

SYMBOL	POWER
	HOME RUN TO PANELBOARD LETTERS AND NUMBERS DESIGNATE PANEL AND CIRCUITS. PROVIDE ONE PHASE CONDUCTOR, ONE NEUTRAL CONDUCTOR, AND ONE EQUIPMENT GROUNDING CONDUCTOR FOR SINGLE POLE CIRCUIT BREAKER CIRCUITS. PROVIDE TWO PHASE CONDUCTORS AND ONE EQUIPMENT GROUNDING CONDUCTOR FOR TWO POLE CIRCUIT BREAKER CIRCUITS. PROVIDE THREE PHASE CONDUCTORS AND ONE EQUIPMENT GROUNDING CONDUCTOR FOR THREE POLE CIRCUIT BREAKER CIRCUITS. CONDUIT AND CABLE, CONCEALED IN FINISHED SPACES, EXPOSED ELSEWHERE. CONDUIT AND CABLE, BELOW GRADE OR SLAB.
	UNDERGROUND DUCTBANK: EU = DENOTES ELECTRICAL GAS = DENOTES GAS LINE OE = DENOTES OVERHEAD ELECTRIC LINE T = DENOTES TELECOMMUNICATIONS
	CONDUIT TURNED UP. CONDUIT TURNED DOWN.
	GROUND ROD TEST WELL
	GROUND ROD
	EXOTHERMIC WELD.
	CLAMP CONNECTOR
	BOLTED CONNECTION
	AIR TERMINAL
	GROUND / GROUND ROD / GEC
	LIGHTNING PROTECTION MAIN CONDUCTOR
	BARE COPPER GROUNDING CONDUCTOR.
	GROUNDING BUSBAR
	WALL SWITCH UNLESS OTHERWISE NOTED MOUNTED 48" AFF. "X" REPRESENTS TYPE. "a" REPRESENTS LIGHTS SWITCHED. = 4 BUTTON LOW VOLTAGE SWITCH WITH RAISE/LOWER AND ON/OFF = 8 BUTTON LOW VOLTAGE SWITCH WITH RAISE/LOWER AND ON/OFF AND 4 ZONES TS = TIME SWITCH = LOW VOLTAGE DIMMER - WITH RAISE/LOWER AND ON/OFF AND 4 ZONES LV = LOW VOLTAGE SWITCH = NO DESIGNATION IS STANDARD LINE VOLTAGE SWITCH = 3 OR 4 WAY LINE VOLTAGE SWITCH AS INDICATED
	SINGLE, DUPLEX, 4-PLEX RECEPTACLE, MOUNTED 18" AFF UON. WP = WATERPROOF SP = SURGE SUPPRESSION TR = TAMPER RESISTANT AC = MOUNTED ABOVE COUNTER, 6" ABOVE COUNTERTOP SW = SWITCHED RECEPTACLE SPECIAL PURPOSE RECEPTACLE, SIZE AND TYPE AS SHOWN ON THE DRAWING. GFI DUPLEX RECEPTACLE. DUPLEX RECEPTACLE. FLUSH FLOOR MOUNTED, UNLESS OTHERWISE NOTED. DUPLEX RECEPTACLE. CEILING MOUNTED, UNLESS OTHERWISE NOTED. DUPLEX RECEPTACLE WITH TWO 5VDC USB PORTS, ONE TYPE A USB PORT AND ONE TYPE B USB PORT. PULLBOX SIZE PER NEC UNLESS OTHERWISE NOTED.
	TRANSFORMER.
	JUNCTION BOX SIZE PER NEC UNLESS OTHERWISE NOTED.
	EQUIPMENT CONNECTION POINT.
	PANELBOARD SURFACE OR FLUSH MOUNTED AS INDICATED.
	VARIABLE FREQUENCY DRIVE.
	MOTOR CONNECTION.
	SINGLE POLE MANUAL MOTOR STARTER, WITH THERMAL OVERLOAD PROTECTION.
	NON-FUSIBLE DISCONNECT. "100/3" DENOTES 100A, 3P, '3R'. FUSIBLE DISCONNECT SWITCH. "200/3/150" DENOTES 200A, 3P, WITH 150A FUSES.
	ENCLOSED THERMAL MAGNETIC CIRCUIT BREAKER INDIVIDUALLY MOUNTED. "100/3" DENOTES 100A, 3P, 3R (NOTATION TYPICAL). MAGNETIC MOTOR STARTER INDIVIDUALLY MOUNTED.
	FUSIBLE DISCONNECT SWITCH TYPE COMBINATION MAGNETIC MOTOR STARTER, CIRCUIT NUMBER AS SHOWN ON THE DRAWINGS. INDIVIDUALLY MOUNTED 54 IN. ABOVE FINISHED FLOOR.
	MOTOR CIRCUIT PROTECTOR TYPE COMBINATION MAGNETIC MOTOR STARTER, CIRCUIT NUMBERS AS SHOWN ON THE DRAWINGS. INDIVIDUALLY MOUNTED 54 IN. ABOVE FINISHED FLOOR.
	SURFACE METAL RACEWAY, (SMR) COORDINATE SIZE WITH SPECIFICATION, MOUNTED ABOVE COUNTER TOP, UNLESS OTHERWISE NOTED.
	MULTISERVICE FLOOR BOX, . SEE E-502 FOR MORE INFORMATION. MULTISERVICE FLOOR BOX, . SEE E-503 FOR MORE INFORMATION.
	MULTISERVICE POKE THRU WITH QUADRUPLEX SOCKET AND GROUND. SEE MTF-T001 FOR TELECOMMUNICATIONS INFORMATION.
	EMERGENCY PUSH BUTTON PUSH BUTTON CONTROLLER
	HANDHOLE

SYMBOL	FLOORBOXES
	FLOORBOX LOCATION, TRAINING SIMULATION SYSTEM - UNCLASSIFIED; INSTALLED IN RAISED ACCESS FLOOR. INSTALL EIGHT (8) CATEGORY 6A UTP PLENUM-RATED, GREEN JACKET COPPER CABLES FROM TERMINATING RACK IN SIM SERVER ROOM TO FLOORBOX LOCATION. SEE DETAIL SHEET E-502 FOR TERMINATION DETAILS.
	FLOORBOX LOCATION, TRAINING SIMULATION SYSTEM - CLASSIFIED; INSTALLED IN RAISED ACCESS FLOOR. INSTALL EIGHT (8) CATEGORY 6A UTP PLENUM-RATED, RED JACKET COPPER CABLES FROM TERMINATING RACK IN SIM SERVER ROOM TO FLOORBOX LOCATION. SEE DETAIL SHEET E-502 FOR TERMINATION DETAILS.
	FLOORBOX LOCATION, TRAINING SIMULATION SYSTEM - CLASSIFIED; INSTALLED IN RAISED ACCESS FLOOR. INSTALL TWO (2) 5-20R RECEPTACLES FROM DEDICATED PANEL WITHIN ROOM TO FLOORBOX LOCATION. SEE DETAIL SHEET E-502 FOR TERMINATION DETAILS.
	FLOORBOX LOCATION, EXERCISE CONTROL - CLASSIFIED; INSTALLED IN RAISED ACCESS FLOOR. INSTALL EIGHT (8) CATEGORY 6A UTP PLENUM-RATED, RED JACKET COPPER CABLES FROM TERMINATING RACK IN SIM SERVER ROOM TO FLOORBOX LOCATION. SEE DETAIL SHEET E-503 FOR TERMINATION DETAILS.
SYMBOL	GENERAL
	SHEET KEYNOTE X = KEYNOTE NUMBER
SYMBOL	LIGHTING
	STRIP LIGHTING FIXTURE. "LP1"=PANELBOARD, "2"=CIRCUIT NUMBER, "b"=SWITCH LETTER, "A"=FIXTURE TYPE LETTER. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS.
	LIGHTING FIXTURE. "LP1"=PANELBOARD, "2"=CIRCUIT NUMBER, "b"=SWITCH LETTER, "A"=FIXTURE TYPE LETTER.
	LIGHTING FIXTURE. "LP1"=PANELBOARD, "2"=CIRCUIT NUMBER, "b"=SWITCH LETTER, "A"=FIXTURE TYPE LETTER. SHADING DENOTES FIXTURE IS PROVIDED WITH EMERGENCY BATTERY BALLAST/DRIVER CONNECTED TO UNSWITCHED SENSING CIRCUIT WIRE.
	LIGHTING FIXTURE. "LP1"=PANELBOARD, "2"=CIRCUIT NUMBER, "A"=FIXTURE TYPE LETTER. FULL SHADING DENOTES FIXTURE IS UNSWITCHED AND PROVIDED WITH EMERGENCY BATTERY BALLAST/DRIVER.
	PENDANT MOUNTED LIGHTING FIXTURE.
	PENDANT MOUNTED STRIP LIGHTING FIXTURE
	CEILING MOUNTED LIGHTING FIXTURE.
	WALL MOUNTED LIGHTING FIXTURE.
	SITE LIGHTING ASSEMBLY.
	TWIN SITE LIGHTING ASSEMBLY.
	PHOTOCELL. COMPATIBLE WITH LIGHTING CONTROL PANEL.
	CEILING MOUNTED EXIT SIGN, DRAWINGS INDICATE SINGLE OR DOUBLE FACED WITH DIRECTIONAL ARROWS..
	WALL MOUNTED EXIT SIGN, DRAWINGS INDICATE SINGLE OR DOUBLE FACED WITH DIRECTIONAL ARROWS. MOUNT 8'-0" AFF.
	EMERGENCY LIGHTING MASTER UNIT, BATTERY POWERED. CONNECT TO UNSWITCHED PORTION OF LOCAL LIGHTING CIRCUIT. LP1 DENOTES PANELBOARD DESIGNATION. 12 DENOTES CIRCUIT NUMBER. W DENOTES FIXTURE TYPE LETTER.
	WALL SWITCH DUAL TECH, VACANCY SENSOR
	WALL SWITCH DUAL TECH, VACANCY SENSOR - WITH DIMMING
	WALL SWITCH DUAL TECH, OCCUPANCY SENSOR
	CEILING MOUNTED, DUAL TECH LOW VOLTAGE OCCUPANCY SENSOR
	CEILING MOUNTED, LOW VOLTAGE ULTRASONIC CORRIDOR OCCUPANCY SENSOR - PROVIDE MASKING FOR CORRIDOR
	CEILING MOUNTED DUAL TECH LOW VOLTAGE VACANCY SENSOR
	SMART POWER PACK, EQUAL TO nLIGHT. - PROVIDE WITH DIMMING
	SMART PLUG LOAD POWER PACK, EQUAL TO nLIGHT.
	LIGHTING CONTROL PANEL.
	DOOR CONTACT LIGHT SWITCH.
	LOW VOLTAGE SWITCH
SYMBOL	PHASING
	NEW CONSTRUCTION
	DEMOLITION
	EXISTING TO REMAIN
	REMOVE AND RELOCATE
	EXISTING RELOCATED

GENERAL NOTES	
1. THIS IS A STANDARD LEGEND SHEET. NOT ALL SYMBOLS OR ABBREVIATIONS MAY APPEAR ON DRAWINGS.	
2. MOUNTING DEVICES AND EQUIPMENT PER SPECIFICATIONS UNLESS OTHERWISE NOTED.	
3. ENCLOSURES SHALL BE NEMA 1 UNLESS OTHERWISE NOTED. 3R=NEMA 3R, 4X=NEMA 4X, WP=WEATHERPROOF, AND XP=EXPLOSION PROOF.	
4. PROVIDE GROUND CONDUCTOR FOR ALL BRANCH, FEED, AND EQUIPMENT CIRCUITS SIZED PER NEC, UNLESS OTHERWISE INDICATED.	
5. WHERE MULTIPLE CIRCUITS ARE COMBINED IN A SINGLE RACEWAY THE CONTRACTOR SHALL DETERMINE THE EXACT NUMBER OF CONDUCTORS, ROUTING, AND SIZE OF THE RACEWAY. SIZE THE WIRE AMPACITY IN ACCORDANCE WITH THE NEC.	
6. CONTRACTOR SHALL COORDINATE ALL CONDUIT PENETRATIONS AND PROVIDE CONDUIT SEALS IN HAZARDOUS LOCATION. PENETRATION SEALS, EXPANSION/VIBRATION ISOLATION FITTINGS AS APPLICABLE.	
7. ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN AIR BARRIER INTEGRITY FOR ELECTRICAL RACEWAY PENETRATION.	
8. ALL WIRING FOR LIGHTING AND POWER CIRCUITS SHALL BE NO. 12 AWG MINIMUM.	
9. ALL WIRING FOR CONTROL SHALL BE NO. 14 MINIMUM.	
10. ALL CONDUIT SHALL BE MINIMUM 3/4" FOR POWER, MINIMUM 1" FOR DATA/COMM.	
11. THE WIRE SIZE FROM A 20 AMPERE, SINGLE POLE, 120 VOLT CIRCUIT BREAKER MOUNTED IN A LIGHTING PANELBOARD TO THE LOAD SHALL BE AS FOLLOWS: NO. 12 AWG WIRE UP TO 100 FEET RUN; NO. 10 AWG WIRE; 101 FEET RUN UP TO 200 FEET RUN; NO. 8 AWG WIRE 201 FEET RUN UP TO 300 FEET RUN.	
12. SELF CONTAINED UNIT EQUIPMENT SERVING EXIT AND EGRESS LIGHTING SYSTEMS SHALL BE CONNECTED TO THE UNSWITCHED PORTION OF THE LOCAL LIGHTING CIRCUIT IN COMPLIANCE WITH NEC 700.12 (F).	
13. CONTRACTOR SHALL COMPLY WITH ALL CONTRACT REQUIREMENTS AND ALL APPLICABLE CODES, LAWS, AND REGULATIONS, INCLUDING NATIONAL ELECTRICAL CODE, OSHA, AND NATIONAL ELECTRICAL SAFETY CODE.	
14. THIS SPECIFICATION AND THE DRAWINGS ARE NOT INTENDED TO SHOW ALL DETAILS, WIRING, BOXES, COVERS, FITTINGS, AND SPECIAL CONSTRUCTION WHICH MAY BE NECESSARY OR REQUIRED. THIS CONTRACTOR SHALL FURNISH, INSTALL, AND CONNECT ALL REQUIRED WORK IN ORDER TO MAKE THE INSTALLATION COMPLETE AS INDICATED BY THIS SPECIFICATION AND THE DRAWINGS. "PROVIDE" SHALL MEAN FURNISH AND INSTALL COMPLETE. "APPROVED" SHALL MEAN APPROVED BY OWNER'S REPRESENTATIVE. "DIRECTED" SHALL MEAN DIRECTED BY THE OWNER'S REPRESENTATIVE.	
15. THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW EXACT ROUTES OF WIRING AND EXACT LOCATION OF EQUIPMENT. CONTRACTOR SHALL BECOME FAMILIAR WITH JOB CONDITIONS AND SHALL ARRANGE ALL WORK TO AVOID CONFLICTS. ALL FINAL LOCATIONS OF NEW CONDUITS, OUTLETS, AND EQUIPMENT SHALL BE SUBJECT TO APPROVAL.	
16. PROVIDE ALL ITEMS INDICATED ON DRAWINGS AND REQUIRED BY SPECIFICATIONS, INCLUDING: ALL SUPPORTS, HARDWARE AND ACCESSORIES, BRANCH CIRCUIT WIRING, AND DEVICES.	
17. PRIOR TO EXECUTION OF THIS CONTRACT, THIS CONTRACTOR SHALL HAVE VISITED THE SITE (BY APPOINTMENT) AND SHALL HAVE EXAMINED ALL EXISTING CONDITIONS WHICH MAY AFFECT HIS WORK. SUBMISSION OF A BID SHALL BE CONSIDERED INDICATIVE THAT THIS CONTRACTOR HAS VISITED THE SITE AND HAS DETERMINED ALL EXISTING CONDITIONS WHICH MAY AFFECT THE CONTRACT WORK AND HAS INCLUDED ALL COSTS RELATED TO SITE CONDITIONS IN THE AMOUNT BID.	
18. PROVIDE ARC FLASH LABELING IAW NEC 110.16.	
19. ALL LISTED MATERIALS AND EQUIPMENT ARE INDICATIVE OF COMPLETE AND WHOLE UNITS (UNLESS SPECIFICALLY INDICATED TO THE CONTRARY) AND SHALL BE FURNISHED AS SUCH.	
20. ALL CONSTRUCTION UNDER THIS CONTRACT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER BY MECHANICS SKILLED IN THE TRADE. THE CONTRACTOR SHALL REMOVE AND REPLACE ALL WORK WHICH IS NOT INSTALLED AS APPROVED.	
21. UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT SHALL BE NEW, APPROVED QUALITY, SPECIFICATION GRADE, AND LISTED BY UNDERWRITER'S LABORATORIES OF NATIONAL BOARD OF FIRE UNDERWRITERS.	
22. ALL CUTTING REQUIRED FOR THE INSTALLATION OF ELECTRICAL CONSTRUCTION UNDER THIS CONTRACT SHALL BE ACCOMPLISHED IN SUCH MANNER AS NOT TO CAUSE STRUCTURAL OR ARCHITECTURAL DAMAGE TO BUILDING OR LEAVE UNSIGHTLY SURFACES. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PATCHING TO PROVIDE A NEAT AND FINISHED SURFACE EQUAL TO SURROUNDING UNDISTURBED SURFACES WHEREVER CUTTING, PATCHING, DAMAGE OR REMOVAL OF EQUIPMENT IS PERFORMED UNDER THIS CONTRACT. ALL PATCHING AND RESTORING OF SURFACES SHALL BE PERFORMED BY WORKMEN SKILLED IN THE TRADE INVOLVED AND SHALL BE SUBJECT TO APPROVAL.	
23. PROVIDE ROUGH-IN CONNECTIONS FOR ALL OFOI/OFCI EQUIPMENT INCLUDING BUT NOT LIMITED TO PRINTER, COPIER, FAX MACHINES, INTERCOM, CAMERAS, PROJECTORS, PODIUMS, SMARTBOARDS, FLAT SCREEN MONITORS, FURNITURE SYSTEMS, AND SECURITY SYSTEMS.	
24. THE ELECTRICAL CONTRACTOR SHALL REVIEW REQUIREMENTS FOR THE INSTALLATION OF ELECTRICAL PORTIONS OF WORK INDICATED ON THE CONSTRUCTION DOCUMENTS OF OTHER TRADES AND INCLUDE REQUIREMENTS IN BIDDING THIS CONTRACT.	
25. CONTRACTOR SHALL BE CURRENT ON ALL LICENSES AND CERTIFICATIONS REQUIRED IN THE STATE OF NORTH CAROLINA FOR THE INSTALLATION, SPLICING, AND TERMINATION OF MEDIUM VOLTAGE CABLES AND ASSOCIATED MEDIUM VOLTAGE WORK.	
SYMBOL	SINGLE-LINE DIAGRAM
	SINGLE LINE DIAGRAM THERMAL-MAGNETIC CIRCUIT BREAKER.
	SINGLE LINE DIAGRAM COMBINATION MOTOR STARTER WITH MOTOR CIRCUIT PROTECTOR (MCP) AND THERMAL OVERLOAD (OL).
	SINGLE LINE DIAGRAM NON-FUSED DISCONNECT SWITCH.
	SINGLE LINE DIAGRAM FUSED DISCONNECT SWITCH.
	SINGLE LINE DIAGRAM TRANSFORMER
	VARIABLE FREQUENCY DRIVE WITH INTERNAL OVERCURRENT DISCONNECT DEVICE.
	WOOD UTILITY POLE
	ATS
	GROUNDING ELECTRODE
	GENERATOR
	SINGLE LINE DIAGRAM METER

ABBREVIATIONS	
A AMPS	XFMR TRANSFORMER
AFF ABOVE FINISHED FLOOR	XP EXPLOSION PROOF
AFG ABOVE FINISHED GROUND	
AHU AIR HANDLING UNIT	
AIC CURRENT INTERRUPTER CAPACITY	
ATS AUTOMATIC TRANSFER SWITCH	
AWG AMERICAN WIRE GAUGE	
BFC BELOW FINISHED CEILING	
BRKR CIRCUIT BREAKER	
C CONDUIT	
CB CIRCUIT BREAKER	
CFCI CONTRACTOR FURNISHED CONTRACTOR INSTALLED	
CPR COPIER	
CRAC COMPUTER ROOM AIR CONDITIONER	
CRCU COMPUTER ROOM CONDENSING UNIT	
CT CONTROL TRANSFORMERS	
DB DIRECT BURIED	
DIA DIAMETER	
DP DISTRIBUTION PANEL	
DWG DRAWING	
EGC EQUIPMENT GROUNDING CONDUCTOR	
EMT ELECTRICAL METALLIC TUBING	
ER EXISTING RELOCATED	
ERU ENERGY RECOVERY UNIT	
ETR EXISTING TO REMAIN	
EWC ELECTRIC WATER COOLER	
EXST EXISTING	
FB FLOOR BOX	
GEC GROUNDING ELECTRODE CONDUCTOR	
GFP GROUND FAULT PROTECTION	
GND GROUND	
GRD GROUND	
GRS GALVANIZED RIGID STEEL	
IAW IN ACCORDANCE WITH	
IDS INTRUSION DETECTION SYSTEM	
IMC INTERMEDIATE METALLIC CONDUIT	
KVA KILO VOLT AMPS	
KW KILO WATT	
LCP LIGHTING CONTROL PANEL	
LED LIGHT EMITTING DIODE	
LP LIGHTING PANEL	
MC MECHANICAL CONTRACTOR	
MCP MOTOR CIRCUIT PROTECTOR	
MCS MOLDED CASE SWITCH	
MEP MECHANICAL EQUIPMENT PANEL	
MIN MINIMUM	
MLO MAIN LUG ONLY	
MTD MOUNTED	
MUA MAKE UP AIR UNIT	
NEC NATIONAL ELECTRICAL CODE	
NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	
NEC NATIONAL ELECTRICAL SAFETY CODE	
NFPA NATIONAL FIRE PROTECTION ASSOCIATION	
NIC NOT IN CONTRACT	
NO NUMBER	
NP NIPRNET SENDER	
NS SIPRNET SENDER	
NTS NOT TO SCALE	
OEM ORIGINAL EQUIPMENT MANUFACTURER	
OFCI OWNER FURNISHED CONTRACTOR INSTALLED	
OFOI OWNER FURNISHED OWNER INSTALLED	
OL THERMAL OVERLOAD	
OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION	
OSP OUTSIDE PLANT	
P POLE	
PH PHASE	
PIV POST INDICATOR VALVE	
PP POWER PANEL	
PSI POUNDS PER SQUARE INCH	
PT POTENTIAL TRANSFORMERS	
PVC POLYVINYL CHLORIDE	
QTY QUANTITY	
RCD RESIDUAL CURRENT DEVICE	
RECEPT RECEPTACLE	
RR REMOVE AND RELOCATE	
RGS RIGID GALVANIZED STEEL CONDUIT	
RMC RIGID METAL CONDUIT	
RS RIGID STEEL	
SCH SCHEDULE	
SDP STANDBY DISTRIBUTION PANEL	
SGP SINGLE GROUND POINT	
SLP STANDBY LIGHTING PANEL	
SP SIPRNET PRINTER	
SPD SURGE PROTECTION DEVICE	
SPP STANDBY POWER PANEL	
SS SIPRNET SENDER	
SW SWITCHED	
T TRANSFORMER	
TV TELEVISION	
TW TEST WELL	
TX TRANSFORMER	
TYP TYPICAL	
UG UNDERGROUND	
UON UNLESS OTHERWISE NOTED	
V VOLTS	
VAV VARIABLE AIR VOLUME	
VDC VOLTS DIRECT CURRENT	
VFD VARIABLE FREQUENCY DRIVE	
W WATTS OR WIRE	
WP WEATHERPROOF	

**PRELIMINARY**  
FOR REFERENCE ONLY

**Michael Baker**  
INTERNATIONAL

100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E IN/PS

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50    DRW 144    CHK 193

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE    JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

ELECTRICAL - NOTES, SYMBOLS, AND ABBREVIATIONS

SCALE: AS NOTED  
EPROJCT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.

SHEET OF

**E-001**

FILE NAME: BIM\_360/HFF PACKAGE\_3P1338.MEF\_SIM CTR-1500892-E-01  
PLOTTED: 8/19/2021 7:45:51 AM

UNCLASSIFIED  
DPI UPDATES WITH DP2 FINAL SUBMISSION



1

2

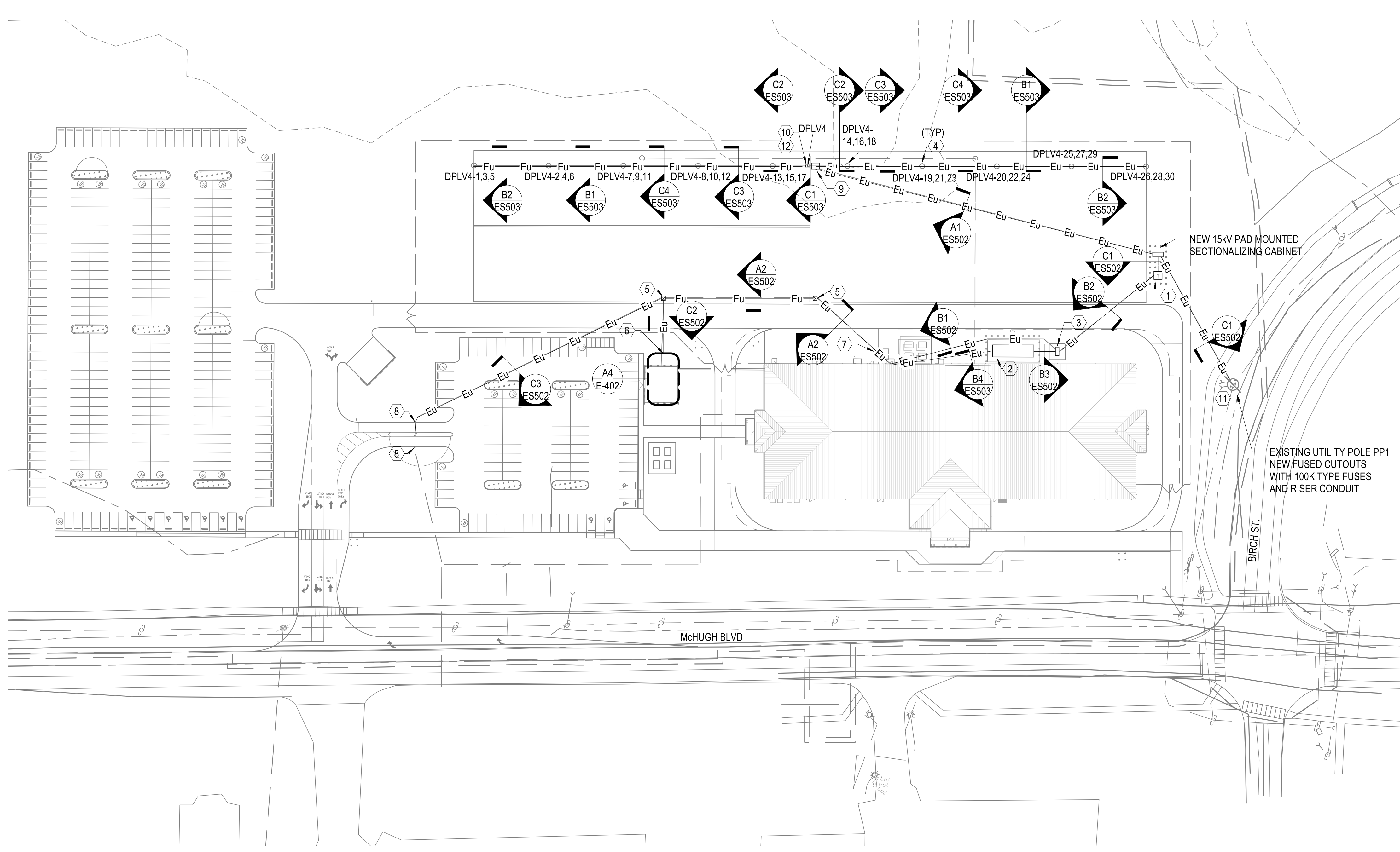
3

4

5

UNCLASSIFIED

D  
C  
B  
A



### ELECTRICAL - SITE UTILITY PLAN

SCALE: 1" = 60'-0"

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-1590892-E-1

PLOTTED: 8/19/2021 7:48:32 AM

### GENERAL NOTES

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- DEPTH OF DUCTBANKS SHALL BE COORDINATED WITH OTHER UTILITIES.

### KEYNOTES

- 12.47KV-480Y/277V, 3PH, 4W, 60HZ, OIL FILLED UTILITY TRANSFORMER, OVER A PRECAST TRANSFORMER PAD. FOR ADDITIONAL INFORMATION SEE SPECIFICATIONS AND DRAWING E-602.
- 480Y/277V, DIESEL GENERATOR WITH SUBBASE FUEL TANK AND CONCRETE PAD. SEE ADDITIONAL INFORMATION ON DRAWING E-502. FOR ADDITIONAL INFORMATION SEE SPECIFICATIONS AND DRAWINGS E-502 / E-602.
- AUTOMATIC TRANSFER SWITCH EQUIPPED WITH MAINTENANCE BYPASS SWITCH. FOR ADDITIONAL INFORMATION SEE SPECIFICATIONS AND DRAWING E-602.
- POWER PEDESTAL WITH HEAVY-DUTY NEMA 4X STAINLESS STEEL AND FUSED DISCONNECT SWITCH. COORDINATE FINAL POWER LOCATIONS WITH FINAL PEDESTAL LOCATION.
- TYPE 4 TRAFFIC/AIRFIELD RATED HANDHOLE FOR POWER. COORDINATE HANDHOLE LOCATIONS WITH FINAL POWER LOCATIONS. SEE DETAIL UG-5 ON ES505.
- CONTRACTOR TO COORDINATE FINAL TERMINATION POINT FOR ELECTRICAL CONNECTIONS BEFORE RUNNING CONDUIT.
- RUN CHILLER CONDUITS UNDER ELECTRICAL ROOM SLAB AND STUB UP AT SWITCHBOARD LOCATION. SEE DRAWING E-401 FOR SWITCHBOARD LOCATION.
- TYPE 5 COMPOSITE / FIBERGLASS, NON TRAFFIC RATED HANDHOLE FOR POWER AND COMM TO VEHICLE LIFT GATES. COORDINATE HANDHOLE LOCATION WITH FINAL POWER LOCATIONS FOR LIFT GATES. SEE DETAIL UG-6 ON ES505.
- 225KVA, 12.47KV-208Y/120V, 3PH, 4W, 60HZ, OIL FILLED UTILITY TRANSFORMER, OVER A PRECAST TRANSFORMER PAD TO SERVE DISTRIBUTION PANELBOARD FEEDING POWER PEDESTALS. FOR ADDITIONAL INFORMATION SEE SPECIFICATIONS AND DRAWING E-602.
- 800A, NEMA 4X STAINLESS STEEL, 208/120V DISTRIBUTION PANELBOARD FOR POWER PEDESTAL CONNECTIONS.
- SEE NAVFAC STANDARD OVERHEAD TEMPLATES ON SHEET ES504.
- PROVIDE (2) 2" CONDUITS AT THE DPLV4 CONCRETE PAD FOR FUTURE CONNECTIONS. THEY SHALL BE CAPPED FOR FUTURE USE.

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY

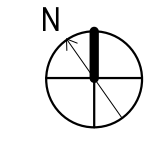
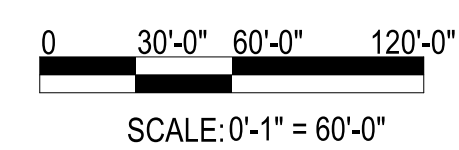


**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
APPROVED

FOR COMMANDER NAVFAC		
ACTIVITY		
MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES 50	DRW 14K	CHK 195
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
ELECTRICAL - SITE UTILITY PLAN

SCALE:	AS NOTED
EPROJECT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
<b>ES101</b>	



SCALE: 0'-1" = 60'-0"

1

2

3

4

5

UNCLASSIFIED

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED



1

2

3

4

5

- GENERAL NOTES**
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - SEE SHEET E-601 FOR LIGHTING FIXTURE SCHEDULE.
  - DUCTBANKS UNDER PAVEMENT SHALL BE CONCRETE ENCASED.
  - PROVIDE BUILDING MOUNTED CENTRALIZED PHOTOCELL FOR SITE LIGHTING ON TRUE NORTH SIDE OF BUILDING.

- KEYNOTES**
- SITE LIGHTING HAND HOLE, SIZE PER NEC.
  - MOUNT FIXTURE 8'-0" ABOVE FINISHED GRADE.
  - TYPE 3 TRAFFIC/AIRFIELD RATED HANDHOLE FOR SITE LIGHTING. COORDINATE HANDHOLE LOCATIONS WITH FINAL SITE LIGHTING LOCATIONS. SEE DETAIL UG-5 ON ES505.
  - STUB UP 1" CONDUIT AT TRANSFORMER PAD FOR ELECTRICAL METER CONNECTION.

SYMBOL	DESCRIPTION	DATE	APPROVED

**PRELIMINARY**  
FOR REFERENCE ONLY



100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
APPROVED

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE  
DES 50    DRW/CHK    CHK YRS

BRANCH MANAGER  
CHIEF ENGINEER  
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

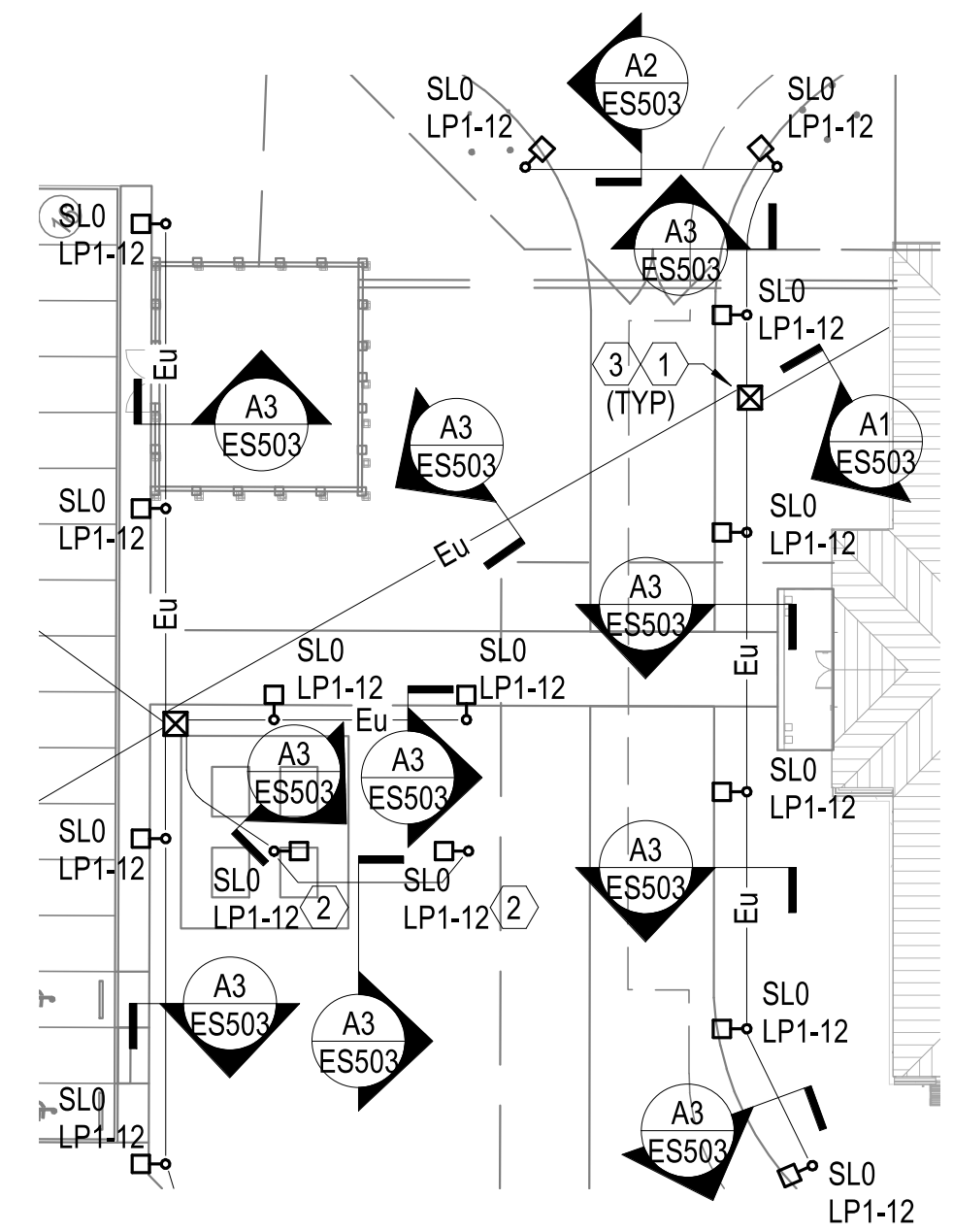
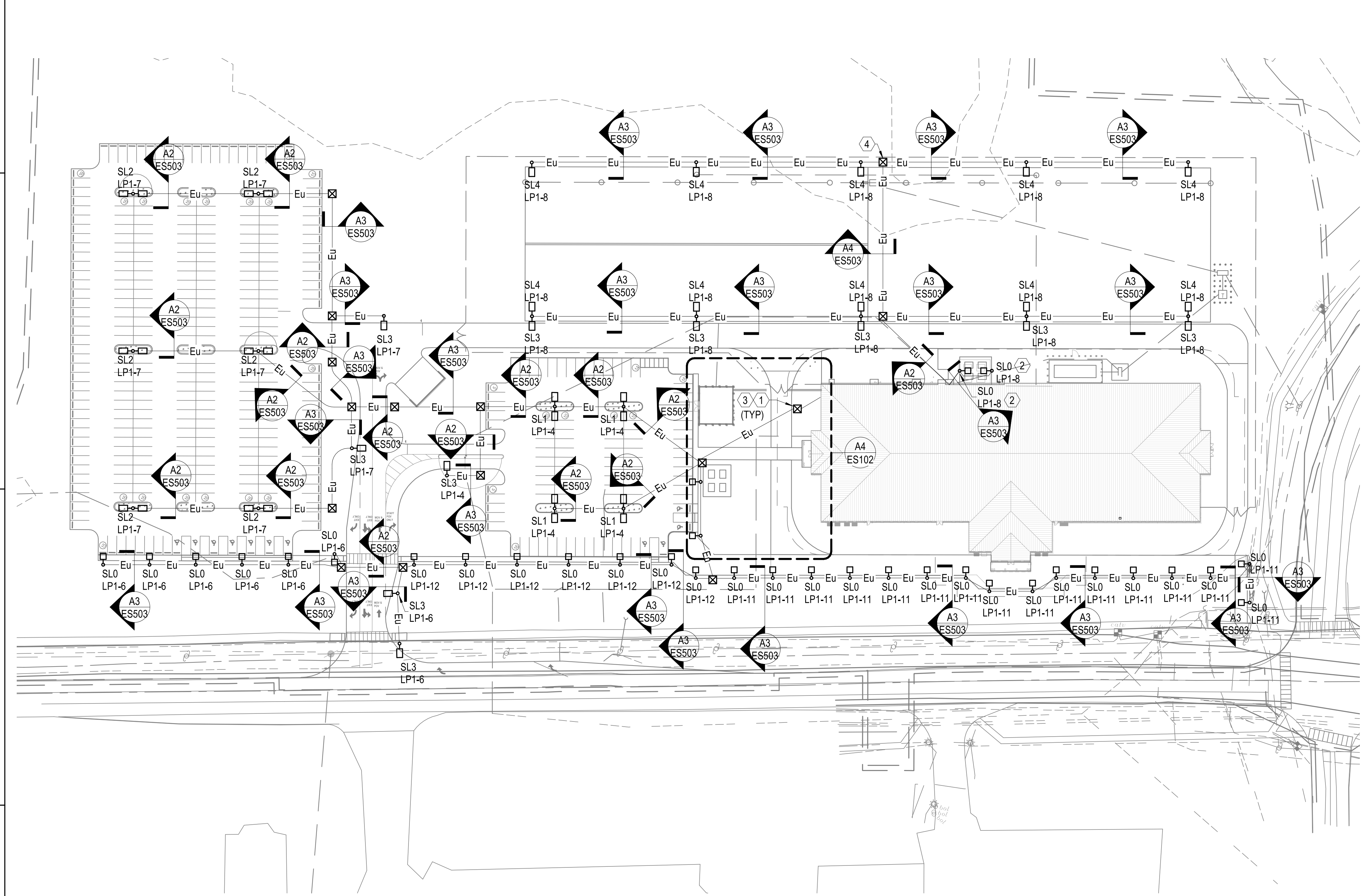
ELECTRICAL - SITE LIGHTING PLAN

SCALE: AS NOTED  
PROJECT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:

SHEET OF

**ES102**

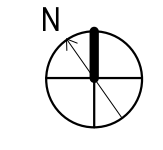
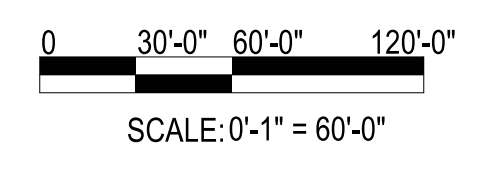
DP1 UPDATES WITH DP2 FINAL SUBMISSION



**A4 ELECTRICAL - SITE LIGHTING PLAN**  
SCALE: 1" = 30'-0" (ES102)

**ELECTRICAL - SITE LIGHTING PLAN**

SCALE: 1" = 60'-0"



SCALE: 0'-1" = 60'-0"

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-1500892-E-01

PLOTTED: 8/19/2021 7:48:39 AM

A

D

C

B

D

C

B

A



1

2

3

4

5

D

C

B

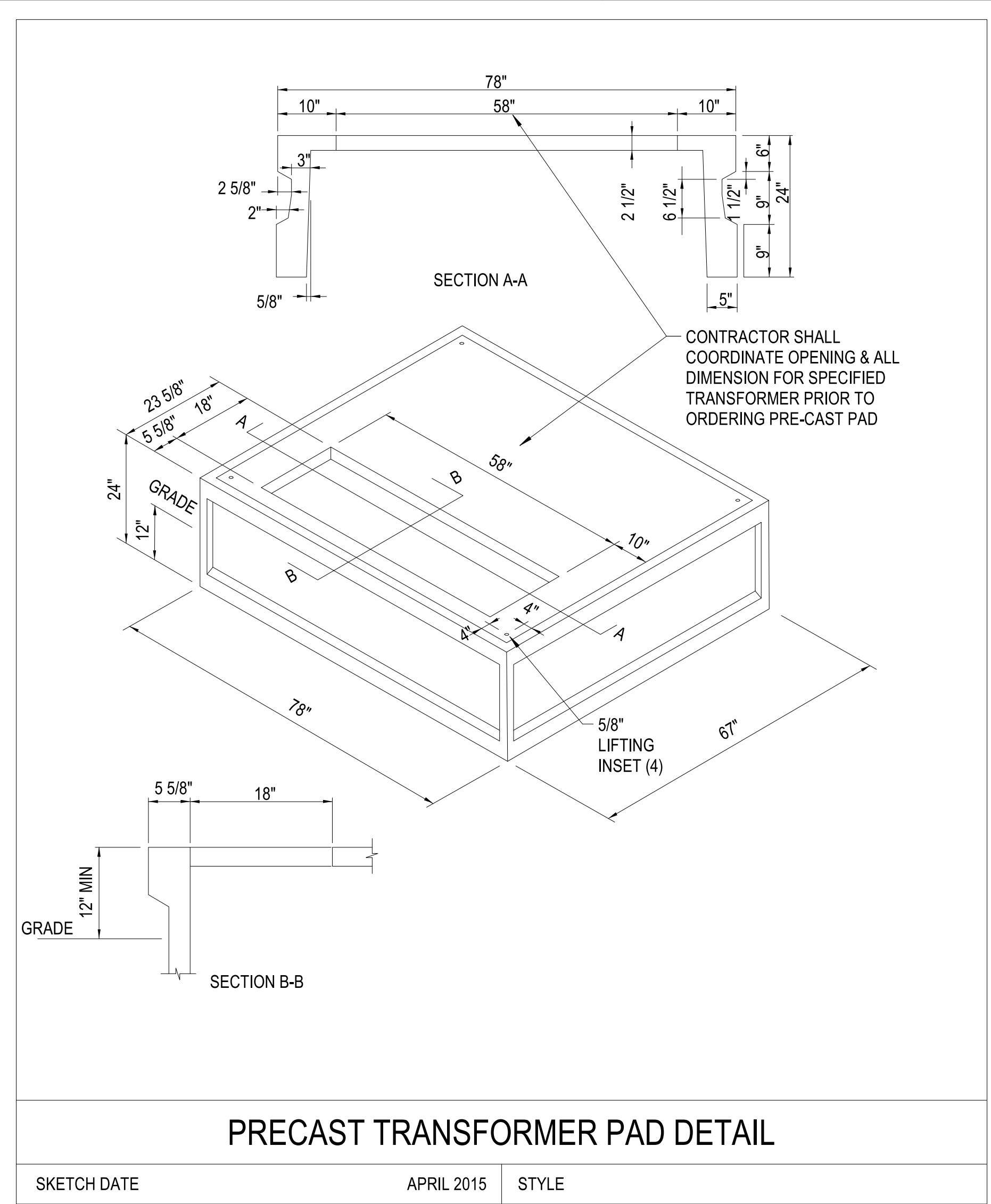
A

D

C

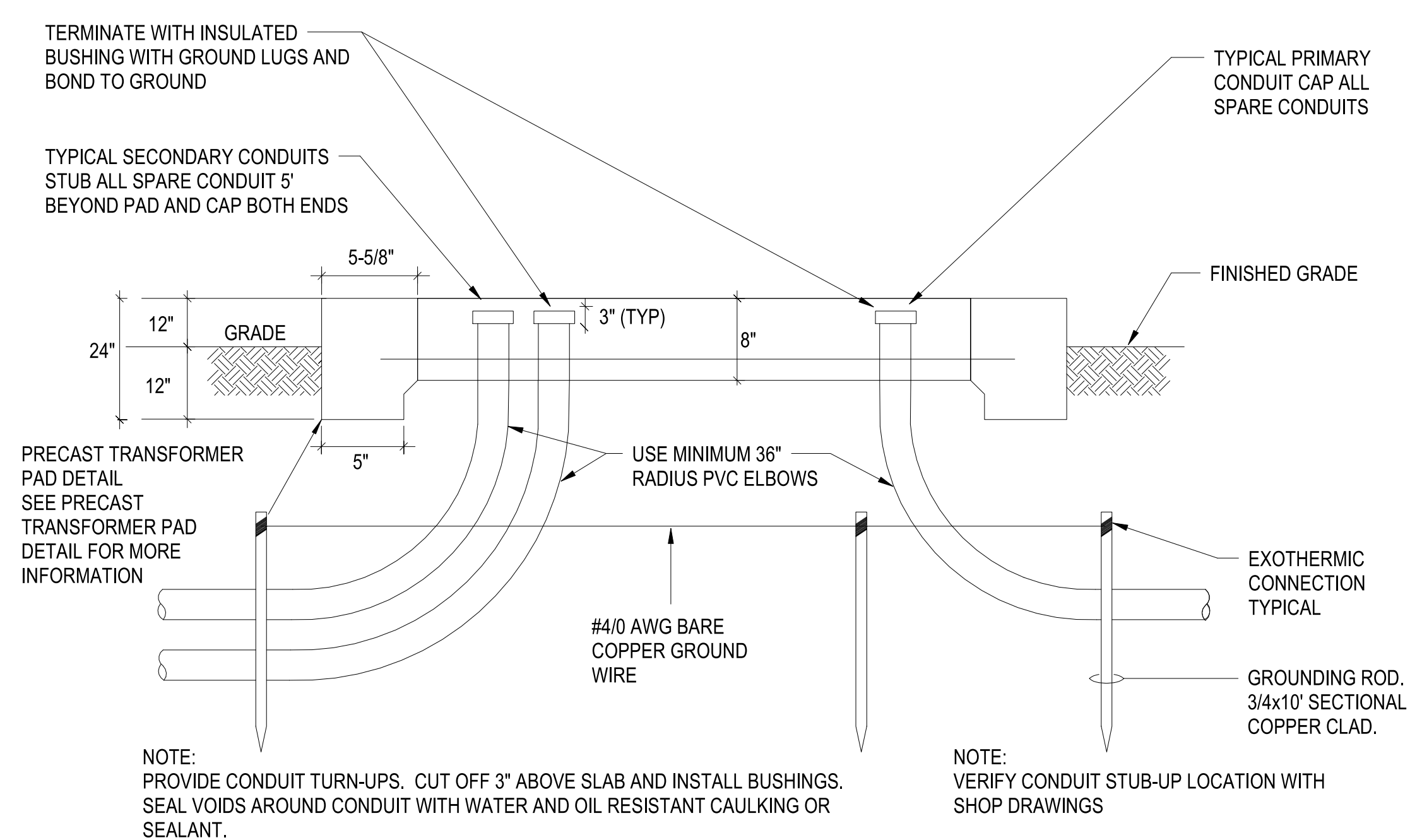
B

A



PRECAST TRANSFORMER PAD DETAIL

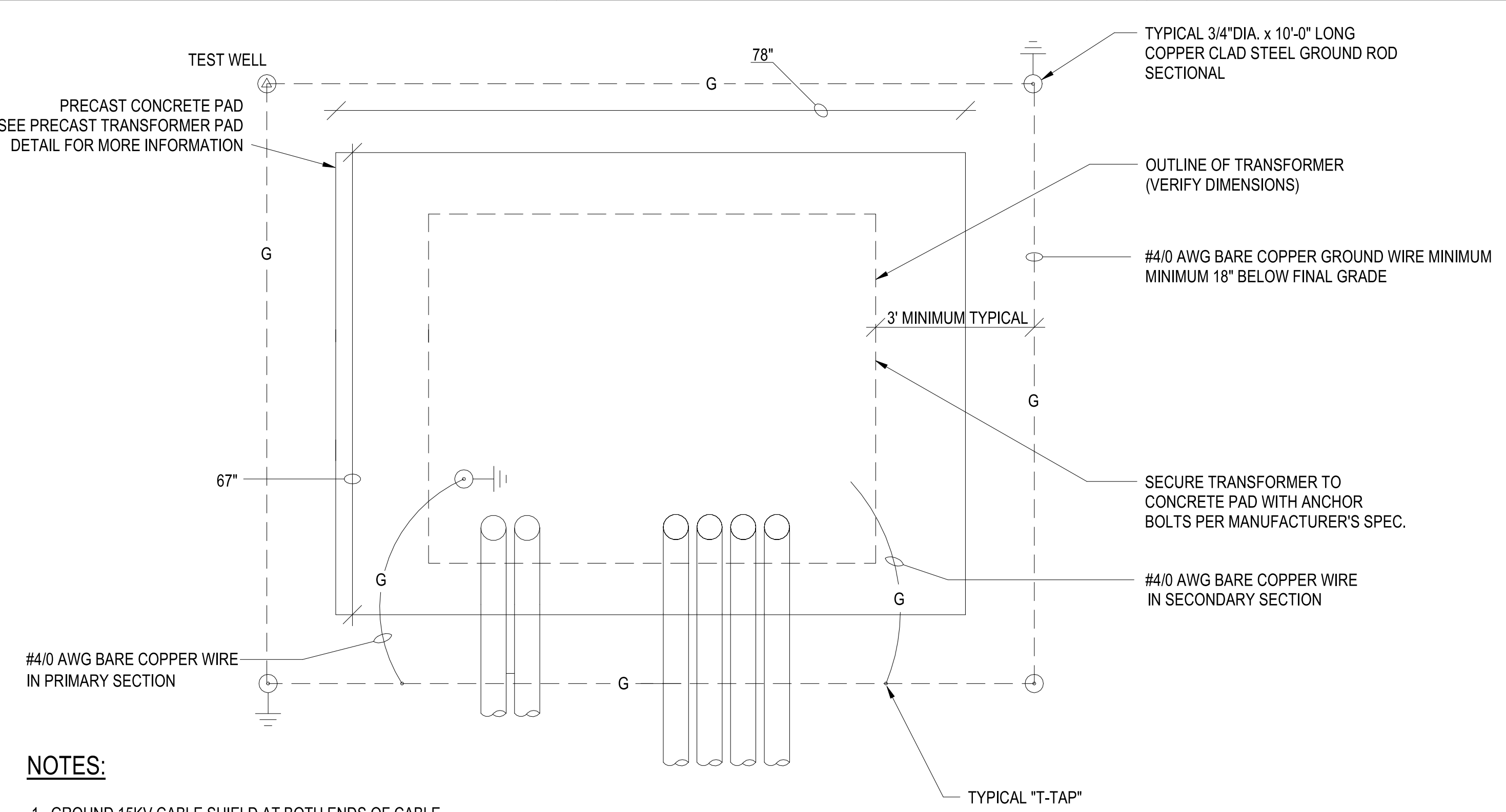
SKETCH DATE	APRIL 2015	STYLE
-------------	------------	-------



PRECAST TRANSFORMER PAD GROUNDING SECTION

SCALE: 12" = 1'-0"

A1



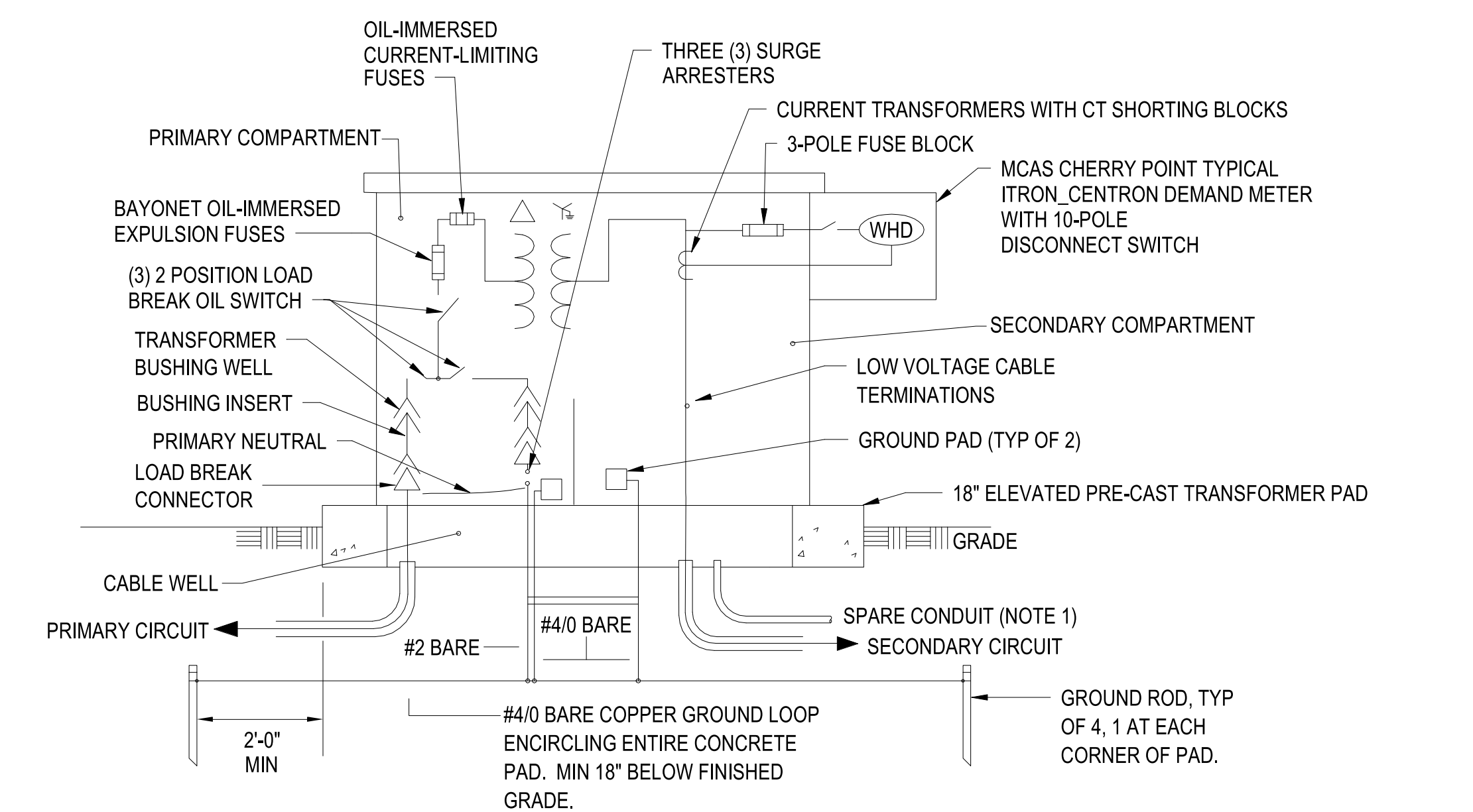
NOTES:

1. GROUND 15KV CABLE SHIELD AT BOTH ENDS OF CABLE.
2. FINAL CONNECTIONS TO EXISTING PRIMARY SYSTEM SHALL BE MADE BY CONTRACTOR AFTER INSPECTION BY THE BASE EXTERIOR ELECTRICAL SHOP. ALL MATERIALS REQUIRED SHALL BE PROVIDED BY CONTRACTOR.
3. PROVIDE WINDOWS IN PAD PER TRANSFORMER MANUFACTURER'S RECOMMENDATIONS.

