"/> WITH HINGABLE COVER <input checked="" type="checkbox"/> WITHOUT HINGABLE COVER						
ALL BRANCH BREAKERS 20A 1 POLE UNLESS NOTED OTHERWISE U/L LISTED BREAKER INTERRUPTING CAPACITY: <u>10,000</u> A RMS. SYM. MIN.								
DESCRIPTION	LOAD	CKT NO.	CKT NO.	DESCRIPTION	LOAD	PHASE LOAD (AMPS)		
						L1	L2	L3
?		1	2	?				
?		3	4	?				
AREA POLE LIGHT (EAST) +	9.0	5	6	?				
	9.0	7	8	?				
BRINE SHED PANEL		9	10	?				
		11	12	SPACE				
AREA POLE LIGHT (WEST) ~	7.5	13	14	SPACE				
	7.5	15	16	SPACE				
SPACE		17	18	SPACE				
SPACE		19	20	SPACE				
SPACE		21	22	SPARE (WAS AREA POLE LIGHT WEST)				
SPACE		23	24	SPACE				

PANELBOARD LOCATION: OUTSIDE NEAR TRANSIT BUS PARKING
 MANUFACTURER: GENERAL ELECTRIC
 MODEL/CAT. NO.: _____
 FEED: _____

KEY: MULTIPOLE BREAKER GFI BREAKER LOCKOFF ATTACH SWITCH DUTY PADLOCK ATTACH HACR HID RATED ARC FAULT

(EXISTING PANELBOARD SHOWN FOR REFERENCE ONLY, CIRCUITS HAVE NOT BEEN FIELD VERIFIED)
 + NEW LOAD ADDED TO EXISTING CIRCUIT BREAKER
 * EXISTING SPARE CIRCUIT BREAKER TO BE USED
 ~ NEW CIRCUIT BREAKER IN EXISTING SPACE
 ^ NEW CIRCUIT BREAKER, EXISTING CIRCUIT BREAKER TO BE REMOVED

EXISTING - BUILDING 'C'

PANELBOARD BUILDING C: PANEL A		VOLTAGE: <input checked="" type="checkbox"/> 208/120V., 3 PHASE, 4 WIRE						
MOUNTING: <input type="checkbox"/> FLUSH <input checked="" type="checkbox"/> SURFACE	MAIN: <input checked="" type="checkbox"/> LUGS ONLY <input type="checkbox"/> MAIN BREAKER	BUS: <u>125</u> A TRIP: <u>NA</u> A	FRAME: <u> </u> A <input checked="" type="checkbox"/> TOP <input type="checkbox"/> BOTTOM					
COVER: <input checked="" type="checkbox"/> DOOR WITH LOCK <input type="checkbox"/> DOOR WITHOUT LOCK		<input type="checkbox"/> WITH HINGABLE COVER <input checked="" type="checkbox"/> WITHOUT HINGABLE COVER						
ALL BRANCH BREAKERS 20A 1 POLE UNLESS NOTED OTHERWISE U/L LISTED BREAKER INTERRUPTING CAPACITY: <u>10,000</u> A RMS. SYM. MIN.								
DESCRIPTION	LOAD	CKT NO.	CKT NO.	DESCRIPTION	LOAD	PHASE LOAD (AMPS)		
						L1	L2	L3
HEATER FAN ROOM 102		1	2	RECPTS ROOMS 102 & 103				
HEATER FAN ROOM 103		3	4	FLOOR RECPT.				
RECPTS. ROOM 100		5	6					
RECPTS. ROOM 101		7	8	EXHAUST FAN				
OFFICE REC		9	10	WORKBENCH				
OFFICE LIGHTS		11	12	SPARE				
AIR COMPRESSOR		13	14	SPACE				
		15	16	AREA POLE LIGHT (EAST) ^	9.0			
AC UNIT		17	18		9.0			
		19	20	AC UNIT #3				
AREA POLE LIGHT (SOUTH) ~	6.0	21	22					
	6.0	23	24	SPACE				

PANELBOARD LOCATION: BUILDING C BUILDINGS & GROUNDS
 MANUFACTURER: GENERAL ELECTRIC
 MODEL/CAT. NO.: AQF3241MTX
 FEED: _____

