SYMBOLS, SPECIFICATIONS, NOTES & ABBREVIATIONS

A. GENERAL

- 1. THE CONTRACTOR SHALL COMPLY WITH ALL THE LAWS, ORDINANCES, RULES AND REGULATIONS OF ALL LOCAL AND STATE GOVERNMENTAL AUTHORITIES, THE RULES OF THE NATIONAL FIRE PROTECTION ASSOCIATION AS INTERPRETED BY THE ENFORCING AUTHORITY HAVING JURISDICTION AND OF THE PUBLIC UTILITIES HAVING CONNECTION WITH ANY OF THE SYSTEMS HEREIN SPECIFIED.
- 2. THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED BY ANY OF THE FOREGOING AUTHORITIES, AND PAY FOR ALL OTHER COSTS IN CONNECTION WITH THE WORK. ALL CERTIFICATES SHALL BE IN DUPLICATE AND SHALL BE DELIVERED TO THE ARCHITECT.
- 3. THE SITE, LOCATION AND ROUTING OF SYSTEMS INDICATED TO HAVE NEW CONNECTIONS MADE TO THEM ARE SHOWN AS ACCURATELY AS FIELD CONDITIONS WOULD PERMIT. BIDDERS SHALL VISIT THE SITE AND THOROUGHLY EXAMINE THE CONTRACT DRAWINGS. ALL EXISTING CONDITIONS SHALL BE EXAMINED AND THEIR EXACT LOCATIONS VERIFIED. THE CONTRACTOR SHALL REPORT TO THE ARCHITECT BEFORE SUBMITTING A BID, ANY CONDITIONS WHICH MIGHT MAKE INSTALLATION OF REQUIRED EQUIPMENT A PROBLEM. NO CONSIDERATION OR ALLOWANCE WILL BE GRANTED FOR FAILURE TO INVESTIGATE CONDITIONS OR MISUNDERSTANDING OF THE CONTRACTUAL REQUIREMENTS.
- 4. THE CONTRACTOR SHALL INSTALL AND CONNECT ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE BEST ENGINEERING PRACTICE AND, UNLESS OTHERWISE SHOWN OR SPECIFIED, FOLLOW THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS AND FURNISH AND INSTALL ALL REQUIRED AUXILIARY ITEMS COMPLETE.
- 5. DRAWINGS SHALL BE CONSIDERED DIAGRAMMATIC AND FOR BIDDING PURPOSES ONLY. WHILE THE DRAWINGS ARE GENERALLY TO SCALE AND ARE AS ACCURATE AS THE SCALE WILL PERMIT, ALL IMPORTANT DIMENSIONS SHALL BE DETERMINED IN THE FIELD.
- COORDINATE WITH ALL TRADES TO AVOID INTERFERENCE AMONG MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL ITEMS. PROVIDE ALL NECESSARY OFFSETS AND FITTINGS IN CIRCUITRY AND OTHER ITEMS REQUIRED TO INSTALL THE WORK WITHOUT INTERFERENCES.
- 7. THE CONTRACTOR SHALL TEST ALL EQUIPMENT INSTALLED UNDER THIS CONTRACT AND DEMONSTRATE TO THE OWNER ITS PROPER OPERATIONS. ALL NEW EQUIPMENT SHALL BE MOUNTED VIBRATION FREE.
- 8. ALL EQUIPMENT AND WORKMANSHIP SHALL BE GUARANTEED IN FULL FROM ALL DEFECTS FOR ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THIS WORK.
- 9. ALL EQUIPMENT INSTALLED SHALL BE NEW AND SHALL CONFORM IN ALL RESPECTS TO THE LATEST APPROVED STANDARDS OF IEEE, ANSI, NEMA AND UNDERWIRTERS LABORATORIES, INC., (UNLESS INDICATED OTHERWISE). SUBSTITUTIONS SHALL ONLY BE ACCOMPLISHED AT THE DISCRETION OF THE ARCHITECT. SHOP DRAWINGS ARE TO BE SUBMITTED AND APPROVED BEFORE THE EQUIPMENT IS ORDERED. SUBMIT SIX (6) COPIES OF SHOP DRAWINGS TO THE ARCHITECT OF THE FOLLOWING: LIGHTING FIXTURES, DISCONNECT SWITCHES, PANELBOARDS, TRANSFORMERS, FIRE ALARM SYSTEM AND WIRING DEVICES.

10. DEFINITIONS

- "PROVIDE" UNDER THIS CONTRACT IS DEFINED AS FURNISH AND INSTALL.
- "CONCEALED" UNDER THIS CONTRACT IS DEFINED AS HIDDEN BY ARCHITECTURAL WALLS AND CEILINGS.
- "EXPOSED" UNDER THIS CONTRACT IS DEFINED AS VISIBLE TO VIEW. "INDICATED" UNDER THIS CONTRACT IS DEFINED AS SHOWN IN THE CONTRACT DOCUMENTS.
- 11. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN THE CONTRACT AREA AND
- ALL OTHER AREAS USED FOR STORAGE, STAGING, ETC. 12. PROVIDE TEMPORARY SERVICE FOR LIGHTING AND POWER EQUIPMENT (DRILLS, SAW, ETC.). VERIFY
- TEMPORARY REQUIREMENTS WITH GENERAL CONTRACTOR. TEMPORARY LIGHTING AND POWER SHALL MEET OSHA REQUIREMENTS AND LOCAL CODE. TEMPORARY POWER SHALL BE 120 VOLTS.
- 13. FINAL TESTING: AT THE TIME OF FINAL INSPECTION AND TESTS, ALL CONNECTIONS AT PANELBOARDS, DEVICES AND EQUIPMENT AND ALL SPLICES MUST BE COMPLETED. EACH BRANCH CIRCUIT AND ITS RESPECTIVE CONNECTED EQUIPMENT MUST TEST FREE OF SHORT CIRCUITS. UPON COMPLETION OF THE WORK, CLEAN AND POLISH ALL EXPOSED SURFACES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

B. RACEWAYS, BOXES AND CONDUITS

- 1. OUTDOORS WIRING METHODS: USE THE FOLLOWING WIRING METHODS:
- a. EXPOSED: RIGID OR INTERMEDIATE METAL CONDUIT OR RIGID ALUMINUM CONDUIT.
- CONCEALED: RIGID OR INTERMEDIATE METAL CONDUIT. UNDERGROUND: RIGID NONMETALLIC CONDUIT, UNLESS OTHERWISE NOTED.
- CONNECTION TO VIBRATING EQUIPMENT: LIQUIDTIGHT FLEXIBLE METAL CONDUIT. BOXES AND ENCLOSURES: NEMA TYPE 3F
- 2. INDOORS WIRING METHODS: USE THE FOLLOWING METHODS:
- CONNECTION TO VIBRATING EQUIPMENT: FLEXIBLE METAL CONDUIT, EXCEPT IN WET OR DAMP LOCATIONS USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT.
- b. DAMP OR WET LOCATIONS: RIGID STEEL CONDUITS.
- EXPOSED: ELECTRICAL METALLIC TUBING.
- d. CONCEALED: ELECTRICAL METALLIC TUBING OR, AS APPROVED, ARMOR-CLAD (MC) CABLE. e. BOXES AND ENCLOSURES: NEMA TYPE 1, EXCEPT IN DAMP OR WET LOCATIONS USE NEMA TYPE 3R.
- 3. ALL CIRCUITRY IN FINISHED AREAS SHALL BE RUN CONCEALED. MINIMUM SIZE CONDUIT SHALL BE 1/2".
- 4. EMT CONNECTORS AND COUPLINGS SHALL BE OF THE ALL-STEEL, COMPRESSION TYPE.
- 5. EXPOSED AND CONCEALED CIRCUITRY (WHETHER CONDUIT AND WIRE OR CABLE) SHALL BE RUN TIGHT TO CEILING SLAB (AS HIGH AS POSSIBLE TO MAXIMIZE HEADROOM) IN A NEAT, WORKMANLIKE MANNER. ALL
- RUNS SHALL BE PARALLEL OR PERPENDICULAR TO THE BUILDING WALLS. 6. ALL CIRCUITRY RUNS INDICATED ARE DIAGRAMMATIC. THE CONTRACTOR SHALL DETERMINE IN THE FIELD THE MOST SUITABLE ROUTES.
- 7. ALL EMPTY RACEWAYS SHALL CONTAIN A DRAG WIRE. EMPTY RACEWAYS 2" OR LARGER IN SIZE SHALL HAVE A MAXIMUM OF 3-90 DEGREE BENDS. PROVIDE 1" EMT FROM EACH TELEPHONE OR
- COMMUNICATION OUTLET DEVICE TO CEILING SPACE FOR ALL INSULATED WALLS. 8. EXPOSED LOW VOLTAGE WIRING SHALL BE INSTALLED IN A RACEWAY, UNLESS OTHERWISE NOTED.
- 9. OUTLET BOXES SHALL BE A MINIMUM OF 4" SQUARE WITH THE APPROPRIATE PLASTER RING OR TILE

C. WIRE AND CABLE

- 1. ALL CONDUCTORS SHALL BE COPPER, MINIMUM #12 (EXCEPT CONTROL CONDUCTORS AND LIGHTING TAPS AS PERMITTED BY NEC. CONDUCTORS FOR SWITCHING LIGHTS SHALL NOT BE CONSIDERED CONTROL CONDUCTORS). WITH 600 VOLT TYPE "THHN-THWN" INSULATION. CONDUCTORS #8 AND LARGER SHALL BE STRANDED. CONDUCTOR SIZES ARE BASED ON 75°C RATING.
- 2. WHERE APPROVED BY THE AUTHORITIES HAVING JURISDICTION, "MC" CABLE MAY BE UTILIZED FOR INTERIOR BRANCH CIRCUITS. ALL "MC" CABLE SHALL HAVE A GREEN INSULATED GROUND WIRE IN ADDITION TO THE
- 3. ALL 120 VOLT CIRCUIT HOMERUNS WHICH ARE OVER 100 LINEAR FEET SHALL BE #10 CONDUCTORS MINIMUM.
- 4. RUN MULTIPLE HOMERUNS TO ALTERNATELY NUMBERED PANELBOARD CIRCUITS (I.E., 1,3,5)
- 5. WHERE APPROVED BY THE AUTHORITIES HAVING JURISDICTION, "NMC" CABLE MAY BE UTILIZED FOR INTERIOR BRANCH CIRCUITS IN THE RESIDENTIAL UNITS. ALL "NMC" CABLE SHALL HAVE A GREEN GROUND WIRE IN ADDITION.
- PROVIDE UL LISTED FIRE RATED CONDUCTORS IN CONDUIT FOR CONTROL AND POWER WIRING SERVING EMERGENCY SYSTEMS THROUGHOUT THE BUILDING AS PER NEC ARTICLE 700.10(D)(1) AND IBC SECTION 909.20.6.1.3(EXCEPTION 3) & [F] IBC 909.12.2. THE CONDUCTORS SHALL BE UL LISTED MINIMUM 2-HOUR RATED WHEN INSTALLED IN CONDUIT. EMERGENCY SYSTEMS SHALL INCLUDE BUT NOT BE LIMITED TO FEEDERS SERVING EGRESS LIGHTING, FIRE ALARM SYSTEM, AND VOICE EVACUATION SYSTEM.

D. SUPPORTING DEVICES

- 1. INSTALL SUPPORTING DEVICES TO FASTEN ELECTRICAL COMPONENTS SECURELY AND PERMANENTLY IN
- ACCORDANCE WITH NEC REQUIREMENTS AND ANY ADDITIONAL LOCAL CODES. 2. COORDINATE WITH THE BUILDING STRUCTURAL SYSTEM AND WITH OTHER ELECTRICAL INSTALLATIONS.

E. EQUIPMENT CONNECTION

- EXTEND WIRING TO ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AND MAKE FINAL AND COMPLETE CONNECTIONS TO ALL EQUIPMENT. BEFORE ROUGHING IN. THE LOCATION AND TYPE OF DEVICE SHALL HAVE VERIFIED FROM SHOP DRAWINGS OF THE EQUIPMENT. STARTERS AND DISCONNECTS AND OTHER ELECTRICAL CIRCUITRY AND DEVICES SHALL BE LOCATED TO ALLOW ACCESS TO DEVICES AND NOT INTERFERE WITH THE OPERATION OF THE MECHANICAL OR ARCHITECTURAL DEVICES OR THEIR POSSIBLE MAINTENANCE OR REMOVAL.
- 2. ALL EQUIPMENT PROVIDED ON THIS PROJECT SHALL HAVE MANUFACTURER TERMINATIONS RATED 75°C.

. WIRING DEVICES AND TELPHONE/DATA OUTLETS

DUPLEX RECEPTACLE WITH GFCI*

DUPLEX RECEPTACLE WITH USB

*GFCI - GROUND FAULT CIRCUIT INTERRUPTER

- 1. THE LOCATION OF ALL WIRING DEVICES AND TELEPHONE/DATA OUTLETS SHALL BE VERIFIED BEFORE INSTALLATION WITH THE ARCHITECT. THE ARCHITECT MAY, AT HIS OPTION, RELOCATE ANY DEVICE WITHIN 5 FEET AT NO CHARGE TO THE OWNER.
- 2. WHERE TWO OR MORE DEVICES ARE SHOWN TOGETHER ON THE PLANS, A MULTI-GANG BOX AND PLATE SHALL BE USED. DEVICES OF DIFFERENT VOLTAGES SHALL BE SEPARATED BY PERMANENTLY INSTALLED
- 3. ALL OUTLETS SHOWN ON A WALL BACK TO BACK SHALL BE OFFSET A MINIMUM OF 6" HORIZONTALLY. 4. WALL MOUNTED WIRING DEVICES SHALL BE SELECTED BY THE ARCHITECT AND EQUAL TO THE FOLLOWING:
- SINGLE POLE SWITCH HUBBELL 1221 HUBBELL 1222 TWO-POLE SWITCH THREE-WAY SWITCH HUBBELL 1223 DIMMER SWITCH LUTRON NOVA SERIES WALL SENSOR WATTSTOPPER DUAL TECH DW-100 CEILING SENSOR WATTSTOPPER DUAL TECH DT-300 W/B2-150 POWER PACK WALL VACANCY SENSOR SWITCH WATTSTOPPER CS-50 DUPLEX RECEPTACLE HUBBELL 5352

HUBBELL GF 5352

LEVITON T-5832

- 5. DEVICE PLATES AND COVERS SHALL BE SELECTED BY THE ARCHITECT.
- 6. COORDINATE LIGHT SWITCHES SHOWN ON DRAWINGS WITH DOOR SWINGS. LOCATE LIGHT SWITCH ON LOCK SIDE OF DOOR.
- 7. COORDINATE WALL MOUNTED TELEPHONE/DATA OUTLET LOCATIONS WITH THE ARCHITECT. TELEPHONE/DATA OUTLET CONDUCTORS WILL BE INSTALLED BY OTHERS.

6. ELECTRICAL IDENTIFICATION

1. CONDUCTOR COLOR CODING: PROVIDE COLOR CODING OF FEEDERS AND BRANCH CIRCUIT CONDUCTORS AS FOLLOWS:

208/120 VOLTS	PHASE	480/277 VOLTS
BLACK	A	BROWN
RED	B	ORANGE
BLUE	C	YELLOW
WHITE	NEUTRAL	GRAY
GREEN	GROUND	GREEN

- 2. APPLY EQUIPMENT IDENTIFICATION LABELS (MINIMUM 1" HIGH LETTERS) OF ENGRAVED PLASTIC-LAMINATE ON EACH MAJOR UNIT OF ELECTRICAL EQUIPMENT.
- 3. FOR PANELBOARDS: PROVIDE FRAMED, TYPED CIRCUIT SCHEDULES WITH EXPLICIT DESCRIPTION AND IDENTIFICATION OF ITEMS CONTROLLED BY EACH INDIVIDUAL BREAKER.

- 1. GROUND ELECTRICAL SYSTEMS AND EQUIPMENT IN ACCORDANCE THE NEC EXCEPT WHERE GROUNDING IN EXCESS OF NEC REQUIREMENTS IS INDICATED.
- 2. ALL CIRCUITS SHALL CONTAIN AN INSULATED GROUNDING CONDUCTOR.

INSTALL FUSES IN FUSIBLE DEVICES AS INDICATED.

OF 200,000 SYMMETRICAL RMS AMPERES

- INSTALL TYPEWRITTEN LABELS ON THE INSIDE DOOR OF EACH FUSED SWITCH TO INDICATE FUSE REPLACEMENT INFORMATION.
- 3. ALL FUSES SHALL BE CLASS RK-5 TIME DELAY TYPE, UNLESS OTHERWISE INDICATED.

4. SPARE FUSES: FURNISH 1 SET OF 3 OF EACH FUSE TYPE AND SIZE INSTALLED. J. DISCONNECTS AND CIRCUIT BREAKERS

- 1. ENCLOSED FUSIBLE AND NON-FUSIBLE SWITCH SHALL BE NEMA HEAVY-DUTY TYPE WITH ENCLOSURE CONSISTENT WITH ENVIRONMENT WHERE LOCATED, HANDLE LOCKABLE WITH 2 PADLOCKS, AND INTERLOCKED WITH COVER IN "CLOSED" POSITION. ENCLOSED FUSIBLE SWITCHES SHALL BE NEMA HEAVY-DUTY TYPE WITH CLIPS TO ACCOMMODATE SPECIFIED FUSES. SWITCHES SHALL HAVE MINIMUM FAULT CURRENT RATING
- LOCATE DISCONNECT SWITCH (AND MOTOR CONTROLLER) FOR MECHANICAL EQUIPMENT TO PERMIT SERVICING OF EQUIPMENT. CHECK MOTORS FOR PROPER ROTATION. CONNECT CONDUCTORS AS REQUIRED BY MANUFACTURER.
- 3. ENCLOSED MOLDED-CASE CIRCUIT BREAKER: FRAME SIZE, TRIP RATING, NUMBER OF POLES, AND AUXILIARY DEVICES AS INDICATED: INTERRUPTING CAPACITY RATING TO MEET AVAILABLE FAULT CURRENT. 10,000 SYMMETRICAL RMS AMPERES MINIMUM; WITH APPROPRIATE APPLICATION LISTING WHEN USED FOR SWITCHING FLUORESCENT LIGHTING LOADS OR HEATING, AIR CONDITIONING AND REFRIGERATION EQUIPMENT.
- 4. ENCLOSURE: NEMA TYPE 1, UNLESS SPECIFIED OR REQUIRE OTHERWISE TO MEET ENVIRONMENTAL CONDITIONS OF INSTALLED LOCATION.
- a. OUTDOOR LOCATIONS AND OTHER WET OR DAMP INDOOR LOCATIONS: TYPE 3R
- 5. PROPERLY SUPPORT DISCONNECT OR ENCLOSED CIRCUIT BREAKER ON WALL WITH METAL FRAMING AS
- 6. PROVIDE FUSES IF REQUIRED BY MANUFACTURER OF EQUIPMENT FOR UL APPROVAL OR HACR CIRCUIT BREAKERS.
- 7. PROVIDE DISCONNECTS BY THE SAME MANUFACTURER AS THE PANELBOARDS.

K. PANELBOARDS

- 1. IN PANELBOARDS, "EQUIPPED SPACE" OR "SPACE" IS DEFINED TO INCLUDE ALL NECESSARY BUS, DEVICE SUPPORTS AND CONNECTIONS FOR INSERTION OF A FUTURE DEVICE.
- 2. ALL PANELBOARDS SHALL BE EQUIPPED WITH COMMON KEYED LOCKS. PROVIDE A MINIMUM OF TWO KEYS PER PANEL. PANELBOARDS SHALL BE COMPLETE WITH COVERS AND TRIMS AND SHALL CONTAIN A GROUND BUS. PANELBOARD BUS SHALL BE COPPER. PANELBOARD CIRCUITING SHALL MATCH THE DRAWINGS. CIRCUITING CHANGES MUST BE APPROVED BY THE ARCHITECT.
- EQUIPMENT MANUFACTURER'S REQUIREMENTS. COORDINATE CONDUCTOR SIZE WITH ACTUAL MOTORS AND OTHER MECHANICAL AND ARCHITECTURAL EQUIPMENT FURNISHED BEFORE INSTALLING CIRCUITRY. SURFACE MOUNTED PANELBOARD CABINETS SHALL BE INSTALLED ON AN APPROVED STEEL FRAMEWORK TO

3. BEFORE ORDERING PANELBOARDS, COORDINATE ALL MOTOR CIRCUIT BREAKER TRIPS WITH MECHANICAL

- DISTRIBUTE THE WEIGHT EVENLY TO THE WALL AND FLOOR AND TO PROVIDE A 1-INCH AIR SPACE BETWEEN WALL AND CABINET. PAINT FRAMEWORK WITH TWO COATS OF GRAY ENAMEL AFTER FABRICATION. 5. PANELBOARD SHALL BE EQUAL TO SQUARE D TYPE NEHB OR NQOD UNLESS OTHERWISE NOTED.
- TRANSFORMERS
- DRY-TYPE TRANSFORMERS SHALL COMPLY WITH NEMA STANDARD ST20 "DRY-TYPE TRANSFORMERS FOR GENERAL APPLICATIONS".
- 2. GENERAL-PURPOSE. DRY-TYPE TRANSFORMERS SHALL BE EQUAL TO SQUARE D CLASS 7411 GENERAL PURPOSE TRANSFORMERS.

NON-LINEAR LOAD SERVICE, DRY-TYPE TRANSFORMERS SHALL BE EQUAL TO SQUARE D "NLP SERIES"

WITH UL K-13 RATING. 4. TRANSFORMER SHALL BE SAME MANUFACTURER AS PANELBOARDS.

M. MOTOR CONTROLLERS

- 1. MOTOR CONTROLLER FEATURES: PROVIDE CONTROLLERS CONSISTENT WITH THE RATINGS AND CHARACTERISTICS OF THE SUPPLY CIRCUIT, THE MOTOR, THE REQUIRED CONTROL SEQUENCE, THE DUTY CYCLE OF THE MOTOR, DRIVE AND LOAD AND THE PILOT DEVICE AND CONTROL CIRCUIT AFFECTING CONTROLLER FUNCTIONS. CONTROLLERS SHALL BE HORSEPOWER RATED TO SUIT THE MOTOR
- CONTACTS SHALL OPEN EACH UNGROUNDED CONNECTION TO THE MOTOR.
- OVERLOAD RELAYS: FOR MOTORS 1/3 HP OR LARGER, PROVIDE IN EACH PHASE AMBIENT COMPENSATED TYPE WITH INVERSE TIME-CURRENT CHARACTERISTIC, WITH HEATER OR SENSORS IN EACH PHASE MATCHED TO NAMEPLATE FULL-LOAD CURRENT OF THE SPECIFIC MOTOR TO WHICH CONNECTED. WITH APPROPRIATE ADJUSTMENT FOR DUTY CYCLE.
- ENCLOSURES FOR INDIVIDUALLY MOUNTED MOTOR CONTROLLERS AND CONTROL DEVICES: SUITABLE FOR THE ENVIRONMENTAL CONDITIONS AT THE CONTROLLER LOCATION. PROVIDE NEMA TYPE 1 ENCLOSURE EXCEPT AS OTHERWISE INDICATED.
- 2. MANUAL MOTOR CONTROLLERS: QUICK-MATE, QUICK-BREAK TOGGLE ACTION WITH RED PILOT LIGHT AND HANDLE GUARD/LOCK OFF.
- CONTROLLER, EXCEPT WHERE ANOTHER TYPE IS INDICATED. CONTROLLERS TO BE EQUIPPED WITH 2 N.O. AND 2 N.C. AUXILIARY CONTACTS, HAND-OFF-AUTO SELECTOR SWITCH, RED AND GREEN PILOT LIGHTS. CONTROL CIRCUIT: MAXIMUM 120V CONTROL POWER. PROVIDE TRANSFORMER CONSISTENT WITH

CONTROL CONTACTOR VOLTAGE AND SIZE REQUIREMENTS. PROVIDE CONTROL POWER TRANSFORMER

WITH ADEQUATE CAPACITY TO OPERATE CONNECTED PILOT, INDICATING AND CONTROL DEVICES, PLUS

MAGNETIC MOTOR CONTROLLERS: PROVIDE FULL-VOLTAGE, NON-REVERSING, ACROSS-THE-LINE, MAGNETIC

100 PERCENT SPARE CAPACITY. COMBINATION CONTROLLER" SWITCH TYPE; FUSED OR NON-FUSED AS INDICATED; QUICK-MAKE, QUICK-BREAK SWITCH FACTORY ASSEMBLED WITH CONTROLLER AND ARRANGED TO DISCONNECT IT FOR FUSED SWITCHES, PROVIDE REJECTION-TYPE FUSE CLIPS AND FUSES RATED AS INDICTED. INTERLOCK SWITCH WITH UNIT COVER OR DOOR.

N. LIGHTING

- COORDINATE RECESSED LIGHTING FIXTURES WITH MECHANICAL EQUIPMENT AND ARCHITECTURAL CEILING PLAN. LAYOUT ON PLANS IS APPROXIMATE. ADJUST LIGHTING FIXTURES IN FIELD PER ARCHITECT.
- PROVIDE FINISHING FRAMES FOR ALL RECESSED LIGHTING FIXTURES, TYPE TO BE COMPATIBLE WITH CEILING. COORDINATE ALL FIXTURE TYPES WITH CEILING SYSTEM BEFORE ORDERING FIXTURES. PROVIDE ALL MOUNTING ATTACHMENTS FOR A COMPLETE INSTALLATION.
- 3. ALL NEW LIGHTING FIXTURES SHALL BE INSTALLED COMPLETE WITH LAMPS. SEE PLANS FOR SPECIFIC REQUIREMENTS.
- 4. FIXTURES IN ANY ROOM OR COMMON AREA SHALL HAVE ALL LAMPS ORIENTED IN THE SAME DIRECTION.
- COORDINATE DIMMER CONTROLS WITH ELECTRONIC OR MAGNETIC LOW VOLTAGE LIGHTING AND LED DRIVERS PER MANUFACTURER OF LIGHTING FIXTURES AND LAMPS.
- 7. LAMP COLOR SHALL BE 3500K OR AS SELECTED BY THE ARCHITECT.
- 8. SUPPORT LIGHT FIXTURES FROM STRUCTURE WITH MINIMUM #12 AWG.

O. FIRE ALARM SYSTEM

- ALL FIRE ALARM SYSTEM FINAL CONNECTIONS MUST BE PERFORMED BY THE FIRE ALARM SYSTEM CONTRACTOR. PROVIDE A SET OF DRAWINGS TO THE CONTRACTOR, TO OBTAIN A PRICE FOR THE REQUIRED
- SUBMIT BIDS THAT INCLUDE ALL FIRE ALARM WORK INCLUDING EXTENDER PANELS/POWER SUPPLIES, CIRCUITS AND FLASHING LIGHT SYNCHRONIZATION MODULES (WHERE SYNCHRONIZATION IS REQUIRED BY NFPA72 SECTION 4-4), AS REQUIRED TO ACCOMMODATE THE FIRE ALARM DEVICES BEING INSTALLED UNDER THIS PROJECT.
- INCLUDE IN THE BID PRICE, THE COST TO PREPARE AND SUBMIT PLANS SEALED BY A REGISTERED PROFESSIONAL ENGINEER TO THE FIRE MARSHAL, SHOWING ALL FIRE ALARM DEVICES, CUT SHEETS, POWER SUPPLY AND BATTERY CALCULATIONS AND OTHER INFORMATION AS REQUIRED FOR FIRE MARSHALS REVIEW AND AS REQUIRED TO OBTAIN NECESSARY PERMITS AND INSPECTIONS. ARCHITECT WILL PROVIDE UP TO FOUR ADDITIONAL SETS OF THE CONTRACT DOCUMENTS ONLY. ALL OTHER INFORMATION REQUIRED BY THE LOCAL JURISDICTION IS THE CONTRACTOR'S RESPONSIBILITY.
- 4. SUBMIT FINAL, APPROVED FIRE ALARM SHOP DRAWINGS TO THE OWNER FOR RECORD PURPOSES ONLY INDICATING ALL WORK TO THE FIRE ALARM SYSTEM PERFORMED UNDER THIS CONTRACTOR. INCLUDE TABULATIONS OF FIRE ALARM DEVICE LOADS AND THE CAPACITY REMAINING IN THE CONTROL PANEL, ANNUNCIATOR PANEL AND BATTERIES FOLLOWING THE COMPLETION OF THIS CONTRACT.
- INSTALL ALL FIRE ALARM CONDUCTORS IN RED ELECTRICAL METALLIC TUBING (OR RED TYPE MC FIRE ALARM CABLE IF ACCEPTABLE TO THE LOCAL JURISDICTION AND BUILDING ENGINEER).
- 6. PROVIDE ALL VISUAL ALARMS AND COMBINATION AUDIBLE/VISUAL ALARMS IN ACCORDANCE WITH NFPA 72 GUIDELINES.

P. RECORD DRAWINGS

THE ELECTRICAL CONTRACTOR SHALL MAINTAIN AT THE SITE. FOR THE OWNER. ONE COPY OF ALL DRAWINGS, ADDENDA, APPROVED SHOP DRAWINGS, REVISIONS AND OTHER MODIFICATIONS, IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. THE SET OF DRAWINGS AND OTHER INFORMATION SHALL BE DELIVERED TO THE OWNER UPON COMPLETION OF WORK.