PRECAST TRANSFORMER PAD GROUNDING DETAIL

SCALE: 12" = 1'-0"

C3



PAD MOUNTED TRANSFORMER DETAIL

SCALE: 12" = 1'-0"

A3

APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	SYMBOL
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
<b>Michael Baker</b> INTERNATIONAL 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
FOR COMMANDER NAVFAC		
ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES 50	DRW/CHK	CHK YRS
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC		
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT ELECTRICAL - SITE DETAILS		
SCALE: AS NOTED EPROJECT NO.: 1500892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF		
<b>ES501</b>		

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1500892-01  
PLOTTED: 8/19/2021 7:48:41 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSIONAL SUBMISSION

UNCLASSIFIED



1

2

3

4

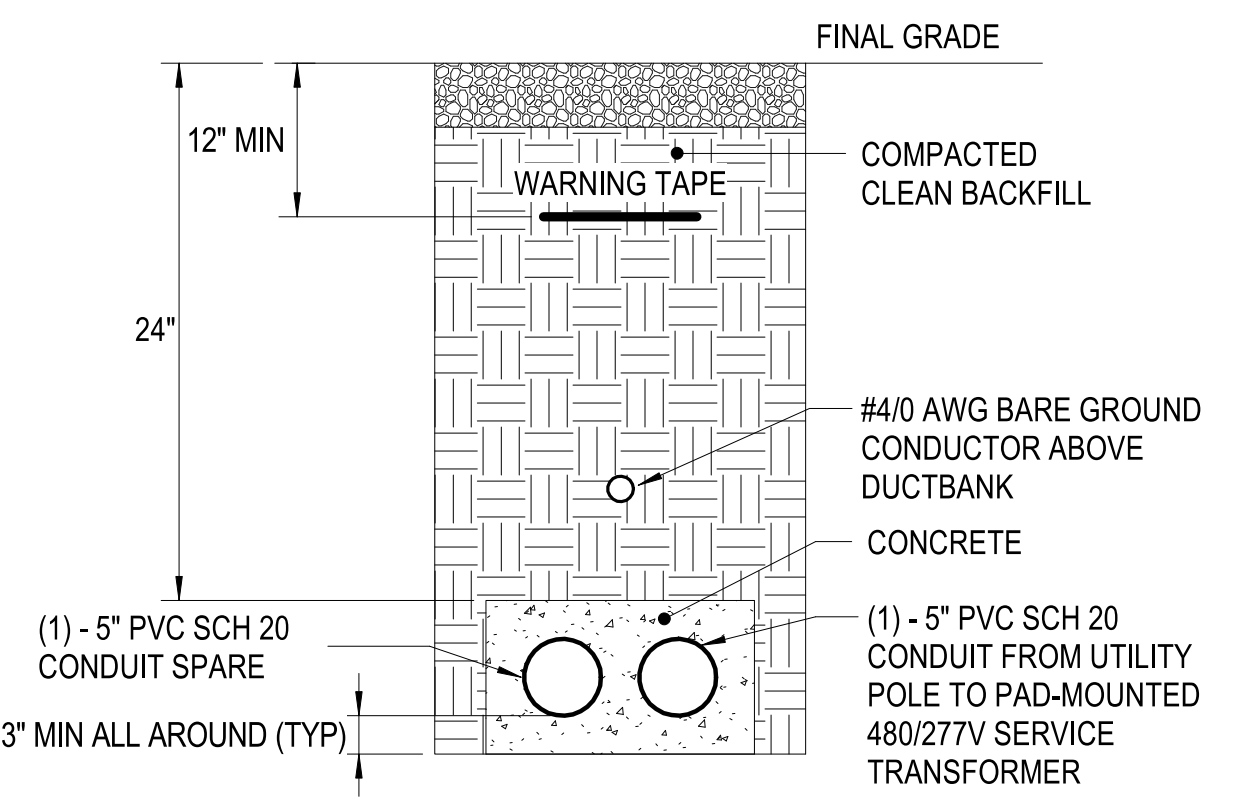
5

D

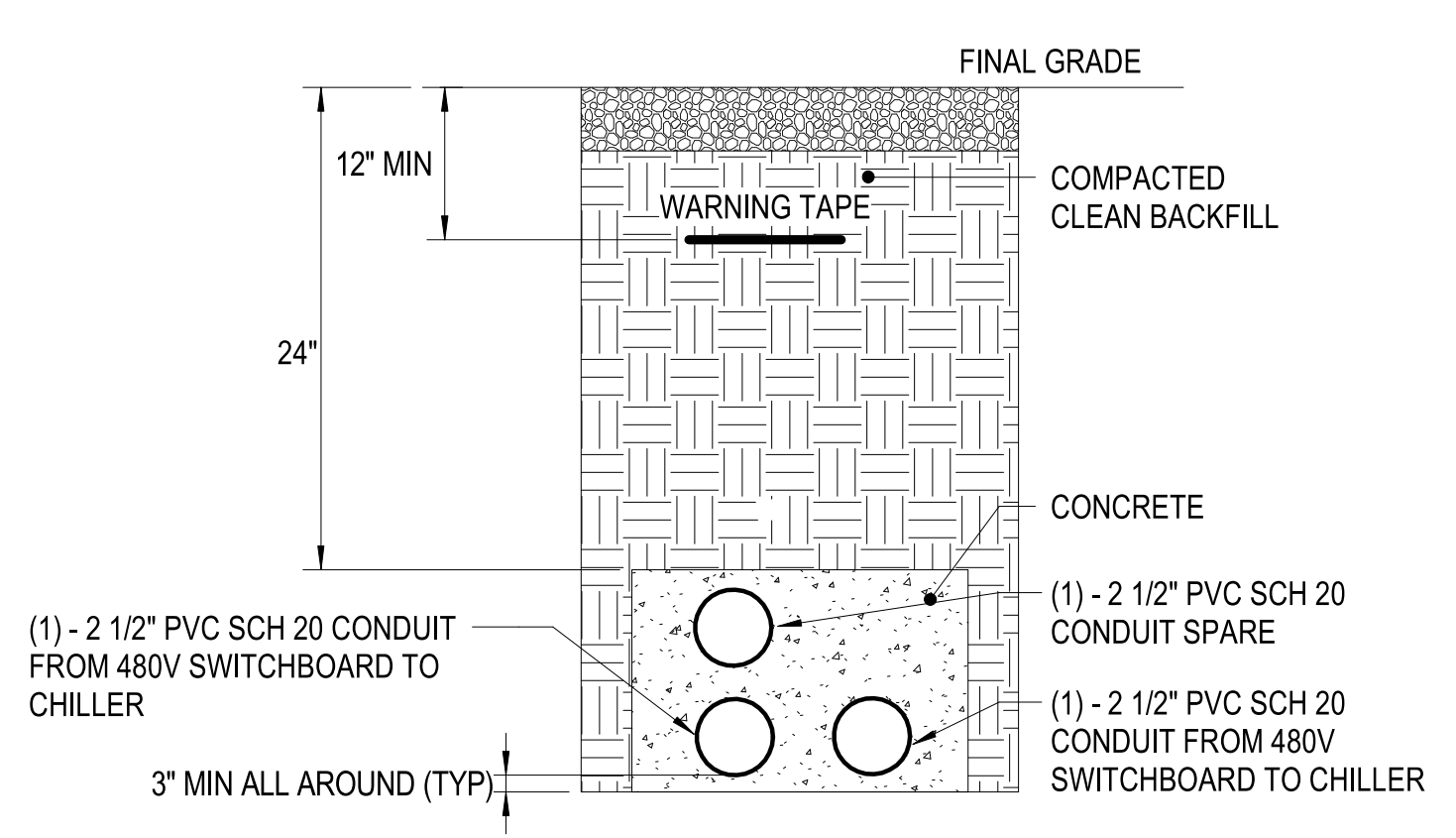
C

B

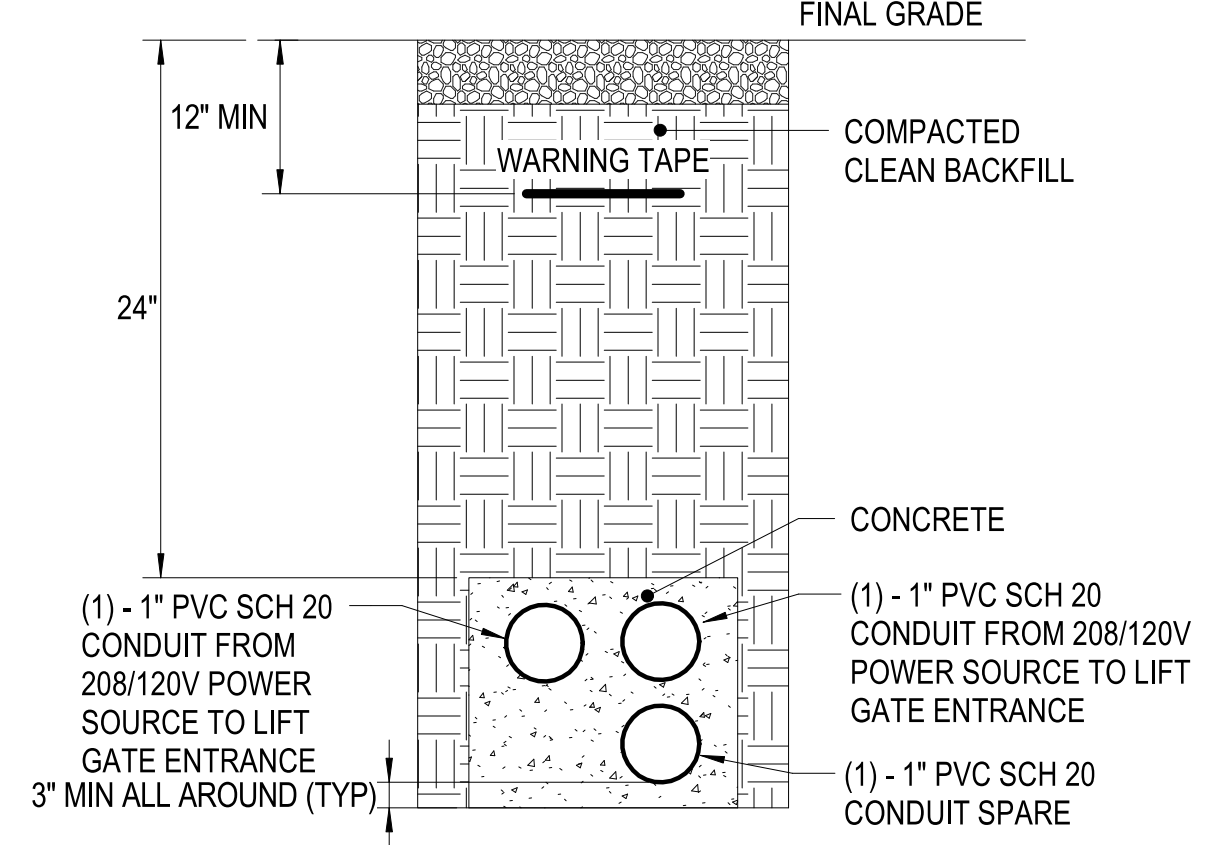
A



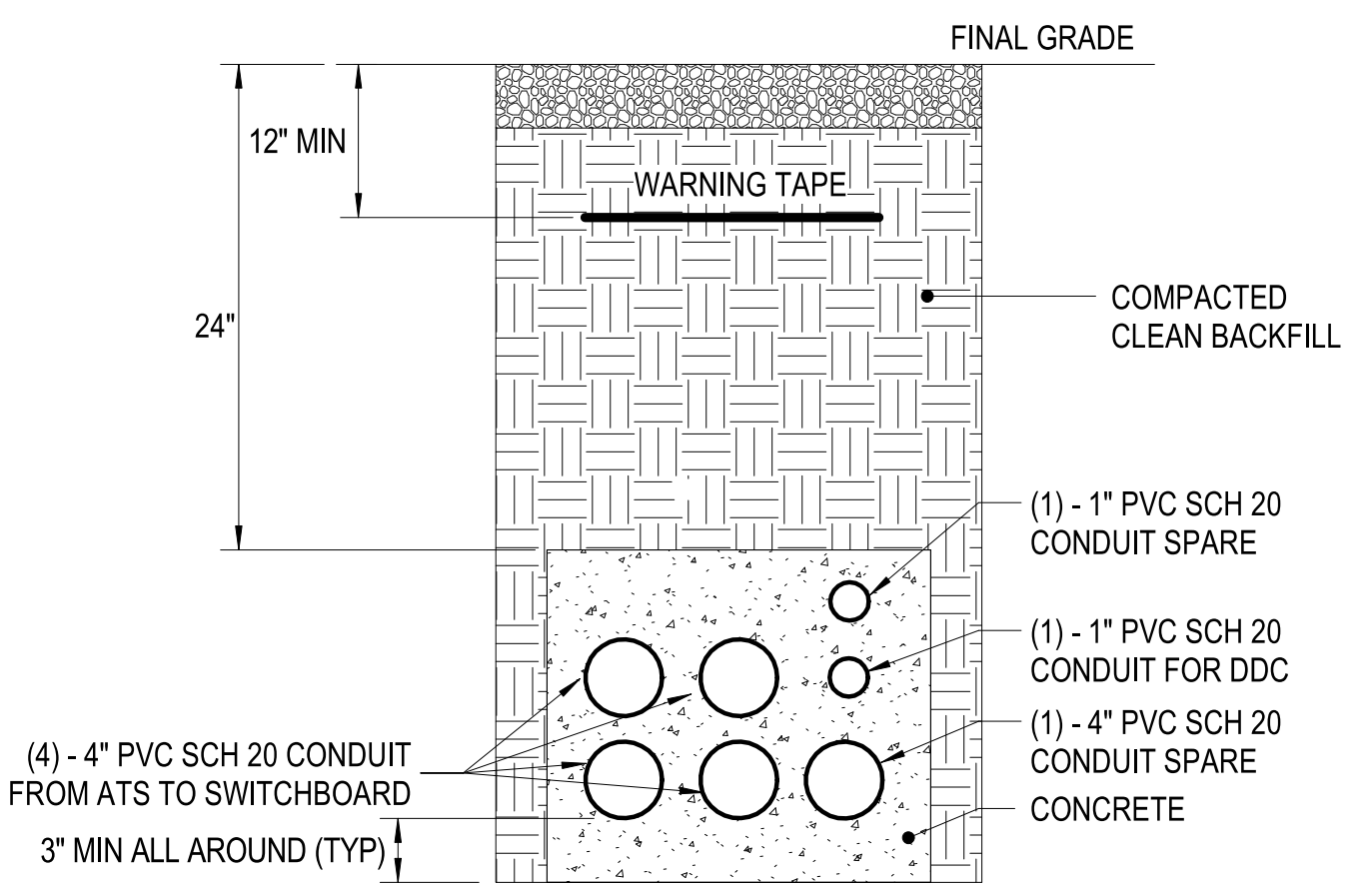
**2-WAY CONCRETE ENCASED DUCTBANK**  
 SCALE: NTS ES101 **C1**



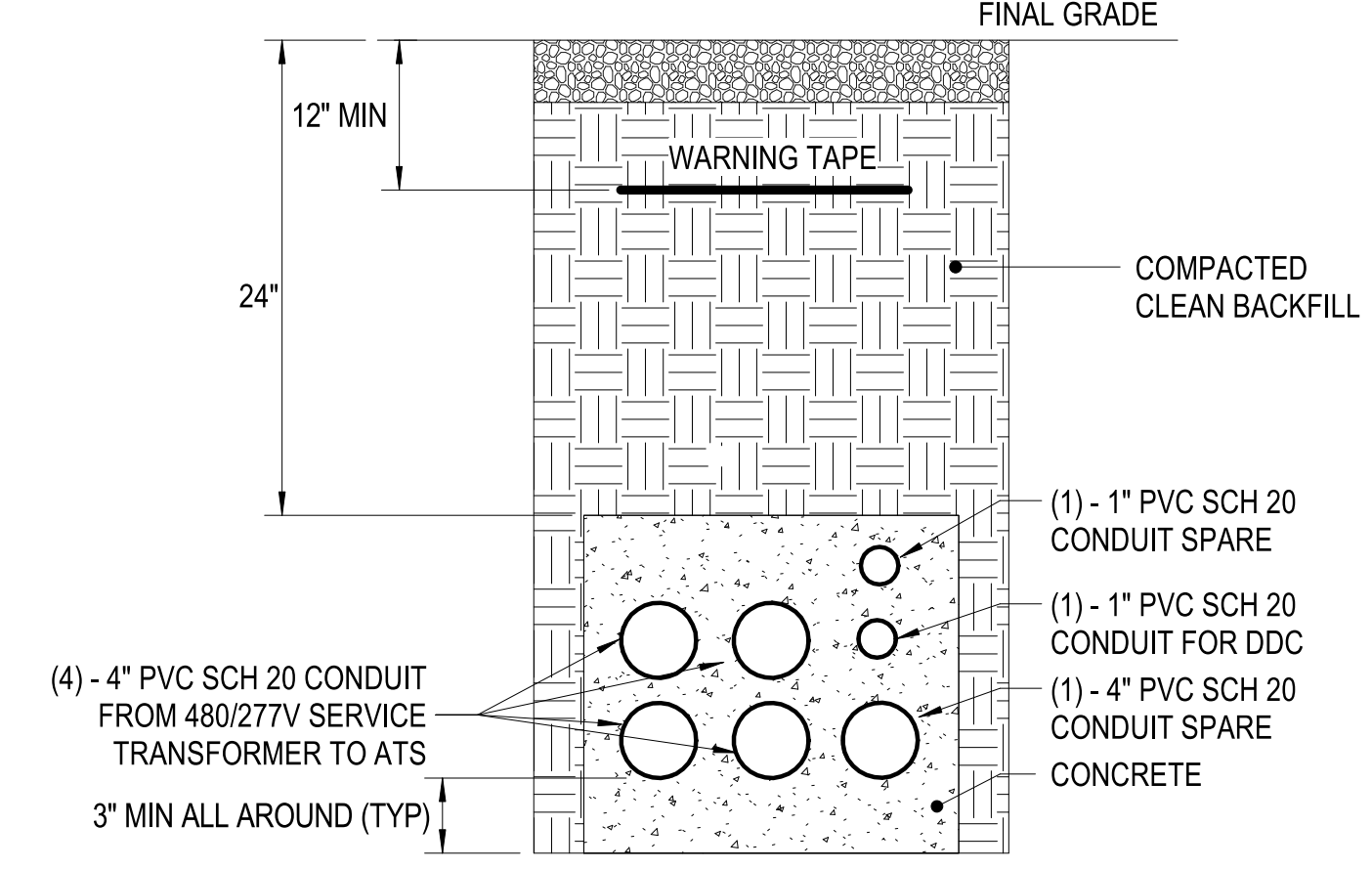
**3-WAY DUCTBANK - CHILLER**  
 SCALE: NTS ES101 **C2**



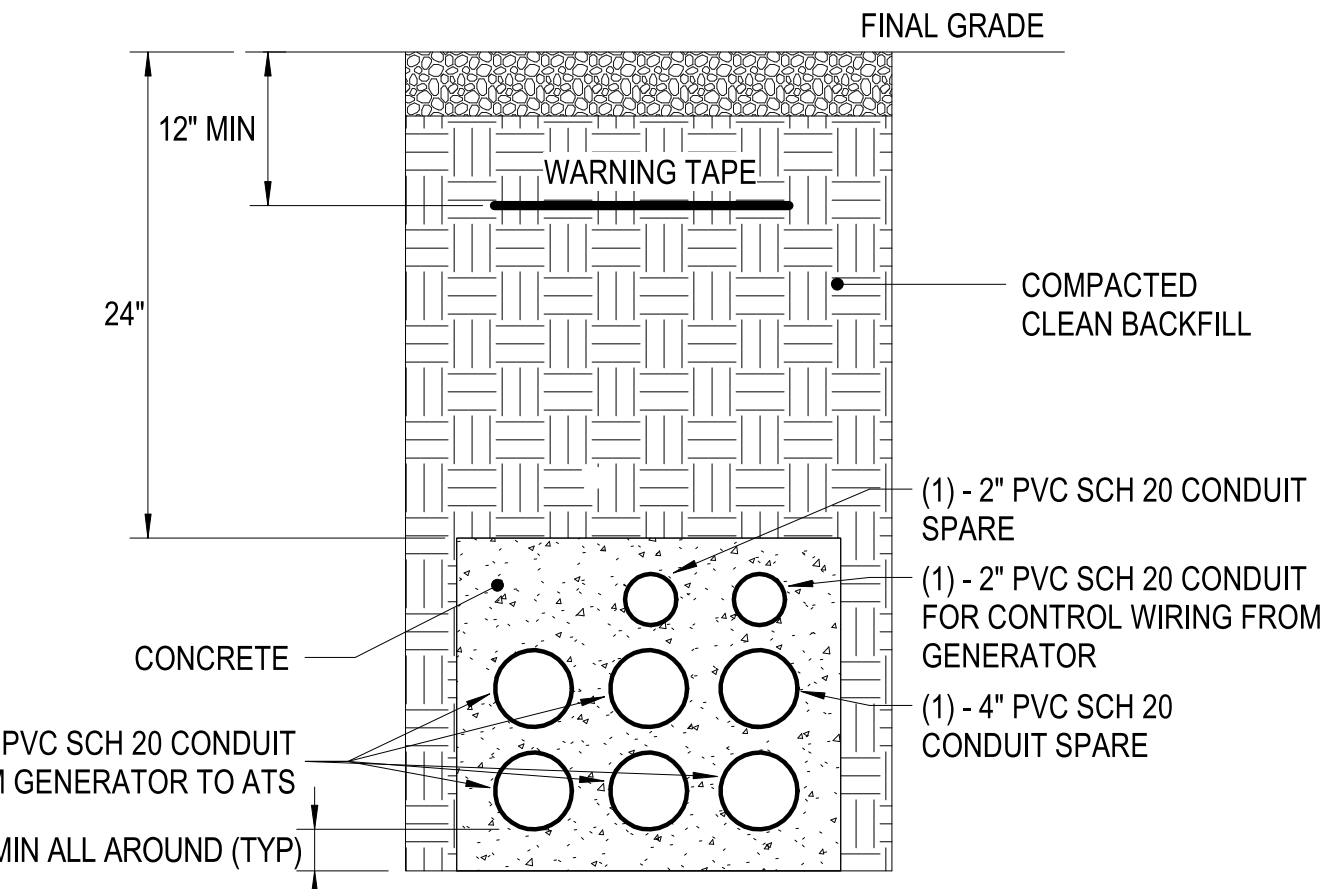
**3-WAY DUCTBANK - LIFT GATE**  
 SCALE: NTS ES101 **C3**



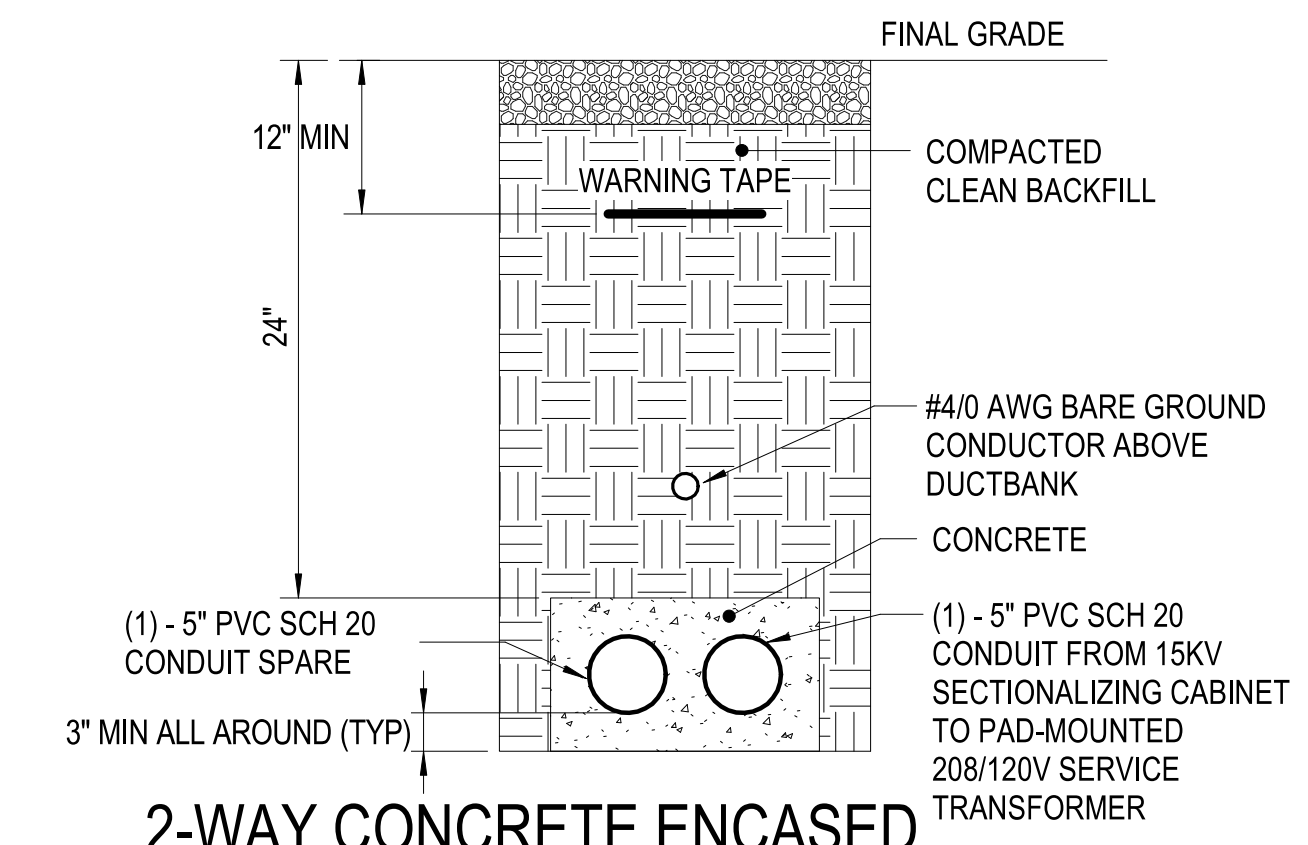
**7-WAY DUCTBANK**  
 SCALE: NTS ES101 **B1**



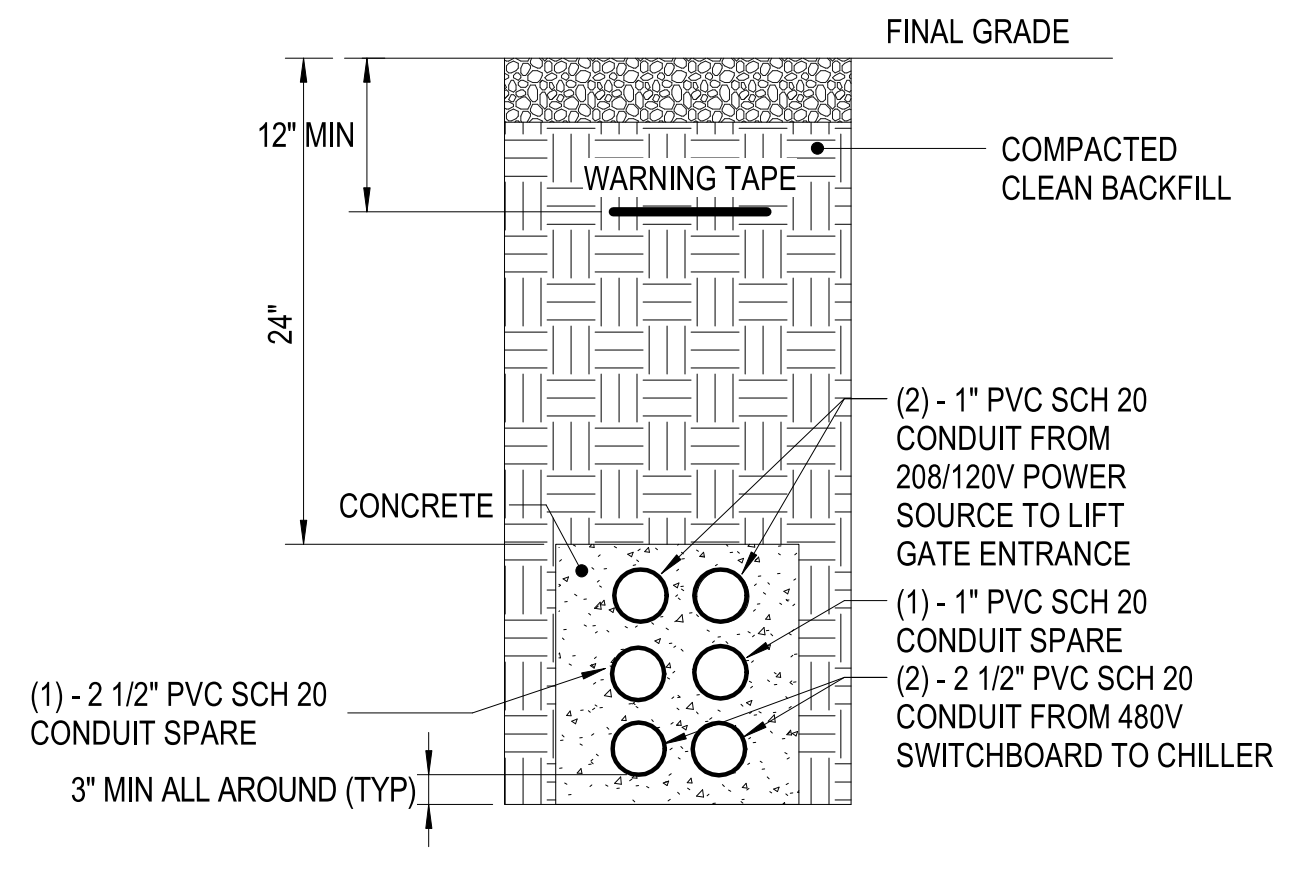
**7-WAY DUCTBANK (A)**  
 SCALE: NTS ES101 **B2**



**8-WAY DUCTBANK - GENERATOR**  
 SCALE: NTS ES101 **B3**



**2-WAY CONCRETE ENCASED DUCTBANK (B)**  
 SCALE: 1 : 15 ES101 **A1**



**6-WAY DUCTBANK**  
 SCALE: 1 : 15 ES101 **A2**



1

2

3

4

5

APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	SYM
 <b>NAVFAC</b>		
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
 <b>RQ Jordan COMPANY</b> - A JOINT VENTURE -		
<b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E/IN/P/O APPROVED		
FOR COMMANDER NAVFAC		
ACTIVITY		
MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES 50	DRW/LAK	CHK YRS
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION JACKSONVILLE, NC MCB CAMP LEJEUNE P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT ELECTRICAL - SITE DETAILS		
SCALE: AS NOTED		
EPROJCT NO.: 1500892		
CONSTR. CONTR. NO. N40085-20-C-0059		
NAVFAC DRAWING NO.		
SHEET OF		
<b>ES502</b>		

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1500892-E-01  
 PLOTTED: 8/19/2021 7:48:42 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED





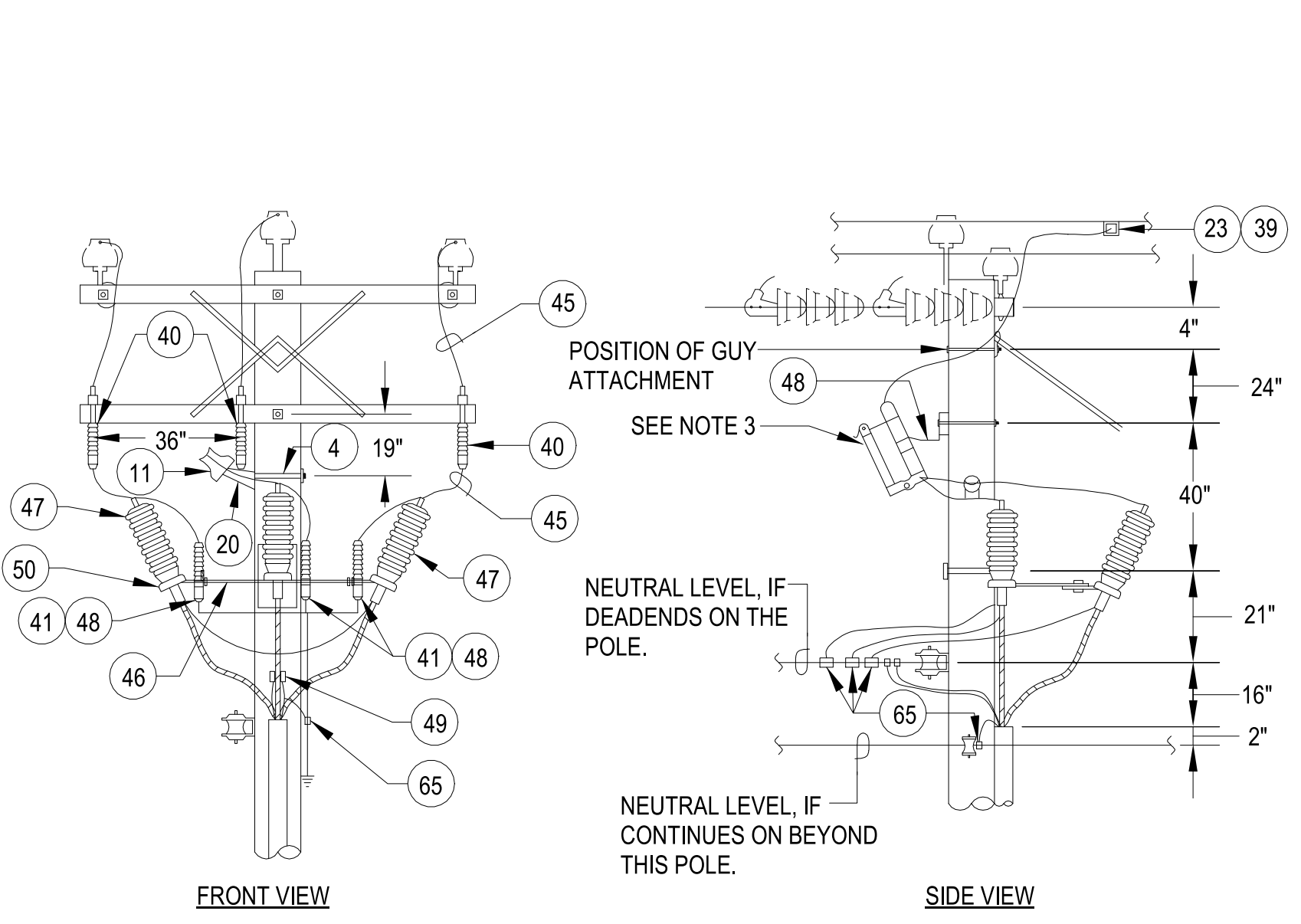


**POLE LINE MATERIAL LIST**

1	FLAT STEEL BRACE (TWO PIECES)
2	MACHINE BOLT, 3/8" X LENGTH NEEDED WITH WASHER, NUT AND LOCKWASHER
3	8" WOOD CROSSARM WITH CROSS SECTION DIMENSIONS OF 3 1/2" X 4 1/2"
4	MACHINE BOLT, 5/8" X LENGTH NEEDED WITH WASHER, NUT AND LOCKWASHER
5	TIMBER CONNECTOR
6	LAGSCREW, 1/2" X 4"
7	ANGLE STEEL BRACE (TWO PIECES)
8	MACHINE BOLT, 1/2" X LENGTH NEEDED, WITH WASHER, NUT & LOCKWASHER
9	DEADEND BOX
10	STEEL PIN
11	PIN INSULATOR
12	GRID GAIN, USED ONLY WHEN THERE IS NO POLE GAIN
13	ANGLE STEEL BRACE (ONE PIECE)
14	10" WOOD CROSSARM WITH CROSS SECTION DIMENSIONS OF 3 1/2" X 4 1/2"
15	5/8" EYE NUT
16	5/8" EYE BOLT, LENGTH AS NEEDED, WITH WASHER, NUT & LOCKWASHER
17	EXTENSION LINK
18	BELL TYPE SUSPENSION INSULATOR WITH CONNECTING HARDWARE
19	STRAIN CLAMP
20	STEEL ANGLE PIN
21	CLUSTER MOUNTING BRACKET, STEEL
22	TRANSFORMER GROUNDING CONNECTION
23	STIRRUP
24	SECONDARY LEAD SUPPORT BRACKET
25	ADAPTER PLATE FOR CLUSTER MOUNTING
26	CLEVIS BRACKET FOR SPOOL INSULATOR
27	SPOOL INSULATOR
28	U BOLT CLAMP
29	PREFORMED GUY GRIP
30	GUY HOOK
31	GUY STRAIN INSULATOR
32	GUY WIRE, SIZE AS SPECIFIED
33	#4 WP CU. SOFT DRAWN GROUND WIRE
34	GROUND CLAMP
35	CONDUIT COUPLING
36	CONDUIT BEND
37	INSULATED BUSHING
38	PERFORATED STRAPPING, 1-1/2" WIDE
39	HOT LINE CLAMP
40	GANG OPERATED ISOLATION SWITCH, AS SPECIFIED
41	SURGE ARRESTER, AS SPECIFIED
42	POLE TOP PIN (RIDGE PIN) - 24 INCHES LONG
43	CROSSARM ANGLE PIN
44	ANGLE POLE TOP PIN
45	WEATHERPROOF SOFT DRAWN WIRE-SIZE (a) TO MATCH OR EXCEED AMPACITY OF CONNECTING CABLE, OR (b) AT 125% OF TRANSFORMER FULL LOAD CURRENT, BUT NOT LESS THAN NO. 4 AWG

**POLE LINE MATERIAL LIST**

46	TRI-MOUNT BRACKET
47	TERMINATOR
48	MOUNTING BRACKET
49	CABLE GRIP HANGER
50	HOSE CLAMP
51	STUD, 3/4" X 1-3/4"
52	LINE POST INSULATOR
53	TRIPLE INSULATOR BRACKET
54	ANGLE CLAMP
55	INSULATOR, LINE POST CLAMP
56	4" CROSSARM
57	CROSSARM GAIN BRACKET
58	PULLEY BRACKET
59	WEDGE CLAMP
60	MIDSPAN SERVICE CLAMP
61	STUD, 7"
62	SADDLE, ANGLE
63	SADDLE CROSSARM
64	FITTING, POLE TOP
65	CONNECTOR
66	SUSPENSION CLAMP
67	TIE, SERVICE CABLE
68	54" FIBERGLASS STRAIN INSULATOR
69	PVC RISER SHIELD
70	PVC EXTENSION SHIELD
71	PVC BACK PLATE
72	8" WOOD CROSSARM WITH CROSS SECTION DIMENSIONS OF 4 3/4" X 5 3/4"
73	10" WOOD CROSSARM WITH CROSS SECTION DIMENSIONS OF 4 3/4" X 5 3/4"
74	BACK-UP CURRENT LIMITING FUSE



**NOTES**

1. MODIFY POSITION OF TERMINAL ON DEADENDS TO BE UNDER THE CONDUCTORS AND THE CUTOUTS ON THE BACKSIDE OF CROSSARM. POLE RISER MUST BE OFFSET TO CLEAR NEUTRAL CLEVIS BRACKET.
2. CONNECT BOTTOM LEAD OF ARRESTER DIRECTLY TO POLE GROUND. INTERCONNECT CABLE INSULATION SHIELD DRAIN WIRES AND CONDUIT RISER GROUND TO MULTI-GROUNDED NEUTRAL (IF EXISTING) AND POLE GROUND.
3. PROVIDE GANG OPERATED ISOLATION SWITCH. COORDINATE WITH SPECIFIC DESIGN REQUIREMENTS PROVIDED.

**POLE LINE MATERIAL LIST**

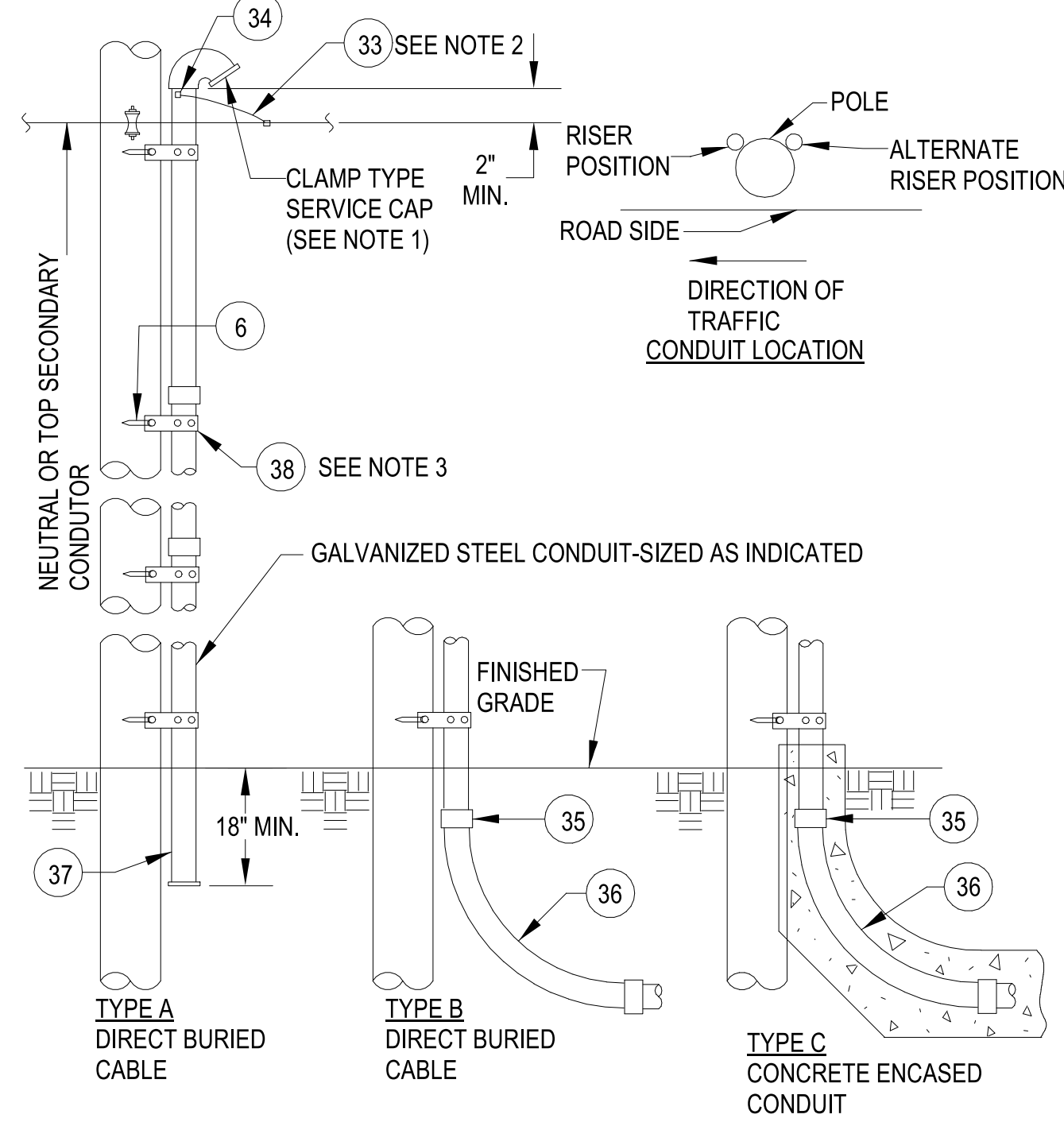
SKETCH DATE:	JUNE 2002	STYLE:	OH-1.5
--------------	-----------	--------	--------

**POLE LINE MATERIAL LIST**

SKETCH DATE:	JUNE 2002	STYLE:	OH1.5A
--------------	-----------	--------	--------

**U.G. TERMINAL (0-25kV)**

SKETCH DATE:	JUNE 2002	STYLE:	OH-31
--------------	-----------	--------	-------

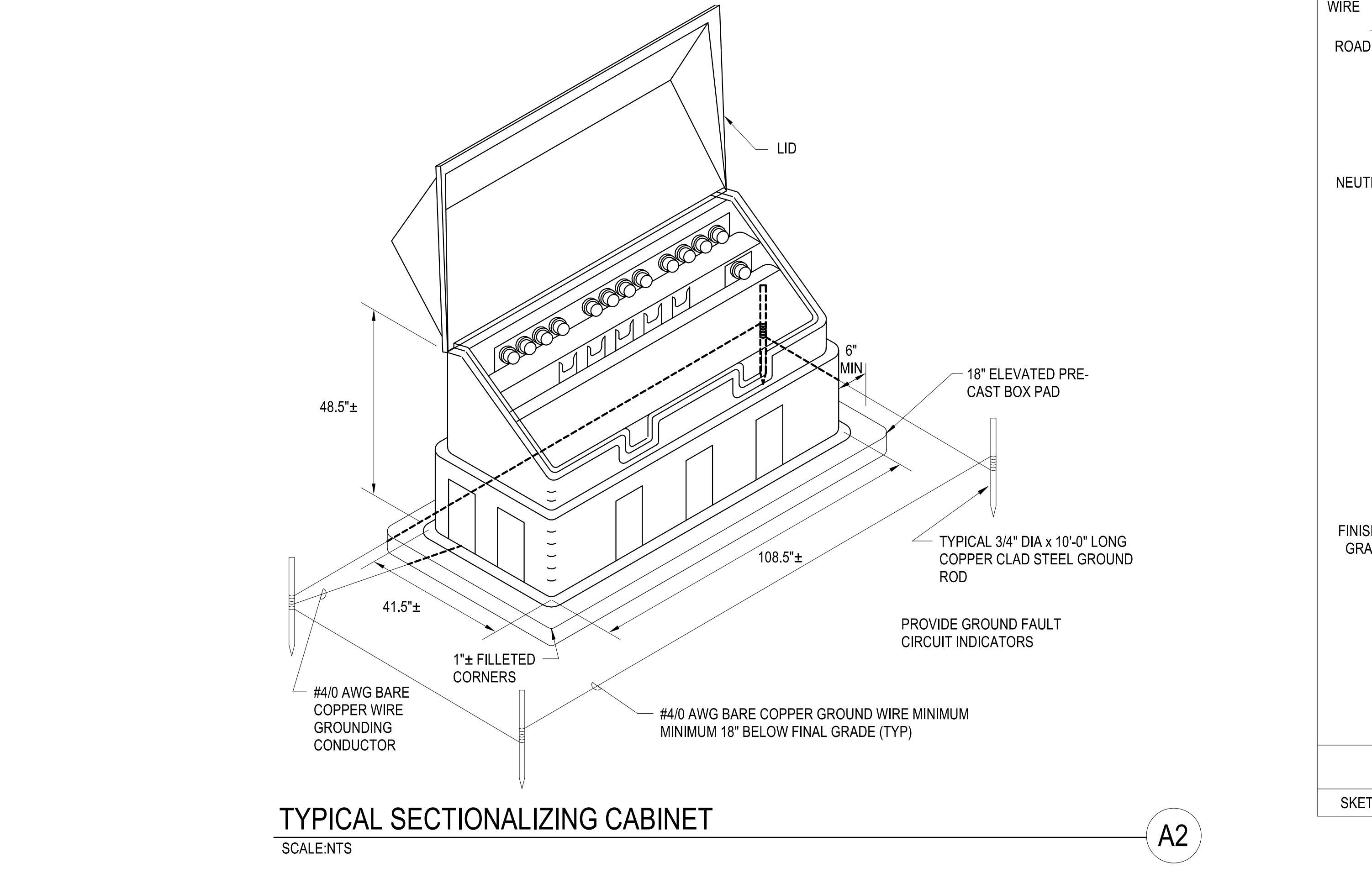


**NOTES**

1. ON CONDUIT RISER FOR PRIMARY CIRCUITS, ELIMINATE SERVICE CAP AND PROVIDE GROUNDING TYPE INSULATOR BUSHING.
2. BOND CONDUIT TO POLE GROUND AND SYSTEM NEUTRAL (IF EXISTING). SEE GROUNDING NOTES ON SKETCH OH-41.
3. SPACE STRAPS AT MAXIMUM OF 4' INTERVALS.

**CONDUIT RISER (SIZE & TYPE AS INDICATED)**

SKETCH DATE:	JUNE 2002	STYLE:	OH-35
--------------	-----------	--------	-------



**GROUND**

SKETCH DATE:	JUNE 2002	STYLE:	OH-41
--------------	-----------	--------	-------

APPR. DATE

SYN. DESCRIPTION

**PRELIMINARY FOR REFERENCE ONLY**

100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
A/E INF/CS  
APPROVED

**Michael Baker INTERNATIONAL**

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES. BY: DRW. BY: CHK. BY:

PM  
BRANCH MANAGER  
CHIEF ENGINEER  
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
ELECTRICAL - SITE DETAILS

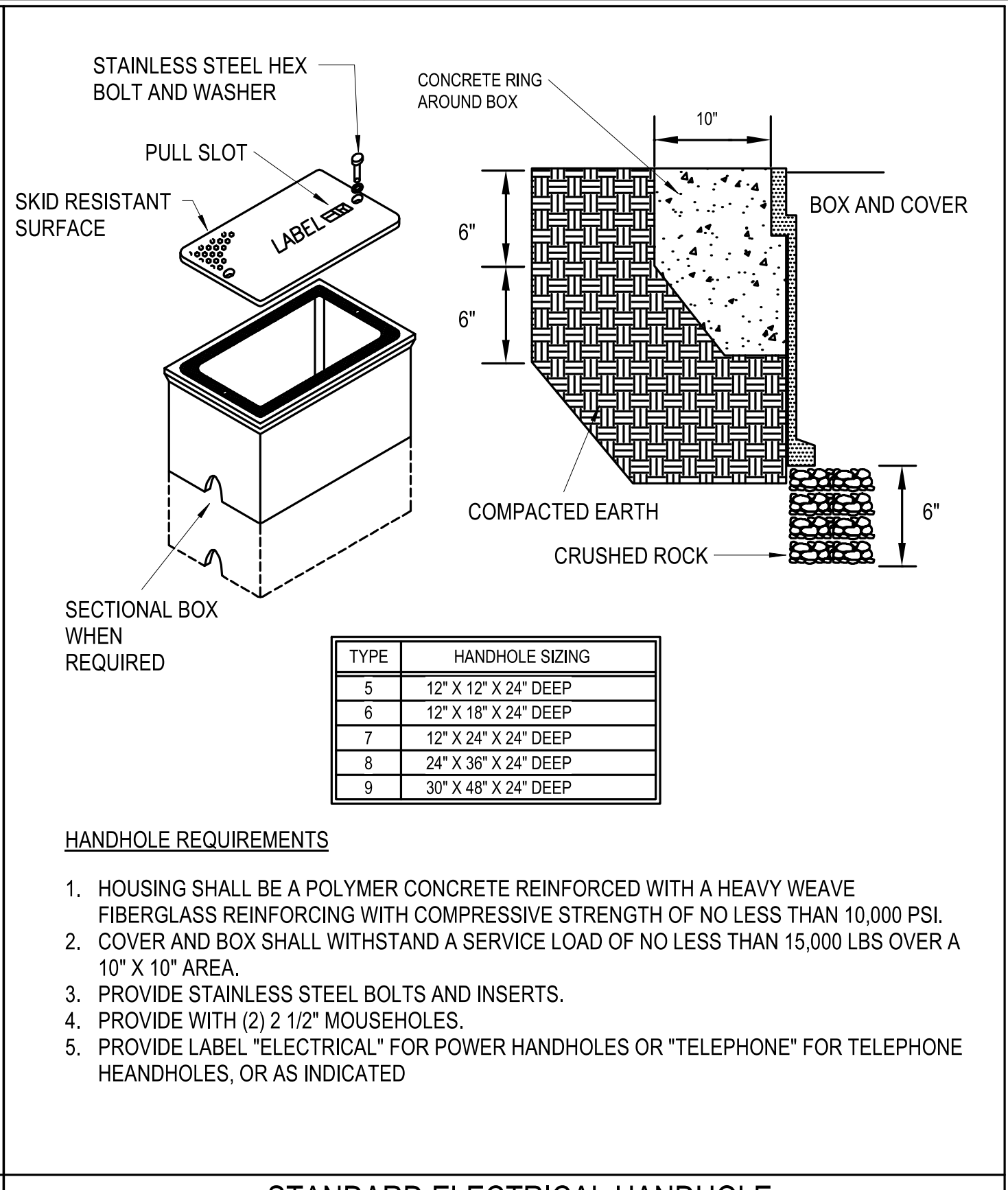
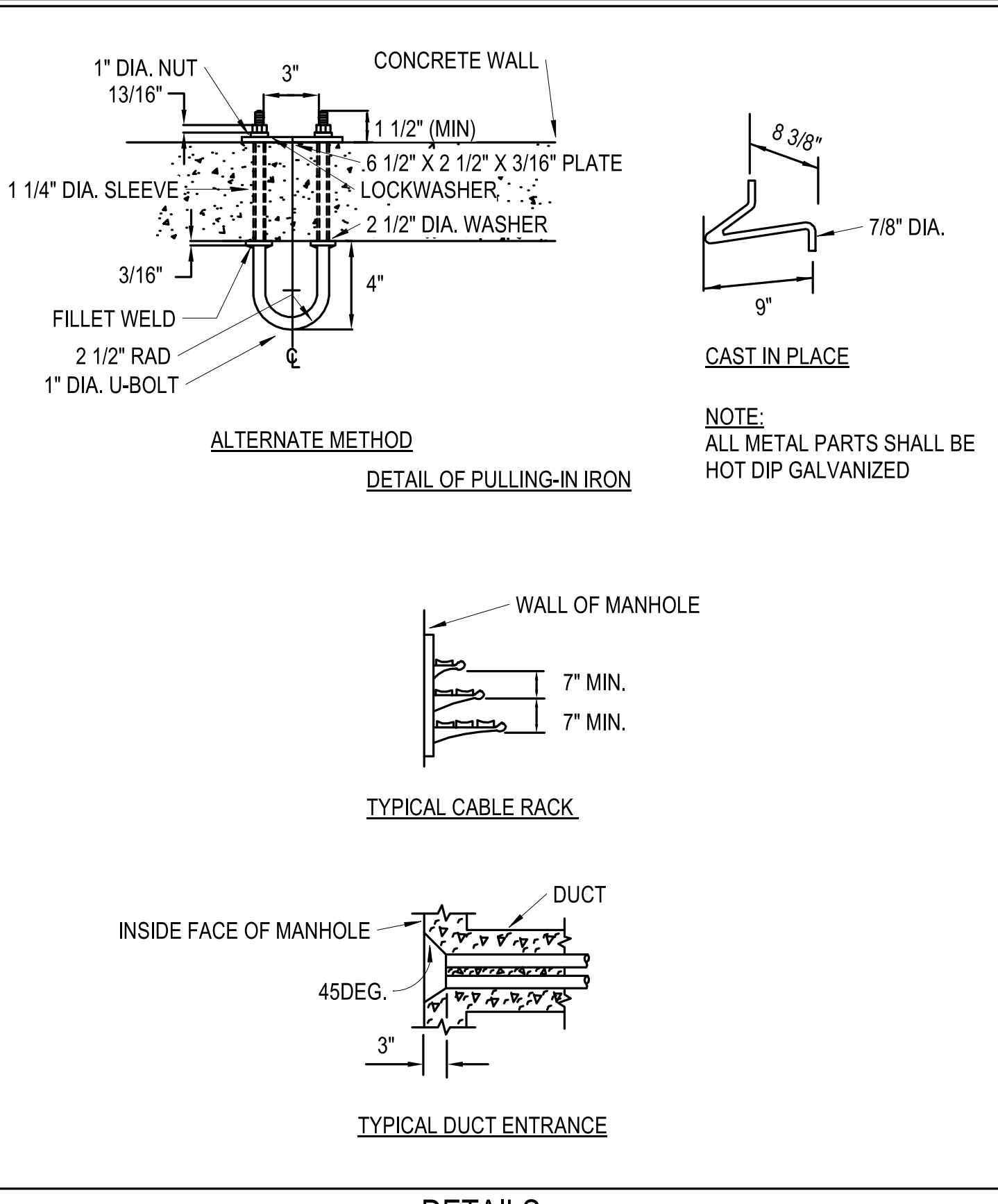
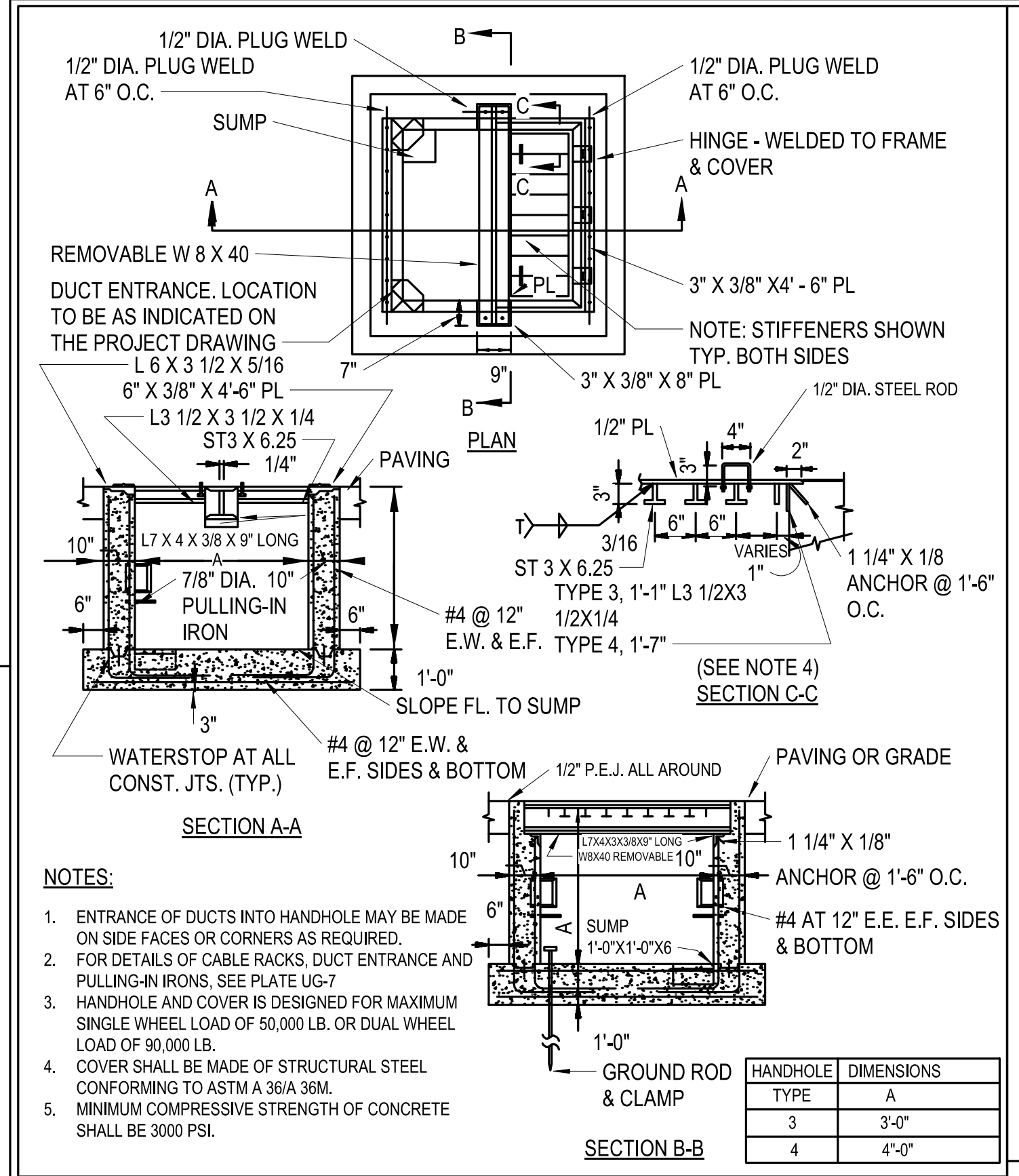
SCALE: AS NOTED  
EPROJCT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF

