

# FRANCIS MARION UNIVERSITY LIBRARY 1st FLOOR ELECTRICAL ADDITIONS PROJECT

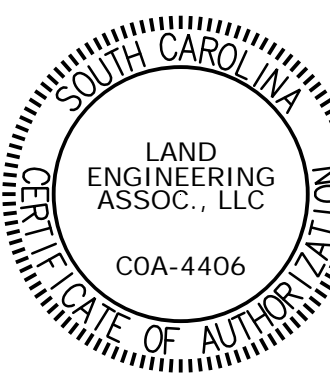
STATE PROJECT NO.: H18-N071-PD

Florence, South Carolina



LAND  
ENGINEERING  
ASSOCIATES, LLC

262 SANDHURST ROAD, SUITE 101  
COLUMBIA, SOUTH CAROLINA 29210  
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REVISION  
NO. DATE

TITLE SHEET

DRAWING TITLE

Representative IDC Project No: H18-N071-PD  
Electrical Contracting Services IDC Project No: H18-D089-PD

PROJECT TITLE:  
FRANCIS MARION UNIVERSITY  
LIBRARY 1st FLOOR ELECTRICAL  
ADDITIONS PROJECT

PROJECT NO.: FMU-2017-01  
DRAWING NO.: T-1  
DRAWN BY: JSJ  
CHECKED BY: JWL  
DATE: 10/22/17

DRAWING NO.:

T-1

SHEET: 1 OF 3

## PROJECT TEAM

### OWNER/AGENCY

FRANCIS MARION UNIVERSITY  
P.O. BOX 100547  
FLORENCE, SC 29502

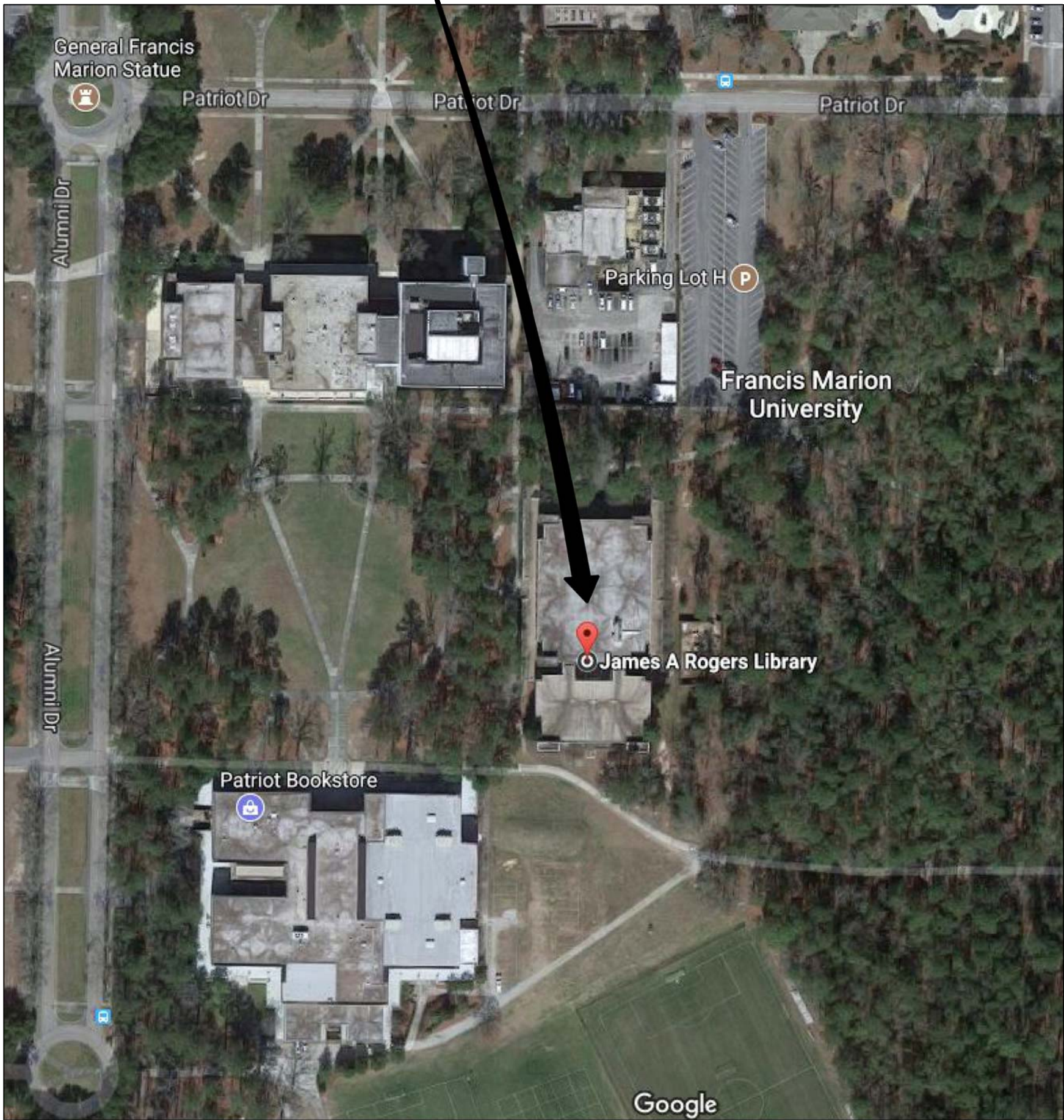
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ARCHITECT/ENGINEER III  
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JBace@fmarion.edu