ABBREVIATIONS

Α	AMPS	LTG	LIGHTING
AIC	AMPS INTERRUPTING CAPACITY	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
ATS	AUTOMATIC TRANSFER SWITCH	MLO	MAIN LUGS ONLY
AWG	AMERICAN WIRE GAGE	(N)	NEW
С	CONDUIT	NEC	NATIONAL ELECTRIC CODE
СВ	CIRCUIT BREAKERS	NFSS	NON-FUSED SAFETY SWITCH
CLG	CEILING	NTS	NOT TO SCALE
CT	CURRENT TRANSFORMER	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
(E)	EXISTING TO REMAIN	PB	PULL BOX
EC	EMPTY CONDUIT	(ER)	NEW LOCATION OF RELOCATED ITEM
FACP	FIRE ALARM CONTROL PANEL	(R)	REMOVE FOR RELOCATION
FLA	FULL LOAD AMPS	T	TRANSFORMER
FSS	FUSED SAFETY SWITCH	TYP	TYPICAL
G	GROUND	UON	UNLESS OTHERWISE NOTED
GFI	GROUND FAULT INTERRUPTER	٧	VOLTS
HOA	HAND OFF AUTOMATIC	W	WATTS
HP	HORSEPOWER	WP	WEATHERPROOF
KVA	KILOVOLT AMPERE	(X)	REMOVE EXISTING EQUIPMENT
KW	KILOWATTS		
I			

The McKnight Group PLAN REFERENCE NOTE SYMBOL LIGHTING FIXTURE DESIGNATION

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Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.



CEILING MOUNTED OCCUPANCY SENSOR WITH POWER/RELAY PACK. DIMMER SWITCH +48" A.F.F. (LOAD COMPATIBLE)

DUPLEX RECEPTACLE — WALL MOUNTED 120V, 20A +18" A.F.F. IG = ISOLATED GROUNDING CONFIGURATION DUPLEX RECEPTACLE WITH BUILT-IN GROUND FAULT PROTECTION 120V, 20A +42" A.F.F. (UON)

DUPLEX RECEPTACLE WEATHERPROOF WITH BUILT-IN GROUND FAULT PROTECTION 120V, 20A +42" A.F.F. (UON) DUPLEX RECEPTACLE WITH USB — WALL MOUNTED 120V, 20A +18" A.F.F. TAMPER RESISTANT DUPLEX RECEPTACLE -

QUAD RECEPTACLE - WALL MOUNTED 120V, 20A +18" A.F.F. IG = ISOLATED GROUNDING CONFIGURATION SPECIAL CONFIGURATION OR VOLTAGE RECEPTACLE

WALL MOUNTED 120V, 20A +18" A.F.F.

DUPLEX RECEPTACLE - FLUSH FLOOR MOUNTED 120V. 20A. JUNCTION BOX - SIZE AS REQUIRED

PLAN SYMBOLS

<u>LIGHTING</u>

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SWITCHING

<u>POWER</u>

EMERGENCY LIGHTING

EXISTING TO BE REMOVED

EXISTING TO REMAIN

2'x2' LED FIXTURE

2'x4' LED FIXTURE

1'x4' LED FIXTURE

2'x2' LED FIXTURE PROVIDED WITH EMERGENCY BATTERY BACK-UP

2'x4' LED FIXTURE PROVIDED WITH EMERGENCY BATTERY BACK-UP

1'x4' LED FIXTURE PROVIDED WITH EMERGENCY BATTERY BACK-UP

DOWNLIGHT PROVIDED WITH EMERGENCY BATTERY BACK-UP

EXIT LIGHT - SINGLE FACE WITH BATTERY PACK

EXIT LIGHT - DOUBLE FACE WITH BATTERY PACK

MOTOR RATED TOGGLE SWITCH WITH THERMAL ELEMENT

WALL SWITCH TYPE OCCUPANCY SENSOR +48" A.F.F.

WALL SWITCH TYPE VACANCY SENSOR +48" A.F.F.

EMERGENCY BATTERY WALL PACK

ARROWS INDICATED DIRECTION

ARROWS INDICATED DIRECTION

SINGLE POLE SWITCH +48" A.F.F.

THREE-WAY SWITCH +48" A.F.F.

WALL SCONCE

DOWNLIGHT

NEW WORK

DISCONNECT SWITCH, FUSED SIZE AS NOTED COMBINATION DISCONNECT SWITCH/MOTOR STARTER,

NEMA SIZE 1, 3ø, (UON) PANELBOARD

GROUND

HOMERUN TO PANELBOARD. NUMERALS AND LETTERS ADJACENT TO ARROWHEADS INDICATE ASSIGNED PANEL AND CIRCUITS. TICK MARKS IN HOMERUN OR BRANCH CIRCUITRY INDICATE THE QUANTITY (WHERE MORE THAN TWO) OF CURRENT CARRYING CONDUCTORS. SEE PANELBOARD SCHEDÚLE OR DRAWINGS FOR WIRE SIZES. ALL SIZED PER NEC. **COMMUNICATIONS**

POWER, CATV & TELE/DATA OUTLET PROVIDE BACKBOX AND EC WITH PULL CORD TO ABOVE FINISHED CEILING, MOUNTING HEIGHT TO BE DETERMINED BY AVL ENGINEER. IG = ISOLATE GROUNDING CONFIGURATION FOR POWER RECEPTACLE TELEPHONE/DATA OUTLET, +18" A.F.F. PROVIDE BACKBOX AND 1"EC

WITH PULL CORD TO ABOVE FINISHED CEILING. TELEPHONE/DATA OUTLET. FLUSH FLOOR MOUNTED. PROVIDE BACKBOX AND 1"EC WITH PULL CORD TO ABOVE FINISHED CEILING.

FIRE ALARM

FIRE ALARM PULL STATION - +48" A.F.F. (UON)

♥_{5CD} SHALL BE 15CD UNLESS OTHERWISE NOTED. CEILING MOUNTED ₩_{5CD} ADA AUDIO-VISUAL FIRE ALARM ANNUNCIATOR. VISUAL CANDELA RATING SHALL BE 15CD UNLESS OTHERWISE NOTED. CEILING MOUNTED

ADA VISUAL FIRE ALARM ANNUNCIATOR. VISUAL CANDELA RATING

SMOKE DETECTOR

SPRINKLER SYSTEM WATER FLOW SWITCH SPRINKLER SYSTEM TAMPER SWITCH

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DATE DRAWING DD MEETING #1 07/16/2019

DD MEETING #2 09/06/2019 DD MEETING #3 10/06/2023 BID SET 11/15/2023

PERMIT SET

X AVL COORD / BID SET

REVISIONS/ADDENDUMS

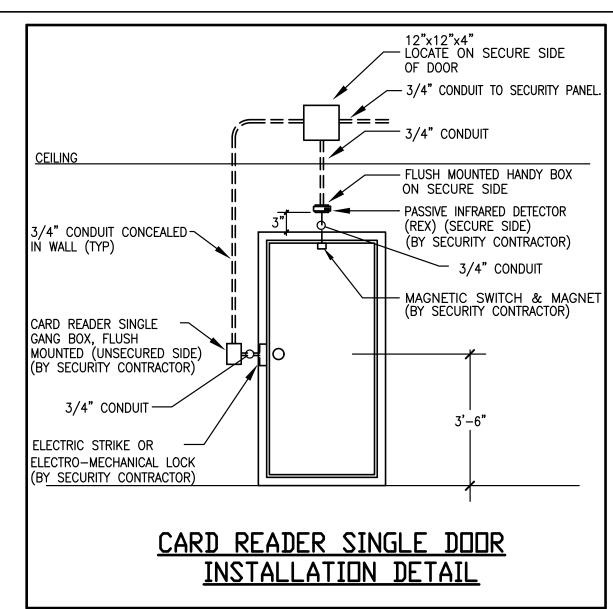
01/31/2024

SPECIFICATIONS, SYMBOLS, AND

ABBREVIATIONS

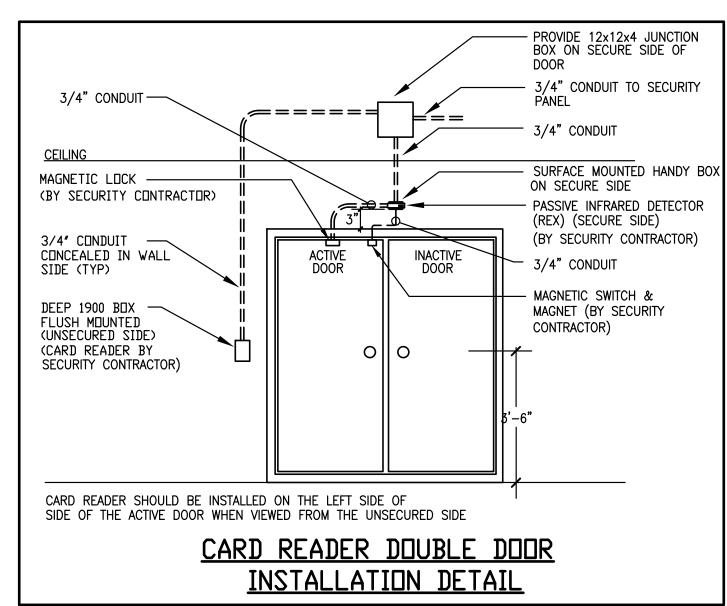
OF SHEETS

E001



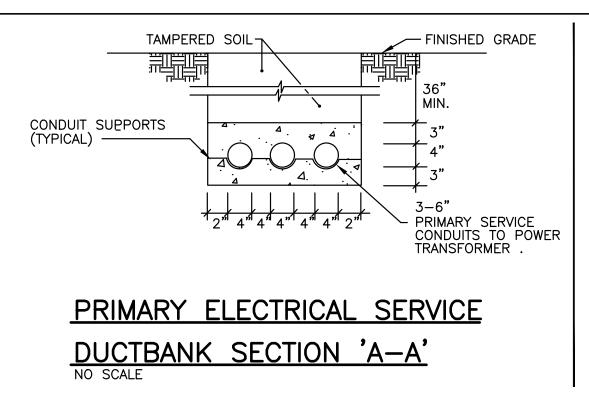
CARD ACCESS SYSTEM NOTES:

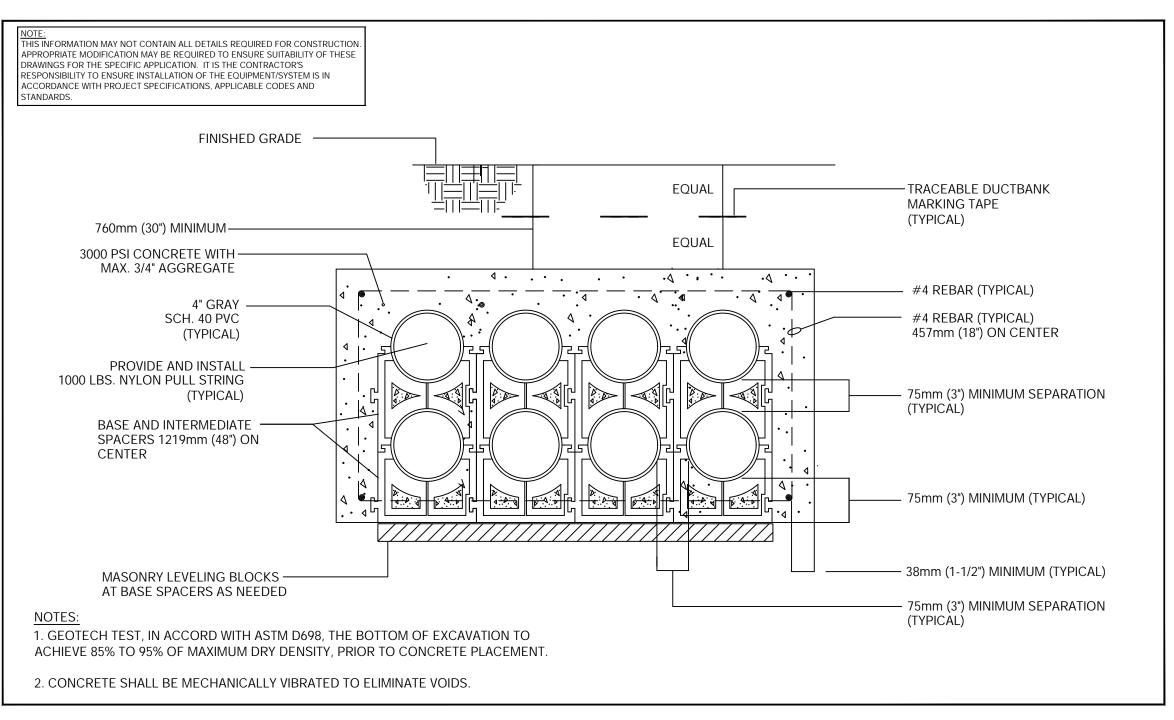
- 1 CONDUIT BOXES AND CABLE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. DOOR STRIKES (OR ELECTRO-MECHANICAL LOCK) FURNISHED AND INSTALLED BY
- GENERAL CONTRACTOR. 2 ALL ACCESS CONTROL EQUIPMENT IS FURNISHED AND INSTALLED BY SECURITY
- 3 PROVIDE ALL WORK INDICATED ON THIS DETAIL AT ALL SINGLE DOORS INDICATED ON PLANS WITH CARD READER SYMBOL. [CR]

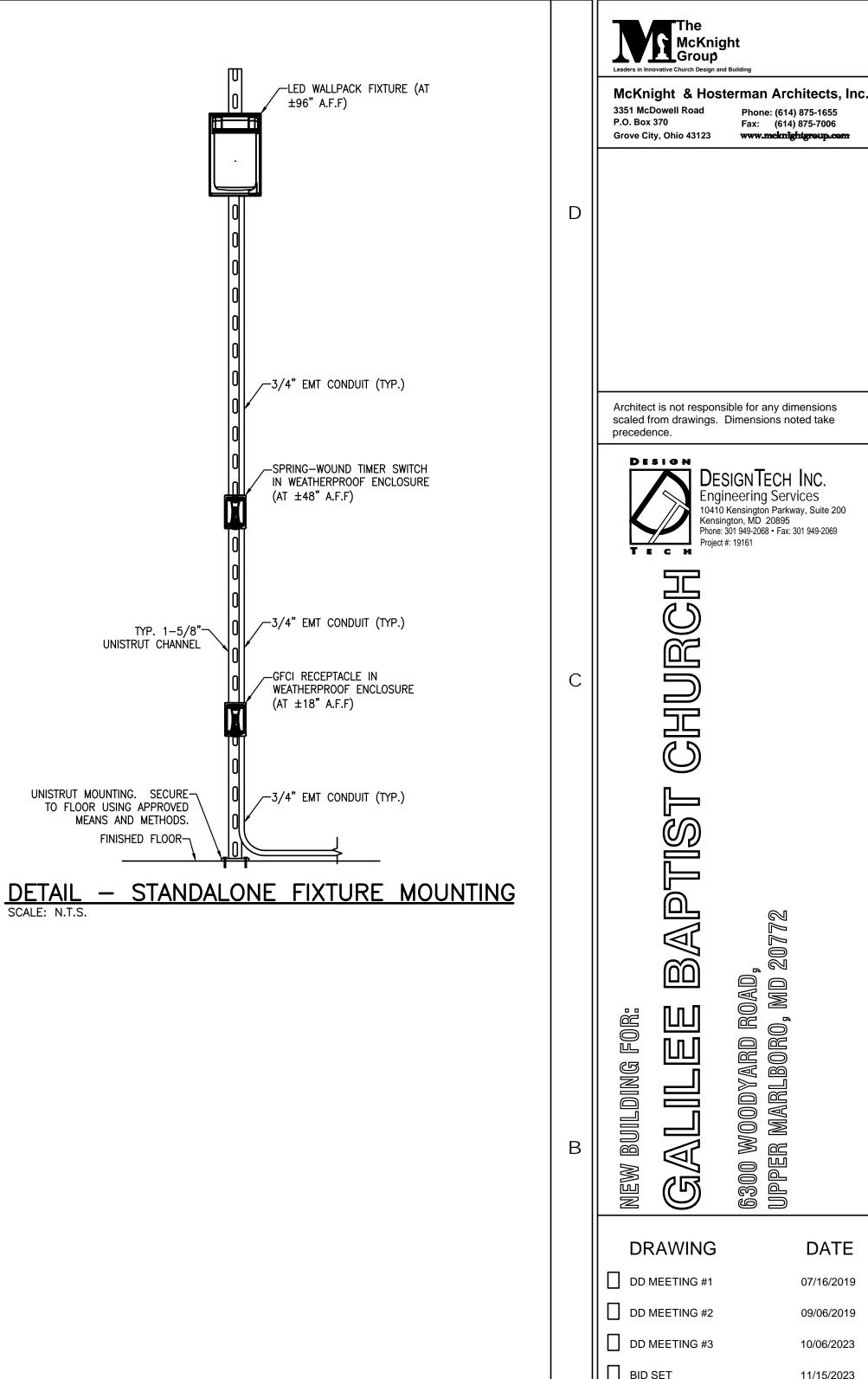


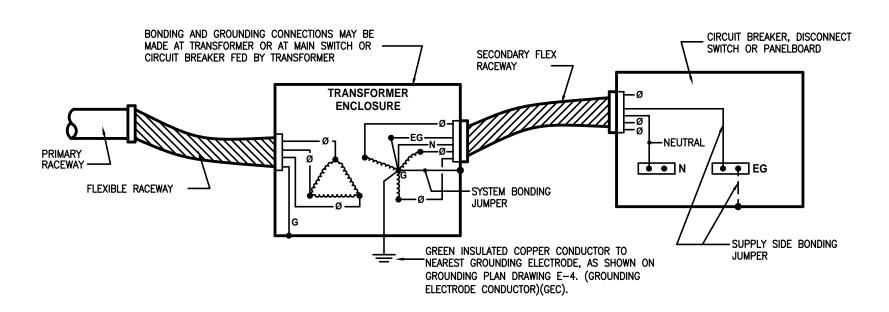
CARD ACCESS SYSTEM NOTES:

- 1 CONDUIT BOXES AND CABLE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. DOOR STRIKES (OR
- ELECTRO-MECHANICAL LOCK) FURNISHED AND INSTALLED BY GENERAL CONTRACTOR.
- 2 ALL ACCESS CONTROL EQUIPMENT IS FURNISHED AND INSTALLED BY SECURITY CONTRACTOR. 3 PROVIDE ALL WORK INDICATED ON THIS DETAIL AT ALL DOUBLE DOORS INDICATED ON PLANS WITH CARD READER SYMBOL. CR



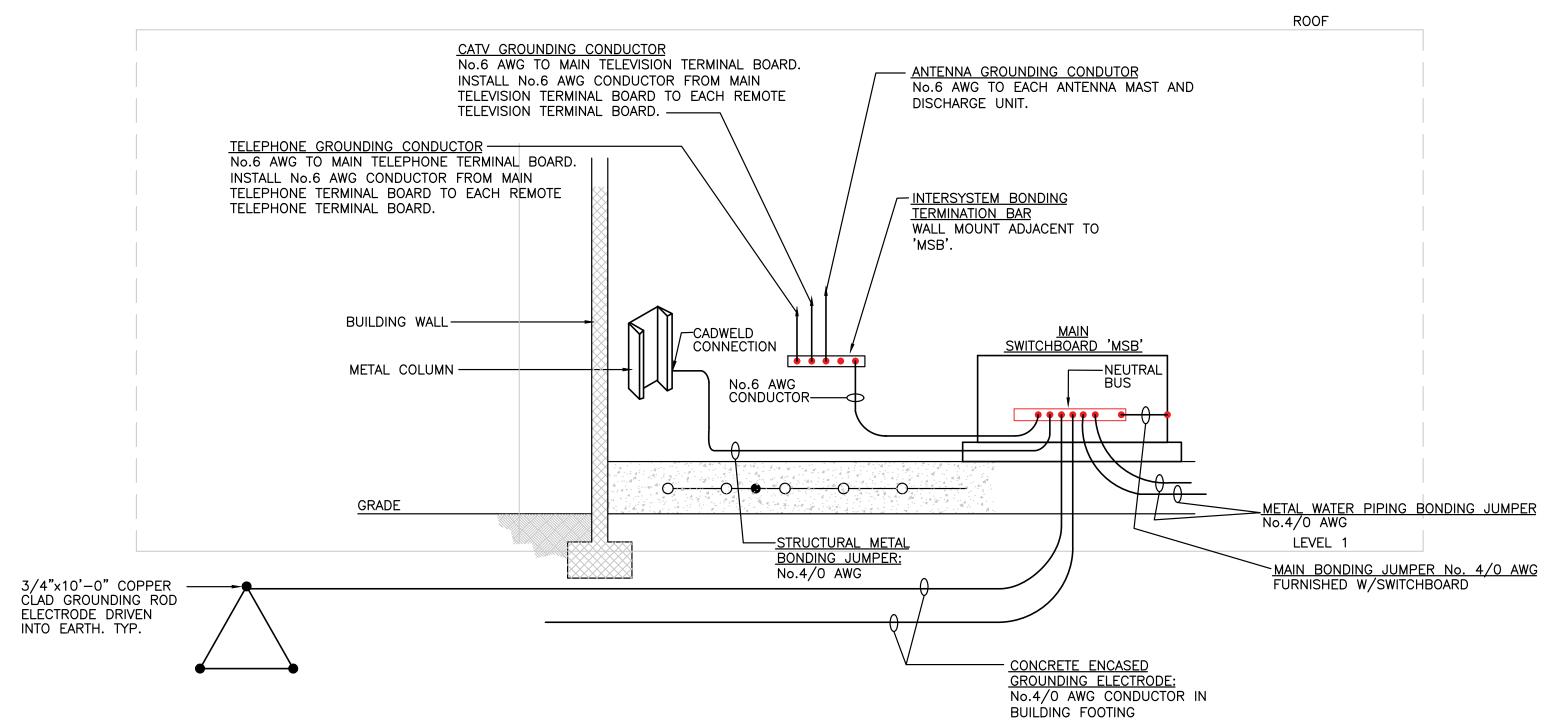






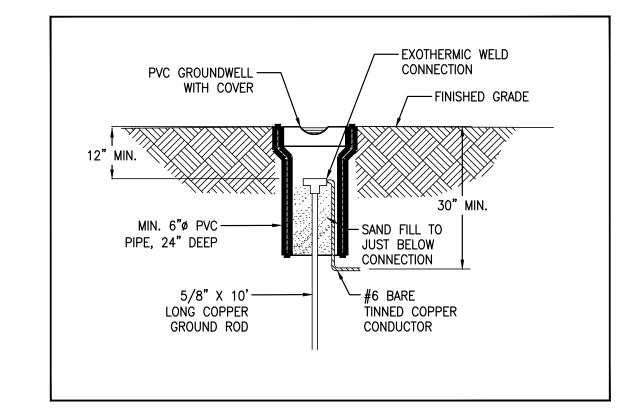
TRANSFORMER GROUNDING DETAIL Scale: Not To Scale

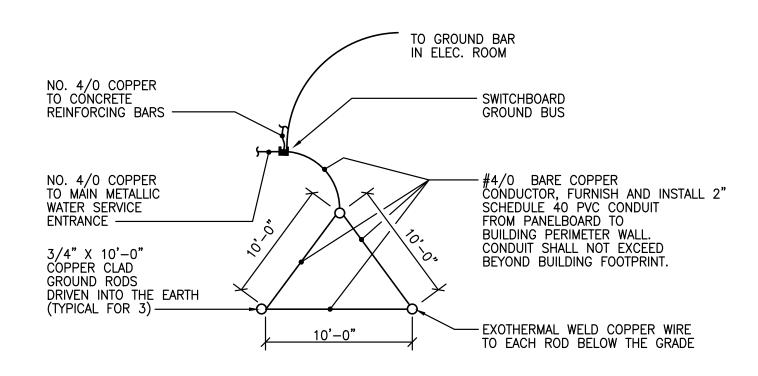
			TF	RANS	SFOI	RME	R	SCHI	EDULI	Ξ.			
			Pf	RIMARY					SECONDARY				
TRANSFORMER SIZE	PHASE	VOLTS	CIRCUIT BREAKER	FEEDER	GROUND	CONDUIT	VOLTS	CIRCUIT BREAKER		System/ Supply Side BNDG Jumper	CONDUIT	GROUNDING ELECTRODE CONDUCTOR	MOUNTED
15 KVA DRY-TYPE	3	480	30A	3#10	#10	.75" FLEX C	120/208	50A	4#6	#8	1.25" FLEX C	#8 IN 0.75"	WALL
30 KVA DRY-TYPE	3	480	50A	3#8	#10	3/4" FLEX C	120/208	100A	4#2	#6	1.5" FLEX C	#6 IN 0.75"	FLOOR
45 KVA DRY-TYPE	3	480	70A	3#4	#8	1.25" FLEX C	120/208	125A	4#1/0	#6	2" FLEX C	#6 IN 0.75"	FLOOR
75 KVA DRY-TYPE	3	480	125A	3#1	#6	1.5" FLEX C	120/208	250A	250 kcmil	#2	3" FLEX C	#2 IN 0.75"	FLOOR
112.5 KVA DRY-TYPE	3	480	200A	3#3/0	#6	2.5" FLEX C	120/208	400A	4-500 kcmil	#1/0	4" FLEX C	#1/0 IN 0.75"	FLOOR
150 KVA DRY-TYPE	3	480	225A	3#4/0	#4	2.5" FLEX C	120/208	500A	2 SETS OF 250 kcmil	#3/0	(2)3" FLEX C	#3/0 IN 1"	FLOOR

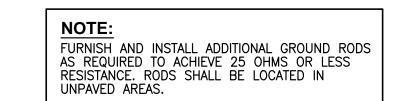


ELECTRICAL SERVICE GROUNDING SYSTEM DETAIL

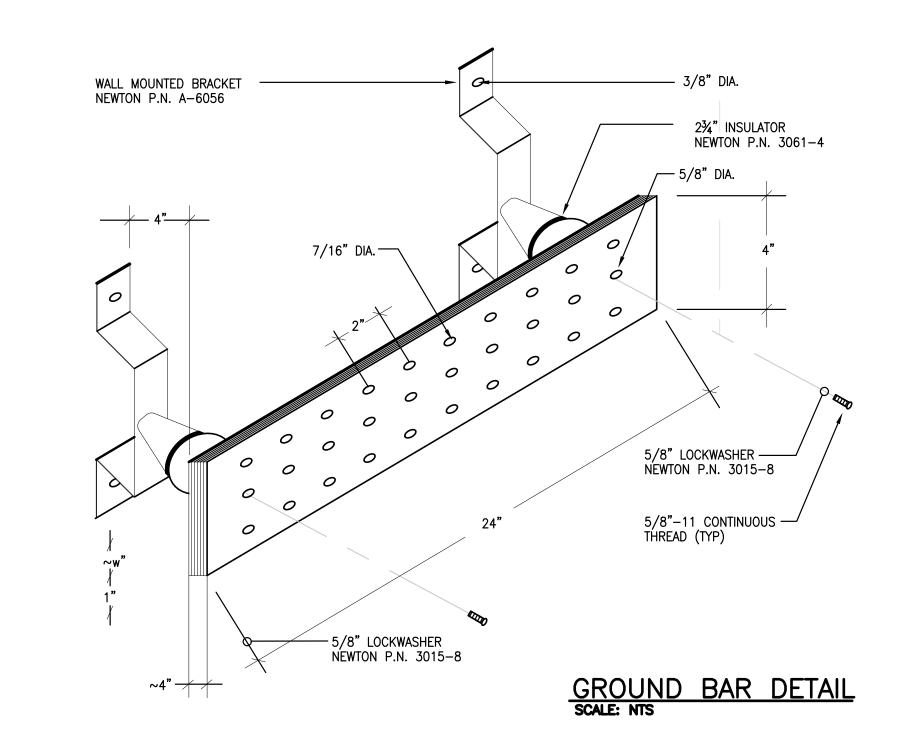
- 1. ALL CONDUCTORS AND JUMPERS SHALL BE COPPER.
- 2. CONDUCTORS AND JUMPERS ROUTED THROUGH FLOOR SLABS AND IN EARTH SHALL BE INSTALLED IN RIGID PVC CONDUIT.
- 3. ALL GROUNDING AND BONDING CONNECTIONS SHALL BE ACCESSIBLE AND LOCATED ADJACENT TO VALVES, BACKFLOW
- PREVENTER AND GAS METER AS SHOWN.
- 4. CONDUCTOR OR JUMPER INSTALLED IN METALLIC RACEWAY SHALL BE BONDED TO RACEWAY AT EACH END IN ACCORDANCE WITH







MAIN SERVICE GROUND DETAIL



The McKnight Group

McKnight & Hosterman Architects, Inc. 3351 McDowell Road Phone: (614) 875-1655 P.O. Box 370 Fax: (614) 875-7006 Grove City, Ohio 43123 www.mcknightgroup.com

Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.



