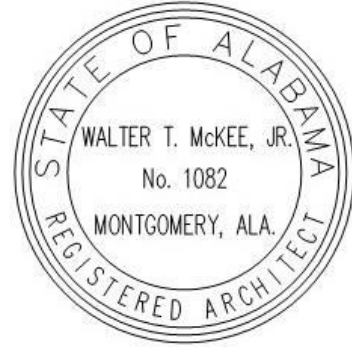


**Addendum No. 5**  
**Date: November 29, 2022**



Project:

**Classroom Addition for  
Union Hill School for the  
Morgan County Schools  
Somerville, Alabama**

**MCKEE PROJECT NO. 22.134**  
**ALABAMA DIVISION OF CONSTRUCTION MANAGEMENT NO. 2022222**

The following changes and/or substitutions to the plans and specifications are hereby made a part of same and are incorporated in full force as part of the contract.

Bidders shall acknowledge receipt of this Addendum in writing on his Proposal Form.

**A5.1 GENERAL MODIFICATIONS:**

A. NONE

**A5.2 SPECIFICATION MODIFICATIONS:**

A. NONE

**A5.3 DRAWING MODIFICATIONS:**

A. See the attached Revised Drawings as follows:

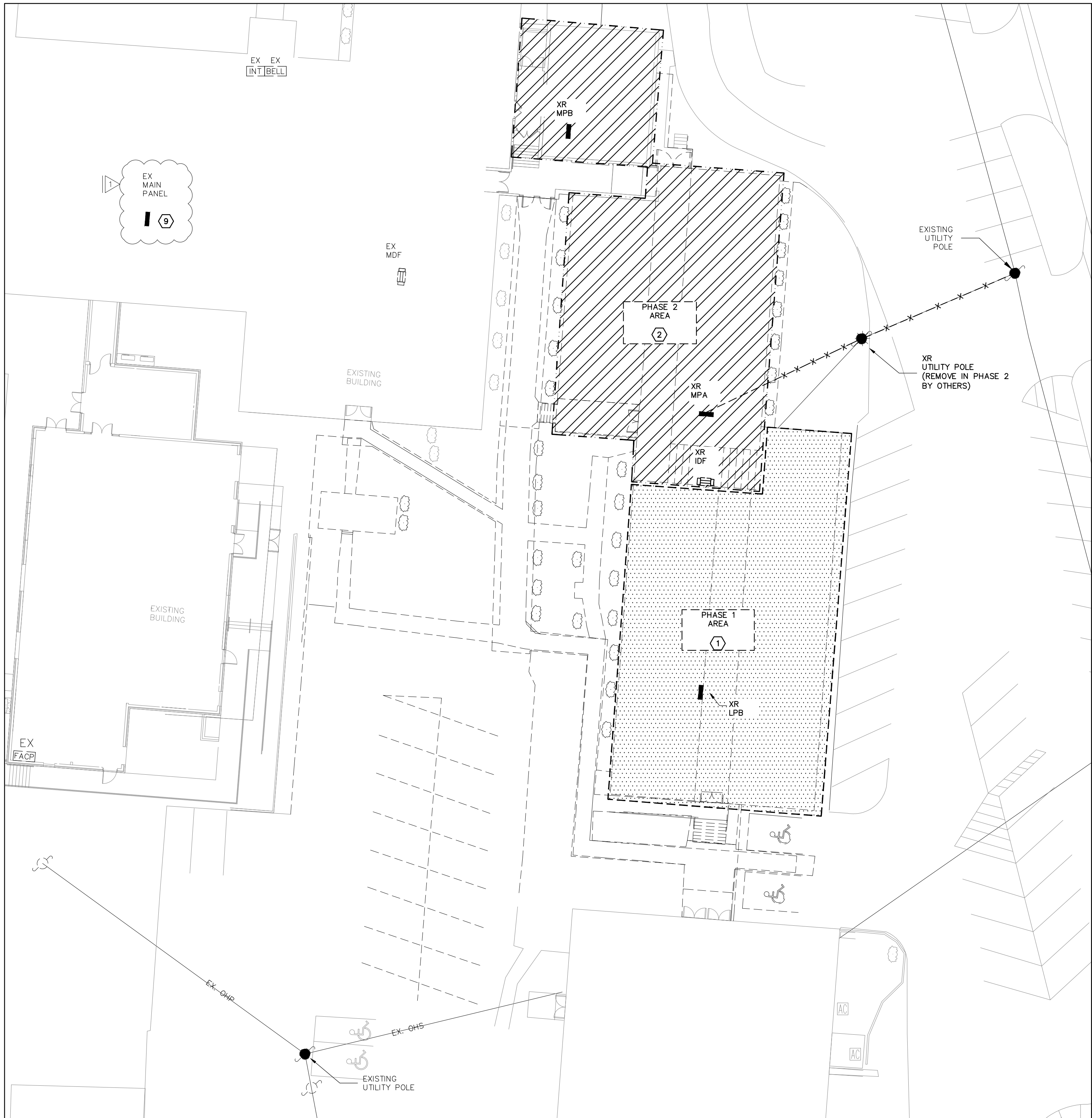
1. Sheets **E1.1, E2.1, E2.2, E3.1, E4.1, E4.2, E5.1, E5.3, E7.1, and E8.2**, all revised **11.29.2022**, herein.

**A5.4 CLARIFICATIONS AND RESPONSES**

A. NONE

**END OF ADDENDUM**





### SITE PLAN - ELECTRICAL - DEMOLITION

SCALE: 1"=20'-0"

#### UNDERGROUND UTILITY NOTES:

- THE UNDERGROUND UTILITY PORTION OF THIS PROJECT CONSISTS OF BUT IS NOT LIMITED TO:
  - TRENCHING/BACKFILLING FOR DUCT LINES AND CONDUIT SYSTEMS
  - LOW VOLTAGE CONDUCTOR INSTALLATION
  - PATCH/REPAIR ALL DAMAGED SURFACES AS A RESULT OF DUCTLINE INSTALLATIONS
- INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL SAFETY CODE (NEC) AND THE NATIONAL ELECTRICAL CODE (NEC).
- ALL CONDUCTIVE PARTS OF EQUIPMENT, ENCLOSURES, SUPPORTS, FRAMES, CASES, CONDUIT SYSTEMS AND SURGE ARRESTORS, CABLE SHEATHS, CABLE SHIELDS, COMMON NEUTRALS, ETC., SHALL BE GROUNDED, UNLESS NOTED OTHERWISE. CONNECTIONS BELOW GRADE SHALL BE FUSION-WELDED AND ABOVE GRADE FUSION-WELDED OR BOLTED SOLDERLESS. ALL GROUND CONDUCTORS SHALL BE COPPER.
- ALL CLEARANCES SHALL BE MAINTAINED PER NEC AND NEC. ALL PARTS, DEVICES, EQUIPMENT, ETC. WHICH REQUIRE MAINTENANCE, ADJUSTMENT, OPERATION OR EXAMINATION DURING NORMAL NETWORK OPERATION SHALL BE ARRANGED SO AS TO BE ACCESSIBLE BY THE PROVISION OF ADEQUATE WORKING SPACES, WORKING FACILITIES AND CLEARANCES. UNLESS NOTED OTHERWISE ALL CLEARANCES ARE MEASURED FROM SURFACE TO SURFACE.
- ALL DIMENSIONS INDICATED IN THESE DOCUMENTS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD.
- UNLESS OTHERWISE SHOWN OR DIRECTED DUCT LINES SHALL NOT BE LOCATED DIRECTLY UNDER STRUCTURES AND NOT DIRECTLY UNDER OR OVER OTHER SUBSURFACE STRUCTURES. WHERE DUCT LINES ARE REQUIRED TO CROSS OTHER UTILITIES SUCH AS SEWERS, WATER LINES, OTHER POWER LINES, COMMUNICATION LINES, ETC., ADEQUATE SUPPORT SHALL BE PROVIDED ON EACH SIDE OF THE CROSSING TO PREVENT TRANSFERRING ANY DIRECT LOAD ONTO THE OTHER LINE. DUCT LINES SHALL BE SO INSTALLED AS TO PREVENT HEAT TRANSFER BETWEEN ANY HEAT PRODUCING LINES AND/OR EQUIPMENT TO DUCT LINES.
- ROUTING SHOWN ON DRAWINGS IS TYPICAL AND THE CONTRACTOR SHALL PROPOSE FINAL ROUTING BASED UPON ACTUAL FIELD DIMENSIONS, CONDITIONS AND EXISTING UNDERGROUND UTILITIES AND STRUCTURES.
- PRIOR TO TRENCHING, THE CONTRACTOR SHALL STAKE OUT THE ENTIRE NETWORK ARRANGEMENT, ONE GRADE A WOODEN STAKE WITH RED FLAG SHALL BE DRIVEN EVERY 50'-0" AND AT EACH CHANGE OF DIRECTION, FOUR STAKES SHALL BE DRIVEN TO OUTLINE EQUIPMENT AND/OR MANHOLE LOCATIONS. ON PAVEMENTS RED PAINT SHALL BE USED TO OUTLINE THE AREAS TO BE CUT. SECURE EXISTING UNDERGROUND UTILITY INFORMATION FROM THE CONTRACTING OFFICER PRIOR TO PERFORMING ANY TRENCHING.
- DEPTHS INDICATED FOR INSTALLATION ARE MINIMUM. ACTUAL DEPTHS MAY VARY DUE TO TERMINATIONS, COMPENSATIONS FOR RADIUS OF VERTICAL TRANSITIONS, EXISTING UTILITY CROSSINGS, ETC. APPROVAL SHALL BE OBTAINED FOR ANY DEPTH LESS THAN INDICATED. TRENCHES SHALL BE OVER-EXCAVATED AS NECESSARY TO ALLOW FOR PROPER TRENCH PREPARATION, DUCT BANK CONSTRUCTION, FORMING AND/OR BACKFILLING REQUIREMENTS.
- ALL TRENCHING AND BACKFILL COMPACTION SHALL COMPLY WITH GEOTECHNICAL REPORT AND DIVISION 200.

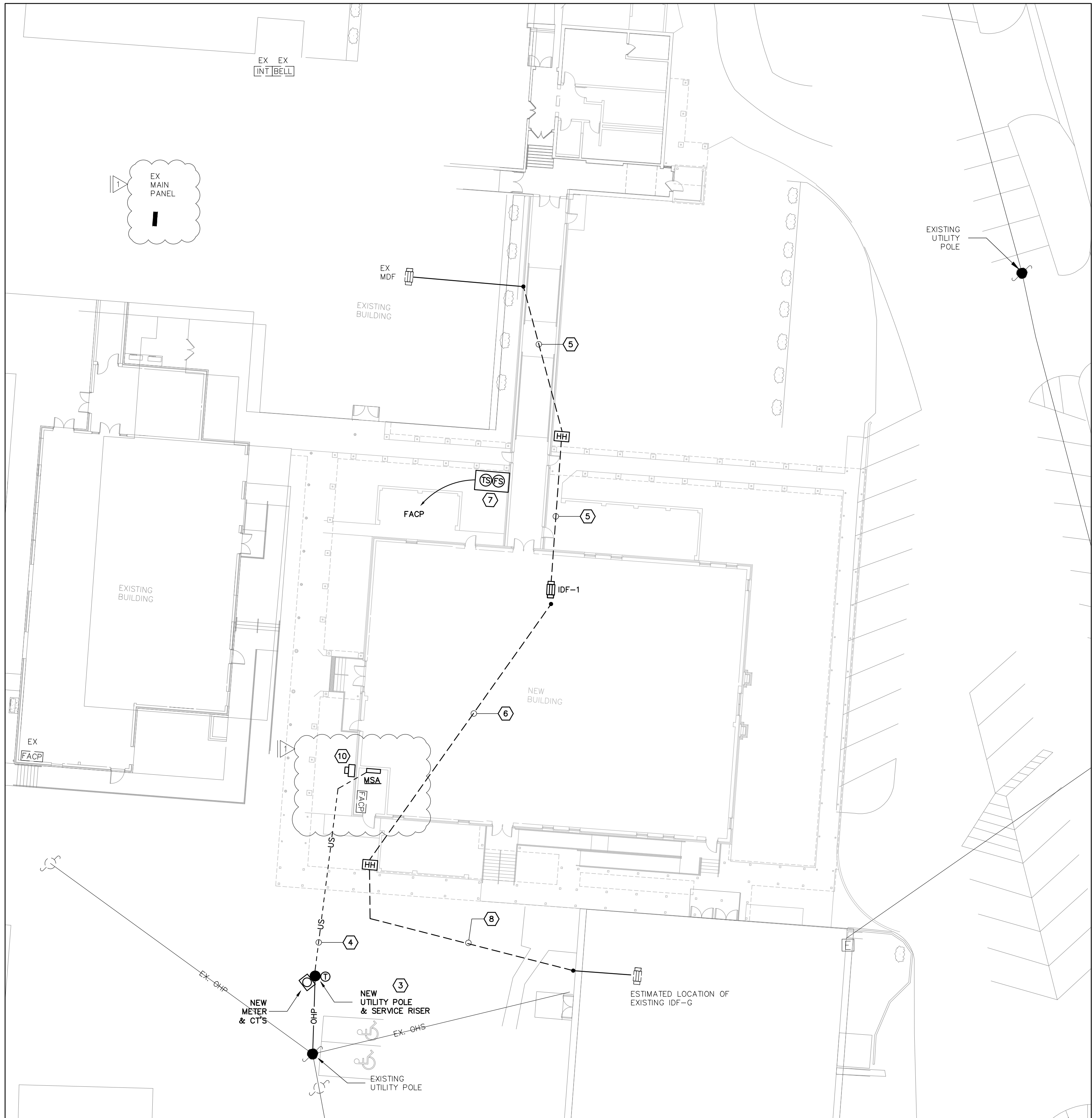
#### SITE LEGEND

- OHP-- OVERHEAD ELECTRICAL BY UTILITY  
--OHS-- OVERHEAD SECONDARY  
---UP--- UNDERGROUND PRIMARY  
---US--- UNDERGROUND SECONDARY  
---UC--- UNDERGROUND COMMUNICATION  
---OC--- OVERHEAD COMMUNICATION  
---UG--- UNDERGROUND BRANCH CIRCUITING  
---OH--- OVERHEAD BRANCH CIRCUITING

- |    |   |
|----|---|
| 1x | PAD MOUNTED TRANSFORMER   |
| 1  | POLE MOUNTED TRANSFORMER  |
| ●  | UTILITY POLE  |
| ●  | UTILITY POLE WITH UTILITY FLOOD LIGHT   |
| HH | UNDERGROUND PULLBOX- HIGHLINE NO. PHA243624H2-M00. PROVIDE WITH COVER LABELED "COMMUNICATION" |

#### GENERAL NOTES:

- LOCATIONS OF RISER POLES, AND TRANSFORMERS SHALL BE COORDINATED PRIOR TO BIDS. ADJUST FEEDER AND CONDUIT LENGTHS ACCORDINGLY. PAY ALL UTILITY COMPANY FEES. BID ACCORDINGLY.
- ALL UNDERGROUND CONDUITS SHALL BE 36" MINIMUM BELOW GRADE. PRIMARY CONDUIT SHALL BE MINIMUM 48" BELOW GRADE.
- ALL ROUTING IS SHOWN DIAGRAMMATIC. VERIFY ACTUAL ROUTING AND FIELD CONDITIONS PRIOR TO BIDS.
- CONTRACTOR SHALL LABEL ALL CONDUITS ENTERING BACKBOARDS.



### SITE PLAN - ELECTRICAL - NEW WORK

SCALE: 1"=20'-0"

#### SHEET NOTES:

- REMOVE ALL LIGHTING, POWER, AND AUXILIARY IN PHASE 1 AREA. PHASE 2 AREA IS TO BE MAINTAINED AND IN OPERATION DURING CONSTRUCTION OF PHASE 1.
- UPON COMPLETION OF PHASE 1 AREA WORK, REMOVE ALL LIGHTING, POWER, AND AUXILIARY IN PHASE 2 AREA.
- COORDINATE WITH UTILITY COMPANY FOR SPECIFIC LOCATION AND REQUIREMENTS OF POLE MOUNTED TRANSFORMER. SEE POWER RISER DIAGRAM SHEET E7.1 FOR FURTHER REQUIREMENTS.
- PROVIDE SECONDARY CONDUCTORS AS INDICATED ON RISER DIAGRAM SHEET E7.1.
- PROVIDE CONDUIT BELOW GRADE FROM NEW IDF TO EXISTING MDF IN LIBRARY. VERIFY ROUTE PRIOR TO BID. SEE EB.2 FOR ADDITIONAL INFORMATION.
- EXTEND TWO (2) - 2" EC FROM BELOW GRADE IN CORNER OF IDF ROOM TO CORNER OF ELEC ROOM FOR FUTURE. INCLUDE GROMMET & PULL STRING IN EACH CONDUIT.
- PROVIDE WEATHERPROOF DEVICES FOR MONITORING OF FIRE PROTECTION EQUIPMENT. ALL CIRCUITS INTO BUILDING SHALL HAVE SURGE PROTECTION. VERIFY LOCATION.
- EXTEND CONDUIT BELOW GRADE FROM IN-GRADE BOX TO EXISTING GYM. EXTEND CONDUIT UP GYM WALL AND THROUGH WALL TO EXISTING IDF-G WITH FIBER. SEE SHEET EB.2 FOR ADDITIONAL INFORMATION.
- PROVIDE PERMANENT SERVICE PLAQUE AT EXISTING SERVICE ENTRANCE INDICATING "1 OF 2 SERVICES TO SCHOOL BUILDINGS". ADDITIONAL INFORMATION SHALL MEET ALL NEC REQUIREMENTS INCLUDING NEC 230.2(E).
- PROVIDE PERMANENT SERVICE PLAQUE AT NEW SERVICE ENTRANCE E-STOP BUTTON INDICATING "2 OF 2 SERVICES TO SCHOOL BUILDINGS". ADDITIONAL INFORMATION SHALL MEET ALL NEC REQUIREMENTS INCLUDING NEC 230.2(E).