KEY: MULTIPOLE BREAKER GFI BREAKER LOCKOFF ATTACH SWITCH DUTY PADLOCK ATTACH HACR HID RATED ARC FAULT

(EXISTING PANELBOARD SHOWN FOR REFERENCE ONLY, CIRCUITS HAVE NOT BEEN FIELD VERIFIED)
 + NEW LOAD ADDED TO EXISTING CIRCUIT BREAKER
 * EXISTING SPARE CIRCUIT BREAKER TO BE USED
 ~ NEW CIRCUIT BREAKER IN EXISTING SPACE
 ^ NEW CIRCUIT BREAKER, EXISTING CIRCUIT BREAKER TO BE REMOVED

EXISTING - BUILDING 'F'

PANELBOARD BUILDING F: PANEL CS		VOLTAGE: <input checked="" type="checkbox"/> 208/120V., 3 PHASE, 4 WIRE						
MOUNTING: <input type="checkbox"/> FLUSH <input checked="" type="checkbox"/> SURFACE	MAIN: <input checked="" type="checkbox"/> LUGS ONLY <input type="checkbox"/> MAIN BREAKER	BUS: <u>125</u> A TRIP: <u>NA</u> A	FRAME: <u> </u> A <input type="checkbox"/> TOP <input type="checkbox"/> BOTTOM					
COVER: <input checked="" type="checkbox"/> DOOR WITH LOCK <input type="checkbox"/> DOOR WITHOUT LOCK		<input type="checkbox"/> WITH HINGABLE COVER <input checked="" type="checkbox"/> WITHOUT HINGABLE COVER						
ALL BRANCH BREAKERS 20A 1 POLE UNLESS NOTED OTHERWISE U/L LISTED BREAKER INTERRUPTING CAPACITY: <u>10,000</u> A RMS. SYM. MIN.								
DESCRIPTION	LOAD	CKT NO.	CKT NO.	DESCRIPTION	LOAD	PHASE LOAD (AMPS)		
						L1	L2	L3
BLOCK HEATER		1	2	AREA POLE LIGHT (WEST) ~	3.0			
BLOCK HEATER		3	4		3.0			
BLOCK HEATER		5	6	SPACE				
BLOCK HEATER		7	8	SPACE				
BLOCK HEATER		9	10	SPACE				
BLOCK HEATER		11	12	STORAGE LIGHT (?POLE LIGHT)				
BLOCK HEATER		13	14	HEATER FAN				
GARAGE LIGHT		15	16	SPACE				
GARAGE POWER		17	18	SPACE				
STORAGE POWER		19	20	SPACE				
EXTERIOR LIGHTS		21	22	SPACE				
SPACE		23	24	SPACE				

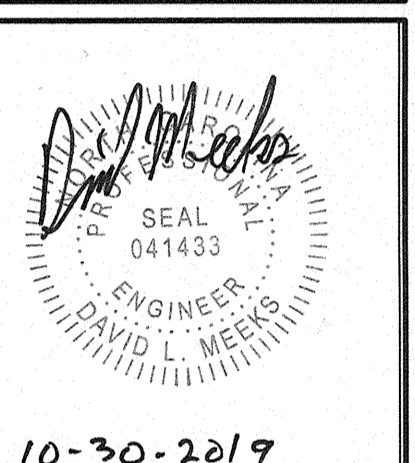
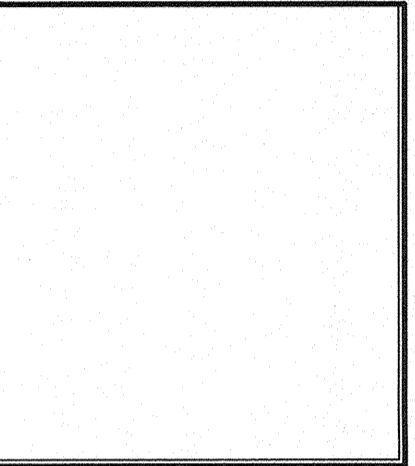
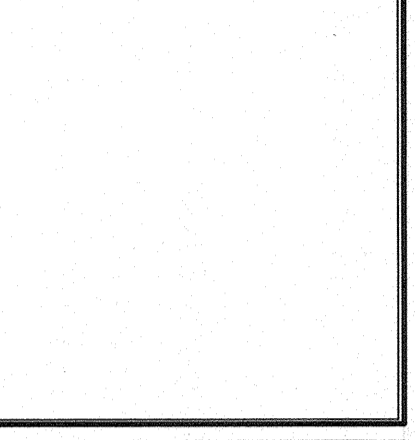
PANELBOARD LOCATION: BUILDING F
 MANUFACTURER: GENERAL ELECTRIC
 MODEL/CAT. NO.: AQF3241MTX
 FEED: _____

