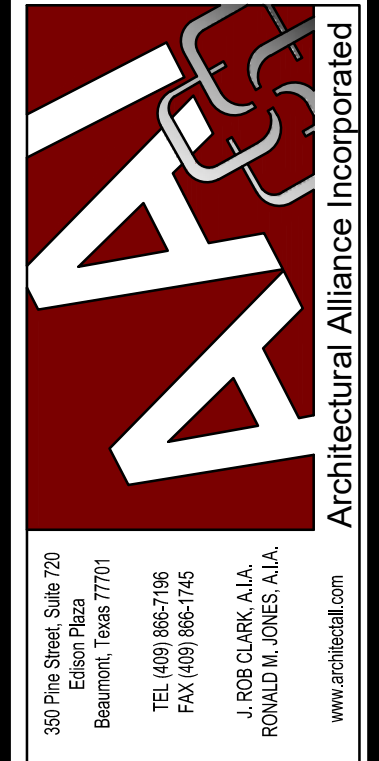


**LIGHT FIXTURES ENCLOSURE NOTES:**  
INSTALL 1-HOUR FIRE RESISTANCE RATINGS ANSI/UL 263/G256 ENCLOSURE FOR ALL CEILING RECESSED LIGHT FIXTURES LOCATED ON FIRST FLOOR CEILING, EXCEPT IN CLASSROOM 118-122, WALKWAY 129-130, SHELL SPACE 124 & ADA TLT 135-136. REFER TO ARCHITECTURAL DRAWINGS EXACT LOCATION OF FIRE RATED WALLS AND CEILINGS. PROVIDE ALL ACCESSORIES REQUIRED.

**1 LIGHTING - FIRST FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2021



ARCHITECT HAS REVIEWED THE CONSULTANT'S WORK AND COORDINATED IT WITH THE OVERALL PROJECT

**UNITED CHRISTIAN ACADEMY**

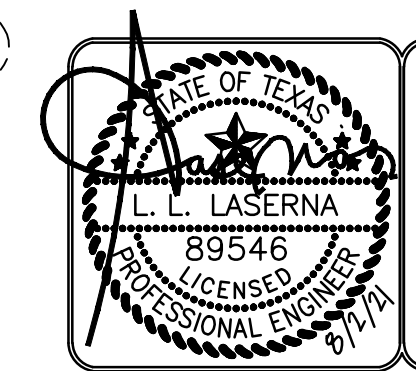
First Pentecostal Church

Highway 69

Nederland, TX 77627

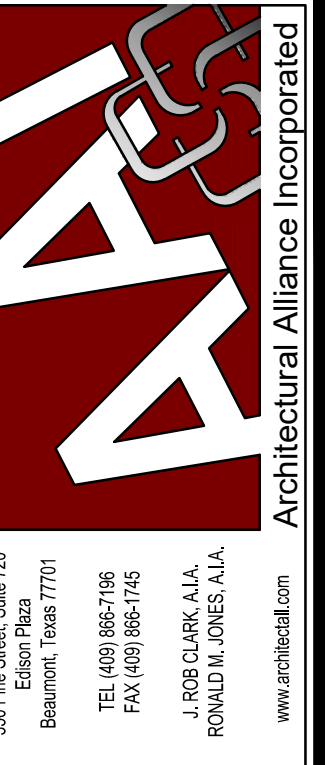
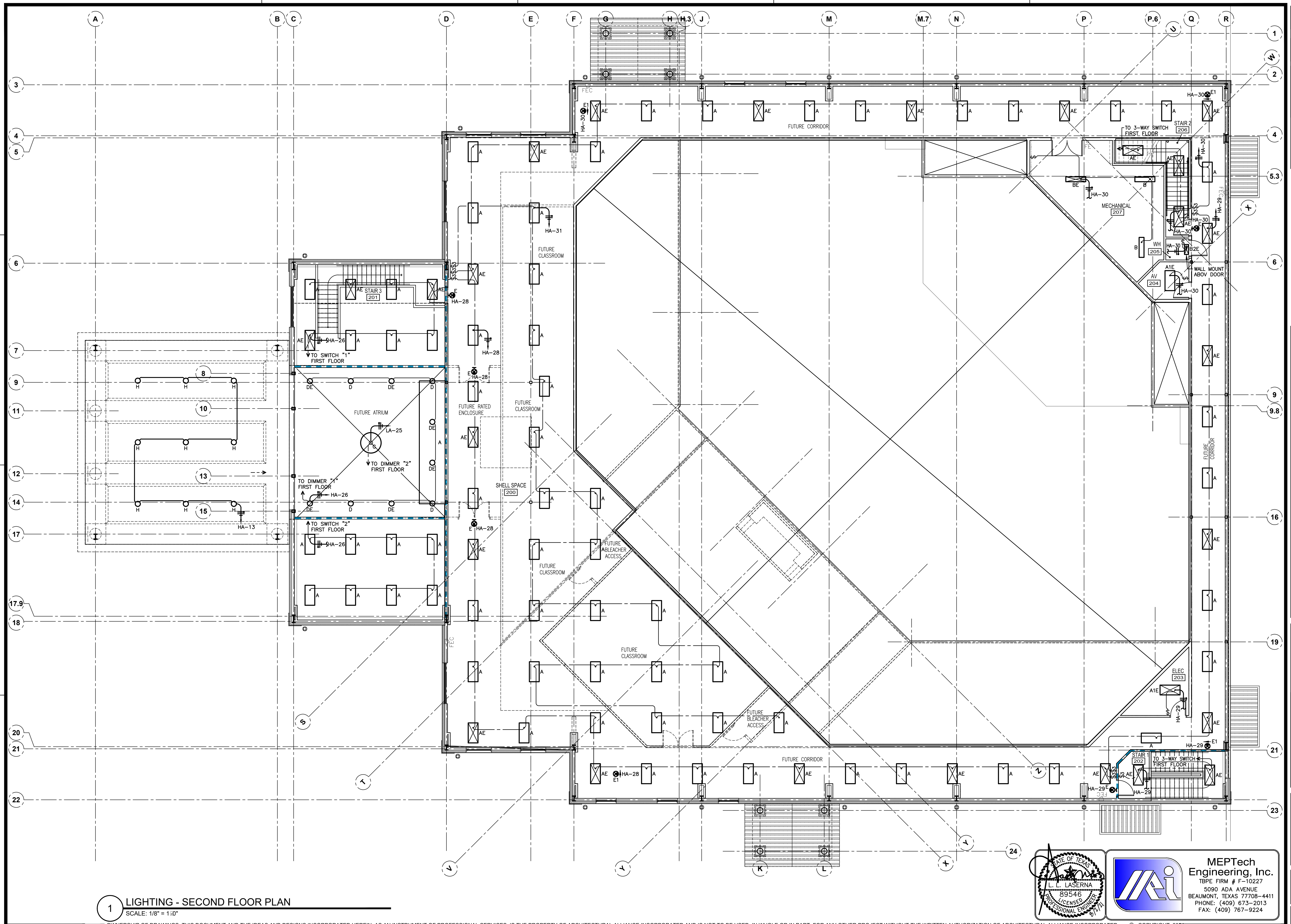
ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input type="checkbox"/>
DATE: 8/02/2021	
REVISION:	
DATE:	
REVISION:	
DATE:	
REVISION:	
DATE:	

DRAWINGS SHEET TITLE	
LIGHTING FIRST FLOOR PLAN	
REF. ADD #1	
SHEET NUMBER	E.1
20105	
PROJECT NUMBER	



**MEPTech Engineering, Inc.**  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224





ARCHITECT HAS REVIEWED  
THE CONSULTANT'S WORK  
AND COORDINATED IT WITH  
THE OVERALL PROJECT

UNITED CHRISTIAN ACADEMY

First Pentecostal Church

---

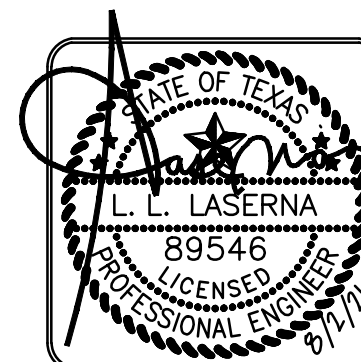
1111

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE: _____	
ISSUED FOR SCHEMATIC DEVELOPMENT	<input type="checkbox"/>
DATE: _____	
ISSUED FOR BIDS & CONSTRUCTION	<input type="checkbox"/>
DATE: 8/02/2021	
REVISION: DATE: _____	
REVISION: DATE: _____	
REVISION: DATE: _____	

DRAWINGS SHEET TITLE

LIGHTING  
SECOND FLOOR  
PLAN

SHEET NUMBER  
**E.2**  
20105  
PROJECT NUMBER



**MEPTech  
Engineering, Inc.**  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224

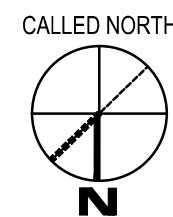
1 LIGHTING - SECOND FLOOR PLAN  
SCALE: 1/8" = 1'-0"

OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2011



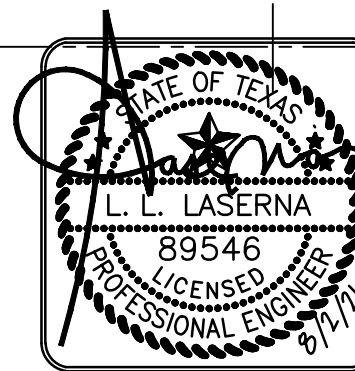
SAVED MICHAEL  
PLOT: MICHAEL MASTAIN  
PLOT DATE: 8/10/2021 5:02 PM  
SHEET SIZE: ARCH-Expanded D (36.00 x 24.00 inches)



1 POWER & COMMUNICATIONS - FIRST FLOOR PLAN  
SCALE: 1/8" = 1'-0"

OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2021



MEPTech  
Engineering, Inc.  
TBE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224

ISSUED FOR SCHEMATIC DESIGN ☒  
DATE: 8/10/2021  
DESIGN DEVELOPMENT ☒  
DATE: 8/10/2021  
BIDS & CONSTRUCTION ☒  
DATE: 8/10/2021  
REVISION: ☐  
DATE: MM-DD-YYYY  
REVISION: ☐  
DATE: MM-DD-YYYY  
REVISION: ☐  
DATE: MM-DD-YYYY

DRAWINGS SHEET TITLE  
POWER & COMMUNICATIONS  
FIRST FLOOR  
PLAN

SHEET NUMBER  
E.3  
20105  
PROJECT NUMBER

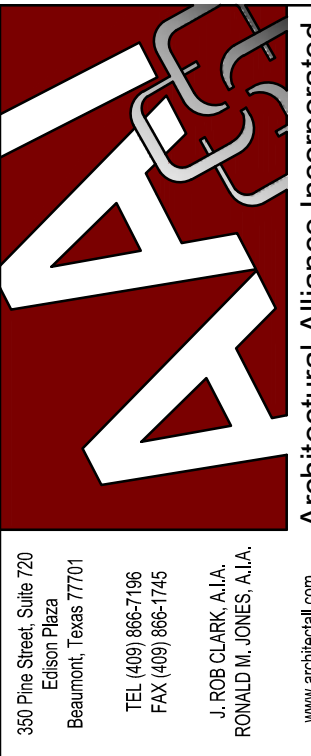
UNITED CHRISTIAN ACADEMY

First Pentecostal Church

Highway 69

Nederland, TX 77627

ARCHITECT HAS REVIEWED THE CONSULTANT'S WORK AND COORDINATED IT WITH THE OVERALL PROJECT



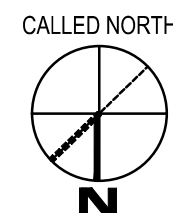


SAVED MICHAEL

PLOT: MICHAEL MAGTAN

PLOT DATE: 8/10/2021 5:02 PM

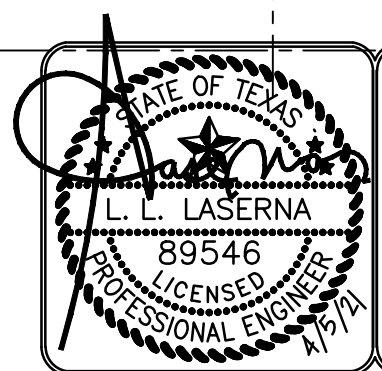
SHEET SIZE: ARCH-standard D (36.00 x 24.00 inches)



