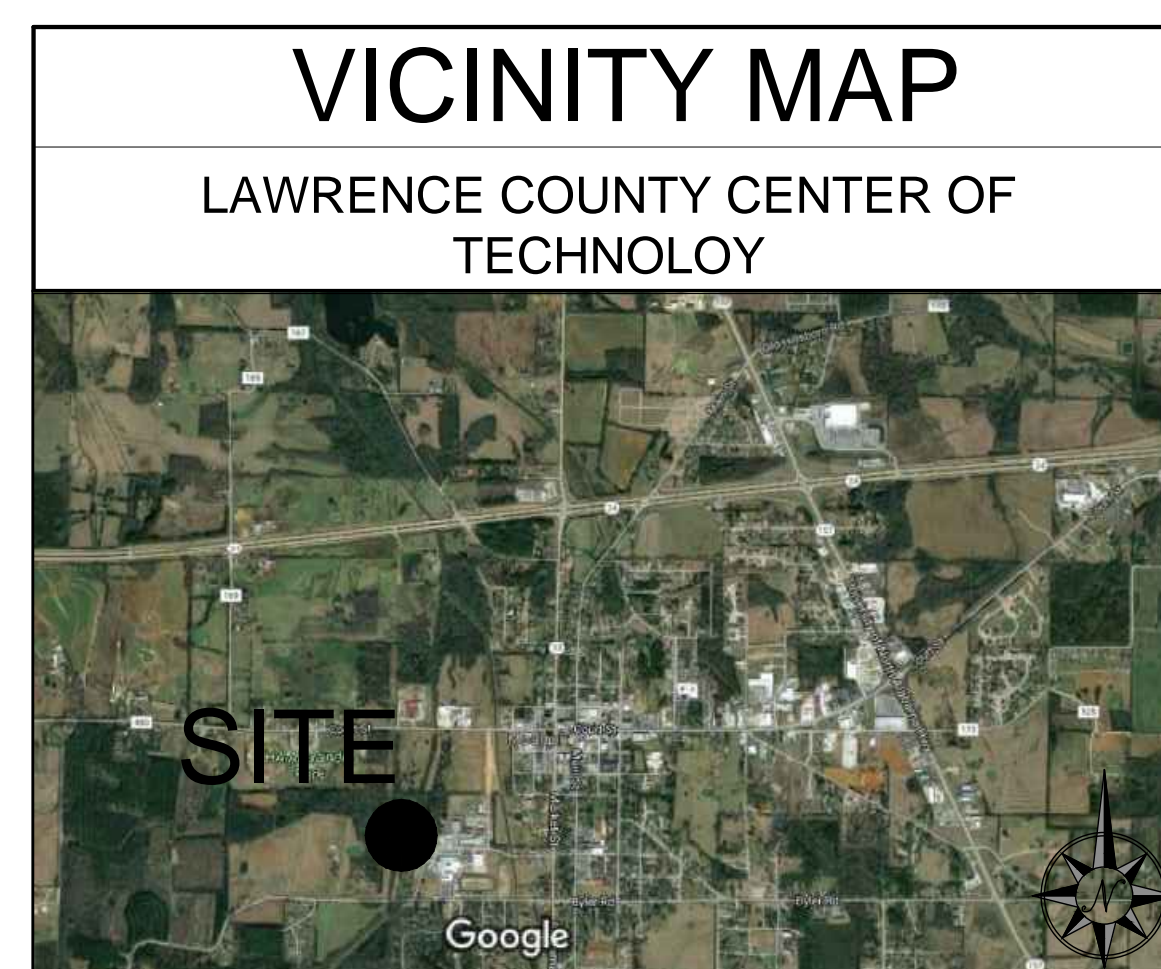


# MECHANICAL & ELECTRICAL IMPROVEMENTS

FOR THE

## LAWRENCE COUNTY BOARD of EDUCATION

LAWRENCE COUNTY, ALABAMA



## CONTACTS

CONTACTS	
<u>OWNER</u> Lawrence County Board of Education 14131 Market Street Moulton, Alabama 35650 Phone: (256) 905-2400	<u>PLUMBING and MECHANICAL</u> Zgouvas, Eiring and Associates 800 South McDonough Street Montgomery, Alabama 36104 Phone: (334) 263.4406
<u>ARCHITECTURAL</u> Mckee and Associates 631 South Hull Street Montgomery, Alabama 36104 Phone: (334) 834.9933	<u>ELECTRICAL</u> Gunn and Associates 3102 Highway 14 Millbrook, AL 36054 Phone: (334) 285.1273

## INDEX TO DRAWINGS

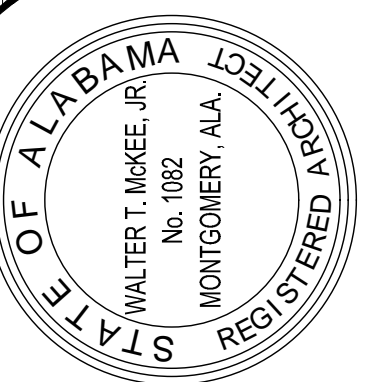
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## MECHANICAL & ELECTRICAL IMPROVEMENTS

LAWRENCE COUNTY BOE

LAWRENCE COUNTY, ALABAMA

**McKee and Associates**  
ARCHITECTURE and INTERIOR DESIGN  
631 SOUTH HULL STREET MONTGOMERY, ALABAMA 36104 (334) 834-9933