KEY: MULTIPOLE BREAKER GFI BREAKER LOCKOFF ATTACH SWITCH DUTY PADLOCK ATTACH HACR HID RATED ARC FAULT

(EXISTING PANELBOARD SHOWN FOR REFERENCE ONLY, CIRCUITS HAVE NOT BEEN FIELD VERIFIED)
 + NEW LOAD ADDED TO EXISTING CIRCUIT BREAKER
 * EXISTING SPARE CIRCUIT BREAKER TO BE USED
 ~ NEW CIRCUIT BREAKER IN EXISTING SPACE
 ^ NEW CIRCUIT BREAKER, EXISTING CIRCUIT BREAKER TO BE REMOVED



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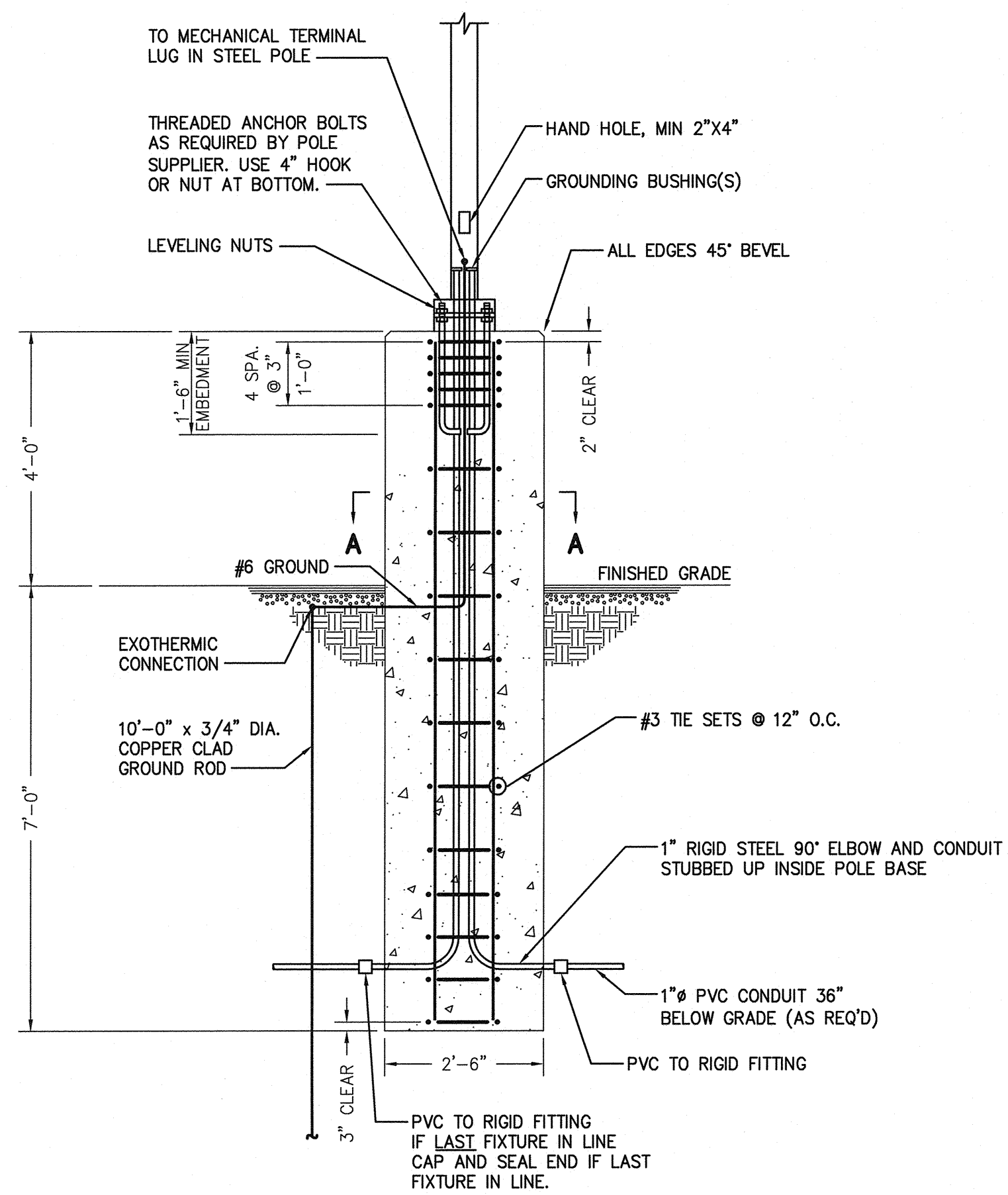
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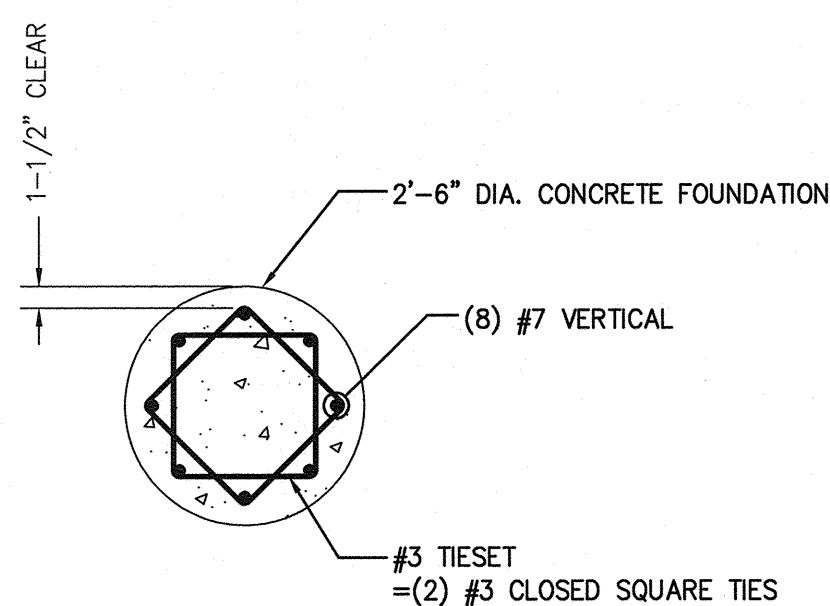
TEG PROJECT NO.	20180157
CLIENT PROJECT NO.	
PROJECT TITLE	CITY OF GREENVILLE PUBLIC WORKS SITE LIGHTING (PHASE 1)
DRAWING TITLE	ELECTRICAL PANEL SCHEDULES