1" = 20'-0"

20' 0 20' 40'

GRAPHIC SCALE

**Gunn & Associates, P.C.**  
Consulting Engineers  
3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273  
1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065

CLASSROOM ADDITION

FOR

UNION HILL SCHOOL

SOMERVILLE, ALABAMA

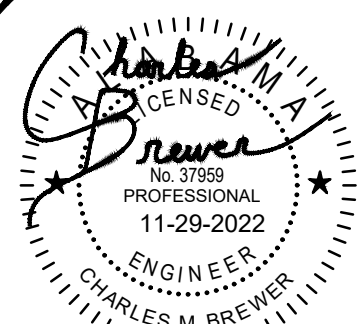
FOR THE

MORGAN COUNTY BOARD OF EDUCATION

**McKee and Associates**

ARCHITECTURE and INTERIOR DESIGN

637 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833



SHEET TITLE : SITE PLAN-ELECTRICAL DEMOLITION & NEW WORK  
MCKEE JOB # : 22-134  
DRAWN BY : CMB  
DATE : 10.13.2022  
REVISED DATE : 11.29.2022  
REVISED DATE :  
REVISED DATE :  
SHEET NO. : E1.1



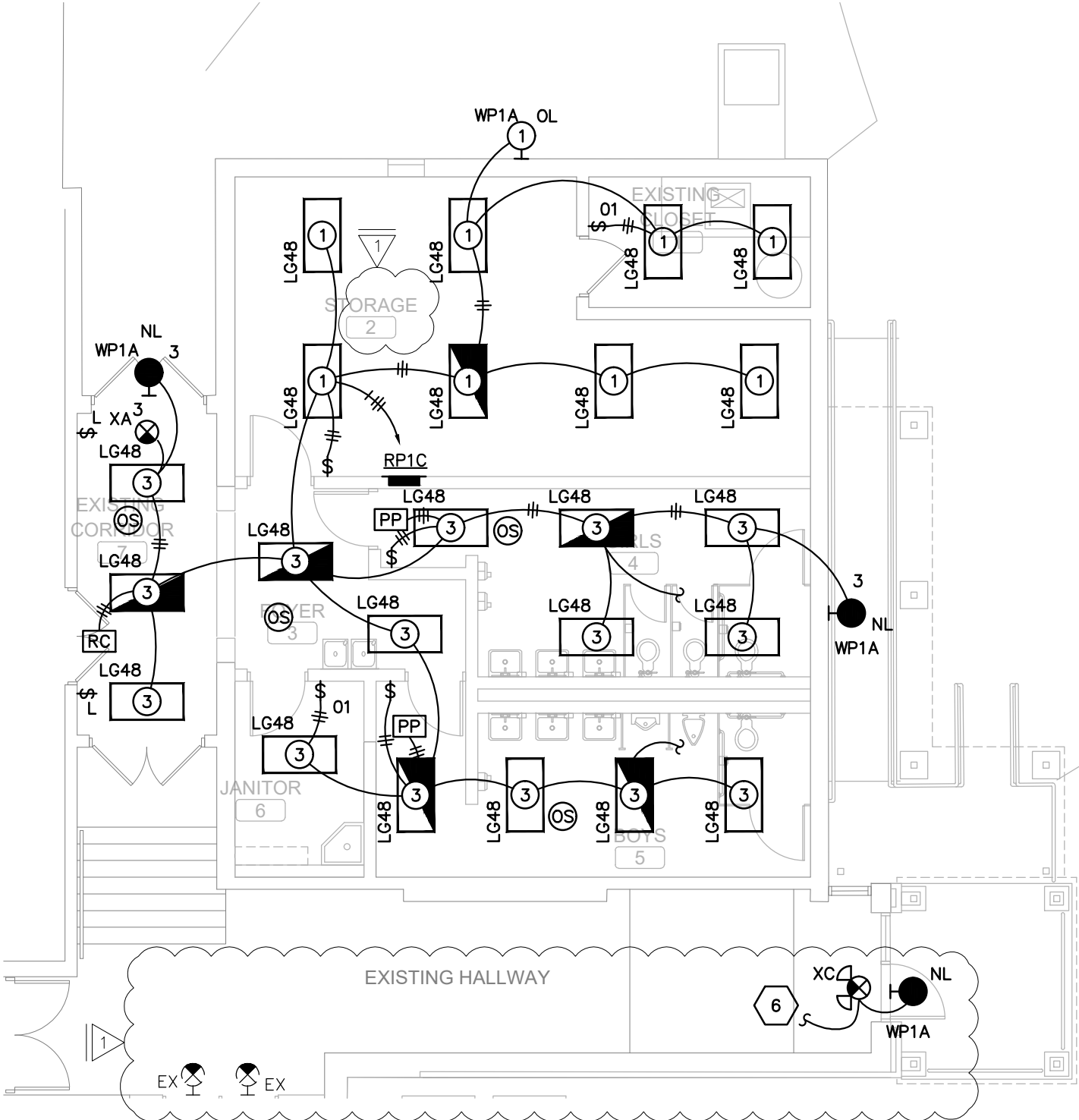
ROOM CONTROLLER NOTES:

1. CONTRACTOR SHALL LOCATE ALL ROOM CONTROLLERS ABOVE DOORS IN EACH ROOM 6" ABOVE CEILING GRID. PROVIDE ACCESS PANELS WHERE LOCATED ABOVE HARD CEILINGS OR MOUNT IN UTILITY TYPE ROOMS WHENEVER POSSIBLE. ROOM CONTROLLER SHOWN ON THIS PLAN IS DIAGRAMMATIC FOR CIRCUITRY. DO NOT USE THESE FOR ACTUAL LOCATIONS. PROVIDE A WHITE PHENOLIC LABEL WITH 1" BLACK TEXT THAT READS 'RC' GLUED ON CEILING GRID UNDER POWER PACK FOR EACH LOCATION FOR FUTURE MAINTENANCE.

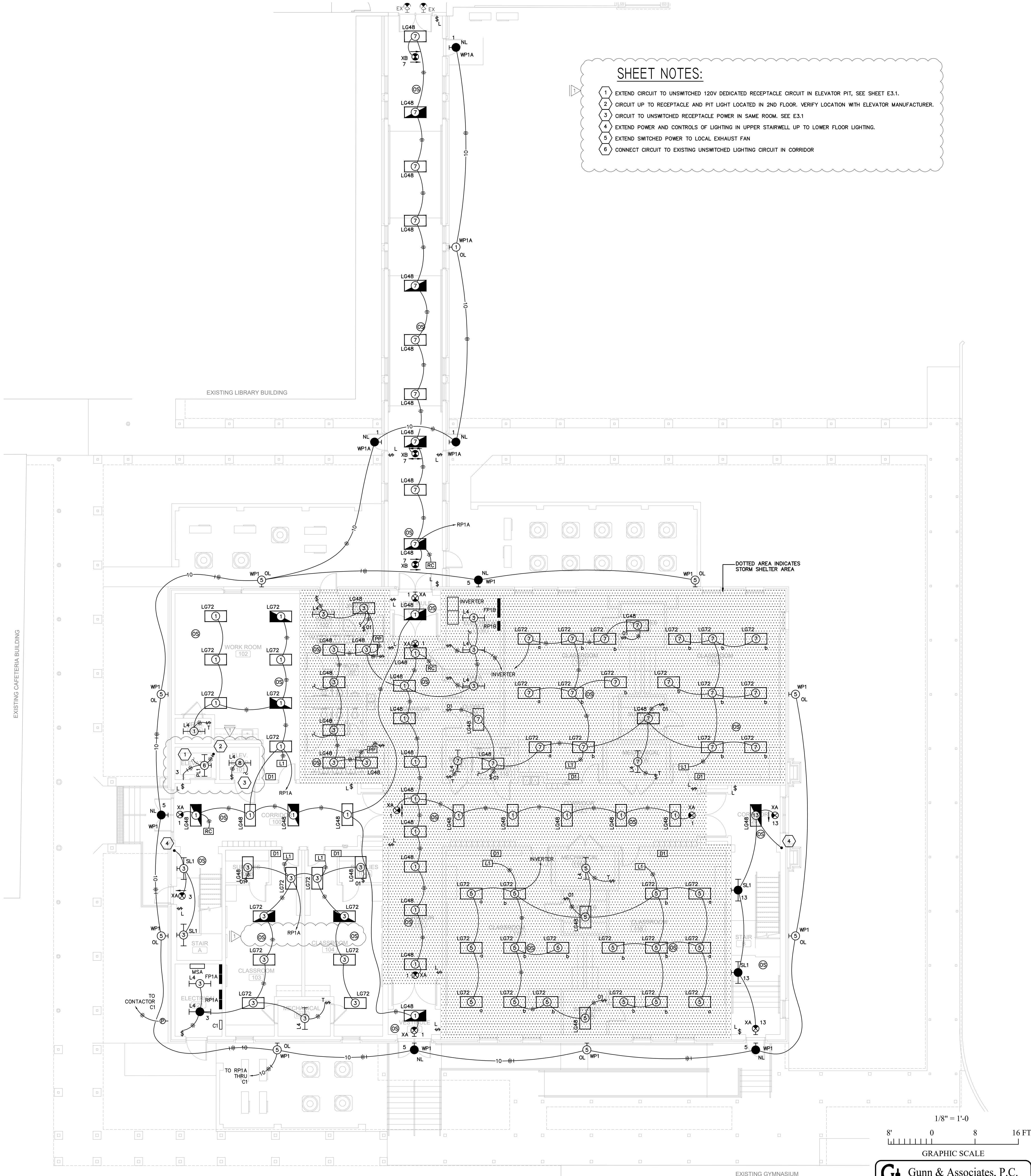
STORM SHELTER NOTES:

1. CONTRACTOR SHALL INSTALL ALL CONDUITS ENTERING OR EXITING THE STORM SHELTER UNDERGROUND SUCH THAT THEY DO NOT PENETRATE THE STORM SHELTER WALLS OR CEILING. IF A PENETRATION IS REQUIRED, THEN THERE SHALL BE NO PENETRATION GREATER THAN 2". ANY PENETRATIONS SHALL CONFORM TO ICC 500.

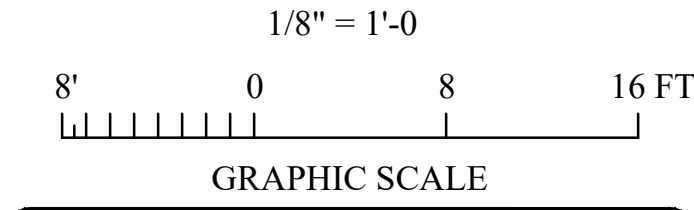
- SHEET NOTES:
1. EXTEND CIRCUIT TO UNSWITCHED 120V DEDICATED RECEPTACLE CIRCUIT IN ELEVATOR PIT, SEE SHEET E3.1.
  2. CIRCUIT UP TO RECEPTACLE AND PIT LIGHT LOCATED IN 2ND FLOOR. VERIFY LOCATION WITH ELEVATOR MANUFACTURER.
  3. CIRCUIT TO UNSWITCHED RECEPTACLE POWER IN SAME ROOM. SEE E3.1
  4. EXTEND POWER AND CONTROLS OF LIGHTING IN UPPER STAIRWELL UP TO LOWER FLOOR LIGHTING.
  5. EXTEND SWITCHED POWER TO LOCAL EXHAUST FAN
  6. CONNECT CIRCUIT TO EXISTING UNSWITCHED LIGHTING CIRCUIT IN CORRIDOR



PROJECT NORTH  
RESTROOM FLOOR PLAN - LIGHTING  
SCALE: 1/8"=1'-0"



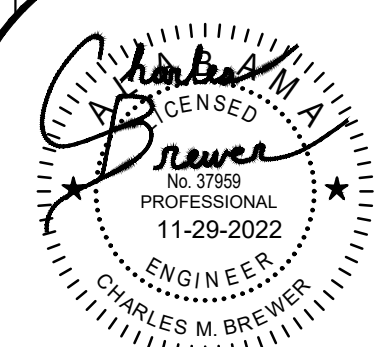
PROJECT NORTH  
FIRST FLOOR PLAN- LIGHTING  
SCALE: 1/8"=1'-0"



**G** Gunn & Associates, P.C.  
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GA#22-065

CLASSROOM ADDITION  
FOR  
UNION HILL SCHOOL  
SOMERVILLE, ALABAMA  
FOR THE  
MORGAN COUNTY BOARD OF EDUCATION



SHEET TITLE : FIRST FLOOR PLAN - LIGHTING

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE : 10.13.2022

REVISED DATE : 11.29.2022

REVISED DATE :

REVISED DATE :

SHEET NO. : E2.1

**MCKEE and ASSOCIATES**  
ARCHITECTURE and INTERIOR DESIGN  
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833



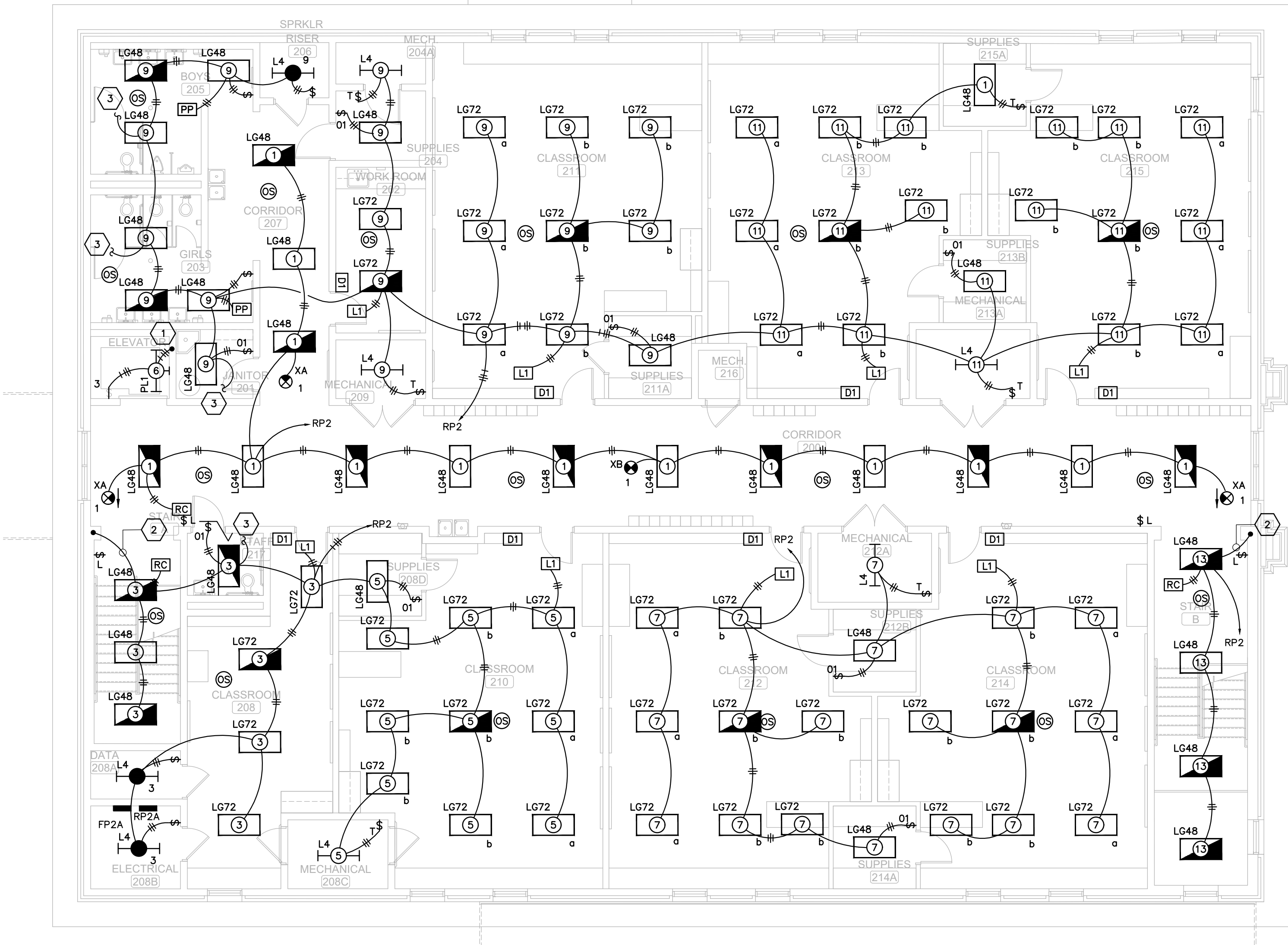
ROOM CONTROLLER NOTES:

1. CONTRACTOR SHALL LOCATE ALL ROOM CONTROLLERS ABOVE DOORS IN EACH ROOM 6" ABOVE CEILING GRID. PROVIDE ACCESS PANELS WHERE LOCATED ABOVE HARD CEILINGS OR MOUNT IN UTILITY TYPE ROOMS WHENEVER POSSIBLE. ROOM CONTROLLER SHOWN ON THIS PLAN IS DIAGNOSTIC FOR CIRCUITRY. DO NOT USE THESE FOR ACTUAL LOCATIONS. PROVIDE A WHITE PHENOLIC LABEL WITH 1" BLACK TEXT THAT READS "RC" GLUED ON CEILING GRID UNDER POWER PACK FOR EACH LOCATION FOR FUTURE MAINTENANCE.

