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 AND COORDINATED IT WITH
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UNITED CHRISTIAN ACADEMY
 First Pentecostal Church
 Nederland, TX 77627
 Highway 69

ISSUED FOR SCHEMATIC DESIGN	<input type="checkbox"/>
DATE:	
DESIGN DEVELOPMENT	<input type="checkbox"/>
DATE:	
BIDS & CONSTRUCTION	<input type="checkbox"/>
DATE:	8/02/2021
REVISION:	
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DRAWINGS SHEET TITLE	LIGHTING FIRST FLOOR PLAN
REF. ADD #1	
SHEET NUMBER	E.1
PROJECT NUMBER	20105

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"

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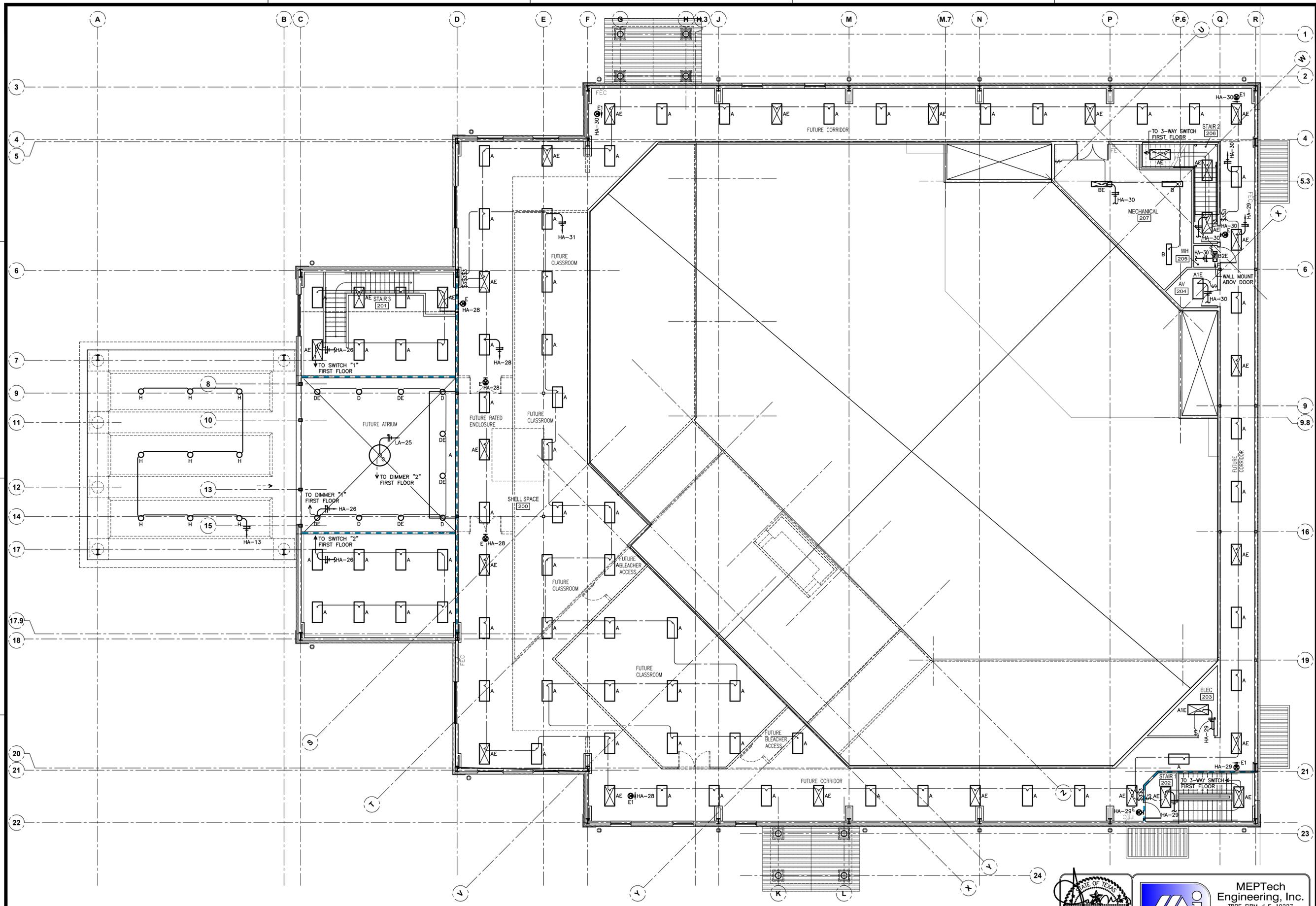
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DRAWINGS SHEET TITLE
LIGHTING SECOND FLOOR PLAN