SHEET TITLE : TITLE SHEET and INDEX  
TO DRAWINGS

MCKEE JOB #: 17.189

DRAWN BY : LAB

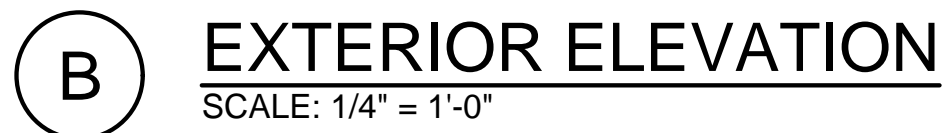
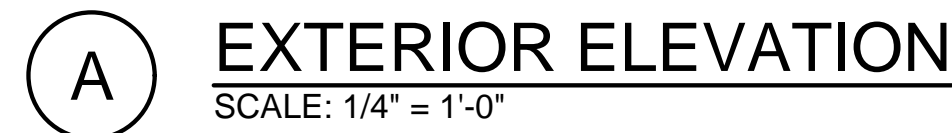
DATE: 09.21.17

REVISÉ DATE:

REVISÉ DATE:

REVISÉ DATE:

SHEET NO. : **G0.1**



# EXIT CALCULATIONS

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**TOTAL BUILDING AREA**

OCCUPANCY TYPE : GROUP 'U'  
BUILDING TYPE: 2B  
ALLOWABLE SF: **8,500** SQ FT (TABLE 506.2)  
ACTUAL SF : **1,280** SQ FT

ALLOWABLE HEIGHT

ALLOWABLE HEIGHT: **55** FT (TABLE 504.3)  
ALLOWABLE NO. OF STORIES: **2** (TABLE **504.4**)  
ACTUAL BUILDING HEIGHT: **4** 20 FT  
ACTUAL NO. OF STORIES: **1**

**OCCUPANT LOAD**


OCCUPANT LOAD TOTAL (1004 & TABLE 1004.1.2) =  
**5** PERSONS

**EXIT REQUIREMENTS**

EXIT ACCESS (1016 & TABLE 1006.3.1)  
NO. OF EXITS REQUIRED: **1**  
NO. OF EXITS FURNISHED: **1**

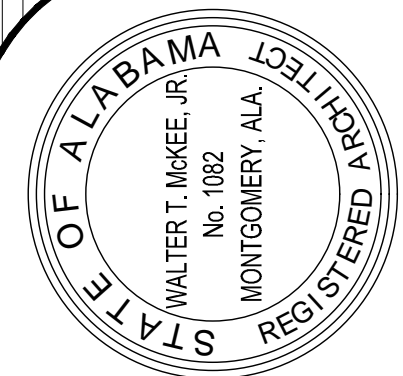
MEANS OF EGRESS WIDTH (TABLE 1005.3.2)  
**SEE PLAN FOR EXIT WIDTHS**



FLOOR PLAN LEGEND	
<u>SYMBOL</u>	<u>DESCRIPTION</u>
	FIRE EXTINGUISHER CABINET (SEE DETAIL A9.1)