**ES504**

DP1 UPDATES WITH DP2 FINAL SUBMISSION

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1500892-E-01  
PLOTTED: 8/19/2021 7:48:45 AM





STANDARD ELECTRICAL HANDHOLE (TRAFFIC/AIRFIELD) TYPES 3 & 4

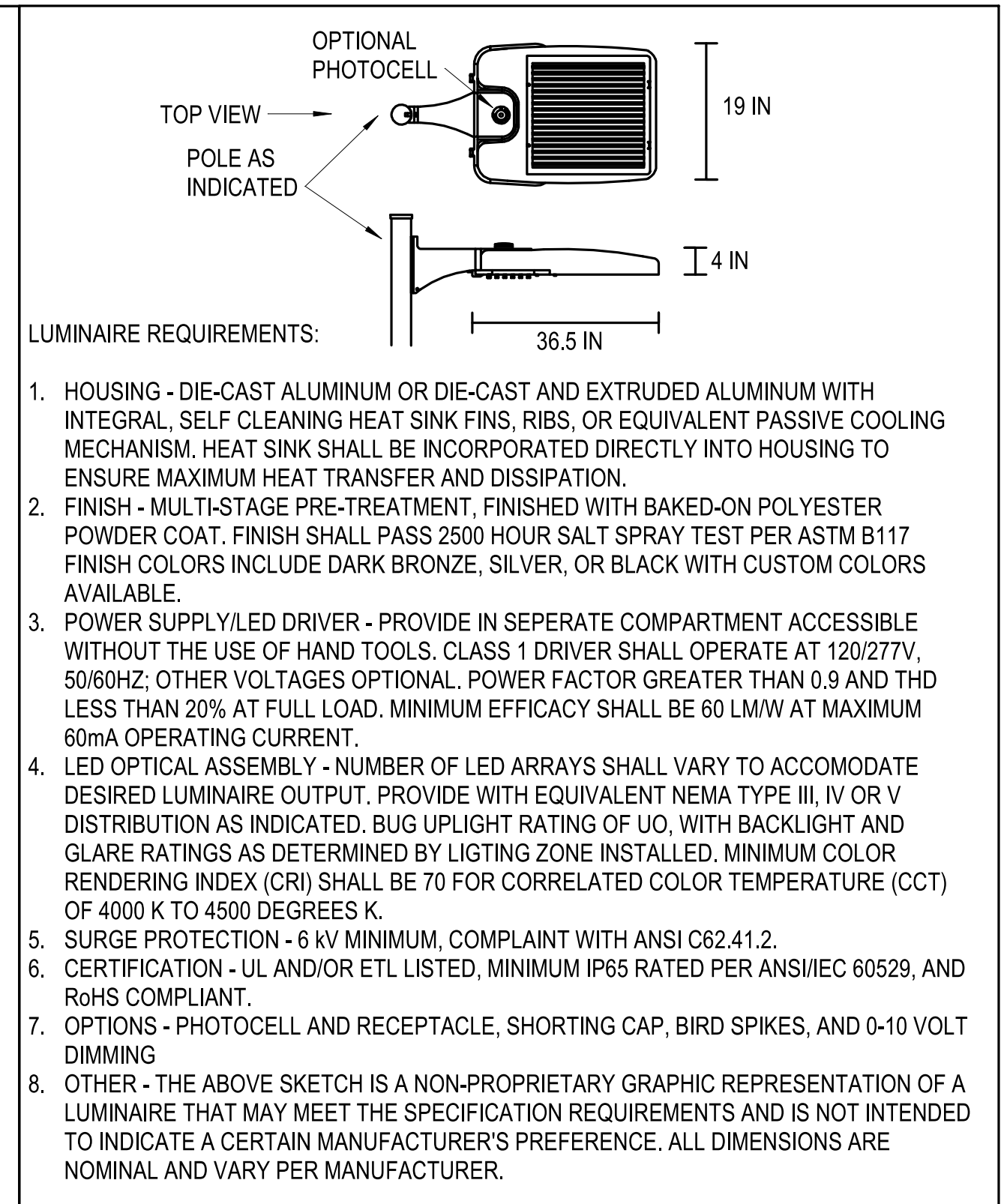
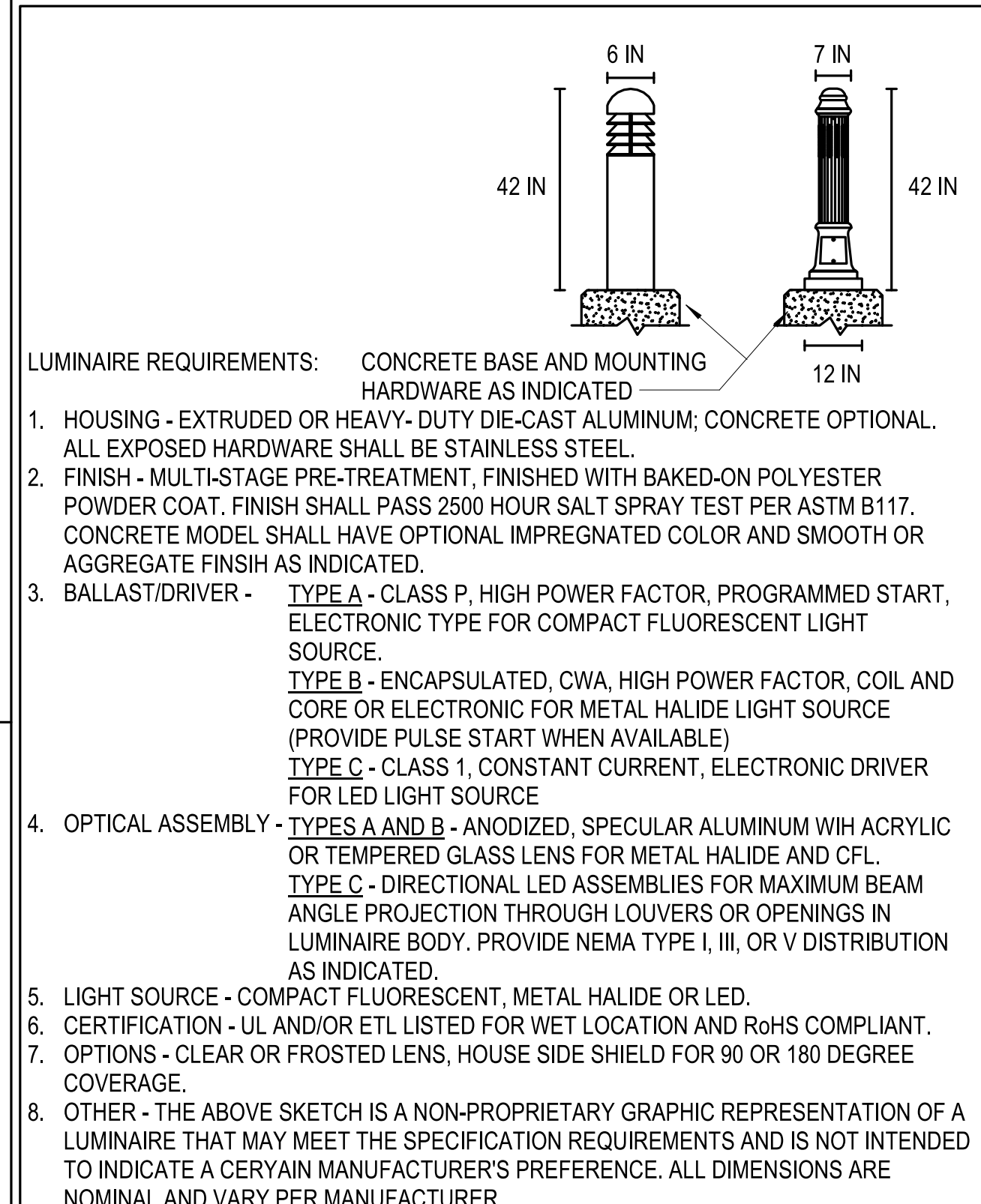
SKETCH DATE: JUNE 2002 STYLE: UG-5

DETAILS (PULLING-IN IRONS, CABLE RACK AND DUCT ENTRANCE)

SKETCH DATE: JUNE 2002 STYLE: UG-7

STANDARD ELECTRICAL HANDHOLE (NONTRAFFIC)(COMPOSITE/FIBERGLASS) TYPES 5, 6, 7, 8, & 9

SKETCH DATE: JUNE 2002 STYLE: UG-6

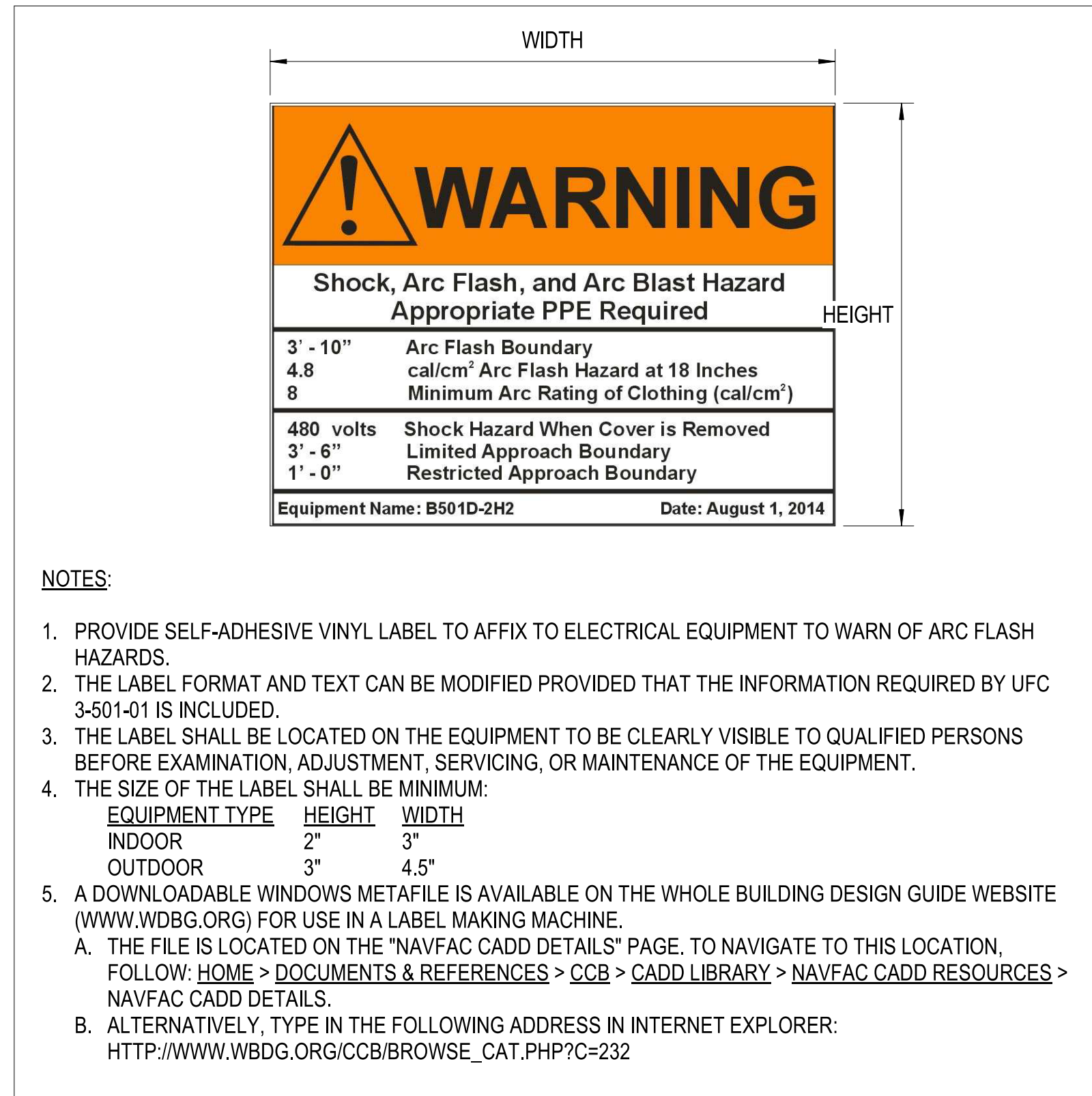


**DECORATIVE BOLLARD**

REVISED: MARCH 2013 LUMINAIRE PLATE: XL-12

**LED AREA LUMINAIRE**

REVISED: MARCH 2013 LUMINAIRE PLATE: XL-03



**DETAILED ARC FLASH WARNING LABEL**

SKETCH DATE: APRIL 2015 STYLE: AF-3

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM CTR-1500092-E.MT PLOTTED: 8/19/2021 7:48:48 AM

APPROVED: \_\_\_\_\_ DATE: \_\_\_\_\_

SYMBOL DESCRIPTION

**PRELIMINARY FOR REFERENCE ONLY**

**RO Jordan COMPANY**  
- A JOINT VENTURE -

**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E/IN/P/ APPROVED

FOR COMMANDER NAVFAC

ACTIVITY: MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE: \_\_\_\_\_

DES 50: \_\_\_\_\_ DRW: JAK \_\_\_\_\_ CHK: YRS \_\_\_\_\_

PM: \_\_\_\_\_

BRANCH MANAGER: \_\_\_\_\_

CHIEF ENGINEER: \_\_\_\_\_

FIRE PROTECTION: \_\_\_\_\_

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC, NORFOLK, VA  
MBC CAMP LEJEUNE  
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
ELECTRICAL - SITE DETAILS

SCALE: AS NOTED  
EPROJCT NO.: 1500092  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.: \_\_\_\_\_  
SHEET OF \_\_\_\_\_

**ES505**

DPI UPDATES WITH DP2 FINAL SUBMISSION



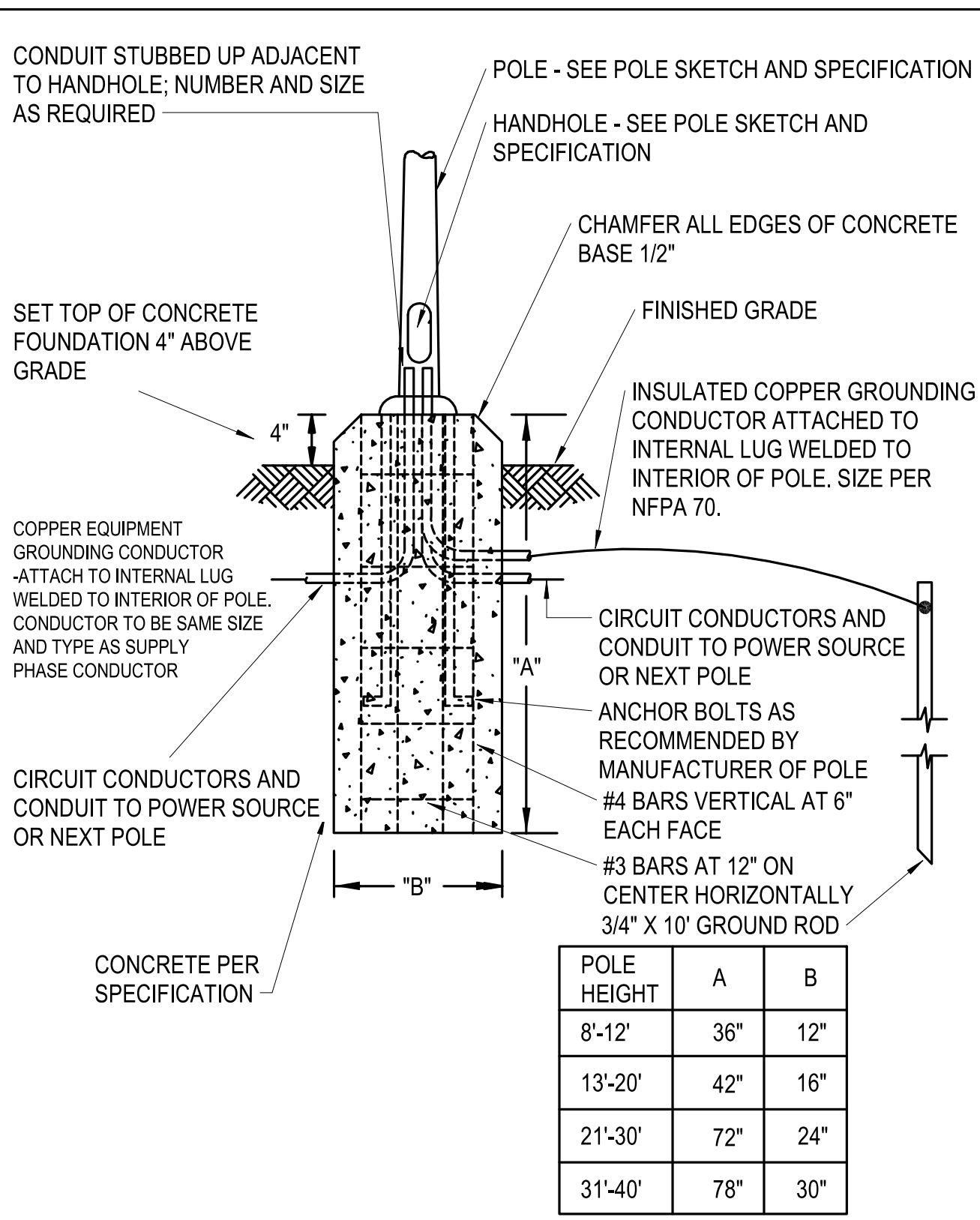
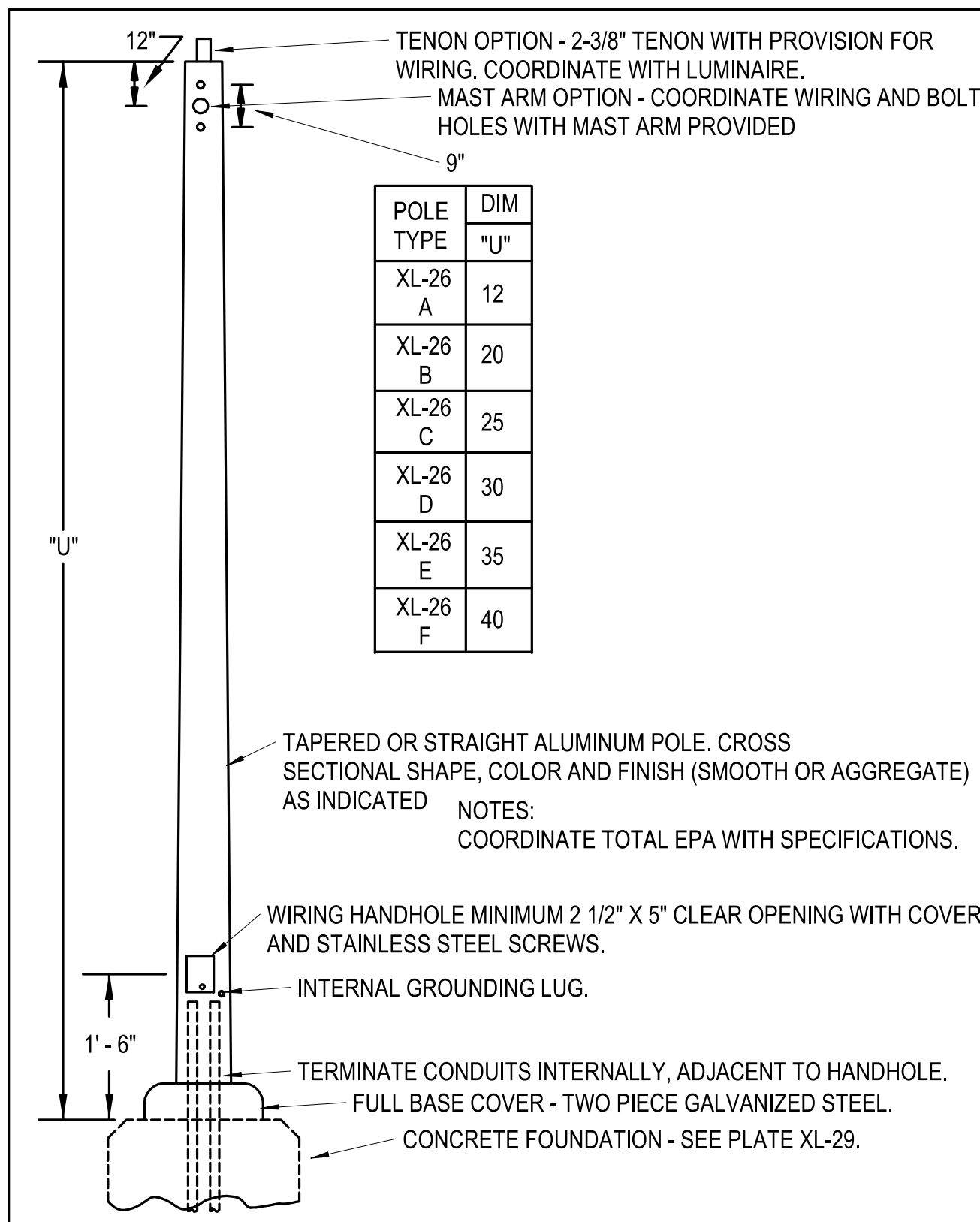
1

2

3

4

5

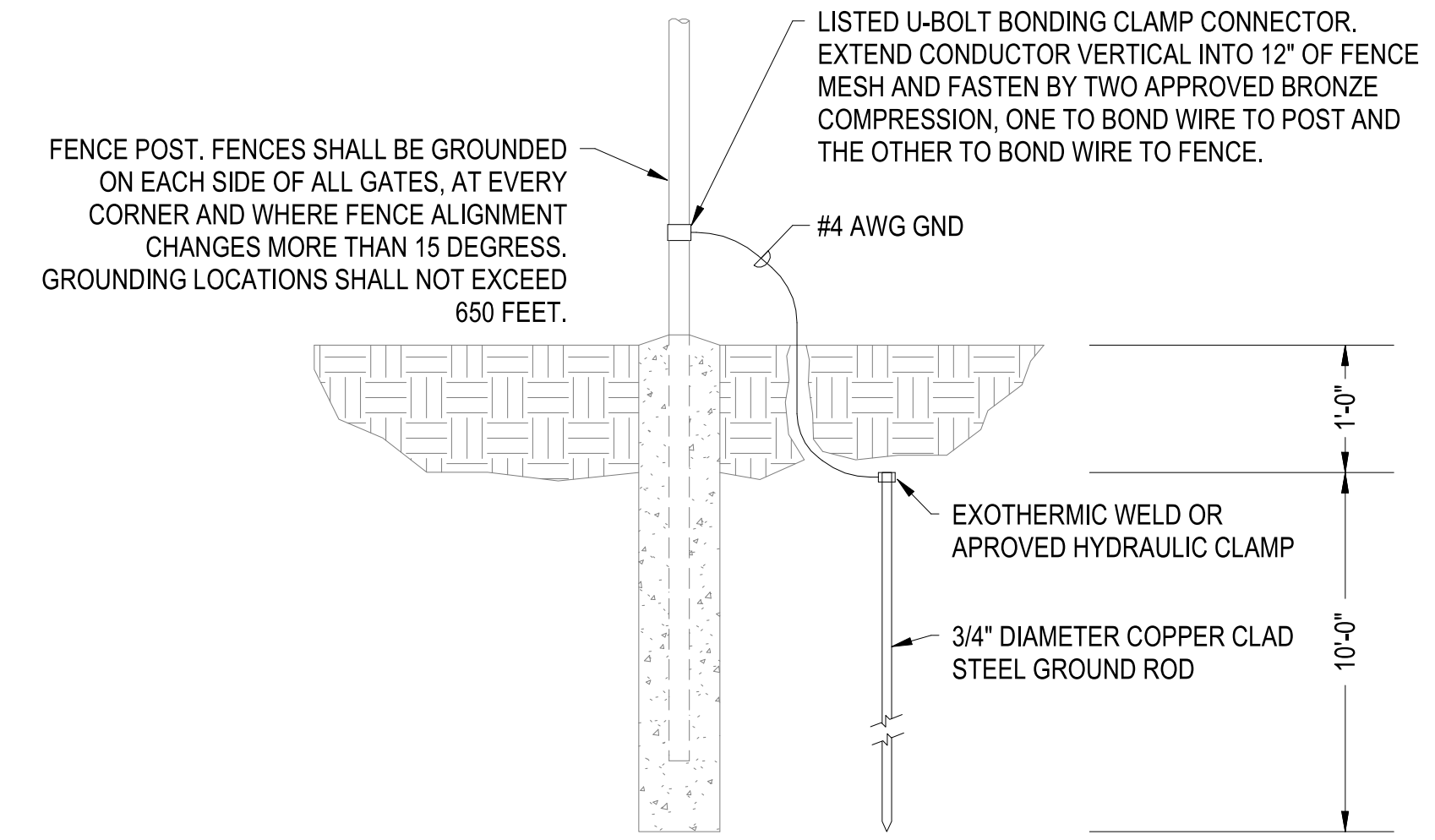


POLE HEIGHT	A	B
8'-12"	36"	12"
13'-20"	42"	16"
21'-30"	72"	24"
31'-40"	78"	30"

ANCHOR BASE ALUMINUM POLE

ANCHOR BASE POLE FOUNDATION

REVISED: MARCH 2013 LUMINAIRE PLATE: XL - 28      REVISED: MARCH 2013 LUMINAIRE PLATE: XL - 29



NOTES:  
 1. PLACE GROUND ROD NOT CLOSER THAN 2 FEET FROM FENCE POST AND NOT MORE THAN 8 FEET FROM FENCE POST.  
 2. EACH GATE SECTION SHALL BE BONDED TO ITS GATEPOST BY 1 1/8" X 1" FLEXIBLE BRAIDED COPPER STRAP AND GROUND POST CLAMPS.

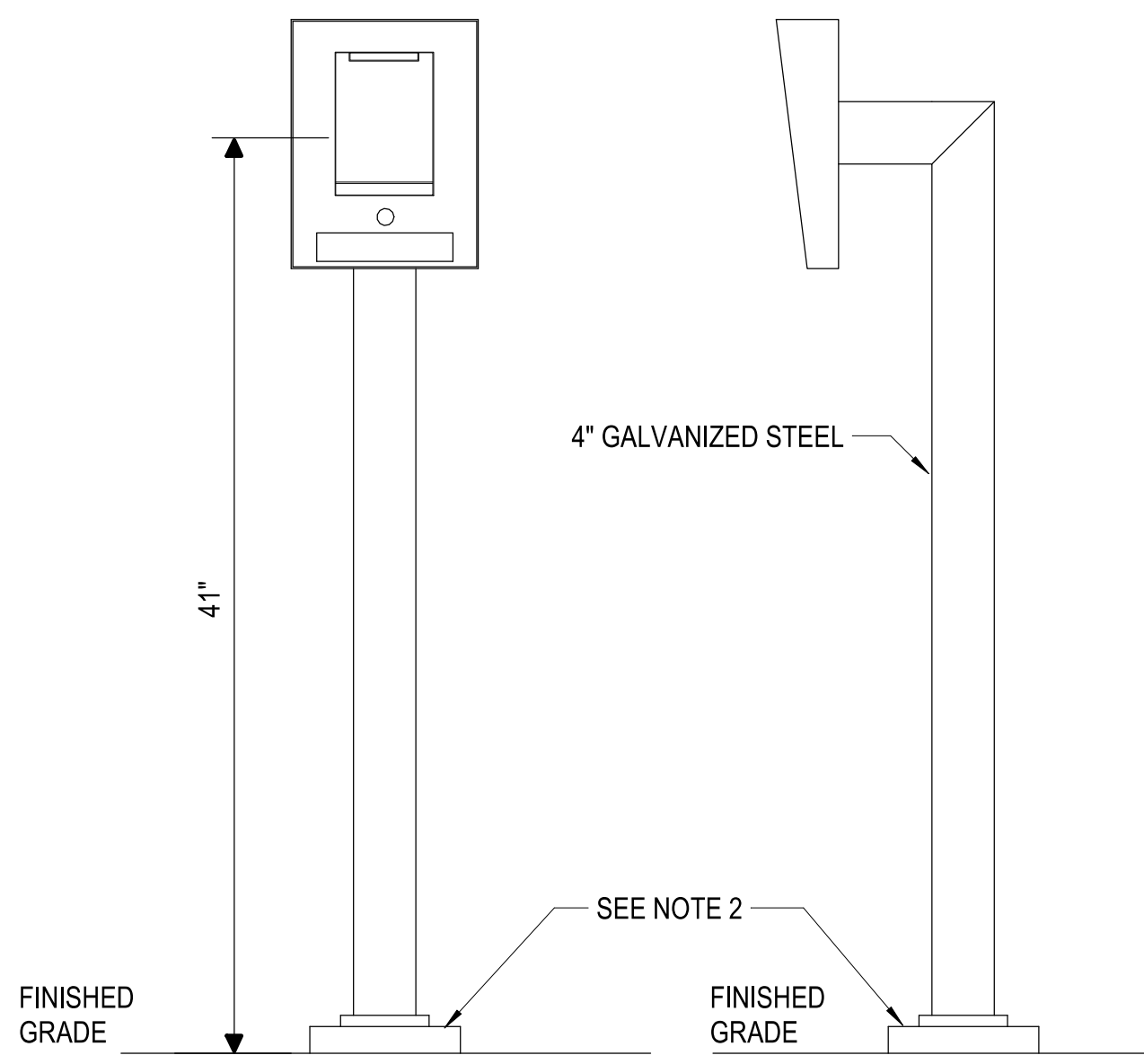
FENCE GROUNDING DETAIL

SCALE:NTS

C4

PLOTTED: 8/19/2021 7:48:40 AM

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-1590892.E-41



NOTES:  
 1. CONTRACTOR SHALL PLACE CARD READER SUCH THAT THE FACE OF THE READERS ARE NO LESS THAN 6" FROM THE FACE OF CURB, OR IF GIVEN, AT A DISTANCE SPECIFIED BY THE MANUFACTURER.  
 2. PROVIDE CONCRETE PAD OR SET IN CONCRETE FOR PEDESTAL INSTALLATION.

ACS PEDESTAL SECURITY  
 DETAIL

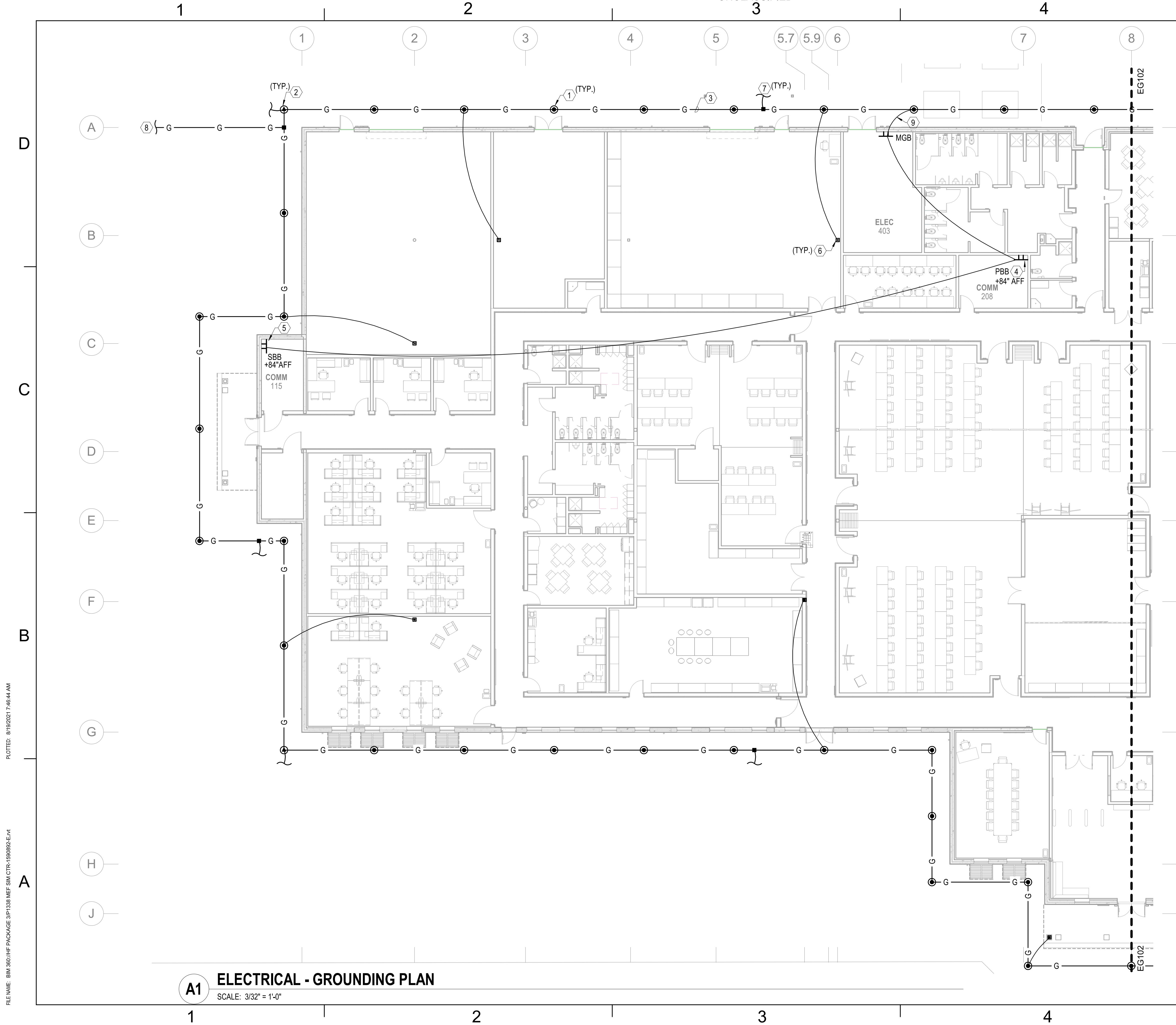
SCALE:NTS

A1

APPR	DATE
SYM	DESCRIPTION
<p><b>PRELIMINARY</b> FOR REFERENCE ONLY</p>	
<p><b>Michael Baker</b> INTERNATIONAL</p> <p>100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E/IN/P</p>	
<p>FOR COMMANDER NAVFAC</p> <p>ACTIVITY MARINE CORPS BASE CAMP LEJEUNE</p> <p>SATISFACTORY TO DATE</p> <p>DES BY: DRW/LAK      CHK: YRS</p> <p>PM</p> <p>BRANCH MANAGER</p> <p>CHIEF ENGINEER</p> <p>FIRE PROTECTION</p>	
<p>DEPARTMENT OF THE NAVY                  NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND                  ATLANTIC DESIGN AND CONSTRUCTION                  JACKSONVILLE, NC                  MCB CAMP LEJEUNE                  P1338 II MEF SIMULATION/TRAINING CENTER                  REPLACEMENT                  ELECTRICAL - SITE DETAILS</p>	
<p>SCALE: AS NOTED</p> <p>EPROJCT NO.: 1590892</p> <p>CONSTR. CONTR. NO.: N40085-20-C-0059</p> <p>NAVFAC DRAWING NO.</p> <p>SHEET OF</p> <p style="text-align: right;"><b>ES506</b></p>	

DPI UPDATES WITH DP2 FINAL SUBMISSION





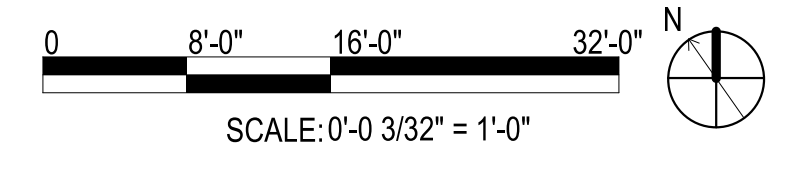
**A1 ELECTRICAL - GROUNDING PLAN**  
 SCALE: 3/32" = 1'-0"



**GENERAL NOTES**

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- SEE SHEET EG501 FOR GROUNDING DETAILS
- SEE SHEETS EG103 AND EG104 FOR LIGHTNING PROTECTION PLAN

**KEYNOTES**

- 3/4" DIAMETER BY 10' LONG COPPER CLAD GROUND ROD.
- GROUND TEST WELL STATION. SEE DETAIL C4 ON SHEET EG501.
- #4/0 AWG BARE COPPER GROUND LOOP INSTALLED 3' MINIMUM TO 10' MAXIMUM FROM BUILDING FOUNDATION AND BEYOND THE BUILDING PERIMETER.
- PROVIDE CONNECTION TO MAIN GROUNDING BUS (MGB) IN ELECTRICAL ROOM 403 WITH #4/0 AWG BARE COPPER GEC. SEE DETAIL C1 ON SHEET EG501.
- TELECOMMUNICATION SECONDARY GROUNDING BUSBAR (SBB) TO BE CONNECTED TO TELECOMMUNICATION PRIMARY GROUNDING BUSBAR (PBB) IN ROOM 208. #4/0 AWG BARE COPPER GROUNDING WIRE TO BE USED FOR CONNECTION.
- EXOTHERMIC WELD CONNECTION TO BUILDING STEEL.
- DOWN CONDUCTOR CONNECTION FROM ROOF LIGHTNING PROTECTION SYSTEM. DOWN CONDUCTORS SHALL RUN DOWN THE EXTERIOR OF THE BUILDING WALLS, PROTECTED BY SCH. 40 PVC CONDUIT. COORDINATE WITH LIGHTNING PROTECTION PLANS ON SHEETS EG103 AND EG104.
- #4/0 AWG BARE COPPER GROUND CABLE RUN LENGTH OF NEW FENCE. TIE FENCE POST TO GROUND WIRE VIA GROUND ROD. SEE DETAIL A2 ON SHEET ES506.
- #4/0 AWG BARE COPPER GROUND WIRE FROM GROUND BAR TO GROUND RING.



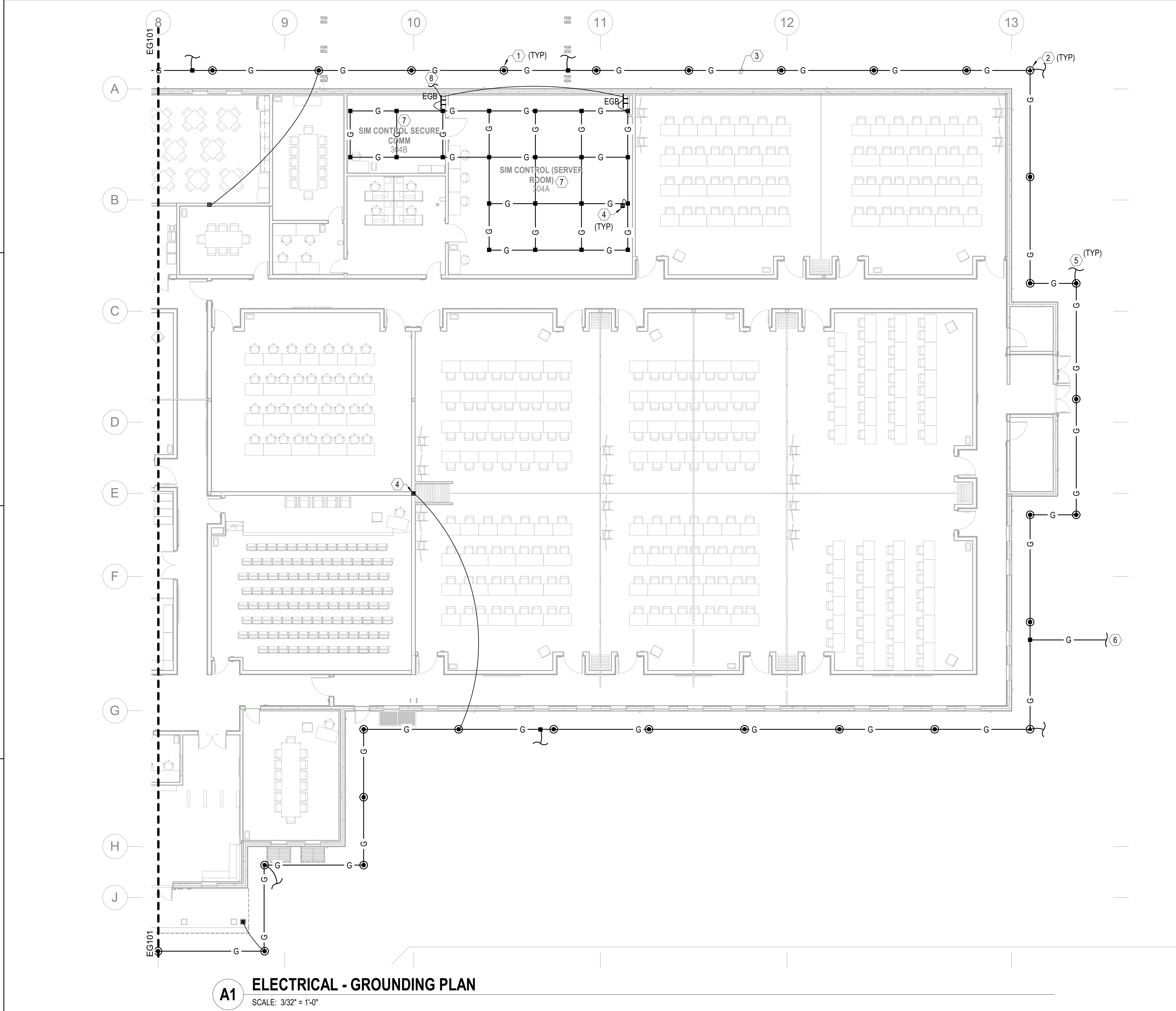
APPR	DATE
SYM	DESCRIPTION
 <b>PRELIMINARY</b> FOR REFERENCE ONLY	
 <b>Michael Baker</b> INTERNATIONAL <small>100 AIRSIDE DRIVE          MOON TOWNSHIP, PA 15108</small>	
FOR COMMANDER NAVFAC ACTIVITY <b>MARINE CORPS BASE          CAMP LEJEUNE</b>	
SATISFACTORY TO DATE DES BY: DRW/LAK    CHK YRS	
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER          REPLACEMENT</b> <b>ELECTRICAL - GROUNDING PLAN</b>	
SCALE: AS NOTED EPROJECT NO.: 1500892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.:	
SHEET OF <b>EG101</b>	

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-1500892-E-1  
 PLOTTED: 8/19/2021 7:46:44 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSION



FILE NAME: BIM360/HF PACKAGE 3P1338 MEF SIM CTR-1509092-E-N1  
PLOTTED: 8/19/2021 7:46:48 AM



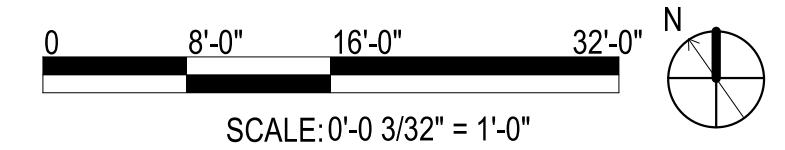
**A1 ELECTRICAL - GROUNDING PLAN**  
SCALE: 3/32" = 1'-0"





**GENERAL NOTES**

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- SEE SHEET EG501 FOR GROUNDING DETAILS
- SEE SHEETS EG103 AND EG104 FOR LIGHTNING PROTECTION PLAN

**KEYNOTES**

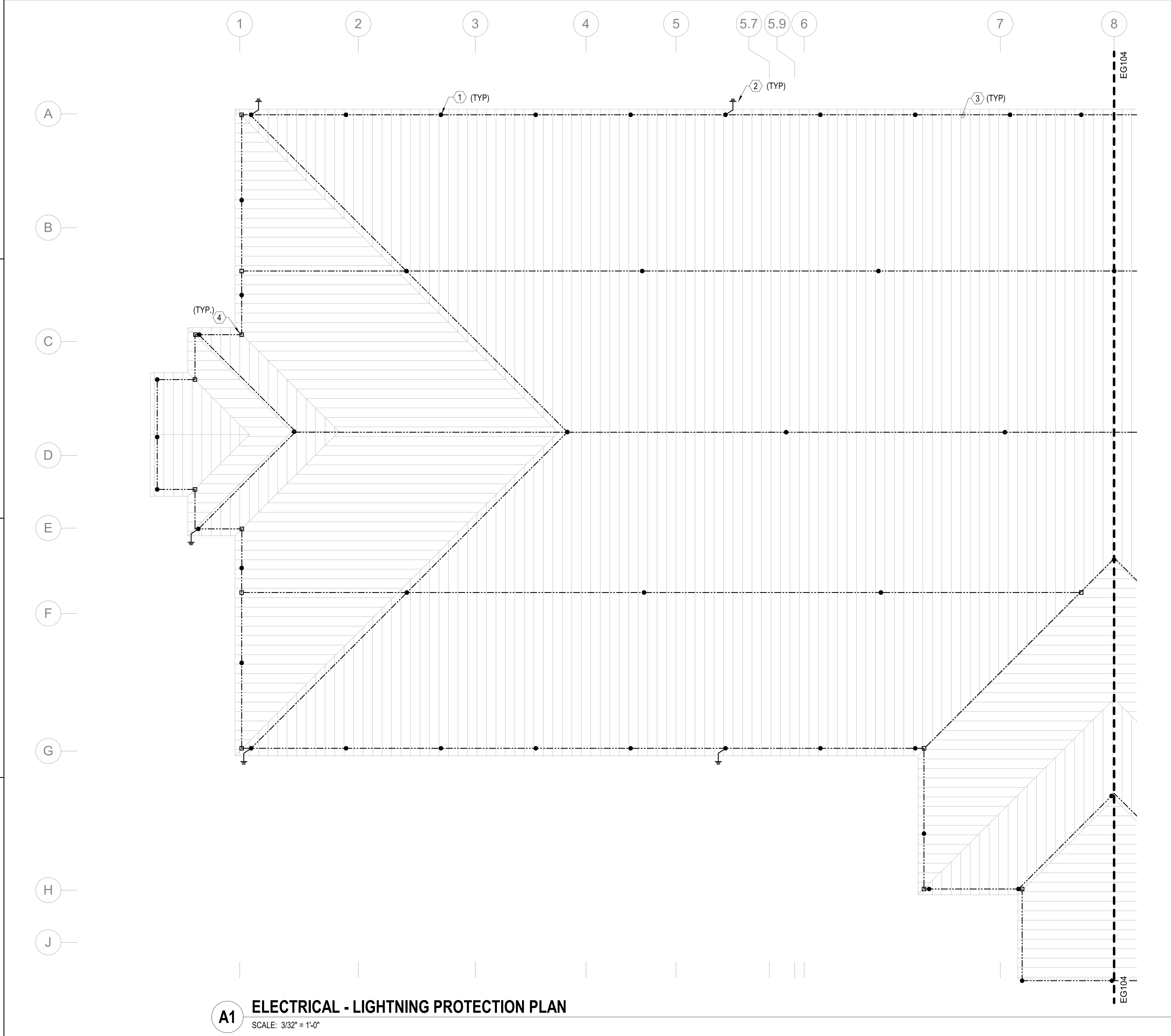
- 3/4" DIAMETER BY 10' LONG COPPER CLAD GROUND ROD.
- GROUND TEST WELL STATION. SEE DETAIL C4 ON SHEET EG501.
- #4/0 AWG BARE COPPER GROUND LOOP INSTALLED 3' MINIMUM TO 10' MAXIMUM FROM BUILDING FOUNDATION AND BEYOND THE BUILDING PERIMETER.
- EXOTHERMIC WELD CONNECTION TO BUILDING STEEL.
- DOWN CONDUCTOR CONNECTION FROM ROOF LIGHTNING PROTECTION SYSTEM. DOWN CONDUCTORS SHALL RUN DOWN THE EXTERIOR OF THE BUILDING WALLS, PROTECTED BY SCH. 40 PVC CONDUIT. COORDINATE WITH LIGHTNING PROTECTION PLANS ON SHEETS EG103 AND EG104.
- #4/0 AWG BARE COPPER GROUND CABLE RUN LENGTH OF NEW FENCE. TIE FENCE POST TO GROUND WIRE VIA GROUND ROD. SEE DETAIL A2 ON SHEET ES506.
- #4/0 AWG BARE COPPER GROUND BONDING CONNECTION TO TELECOMMUNICATION RACKS IN RM 304A AND 304B. COORDINATE FINAL LOCATION OF TELECOMMUNICATION RACKS.
- PROVIDE CONNECTION TO MAIN GROUNDING BUS (MGB) IN ELECTRICAL ROOM 403 WITH #4/0 AWG BARE COPPER GEC. SEE DETAIL C1 ON SHEET EG501.



APPR	DATE	SYMBOL	DESCRIPTION
			
			
			
			
FOR COMMANDER NAVFAC ACTIVITY <b>MARINE CORPS BASE CAMP LEJEUNE</b>			
SATISFACTORY TO DATE			
DES 50	DRW 100	CHK 100	YES
BRANCH MANAGER			
CHIEF ENGINEER			
FIRE PROTECTION			
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> <b>ELECTRICAL - GROUNDING PLAN</b>			
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> <b>ELECTRICAL - GROUNDING PLAN</b>			
SCALE: AS NOTED			
EPROJCT NO.: 1509092			
CONSTR. CONTR. NO. N40085-20-C-0059			
NAVFAC DRAWING NO.			
SHEET OF			
<b>EG102</b>			



FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-459082-E-N  
PLOTTED: 8/19/2021 7:46:50 AM



**A1 ELECTRICAL - LIGHTNING PROTECTION PLAN**  
SCALE: 3/32" = 1'-0"

**GENERAL NOTES**

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 SEE SHEETS EG101 AND EG102 FOR GROUNDING PLANS
- 3 SEE SHEET EG501 FOR LIGHTNING PROTECTION DETAILS
- 4 LIGHTNING PROTECTION DESIGN AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA 780 AND UL96. DESIGN SHALL BE LPI MASTER LABEL CERTIFIED.

**KEYNOTES**

- 1 5/8" BY 10" SOLID ALUMINUM AIR TERMINAL.
- 2 #4/0 AWG BARE STRANDED CLASS 1 ALUMINUM DOWN CONDUCTOR CONSISTING OF STRANDS OF #13 AWG ALUMINUM. CONCEAL DOWN CONDUCTORS. PROVIDE APPROPRIATE ALUMINUM TO COPPER BIMETALLIC CONNECTORS AS REQUIRED FOR CONNECTION TO COPPER CLAD GROUND ROD. COORDINATE CONNECTION WITH GROUNDING PLAN ON SHEET EG101 AND EG102.
- 3 #4/0 AWG BARE STRANDED CLASS 1 ALUMINUM LIGHTNING PROTECTION MAIN CONDUCTOR CONSISTING OF STRANDS OF #13 AWG ALUMINUM.
- 4 ALUMINUM TO ALUMINUM CLAMP CONNECTOR.

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



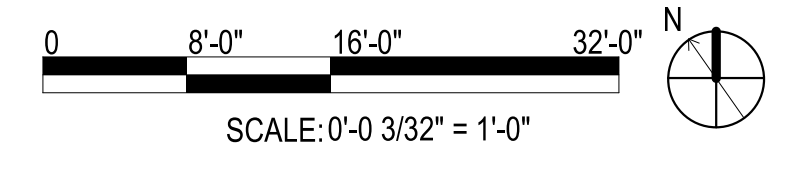
**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108

FOR COMMANDER NAVFAC  
ACTIVITY  
**MARINE CORPS BASE CAMP LEJEUNE**

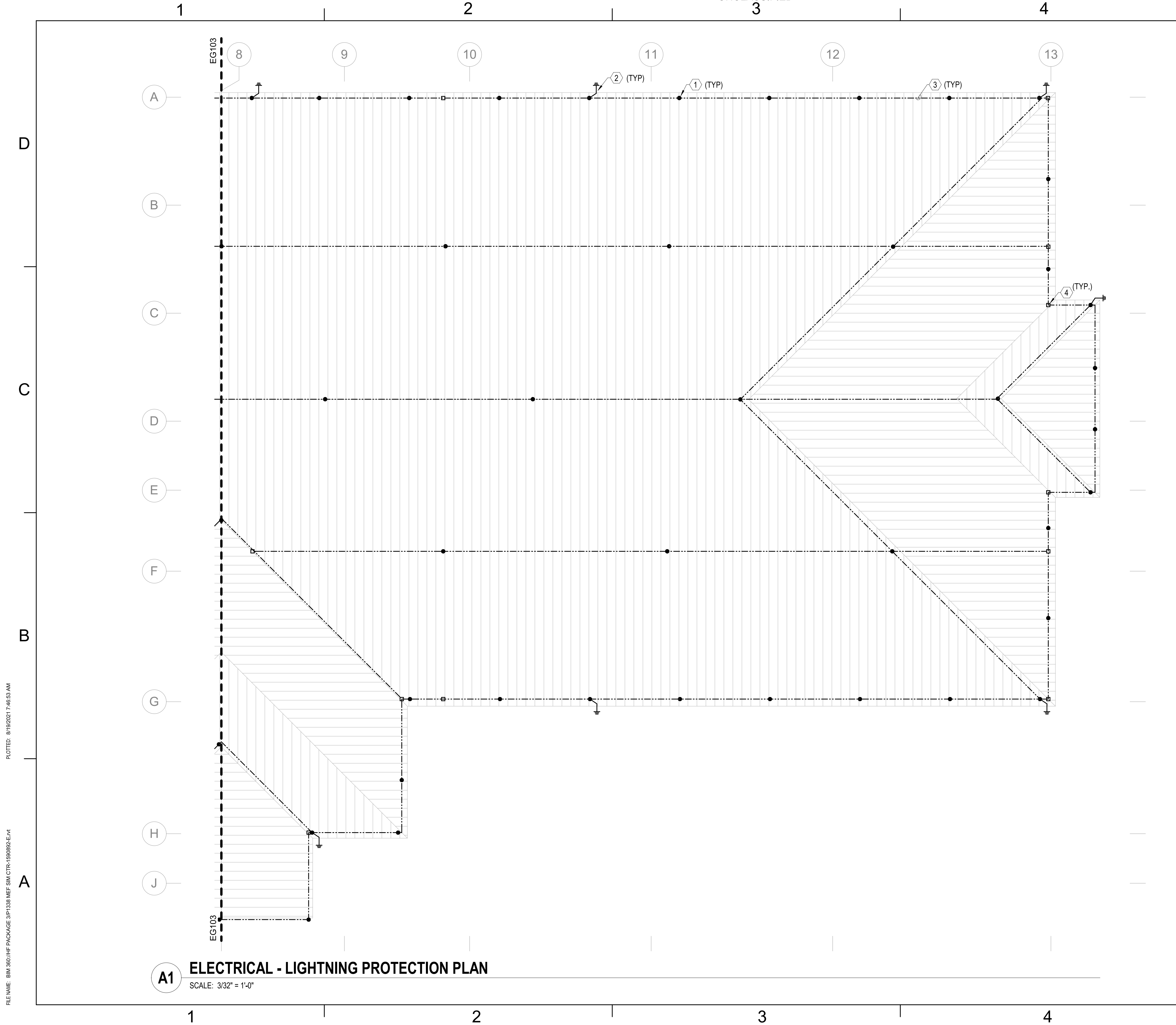
SATISFACTORY TO DATE  
DES BY: DRW/LAK    CHK: VRS  
PM:     
BRANCH MANAGER:     
CHIEF ENGINEER:     
FIRE PROTECTION:   

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC  
**P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT**  
ELECTRICAL - LIGHTNING PROTECTION PLAN

SCALE: AS NOTED  
PROJECT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF  
**EG103**









**A1 ELECTRICAL - LIGHTNING PROTECTION PLAN**  
 SCALE: 3/32" = 1'-0"

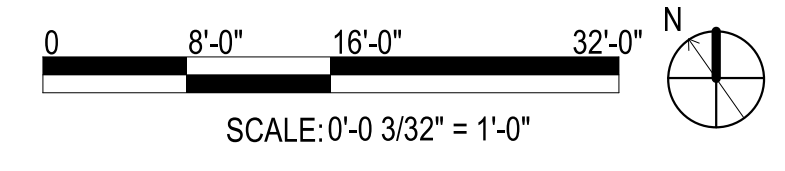
**GENERAL NOTES**

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- SEE SHEETS EG101 AND EG102 FOR GROUNDING PLANS
- SEE SHEET EG501 FOR LIGHTNING PROTECTION DETAILS
- LIGHTNING PROTECTION DESIGN AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA 780 AND UL96. DESIGN SHALL BE LPI MASTER LABEL CERTIFIED.