STORM SHELTER NOTES:

1. CONTRACTOR SHALL INSTALL ALL CONDUITS ENTERING OR EXITING THE STORM SHELTER UNDERGROUND SUCH THAT THEY DO NOT PENETRATE THE STORM SHELTER WALLS OR CEILING. IF A PENETRATION IS REQUIRED, THEN THERE SHALL BE NO PENETRATION GREATER THAN 2". ANY PENETRATIONS SHALL CONFORM TO ICC 500.

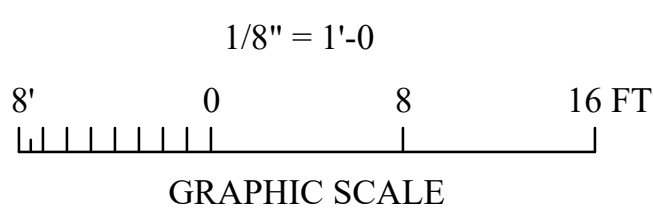
- SHEET NOTES:
- 1. CIRCUIT DOWN TO RECEPTACLE AND PIT LIGHT LOCATED IN 1ST FLOOR. VERIFY LOCATION WITH ELEVATOR MANUFACTURER.
  - 2. EXTEND POWER AND CONTROLS OF LIGHTING IN UPPER STAIRWELL UP TO LOWER FLOOR LIGHTING.
  - 3. EXTEND SWITCHED POWER TO LOCAL EXHAUST FAN



PROJECT NORTH

SECOND FLOOR PLAN- LIGHTING

SCALE: 1/8"=1'-0"

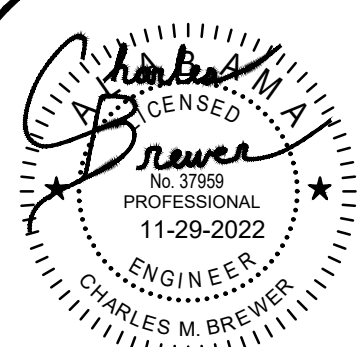


Gunn & Associates, P.C.  
Consulting Engineers

3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273

1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065

CLASSROOM ADDITION  
FOR  
UNION HILL SCHOOL  
SOMERVILLE, ALABAMA  
FOR THE  
MORGAN COUNTY BOARD OF EDUCATION



SHEET TITLE : SECOND FLOOR PLAN - LIGHTING

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE: 10.13.2022

REVISED DATE: 11.29.2022

REVISED DATE:

REVISED DATE:

SHEET NO. : E2.2

MCKEE and ASSOCIATES  
ARCHITECTURE and INTERIOR DESIGN  
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833



ROOM CONTROLLER NOTES:

1. CONTRACTOR SHALL LOCATE ALL ROOM CONTROLLERS ABOVE DOORS IN EACH ROOM 6" ABOVE CEILING GRID. PROVIDE ACCESS PANELS WHERE LOCATED ABOVE HARD CEILINGS OR MOUNT IN UTILITY TYPE ROOMS WHENEVER POSSIBLE. ROOM CONTROLLER SHOWN ON THIS PLAN IS DIAGRAMMATIC FOR CIRCUITRY. DO NOT USE THESE FOR ACTUAL LOCATIONS. PROVIDE A WHITE PHENOLIC LABEL WITH 1" BLACK TEXT THAT READS 'RC' GLUED ON CEILING GRID UNDER POWER PACK FOR EACH LOCATION FOR FUTURE MAINTENANCE.

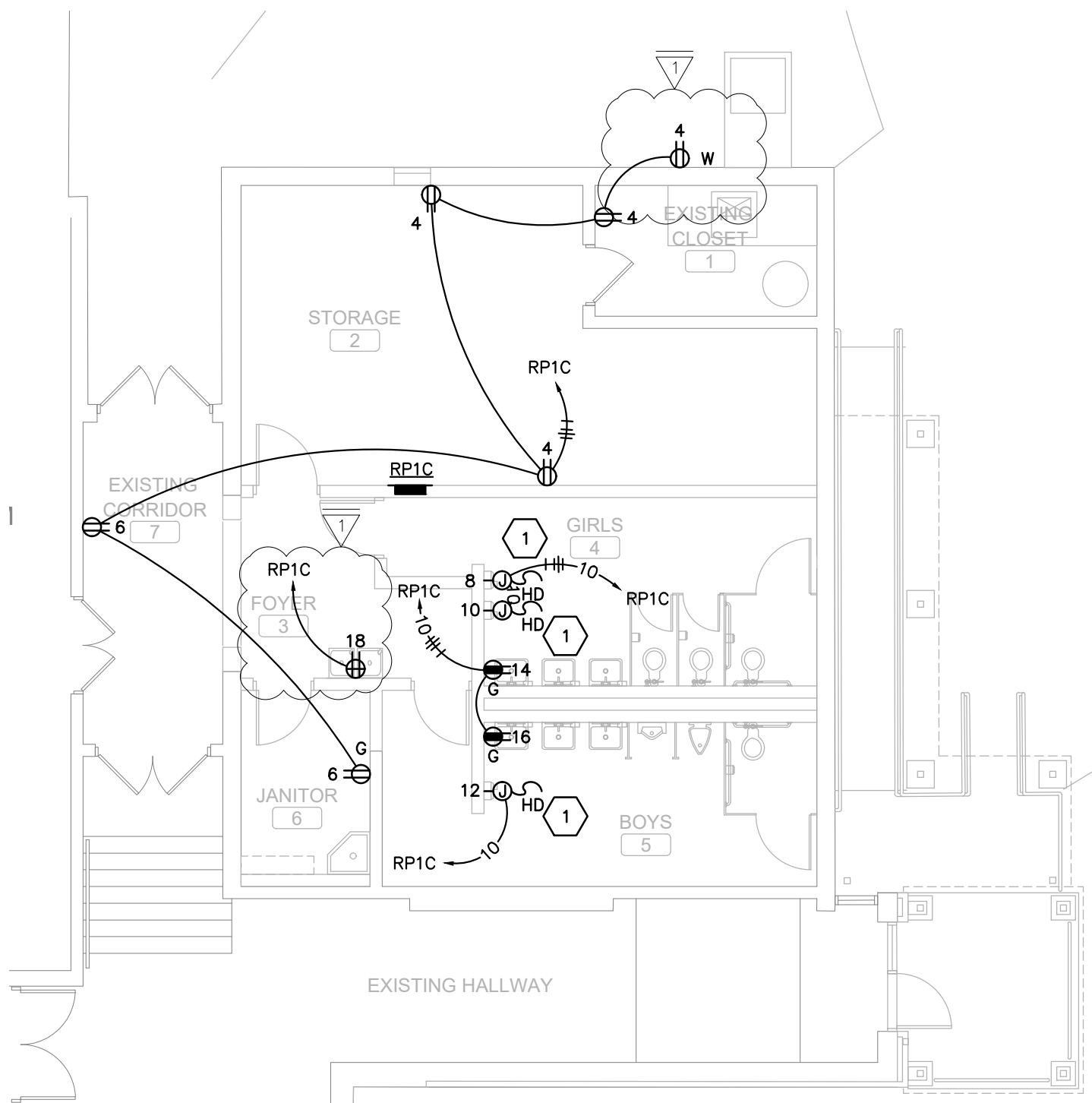
STORM SHELTER NOTES:

1. CONTRACTOR SHALL INSTALL ALL CONDUITS ENTERING OR EXITING THE STORM SHELTER UNDERGROUND SUCH THAT THEY DO NOT PENETRATE THE STORM SHELTER WALLS OR CEILING. IF A PENETRATION IS REQUIRED, THEN THERE SHALL BE NO PENETRATION GREATER THAN 2". ANY PENETRATIONS SHALL CONFORM TO ICC 500.

SHEET NOTES:

1. PROVISIONS FOR ELECTRIC HAND DRYER. MOUNT JUNCTION BOX BEHIND PAPER TOWEL DISPENSER AND WALL BLANK OFF. CIRCUIT BREAKERS FEEDING CIRCUITRY SHALL BE SWITCHED OFF AND WIRE DISCONNECTED.

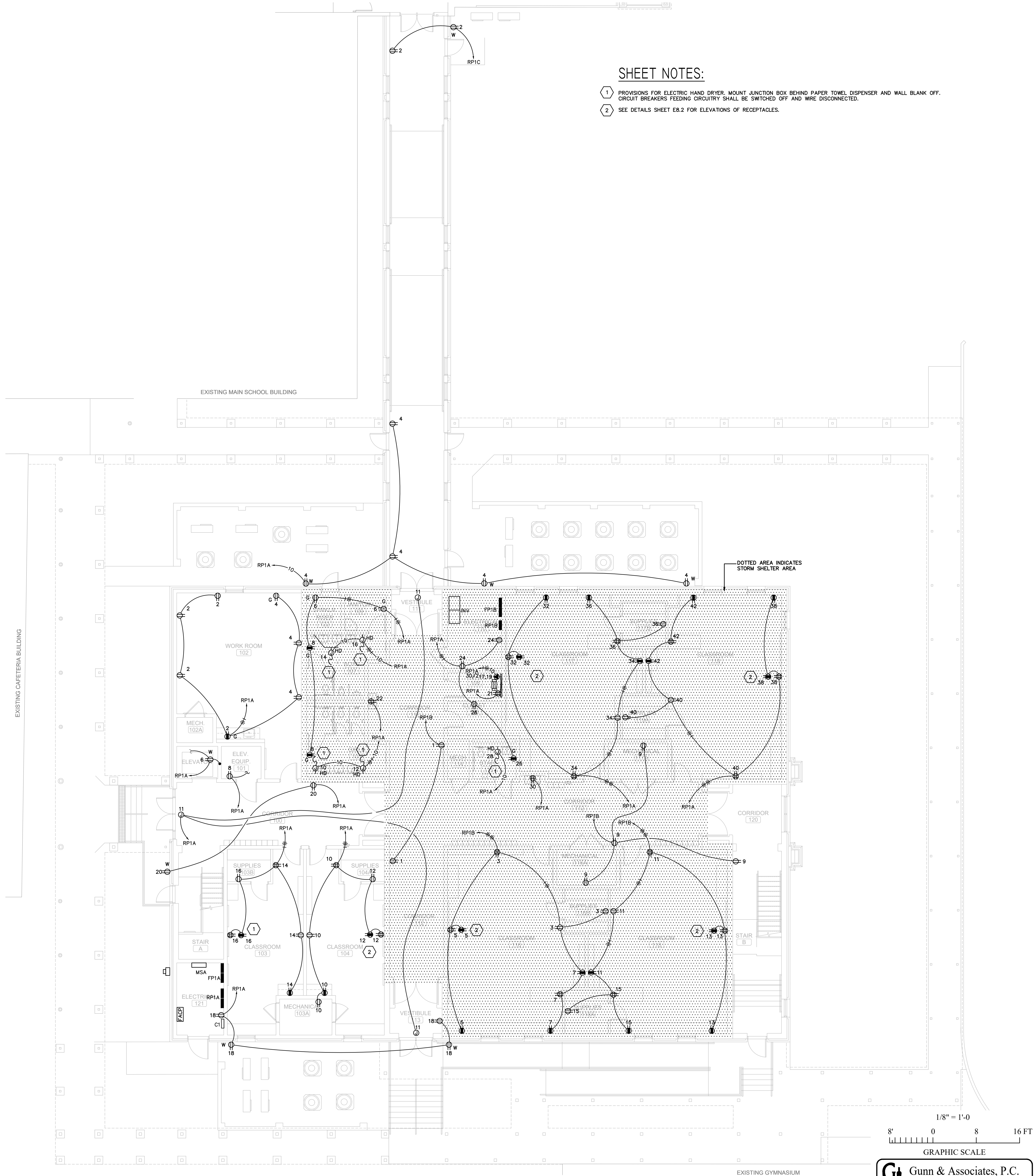
2. SEE DETAILS SHEET E8.2 FOR ELEVATIONS OF RECEPTACLES.



PROJECT NORTH

RESTROOM FLOOR PLAN- POWER

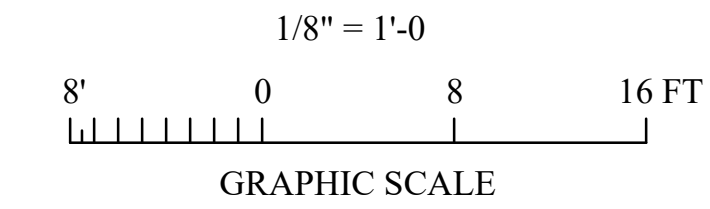
SCALE: 1/8"=1'-0"



PROJECT NORTH

FIRST FLOOR PLAN- POWER

SCALE: 1/8"=1'-0"



**GA** Gunn & Associates, P.C.  
Consulting Engineers  
3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273

1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065

SHEET TITLE : FIRST FLOOR PLAN - POWER

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE : 10.13.2022

REVISED DATE : 11.29.2022

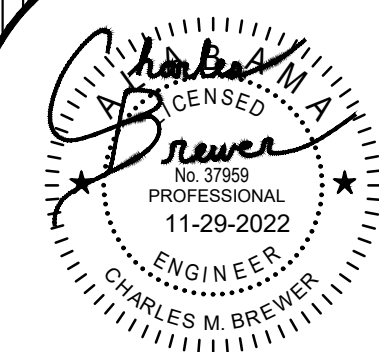
REVISED DATE :

REVISED DATE :

SHEET NO. : E3.1

CLASSROOM ADDITION  
FOR  
UNION HILL SCHOOL  
SOMERVILLE, ALABAMA  
FOR THE  
MORGAN COUNTY BOARD OF EDUCATION

**MCKEE and ASSOCIATES**  
ARCHITECTURE and INTERIOR DESIGN  
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833





### STORM SHELTER NOTES:

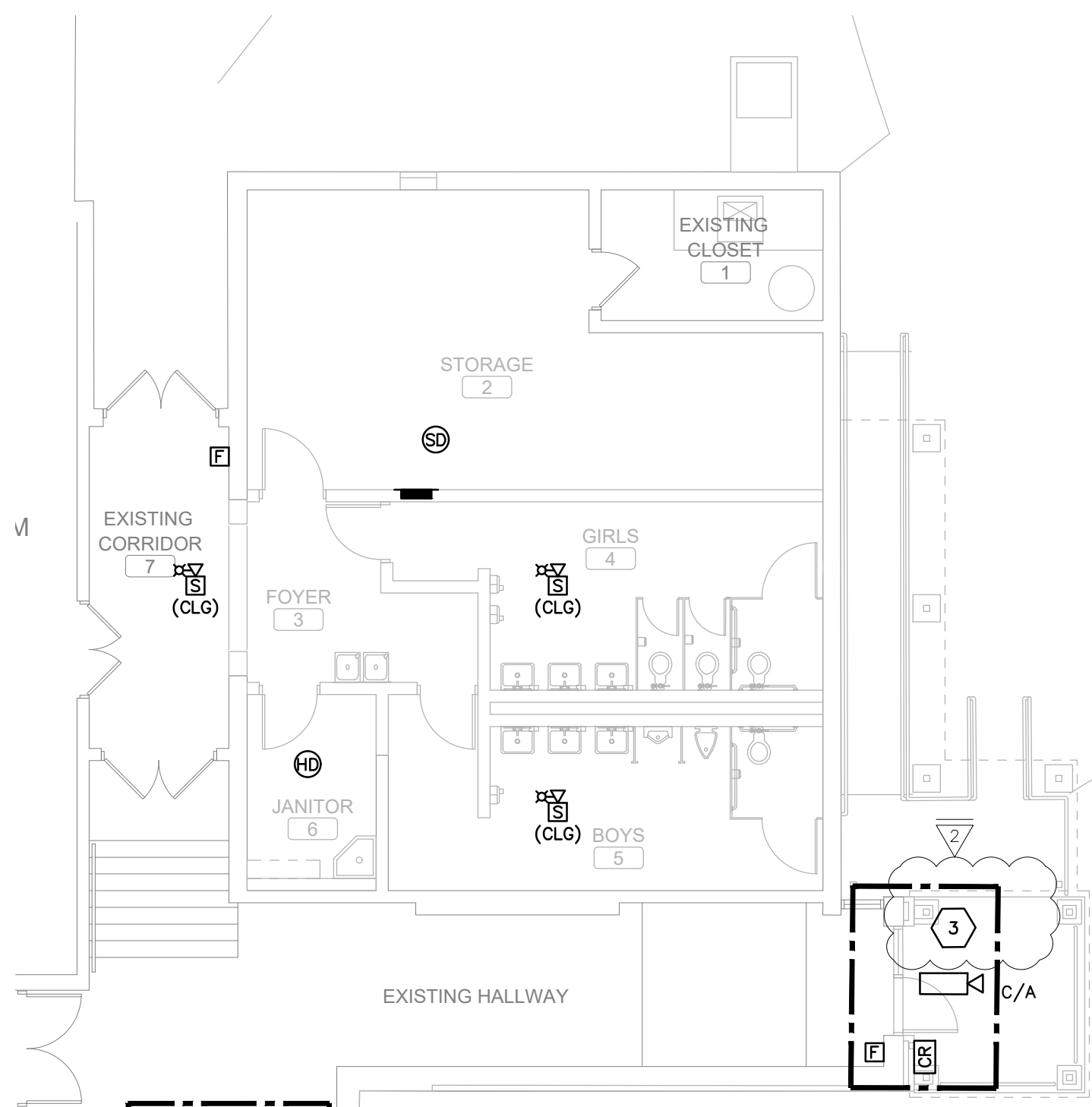
1. CONTRACTOR SHALL INSTALL ALL CONDUITS ENTERING OR EXITING THE STORM SHELTER UNDERGROUND SUCH THAT THEY DO NOT PENETRATE THE STORM SHELTER WALLS OR CEILING. IF A PENETRATION IS REQUIRED, THEN THERE SHALL BE NO PENETRATION GREATER THAN 2". ANY PENETRATIONS SHALL CONFORM TO ICC 500.