DRAWING NO.	E3.1
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ELEVATION VIEW



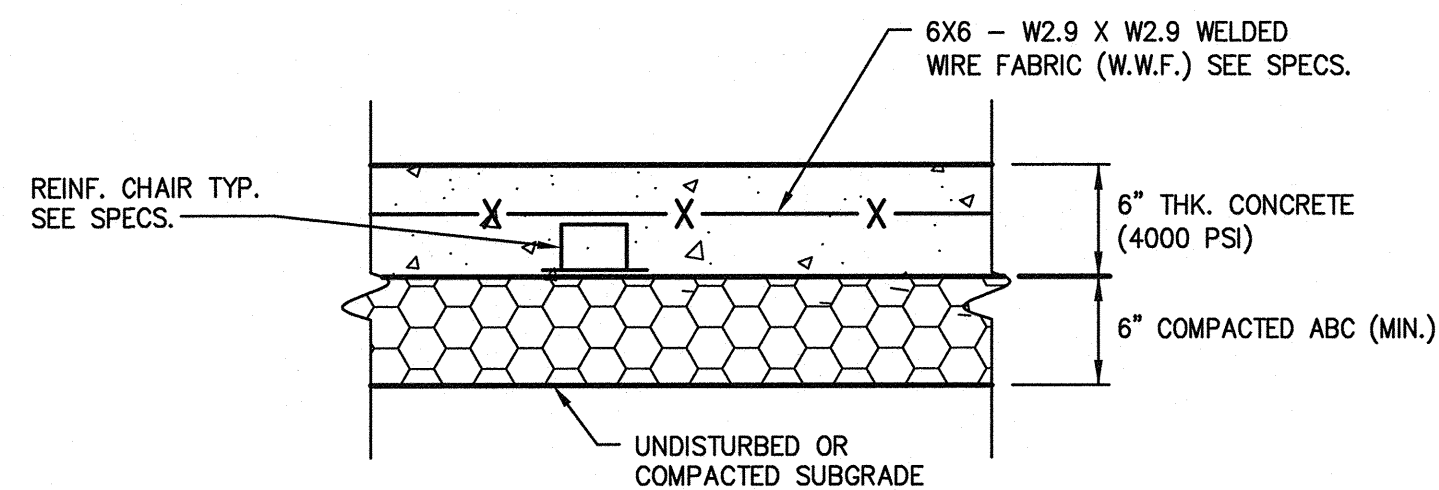
PLAN VIEW - SECTION A-A

DETAIL STRUCTURAL NOTES:

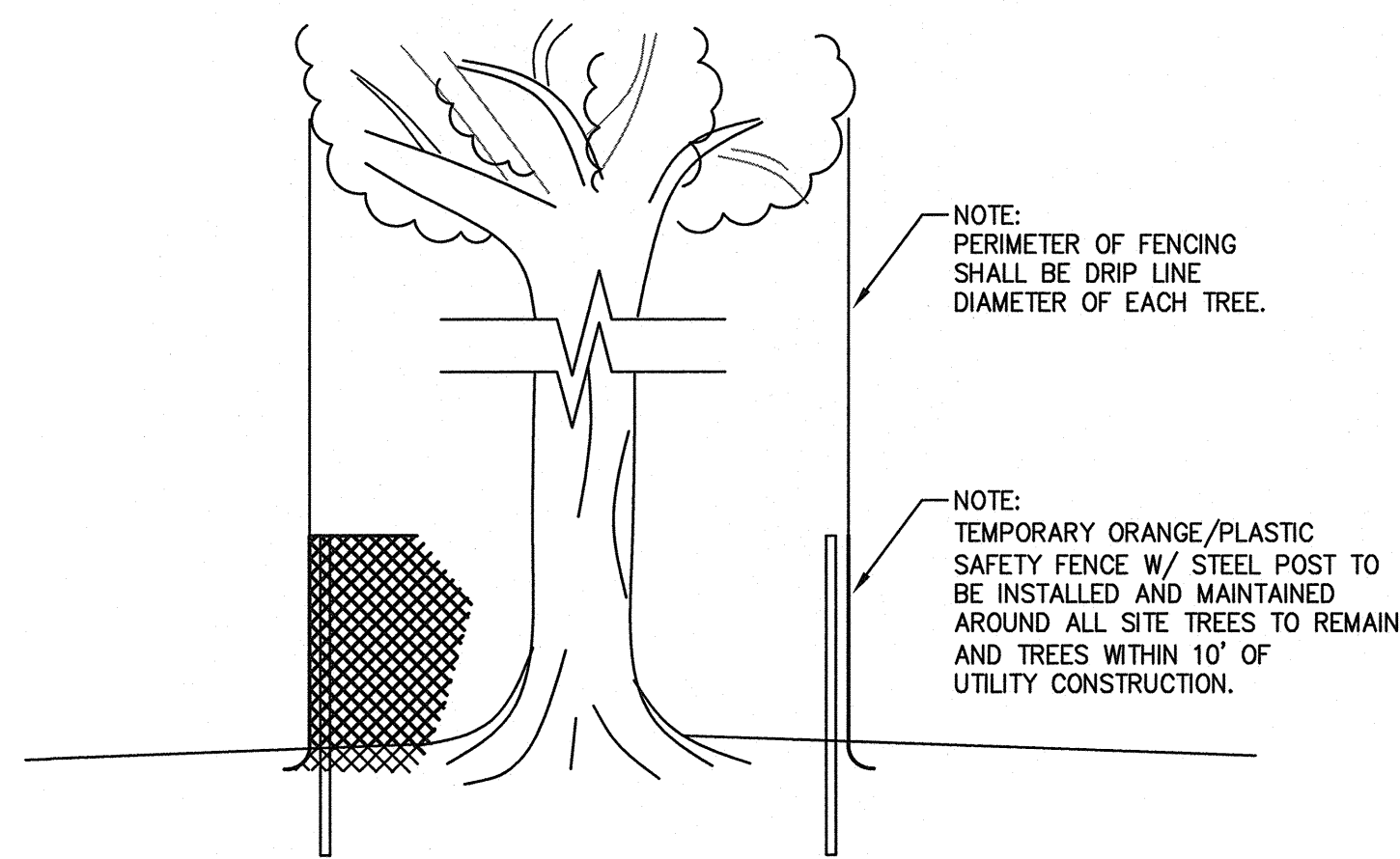
- ANCHOR BOLTS SHALL BE GALVANIZED A36 OR F1554 GRADE 36 STEEL.
- REBAR SHALL BE A615 GRADE 60.
- CONCRETE SHALL HAVE 3000 PSI MINIMUM 28-DAY COMPRESSION STRENGTH.
- AFTER THE FOUNDATION IS FORMED AND POURED, THE SOIL AROUND THE BASE SHALL BE BACKFILLED AND COMPACTED TO ACHIEVE 98% COMPACTION (STANDARD PROCTOR METHOD).
- SEE PLAN DWGS. FOR LOCATIONS OF LIGHT POLE BASES.