**KEYNOTES**

- 5/8" BY 10" SOLID ALUMINUM AIR TERMINAL.
- #4/0 AWG BARE STRANDED CLASS 1 ALUMINUM DOWN CONDUCTOR CONSISTING OF STRANDS OF #13 AWG ALUMINUM. CONCEAL DOWN CONDUCTORS. PROVIDE APPROPRIATE ALUMINUM TO COPPER BIMETALLIC CONNECTORS AS REQUIRED FOR CONNECTION TO COPPER CLAD GROUND ROD. COORDINATE CONNECTION WITH GROUNDING PLAN ON SHEET EG101 AND EG102.
- #4/0 AWG BARE STRANDED CLASS 1 ALUMINUM LIGHTNING PROTECTION MAIN CONDUCTOR CONSISTING OF STRANDS OF #13 AWG ALUMINUM.
- ALUMINUM TO ALUMINUM CLAMP CONNECTOR.

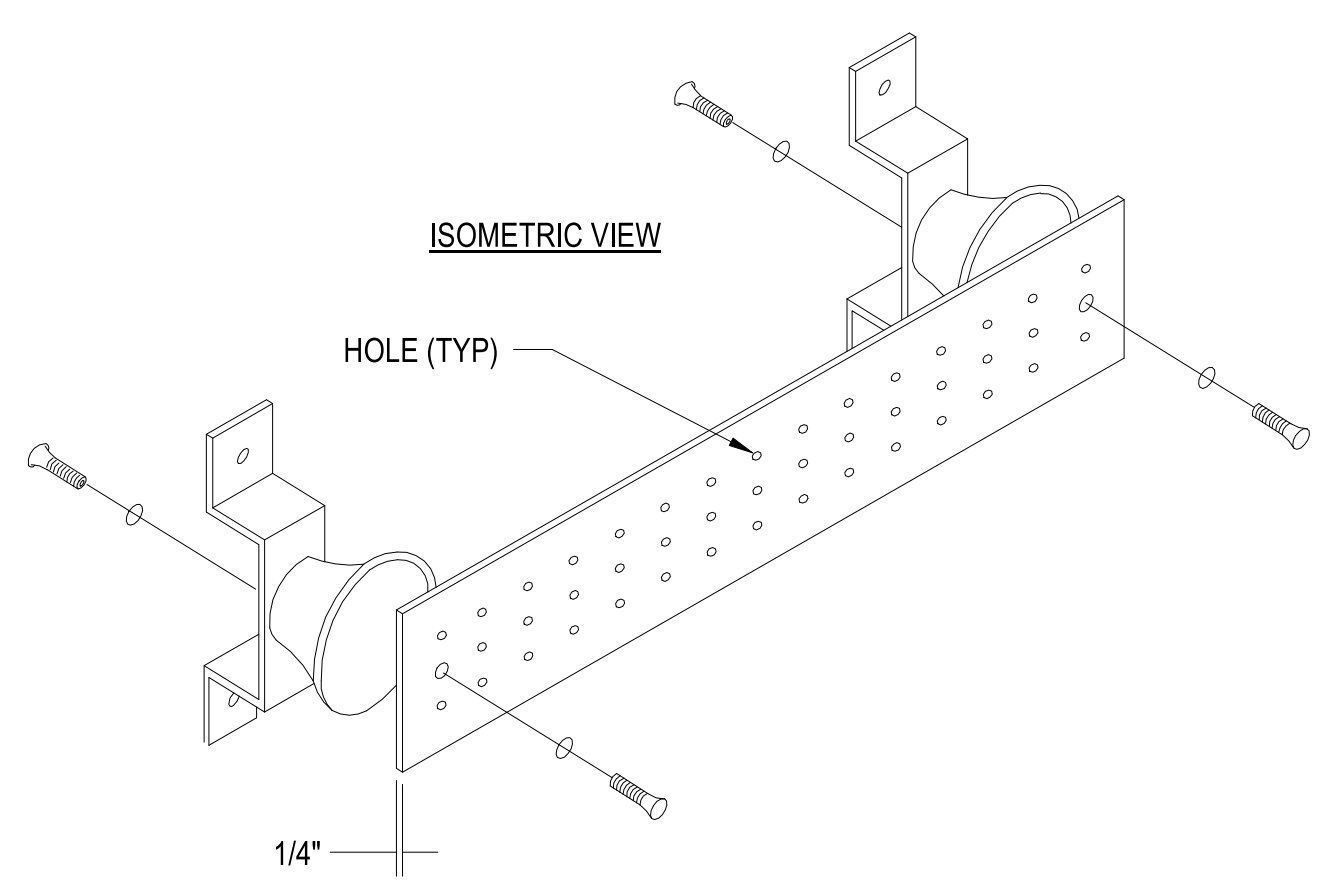
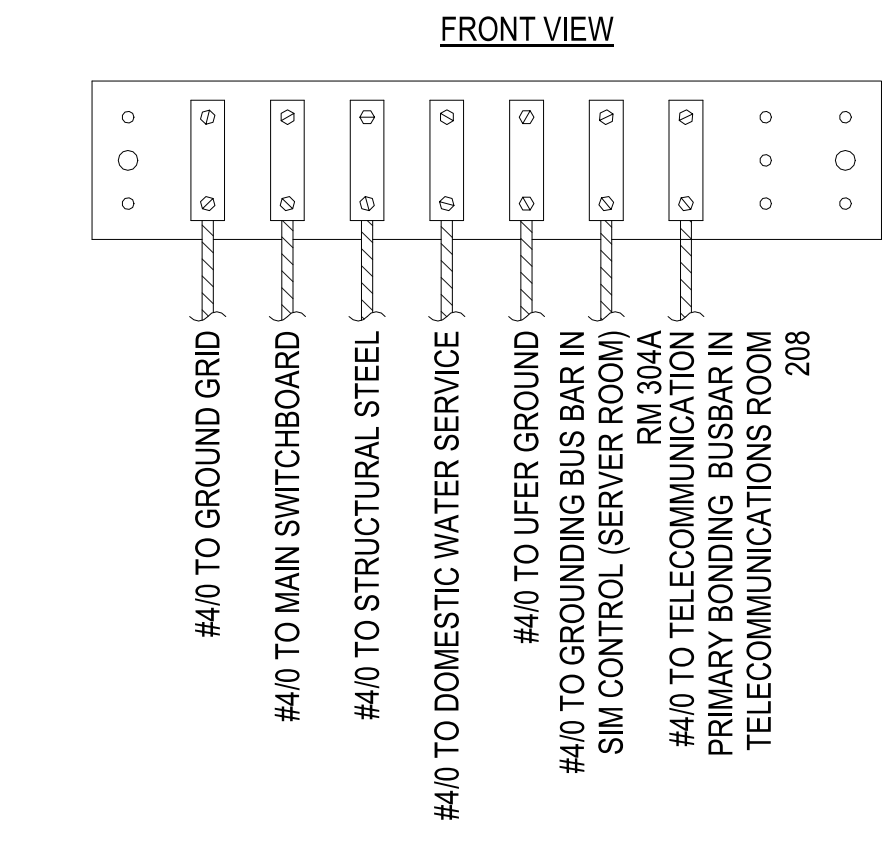
APPR	
DATE	
DESCRIPTION	
SYM	
 <b>PRELIMINARY</b> FOR REFERENCE ONLY	
 <b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
MARINE CORPS BASE CAMP LEJEUNE	
SATISFACTORY TO DATE	
DES BY	CHK YRS
DRW: lak	CHK: yrs
PM	
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER</b> REPLACEMENT <b>ELECTRICAL - LIGHTNING PROTECTION PLAN</b>	
SCALE:	AS NOTED
PROJECT NO.:	1500892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
<b>EG104</b>	



FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-1500892-E-14 PLOTTED: 8/19/2021 7:46:53 AM

DPI UPDATES WITH DP2 FINAL SUBMISSION





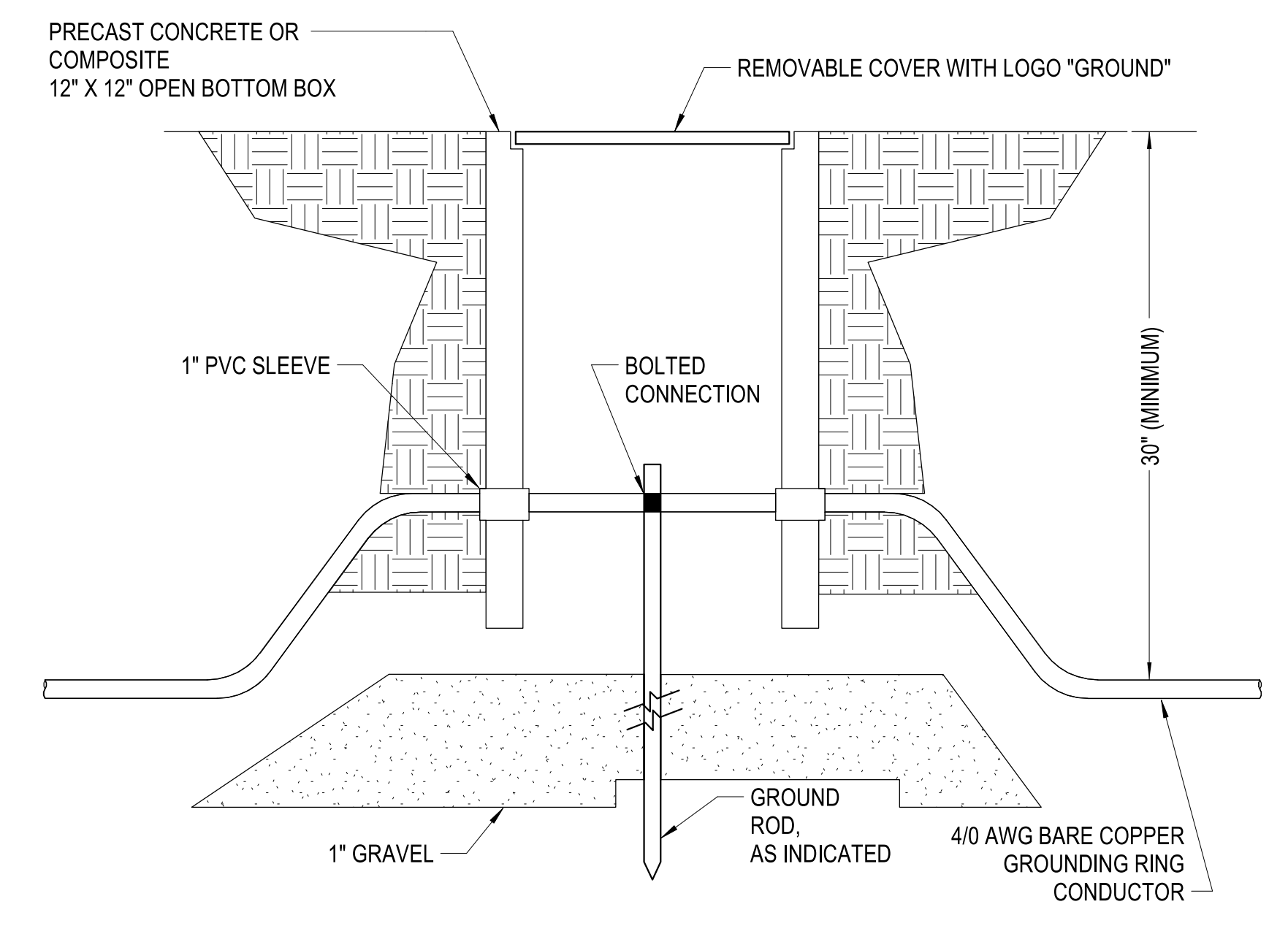
- NOTES:
1. GROUND BUSBAR IS PRE-DRILLED COPPER WITH STANDARD NEMA BOLT HOLE SIZING AND SPACING.
  2. MGB IS 1/4" THICK AND 4" WIDE.
  3. LENGTH SIZED TO ACCOMMODATE GROUND CONNECTIONS OF ALL GROWTH PROVISION. MINIMUM LENGTH SHALL BE 12".

**ELECTRICAL MAIN GROUNDING BUSBAR**

SCALE:NTS

REF EG101 - EG102

C1

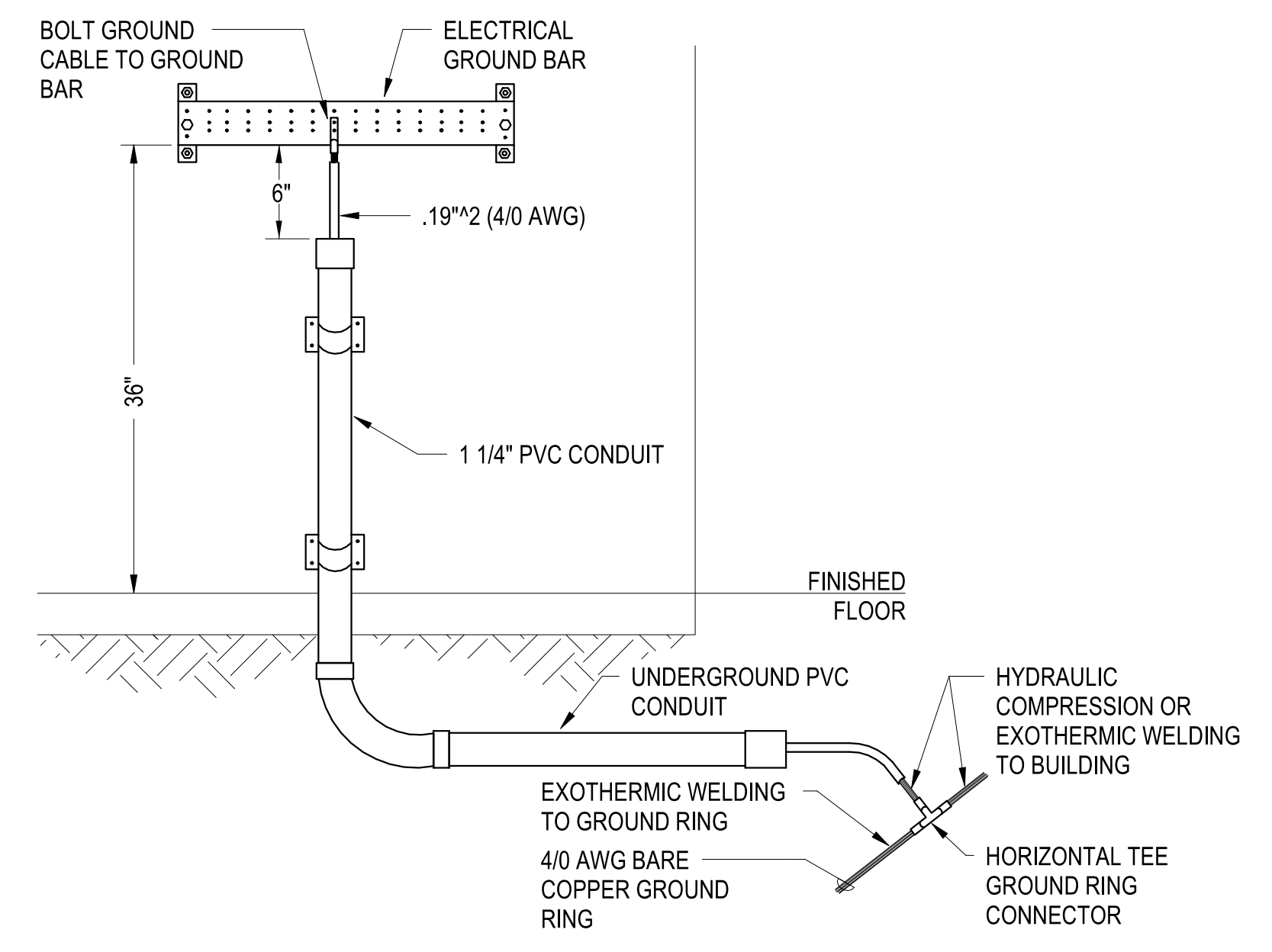


**GROUND ROD TEST WELL**

SCALE:NTS

REF EG101 - EG102

C4

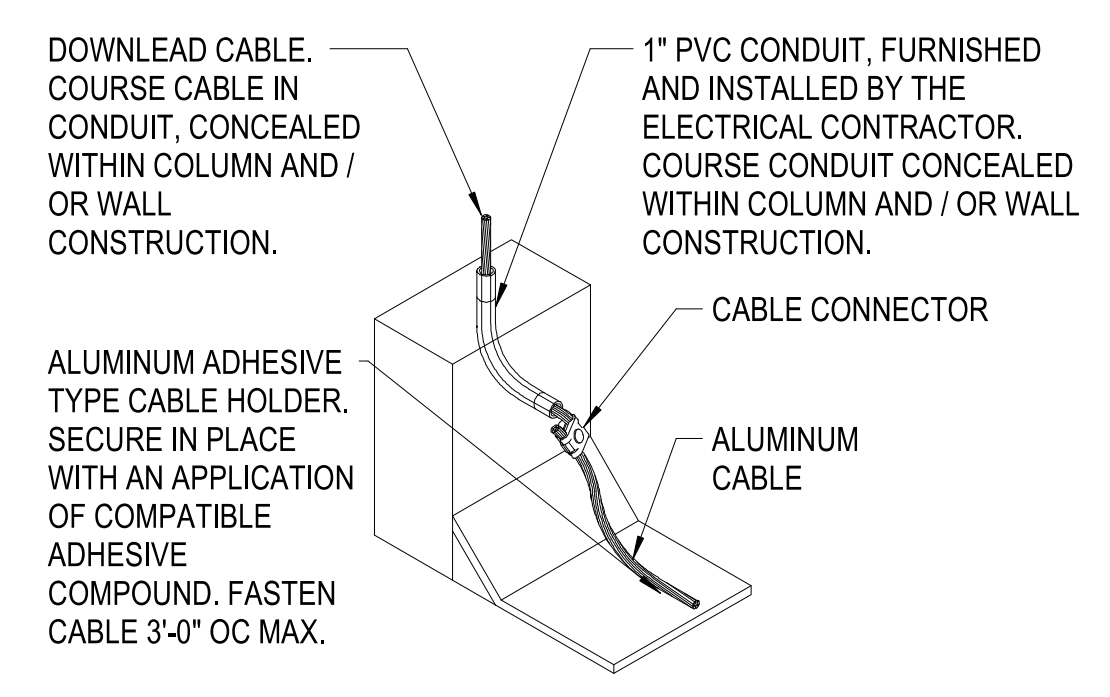


**ELECTRICAL GROUND BAR AND GROUND RING CONNECTIONS**

SCALE:NTS

REF EG101 - EG102

A1

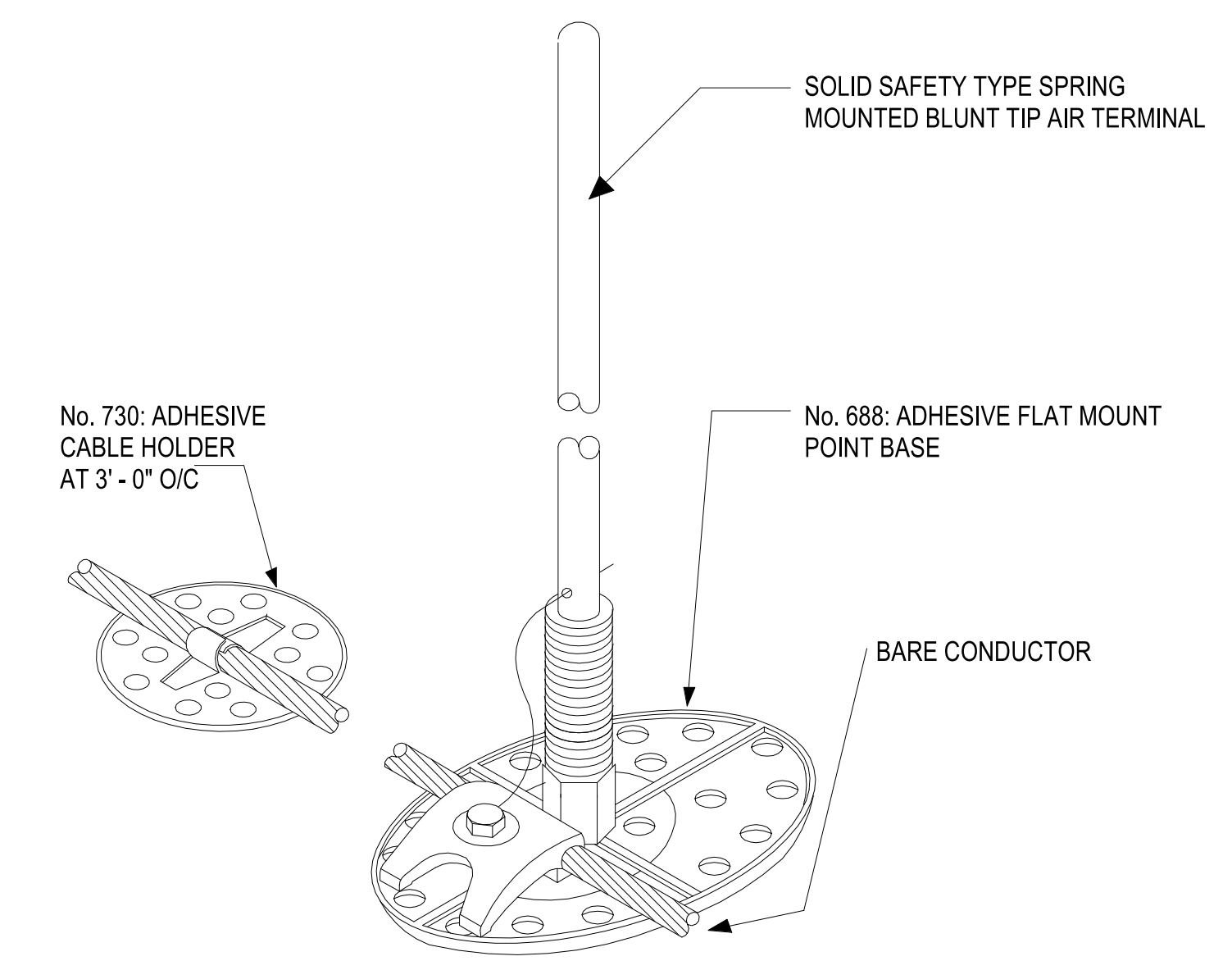


**CONCEALED DOWNLEAD TO LOWER ROOF**

SCALE:NTS

REF EG103 - EG104

A3



**AIR TERMINALS & CABLE HOLDERS**

SCALE:NTS

REF EG103 - EG104

A4

PLOTTED: 8/19/2021 7:46:54 AM

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-4590892-E-N1

APPR	
DATE	
SYN	DESCRIPTION
<b>PRELIMINARY</b> FOR REFERENCE ONLY	
<b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED	
FOR COMMANDER NAVFAC	
ACTIVITY	
MARINE CORPS BASE CAMP LEJEUNE	
SATISFACTORY TO DATE	
DES 50	CHK YRS
DRW/CHK	PM
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION NORFOLK, VA JACKSONVILLE, NC MCB CAMP LEJEUNE P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT <b>ELECTRICAL - GROUNDING DETAILS</b>	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION NORFOLK, VA JACKSONVILLE, NC MCB CAMP LEJEUNE P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT <b>ELECTRICAL - GROUNDING DETAILS</b>	
SCALE:	AS NOTED
EPROJCT NO.:	1509892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
<b>EG501</b>	

UNCLASSIFIED

DP1 UPDATES WITH DP2 FINAL SUBMISSION



1

2

3

4

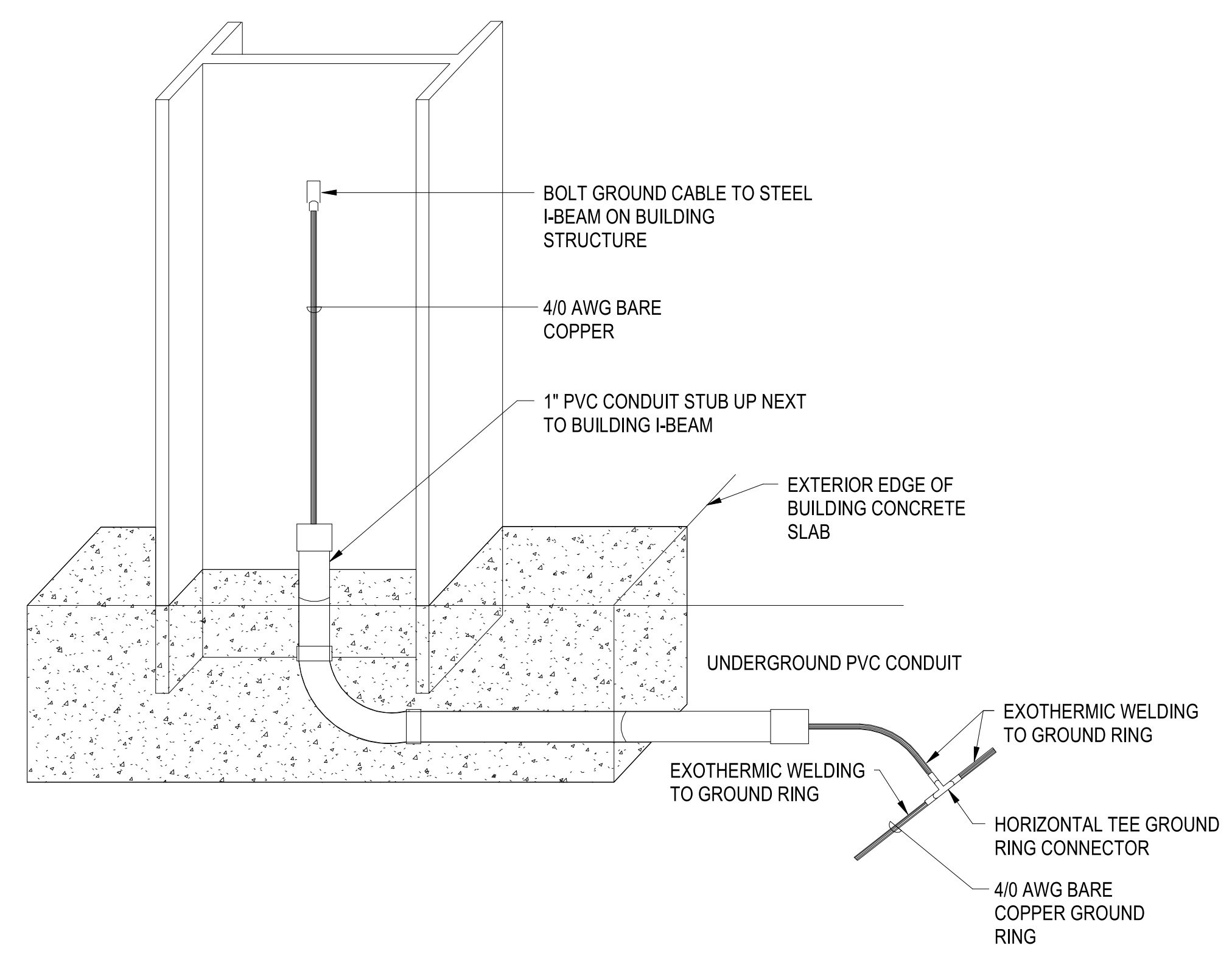
5

D

C

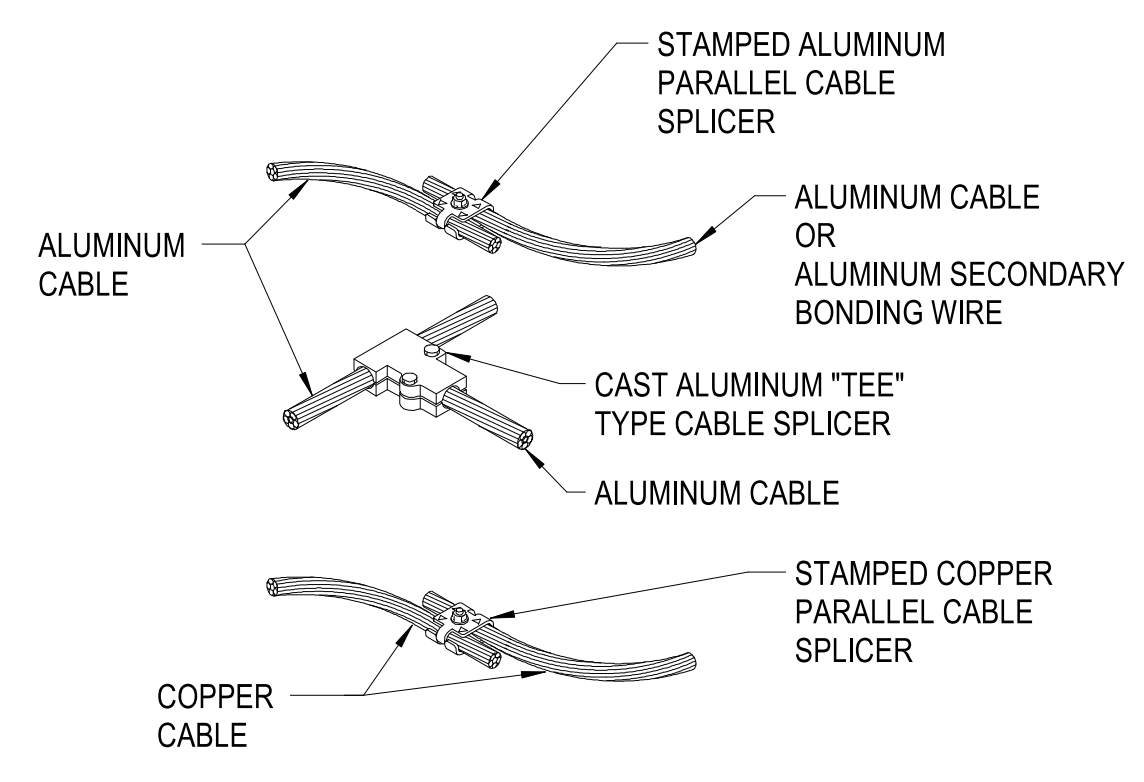
B

A



**BUILDING GROUND AND GROUND RING CONNECTIONS**  
SCALE:NTS

REF EG101 - EG102 **C1**



**TYPICAL CABLE SPLICERS**

SCALE:NTS REF EG101 - EG102 **C3**

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF\_SIM\_CTR-1590892.E-N

PLOTTED: 8/19/2021 7:46:55 AM

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108

FOR COMMANDER NAVFAC		
ACTIVITY		
MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES 50	DRW/CHK	CHK YRS
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
ELECTRICAL - GROUNDING DETAILS

SCALE:	AS NOTED
PROJECT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF

**EG502**

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

1

2

3

4

5







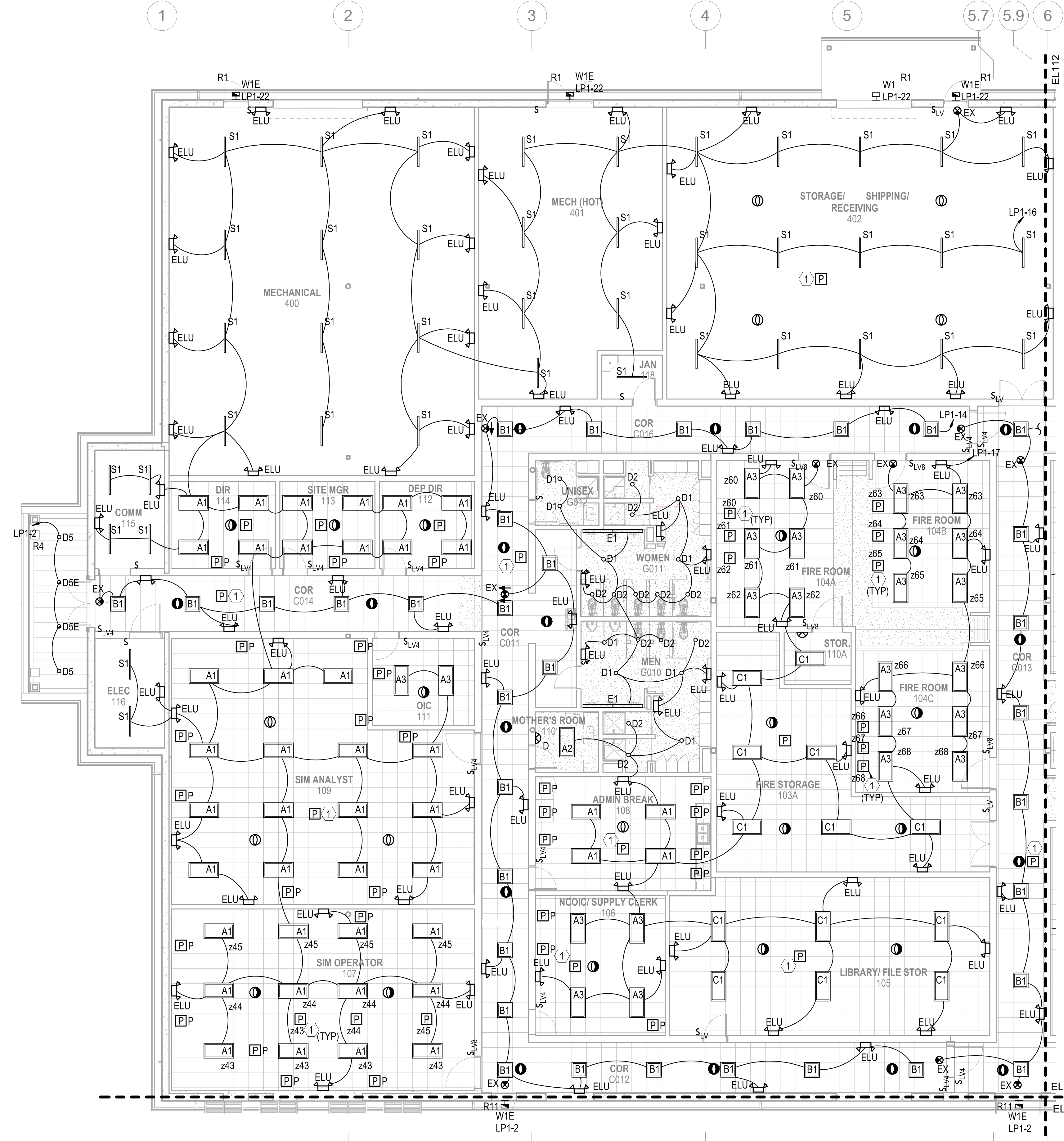
1

2

3

4

5



- ### GENERAL NOTES
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - SEE SHEET E-601 FOR LIGHTING FIXTURE SCHEDULE.
  - THE WIRING SHOWN ON THE LIGHTING PLANS INDICATE FIXTURES WHICH ARE ON THE SAME CIRCUIT, NOT THE ACTUAL WIRING. CONTRACTOR SHALL ADHERE TO THE SWITCH DESIGNATIONS AND LIGHTING CONTROL DIAGRAMS FOR THE ACTUAL WIRING.
  - CONNECT EXIT SIGN AND EMERGENCY LIGHTING UNITS AHEAD OF THE SWITCH/SENSOR TO THE NORMAL LIGHTING CIRCUIT THAT IS LOCATED IN THE SAME AREA/ROOM IN WHICH THOSE EXIT AND EMERGENCY LUMINAIRES ARE SERVING.
  - ALL MECHANICAL AREA LIGHTING FIXTURES LOCATIONS AND MOUNTING HEIGHTS TO BE FIELD COORDINATED WITH EXACT MECHANICAL EQUIPMENT LAYOUT.
  - PROVIDE POWER PACKS AS REQUIRED FOR PLUG LOAD RECEPTACLE CONTROL, LOCATED ABOVE ACCESSIBLE CEILING. SEE DETAIL B1 ON SHEET E-507 FOR MORE INFORMATION.

- ### KEYNOTES
- PROVIDE AN AUXILIARY INPUT/OUTPUT INTERFACE TO ALLOW INPUT FROM FIRE ALARM PANEL TO OVERRIDE LIGHTING CONTROLS. PROGRAM STANDALONE DEVICES SO THAT ALL CONTROLLED LIGHTING ALONG THE PATH OF EGRESS COMES TO FULL BRIGHTNESS UPON FIRE ALARM ACTIVATION. SEE DETAIL C3, SHEET E-506 FOR MORE INFORMATION.



FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES BY: DRW/LAK CHK: YRS

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

LIGHTING - FIRST FLOOR PLAN - AREA A

SCALE: AS NOTED  
EPROJCT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.



SHEET OF

**EL111**

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1500892-E-A1  
PLOTTED: 8/19/2021 7:47:23 AM

**A1 LIGHTING - FIRST FLOOR PLAN - AREA A**  
SCALE: 1/8" = 1'-0" (EL110)

SYMBOL	DESCRIPTION	DATE	APPROVED

**PRELIMINARY FOR REFERENCE ONLY**

**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
APPROVED

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES BY: DRW/LAK CHK: YRS

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

LIGHTING - FIRST FLOOR PLAN - AREA A

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

B

DP1 UPDATES WITH DP2 FINAL SUBMISSION

1

2

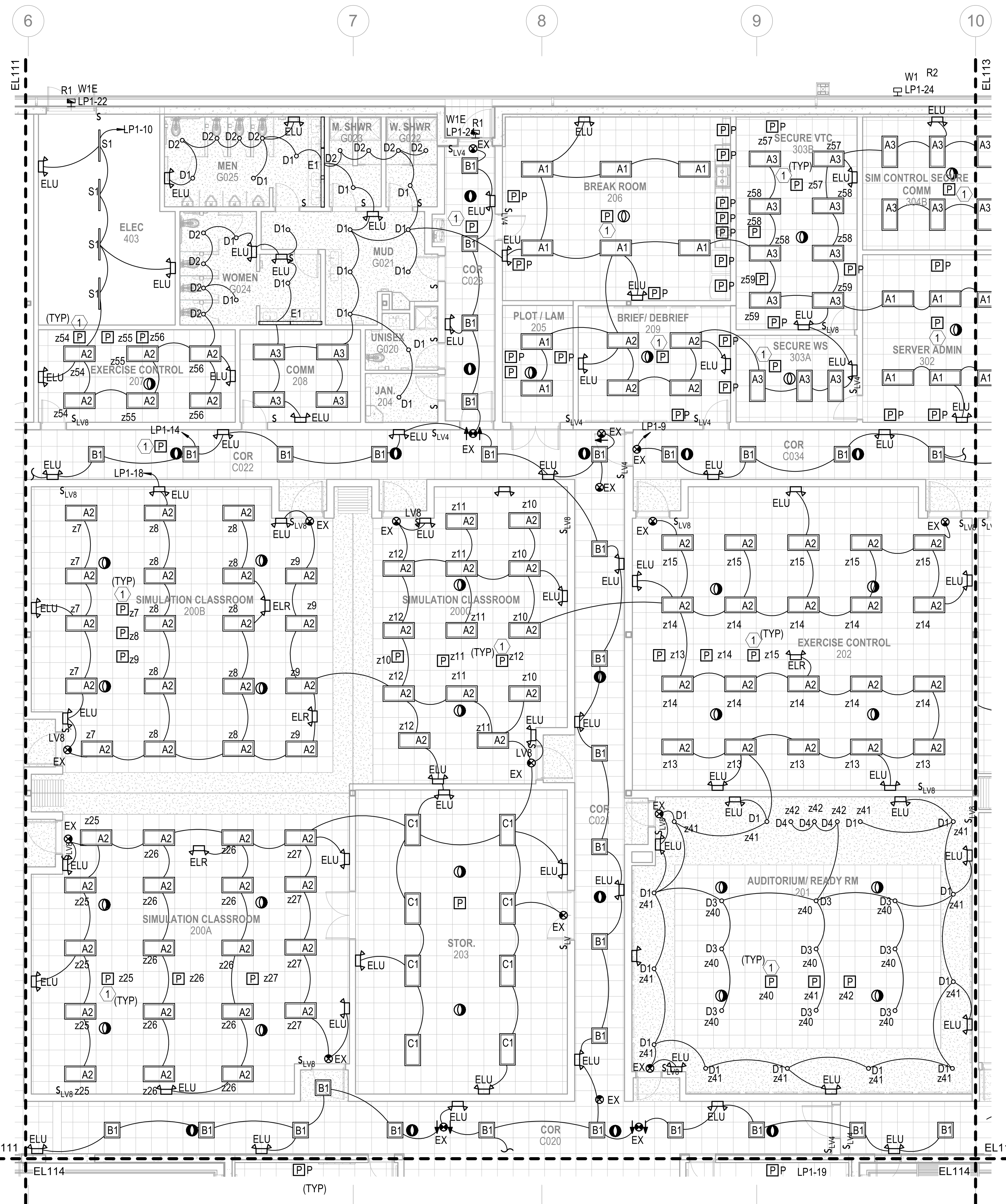
3

4

5

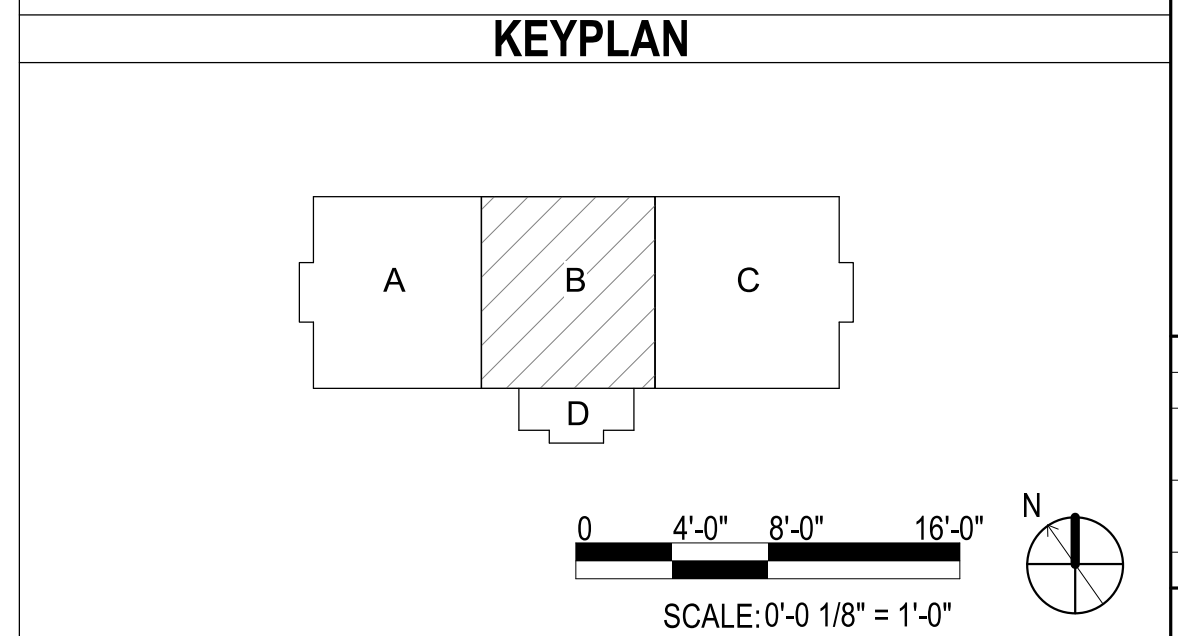
UNCLASSIFIED





- ### GENERAL NOTES
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - SEE SHEET E-601 FOR LIGHTING FIXTURE SCHEDULE.
  - THE WIRING SHOWN ON THE LIGHTING PLANS INDICATE FIXTURES WHICH ARE ON THE SAME CIRCUIT, NOT THE ACTUAL WIRING. CONTRACTOR SHALL ADHERE TO THE SWITCH DESIGNATIONS AND LIGHTING CONTROL DIAGRAMS FOR THE ACTUAL WIRING.
  - CONNECT EXIT SIGN AND EMERGENCY LIGHTING UNITS AHEAD OF THE SWITCH/SENSOR TO THE NORMAL LIGHTING CIRCUIT THAT IS LOCATED IN THE SAME AREA/ROOM IN WHICH THOSE EXIT AND EMERGENCY LUMINAIRES ARE SERVING.
  - ALL MECHANICAL AREA LIGHTING FIXTURES LOCATIONS AND MOUNTING HEIGHTS TO BE FIELD COORDINATED WITH EXACT MECHANICAL EQUIPMENT LAYOUT.
  - PROVIDE POWER PACKS AS REQUIRED FOR PLUG LOAD RECEPTACLE CONTROL, LOCATED ABOVE ACCESSIBLE CEILING. SEE DETAIL B1 ON SHEET E-507 FOR MORE INFORMATION.

- ### KEYNOTES
- PROVIDE AN AUXILIARY INPUT/OUTPUT INTERFACE TO ALLOW INPUT FROM FIRE ALARM PANEL TO OVERRIDE LIGHTING CONTROLS. PROGRAM STANDALONE DEVICES SO THAT ALL CONTROLLED LIGHTING ALONG THE PATH OF EGRESS COMES TO FULL BRIGHTNESS UPON FIRE ALARM ACTIVATION. SEE DETAIL C3, SHEET E-506 FOR MORE INFORMATION.



**A1 LIGHTING - FIRST FLOOR PLAN - AREA B**  
SCALE: 1/8" = 1'-0" (EL110)

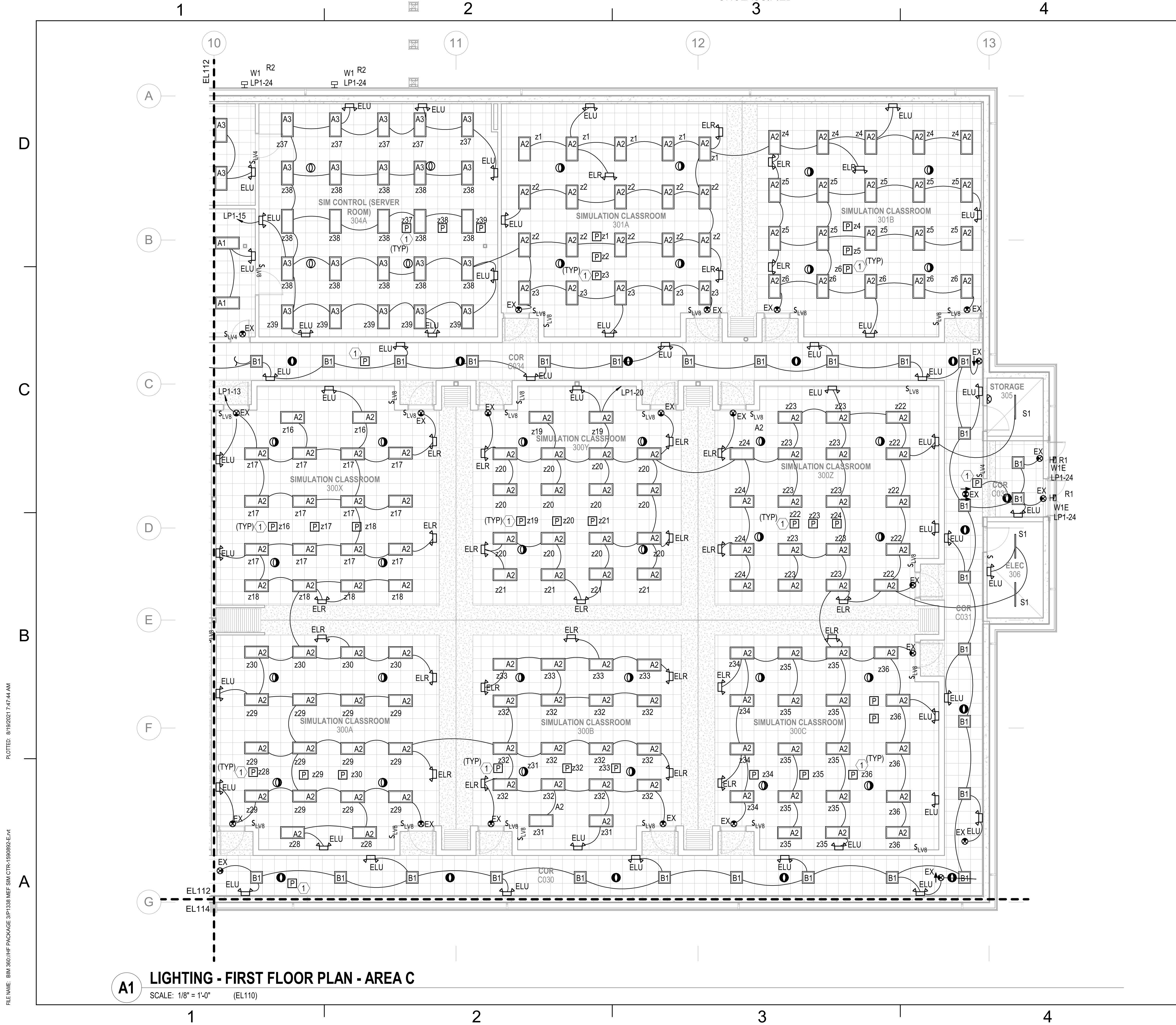
APPR	DATE				
SYN	DESCRIPTION				
<b>PRELIMINARY</b> FOR REFERENCE ONLY					
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED					
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE					
SATISFACTORY TO DATE DES BY: DRW/LAK CHK: YRS					
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION					
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC					
<b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> LIGHTING - FIRST FLOOR PLAN - AREA B					
SCALE: AS NOTED EPROJCT NO.: 1500892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF					
<b>EL112</b>					

FILE NAME: BIM\_360/HF PACKAGE 3P1338\_MEF\_SIM\_CTR-1500892-E-11  
 PLOTTED: 8/19/2021 7:47:38 AM  
 DPI UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

DPI UPDATES WITH DP2 FINAL SUBMISSION



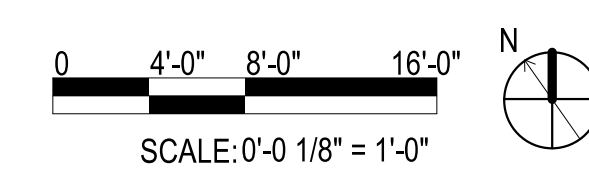
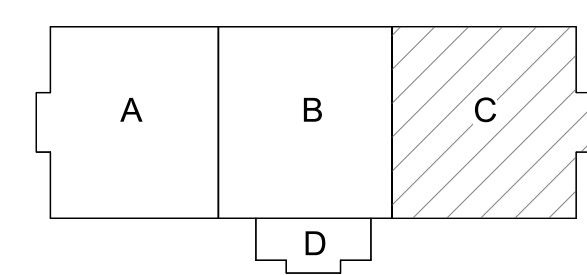


**A1 LIGHTING - FIRST FLOOR PLAN - AREA C**  
SCALE: 1/8" = 1'-0" (EL110)

- GENERAL NOTES**
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - SEE SHEET E-601 FOR LIGHTING FIXTURE SCHEDULE.
  - THE WIRING SHOWN ON THE LIGHTING PLANS INDICATE FIXTURES WHICH ARE ON THE SAME CIRCUIT, NOT THE ACTUAL WIRING. CONTRACTOR SHALL ADHERE TO THE SWITCH DESIGNATIONS AND LIGHTING CONTROL DIAGRAMS FOR THE ACTUAL WIRING.
  - CONNECT EXIT SIGN AND EMERGENCY LIGHTING UNITS AHEAD OF THE SWITCH/SENSOR TO THE NORMAL LIGHTING CIRCUIT THAT IS LOCATED IN THE SAME AREA/ROOM IN WHICH THOSE EXIT AND EMERGENCY LUMINAIRES ARE SERVING.
  - ALL MECHANICAL AREA LIGHTING FIXTURES LOCATIONS AND MOUNTING HEIGHTS TO BE FIELD COORDINATED WITH EXACT MECHANICAL EQUIPMENT LAYOUT.
  - PROVIDE POWER PACKS AS REQUIRED FOR PLUG LOAD RECEPTACLE CONTROL, LOCATED ABOVE ACCESSIBLE CEILING. SEE DETAIL B1 ON SHEET E-507 FOR MORE INFORMATION.

- KEYNOTES**
- PROVIDE AN AUXILIARY INPUT/OUTPUT INTERFACE TO ALLOW INPUT FROM FIRE ALARM PANEL TO OVERRIDE LIGHTING CONTROLS. PROGRAM STANDALONE DEVICES SO THAT ALL CONTROLLED LIGHTING ALONG THE PATH OF EGRESS COMES TO FULL BRIGHTNESS UPON FIRE ALARM ACTIVATION. SEE DETAIL C3, SHEET E-506 FOR MORE INFORMATION.