### ENGINEER

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PHONE: (803) 528-1437  
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JAMES A. ROGERS LIBRARY



VICINITY MAP

## PROJECT ADDRESS

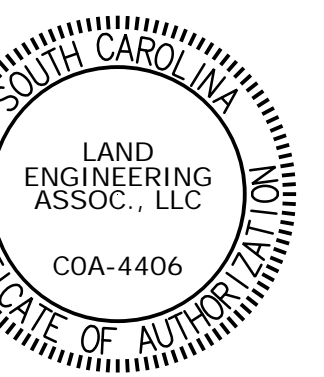
JAMES A. ROGERS LIBRARY  
4822 EAST PALMETTO STREET  
FLORENCE, SC 29506

## INDEX OF DRAWINGS

- T-1 PROJECT TITLE SHEET
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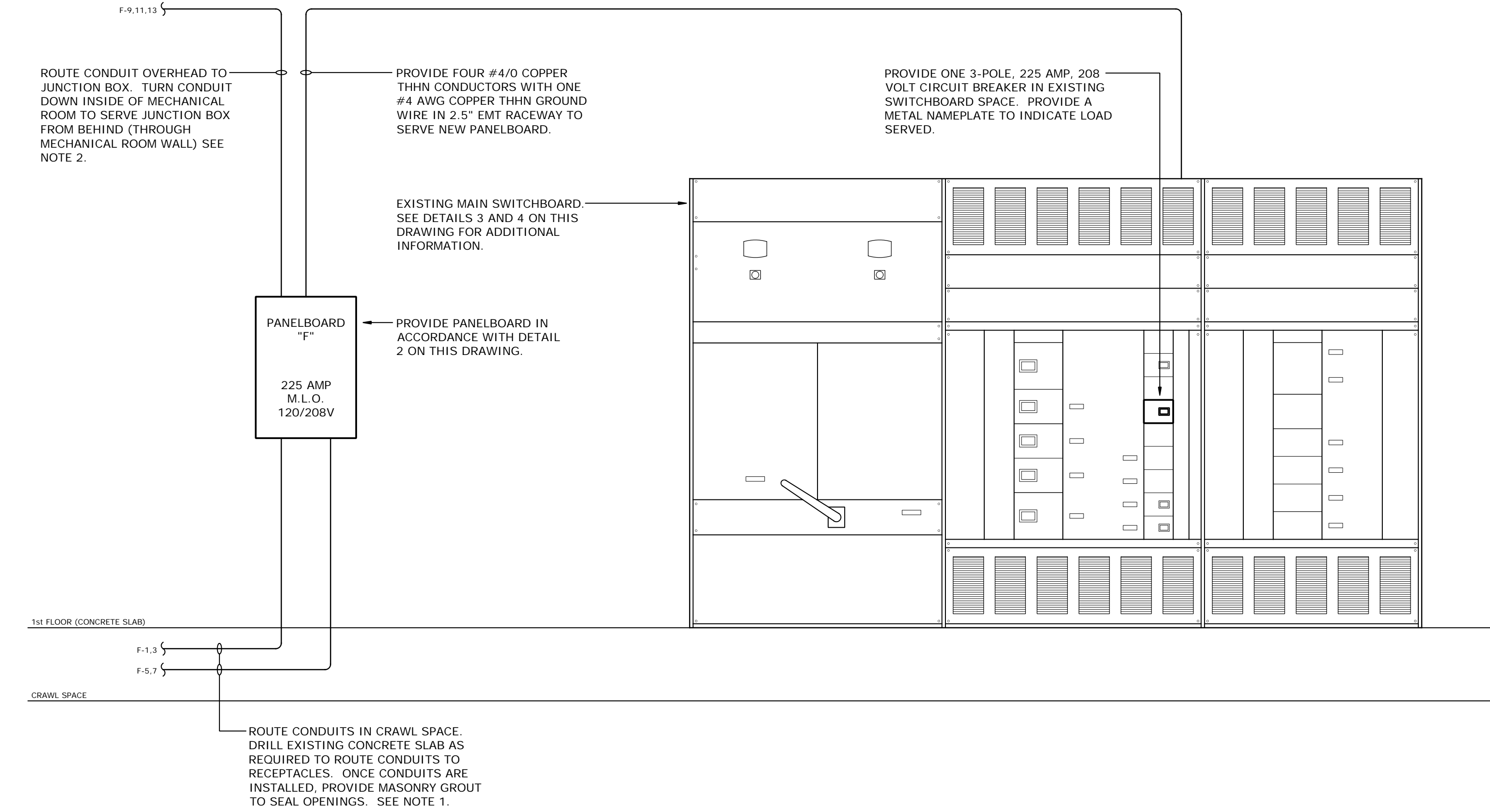




ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
■	ONE-SECTION ELECTRICAL PANELBOARD, SURFACE MOUNT PANEL WITH TOP AT 66" AFF.
⊕	120 VOLT DUPLEX RECEPTACLE, NEMA 5-20R, SPECIFICATION GRADE, WITH IVORY WALLPLATE. COORDINATE EXACT LOCATION OF RECEPTACLE IN ROOM WITH OWNER PRIOR TO ROUGH-IN. ALL RACEWAY AND BOXES ABOVE EXISTING CONCRETE FLOOR SLAB SHALL BE A WIREMOLD #500 IVORY RACEWAY AND BOX SYSTEM (OR EQUAL).
⊕	120 VOLT DUPLEX GROUND-FAULT-INTERRUPT TYPE RECEPTACLE, NEMA 5-20R, SPECIFICATION GRADE WITH IVORY WALLPLATE. COORDINATE EXACT LOCATION OF RECEPTACLE IN ROOM WITH OWNER PRIOR TO ROUGH-IN. ALL RACEWAY AND BOXES ABOVE EXISTING CONCRETE FLOOR SLAB SHALL BE A WIREMOLD #500 IVORY RACEWAY AND BOX SYSTEM (OR EQUAL).
□	4" SQUARE WIREMOLD (OR EQUAL) STEEL SURFACE BOX WITH 4" STEEL FLUSH-MOUNTED BACKBOX (CUT BACKBOX INTO EXISTING WALL). PROVIDE A BRUSHED-ALUMINUM WALLPLATE WITH A 3/4" KNOCK-OUT CENTERED IN WALLPLATE. COORDINATE EXACT LOCATION OF JUNCTION BOX ALONG EXISTING WALL WITH OWNER PRIOR TO ROUGH-IN.