1 POWER & COMMUNICATIONS - SECOND FLOOR PLAN  
SCALE: 1/8" = 1'-0"

OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2021



**MEPTech Engineering, Inc.**  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224

ISSUED FOR SCHEMATIC DESIGN	<input checked="" type="checkbox"/>
DATE: X	
DESIGN DEVELOPMENT	<input checked="" type="checkbox"/>
DATE: X	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: X	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	

DRAWINGS SHEET TITLE  
**POWER & COMMUNICATIONS  
SECOND FLOOR  
PLAN**

SHEET NUMBER  
**E.4**  
20105  
PROJECT NUMBER

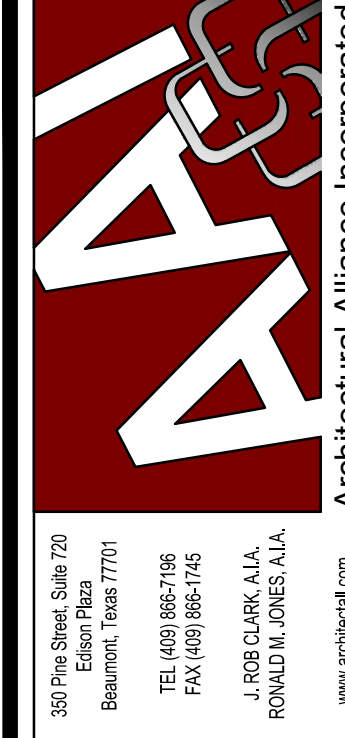
UNITED CHRISTIAN ACADEMY

First Pentecostal Church

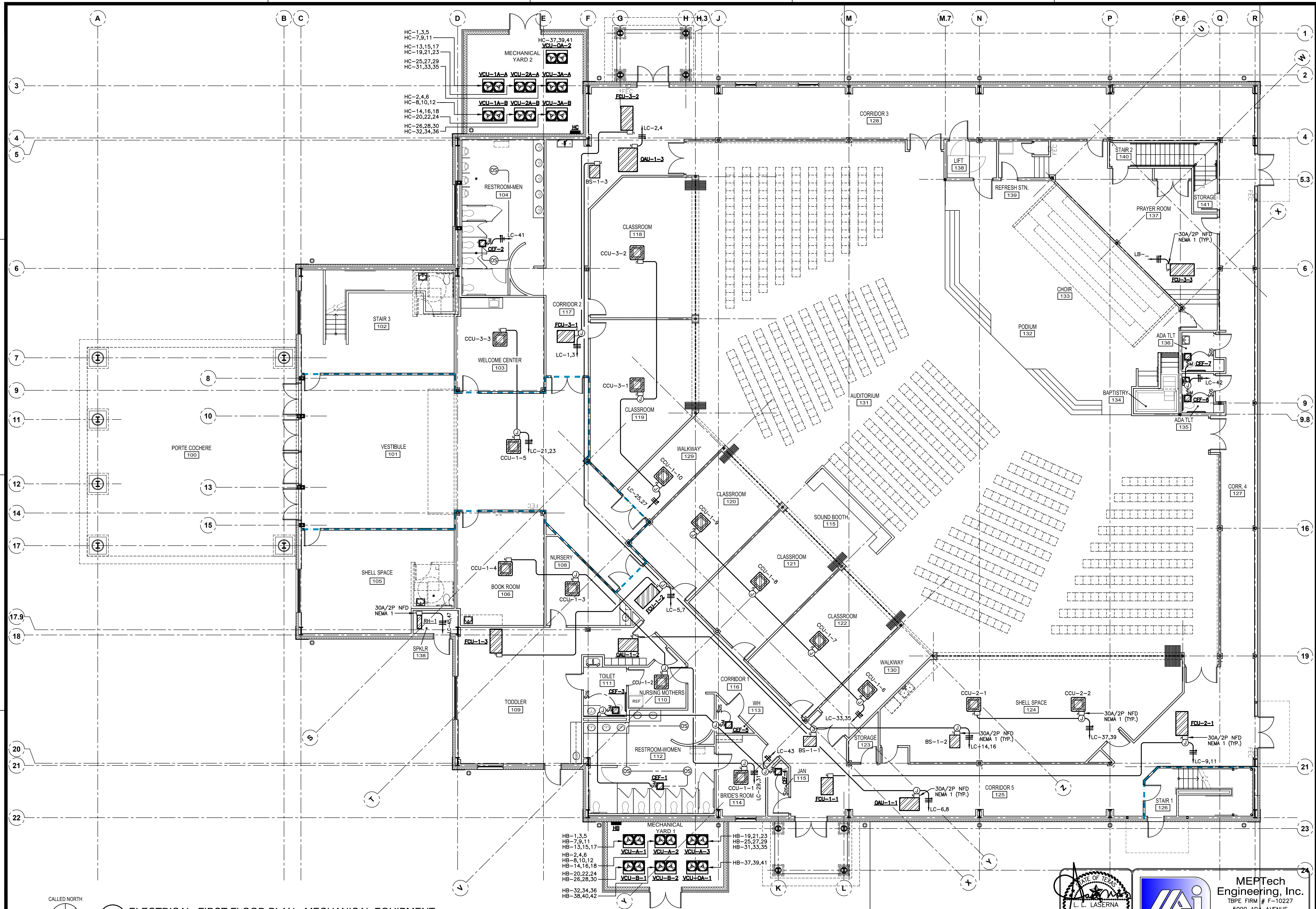
Highway 69

Nederland, TX 77627

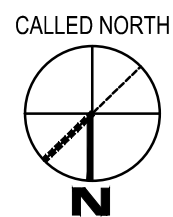
ARCHITECT HAS REVIEWED THE CONSULTANT'S WORK AND COORDINATED IT WITH THE OVERALL PROJECT





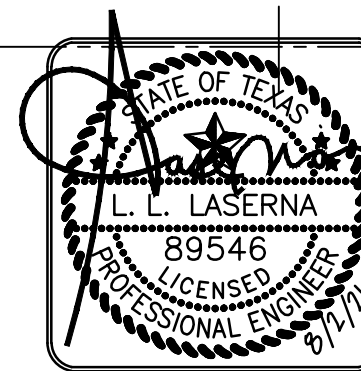


1 ELECTRICAL FIRST FLOOR PLAN - MECHANICAL EQUIPMENT  
SCALE: 1/8" = 1'-0"

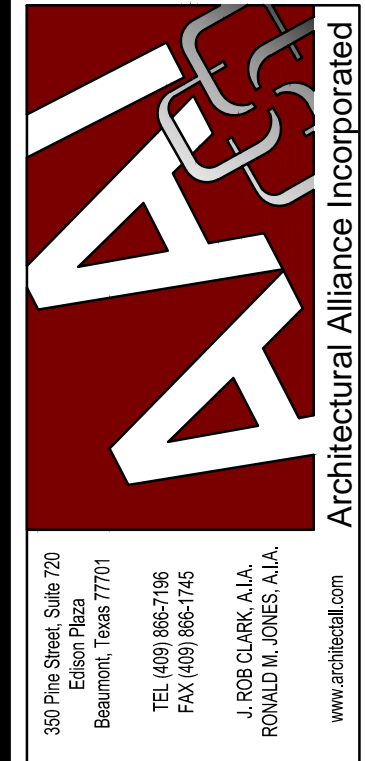


OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2021



**MEPTech Engineering, Inc.**  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224



ARCHITECT HAS REVIEWED THE CONSULTANT'S WORK AND COORDINATED IT WITH THE OVERALL PROJECT

UNITED CHRISTIAN ACADEMY  
First Pentecostal Church

Nederland, TX 77627

Highway 69

ISSUED FOR SCHEMATIC DESIGN	<input checked="" type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input checked="" type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 8/2/2021	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	

DRAWINGS SHEET TITLE  
**ELECTRICAL FIRST FLOOR PLAN - MECH. EQUIPMENT**

SHEET NUMBER
<b>E.5</b>
20105
PROJECT NUMBER



ARCHITECT HAS REVIEWED  
THE CONSULTANT'S WORK  
AND COORDINATED IT WITH  
THE OVERALL PROJECT

Nederland, TX 77627

UNITED CHRISTIAN ACADEMY

First Pentecostal Church

Highway 69

ISSUED FOR SCHEMATIC DESIGN	<input checked="" type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input checked="" type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input checked="" type="checkbox"/>
DATE: 8/2/2021	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	
REVISION:	
DATE: MM-DD-YYYY	

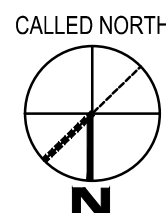
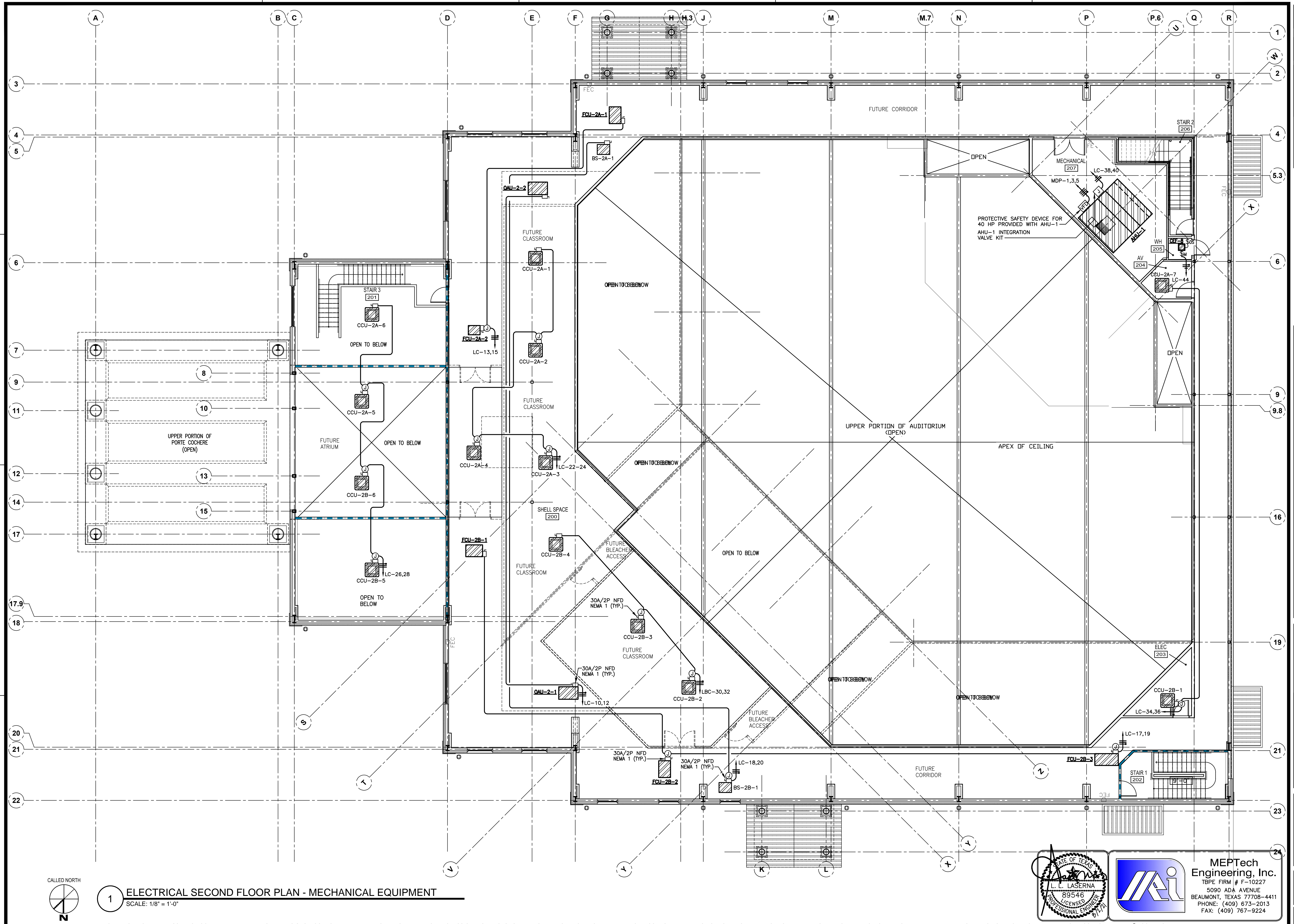
DRAWINGS SHEET TITLE  
ELECTRICAL SECOND FLOOR  
PLAN - MECH.  
EQUIPMENT

SHEET NUMBER

E.6

20105

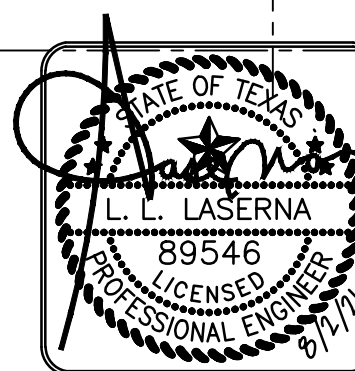
PROJECT NUMBER



1 ELECTRICAL SECOND FLOOR PLAN - MECHANICAL EQUIPMENT  
SCALE: 1/8" = 1'-0"

OWNERSHIP OF DRAWINGS THIS DOCUMENT AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICES, IS THE PROPERTY OF ARCHITECTURAL ALLIANCE INCORPORATED AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF ARCHITECTURAL ALLIANCE INCORPORATED.