**KEYPLAN**



APPROVED	DATE	APPR
DESCRIPTION	DATE	APPR
SYMBOL	DATE	APPR
<p><b>PRELIMINARY</b> FOR REFERENCE ONLY</p>		
<p><b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED</p>		
<p>FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE</p>		
<p>SATISFACTORY TO DATE</p>		
DESIGN	DRWING	CHK
PM		
<p>BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION</p>		
<p>NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCR CAMP LEJEUNE JACKSONVILLE, NC</p>		
<p>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT LIGHTING - FIRST FLOOR PLAN - AREA C</p>		
<p>DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCR CAMP LEJEUNE JACKSONVILLE, NC</p>		
<p>SCALE: AS NOTED EPROJCT NO.: 1509892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO. SHEET OF</p>		
<p><b>EL113</b></p>		

PLOTTED: 8/19/2021 7:47:44 AM

FILE NAME: BIM\_360/HF PACKAGE 3P11338.MEF\_SIM\_CTR-1509892-EL11

DPI UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED



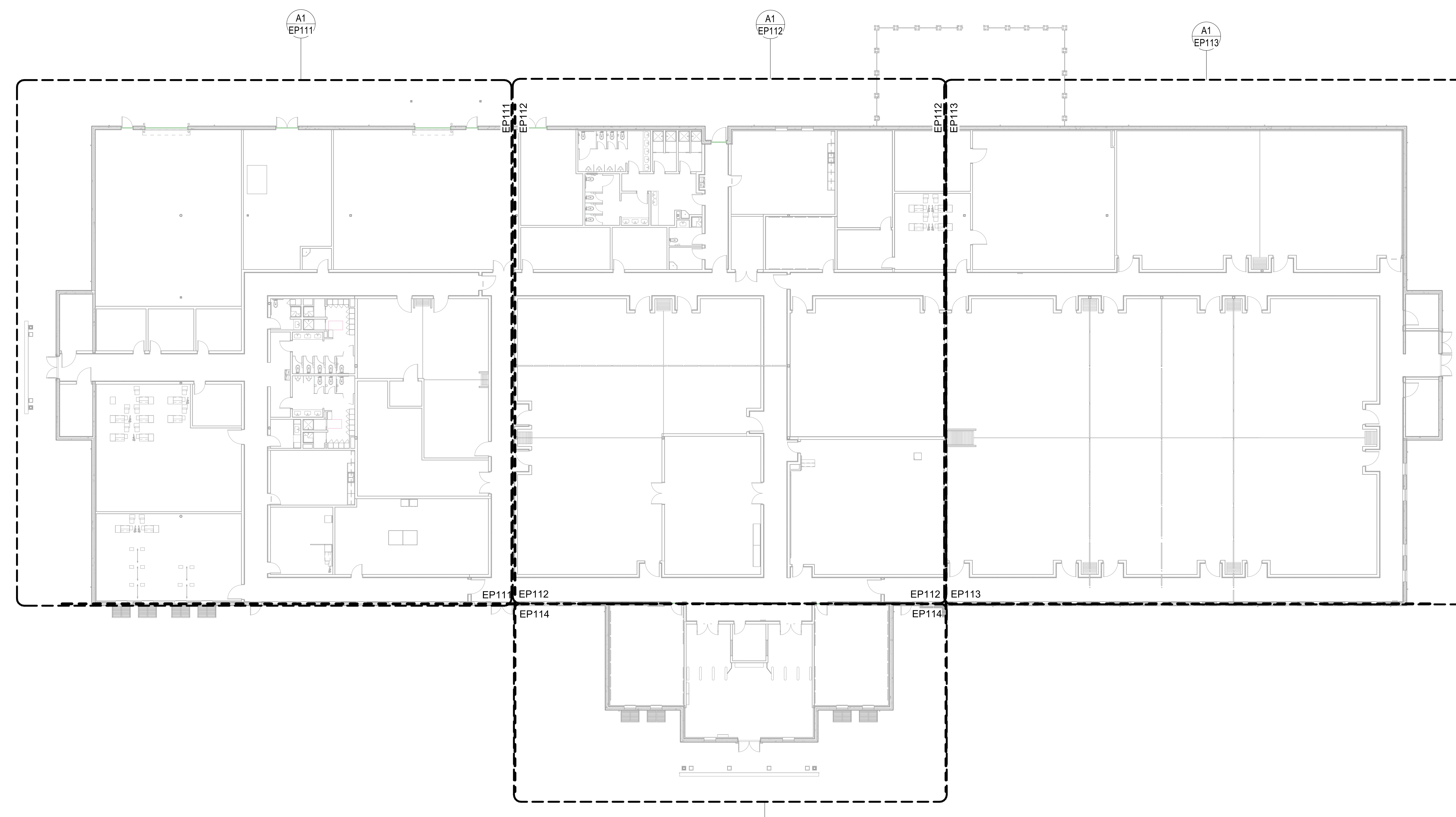




PLOTTED: 8/19/2021 7:47:51 AM

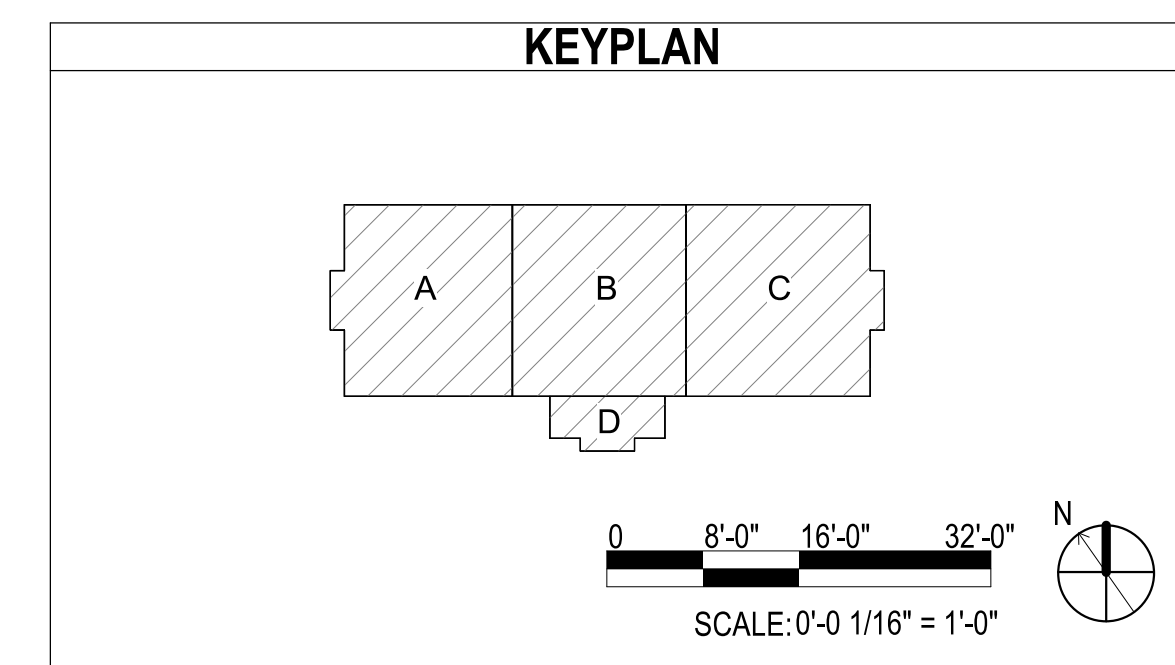
FILE NAME: BIM360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1590892.E-1

UNCLASSIFIED



### POWER - FIRST FLOOR PLAN - OVERALL

SCALE: 1/16" = 1'-0"



APPR	
DATE	
DESCRIPTION	
SYM	

**PRELIMINARY**  
FOR REFERENCE ONLY

**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E INF/CS  
APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES	DRW	CHK
50	14K	19S

BRANCH MANAGER  
CHIEF ENGINEER  
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
NAVFAC JACKSONVILLE, NC

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
NORFOLK, VA

MCB CAMP LEJEUNE  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

POWER - FIRST FLOOR PLAN - OVERALL

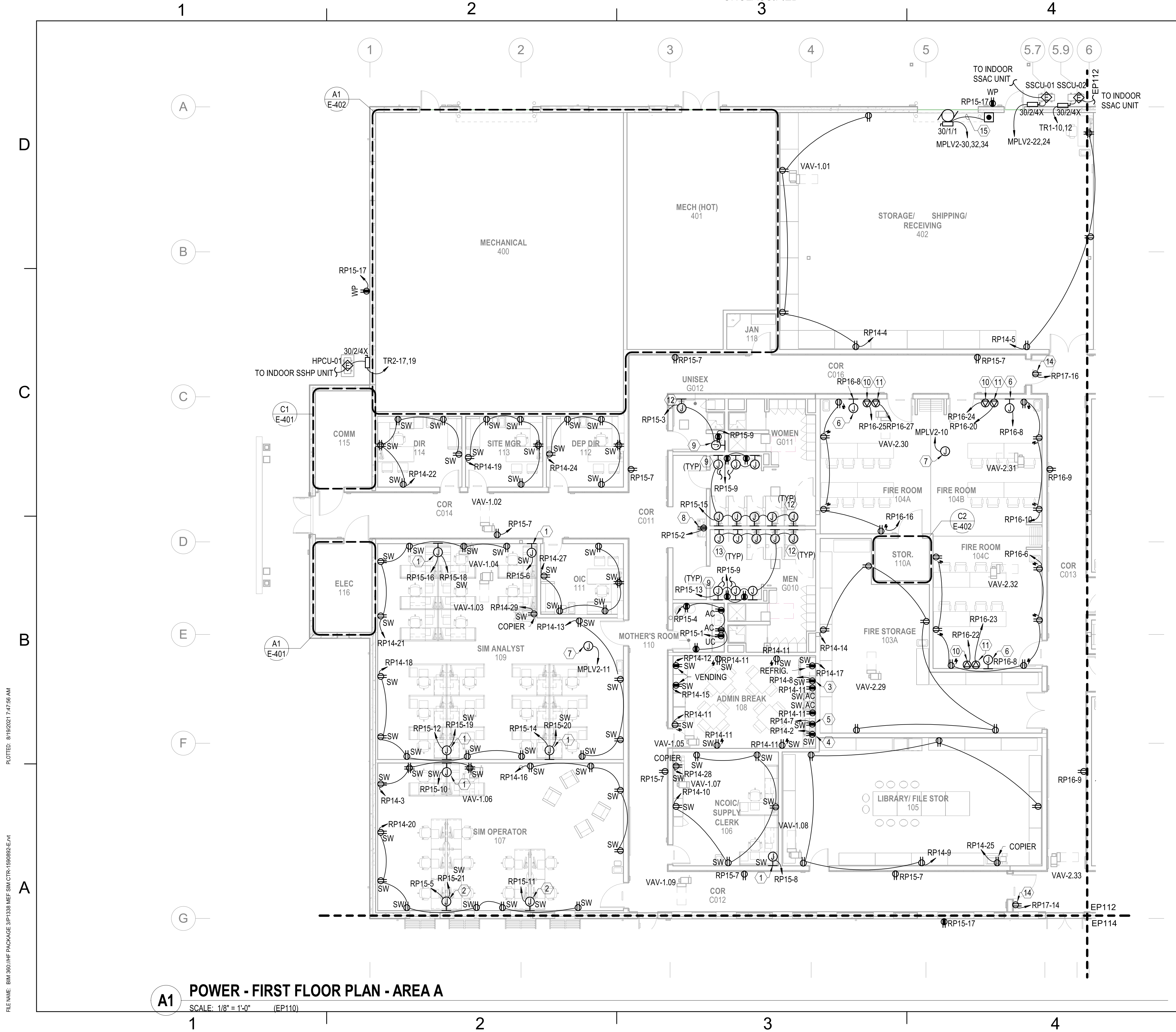
SCALE: AS NOTED  
EPROJCT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF

**EP110**

UNCLASSIFIED

DP1 UPDATES WITH DP2 FINAL SUBMISSION

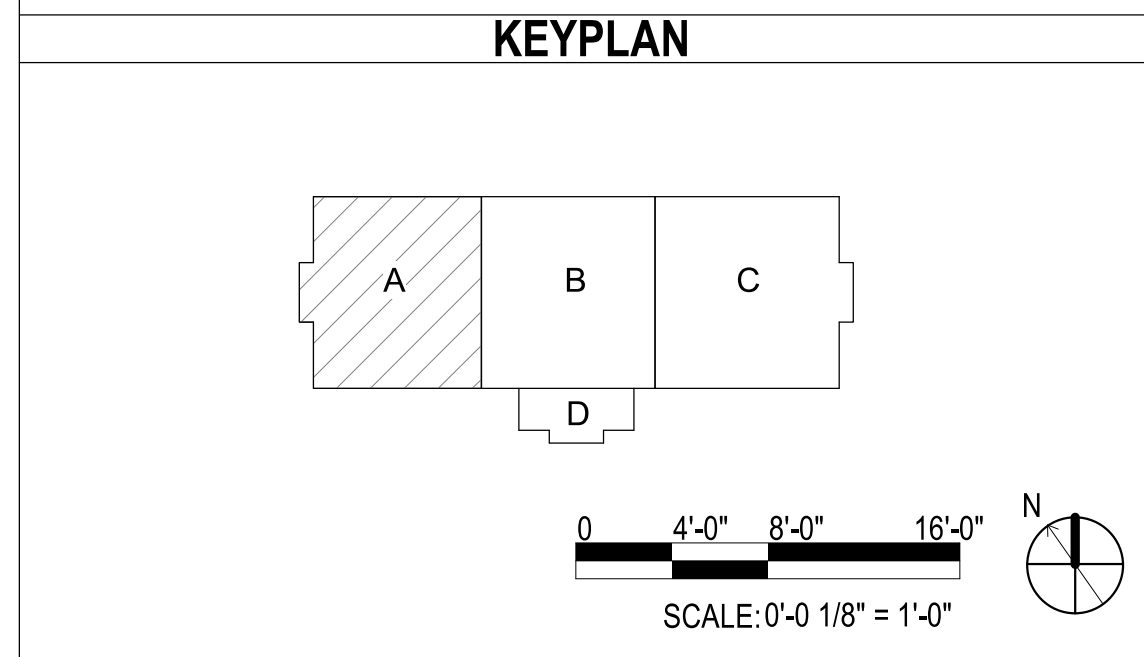




**A1 POWER - FIRST FLOOR PLAN - AREA A**  
 SCALE: 1/8" = 1'-0" (EP110)

- GENERAL NOTES**
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
  - RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507

- KEYNOTES**
- JUNCTION BOX FOR FURNITURE WHIP. COORDINATE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - JUNCTION BOX FOR FURNITURE POWER BAR. COORDINATE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - RECEPTACLE FOR MICROWAVE ON SHELF ABOVE COUNTERTOP. MOUNT RECEPTACLE AT 60" AFF.
  - GFCI RECEPTACLE ABOVE COUNTER DEDICATED FOR COFFEE POT.
  - GFCI RECEPTACLE ABOVE COUNTER DEDICATED FOR MICROWAVE.
  - DEDICATED RECEPTACLE FOR AV FLAT PANEL. RECEPTACLE TO BE INSTALLED IN AV WALL BOX. REFERENCE TA-SERIES DRAWINGS FOR DETAILS, MOUNTING HEIGHT, AND LOCATION.
  - 120V ELECTRICAL CONNECTION FOR VAV BOX 120-24V CONTROL TRANSFORMER. TERMINATE CONDUCTORS ON THE LINE SIDE OF THE TRANSFORMER. 120V POWER BY ELECTRICAL CONTRACTOR. 24V LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE VAV IS BY OTHERS. COORDINATE WITH MECHANICAL INSTALLATION.
  - RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE LOCATION WITH MANUFACTURER'S RECOMMENDATIONS.
  - HARD-WIRED 120V CONNECTION FOR LAVATORY INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF LAVATORY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - NEMA L6-30R TWIST LOCK RECEPTACLE - 208V, 1PH, 30A. COORDINATE FINAL LOCATION AND MOUNTING HEIGHT WITH USER.
  - NEMA 5-20R RECEPTACLE - 120V, 1PH, 20A. COORDINATE FINAL LOCATION AND MOUNTING HEIGHT WITH USER.
  - HARD-WIRED 120V CONNECTION FOR WATER CLOSET INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF WATER CLOSET. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - HARD-WIRED 120V CONNECTION FOR URINAL INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF URINAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - DEDICATED DUPLEX RECEPTACLE FOR SYNCHRONIZED CLOCK SYSTEM. COORDINATE FINAL HEIGHT AND LOCATION WITH INSTALLATION OF CLOCK.
  - CONDUIT BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING BY OTHERS.

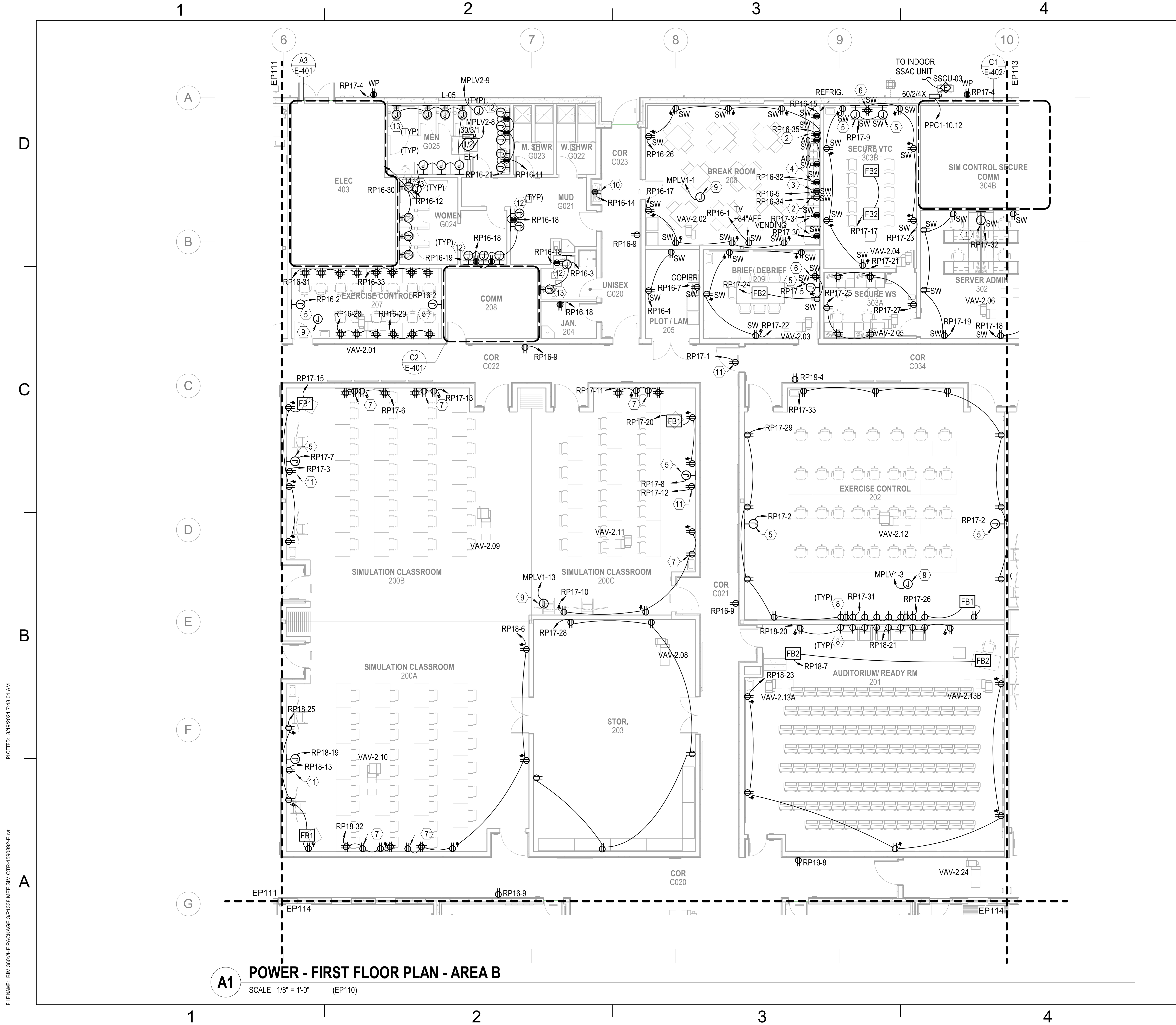


APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	SYM
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
100 ARSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE DES BY: DRW/LAK CHK YRS		
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC		
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT POWER - FIRST FLOOR PLAN - AREA A		
SCALE: AS NOTED EPROJCT NO.: 1500892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF		
<b>EP111</b>		

FILE NAME: BIM\_360/HF PACKAGE 3PT1338.MEF\_SIM\_CTR-1500892-E-A1  
 PLOTTED: 8/19/2021 7:47:56 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSION

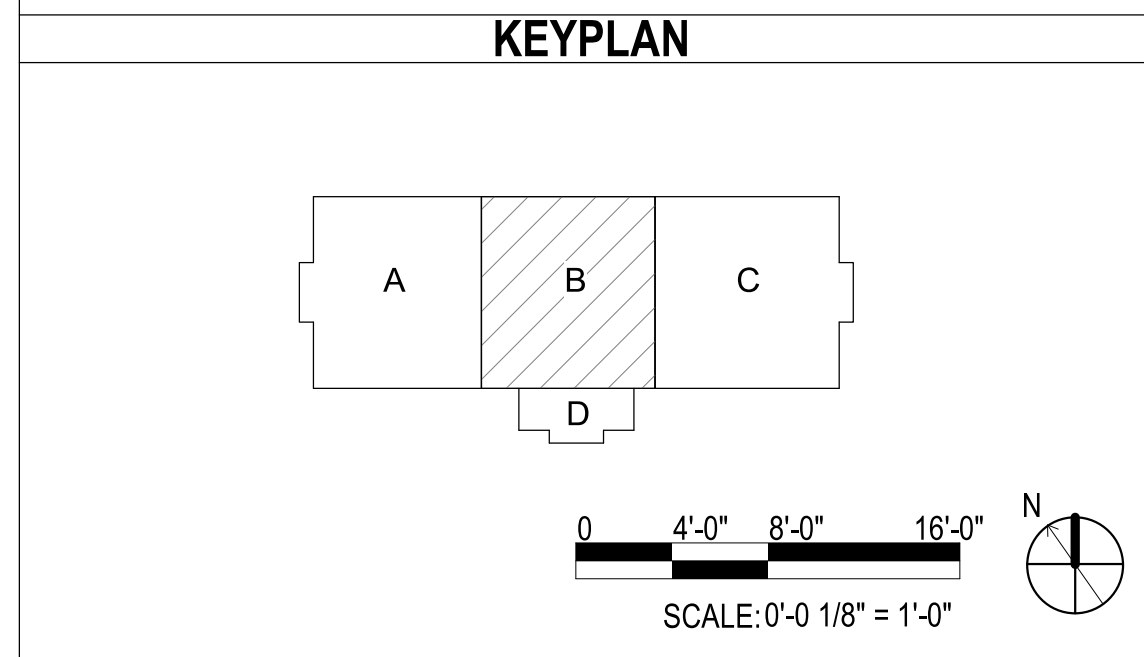






**A1 POWER - FIRST FLOOR PLAN - AREA B**  
 SCALE: 1/8" = 1'-0" (EP110)

- ### GENERAL NOTES
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
  - RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507

- ### KEYNOTES
- JUNCTION BOX FOR FURNITURE WHIP. COORDINATE AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - RECEPTACLE FOR MICROWAVE ON SHELF ABOVE COUNTERTOP, MOUNT RECEPTACLE AT 60" AFF.
  - GFCI RECEPTACLE ABOVE COUNTER DEDICATED FOR COFFEE POT.
  - GFCI RECEPTACLE ABOVE COUNTER DEDICATED FOR MICROWAVE.
  - DEDICATED RECEPTACLE FOR AV FLAT PANEL. RECEPTACLE TO BE INSTALLED IN AV WALL BOX. REFERENCE TA-SERIES DRAWINGS FOR DETAILS, MOUNTING HEIGHT, AND LOCATION.
  - AV RECESSED QUAD RECEPTACLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH AV INSTALLATION.
  - AV RECESSED DUPLEX RECEPTACLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH AV INSTALLATION.
  - AV RECESSED CLOCK RECEPTACLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH AV INSTALLATION.
  - 120V ELECTRICAL CONNECTION FOR VAV BOX 120-24V CONTROL TRANSFORMER. TERMINATE CONDUCTORS ON THE LINE SIDE OF THE TRANSFORMER. 120V POWER BY ELECTRICAL CONTRACTOR. 24V LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE VAV IS BY OTHERS. COORDINATE WITH MECHANICAL INSTALLATION.
  - RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE LOCATION WITH MANUFACTURER'S RECOMMENDATIONS.
  - DEDICATED DUPLEX RECEPTACLE FOR SYNCHRONIZED CLOCK SYSTEM. COORDINATE FINAL HEIGHT AND LOCATION WITH INSTALLATION OF CLOCK.
  - HARD-WIRED 120V CONNECTION FOR LAVATORY INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF LAVATORY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - HARD-WIRED 120V CONNECTION FOR WATER CLOSET INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF WATER CLOSET. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - HARD-WIRED 120V CONNECTION FOR URINAL INFRARED FLUSH VALVE. COORDINATE FINAL LOCATION WITH INSTALLATION OF URINAL. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	SYM
 <b>PRELIMINARY</b> FOR REFERENCE ONLY		
 <b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
FOR COMMANDER NAVFAC		
ACTIVITY		
MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DESIGN	DRAWING	CHK
PM	BRANCH MANAGER	
CHIEF ENGINEER	FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> <b>POWER - FIRST FLOOR PLAN - AREA B</b>		
SCALE: AS NOTED EPROJCT NO.: 1500892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF <b>EP112</b>		

PLOTTED: 8/19/2021 7:48:01 AM  
 FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-1500892-E-1

DPL UPDATES WITH DP2 FINAL SUBMISSION





FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF SIM CTR-1509092-E-11  
 PLOTTED: 8/19/2021 7:48:05 AM

**A1 POWER - FIRST FLOOR PLAN - AREA C**  
 SCALE: 1/8" = 1'-0" (EP110)

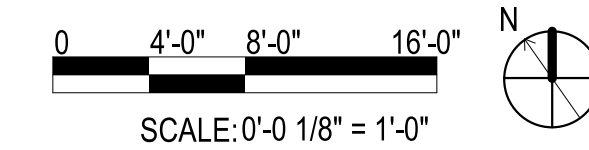
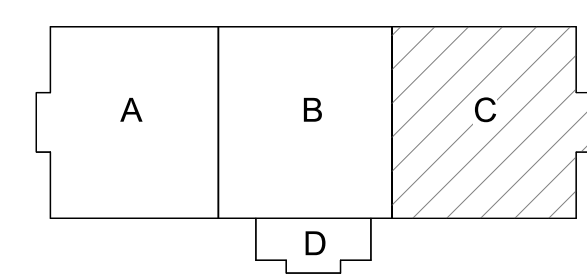
**GENERAL NOTES**



- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
- RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507

**KEYNOTES**

- DEDICATED RECEPTACLE FOR AV FLAT PANEL. RECEPTACLE TO BE INSTALLED IN AV WALL BOX. REFERENCE TA-SERIES DRAWINGS FOR DETAILS, MOUNTING HEIGHT, AND LOCATION.
- AV RECESSED DUPLEX RECEPTACLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH AV INSTALLATION.
- 120V ELECTRICAL CONNECTION FOR VAV BOX 120-24V CONTROL TRANSFORMER. TERMINATE CONDUCTORS ON THE LINE SIDE OF THE TRANSFORMER. 120V POWER BY ELECTRICAL CONTRACTOR. 24V LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE VAV IS BY OTHERS. COORDINATE WITH MECHANICAL INSTALLATION.
- DEDICATED DUPLEX RECEPTACLE FOR SYNCHRONIZED CLOCK SYSTEM. COORDINATE FINAL HEIGHT AND LOCATION WITH INSTALLATION OF CLOCK.

**KEYPLAN**



APPROVED	DATE	APPR
DESCRIPTION	DATE	APPR
 <b>PRELIMINARY</b> FOR REFERENCE ONLY		
 <b>Michael Baker INTERNATIONAL</b> 100 ARSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE DES BY   DRW/LAK   CHK YRS		
BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> POWER - FIRST FLOOR PLAN - AREA C		
SCALE: AS NOTED EPROJCT NO.: 1509092 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF		
<b>EP113</b>		

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED



1

2

3

4

5

UNCLASSIFIED

D

C

B

A

D

C

B

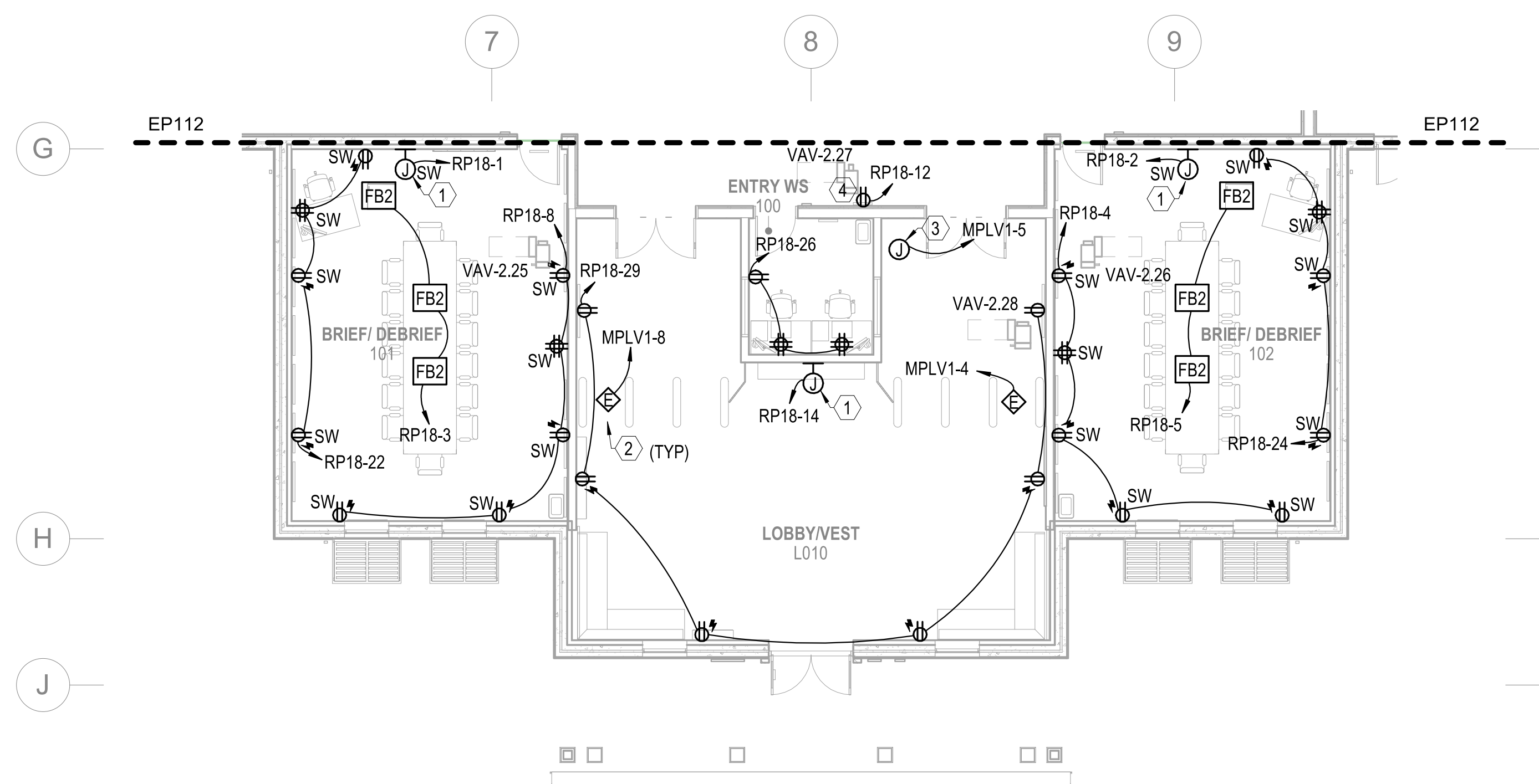
A

### GENERAL NOTES

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
- RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507

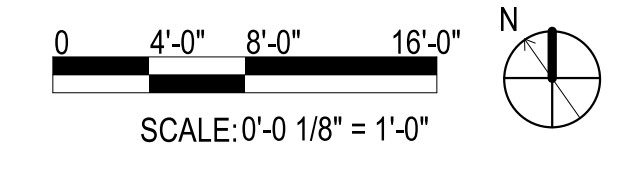
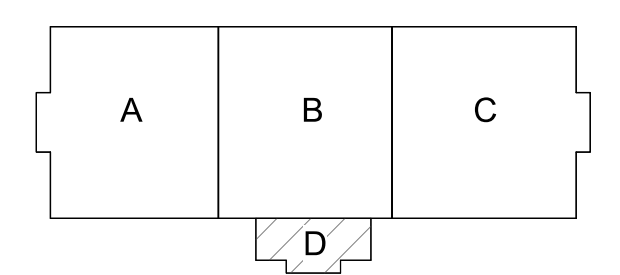
### KEYNOTES

- DEDICATED RECEPTACLE FOR AV FLAT PANEL. RECEPTACLE TO BE INSTALLED IN AV WALL BOX. REFERENCE TA-SERIES DRAWINGS FOR DETAILS, MOUNTING HEIGHT, AND LOCATION.
- POWER ELECTRICAL CONNECTION FOR TURNSTILE CONTROL GATE REMOTE POWER SUPPLY. COORDINATE FINAL POWER LOCATION WITH FINAL LOCATION OF REMOTE POWER SUPPLY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- 120V ELECTRICAL CONNECTION FOR VAV BOX 120-24V CONTROL TRANSFORMER. TERMINATE CONDUCTORS ON THE LINE SIDE OF THE TRANSFORMER. 120V POWER BY ELECTRICAL CONTRACTOR. 24V LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE VAV IS BY OTHERS. COORDINATE WITH MECHANICAL INSTALLATION.
- DEDICATED DUPLEX RECEPTACLE FOR SYNCHRONIZED CLOCK SYSTEM. COORDINATE FINAL HEIGHT AND LOCATION WITH INSTALLATION OF CLOCK.



**A1 POWER - FIRST FLOOR PLAN - AREA D**  
 SCALE: 1/8" = 1'-0" (EP110)

### KEYPLAN



SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
 FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
 100 AIRSIDE DRIVE  
 MOON TOWNSHIP, PA 15108  
 APPROVED

FOR COMMANDER NAVFAC	
ACTIVITY	MARINE CORPS BASE CAMP LEJEUNE
SATISFACTORY TO DATE	
DES 50	CHK 195
DRW:ak	CHK:ysb
PM	
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY  
 NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
 ATLANTIC DESIGN AND CONSTRUCTION  
 MCB CAMP LEJEUNE  
 JACKSONVILLE, NC  
 P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
 POWER - FIRST FLOOR PLAN - AREA D

SCALE:	AS NOTED
EPROJCT NO.:	1509092
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
<b>EP114</b>	

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1509092-E-14

PLOTTED: 8/19/2021 7:48:08 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSION

1

2

3

4

5

UNCLASSIFIED

UNCLASSIFIED



1

2

3

4

5

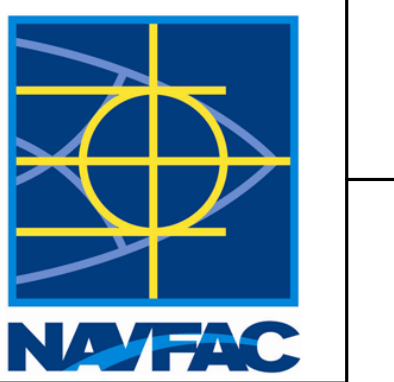
GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.

KEYNOTES

- 1 UNDERFLOOR MODULAR POWER MAIN DISTRIBUTION BOX. PREWIRED WITH HOME RUN CABLE BACK TO DESIGNATED RP PANEL WITHIN THE ROOM SERVING. COORDINATE FINAL LOCATION WITH INSTALLATION OF RAISED ACCESS FLOORING AND TELECOMMUNICATIONS CABLE TRAY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. FOR MORE INFORMATION SEE SPECIFICATIONS AND DETAILS ON SHEETS E-502 AND E-503.

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE  
DES BY: DRW/LAK CHK: YRS

PM  
BRANCH MANAGER  
CHIEF ENGINEER  
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

POWER - UNDERFLOOR PLAN - AREA A

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCR CAMP LEJEUNE  
JACKSONVILLE, NC

SCALE: AS NOTED  
PROJECT NO.: 1500892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:

SHEET OF

**EP115**

DP1 UPDATES WITH DP2 FINAL SUBMISSION

PLOTTED: 8/19/2021 7:48:12 AM

FILE NAME: BIM360/HF PACKAGE 3P11338.MEF SIM CTR-1500892-E-01

A

B

C

D

E

F

G

1

2

3

4

5

5.7

5.9

6

EP116

EP116  
EP118

FIRE ROOM 104A FIRE ROOM 104B

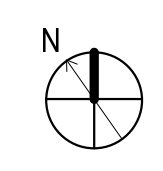
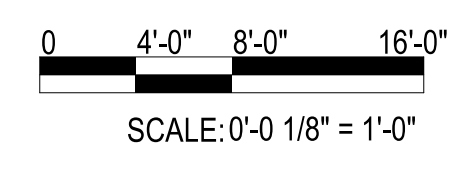
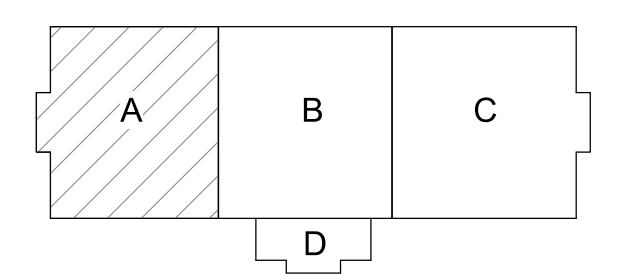
RP13-1 RP13-2 RP13-3 RP13-10 RP13-11 RP13-12  
 RP13-4 RP13-5 RP13-6 RP13-15 RP13-14 RP13-13  
 RP13-9 RP13-8 RP13-7 (TYP) RP13-16 RP13-17 RP13-18

FIRE ROOM 104C

RP13-19 RP13-20 RP13-21  
 RP13-24 RP13-23 RP13-22  
 RP13-25 RP13-26 RP13-27 (TYP)

**A1 POWER - UNDERFLOOR PLAN - AREA A**  
SCALE: 1/8" = 1'-0"

KEYPLAN



1

2

3

4

5

D

C

UNCLASSIFIED

B

DP1 UPDATES WITH DP2 FINAL SUBMISSION



1

2

UNCLASSIFIED

3

4

5

A

B

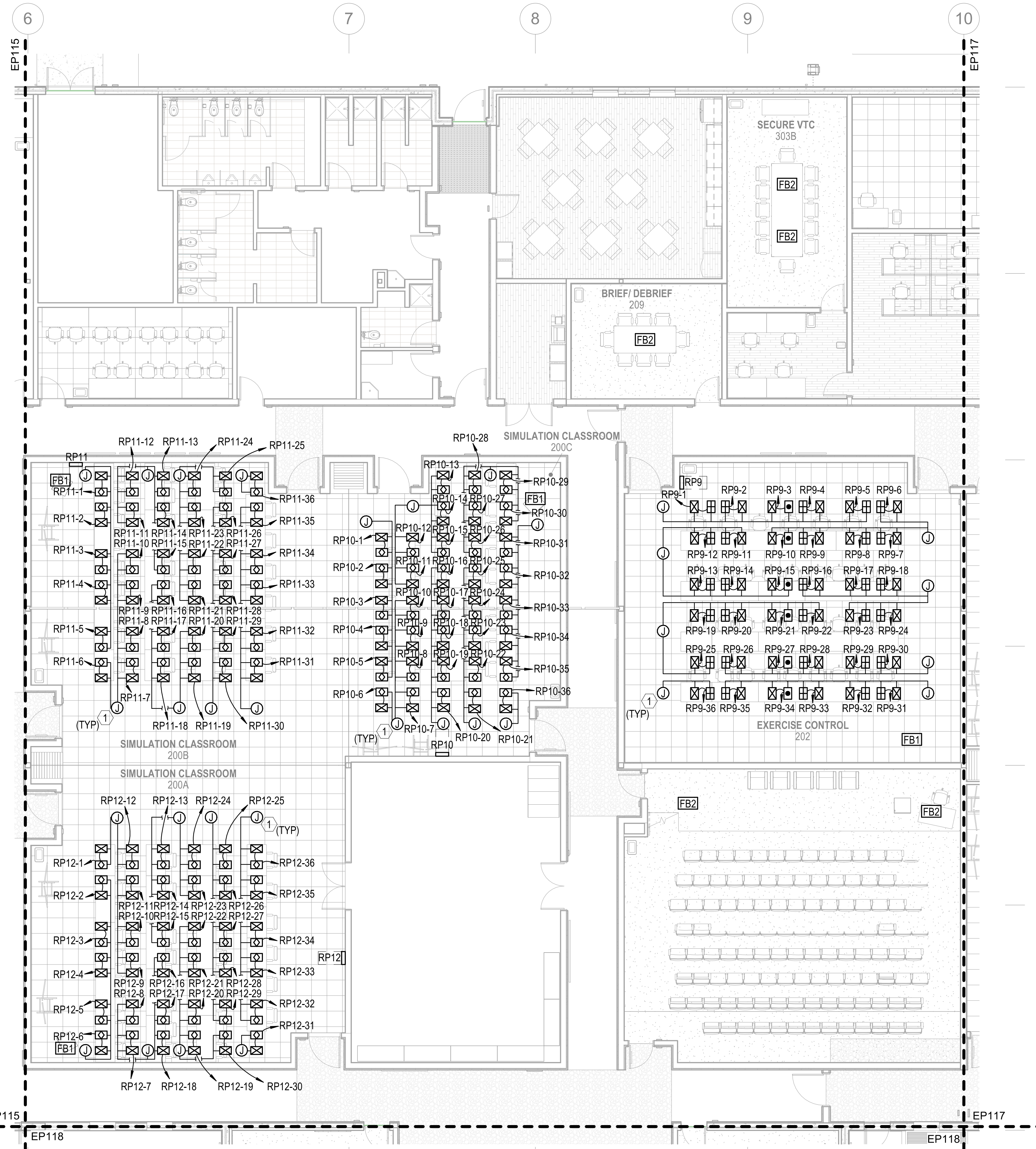
C

D

E

F

G



**A1 POWER - UNDERFLOOR PLAN - AREA B**  
SCALE: 1/8" = 1'-0"

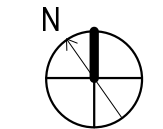
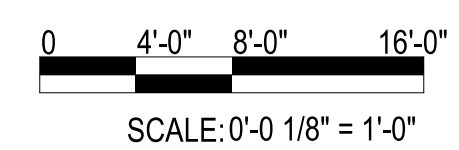
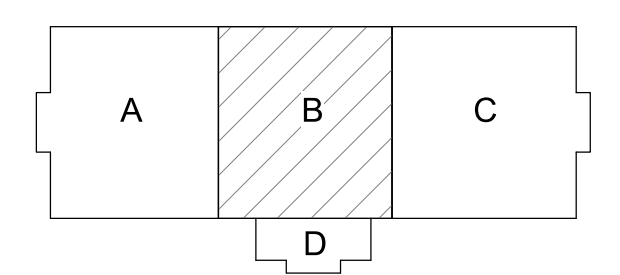
**GENERAL NOTES**

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.

**KEYNOTES**

- UNDERFLOOR MODULAR POWER MAIN DISTRIBUTION BOX. PREWIRED WITH HOME RUN CABLE BACK TO DESIGNATED RP PANEL WITHIN THE ROOM SERVING. COORDINATE FINAL LOCATION WITH INSTALLATION OF RAISED ACCESS FLOORING AND TELECOMMUNICATIONS CABLE TRAY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. FOR MORE INFORMATION SEE SPECIFICATIONS AND DETAILS ON SHEETS E-502 AND E-503.

**KEYPLAN**



DATE	DESCRIPTION	SYMBOL	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
A/E IN/PS

FOR COMMANDER NAVFAC		
ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE	DESIGN	CHK YES
DESIGN	DRW/CHK	CHK YES
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NAVFAC JACKSONVILLE, NC  
MCC CAMP LEJEUNE  
JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
POWER - UNDERFLOOR PLAN - AREA B

SCALE:	AS NOTED
PROJECT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF

**EP116**

FILE NAME: BIM\_360/HF\_PACKAGE\_3P1338\_MEF\_SIM\_CTR-1590892-E-11

PLOTTED: 8/19/2021 7:48:18 AM

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

1

2

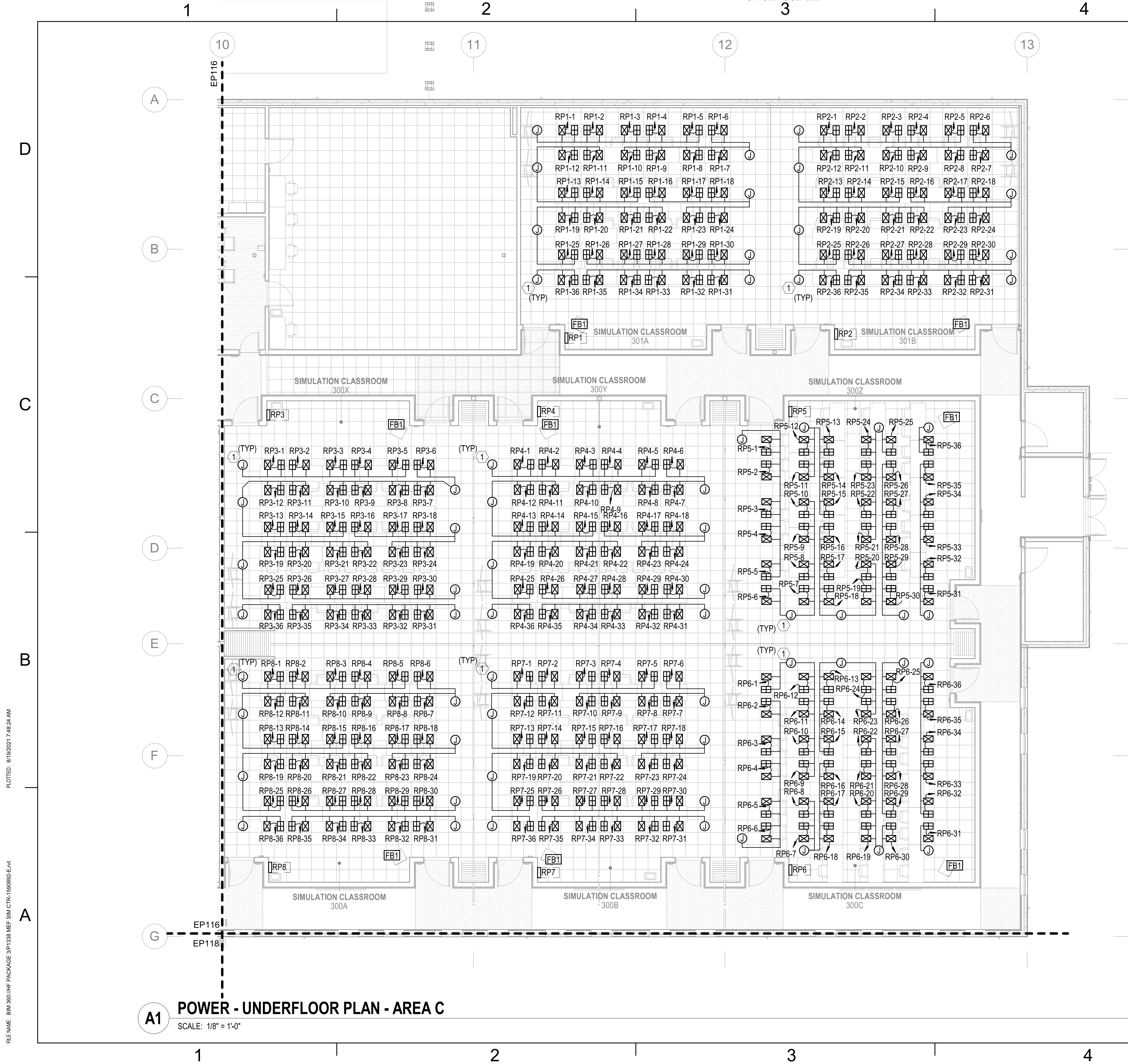
UNCLASSIFIED

3

4

5





FILE NAME: BIM360/HF PACKAGE 3P1338 MEF SIM CTR-4-590892-E-41  
 PLOTTED: 8/19/2021 7:48:24 AM

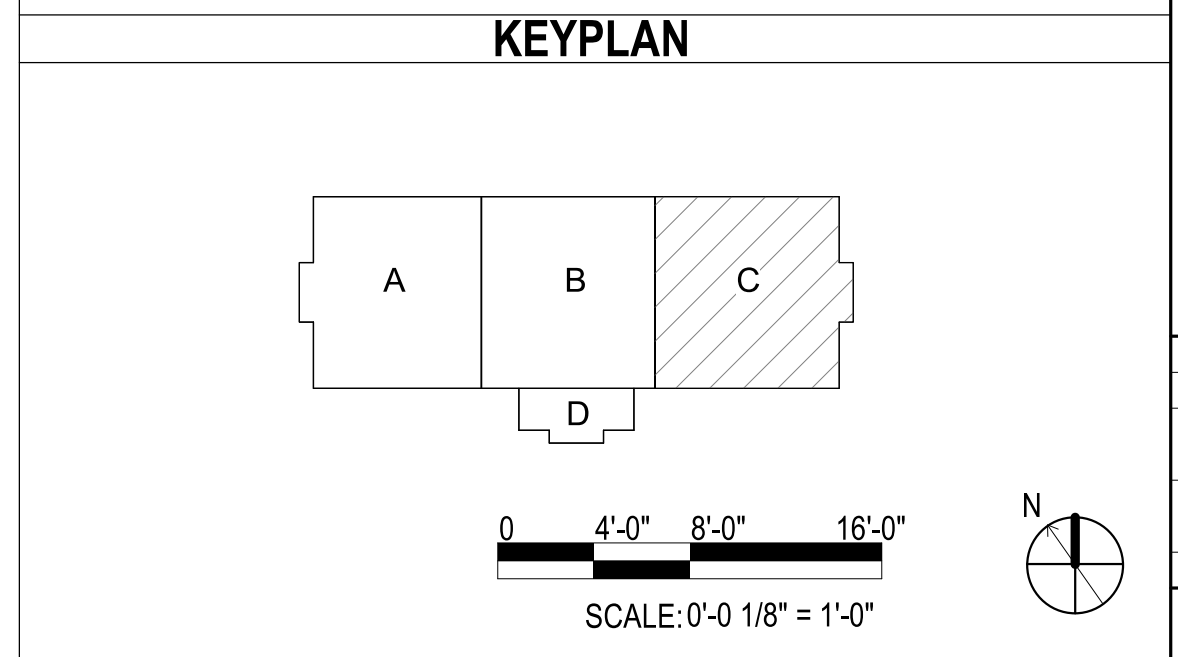
**A1 POWER - UNDERFLOOR PLAN - AREA C**  
SCALE: 1/8" = 1'-0"



**GENERAL NOTES**

- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.

**KEYNOTES**

- UNDERFLOOR MODULAR POWER MAIN DISTRIBUTION BOX. PREWIRED WITH HOME RUN CABLE BACK TO DESIGNATED RP PANEL WITHIN THE ROOM SERVING. COORDINATE FINAL LOCATION WITH INSTALLATION OF RAISED ACCESS FLOORING AND TELECOMMUNICATIONS CABLE TRAY. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. FOR MORE INFORMATION SEE SPECIFICATIONS AND DETAILS ON SHEETS E-502 AND E-503.



	APPR
	DATE
 <b>PRELIMINARY</b> FOR REFERENCE ONLY	SYMBOL DESCRIPTION
 <b>Michael Baker</b> INTERNATIONAL <small>100 AIRSIDE DRIVE          MOON TOWNSHIP, PA 15108 A/E INF/3          APPROVED</small>	SEAL
FOR COMMANDER NAVFAC ACTIVITY <b>MARINE CORPS BASE          CAMP LEJEUNE</b>	
SATISFACTORY TO DATE DES BY DRW/LAK CHK VES	
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION	
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER          REPLACEMENT</b> <b>POWER - UNDERFLOOR PLAN - AREA C</b>	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER          REPLACEMENT</b> <b>POWER - UNDERFLOOR PLAN - AREA C</b>	
SCALE: AS NOTED EPROJCT NO.: 1590892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF <b>EP117</b>	

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED



1

2

3

4

5

D

C

B

A

D

C

B

A

GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



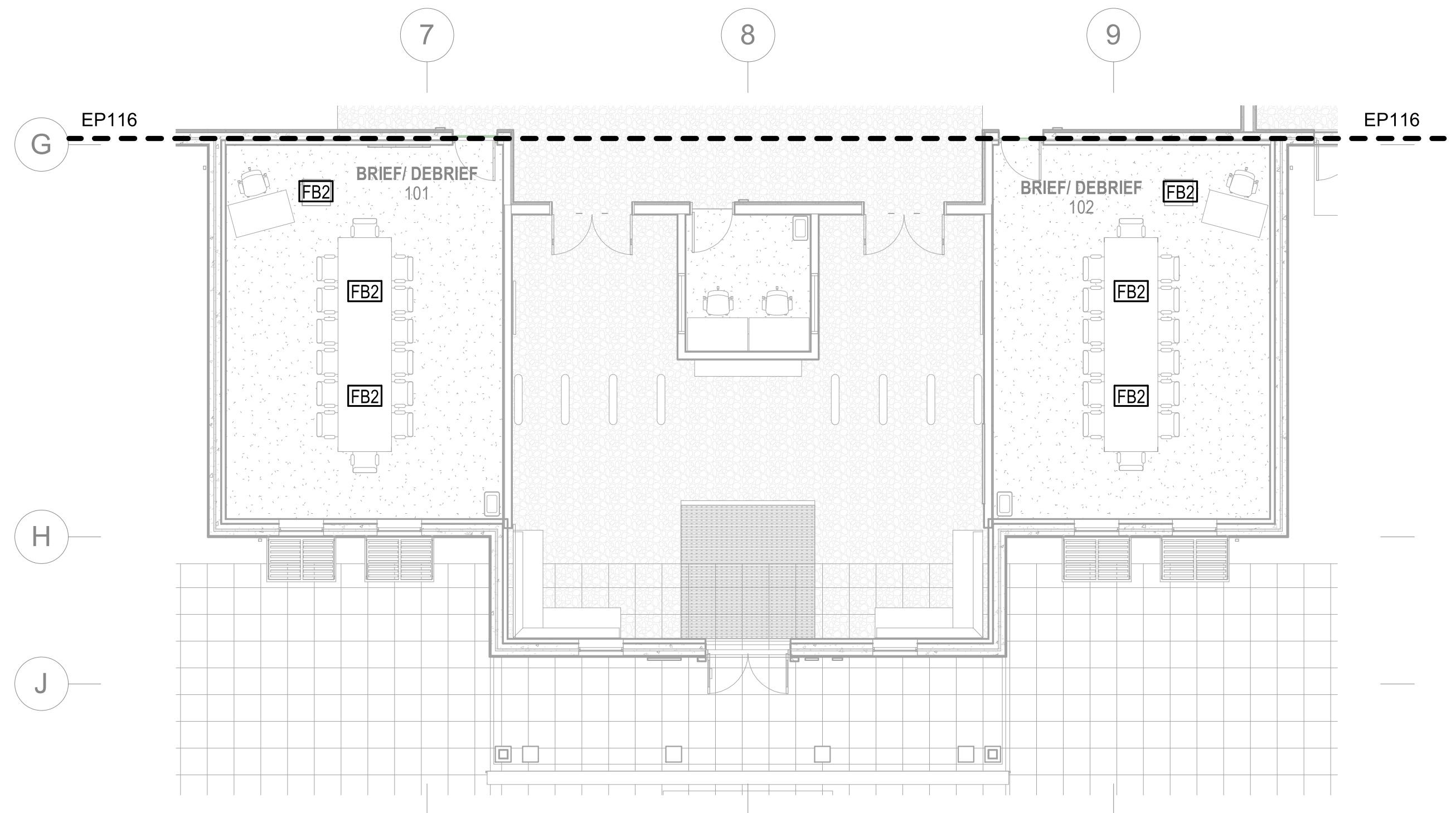
**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108  
APPROVED

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE  
DES BY: DRW/lak CHK: yes  
PM:  
BRANCH MANAGER:  
CHIEF ENGINEER:  
FIRE PROTECTION:

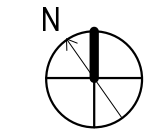
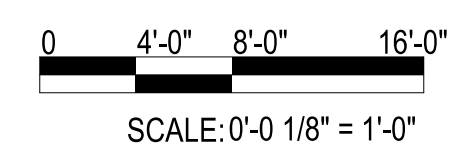
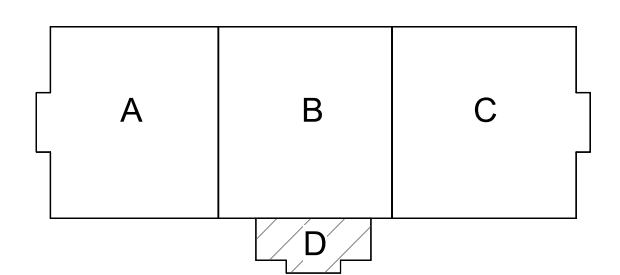
DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT  
JACKSONVILLE, NC  
POWER - UNDERFLOOR PLAN - AREA D

SCALE: AS NOTED  
EPROJCT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF  
**EP118**



**A1 POWER - UNDERFLOOR PLAN - AREA D**  
SCALE: 1/8" = 1'-0"

KEYPLAN



PLOTTED: 8/19/2021 7:48:27 AM

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-1590892-E-1

1

2

3

4

5



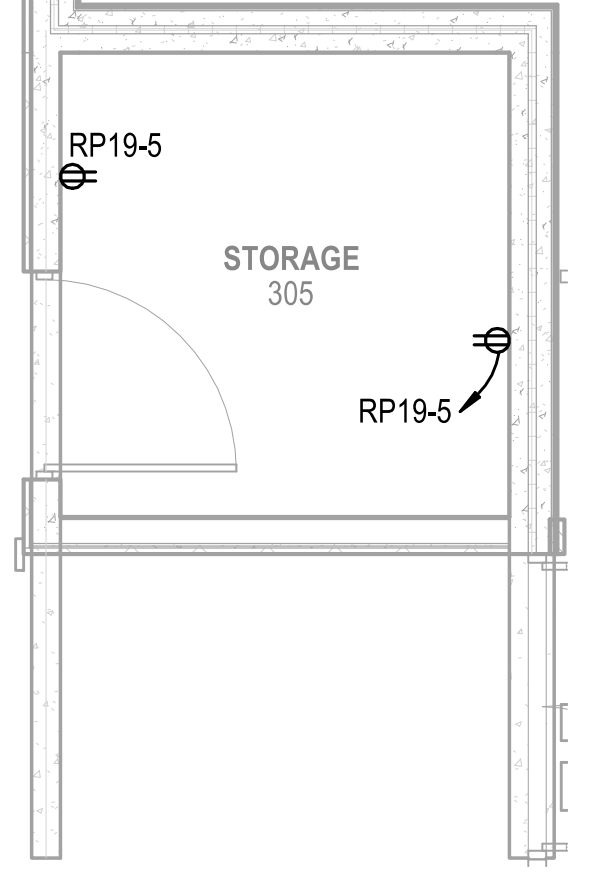
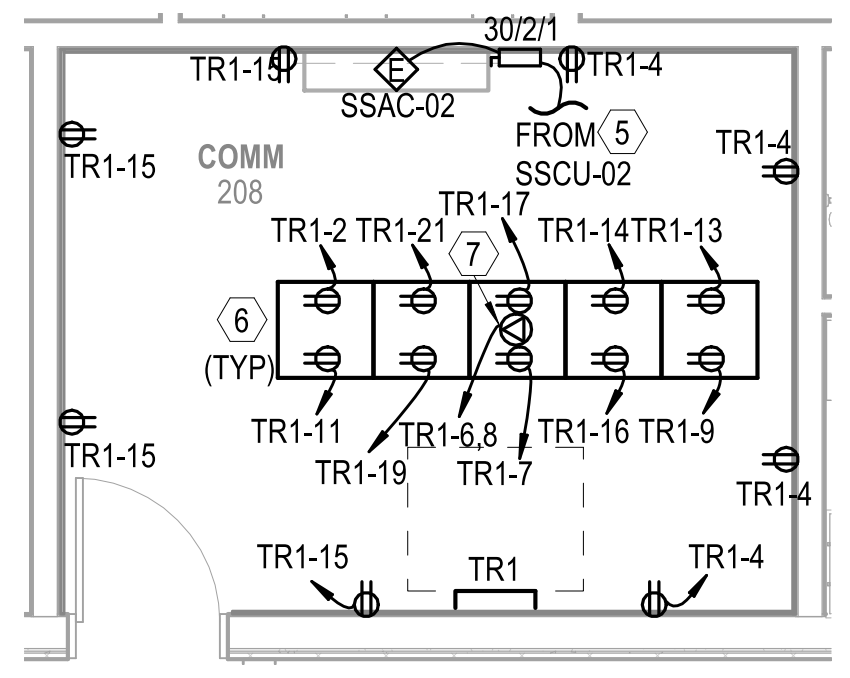
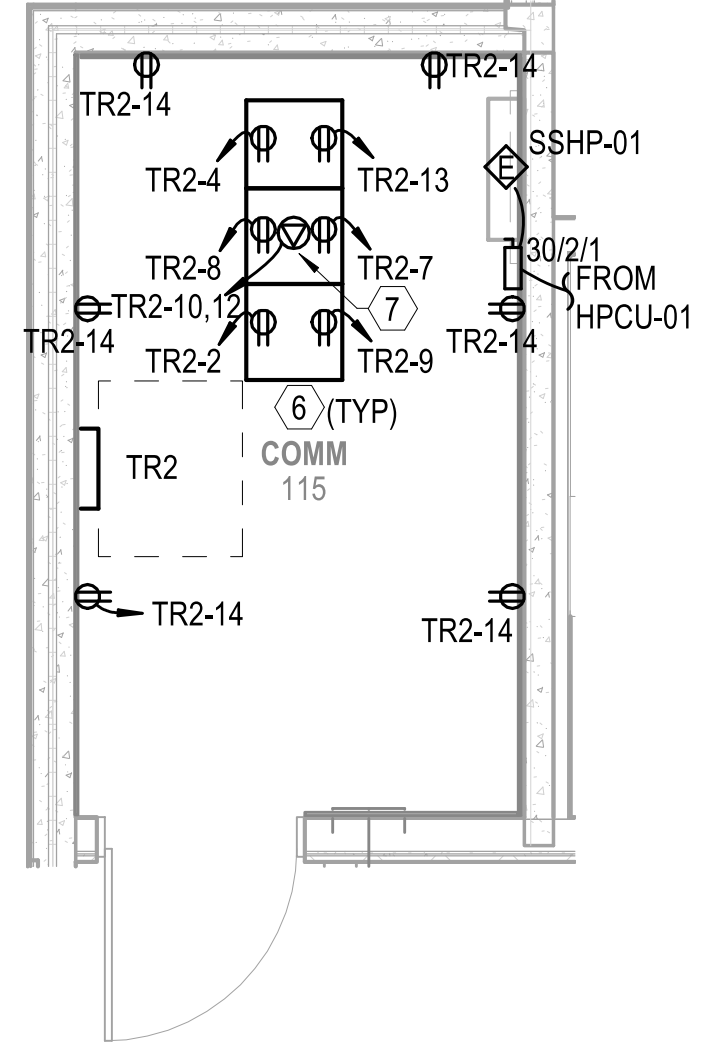
1

2

3

4

5



- ### KEYNOTES
- TWO (2) DEDICATED NEMA 5-20R RECEPTACLES - 120V, 1PH, 20A PER SERVER RACK. COORDINATE MOUNTING AND INSTALLATION OF THE RECEPTACLES WITH THE ACTIVITY.
  - CEILING MOUNTED JUNCTION BOX FOR POWER TO LOUVER TRANSFORMERS. 120V POWER SHALL BE PROVIDED BY THE EC TO EACH TRANSFORMER. LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE LOUVER IS BY OTHERS. COORDINATE LOCATION AND QUANTITY WITH MECHANICAL INSTALLATION.
  - EMERGENCY POWER OFF (EPO) BOX. EACH EPO BOX HAS AN EIGHT (8) CIRCUIT CAPACITY WITH ONE CIRCUIT BEING REQUIRED FOR EACH UPS. USE THE SAME BRANCH CIRCUIT FOR ALL EPO BOXES IN THE ROOM. SEE DETAILS ON SHEETS E-504 AND E-505 FOR MORE INFORMATION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - NEMA L6-30R RECEPTACLE - 208V, 1PH, 30A. COORDINATE MOUNTING AND INSTALLATION OF THE RECEPTACLES WITH THE ACTIVITY.
  - NEMA 5-20R RECEPTACLE - 120V, 1PH, 20A. COORDINATE MOUNTING AND INSTALLATION OF THE RECEPTACLES WITH THE ACTIVITY.
  - CONFIRM ALL UPS'S ARE EQUIPPED WITH EPO SWITCHES BEFORE ANY MATERIAL PURCHASE AND INSTALLATION.
  - IF NORMALLY OPEN CONTACTS ARE USED:
    - IF THE EPO SWITCH OR RELAY CONTACTS ARE NORMALLY OPEN, INSERT THE WIRES FROM THE SWITCH OR CONTACTS AT PINS 1 AND 2 OF THE EPO TERMINAL BLOCK. USE 16-28 AWG WIRE.
    - SECURE THE WIRES BY TIGHTENING THE SCREWS. IF THE CONTACTS ARE CLOSED, THE UPS WILL TURN OFF AND POWER WILL BE REMOVED FROM THE LOAD.
  - IF NORMALLY CLOSED CONTACTS ARE USED:
    - IF THE EPO SWITCH OR RELAY CONTACTS ARE NORMALLY CLOSED, INSERT THE WIRES FROM THE SWITCH OR CONTACTS AT PINS 2 AND 3 OF THE EPO TERMINAL BLOCK. USE 16-28 AWG WIRE.
    - INSERT A WIRE JUMPER BETWEEN PINS 1 AND 2. SECURE THE WIRES BY TIGHTENING THE THREE SCREWS AT POSITIONS 1, 2, AND 3. IF THE CONTACTS ARE OPEN, THE UPS WILL TURN OFF AND POWER WILL BE REMOVED FROM THE LOAD.