- ### GENERAL CONSTRUCTION NOTES
- PROVIDE ALL WORK IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS:
    - INTERNATIONAL EXISTING BUILDING CODE 2015 EDITION
    - NFPA 70 - NATIONAL ELECTRICAL CODE 2014 EDITION
  - RACEWAYS SHALL BE EMT WITH COMPRESSION TYPE FITTINGS UNLESS NOTED OR DETAILED OTHERWISE. JUNCTION BOXES SHALL BE STEEL TYPE WITH SCREW COVER, SIZED AND SUPPORTED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
  - INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH DUCTS, PIPES, STRUCTURAL MEMBERS, OR OTHER SYSTEMS.
  - THOROUGHLY CLEAN ALL DEVICES, BOXES, RACEWAYS, AND PANELBOARDS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION.
  - THE CONTRACTOR SHALL GUARANTEE THE WORK INSTALLED UNDER THIS CONTRACT FOR A PERIOD OF ONE YEAR AFTER DATE OF FINAL ACCEPTANCE. DEFECTS WHICH APPEAR AS A RESULT OF NORMAL USAGE SHALL BE REMEDIED BY THE CONTRACTOR TO THE COMPLETE SATISFACTION OF THE OWNER WITHOUT COST TO THE OWNER.
  - CUTTING, DRILLING, AND PATCHING: PROVIDE CHASES, SLOTS, AND OPENINGS IN EXISTING BUILDING COMPONENTS TO ALLOW FOR ELECTRICAL INSTALLATIONS. PERFORM CUTTING, DRILLING, FITTING, AND PATCHING REQUIRED TO:
    - A) INSTALL EQUIPMENT, MATERIALS, AND RACEWAYS IN EXISTING STRUCTURES.
    - B) REMOVE AND REPLACE DEFECTIVE WORK THAT DOES NOT CONFORM TO REQUIREMENTS OF THE CONTRACT DOCUMENTS.
    - C) UPON WRITTEN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER, UNCOVER AND RESTORE WORK TO PROVIDE FOR ARCHITECT/ENGINEER OBSERVATION OF CONCEALED WORK.
- PROTECT EXISTING STRUCTURES, FURNISHINGS, FINISHES, MECHANICAL SYSTEMS, AND ELECTRICAL SYSTEMS WHILE PERFORMING CUTTING, DRILLING, FITTING, AND PATCHING.
- PATCH EXISTING SURFACES AND BUILDING COMPONENTS USING NEW MATERIALS THAT MATCH EXISTING MATERIALS. PATCHING SHALL BE PERFORMED BY EXPERIENCED INSTALLERS.

- ### SINGLE-LINE NOTES
- FOR CIRCUITS F-1, 3 AND F1-5, 7 (EACH) PROVIDE TWO #12 AWG COPPER THIN CONDUCTORS, TWO #12 AWG COPPER THIN NEUTRALS, AND TWO #12 AWG COPPER GREEN-INSULATED GROUND WIRES IN 3/4" EMT TO SERVE RECEPTACLES.
  - FOR CIRCUITS F-9, 11, 13 PROVIDE THREE#12 AWG COPPER THIN CONDUCTORS, ONE#12 AWG COPPER THIN NEUTRAL, AND ONE#12 AWG COPPER GREEN-INSULATED GROUND WIRE IN 3/4" EMT TO SERVE OWNER-FURNISHED COMPUTER DESKS.



**1 ELECTRICAL SINGLE-LINE DIAGRAM**  
E-1 NOT TO SCALE

MANUFACTURER: SQUARE-D, CUTLER-HAMMER, GENERAL ELECTRIC, OR SIEMENS  
120/208V, 3 PH, 60 HZ  
225 AMP MAIN LUGS ONLY  
NEMA-1 ENCLOSURE, SURFACE MOUNTED  
42,000 A.I.C. SYM. (MINIMUM)