Design Tech Inc. Engineering Services 10410 Kensington Parkway, Suite 200 Kensington, MD 20895 Phone: 301 949-2068 • Fax: 301 949-2069 Project #: 19161

CHURCH

<u></u>

VOODYARD ROAD, MARLBORO, MD 2 FOR: BUILDING 6300 \ UPPE

DATE DRAWING DD MEETING #1 07/16/2019 DD MEETING #2 09/06/2019 DD MEETING #3 10/06/2023 ☐ BID SET 11/15/2023

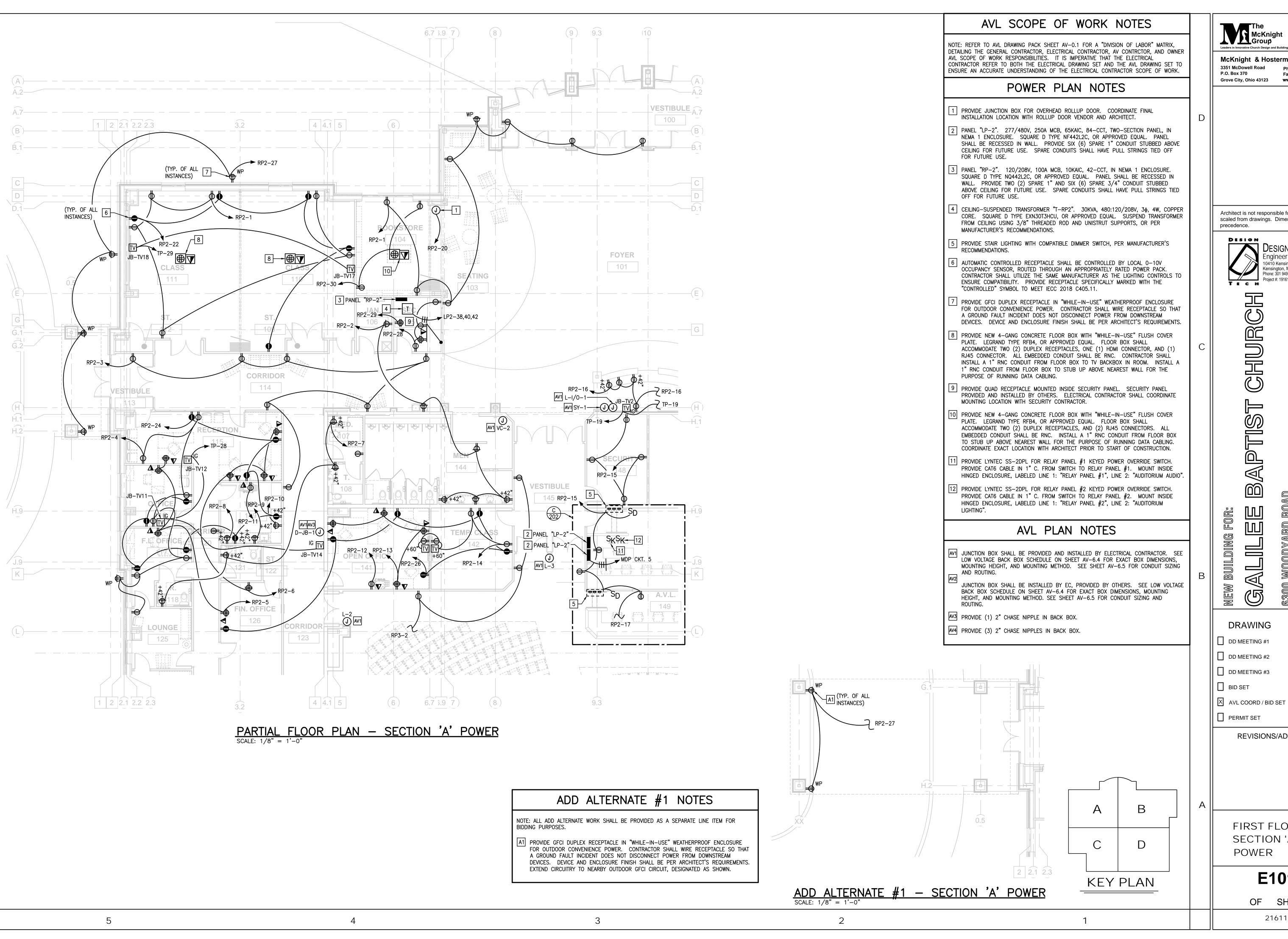
X AVL COORD / BID SET PERMIT SET

REVISIONS/ADDENDUMS

01/31/2024

GROUNDING DETAILS

> **E003** OF SHEETS



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DESIGN TECH

Design Tech Inc. **Engineering Services** 10410 Kensington Parkway, Suite 200 Kensington, MD 20895 Phone: 301 949-2068 • Fax: 301 949-2069 Project #: 19161

CHURCH

NOODYARD ROAD, I MARLBORO, MD 2

DRAWING DATE DD MEETING #1 07/16/2019 DD MEETING #2 09/06/2019

DD MEETING #3 10/06/2023 11/15/2023 12/08/2023

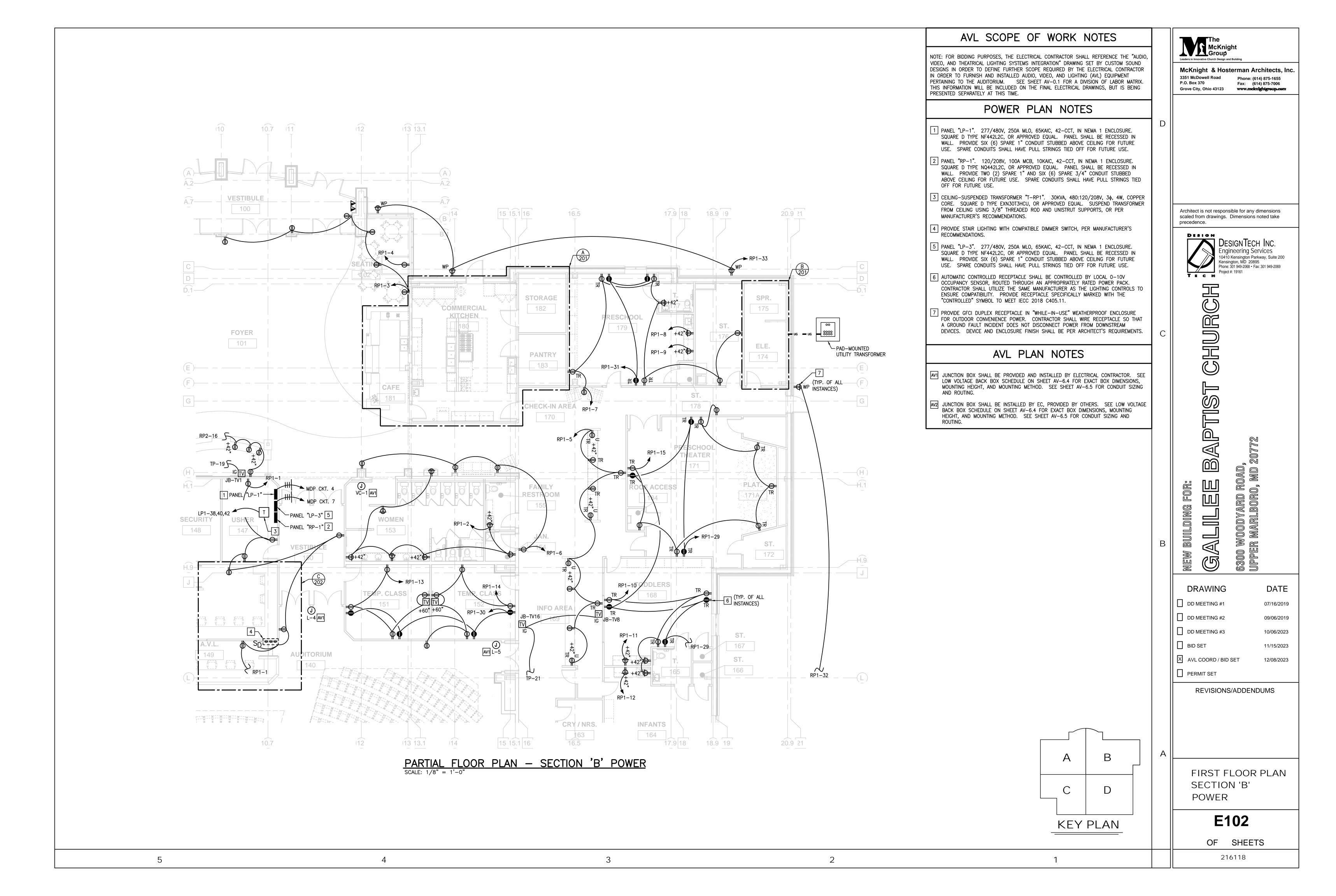
PERMIT SET

REVISIONS/ADDENDUMS

FIRST FLOOR PLAN SECTION 'A' POWER

E101

OF SHEETS



2.2 2.3 2.4 4 4.1 (TYP. OF ALL INSTANCES) RP3-16 ▲ RP3-20 CONFER (TYP. OF ALL 5 RP3-21 INSTANCES) J PTZ-6/ AUDITORIUM

AVL SCOPE OF WORK NOTES

NOTE: FOR BIDDING PURPOSES, THE ELECTRICAL CONTRACTOR SHALL REFERENCE THE "AUDIO, VIDEO, AND THEATRICAL LIGHTING SYSTEMS INTEGRATION" DRAWING SET BY CUSTOM SOUND DESIGNS IN ORDER TO DEFINE FURTHER SCOPE REQUIRED BY THE ELECTRICAL CONTRACTOR IN ORDER TO FURNISH AND INSTALLED AUDIO, VIDEO, AND LIGHTING (AVL) EQUIPMENT PERTAINING TO THE AUDITORIUM. SEE SHEET AV-0.1 FOR A DIVISION OF LABOR MATRIX. THIS INFORMATION WILL BE INCLUDED ON THE FINAL ELECTRICAL DRAWINGS, BUT IS BEING PRESENTED SEPARATELY AT THIS TIME.

POWER PLAN NOTES

- PANEL "RP-3". 120/208V, 100A MCB, 10KAIC, 42-CCT, IN NEMA 1 ENCLOSURE.

 SQUARE D TYPE NQ442L2C, OR APPROVED EQUAL. PANEL SHALL BE RECESSED IN WALL. PROVIDE TWO (2) SPARE 1" AND SIX (6) SPARE 3/4" CONDUIT STUBBED ABOVE CEILING FOR FUTURE USE. SPARE CONDUITS SHALL HAVE PULL STRINGS TIED OFF FOR FUTURE USE.
- 2 CEILING-SUSPENDED TRANSFORMER "T-RP3". 30KVA, 480:120/208V, 3¢, 4W, COPPER CORE. SQUARE D TYPE EXN30T3HCU, OR APPROVED EQUAL. SUSPEND TRANSFORMER FROM CEILING USING 3/8" THREADED ROD AND UNISTRUT SUPPORTS, OR PER MANUFACTURER'S RECOMMENDATIONS.
- 3 PROVIDE STAIR LIGHTING WITH COMPATIBLE DIMMER SWITCH, PER MANUFACTURER'S RECOMMENDATIONS.
- 4 AUTOMATIC CONTROLLED RECEPTACLE SHALL BE CONTROLLED BY LOCAL 0-10V OCCUPANCY SENSOR, ROUTED THROUGH AN APPROPRIATELY RATED POWER PACK. CONTRACTOR SHALL UTILIZE THE SAME MANUFACTURER AS THE LIGHTING CONTROLS TO ENSURE COMPATIBILITY. PROVIDE RECEPTACLE SPECIFICALLY MARKED WITH THE "CONTROLLED" SYMBOL TO MEET IECC 2018 C405.11.
- PROVIDE GFCI DUPLEX RECEPTACLE IN "WHILE—IN—USE" WEATHERPROOF ENCLOSURE FOR OUTDOOR CONVENIENCE POWER. CONTRACTOR SHALL WIRE RECEPTACLE SO THAT A GROUND FAULT INCIDENT DOES NOT DISCONNECT POWER FROM DOWNSTREAM DEVICES. DEVICE AND ENCLOSURE FINISH SHALL BE PER ARCHITECT'S REQUIREMENTS.
- 6 PROVIDE NEW 1-GANG CONCRETE FLOOR BOX WITH "WHILE-IN-USE" FLUSH COVER PLATE. LEVITON TYPE FBID1, OR APPROVED EQUAL. FLOOR BOX SHALL ACCOMMODATE ONE (1) DUPLEX RECEPTACLE. ALL EMBEDDED CONDUIT SHALL BE RNC.
- 7 PROVIDE EMERGENCY LIGHTING INVERTER "EM INV". IOTA TYPE IIS-3750-208IN-1200UT-ST WITH BREAKER PACKAGE 12-1P120-20AMP-ON, OR APPROVED EQUAL.

AVL PLAN NOTES

- JUNCTION BOX SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEE LOW VOLTAGE BACK BOX SCHEDULE ON SHEET AV-6.4 FOR EXACT BOX DIMENSIONS, MOUNTING HEIGHT, AND MOUNTING METHOD. SEE SHEET AV-6.5 FOR CONDUIT SIZING AND ROUTING.
- JUNCTION BOX SHALL BE INSTALLED BY EC, PROVIDED BY OTHERS. SEE LOW VOLTAGE BACK BOX SCHEDULE ON SHEET AV-6.4 FOR EXACT BOX DIMENSIONS, MOUNTING HEIGHT, AND MOUNTING METHOD. SEE SHEET AV-6.5 FOR CONDUIT SIZING AND ROUTING.

The McKnight Group

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Grove City, Ohio 43123

Www.mcknightgroup.com

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TIST CHURCH

ARD ROAD,

NEW BUILDING FOR:

GALLILEE

 DRAWING
 DATE

 □ DD MEETING #1
 07/16/2019

 □ DD MEETING #2
 09/06/2019

 □ DD MEETING #3
 10/06/2023

 □ BID SET
 11/15/2023

X AVL COORD / BID SET

PERMIT SET

REVISIONS/ADDENDUMS

FIRST FLOOR PLAN SECTION 'C' POWER

E103

OF SHEETS
216118

PARTIAL FLOOR PLAN — SECTION 'C' POWER SCALE: 1/8" = 1'-0"

5

A B
C D
KEY PLAN

15.1 16 18.9 9 INFANTS RP4-5 AV1 PTZ-1 RP4-6 AV1AV3 D-JB-2 MEN VC-4 AV1 JB-TV15 TV RP4-12 **YOUTH LOUNGE** $\begin{array}{c} \mathsf{L}-6\\ \boxed{\mathsf{J}}\,\mathsf{AV1} \end{array}$ RP4-13 PLATFORM 136 ELEM. CLASS LP1-37,39,41 156 MDP CKT. 9 (TYP. OF ALL INSTANCES) (TYP. OF ALL INSTANCES) 16.5 15.1 16 18.9 19 PARTIAL FLOOR PLAN — SECTION 'D' POWER SCALE: 1/8" = 1'-0"

5

AVL SCOPE OF WORK NOTES

NOTE: FOR BIDDING PURPOSES, THE ELECTRICAL CONTRACTOR SHALL REFERENCE THE "AUDIO, VIDEO, AND THEATRICAL LIGHTING SYSTEMS INTEGRATION" DRAWING SET BY CUSTOM SOUND DESIGNS IN ORDER TO DEFINE FURTHER SCOPE REQUIRED BY THE ELECTRICAL CONTRACTOR IN ORDER TO FURNISH AND INSTALLED AUDIO, VIDEO, AND LIGHTING (AVL) EQUIPMENT PERTAINING TO THE AUDITORIUM. SEE SHEET AV-0.1 FOR A DIVISION OF LABOR MATRIX. THIS INFORMATION WILL BE INCLUDED ON THE FINAL ELECTRICAL DRAWINGS, BUT IS BEING PRESENTED SEPARATELY AT THIS TIME.

POWER PLAN NOTES

- PANEL "RP-4". 120/208V, 100A MCB, 10KAIC, 42-CCT, IN NEMA 1 ENCLOSURE.

 SQUARE D TYPE NQ442L2C, OR APPROVED EQUAL. PANEL SHALL BE RECESSED IN

 WALL. PROVIDE TWO (2) SPARE 1" AND SIX (6) SPARE 3/4" CONDUIT STUBBED

 ABOVE CEILING FOR FUTURE USE. SPARE CONDUITS SHALL HAVE PULL STRINGS TIED

 OFF FOR FUTURE USE.
- 2 CEILING-SUSPENDED TRANSFORMER "T-RP4". 30KVA, 480:120/208V, 3¢, 4W, COPPER CORE. SQUARE D TYPE EXN30T3HCU, OR APPROVED EQUAL. SUSPEND TRANSFORMER FROM CEILING USING 3/8" THREADED ROD AND UNISTRUT SUPPORTS, OR PER MANUFACTURER'S RECOMMENDATIONS.
- 3 PROVIDE STAIR LIGHTING WITH COMPATIBLE DIMMER SWITCH, PER MANUFACTURER'S RECOMMENDATIONS.
- 4 AUTOMATIC CONTROLLED RECEPTACLE SHALL BE CONTROLLED BY LOCAL 0-10V OCCUPANCY SENSOR, ROUTED THROUGH AN APPROPRIATELY RATED POWER PACK. CONTRACTOR SHALL UTILIZE THE SAME MANUFACTURER AS THE LIGHTING CONTROLS TO ENSURE COMPATIBILITY. PROVIDE RECEPTACLE SPECIFICALLY MARKED WITH THE "CONTROLLED" SYMBOL TO MEET IECC 2018 C405.11.
- PROVIDE GFCI DUPLEX RECEPTACLE IN "WHILE—IN—USE" WEATHERPROOF ENCLOSURE FOR OUTDOOR CONVENIENCE POWER. CONTRACTOR SHALL WIRE RECEPTACLE SO THAT A GROUND FAULT INCIDENT DOES NOT DISCONNECT POWER FROM DOWNSTREAM DEVICES. DEVICE AND ENCLOSURE FINISH SHALL BE PER ARCHITECT'S REQUIREMENTS.
- 6 PROVIDE NEW 1-GANG CONCRETE FLOOR BOX WITH "WHILE-IN-USE" FLUSH COVER PLATE. LEVITON TYPE FBID1, OR APPROVED EQUAL. FLOOR BOX SHALL ACCOMMODATE ONE (1) DUPLEX RECEPTACLE. ALL EMBEDDED CONDUIT SHALL BE RNC.
- PANEL "TP". 120/208V, 150A MCB, 10KAIC, 42—CCT, IN NEMA 1 ENCLOSURE.

 SQUARE D TYPE NQ442L2C, OR APPROVED EQUAL. PROVIDE PANEL WITH GROUND BAR AND ISOLATED GROUND BAR. ISOLATED GROUND SHALL BE CONNECTED PER SHEET AV—0.3 GROUNDING DETAIL. PROVIDE 1" CONDUIT BETWEEN PANEL AND RELAY PANEL
- 8 PROVIDE RELAY PANEL #1 LYNTEC PDS12, FOR SUPPLYING POWER TO AUDITORIUM AUDIO. SEE SHEET AV-6.3 FOR SPECIFIC BOARD REQUIREMENTS. PROVIDE CAT-6 CABLE TO LYNTEC OVERRIDE SWITCH IN AVL BOOTH.
- 9 PANEL "NTP". 120/208V, 100A MCB, 10KAIC, 42-CCT, IN NEMA 1 ENCLOSURE. SQUARE D TYPE NQ442L2C, OR APPROVED EQUAL. PROVIDE 1" CONDUIT BETWEEN PANEL AND RELAY PANEL #2.
- PROVIDE RELAY PANEL #2 LYNTEC PDS12, FOR SUPPLYING POWER TO AUDITORIUM AUDIO. SEE SHEET AV-6.3 FOR SPECIFIC BOARD REQUIREMENTS. PROVIDE CAT-6 CABLE TO LYNTEC OVERRIDE SWITCH IN AVL BOOTH.
- PROVIDE RELAY PANEL #3 LYNTEC PDS12-8, FOR SUPPLYING POWER TO AUDITORIUM AUDIO. SEE SHEET AV-6.3 FOR SPECIFIC BOARD REQUIREMENTS. PROVIDE ADDITIONAL 1" CONDUIT BETWEEN RELAY #2 AND RELAY #3 FOR FURTHER POWER OVERRIDE COMMUNICATIONS CABLING.
- [12] CEILING—SUSPENDED TRANSFORMER "T—TP". 45KVA, 480:120/208V, 3\(\phi\), 4W, COPPER CORE. SQUARE D TYPE EXN45T3HCU, OR APPROVED EQUAL. SUSPEND TRANSFORMER FROM CEILING USING 3/8" THREADED ROD AND UNISTRUT SUPPORTS, OR PER MANUFACTURER'S RECOMMENDATIONS.
- 13 CEILING-SUSPENDED TRANSFORMER "T-NTP". 30KVA, 480:120/208V, 3φ, 4W, COPPER CORE. SQUARE D TYPE EXN30T3HCU, OR APPROVED EQUAL. SUSPEND TRANSFORMER FROM CEILING USING 3/8" THREADED ROD AND UNISTRUT SUPPORTS, OR PER MANUFACTURER'S RECOMMENDATIONS.

AVL PLAN NOTES

- JUNCTION BOX SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR. SEE LOW VOLTAGE BACK BOX SCHEDULE ON SHEET AV-6.4 FOR EXACT BOX DIMENSIONS, MOUNTING HEIGHT, AND MOUNTING METHOD. SEE SHEET AV-6.5 FOR CONDUIT SIZING AND ROLITING
- JUNCTION BOX SHALL BE INSTALLED BY EC, PROVIDED BY OTHERS. SEE LOW VOLTAGE BACK BOX SCHEDULE ON SHEET AV-6.4 FOR EXACT BOX DIMENSIONS, MOUNTING HEIGHT, AND MOUNTING METHOD. SEE SHEET AV-6.5 FOR CONDUIT SIZING AND
- AV3 PROVIDE 2" CHASE NIPPLE IN BACK BOX.

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. CHURCH

FOR: SEBAPTIST

GALILEEE E 6300 WOODYARD ROAD UPPER MARLBORO, MD

 DRAWING
 DATE

 □ DD MEETING #1
 07/16/2019

 □ DD MEETING #2
 09/06/2019

 □ DD MEETING #3
 10/06/2023

BID SET

X AVL COORD / BID SET

BUILDING

PERMIT SET

REVISIONS/ADDENDUMS

11/15/2023

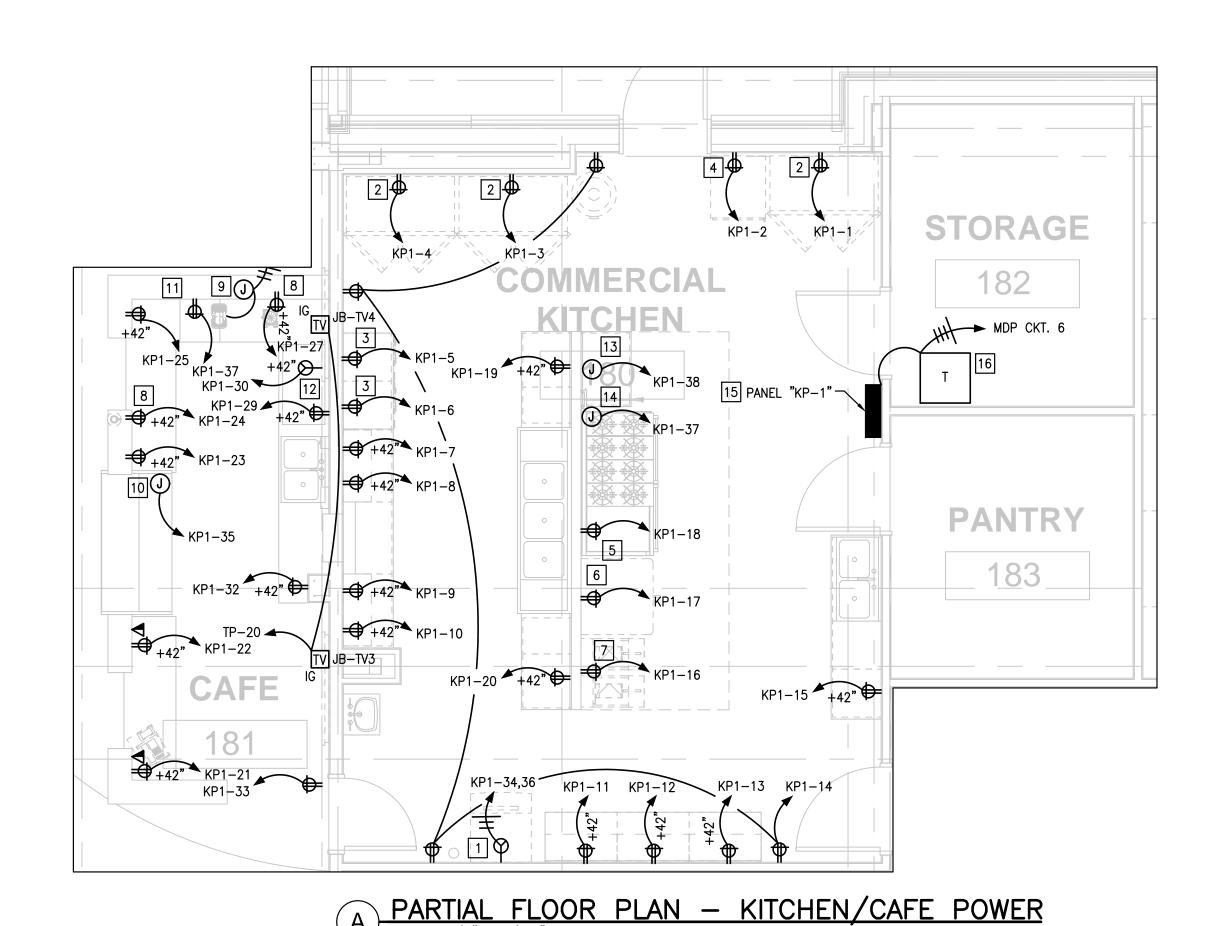
12/08/2023

FIRST FLOOR PLAN SECTION 'D' POWER

E104

OF SHEETS
216118

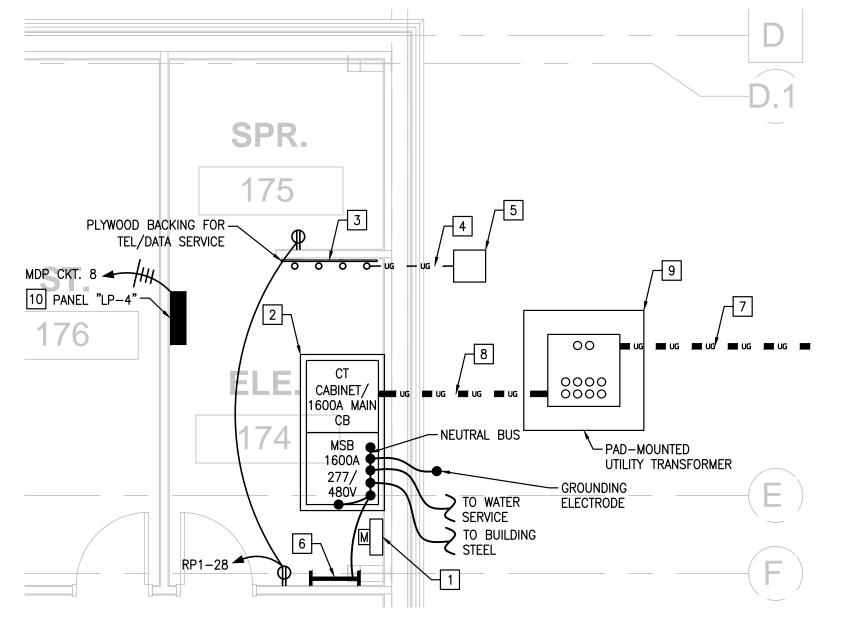
A B
C D
KEY PLAN



POWER PLAN NOTES

- PROVIDE DEDICATED DUPLEX RECEPTACLES FOR ICE MACHINE. 208V, 1¢, 12.2A, 20A MOCP, WITH NEMA 6-20R RECEPTACLE.
- 2 PROVIDE DEDICATED DUPLEX RECEPTACLE FOR REFRIGERATOR/FREEZER. 120V, 1φ,
- 3 PROVIDE DEDICATED DUPLEX RECEPTACLE FOR UNDERCOUNTER DISHWASHER. 120V, 16,
- PROVIDE DEDICATED DUPLEX RECEPTACLE FOR MOBILE WARMING CABINET. 120V, 1¢,
- 5 PROVIDE DEDICATED DUPLEX RECEPTACLE FOR RANGE AND OVEN. 120V, 16, 4A.
- 6 PROVIDE DEDICATED DUPLEX RECEPTACLE FOR DOUBLE DECK CONVECTION OVEN.
- 120V, 1¢, 15.4A.

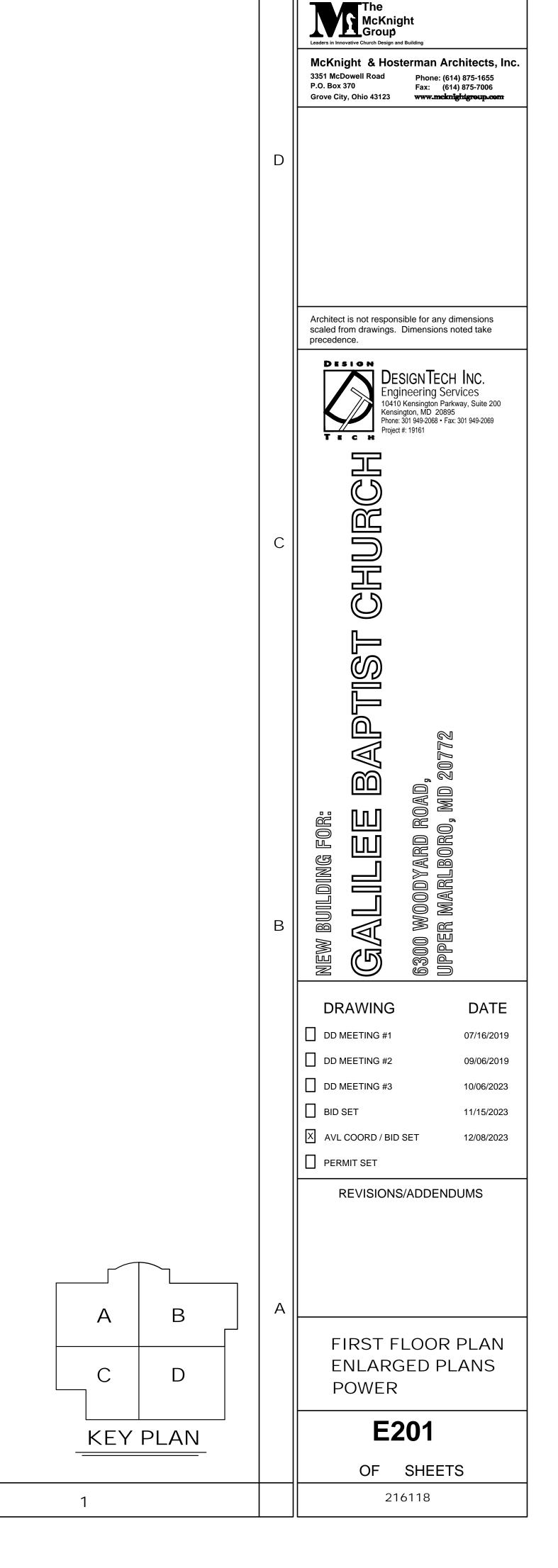
 7 PROVIDE DUPLEX RECEPTACLE FOR FRYER. 120V, 1¢, 1.5A.
- 8 PROVIDE DEDICATED DUPLEX RECEPTACLE FOR BLENDER. 120V, 16, 15A.
- PROVIDE JUNCTION BOX FOR COFFEE MAKER. 208V, 1φ, 3W + G, 3.55KW, IN A HARDWIRED CONFIGURATION. CONTRACTOR SHALL PROVIDE NECESSARY JUNCTION BOX IN ORDER TO ROUTE CABLING TO FINAL LOCATION. CONTRACTOR SHALL PERMANENTLY LAND CABLES AT EQUIPMENT ONCE INSTALLED. PROVIDE PVC JACKETED MC STYLE CABLE. OR OTHER APPROVED FOR INSTALLATION BY AHJ.
- PROVIDE JUNCTION BOX RECEPTACLE FOR REFRIGERATED DISPLAY CASE. 120V, 1¢, IN A HARDWIRES CONFIGURATION. CONTRACTOR SHALL COORDINATE EXACT INSTALLATION REQUIREMENTS WITH GC PRIOR TO PURCHASE OF EQUIPMENT.
- PROVIDE DEDICATED DUPLEX RECEPTACLE FOR UNDERCOUNTER ICE MACHINE. 120V,
- PROVIDE DEDICATED NEMA 6-20R RECEPTACLE FOR ESPRESSO MACHINE. 208V, 1¢, 3.4KW, 17A.
- PROVIDE POWER TO EXHAUST HOOD CONTROL PANEL. COORDINATE EXACT EQUIPMENT LOCATION WITH HOOD INSTALLER. ELECTRICAL CONTRACTOR SHALL PROVIDE ADDITIONAL CONDUIT AND CABLING TO EXTEND CIRCUIT FROM CONTROL PANEL TO GAS VALVE POWER CONTACTORS.
- POWER TO INTEGRAL HOOD LIGHT FIXTURES. CONTRACTOR SHALL PROVIDE NECESSARY FIELD WIRING FROM HOOD LIGHT SWITCH (PROVIDED BY VENDOR) TO EACH FIXTURE JUNCTION BOX. WIRE PER HOOD ELECTRICAL CONTROL PANEL SCHEMATIC IN HOOD SUBMITTAL.
- PANEL "KP-1". 120/208V, 150A MCB, 10KAIC, 42-CCT, IN NEMA 1 ENCLOSURE. SQUARE D TYPE NQ442L2C, OR APPROVED EQUAL.
- CEILING—SUSPENDED TRANSFORMER "T—KP1". 45KVA, 480:120/208V, 3¢, 4W, COPPER CORE. SQUARE D TYPE EXN45T3HCU, OR APPROVED EQUAL. SUSPEND TRANSFORMER FROM CEILING USING 3/8" THREADED ROD AND UNISTRUT SUPPORTS, OR PER MANUFACTURER'S RECOMMENDATIONS.