SHEET NUMBER
E.2
20105
PROJECT NUMBER



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

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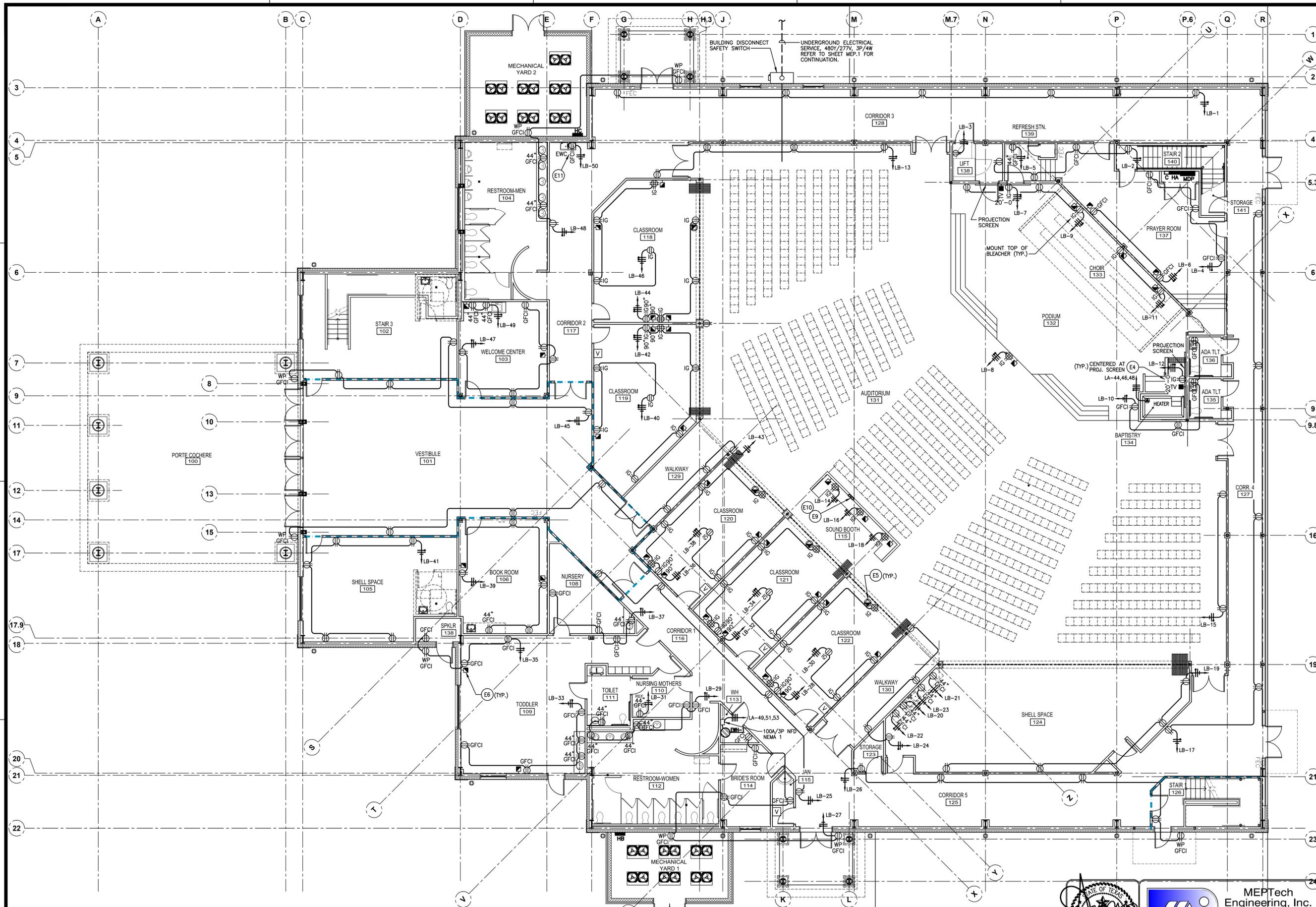
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DRAWINGS SHEET TITLE
POWER & COMMUNICATIONS
FIRST FLOOR PLAN

SHEET NUMBER
E.3
 20105
 PROJECT NUMBER



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



SAVED: MICHAEL M
 PLOT: MICHAEL MACTAN
 PLOT DATE: 8/16/2021 5:02 PM
 SHEET SIZE: ARCH-standard D (36.00 x 24.00 inches)