© COPYRIGHT 2021



MEPTech  
Engineering, Inc.  
TBE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224



LIGHT FIXTURE SCHEDULE					
MARK	MANUFACTURER	MODEL NO.	LAMPS	VOLTAGE	REMARKS
A	METALUX	22C22-44-S-UNV-L840-CD1-U	(1)-43W LED/840 (INCLUDED)	120-277	2' x 2' RECESSED GRID LED WITH DIE-FORMED COLD ROLLED STEEL, INTEGRAL DRIVER AND SMOOTH FROSTED ACRYLIC LENS.
AE	METALUX	22C22-44-S-UNV-EL14W L840-CD1-U	(1)-43W LED/840 (INCLUDED)	120-277	SAME AS FIXTURE TYPE "A" EXCEPT WITH EMERGENCY BATTERY PACK INSTALLED.
A1E	METALUX	24FPX-47-UNV-EL14W L840-CD1	(1)-40W LED/840 (INCLUDED)	120-277	2' x 4' RECESSED GRID LED WITH DIE FORMED COLD ROLLED STEEL, INTEGRAL DRIVER EMERGENCY BATTERY AND SMOOTH FROSTED ACRYLIC LENS.
A2E	METALUX	22FPX-32-UNV-EL14W L840-CD1	(1)-31W LED/840 (INCLUDED)	120-277	2' x 2' RECESSED GRID LED WITH DIE FORMED COLD ROLLED STEEL, INTEGRAL DRIVER EMERGENCY BATTERY AND SMOOTH FROSTED ACRYLIC LENS.
B	METALUX	4VT2-LD5-6-DR-UNV-L840-CD1-WL-SSL-U	(1)-51W LED/840 (INCLUDED)	120-277	4' SURFACE MOUNTED WITH FIBERGLASS HOUSING, PRISMATIC LENS, LED SYSTEM INTEGRAL DRIVER, POLYURETHANE GASKETING, STAINLESS STEEL LATCHES, EBP AND UL LISTED FOR WET LOCATIONS.
BE	METALUX	4VT2-LD5-6-DR-UNV EL10W-L840-CD1-WL-SSL-U	(1)-51W LED/840 (INCLUDED)	120-277	SAME AS FIXTURE TYPE "B" EXCEPT WITH SELF-CONTAINED EMERGENCY BATTERY OPERATES 10 WAIT.
B1E	METALUX	4VT2-LD5-4-DR-UNV EL10W-L840-CD1-WL-SSL-U	(1)-30W LED/840 (INCLUDED)	120-277	4' SURFACE MOUNTED WITH FIBERGLASS HOUSING, PRISMATIC LENS, LED SYSTEM INTEGRAL DRIVER, POLYURETHANE GASKETING, STAINLESS STEEL LATCHES, EBP AND UL LISTED FOR WET LOCATIONS. SELF-CONTAINED EMERGENCY BATTERY OPERATES 10 WAIT.
B2E	METALUX	2VT2-LD5-3-DR-UNV EL10W-L840-CD1-WL-SSL-U	(1)-22W LED/840 (INCLUDED)	120-277	2' SURFACE MOUNTED WITH FIBERGLASS HOUSING, PRISMATIC LENS, LED SYSTEM INTEGRAL DRIVER, POLYURETHANE GASKETING, STAINLESS STEEL LATCHES, EBP AND UL LISTED FOR WET LOCATIONS. SELF-CONTAINED EMERGENCY BATTERY OPERATES 10 WAIT.
C	HALO	PD620D010B PDM6B840/61VC	(1)-21W LED/840 (INCLUDED)	120-277	RECESSED 6" LED LENS DOWNLIGHT WITH PARABOLIC ALUMINUM REFLECTOR, INTEGRAL DRIVER, SELF-FLANGED, SPECULAR CLEAR FINISH AND MOUNTING BRACKETS.
CE	HALO	PD620D010B-1EM PDM6B840/61VC	(1)-21W LED/840 (INCLUDED)	120-277	SAME AS FIXTURE TYPE "C" EXCEPT WITH EMERGENCY BATTERY PACK.
D	HALO	HC630D010-HM634840-61WDCWF RMB22	(1)-27 LED/840	120-277	6" OPEN DOWNLIGHT SELF FLANGED, WIDE BEAM WITH SPECULAR CLEAR FINISH & C-CHANNEL BAR HANGER.
DE	HALO	HC630D010-HM634840-61WDCWF RMB22 1EM14	(1)-27 LED/840	120-277	SAME AS FIXTURE TYPE "D" EXCEPT WITH EMERGENCY BATTERY PACK INSTALLED.
E	SURE-LITES COOPER	LPX7SD90	(1)-1.12W LED (LED LAMPS INCLUDED)	120/277	BACK MOUNT SINGLE FACE EXIT SIGN WITH HIGH IMPACT POLYCARBONATE HOUSING, STENCIL RED FACE, WHITE FACE/HOUSING TEXTURED FINISH, LED LAMP AND NICKEL CADMIUM BATTERY. MOUNT BOTTOM EXIT SIGN 12" CENTERED ABOVE DOOR.
E1	SURE-LITES COOPER	LPX7SD90	(1)-1.12W LED (LED LAMPS INCLUDED)	120/277	TOP MOUNT SINGLE FACE EXIT SIGN WITH IM HI POLYCARBONATE HOUSING, STENCIL RED FACE, WHITE HOUSING FINISH, LED LAMP, NICKEL CADMIUM BATTERY AND CHEVRON DIRECTIONAL INDICATOR KNOCKOUTS AS INDICATED ON PLANS.
E2	SURE-LITES COOPER	LPX7SD90	(1)-1.12W LED (LED LAMPS INCLUDED)	120/277	SAME AS FIXTURE TYPE "E1" EXCEPT WITH DOUBLE FACE.
EC	SURE-LITES COOPER	LPX225SD	(1)-3.2W LED (LED LAMPS INCLUDED)	120/277	COMBO BACK MOUNT SINGLE FACE EXIT SIGN WITH HIGH IMPACT POLYCARBONATE HOUSING, STENCIL RED FACE, WHITE FACE/HOUSING TEXTURED FINISH, LED LAMP AND NICKEL CADMIUM BATTERY. MOUNT BOTTOM EXIT SIGN 12" CENTERED ABOVE DOOR.
F	PORTFOLIO	LSR8B90D010-EC8B90840 8LBW3LI	(1)-87 LED/840	277	PENDANT MOUNT WITH 8" REFLECTOR, WIDE SPUN ALUMINUM, SPECULAR CLEAR AND BRONZE FINISHED. PROVIDE REQUIRED CONDUIT, PENDANT KIT CONDUIT KNOCKOUT COVER, BRONZE AND ALL ACCESSORIES. REFER TO ARCHITECTURAL SECTIONS AND ELEVATIONS FOR EXACT CONDUIT LENGTH REQUIRED.
FE	PORTFOLIO	LSR8B90D010-EC8B90840 8LBW3LI	(1)-87 LED/840	277	SAME AS FIXTURE TYPE "F" EXCEPT WITH EMERGENCY MODULE INSTALLED.
G	----	----	----	120-277	LIGHT FIXTURES FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.
H	HALO	PR840D010/PR8M34-MD-MW	(1)-44W LED/840 (INCLUDED)	120	RECESSED 8" SHALLOW LENSED LED DOWNLIGHT MED. DISTRIBUTION SHIELDING, INTEGRAL DRIVER, SELF-FLANGED AND MOUNTING BRACKETS. U.L. LISTED FOR WET LOCATION.
J	LUMARK	AXCL10A	(1)-102W LED 4000K INCLUDED	277	WALL MOUNT FULL CUTOFF LOW-PROFILE WITH LED FLOODLIGHT WITH DIE-CAST ALUMINUM CONSTRUCTION WHITE FINISH, SILICONE SEALED OPTICAL LED IMPACT-RESISTANT MOLDED REFRACTIVE PRISM, COLD WEATHER BALLAST AND U.L. LISTED FOR WET LOCATIONS.
J1	LUMARK	XTOR2B	(1)-18W LED 4000K INCLUDED	277	WALL MOUNT FULL CUTOFF LOW-PROFILE WITH LED FLOODLIGHT WITH DIE-CAST ALUMINUM CONSTRUCTION WHITE FINISH, SILICONE SEALED OPTICAL LED IMPACT-RESISTANT MOLDED REFRACTIVE PRISM, COLD WEATHER BALLAST AND U.L. LISTED FOR WET LOCATIONS.
P	McGRAW-EDISON KWI	GLEON-SA4B-740-U-5MQ-BZ SSP25-5.0-7-BRZ-DM2180-BC (130 MPH) □=□	(2)-266W LED/740 INCLUDED	277	25'-0" STEEL SQUARE POLE WITH DURAGRIP PLUS SINGLE MOUNT FIXTURE WITH DIE FORMED HEAVY GAUGE ALUM. CONSTRUCTION, COMPLETELY GASKETED, HEAT RESISTANT FLAT CLEAR TEMPERED GLASS, TENON MOUNT BRONZE FINISH, LED AND U.L. LISTED FOR WET LOCATION.
P1	McGRAW-EDISON KWI	GLEON-SA4B-740-U-T3-BZ SSP25-5.0-7-BRZ-DM10-BC (130 MPH) □=□	(1)-266W LED/740 INCLUDED	277	25'-0" STEEL SQUARE POLE WITH DURAGRIP PLUS SINGLE MOUNT FIXTURE WITH DIE FORMED HEAVY GAUGE ALUM. CONSTRUCTION, COMPLETELY GASKETED, HEAT RESISTANT FLAT CLEAR TEMPERED GLASS, TENON MOUNT BRONZE FINISH, LED AND U.L. LISTED FOR WET LOCATION.
P2	McGRAW-EDISON KWI	GLEON-SA4B-740-U-5MQ-BZ SSP25-5.0-7-BRZ-DM2090-BC (130 MPH) □=□	(2)-266W LED/740 INCLUDED	277	25'-0" STEEL SQUARE POLE WITH DURAGRIP PLUS SINGLE MOUNT FIXTURE WITH DIE FORMED HEAVY GAUGE ALUM. CONSTRUCTION, COMPLETELY GASKETED, HEAT RESISTANT FLAT CLEAR TEMPERED GLASS, TENON MOUNT BRONZE FINISH, LED AND U.L. LISTED FOR WET LOCATION.