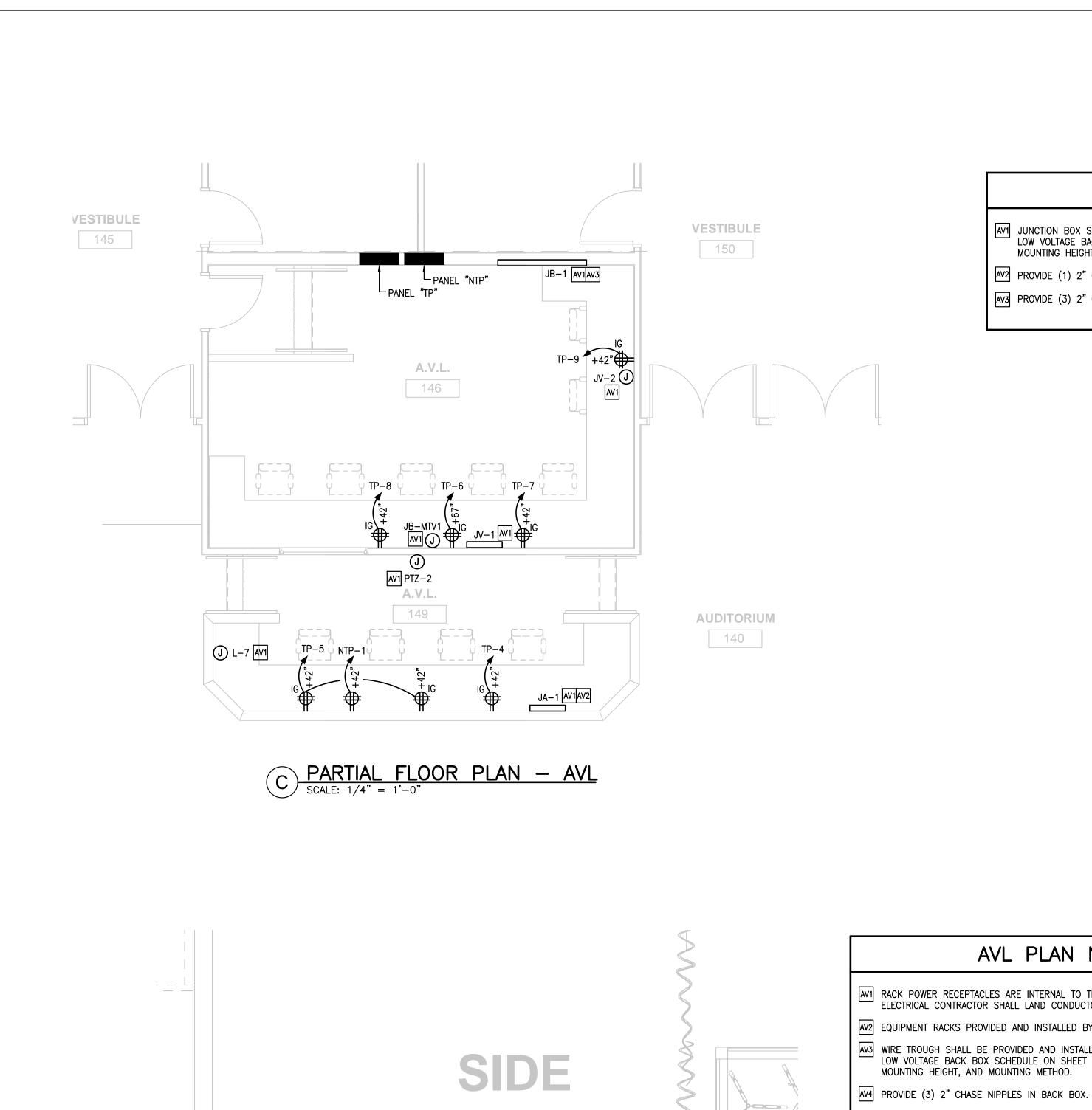
B PARTIAL FLOOR PLAN - ELECTRICAL/SPRINKLER POWER SCALE: 1/4" = 1'-0"

POWER PLAN NOTES

- 1 UTILITY METER. PROVIDE 1-1/2" EMT CONDUIT FROM METER CABINET TO SWITCHBOARD C/T CABINET.
- 2 C/T CABINET AND MAIN SWITCHBOARD "MSB". 1600A, 277/480V, 3¢, 4W, 65,000 AIC. SQUARE D TYPE QED-2 STYLE SWITCHBOARD. SEE SWITCHBOARD ELEVATION FOR FURTHER DETAILS. SWITCHBOARD SHALL BE MOUNTED ON A 4" CONCRETE HOUSEKEEPING PAD, EXTENDING 4" PAST EQUIPMENT WITH A 1/2" CHAMFERED EDGE.
- PROVIDE (1) 4'X8' 1—HR FIRE RATED OSB COMMUNICATIONS BACKBOARD. COORDINATE EXACT LOCATION IN FIELD WITH LOW—VOLTAGE CONTRACTOR.
- PROVIDE A COMMUNICATIONS DUCTBANK OF (4) 3" SCHEDULE 40 PVC CONDUIT FROM COMMUNICATIONS HANDHOLE, STUBBED UP INSIDE THE BUILDING AT THE LOCATION OF THE COMMUNICATIONS BACKBOARD. PROVIDE PULL STRINGS IN EACH CONDUIT.
- PROVIDE A COMMUNICATIONS HANDHOLE FOR THE PURPOSE OF ROUTING TELE/DATA CABLING INTO BUILDING. HANDHOLE SHALL BE 18" X 18" X 12" MIN. CONCRETE HANDHOLE, VISIBLY MARKED AS TELE/DATA ON THE COVER.
- PROVIDE MAIN GROUND BAR, SIZED AS SHOWN ON GROUND BAR DETAIL ON SHEET E003. SEE ELECTRICAL SERVICE GROUNDING SYSTEM DETAIL ON SHEET E003 FOR GROUND CONDUCTOR SIZING AND DETAILS.
- 7 UTILITY PRIMARY DUCTBANK. SEE PRIMARY DUCTBANK DETAIL ON SHEET E003..
- 8 UTILITY SECONDARY DUCTBANK. SEE SECONDARY DUCTBANK DETAIL ON SHEET E003.
- 9 UTILITY PAD-MOUNTED TRANSFORMER.
- PANEL "LP-4". 277/480V, 250A MLO, 65KAIC, 18-CCT, IN NEMA 1 ENCLOSURE. SQUARE D TYPE NF418L1C, OR APPROVED EQUAL. FOR OUTDOOR LIGHTING PURPOSES.



4



135

AV RACK "R-2" AV2

AV RACK "R-1" AV2

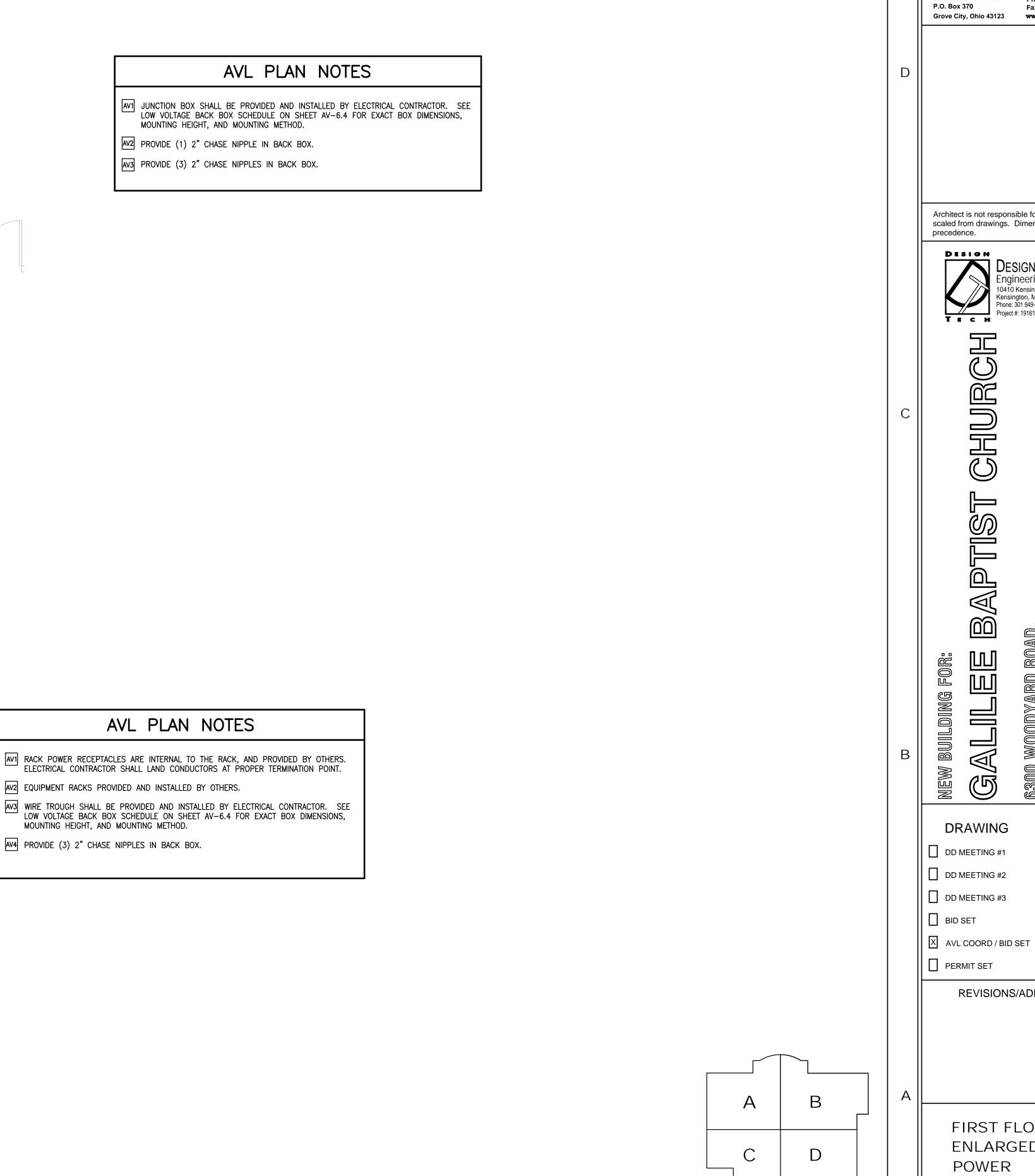
D PARTIAL FLOOR PLAN - AV RACKS

SCALE: 1/2" = 1'-0"

3

TP-10,11,12,13,17

5



The McKnight Group

3351 McDowell Road P.O. Box 370

precedence.

T E C H

CHURCH

BAPTIST

DRAWING

NEW BUILDING FOR:

6300 WOODYARD ROAD UPPER MARLBORO, MD

REVISIONS/ADDENDUMS

FIRST FLOOR PLAN

ENLARGED PLANS

E202

OF SHEETS

216118

POWER

KEY PLAN

DATE

07/16/2019

09/06/2019

10/06/2023

11/15/2023

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McKnight & Hosterman Architects, Inc.

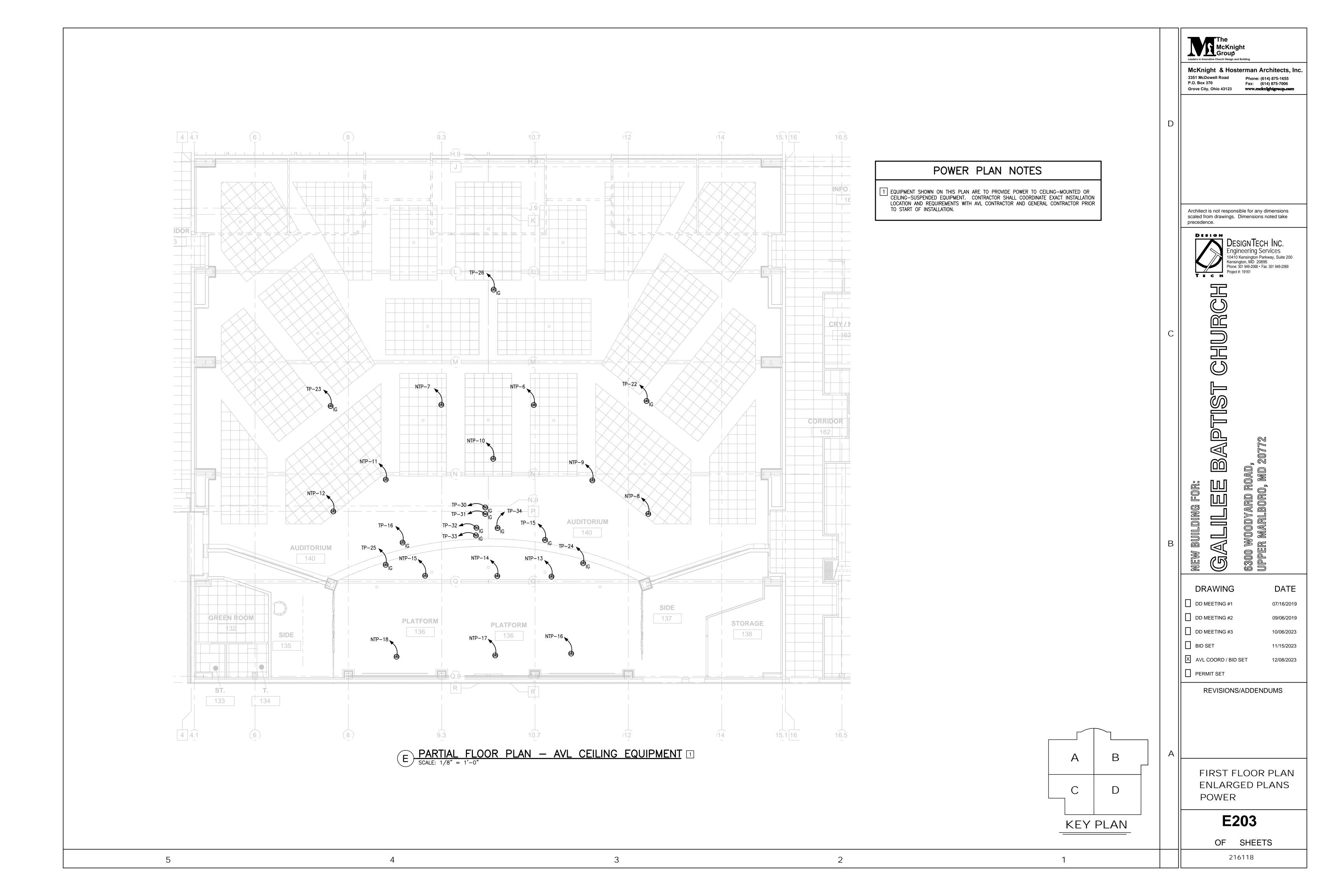
Grove City, Ohio 43123 www.mcknightgroup.com

Architect is not responsible for any dimensions

scaled from drawings. Dimensions noted take

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		LIG	HTI	NG	СО	NTF	ROL	S C	PE	RAT	ION	S	
ROOM NUMBER			LPD ALLOWANCE (WATTS/SQ. FT.)	SEQUENCE OF OPERATIONS	DESIGN ILLUMINANCE LEVEL (AVG. FC)	N1 - LINE-VOLTAGE SWITCH	N2 - ON/OFF/RAISE/ LOWER KEYPAD	N3 - SCENE SELECT KEYPAD	N4 - OCCUPANCY SENSOR (AUTO PART ON)	N5 - VACANCY SENSOR (AUTO OFF)	- TIME CLOCK	N7 - DAYLIGHTING HARVESTING	
l 8	SPACE DESIGNATION	SPACE TYPE		SEC	9 9	N1 SW	N2 10	N3 KEY	AN (AI	N5 (Al	9N	N7 HA	NOTES
100 101	VESTIBULE FOYER	LOBBY LOBBY	0.84 0.84					X	X	X	X	X	THESE AREAS SHALL BE CONTROLLED
102	SEATING	LOBBY	0.84					X	Х	Х	X	Х	SIMULTANEOUSLY BY SAME DEVICES
103 104	SEATING BOOKSTORE	LOBBY	0.84 0.96				х	Х	X	X	X	X	
105	SECURITY	ENCLOSED OFFICE	0.74				X		X	X			
106	JANITOR MEDICAL	ELEC/MECH RM EXAM/TREATMENT	1.4			X	х		X	X			EACH FIXTURE TYPE SHALL HAVE INDEPENDENT MANUAL CONTROLS, BUT SHARED OCCUPANCY VACANY CONTROLS
108	TOILET	RESTROOM	0.63				Х		Х	Х			
109 110	STORAGE CLOSET CLASSROOM	STORAGE ROOM CLASSROOM	0.38			Х	Х		Х	Х	Х	Х	
111	CLASSROOM	CLASSROOM	0.71			.,	Х		Х	Х	Х	Х	
112 113	STORAGE CLOSET VESTIBULE	STORAGE ROOM LOBBY	0.38 0.84			X	Х		X	X	X	Х	
114	CORRIDOR	CORRIDOR	0.41				Х		Х	Х	Х		
115 116	RECEPTION OFFICE	ENCLOSED OFFICE ENCLOSED OFFICE	0.74 0.74				X		X	X	X	X	
117	F.L. OFFICE	ENCLOSED OFFICE	0.74				Х		Х	Х	Х	X	
118 119	RESTROOM WORKROOM	RESTROOM COPY/PRINT	0.63 0.31				X		X	X	X		
119	CORRIDOR	COPY/PRINT	0.31	<u> </u>			X		X	X	X		
121	TOILET	RESTROOM	0.63				Х		Х	Х			
122 123	STORAGE CLOSET CORRIDOR	STORAGE ROOM CORRIDOR	0.38 0.41			Х	Х		X	Х	X		
125	LOUNGE	LOUNGE	0.59				X		X	X	X	Х	
126	FINANCIAL OFFICE	ENCLOSED OFFICE ENCLOSED OFFICE	0.74 0.74				X		X	X	X	v	
127 128	PASTORS OFFICE TOILET	RESTROOM	0.74				X		X	X	X	X	
129	STORAGE CLOSET	STORAGE ROOM	0.38			Х							
130 131	OFFICE CLASS/CONFERENCE	ENCLOSED OFFICE CLASSROOM	0.74 0.71				Х	X	X	X	X	X	
132	GREEN ROOM	LOUNGE	0.59				Х		X	Х	X	X	
133	STORAGE CLOSET	STORAGE ROOM	0.38			Х							
134 135	TOILET SIDE	RESTROOM STORAGE ROOM	0.63 0.38				X		X	X			
136	PLATFORM	-											CONTROLS PART OF AV SCOPE OF WORK
137 138	SIDE STORAGE CLOSET	STORAGE ROOM STORAGE ROOM	0.38			Х	Х		Х	Х			
140	AUDITORIUM	-											CONTROLS PART OF AV SCOPE OF WORK
141 142	OPEN OFFICE TEMPORARY CLASS	ENCLOSED OFFICE CLASSROOM	0.74 0.71				X		X	X	X		
144	MEN'S TOILET	RESTROOM	0.63				X		X	X	X		
145	VESTIBULE	CONTRICTED BOOM	0.41				X		X	X	X		
146 147	A.V.L. USHER	COMPUTER ROOM LOUNGE	0.94 0.59				X		X	X	X		
148	SECURITY	ENCLOSED OFFICE	0.74				Х		Х	Х	Х		
149 150	A.V.L. VESTIBULE	COMPUTER ROOM CORRIDOR	0.94 0.41				X		X	X	X		
151	TEMPORARY CLASS	CLASSROOM	0.71				Х		Х	Х	Х		
152 153	TEMPORARY CLASS WOMEN'S TOILET	CLASSROOM RESTROOM	0.71 0.63				X		X	X	X		
154	JANITOR	ELEC/MECH RM	0.43			Х			Λ	^			
155	FAMILY RESTROOM	RESTROOM	0.63				Х		Х	Х			
156 157	ELEM. CLASS STORAGE CLOSET	CLASSROOM STORAGE ROOM	0.71 0.38			Х							
158	YOUTH LOUNGE	CLASSROOM	0.71				X		X	X	X	Х	
159 160	MEN'S TOILET WOMEN'S TOILET	RESTROOM RESTROOM	0.63 0.63				X		X	X	X		
161	CRIBS	GUESTROOM	0.41				Х		Х	Х			
162 163	CORRIDOR CRY/NURSERY	CORRIDOR GUESTROOM	0.41 0.41				X		X	X	X		
164	INFANTS	CLASSROOM	0.71				Х		Х	х	Х		
165 166	TOILET STORAGE CLOSET	RESTROOM STORAGE ROOM	0.63			Х	Х		Х	Х			
166 167	STORAGE CLOSET STORAGE CLOSET	STORAGE ROOM STORAGE ROOM	0.38	<u>L</u>		X							
168	TODDLERS	CLASSROOM	0.71				Х		Х	Х	X		
169 170	INFO AREA CHECK-IN AREA	CORRIDOR CORRIDOR	0.41 0.41				X		X	X	X		
171	PRESCHOOL THEATER	CLASSROOM	0.71					х	X	X	X		
171A 172	PLATFORM STORAGE CLOSET	CLASSROOM STORAGE ROOM	0.71 0.38	1		X							
173	STORAGE CLOSET	STORAGE ROOM	0.38			Х							
174	ELECTRICAL ROOM	ELEC/MECH RM	0.43			X							
175 176	SPRINKLER ROOM STORAGE CLOSET	ELEC/MECH RM STORAGE ROOM	0.43	L		X						<u>L</u> _	
177	TOILET	RESTROOM	0.63				Х		Х	Х			
178 179	STORAGE CLOSET PRESCHOOL	STORAGE ROOM CLASSROOM	0.38 0.71			Х	Х		X	X	X	X	
180	COMMERCIAL KITCHEN	FOOD PREP	1.09			Х							
181 182	CAFÉ STORAGE CLOSET	FOOD PREP STORAGE ROOM	1.09 0.38			Х	Х						
183	PANTRY	STORAGE ROOM	0.38				Х		Х	Х			
184	ROOF ACCESS	ELEC/MECH RM	0.43			Х							
Tabl	LE NOTES:												

TABLE NOTES:

- N1 MANUAL ON/OFF DEVICE LOCATED WITHIN THE AREA IT CONTROLS.
- N2 CONTROLS THAT ALLOW THE LIGHTING LEVEL TO BE ADJUSTED UP AND DOWN.
- N3 8-BUTTON CONTROLLER: ON, OFF, RAISE, LOWER, AND FOUR (4) ADDITIONAL SCENE BUTTONS.
- N4 AUTO—ON TO 50% OF MAXIMUM LIGHT OUTPUT. MANUAL RAISE/LOWER. MANUAL—OFF AND AUTO—ON.

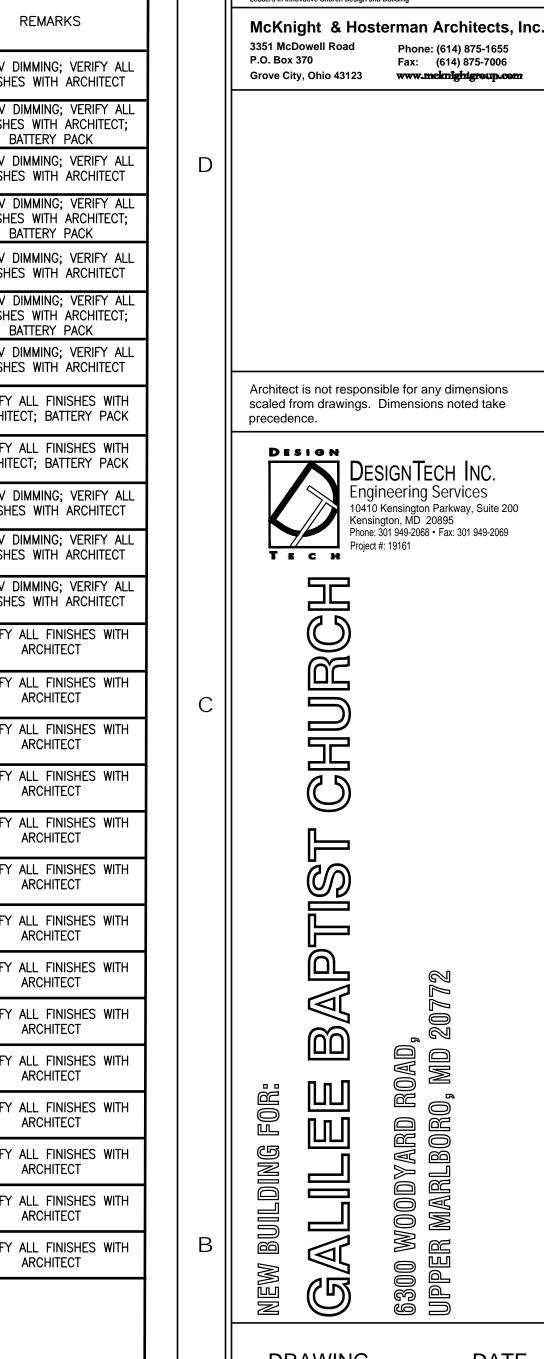
 *Special Exception: Fixtures shall Auto—On to 100% of miximum light output in areas concerning personnel security, such as Entry Ways, Vestibules,

 Stairwells, and Corridors.
- N5 AUTO-OFF AFTER FIFTEEN (15) MINUTES OF VACANCY WITH 5-SECOND FADE. DURING NON-NORMAL HOURS, AUTO-OFF AFTER FIVE (5) MINUTES OF VACANCY USING A 5-SECOND FADE.
- N6 AUTO-ON DURING NORMAL HOURS OF OPERATION (7:00AM TO 5:00PM, WEEKDAYS). DURING NON-NORMAL HOURS, LIGHTING IS TURNED OFF AUTOMATICALLY. MAY BE MANUALLY OVERRIDDEN TO ON.
- N7 AT THIRTY (30) MINUTES AFTER CIVIL DUSK, INTERIOR LIGHTING SHALL BE REDUCED BY 25% OVER TEN (10) MINUTES. AT THIRTY (30) MINUTES AFTER CIVIL DAWN, INTERIOR LIGHTING SHALL RETURN TO ITS NORMAL LEVELS OVER TEN (10) MINUTES.