LOADS SERVED	BKR AMP	LOAD KVA	CKT. NO.	(S / N)	CKT. NO.	LOAD KVA	BKR AMP	LOADS SERVED
RECEPTACLE - LOUNGE	20	1.5	1	•	2	0	20	SPARE
RECEPTACLE - LOUNGE	20	1.5	3	•	4	0	20	SPARE
RECEPTACLE - DEAN'S OFFICE	20	0.2	5	•	6	0	20	SPARE
RECEPTACLE - OFFICE	20	0.2	7	•	8	0	20	SPARE
POWER FEED TO COMPUTER DESKS	20	0.7	9	•	10	0	20	SPARE
POWER FEED TO COMPUTER DESKS	20	0.7	11	•	12	0	20	SPARE
POWER FEED TO COMPUTER DESKS	20	0.7	13	•	14	0	20	SPARE
SPACE ONLY	-	-	15	•	16	-	-	SPACE ONLY
SPACE ONLY	-	-	17	•	18	-	-	SPACE ONLY
SPACE ONLY	-	-	19	•	20	-	-	SPACE ONLY
SPACE ONLY	-	-	21	•	22	-	-	SPACE ONLY
SPACE ONLY	-	-	23	•	24	-	-	SPACE ONLY
SPACE ONLY	-	-	25	•	26	-	-	SPACE ONLY
SPACE ONLY	-	-	27	•	28	-	-	SPACE ONLY
SPACE ONLY	-	-	29	•	30	-	-	SPACE ONLY
SPACE ONLY	-	-	31	•	32	-	-	SPACE ONLY
SPACE ONLY	-	-	33	•	34	-	-	SPACE ONLY
SPACE ONLY	-	-	35	•	36	-	-	SPACE ONLY
SPACE ONLY	-	-	37	•	38	-	-	SPACE ONLY
SPACE ONLY	-	-	39	•	40	-	-	SPACE ONLY
SPACE ONLY	-	-	41	•	42	-	-	SPACE ONLY
SPACE ONLY	-	-	43	•	44	-	-	SPACE ONLY
SPACE ONLY	-	-	45	•	46	-	-	SPACE ONLY
SPACE ONLY	-	-	47	•	48	-	-	SPACE ONLY
SPACE ONLY	-	-	49	•	50	-	-	SPACE ONLY
SPACE ONLY	-	-	51	•	52	-	-	SPACE ONLY
SPACE ONLY	-	-	53	•	54	-	-	SPACE ONLY

TOTAL LOAD (KVA): 5.5

**2 PANELBOARD SCHEDULE - PANEL "F"**  
E-1 NOT TO SCALE



**3 PHOTO: EXISTING SWITCHBOARD**  
E-1 NOT TO SCALE



**4 PHOTO: SWITCHBOARD NAMEPLATE**  
E-1 NOT TO SCALE

REVISION NO. DATE

GENERAL NOTES, LEGEND, SINGLE-LINE DIAGRAM, AND DETAILS

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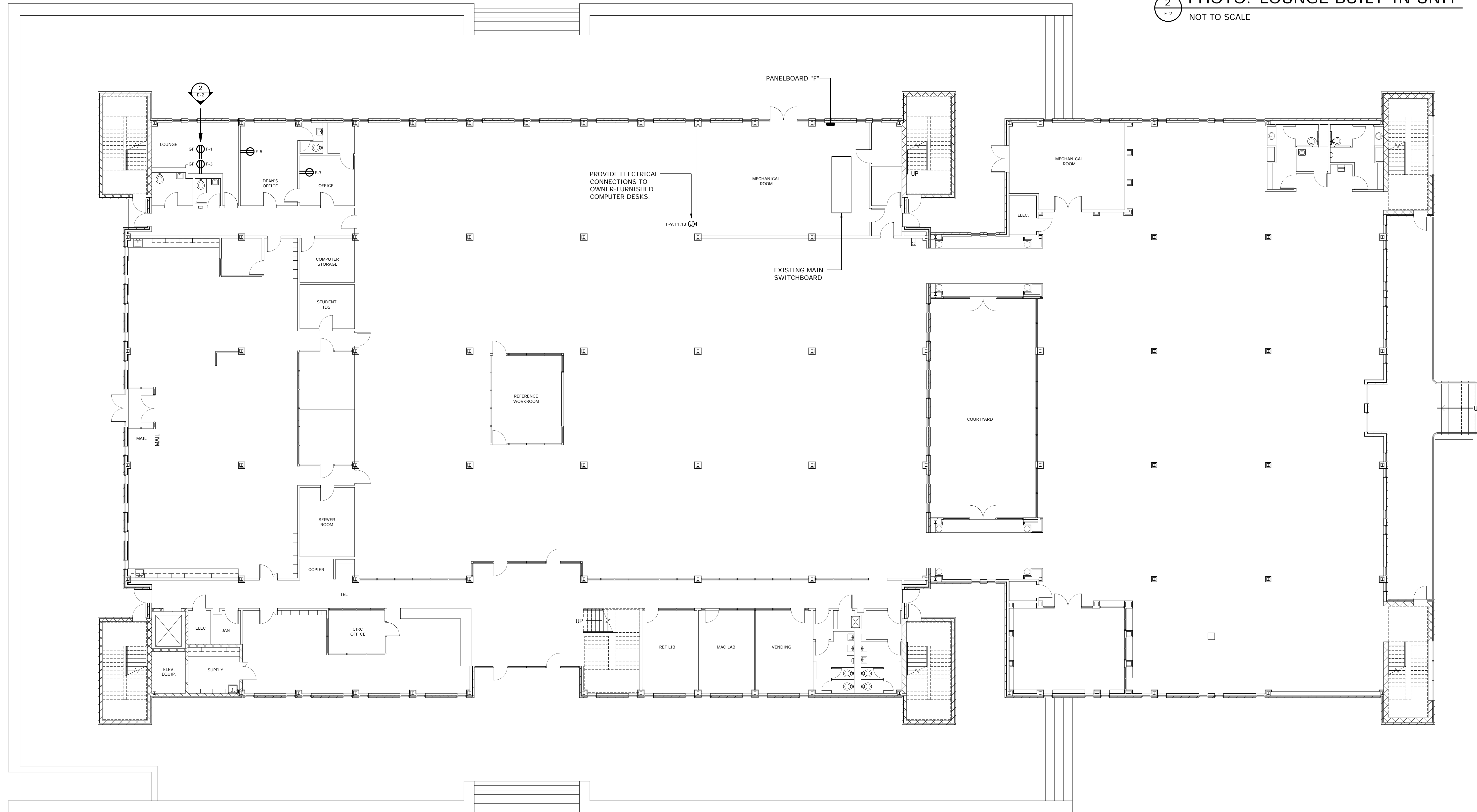
Representative IDC Project No: H18-N071-PD  
Electrical Contracting Services IDC Project No: H18-D089-PD