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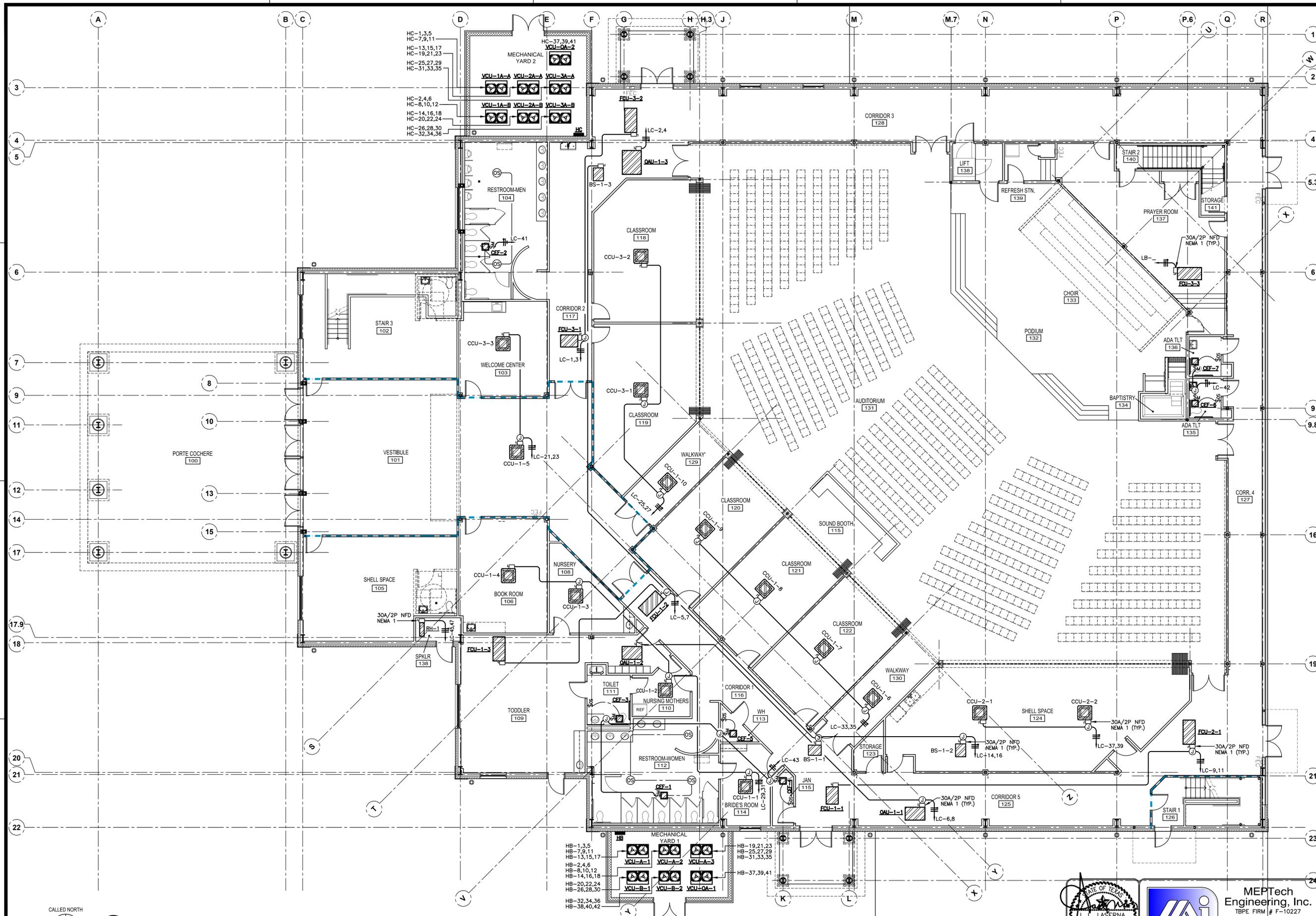
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DRAWINGS SHEET TITLE
ELECTRICAL FIRST FLOOR PLAN - MECH. EQUIPMENT

SHEET NUMBER
E.5
 20105
 PROJECT NUMBER



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



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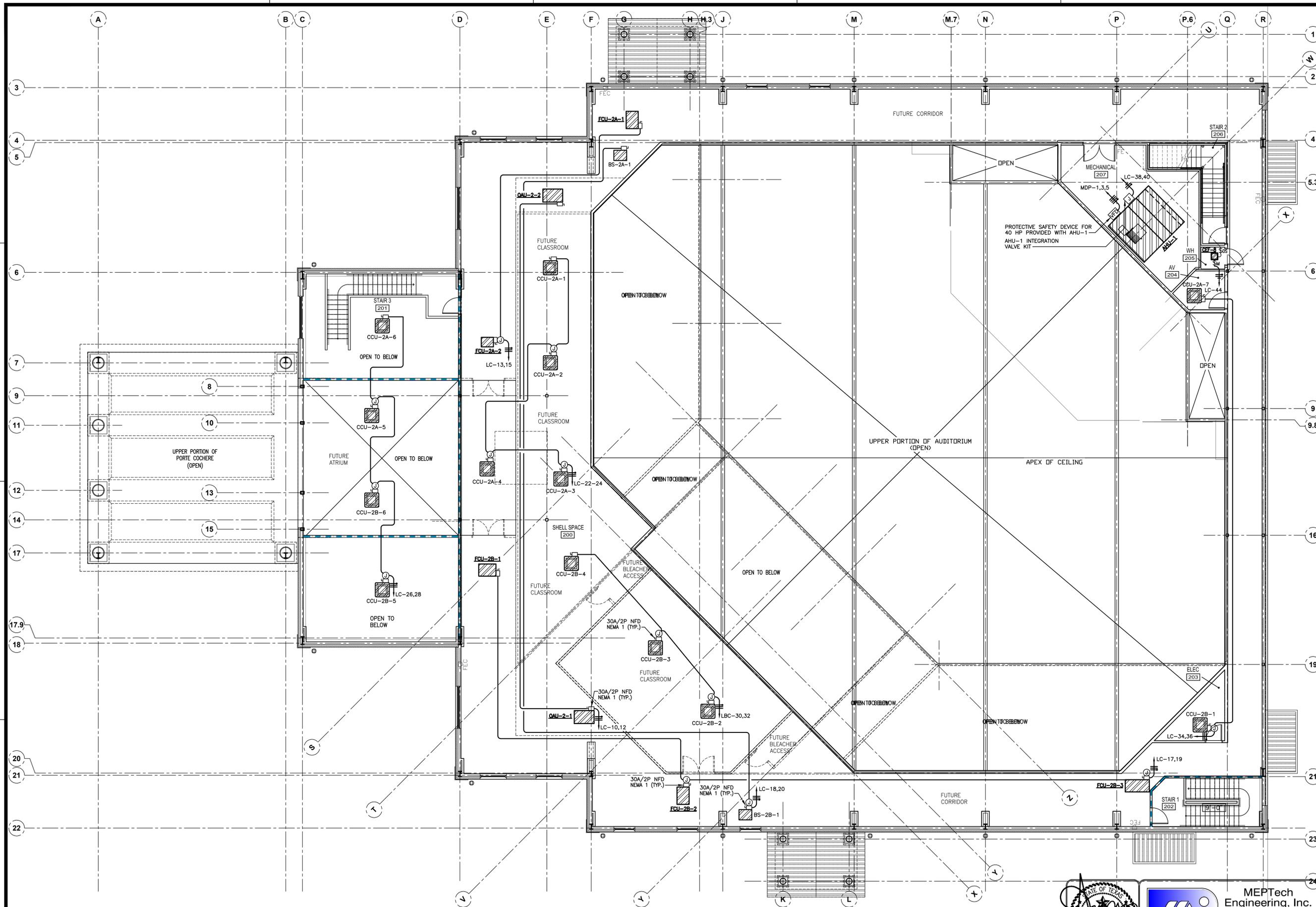
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DRAWINGS SHEET TITLE
ELECTRICAL SECOND FLOOR PLAN - MECH. EQUIPMENT