- ### GENERAL NOTES
- SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
  - RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507
- ### KEYNOTES
- AV RECESSED QUAD RECEPTACLE. COORDINATE MOUNTING HEIGHT AND LOCATION WITH AV INSTALLATION.
  - POWER ELECTRICAL CONNECTION FOR HARDWIRE INPUT TO 10KVA UPS.
  - PROVIDE 4-INCH THICK CONCRETE PAD WITH CHAMFERED EDGES FOR FLOOR MOUNTED EQUIPMENT. EXTEND PAD 6-INCH BEYOND EDGE OF EQUIPMENT.
  - PROVIDE FIRE-RESISTANT, HEAT-INSULATING BARRIER. COORDINATE WITH FINAL LOCATION OF TRANSFORMER.
  - INDOOR UNIT POWERED BY OUTDOOR UNIT. CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS BY MECHANICAL CONTRACTOR. CONDUIT AND POWER WIRING BETWEEN INDOOR AND OUTDOOR UNITS BY ELECTRICAL CONTRACTOR. SEE MECH. SCHEDULES FOR ADDITIONAL INFORMATION.
  - TWO (2) DEDICATED NEMA 5-20R RECEPTACLES - 120V, 1PH, 20A PER TELECOMMUNICATIONS RACK. RECEPTACLES MUST BE INSTALLED 6" ABOVE AND 6" BEHIND THE TELECOM RACKS ON A PIECE OF CHanneled STRUT SUPPORTED FROM THE CEILING BY A THREADED ROD ACROSS THE BACK OF THE TELECOM CABINETS. RECEPTACLE TO BE MOUNTED TO CHanneled STRUT AND CONDUIT TO BE FED FROM CEILING DOWN TO THE OUTLETS.
  - L6-30R TWIST LOCK RECEPTACLE - 208V, 1PH, 30A. RECEPTACLE MUST BE INSTALLED 6" ABOVE AND 6" BEHIND TELECOM RACKS ON A PIECE OF CHanneled STRUT SUPPORTED FROM THE CEILING BY A THREADED ROD ACROSS THE BACK OF THE TELECOM CABINETS. RECEPTACLE TO BE MOUNTED TO CHanneled STRUT AND CONDUIT TO BE FED FROM CEILING DOWN TO THE OUTLETS.

POWER - ENLARGED PLAN

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

EP111

C1

POWER - ENLARGED PLAN

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

EP111

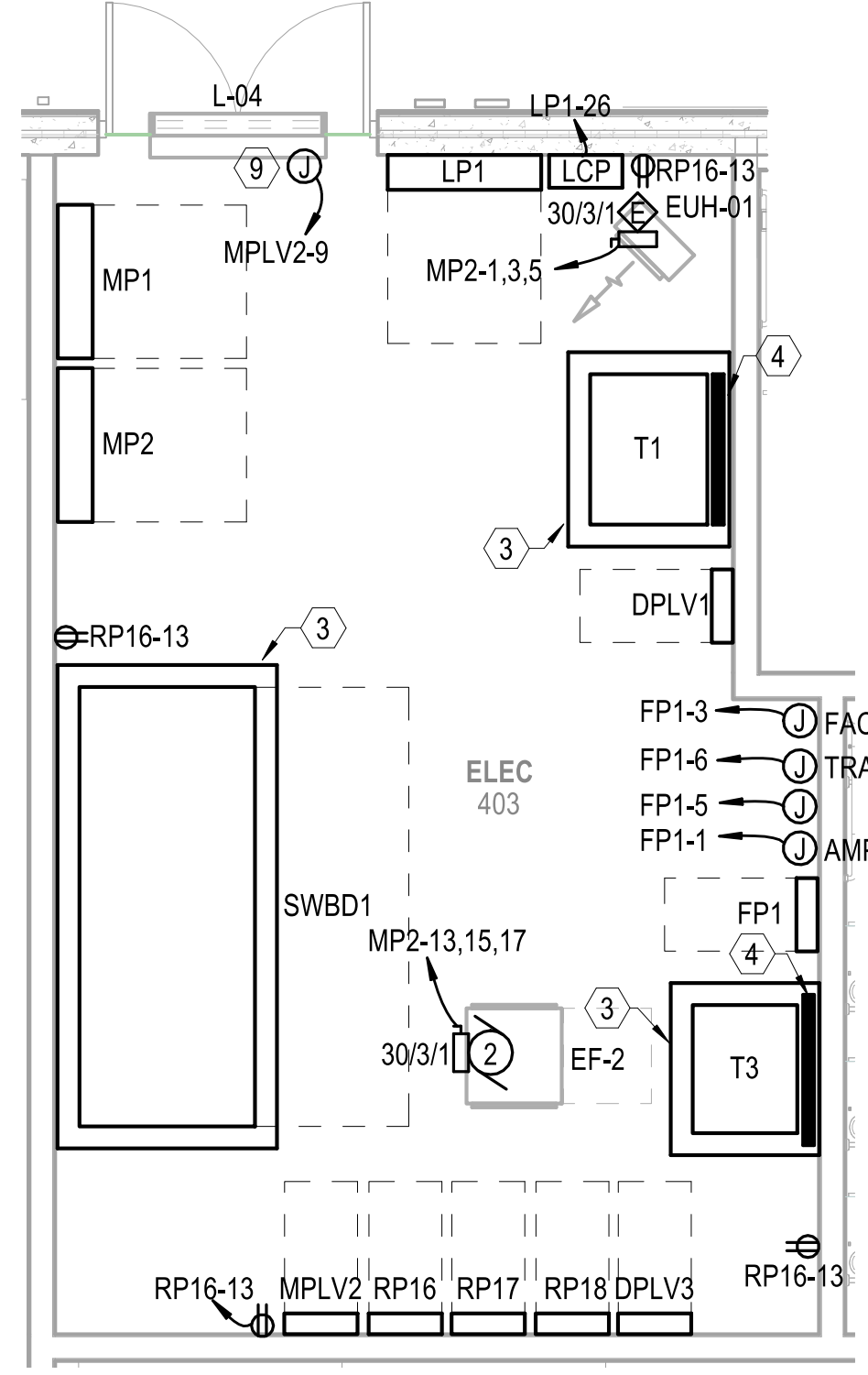
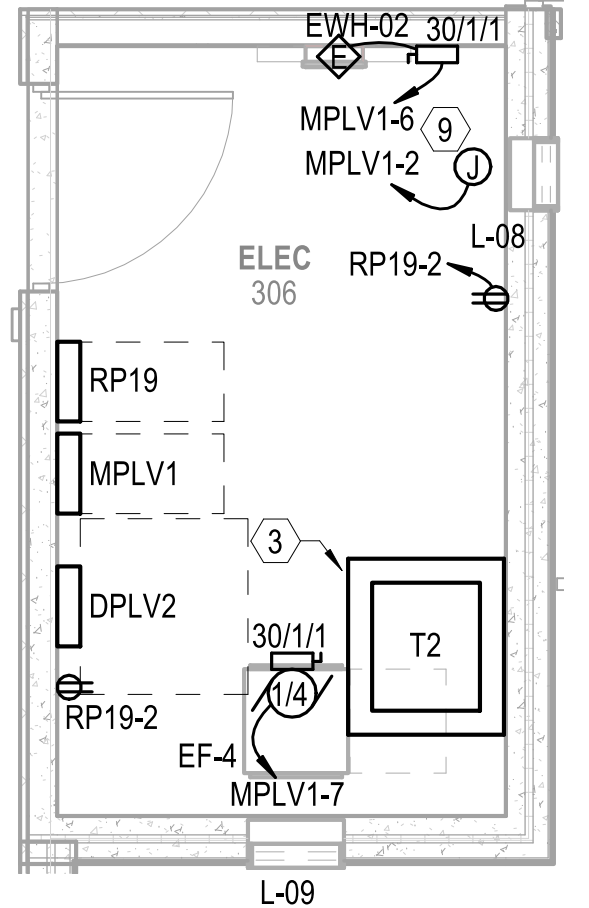
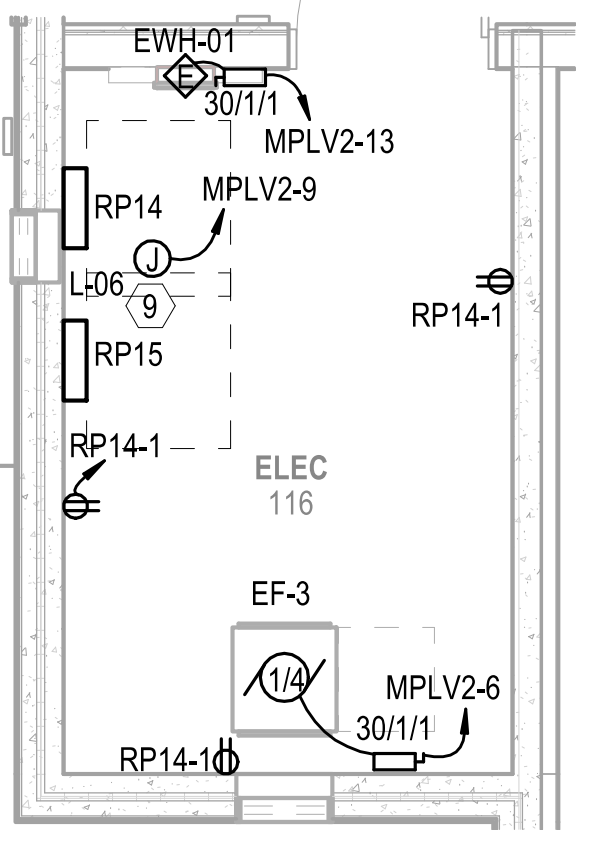
C2

POWER - ENLARGED PLAN

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

EP111

C3



POWER - ENLARGED PLAN

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

EP111

A1

POWER - ENLARGED PLAN

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

EP111

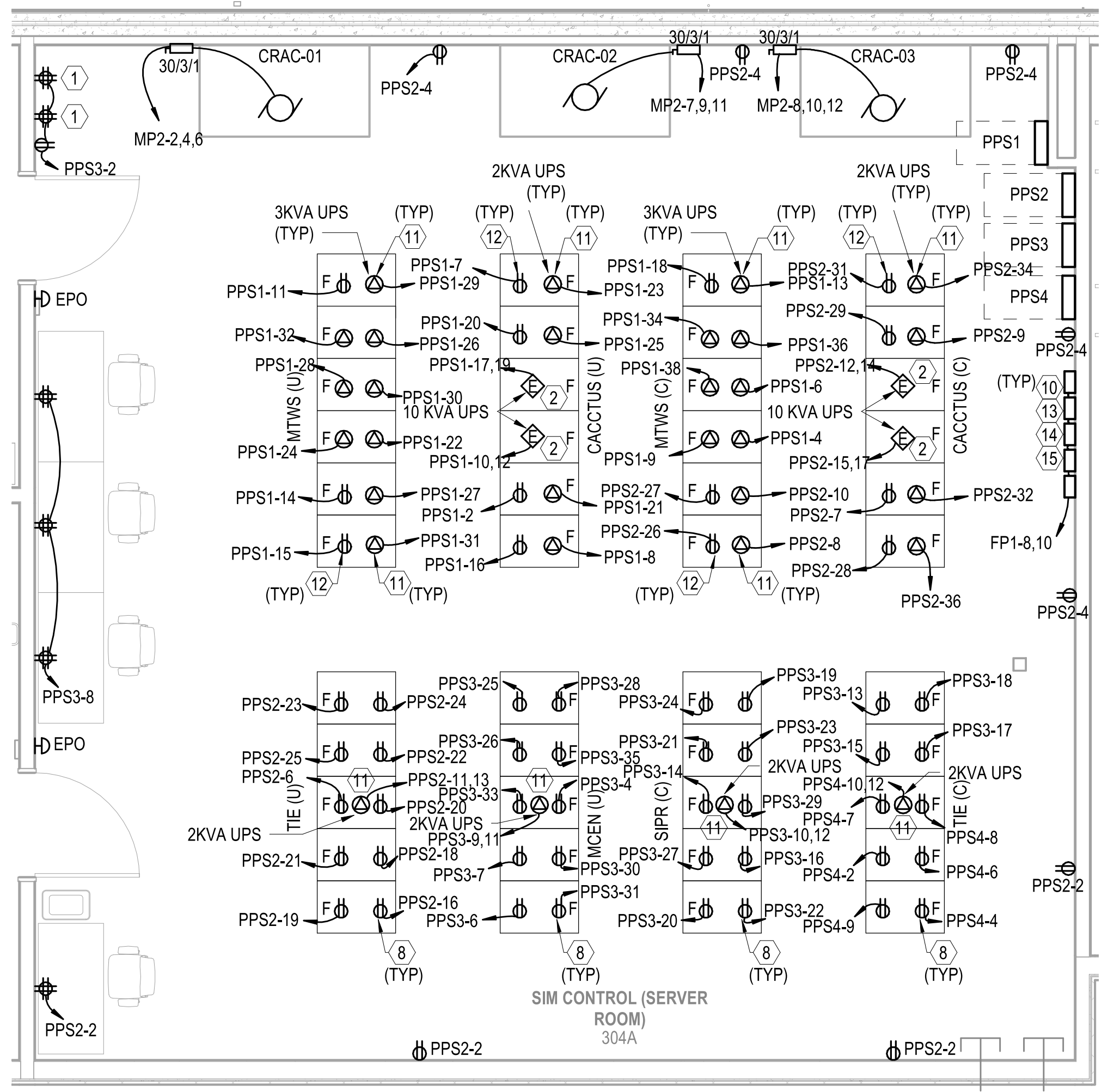
A2

POWER - ENLARGED PLAN

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

EP111

A3

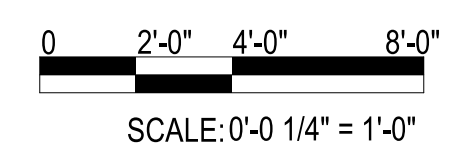


POWER - ENLARGED PLAN

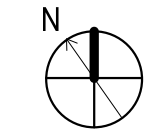
SCALE: 1/4" = 1'-0"

EP111

A4



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



FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-4590892-E-41

PLotted: 8/19/2021 7:45:58 AM

APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
<b>Michael Baker INTERNATIONAL</b>		
FOR COMMANDER NAVFAC		
ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DESIGN	DRWING	CHK
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC		
<b>P1338 II MEF SIMULATION/TRAINING CENTER</b> REPLACEMENT		
<b>ELECTRICAL - ENLARGED PLANS</b>		
DEPT UPDATES WITH DP2 FINAL SUBMISSION		
SCALE: AS NOTED EPROJCT NO.: 1590892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF		
<b>E-401</b>		

UNCLASSIFIED

UNCLASSIFIED

UNCLASSIFIED



KEYNOTES

- 9 NEMA L6-30R RECEPTACLE - 208V, 1PH, 30A. COORDINATE MOUNTING AND INSTALLATION OF THE RECEPTACLES WITH THE ACTIVITY.
- 10 NEMA 5-20R RECEPTACLE - 120V, 1PH, 20A. COORDINATE MOUNTING AND INSTALLATION OF THE RECEPTACLES WITH THE ACTIVITY.
- 11 CONFIRM ALL UPS'S ARE EQUIPPED WITH EPO SWITCHES BEFORE ANY MATERIAL PURCHASE AND INSTALLATION.
- 12 IF NORMALLY OPEN CONTACTS ARE USED:  
A. IF THE EPO SWITCH OR RELAY CONTACTS ARE NORMALLY OPEN, INSERT THE WIRES FROM THE SWITCH OR CONTACTS AT PINS 1 AND 2 OF THE EPO TERMINAL BLOCK. USE 16-28 AWG WIRE.  
B. SECURE THE WIRES BY TIGHTENING THE SCREWS. IF THE CONTACTS ARE CLOSED, THE UPS WILL TURN OFF AND POWER WILL BE REMOVED FROM THE LOAD.
- 13 IF NORMALLY CLOSED CONTACTS ARE USED:  
A. IF THE EPO SWITCH OR RELAY CONTACTS ARE NORMALLY CLOSED, INSERT THE WIRES FROM THE SWITCH OR CONTACTS AT PINS 2 AND 3 OF THE EPO TERMINAL BLOCK. USE 16-28 AWG WIRE.  
B. INSERT A WIRE JUMPER BETWEEN PINS 1 AND 2, AND 3. IF THE CONTACTS ARE OPEN, THE UPS WILL TURN OFF AND POWER WILL BE REMOVED FROM THE LOAD.

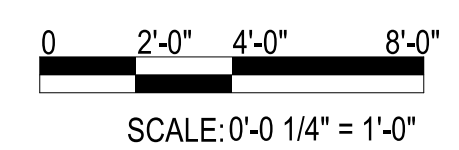
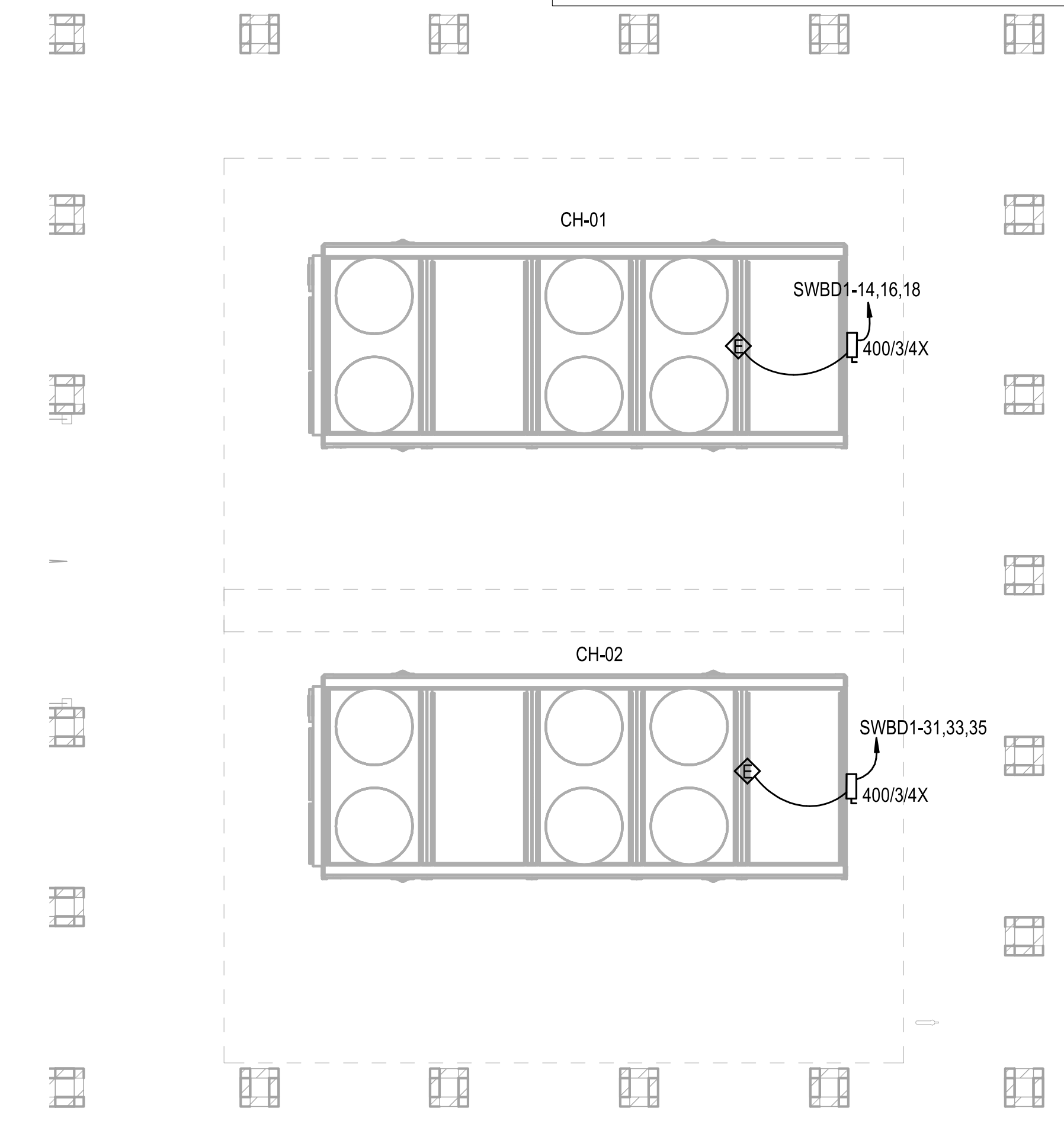
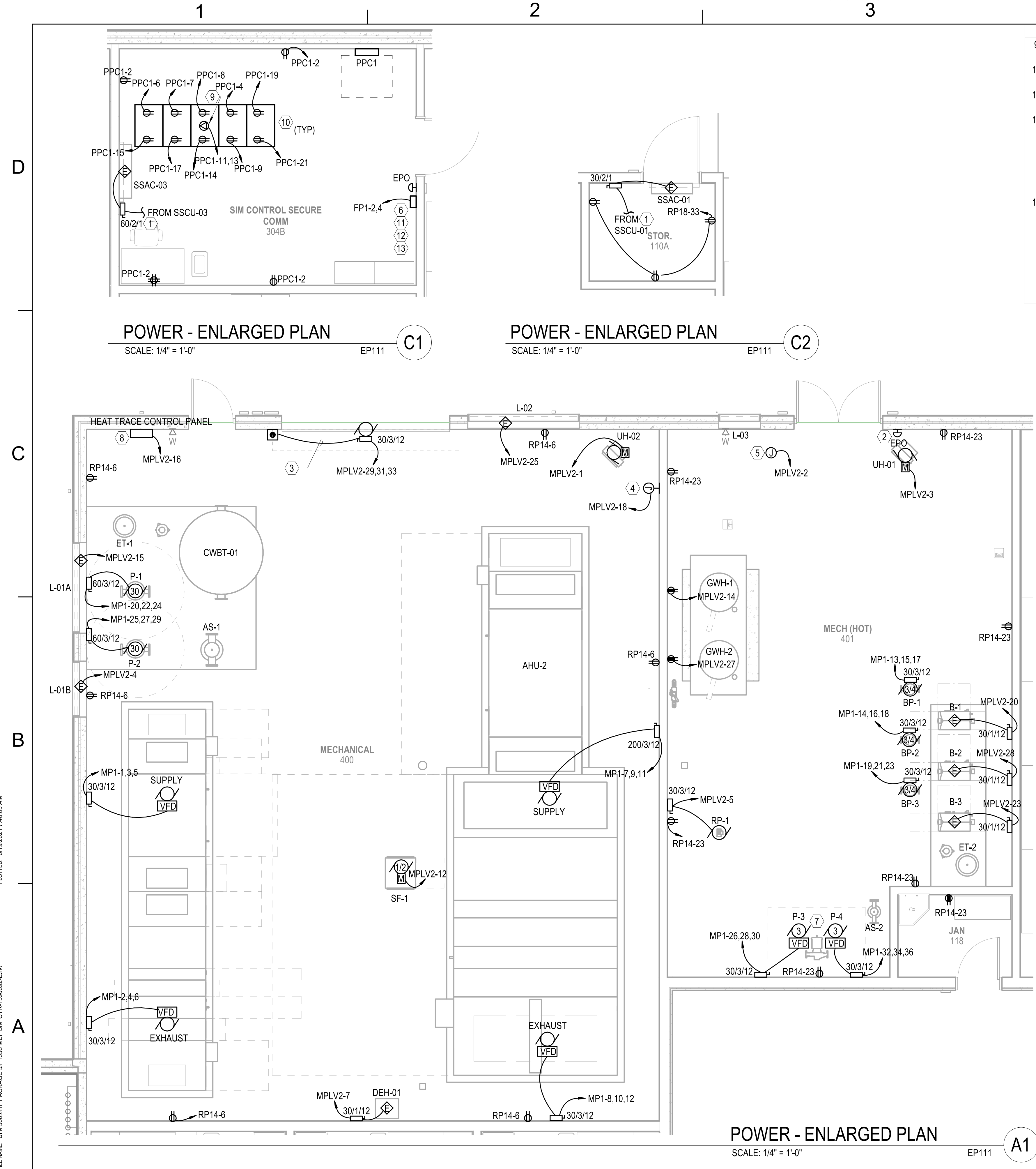
GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
  - 2 ALL FLOORBOX AND JUNCTION BOX LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS BASED ON EQUIPMENT AND FURNITURE FINAL LOCATIONS.
  - 3 RECEPTACLE CONTROL PLUG LOAD POWER PACKS ARE INDICATED ON LIGHTING SHEETS EL111-EL114 WITH LIGHTING POWER PACKS. ALL POWER PACKS TO BE LOCATED ABOVE ACCESSIBLE CEILING. COORDINATE WITH DETAIL B1 ON SHEET E-507
- KEYNOTES
- 1 INDOOR UNIT POWERED BY OUTDOOR UNIT. CONTROL WIRING BETWEEN INDOOR AND OUTDOOR UNITS BY MECHANICAL CONTRACTOR. CONDUIT AND POWER WIRING BETWEEN INDOOR AND OUTDOOR UNITS BY ELECTRICAL CONTRACTOR. SEE MECH. SCHEDULES FOR ADDITIONAL INFORMATION.
  - 2 PROVIDE EMERGENCY POWER OFF MUSHROOM STYLE PUSH OFF/PULL ON WITH CLEAR COVER. PROVIDE LABEL FOR SWITCH: "EMERGENCY BOILER SHUT OFF SWITCH. PULL TO RESET." COMPLY WITH ALL ASME CSD-1 REQUIREMENTS. CONFIRM LOCATION WITH AUTHORITY HAVING JURISDICTION (AHJ) FOR APPROVAL PRIOR TO INSTALLING.
  - 3 CONDUIT BY ELECTRICAL CONTRACTOR. LOW VOLTAGE WIRING BY OTHERS.
  - 4 PROVIDE 120V POWER CONNECTION FOR DDC CONTROLLER. COORDINATE EXACT LOCATION WITH MECHANICAL/CONTROLS CONTRACTOR PRIOR TO ROUGH IN.
  - 5 CEILING MOUNTED JUNCTION BOX FOR POWER TO LOUVER TRANSFORMERS. 120V POWER SHALL BE PROVIDED BY THE EC TO EACH TRANSFORMER. LOW VOLTAGE WIRING FROM THE TRANSFORMER TO THE LOUVER IS BY OTHERS. COORDINATE LOCATION AND QUANTITY WITH MECHANICAL INSTALLATION.
  - 6 EMERGENCY POWER OFF (EPO) BOX. EACH EPO BOX HAS AN EIGHT (8) CIRCUIT CAPACITY WITH ONE CIRCUIT BEING REQUIRED FOR EACH UPS. USE THE SAME BRANCH CIRCUIT FOR ALL EPO BOXES IN THE ROOM. SEE DETAILS ON SHEETS E-504 AND E-505 FOR MORE INFORMATION. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
  - 7 PUMPS ARE VERTICALLY STACKED. COORDINATE WITH INSTALLATION OF THE PUMPS.
  - 8 ELECTRICAL CONNECTION FOR CHILLER HEAT TRACING CONTROL PANEL. COORDINATE EXACT POWER CONNECTION LOCATION WITH MECHANICAL DRAWINGS PRIOR TO ROUGH IN. PROVIDE 20A BREAKER WITH 30mA GROUND FAULT TRIP. ALL WIRING AND INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.

POWER - ENLARGED PLAN  
SCALE: 1/4" = 1'-0"

POWER - ENLARGED PLAN  
SCALE: 1/4" = 1'-0"

POWER - ENLARGED PLAN  
SCALE: 1/4" = 1'-0"



APPROVED	DATE	APPR
SYMBOL	DESCRIPTION	DATE
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
<b>Michael Baker INTERNATIONAL</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED		
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE DES 50    DRW/ak    CHK yss		
BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC		
<b>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</b> <b>ELECTRICAL - ENLARGED PLANS</b>		
SCALE: AS NOTED EPROJECT NO.: 1590892 CONSTR. CONTR. NO. N40085-20-C-0059 NAVFAC DRAWING NO.		
SHEET OF <b>E-402</b>		

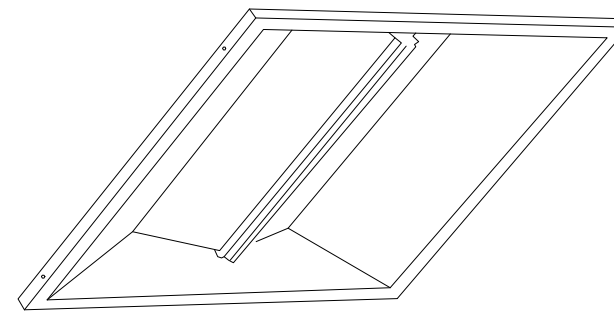
FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1590892-E-41  
PLOTTED: 8/19/2021 7:46:03 AM

DPI UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED



FIXTURE: A1, A2, A3, B1, C1



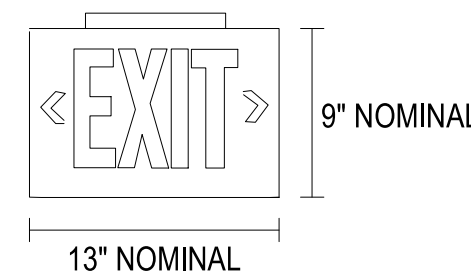
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD ROLLED STEEL, WITH ONE-PIECE LOWER REFLECTOR HAVING TEXTURED, HIGH REFLECTANCE, WHITE POLYESTER POWDER-COATED FINISH. OPTIONAL SIZES OF 1FT x 4FT, 2FT x 2FT, AND 2FT x 4FT AVAILABLE.
- LIGHT SOURCE - UPWARD-FACING LEDS WITH DIFFUSE LENS TO ELIMINATE DIRECT VIEW OF LIGHT SOURCE. 3500K COLOR TEMPERATURE UON, MAXIMUM BINNING TOLERANCE OF A 4-STEP MCADAM ELLIPSE, MINIMUM EFFICACY OF 126 LUMENS/WATT, WITH A MINIMUM CRI OF 80. INITIAL LUMEN OUTPUT AS INDICATED IN LUMINAIRE SCHEDULE.
- DRIVER - REPLACEABLE, INTEGRAL, HIGH-EFFICIENCY DRIVER WITH MINIMUM 0.9 PF, OPERATING VOLTAGE OF 120-277V, THERMAL MANAGEMENT, < 20% TOTAL HARMONIC DISTORTION. STEP-DIMMABLE OR FULLY DIMMABLE AS INDICATED IN LUMINAIRE SCHEDULE.
- CERTIFICATION - UL 1598, DAMP LOCATION, DLC QUALIFIED, AND ROHS COMPLIANT. COMPLIES WITH LM79, LM80 AND TM21 TESTING STANDARDS. IC RATED WHEN INDICATED.
- MOUNTING - RECESSED IN SUSPENDED ACOUSTICAL TILE OR HARD CEILING.
- THIS SKETCH IS A NON-PROPRIETARY GRAPHIC REPRESENTATION OF A LUMINAIRE THAT MAY MEET THE SPECIFICATION REQUIREMENTS. IT IS NOT INTENDED TO INDICATE A CERTAIN MANUFACTURER OR PREFERENCE.

DIRECT/INDIRECT LED TROFFER

REVISED: APRIL 2016 LIGHTING PLATE: NL-1

FIXTURE: EX



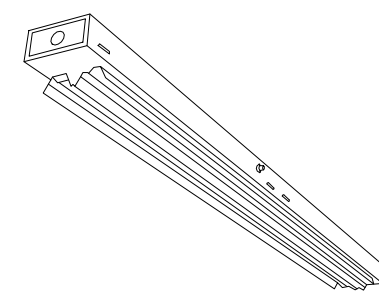
LUMINAIRE REQUIREMENTS:

- HOUSING - HIGH-IMPACT, UV-STABILIZED, INJECTION-MOLDED CAST ALUMINUM. SINGLE OR DOUBLE-FACED AS INDICATED.
- LETTERS/CHEVRONS - MINIMUM 6" HIGH WITH 3/4" STROKE. RED OR GREEN LETTERS AS INDICATED. PROVIDE CHEVRONS AS INDICATED EITHER LEFT, RIGHT, OR BOTH DIRECTIONS AS INDICATED. CHEVRONS PUNCHED OUT THROUGH HOUSING AS REQUIRED.
- EMERGENCY PACK - SOLID-STATE, CONSTANT-CURRENT TYPE BATTERY CHARGER WITH MAINTENANCE-FREE, NICKEL-CADMIUM BATTERY, AC-ON INDICATOR LAMP AND TEST SWITCH.
- MOUNTING - UNIVERSAL MOUNTING KIT FOR CEILING, WALL, OR END OF FIXTURE MOUNTING.
- ILLUMINATION - PROVIDED BY RED, GREEN, OR WHITE HIGH-OUTPUT LEDS INSIDE OF FIXTURE HOUSING. PROVIDE POLYSTYRENE DIFFUSER IN COLOR INDICATED WITH FREQUENCY-MATCHED SILKSCREEN COATING FOR MAXIMUM LED LIGHT OUTPUT.
- CERTIFICATION - UL LISTED AND CERTIFIED FOR DAMP LOCATIONS.

LED EXIT SIGN

REVISED: AUGUST 2004 LIGHTING PLATE: NL-63

FIXTURE: E1, S1



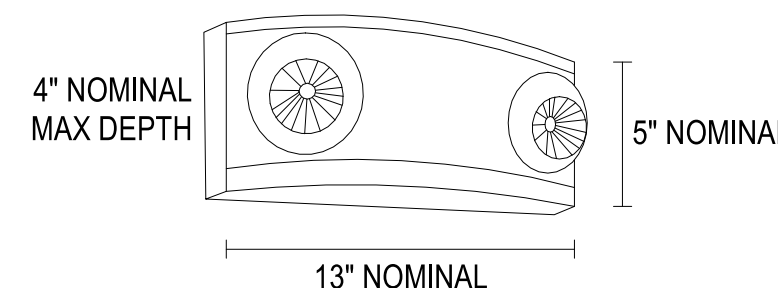
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, WITH REINFORCEMENT RIBS FOR RIGIDITY AND SPECULAR ALUMINUM OR HIGHLY-REFLECTIVE PAINTED STEEL REFLECTORS. OPTIONAL LENGTHS OF 4FT OR 8FT.
- FINISH - MULTI-STAGE PHOSPHATE BONDING TREATMENT FINISHED WITH HIGH-REFLECTANCE, WHITE POLYESTER POWDER COAT, PAINTED AFTER FABRICATION.
- LIGHT SOURCE - SOLID STATE LEDS WITH MINIMUM 50K HOURS RATED LIFE AT L70, 3500K CCT UON, MINIMUM 80 CRI, MAXIMUM 4-STEP MCADAM ELLIPSE BINNING TOLERANCE FOR COLOR CONSISTENCY, AND MINIMUM EFFICACY OF 128 LUMENS/WATT. INITIAL LUMEN OUTPUT AS INDICATED IN LUMINAIRE SCHEDULE.
- DRIVER - REPLACEABLE, INTEGRAL, HIGH-EFFICIENCY DRIVER WITH MINIMUM 0.9 PF, OPERATING VOLTAGE OF 120-277V, THERMAL MANAGEMENT, < 20% TOTAL HARMONIC DISTORTION. ON-OFF CONTROL, STEP-DIMMABLE OR FULLY DIMMABLE AS INDICATED.
- CERTIFICATION - UL 1598, DAMP LOCATION, DLC QUALIFIED, AND ROHS COMPLIANT. COMPLIES WITH LM79, LM80 AND TM21 TESTING STANDARDS. UL 924 WHEN EQUIPPED WITH EMERGENCY BATTERY BACK-UP.
- MOUNTING - SURFACE ON CEILING OR SUSPENDED
- OPTIONS - WIRE GUARD, CHAIN, STEM OR SWIVEL STEM HANGERS.
- THIS SKETCH IS A NON-PROPRIETARY GRAPHIC REPRESENTATION OF A LUMINAIRE THAT MAY MEET THE SPECIFICATION REQUIREMENTS. IT IS NOT INTENDED TO INDICATE A CERTAIN MANUFACTURER OR PREFERENCE.

LED INDUSTRIAL STRIP

REVISED: APRIL 2016 LIGHTING PLATE: NL-7

FIXTURE: ELU



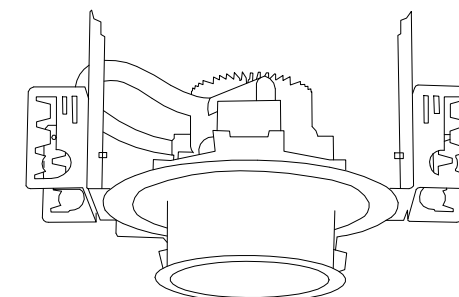
LUMINAIRE REQUIREMENTS:

- HOUSING - UV STABLE, FLAME-RATED, HIGH-IMPACT THERMOPLASTIC IN WHITE OR BLACK TEXTURED FINISH.
- INTERNAL COMPONENTS - FULLY AUTOMATIC, SOLID STATE, CONSTANT VOLTAGE, CURRENT-LIMITED BATTERY CHARGER; MAINTENANCE-FREE LEAD-ACID BATTERY; AND BUILT-IN OVERLOAD AND LOW-VOLTAGE BATTERY PROTECTION.
- EXTERIOR HOUSING INDICATORS - LED AC-ON INDICATOR AND INTEGRAL TEST SWITCH.
- LAMP HEADS - UV STABLE, FLAME RATED POLYCARBONATE THERMOPLASTIC. MR16 LED LAMPS SHALL BE 5 WATTS, HIGH-OUTPUT, OR AS INDICATED IN LIGHTING FIXTURE SCHEDULE.
- MOUNTING - DIRECTLY TO 4" OCTAGONAL OR SQUARE OUTLET BOX.
- CERTIFICATION - UL LISTED AND LABELED, COMPLIES WITH UL 924 AND NFPA 101 REQUIREMENTS. LISTED FOR DAMP LOCATIONS.
- OPTIONS - VOLTMETER, VANDEL-RESISTANT SHIELD, SELF-DIAGNOSTIC/TESTING ELECTRONICS, AND WIRE GUARD

DECORATIVE EMERGENCY LIGHTING UNIT

REVISED: AUGUST 2004 LIGHTING PLATE: NL-67

FIXTURE: D1, D2, D3, D4, D5



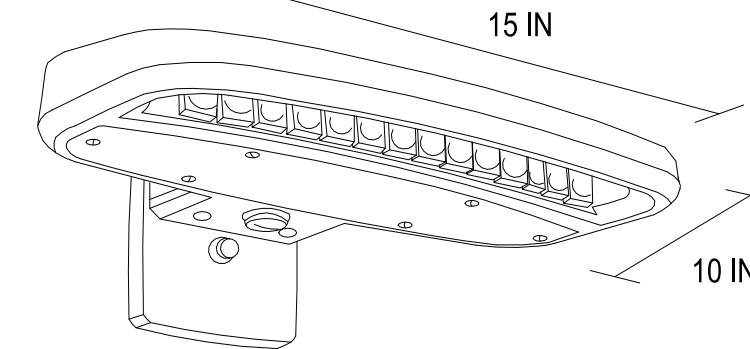
LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-FORMED, COLD-ROLLED STEEL, OR FORGED ALUMINUM WITH HEAT SINK. DRIVER MUST BE ACCESSIBLE FROM BOTTOM OF LUMINAIRE. PROVIDE T-BAR HANGERS FOR INSTALLATION IN ACOUSTICAL TILE CEILINGS OR TABS WHEN MOUNTING IN HARD CEILINGS.
- REFLECTOR AND TRIM - SPECIFICATION GRADE, LOW IRRIDESCENT, SPECULAR ALUMINUM REFLECTOR WITH METALLIC OR PAINTED TRIM RING.
- LIGHT SOURCE - SOLID STATE LEDS WITH MINIMUM 50K HOURS RATED LIFE AT L70, 4000K CCT UON, MINIMUM 80 CRI, MAXIMUM 4-STEP MCADAM ELLIPSE BINNING TOLERANCE FOR COLOR CONSISTENCY, AND MINIMUM EFFICACY OF 90 LUMENS/WATT. INITIAL LUMEN OUTPUT AS INDICATED IN LUMINAIRE SCHEDULE.
- DRIVER - REPLACEABLE, INTEGRAL, HIGH-EFFICIENCY DRIVER WITH MINIMUM 0.9 PF, OPERATING VOLTAGE OF 120-277V, THERMAL MANAGEMENT, < 20% TOTAL HARMONIC DISTORTION. ON-OFF CONTROL, STEP-DIMMABLE OR FULLY DIMMABLE AS INDICATED.
- CERTIFICATION - UL 1598, DAMP LOCATION, DLC QUALIFIED, AND ROHS COMPLIANT. COMPLIES WITH LM79, LM80 AND TM21 TESTING STANDARDS. UL 924 WHEN EQUIPPED WITH EMERGENCY BATTERY BACK-UP.
- MOUNTING - RECESSED IN HARD OR ACOUSTICAL TILE CEILING.
- OPTIONS - EMERGENCY BATTERY BACK-UP, WALL-WASH TRIM, IC RATED FOR DIRECT CONTACT WITH INSULATION, VARIOUS APERTURE DIAMETERS, AND VARIOUS GLASS LENSES.
- THIS SKETCH IS A NON-PROPRIETARY GRAPHIC REPRESENTATION OF A LUMINAIRE THAT MAY MEET THE SPECIFICATION REQUIREMENTS. IT IS NOT INTENDED TO INDICATE A CERTAIN MANUFACTURER OR PREFERENCE.

LED RECESSED DOWNLIGHT

REVISED: APRIL 2016 LIGHTING PLATE: NL-19

FIXTURE: W1



LUMINAIRE REQUIREMENTS:

- HOUSING - DIE-CAST OR EXTRUDED ALUMINUM WITH INTEGRAL PASSIVE COOLING MECHANISM. HEAT SINK SHALL BE INCORPORATED DIRECTLY INTO HOUSING OR DRIVER COMPARTMENT TO ENSURE MAXIMUM HEAT TRANSFER AND DISSIPATION.
- FINISH - MULTI-STAGE PRE-TREATMENT, FINISHED WITH BAKED-ON POLYESTER POWDER COAT. FINISH SHALL PASS 2500 HOUR SALT SPRAY TEST PER ASTM B117. STANDARD FINISH IS DARK BRONZE, WITH OTHER CUSTOM COLORS AVAILABLE.
- POWER SUPPLY/LED DRIVER - CLASS 1 DRIVER SHALL OPERATE AT 120/277 VOLTS, 50/60 HZ, WITH OTHER VOLTAGES OPTIONAL; POWER FACTOR GREATER THAN 0.9 AND THD LESS THAN 20% AT FULL LOAD. MINIMUM EFFICACY SHALL BE 108 LM/W AT MAXIMUM 600mA OPERATING CURRENT.
- LED OPTICAL ASSEMBLY - PRECISION MOLDED ACRYLIC LENS PROVIDED FOR MULTIPLE HIGH-POWERED LEDS PRODUCING NEMA TYPE III DISTRIBUTION OR AS OTHERWISE INDICATED. BUG UPLIGHT RATING OF U0, WITH GLARE RATING AS DETERMINED BY LIGHTING ZONE INSTALLED. MINIMUM COLOR RENDERING INDEX (CRI) SHALL BE 80 FOR CORRELATED COLOR TEMPERATURE (CCT) OF 4000 DEGREES K.
- CERTIFICATION - UL AND/OR ETL LISTED FOR DAMP OR WET LOCATIONS AS INDICATED, AND ROHS COMPLIANT.
- OPTIONS - VARIOUS LUMEN OUTPUT RATING AS INDICATED, PHOTOCELL, AND 0-10 VOLT DIMMING DRIVER.
- OTHER - THE ABOVE SKETCH IS A NON-PROPRIETARY GRAPHIC REPRESENTATION OF A LUMINAIRE THAT MAY MEET THE SPECIFICATION REQUIREMENTS AND IS NOT INTENDED TO INDICATE A CERTAIN MANUFACTURER'S PREFERENCE. ALL DIMENSIONS ARE NOMINAL AND VARY PER MANUFACTURER.