### SHEET NOTES:

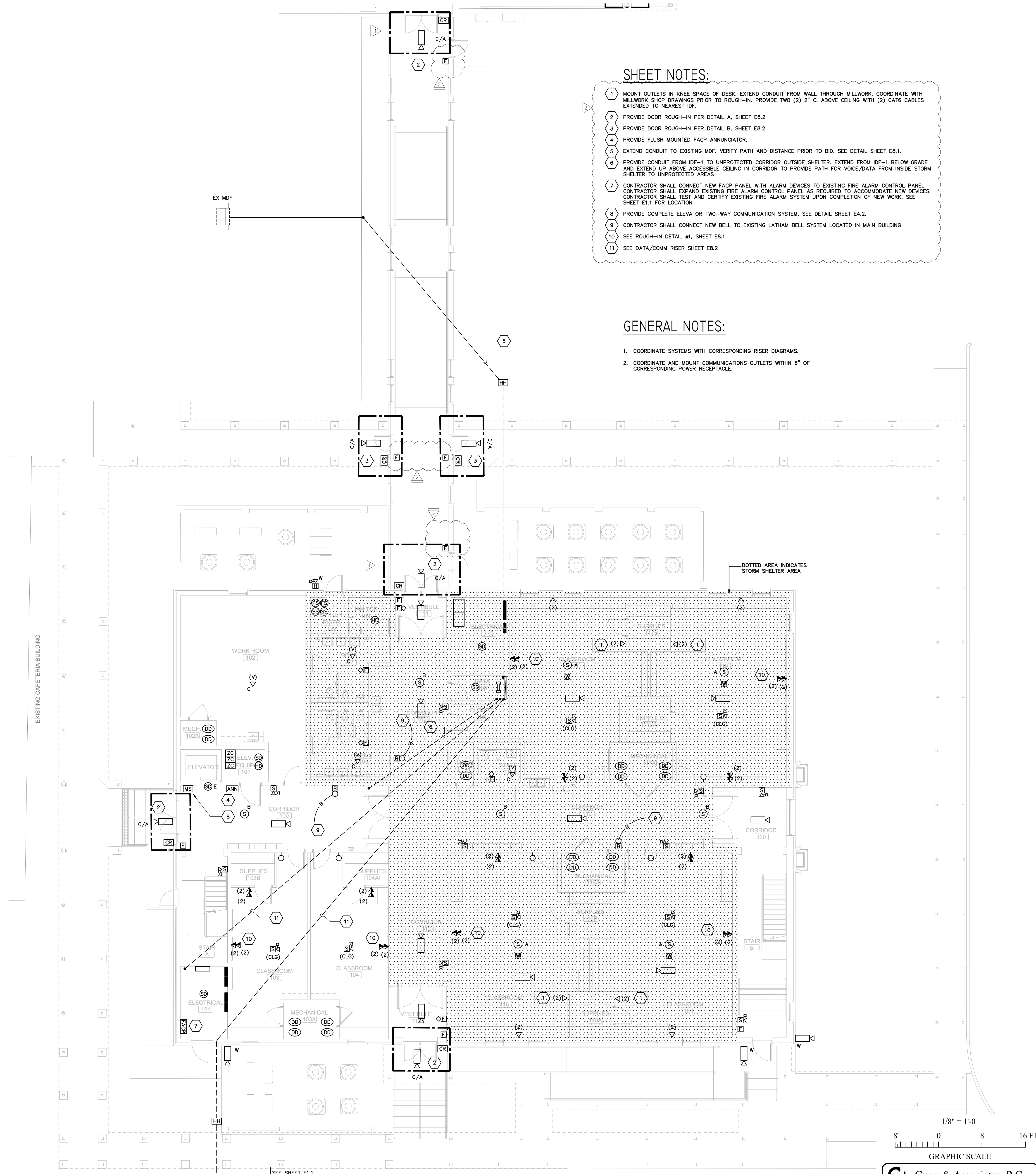
1. MOUNT OUTLETS IN KNEE SPACE OF DESK. EXTEND CONDUIT FROM WALL THROUGH MILLWORK. COORDINATE WITH MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. PROVIDE TWO (2) 2" C. ABOVE CEILING WITH (2) CAT6 CABLES EXTENDED TO NEAREST IDF.
2. PROVIDE DOOR ROUGH-IN PER DETAIL A, SHEET E8.2
3. PROVIDE DOOR ROUGH-IN PER DETAIL B, SHEET E8.2
4. PROVIDE FLUSH MOUNTED FACP ANNUNCIATOR.
5. EXTEND CONDUIT TO EXISTING MDF. VERIFY PATH AND DISTANCE PRIOR TO BID. SEE DETAIL SHEET E8.1.
6. PROVIDE CONDUIT FROM IDF-1 TO UNPROTECTED CORRIDOR OUTSIDE SHELTER. EXTEND FROM IDF-1 BELOW GRADE AND EXTEND UP ABOVE ACCESSIBLE CEILING IN CORRIDOR TO PROVIDE PATH FOR VOICE/DATA FROM INSIDE STORM SHELTER TO UNPROTECTED AREAS.
7. CONTRACTOR SHALL CONNECT NEW FACP PANEL WITH ALARM DEVICES TO EXISTING FIRE ALARM CONTROL PANEL. CONTRACTOR SHALL EXPAND EXISTING FIRE ALARM CONTROL PANEL AS REQUIRED TO ACCOMMODATE NEW DEVICES. CONTRACTOR SHALL TEST AND CERTIFY EXISTING FIRE ALARM SYSTEM UPON COMPLETION OF NEW WORK. SEE SHEET E1.1 FOR LOCATION.
8. PROVIDE COMPLETE ELEVATOR TWO-WAY COMMUNICATION SYSTEM. SEE DETAIL SHEET E4.2.
9. CONTRACTOR SHALL CONNECT NEW BELL TO EXISTING LATHAM BELL SYSTEM LOCATED IN MAIN BUILDING
10. SEE ROUGH-IN DETAIL #1, SHEET E8.1
11. SEE DATA/COMM RISER SHEET E8.2

### GENERAL NOTES:

1. COORDINATE SYSTEMS WITH CORRESPONDING RISER DIAGRAMS.
2. COORDINATE AND MOUNT COMMUNICATIONS OUTLETS WITHIN 6" OF CORRESPONDING POWER RECEPTACLE.



**RESTROOM FLOOR PLAN- AUXILIARY**  
SCALE: 1/8"=1'-0"



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

1/8" = 1'-0"  
8' 0 8 16 FT  
GRAPHIC SCALE

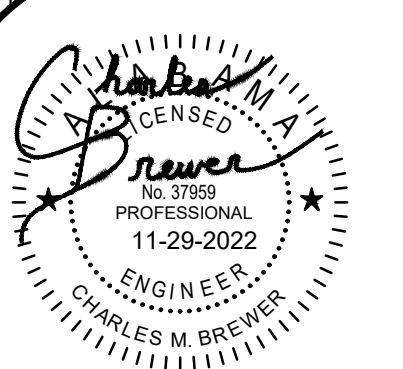
**Gunn & Associates, P.C.**  
Consulting Engineers  
3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273  
1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065

SHEET TITLE : FIRST FLOOR PLAN - AUXILIARY  
MCKEE JOB # : 22-134  
DRAWN BY : CMB  
DATE : 10.13.2022  
REVISED DATE : 11.03.2022  
REVISED DATE : 11.29.2022  
REVISED DATE :

SHEET NO. : **E4.1**

**CLASSROOM ADDITION**  
FOR  
**UNION HILL SCHOOL**  
SOMERVILLE, ALABAMA  
FOR THE  
**MORGAN COUNTY BOARD OF EDUCATION**

**McKee and Associates**  
ARCHITECTURE and INTERIOR DESIGN  
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833





STORM SHELTER NOTES:

1. CONTRACTOR SHALL INSTALL ALL CONDUITS ENTERING OR EXITING THE STORM SHELTER UNDERGROUND SUCH THAT THEY DO NOT PENETRATE THE STORM SHELTER WALLS OR CEILING. IF A PENETRATION IS REQUIRED, THEN THERE SHALL BE NO PENETRATION GREATER THAN 2". ANY PENETRATIONS SHALL CONFORM TO ICC 500.

SHEET NOTES:

- 1 TWO (2) 2" FIRE RATED SLEEVES ABOVE ACCESSIBLE CEILING
- 2 PROVIDE FIBER FROM IDF-2 TO IDF-1. EXTEND DOWN BELOW GRADE AND EXTEND UP NEAR IDF-1 INSIDE STORM SHELTER.
- 3 PROVIDE COMPLETE ELEVATOR TWO-WAY COMMUNICATION SYSTEM. SEE DETAIL THIS SHEET.
- 4 CONTRACTOR SHALL CONNECT NEW BELL TO EXISTING LATHAM BELL SYSTEM LOCATED IN MAIN BUILDING.

GENERAL NOTES:

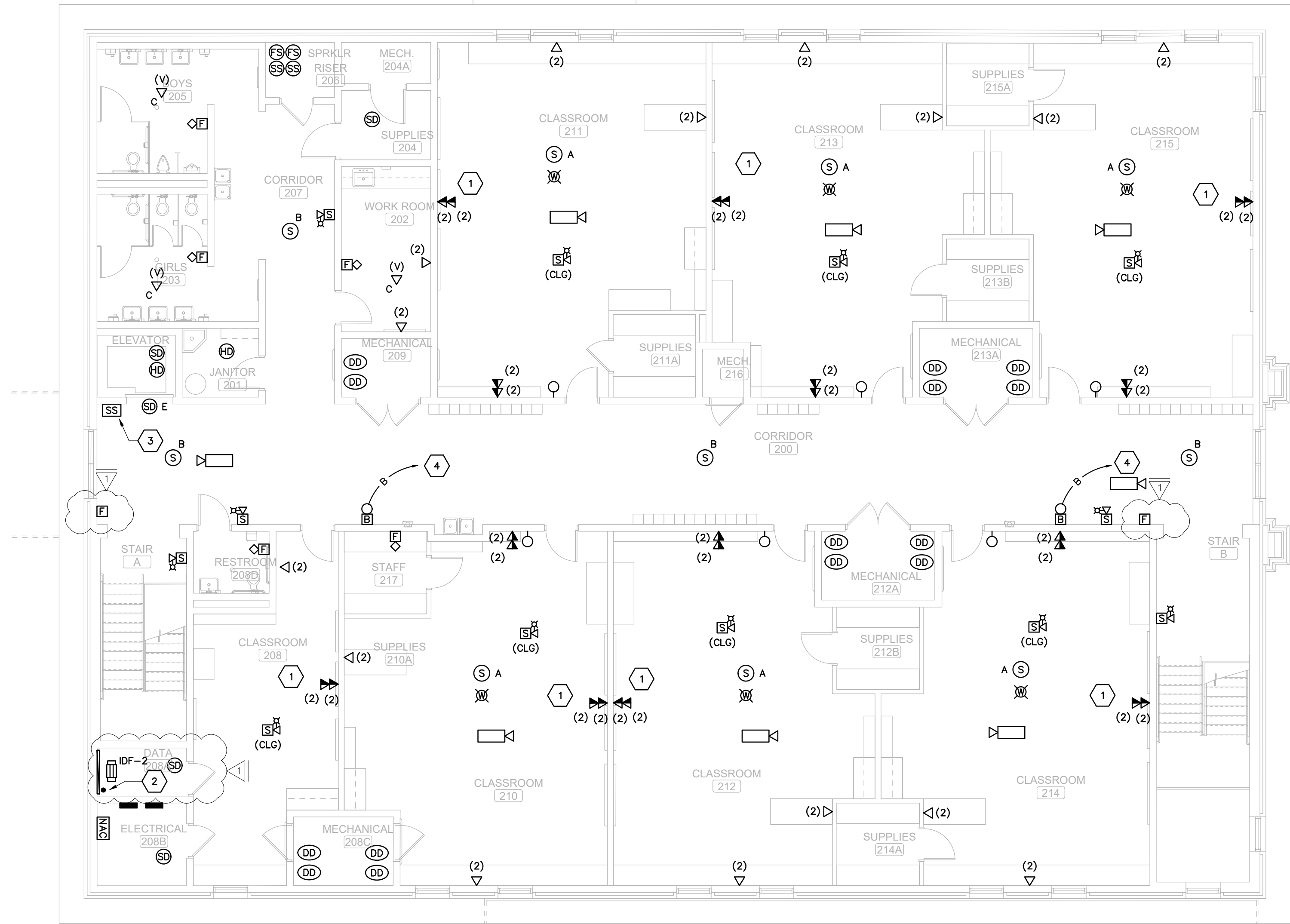
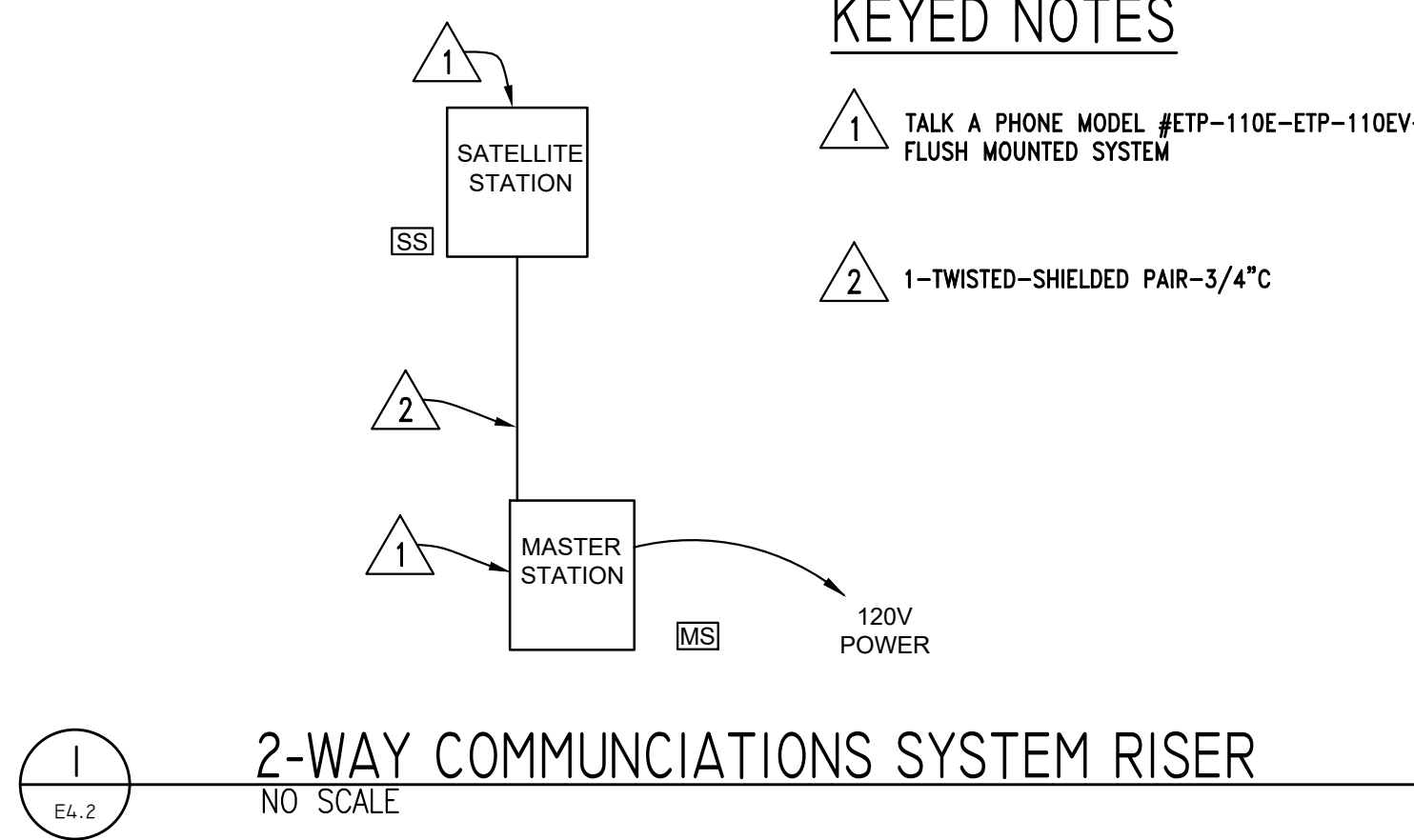
1. COORDINATE SYSTEMS WITH CORRESPONDING RISER DIAGRAMS.
2. MOUNT ALL COMMUNICATION OUTLETS WITH 6" OF A POWER OUTLET.
3. FINAL DATA, WIFI, AND CAMERA CONNECTIONS BY OWNERS REP.
4. PROVIDE A GREEN DOT STICKER ON CEILING GRID UNDER EACH WIRELESS ACCESS POINT TO PROVIDE LOCATION TO IT STAFF. PROVIDE 15' MINIMUM OF CAT6 SLACK, COILED UP ABOVE CEILING.