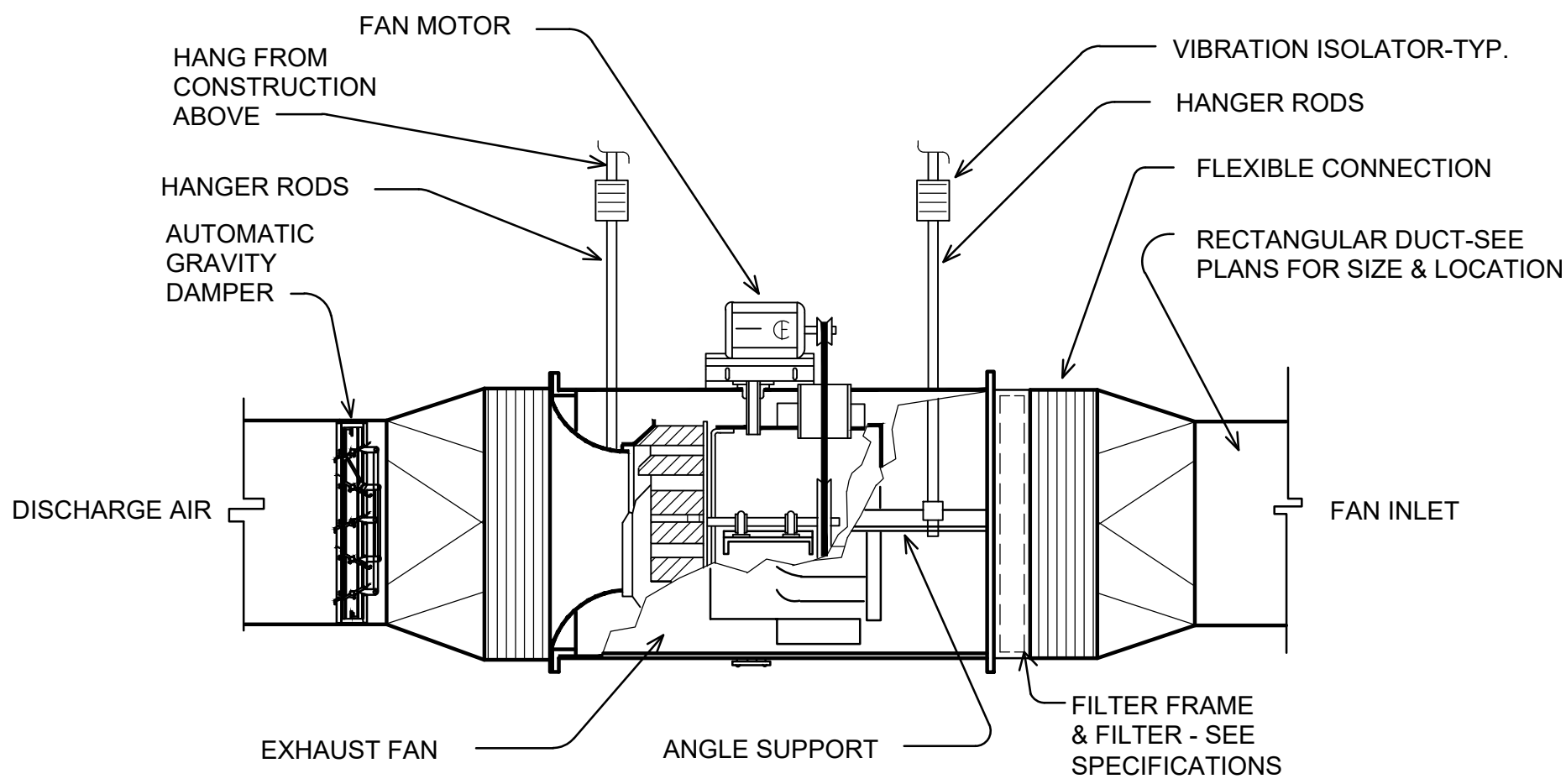
MECHANICAL & ELECTRICAL IMPROVEMENTS  
FOR THE  
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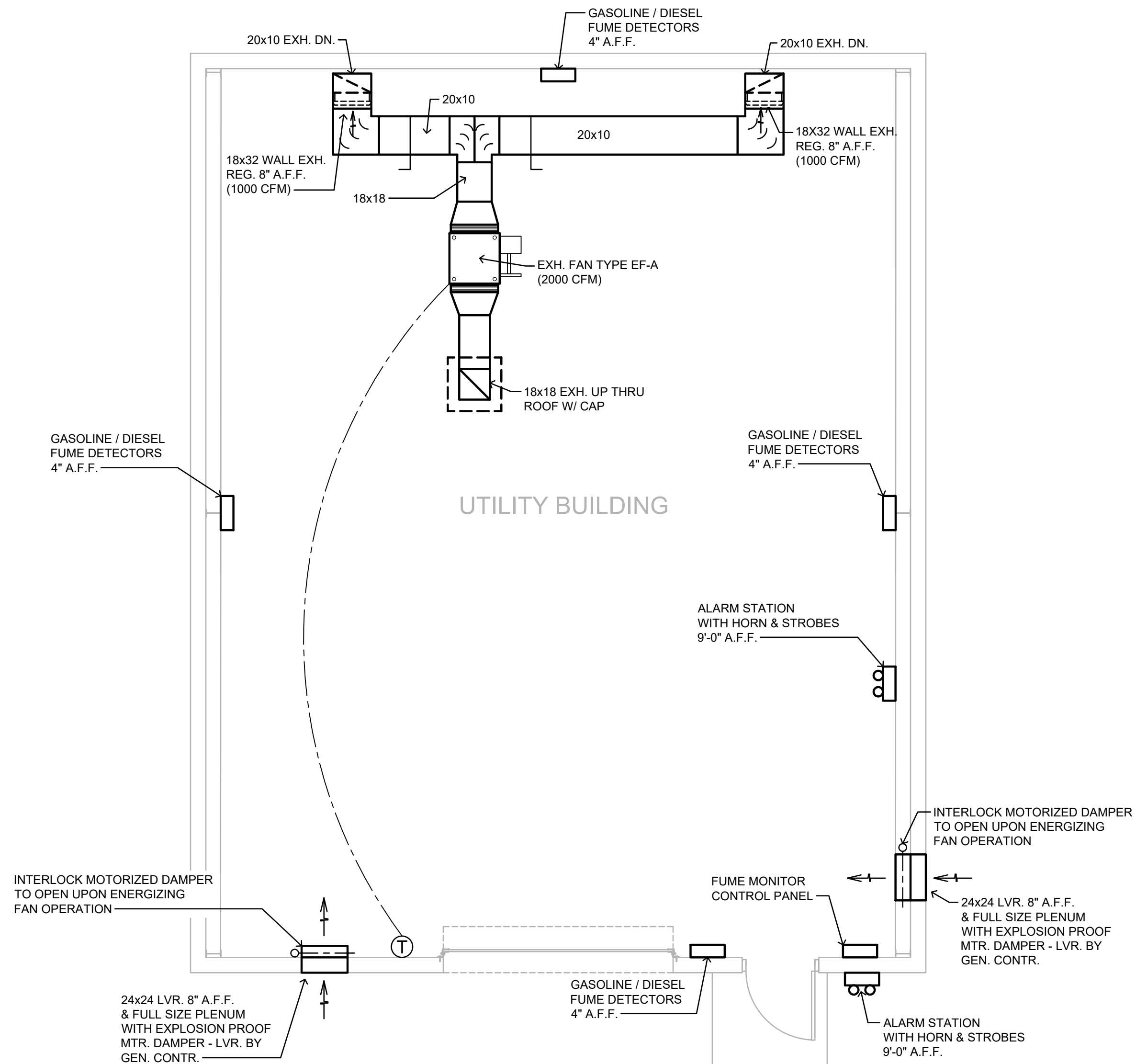


SHEET NO. : **A1.1**





CABINET TYPE IN-LINE CENTRIFUGAL FAN DETAIL  
NOT TO SCALE



VENTILATION FLOOR PLAN  
SCALE: 1/4" = 1'-0"

FANS SCHEDULE

FAN TYPE	FAN CFM	DESCRIPTION	MINIMUM FAN SIZE INCHES	APPROX. WALL / ROOF OPENING -INCHES	MAXIMUM FAN SPEED RPM	APPROX. EXT. STATIC PRESS. IN. WTR. COL.	FAN MOTOR				CONTROL INTERLOCK	REMARKS
							MIN. WATTS	POWER VOLTS	PH.	HERTZ		
EF-A	2000	IN-LINE, CENTRIFUGAL, BELT DRIVEN	18.0	N/A	883	.67	1/2 HP	120	1	60	SEE NOTE BELOW	EXPLOSION PROOF & PETROLEUM RESISTANT COATING