LED WALL PACK

REVISED: MARCH 2013 LIGHTING PLATE: XL-17

PLOTTED: 8/19/2021 7:46:04 AM

FILE NAME: BIM\_360/IFB PACKAGE 3P1338.MEF\_S1M CTR-1590892-E-01

APPROVED	DATE	APPR
SYN	DESCRIPTION	
<b>PRELIMINARY</b> FOR REFERENCE ONLY		
<b>Michael Baker International</b> 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E IN/PD APPROVED		
FOR COMMANDER NAVFAC		
ACTIVITY MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES 50	DRW/CHK	CHK YRS
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE JACKSONVILLE, NC <b>P1338 II MEF SIMULATION/TRAINING CENTER</b> REPLACEMENT <b>ELECTRICAL - DETAILS</b>		
SCALE: AS NOTED		
EPROJECT NO.: 1590892		
CONSTR. CONTR. NO. N40085-20-C-0059		
NAVFAC DRAWING NO.		
SHEET OF		
<b>E-501</b>		











1

2

3

4

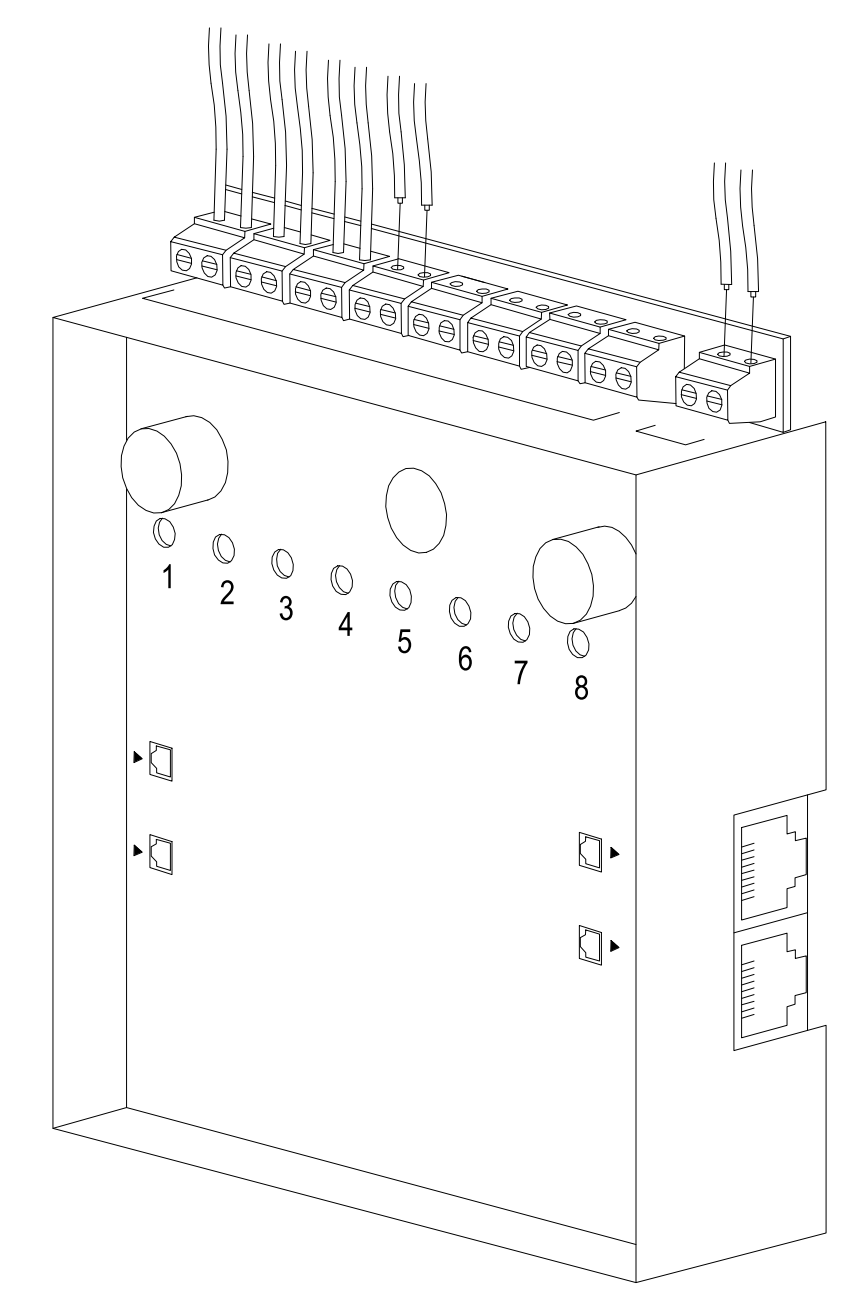
5

D

C

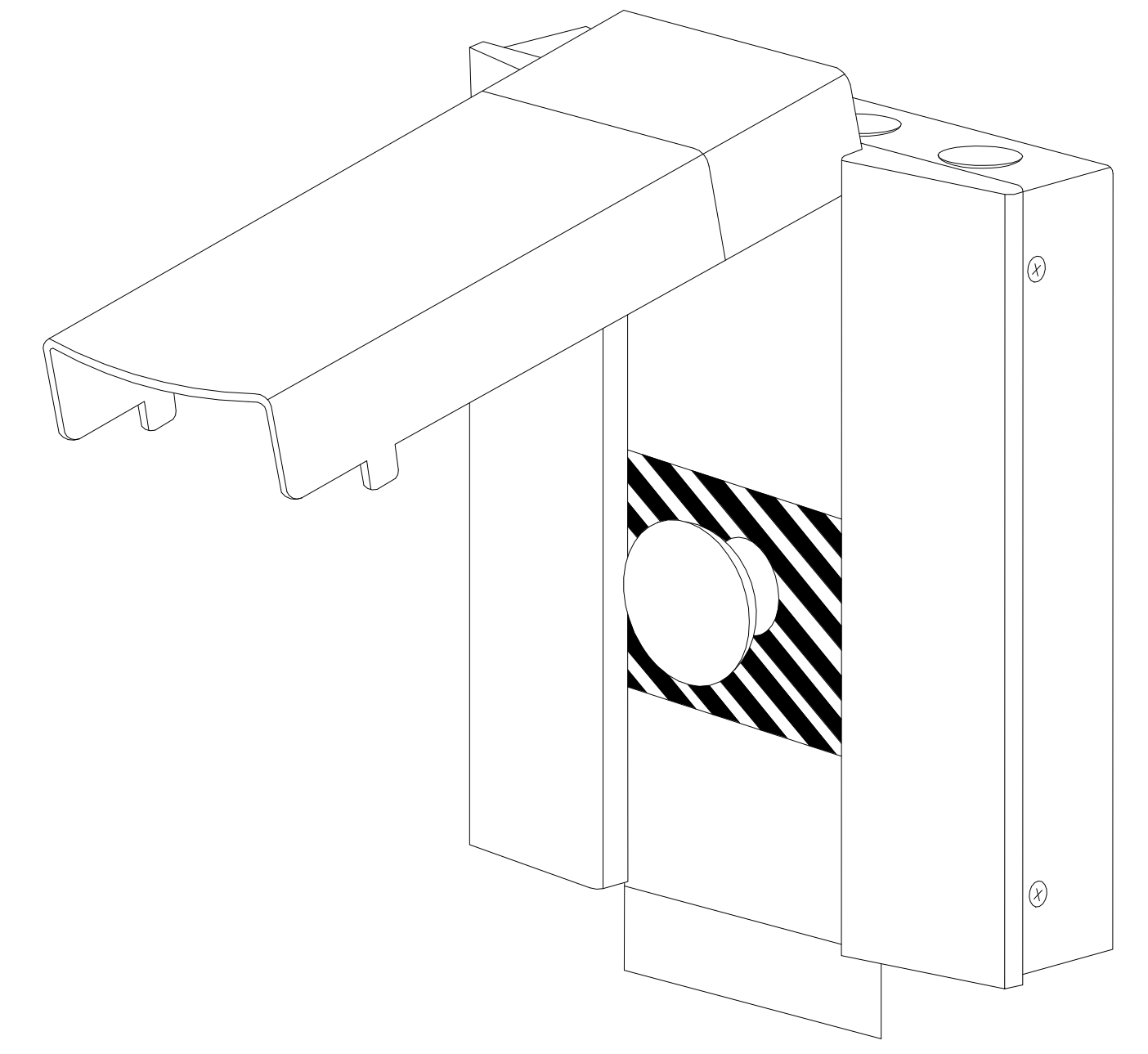
B

A



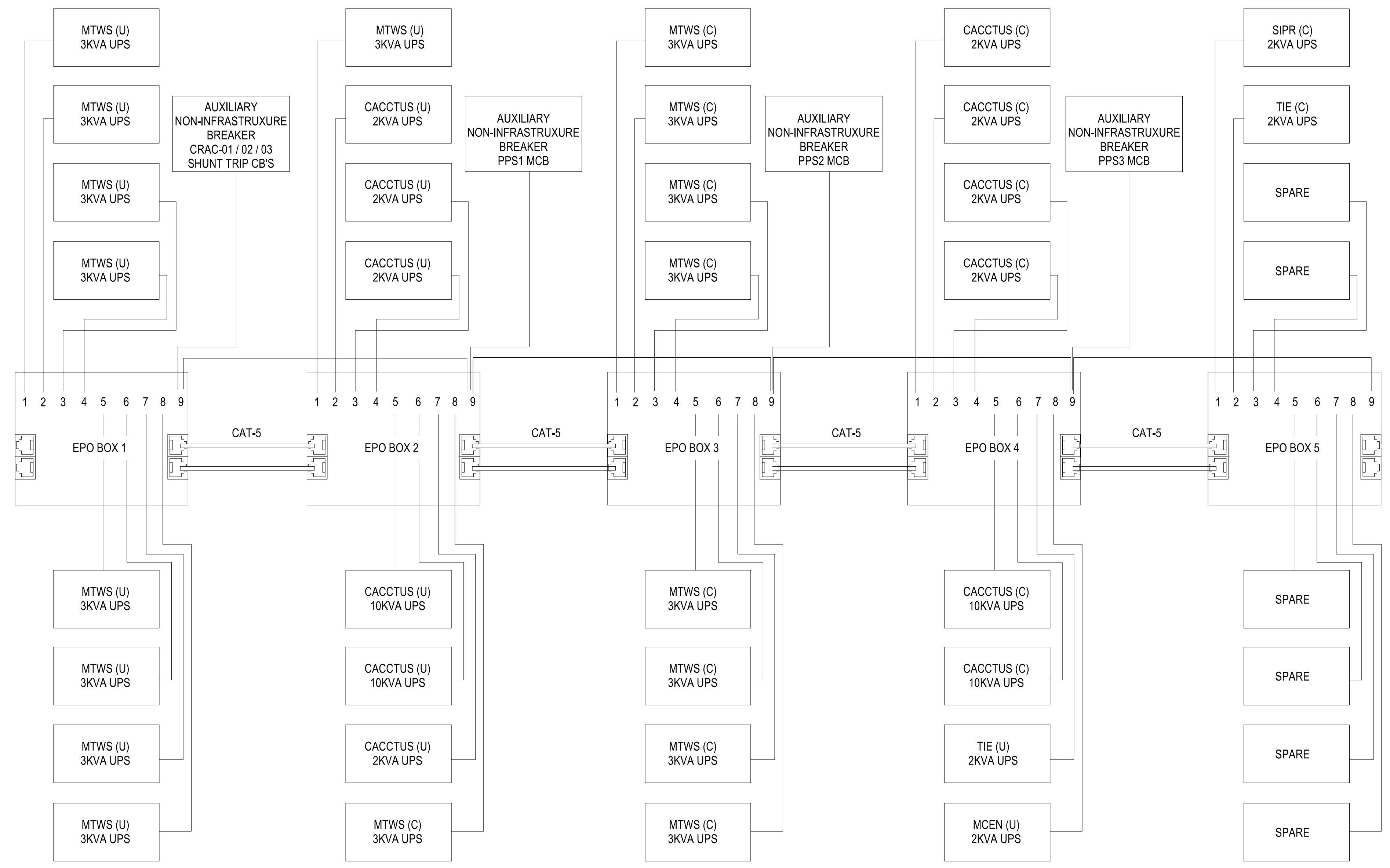
**EMERGENCY POWER OFF (EPO) BOX - WIRING TERMINALS (INTERNAL)**  
SCALE:NTS

C1




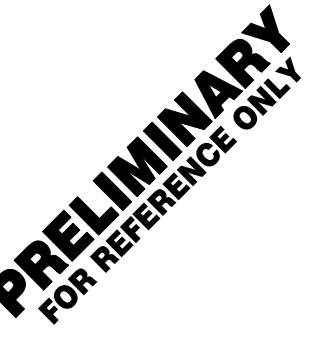


**EMERGENCY POWER OFF (EPO) SYSTEM - SWITCH**  
SCALE:NTS

A1



**EMERGENCY POWER OFF (EPO) SYSTEM - WIRING DIAGRAM (SERVER ROOM)**  
SCALE:NTS

A3

APPR	DATE
SYM	DESCRIPTION
	
	
	
	
APPROVED 100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E IN/PG	
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE	
SATISFACTORY TO DATE DES:so    DRW:lak    CHK:ysb	
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION JACKSONVILLE, NC MCB CAMP LEJEUNE P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT ELECTRICAL - DETAILS	
SCALE:	AS NOTED
EPROJCT NO.:	1509092
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
<b>E-504</b>	

UNCLASSIFIED

DP1 UPDATES WITH DP2 FINAL SUBMISSION

PLOTTED: 8/19/2021 7:46:07 AM

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM\_CTR-1509092-E-N1

1

2

3

4

5



1

2

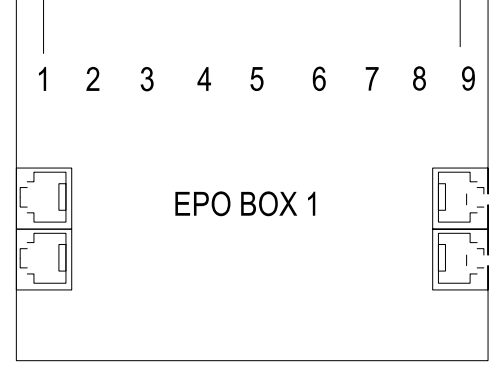
3

4

5

SIM CNTRL  
SECURE COMM  
RACK UPS

AUXILIARY  
NON-INFRASTRUXURE  
BREAKER  
PPC1 MCB



EMERGENCY POWER OFF  
(EPO) SYSTEM - WIRING  
DIAGRAM (SECURE COMM)

SCALE: NTS

C1

PLOTTED: 8/19/2021 7:46:08 AM

FILE NAME: BIM360/HF PACKAGE 3P1338.MEF SIM CTR-459082.E-1

1

2

3

4

5

SYMBOL	DESCRIPTION	DATE	APPROVED



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker**  
INTERNATIONAL  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E/INFC

FOR COMMANDER NAVFAC  
ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES BY DRW:ak CHK YES

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NAVFAC JACKSONVILLE  
MCR CAMP LEJEUNE JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
ELECTRICAL - DETAILS

SCALE: AS NOTED  
EPROJCT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF

**E-505**











D

C

B

A

SEQUENCE OF OPERATION MATRIX														
ROOM #	SPACE NAME	OCCUPANCY/VACANCY SENSOR						TIME CLOCK		DAYLIGHT SENSOR				
		VACANCY MODE (MANUAL ON)	OCCUPANCY MODE (AUTO ON)	SENSOR TIMEOUT PERIOD (MINUTES)	INITIAL OCCUPIED LIGHTING LEVEL (%)	PREFERRED CONTROL STEP DIMMING (%)	UNOCCUPIED LIGHTING LEVEL (%)	OCCUPANCY SENSOR OVERRIDE - FIRE ALARM PANEL	SCHEDULED "ON" TIME	SCHEDULE "OFF" TIME	REDUCE FIXTURE LIGHTING LEVEL% AT MIDNIGHT OR CLOSING	YES/NO	TARGET LIGHTING LEVEL	MANUAL WALL CONTROL ONLY - (AS INDICATED ON DRAWINGS)
100	ENTRY WS	X		15	100	30-70DIM	0				N	N/A		
101	BRIEF/DEBRIEF	X		15	100	30-70DIM	0	X			N	N/A		X
102	BRIEF/DEBRIEF	X		15	100	30-70DIM	0	X			N	N/A		X
103A	FIRE STORAGE	X		15	100		0				N	N/A		
104A	FIRE ROOM	X		15	100	30-70DIM	0	X			N	N/A		
104B	FIRE ROOM	X		15	100	30-70DIM	0	X			N	N/A		
104C	FIRE ROOM	X		15	100	30-70DIM	0	X			N	N/A		
105	LIBRARY/FILE STORAGE	X		15	100		0				N	N/A		
106	NCOIC/SUPPLY CLERK	X		15	100	30-70DIM	0	X			N	N/A		X
107	SIM OPERATOR	X		15	100	30-70DIM	0	X			N	N/A		X
108	ADMIN BREAK		X	15	50	30-70DIM	0	X			N	N/A		X
109	SIM ANALYST		X	15	50	30-70DIM	0	X			N	N/A		X
110	MOTHERS ROOM	X		15	100	30-70DIM	0				N	N/A		
110A	STORAGE	X			100		0				N	N/A		
111	OIC	X		15	100	30-70DIM	0				N	N/A		X
112	DEP. DIR.	X		15	100	30-70DIM	0				N	N/A		X
113	SITE MGR.	X		15	100	30-70DIM	0				N	N/A		X
114	DIR.	X		15	100	30-70DIM	0				N	N/A		X
115	COMM.				100		0				N	N/A	X	
116	ELEC.				100		0				N	N/A	X	
118	JAN.				100		0				N	N/A	X	
200A	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
200B	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
200C	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
201	AUDITORIUM READY ROOM	X		15	100	30-70DIM	0	X			N	N/A		
202	EXERCISE CONTROL	X		15	100	30-70DIM	0	X			N	N/A		
203	STORAGE	X		15	100		0				N	N/A		
204	JAN.				100		0				N	N/A	X	
205	PLOT/LAM	X		15	100	30-70DIM	0				N	N/A		X
206	BREAK ROOM		X	15	50	30-70DIM	0	X			N	N/A		X
207	EXERCISE CONTROL	X		15	100	30-70DIM	0	X			N	N/A		
208	COMM.				100		0				N	N/A	X	
209	BRIEF/DEBRIEF	X		15	100	30-70DIM	0	X			N	N/A		X
300A	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
300B	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
300C	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
300X	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
300Y	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
300Z	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
301A	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
301B	SIMULATION CLASSROOM	X		15	100	30-70DIM	0	X			N	N/A		
302	SERVER ADMIN.	X		15	100	30-70DIM	0	X			N	N/A		X
303A	SECURE WS		X	15	50	30-70DIM	0	X			N	N/A		
303B	SECURE VTC	X		15	100	30-70DIM	0	X			N	N/A		X
304A	SIM CONTROL (SERVER ROOM)		X	15	50	30-70DIM	0	X			N	N/A		
304B	SIM CONTROL (SECURE COMM)	X		15	100	30-70DIM	0	X			N	N/A		
305	STORAGE	X			100		0				N	N/A		
306	ELEC.				100		0				N	N/A	X	
400	MECH.				100		0				N	N/A	X	
401	MECH. (HOT)				100		0				N	N/A	X	
402	STORAGE/SHIPPING/RECEIVING		X	15	50	30-70DIM	0	X			N	N/A		
403	ELEC.				100		0				N	N/A	X	


FILE NAME: BIM\_360/IFP PACKAGE 3P1338\_MEF\_SIM CTR-1509092-E-01 PLOTTED: 8/19/2021 7:46:12 AM

SEQUENCE OF OPERATION MATRIX														
ROOM #	SPACE NAME	OCCUPANCY/VACANCY SENSOR						TIME CLOCK		DAYLIGHT SENSOR				
		VACANCY MODE (MANUAL ON)	OCCUPANCY MODE (AUTO ON)	SENSOR TIMEOUT PERIOD (MINUTES)	INITIAL OCCUPIED LIGHTING LEVEL (%)	PREFERRED CONTROL STEP DIMMING (%)	UNOCCUPIED LIGHTING LEVEL (%)	OCCUPANCY SENSOR OVERRIDE - FIRE ALARM PANEL	SCHEDULED "ON" TIME	SCHEDULE "OFF" TIME	REDUCE FIXTURE LIGHTING LEVEL% AT MIDNIGHT OR CLOSING	YES/NO	TARGET LIGHTING LEVEL	MANUAL WALL CONTROL ONLY - (AS INDICATED ON DRAWINGS)
C010	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C011	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C012	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C013	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C014	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C015	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C016	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C017	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C018	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C020	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C021	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C022	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C023	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C030	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C031	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C032	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
C034	CORRIDOR		X	15	100	0-35DIM	50-0	X			N	N/A		
G010	MEN						0				N	N/A	X	
G011	WOMEN						0				N	N/A	X	
G012	UNISEX						0				N	N/A	X	
G020	UNISEX						0				N	N/A	X	
G021	MUD						0				N	N/A	X	
G022	W. SHWR.						0				N	N/A	X	
G023	M. SHWR.						0				N	N/A	X	
G024	WOMEN						0				N	N/A	X	
G025	MEN						0				N	N/A	X	
L010	LOBBY/VEST.		X	15	100	0-35DIM	50-0	X			N	N/A		


DATE

APPR

SYN DESCRIPTION



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E/IN/P  
APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50 DRW/L&K CHK YRS

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NORFOLK, VA  
JACKSONVILLE, NC  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
**ELECTRICAL - LIGHTING CONTROL MATRIX**

SCALE: AS NOTED  
EPROJCT NO.: 1509092  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.:  
SHEET OF  
**E-508**

DPI UPDATES WITH DP2 FINAL SUBMISSION

D

C

B

A

UNCLASSIFIED

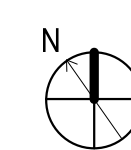



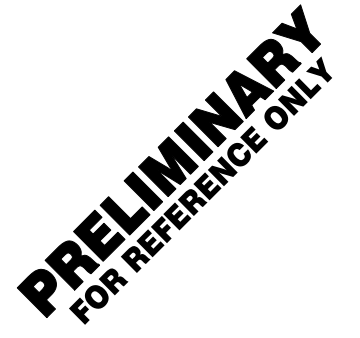

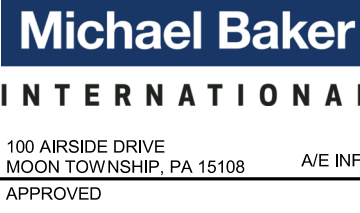
LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	MANUFACTURER / CATALOG #	LAMP TYPE	LAMP QTY	INPUT WATTAGE	VOLTAGE	REMARKS
A1	2' x 4' LED TROFFER	RECESSED	LITHONIA LIGHTING 2BLT4 40LHE ADPT LP835 / OR APPROVED EQUAL	LED 82 CRI, 4000 LUMENS 3500K CCT	---	29	MVOLT	
A2	2' x 4' LED TROFFER	RECESSED	LITHONIA LIGHTING 2BLT4 48LHE ADP LP835/ OR APPROVED EQUAL	LED 82 CRI, 4800 LUMENS 3500K CCT	---	34	MVOLT	
A3	2' x 4' LED TROFFER	RECESSED	LITHONIA LIGHTING 2BLT4 60LHE ADP LP835/ OR APPROVED EQUAL	LED 82 CRI, 6000 LUMENS 3500K CCT	---	44	MVOLT	
B1	2' x 2' LED TROFFER	RECESSED	LITHONIA LIGHTING 2BLT2 20LHE ADP LP835/ OR APPROVED EQUAL	LED 82 CRI, 2000 LUMENS 3500K CCT	---	15	MVOLT	
C1	2' x 4' LED RECESSED FLAT PANEL	RECESSED	LITHONIA LIGHTING EPANL 2X4 3000LMHE 80CRI 35K / OR APPROVED EQUAL	LED 80 CRI, 3000 LUMENS 3500K CCT	---	23	MVOLT	
D1	6" RECESSED DOWNLIGHT	RECESSED	LITHONIA LIGHTING LDN6 35/15 LO6AR LD/ OR APPROVED EQUAL	LED 80 CRI, 1500 LUMENS 3500K CCT	---	18	MVOLT	
D2	6" RECESSED DOWNLIGHT	RECESSED	LITHONIA LIGHTING LDN6 35/05 LO6AR LD/ OR APPROVED EQUAL	LED 80 CRI, 500 LUMENS 3500K CCT	---	6	MVOLT	
D3	6" RECESSED DOWNLIGHT	RECESSED	LITHONIA LIGHTING LDN6 35/30 LO6AR LD/ OR APPROVED EQUAL	LED 80 CRI, 3000 LUMENS 3500K CCT	---	35	MVOLT	
D4	6" RECESSED DOWNLIGHT WALL WASH	RECESSED	LITHONIA LIGHTING/ LDN6 35/50 LW6WR/ OR APPROVED EQUAL	LED 80 CRI, 5000 LUMENS 3500K CCT	---	1	MVOLT	
D5	6" RECESSED DOWNLIGHT - WET LOCATION LISTED FOR UNDER CANOPY	RECESSED	LITHONIA LIGHTING LDN6 40/10 LO6AR LD/ OR APPROVED EQUAL	LED 80 CRI, 1000 LUMENS 4000K CCT	---	10	MVOLT	
D5E	6" RECESSED DOWNLIGHT - WET LOCATION LISTED FOR UNDER CANOPY W/ 90 MINUTE BATTERY BACKUP	RECESSED	LITHONIA LIGHTING LDN6 40/10 LO6AR LD/ OR APPROVED EQUAL	LED 80 CRI, 1000 LUMENS 4000K CCT	---	10	MVOLT	
E1	4' FLUSHED LED STRIP LIGHT	RECESSED	MARK ARCHITECTURAL LIGHTING SL4L 4 FLP 80 CRI 35K 400LMF/ OR APPROVED EQUAL	LED 80CRI, 400 LUMENS PER FT 3500K CCT	---	14	MVOLT	LENGTH AS REQUIRED-CONTINUOUS FLUSH LED STRIP LIGHT - PROVIDE WALL TO WALL INSTALLATION WITH EQUAL LENGTH FIXTURES. PROVIDE 1 PIECE FIXTURE FOR LENGTHS UP TO 12 FOOT
ELR	RECESSED EMERGENCY LIGHTING UNIT WITH LED LAMPS	RECESSED	LITHONIA LIGHTING ELR2 / OR APPROVED EQUAL	LED	---	16W	MVOLT	PROVIDE WITH 90 MINUTE BATTERY FOR EMERGENCY BACKUP POWER.
ELU	EMERGENCY LIGHTING UNIT W/ AIMABLE REMOTE HEADS MINIMUM 200 LUMENS PER HEAD	WALL	LITHONIA LIGHTING ELM2L / OR APPROVED EQUAL	LED	---	3W PER LAMP	MVOLT	MOUNT FIXTURE AT 7'-0" AFF UNLESS OTHERWISE NOTED. PROVIDE WITH 90 MINUTE BATTERY FOR EMERGENCY BACKUP POWER.
EX	LOW PROFILE SNAP TOGETHER QUICK MOUNT DESIGN. FLAME RATED, DIE-CAST ALUMINUM HOUSING. UNIVERSAL MOUNTING, CANOPY PROVIDED. POP OUT SHEVRON DIRECTIONAL INDICATIONS EASILY REMOVED AS REQUIRED. MOUNTS TO STANDARD 4 INCH SQUARE OUTLET BOX.	UNIVERSAL	LITHONIA LIGHTING LQC R ELN SERIES OR APPROVED EQUAL	LED	---	5	120	
S1	4' SUSPENDED LED STRIP LIGHT	SUSPENDED	LITHONIA LIGHTING ZL1N L48 5000LM FST MVOLT 40K 80 CRI/ OR APPROVED EQUAL	LED 80CRI, 5000 LUMENS 4000K CCT	---	34	MVOLT	MOUNT FIXTURES AT 10'-0" AFF. UNLESS OTHERWISE NOTED.
SL0	SITE LIGHTING TYPE VLS DISTRIBUTION	POLE	LITHONIA LIGHTING DSX0-LED-P1-40K-VLS-MVOLT-RPA-PER-DMG-PIRHN-FAO OR APPROVED EQUAL	LED 80 CRI, 4329 LUMENS 4000K CCT	---	56	277	MOUNT FIXTURE 12' ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED.
SL1	SITE LIGHTING TYPE VS DISTRIBUTION	POLE BACK TO BACK	LITHONIA LIGHTING RSX1-LED-P1-40K-R5S-MVOLT-RPA-PE-DMG-PIRHN OR APPROVED EQUAL	LED 80 CRI, 7479 LUMENS EACH 4000K CCT	---	51 EACH	277	MOUNT FIXTURE 39' ABOVE FINISHED GRADE.
SL2	SITE LIGHTING TYPE VS DISTRIBUTION	POLE BACK TO BACK	LITHONIA LIGHTING RSX1-LED-P2-40K-R5S-MVOLT-RPA-PE-DMG-PIRHN OR APPROVED EQUAL	LED 80 CRI, 10374 LUMENS EACH 4000K CCT	---	72 EACH	277	MOUNT FIXTURE 39' ABOVE FINISHED GRADE.
SL3	SITE LIGHTING TYPE II DISTRIBUTION	POLE	LITHONIA LIGHTING RSX2-LED-P1-40K-R2-MVOLT-RPA-PE-DMG-PIRHN OR APPROVED EQUAL	LED 80 CRI, 11031 LUMENS 4000K CCT	---	73	277	MOUNT FIXTURE 39' ABOVE FINISHED GRADE.
SL4	SITE LIGHTING TYPE IV DISTRIBUTION	POLE	LITHONIA LIGHTING RSX2-LED-P2-40K-R4-MVOLT-RPA-PE-DMG-PIRHN OR APPROVED EQUAL	LED 80 CRI, 17427 LUMENS 4000K CCT	---	111	277	MOUNT FIXTURE 39' ABOVE FINISHED GRADE.
W1	EXTERIOR WALL PACK.	EXTERIOR WALL	LITHONIA LIGHTING WST LED P1 40K VW MVOLT OR APPROVED EQUAL	LED 70 CRI, 1500 LUMENS 4000K CCT	---	12	MVOLT	
W1E	EXTERIOR WALL PACK - PROVIDE WITH 90 MINUTE BATTERY BACKUP	EXTERIOR WALL	LITHONIA LIGHTING WST LED P1 40K VW MVOLT OR APPROVED EQUAL	LED 70 CRI, 1500 LUMENS 4000K CCT	---	12	MVOLT	

FILE NAME: BIM 360/HF PACKAGE 3P1338.MEF SIM CTR-1590892-E-01

PLOTTED: 8/19/2021 7:46:14 AM



APPR	DATE
SYN	DESCRIPTION
	
	
	
	
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E IN/PS APPROVED	
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE	
SATISFACTORY TO DATE DES 50    DRW 144    CHK 193	
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION	
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION MCB CAMP LEJEUNE    JACKSONVILLE, NC P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT ELECTRICAL - LIGHTING FIXTURE SCHEDULE	
SCALE: AS NOTED EPROJCT NO.: 1590892 CONSTR. CONTR. NO. N40085-20-C-0059 NAVFAC DRAWING NO. SHEET    OF	
<b>E-601</b>	

DP1 UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED



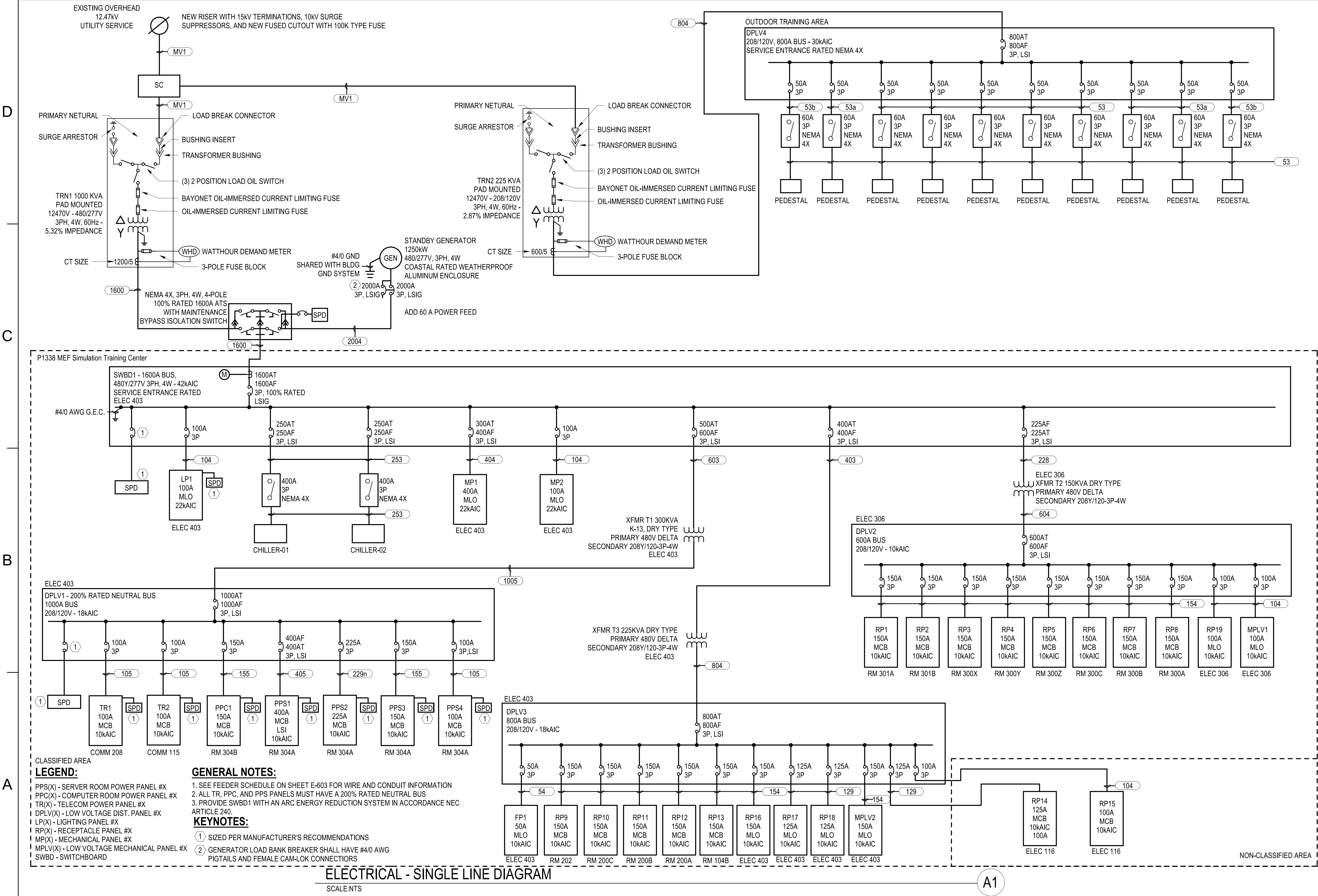
1

2

3

4

5



ELECTRICAL - SINGLE LINE DIAGRAM

SCALE:NTS

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SLM\_CTR-450902-E-01 PLOTTED: 8/19/2021 7:46:16 AM

- CLASSIFIED AREA**
- LEGEND:**
- PPS(X) - SERVER ROOM POWER PANEL #X
  - PPC(X) - COMPUTER ROOM POWER PANEL #X
  - TR(X) - TELECOM POWER PANEL #X
  - DPLV(X) - LOW VOLTAGE DIST. PANEL #X
  - LP(X) - LIGHTING PANEL #X
  - RP(X) - RECEPTACLE PANEL #X
  - MP(X) - MECHANICAL PANEL #X
  - MPLV(X) - LOW VOLTAGE MECHANICAL PANEL #X
  - SWBD - SWITCHBOARD

- GENERAL NOTES:**
- SEE FEEDER SCHEDULE ON SHEET E-603 FOR WIRE AND CONDUIT INFORMATION
  - ALL TR, PPC, AND PPS PANELS MUST HAVE A 200% RATED NEUTRAL BUS
  - PROVIDE SWBD1 WITH AN ARC ENERGY REDUCTION SYSTEM IN ACCORDANCE NEC ARTICLE 240.
- KEYNOTES:**
- SIZED PER MANUFACTURER'S RECOMMENDATIONS
  - GENERATOR LOAD BANK BREAKER SHALL HAVE #4/0 AWG PIGTAILS AND FEMALE CAM-LOK CONNECTIONS

SYMBOL	DESCRIPTION	DATE	APPROVED

**PRELIMINARY FOR REFERENCE ONLY**

**Michael Baker INTERNATIONAL**

100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E IN/PS

APPROVED

FOR COMMANDER NAVFAC

ACTIVITY: MARINE CORPS BASE CAMP LEJEUNE

SATISFACTORY TO DATE

DESIGN: DRW/MLK CHK: YRS

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVFAC DRAWING NO. JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT

ELECTRICAL - SINGLE LINE DIAGRAM

SCALE: AS NOTED

PROJECT NO.: 1509092

CONSTR. CONTR. NO.: N40085-20-C-0059

NAVFAV DRAWING NO.

SHEET OF

**E-602**

DPI UPDATES WITH DP2 FINAL SUBMISSION







GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

FED FROM: LOCATION: ELEC 403 MOUNT: FLOOR

**PANEL SWBD1**

1600 A MAIN CIRCUIT BREAKER 3PH 4WIRE 480Y/277V 42K AIC GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	55.42			3	300	* MP1	2
3	--	--	--	--		0.00	55.42		--	--	--	4
5	--	--	--	--			0.00	55.42		--	--	6
7	LP1	1	100	3	8.46	80.16	8.78	80.70	3	225	4 T2	8
9	--	--	--	--					--	--	--	10
11	--	--	--	--			8.45	80.45	--	--	--	12
13	MP2	1	100	3	16.73	50.77			3	250	* CHILLER CH-01	14
15	--	--	--	--		16.73	50.77		--	--	--	16
17	--	--	--	--			16.73	50.77		--	--	18
19	T1	*	500	3	71.15	0.00			3	225	SPARE	20
21	--	--	--	--		70.40	0.00		--	--	--	22
23	--	--	--	--			72.19	0.00	--	--	--	24
25	T3	*	400	3	100.57	0.00			3	400	SPARE	26
27	--	--	--	--		96.69	0.00		--	--	--	28
29	--	--	--	--			96.13	0.00	--	--	--	30
31	CHILLER CH-02	*	250	3	50.77	0.00			--	--	PROVISIONED SPACE	32
33	--	--	--	--		50.77	0.00		--	--	PROVISIONED SPACE	34
35	--	--	--	--			50.77	0.00	--	--	PROVISIONED SPACE	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	PROVISIONED SPACE	38
39	PROVISIONED SPACE	--	--	--					--	--	PROVISIONED SPACE	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	PROVISIONED SPACE	42
TOTAL					434.0	430.3	430.9				KVA	
CONNECTED LOAD					1567.2	1553.3	1556.0				AMPS	
NEC ARTICLE 220					1295.2		1557.9				AMPS	
DEMAND LOAD					872.1		1048.9				AMPS	
Load Classification					Connected Load	Demand Factor	Estimated Demand	Panel Totals				
Equipment					221848 VA	100.00%	221848 VA	Total Conn. Load: 1295206 VA				
Power					2360 VA	100.00%	2360 VA	Total Est. Demand: 872070 VA				
RECEPT					475120 VA	51.05%	242560 VA	Total Conn.: 1558 A				
LTG					25689 VA	75.00%	19266 VA	Total Est. Demand: 1049 A				
Water Heater					720 VA	100.00%	720 VA					
UFC-MOTOR-25%					25362 VA	25.00%	6341 VA					
UFC-MOTOR-30%					84764 VA	30.00%	25429 VA					
UFC-HVAC-70%					144801 VA	70.00%	101361 VA					
UFC-HEATER-80%					7162 VA	80.00%	5730 VA					
UFC-CHILLER-80%					304619 VA	80.00%	243695 VA					
FIRE PROTECTION - 100%					2760 VA	100.00%	2760 VA					

FED FROM: T1 LOCATION: ELEC 403 MOUNT: SURFACE

**PANEL DPLV1**

1000 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 18K AIC GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	3.00			3	100	1 PPS4	2
3	--	--	--	--		0.00	3.00		--	--	--	4
5	--	--	--	--			0.00	2.00	--	--	--	6
7	TR2	1	100	3	2.72	3.40	2.86	3.56	3	100	1 TR1	8
9	--	--	--	--					--	--	--	10
11	--	--	--	--			3.42	4.44	--	--	--	12
13	PPC1	1/0	150	3	6.15	9.98			3	150	1/0 PPS3	14
15	--	--	--	--		6.08	10.00		--	--	--	16
17	--	--	--	--			5.33	10.00	--	--	--	18
19	PPS2	4/0	225	3	17.90	28.00	17.90	27.00	3	400	* PPS1	20
21	--	--	--	--			18.00	29.00	--	--	--	22
23	--	--	--	--					--	--	--	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			3	100	SPARE	26
27	PROVISIONED SPACE	--	--	--					--	--	--	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	30
31	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	PROVISIONED SPACE	32
33	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	PROVISIONED SPACE	34
35	PROVISIONED SPACE	--	--	--				0.00	0.00	--	PROVISIONED SPACE	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	PROVISIONED SPACE	38
39	PROVISIONED SPACE	--	--	--				0.00	0.00	--	PROVISIONED SPACE	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	PROVISIONED SPACE	42
TOTAL					71.1	70.4	72.2				KVA	
CONNECTED LOAD					593.8	586.7	602.5				AMPS	
NEC ARTICLE 220					213.7		593.3				AMPS	
DEMAND LOAD					205.9		571.7				AMPS	
Load Classification					Connected Load	Demand Factor	Estimated Demand	Panel Totals				
Equipment					184500 VA	100.00%	184500 VA	Total Conn. Load: 213732 VA				
RECEPT					20080 VA	74.90%	15040 VA	Total Est. Demand: 205946 VA				
UFC-HVAC-70%					9152 VA	70.00%	6406 VA	Total Conn.: 593 A				
								Total Est. Demand: 572 A				

FED FROM: T2 LOCATION: ELEC 306 MOUNT: SURFACE

**PANEL DPLV2**

600 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 10K AIC GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	MPLV1	1	100	3	3.62	8.28			3	150	1/0 RP1	2
3	--	--	--	--		3.44	8.64		--	--	--	4
5	--	--	--	--			3.55	8.64	--	--	--	6
7	RP2	1/0	150	3	8.64	8.64	8.64	8.64	3	150	1/0 RP3	8
9	--	--	--	--			8.64	8.64	--	--	--	10
11	--	--	--	--			8.64	8.64	--	--	--	12
13	RP4	1/0	150	3	8.64	8.64	8.64	8.64	3	150	1/0 RP5	14
15	--	--	--	--		8.64	8.64		--	--	--	16
17	--	--	--	--			8.64	8.64	--	--	--	18
19	RP6	1/0	150	3	8.64	8.64	8.64	8.64	3	150	1/0 RP7	20
21	--	--	--	--		8.64	8.64		--	--	--	22
23	--	--	--	--			8.64	8.64	--	--	--	24
25	RP8	1/0	150	3	8.64	7.78	8.64	8.14	3	100	1 RP19	26
27	--	--	--	--			8.64	7.78	--	--	--	28
29	--	--	--	--			8.64	7.78	--	--	--	30
31	SPARE	--	150	3	0.00	0.00			3	150	SPARE	32
33	--	--	--	--		0.00	0.00		--	--	--	34
35	--	--	--	--			0.00	0.00	--	--	--	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	PROVISIONED SPACE	38
39	PROVISIONED SPACE	--	--	--					--	--	PROVISIONED SPACE	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	PROVISIONED SPACE	42
TOTAL					80.2	80.7	80.4				KVA	
CONNECTED LOAD					668.0	672.9	670.8				AMPS	
NEC ARTICLE 220					241.3		669.8				AMPS	
DEMAND LOAD					126.0		349.8				AMPS	
Load Classification					Connected Load	Demand Factor	Estimated Demand	Panel Totals				
Equipment					2880 VA	100.00%	2880 VA	Total Conn. Load: 241304 VA				
RECEPT					230700 VA	52.17%	120350 VA	Total Est. Demand: 126012 VA				
UFC-MOTOR-25%					6176 VA	25.00%	1544 VA	Total Conn.: 670 A				
UFC-HEATER-80%					1548 VA	80.00%	1238 VA	Total Est. Demand: 350 A				

FED FROM: T3 LOCATION: ELEC 403 MOUNT: SURFACE

**PANEL DPLV3**

800 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 18K AIC GROUND BAR


CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	FP1	6	50	3	0.78	7.20			3	150	1/0 RP13	2
3	--	--	--	--		1.14	6.48		--	--	--	4
5	--	--	--	--			1.20	5.76	--	--	--	6
7	MPLV2	1/0	150	3	12.45	8.93	10.61	8.67	3	125	1/0 RP18	8
9	--	--	--	--			11.65	8.03	--	--	--	10
11	--	--	--	--			8.60	10.85	--	--	--	12
13	RP17	1/0	125	3	8.64	10.80	8.35	10.98	3	150	1/0 RP16	14
15	--	--	--	--			9.66	8.64	--	--	--	16
17	--	--	--	--			8.64	8.64	--	--	--	18
19	RP14	1/0	125	3	9.67	8.64	9.48	8.64	3	150	1/0 RP10	20
21	--	--	--	--			9.66	8.64	--	--	--	22
23	--	--	--	--			8.64	8.64	--	--	--	24
25	RP11	1/0	150	3	8.64	8.64	8.64	8.64	3	150	1/0 RP12	26
27	--	--	--	--			8.64	8.64	--	--	--	28
29	--	--	--	--			8.64	8.64	--	--	--	30
31	RP9	1/0	150	3	8.64	7.56	8.64	6.30	3	100	1 RP15	32
33	--	--	--	--		8.64	6.30		--	--	--	34
35	--	--	--	--			8.64	5.94	--	--	--	36
37	SPARE	--	150	3	0.00	0.00			3	200	SPARE	38
39	--	--	--	--					--	--	--	40
41	--	--	--	--			0.00	0.00	--	--	--	42
TOTAL					100.6	96.7	96.1				KVA	
CONNECTED LOAD					838.8	806.4	801.1				AMPS	
NEC ARTICLE 220					293.4		814.4				AMPS	
DEMAND LOAD					167.9		466.0				AMPS	
Load Classification					Connected Load	Demand Factor	Estimated Demand	Panel Totals				
Equipment					34468 VA	100.00%	34468 VA	Total Conn. Load: 293389 VA				
Power					2360 VA	100.00%	2360 VA	Total Est. Demand: 167896 VA				
RECEPT					224340 VA	52.23%	117170 VA	Total Conn.: 814 A				
Water Heater					720 VA	100.00%	720 VA	Total Est. Demand: 466 A				
UFC-MOTOR-25%					16360 VA	25.00%	4090 VA					
UFC-MOTOR-30%					6282 VA	30.00%	1885 VA					
UFC-HVAC-70%					4359 VA	70.00%	3052 VA					
UFC-HEATER-80%					1740 VA	80.00%	1392 VA					
FIRE PROTECTION - 100%					2760 VA	100.00%	2760 VA					

PLotted: 8/19/2021 7:46:20 AM


FILE NAME: BIM\_360/HF PACKAGE\_3P11338\_MEF\_SIM\_CTR-159082-E-V1

APPR DATE

SYN DESCRIPTION



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E/IN/P  
APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DESIGN DRW/CHK

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVFACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DIVISION  
JACKSONVILLE, NC

NAVFACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE  
P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT  
ELECTRICAL - PANEL SCHEDULES

SCALE: AS NOTED  
E-PROJECT NO.: 159082  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.  
SHEET OF  
**E-604**

DPI UPDATES WITH DP2 FINAL SUBMISSION

UNCLASSIFIED



GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

800 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
30K AIC  
GROUND BAR

FED FROM: LOCATION: MOUNT: FLOOR

### PANEL DPLV4

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	PEDESTAL 1	3	50	3	4.80	4.80			3	50	4	PEDESTAL 2	2
3	--	--	--	--		4.80	4.80		--	--	--	--	4
5	--	--	--	--			4.80	4.80	--	--	--	--	6
7	PEDESTAL 3	6	50	3	4.80	4.80			3	50	6	PEDESTAL 4	8
9	--	--	--	--		4.80	4.80		--	--	--	--	10
11	--	--	--	--			4.80	4.80	--	--	--	--	12
13	PEDESTAL 5	6	50	3	4.80	4.80			3	50	6	PEDESTAL 6	14
15	--	--	--	--		4.80	4.80		--	--	--	--	16
17	--	--	--	--			4.80	4.80	--	--	--	--	18
19	PEDESTAL 7	6	50	3	4.80	4.80			3	50	4	PEDESTAL 8	20
21	--	--	--	--		4.80	4.80		--	--	--	--	22
23	--	--	--	--			4.80	4.80	--	--	--	--	24
25	PEDESTAL 9	4	50	3	4.80	4.80			3	50	3	PEDESTAL 10	26
27	--	--	--	--		4.80	4.80		--	--	--	--	28
29	--	--	--	--			4.80	4.80	--	--	--	--	30
31	SPARE	--	50	3	0.00	0.00			3	50	--	SPARE	32
33	--	--	--	--		0.00	0.00		--	--	--	--	34
35	--	--	--	--			0.00	0.00	--	--	--	--	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	38
39	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	42
TOTAL					48.0	48.0	48.0				KVA		
CONNECTED LOAD					400.3	400.3	400.3				AMPS		
DEMAND LOAD					144.1		400.0				AMPS		
DEMAND LOAD					144.1		400.0				AMPS		
NEC ARTICLE 220													
Load Classification													
Equipment					144107 VA	100.00%	144107 VA						
Panel Totals													
Total Conn. Load:					144107 VA								
Total Est. Demand:					144107 VA								
Total Conn.:					400 A								
Total Est. Demand:					400 A								

100 A MAIN LUG ONLY  
3PH 4WIRE 480Y/277V  
22K AIC  
GROUND BAR

FED FROM: SWBD1  
LOCATION: ELEC 403  
MOUNT: SURFACE

### PANEL LP1

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	0.13			1	20	12	LTG - EXTERIOR CANOPIES	2
3	--	--	--	--		0.00	0.35		1	20	10	SITE LIGHTING (CKT D)	4
5	--	--	--	--			0.00	0.55	1	20	10	SITE LIGHTING (CKT C)	6
7	SITE LIGHTING (CKT E)	6	20	1	0.55	1.17			1	20	4	SITE LIGHTING (CKT F)	8
9	LTG COR C030	12	20	1		0.63	2.30					LTG RM 304B, 303B, 303A, 302, 209, 205, 206, 204, G020,...	10
11	SITE LIGHTING (CKT B)	10	20	1			1.10	1.52	1	20	10	SITE LIGHTING (CKT A)	12
13	LTG RM 300B, 300A, 300Y, 300X	12	20	1	2.08	1.21						LTG RM C020, C022, C021, C023	14
15	LTG RM 301A, 301B, 304A	12	20	1		2.64	2.82					LTG RM 402, 401, 400, 118	16
17	LTG RM 106, 105, 108, G011, G012, G010, 110	12	20	1			1.80	3.40	1	20	12	LTG RM 202, 201, 203, 200B, 200A, 200C	18
19	LTG RM 102, 101, L010, 100	12	20	1	0.97	2.25						LTG RM 300C, 300Z, C032, C034, C031, C030, 306	20
21	SPARE	--	20	1			0.00	0.06	1	20	12	LTG BUILDING MOUNTED	22
23	SPARE	--	20	1			0.00	0.07	1	20	12	LTG BUILDING MOUNTED	24
25	SPARE	--	20	1	0.00	0.10			1	20	12	LCP RM 403	26
27	SPARE	--	20	1			0.00	0.00	--	--	--	PROVISIONED SPACE	28
29	SPARE	--	20	1			0.00	0.00	--	--	--	PROVISIONED SPACE	30
TOTAL					8.5	8.8	8.4				KVA		
CONNECTED LOAD					30.5	31.7	30.5				AMPS		
DEMAND LOAD					25.7		30.9				AMPS		
DEMAND LOAD					19.3		23.2				AMPS		
NEC ARTICLE 220													
Load Classification													
LTG					25689 VA	75.00%	19266 VA						
Panel Totals													
Total Conn. Load:					25689 VA								
Total Est. Demand:					19266 VA								
Total Conn.:					31 A								
Total Est. Demand:					23 A								

PROVIDE SHUNT TRIP CIRCUIT  
BREAKER ON CIRCUITS FEEDING  
CRAC UNITS.

400 A MAIN LUG ONLY  
3PH 4WIRE 480Y/277V  
22K AIC  
GROUND BAR

FED FROM: SWBD1  
LOCATION: ELEC 403  
MOUNT: SURFACE

### PANEL MP1

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	AHU-01 (SUPPLY FAN) RM MECHANICAL 400	10	30	3	3.88	0.94			3	15	12	AHU-01 (EXHASUT FAN) RM MECHANICAL 400	2
3	--	--	--	--		3.88	0.94		--	--	--	--	4
5	--	--	--	--			3.88	0.94	--	--	--	--	6
7	AHU-02 (SUPPLY FAN) RM MECHANICAL 400	2/0	175	3	22.17	2.27			3	15	12	AHU-02 (EXHASUT FAN) RM MECHANICAL 400	8
9	--	--	--	--		22.17	2.27		--	--	--	--	10
11	--	--	--	--			22.17	2.27	--	--	--	--	12
13	BP-1 RM MECH (HOT) 401	12	20	3	0.44	0.44			3	20	12	BP-2 RM MECH (HOT) 401	14
15	--	--	--	--		0.44	0.44		--	--	--	--	16
17	--	--	--	--			0.44	0.44	--	--	--	--	18
19	BP-3 RM MECH (HOT) 401	12	20	3	0.44	11.09			3	50	6	P-01 RM MECHANICAL 400	20
21	--	--	--	--		0.44	11.09		--	--	--	--	22
23	--	--	--	--			0.44	11.09	--	--	--	--	24
25	P-02 MECHANICAL 400	6	50	3	11.09	1.33			3	20	12	P-03 RM MECH (HOT) 401	26
27	--	--	--	--		11.09	1.33		--	--	--	--	28
29	--	--	--	--			11.09	1.33	--	--	--	--	30
31	SPARE	--	20	3	0.00	1.33			3	20	12	P-04 RM MECH (HOT) 401	32
33	--	--	--	--		0.00	1.33		--	--	--	--	34
35	--	--	--	--			0.00	1.33	--	--	--	--	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			3	20	--	SPARE	38
39	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	--	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	--	42
TOTAL					55.4	55.4	55.4				KVA		
CONNECTED LOAD					200.1	200.1	200.1				AMPS		
DEMAND LOAD					166.3		200.0				AMPS		
DEMAND LOAD					85.0		102.2				AMPS		
NEC ARTICLE 220													
Load Classification													
UFC-MOTOR-30%					78482 VA	30.00%	23545 VA						
UFC-HVAC-70%					87792 VA	70.00%	61454 VA						
Panel Totals													
Total Conn. Load:					166274 VA								
Total Est. Demand:					84999 VA								
Total Conn.:					200 A								
Total Est. Demand:					102 A								

100 A MAIN LUG ONLY  
3PH 4WIRE 480Y/277V  
22K AIC  
GROUND BAR

FED FROM: SWBD1  
LOCATION: ELEC 403  
MOUNT: SURFACE

### PANEL MP2

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	EUH-01 RM ELEC 402	12	20	3	1.29	4.83			3	25	10	CRAC-01 RM SIM CONTROL (SERVER ROOM) 304A	2
3	--	--	--	--		1.29	4.83		--	--	--	--	4
5	--	--	--	--			1.29	4.83	--	--	--	--	6
7	CRAC-02 RM SIM CONTROL (SERVER ROOM) 304A	10	25	3	4.83	4.83			3	25	10	CRAC-03 RM SIM CONTROL (SERVER ROOM) 304A	8
9	--	--	--	--		4.83	4.83		--	--	--	--	10
11	--	--	--	--			4.83	4.83	--	--	--	--	12
13	EF-02 RM ELEC 403	12	20	3	0.94	0.00			3	25	--	SPARE	14
15	--	--	--	--		0.94	0.00		--	--	--	--	16
17	--	--	--	--			0.94	0.00	--	--	--	--	18
19	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	20
21	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	22
23	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
31	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	32
33	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	34
35	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	36
37	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	38
39	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	40
41	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	42
TOTAL					16.7	16.7	16.7				KVA		
CONNECTED LOAD					60.4	60.4	60.4				AMPS		
DEMAND LOAD					50.2		60.4				AMPS		
DEMAND LOAD					34.3		41.2				AMPS		
NEC ARTICLE 220													
Load Classification													
UFC-MOTOR-25%					2826 VA	25.00%	707 VA						
UFC-HVAC-70%					43498 VA	70.00%	30449 VA						
UFC-HEATER-80%					3874 VA	80.00%	3099 VA						
Panel Totals													
Total Conn. Load:					50198 VA								
Total Est. Demand:					34255 VA								
Total Conn.:					60 A								
Total Est. Demand:					41 A								

8/19/2021 7:46:22 AM

BIM 360/HF PACKAGE 3P1338 MEF SIM CTR-450082-E-01

APPR	
DATE	
DESCRIPTION	
SYM	
SEAL	



GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

FED FROM: DPLV2  
LOCATION: ELEC 306  
MOUNT: SURFACE

**PANEL MPLV1**

100 A MAIN LUG ONLY  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	J-BOX VAV 24V POWER RM BREAK ROOM 206	12	20	1	0.18	0.30			1	20	12	LOUVER LOW VOLTAGE POWER ELEC 306	2
3	J-BOX VAV 24V POWER RM EXERCISE CONTROL 202	12	20	1		1.00	1.44		1	20	15	RIGHT TURNSTILE GATE POWER SUPPLY	4
5	J-BOX VAV 24V POWER RM LOBBY/VEST L010	12	20	1			1.00	1.55	1	20	12	EPH-02 RM ELEC 306	6
7	EF-04 RM ELEC 306	12	20	1	0.70	1.44			1	15	12	LEFT TURNSTILE GATE POWER SUPPLY	8
9	J-BOX VAV 24V POWER RM SIM. CLASSROOM 300Y	12	20	1		1.00	0.00		--	--	--	PROVISIONED SPACE	10
11	J-BOX VAV 24V POWER RM SIM. CLASSROOM 301A	12	20	1			1.00	0.00	--	--	--	PROVISIONED SPACE	12
13	J-BOX VAV 24V POWER RM SIM. CLASSROOM 200C	12	20	1	1.00	0.00			--	--	--	PROVISIONED SPACE	14
15	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	16
17	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	18
19	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	20
21	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	22
23	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
31	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	32
33	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	34
35	SPARE	--	20	1			0.00	0.00	--	--	--	PROVISIONED SPACE	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1					1	20	--	SPARE	42
TOTAL					3.6	3.4	3.5				KVA		
CONNECTED LOAD					30.3	28.7	29.7				AMPS		
DEMAND LOAD					10.6		29.4				AMPS		
NEC ARTICLE 220					5.7		15.7				AMPS		
<b>Load Classification</b>		<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>					
Equipment		2880 VA		100.00%		2880 VA		<b>Total Conn. Load:</b> 10604 VA					
UFC-MOTOR-25%		6176 VA		25.00%		1544 VA		<b>Total Est. Demand:</b> 5662 VA					
UFC-HEATER-80%		1548 VA		80.00%		1238 VA		<b>Total Conn.:</b> 29 A					
								<b>Total Est. Demand:</b> 16 A					

FED FROM: DPLV3  
LOCATION: ELEC 403  
MOUNT: SURFACE

**PANEL MPLV2**

150 A MAIN LUG ONLY  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	UH-01 RM MECHANICAL 400	12	20	1	0.10	0.50			1	20	12	J-BOX LOUVER 24V POWER MECH (HOT) 401	2
3	UH-02 RM MECH (HOT) 401	12	20	1		0.10	0.86		1	20	12	LOUVER L-01B RM MECHANICAL 400	4
5	RP-1 RM MECH (HOT) 401	12	20	1			0.37	0.70	1	20	12	EF-3 RM ELEC 116	6
7	DEHUMIDIFIER DEH-01 RM MECHANICAL 400	12	20	1	0.77	1.18			1	20	12	EF-1 RM MEN G025	8
9	J-BOX LOUVER 24V POWER ELEC 116/403/	12	20	1		0.90	1.00		1	20	12	J-BOX VAV 24V POWER RM FIRE ROOM 104B	10
11	J-BOX VAV 24V POWER RM 109	12	20	1			1.00	1.18	1	20	12	SF-1 RM MECHANICAL 400	12
13	EPH-01 RM ELEC 116	12	20	1	1.55	0.36			1	20	12	GWH-1 MECH (HOT) 401	14
15	LOUVERS L-01A RM MECHANICAL 400	12	20	1		0.86	2.00		1	20	12	CHILLER HEAT TRACE CNTRL PANEL RM MECHANICAL...	16
17	GENERATOR JACKET WATER HEATER WITH PUMP	4	60	2			4.26	0.36	1	20	12	J-BOX FOR DDC CONTROLLER MECHANICAL 400	18
19		--	--	--	4.26	0.59			1	15	12	BOILER B-01 RM MECH (HOT) 401	20
21	GENERATOR CHARGER	12	20	1		1.92	0.92		2	25	10	SSCU-01	22
23	BOILER B-03 RM MECH (HOT) 401	12	15	1			0.59	0.92	--	--	--		24
25	LOUVER L-02 RM MECHANICAL 400	12	20	1	0.86	1.18			1	20	12	LIFT GATE CIRCUIT 2	26
27	GWH-2 MECH (HOT) 401	12	20	1		0.36	0.59		1	15	12	BOILER B-02 RM MECH (HOT) 401	28
29	OH ROLL UP DOOR RM MECHANICAL 400	12	20	3			0.55	0.55	3	20	12	OH ROLL UP DOOR RM STORAGE/SHIP/RECEIVING 402	30
31		--	--	--	0.55	0.55			--	--	--		32
33		--	--	--		0.55	0.55		--	--	--		34
35	SPARE	--	15	1			0.00	1.18	1	20	12	LIFT GATE CIRCUIT 1	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1					1	20	--	SPARE	42
TOTAL					12.4	10.6	11.7				KVA		
CONNECTED LOAD					105.0	88.4	98.4				AMPS		
DEMAND LOAD					34.7		96.3				AMPS		
NEC ARTICLE 220					22.1		61.2				AMPS		
<b>Load Classification</b>		<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>					
Equipment		10448 VA		100.00%		10448 VA		<b>Total Conn. Load:</b> 34709 VA					
Power		2360 VA		100.00%		2360 VA		<b>Total Est. Demand:</b> 22056 VA					
Water Heater		720 VA		100.00%		720 VA		<b>Total Conn.:</b> 96 A					
UFC-MOTOR-25%		8800 VA		25.00%		2200 VA		<b>Total Est. Demand:</b> 61 A					
UFC-MOTOR-30%		6282 VA		30.00%		1885 VA							
UFC-HVAC-70%		4359 VA		70.00%		3052 VA							
UFC-HEATER-80%		1740 VA		80.00%		1392 VA							

FED FROM: DPLV3  
LOCATION: ELEC 403  
MOUNT: SURFACE


**PANEL FP1**

50 A MAIN LUG ONLY  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	AMPLIFIER RM 403	12	20	1	0.60	0.03			2	20	12	EPO BOX SIM CONTROL SECURE COMM 304B	2
3	FACP RM 403	12	20	1		0.96	0.03		--	--	--		4
5	POWER SUPPLY RM 403	12	20	1			0.60	0.60	1	20	12	TRANSMITTER PANEL RM 403	6
7	PROVISIONED SPACE	--	--	--	0.00	0.15			2	20	12	EPO BOXES SIM CONTROL (SERVER ROOM) 304A	8
9	PROVISIONED SPACE	--	--	--		0.00	0.15		--	--	--		10
11	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	12
13	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	14
15	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	16
17	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	18
19	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	20
21	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	22
23	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
TOTAL					0.8	1.1	1.2				KVA		
CONNECTED LOAD					6.5	9.9	10.5				AMPS		
DEMAND LOAD					3.1		8.6				AMPS		
NEC ARTICLE 220					3.1		8.6				AMPS		
<b>Load Classification</b>		<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>					
Equipment		350 VA		100.00%		350 VA		<b>Total Conn. Load:</b> 3110 VA					
FIRE PROTECTION - 100%		2760 VA		100.00%		2760 VA		<b>Total Est. Demand:</b> 3110 VA					
								<b>Total Conn.:</b> 9 A					
								<b>Total Est. Demand:</b> 9 A					