SHEET NUMBER
E.6
 20105
 PROJECT NUMBER



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



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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	4V72-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, EPB AND UL LISTED FOR WET LOCATIONS.
BE	METALUX	4V72-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 WATT.
B1E	METALUX	4V72-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, EPB AND UL LISTED FOR WET LOCATIONS. SELF-CONTAINED EMERGENCY BATTERY OPERATES 10 WATT.
B2E	METALUX	2V72-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, EPB AND UL LISTED FOR WET LOCATIONS. SELF-CONTAINED EMERGENCY BATTERY OPERATES 10 WATT.
C	HALO	PD620D010B PD66B840/61VC	(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-EM PD66B840/61VC	(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	LPX2SSD	(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 BLBW3LI	(1)-87 LED/840	277	PENDANT MOUNT WITH 8" REFLECTOR, WIDE SPIN ALUMINUM, SPECULAR CLEAR AND BRONZE FINISH. 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 BLBW3LI	(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. UL 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" AFF
	THREE-WAY SWITCH, 48" AFF
	THREE-WAY DIMMER SWITCH, 48" AFF
	MOTOR RATED SWITCH
	SWITCH WITH PILOT LIGHT, 48" AFF
	OCCUPANCY SENSOR SWITCH, 48" AFF
	OCCUPANCY SENSOR DIMMER SWITCH, 48" AFF
	MOTOR
	DISCONNECT SAFETY SWITCH
	COMBINATION MOTOR STARTER AND DISCONNECT SAFETY SWITCH
	HARDWIRED CONNECTION
	DUPLX RECEPTACLE, 12" AFF
	DUPLX RECEPTACLE ABOVE CEILING
	FLOOR MOUNTED DUPLX RECEPTACLE
	ISOLATED GROUND DUPLX RECEPTACLE
	DUPLX RECEPTACLE WITH MOUNTING HEIGHT
	WEATHER PROOF DUPLX RECEPTACLE
	GROUND FAULT CIRCUIT INTERRUPTER DUPLX RECEPTACLE
	DOUBLE DUPLX RECEPTACLE, 12" AFF
	ISOLATED GROUND DOUBLE DUPLX RECEPTACLE, 12" AFF
	DOUBLE DUPLX RECEPTACLE WITH MOUNTING HEIGHT
	CEILING MOUNTED JUNCTION BOX
	WALL MOUNTED JUNCTION BOX
	DATA AND/OR VOICE OUTLETS, 12" AFF (DOUBLE DUPLX CAT 5)
	DATA AND/OR VOICE OUTLETS, 12" AFF (DUPLX CAT 5)
	CEILING MOUNTED DATA AND/OR VOICE OUTLETS (DOUBLE DUPLX CAT 5)
	FLOOR MOUNTED DATA AND/OR VOICE OUTLETS (DOUBLE DUPLX CAT 5)
	DATA AND/OR VOICE OUTLETS WITH MOUNTING HEIGHT (DOUBLE DUPLX CAT 5)
	TV DATA OUTLET
	DUCT MOUNTED SMOKE DETECTOR WITH INDICATOR LIGHT
	PHOTO ELECTRIC CONTROL, 108" AFF
	LIGHTING CONTACTOR, 54" AFF
	SHUT DOWN RELAY
	CEILING MOUNTED OCCUPANCY SENSOR
ABBREVIATIONS	
A	AMPERES
AI	AMPS INTERRUPTING CURRENT
AF	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 SEPARATE 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 FINISH. PROVIDE 6" WENTENRY 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 ENTERY 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 INSTALLATION. 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 ANNUAL 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 ANNUAL 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

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

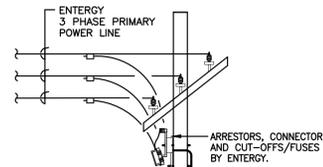
UNITED CHRISTIAN ACADEMY
 First Pentecostal Church
 Neffland, TX 77627
 Highway 69

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 NOTES, SYMBOLS & LIGHT FIXTURE SCHEDULE