NOTE:  
EF-A SHALL BE ENERGIZED UPON DETECTION OF GASOLINE / DIESEL / HYDROCARBON FUMES - WHEN MONITORING SYSTEM DOES NOT CALL FOR EXHAUST, EF-A SHALL BE ENERGIZED BY THE EF-A THERMOSTAT

MECHANICAL & ELECTRICAL IMPROVEMENTS

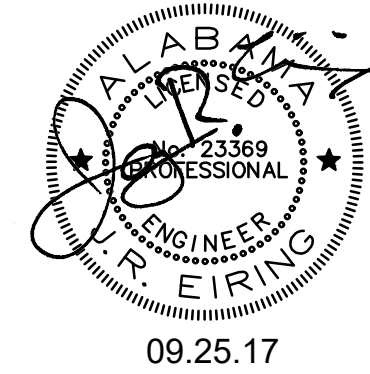
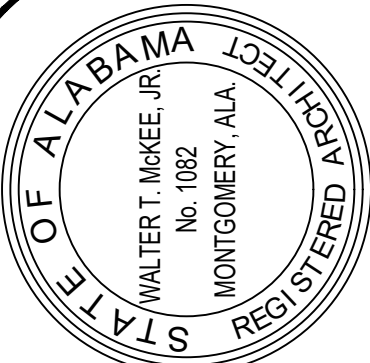
FOR THE  
LAWRENCE COUNTY BOE

LAWRENCE COUNTY, ALABAMA

McKEE and ASSOCIATES

ARCHITECTURE and INTERIOR DESIGN

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



SHEET TITLE : VENTILATION PLAN

MCKEE JOB # : 17.189

DRAWN BY : C. WARD

CHECKED BY : T. ZGOUVAS

DATE : 09.25.17

REVISED DATE:

REVISED DATE:

REVISED DATE:



SHEET NO. : M1

ELECTRICAL LEGEND

CEILING OUTLETS

EF EXHAUST FAN

BRANCH CIRCUITING

— RUN CONCEALED UNDER FLOOR OR IN GRADE  
— RUN CONCEALED IN CEILING OR WALLS  
LA-1 HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #12, 1 #12 GROUND - 3/4" C; -10- 3 #12, 1 #12 GROUND - 3/4" C; -10- 4 #12, 1 #12 GROUND - 3/4" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.  
LA-1 10 HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #10, 1 #10 GROUND - 3/4" C; -10- 3 #10, 1 #10 GROUND - 3/4" C; -10- 4 #10, 1 #10 GROUND - 1" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.  
LA-1 8 HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #8, 1 #10 GROUND - 1" C; -8- 3 #8, 1 #10 GROUND - 3/4" C; -8- 4 #8, 1 #10 GROUND - 1 1/4" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.  
6 WHERE A NUMBER IS SHOWN NEXT TO OR ON THE CIRCUIT OR HOMERUN, THE NUMBER INDICATES CONDUCTOR SIZE OTHER THAN #12 - NUMBER #6 CONDUCTORS INDICATED. PROVIDE GROUND SIZED PER NEC TABLE 250-95 FOR MAX AMPACITY OF CONDUCTOR SIZE AS SHOWN. SIZE CONDUIT PER NEC ANNEX C.  
~ LIQUID-TIGHT FLEXIBLE CONDUIT CONNECTION  
— SURFACE MOUNTED CONDUIT; RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES  
E EMPTY CONDUIT WITH PULLWIRE RUN CONCEALED IN CEILING OR WALLS

PANELS AND POWER

■ PANELBOARD

CON CONTROL PANEL

WALL SWITCHES (UNLESS OTHERWISE NOTED, MOUNT 48" A.F.F.)

SM MOTOR RATED TOGGLE SWITCH DISCONNECT, WITH THERMAL OVERLOADS A.C. TYPE, 20 AMP, 120/277 VOLT (EXPLOSION PROOF)

MISCELLANEOUS EQUIPMENT

CON CONTROL PANEL

MISCELLANEOUS

A AMPERE  
ADA AMERICANS WITH DISABILITIES ACT  
AFF ABOVE FINISH FLOOR  
AIC AMPERE INTERRUPTING CAPACITY  
ATS AUTOMATIC TRANSFER SWITCH  
C CONDUIT  
CL CENTER LINE  
CWP COLD WATER PIPE  
EM EMERGENCY  
EMT ELECTRIC METALLIC TUBING  
GFI GROUND FAULT INTERRUPTER  
GRC GALVANIZED RIGID METAL CONDUIT  
GRD GROUND  
MCB MAIN CIRCUIT BREAKER  
MCC MOTOR CONTROL CENTER  
MLO MAIN LUGS ONLY  
MT MOUNT  
N NEUTRAL  
NIC NOT IN CONTRACT  
NIC NATIONAL ELECTRICAL CODE  
NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.  
NFPA NATIONAL FIRE PROTECTION ASSOCIATION  
NL NIGHT LIGHT  
NTS NOT TO SCALE  
P POLE  
PF POWER FACTOR  
PH PHASE  
PNL PANEL  
PVC PVC (POLYVINYL CHLORIDE) CONDUIT  
SLD SINGLE LINE DIAGRAM  
TBB TELEPHONE BACKBOARD  
TVSS TRANSIENT VOLTAGE SURGE SUPPRESSORS  
UL UNDERWRITER'S LABORATORY  
UL UNLESS NOTED OTHERWISE  
V VOLTAGE  
W WIRE  
WP WEATHERPROOF  
# NUMBER  
3R NEMA 3R WEATHERPROOF ENCLOSURE  
4X NEMA 4X WEATHERPROOF/CORROSION ENCLOSURE

GENERAL ELECTRICAL NOTES:

1. THE SERVICE VOLTAGE TO THE FACILITY IS 120/208 VOLT, 3 PHASE, 4 WIRE.
2. INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES, AND MANUFACTURER'S RECOMMENDATIONS.
3. MAINTAIN ALL CLEARANCES FOR ELECTRICAL EQUIPMENT PER THE NEC.
4. COORDINATE ROUGH-IN OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. AVOID ALL BACKSPASHES AT COUNTERS.
5. ALL DIMENSIONS INDICATED IN THESE DOCUMENTS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD, AND COORDINATING WORK WITH OTHER TRADES TO AVOID CONFLICTS.
6. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL BEFORE ROUGH-IN OF LIGHT SWITCHES TO ENSURE PROPER SWITCH LOCATION.
7. THE LOCATION OF OUTLETS, FIXTURES, AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE, OFFSET AS NEEDED OR AS REQUESTED BY THE OWNER. THE OWNER SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ANY ADDITIONAL COST.
8. COORDINATE EXACT LOCATION OF ALL ELECTRICAL FLOOR DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
9. ALL CONDUIT SIZE SHALL BE A MINIMUM 3/4" UNLESS NOTED OTHERWISE IN THE DRAWINGS OR SPECIFICATIONS.
10. ALL ELECTRICAL RACEWAYS AND CABLING SHALL BE INSTALLED CONCEALED WITHIN THE CONFINES OF THE BUILDING FOUNDATIONS EXCEPT THOSE SPECIFICALLY SERVING LOADS OR EQUIPMENT EXTERIOR OF THE BUILDING. ALL SUCH RACEWAYS SHALL BE A MINIMUM 18" INSIDE FOUNDATIONS AND POWER AND COMMUNICATIONS RACEWAYS SHALL BE SEPARATED BY A MINIMUM 18".
11. ALL CONDUITS INSTALLED UNDERFLOOR SHALL BE ROUTED UNDER STRUCTURAL CONCRETE FLOOR SLABS. CONTRACTOR SHALL NOT INSTALL CONDUITS IN CONCRETE FLOORING WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER. CONDUITS PENETRATING THRU CONCRETE FLOORS SHALL ADHERE TO THE ELECTRICAL SPECIFICATIONS AND RECOMMENDATIONS OF THE STRUCTURAL ENGINEER.
12. ALL RACEWAYS INSTALLED ON EXTERIOR OF THE BUILDING, INCLUDING CONDUIT UNDER CANOPIES, SHALL BE GRC. EMT WILL NOT BE ACCEPTED.
13. ALL RACEWAYS SHALL BE SUPPORTED PER NEC AND AT LEAST EVERY 10' AND WITHIN 3' OF EVERY JUNCTION BOX. RACEWAYS SUPPORTED ON BOTTOM OF SECONDARY CEILING SHALL BE SUPPORTED FROM THE STRUCTURE NOT FROM THE GYPBOARD CEILING.
14. ALL EMPTY WALL MOUNTED JUNCTION BOXES SHALL BE PROVIDED WITH A WALL BLANK AND ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH A PULL WIRES.
15. PROVIDE ALL CONDUIT STUBS WITH A PROTECTIVE COLLAR.
16. INSURE THAT ALL PENETRATIONS OF FIRE WALLS AND DECKS ARE PROPERLY SEALED PER INTERNATIONAL BUILDING CODE 712 AND WITH AN UL APPROVED DEVICE OR FIRE CAULK. REFER TO ARCHITECTURAL PLANS FOR THE LOCATIONS OF RATED FIRE WALLS AND UL ASSEMBLY LOCATIONS AND TYPES AND BID ACCORDINGLY.
17. PROVIDE A CONDUIT EXPANSION JOINTS WITH BONDING JUMPER IN ALL CONDUITS CROSSING AN EXPANSION JOINT. REFER TO ARCHITECTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS.
18. ALL UNDERGROUND CONDUITS RUNS ENTERING THE BUILDING SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE.
19. ALL FLEXIBLE CONDUITS ON THE EXTERIOR, IN WET LOCATIONS OR ANY MECHANICAL ROOM SHALL BE LIQUID TIGHT WITH SUITABLE FITTINGS.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING AROUND DEVICES, PENETRATIONS, OUTLETS, AND CONDUITS THAT PENETRATE THE WALLS ABOVE THE CEILING TO MAINTAIN SOUNDPROOFING. CONTRACTOR SHALL VERIFY THAT THE OPENINGS SIZES ARE LESS THAN 1/2" ON ALL SIDES OF THE PENETRATIONS. ALL OPENINGS IN EXCESS OF 1/2" SHALL BE CAULKED/SEALED WITH SHEET ROCK MUD. THE DRYWALL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING PENETRATIONS IN PLACE WHEN THE SHEETROCK ARE INSTALLED. PENETRATIONS MADE AFTER THE DRYWALL CONTRACTOR HAS FINISHED IN AN AREA SHALL BE SEALED BY THE CONTRACTOR MAKING THE PENETRATION.
21. ALL JUNCTION BOX COVERS ABOVE THE CEILING SHALL BE CLEARLY MARKED WITH WHICH CIRCUITS OR ELECTRICAL SYSTEM THEY CONTAIN.