2-WAY COMMUNICATIONS SYSTEM NOTES:

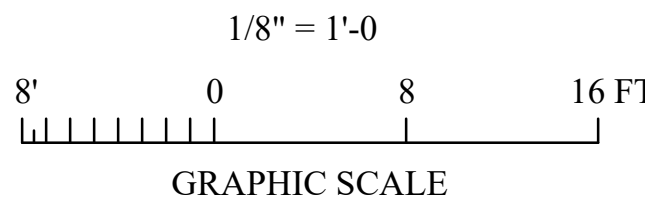
1. CONTRACTOR SHALL PROVIDE A TWO-WAY COMMUNICATIONS SYSTEM IN THE ELEVATOR LOBBIES FOR EACH FLOOR PER IBC 1007.8. PROVIDE ONE MASTER STATION AT THE ELEVATOR ON THE FIRST FLOOR. PROVIDE ONE SATELLITE STATION BESIDE THE ELEVATOR ON THE SECOND. THE STATIONS SHALL BE FLUSH MOUNTED WITH BRUSHED STAINLESS STEEL FACEPLATES. PROVIDE INTERCONNECTING WIRING AS RECOMMENDED BY THE MANUFACTURER.
2. SYSTEM SHALL USE REGULAR PHONE LINES OR PDI
3. PHONE LINE POWERED: NO POWER SUPPLY OR BATTERIES.
4. PUSH BUTTON ONCE TO CALL, THEN HANDS FREE.
5. LED INDICATOR FOR HEARING IMPAIRED.
6. BUILT-IN AUTO DIALER WITH ABILITY TO DIAL TWO NUMBERS: IF FIRST NUMBER IS BUSY OR DON'T ANSWER, THEN DIALER DIALS SECOND NUMBER.
7. PROVIDE AUTO-ANSWER TO ALLOW SECURITY TO MONITOR AND INITIATE CALLS WITH EMERGENCY PHONE.
8. PROVIDE ABILITY TO AUTOMATICALLY IDENTIFY ATTENDANT OF LOCATION OF CALLING PHONE BY RECORDED MESSAGE AND DIGITAL DISPLAY.
9. ALL SYSTEM COMPONENTS, ENCLOSURES, FRAMES, SURGE ARRESTORS, ETC., SHALL BE GROUNDED.
10. CIRCUITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
11. ALL WIRING FOR THIS SYSTEM SHALL BE INSTALLED IN CONDUIT THROUGH OUT THE BUILDING.
12. THE COMPLETE 2-WAY COMMUNICATIONS SYSTEM IS IN THE BASE BID.
13. CONTRACTOR SHALL PROVIDE TWO (2) CAT 6 CABLES IN THE BASE BID FROM THE MASTER STATION TO THE TELEPHONE DEMARK IN FIRST FLOOR IDF ROOM FOR EXTERIOR CALL OUT.

KEYED NOTES

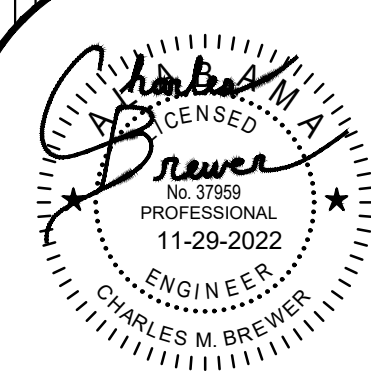
- 1 TALK A PHONE MODEL #ETP-110E-ETP-110EV-AUX-MS-400. FLUSH MOUNTED SYSTEM
- 2 1-TWISTED-SHIELDED PAIR-3/4"



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



**Gunn & Associates, P.C.**  
Consulting Engineers  
3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273  
1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065



SHEET TITLE : SECOND FLOOR PLAN - AUXILIARY

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE: 10.13.2022

REVISED DATE: 11.29.2022

REVISED DATE:

REVISED DATE:

SHEET NO. : E4.2



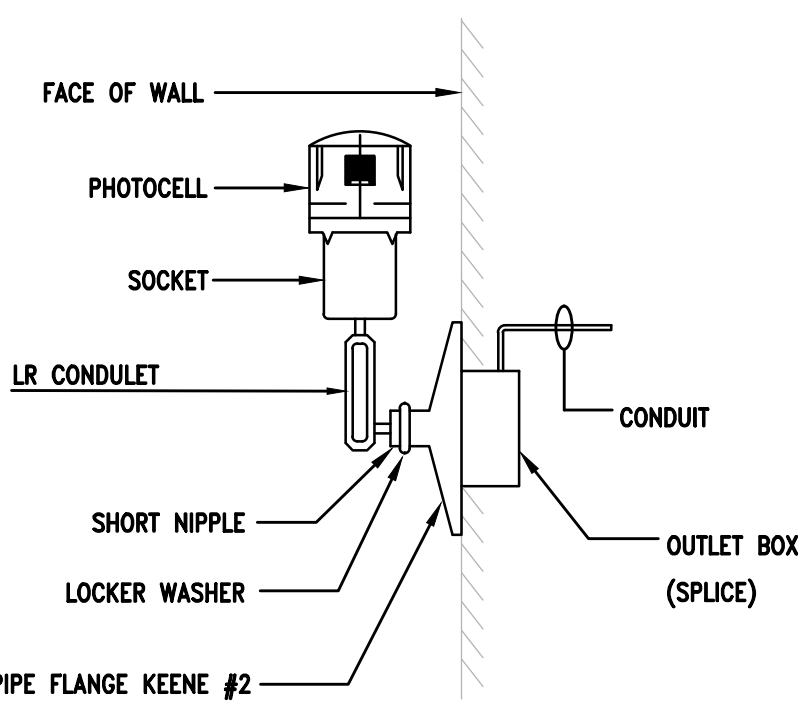
LIGHTING FIXTURE SCHEDULE						
TYPE:	MANUFACTURER NUMBER AND EQUALS:	VOLTAGE:	MOUNTING:	LAMP TYPE:	LAMP QUANTITY:	DESCRIPTION:
L4	COOPER NO. 45SNLED-LD5-50SL-LW-UNV-L840-CD-1 COLUMBIA NO. LCL4-40ML-EDU PHILIPS NO. FSS45SL840-UNV-DIM	MVOLT	SURFACE	L.E.D. 4000K	1 5200 LUMEN 46 WATTS	WALL OR SURFACE MOUNTED LINEAR L.E.D. LUMINAIRE, 4'-0"L., WHITE FINISH WITH FROSTED LENS.
LG48	COLUMBIA NO. SRP24-40LG-EDU  OR EQUAL BY COOPER OR HE WILLIAMS	MVOLT	RECESSED	L.E.D. 4000K	1 4800 LUMEN 42 WATTS	RECESSED MOUNTED, EDGE LIT, L.E.D. FLAT PANEL, 2x4' LAY-IN, WHITE FINISH.
LG72	HUBBELL NO. SRP-24-40VLEHG-EDU  OR EQUAL BY COOPER OR HE WILLIAMS	MVOLT	RECESSED	L.E.D. 4000K	1 7200 LUMEN 54 WATTS	RECESSED MOUNTED, EDGE LIT, L.E.D. FLAT PANEL, 2x4' LAY-IN, WHITE FINISH.
PL1	EATON NO. 4VT2-LD5-6-UNV OR EQUAL BY HE WILLIAMS, HUBBELL	120/277	CEILING	LED 4000K	1 6,000 LM 51 WATTS	EXTERIOR LINEAR LED 4'-0" LINEAR VAPORTITE FIXTURE WITH GASKETS AND LENS.
SL1	COOPER NO. 4SWLED-72HL-LW-UNV-L840-CD1-U  OR PRIOR APPROVED EQUAL BY HE WILLIAMS OR HUBBELL	MVOLT	WALL	L.E.D. 4000K	1 7200 LUMEN 68 WATTS	WALL MOUNTED L.E.D. LUMINAIRE STAIRWELL FIXTURE WITH INTEGRAL OCC, SENSOR, BATTERY PACK, AND DIMMING
WP1	COOPER NO. ISC-SA1-E740-U-T4W-XX  OR PRIOR APPROVED EQUAL BY HE WILLIAMS OR HUBBELL	MVOLT	WALL	L.E.D. 4000K	1 5600 LUMEN 58 WATTS	EXTERIOR WALL MOUNTED L.E.D. LUMINAIRE (HALF CYLINDER) WITH CUT OFF, FINISH AS SELECTED BY ARCHITECT. MOUNTED 16'-0" ABOVE GRADE. VERIFY WITH ARCH PRIOR TO ROUGH-IN.
WP1A	COOPER NO. ISC-SA1-E740-U-T4W-XX  OR PRIOR APPROVED EQUAL BY HE WILLIAMS OR HUBBELL	MVOLT	WALL	L.E.D. 4000K	1 5600 LUMEN 58 WATTS	EXTERIOR WALL MOUNTED L.E.D. LUMINAIRE (HALF CYLINDER) WITH CUT OFF, FINISH AS SELECTED BY ARCHITECT, - PROVIDE WITH INTEGRAL PHOTOCELL BUTTON
XA	LITHONIA NO. LQM-S-W-3-R-120/277-ELN-SD - WIREGUARDS IN GYM AREAS OR PRIOR APPROVED EQUAL BY EMERGI-LITE, MCPHILBEN, OR PRESCOLITE	MVOLT	CEILING/ WALL	L.E.D.	1 3 WATT	CEILING MOUNTED SINGLE FACE EXIT SIGN, PLASTIC BODY WITH RED LETTERS, PROVIDE WITH SELF-CONTAINED EMERGENCY BATTERY AND DIAGNOSTICS, ARROWS AS SHOWN ON DRAWINGS.
XB	LITHONIA NO. LQM-S-W-3-R-120/277-ELN-SD; WIREGUARDS IN GYM AREAS EELP NO. XE-2-R-W-SD H.E. WILLIAMS NO. EXT-R-EM-WHT-SDT-D	MVOLT	CEILING	L.E.D.	1 3 WATTS	CEILING MOUNTED DOUBLE FACE EXIT SIGN, PLASTIC BODY WITH RED LETTERS, PROVIDE WITH SELF-CONTAINED EMERGENCY BATTERY AND DIAGNOSTICS, ARROWS AS SHOWN ON DRAWINGS.
XC	LITHONIA NO. LHQM-S-W-3-R-HO-LP06VS - WIREGUARDS IN GYM AREAS OR PRIOR APPROVED EQUAL BY EMERGI-LITE, MCPHILBEN, OR PRESCOLITE	MVOLT	CEILING/ WALL	LED	1 1000 LUMENS 10 WATTS	THERMOPLASTIC 1000 LUMEN COMBO LED EXIT SIGN EGRESS LIGHT. PROVIDE WITH NUMBER OF FACES AND DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS. COORDINATE COLOR OF SIGNAGE WITH LOCAL REQUIREMENTS. PROVIDE WITH EMERGENCY BATTERY. PROVIDE WIREGUARDS IN GYM.
NOTES: 1. ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS OR MAKE CUSTOM COLOR DURING SHOP DRAWING REVIEW. BID ACCORDINGLY. 2. COORDINATE MOUNTING OF ALL LUMINAIRES WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION. 3. PROVIDE EMERGENCY BATTERY BALLAST FOR ALL EMERGENCY TYPE FIXTURES CAPABLE OF 90 MINUTES. 4. FOR WARRANTY AND LONG TERM SUPPORT FOR OWNER, ALL LIGHTING FIXTURES SHALL BE PURCHASED THROUGH MANUFACTURER REPRESENTATIVES LOCATED IN THE STATE OF ALABAMA. SUBMITTALS RECEIVED THAT DO NOT COMPLY WITH THIS REQUIREMENT WILL BE REJECTED WITHOUT REVIEW. THE ELECTRICAL CONTRACTOR						

LUMINAIRE NOTES:

- ALL LUMINAIRES AND INSTALLATION SHALL BE IN ACCORDANCE WITH NEC, NFPA AND LOCAL CODES. ALL LUMINAIRES SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH THE UL LISTING.
- LUMINAIRES SHALL BE FURNISHED COMPLETE WITH THE PROPER LAMP BASE OR PIN RECEPTS, WIRING COMPONENTS, LAMPS, SUPPORTING FRAMES AND DEVICES, ETC., FOR A COMPLETE INSTALLATION.
- ALL LUMINAIRE DEVICES, COMPONENTS, FITTINGS, SUPPORTS, ETC., SHALL BE COORDINATED TO PROVIDE A COMPLETE UL LISTED INSTALLATION.
- ALL LUMINAIRES BALLAST, DRIVERS, LAMPS, ETC SHALL BE COMPATIBLE WITH THE LIGHTING CONTROL SYSTEM OR DIMMING CONTROL SYSTEM PROVIDED.
- SECURE EACH LAY-IN LUMINAIRE AT TWO LOCATIONS TO THE CEILING GRID. PROVIDE BOLTS, SCREWS, RIVETS OR APPROVED CLIPS FOR USE WITH THE TYPE CEILING AND LUMINAIRE INSTALLED.
- ALL LUMINAIRES IN MECHANICAL AND ELECTRICAL ROOMS SHALL BE INSTALLED TO CLEAR ELECTRICAL EQUIPMENT, DUCT, PIPING, ETC., SUSPEND BELOW OBSTRUCTION WHEN CONFLICTS OCCUR.
- ALL FLUORESCENT LUMINAIRES SHALL BE PROVIDED WITH 3500K COLOR TEMPERATURE LAMPS, UNLESS NOTED OTHERWISE.
- PROVIDE ALL DUAL SWITCHED LUMINAIRES WITH DUAL BALLAST.
- LUMINAIRES WITH TWO SUB-SCRIPTS AN "a" AND "b" SHALL HAVE OUTSIDE TWO LAMPS CONTROLLED BY SWITCH OR RELAY POLE "a" AND INSIDE LAMP OR LAMPS CONTROLLED BY SWITCH OR RELAY POLE "b". SIMILARLY FOR OTHER SETS OF SUB-SCRIPTS SUCH AS "c, d, e, f, etc."
- ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS FOR LUMINAIRES, POLES, MOUNTING ACCESSORIES, ETC. DURING SHOP DRAWING REVIEW.
- COORDINATE LUMINAIRE MOUNTING WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION.
- PROVIDE ALL EXIT SIGNS WITH DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS.
- CONTRACTOR SHALL PROVIDE ALL SLOPE ADAPTERS, FLANGE KITS, TRIMS, AND ALL OTHER MOUNTING ACCESSORIES AS NEEDED TO MOUNT EACH LUMINAIRE IN CEILINGS AS SHOWN. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- ALL EXIT SIGNS AND LUMINAIRES DESIGNATED AS EMERGENCY SHALL BE PROVIDED WITH A MINIMUM 1100 LUMEN EMERGENCY BATTERY BALLAST CAPABLE OF 90 MINUTES OF ILLUMINATION.