GENERAL DETAIL NOTES:

- TOP OF GROUND ROD SHALL BE DRIVEN TO 2" BELOW FINISHED GRADE. CADWELD GROUNDING CONDUCTOR CONNECTIONS.
- GROUT SHALL BE PACKED UNDER BASE OF POLE LIGHT TO ENSURE FULL CONTACT WITH FOUNDATION.
- PROVIDE 2'-6" ROUND CONCRETE FIBER FORM TO FINISHED GRADE AND 2'-6" ROUND FORMING ABOVE FINISHED GRADE.



2 CONCRETE PAVEMENT DETAIL
E4.1 NTS



- NOTES:**
- ALL TREES LOCATED WITHIN 20 FEET OF CONSTRUCTION SHALL BE PROTECTED PER THIS DETAIL.

3 TEMPORARY TREE PROTECTION
E4.1 NTS

LIGHTING FIXTURE SCHEDULE

FIXTURE		LAMPS (EC SHALL PROVIDE AND INSTALL ALL LAMPS.)							REMARKS
TYPE	DESCRIPTION	MANUFACTURER / CATALOG NUMBER	VOLTS	QTY.	TYPE	WATTS	COLOR	CATALOG NUMBER	
A1	POLE MOUNTED AREA LIGHT, LED, 4000K, R4 DISTRIBUTION, 208VAC, DOUBLE FUSE, NETWORKED, PHOTOCCELL, DARK BRONZE FINISH. PROVIDED WITH ROUND TAPERED STEEL POLE, 39'-0" HEIGHT, MINIMUM 11 GA WALL THINNESS, 9 INCH BUTT, DARK BRONZE FINISH WITH ACCESS COVER.	LITHONIA - RSX3-LED-P4-40K-R4-208-RPA-DF-PE-DDBXD (FIXTURE) WITH RTS-39-B-90-4-BM-D190 (POLE) (1 FIXTURE PER POLE. EC TO COMPLETE PART NUMBER.)	208	-	LED	312	4000K		BOTTOM OF FIXTURE MOUNTED APPROXIMATELY 43'-0" AFG. SEE 1/E4.1 FOR POLE FOUNDATION DETAIL.
B2	POLE MOUNTED AREA LIGHT, LED, 4000K, R5 DISTRIBUTION, 208VAC, DOUBLE FUSE, PHOTOCCELL, DARK BRONZE FINISH. PROVIDED WITH ROUND TAPERED STEEL POLE, 39'-0" HEIGHT, MINIMUM 11 GA WALL THINNESS, 9 INCH BUTT, DARK BRONZE FINISH WITH ACCESS COVER.	LITHONIA - RSX3-LED-P4-40K-R5-208-RPA-DF-PE-DDBXD (FIXTURE) WITH RTS-39-B-90-4-BM-D290 (POLE) (2 FIXTURES PER POLE. EC TO COMPLETE PART NUMBER.)	208	-	LED	312	4000K		BOTTOM OF FIXTURE MOUNTED APPROXIMATELY 43'-0" AFG. SEE 1/E4.1 FOR POLE FOUNDATION DETAIL.
B4	POLE MOUNTED AREA LIGHT, LED, 4000K, R5 DISTRIBUTION, 208VAC, DOUBLE FUSE, PHOTOCCELL, DARK BRONZE FINISH. PROVIDED WITH ROUND TAPERED STEEL POLE, 39'-0" HEIGHT, MINIMUM 11 GA WALL THINNESS, 9 INCH BUTT, DARK BRONZE FINISH WITH ACCESS COVER.	LITHONIA - RSX3-LED-P4-40K-R5-208-RPA-DF-PE-DDBXD (FIXTURE) WITH RTS-39-B-90-4-BM-D490 (POLE) (4 FIXTURES PER POLE. EC TO COMPLETE PART NUMBER.)	208	-	LED	312	4000K		BOTTOM OF FIXTURE MOUNTED APPROXIMATELY 43'-0" AFG. SEE 1/E4.1 FOR POLE FOUNDATION DETAIL.