TYPE	DESCRIPTION	MANUFACTURER	CATALOGUE #	LAMP	VOLT	INPUT WATTS	MOUNTING	REMARKS
A	RECESSED LED 2X4 VOLUMETRIC TROFFER	LITHONIA LIGHTING	2VTL4-60L-ADP-EZ1-LP835	6301 LUMENS LED 3500K	120/277	47.7	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI
AE	RECESSED LED 2X4 VOLUMETRIC TROFFER W/ BATTERY PACK	LITHONIA LIGHTING	2VTL4-60L-ADP-EZ1-LP835- EL7L	6301 LUMENS LED 3500K	120/277	47.7	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI BATTERY PACK
В	RECESSED LED 2X2 VOLUMETRIC TROFFER	LITHONIA LIGHTING	2VTL2-40L-ADP-EZ1-LP835	4000 LUMENS LED 3500K	120/277	33.1	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI
BE	RECESSED LED 2X2 VOLUMETRIC TROFFER W/ BATTERY PACK	LITHONIA LIGHTING	2VTL2-40L-ADP-EZ1-LP835- EL7L	4000 LUMENS LED 3500K	120/277	33.1	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI BATTERY PACK
С	RECESSED LED 2X4 INDIRECT TROFFER	LITHONIA LIGHTING	2BZL4-60L-EZ1-LP835	5904 LUMENS LED 3500K	120/277	58	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI
CE	RECESSED LED 2X4 INDIRECT TROFFER W/ BATTERY PACK	LITHONIA LIGHTING	2BZL4-60L-EZ1-LP835- EL14L	5904 LUMENS LED 3500K	120/277	58	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI' BATTERY PACK
D	LED PENDANT STEM CYLINDER	GOTHAM EVO	EVO4PC-35/20-AR-LSS-MWD- MVOLT-GZ10-JBX-PCAN-S4	1,994 LUMENS LED 3500K	120/277	19.5	STEM	0-10V DIMMING; VERIF FINISHES WITH ARCHI
E	LED STRIP LIGHT	LITHONIA LIGHTING	CSS-L48-4000LM-MVOLT- 35K-80CRI	4000 LUMENS LED 5000K	120/277	35.3	SURFACE	VERIFY ALL FINISHES ARCHITECT; BATTERY
EE	LED STRIP LIGHT W/ BATTERY PACK	LITHONIA LIGHTING	CSS-L48-4000LM-MVOLT- 35K-80CRI-IE7WCP	4000 LUMENS LED 5000K	120/277	35.3	SURFACE	VERIFY ALL FINISHES ARCHITECT; BATTERY
F	8" LED CYLINDER DOWNLIGHT	LITHONIA LIGHTING	LDN8CYL-35/100-L08-AR- LSS-MVOLT-GZ1-PM-DBL	10000 LUMENS LED 3500K	120/277	118.83	3/8" PENDANT	0-10V DIMMING; VERIF FINISHES WITH ARCHI
G	6" LED CYLINDER CAN LIGHT	LITHONIA LIGHTING	LDN6-35/50-L06-AR-LSS- TRW-MVOLT-GZ10	6000 LUMENS LED 3500K	120/277	73	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI
GE	6" LED CYLINDER CAN LIGHT	LITHONIA LIGHTING	LDN6-35/50-L06-AR-LSS- TRW-MVOLT-GZ10-EL	6000 LUMENS LED 3500K	120/277	73	RECESSED	0-10V DIMMING; VERIF FINISHES WITH ARCHI
Н	LED STEP LIGHT	WAC LIGHTING	WL-LED201-27-WT	LED 2700K	120	3.5	WALL	VERIFY ALL FINISHES ARCHITECT
I	LED SURFACE VOLUMETRIC	LITHONIA LIGHTING	STL4-48L-EZ1-LP835	4850 LUMENS LED 3500K	120/277	45.2	SUSPENDED	VERIFY ALL FINISHES ARCHITECT
IE	LED SURFACE VOLUMETRIC	LITHONIA LIGHTING	STL4-48L-EZ1-LP835-EL7L	4850 LUMENS LED 3500K	120/277	45.2	SUSPENDED	VERIFY ALL FINISHES ARCHITECT
J	LED WALL CYLINDER LIGHT	LITHONIA LIGHTING	OLLWU LED-P1-30K-MVOLT- DDB	947 LUMENS LED 3000K	120/277	14	WALL	VERIFY ALL FINISHES ARCHITECT
K	OUTDOOR LED AREA LUMINAIRE	LITHONIA LIGHTING	DSX1 LED-P1-30K-70CRI- T2M-MVOLT-SPA-PIR- DDBXD	7,203 LUMENS LED 3000K	277	50	POLE	VERIFY ALL FINISHES ARCHITECT
L	OUTDOOR LED FLOOD LIGHT	LITHONIA LIGHTING	DSXF2 LED-P1-30K-70CRI- NSP-MVOLT-THK-PE-DDBXD	8,248 LUMENS LED 3000K	120/277	129	1/2" NPT THREAD	VERIFY ALL FINISHES ARCHITECT
М	OUTDOOR LED FLOOD LIGHT	LITHONIA LIGHTING	DSXF2 LED-P2-30K-70CRI- HMF-MVOLT-THK-PE-DDBXD	8,963 LUMENS LED 3000K	120/277	113	1/2" NPT THREAD	VERIFY ALL FINISHES ARCHITECT
N	4" LED CYLINDER DOWNLIGHT	LITHONIA LIGHTING	LDN4-35/07-L04-AR-LSS- TRW-MVOLT-GZ10	751 LUMENS LED 3500K	120/277	8.6	DOWNLIGHT	VERIFY ALL FINISHES ARCHITECT
0	6" LED CYLINDER DOWNLIGHT	LITHONIA LIGHTING	LDN6-35/30-L06-AR-LSS- TRW-MVOLT-GZ10	3021 LUMENS LED 3500K	120/277	34.8	DOWNLIGHT	VERIFY ALL FINISHES ARCHITECT
OE	6" LED CYLINDER DOWNLIGHT	LITHONIA LIGHTING	LDN6-35/30-L06-AR-LSS- TRW-MVOLT-GZ10-EL VCPGX LED-V4-P2-30K-	3021 LUMENS LED 3500K	120/277	34.8	DOWNLIGHT	VERIFY ALL FINISHES ARCHITECT
P	LED CANOPY FIXTURE	LITHONIA LIGHTING	70CRI-T5M-MVOLT-SRM- UPL1-PIR-DDBXD	4567 LUMENS LED 3000K	120/277	40.5	SURFACE	VERIFY ALL FINISHES ARCHITECT
454	ARCHITECTURAL EMERGENCY LIGHTING		AFF-OEL-DBLBXD-UVOLT- LTP-SDRT-FCT	3021 LUMENS LED 3500K	120/277	34.8	DOWNLIGHT	VERIFY ALL FINISHES ARCHITECT
*	LED EMERGENCY LIGHT/ EXIT SIGN	DUAL-LITE	EVC-U-R-W	88 LUMENS/LED	120/277	1.65	EMERGENCY	VERIFY ALL FINISHES ARCHITECT

GENERAL LIGHTING NOTES

- 1. FINAL SELECTION AND APPROVAL OF ALL NEW LIGHT FIXTURES AND ACCESSORIES IS SUBJECT TO THE ARCHITECT'S REVIEW.
- 2. COORDINATE WITH ARCHITECTURAL PLANS, CEILING TYPES AND WITH EXISTING CEILING MOUNTED EQUIPMENT FOR EXACT LIGHT FIXTURE LOCATIONS.
- 3. COORDINATE COMPATIBILITY OF ALL NEW LIGHT FIXTURES WITH SELECTED LIGHTING CONTROL DEVICE/SYSTEM.



The McKnight Group

DRAWING

DD MEETING #1

DD MEETING #2

07/16/2019

09/06/2019

12/08/2023

DD MEETING #3 10/06/2023

BID SET 11/15/2023

X AVL COORD / BID SET

PERMIT SET

REVISIONS/ADDENDUMS

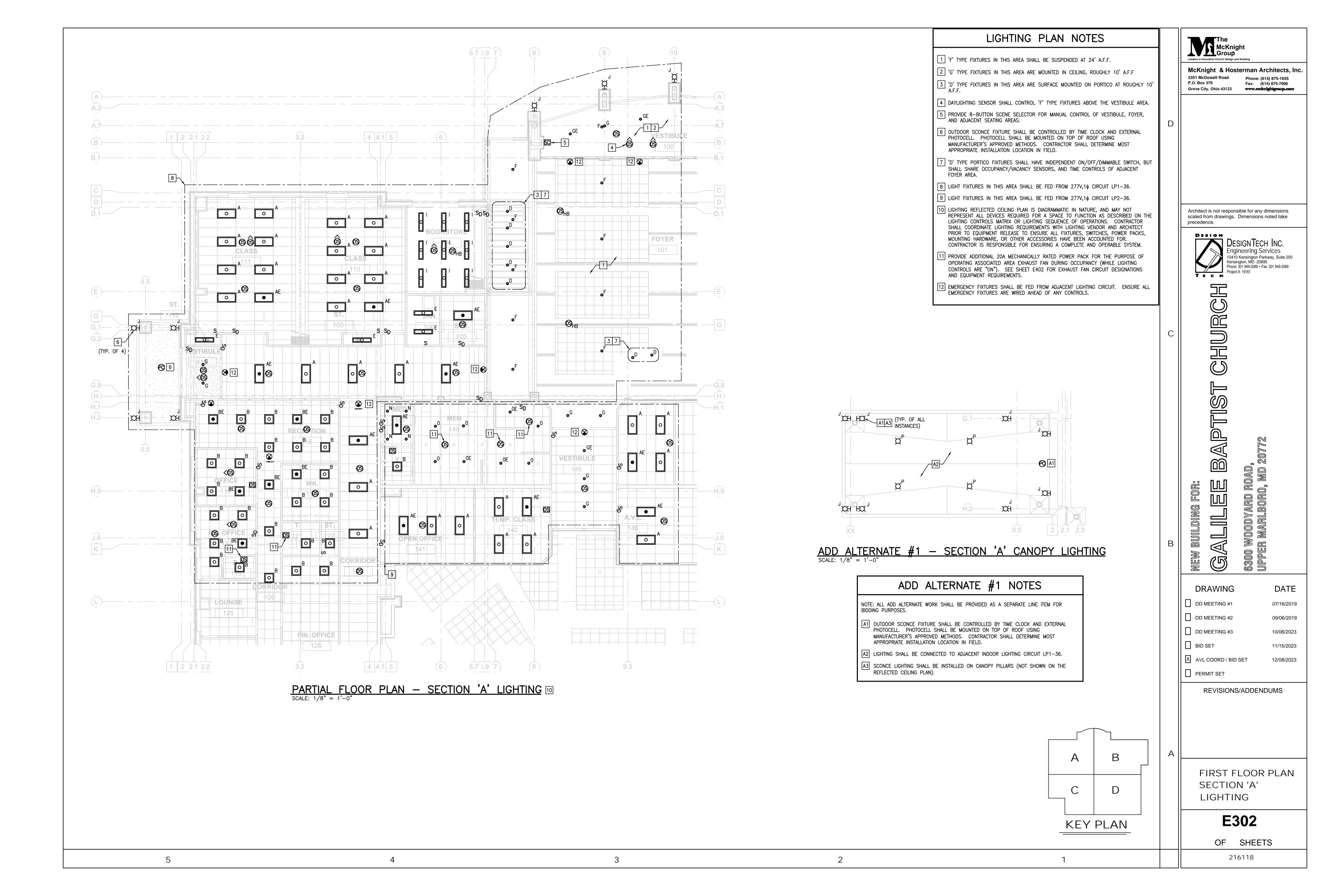
FIRST FLOOR PLAN
SECTION 'A'
LIGHTING

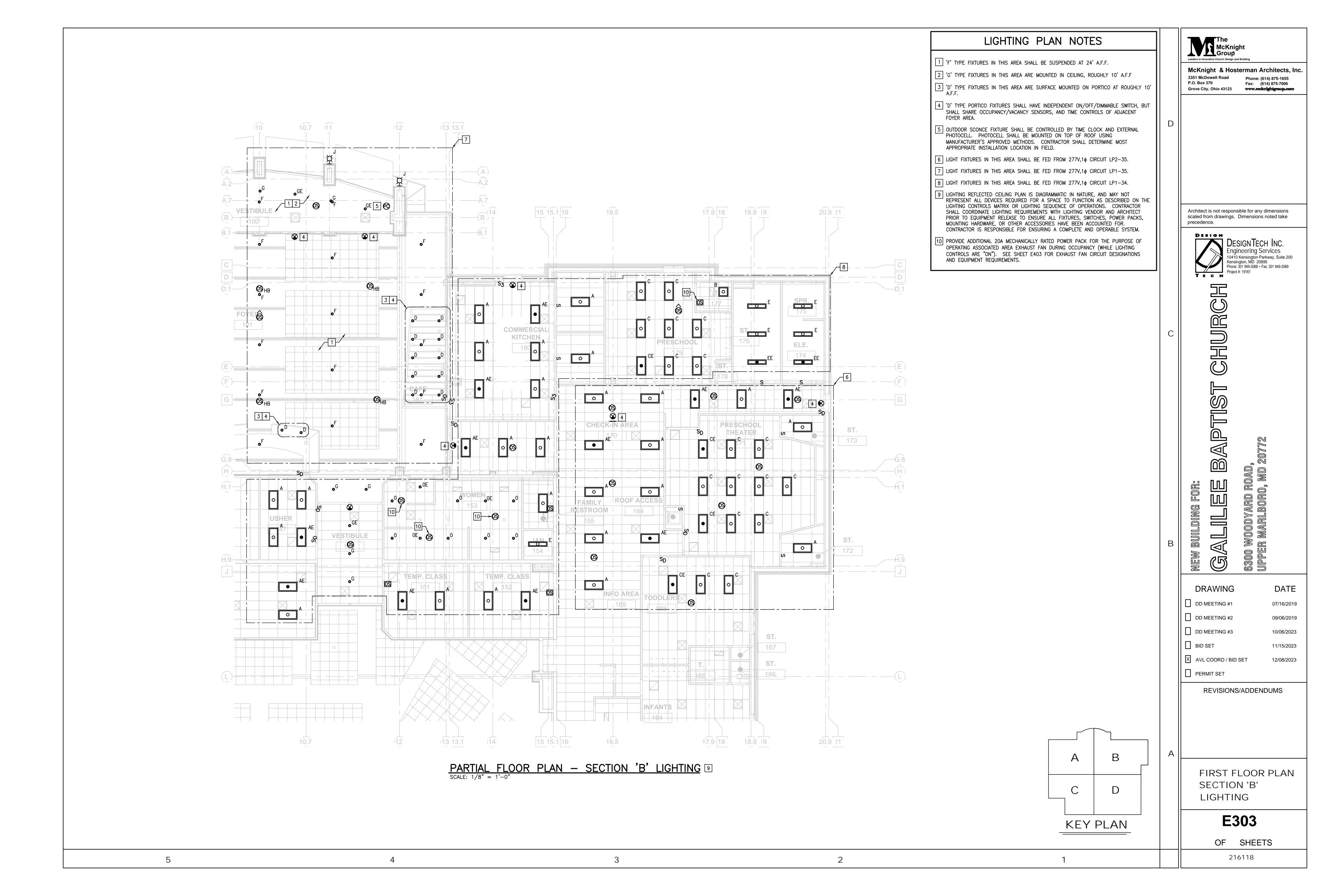
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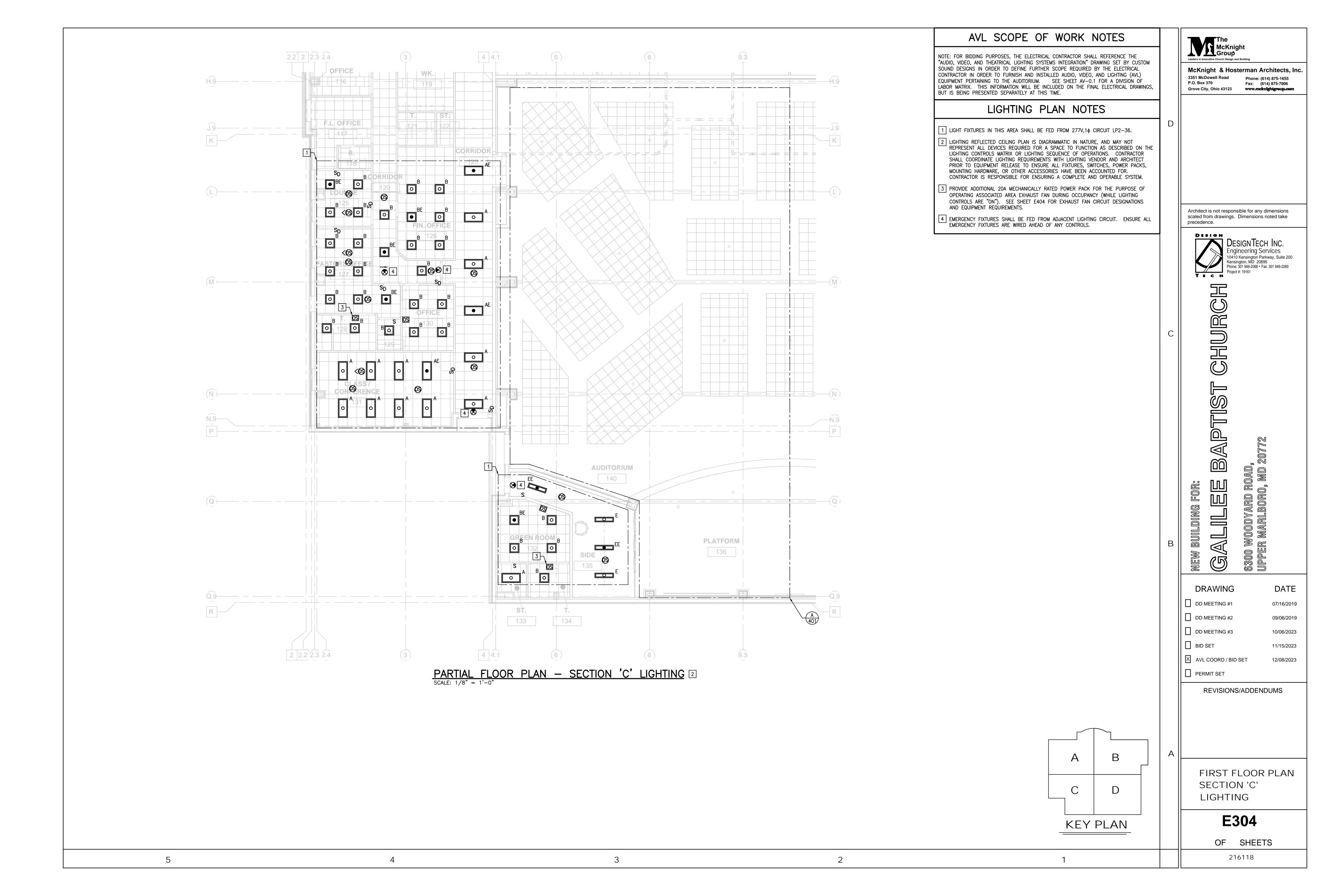
OF SHEETS 216118

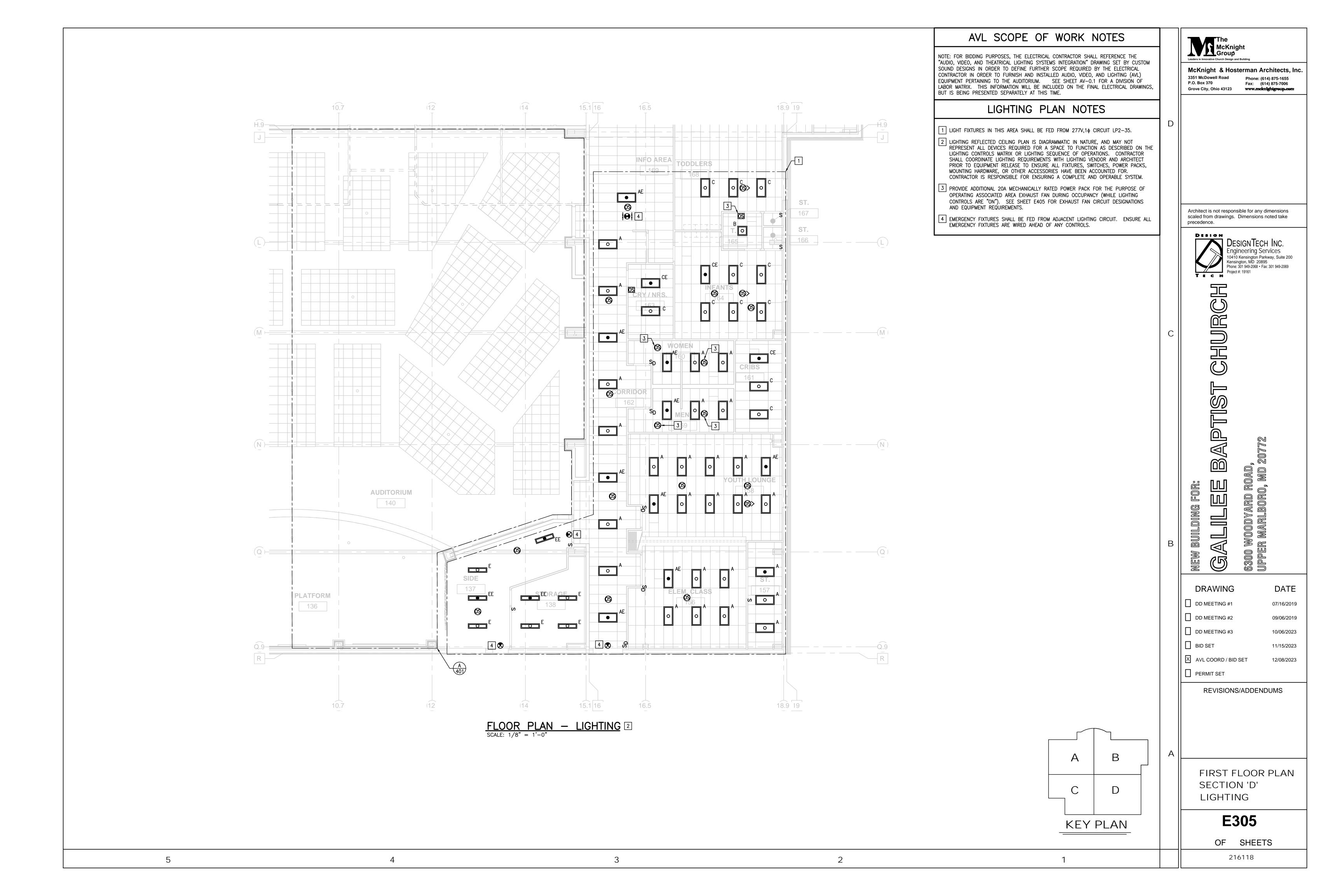
A B
C D
KEY PLAN

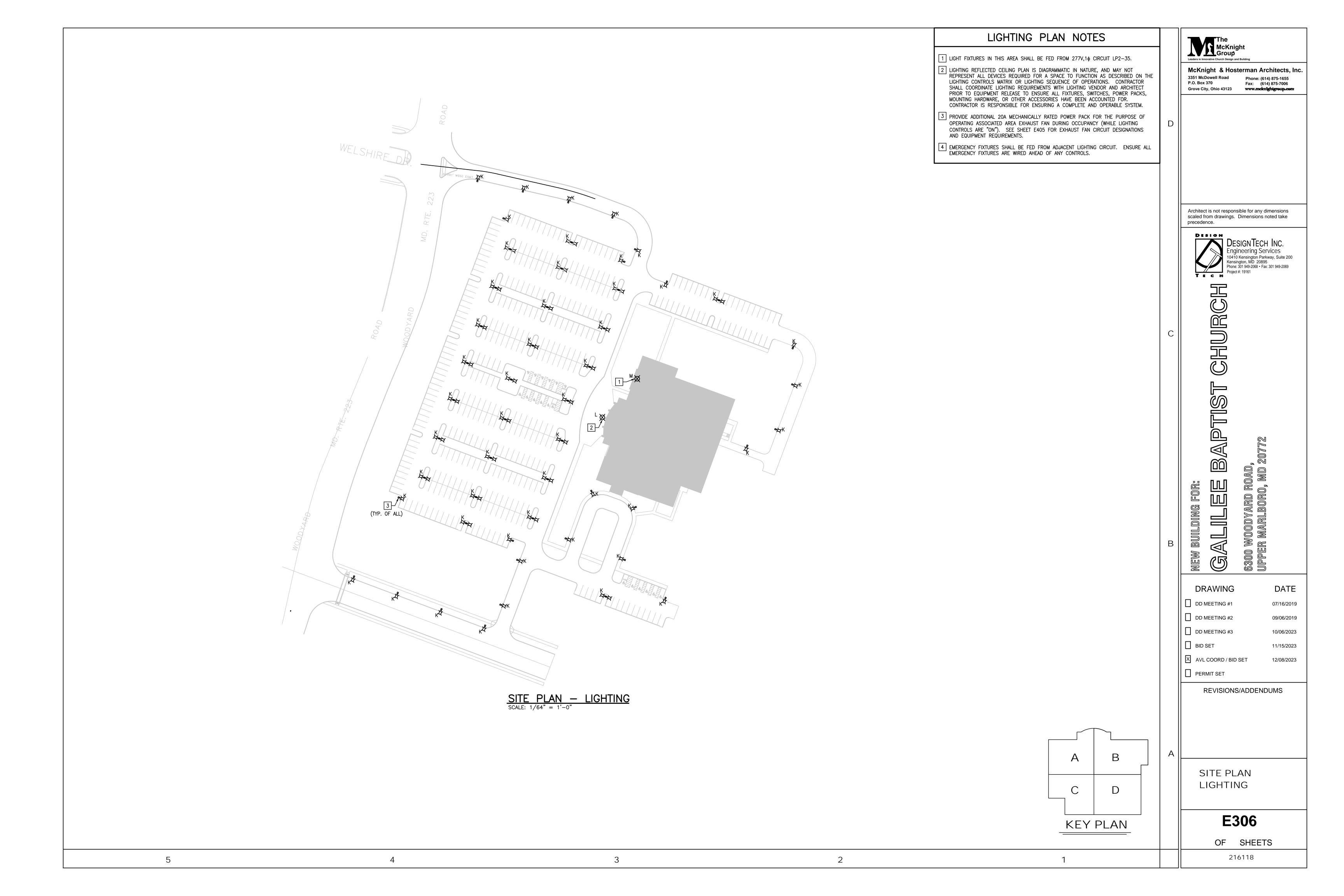
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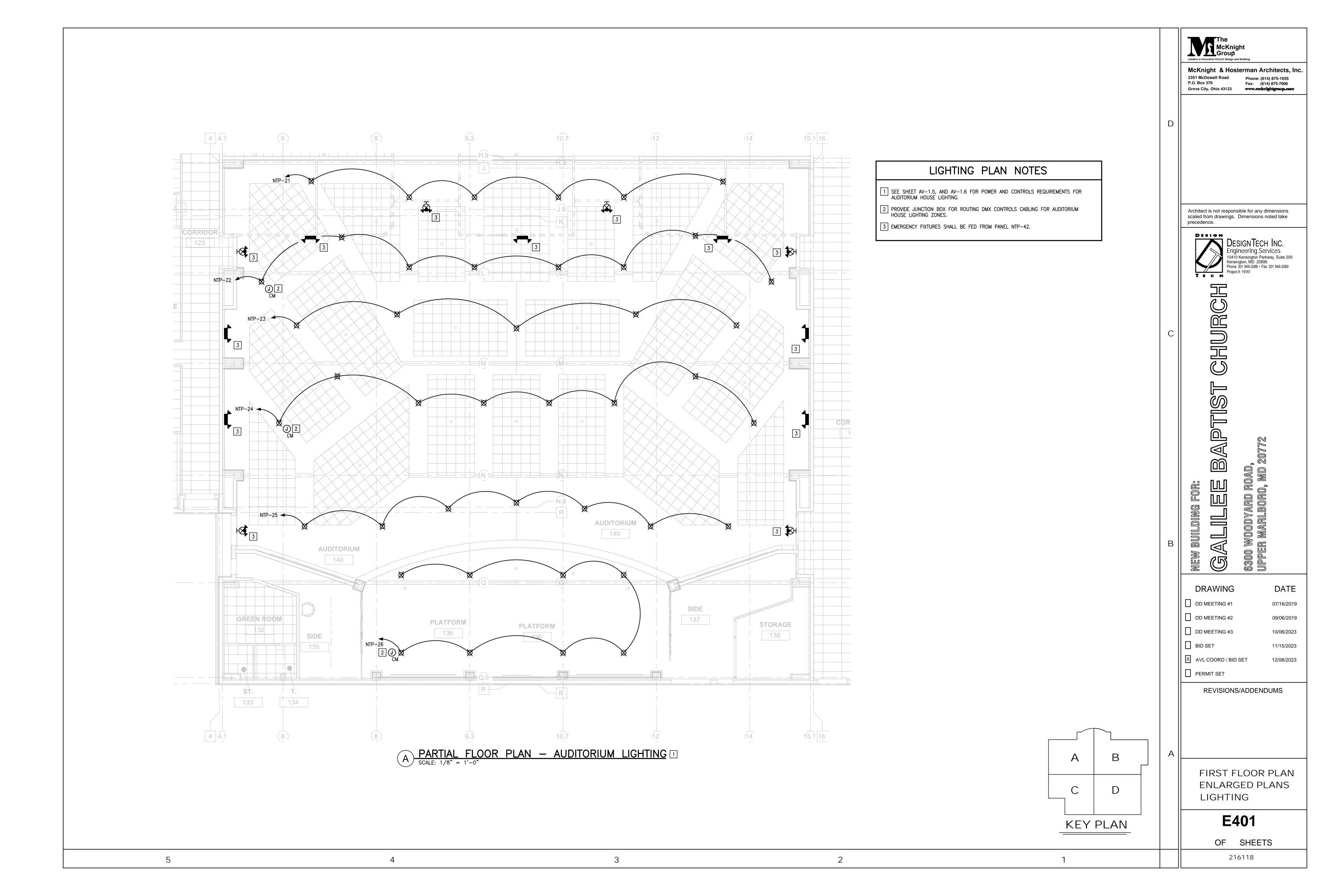