MECHANICAL & ELECTRICAL IMPROVEMENTS

FOR THE

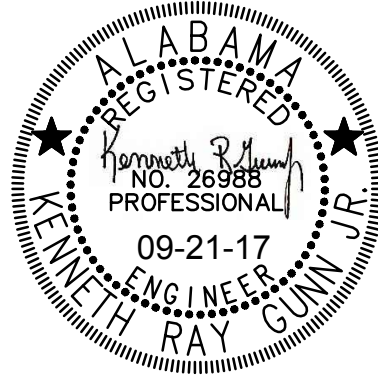
LAWRENCE COUNTY BOE

LAWRENCE COUNTY, ALABAMA

MCKEE and ASSOCIATES

ARCHITECTURE and INTERIOR DESIGN

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



SHEET TITLE : ELECTRICAL LEGEND & NOTES

MCKEE JOB # : 17.189

DRAWN BY : J. TILLERY

DATE : 09.21.17

REVISED DATE:

REVISED DATE:

REVISED DATE:

Gunn & Associates, P.C.  
Consulting Engineers

3102 Highway 14  
Millbrook, AL 36054  
Tel: 334.285.1275  
Fax: 334.285.1274  
GA#17-131

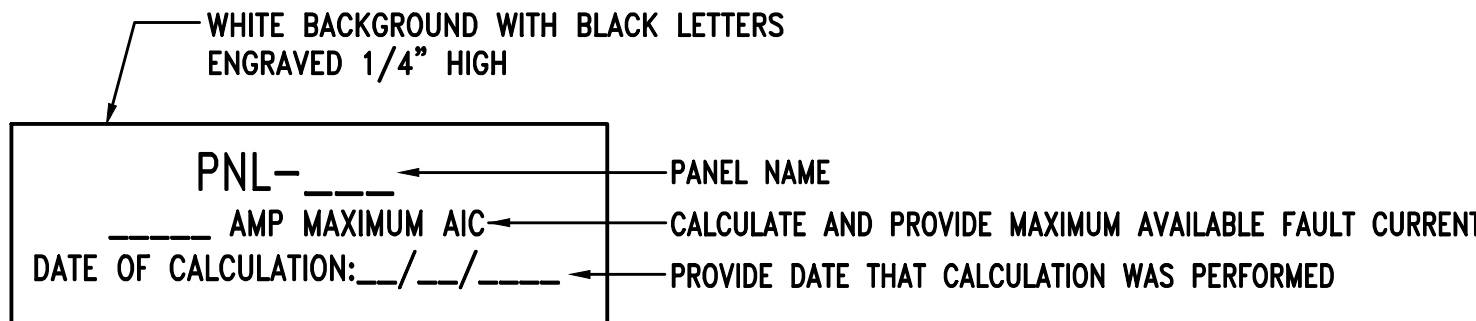
SHEET NO. : E-1



PANEL - SE															
TYPE: 225A MAIN CIRCUIT BREAKER				AIC: 65,000 AMPERES				MOUNTED: SURFACE				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				
EFA	1,176			20	1	1	2					BUSSED SPACE			
CONTROL PANEL		600		20	1	3	4					BUSSED SPACE			
BUSSED SPACE						5	6					BUSSED SPACE			
BUSSED SPACE						7	8					BUSSED SPACE			
BUSSED SPACE						9	10					BUSSED SPACE			
BUSSED SPACE						11	12					BUSSED SPACE			
BUSSED SPACE						13	14					BUSSED SPACE			
BUSSED SPACE						15	16					BUSSED SPACE			
BUSSED SPACE						17	18					BUSSED SPACE			
BUSSED SPACE						19	20					BUSSED SPACE			
BUSSED SPACE						21	22					BUSSED SPACE			
BUSSED SPACE						23	24					BUSSED SPACE			
BUSSED SPACE						25	26					BUSSED SPACE			
BUSSED SPACE						27	28					BUSSED SPACE			
BUSSED SPACE						29	30					BUSSED SPACE			
BUSSED SPACE						31	32					BUSSED SPACE			
BUSSED SPACE						33	34					BUSSED SPACE			
BUSSED SPACE						35	36					BUSSED SPACE			
BUSSED SPACE						37	38					BUSSED SPACE			
BUSSED SPACE						39	40					BUSSED SPACE			
BUSSED SPACE						41	42					BUSSED SPACE			
SUB TOTAL (VA)	1,176	600	0						0	0	0	SUB TOTAL (VA)			
TOTAL LOAD PHASE A:						1,176 (VA)								NOTES:	
TOTAL LOAD PHASE B:						600 (VA)								1. PANELBOARD SHALL BE UL LISTED FOR SERVICE ENTRANCE.	
TOTAL LOAD PHASE C:						0 (VA)								2. MAIN BREAKER SHALL BE 100% (FULLY) RATED.	
TOTAL LOAD:						1,176 (VA) =								3. PROVIDE PANEL WITH NAME PLATE INDICATING AIC RATING. SEE DETAIL.	
						5 AMPS								4. PROVIDE ARC FAULT LABEL PER DETAIL.	
														5. PROVIDE NEMA 3R ENCLOSURE.	