NOTES

- PAINT CONDUIT NIPPLE, SOCKET AND PIPE FLANGE WITH TWO COATS OF ENAMEL.
- COMPLETE ASSEMBLY TO BE UL LISTED FOR WET LOCATIONS.
- PHOTOCELL TO BE MOUNTED FACING NORTH FREE FROM ALL SHADOWS WHICH MIGHT CAUSE PHOTOCELL TO TURN LIGHTS ON EARLY. CONTRACTOR SHALL COORDINATE PROPER MOUNTING LOCATION PRIOR TO INSTALLATION.



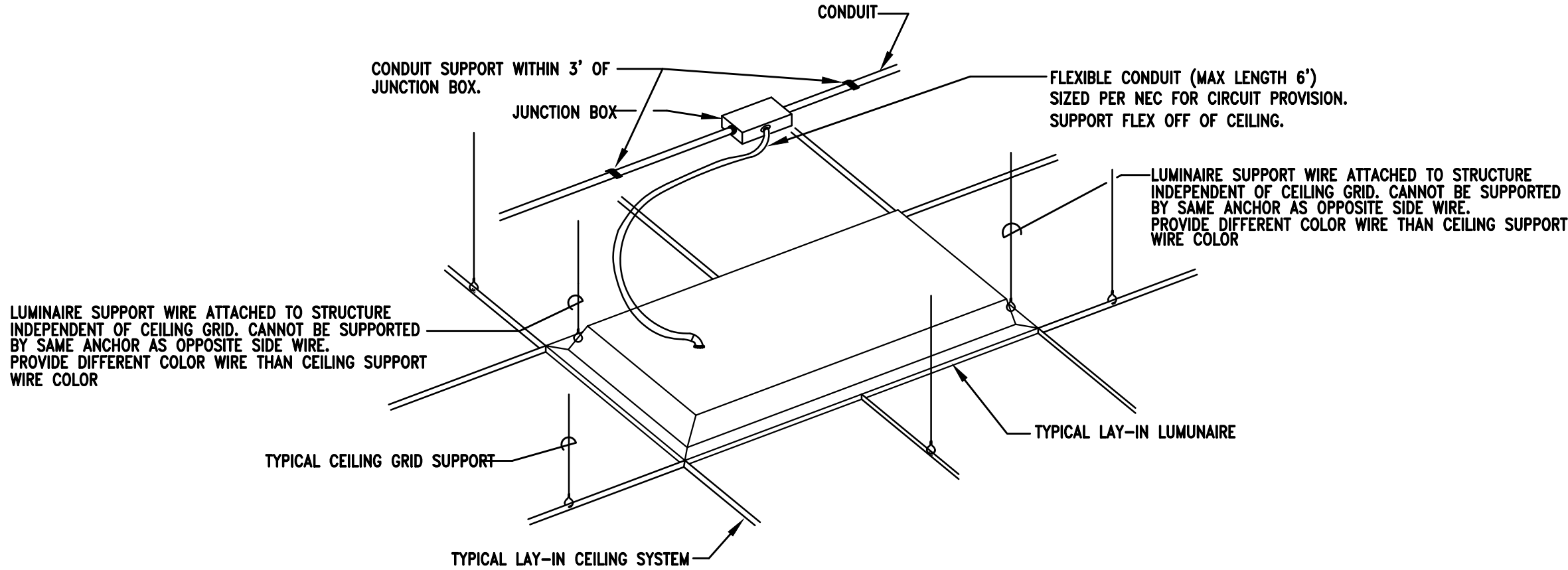
DETAIL - INSTALLATION OF PHOTO-CELL

PANEL - RP1C

TYPE: 125 AMP MAIN BREAKER				AIC: 42,000 AMPERES				MOUNTED: RECESSED - NEMA 1				VOLTAGE: 120/208 VOLTS, 3 PHASE, 4 WIRE			
CIRCUIT DIRECTORY	(VA) PER PHASE			AMP	POLE	CIRCUIT NUMBER	AMP	POLE	(VA) PER PHASE			CIRCUIT DIRECTORY			
	PHASE A	PHASE B	PHASE C						PHASE A	PHASE B	PHASE C				
LIGHTING	394			20	1	1	20	1	400			RECEPTACLES			
LIGHTING		746		20	1	3	4	20	1	600		RECEPTACLES			
BUSSED SPACE				50	1	5	6	20	1		400	RECEPTACLES			
BUSSED SPACE				50	1	7	8	20	1	1,000		HAND DRYER			
BUSSED SPACE				50	1	9	10	20	1	1,000		HAND DRYER			
BUSSED SPACE				50	1	11	12	20	1		1,000	HAND DRYER			
BUSSED SPACE				50	1	13	14	20	1	200		RECEPTACLES			
BUSSED SPACE				50	1	15	16	20	1		200	RECEPTACLES			
BUSSED SPACE				50	1	17	18	20	1		1,000	WATER COOLER			
BUSSED SPACE				50	1	19	20	20	1	0		SPARE			
BUSSED SPACE				50	1	21	22	20	1	0		SPARE			
BUSSED SPACE				50	1	23	24	20	1		0	SPARE			
BUSSED SPACE				50	1	25	26	20	1	0		SPARE			
HP-IG		3,598		50	1	27	28	20	1	0		SPARE			
-			3,598		2	29	30	20	1		0	SPARE			
DHP-OG	750			20		31	32	20	1	0		SPARE			
-		750			2	33	34	20	1		0	SPARE			
CCHP-OC1			1,082	20		35	36	20	1		0	SPARE			
-	1,082			20	2	37	38	20	1	0		SPARE			
CCHP-OC2		1,082		20		39	40	30			2,250	WH-3			
-			1,082		2	41	42		2		2,250	-			
SUB TOTAL (VA)	2,226	6,176	5,762							1,600	4,050	4,650	SUB TOTAL (VA)		
TOTAL LOAD PHASE A:		3,826 (VA)													
TOTAL LOAD PHASE B:		10,226 (VA)													
TOTAL LOAD PHASE C:		10,412 (VA)													
TOTAL LOAD:		24,464 (VA) =		68	AMPS										
NOTES: 1. PANELBOARD TO BE BOLT-ON TYPE WITH DOOR-IN-DOOR CONSTRUCTION. 2. PROVIDE ARC FAULT LABEL PER DETAIL.															

NOTES:

- ALL RECESSED LUMINAIRES SHALL BE WIRED FROM A JUNCTION BOX AS SHOWN, INCLUDING LUMINAIRES IN A CONTINUOUS ROW. NO WIRING THRU FIXTURES. NO MORE THAN TWO LUMINAIRES SHALL BE CIRCUITED TO ONE JUNCTION BOX.
- LUMINAIRE SUPPORT WIRES TO BE A MINIMUM OF #14 GAGE PRE-STRAINED GALVANIZED WIRE ATTACHED AT OPPOSITE CORNERS. LUMINAIRE SHALL BE SUPPORTED TO THE STRUCTURE INDEPENDENT OF THE CEILING GRID.
- CONDUCTORS IN FLEXIBLE CONDUIT FROM JUNCTION BOX TO LUMINAIRE SHALL CONTAIN AN INSULATED GREEN GROUND WIRE, WITH NEUTRAL AND PHASE CONDUCTORS REQUIRED FOR THE CIRCUITING AND SWITCHING REQUIREMENTS INDICATED.
- JUNCTION BOXES SHALL BE ACCESSIBLE AND LOCATED WITHIN 1'-6" ABOVE LAY-IN CEILING INSTALLATION. PROVIDE PENDANT ALL-THREAD RODS AND/OR STRUT ASSEMBLIES TO MEET THIS REQUIREMENT WHERE DROP CEILING IS MORE THAN 1'-6" FROM STRUCTURE.
- CONTRACTOR SHALL INSTALL ALL T-BAR SAFETY CLIPS TO GRID. IF FIXTURE DOES NOT COME WITH GRID SAFETY CLIPS, THEN THE CONTRACTOR SHALL PROVIDE SUPPORT WIRES ON ALL FOUR SIDES.



DETAIL - TYPICAL LAY-IN LUMINAIRE INSTALLATION

SHEET TITLE : LUMINAIRE & PANEL SCHEDULE AND NOTES

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE : 10.13.2022

REVISED DATE : 11.29.2022

REVISED DATE :

REVISED DATE :

SHEET NO. :

E5.1

SOMERVILLE, ALABAMA

FOR THE

UNION HILL SCHOOL

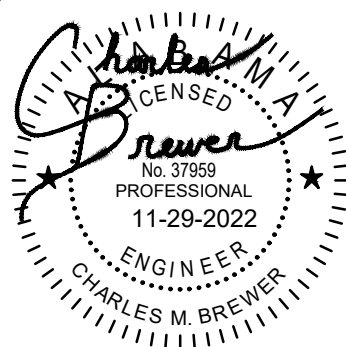
CLASSROOM ADDITION

MORGAN COUNTY BOARD OF EDUCATION

MCKEE and ASSOCIATES

ARCHITECTURE and INTERIOR DESIGN

631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9833



Gunn & Associates, P.C.  
Consulting Engineers  
3102 Highway 14  
Millbrook, AL 36054  
Tel: 334-285.1273  
1200 Providence Park, Suite 200  
Birmingham, AL 35242  
GA#22-065



PANEL - RP2												
TYPE: 225 AMP MAIN LUGS			AIC: 42,000 AMPERES			MOUNTED: SURFACE - NEMA 1			VOLTAGE: 120/208 VOLTS, 3 PHASE, 4 WIRE			
CIRCUIT DIRECTORY	(VA) PER PHASE			AMP	POLE	CIRCUIT NUMBER	AMP	POLE	(VA) PER PHASE			CIRCUIT DIRECTORY
	PHASE A	PHASE B	PHASE C						PHASE A	PHASE B	PHASE C	
LIGHTING	600			20	1	2	20	1	400			RECEPTACLES
LIGHTING		570		20	1	3	4	20	1	1,000		HAND DRYER
LIGHTING			574	20	1	5	6	20	1		1,000	HAND DRYER
LIGHTING	994			20	1	7	8	20	1	1,000		HAND DRYER
LIGHTING		1,056		20	1	9	10	20	1		1,000	HAND DRYER
LIGHTING			994	20	1	11	12	20	1		800	RECEPTACLES
LIGHTING	346			20	1	13	14	20	1	600		RECEPTACLES
SPARE		0		20	1	15	16	20	1		800	WATER COOLER
SPARE			0	20	1	17	18	20	1		1,000	RECEPTACLES
SPARE	0			20	1	19	20	20	1	800		RECEPTACLES
SPARE		0		20	1	21	22	20	1		800	RECEPTACLES
SPARE			0	20	1	23	24	20	1		1,000	RECEPTACLES
SPARE	0			20	1	25	26	20	1	800		RECEPTACLES
SPARE		0		20	1	27	28	20	1		800	RECEPTACLES
SPARE			0	20	1	29	30	20	1		1,000	RECEPTACLES
SPARE	0			20	1	31	32	20	1	600		RECEPTACLES
SPARE		0		20	1	33	34	20	1		1,000	RECEPTACLES
SPARE			0	20	1	35	36	20	1		1,000	RECEPTACLES
SPARE	0			20	1	37	38	20	1	600		RECEPTACLES
SPARE		0		20	1	39	40	20	1		1,000	RECEPTACLES
SPARE			0	20	1	41	42	20	1		800	WATER COOLER
BUSSED SPACE				50	1	43	44	20	1	1,000		RECEPTACLES
BUSSED SPACE				50	1	45	46	20	1		800	RECEPTACLES
BUSSED SPACE				50	1	47	48	20	1		800	RECEPTACLES
BUSSED SPACE				50	1	49	50	20	1	1,000		RECEPTACLES
BUSSED SPACE				50	1	51	52	20	1		1,200	RECEPTACLES
BUSSED SPACE				50	1	53	54	20	1		800	RECEPTACLES
BUSSED SPACE				50	1	55	56	20	1	1,000		HAND DRYER
BUSSED SPACE				50	1	57	58	20	1		200	RECEPTACLES
BUSSED SPACE				50	1	59	60	20	1		800	RECEPTACLES
BUSSED SPACE				50	1	61	62	20	1	1,000		RECEPTACLES
BUSSED SPACE				50	1	63	64	20	1		600	RECEPTACLES
BUSSED SPACE				50	1	65	66	20	1		600	RECEPTACLES
BUSSED SPACE				50	1	67	68	30		1,000		IT
BUSSED SPACE				50	1	69	70		2		1,000	-
BUSSED SPACE				50	1	71	72	20	1		400	RECEPTACLES
BUSSED SPACE				50	1	73	74	20	1	400		RECEPTAC

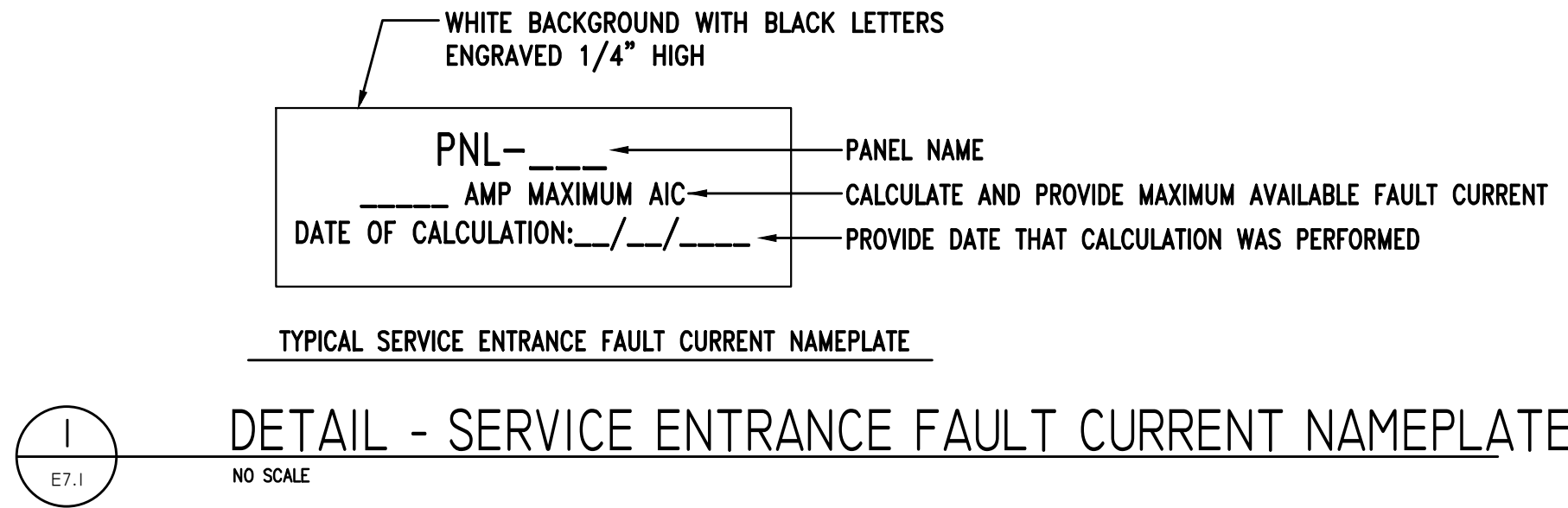
<

631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9933





RISER DIAGRAMS - ALUMINUM WIRE WILL BE ALLOWED FOR SERVICE ENTRANCE, PANELBOARD AND TRANSFORMER FEEDERS OF EQUAL AMPACITY FOR CONDUCTORS LARGER THAN #1 CABLE SIZE. ALL FEEDERS ARE CURRENTLY SIZED FOR COPPER. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO UPSIZE CONDUCTORS AND CONDUITS AS NEEDED FOR AMPACITY AND VOLTAGE DROP. DURING THE SUBMITTAL PHASE PROVIDE UPDATED ALUMINUM FEEDER SIZES FOR APPROVAL. COORDINATE WITH ALABAMA POWER FOR EXTRA RUNS OF CONDUCTORS TO THE TRANSFORMER. COMPRESSION LUGS WILL BE REQUIRED FOR ALL TERMINATION OF ALUMINUM WIRE WITH ANTI-OXIDANT COMPOUND.



INVERTER				
MARK	KVA	VOLTAGE		DESCRIPTION
		PRIMARY	SECONDARY	
INV	8.5KW	120/208V., 1PH., 3W.	120/208V., 1PH., 3W.	(6) 20A/1P (1) 40A/2P CENTRAL BATTERY INVERTER BY CONTROLLED POWER NO. ELU-LLX-8.5KW-0N10 (301555) RUN TIME 180 MINUTES EMERGI-LITE AND DUAL-LITE ARE EQUAL.

\* INVERTER SIZE SHALL BE CALCULATED USING THE FOLLOWING INFORMATION.  
LIGHTS: 3,200 WATTS  
FANS: (1) 1.0HP  
(5) FRACTIONAL HP  
SYSTEM IS DESIGNED AROUND CONTROLLED POWER. EQUAL MANUFACTURERS MUST MEET PHYSICAL EQUIPMENT SIZE AS SHOWN ON DRAWINGS.