ELECTRICAL SYMBOLS	
	REFERENCE TO DETAIL AND SHEET NUMBER
	SURFACE MOUNTED PANEL
	FLUSH MOUNTED PANEL
	LED LIGHT FIXTURE
	LED EMERGENCY LIGHT FIXTURE
	CEILING MOUNTED DOWNLIGHT LIGHT FIXTURE
	CEILING MOUNTED EXIT LIGHT FIXTURE
	WALL MOUNTED EXIT LIGHT FIXTURE
	NEUTRAL CONDUCTOR
	PHASE CONDUCTOR
	GROUND CONDUCTOR
	ISOLATED GROUND & GROUND CONDUCTOR
	SWITCH LEG AND/OR BRANCH CIRCUIT
	BRANCH CIRCUIT
	HOME RUN TO PANELBOARD
	SWITCH, 48\"/>
	THREE-WAY SWITCH, 48\"/>
	THREE-WAY DIMMER SWITCH, 48\"/>
	MOTOR RATED SWITCH
	SWITCH WITH PILOT LIGHT, 48\"/>
	OCCUPANCY SENSOR SWITCH, 48\"/>
	OCCUPANCY SENSOR DIMMER SWITCH, 48\"/>
	MOTOR
	DISCONNECT SAFETY SWITCH
	COMBINATION MOTOR STARTER AND DISCONNECT SAFETY SWITCH
	HARDWIRED CONNECTION
	DUPLEX RECEPTACLE, 12\"/>
	DUPLEX RECEPTACLE ABOVE CEILING
	FLOOR MOUNTED DUPLEX RECEPTACLE
	ISOLATED GROUND DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE WITH MOUNTING HEIGHT
	WEATHER PROOF DUPLEX RECEPTACLE
	GROUND FAULT CIRCUIT INTERRUPTER DUPLEX RECEPTACLE
	DOUBLE DUPLEX RECEPTACLE, 12\"/>
	ISOLATED GROUND DOUBLE DUPLEX RECEPTACLE, 12\"/>
	DOUBLE DUPLEX RECEPTACLE WITH MOUNTING HEIGHT
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	DATA AND/OR VOICE OUTLETS, 12\"/>
	DATA AND/OR VOICE OUTLETS, 12\"/>
	CEILING MOUNTED DATA AND/OR VOICE OUTLETS (DOUBLE DUPLEX CAT 5)
	FLOOR MOUNTED DATA AND/OR VOICE OUTLETS (DOUBLE DUPLEX CAT 5)
	DATA AND/OR VOICE OUTLETS WITH MOUNTING HEIGHT (DOUBLE DUPLEX CAT 5)
	TV DATA OUTLET
	DUCT MOUNTED SMOKE DETECTOR WITH INDICATOR LIGHT
	PHOTO ELECTRIC CONTROL, 108\"/>
	LIGHTING CONTACTOR, 54\"/>
	SHUT DOWN RELAY
	CEILING MOUNTED OCCUPANCY SENSOR
ABBREVIATIONS	
A	AMPERES
AIC	AMPS INTERRUPTING CURRENT
AFF	ABOVE FINISHED FLOOR
C	CONDUIT
CU	COPPER
CB	CIRCUIT BREAKER
FD	FUSED DISCONNECT SAFETY SWITCH
GND	GROUND CONDUCTOR
IG	ISOLATED GROUND
KVA	KILOVOLT-AMPS
MLO	MAIN LUGS ONLY
MCB	MAIN CIRCUIT BREAKER
NEC	NATIONAL ELECTRICAL CODE
NFD	NON-FUSED DISCONNECT SAFETY SWITCH
UC	UNDER COUNTER
V	VOLTS
WP	WEATHERPROOF

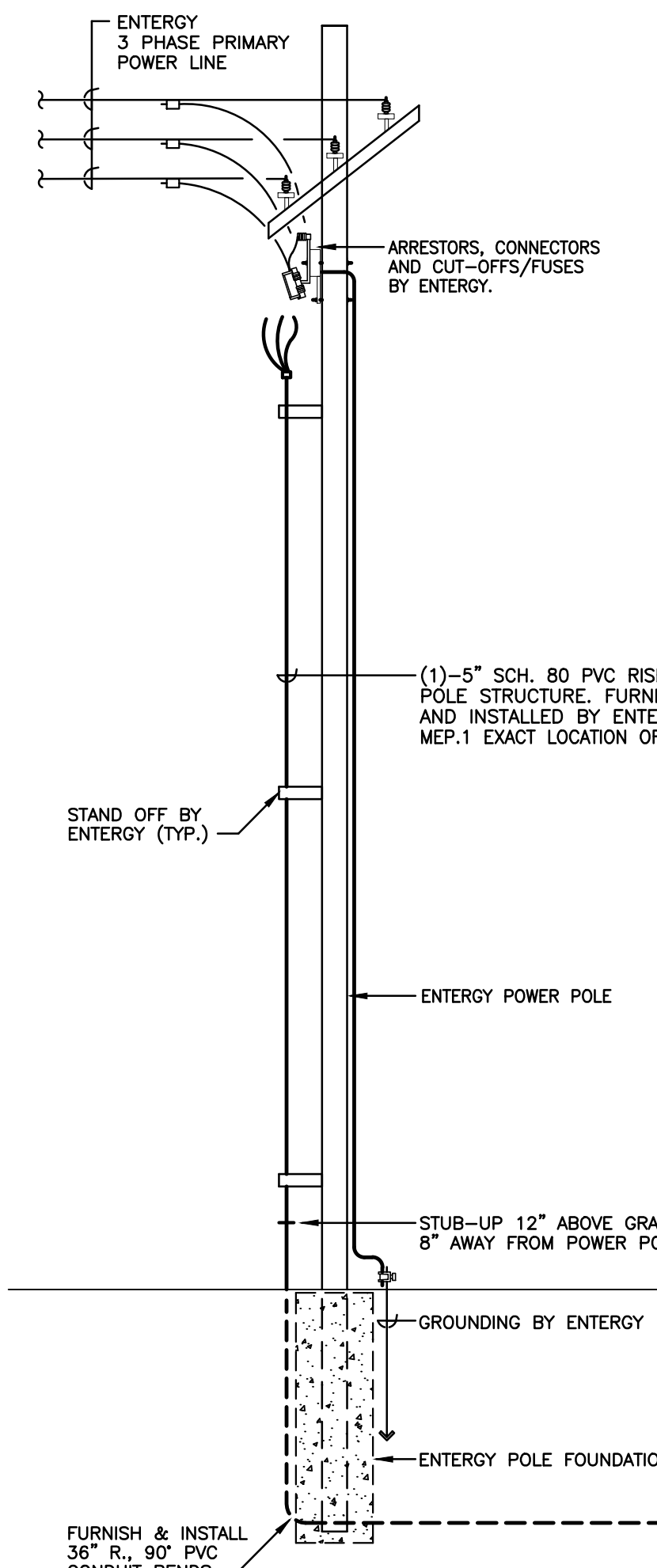
ELECTRICAL NOTES	
E1	COORDINATE EXACT LOCATION OF ALL LIGHT FIXTURES WITH ACTUAL CEILING GRID SYSTEMS AND STRUCTURES. REFERENCE ARCHITECTURAL REFLECTED CEILING PLAN, WALLS, ROOF/CEILING STRUCTURES, SECTIONS & ELEVATIONS. IN EXPOSED CEILING STRUCTURES, CONFIRM WITH ENGINEER AND ARCHITECT EXACT CONDUIT ROUTING PRIOR TO MAKE INSTALLATION AND MUST BE CONCEALED AS MUCH AS POSSIBLE.
E2	INSTALL INTERMATIC PHOTO ELECTRIC CONTROL SERIES K4533 WITH COMPLETE OF ACCESSORIES AND ADJUSTABLE STEM TO CONTROL HA-1 TO HA-13 THROUGH 16 POLES, 30 AMP, 120V, NEMA 1, MECHANICALLY HELD LIGHTING CONTACTOR "C" WITH CONTROL RELAY. LOCATE PHOTO ELECTRIC CONTROL AT 9'-0" AFF OR AS REQUIRED TO FACE FACE NORTH. CONNECT PHOTO ELECTRIC CONTROL AND LIGHTING CONTACTOR "C" TO HA-14.
E3	MOUNT LIGHT FIXTURE "T", "TE" AND TRACK LIGHTS AT 25'-0" AFF. PROVIDE GALVANIZED 3/4" THREADED RODS & NUTS/STRUTS SUPPORTS WITH ALL MOUNTING ACCESSORIES. REFER TO ARCHITECTURAL SECTIONS AND ELEVATIONS FOR EXACT REQUIREMENTS.
E4	INSTALL SINGLE GANG DEEP WALL BOX WITH APPROPRIATE COVER PLATE CABLE TV OUTLET. PROVIDE (1)-3/4" EMPTY CONDUIT WITH PULL STRING FROM SINGLE GANG DEEP WALL UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING. FIELD CONFIRM EXACT LOCATION OF CABLE TV OUTLET AND DUPLEX RECEPTACLE WITH OWNER PRIOR TO MAKE FINAL INSTALLATION.
E5	INSTALL SINGLE GANG DEEP FLOOR BOX WITH APPROPRIATE COVER PLATE FOR DATA AND/OR VOICE OUTLETS. PROVIDE (1)-1" EMPTY CONDUIT WITH PULL STRING FROM SINGLE GANG DEEP FLOOR BOX UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING.
E6	INSTALL SINGLE GANG DEEP WALL BOX WITH APPROPRIATE COVER PLATE FOR DATA AND/OR VOICE OUTLETS. PROVIDE (1)-1" EMPTY CONDUIT WITH PULL STRING FROM SINGLE GANG DEEP WALL BOX UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING.
E7	INSTALL WALL AND/OR BACK BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING FOR FIRE ALARM AND/OR SECURITY DEVICES. CONFIRM ALL REQUIREMENTS WITH FIRE ALARM AND SECURITY SYSTEMS INSTALLER. ALL LOCATIONS AND REQUIREMENTS OF SECURITY SYSTEM MUST BE CONFIRMED AND COORDINATED WITH SECURITY SYSTEM INSTALLER. FIRE ALARM AND SECURITY SYSTEMS INSTALLER TO PROVIDE SEPERATE DRAWINGS PER NFPA 72 AND 101.
E8	INSTALL 4"x8"x3/4" GRADE PLYWOOD ON WALL AS SHOWN FOR DATA, VIDEO & TELEPHONE BOARD. PAINT TO MATCH WALL COLOR. PROVIDE GROUNDING WITH #6 GROUND CONDUCTOR AND TO CONNECT TO ELECTRICAL SERVICE GROUND ROD. INSTALL (2)-3" EMPTY CONDUIT WITH PULL STRINGS FROM 6" STUB UP BELOW TELEPHONE BOARD DOWN UNDERGROUND UP TO 12" STUB UP ABOVE FINISHED GRADE 6" AWAY FROM ENTERGY POWER POLE. FIELD COORDINATE EXACT CONDUIT TERMINATION WITH TELEPHONE AND/OR CABLE COMPANY PRIOR TO MAKE FINAL INSTALLATION. REFER TO SHEET MEP.1 AND CIVIL DRAWINGS EXACT LOCATION OF ENTERGY POWER POLE AND ROUTING OF CONDUIT.
E9	INSTALL (6)-1" EMPTY CONDUIT WITH PULL STRINGS FROM 6" STUB-UP UNDER COUNTER DOWN UNDER FLOOR UP WALL TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING IN CORRIDOR 4'-12". CONFIRM EXACT REQUIREMENTS WITH OWNER PRIOR TO MAKE FINAL INSTALLATION.
E10	INSTALL (2)-1" EMPTY CONDUIT WITH PULL STRINGS FROM 6" STUB-UP UNDER COUNTER DOWN UNDER FLOOR UP TO 6" ABOVE FINISHED FLOOR BELOW PODIUM 132. CONFIRM EXACT REQUIREMENTS WITH OWNER PRIOR TO MAKE FINAL INSTALLATION.
E11	LOCATE RECEPTACLE BEHIND ELECTRIC WATER COOLER ENCLOSURE. FIELD COORDINATE EXACT REQUIREMENTS AND LOCATION WITH PLUMBING CONTRACTOR.
E12	INSTALL SINGLE GANG WALL BOX WITH APPROPRIATE COVER PLATE FOR HVAC THERMOSTAT. PROVIDE 3/4" EMPTY CONDUIT WITH PULL STRING FROM SINGLE GANG WALL BOX UP TO 6" ABOVE ACCESSIBLE CEILING WITH BUSHING. COORDINATE EXACT LOCATION WITH DIVISION 15, MECHANICAL CONTRACTOR. REFER TO MECHANICAL FLOOR PLAN, SHEET 1/M.1 FOR LOCATION OF WALL MOUNTED THERMOSTAT.
E13	ROUGH-IN AND MAKE FINAL CONNECTIONS TO EQUIPMENT SPECIFIED IN OTHER DIVISIONS, OR FURNISHED BY OWNER. FIELD CONFIRM WITH EQUIPMENT SUPPLIER AND/OR INSTALLER EXACT REQUIREMENTS PRIOR BIDDING AND INSTALLATION.
E14	ALL LOCATIONS OF ELECTRICAL AND TECHNOLOGY DEVICES MUST BE CONFIRMED WITH ARCHITECTURAL SECTIONS, ELEVATIONS, MILLWORKS AND CASEWORK PRIOR TO MAKE FINAL INSTALLATIONS. ALL CHANGES DUE TO CONFLICT OF LOCATIONS AND/OR LACK OF ARCHITECTURAL SHEETS COORDINATION SHALL BE MADE WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
E15	ALL CONDUIT PENETRATIONS AT FIRE RATED WALLS MUST BE PROVIDED WITH SCHEDULE 40 GALVANIZED CONDUIT SLEEVE SECURED TO PARTITION WITH GROUT AND CAULK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH FIRE RETARDANT SEALANT. WHERE CONDUIT IS EXPOSED AT FINISHED WALLS, PROVIDE FLUSH MOUNTED SLEEVE AND STAINLESS STEEL ESCUTCHEON PLATES. AT NON-FIRE RATED INTERIOR WALLS, CAULK ANNULAR SPACE BETWEEN CONDUIT AND SLEEVE WITH 1 LB. DENSITY FIBERGLASS AND SEAL ENDS WITH DOW CORNING 732 RTV OR EQUAL.
E16	ALL EXHAUST FANS (120V/1Ø) ARE SPECIFIED WITH FACTORY INSTALLED DISCONNECT SAFETY SWITCH. MOTOR STARTERS ARE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. THERMOSTATS, FAN INTERLOCKS AND HVAC CONTROLS ARE ALL PROVIDED AND INSTALLED UNDER DIVISION 15. CONFIRM WITH DIVISION 15 AND MECHANICAL SCHEDULES.
E17	COORDINATE AND CONFIRM HORSEPOWER RATING AND LOCATION OF ALL MECHANICAL AND PLUMBING EQUIPMENT WITH DIVISION 15 AND MECHANICAL SCHEDULES PRIOR TO ORDERING AND INSTALLATION OF DISCONNECT SAFETY SWITCHES, MOTOR STARTERS OR COMBINATION MOTOR STARTERS.
E18	<u>ALL LIGHTING CIRCUITS SHALL HAVE SEPARATE NEUTRALS. NO SHARED NEUTRALS.</u>