SHEET NUMBER
E.7

20105
 PROJECT NUMBER

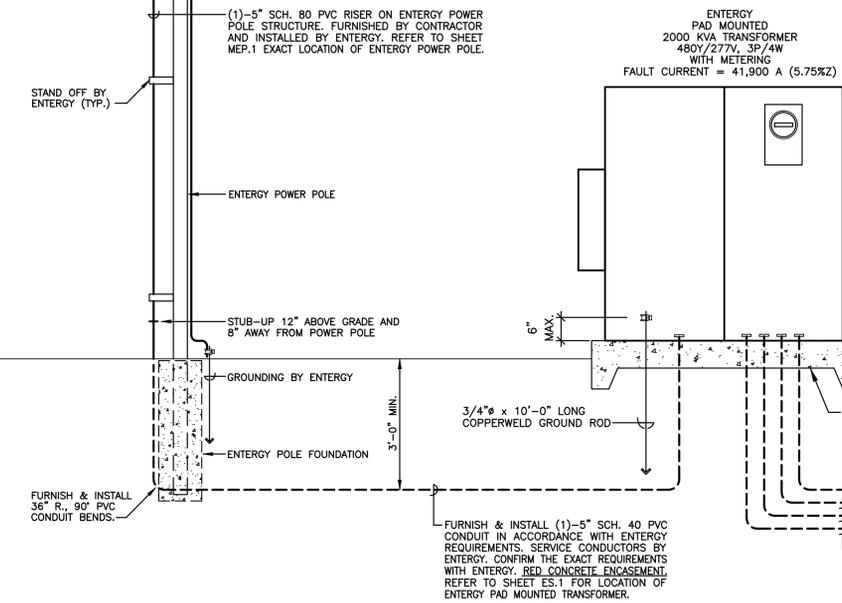


SHORT-CIRCUIT CURRENTS NOTES:
 CALCULATION OF SHORT-CIRCUIT CURRENTS, POINT-TO-POINT METHOD PER NEC 2017 ARTICLE 110.9, 110.10 & 240.1.

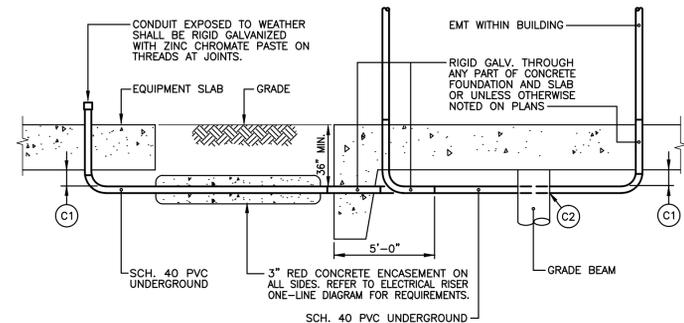
WORKING CLEARANCES:
 SYSTEMS OPERATING AT 600 VOLTS OR LESS TO GROUND, THE WORKING CLEARANCE SHALL NOT BE LESS THAN INDICATED IN TABLE 110.26 (A)(1) IN ADDITION TO THE DIMENSION SHOWN IN TABLE 110.26(A)(1). THE WORKING SPACE SHALL NOT BE LESS THAN 30 IN. WIDE IN FRONT OF THE ELECTRIC EQUIPMENT. THIS 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 INCLUDE 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.



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

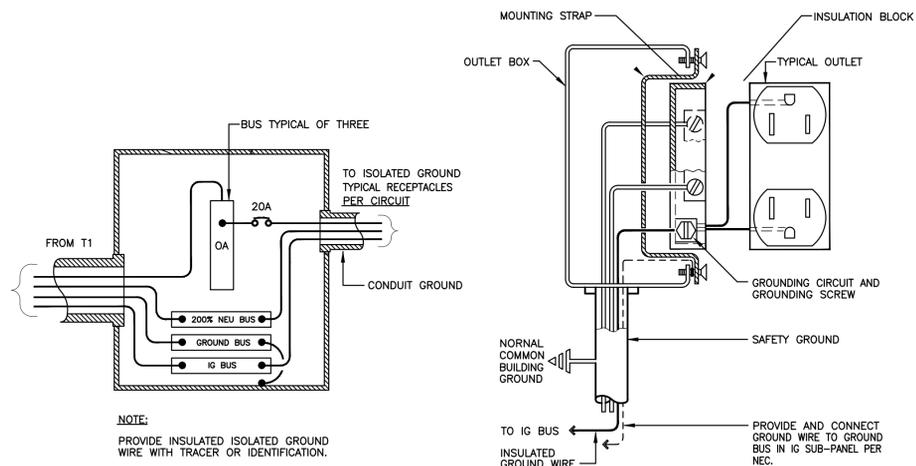


NOTES:

(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
LIGHTING LOADS (NEC 2017 ARTICLE 220.12)	32,550
1.) LIGHTING LOADS: 26,040 x 1.25 = 32,550 VA	
RECEPTACLE LOADS (NEC 2017 ARTICLE 220.14 (K))	58,510
1.) RECEPTACLE LOADS: 58,510 VA	
MOTOR AND HVAC LOADS (NEC 2017 ARTICLE 430.24.25 & 440)	715,414
a.) HVAC & EQUIPMENT = 704,606 VA	
b.) 25% OF THE HIGHEST MOTOR (40 HP-480V/3Ø) = 43,231 VA x .25 = 10,808 VA	
TOTAL HVAC LOAD = 704,606 + 10,808 = 715,414 VA	
TOTAL DEMAND LOAD	806,474
REMARKS:	
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.	
TOTAL DEMAND LOAD FOR FUTURE BUILDING ADDITION & SITE LIGHTING	980,000
REMARKS:	
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.	