#### POWER RISER DIAGRAM NOTES:

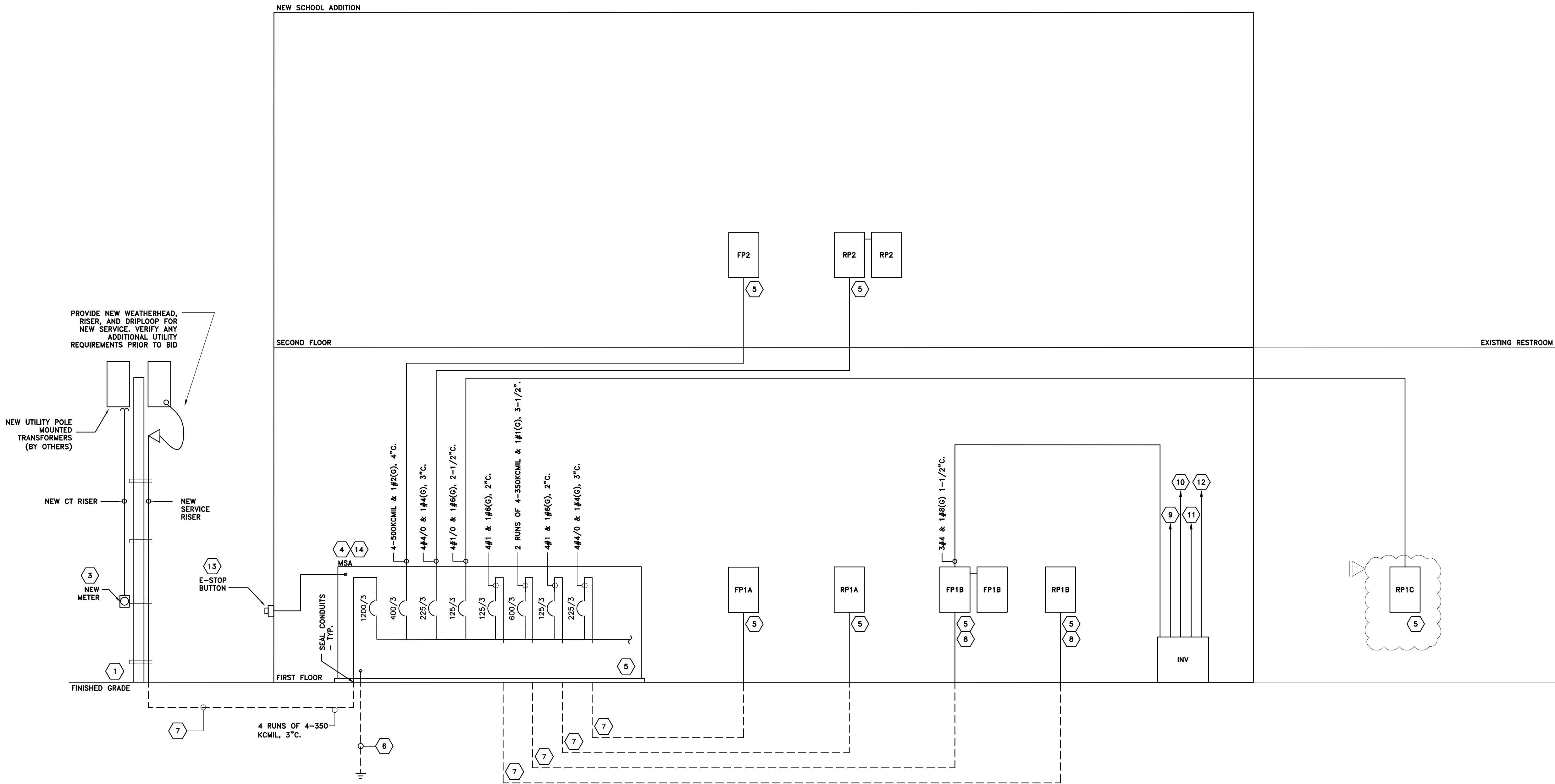
1. INSTALLATION AND CONNECTION OF ALL DEVICES SHALL BE IN ACCORDANCE WITH NEC, MANUFACTURER'S RECOMMENDATIONS, AND STATE AND LOCAL CODES.
2. CONTRACTOR IS RESPONSIBLE FOR THE CONNECTING, INSTALLATION, AND MARKING OF ALL POWER FEEDER CONDUCTORS FOR THE PROPER PHASE SEQUENCE AND LOADING. CONTRACTOR SHALL TEST EACH FEEDER AND EQUIPMENT FEEDERS WITH A PHASE METER PRIOR TO CONNECTING LOADS.
3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND VERIFYING WITH ALL DIVISIONS THE ACTUAL NAMEPLATE DATA OF ALL EQUIPMENT AND DEVICES SUPPLIED ON THIS PROJECT PRIOR TO BID. CONTRACTOR SHALL THEN PROVIDE THE PROPERLY SIZED OVERCURRENT DEVICES (CIRCUIT BREAKERS, CONDUCTORS, DISCONNECTS, FUSES, ETC.) TO PROPERLY PROTECT THE EQUIPMENT PER THE NEC. ENGINEER'S DESIGN BASED ON DATA GIVEN TO HIM BY DESIGNERS OF OTHER DIVISIONS, ACTUAL NAMEPLATE DATA COULD DIFFER.
4. SEAL ALL CONDUITS FROM THE EXTERIOR WITH A SEALING COMPOUND, ONCE ALL CABLING HAS BEEN INSTALLED.
5. PROVIDE 4" CONCRETE HOUSEKEEPING PAD WITH 1" CHAMFER FOR ALL FLOOR MOUNTED TRANSFORMERS AND SWITCHBOARDS.
6. COORDINATE WITH GROUNDING DETAILS ON SHEET E7.02 FOR ALL THE DIFFERENT TYPE GROUNDING REQUIREMENTS.
7. ALL UNDERGROUND SECONDARY FEEDERS SHALL BE A MINIMUM OF 36" BELOW GRADE TO THE TOP OF THE DUCT BANK.
8. ALL UNDERGROUND PRIMARY FEEDERS SHALL BE A MINIMUM OF 48" BELOW GRADE TO THE TOP OF THE CONDUIT.
9. CONTRACTOR SHALL PROVIDE A FULL SIZE COPY OF THE AS-BUILT POWER RISER DIAGRAM FRAMED BEHIND PLEXIGLASS SCREWED TO THE WALL NEAR MAIN SERVICE PANEL.

#### NOTES:

1. CONTRACTOR SHALL CALCULATE AND PROVIDE NAMEPLATE ON THE SERVICE ENTRANCE EQUIPMENT THAT INDICATES THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE CALCULATION WAS PERFORMED. SEE NAMEPLATE REQUIREMENTS BELOW.

#### SHEET NOTES:

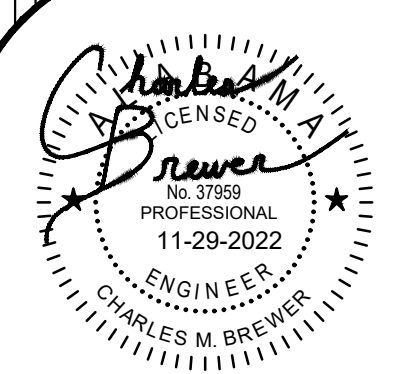
1. NEW POLE MOUNTED SERVICE. ELECTRICAL CONTRACTOR TO COORDINATE SHUTDOWNS AND ANY ADDITIONAL ITEMS WITH UTILITY. COORDINATE WITH SCHOOL OFFICIALS A MIN. OF 2 WEEKS PRIOR FOR ALL OUTAGES REQUIRED.
2. NOTE NOT USED.
3. METER PROVIDE BY UTILITY COMPANY. ELECTRICAL CONTRACTOR TO PROVIDE METER CONDUIT PER UTILITY COMPANY SPECIFICATIONS.
4. MSA - 1200 AMP, 120/208V, 3PH., 4W., SWITCHBOARD, SHUNT TRIP MAIN CIRCUIT BREAKER, 100% RATED, INTEGRAL SPD, RATED FOR SERVICE ENTRANCE EQUIPMENT, 42,000 AIC.
5. SEE PANELBOARD SCHEDULE FOR CIRCUIT BREAKER PROVISIONS.
6. PROVIDE GROUNDING PER DETAIL ON SHEET E7.2.
7. FEEDER CIRCUIT SHALL BE INSTALLED UNDERGROUND BELOW SLAB.
8. FEEDERS FOR PANELBOARDS IN STORM SHELTER SHALL BE FED FROM BELOW. NO FEEDER CONDUITS SHALL PENETRATE SHELTER WALLS.
9. LIGHTING IN STORM SHELTER SHALL BE CONNECTED TO INVERTER. SEE SHEET E2.1 FOR ADDITIONAL INFORMATION.
10. VENTILATION FAN SAF-1, EF-A1, EF-A2, EF-B1, EF-B2, & EF-E SHALL BE CONNECTED TO THE INVERTER. SEE EQUIPMENT SCHEDULE E3.5 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
11. STORM SHELTER PLUMBING SHUTOFF VALVE. SEE PLUMBING FOR LOCATION.
12. RELAY CONTACT FOR SAF-1
13. PROVIDE E-STOP BUTTON WITH OUTDOOR ENCLOSURE, CIRCUITED TO MAIN BREAKER SHUNT TRIP, 120V, 2#12 & 1#12(G), 3/4". VERIFY LOCATION ON EXTERIOR BUILDING WITH LOCAL FIRST RESPONDER AUTHORITY.  
STB: #SS227490-CN  
COVER: "IN CASE OF EMERGENCY"  
"LIFT COVER - PRESS BUTTON"  
BUTTON: "EMERGENCY"  
"POWER OFF"
14. SEE SERVICE ENTRANCE NAMEPLATE DETAIL THIS SHEET.



4 RISER DIAGRAM POWER DISTRIBUTION - NEW BUILDING

CLASSROOM ADDITION  
FOR  
UNION HILL SCHOOL  
SOMERVILLE, ALABAMA  
FOR THE  
MORGAN COUNTY BOARD OF EDUCATION

McKee and Associates  
ARCHITECTURE and INTERIOR DESIGN



SHEET TITLE : RISER DIAGRAM AND NOTES

MCKEE JOB # : 22-134

DRAWN BY : CMB

DATE : 10.13.2022

REVISED DATE : 11.29.2022

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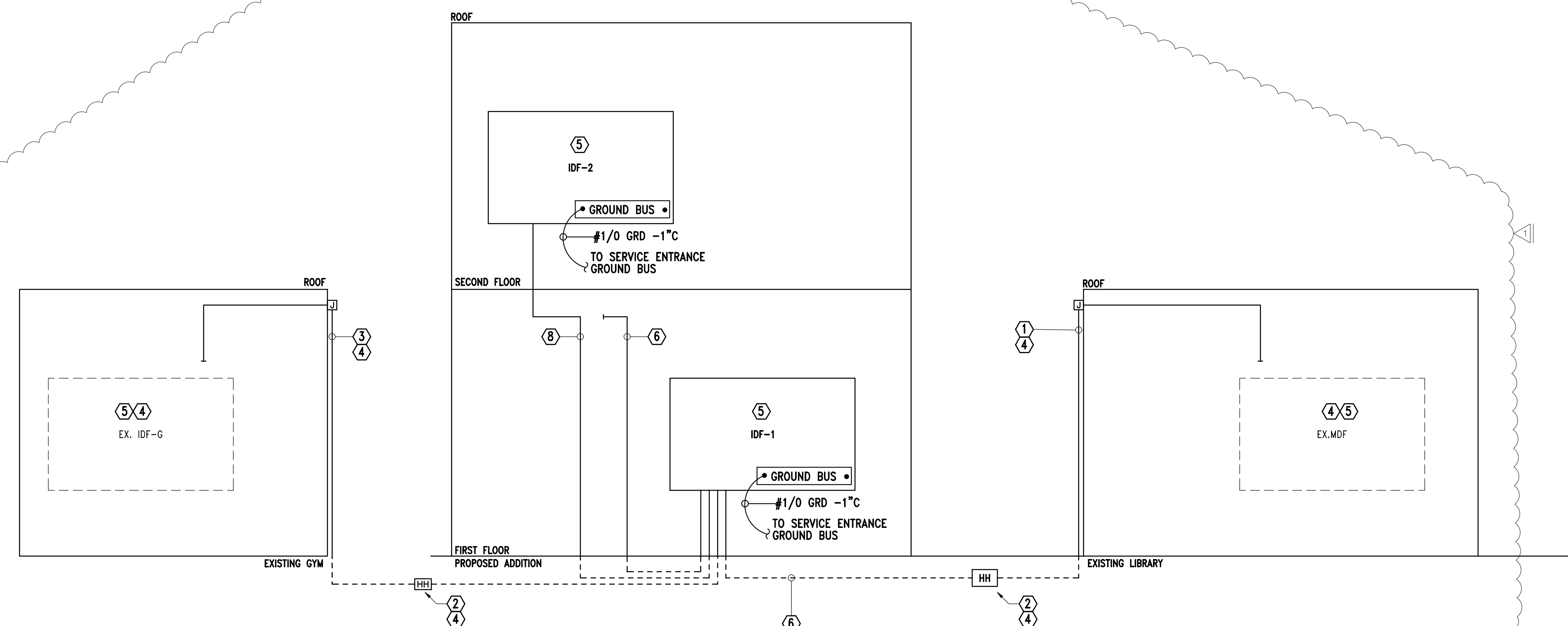
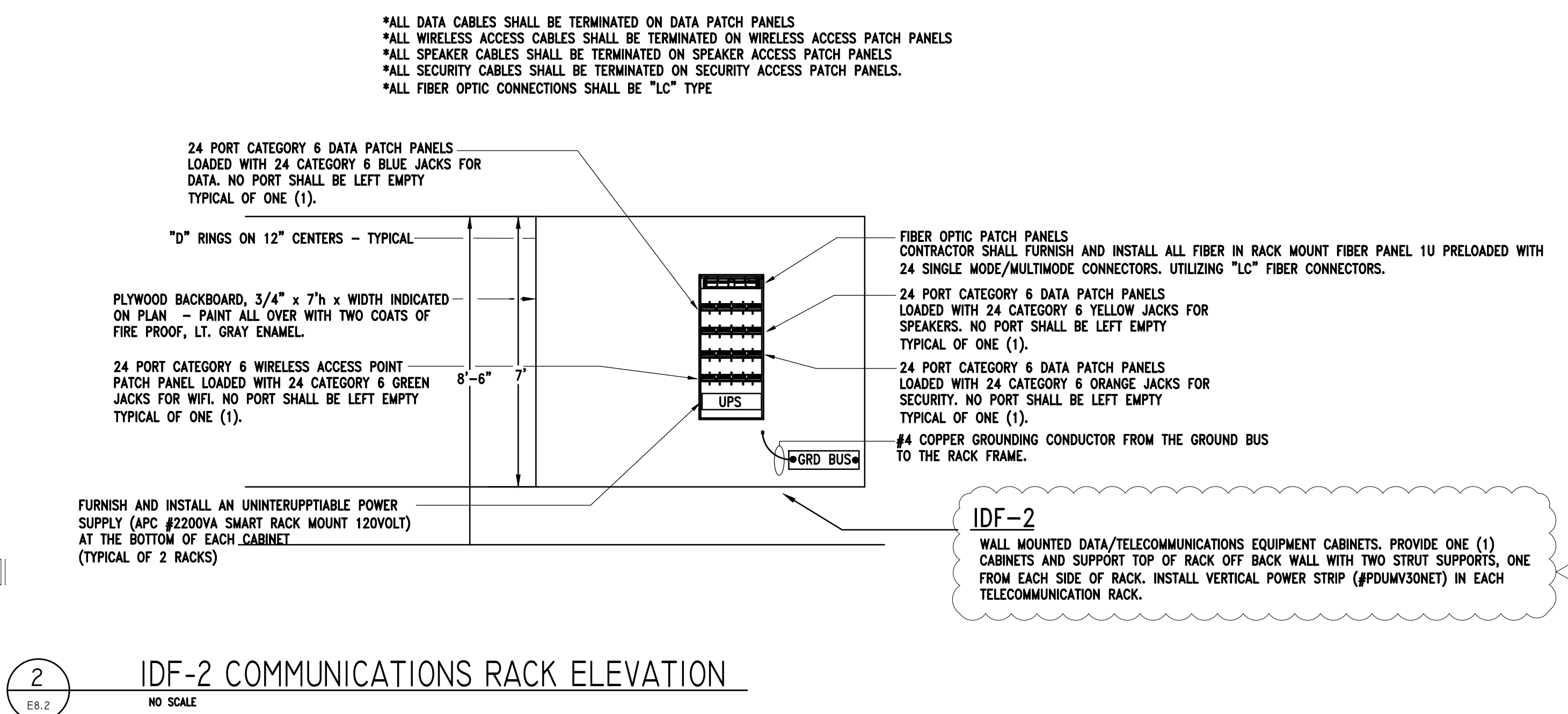
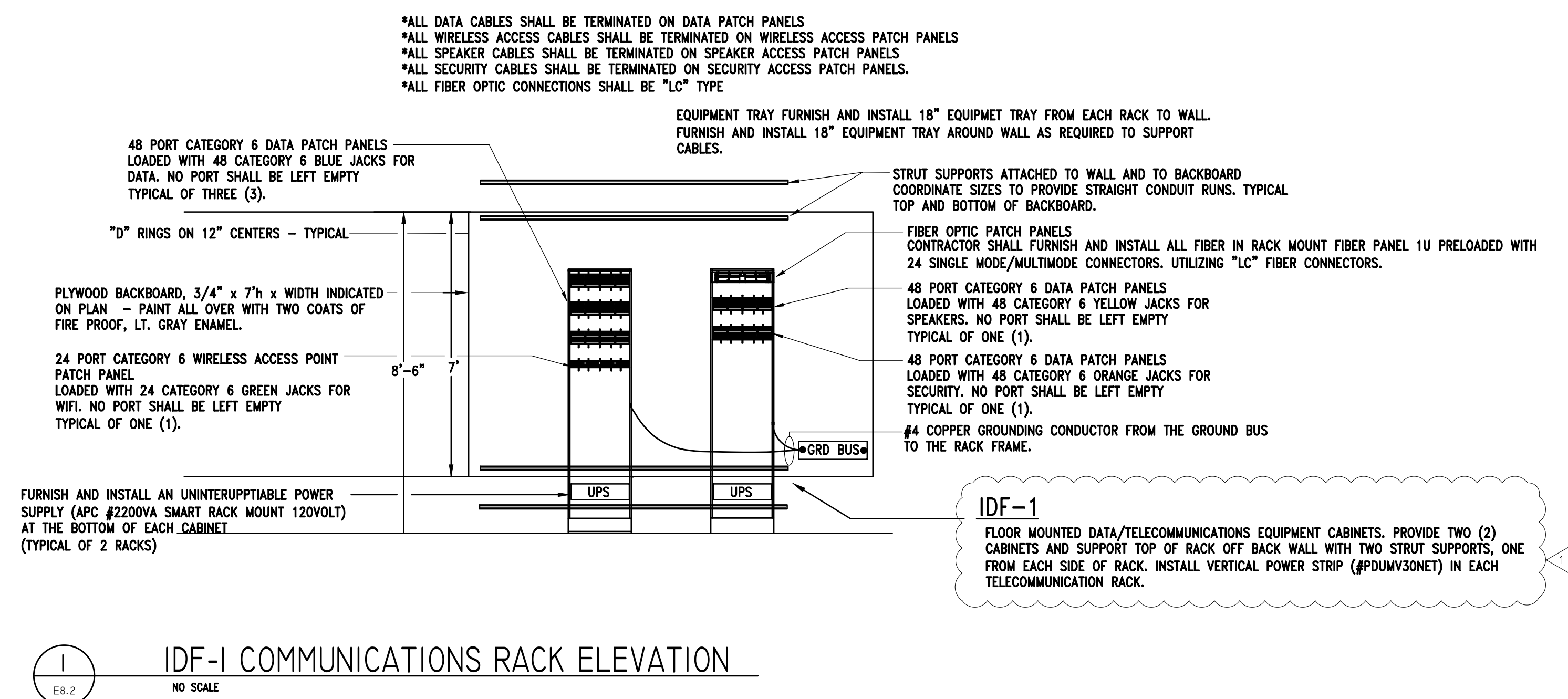
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E7.1