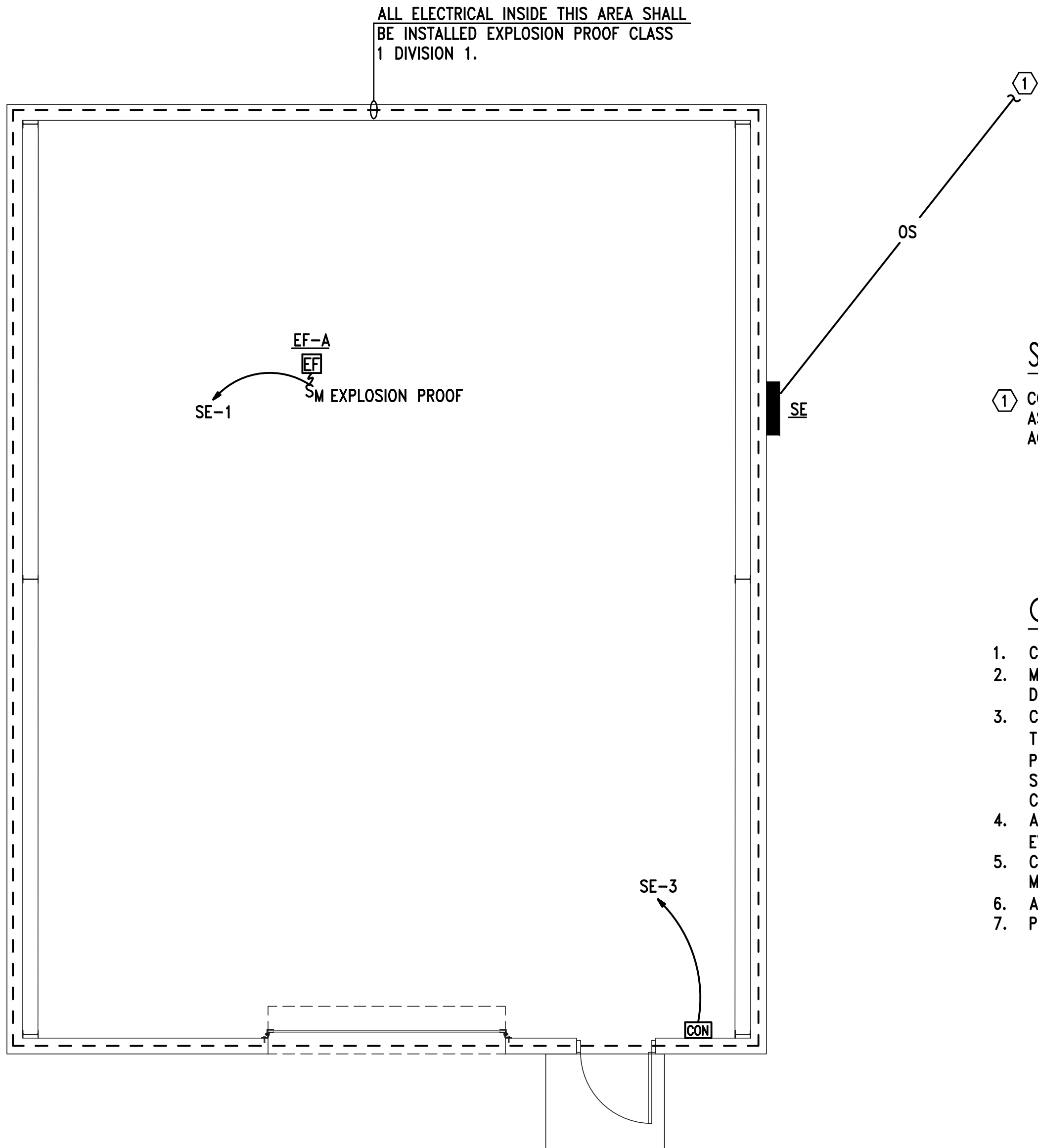
NOTES:

- 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.



TYPICAL SERVICE ENTRANCE FAULT CURRENT NAMEPLATE

6 E-2 NO SCALE  
DETAIL - SERVICE ENTRANCE FAULT CURRENT NAMEPLATE

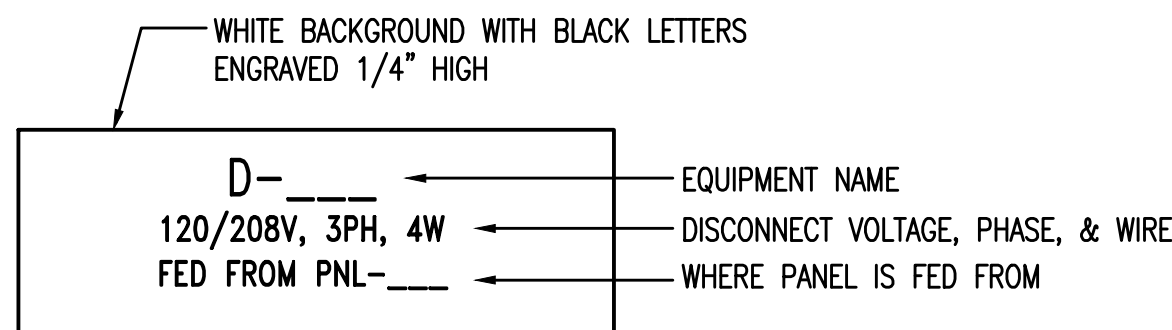


SHEET NOTES:

- COORDINATE WITH LOCAL UTILITY COMPANY FOR OVERHEAD SECONDARY TO BE BROUGHT TO BUILDING AND PAY ALL ASSOCIATED FEES. COORDINATE PRIOR TO BIDS AND PAY ALL ASSOCIATED FEES. COORDINATE PRIOR TO BIDS AND BID ACCORDINGLY.

GENERAL NOTES:

- COORDINATE WITH MECHANICAL/PLUMBING DRAWINGS FOR EXACT LOCATIONS OF EQUIPMENT.
- MOUNT EXTERIOR DISCONNECTS ON EXTERIOR WALLS AT LEAST 18" FROM WINDOWS. LOCATIONS OF DISCONNECTS AND EQUIPMENT ARE SHOWN FOR DRAWING CLARITY PURPOSES ONLY.
- COORDINATE WITH MECHANICAL/PLUMBING CONTRACTORS TO INSURE OVERCURRENT PROTECTION DEVICES FOR THEIR EQUIPMENT IS SIZED PER MANUFACTURER'S RECOMMENDATIONS. ENGINEER SIZED OVERCURRENT PROTECTION ACCORDING TO MECHANICAL/PLUMBING DRAWINGS AND SPECIFICATIONS, ACTUAL EQUIPMENT SUPPLIED MAY DIFFER. ELECTRICAL CONTRACTOR SHALL WORK WITH OTHER TRADE DISCIPLINES TO INSURE ANY CHANGES WILL BE INSTALLED CORRECTLY AT THE COST OF THE PERSON MAKING THE CHANGES.
- ALL FLEXIBLE CONNECT TO HVAC UNITS SHALL BE RUN PARALLEL TO HARD SURFACE AND STRAPPED AT LEAST EVERY 2'.
- CONTRACTOR SHALL PROVIDE CONDUIT FOR MECHANICAL CONTROLS. COORDINATE EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- ALL DISCONNECTS TO HAVE NAMEPLATE AS SHOWN IN DETAIL (2) THIS SHEET, NO EXCEPTIONS.
- PROVIDE DEDICATED NEUTRALS FOR EACH MULTIWIRE HOMERUN PER NEC.