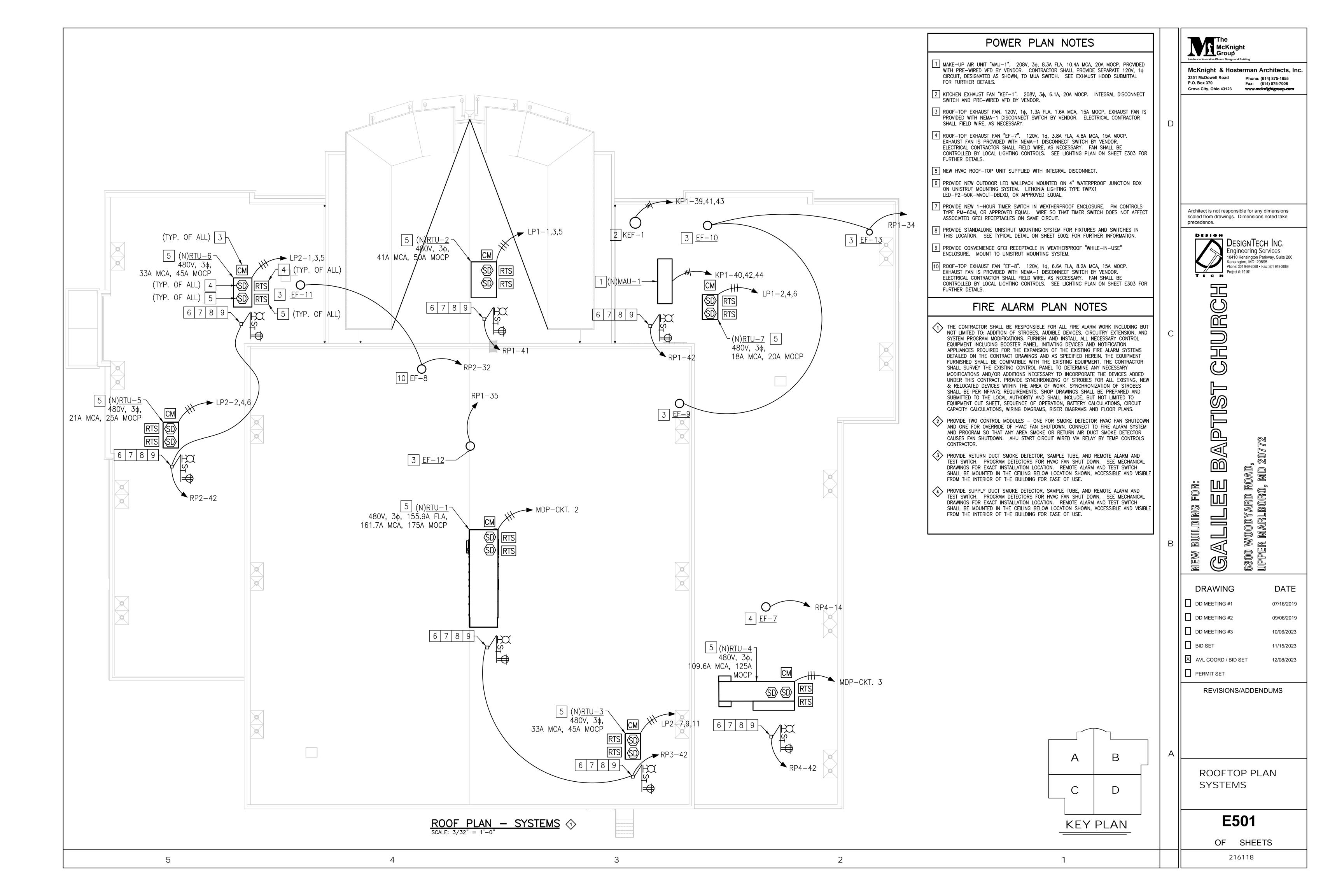


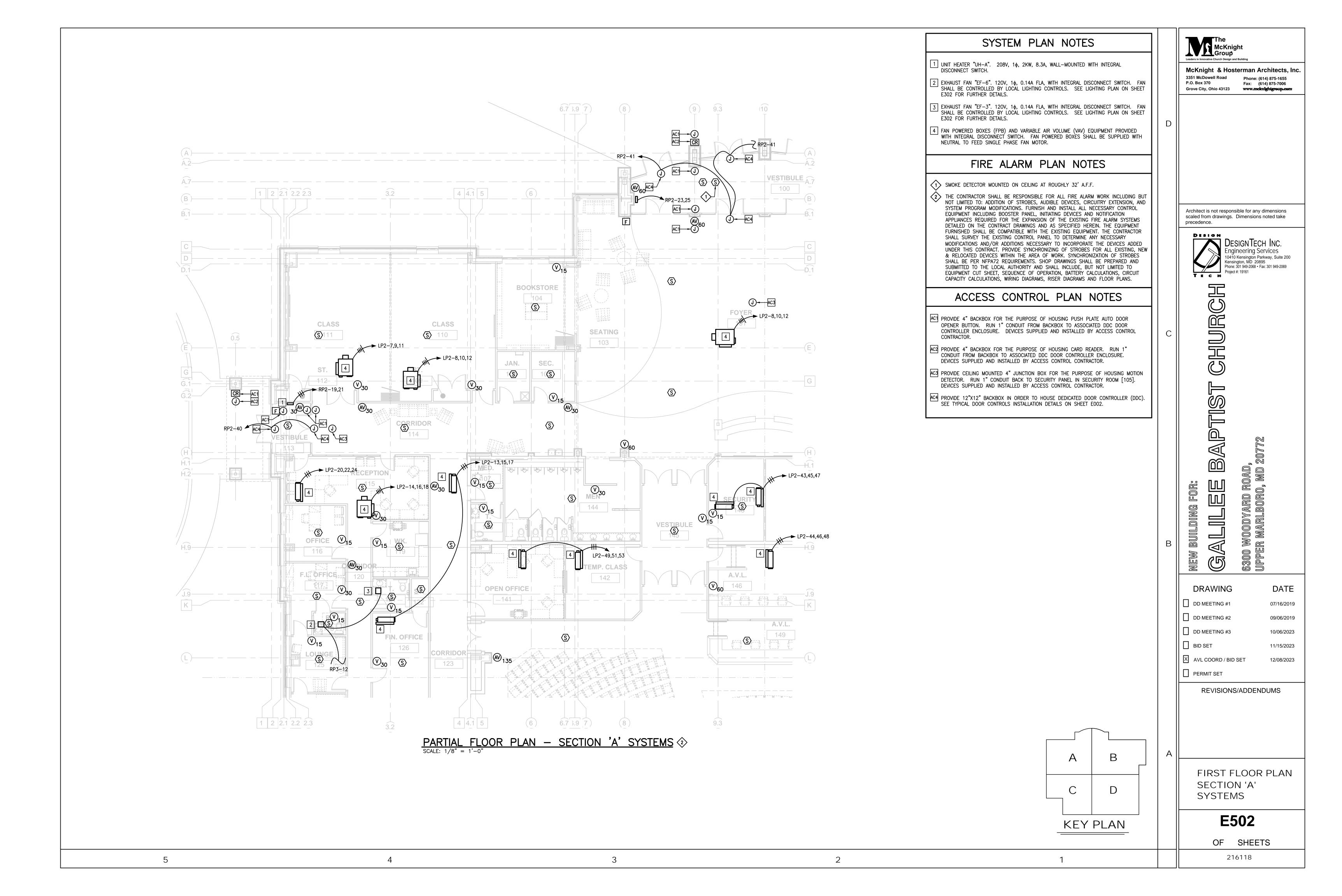


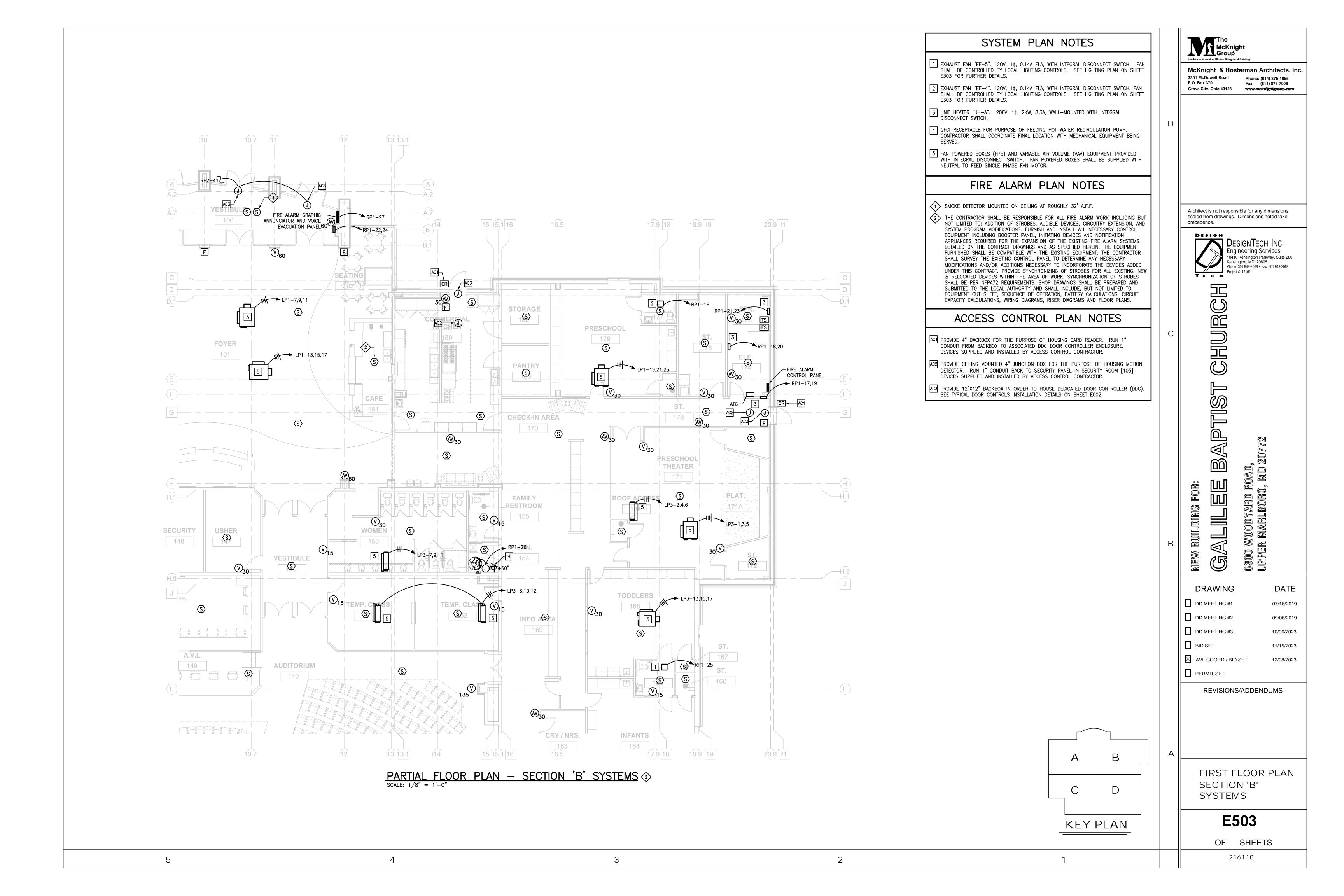


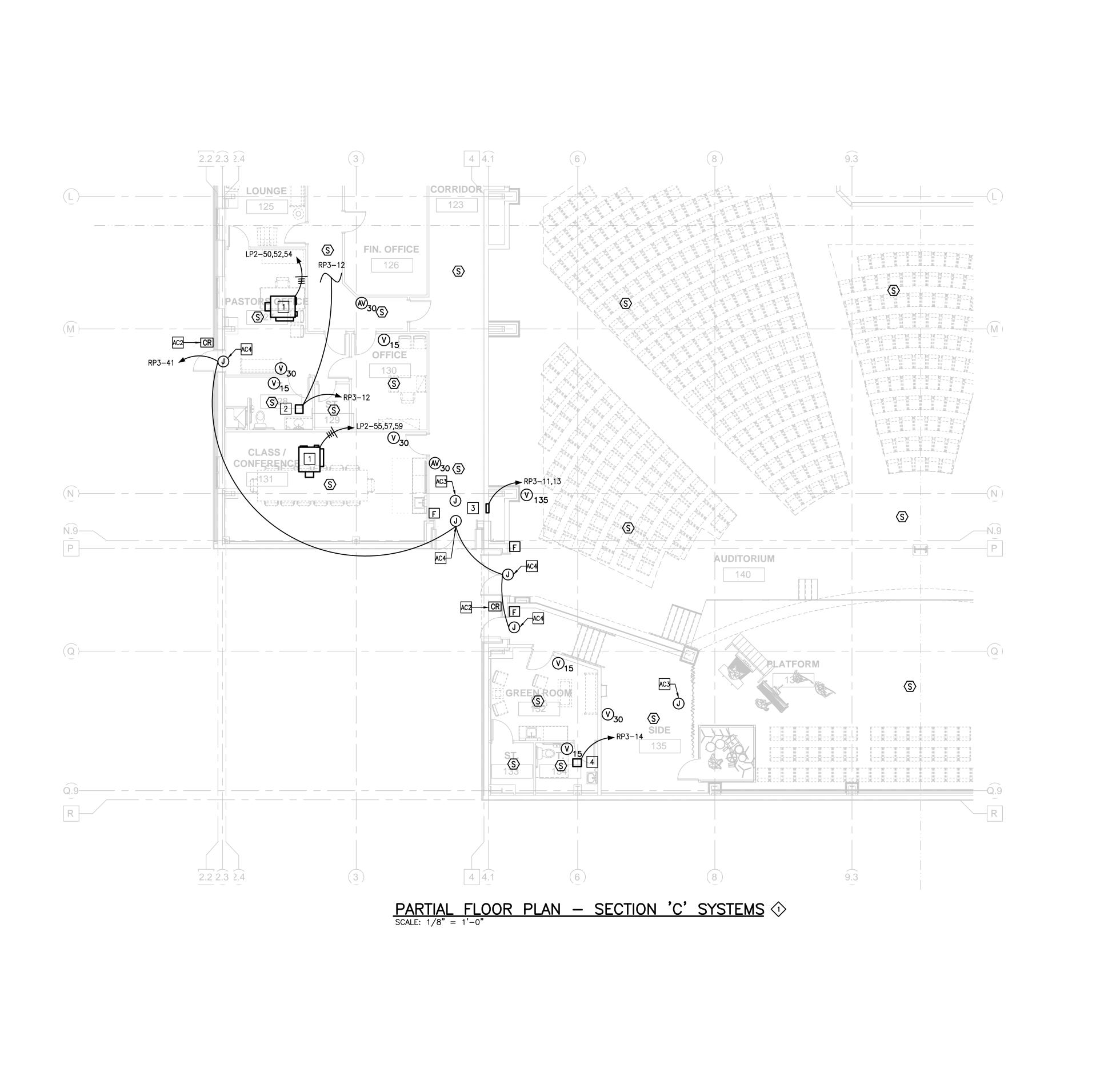












5

SYSTEM PLAN NOTES

- 1 FAN POWERED BOXES (FPB) AND VARIABLE AIR VOLUME (VAV) EQUIPMENT PROVIDED WITH INTEGRAL DISCONNECT SWITCH. FAN POWERED BOXES SHALL BE SUPPLIED WITH NEUTRAL TO FEED SINGLE PHASE FAN MOTOR.
- 2 EXHAUST FAN "EF-2". 120V, 1¢, 0.14A FLA, WITH INTEGRAL DISCONNECT SWITCH. FAN SHALL BE CONTROLLED BY LOCAL LIGHTING CONTROLS. SEE LIGHTING PLAN ON SHEET E304 FOR FURTHER DETAILS.
- 3 UNIT HEATER "UH-A". 208V, 1¢, 2KW, 8.3A, WALL-MOUNTED WITH INTEGRAL DISCONNECT SWITCH.
- 4 EXHAUST FAN "EF-1". 120V, 1φ, 0.14A FLA, WITH INTEGRAL DISCONNECT SWITCH. FAN SHALL BE CONTROLLED BY LOCAL LIGHTING CONTROLS. SEE LIGHTING PLAN ON SHEET E304 FOR FURTHER DETAILS.

FIRE ALARM PLAN NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIRE ALARM WORK INCLUDING BUT NOT LIMITED TO: ADDITION OF STROBES, AUDIBLE DEVICES, CIRCUITRY EXTENSION, AND SYSTEM PROGRAM MODIFICATIONS. FURNISH AND INSTALL ALL NECESSARY CONTROL EQUIPMENT INCLUDING BOOSTER PANEL, INITIATING DEVICES AND NOTIFICATION APPLIANCES REQUIRED FOR THE EXPANSION OF THE EXISTING FIRE ALARM SYSTEMS DETAILED ON THE CONTRACT DRAWINGS AND AS SPECIFIED HEREIN. THE EQUIPMENT FURNISHED SHALL BE COMPATIBLE WITH THE EXISTING EQUIPMENT. THE CONTRACTOR SHALL SURVEY THE EXISTING CONTROL PANEL TO DETERMINE ANY NECESSARY MODIFICATIONS AND/OR ADDITIONS NECESSARY TO INCORPORATE THE DEVICES ADDED UNDER THIS CONTRACT. PROVIDE SYNCHRONIZING OF STROBES FOR ALL EXISTING, NEW & RELOCATED DEVICES WITHIN THE AREA OF WORK. SYNCHRONIZATION OF STROBES SHALL BE PER NFPA72 REQUIREMENTS. SHOP DRAWINGS SHALL BE PREPARED AND SUBMITTED TO THE LOCAL AUTHORITY AND SHALL INCLUDE, BUT NOT LIMITED TO EQUIPMENT CUT SHEET, SEQUENCE OF OPERATION, BATTERY CALCULATIONS, CIRCUIT CAPACITY CALCULATIONS, WIRING DIAGRAMS, RISER DIAGRAMS AND FLOOR PLANS.

ACCESS CONTROL PLAN NOTES

- AC1 PROVIDE 4" BACKBOX FOR THE PURPOSE OF HOUSING PUSH PLATE AUTO DOOR OPENER BUTTON. RUN 1" CONDUIT FROM BACKBOX TO ASSOCIATED DDC DOOR CONTROLLER ENCLOSURE. DEVICES SUPPLIED AND INSTALLED BY ACCESS CONTROL
- AC2 PROVIDE 4" BACKBOX FOR THE PURPOSE OF HOUSING CARD READER. RUN 1" CONDUIT FROM BACKBOX TO ASSOCIATED DDC DOOR CONTROLLER ENCLOSURE. DEVICES SUPPLIED AND INSTALLED BY ACCESS CONTROL CONTRACTOR.
- PROVIDE CEILING MOUNTED 4" JUNCTION BOX FOR THE PURPOSE OF HOUSING MOTION DETECTOR. RUN 1" CONDUIT BACK TO SECURITY PANEL IN SECURITY ROOM [105]. DEVICES SUPPLIED AND INSTALLED BY ACCESS CONTROL CONTRACTOR.
- PROVIDE 12"X12" BACKBOX IN ORDER TO HOUSE DEDICATED DOOR CONTROLLER (DDC). SEE TYPICAL DOOR CONTROLS INSTALLATION DETAILS ON SHEET E002.

The McKnight Group

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Architect is not responsible for any dimensions scaled from drawings. Dimensions noted take precedence.



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CHURCH

<u></u>

NEW BUILDING FOR:

DATE DRAWING DD MEETING #1

DD MEETING #2 DD MEETING #3

BID SET X AVL COORD / BID SET

PERMIT SET

REVISIONS/ADDENDUMS

09/06/2019

10/06/2023

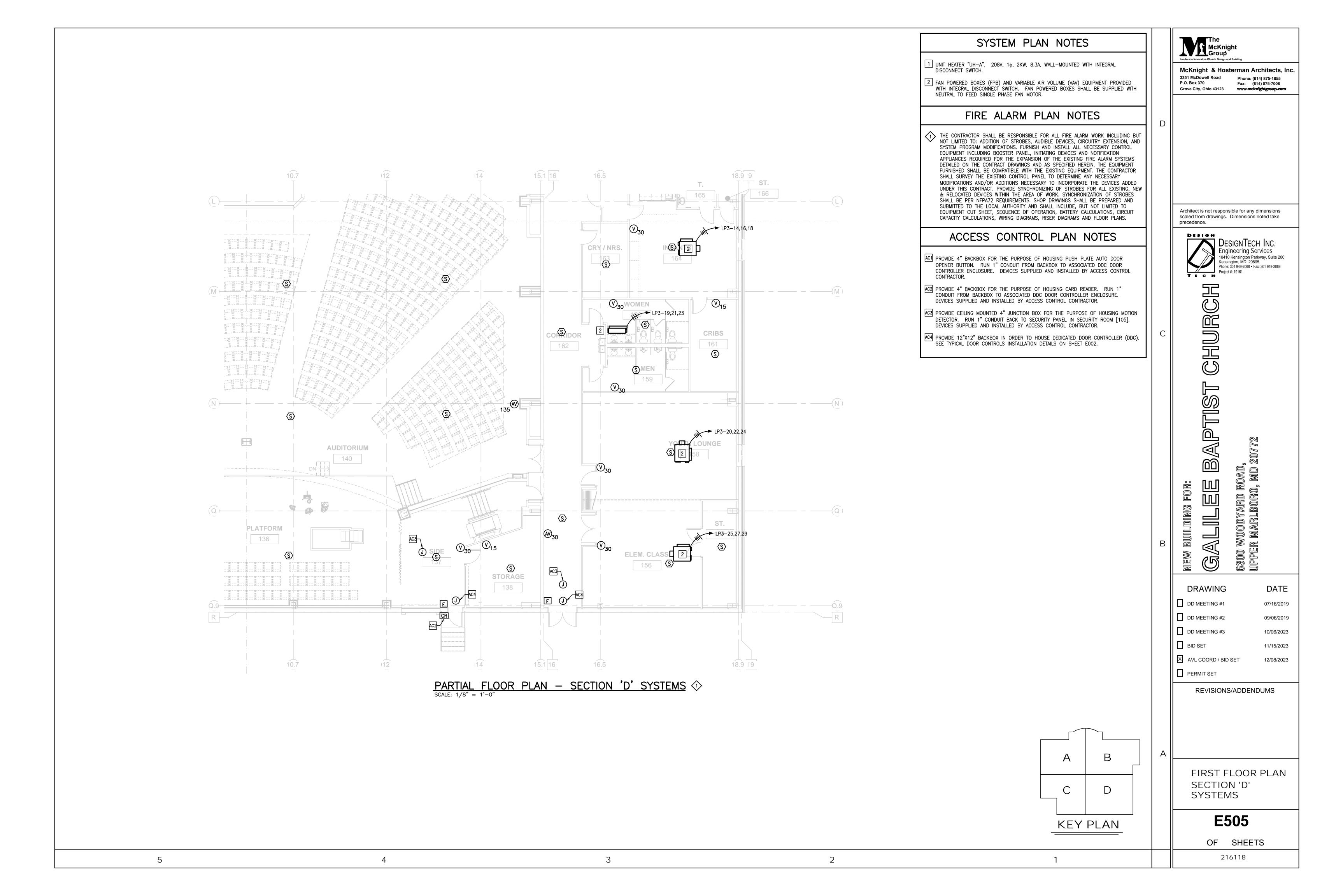
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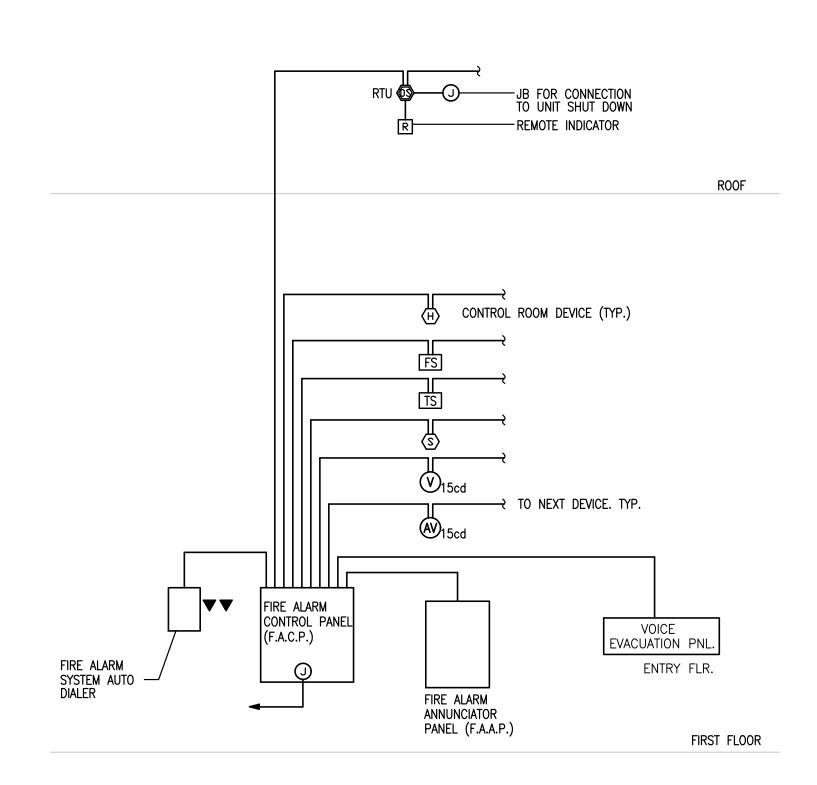
FIRST FLOOR PLAN SECTION 'C' SYSTEMS

E504

OF SHEETS 216118

KEY PLAN





FIRE ALARM SYSTEM RISER DIAGRAM

FIRE ALARM RISER NOTES

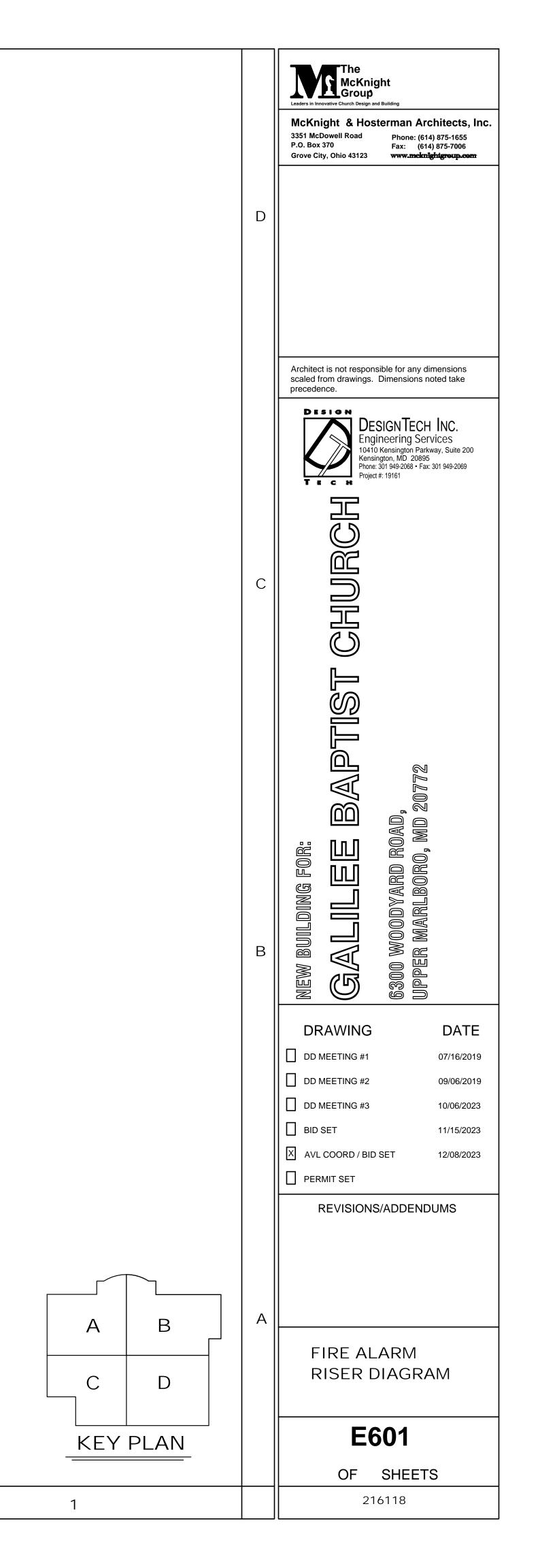
- 1. ALL WIRE AND CONDUIT AND SHALL BE AS REQUIRED BY EQUIPMENT MANUFACTURER.
- 2. FIRE ALARM CONDUCTORS SHALL BE KEPT A MINIMUM DISTANCE OF 12" FROM ELECTRICAL WIRING.
- 3. REFER TO FLOOR PLANS FOR EXACT QUANTITY OF DEVICES.
- 4. PROVIDE AUTOMATIC DIALER FOR THE FIRE ALARM CONTROL PANEL.
- 5. PROVIDE BATTERY AND CHARGER SYSTEM AS INTEGRAL PART OF F.A.C.P.
- 6. THE VOICE EVACUATION PANEL SHALL BE SECURED FROM VANDALISM AND SHALL BE PROVIDED WITH BUILT—IN MICROPHONE AND ALL CALL CAPABILITY AS MINIMUM REQUIREMENTS, AND SHALL BE INSTALLED NEXT TO THE NEW FIRE ALARM ANNUNCIATOR PANEL. REFER TO VOICE EVACUATION SYSTEM GENERAL NOTES ON THIS SHEET.