FIRE ALARM & SMOKE DETECTION SYSTEM NOTES	
1.	IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE ALL CONDUIT SYSTEMS AND ELECTRICAL CEILING/WALL BOXES REQUIRED BY FIRE ALARM SYSTEM INSTALLER.
2.	FIRE ALARM INSTALLER TO PROVIDE A SEPARATE DRAWINGS SHOWING ALL DEVICES PER NFPA 72/101 AND LOCAL CODES. COORDINATE AND CONFIRM WITH ELECTRICAL CONTRACTOR PRIOR TO SUBMIT BIDDING. FIRE ALARM SYSTEM MUST BE INCLUDED UNDER ELECTRICAL CONTRACTOR BIDS.

REF. ADD #1

MEPTech  
Engineering, Inc.  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224





**SHORT-CIRCUIT CURRENTS NOTES:**  
CALCULATION OF SHORT-CIRCUIT CURRENTS, POINT-TO-POINT METHOD PER NEC 2017 ARTICLE 110.9, 110.10 & 240.1.

**WORKING CLEARANCES:**  
SYSTEMS OPERATING AT 600 VOLTS OR LESS TO GROUND, THE WORKING CLEARANCE SHALL NOT BE LESS THAN INDICATED IN TABLE 110.26 (A)(1) IN ADDITION TO THE DIMENSION SHOWN IN TABLE 110.26(A)(1). THE WORKING SPACE SHALL NOT BE LESS THAN 30 IN. WIDE IN FRONT OF THE ELECTRIC EQUIPMENT. THIS SPACE SHALL BE CLEAR FROM THE FLOOR TO THE HEIGHT REQUIRED BY THIS SECTION, CHECK ACCESS, ENTRANCE AND ILLUMINATION TO BE IN COMPLIANCE, ARTICLE 110.26 NEC.

**AVAILABLE FAULT CURRENT LABELING:**  
IN LIEU OF THE MAXIMUM AVAILABLE FAULT CURRENT MARKING AS REQUIRED BY 110.24, A PERMANENT AFFIXED LABEL SHALL BE APPLIED WITH THE FAULT CURRENT AT THE TIME OF INSTALLATION AND CALCULATION. THE LABEL SHALL BE 2"x3" IN SIZE AND SHALL BE BLUE LETTERING ON A CONTRASTING BACKGROUND. THIS LABEL SHALL ALSO INCLUDED THE DATE OF THE CALCULATION (8/2/2021).

**ARC-FLASH HAZARD WARNING PER 2017 NEC ARTICLE 110.16:**  
THE MARKING SHALL MEET THE REQUIREMENTS IN 110.21(B) AND SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.

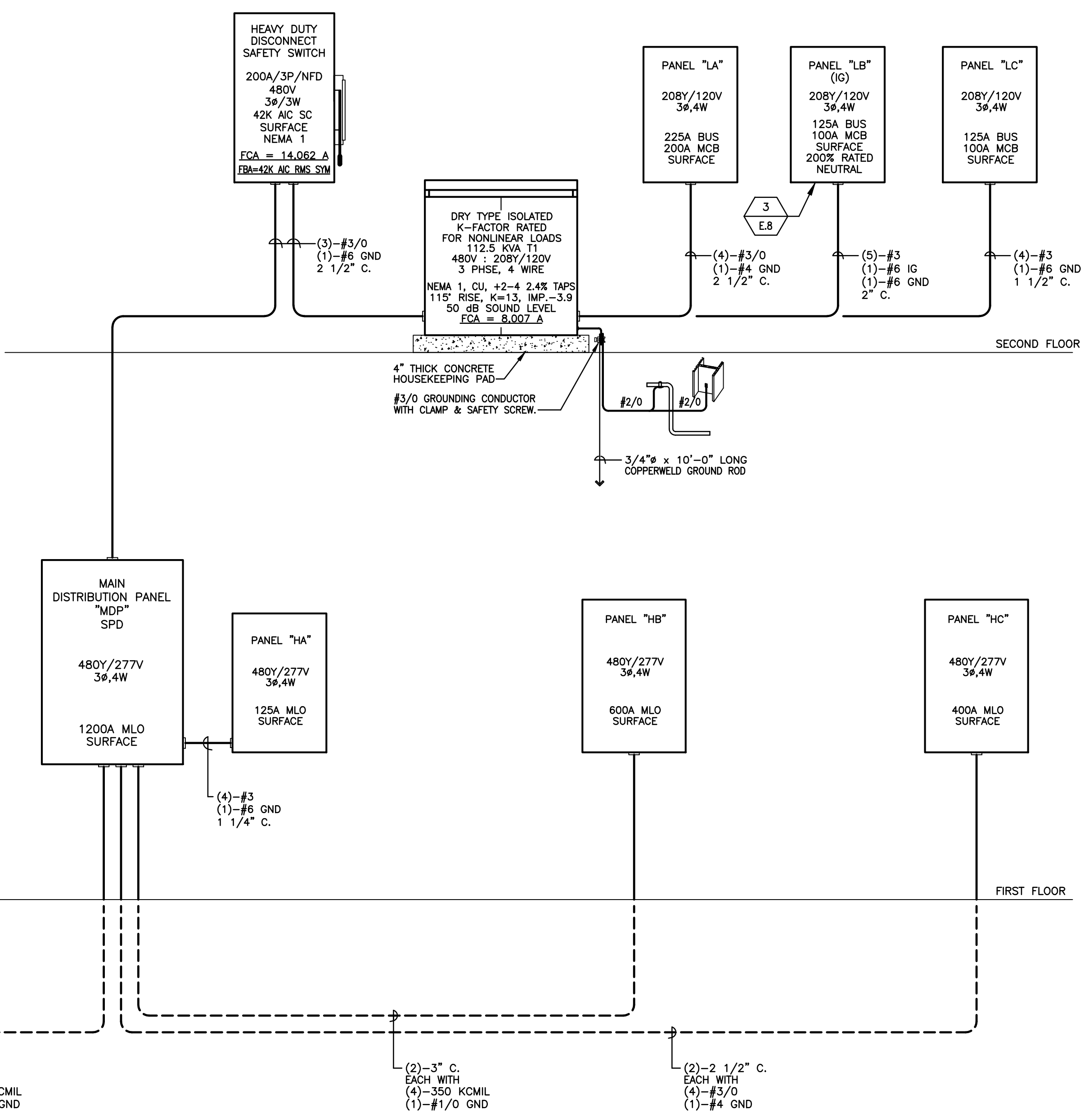
**ELECTRICAL RISER NOTES**

(ER1) ELECTRICAL CONTRACTOR MUST CONFIRM THE ACTUAL PHYSICAL DIMENSIONS OF NEW PANELBOARDS WITH GENERAL CONTRACTOR PRIOR TO MAKE FINAL INSTALLATION. ALL ELECTRICAL PANELBOARDS, DISCONNECT SAFETY SWITCHES, CONTROL BOXES AND TO BE INSTALLED PER 2017 NEC OR AT "WORKING HEIGHT".

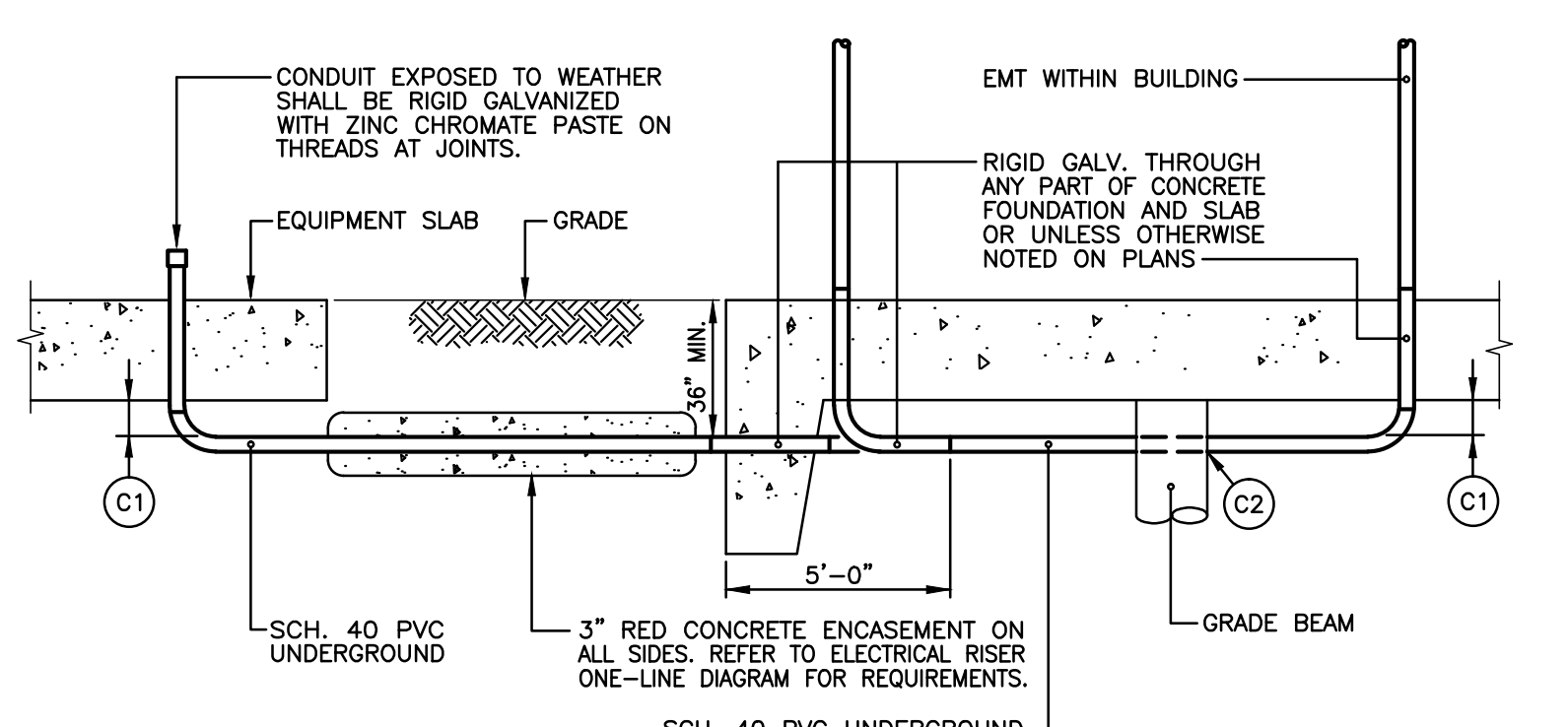
(ER2) FIELD VERIFY AND COORDINATE THE EXACT ROUTING OF ALL CONDUITS WITH ALL TRADES PRIOR TO MAKE FINAL INSTALLATION.