APPR  
DATE

SYN DESCRIPTION



**PRELIMINARY**  
FOR REFERENCE ONLY

SEAL



**Michael Baker**  
INTERNATIONAL

100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E IN P/D  
APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50	DRW/50	CHK 1/50
--------	--------	----------

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NORFOLK, VA

JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER  
REPLACEMENT

**ELECTRICAL - PANEL SCHEDULES**

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCB CAMP LEJEUNE

SCALE: AS NOTED  
EPROJCT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.  
SHEET OF

**E-606**

DPI UPDATES WITH DP2 FINAL SUBMISSION

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-1590892-E-01 PLOTTED: 8/19/2021 7:46:24 AM



GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

FED FROM: DPLV2  
LOCATION: SIMULATION CLASSROOM 301A  
MOUNT: RECESSED

**PANEL RP1**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	FLOOR BOXES RM 301A	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301A	2
3	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	4
5	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	6
7	FLOOR BOXES RM 301A	10	20	1	0.72	0.36			1	20	FLOOR BOXES RM 301A	8
9	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	10
11	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	12
13	FLOOR BOXES RM 301A	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301A	14
15	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	16
17	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	18
19	FLOOR BOXES RM 301A	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301A	20
21	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	22
23	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	24
25	FLOOR BOXES RM 301A	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301A	26
27	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	28
29	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	30
31	FLOOR BOXES RM 301A	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301A	32
33	FLOOR BOXES RM 301A	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301A	34
35	FLOOR BOXES RM 301A	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301A	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
TOTAL					8.3	8.6			8.6	KVA		
CONNECTED LOAD					69.0	72.5			72.5	AMPS		
DEMAND LOAD					25.6	KVA			70.9	AMPS		
					17.8	KVA			49.4	AMPS		
NEC ARTICLE 220		Connected Load		Demand Factor		Estimated Demand		Panel Totals				
RECEPT		25560 VA		69.56%		17780 VA						
								Total Conn. Load: 25560 VA				
								Total Est. Demand: 17780 VA				
								Total Conn.: 71 A				
								Total Est. Demand: 49 A				

FED FROM: DPLV2  
LOCATION: SIMULATION CLASSROOM 301B  
MOUNT: RECESSED

**PANEL RP2**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	2
3	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	4
5	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	6
7	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	8
9	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	10
11	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	12
13	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	14
15	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	16
17	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	18
19	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	20
21	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	22
23	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	24
25	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	26
27	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	28
29	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	30
31	FLOOR BOXES RM 301B	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 301B	32
33	FLOOR BOXES RM 301B	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 301B	34
35	FLOOR BOXES RM 301B	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 301B	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
TOTAL					8.6	8.6			8.6	KVA		
CONNECTED LOAD					72.0	72.0			72.0	AMPS		
DEMAND LOAD					25.9	KVA			71.9	AMPS		
					18.0	KVA			49.9	AMPS		
NEC ARTICLE 220		Connected Load		Demand Factor		Estimated Demand		Panel Totals				
RECEPT		25920 VA		69.29%		17960 VA						
								Total Conn. Load: 25920 VA				
								Total Est. Demand: 17960 VA				
								Total Conn.: 72 A				
								Total Est. Demand: 50 A				

FED FROM: DPLV2  
LOCATION: SIMULATION CLASSROOM 300X  
MOUNT: RECESSED

**PANEL RP3**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	2
3	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	4
5	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	6
7	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	8
9	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	10
11	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	12
13	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	14
15	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	16
17	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	18
19	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	20
21	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	22
23	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	24
25	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	26
27	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	28
29	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	30
31	FLOOR BOXES RM 300X	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300X	32
33	FLOOR BOXES RM 300X	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300X	34
35	FLOOR BOXES RM 300X	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300X	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
TOTAL					8.6	8.6			8.6	KVA		
CONNECTED LOAD					72.0	72.0			72.0	AMPS		
DEMAND LOAD					25.9	KVA			71.9	AMPS		
					18.0	KVA			49.9	AMPS		
NEC ARTICLE 220		Connected Load		Demand Factor		Estimated Demand		Panel Totals				
RECEPT		25920 VA		69.29%		17960 VA						
								Total Conn. Load: 25920 VA				
								Total Est. Demand: 17960 VA				
								Total Conn.: 72 A				
								Total Est. Demand: 50 A				

FED FROM: DPLV2  
LOCATION: SIMULATION CLASSROOM 300Y  
MOUNT: RECESSED

**PANEL RP4**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	2
3	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	4
5	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	6
7	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	8
9	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	10
11	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	12
13	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	14
15	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	16
17	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	18
19	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	20
21	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	22
23	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	24
25	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	26
27	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	28
29	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	30
31	FLOOR BOXES RM 300Y	10	20	1	0.72	0.72			1	20	FLOOR BOXES RM 300Y	32
33	FLOOR BOXES RM 300Y	10	20	1		0.72	0.72		1	20	FLOOR BOXES RM 300Y	34
35	FLOOR BOXES RM 300Y	10	20	1			0.72	0.72	1	20	FLOOR BOXES RM 300Y	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
TOTAL					8.6	8.6			8.6	KVA		
CONNECTED LOAD					72.0	72.0			72.0	AMPS		
DEMAND LOAD					25.9	KVA			71.9	AMPS		
					18.0	KVA			49.9	AMPS		
NEC ARTICLE 220		Connected Load		Demand Factor		Estimated Demand		Panel Totals				
RECEPT												



**GENERAL NOTES**  
 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.  
 2 \*SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

FED FROM: DPLV2  
 LOCATION: SIMULATION CLASSROOM 300Z  
 MOUNT: RECESSED

**PANEL RP5**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	2
3	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	4
5	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	6
7	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	8
9	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	10
11	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	12
13	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	14
15	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	16
17	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	18
19	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	20
21	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	22
23	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	24
25	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	26
27	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	28
29	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	30
31	FLOOR BOXES RM 300Z	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300Z	32
33	FLOOR BOXES RM 300Z	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300Z	34
35	FLOOR BOXES RM 300Z	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300Z	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	KVA					
CONNECTED LOAD					72.0	72.0	72.0	AMPS					
DEMAND LOAD					25.9	KVA	71.9	AMPS					
NEC ARTICLE 220					18.0	KVA	49.9	AMPS					
Load Classification					Connected Load		Demand Factor		Estimated Demand		Panel Totals		
RECEPT					25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA		
									Total Est. Demand: 17960 VA				
									Total Conn.: 72 A				
									Total Est. Demand: 50 A				

FED FROM: DPLV2  
 LOCATION: SIMULATION CLASSROOM 300C  
 MOUNT: RECESSED

**PANEL RP6**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	2
3	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	4
5	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	6
7	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	8
9	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	10
11	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	12
13	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	14
15	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	16
17	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	18
19	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	20
21	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	22
23	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	24
25	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	26
27	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	28
29	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	30
31	FLOOR BOXES RM 300C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300C	32
33	FLOOR BOXES RM 300C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300C	34
35	FLOOR BOXES RM 300C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300C	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	KVA					
CONNECTED LOAD					72.0	72.0	72.0	AMPS					
DEMAND LOAD					25.9	KVA	71.9	AMPS					
NEC ARTICLE 220					18.0	KVA	49.9	AMPS					
Load Classification					Connected Load		Demand Factor		Estimated Demand		Panel Totals		
RECEPT					25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA		
									Total Est. Demand: 17960 VA				
									Total Conn.: 72 A				
									Total Est. Demand: 50 A				

FED FROM: DPLV2  
 LOCATION: SIMULATION CLASSROOM 300B  
 MOUNT: RECESSED

**PANEL RP7**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	2
3	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	4
5	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	6
7	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	8
9	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	10
11	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	12
13	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	14
15	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	16
17	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	18
19	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	20
21	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	22
23	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	24
25	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	26
27	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	28
29	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	30
31	FLOOR BOXES RM 300B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300B	32
33	FLOOR BOXES RM 300B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300B	34
35	FLOOR BOXES RM 300B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300B	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	KVA					
CONNECTED LOAD					72.0	72.0	72.0	AMPS					
DEMAND LOAD					25.9	KVA	71.9	AMPS					
NEC ARTICLE 220					18.0	KVA	49.9	AMPS					
Load Classification					Connected Load		Demand Factor		Estimated Demand		Panel Totals		
RECEPT					25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA		
									Total Est. Demand: 17960 VA				
									Total Conn.: 72 A				
									Total Est. Demand: 50 A				

FED FROM: DPLV2  
 LOCATION: SIMULATION CLASSROOM 300A  
 MOUNT: RECESSED

**PANEL RP8**

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	2
3	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	4
5	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	6
7	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	8
9	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	10
11	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	12
13	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	14
15	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	16
17	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	18
19	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	20
21	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	22
23	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	24
25	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	26
27	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	28
29	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	30
31	FLOOR BOXES RM 300A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 300A	32
33	FLOOR BOXES RM 300A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 300A	34
35	FLOOR BOXES RM 300A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 300A	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	KVA					
CONNECTED LOAD					72.0	72.0	72.0	AMPS					
DEMAND LOAD					25.9	KVA	71.9	AMPS</					



GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

### PANEL RP9

FED FROM: DPLV3  
LOCATION: EXERCISE CONTROL 202  
MOUNT: RECESSED

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	2
3	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	4
5	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	6
7	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	8
9	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	10
11	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	12
13	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	14
15	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	16
17	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	18
19	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	20
21	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	22
23	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	24
25	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	26
27	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	28
29	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	30
31	FLOOR BOXES RM 202	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 202	32
33	FLOOR BOXES RM 202	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 202	34
35	FLOOR BOXES RM 202	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 202	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	8.6	KVA				
CONNECTED LOAD					72.0	72.0	72.0	72.0	AMPS				
DEMAND LOAD					25.9		71.9		KVA				
DEMAND LOAD					18.0		49.9		AMPS				
NEC ARTICLE 220				Connected Load		Demand Factor		Estimated Demand		Panel Totals			
Load Classification				25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA			
RECEPT										Total Est. Demand: 17960 VA			
										Total Conn.: 72 A			
										Total Est. Demand: 50 A			

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

### PANEL RP10

FED FROM: DPLV3  
LOCATION: SIMULATION CLASSROOM 200C  
MOUNT: RECESSED

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	2
3	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	4
5	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	6
7	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	8
9	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	10
11	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	12
13	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	14
15	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	16
17	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	18
19	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	20
21	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	22
23	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	24
25	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	26
27	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	28
29	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	30
31	FLOOR BOXES RM 200C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200C	32
33	FLOOR BOXES RM 200C	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200C	34
35	FLOOR BOXES RM 200C	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200C	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	8.6	KVA				
CONNECTED LOAD					72.0	72.0	72.0	72.0	AMPS				
DEMAND LOAD					25.9		71.9		KVA				
DEMAND LOAD					18.0		49.9		AMPS				
NEC ARTICLE 220				Connected Load		Demand Factor		Estimated Demand		Panel Totals			
Load Classification				25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA			
RECEPT										Total Est. Demand: 17960 VA			
										Total Conn.: 72 A			
										Total Est. Demand: 50 A			

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

### PANEL RP11

FED FROM: DPLV3  
LOCATION: SIMULATION CLASSROOM 200B  
MOUNT: RECESSED

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	2
3	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	4
5	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	6
7	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	8
9	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	10
11	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	12
13	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	14
15	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	16
17	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	18
19	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	20
21	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	22
23	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	24
25	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	26
27	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	28
29	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	30
31	FLOOR BOXES RM 200B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200B	32
33	FLOOR BOXES RM 200B	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200B	34
35	FLOOR BOXES RM 200B	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200B	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	--	SPARE	42
TOTAL					8.6	8.6	8.6	8.6	KVA				
CONNECTED LOAD					72.0	72.0	72.0	72.0	AMPS				
DEMAND LOAD					25.9		71.9		KVA				
DEMAND LOAD					18.0		49.9		AMPS				
NEC ARTICLE 220				Connected Load		Demand Factor		Estimated Demand		Panel Totals			
Load Classification				25920 VA		69.29%		17960 VA		Total Conn. Load: 25920 VA			
RECEPT										Total Est. Demand: 17960 VA			
										Total Conn.: 72 A			
										Total Est. Demand: 50 A			

150 A MAIN CIRCUIT BREAKER  
3PH 4WIRE 208Y/120V  
10K AIC  
GROUND BAR

### PANEL RP12

FED FROM: DPLV3  
LOCATION: SIMULATION CLASSROOM 200A  
MOUNT: RECESSED

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	2
3	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	4
5	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	6
7	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	8
9	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	10
11	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	12
13	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	14
15	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	16
17	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	18
19	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	20
21	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	22
23	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	24
25	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	26
27	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	28
29	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	30
31	FLOOR BOXES RM 200A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 200A	32
33	FLOOR BOXES RM 200A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 200A	34
35	FLOOR BOXES RM 200A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 200A	36
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	40
4													



**GENERAL NOTES**  
 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.  
 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

FED FROM: DPLV3  
 LOCATION: FIRE ROOM 104B  
 MOUNT: RECESSED

**PANEL RP13**

150 A MAIN CIRCUIT BREAKER  
 3PH 4WIRE 208Y/120V  
 10K AIC  
 GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	FLOOR BOXES RM 104A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104A	2
3	FLOOR BOXES RM 104A	10	20	1		0.72	0.72		1	20	10	FLOOR BOXES RM 104A	4
5	FLOOR BOXES RM 104A	10	20	1			0.72	0.72	1	20	10	FLOOR BOXES RM 104A	6
7	FLOOR BOXES RM 104A	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104A	8
9	FLOOR BOXES RM 104A	10	20	1					1	20	10	FLOOR BOXES RM 104B	10
11	FLOOR BOXES RM 104B	10	20	1					1	20	10	FLOOR BOXES RM 104B	12
13	FLOOR BOXES RM 104B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104B	14
15	FLOOR BOXES RM 104B	10	20	1					1	20	10	FLOOR BOXES RM 104B	16
17	FLOOR BOXES RM 104B	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104B	18
19	FLOOR BOXES RM 104C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104C	20
21	FLOOR BOXES RM 104C	10	20	1					1	20	10	FLOOR BOXES RM 104C	22
23	FLOOR BOXES RM 104C	10	20	1					1	20	10	FLOOR BOXES RM 104C	24
25	FLOOR BOXES RM 104C	10	20	1	0.72	0.72			1	20	10	FLOOR BOXES RM 104C	26
27	FLOOR BOXES RM 104C	10	20	1					1	20	-	SPARE	28
29	SPARE	-	-	-					1	20	-	SPARE	30
31	SPARE	-	-	-	0.00	0.00			1	20	-	SPARE	32
33	SPARE	-	-	-					1	20	-	SPARE	34
35	PROVISIONED SPACE	-	-	-					1	20	-	PROVISIONED SPACE	36
37	PROVISIONED SPACE	-	-	-	0.00	0.00			1	20	-	PROVISIONED SPACE	38
39	PROVISIONED SPACE	-	-	-					1	20	-	PROVISIONED SPACE	40
41	PROVISIONED SPACE	-	-	-					1	20	-	PROVISIONED SPACE	42
TOTAL					7.2	6.5	5.8				KVA		
CONNECTED LOAD					60.9	54.9	48.0				AMPS		
DEMAND LOAD					19.4	KVA	54.0				AMPS		
NEC ARTICLE 220					14.7	KVA	40.9				AMPS		
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals								
RECEPT		19440 VA	75.72%	14720 VA	Total Conn. Load: 19440 VA								
					Total Est. Demand: 14720 VA								
					Total Conn.: 54 A								
					Total Est. Demand: 41 A								

FED FROM: DPLV3  
 LOCATION: ELEC 116  
 MOUNT: SURFACE

**PANEL RP14**

125 A MAIN CIRCUIT BREAKER  
 3PH 4WIRE 208Y/120V  
 10K AIC  
 GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	RECEPT ELEC 116	12	20	1	0.54	0.85			1	20	12	COFFEE MAKER RM 108	2
3	RECEPT RM 107	12	20	1		0.54	0.72		1	20	12	RECEPT RM 402	4
5	RECEPT RM 402	12	20	1			0.72	1.08	1	20	12	RECEPT RM 400	6
7	MICROWAVE RM 108	12	20	1	1.65	1.65			1	20	12	MICROWAVE RM 108	8
9	RECEPT RM 105	12	20	1					1	20	12	RECEPT RM 106	10
11	RECEPT RM 108	12	20	1					1	20	12	VENDING MACHINE RM 108	12
13	RECEPT RM 109	12	20	1	0.72	0.90			1	20	12	RECEPT RM 103A	14
15	VENDING MACHINE RM 108	12	20	1					1	20	12	RECEPT RM 107	16
17	REFRIG RM 108	12	20	1					1	20	12	RECEPT RM 109	18
19	RECEPT RM 113	12	20	1	1.08	1.08			1	20	12	RECEPT RM 107	20
21	RECEPT RM 109	12	20	1					1	20	12	RECEPT RM 114	22
23	RECEPT RM 401 / RM 118	12	20	1					1	20	12	RECEPT RM 112	24
25	COPIER RM 105	12	20	1	1.20	0.00			1	20	-	PROVISIONED SPACE	26
27	RECEPT RM 111	12	20	1					1	20	12	COPIER RM 106	28
29	COPIER RM 109	12	20	1					1	20	-	PROVISIONED SPACE	30
31	PROVISIONED SPACE	-	-	-	0.00	0.00			1	20	-	PROVISIONED SPACE	32
33	PROVISIONED SPACE	-	-	-					1	20	-	PROVISIONED SPACE	34
35	PROVISIONED SPACE	-	-	-					1	20	-	SPARE	36
37	SPARE	-	-	-	0.00	0.00			1	20	-	SPARE	38
39	SPARE	-	-	-					1	20	-	SPARE	40
41	SPARE	-	-	-					1	20	-	SPARE	42
TOTAL					9.7	9.5	9.7				KVA		
CONNECTED LOAD					80.8	79.0	80.7				AMPS		
DEMAND LOAD					28.8	KVA	80.0				AMPS		
NEC ARTICLE 220					25.1	KVA	69.6				AMPS		
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals								
RECEPT		11350 VA	100.00%	11350 VA	Total Conn. Load: 28810 VA								
Equipment		17460 VA	78.64%	13730 VA	Total Est. Demand: 25080 VA								
					Total Conn.: 80 A								
					Total Est. Demand: 70 A								

FED FROM: DPLV3  
 LOCATION: ELEC 116  
 MOUNT: SURFACE

**PANEL RP15**

100 A MAIN CIRCUIT BREAKER  
 3PH 4WIRE 208Y/120V  
 10K AIC  
 GROUND BAR

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	REFRIG RM 110	12	20	1	0.18	0.72			1	20	12	ELEC WATER COOLER COR. C011	2
3	LAVATORY / WATER CLOSET RM G012	12	20	1		0.36	0.72		1	20	12	RECEPT MOTHER'S ROOM 110	4
5	SYSTEMS FURNITURE RM 107	12	20	1			1.08	0.72	1	20	12	SYSTEMS FURNITURE RM 109	6
7	RECEPT COR. C011 / COR. C012 / COR. C014 / COR...	12	20	1	1.26	0.72			1	20	12	SYSTEMS FURNITURE RM 106	8
9	RECEPT RM G011, G010, G012	12	20	1		0.90	0.72		1	20	12	SYSTEMS FURNITURE RM 107	10
11	SYSTEMS FURNITURE RM 107	12	20	1					1	20	12	SYSTEMS FURNITURE RM 109	12
13	LAVATORY / URINAL / WATER CLOSET RM G010	12	20	1	1.44	1.08			1	20	12	SYSTEMS FURNITURE RM 109	14
15	LAVATORY / WATER CLOSET RM G011	12	20	1		1.44	1.08		1	20	12	SYSTEMS FURNITURE RM 109	16
17	RECEPT EXTERIOR	12	20	1			0.54	1.08	1	20	12	SYSTEMS FURNITURE RM 109	18
19	SYSTEMS FURNITURE RM 109	12	20	1	1.08	1.08			1	20	12	SYSTEMS FURNITURE RM 109	20
21	SYSTEMS FURNITURE RM 107	12	20	1		1.08	0.00		1	20	-	PROVISIONED SPACE	22
23	PROVISIONED SPACE	-	-	-					1	20	-	PROVISIONED SPACE	24
25	SPARE	-	-	-	0.00	0.00			1	20	-	PROVISIONED SPACE	26
27	SPARE	-	-	-					1	20	-	SPARE	28
29	SPARE	-	-	-					1	20	-	SPARE	30
TOTAL					7.6	6.3	5.9				KVA		
CONNECTED LOAD					63.5	53.0	49.5				AMPS		
DEMAND LOAD					19.8	KVA	55.0				AMPS		
NEC ARTICLE 220					14.5	KVA	40.4				AMPS		
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals								
Equipment		900 VA	100.00%	900 VA	Total Conn. Load: 19800 VA								
RECEPT		15660 VA	81.93%	12830 VA	Total Est. Demand: 14540 VA								
UFC-MOTOR-25%		3240 VA	25.00%	810 VA	Total Conn.: 55 A								
					Total Est. Demand: 40 A								

FED FROM: DPLV3  
 LOCATION: ELEC 403  
 MOUNT: SURFACE

**PANEL RP16**

150 A MAIN LUG ONLY  
 3PH 4WIRE 208Y/120V  
 10K AIC  
 GROUND BAR


CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	RECEPT TV RM 206	12	20	1	0.18	0.50			1	20	12	AV FLAT PANELS RM 207	2
3	LAVATORY / WATER CLOSET RM G020	12	20	1		0.36	0.36		1	20	12	RECEPT RM 205	4
5	COFFEE POT RM 206	12	20	1			0.85	1.08	1	20	12	RECEPT FIRE ROOM 104C	6
7	COPIER RM 205	12	20	1	1.20	0.41			1	20	12	AV FLAT PANELS RM 104A, 104B, 104C	8
9	RECEPT CORR C013, C020, C021, C022, C023	12	20	1		1.08	0.54		1	20	12	RECEPT FIRE ROOM 104B	10
11	RECEPT RM G025	12	20	1			0.54	0.72	1	20	12	WATER CLOSET RM G024	12
13	RECEPT RM 403	12	20	1	0.72	0.72			1	20	12	ELEC WATER COOLER COR C023	14
15	REFRIG RM 206	12	20	1		0.72	0.72		1	20	12	RECEPT FIRE ROOM 104A	16
17	RECEPT RM 206	12	20	1			0.72	0.90	1	20	12	RECEPT RM 204, G024, G020, G021	18
19	LAVATORY RM G021, G024	12	20	1	0.90	1.00			1	20	12	RECEPT FIRE ROOM 104B	20
21	LAVATORY RM G025	12	20	1		0.90	1.00		1	30	10	RECEPT FIRE ROOM 104C	22
23	RECEPT FIRE ROOM 104C	12	20	1			1.00	1.00	1	30	10	RECEPT FIRE ROOM 104B	24
25	RECEPT FIRE ROOM 104A	10	30	1	1.00	1.08			1	20	12	RECEPT RM 206	26
27	RECEPT FIRE ROOM 104A	12	20	1		1.00	1.08		1	20	12	RECEPT RM 207	28
29	RECEPT RM 207	12	20	1			1.08	1.44	1	20	12	URINAL / WATER CLOSET RM G025	30
31	RECEPT RM 207	12	20	1	1.44	1.65			1	20	12	MICROWAVE RM 206	32
33	RECEPT RM 207	12	20	1		1.44	1.65		1	20	12	MICROWAVE RM 206	34
35	MICROWAVE RM 206	12	20	1			1.65	0.00	1	20	-	SPARE	36
37	SPARE	-	-	-	0.00	0.00			1	20	-	SPARE	38
39	SPARE	-	-	-			0.00	0.00	1	20	-	SPARE	40
41	SPARE	-	-	-					1	20	-	SPARE	42
TOTAL					10.8	10.9	11.0				KVA		
CONNECTED LOAD					90.0	90.5	91.6				AMPS		
DEMAND LOAD					32.6	KVA	90.6				AMPS		
NEC ARTICLE 220					24.5	KVA	67.9				AMPS		
Load Classification		Connected Load	Demand Factor	Estimated Demand	Panel Totals								
Equipment		8440 VA	100.00%	8440 VA	Total Conn. Load: 32625 VA								
RECEPT		19865 VA	75.17%	14933 VA	Total Est. Demand: 24453 VA								
UFC-MOTOR-25%		4320 VA	25.00%	1080 VA	Total Conn.: 91 A								
					Total Est. Demand: 68 A								

PLOTTED: 8/19/2021 7:46:54 AM

FILE NAME: BIM\_360/HF PACKAGE 3P1338.MEF\_SIM CTR-4590892-E-4


APPR: \_\_\_\_\_ DATE: \_\_\_\_\_

SYN DESCRIPTION



**PRELIMINARY**  
FOR REFERENCE ONLY

SEAL



**Michael Baker INTERNATIONAL**  
 100 AIRSIDE DRIVE  
 MOON TOWNSHIP, PA 15108 A/E INF/0  
 APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
 MARINE CORPS BASE  
 CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50 \_\_\_\_\_ DRW/44 \_\_\_\_\_ CHK 1/53 \_\_\_\_\_

BRANCH MANAGER \_\_\_\_\_

CHIEF ENGINEER \_\_\_\_\_

FIRE PROTECTION \_\_\_\_\_

NAVFAC DESIGN AND CONSTRUCTION

NAVFAC JACKSONVILLE, NC

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND

P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT

ELECTRICAL - PANEL SCHEDULES

DP1 UPDATES WITH DP2 FINAL SUBMISSION

SCALE: AS NOTED  
 EPROJECT NO.: 1590892  
 CONSTR. CONTR. NO. N40085-20-C-0059  
 NAVFAC DRAW



1

2

UNCLASSIFIED

3

4

5

**GENERAL NOTES**  
 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.  
 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

**125 A MAIN LUG ONLY**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

**PANEL RP17**

FED FROM: DPLV3  
 LOCATION: ELEC 403  
 MOUNT: SURFACE

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	RECEPT COR C022	12	20	1	0.18	0.50		1	20	12	AV FLAT PANELS RM 202	2
3	RECEPT TIMEZONE CLOCK 200B	12	20	1		0.18	0.36		1	20	RECEPT EXTERIOR	4
5	AV FLAT PANEL RM 209	12	20	1			0.25	1.08	1	20	RECEPT RM 200B	6
7	AV FLAT PANEL RM 200B	12	20	1	0.65	0.65			1	20	AV FLAT PANEL RM 200C	8
9	AV FLAT PANELS RM 303B	12	20	1		0.50	0.72		1	20	RECEPT RM 200C	10
11	RECEPT RM 200C	12	20	1			1.08	0.18	1	20	RECEPT TIMEZONE CLOCK RM 200C	12
13	RECEPT RM 200B	12	20	1	0.72	0.18			1	20	RECEPT TIMEZONE CLOCK COR C020	14
15	RECEPT RM 200B	12	20	1		0.90	0.18		1	20	RECEPT TIMEZONE CLOCK COR C022	16
17	RECEPT RM 303B	12	20	1			0.72	0.72	1	20	RECEPT RM 302	18
19	RECEPT RM 302	12	20	1	0.72	0.72			1	20	RECEPT RM 200C	20
21	RECEPT RM 303B	12	20	1		0.72	0.72		1	20	RECEPT RM 209	22
23	RECEPT RM 303B	12	20	1			0.90	0.90	1	20	RECEPT RM 209	24
25	RECEPT RM 303A	12	20	1	0.90	0.90			1	20	RECEPT RM 202	26
27	RECEPT RM 303A	12	20	1		0.90	0.90		1	20	RECEPT RM 203	28
29	RECEPT RM 202	12	20	1			1.08	1.44	1	20	VENDING MACHINE RM 206	30
31	RECEPT RM 202	12	20	1	1.08	1.44			1	20	SYSTEMS FURNITURE RM 302	32
33	RECEPT RM 202	12	20	1		1.08	1.44		1	20	VENDING MACHINE RM 206	34
35	PROVISIONED SPACE	--	--	--			0.00	0.00	1	20	SPARE	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
					TOTAL	8.6	8.6	8.4		KVA		
					CONNECTED LOAD	72.3	72.0	69.6		AMPS		
					DEMAND LOAD	25.6	KVA	71.0		AMPS		
					DEMAND LOAD	19.2	KVA	53.4		AMPS		
<b>NEC ARTICLE 220</b>					<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>	
<b>Equipment</b>					2880 VA		100.00%		2880 VA		<b>Total Conn. Load:</b>	25590 VA
<b>RECEPT</b>					22710 VA		72.02%		16355 VA		<b>Total Est. Demand:</b>	19235 VA
											<b>Total Conn.:</b>	71 A
											<b>Total Est. Demand:</b>	53 A

**125 A MAIN LUG ONLY**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

**PANEL RP18**

FED FROM: DPLV3  
 LOCATION: ELEC 403  
 MOUNT: SURFACE

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	AV FLAT PANEL RM 101	12	20	1	0.65	0.65		1	20	12	AV FLAT PANEL RM 102	2
3	RECEPT RM 101	12	20	1		1.08	1.08		1	20	RECEPT RM 102	4
5	RECEPT RM 102	12	20	1			1.08	1.08	1	20	RECEPT RM 200A	6
7	RECEPT RM 201	12	20	1	0.72	1.08			1	20	RECEPT RM 101	8
9	RECEPT TIMEZONE CLOCK RM 300A	12	20	1		0.18	0.18		1	20	RECEPT TIMEZONE CLOCK COR 034	10
11	RECEPT TIMEZONE CLOCK RM 300X	12	20	1			0.18	0.18	1	20	RECEPT TIMEZONE CLOCK COR C020	12
13	RECEPT TIMEZONE CLOCK RM 200A	12	20	1	0.18	0.14			1	20	RECEPT TIMEZONE CLOCK RM L010	14
15	AV FLAT PANEL RM 300A	12	20	1		0.65	0.90		1	20	RECEPT RM 300A	16
17	AV FLAT PANEL RM 300X	12	20	1			0.65	0.90	1	20	RECEPT RM 300X	18
19	AV FLAT PANEL RM 200A	12	20	1	0.65	0.90			1	20	RECEPT RM 201	20
21	RECEPT RM 201	12	20	1		0.90	0.90		1	20	RECEPT RM 101	22
23	RECEPT RM 201	12	20	1			0.90	0.90	1	20	RECEPT RM 102	24
25	RECEPT RM 200A	12	20	1	0.90	0.90			1	20	RECEPT RM 100	26
27	RECEPT RM 300X	12	20	1		1.08	1.08		1	20	RECEPT RM 300A	28
29	RECEPT RM L010	12	20	1			1.08	1.08	1	20	RECEPT RM 300A	30
31	RECEPT RM 300X	12	20	1	1.08	1.08			1	20	RECEPT RM 200A	32
33	RECEPT STOR. 110A	12	20	1		0.54	0.10		1	20	SHUNT TRIP CIRCUIT RM 304A / RM 304B	34
35	PROVISIONED SPACE	--	--	--			0.00	0.00	1	20	SPARE	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
					TOTAL	8.9	8.7	8.0		KVA		
					CONNECTED LOAD	75.2	73.1	66.9		AMPS		
					DEMAND LOAD	25.6	KVA	71.1		AMPS		
					DEMAND LOAD	17.9	KVA	49.6		AMPS		
<b>NEC ARTICLE 220</b>					<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>	
<b>Equipment</b>					100 VA		100.00%		100 VA		<b>Total Conn. Load:</b>	25625 VA
<b>RECEPT</b>					25525 VA		69.59%		17763 VA		<b>Total Est. Demand:</b>	17863 VA
											<b>Total Conn.:</b>	71 A
											<b>Total Est. Demand:</b>	50 A


**100 A MAIN LUG ONLY**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

**PANEL RP19**


FED FROM: DPLV2  
 LOCATION: ELEC 306  
 MOUNT: SURFACE

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT
1	RECEPT TIMEZONE CLOCK COR C030	12	20	1	0.18	0.36		1	20	12	RECEPT RM 306	2
3	RECEPT TIMEZONE CLOCK COR C034	12	20	1		0.18	0.90		1	20	RECEPT COR C031, C034	4
5	RECEPT RM 305	12	20	1			0.36	0.72	1	20	RECEPT RM 301A	6
7	RECEPT RM 301B	12	20	1	0.72	0.90			1	20	RECEPT COR C020, C030, C031	8
9	RECEPT RM 300B	12	20	1		1.08	0.18		1	20	RECEPT TIMEZONE CLOCK RM 301A	10
11	RECEPT RM 300C	12	20	1			1.08	0.18	1	20	RECEPT TIMEZONE CLOCK RM 301B	12
13	RECEPT TIMEZONE CLOCK RM 300Z	12	20	1	0.18	0.18			1	20	RECEPT TIMEZONE CLOCK RM 300B	14
15	RECEPT TIMEZONE CLOCK RM 300C	12	20	1		0.18	0.65		1	20	AV FLAT PANEL RM 301A	16
17	RECEPT TIMEZONE CLOCK RM 300Y	12	20	1			0.18	0.65	1	20	AV FLAT PANEL RM 301B	18
19	AV FLAT PANEL RM 300Z	12	20	1	0.65	0.65			1	20	AV FLAT PANEL RM 300B	20
21	AV FLAT PANEL RM 300C	12	20	1		0.65	0.90		1	20	RECEPT RM 301B	22
23	AV FLAT PANEL RM 300Y	12	20	1			0.65	0.90	1	20	RECEPT RM 301B	24
25	RECEPT RM 301A	12	20	1	0.90	0.90			1	20	RECEPT RM 300C	26
27	RECEPT RM 300Z	12	20	1		0.90	1.08		1	20	RECEPT RM 301B	28
29	RECEPT RM 301A	12	20	1			0.90	1.08	1	20	RECEPT SIMULATION CLASSROOM 300Z	30
31	RECEPT RM 301A	12	20	1	1.08	1.08			1	20	RECEPT RM 300C	32
33	RECEPT RM 300Y	12	20	1		1.08	0.36		1	20	RECEPT EXTERIOR	34
35	SPARE	--	20	1			0.00	1.08	1	20	RECEPT RM 300Z	36
37	SPARE	--	20	1	0.00	0.00			1	20	SPARE	38
39	SPARE	--	20	1		0.00	0.00		1	20	SPARE	40
41	SPARE	--	20	1			0.00	0.00	1	20	SPARE	42
					TOTAL	7.8	8.1	7.8		KVA		
					CONNECTED LOAD	64.8	67.8	64.8		AMPS		
					DEMAND LOAD	23.7	KVA	65.8		AMPS		
					DEMAND LOAD	16.9	KVA	46.8		AMPS		
<b>NEC ARTICLE 220</b>					<b>Connected Load</b>		<b>Demand Factor</b>		<b>Estimated Demand</b>		<b>Panel Totals</b>	
<b>Equipment</b>					23700 VA		71.10%		16850 VA		<b>Total Conn. Load:</b>	23700 VA
<b>RECEPT</b>											<b>Total Est. Demand:</b>	16850 VA
											<b>Total Conn.:</b>	66 A
											<b>Total Est. Demand:</b>	47 A

APPR  
DATE  
SYN DESCRIPTION  
SEAL



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker**  
INTERNATIONAL

100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E INF/0  
APPROVED

FOR COMMANDER NAVFAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50 DRW/44 CHK 193

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
MCF CAMP LEJEUNE  
JACKSONVILLE, NC

**P1338 II MEF SIMULATION/TRAINING CENTER**  
REPLACEMENT

**ELECTRICAL - PANEL SCHEDULES**

SCALE: AS NOTED  
EPROJCT NO.: 1590892  
CONSTR. CONTR. NO.: N40085-20-C-0059  
NAVFAC DRAWING NO.  
SHEET OF

**E-611**

DPI UPDATES WITH DP2 FINAL SUBMISSION

1

2

UNCLASSIFIED

3

4

5

PLOTTED: 8/19/2021 7:46:36 AM

FILE NAME: BIM 360/HF PACKAGE 3P1338.MEF SIM CTR-1590892-E-41



GENERAL NOTES

- 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.
- 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

**100 A MAIN CIRCUIT BREAKER**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

FED FROM: DPLV1  
LOCATION: COMM 208  
MOUNT: SURFACE

### PANEL TR1

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	SURGE PROTECTIVE DEVICE	--	20	3	0.00	0.18			1	20	12	RECEPT TELECOM RACK RM 208	2
3	--	--	--	--		0.00	0.72		1	20	12	RECEPT RM 208	4
5	--	--	--	--			0.00	2.50	2	30	10	TELECOM RACK RM 208	6
7	RECEPT TELECOM RACK RM 208	12	20	1	0.18	2.50			--	--	--	--	8
9	RECEPT TELECOM RACK RM 208	12	20	1		0.18	1.58		2	25	10	SSCU-02	10
11	RECEPT TELECOM RACK RM 208	12	20	1			0.18	1.58	--	--	--	--	12
13	RECEPT TELECOM RACK RM 208	12	20	1	0.18	0.18			1	20	12	RECEPT TELECOM RACK RM 208	14
15	RECEPT RM 208	12	20	1		0.72	0.18		1	20	12	RECEPT TELECOM RACK RM 208	16
17	RECEPT TELECOM RACK RM 208	12	20	1			0.18	0.00	1	20	--	SPARE	18
19	RECEPT TELECOM RACK RM 208	12	20	1	0.18	0.00			1	20	--	SPARE	20
21	RECEPT TELECOM RACK RM 208	12	20	1		0.18	0.00		1	20	--	SPARE	22
23	SPARE	--	20	2			0.00	0.00	--	--	--	PROVISIONED SPACE	24
25	--	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26
27	SPARE	--	20	1		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
TOTAL					3.4	3.6	4.4						
CONNECTED LOAD					28.3	29.9	37.2						
DEMAND LOAD					11.4	KVA	31.6						
DEMAND LOAD					10.5	KVA	29.0						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
RECEPT	8240 VA	100.00%	8240 VA	Total Conn. Load: 11402 VA Total Est. Demand: 10453 VA Total Conn.: 32 A Total Est. Demand: 29 A
UFC-HVAC-70%	3162 VA	70.00%	2213 VA	

NEC ARTICLE 220

PROVIDE 150A MCB FOR PANEL  
PPC1 WITH SHUNT TRIP

**150 A MAIN CIRCUIT BREAKER**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

FED FROM: DPLV1  
LOCATION: SIM CONTROL SECURE COMM 304B  
MOUNT: SURFACE

### PANEL PPC1

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	0.90			1	20	12	RECEPT RM 304B	2
3	--	--	--	--		0.00	1.00		1	20	12	RECEPT RACK RM 304B	4
5	--	--	--	--			0.00	1.00	1	20	12	RECEPT RACK RM 304B	6
7	RECEPT RACK RM 304B	12	20	1	1.00	1.00			1	20	12	RECEPT RACK RM 304B	8
9	RECEPT RACK RM 304B	12	20	1		1.00	2.08		2	30	10	SSCU-03	10
11	RECEPT RACK RM 304B	10	30	2			1.25	2.08	--	--	--	--	12
13	--	--	--	--	1.25	1.00			1	20	12	RECEPT RACK RM 304B	14
15	RECEPT RACK RM 304B	12	20	1		1.00	0.00		2	30	--	SPARE	16
17	RECEPT RACK RM 304B	12	20	1			1.00	0.00	--	--	--	--	18
19	RECEPT RACK RM 304B	12	20	1	1.00	0.00			1	20	--	SPARE	20
21	RECEPT RACK RM 304B	12	20	1		1.00	0.00		1	20	--	SPARE	22
23	PROVISIONED SPACE	--	--	--			0.00	0.00	1	20	--	SPARE	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			1	20	--	SPARE	26
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
TOTAL					6.2	6.1	5.3						
CONNECTED LOAD					52.2	KVA	44.4						
DEMAND LOAD					17.6	KVA	48.7						
DEMAND LOAD					16.3	KVA	45.3						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	12500 VA	100.00%	12500 VA	Total Conn. Load: 17560 VA Total Est. Demand: 16312 VA Total Conn.: 49 A Total Est. Demand: 45 A
RECEPT	900 VA	100.00%	900 VA	
UFC-HVAC-70%	4160 VA	70.00%	2912 VA	

NEC ARTICLE 220

FILE NAME: BIM 360/HF PACKAGE 3P11338.MEF SIM CTR-1500892-E-1

**100 A MAIN CIRCUIT BREAKER**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**

FED FROM: DPLV1  
LOCATION: COMM 115  
MOUNT: SURFACE

### PANEL TR2

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	SURGE PROTECTIVE DEVICE	--	20	3	0.00	0.18			1	20	12	RECEPT TELECOM RACK RM 115	2
3	--	--	--	--		0.00	0.18		1	20	12	RECEPT TELECOM RACK RM 115	4
5	--	--	--	--			0.00	0.00	1	20	--	SPARE	6
7	RECEPT TELECOM RACK RM 115	12	20	1	0.18	0.18			1	20	12	RECEPT TELECOM RACK RM 115	8
9	RECEPT TELECOM RACK RM 115	12	20	1		0.18	2.50		2	30	10	TELECOM RACK RM 115	10
11	SPARE	--	20	1			0.00	2.50	--	--	--	--	12
13	RECEPT TELECOM RACK RM 115	12	20	1	0.18	1.08			1	20	12	RECEPT RM 115	14
15	SPARE	--	20	1		0.00	0.00		2	30	--	SPARE	16
17	HPCU-01	10	25	2			0.92	0.00	--	--	--	--	18
19	--	--	--	--	0.92	0.00			1	20	--	SPARE	20
21	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	22
23	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	24
25	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30
TOTAL					2.7	2.9	3.4						
CONNECTED LOAD					22.6	24.0	28.6						
DEMAND LOAD					9.0	KVA	25.0						
DEMAND LOAD					8.4	KVA	23.4						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
RECEPT	7160 VA	100.00%	7160 VA	Total Conn. Load: 8990 VA Total Est. Demand: 8441 VA Total Conn.: 25 A Total Est. Demand: 23 A
UFC-HVAC-70%	1830 VA	70.00%	1281 VA	

NEC ARTICLE 220

PROVIDE 400A MCB FOR PANEL  
PPS1 WITH SHUNT TRIP

**400 A MAIN CIRCUIT BREAKER**  
**3PH 4WIRE 208Y/120V**  
**10K AIC**  
**GROUND BAR**



FED FROM: DPLV1  
LOCATION: SIM CONTROL (SERVER ROOM) 304A  
MOUNT: SURFACE

### PANEL PPS1

CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT	
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	1.00			1	20	12	CACCTUS (U) RACK RM 304A	2
3	--	--	--	--		0.00	3.00		1	30	10	MTWS (C) UPS RM 304A	4
5	--	--	--	--			0.00	3.00	1	30	10	MTWS (C) UPS RM 304A	6
7	CACCTUS (U) RACK RM 304A	12	20	1	1.00	2.00			1	15	12	CACCTUS (U) UPS RM 304A	8
9	MTWS (C) UPS RM 304A	10	30	1		3.00	5.00		2	70	4	CACCTUS (U) UPS RM 304A	10
11	MTWS (U) RACK RM 304A	12	20	1			1.00	5.00	--	--	--	--	12
13	MTWS (C) UPS RM 304A	10	30	1	3.00	1.00			1	20	12	MTWS (U) RACK RM 304A	14
15	MTWS (U) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	CACCTUS (U) RACK RM 304A	16
17	CACCTUS (U) UPS RM 304A	4	70	2			5.00	1.00	1	20	12	MTWS (C) RACK RM 304A	18
19	--	--	--	--	5.00	1.00			1	20	12	CACCTUS (U) RACK RM 304A	20
21	CACCTUS (U) UPS RM 304A	12	15	1		2.00	3.00		1	30	10	MTWS (U) UPS RM 304A	22
23	CACCTUS (U) UPS RM 304A	12	15	1			2.00	3.00	1	30	10	MTWS (U) UPS RM 304A	24
25	CACCTUS (U) UPS RM 304A	12	15	1	2.00	3.00			1	30	10	MTWS (U) UPS RM 304A	26
27	MTWS (U) UPS RM 304A	10	30	1		3.00	3.00		1	30	10	MTWS (U) UPS RM 304A	28
29	MTWS (U) UPS RM 304A	10	30	1			3.00	3.00	1	30	10	MTWS (U) UPS RM 304A	30
31	MTWS (U) UPS RM 304A	10	30	1	3.00	3.00			1	30	10	MTWS (U) UPS RM 304A	32
33	SPARE	--	20	1		0.00	3.00		1	30	10	MTWS (C) UPS RM 304A	34
35	SPARE	--	20	1			0.00	3.00	1	30	10	MTWS (C) UPS RM 304A	36
37	SPARE	--	15	1	0.00	3.00			1	30	10	MTWS (C) UPS RM 304A	38
39	SPARE	--	70	2		0.00	0.00		1	20	--	SPARE	40
41	--	--	--	--			0.00	0.00	1	20	--	SPARE	42
TOTAL					28.0	27.0	29.0						
CONNECTED LOAD					234.6		242.9						
DEMAND LOAD					84.0	KVA	233.2						
DEMAND LOAD					84.0	KVA	233.2						

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Equipment	84000 VA	100.00%	84000 VA	Total Conn. Load: 84000 VA Total Est. Demand: 84000 VA Total Conn.: 233 A Total Est. Demand: 233 A

NEC ARTICLE 220

APPR		DATE		SYN		DESCRIPTION	
APPR		DATE		SYN		DESCRIPTION	
							
<p style="color: red; font-weight: bold; transform: rotate(-45deg);">PRELIMINARY FOR REFERENCE ONLY</p>							
							
<p><b>Michael Baker INTERNATIONAL</b></p> <p>100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E IN/PS</p>							
<p>FOR COMMANDER NAVFAC</p> <p>ACTIVITY</p> <p>MARINE CORPS BASE CAMP LEJEUNE</p> <p>SATISFACTORY TO DATE</p> <p>DES 50    DRWLAK    CHK YRS</p> <p>PM</p> <p>BRANCH MANAGER</p> <p>CHIEF ENGINEER</p> <p>FIRE PROTECTION</p>							
<p>NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND ATLANTIC DESIGN AND CONSTRUCTION NAVFAC CAMP LEJEUNE JACKSONVILLE, NC</p> <p>P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT</p> <p>ELECTRICAL - PANEL SCHEDULES</p>							
<p>SCALE: AS NOTED</p> <p>EPROJCT NO.: 1500892</p> <p>CONSTR. CONTR. NO. N40085-20-C-0059</p> <p>NAVFAC DRAWING NO.</p> <p>SHEET                      OF</p> <p style="font-size: 24pt; font-weight: bold;">E-612</p>							



**GENERAL NOTES**  
 1 SEE SHEET E-001 FOR ELECTRICAL NOTES, SYMBOLS, AND ABBREVIATIONS.  
 2 \* SEE E-603 FOR WIRE SIZES NOT INDICATED IN PANEL SCHEDULES.

PROVIDE 125A MCB FOR PANEL  
 PPS2 WITH SHUNT TRIP

225 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 10K AIC GROUND BAR														
FED FROM: DPLV1 LOCATION: SIM CONTROL (SERVER ROOM) 304A MOUNT: SURFACE														
PANEL PPS2														
CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT		
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	0.90			1	20	12	RECEPT RM 304A	2	
3	--	--	--	--		0.00	0.90		1	20	12	RECEPT RM 304A	4	
5	--	--	--	--			0.00	1.00	1	20	12	RECEPT TIE (U) RACK RM 304A	6	
7	CACCTUS (C) RACK RM 304A	12	20	1	1.00	3.00			1	30	10	MTWS (C) UPS RM 304A	8	
9	CACCTUS (C) UPS RM 304A	12	15	1		2.00	3.00		1	30	10	MTWS (C) UPS RM 304A	10	
11	TIE (U) UPS RM 304A	10	30	2			1.00	5.00	2	70	4	CACCTUS (C) UPS RM 304A	12	
13	--	--	--	--	1.00	5.00			--	--	--	--	14	
15	CACCTUS (C) UPS RM 304A	4	70	2		5.00	1.00		1	20	12	RECEPT TIE (U) RACK RM 304A	16	
17	--	--	--	--			5.00	1.00	1	20	12	RECEPT TIE (U) RACK RM 304A	18	
19	RECEPT TIE (U) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	RECEPT TIE (U) RACK RM 304A	20	
21	RECEPT TIE (U) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	RECEPT TIE (U) RACK RM 304A	22	
23	RECEPT TIE (U) RACK RM 304A	12	20	1			1.00	1.00	1	20	12	RECEPT TIE (U) RACK RM 304A	24	
25	RECEPT TIE (U) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	MTWS (C) RACK RM 304A	26	
27	MTWS (C) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	CACCTUS (C) RACK RM 304A	28	
29	CACCTUS (C) RACK RM 304A	12	20	1			1.00	0.00	--	--	--	PROVISIONED SPACE	30	
31	CACCTUS (C) RACK RM 304A	12	20	1	1.00	2.00			1	15	12	CACCTUS (C) UPS RM 304A	32	
33	SPARE	--	20	1		0.00	2.00		1	15	12	CACCTUS (C) UPS RM 304A	34	
35	SPARE	--	70	2			0.00	2.00	1	15	12	CACCTUS (C) UPS RM 304A	36	
37	--	--	--	--	0.00	0.00			1	20	--	SPARE	38	
39	SPARE	--	20	1		0.00	0.00		1	30	--	SPARE	40	
41	SPARE	--	20	1			0.00	0.00	1	30	--	SPARE	42	
TOTAL					17.9	17.9	18.0				KVA			
CONNECTED LOAD					149.2	149.2	150.0				AMPS			
DEMAND LOAD					53.8		149.3				AMPS			
DEMAND LOAD					53.8		149.3				AMPS			
NEC ARTICLE 220														
Load Classification														
Equipment					52000 VA	100.00%	52000 VA							
RECEPT					1800 VA	100.00%	1800 VA							
Panel Totals														
Total Conn. Load:					53800 VA									
Total Est. Demand:					53800 VA									
Total Conn.:					149 A									
Total Est. Demand:					149 A									


PROVIDE 125A MCB FOR PANEL  
 PPS3 WITH SHUNT TRIP

150 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 10K AIC GROUND BAR														
FED FROM: DPLV1 LOCATION: SIM CONTROL (SERVER ROOM) 304A MOUNT: SURFACE														
PANEL PPS3														
CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT		
1	SURGE PROTECTIVE DEVICE	--	20	3	0.00	0.90			1	20	12	RECEPT RM 304A	2	
3	--	--	--	--		0.00	1.00		1	20	12	RECEPT MCEN (U) RACK RM 304A	4	
5	--	--	--	--			0.00	1.00	1	20	12	RECEPT MCEN (U) RACK RM 304A	6	
7	RECEPT MCEN (U) RACK RM 304A	12	20	1	1.00	1.08			1	20	12	RECEPT RM 304A	8	
9	MCEN (U) UPS RM 304A	10	30	2		1.00	1.00		2	30	10	SIPR (C) UPS RM 304A	10	
11	--	--	--	--			1.00	1.00	--	--	--	--	12	
13	RECEPT TIE (C) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	RECEPT SIPR (C) RACK RM 304A	14	
15	RECEPT TIE (C) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	RECEPT SIPR (C) RACK RM 304A	16	
17	RECEPT TIE (C) RACK RM 304A	12	20	1			1.00	1.00	1	20	12	RECEPT TIE (C) RACK RM 304A	18	
19	RECEPT SIPR (C) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	RECEPT SIPR (C) RACK RM 304A	20	
21	RECEPT SIPR (C) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	RECEPT SIPR (C) RACK RM 304A	22	
23	RECEPT SIPR (C) RACK RM 304A	12	20	1			1.00	1.00	1	20	12	RECEPT SIPR (C) RACK RM 304A	24	
25	RECEPT MCEN (U) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	RECEPT MCEN (U) RACK RM 304A	26	
27	RECEPT SIPR (C) RACK RM 304A	12	20	1		1.00	1.00		1	20	12	RECEPT MCEN (U) RACK RM 304A	28	
29	RECEPT SIPR (C) RACK RM 304A	12	20	1			1.00	1.00	1	20	12	RECEPT MCEN (U) RACK RM 304A	30	
31	RECEPT MCEN (U) RACK RM 304A	12	20	1	1.00	0.00			--	--	--	PROVISIONED SPACE	32	
33	RECEPT MCEN (U) RACK RM 304A	12	20	1		1.00	0.00		1	20	--	SPARE	34	
35	RECEPT MCEN (U) RACK RM 304A	12	20	1			1.00	0.00	1	20	--	SPARE	36	
37	SPARE	--	20	1	0.00	0.00			1	20	--	SPARE	38	
39	SPARE	--	30	2		0.00	0.00		1	20	--	SPARE	40	
41	--	--	--	--			0.00	0.00	1	20	--	SPARE	42	
TOTAL					10.0	10.0	10.0				KVA			
CONNECTED LOAD					83.2	83.4	83.4				AMPS			
DEMAND LOAD					30.0		83.2				AMPS			
DEMAND LOAD					30.0		83.2				AMPS			
NEC ARTICLE 220														
Load Classification														
Equipment					28000 VA	100.00%	28000 VA							
RECEPT					1980 VA	100.00%	1980 VA							
Panel Totals														
Total Conn. Load:					29980 VA									
Total Est. Demand:					29980 VA									
Total Conn.:					83 A									
Total Est. Demand:					83 A									


100 A MAIN CIRCUIT BREAKER 3PH 4WIRE 208Y/120V 10K AIC GROUND BAR														
FED FROM: DPLV1 LOCATION: SIM CONTROL (SERVER ROOM) 304A MOUNT: SURFACE														
PANEL PPS4														
CKT	LOAD SERVED	WIRE	BRKR	PL	A	B	C	PL	BRKR	WIRE	LOAD SERVED	CKT		
1	SURGE PROTECTIVE DEVICE	--	30	3	0.00	1.00			1	20	12	RECEPT TIE (C) RACK RM 304A	2	
3	--	--	--	--		0.00	1.00		1	20	12	RECEPT TIE (C) RACK RM 304A	4	
5	--	--	--	--			0.00	1.00	1	20	12	RECEPT TIE (C) RACK RM 304A	6	
7	RECEPT TIE (C) RACK RM 304A	12	20	1	1.00	1.00			1	20	12	RECEPT TIE (C) RACK RM 304A	8	
9	RECEPT TIE (C) RACK RM 304A	12	20	1		1.00	1.00		2	30	10	TIE (C) US RM 304A	10	
11	SPARE	--	30	2			0.00	1.00	--	--	--	--	12	
13	--	--	--	--	0.00	0.00			1	20	--	SPARE	14	
15	SPARE	--	20	1		0.00	0.00		1	20	--	SPARE	16	
17	SPARE	--	20	1			0.00	0.00	--	--	--	PROVISIONED SPACE	18	
19	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	20	
21	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	22	
23	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	24	
25	PROVISIONED SPACE	--	--	--	0.00	0.00			--	--	--	PROVISIONED SPACE	26	
27	PROVISIONED SPACE	--	--	--		0.00	0.00		--	--	--	PROVISIONED SPACE	28	
29	PROVISIONED SPACE	--	--	--			0.00	0.00	--	--	--	PROVISIONED SPACE	30	
TOTAL					3.0	3.0	2.0				KVA			
CONNECTED LOAD					26.3	26.3	16.7				AMPS			
DEMAND LOAD					8.0		22.2				AMPS			
DEMAND LOAD					8.0		22.2				AMPS			
NEC ARTICLE 220														
Load Classification														
Equipment					8000 VA	100.00%	8000 VA							
Panel Totals														
Total Conn. Load:					8000 VA									
Total Est. Demand:					8000 VA									
Total Conn.:					22 A									
Total Est. Demand:					22 A									

APPR DATE

SYN DESCRIPTION



**PRELIMINARY**  
FOR REFERENCE ONLY



**Michael Baker INTERNATIONAL**  
100 AIRSIDE DRIVE  
MOON TOWNSHIP, PA 15108 A/E INF/0  
APPROVED

FOR COMMANDER NAVAC

ACTIVITY  
MARINE CORPS BASE  
CAMP LEJEUNE

SATISFACTORY TO DATE

DES 50 DRW/14K CHK 1/15

PM

BRANCH MANAGER

CHIEF ENGINEER

FIRE PROTECTION

DEPARTMENT OF THE NAVY  
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND  
ATLANTIC DESIGN AND CONSTRUCTION  
NAVFAC DRAWING NO. P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT JACKSONVILLE, NC

SCALE: AS NOTED  
EPROJCT NO.: 1500892  
CONSTR. CONTR. NO. N40085-20-C-0059  
SHEET OF

**E-613**

DP1 UPDATES WITH DP2 FINAL SUBMISSION

PLOTTED: 8/19/2021 7:46:40 AM  
 FILE NAME: BIM360/HF PACKAGE 3P1338 MEF SIM CTR-4500892-E-01