MISCELLANEOUS EQUIPMENT SCHEDULE

DESCRIPTION	MANUFACTURER AND MODEL NUMBER
GROUND MOUNTED PULL BOX, MINIMUM OF 17" WIDE X 30" LONG X 24" DEEP (APPROX. DIMS), HIGH DENSITY POLYMER-CONCRETE, OPEN BOTTOM, ONE PIECE BOLTABLE LID. PULL BOX AND LID SHALL BE RATED FOR TIER 15 MINIMUM. ALL ELECTRICAL PULL BOXES SHALL HAVE THE WORD 'ELECTRIC' MOLDED IN THE LID. TOP OF PULL BOX SHALL BE INSTALLED TWO INCHES ABOVE FINISHED GRADE & GRADED TO PREVENT WATER FROM ENTERING PULL BOX. COORDINATE EXACT MOUNTING LOCATION OF PULL BOXES WITH OWNER PRIOR TO INSTALLATION.	QUAZITE - PG1730BA24 (BOX) OR EQUAL - PG1730HA017 (COVER LID) OR EQUAL
DUCT SEAL, FOAM-IN-PLACE TWO-PART POLYURETHANE MATERIAL DESIGNED FOR SEALING CONDUITS AND INNERDUCTS. SHALL BE COMPATIBLE WITH CONDUIT MATERIALS AND FUTURE FIBER OPTIC CABLE JACKET MATERIALS, MECHANICAL ADHESIVES TO CONDUITS AND CABLES, WATER RESISTANCE	DURALINE -- HYDRO-SEAL S60 OR EQUAL
DOUBLE-POLE, IN-LINE WATERTIGHT FUSE HOLDER, 600VAC, 30A, COPPER SET-SCREW #12 TO #8 SOLID WIRE, WITH INSULATING BOOTS..	LITTELFUSE LEX-JJ, WITH WPB1 OR EQUAL
FUSE, 5AMPS, 600VAC, TIME DELAY, CLASS CC	LITTELFUSE KLDR-5 OR EQUAL

- NOTES:**
- MANUFACTURER INDICATED FOR LEVEL OF QUALITY, FEATURES, AND SIZE REQUIREMENTS. EQUAL PRODUCT BY OTHER MANUFACTURERS WILL BE ALLOWED PROVIDED PRODUCT MEETS OR EXCEEDS LEVEL OF QUALITY, FEATURES, AND SIZE REQUIREMENTS.

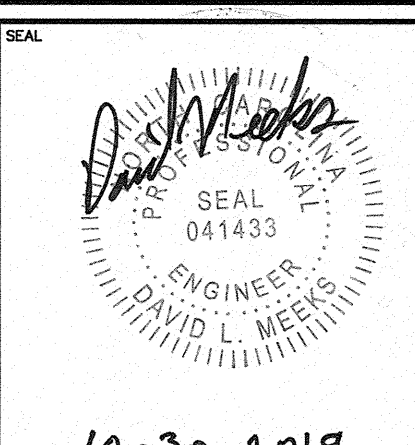
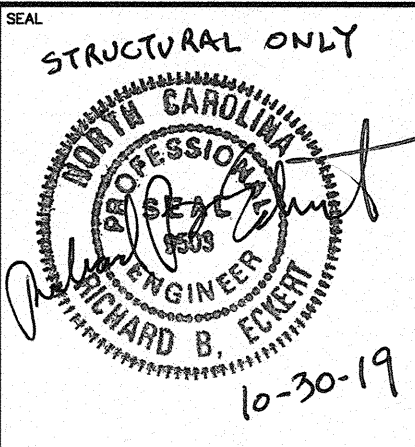


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TED PROJECT NO. 20180157

CLIENT PROJECT NO.

PROJECT TITLE
CITY OF GREENVILLE
PUBLIC WORKS
SITE LIGHTING
(PHASE 1)

DRAWING TITLE
ELECTRICAL
MISCELLANEOUS DETAILS
& LIGHTING FIXTURE
SCHEDULE

DRAWING NO.

E4.1

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