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

UNITED CHRISTIAN ACADEMY
 First Pentecostal Church
 Nederland, TX 77627

ISSUED FOR SCHEMATIC DESIGN [X]
 DATE: X

DESIGN DEVELOPMENT [X]
 DATE: X

BIDS & CONSTRUCTION [X]
 DATE: 8/2/2021

REVISION: [X]
 DATE: MM-DD-YYYY

REVISION: [X]
 DATE: MM-DD-YYYY

REVISION: [X]
 DATE: MM-DD-YYYY

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

SHEET NUMBER
E.8
 20105
 PROJECT NUMBER

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 Highway 69

ISSUED FOR SCHEMATIC DESIGN DATE: X
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 REVISION: DATE: MM-DD-YYYY
 REVISION: DATE: MM-DD-YYYY
 REVISION: DATE: MM-DD-YYYY

DRAWINGS SHEET TITLE
PANEL SCHEDULES
 SHEET NUMBER
E.9
 20105
 PROJECT NUMBER

PANEL "HA" SCHEDULE												
MOUNTING: SURFACE		TYPE: G.E. OR SQ.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				
DESCRIPTION	CONDUIT SIZE	WIRE & IG/GROUND SIZE	LOAD (kVA)	BREAKER	ØA	ØB	ØC	BREAKER	LOAD (kVA)	WIRE & IG/GROUND SIZE	CONDUIT SIZE	DESCRIPTION
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.330	20/1	1	2	20/1	0.798	(2)-#8, (1)-#10	1 1/4"	PARKING LIGHTS	
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	3	4	20/1	1.596	(2)-#8, (1)-#10	1 1/4"	PARKING LIGHTS	
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	5	6	20/1	1.596	(2)-#8, (1)-#10	1 1/4"	PARKING LIGHTS	
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	7	8	20/1	1.064	(2)-#8, (1)-#10	1 1/4"	PARKING LIGHTS	
PARKING LIGHTS	1 1/4"	(2)-#8, (1)-#10	1.064	20/1	9	10	20/1	0.532	(2)-#8, (1)-#10	1 1/4"	PARKING LIGHTS	
SECURITY/EXTERIOR WALL LIGHTS	3/4"	(2)-#10, (1)-#10	0.532	20/1	11	12	20/1	0.616	(2)-#10, (1)-#10	3/4"	SECURITY/EXTERIOR WALL LIGHTS	
FRONT PORCH LIGHTS	3/4"	(2)-#10, (1)-#10	0.396	20/1	13	14	20/1	0.100	(2)-#10, (1)-#10	3/4"	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	(2)-#10, (1)-#10	3/4"	LIGHTS, RMS. 118-119	
LIGHTS, RMS. 103-104	3/4"	(2)-#10, (1)-#10	0.387	20/1	17	18	20/1	0.944	(2)-#10, (1)-#10	3/4"	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	(2)-#10, (1)-#10	3/4"	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	(2)-#10, (1)-#10	3/4"	LIGHTS, RMS. 134-139,141	
LIGHTS, RM 131	3/4"	(2)-#10, (1)-#10	0.783	20/1	23	24	20/1	0.522	(2)-#10, (1)-#10	3/4"	LIGHTS, RMS. 132-133	
LIGHTS, RM 131	3/4"	(2)-#10, (1)-#10	0.609	20/1	25	26	20/1	0.958	(2)-#10, (1)-#10	3/4"	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	(2)-#10, (1)-#10	3/4"	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	(2)-#10, (1)-#10	3/4"	LIGHTS, EXIT SIGNS, RMS. 204-207, FUT. CORR.	
SPARE				20/1	31	32	20/1				SPARE	
				20/1	33	34	20/1					
				20/1	35	36	20/1					
				20/1	37	38	20/1					
				20/1	39	40	20/1					
				20/1	41	42	20/1					
NOTES:		TOTAL KVA #A = 7.734		TOTAL KVA #B = 10.155		TOTAL KVA #C = 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 SQ.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	2	100/3	8.680	(4)-#3, (1)-#8	1 1/2"	PANEL "HA", PRAYER ROOM 137	
			14.410		3	4		8.680				
			14.410		5	6		8.680				
PANEL "HB", MECHANICAL YARD 1	(2)-3"	(4)-350, (1)-#2	113.903	600/3	7	8	400/3	91.845	(4)-#3/0, (1)-#4	Ø2-1/2"	PANEL "HC", MECHANICAL YARD 2	
			113.903		9	10		91.845				
			113.903		11	12						
112.5 KVA TRANSFORMER "T1", RM. ELEC. 203	2 1/2"	(3)-#3/0, (1)-#4	34.212	200/3	13	14					SPACE	
			34.212		15	16						
			34.212		17	18						
SPACE					19	20						
					21	22						
					23	24						
					25	26						
					27	28						
					29	30						
					31	32						
					33	34						
					35	36						
					37	38						
					39	40						
					41	42						
NOTES:		TOTAL KVA #A = 263.050		TOTAL KVA #B = 263.050		TOTAL KVA #C = 263.050						
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.		TOTAL CONNECTED LOAD = 789.150 KVA		949.2 AMPS				③ PROVIDE INTEGRAL SPD ME WITH 160kA MAX. SURGE CURRENT PER PHASE. G.E. TPME27708AS.				
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						

PANEL "HB" SCHEDULE												
MOUNTING: SURFACE		TYPE: G.E. OR SQ.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	ØA	ØB	ØC	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				
			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 #A = 113.903		TOTAL KVA #B = 113.903		TOTAL KVA #C = 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 SQ.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	BREAKER	LOAD (kVA)	WIRE & IG/GROUND SIZE	CONDUIT 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				
			7.178		5	6		7.178				
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				
			7.178		11	12		7.178				
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)	
			7.178		15	16		7.178				
			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				
			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				
			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				
			7.178		35	36		7.178				
VCU-OA-2 (MOD. #1)	3/4"	(3)-#10, (1)-#10	5.709	25/3	37	38			(3)-#8, (1)-#10		SPACE	
			5.709		39	40						
			5.709		41	42						
SPACE					43	44					SPACE	
					45	46						
					47	48						
NOTES:		TOTAL KVA #A = 91.845		TOTAL KVA #B = 91.845		TOTAL KVA #C = 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						