(ER3) USE AND BOND TOGETHER GROUNDING ELECTRODES SUCH AS METAL UNDERGROUND WATER PIPE, METAL FRAME OF THE BUILDING OR STRUCTURE AND CONCRETE ENCASED ELECTRODE PER ARTICLE 250.52(A)(1) THROUGH (A)(3) OF NEC 2017. PROVIDE GROUNDING ELECTRODE CONDUCTOR TO FORM THE GROUNDING ELECTRODE SYSTEM REQUIRED BY ARTICLE 250.52.

(ER4) CONTACT ENTENTRY AT 1-800-ENTENTRY FOR THE UTILITY COMPANY REQUIREMENTS RELATING TO THE UNDERGROUND ELECTRICAL SERVICE. OWNER WILL PAY ANY FEES PAYABLE TO ENTENTRY. FIELD CONFIRM WITH ENTENTRY EXACT LOCATION OF POWER POLE.



1 ELECTRICAL RISER ONE-LINE DIAGRAM  
SCALE: NOT TO SCALE

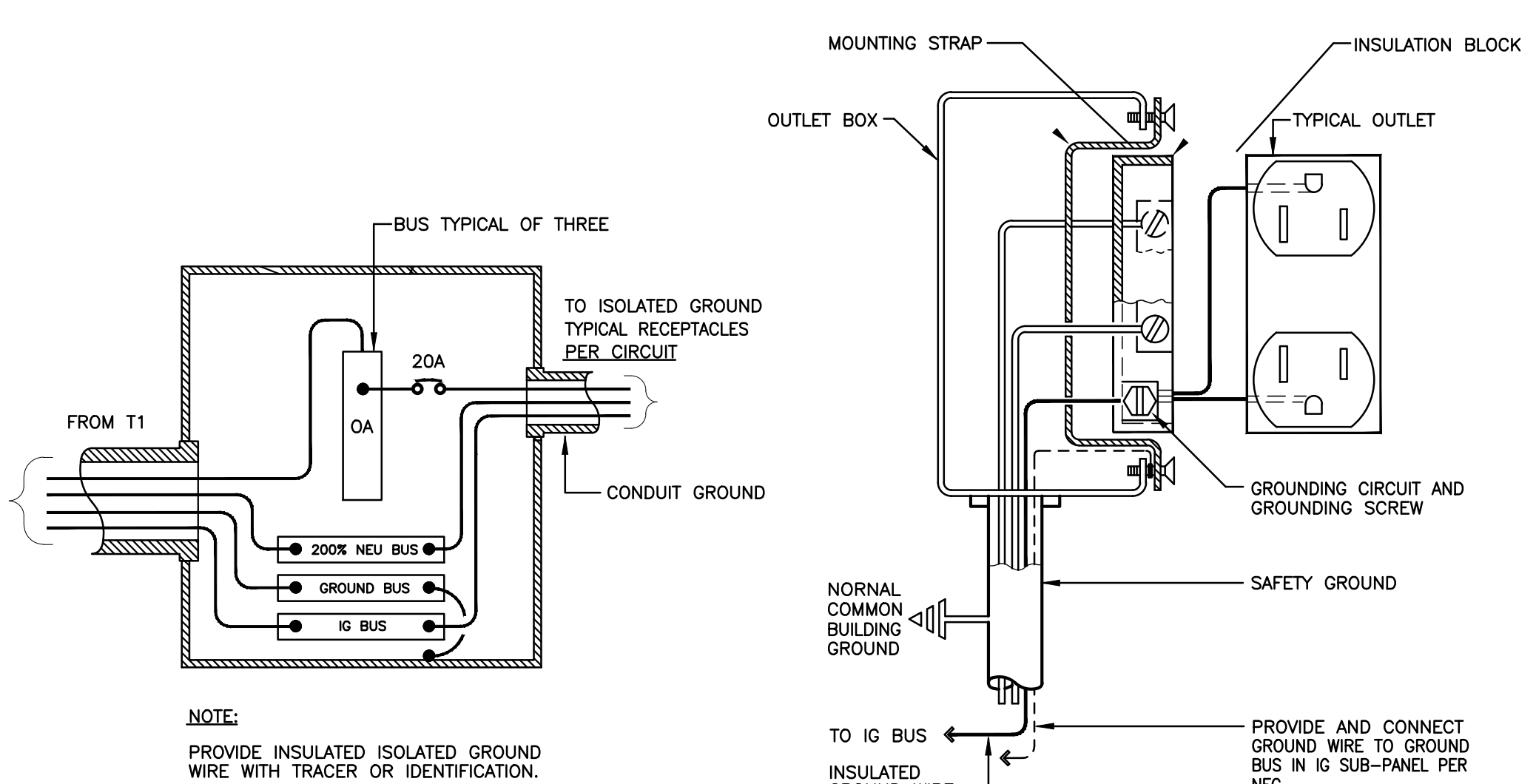


**NOTES:**

(C1) ALL CONDUITS MUST BE BURIED A MINIMUM OF 6" IN THE FILL MATERIAL BELOW THE CONCRETE SLAB. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES, CONFIRM COMPACTION/FILL REQUIREMENTS WITH GENERAL CONTRACTOR.

(C2) PROVIDE SLEEVES WITH MAXIMUM SIZE ALLOWED WILL BE 8 INCHES DIAMETER AND WILL BE PLACED NO CLOSER THAN 12 INCHES CENTER TO CENTER IN EITHER DIRECTION.

2 CONDUIT ROUTING REQUIREMENTS  
SCALE: NOT TO SCALE



ISOLATED GROUND SUB-PANEL  
ISOLATED GROUND RECEPTACLE

3 ISOLATED GROUND REQUIREMENTS  
SCALE: NOT TO SCALE

LOAD ANALYSIS	
LOADS: VOLT-AMPERES (VA)	VA
<b>LIGHTING LOADS (NEC 2017 ARTICLE 220.12)</b>	32,550
1.) LIGHTING LOADS: 26,040 x 1.25 = 32,550 VA	
<b>RECEPTACLE LOADS (NEC 2017 ARTICLE 220.14 (K))</b>	58,510
1.) RECEPTACLE LOADS: 58,510 VA	
<b>MOTOR AND HVAC LOADS (NEC 2017 ARTICLE 430.24.25 &amp; 440)</b>	715,414
a.) HVAC & EQUIPMENT = 704,606 VA	
b.) 25% OF THE HIGHEST MOTOR (40 HP-480V/3P) = 43,231 VA x .25 = 10,808 VA	
TOTAL HVAC LOAD = 704,606 + 10,808 = 715,414 VA	
<b>TOTAL DEMAND LOAD</b>	806,474
<b>REMARKS:</b>	
TOTAL CALCULATED DEMAND LOAD IN AMPS (SERVICE VOLTAGE IS 480Y/277VAC 3P/4W) = 806,474/(480 x 1.732) = 970.0 AMPS. THEREFORE, 1200 AMPS SERVICE SIZE IS SELECTED FOR NEW UNITED CHRISTIAN ACADEMY BUILDING.	
<b>TOTAL DEMAND LOAD FOR FUTURE BUILDING ADDITION &amp; SITE LIGHTING</b>	980,000
<b>REMARKS:</b>	
TOTAL CALCULATED DEMAND LOAD IN AMPS FOR NEW BUILDING AND FUTURE = 1,786,474/(480 x 1.732) = 2,149 AMPS. THEREFORE, 2000 KVA PAD MOUNTED TRANSFORMER IS REQUESTED TO SERVE NEW BUILDING & FUTURE.	

**MEPTech Engineering, Inc.**  
TBE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224

3011 Peachtree Road, Suite 720  
Atlanta, Georgia 30328  
Beaumont, Texas 77701  
TEL: (409) 668-2146  
FAX: (409) 668-1145  
J. ROB CLARK, AIA  
RONALD M. JONES, AIA  
www.aiaalliance.com

ARCHITECT HAS REVIEWED THE CONSULTANT'S WORK AND COORDINATED IT WITH THE OVERALL PROJECT

UNITED CHRISTIAN ACADEMY  
First Pentecostal Church  
Nederland, TX 77627  
Highway 69