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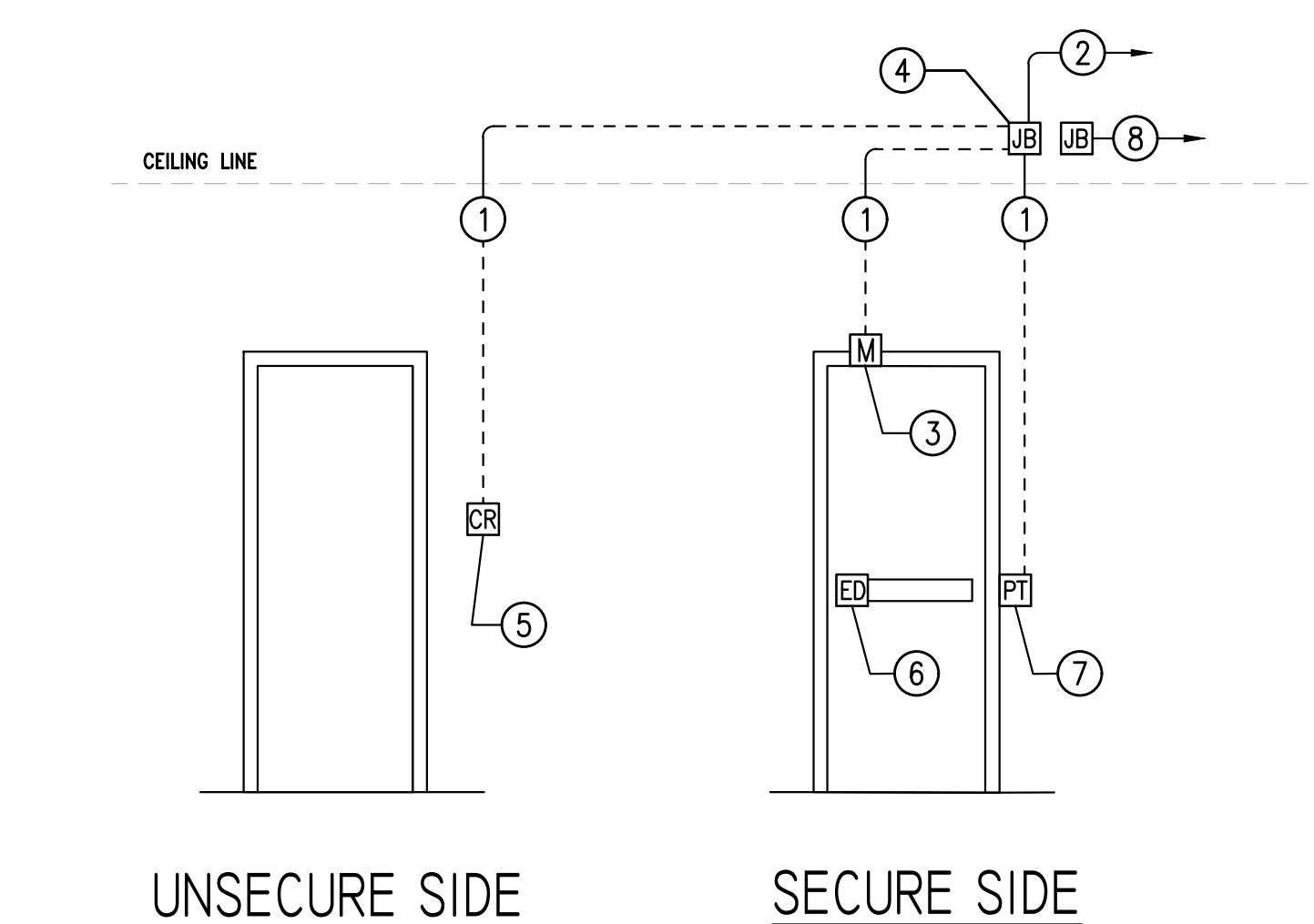
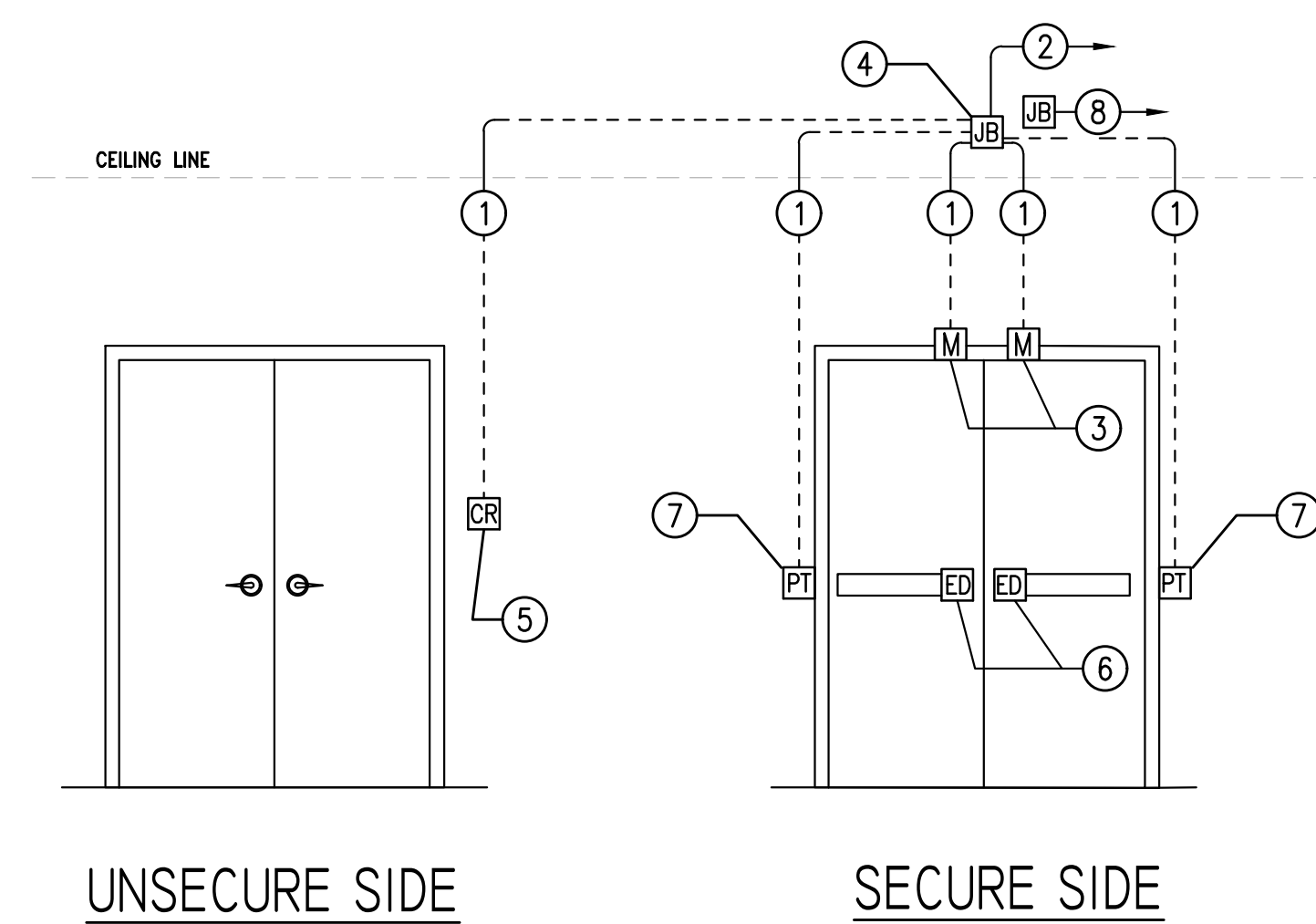


- KEYED NOTES:

- ① PROVIDE 2" CONDUIT EXTENDED FROM ABOVE EXISTING MDF, ABOVE CEILING, THROUGH EXTERIOR WALL. CONDUIT SHALL EXTEND DOWN BELOW GRADE, TO FIBER HAND HOLE. PROVIDE (2) 12 STRAND (OSP) SINGLE MODE FIBER OPTIC CABLE. VERIFY ROUTE AND LOCATION PRIOR TO BIDS AND ADJUST LENGTHS AS REQUIRED. SEE SITE PLAN FOR ADDITIONAL INFORMATION.
- ② NEW COMMUNICATION HANDHOLE. SEE SITE PLAN FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- ③ PROVIDE 2" CONDUIT EXTENDED FROM ABOVE CEILING OF EXISTING GYM, THROUGH EXTERIOR WALL. CONDUIT SHALL EXTEND DOWN BELOW GRADE, TO FIBER HAND HOLE. PROVIDE 12 STRAND (OSP) SINGLE MODE FIBER OPTIC CABLE. VERIFY ROUTE AND LOCATION PRIOR TO BIDS AND ADJUST LENGTHS AS REQUIRED. SEE SITE PLAN FOR ADDITIONAL INFORMATION.
- ④ SEE SITE PLAN FOR LOCATION.
- ⑤ PROVIDE ADDITIONAL FIBER OPTIC PATCH PANELS AS NEEDED.
- ⑥ 2-2" C. FOR PATHWAY FROM UNPROTECTED SPACE TO INSIDE STORE SHELTER, SEE E4.1
- ⑦ SEE SITE PLAN FOR INFORMATION
- ⑧ PROVIDE 2" CONDUIT EXTENDED FROM IDF-1 TO IDF-2. PROVIDE 12 STRAND (OSP) SINGLE MODE FIBER OPTIC CABLE. VERIFY ROUTE AND LOCATION PRIOR TO BIDS AND ADJUST LENGTHS AS REQUIRED. SEE E4.1 FOR PATHWAY.

- COMMUNICATION NOTES:

1. PROVIDE 5/8" STRUT ASSEMBLY AT TOP AND BOTTOM OF IDF TO SUPPORT ALL CONDUITS TERMINATING AT BACKBOARD.
2. TBB SHALL BE 3/4" PLYWOOD EXTERIOR RATED AND CUT TO COVER ALL WALLS OR AS INDICATED. PAINT WITH TWO COATS OF FIRE RETARDANT PAINT. MOUNT 2" AFF.
3. PROVIDE A PLASTIC BUSHING OR PROTECTIVE COLLAR AT EACH CONDUIT TERMINATION, INCLUDING TERMINATIONS ABOVE THE CEILING, AT CABLE TRAY, OR AT TBB.
4. ALL CONDUIT TERMINATIONS SHOULD BE DONE EVENLY AT THE TOP AND BOTTOM OF TBB. TERMINATIONS SHALL BE MADE WITHIN THE FIRST FEW INCHES OF THE TBB.
5. SEAL ALL CONDUITS FROM THE EXTERIOR WITH A SEALING COMPOUND, ONCE ALL CABLEING HAS BEEN INSTALLED.
6. PROVIDE GROUND BUS FOR EACH TBB. SEE GROUND BUS INSTALLATION DETAIL.
7. PROVIDE ALL CONDUITS WITH PULLWIRES.
8. STENCIL ALL JUNCTION BOX COVERS ABOVE THE CEILING WITH 2" LETTERS THAT READ "COMM".
9. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL RACEWAYS, CABLE TRAY, CABLING, PATCH PANELS, TERMINATIONS, BACKBOARDS, ETC. SEE RISER DIAGRAM, DETAILS, AND SPECIFICATIONS FOR FURTHER EQUIPMENT REQUIREMENTS.
10. PROVIDE 1/2" CRANK STAYS WITHIN THE CEILING AND LOWER THE GROUNDING WITH MINIMUM SIZE WIRE OF #1/0.
11. COMMUNICATION CABLEING AND EQUIPMENT MUST BE COMPATIBLE WITH THE EXISTING LEVITON SYSTEM PROVIDED IN RECENT GYMNASIUM PROJECT AT THE MDF. MAINTAIN CURRENT MANUFACTURER WARRANTIES ON ALL EXISTING IT EQUIPMENT.

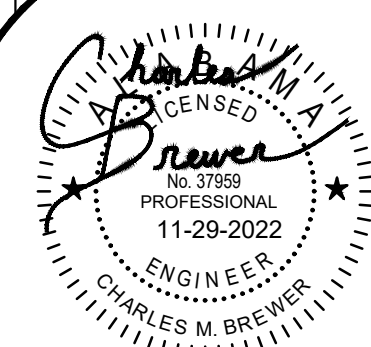


- DOOR/SECURITY/ACCESS HARDWARE KEY

- ① 3/4" CONDUIT TO JUNCTION BOX.
- ② 3/4" CONDUIT STUBBED TO ABOVE NEAREST ACCESSIBLE CEILING.
- ③ RECESSED DOOR POSITION SWITCH. FRAME TO BE PREPPED BY DOOR SUPPLIER.
- ④ 4 SQUARE JUNCTION BOX MOUNTED ABOVE NEAREST ACCESSIBLE CEILING.
- ⑤ CARD READER, SEE SPECIFICATIONS FOR MODEL NUMBER. MOUNTED 48" A.F.F. ON SINGLE GANG BOX.
- ⑥ EXIT DEVICE WITH LATCH RETRACTION AND INTEGRAL REQUEST - TO - EXIT SWITCH.
- ⑦ POWER TRANSFER HINGE. (BY OTHERS)
- ⑧ PROVIDE (1) CAT 6 CONNECTION BACK TO IDF WITH 15' SLACK AT DOOR.

CLASSROOM ADDITION  
FOR  
UNION HILL SCHOOL  
SOMERVILLE, ALABAMA  
FOR THE  
MORGAN COUNTY BOARD OF EDUCATION

**McKee and Associates**  
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SHEET TITLE : AUXILIARY DETAILS

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## E8.2

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