PROJECT NO.: FMU-2017-01  
DRAWING NO.: E-1  
DRAWN BY: JSJ  
CHECKED BY: JWL  
DATE: 10/22/17  
DRAWING NO.:

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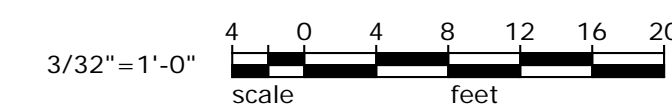
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INSTALL ONE RECEPTACLE CONCEALED BEHIND EACH MICROWAVE UNIT.

2 PHOTO: LOUNGE BUILT-IN UNIT NOT TO SCALE

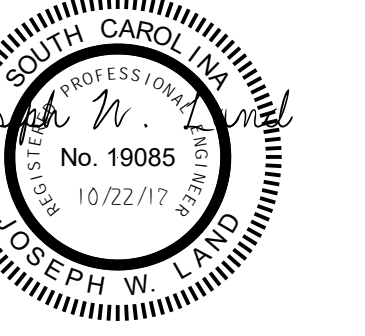
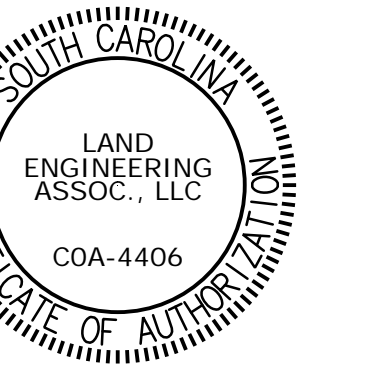
1 1st FLOOR ELECTRICAL RENOVATION PLAN SCALE: 3/32" = 1'-0"



LEA

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1st FLOOR ELECTRICAL RENOVATION PLAN

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Representative IDC Project No: H18-N071-PD Electrical Contracting Services IDC Project No: H18-D089-PD

FRANCIS MARION UNIVERSITY LIBRARY 1st FLOOR ELECTRICAL ADDITIONS PROJECT

PROJECT TITLE

PROJECT NO.: FMU-2017-01 DRAWING NO.: E-2 DRAWN BY: JSJ CHECKED BY: JWL DATE: 10/22/17

DRAWING NO.:

E-2

SHEET: 3 OF 3