ISSUED FOR SCHEMATIC DESIGN ☒  
DATE: X

DESIGN DEVELOPMENT ☒  
DATE: X

BIDS & CONSTRUCTION ☒  
DATE: 8/2/2021

REVISION:   
DATE: MM-DD-YYYY

REVISION:   
DATE: MM-DD-YYYY

REVISION:   
DATE: MM-DD-YYYY

DRAWINGS SHEET TITLE  
**ELECTRICAL RISER DIAGRAM, DETAILS, NOTES & LOAD ANALYSIS**

SHEET NUMBER  
**E.8**

20105  
PROJECT NUMBER



## PANEL "HA" SCHEDULE

MOUNTING: SURFACE			TYPE: G.E. OR S.Q.D.			FAULT CURRENT: 23,725 A			MAIN: MLO BUS: 125 A FEED: BOTTOM			
VOLTS: 480Y/277 Vac BOLT-On			ENCLOSURE: NEMA 1 WITH GROUND BAR			FAULT BRACING: 42K AIC SC FULLY RATED			MAIN SIZE BREAKER: NONE BUS: COPPER			
PHASE: 3 WIRE: 4 Hz.: 60			ISOLATED GROUND: NONE			TVSS/SPD: NONE			LOCATION: PRAYER ROOM 137			
LIGHTING CONTACTOR/PHOTOCELL, WEST WALL DESCRIPTION	CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA) ØA ØB ØC	BREAKER	ØA ØB ØC	CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA) ØA ØB ØC	BREAKER	ØA ØB ØC	CONDUIT SIZE	DESCRIPTION
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.330	20/1	1	2	20/1	0.798	20/1	2	20/1	PARKING LIGHTS
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	3	4	20/1	1.596	20/1	4	20/1	PARKING LIGHTS
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10		20/1	5	6	20/1	1.596	20/1	6	20/1	PARKING LIGHTS
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	7	8	20/1	1.064	20/1	8	20/1	PARKING LIGHTS
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	9	10	20/1	0.532	20/1	10	20/1	PARKING LIGHTS
SECURITY/EXTERIOR WALL LIGHTS	3/4"	(2)-#10, (1)-#10	0.532	20/1	11	12	20/1	0.616	20/1	12	20/1	SECURITY/EXTERIOR WALL LIGHTS
FRONT PORCH LIGHTS	3/4"	(2)-#10, (1)-#10	0.396	20/1	13	14	20/1	0.100	20/1	14	20/1	LIGHTING CONTACTOR "C"/PHOTOCELL
LIGHTS, EXIT SIGNS, RMS. 116-117,125-128	3/4"	(2)-#10, (1)-#10	1.869	20/1	15	16	20/1	0.731	20/1	16	20/1	LIGHTS, RMS. 118-119
LIGHTS, RMS. 103-104	3/4"	(2)-#10, (1)-#10		20/1	17	18	20/1	0.944	20/1	18	20/1	LIGHTS, EXIT SIGNS, RMS. 120-122,129-130
LIGHTS, EXIT SIGNS, RMS. 101,106,108,138	3/4"	(2)-#10, (1)-#10	0.868	20/1	19	20	20/1	0.547	20/1	20	20/1	LIGHTS, RMS. 123-124
LIGHTS, EXIT SIGNS, RMS. 109-115	3/4"	(2)-#10, (1)-#10	1.065	20/1	21	22	20/1	0.583	20/1	22	20/1	LIGHTS, EXIT SIGNS, RMS. 134-139,141
LIGHTS, RM 131	3/4"	(2)-#10, (1)-#10	0.783	20/1	23	24	20/1	0.522	20/1	24	20/1	LIGHTS, RMS. 132-133
LIGHTS, RM 131	3/4"	(2)-#10, (1)-#10	0.609	20/1	25	26	20/1	0.958	20/1	26	20/1	LIGHTS, RMS. 105,201, FUT. ATRIUM
LIGHTS, RM 131	3/4"	(2)-#10, (1)-#10	0.783	20/1	27	28	20/1	0.868	20/1	28	20/1	LIGHTS, EXIT SIGNS, RM. 200, FUT. CORR.
LIGHTS, EXIT SIGNS, RMS 202-203, FUT. CORR.	3/4"	(2)-#10, (1)-#10	0.559	20/1	29	30	20/1	1.148	20/1	30	20/1	LIGHTS, EXIT SIGNS, RMS. 204-207, FUT. CORR.
SPARE				20/1	31	32	20/1		20/1	32	20/1	SPARE
"				20/1	33	34	20/1		20/1	34	20/1	"
"				20/1	35	36	20/1		20/1	36	20/1	"
"				20/1	37	38	20/1		20/1	38	20/1	"
"				20/1	39	40	20/1		20/1	40	20/1	"
"				20/1	41	42	20/1		20/1	42	20/1	"
NOTES:			TOTAL KVA ØA = 7.734 TOTAL KVA ØB = 10.155 TOTAL KVA ØC = 8.151									
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.			TOTAL CONNECTED LOAD = 26.040 KVA									
			31.2 AMPS									
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.			TOTAL DEMAND LOAD = 32.550 KVA									
			39.2 AMPS			2017 NEC ARTICLE 215.3 ARTICLE 220 II & III						

## PANEL "MDP" SCHEDULE

MOUNTING: SURFACE				TYPE: G.E. OR S.Q.D.				FAULT CURRENT: 28,908 A				MAIN: MLO BUS: 1200 A FEED: BACK			
VOLTS: 480Y/277 Vac BOLT-On				ENCLOSURE: NEMA 1 WITH GROUND BAR				FAULT BRACING: 65K AIC SC FULLY RATED				MAIN SIZE BREAKER: NONE BUS: COPPER			
PHASE: 3 WIRE: 4 Hz.: 60				ISOLATED GROUND: YES				TVSS/SPD: NONE				LOCATION: PRAYER ROOM 137			
DESCRIPTION		CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA)		BREAKER	ØA	ØB	ØC	BREAKER	LOAD (kVA)		WIRE & IG/GROUND SIZE	CONDUIT SIZE	DESCRIPTION
AHU-1, 40 HP. MECH. RM. 207, 2ND FLOOR.		1 1/2"	(3)-#2, (1)-#6	14.410		90/3	1	Ø	Ø	2	100/3	8.680	(4)-#3, (1)-#8	1 1/2"	PANEL "HA", PRAYER ROOM 137
			-	14.410	14.410	-	3	Ø	Ø	4	-	8.680	-		
			-			-	5	Ø	Ø	6	-	8.680	-		
PANEL "HB", MECHANICAL YARD 1		(2)-3"	(4)-350, (1)-#2	113.903		600/3	7	Ø	Ø	8	400/3	91.845	(4)-#3/0, (1)-#4	Ø-2 1/2"	PANEL "HC", MECHANICAL YARD 2
			-	113.903		-	9	Ø	Ø	10	-	91.845	-		
			-		113.903	-	11	Ø	Ø	12	-	91.845	-		
112.5 KVA TRANSFORMER "T1", RM. ELEC. 203		2 1/2"	(3)-#3/0, (1)-#4	34.212		200/3	13	Ø	Ø	14					SPACE
			-	34.212		-	15	Ø	Ø	16					
			-		34.212	-	17	Ø	Ø	18					
SPACE							19	Ø	Ø	20					
							21	Ø	Ø	22					
							23	Ø	Ø	24					
							25	Ø	Ø	26					
							27	Ø	Ø	28					
							29	Ø	Ø	30					
							31	Ø	Ø	32					
							33	Ø	Ø	34					
							35	Ø	Ø	36					
							37	Ø	Ø	38					
							39	Ø	Ø	40					
							41	Ø	Ø	42					
NOTES:				TOTAL KVA ØA = 263.050				TOTAL KVA ØB = 263.050				TOTAL KVA ØC = 263.050			
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.				TOTAL CONNECTED LOAD = 789.150 kVA											
				949.2 AMPS											
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.				TOTAL DEMAND LOAD = 806,474 kVA											
				970.0 AMPS											
				2017 NEC ARTICLE 215.3 ARTICLE 220 II & III ARTICLE 440.33											
				③ PROVIDE INTEGRAL SPD ME WITH 160kA MAX. SURGE CURRENT PER PHASE. G.E. TPME27708AS.											

## PANEL "HB" SCHEDULE

MOUNTING: SURFACE				TYPE: G.E. OR S.Q.D.				FAULT CURRENT: 19,580 A				MAIN: MLO BUS: 600 A FEED: BOTTOM									
VOLTS: 480Y/277 Vac BOLT-On				ENCLOSURE: NEMA 4X WITH GROUND BAR				FAULT BRACING: 42K AIC SC FULLY RATED				MAIN SIZE BREAKER: NONE BUS: COPPER									
PHASE: 3 WIRE: 4 Hz.: 60				ISOLATED GROUND: NONE				TVSS/SPD: NONE				LOCATION: MECHANICAL YARD 1									
DESCRIPTION		CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA)			BREAKER	CIRCUIT	ØA	ØB	ØC	CIRCUIT	BREAKER	LOAD (kVA)			WIRE & IG/GROUND SIZE	CONDUIT SIZE	DESCRIPTION		
VCU-A-1 (MOD. #1)		1"	(3)-#8, (1)-#10	8.619			40/3	1	●			2	40/3	8.619			(3)-#8, (1)-#10	1"	VCU-A-2 (MOD. #1)		
"					8.619			3	●			4			8.619					"	
"								5	●			6				8.619				"	
VCU-A-1 (MOD. #2)		1"	(3)-#8, (1)-#10	7.732			40/3	7	●			8	40/3	7.732			(3)-#8, (1)-#10	1"	VCU-A-2 (MOD. #2)		
"					7.732			9	●			10			7.732					"	
"						7.732		11	●			12				7.732				"	
VCU-A-1 (MOD. #3)		1"	(3)-#8, (1)-#10	7.732			40/3	13	●			14	40/3	7.732			(3)-#8, (1)-#10	1"	VCU-A-2 (MOD. #3)		
"					7.732			15	●			16				7.732				"	
"						7.732		17	●			18				7.732				"	
VCU-A-3 (MOD. #1)		1"	(3)-#8, (1)-#10	8.619			40/3	19	●			20	40/3	8.619			(3)-#8, (1)-#10	1"	VCU-B-1 (MOD. #1)		
"					8.619			21	●			22			8.619					"	
"						8.619		23	●			24				8.619				"	
VCU-A-3 (MOD. #2)		1"	(3)-#8, (1)-#10	7.732			40/3	25	●			26	40/3	8.619			(3)-#8, (1)-#10	1"	VCU-B-1 (MOD. #2)		
"					7.732			27	●			28			8.619					"	
"						7.732		29	●			30				8.619				"	
VCU-A-3 (MOD. #3)		1"	(3)-#8, (1)-#10	7.732			40/3	31	●			32	40/3	8.619			(3)-#8, (1)-#10	1"	VCU-B-2 (MOD. #1)		
"					7.732			33	●			34			8.619					"	
"						7.732		35	●			36				8.619				"	
VCU-OA-1 (MOD. #1)		3/4"	(3)-#10, (1)-#10	7.178			35/3	37	●			38	40/3	8.619			(3)-#8, (1)-#10	1"	VCU-B-2 (MOD. #2)		
"					7.178			39	●			40			8.619					"	
"						7.178		41	●			42				8.619				"	
SPACE								43	●			44								SPACE	
"								45	●			46								"	
"								47	●			48								"	
NOTES:				TOTAL KVA ØA = 113.903				TOTAL KVA ØB = 113.903				TOTAL KVA ØC = 113.903									
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.				TOTAL CONNECTED LOAD = 341.709 KVA																	
				411.0 AMPS																	
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.				TOTAL DEMAND LOAD = 341.709 KVA																	
				411.0 AMPS																	
				2017 NEC ARTICLE 215.3 ARTICLE 220 II & III ARTICLE 440.33																	

## PANEL "HC" SCHEDULE

MOUNTING: SURFACE			TYPE: G.E. OR S.Q.D.			FAULT CURRENT: 18,921 A			MAIN: MLO BUS: 400 A FEED: BOTTOM																	
VOLTS: 480Y/277 Vac BOLT-On			ENCLOSURE: NEMA 4X WITH GROUND BAR			FAULT BRACING: 42K AIC SC FULLY RATED			MAIN SIZE BREAKER: NONE BUS: COPPER																	
PHASE: 3 WIRE: 4 Hz.: 60			ISOLATED GROUND: NONE			TVSS/SPD: NONE			LOCATION: MECHANICAL YARD 2																	
DESCRIPTION		CONDUIT SIZE	WIRE & IG/GROUND SIZE		LOAD (kVA)		BREAKER		ØA	ØB	ØC	CONDUIT SIZE	WIRE & IG/GROUND SIZE		LOAD (kVA)		BREAKER		ØA	ØB	ØC	CONDUIT SIZE	WIRE & IG/GROUND SIZE		DESCRIPTION	
VCU-1A-A (MOD. #1)		1"	(3)-#8, (1)-#10	7.178			35/3	1	2	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-1A-B (MOD. #1)											
"				7.178				3	4		7.178															
"								5	6																	
VCU-1A-A (MOD. #2)		1"	(3)-#8, (1)-#10	7.178			35/3	7	8	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-1A-B (MOD. #2)											
"				7.178				9	10		7.178															
"								11	12																	
VCU-2A-A (MOD. #1)		1"	(3)-#8, (1)-#10	7.178			35/3	13	14	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-2A-B (MOD. #1)											
"								15	16		7.178															
"								17	18		7.178															
VCU-2A-A (MOD. #2)		1"	(3)-#8, (1)-#10	7.178			35/3	19	20	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-2A-B (MOD. #2)											
"				7.178				21	22		7.178															
"								23	24		7.178															
VCU-3A-A (MOD. #1)		1"	(3)-#8, (1)-#10	7.178			35/3	25	26	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-3A-B (MOD. #1)											
"				7.178				27	28		7.178															
"								29	30		7.178															
VCU-3A-A (MOD. #2)		1"	(3)-#8, (1)-#10	7.178			35/3	31	32	35/3	7.178		(3)-#8, (1)-#10	1"	VCU-3A-B (MOD. #2)											
"				7.178				33	34		7.178															
"								35	36																	
VCU-0A-2 (MOD. #1)		3/4"	(3)-#10, (1)-#10	5.709			25/3	37	38				(3)-#8, (1)-#10		SPACE											
"								39	40																	
"								41	42																	
SPACE								43	44																	
"								45	46																	
"								47	48																	
NOTES:			TOTAL KVA ØA = 91.845			TOTAL KVA ØB = 91.845			TOTAL KVA ØC = 91.845																	
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.			TOTAL CONNECTED LOAD = 275.535 KVA																							
			331.4 AMPS																							
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.			TOTAL DEMAND LOAD = 275.535 KVA																							
			331.4 AMPS																							
			2017 NEC ARTICLE 215.3 ARTICLE 220 II & III ARTICLE 440.33																							