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

Highway 69
 Nederland, TX 77627

UNITED CHRISTIAN ACADEMY
 First Pentecostal Church

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												
MOUNTING: SURFACE		TYPE: G.E. OR S.O.D.		FAULT CURRENT: 7,612 A		MAIN: MCB BUS: 125 A		FEED: BOTTOM				
VOLTS: 208Y/120 V _{oc} 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	BREAKER	LOAD (kVA)	WIRE & IG/GROUND 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, RMS. 117,131	3/4"	(2)-#10, (1)-#10	0.720	20/1	11	12	20/1	0.500	(2)-#10, (1)-#10	3/4"	TV RECEPTACLE, RM. 131	
RECEPTACLES, RM. 131	3/4"	(2)-#10, (1)-#10	0.360	20/1	13	14	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	15	16	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	17	18	20/1	0.360	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 115	
RECEPTACLE, RM. 124	3/4"	(2)-#10, (1)-#10	0.180	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, RMS. 101,116	3/4"	(2)-#10, (1)-#10	0.720	20/1	23	24	20/1	0.540	(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	25	26	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 124,130	
RECEPTACLES, RMS. 110-112,116	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	
REFRIGERATOR, RM. 110	3/4"	(2)-#10, (1)-#10	0.800	20/1	29	30	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 122	
RECEPTACLES, RM. 109	3/4"	(2)-#10, (1)-#10	0.900	20/1	31	32	20/1	1.260	(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	33	34	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 121	
RECEPTACLES, RM. 108,109	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. 106	3/4"	(2)-#10, (1)-#10	0.900	20/1	37	38	20/1	0.540	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 120	
RECEPTACLES, RM. 105	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, RMS. 101,129, EXT. WALL	3/4"	(2)-#10, (1)-#10	1.260	20/1	41	42	20/1	1.080	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 119	
RECEPTACLES, RMS. 101,102, EXT. WALL	3/4"	(2)-#10, (1)-#10	1.080	20/1	43	44	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	45	46	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 118	
RECEPTACLES, RM. 103	3/4"	(2)-#10, (1)-#10	0.360	20/1	47	48	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RMS. 104,117, EXT. WALL	
SPARE				20/1	49	50	20/1	0.650	(2)-#10, (1)-#10	3/4"	EWC RECEPTACLE, RM. 117	
				20/1	51	52	20/1				SPARE	
				20/1	53	54	20/1					
NOTES:		TOTAL KVA ØA = 12.570		TOTAL KVA ØB = 11.700		TOTAL KVA ØC = 11.380						
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.		TOTAL CONNECTED LOAD = 35.650 KVA		99.0 AMPS		2017 NEC ARTICLE 215.3 ARTICLE 220 II & III						
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.		TOTAL DEMAND LOAD = 22.825 KVA		63.4 AMPS		ARTICLE 440.33						

PANEL "LA" SCHEDULE													
MOUNTING: SURFACE		TYPE: G.E. OR S.O.D.		FAULT CURRENT: 6,545 A		MAIN: MCB BUS: 225 A		FEED: BOTTOM					
VOLTS: 208Y/120 V _{oc} BOLT-On		ENCLOSURE: NEMA 1 WITH GROUND BAR		FAULT BRACING: 22K AIC SC FULLY RATED		MAIN SIZE BREAKER: 200 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	DESCRIPTION	
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	1	2	20/1	0.600	20/1	2	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 131
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	3	4	20/1	0.600	20/1	4	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 131
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	5	6	20/1	0.600	20/1	6	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 131
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	7	8	20/1	0.600	20/1	8	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 131
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	9	10	20/1	0.600	20/1	10	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	11	12	20/1	0.600	20/1	12	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	13	14	20/1	0.600	20/1	14	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	15	16	20/1	0.600	20/1	16	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	17	18	20/1	0.600	20/1	18	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	19	20	20/1	0.600	20/1	20	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	21	22	20/1	0.600	20/1	22	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
STAGE LIGHTS, RM. 131	3/4"	(2)-#10, (1)-#10	0.600	20/1	23	24	20/1	0.600	20/1	24	(2)-#10, (1)-#10	3/4"	STAGE LIGHTS, RM. 132
CHANDELIER LIGHTS, RM. 101, FUT. ATRIUM	3/4"	(2)-#10, (1)-#10	0.500	20/1	25	26	20/1	0.900	20/1	26	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 201, FUT. CORRIDORS
TEL. BOARD RECEPTACLES, RM. 204	3/4"	(2)-#10, (1)-#10	0.360	20/1	27	28	20/1	0.720	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RM. 202, FUT. CORRIDORS		
TEL. BOARD RECEPTACLES, RM. 204	3/4"	(2)-#10, (1)-#10	0.360	20/1	29	30	20/1	0.900	(2)-#10, (1)-#10	3/4"	RECEPTACLES, RMS. 203,205 FUT. CORRIDORS		
RECEPTACLES, RM. 204	3/4"	(2)-#10, (1)-#10	0.360	20/1	31	32	20/1	1.000	(2)-#10, (1)-#10	3/4"	FIRE ALARM CONTROL PANEL "FACP", RM. 203 ①		
RECEPTACLES, RM. 204	3/4"	(2)-#10, (1)-#10	0.360	20/1	33	34	20/1	1.000	(2)-#10, (1)-#10	3/4"	SECURITY CONTROL PANEL "SCP", RM. 203 ②		
RECEPTACLES, RMS. 206,207, FUT. CORRIDORS	3/4"	(2)-#10, (1)-#10	0.900	20/1	35	36	20/1	1.000	(2)-#10, (1)-#10	3/4"	SOUND SYSTEM, RM. 204		
SPARE				20/1	37	38	20/1				SPARE		
				20/1	39	40	20/1						
				20/1	41	42	20/1						
				20/1	43	44	30/3	1.700	(3)-#8, (1)-#10	1"	BAPTISTRY HEATER, RM. 134		
				20/1	45	46		1.700					
				20/1	47	48		1.700					
EW-1, RM. 113	1 1/2"	(3)-#3, (1)-#6	6.000	90/3	49	50	30/3	2.000	(3)-#8, (1)-#10	1"	EW-2, RM. 205		
				51	52			2.000					
				53	54			2.000					
NOTES:		TOTAL KVA ØA = 17.260		TOTAL KVA ØB = 16.940		TOTAL KVA ØC = 17.660							
① ALL PANELS TO BE IDENTIFIED WITH ENGRAVED PHENOLIC RESIN PLACARDS.		TOTAL CONNECTED LOAD = 51.860 KVA		144.0 AMPS		2017 NEC ARTICLE 215.3 ARTICLE 220 II & III		③ PROVIDE LOCKING CIRCUIT BREAKER.					
② PANEL CIRCUIT SCHEDULES TO BE TYPED, NOT HANDWRITTEN, ON PANEL MANUFACTURERS SUPPLIED TEMPLATE.		TOTAL DEMAND LOAD = 55.585 KVA		154.3 AMPS		ARTICLE 440.33							