VOICE EVACUATION SYSTEM GENERAL NOTES

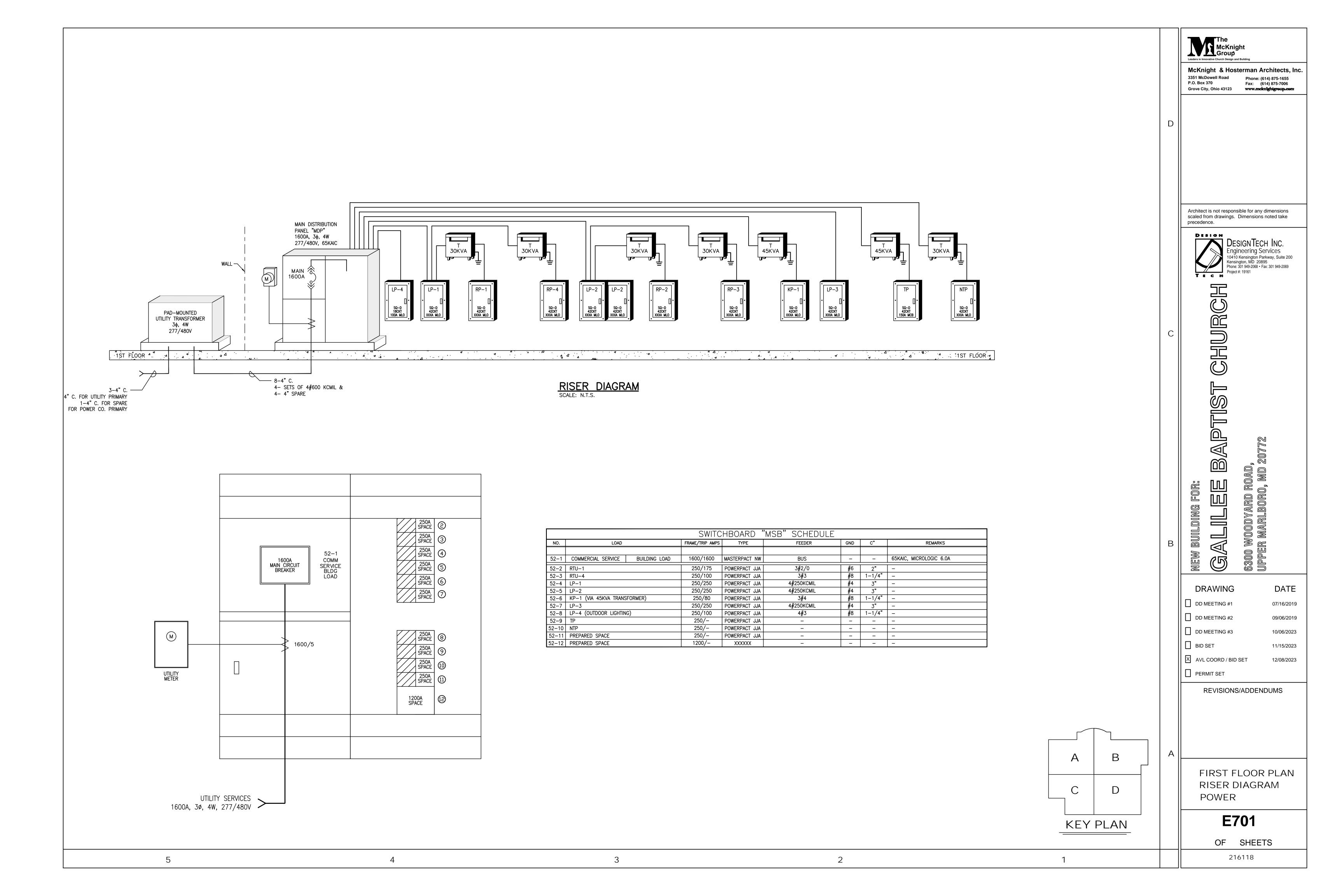
- 1. THE VOICE EVACUATION PANEL DESIGN BASE IS EVAX 50 BY EVAX SYSTEMS SOUND SOLUTIONS, OR APPROVED EQUAL, AND OPERATES WITH ANY FIRE ALARM CONTROL PANEL (FACP).
- 2. THE VOICE EVACUATION PANEL SHALL BE INSTALLED IN A SEMI-FLUSH MOUNTED BACKBOX, WITH A HINGED AND KEY LOCKED DOOR. MOUNTING HEIGHT SHALL BE APPROXIMATELY FIFTY-TWO (52) INCHES ABOVE FINISHED FLOOR TO THE CENTER OF BACKBOX. THE BACKBOX DIMENSIONS ARE 14.5"W X 18"H X 4"D.
- THE VOICE EVACUATION SYSTEM SHALL PROVIDE 50 WATTS SIGNAL POWER AND 50 WATTS VOICE POWER, AND SHALL BE UL LISTED.
- 4. THE VOICE EVACUATION SYSTEM SHALL BE MICROPROCESSOR BASED, AND SHALL CONTAIN AN INTEGRAL MICROPHONE, 50 WATT AUDIO AMPLIFIER, TONE GENERATOR, DIGITAL MESSAGE REPEATER, 120VAC POWER SUPPLY, BATTERIES AND BATTERY CHARGER.
- 5. THE VOICE EVACUATION MESSAGE/SIGNAL SHALL BE BROADCAST UNTIL THE FIRE ALARM CONTROL PANEL (FACP) IS RESET, OR UNTIL FIRE EMERGENCY PERSONNEL INTERRUPT THE BROADCAST WITH A MANUAL PAGE. OR RESET THE SYSTEM SHALL AUTOMATICALLY RETURN TO STANDBY (NORMAL OPERATING)
- 6. A SECONDARY MESSAGE SHALL BE PROVIDED WHICH CAN BE TRIGGERED BY THE CLOSURE OF A CONTACT FROM EITHER THE FACP OR FROM ANY NORMALLY OPEN CONTACT DEVICE.
- 7. REMOTE PAGING MICROPHONE(S) SHALL BE SUPPORTED BY THE SYSTEM THROUGH A SUPERVISED CIRCUIT. REMOTE MICROPHONE(S) MAY BE MOUNTED UP TO 5,000 FEET AWAY FROM THE VOICE EVACUATION PANEL.
- 8. THE ALARM COMMUNICATION SYSTEM SHALL BE DESIGNED AND INSTALLED SO DAMAGE TO ANY TERMINAL UNIT OR SPEAKER WILL NOT RENDER MORE THAN ONE ZONE OF THE SYSTEM INOPERATIVE.
- 9. THE SYSTEM SHALL BE CONTINUOUSLY ELECTRICALLY SUPERVISED AGAINST COMPONENT FAILURE OF THE AUDIOPATH INCLUDING AMPLIFIERS, SPEAKER WIRING, SWITCHES, AND ELECTRICAL CONTACTS AND SHALL DETECT OPENS, SHORTS AND GROUNDS WHICH MIGHT IMPAIR THE FUNCTION FO THE SYSTEM. BOTH A VISUAL AND AUDIBLE TROUBLE SIGNAL SHALL OPERATE AT AN APPROVED CENTRAL STATION.
- 10. ALL WIRING SHALL BE INSTALLED IN METALLIC TUBING OR APPROVED EQUIVALENT. THE INSTALLATION SHALL BE IN A MANNER WHICH WILL AFFORD THE MAXIMUM PROTECTION AGAINST THE EFFECTS OF FIRE AND WHICH WILL FACILITATE REPAIR OR REPLACEMENT.
- 11. THE SYSTEM SHALL BE INSTALLED SO TROUBLE CAN BE READILY DETECTED BY FLOOR AND DEVICE.
- 12. THERE SHALL BE A MAINTAINED CONTACT PUSH BUTTON AND VISUAL INDICATOR FOR EACH FLOOR LEVEL OR ZONE. AN "ALL CALL" POSITION IS ALSO REQUIRED. OPERATION SHALL BE BY SELECTIVE BASIS; I.E., ONE ZONE, ANY COMBINATION OF ZONES, OR BY ALL ZONES. ONE SET OF MAINTAINED PUSH BUTTONS FOR THE FIRE ALARM SYSTEM AND ONE SET FOR THE PUBLIC ADDRESS SYSTEM IS REQUIRED.
- 13. ZONES SHALL BE LIMITED TO A MAXIMUM OF 22,500 SQUARE FEET. IN NO INSTANCE SHALL A ZONE ENCOMPASS MORE THAN ONE FLOOR LEVEL. FLOORS SHALL ALARM ON A PER FLOOR BASIS AND ALARMS SHALL ANNUNCIATE BY FLOOR, ZONE AND DEVICE.
- 14. SPEAKERS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS: ELEVATORS, ELEVATOR LOBBIES, CORRIDORS AND EXIT STAIRWELLS.
- 15. SPEAKERS SHALL BE LISTED BY A RECOGNIZED TESTING AUTHORITY FOR FIRE ALARM USE. SPEAKERS SHALL PROVIDE THE SOUND LEVELS SPECIFIED IN NFPA 72 AT ALL LOCATIONS IN THE STRUCTURE.
- 16. WALL MOUNTED SPEAKERS SHALL BE INSTALLED SO SOUND REPRODUCTION IS IN ONE DIRECTION ONLY. IN NO INSTANCE SHALL CORRIDOR SPEAKERS BE INSTALLED SO SOUND REPRODUCTION IS DIRECTED TOWARDS THE OPPOSITE WALL.
- 17. SPEAKER SPACING SHALL BE IN ACCORDANCE WITH THE RECOMMENDATION OF THE MANUFACTURER, THE LISTING AUTHORITY, AND ABOVE ALL, TO PROVIDE THE REQUIRED SOUND REPRODUCTION LISTED UNDER ITEM "15".
- 18. THE PRE-TAPED MESSAGE SHALL BE: "THERE IS A FIRE EMERGENCY IN THE BUILDING. YOU ARE TO LEAVE THE BUILDING BY THE NEAREST EXIT OR EXIT STAIR. DO NOT USE THE ELEVATORS." VISUAL INDICATION THAT THE MESSAGE IS BEING DELIVERED TO THE REQUIRED ZONES SHALL BE INSTALLED AT THE CONTROL
- 19. FAILURE OF THE PRE-TAPED MESSAGE FOR ANY REASON SHALL CAUSE THE FIRE ALARM SIGNAL TO SOUND CONTINUOUSLY IN THE REQUIRED ZONES UNTIL THE SYSTEM HAS BEEN RESTORED TO NORMAL OR IS SILENCED AT THE CONTROL PANEL.
- 20. THE ALARM SIGNAL SHALL BE THE SLOW WHOOP SIGNAL. THE ALARM SIGNAL SHALL SOUND FOR A MAXIMUM OF 15 SECONDS FOLLOWED BY THE PRE—TAPED MESSAGE. BOTH SHALL SOUND ALTERNATELY IN SEQUENCE UNTIL SILENCED AT THE CONTROL PANEL OR WHEN THE FIRE ALARM PANEL IS RESTORED TO NORMAL. THERE SHALL BE NO MORE THAN A 5 SECOND PAUSE BETWEEN THE ALARM SIGNAL AND THE PRE—TAPED MESSAGE FOR EACH REVOLUTION.
- 21. UPON ACTIVATION OF ANY MANUAL ALARM OR AUTOMATIC FIRE DETECTION OR SUPPRESSION DEVICE, THE FIRE ALARM SYSTEM SHALL OPERATE ON ALL FLOOR LEVELS.

TRANSMISSION IS COMPLETED.

- 22. THE SYSTEM SHALL BE DESIGNED SO THE FIRE ALARM SIGNAL AND PRE—TAPED MESSAGE MAY BE TRANSMITTED TO ANY FLOOR WHILE VOICE MESSAGES ARE BEING TRANSMITTED TO OTHER FLOORS. IF THE VOICE INSTRUCTIONS ARE REQUIRED TO BE TRANSMITTED TO ANY FLOOR, THE FIRE ALARM SIGNAL AND PRE—TAPED MESSAGE SHALL AUTOMATICALLY RESTART OR CONTINUE IN THE REQUIRED SEQUENCE AFTER THE VOICE
- 23. THE MICROPHONE FOR THE TRANSMISSION OF VOICE MESSAGES SHALL BE HAND—HELD TYPE WITH A 5 FOOT CABLE. THE CABLE SHALL BE PERMANENTLY CONNECTED AT BOTH ENDS WITH THE MICROPHONE HANGER MOUNTED ON THE FRONT OF THE PANEL.
- 24. ALARM TONE GENERATORS, PREAMPLIFIERS, POWER AMPLIFIERS AND POWER SUPPLIES SHALL BE CONTINUOUSLY SUPERVISED. BACKUP UNITS SHALL AUTOMATICALLY PROVIDE THE REQUIRED SIGNALING IN THE EVENT OF COMPONENT FAILURE.



4



	PHASE	3: 277/480 3: 4 + G					MAIN BREAKER: MINIMUM AIC:)
	BUSS	3: CU					FED FROM:	UTILITY	
ITEM/	LOAD	HP	KW			CIRCU	IT BREAKER	L	OAD
CIRCUIT	DESCRIPTION			FRAME	TRIP	POLE	NOTE	KVA	AMPS
1	RTU-1			250A	175A	3	3#2/0 + #6G IN 2" C.	134.4	161.7
2	RTU-4			250A	125A	3	3#1 + #6G IN 2" C.	87.7	105.5
3	PANEL LP-1			250A	250A	3	4#250KCMIL + #4G IN 3" C.	172.9	207.9
4	PANEL LP-2			250A	250A	3	4#250KCMIL + #4G IN 3" C.	190.5	229.1
5	PANEL KP-1 (VIA 45KVA XFMR)			250A	80A	3	3#4 + #8G IN 1-1/4" C.	27.2	32.7
6	PANEL LP-3			250A	250A	3	4#250KCMIL + #4G IN 3" C.	90.0	108.2
7	PANEL TP			250A	80A	3	3#4 + #8G IN 1-1/4" C.	36.0	43.3
8	PANEL NTP			250A	50A	3	3#8 + #10G IN 3/4" C.	23.7	28.5
9	PANEL LP-4			250A	100A	3	4#3 + #8G IN 1-1/4" C.	4.0	4.8
			,	250A		3			0.0
10				1200A		3			0.0

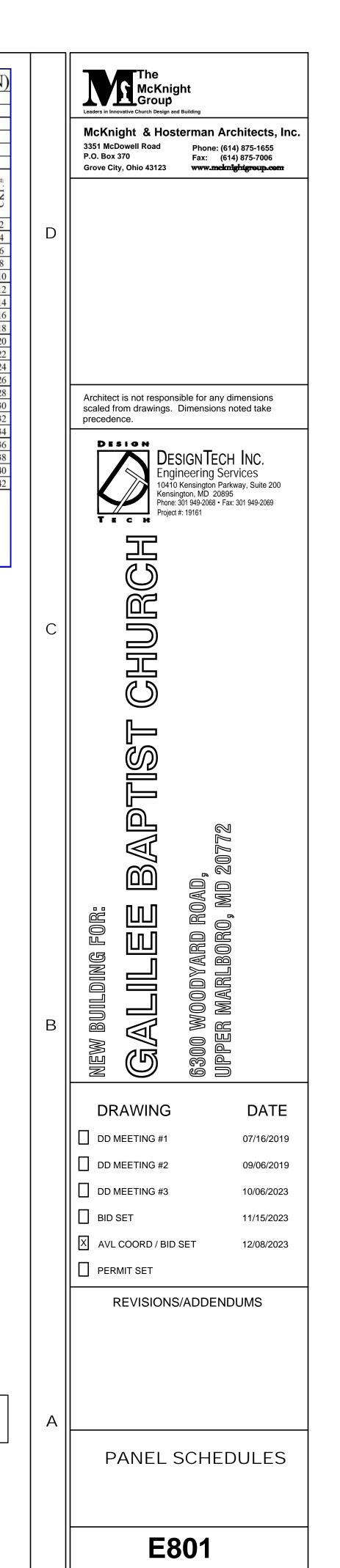
			NELB		M&A				1	200	7/100	ORK	()			LP-1(N)	
1	VOLTA GE	PHASE	WIRE	MO	(B(A)	M	LO ((A)	В	USAMI	PS	AI	C	M	CUNT	ING SECTIONS	
	277/ 480	3	4		2		250 <i>A</i>			250A		35,0	000	RI	ECESS	ED 1 OF 1	
								REM.	AR	KS							
ROY	VIDE EQUIPM	IENT GRO	UND BUS														
_			- 1		T .	· ·					_		f .				_
ŧ.			Ш	GROUND	CONDUIT	CKT. B	RK	LOAD	SE	LOAD	CK	T. BRK	CONDUIT	GROUND	щ		1
	ITEM	SERVED	WIRE	10	2			(KVA)	PHASE	(KVA)			8	10	WIRE	ITEM SERVED	
۱ ر				GR	9	TRIP	P	(KVA)	PI	(KVA)	P	TRIP	CO	GR	>		
1								11.06	A	4.99							
3	RT	'U-2	3#8	#10	1"	50A	3	11.06	В	4.99	3	20A	3/4"	#12	3#12	RTU-7	Г
5								11.06	С	4.99							Г
7	FOY	ER 101	700		i.			5.00	Α	0.50		.6					
)	FP	B-12	4#10	#10	3/4"	25A	3	5.00	В	0.50	3	20A	3/4"	#12	3#12	EF-7	
1	14KW 1	HEATER						5.00	C	0.50	9						
3		ER 101						6.33	A								L
5		B-14	4#10	#10	3/4"	30A	3	6.33	В		3	20A				SPA RE	
7		HEATER						6.33	C								
9	PRESCH	100L 179						5.00	A	9.14							L
21		B-12	4#10	#10	3/4"	25A	3	5.00	В	9.14	3	45A	1"	#10	3#8	RTU-3	L
23		HEATER						5.00	C	9.14				_			1
25		ARE				20A	1		A		1	20A				SPARE	
27	1000000	ARE			A	20A	1		В		1	20A		-		SPARE	
29		ARE				20A	1		C		1	20A				SPARE	
31		ARE				20A	1		A	0	1	20A		├		SPARE	
33		ARE				20A	1		В	2.67	1	20A		-		SECTION B LIGHTING	1
5	SECTION 1	BLIGHTIN	G		8	20A	1	C 10	C	4.08	1	20A		-		SECTION A LIGHTING	1
37	D.4.3.77	T DD 4	2//2	<i>U</i> * 6		50.4	_	6.40	A	9.10	_	50.1	,,,	1110	2//0	DANIET DD 1	
39		EL RP-4	3#8	#10	1"	50A	3	6.32	В	5.27	3	50A	1"	#10	3#8	PANEL RP-1	F
11	VIA 30K	VA XFMR						7.21	C	5.76						VIA 30KVA XFMR	
				A	В	C											
	TOTALLOA	D DEB DIT	A SE (VVA)			59.08	1										
	TOTALLOA	DTEKTH	A DE (KVA)	37.31	30.20	39.00	Ţ										
		C	ONNECTE	TOTA	L(KVA)	172.87	T										
					CITY(A)												

V	OLTAGE	PANE W	IRE		B(A)		LO			US AMI		AI	/	M	DUNTIN	LP-2 SEC 1 SECTIONS	(-
	277/ 480	3	4		-	- 1	250 <i>A</i>	1		250A		35,0	00	RI	ECESSEI	1 OF 2	
								REM	ARI	KS							
		MENT GROUND															
PROV	JIDE PA NELI	BOARD WITH	FEED-T	HRU L	UGS TO	SUPPLY	2NI	D SECTIO)N(OF BOAT	RD.						
#:			SE.	CIND	TIOC	CKT. B	RK	LOAD	SE	LOAD	СК	T. BRK	TIOO	QNO	iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii		T
CKT	ITEM	SERVED	WIRE	GROUND	CONDUIT	TRIP	P	(KVA)	PHASE	(KVA)	P	TRIP	CONDUIT	GROUND	WIRE	ITEM SERVED	
3	R	ГU-6	3#8	#10	1"	45A	3	9.14 9.14	A B	5.82 5.82	3	25A	3/4"	#10	3#10	RTU-5	F
5								9.14	С	5.82							\perp
7		SS 111						2.42	A	2.42						CLASS 110	
9		PB-8	4#12	#12	3/4"	20A	3	2.42	В	2.42	3	20A	3/4"	#12	4#12	FPB-8	
11		HEAT	-					2.42	C	2.42						7KW HEAT	+
13 15		3 / FIN 126 / VAV-6	3#12	#12	3/4"	20A		3.56 3.56	A B	2.75 2.72	3	20A	3/4"	#12	4#12	RECEPTION 115 FPB-10	-
17		KW HEAT	3#12	#12	3/4	20A		3.56	С	2.75	3	20A	3/4	#12	4#12	8KW HEATER	-
19	/KW / 3/	KW IILA I					\vdash	0.30	A	1.08	Н					VESTIBULE 113	\dagger
21	Е	F-8	3#12	#12	3/4"	20A	3	0.30	В	1.08	3	20A	3/4"	#12	3#12	VA V-6	t
23								0.30	С	1.08						3KW HEATER	T
25			100				72.	0.50	A		1	20A				SPARE	I
27	E	F-12	3#12	#12	3/4"	20A	3	0.50	В		1	20A				SPARE	
29								0.50	C		1	20A				SPARE	\perp
31		ARE				20A	1		A		1	20A				SPARE	1
33		ARE				20A	1		В		1	20A				SPARE	4
35	SECTION	D LIGHTING	4			20A	1	4.13	C	3.39	1	20A				SECTION C LIGHTING	1
37 39		EL RP-3	3#8	#10	1"	50A	3	6.36 3.79	A B	8.74 7.56	3	50A	1"	#10	3#8	PA NEL RP-2	
41	VIA 30K	VA XFMR		A	В	С		4.04	С	8.54						VIA 30KVA XFMR	
	TOTAL LOA	AD SECTION 1	(KVA)		39.31	48.08											
		AD SECTION 2			20.00	20.00]										
		CONN	ECTED	TOTA	L(KVA)	190.48											

		PAI	NELB	OAF	RD S	CHE	DI	ULE	(N	IEW	W	ORK	()			LP-2 SEC 2	2(N
V	OLTAGE	PHASE	WIRE	MC	B(A)	M	LO	(A)	В	USAMI	PS	Al	C	M	OUNTING	SECTIONS	
	277/ 480	3	4		-		250 <i>E</i>	A		250A		35,0	000	RI	ECESSED	2 OF 2	
								REM	AR	KS							
ROV	IDE EQUIPM	IENT GRO	UND BUS														
ROV	/IDE PA NELE	BOARD W	ITH FEED-T	HRU L	UGS TO	SUPPLY	2N	D SECTION	ON	OF BOA	RD.						
#			[m]	Ð	III	CKT. B	DV		(II)		C	T. BRK	Ш	Ð	I I		7
H	ITEM	SERVED	WIRE	Ď	DI	CK1. B	ICIX	LOAD	ASI	LOAD	Cr	CI. DICK	DI	15	WIRE	ITEM SERVED	F
CKT.	IILAVI	SLICVLIS	W	GROUND	CONDUIT	TRIP	P	LOAD (KVA)	PH	(KVA)	P	TRIP	CONDUIT	GROUND	፟፟፟፟፟፟፟	THEN SERVED	TAD
43	SEC	C 148					İ	3.67	A	2.17	П					AVL 146	4
45	VA V-6	/ VA V-8	3#12	#12	3/4"	20A	3	3.67	В	2.17	3	20A	3/4"	#12	3#12	VAV-8	4
47	4KW / 6K	W HEATE	R		\$200000	-33000-33		3.67	С	2.17		7604600				6KW HEATER	4
49	OFF. 141/	CLASS 14	2					2.67	A	2.42		31				OFF. 127	5
51	VAV-6	/ VA V-6	3#12	#12	3/4"	20A	3	2.67	В	2.42	3	20A	3/4"	#12	4#12	FPB-8	5
53	3.5KW / 3.5	KW HEAT	ER					2.67	С	2.42						7KW HEATER	5
55	CONFER	ENCE 131						2.75	A	6.33						FOYER 101	5
57	FP	B-10	4#12	#12	3/4"	20A	3	2.75	В	6.33	3	30A	3/4"	#10	4#10	FPB-14	5
59	8KEW	HEATER						2.75	С	6.33	1					18KW HEATER	6
61	SP	ARE				20A	1		A		1	20A				SPARE	6
63	SP.	ARE				20A	1		В		1	20A				SPARE	6
65	SP	ARE				20A	1		C		1	20A				SPARE	6
67	SP	ARE				20A	1		Α		1	20A				SPARE	(
69	SP	ARE				20A	1		В		1	20A				SPARE	7
71	SP	ARE				20A	1		C		1	20A				SPARE	1
73	SP	ARE				20A	1		A		1	20A				SPARE	7
75	SP	ARE				20A	1		В		1	20A				SPARE	7
77	SP	ARE			3	20A	1		C		1	20A				SPARE	7
79	SP	ARE				20A	1		A		1	20A				SPARE	8
81	SP.	ARE				20A	1		В		1	20A				SPARE	8
83	SP	ARE				20A	1		C		1	20A				SPARE	8

VOLTAGE	PHASE	WIRE	MC	B (A)	+	LO		В	US AMP	S	Al		_	OUNTI		
277/ 480	3	4		-	1	250 <i>A</i>	REM	A DI	250A		35,0)00	K	ECESSE	D 1 OF 1	
ROVIDE EQUIP	MENT CDOLL	NID DITE					KEIVI	AKI	X3							
ROVIDE EQUIP	WENT GROU	IND BUS														
# ITEM	SERVED	WIRE	GROUND	CONDUIT	CKT. B	RK	LOAD (KVA)	ASE	LOAD	CK	T. BRK	CONDUIT	GROUND	WIRE	ITEM SERVED	T.#
TEM ITEM	SERVED	W	GRO	CON	TRIP	P	(KVA)	PH/	(KVA)	P	TRIP	CON	GRO	×	HEW SERVED	CKT.
1 THEA	ATER 171						6.33	Α	1.83						THEATER 171	2
3 FI	PB-14	#10	3/4"	30A	3	6.33	В	1.83	3	20A	3/4"	#12	3#12	VA V-8	4	
	HEATER						6.33	C	1.83						5 KW HEATER	6
	IEN'S 153						2.17	A	2.17						TEMP CLASS 151 / 152	8
	'A V-8	3#12	#12	3/4"	20A	3	2.17	В	2.17	3	20A	3/4"	#12	3#12	VA V-6 / VA V-6	10
_	HEATER						2.17	C	2.17						3KW / 3KW HEATER	12
TA CARDONS	DLERS 168		100				3.75	A	3.75			- 0	-		INFANTS 164	14
	A V-10	4#12	#12	3/4"	20A	3	3.75	В	3.75	3	20A	3/4"	#12	4#12	FPB-10	16
	HEATER				-		3.75	C	3.75						11KW HEATER	18
4.7.7.7.4.11.4.1	IEN'S 160		***				2.50	A	3.75			The Carlot Water		7979979797	YOUTH LOUNGE 158	20
	A V-8	3#12	#12	3/4"	20A	3	2.50	В	3.75	3	20A	3/4"	#12	4#12	FPB-10	22
	HEATER	_			ļ	-	2.50	C	3.75						11KW HEATER	24
	I CLASS	2//12	//10	0/40	20.4	_	3.75	A							CD 4 CE	26
	PB-10	3#12	#12	3/4"	20A	3	3.75 3.75	В		3					SPA CE	28 30
29 11KW 31	HEATER		-		-	-	3.73	C								32
	DA CE					3		A B	- 10	3					SPACE	34
_	ACE					3		-	-	3					SFACE	36
	NFL TP	\dashv		i.	1									\vdash		38
		3#8	#10	1"	50A	3		-		3	50A	1"	#10	3#8	PANEL NTP	40
		5/10	2011	-		C		(20)		::#:	., 10	5.1.0		42		
39 VIA	SPACE PANEL TP VIA 45KVA K-13 XFMR A B							A B C		3	50A	1"	#10	3#8	PANEL NTP VIA 45KVA XFMR	

	VOLTAGE 120/ 208	PHA SE	WIRE 4		B(A) 00A	M	LO -	(A)	В	SUS AME 225A	28	Al 10,0			JRFA		
	120, 200				, , , ,	1		REM	AR			,					
PRO	VIDE EQUIP	MENT GROU	JND BUS					A Marie Control	-	2.224.00							
										45			-				
CKT.#	ITEM	SERVED	WIRE	GROUND	CONDUIT	CKT. B	RK P	LOAD (KVA)	PHASE	LOAD (KVA)	Ck P	TRIP	CONDUIT	GROUND	WIRE	ITEM SERVED	CKT.#
1	A LID 140/4	7/50 CONTAIN	EC 2#12	#12	3/4"	100 EAST	1				1	Section Contract	3/4"	. 300	2#12	WE/DM 152/54/55 CECI	2
3	UNIONACE-NUMBER - NEW DOCARD-OLD	7/50 CONVR 01 CONVRE		#12	3/4"	20A 20A	1	1.44	A B	1.58 0.25	1	20A 20A	3/4"	#12 #12	2#12 2#12	WF/RM 153/54/55 GFCI FOYER 101 FIREPLA CE REC	4
5		O CONVRE		#12	3/4"	20A	1	1.80	С	0.25	1	20A 20A	3/4"	#12	2#12	RM 169 CONV REC	6
7	A DESCRIPTION OF THE PROPERTY	9 CONVRE		#12	3/4"	20A	1	1.44	A	0.50	1	20A	3/4"	#12	2#12	RM 179 DED GFCI	8
9		DED GFCI	2#12	#12	3/4"	20A	1	0.50	В	0.90	1	20A	3/4"	#12	2#12	TODDLERS 168 CONV REC	10
11		RS 168 GFC		#12	3/4"	20A	1	0.18	C	0.18	1	20A	3/4"	#12	2#12	INFANTS 164 GFCI	12
13		1 CONV RE		#12	3/4"	20A	1	0.90	A	1.08	1	20A	3/4"	#12	2#12	CLASS 152 CONV REC	14
15		71 CONV RE		#12	3/4"	20A	1	1.62	В	0.02	1	20A	3/4"	#12	2#12	RR 177 EF-4	16
17	CO	RR 178	2#12	#12	3/4"	20A	2	1.00	C	1.00	2	20A	3/4"	#12	2#12	ELE 174	18
19	UNIT I	HEATER A	70000000	08-2-9-2	30378 Oct.		1760	1.00	Α	1.00			33555 54	35.5360		UNIT HEATER A	20
21	SPR	INK 175	2#12	#12	3/4"	20A	2	1.00	В	1.00	2	20A	3/4"	#12	2#12	VESTIBULE 100	22
23	UNIT I	HEATER A						1.00	C	1.00						UNIT HEATER A	24
25	RR 1	165 EF-5	2#12	#12	3/4"	20A	1	0.02	A	0.50	1	20A	3/4"	#12	2#12	JAN 154 WH AND RECIRC	26
27	FAA VES	STIBULE 100	2#12	#12	3/4"	20A	1	0.40	В	0.36	1	20A	3/4"	#12	2#12	ELEC 174 CONV REC	28
29		71 AUTO R		#12	3/4"	20A	1	1.44	C	0.72	1	20A	3/4"	#12	2#12	CLASS 151/52 AUTO REC	30
31		9 AUTO RE		#12	3/4"	20A	1	0.54	В	0.36	1	20A	3/4"	#12	2#12	OUTDOOR GFCI DUP	32
33		OR GFCI DUI		#12	3/4"	20A	1	0.36	C	0.52	1	20A	3/4"	#12	2#12	EX FAN EF-9/10/13	34
35		AN EF-12	2#12	#12	3/4"	20A	1	0.16	A		1	20A	17	S		SPARE	36
37		PARE				20A	1		В		1	20A	8			SPARE	38
39		PA RE	2//12	"10	2/48	20A	1	0.10	C	0.10	1	20A	2/40		0//10	SPARE	40
41	ROOFTC	P GFCI/LTS	2#12	#12	3/4"	20A	1	0.18	C	0.18	1	20A	3/4"	#12	2#12	ROOFTOP GFCI/LTS	42
	TOTAL LOA	CC	SE (KVA) INNECTEI	TOTA]										