ARCHITECT HAS REVIEWED  
THE CONSULTANT'S WORK  
AND COORDINATED IT WITH  
THE OVERALL PROJECT

UNITED CHRISTIAN ACADEMY

First Pentecostal Church


Nederland, TX 77627


Highway 69


ISSUED FOR SCHEMATIC DESIGN DATE: X ☒

DESIGN DEVELOPMENT DATE: X ☒

BIDS & CONSTRUCTION DATE: 8/2/2021 ☒

REVISION:  DATE: MM-DD-YYYY

REVISION:  DATE: MM-DD-YYYY

REVISION:  DATE: MM-DD-YYYY

DRAWINGS SHEET TITLE

PANEL SCHEDULES

SHEET NUMBER

E.10

20105

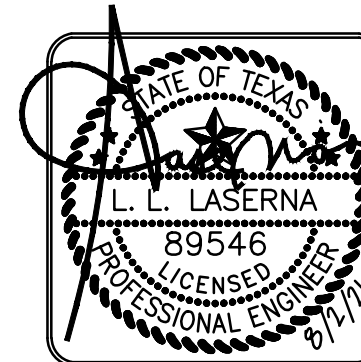
PROJECT NUMBER

## PANEL "LB" SCHEDULE

PANEL "LB" SCHEDULE																
MOUNTING: SURFACE				TYPE: G.E. OR S.Q.D.				FAULT CURRENT: 7,612 A				MAIN: MCB BUS: 125 A FEED: BOTTOM				
VOLTS: 208Y/120 Vac BOLT-On				ENCLOSURE: NEMA 1 WITH GROUND BAR				FAULT BRACING: 22K AIC SC FULLY RATED				MAIN SIZE BREAKER: 100 A BUS: COPPER				
PHASE: 3 WIRE: 4 Hz.: 60				ISOLATED GROUND: YES				TVSS/SPD: NONE				LOCATION: ELEC 204				
DESCRIPTION	CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA)	BREAKER	CIRCUIT	ØA	ØB	ØC	CIRCUIT	BREAKER	LOAD (kVA)	WIRE & IG/GROUND SIZE	CONDUIT SIZE	DESCRIPTION		
RECEPTACLES, RM. 128	3/4"	(2)-#10, (1)-#10	0.900	20/1	1				2	20/1	0.720	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RMS. 137,139,140		
LIFT RECEPTACLE, RM. 138	3/4"	(2)-#10, (1)-#10	1.000	20/1	3				4	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 137		
REFRIGERATOR, RM. 139	3/4"	(2)-#10, (1)-#10		0.800	20/1	5			6	20/1		0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 137	
TV RECEPTACLE, RM. 131	3/4"	(2)-#10, (1)-#10	0.500	20/1	7				8	20/1	0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 132		
RECEPTACLES, RM. 133	3/4"	(2)-#10, (1)-#10		0.540	20/1	9			10	20/1		0.720	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RMS. 132,134-136	
RECEPTACLES, RM. 133	3/4"	(2)-#10, (1)-#10		0.360	20/1	11			12	20/1		0.500	(2)-#10, (1)-#10	3/4"	TV RECEPTACLE, RM. 131	
RECEPTACLES, RMS. 117,131	3/4"	(2)-#10, (1)-#10	0.720	20/1	13				14	20/1	0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 115		
RECEPTACLES, RM. 131	3/4"	(2)-#10, (1)-#10		0.360	20/1	15			16	20/1		0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 115	
RECEPTACLES, RM. 127	3/4"	(2)-#10, (1)-#10		0.900	20/1	17			18	20/1		0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 115	
RECEPTACLES, RM. 124	3/4"	(2)-#10, (1)-#10	0.720	20/1	19				20	20/1	0.180	(2)-#10, (1)-#10	3/4"	RECEPTACLE, RM. 124		
RECEPTACLE, RM. 124	3/4"	(2)-#10, (1)-#10		0.180	20/1	21			22	20/1		0.800	(2)-#10, (1)-#10	3/4"	RECEPTACLE, RM. 124	
RECEPTACLE, RM. 124	3/4"	(2)-#10, (1)-#10		0.180	20/1	23			24	20/1		0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 124,130	
RECEPTACLES, RMS. 101,116	3/4"	(2)-#10, (1)-#10	0.720	20/1	25				26	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 124,130		
RECEPTACLES, RMS. 113-115, MECH. YARD 1	3/4"	(2)-#10, (1)-#10		1.080	20/1	27			28	20/1	1.260	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 122		
RECEPTACLES, RMS. 110-112,116	3/4"	(2)-#10, (1)-#10		1.080	20/1	29			30	20/1		0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 122	
REFRIGERATOR, RM. 110	3/4"	(2)-#10, (1)-#10	0.800	20/1	31				32	20/1	1.260	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 121		
RECEPTACLES, RM. 109	3/4"	(2)-#10, (1)-#10	0.900	20/1	33				34	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 121		
RECEPTACLES, RMS. 109,138, EXT. WALL	3/4"	(2)-#10, (1)-#10		0.720	20/1	35			36	20/1		1.260	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 120	
RECEPTACLES, RM. 108,109	3/4"	(2)-#10, (1)-#10	0.720	20/1	37				38	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 120		
RECEPTACLES, RM. 106	3/4"	(2)-#10, (1)-#10	0.900	20/1	39				40	20/1		0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 119	
RECEPTACLES, RM. 105	3/4"	(2)-#10, (1)-#10		0.900	20/1	41			42	20/1		1.080	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 119	
RECEPTACLES, RMS. 101,129, EXT. WALL	3/4"	(2)-#10, (1)-#10	1.260	20/1	43				44	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 118		
RECEPTACLES, RMS. 101,102, EXT. WALL	3/4"	(2)-#10, (1)-#10		1.080	20/1	45			46	20/1		0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 118	
RECEPTACLES, RMS. 103,117	3/4"	(2)-#10, (1)-#10		0.900	20/1	47			48	20/1		0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RMS. 104,117, EXT. WALL	
RECEPTACLES, RM. 103	3/4"	(2)-#10, (1)-#10		0.360	20/1	49			50	20/1	0.650	(2)-#10, (1)-#10	3/4"	EWC RECEPTACLE, RM. 117		
SPARE					20/1	51			52	20/1			(2)-#10, (1)-#10	3/4"	SPARE	
*					20/1	53			54	20/1					*	
NOTES:				TOTAL KVA ØA = 12.570				TOTAL KVA ØB = 11.700				TOTAL KVA ØC = 11.380				2017 NEC ARTICLE 215.3 ARTICLE 220 II & III ARTICLE 440.33
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.				TOTAL CONNECTED LOAD = 35.650 kVA				99.0 AMPS								
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.				TOTAL DEMAND LOAD = 22.825 kVA												
				63.4 AMPS												

## PANEL "LC" SCHEDULE

PANEL "LC" SCHEDULE																
MOUNTING: SURFACE				TYPE: G.E. OR S.Q.D.				FAULT CURRENT: 6,545 A				MAIN: MCB BUS: 125 A FEED: BOTTOM				
VOLTS: 208Y/120 Vac BOLT-On				ENCLOSURE: NEMA 1 WITH GROUND BAR				FAULT BRACING: 22K AIC SC FULLY RATED				MAIN SIZE BREAKER: 100 A BUS: COPPER				
PHASE: 3 WIRE: 4 Hz.: 60				ISOLATED GROUND: NONE				TVSS/SPD: NONE				LOCATION: ELEC 204				
DESCRIPTION	CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (KVA)	BREAKER	CIRCUIT	ØA	ØB	ØC	BREAKER	LOAD (KVA)	WIRE & IG/GROUND SIZE	CONDUIT SIZE	DESCRIPTION			
FCU-3-1,2, RMS. 117,128	3/4"	(2)-#10, (1)-#10	0.489	15/2	1				2	15/2	0.344	(2)-#10, (1)-#10	3/4"	OAU-1-3, RM. 128		
"			0.489		3				4		0.344					
FCU-1-2,3, RMS. 109,116	3/4"	(2)-#10, (1)-#10	0.448	15/2	5				6	15/2	0.396	(2)-#10, (1)-#10	3/4"	OAU-1-1,2, RMS. 109,125		
"			0.448		7				8		0.396					
FCU-1-1, FCU-2-1, RMS. 125,127	3/4"	(2)-#10, (1)-#10	0.489	15/2	9				10	15/2	0.396	(2)-#10, (1)-#10	3/4"	OAU-2-1,2, 2ND FLR. FUT. CLASSRM./CORR.		
"			0.489		11				12		0.396					
FCU-2A-1,2, FUT. CORRIDORS	3/4"	(2)-#10, (1)-#10	0.333	15/2	13				14	15/2	0.229	(2)-#10, (1)-#10	3/4"	BS-1-1,2,3, RMS. 116,117,124		
"			0.333		15				16		0.229					
FCU-2B-1,2,3 FUT. CORR.	3/4"	(2)-#10, (1)-#10	0.624	15/2	17				18	15/2	0.208	(2)-#10, (1)-#10	3/4"	BS-2A-1, BS-2B-1, 2ND FLR. FUTURE CORRIDORS		
"			0.624		19				20		0.208					
CCU-1-5, CCU-3-3, RMS. 101,103	3/4"	(2)-#10, (1)-#10	0.219	15/2	21				22	15/2	0.125	(2)-#10, (1)-#10	3/4"	CCU-2A-1,2,3, FUT. CLASSROOMS		
"			0.219		23				24		0.125					
CCU-3-1,2, CCU-1-10, RMS. 118-119,129	3/4"	(2)-#10, (1)-#10	0.344	15/2	25				26	15/2	0.479	(2)-#10, (1)-#10	3/4"	CCU-2A-5,6, CCU-2B-5,6, RMS. 105,201, FUT. ATRIUM		
"			0.344		27				28		0.479					
CCU-1-1,2,3,4 RMS. 106,108,110,114	3/4"	(2)-#10, (1)-#10	0.167	15/2	29				30	15/2	0.156	(2)-#10, (1)-#10	3/4"	CCU-2B-2,3,4 FUT. CLASSROOMS		
"			0.167		31				32		0.156					
CCU-1-6,7,8,9, RMS. 120-122,130	3/4"	(2)-#10, (1)-#10	0.208	15/2	33				34	15/2	0.073	(2)-#10, (1)-#10	3/4"	CCU-2A-1, CCU-2B-1, RMS. 203,204		
"			0.208		35				36		0.073					
CCU-2-1,2, RM. 124	3/4"	(2)-#10, (1)-#10	0.312	15/2	37				38	15/2	0.375	(2)-#10, (1)-#10	3/4"	AHU-1 INTEGRATION VALVE KIT, RM. 207		
"			0.312		39				40		0.375					
CEF-2, RM. 104	3/4"	(2)-#10, (1)-#10	0.121	20/1	41				42	20/1	0.060	(2)-#10, (1)-#10	3/4"	CEF-6,7, RMS. 135,136		
CEF-1,3,4,5, RMS. 111-113, 115	3/4"	(2)-#10, (1)-#10	0.293	20/1	43				44	20/1	0.030	(2)-#10, (1)-#10	3/4"	CEF-8, RM. 205		
RH-1, RM. 138	3/4"	(2)-#10, (1)-#10	0.900	20/2	45				46	20/1				SPARE		
"			0.900		47				48	20/1				"		
SPARE				20/1	49				50	20/1				"		
"				20/1	51				52	20/1				"		
"				20/1	53				54	20/1				"		
NOTES:				TOTAL KVA ØA = 5.227				TOTAL KVA ØB = 5.315				TOTAL KVA ØC = 4.590				2017 NEC ARTICLE 215.3 ARTICLE 220 II & III ARTICLE 440.33
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.				TOTAL CONNECTED LOAD = 15.132 KVA				42.0 AMPS								
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.				TOTAL DEMAND LOAD = 15.132 KVA												
				42.0 AMPS												



MEPTech  
Engineering, Inc.  
TBPE FIRM # F-10227  
5090 ADA AVENUE  
BEAUMONT, TEXAS 77708-4411  
PHONE: (409) 673-2013  
FAX: (409) 767-9224