PANEL "LC" SCHEDULE												
MOUNTING: SURFACE		TYPE: G.E. OR S.O.D.		FAULT CURRENT: 6,545 A		MAIN: MCB BUS: 125 A		FEED: BOTTOM				
VOLTS: 208Y/120 V _{oc} 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	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	
FCU-1-2,3, RMS. 109,116	3/4"	(2)-#10, (1)-#10	0.448	15/2	3	4	15/2	0.396	(2)-#10, (1)-#10	3/4"	OAU-1-1,2, RMS. 109,125	
FCU-1-1, FCU-2-1, RMS. 125,127	3/4"	(2)-#10, (1)-#10	0.489	15/2	5	6	15/2	0.396	(2)-#10, (1)-#10	3/4"	OAU-2-1,2, 2ND FLR. FUT. CLASSRM./CORR.	
FCU-2A-1,2, FUT. CORRIDORS	3/4"	(2)-#10, (1)-#10	0.333	15/2	7	8	15/2	0.396	(2)-#10, (1)-#10	3/4"	BS-1-1,2,3, RMS. 116,117,124	
FCU-2B-1,2,3, FUT. CORR.	3/4"	(2)-#10, (1)-#10	0.624	15/2	9	10	15/2	0.229	(2)-#10, (1)-#10	3/4"	BS-2A-1, BS-2B-1, 2ND FLR. FUTURE CORRIDORS	
CCU-1-5, CCU-3-3, RMS. 101,103	3/4"	(2)-#10, (1)-#10	0.219	15/2	11	12	15/2	0.208	(2)-#10, (1)-#10	3/4"	CCU-2A-1,2,3, FUT. CLASSROOMS	
CCU-3-1,2, CCU-1-10, RMS. 118-119,129	3/4"	(2)-#10, (1)-#10	0.344	15/2	13	14	15/2	0.479	(2)-#10, (1)-#10	3/4"	CCU-2A-5,6, CCU-2B-5,6, RMS. 105,201, FUT. ATRIUM	
CCU-1-1,2,3,4 RMS. 106,108,110,114	3/4"	(2)-#10, (1)-#10	0.167	15/2	15	16	15/2	0.479	(2)-#10, (1)-#10	3/4"	CCU-2B-2,3,4 FUT. CLASSROOMS	
CCU-1-6,7,8,9, RMS. 120-122,130	3/4"	(2)-#10, (1)-#10	0.208	15/2	17	18	15/2	0.156	(2)-#10, (1)-#10	3/4"	CCU-2A-1, CCU-2B-1, RMS. 203,204	
CCU-2-1,2, RM. 124	3/4"	(2)-#10, (1)-#10	0.312	15/2	19	20	15/2	0.073	(2)-#10, (1)-#10	3/4"	AHU-1 INTEGRATION VALVE KIT, RM. 207	
CEF-2, RM. 104	3/4"	(2)-#10, (1)-#10	0.121	20/1	21	22	20/1	0.375	(2)-#10, (1)-#10	3/4"		
CEF-1,3,4,5, RMS. 111-113, 115	3/4"	(2)-#10, (1)-#10	0.293	20/1	23	24	20/1	0.030	(2)-#10, (1)-#10	3/4"	CEF-6,7, RMS. 135,136	
RH-1, RM. 138	3/4"	(2)-#10, (1)-#10	0.900	20/2	25	26	20/1	0.030	(2)-#10, (1)-#10	3/4"	CEF-8, RM. 205	
SPARE				20/1	27	28	20/1				SPARE	
				20/1	29	30	20/1					
				20/1	31	32	20/1					
				20/1	33	34	20/1					
				20/1	35	36	20/1					
				20/1	37	38	20/1					
				20/1	39	40						