A B
C D
KEY PLAN

OF SHEETS
216118

		PANE	LB	UAF	\mathbb{D}_{2}	CHE	יע	ULE	(1)	IEW	W	OKK	<u>\</u>	,		RP-4(N)	
7	VOLTAGE	PHASE W	IRE	MC	B (A)	M	LO	(A)	Е	USAMI	PS	Al	C		DUNTI		
	120/ 208	3	4	10	00A		-			225A		10,0	000	SI	URFA (CE 1 OF 1	
								REM	AR	KS							
PRO	VIDE EQUIPN	MENT GROUND	BUS														_
				D	П	CIVIT D	DIZ				CT	T DDV	П	А			T
T.#	ITEM	SERVED	WIRE	N.	DO	CKT. B	KK	LOAD	\SE	LOAD	CK	T. BRK	DO	5	R	ITEM SERVED	-
CKT	HEM	SERVED	WI	GROUND	CONDUIT	TRIP	P	LOAD (KVA)	PH/	(KVA)	P	TRIP	CONDUIT	GROUND	WIRE	HEM SERVED	TAL
1	RMS 163/6	4 CONV REC	2#12	#12	3/4"	20A	1	1.44	A	1.08	1	20A	3/4"	#12	2#12	CORR 162 CONV REC	
3	RMS 156/5	8 CONV REC	2#12	#12	3/4"	20A	1	1.44	В	0.50	1	20A	3/4"	#12	2#12	CORR 162 WTR FNT	
5	RR 159/6	0 GFCI REC	2#12	#12	3/4"	20A	1	1.08	C	0.72	1	20A	3/4"	#12	2#12	CRIBS 161 CONV REC	
7	SIDE 137/3	8 CONV REC	2#12	#12	3/4"	20A	1	1.08	A	1.80	1	20A	3/4"	#12	2#12	STAGE WHL CHAIR LIFT	
9	CORRI	DOR 162	2#12	#12	3/4"	20A	2	1.00	В	0.05	1	20A	3/4"	#12	2#12	STAGE STEP LIGHTS	
11	UNIT H	EATER A						1.00	C	0.90	1	20A	3/4"	#12	2#12	RM 156/58 AUTO REC	
13	OUTDOO	R GFCI DUP	2#12	#12	3/4"	20A	1	0.54	A	0.46	1	20A	3/4"	#12	2#12	EX FAN EF-7	
15	SP	ARE		Ů	Î	20A	1		В		1	20A		-		SPA RE	
17	SP	ARE				20A	1		C		1	20A				SPA RE]
19	SP	ARE				20A	1		A		1	20A				SPARE	1
21	SP	ARE				20A	1		В		1	20A				SPARE	1
23	SP	ARE				20A	1		C		1	20A				SPA RE	1
25	SP	ARE)	20A	1		A		1	20A				SPARE	2
27	SP	ARE				20A	1		В		1	20A				SPARE	1
29	SP	ARE				20A	1		C		1	20A				SPARE	1
31	SP	ARE		ĺ	S	20A	1		В		1	20A				SPARE	
33	SP	ARE				20A	1		C		1	20A				SPARE	6.3
35	SP	ARE				20A	1		A		1	20A				SPARE	3
37					-			3.33	В		1	20A				SPA RE	3
39	BAP	ΓISTRY	4#6	#10	1"	60A	3	3.33	C		1	20A				SPARE	2
41						ļ		3.33	C	0.18	1	20A	3/4"	#12	2#12	ROOFTOP GFCI/LTS	2
				A	В	С	1										
	TOTAL LOA	D PER PHASE	(KVA)	6.40	6.32	7.21											
		CONT	ECTED	TOTA	T (TZXZA)	10.02	1										
		CONNE				19.93	1										

		PA	NEI	LBO	OAR	RD S	CHE	DI	ULE	(N	IEW	W	ORE	()			KP-1(N)	
,	VOLTAGE	PHASE	WIR	RE	MC	B (A)	M	LO	(A)	В	USAMI	PS	A	C	M	DUNT	ING SECTIONS	
	120/ 208	3	4		15	0A		-			225A		10,000		SURFA		CE 1 OF 1	
									REM	ARI	KS						•	
PRO	VIDE EQUIPN	MENT GRO	UND E	BUS														
							-											
#					Ð	Ħ	CKT. B	DV		[1]		CV	T. BRK	II	Ð			#
	ITEM	SERVED		WIRE	GROUND	CONDUIT	CK1. D	IXIX	LOAD	PHASE	LOAD	Ch	II. DIXIX	CONDUIT	GROUND	WIRE	ITEM SERVED	E
CKT.	111241	SLACVED		\geq	RC	O	TRIP	Р	(KVA)	PH	(KVA)	P	TRIP	O	1 × 1	⋝	TILAVI SLACVILIS	CVT
=-0				Cares		900000	0.00 A 20		100 500	:Y:=I:1	E 12242	-	Service Services					
1	KITCHEN F			2#12	#12	3/4"	20A	1	0.65	A	1.50	1	20A	3/4"	#12		KITCHEN MBL WRM CART	-
3	KITCHEN I			2#12	#12	3/4"	20A	1	0.65	В	0.65	1	20A	3/4"	#12	2#12	KITCHEN REF/FREEZER	4
5	KITCHEN D	A SECURITION OF		2#12	#12	3/4"	20A	1	1.85	C	1.85	1	20A	3/4"	#12	2#12	KIT CHEN DISHWASHER	6
7		CNTR GFO		2#12	#12	3/4"	20A	1	1.00	A	1.00	1	20A	3/4"	#12	2#12	KITCHEN CNTR GFCI	8
9		CNTR GFO		2#12	#12	3/4"	20A	1	1.00	В	1.00	1	20A	3/4"	#12	2#12	KITCHEN CNTR GFCI	1
11		CNTR GFO		2#12	#12	3/4"	20A	1	1.00	C	1.00	1	20A	3/4"	#12	2#12	KITCHEN CNTR GFCI	1
13	KITCHEN	CNTR GFO		2#12	#12	3/4"	20A	1	1.00	A	0.72	1	20A	3/4"	#12	2#12	KITCHEN CONV REC	1
15	KITCHEN	CNTR GFO	CI 2	2#12	#12	3/4"	20A	1	1.00	В	0.18	1	20A	3/4"	#12	2#12	KITCHEN FRYER	1
17	KITCHEN	DBL OVE		2#12	#12	3/4"	20A	1	1.85	C	0.48	1	20A	3/4"	#12	2#12	KITCHEN RANGE/OVEN	1
19	- SALES OF ASSESSMENT PROPERTY	CNTR GFO	CI 2	2#12	#12	3/4"	20A	1	1.00	A	1.00	1	20A	3/4"	#12	2#12	KITCHEN CNTR GFCI	2
21	CAFÉI	REGISTER	1	2#12	#12	3/4"	20A	1	0.18	В	0.18	1	20A	3/4"	#12	2#12	CA FÉ REGISTER	2
23	1//	NTR GFCI	2	2#12	#12	3/4"	20A	1	1.00	C	1.80	1	20A	3/4"	#12	2#12	CAFÉ BLENDER	24
25	CAFÉC	NTR GFCI	2	2#12	#12	3/4"	20A	1	1.00	A	1.78	2	20A	3/4"	#12	2#12	CAFE COFFEE MAKER	2
27	CAFÉI	BLENDER		2#12	#12	3/4"	20A	1	1.80	В	1.78							2
29	CAFÉC	NTR GFCI	1	2#12	#12	3/4"	20A	1	1.00	C	1.00	1	20A	3/4"	#12	2#12	CA FÉ CNTR GFCI	3
31	CAFÉ TV/	MONITOR	RS 2	2#12	#12	3/4"	20A	1	0.36	В	1.00	1	20A	3/4"	#12	2#12	CA FÉ CNTR GFCI	3.
33	CA FÉ C	ONVREC	1	2#12	#12	3/4"	20A	1	0.18	C	1.27	2	20A	3/4"	#12	2#12	CAFE COFFEE MAKER	3
35	CAFE DIS	PLAYCAS	SE 2	2#12	#12	3/4"	20A	1	0.65	A	1.27							3
37	EXH H	OODLTS	1	2#12	#12	3/4"	20A	1	0.30	В	1.80	1	20A	3/4"	#12	2#12	EXH HOOD CONTROL PNL	3
39	KITCHEN	EXH HOO	D		7.5				0.73	С	1.00				10		EXHAUST HOOD	4
41	EXHA	UST FAN	3	3#12	#12	3/4"	20A	3	0.73	A	1.00	3	20A	3/4"	#12	3#12	MAKE UP AIR UNIT	4
43	K	EF-1	170						0.73	В	1.00						MAU-1	4
45	1.014.000	ARE					20A	1		С		1	20A				SPARE	4
47		ARE					20A	1		A		1	20A				SPARE	4
49	SP	ARE					20A	1		В		1	20A				SPARE	5
51	SP	ARE	98				20A	1		С	. 95	1	20A				SPARE	5
53	SP	ARE			i i		20A	1		Α		1	20A				SPARE	5
	111/22/2	condesidado A.VII.	-												2			
					A	В	C											
	TOTAL LOA	D PER PHA	ASE (K	(VA)	9.79	7.94	9.48	1										
					*			767 200										
		C	ONNE	CTED	TOTA	L (KVA)	27.21]										
						TTY(A)												

		PA	NELB	OAF	RD S	CHE	DI	ULE	(1	IEW	W	ORK	()			LIGHTS(N)	NCY
7	VOLTAGE	PHASE	WIRE		B(A)	1	LO		1	BUSAMP		AI	/	Mo	DUNT		
	120/ 240	1	3		-		-			_		_	1		-	•	
	13 m3 dec 1920 - 1920 - 1941 1971 1971		70			*		REM	AR	KS	- 3		7/	**		*	
DIST	RIBUTION PA	ANEL IS P	ROVIDED I	NTEGR	AL TO T	HE EME	RGE	NCYLIC	ТН	ING INVI	ERT	ER "EM I	INV".				
SEE	INVERTER IN	STALLAT	TON MANU	JAL FO	R FURTI	HER CIRC	CUI	T BREAT	KER	CONNE	CTI	ON INFO	RMATI	ION.			
-																	
T.#	ITEM	SERVED	WIRE	GROUND	CONDUIT	CKT. B	RK	LOAD	PHASE	LOAD	Ck	KT. BRK	CONDUIT	GROUND	WIRE	ITEM SERVED	T.#
CKI	TITALI SERVIZE			GRC		TRIP	P		PH	(KVA)	P	TRIP	CON	GRC	M	HEW SERVED	CKT
1	AUDIT. H	IOUSE LT	S 2#12	#12	3/4"	20A	1	0.81	A	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	2
3	AUDIT. H	IOUSE LT	S 2#12	#12	3/4"	20A	1	0.68	В	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	4
5	AUDIT. H	IOUSE LT	S 2#12	#12	3/4"	20A	1	0.95	A	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	6
7	SPA	ARE				20A	1		В		1	20A				SPA RE	8
9	SPA	ARE				20A	1		A		1	20A				SPARE	10
11	SPA	ARE				20A	1		В	0.40	1	20A	3/4"	#12	2#12	INSPIRE EXT. CONT. BOX	12
	TOTAL LOA	C	A SE (KVA) ONNECTED NNECTED 2	TOTA]										

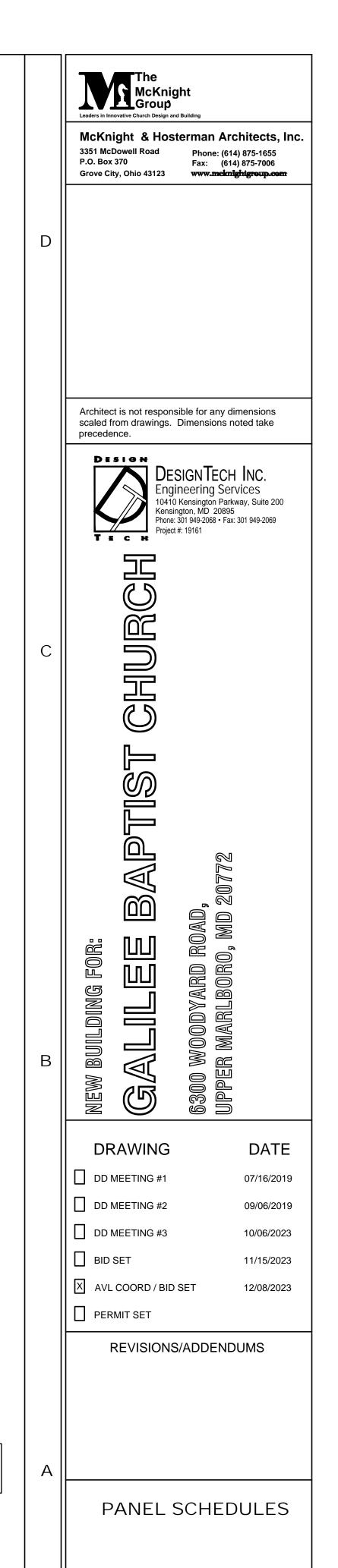
	PANE	LB	OAF	RD S	CHE	DI	JLE	(N	IEW	W	ORK	()			RP-2(N)	
7	VOLTAGE PHASE W	IRE	MC	B (A)	M	LO ((A)	В	USAME	PS	AI	Ć	Mo	DUNT	ING SECTIONS	
	120/ 208 3	4	10	00A	್ತ	***		225A	III.	10,000		S	JRFA	CE 1 OF 1		
							REM.	ARI	KS						-	
RO	VIDE EQUIPMENT GROUND	BUS														
			٥	Н								Н				Т
#		WIRE	GROUND	CONDUIT	CKT. B	RK	LOAD	PHASE	LOAD	Ck	KT. BRK	CONDUIT	GROUND	WIRE		7
CKI.	ITEM SERVED	M	20	N	TDID		(KVA)	HA	(KVA)	_	TDID	Z	S S	M	ITEM SERVED	TAL
٦			5	\sim	TRIP	P		Ь	. ,	P	TRIP	\mathcal{E}	5			Ι`
1	CLASS 110/111 REC	2#12	#12	3/4"	20A	1	1.44	A	1.40	1	20A	3/4"	#12	2#12	JAN 183/MEN 144 GFCI REC	1
3	CORR 123 REC	2#12	#12	3/4"	20A	1	1.26	В	1.80	1	20A	3/4"	#10	2#10	RM 115/17/18/25 CONV REC	,
5	OFC 115/17/18/26 WKST REC	2#12	#12	3/4"	20A	1	1.60	C	1.60	1	20A	3/4"	#12	2#12	RM 115/26 WKST REC	9
7	RM 118/21 GFCI REC	2#12	#12	3/4"	20A	1	0.72	A	0.50	1	20A	3/4"	#12	2#12	RM 119 DED REC	
9	RM 119 DED REC	2#12	#12	3/4"	20A	1	0.50	В	0.50	1	20A	3/4"	#12	2#12	RM 119 DED REC	
11	RM 119 COPIER	2#12	#12	3/4"	20A	1	1.00	C	1.00	1	20A	3/4"	#12	2#12	OFC 141 COPIER	
13	OFC 141 WKST REC	2#12	#12	3/4"	20A	1	1.60	A	1.08	1	20A	3/4"	#12	2#12	CLASS 142 TV/REC]
15	SEC 148 REC	2#12	#12	3/4"	20A	1	0.75	В	1.80	1	20A	3/4"	#12	2#12	RECEPTION 101 DESK REC	1
17	AUD 140/145 CONV REC	2#12	#12	3/4"	20A	1	0.72	C	1.26	1	20A	3/4"	#12	2#12	RM 100/04 CONV REC	
19	VESTIBULE 113	2#12	#12	3/4"	20A	2	1.00	A	1.00	1	20A	3/4"	#12	2#12	BOOK 104 ROLLUP DOOR	2
21	UNIT HEATER A						1.00	В	0.72	1	20A	3/4"	#12	2#12	RMS 110/11 AUTO REC	2
23	VESTIBULE 100	2#12	#12	3/4"	20A	2	1.00	C	1.62	1	20A	3/4"	#12	2#12	RM 115/16/17/19 AUTO REC	2
25	UNIT HEATER A						1.00	A	1.08	1	20A	3/4"	#12	2#12	RM 126/41/42 AUTO REC	2
27	EXTERIOR DUP GFCI	2#12	#12	3/4"	20A	1	0.72	В	0.90	1	20A	3/4"	#12	2#12	SEC 105 REC	2
29	SEC 105 DED QUAD	2#12	#12	3/4"	20A	1	0.36	C	0.72	1	20A	3/4"	#12	2#12	BOOK 104 REC	3
31	SPARE				20A	1		В	0.95	1	20A	3/4"	#12	2#12	EX FAN EF-8 /EF-11	3
33	SPARE				20A	1		C		1	20A				SPARE	3
35	SPARE				20A	1		A		1	20A				SPARE	3
37	SPARE				20A	1		В		1	20A				SPARE	3
39	SPARE		Name of the last	G-040000	20A	1		C	0.50	1	20A	3/4"	#12	2#12	VEST 113 ACCESS CNTRL	2
41	VEST 100 A CCESS CNTRL	2#12	#12	3/4"	20A	1	1.00	C	0.36	1	20A	3/4"	#12	2#12	ROOFTOP GFCI/LTS	4
			A	В	C											
	TOTAL LOAD PER PHASE	(TZ T Z A)	0.777.77	7.56	8.54	1										

CONNECTED TOTAL (KVA) 24.84 CONNECTED AMPACITY (A) 68.95

	PANE	LB	OAF	RD S	CHE	DI	JLE		IEW	W	ORK	()			TP(N)	
-		RE		B(A)	1	LO		_	USAMP		AI		Mo	DUNT	ING SECTIONS	
	PARAMAN LINES STORM	4		50A		74			225A		10,0		-	URFA		
	1		0.88	3000 B U S			REM	AR	A-10-04-04-04-04-04-04-04-04-04-04-04-04-04			***************************************			7,000,000	
PRO	VIDE GROUND BAR AND IS	OLATI	ED GRO	UND BA	AR.											
ALI	BRANCH CIRCUITS SHALL	BE SU	PPLIED	WITH	A GROUN	ND ((GREEN)	AN	DANIS	OLA	TED GR	OUND	CONE	UCTO	OR (GREEN/YELLOW).	
CKT.#	ITEM SERVED	WIRE	GROUND	CONDUIT	CKT. B	RK P	LOAD (KVA)	PHASE	LOAD (KVA)	Ck P	TRIP	CONDUIT	GROUND	WIRE	ITEM SERVED	CKT.#
						Ţ				ı	11-					0.50
1	PLATFORM BAND REC	2#12	#12	3/4"	20A	1	1.60	A	1.20	1	20A	3/4"	#12	2#12	PLATFORM BAND REC	2
3	PLATFORM BAND REC	2#12	#12	3/4"	20A	1	0.80	В	0.20	1	20A	3/4"	#12	2#12	A VL SOUND BOARD	4
5	A VL CAMERA	2#12	#12	3/4"	20A	1	0.70	C	0.45	1	20A	3/4"	#12	2#12	AVL TVS	6
7	A VL VIDEO SWITCHER	2#12	#12	3/4"	20A	1	0.70	A	1.00	1	20A	3/4"	#12	2#12	A VL COMPUTER	8
9	AVL COMPUTER/BOARD	2#12	#12	3/4"	20A	1	0.50	В	1.00	1	20A	3/4"	#12	2#12	SIDE CONSTANT NETWK	10
11	SIDE WIRELESS MICS	2#12	#12	3/4"	20A	1	1.00	C	1.00	1	20A	3/4"	#12	2#12	AMP 1	12
13	SIDE 70 VOLT AMP	2#12	#12	3/4"	20A	1	1.00	A	1.92	1	20A	3/4"	#12	2#12	VIDEO SWITCHER	14
15	JBL A RRA Y BOXES	2#12	#12	3/4"	20A	1	1.60	В	1.60	1	20A	3/4"	#12	2#12	JBL A RRA Y BOXES	16
17	SIDE SPARE	2#12	#12	3/4"	20A	1	1.60	C	1.60	1	20A	3/4"	#12	2#12	OFFICE TVS	18
19	LOBBY TVS	2#12	#12	3/4"	20A	1	0.85	A	0.45	1	20A	3/4"	#12	2#12	CA FÉ TVS	20
21	CORRIDOR TVS	2#12	#12	3/4"	20A	1	0.68	В	0.90	1	20A	3/4"	#12		AUDITORIUM PROJECTOR	
23	AUDITORIUM PROJECTOR	2#12	#12	3/4"	20A	1	0.90	C	0.90	1	20A	3/4"	#12		AUDITORIUM PROJECTOR	
25	AUDITORIUM PROJECTOR	2#12	#12	3/4"	20A	1	0.90	A	0.90	1	20A	3/4"	#12	2#12	AUDITORIUM PROJECTOR	26
27	GREEN ROOM TV	2#12	#12	3/4"	20A	1	0.23	В	0.68	1	20A	3/4"	#12	2#12	RECEPTION TV	28
29	CLA SSROOM TV	2#12	#12	3/4"	20A	1	0.23	C	1.60	1	20A	3/4"	#12	2#12	JBL ARRAY BOXES	30
31	JBL A RRA Y BOXES	2#12	#12	3/4"	20A	1	1.60	A	1.92	1	20A	3/4"	#12	2#12	JBL SUBS	32
33	JBL SUBS	2#12	#12	3/4"	20A	1	1.92	В	1.92	1	20A	3/4"	#12	2#12	JBL SUBS	34
35	SPARE				20A	1		C		1	20A				SPARE	36
37	SPARE				20A	1		A		1	20A				SPARE	38
39	SPARE				20A	1		В		1	20A				SPARE	40
41	SPARE				20A	1		C		1	20A				SPARE	42
	TOTAL LOAD PER PHA SE (CONNI CONNE	ECTED	TOTA	B 12.02 L (KVA)												

,	OLTACE	PHASE	VELB	1	100	_			_	US AMI	-		/	1 1/1	OUNT	RP-3(N) SECTIONS	
7	VOLTAGE 120/ 208		WIRE		B(A)	M	LO	(A)	В		'5	AI		+			
	120/ 208	3	4	1	00A			REM	A D	225A		10,0	000	5	URFA	CE 1 OF 1	
DDO	VIDE COLUDA	ATAIT CDOL	NID DUG					KEIVI	AK	K.5							
PRO	VIDE EQUIPN	MENT GROU	ND BO2														
-44				9		CVT D	DV		r*1		CI	T DDV	Ħ	9			#
T.#	ITEM	SERVED	WIRE	GROUND	CONDUIT	CKT. B	KK	LOAD		LOAD	CK	KT. BRK	CONDUIT	GROUND	WIRE	ITEM CEDITO	
CKT	I I EAVI	SERVED	\boxtimes	S	NO	TRIP	P	(KVA)	PHASE	(KVA)	P	TRIP	NO	RO	⋝	ITEM SERVED	CKT
	CONF 13 GRN 132			_		IKIF	r				Р	IMP		Ð			Ľ
1	OFC 126/2	7 WKST RE		#12	3/4"	20A	1	1.60	A	1.26	1	20A	3/4"	#10	2#10	AUD 140/145 CONV REC	2
3	RM 123/27/3	0/31 CONV F	REC 2#12	#12	3/4"	20A	1	1.44	В	0.90	1	20A	3/4"	#12	2#12	CONF 131 TBL/MON REC	4
5	CONF 13	1 DED GFCI	2#12		3/4"	20A	1	0.50	C	0.50	1	20A	3/4"	#12	2#12	CONF 131 DED GFCI	6
7	GRN 132	CONV REC	2#12	#12	3/4"	20A	1	0.72	Α	0.50	1	20A	3/4"	#12	2#12	GRN 132 DED GFCI	8
9	GRN 132	DED GFCI	2#12	#12	3/4"	20A	1	0.50	В	0.54	1	20A	3/4"	#12	2#12	SIDE 135 CONV REC	1
11	CORR	DOR 123	2#12	#12	3/4"	20A	2	1.00	C	0.06	1	20A	3/4"	#12	2#12	RR 118/19/28 EF-6/EF-3/EF-2	1
13	UNIT H	EATER A						1.00	A	0.02	1	20A	3/4"	#12	2#12	RR 134 EF-1	1
15	STAGE S	TEP LIGHT	2#12	#12	3/4"	20A	1	0.05	В	0.36	1	20A	3/4"	#12	2#12	OFF 130 WKST REC	10
17	RM 126/27/	30 AUTO RI	EC 2#12	#12	3/4"	20A	1	1.08	C	0.36	1	20A	3/4"	#12	2#12	CONF 131 AUTO REC	1
19	RM 127	CONV REC	2#12	#12	3/4"	20A	1	0.54	A	0.72	1	20A	3/4"	#12	2#12	OUTDOOR GFCI DUP	2
21	AUD 14	0 FLR REC	2#12	#12	3/4"	20A	1	0.36	В		1	20A				SPARE	2
23	SF	ARE				20A	1		C		1	20A				SPARE	2
25	SF	ARE	2.0			20A	1		A		1	20A				SPARE	2
27	SF	ARE				20A	1		В		1	20A				SPARE	2
29	SF	ARE				20A	1		C		1	20A				SPARE	30
31	SF	ARE				20A	1		В		1	20A				SPARE	3
33	SF	ARE				20A	1		C		1	20A				SPARE	3
25	SF	'A RE				20A	1		A		1	20A				SPARE	3
35	SE	ARE				20A	1		В		1	20A				SPARE	3
37	51					20A	1		C		1	20A				SPARE	4
_		PARE				20A	-		C	0.54	1	20A	3/4"	#12	2#12	ROOFTOP GFCI/LTS	4

		PA	NE	LBO	OAF	D S	CHE	DI	ULE		IEW	W	ORK	()			NTP(N)	
7	PANELBOARD S VOLTAGE PHASE WIRE MCB (A) 120/208 3 4 100A							LO	(A)	В	USAMP	S	AI	Ć	Mo	DUNT	NG SECTIONS	_
	120/ 208	3	4	1	10	0A		12			100A		10,0	000	S	URFA	CE 1 OF 1	
							•		REM.	AR	KS						1	
PRO	VIDE EQUIPN	MENT GRO	DUND	BUS.														
					Q	Н	1							Н				
Ľ.#				WIRE	GROUND	CONDUIT	CKT. B	RK	LOAD (KVA)	SE	LOAD	CK	T. BRK	CONDUIT	GROUND	WIRE		
CKT	ITEM	SERVED		M M	30	Z	TDID	_ n	(KVA)	HA	(KVA)	P	TDID	Z	2	M	ITEM SERVED	
_	A VL LIGHTING BOAR PLATFORM THEATER I				Ū	\mathcal{C}	TRIP	P		P		Р	TRIP	ŏ	5			
1				2#12	#12	3/4"	20A	1	0.35	A	1.60	1	20A	3/4"	#12	2#12	SIDE THEATER LTS	
3				2#12	#12	3/4"	20A	1	0.90	В	0.60	1	20A	3/4"	#12		PLATFORM THEATER LTS	-
5		The second second second second	E-112/41-1-1	2#12	#12	3/4"	20A	1	0.60	C	1.10	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
7	AUDIT. TH			2#12	#12	3/4"	20A	1	1.10	A	1.10	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
9	AUDIT. TH	A		2#12	#12	3/4"	20A	1	1.10	В	1.10	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
11	AUDIT. TH	HEATER L	TS	2#12	#12	3/4"	20A	1	1.10	C	1.10	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
13	AUDIT. TE	IEA TER L	TS	2#12	#12	3/4"	20A	1	0.90	A	0.90	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
15	AUDIT. TH	IEA TER L	TS	2#12	#12	3/4"	20A	1	0.90	В	1.20	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
17	AUDIT. TH	IEA TER L	TS	2#12	#12	3/4"	20A	1	1.20	C	1.20	1	20A	3/4"	#12	2#12	AUDIT. THEATER LTS	
19	SP	ARE					20A	1		A		1	20A				SPA RE	
21	AUDIT. F	HOUSE LT	S	2#12	#12	3/4"	20A	1	0.81	В	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	
23	AUDIT. F	HOUSE LT	S	2#12	#12	3/4"	20A	1	0.68	C	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	
25	AUDIT. F	HOUSE LT	S	2#12	#12	3/4"	20A	1	0.95	A	1.08	1	20A	3/4"	#12	2#12	AUDIT. HOUSE LTS	
27	SP	ARE					20A	1		В		1	20A				SPARE	
29	SP	ARE					20A	1		C	ì	1	20A				SPARE	
31	SP	ARE					20A	1		A		1	20A				SPA RE	
33	SP	ARE					20A	1		В		1	20A				SPARE	
35	SP	ARE					20A	1		C		1	20A				SPARE	
37	SP	ARE					20A	1		A		1	20A				SPARE	
39	SP	ARE	Į.				20A	1		В		1	20A				SPARE	
41	SP	ARE					20A	1		C		1	20A				SPARE	
						235												
				г	A	В	С	1										
	TOTAL LOA	D PER PH.	ASE (KVA)	7.98	7.69	8.06]										
			ONTAIT	CTP	TOTA	CETTAN	22.72	1										
					AMPAC	L (KVA)		1										



A B
C D
KEY PLAN

E802
OF SHEETS

216118