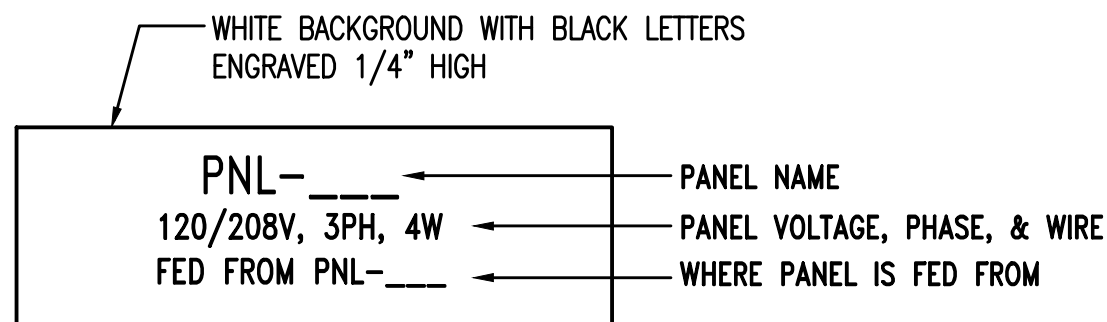


TYPICAL NORMAL POWER NAMEPLATE

2 E-2 NO SCALE  
DETAIL - TYPICAL DISCONNECT NAMEPLATE

PANELBOARD NOTES:

- PANELBOARDS SHALL BE INSTALLED AND ALL CLEARANCES MAINTAINED IN ACCORDANCE WITH THE NEC.
- ALL PANELBOARDS SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH THAT LISTING.
- PANELBOARDS SHALL BE FURNISHED COMPLETE WITH THE PROPERLY SIZED ENCLOSURE, INTERNAL HARDWARE, COMPONENTS, SUPPORTING STRUCTURES, ETC., FOR A COMPLETE INSTALLATION.
- FURNISH EACH PANELBOARD WITH A GROUND BAR BONDED TO THE PANEL ENCLOSURE.
- THE TERMINATION POINT OF THE FEEDER SERVING EACH ASSEMBLY SHALL BE AT THE NEAREST POINT OF FEEDER ENTRY INTO THE PANEL, SO AS TO MINIMIZE CONDUCTOR FILL IN THE ENCLOSURE. COORDINATE TOP/BOTTOM FEED PANELBOARD PROVISIONS WITH EACH FEEDER INSTALLATION.
- PROVIDE THE PROPER SIZE AND QUANTITY OF CONDUCTOR TERMINATION POINTS OR LUGS (MULTIPLE LUGS WHEN PARALLEL FEEDERS ARE USED) ON BUSES AND CIRCUIT BREAKERS FOR THE RESPECTIVE SIZE AND NUMBER OF CONDUCTORS INDICATED.
- ALL FLUSH-MOUNTED PANELBOARDS SHALL BE PROVIDED WITH AT LEAST SIX (6) 3/4" SPARE CONDUITS STUBBED TO ABOVE THE NEAREST ACCESSIBLE CEILING.
- PANELBOARDS SHALL BE FULLY RATED. SERIES RATED PANELBOARDS WILL NOT BE ACCEPTED.
- ALL PANELBOARDS SHALL BE CLEARLY MARKED TO COMPLY WITH NEC ARTICLE 110.16 WITH REGARD TO POTENTIAL HAZARDS OF ARC FLASH.
- ALL PANELBOARDS SHALL BE "DOOR-IN-DOOR" OR "HINGED-FRONT-TRIM" CONSTRUCTION.
- COMPLY WITH NEC ARTICLE 408.4. PROVIDE A TYPED CIRCUIT DIRECTORY THAT INDICATES WHAT EACH CIRCUIT IS SERVING. FOR LIGHTING AND RECEPTACLE CIRCUITS, INCLUDE THE ROOM NUMBER IN THE CIRCUIT DESCRIPTION ON THE DIRECTORY.
- EACH PANELBOARD SHALL HAVE A NAMEPLATE AS SHOWN IN DETAIL 1 ON THIS SHEET. ENGINEER WILL NOT PROVIDE FINAL ACCEPTANCE UNTIL THESE NAMEPLATES ARE PROVIDED.
- MANUFACTURER THAT WILL BE PROVIDING PANELBOARDS ON THIS PROJECT SHALL BE RESPONSIBLE FOR PERFORMING A SHORT CIRCUIT ANALYSIS AND TIME-CURRENT COORDINATION (TCC) STUDY, WHICH DEMONSTRATES THAT THE UPSTREAM OVERCURRENT PROTECTIVE DEVICE NEAREST TO THE FAULT LOCATION WILL OPERATE BEFORE OVERCURRENT PROTECTIVE DEVICES WHICH ARE FURTHER UPSTREAM (I.E. SELECTIVE COORDINATION). INCLUDE COORDINATION STUDY IN THE SHOP DRAWING PACKAGE FOR THE PANELBOARDS FOR REVIEW BY THE ENGINEER OF RECORD. AIC RATINGS MAY BE LOWERED BASED ON STUDY.



TYPICAL NORMAL POWER NAMEPLATE

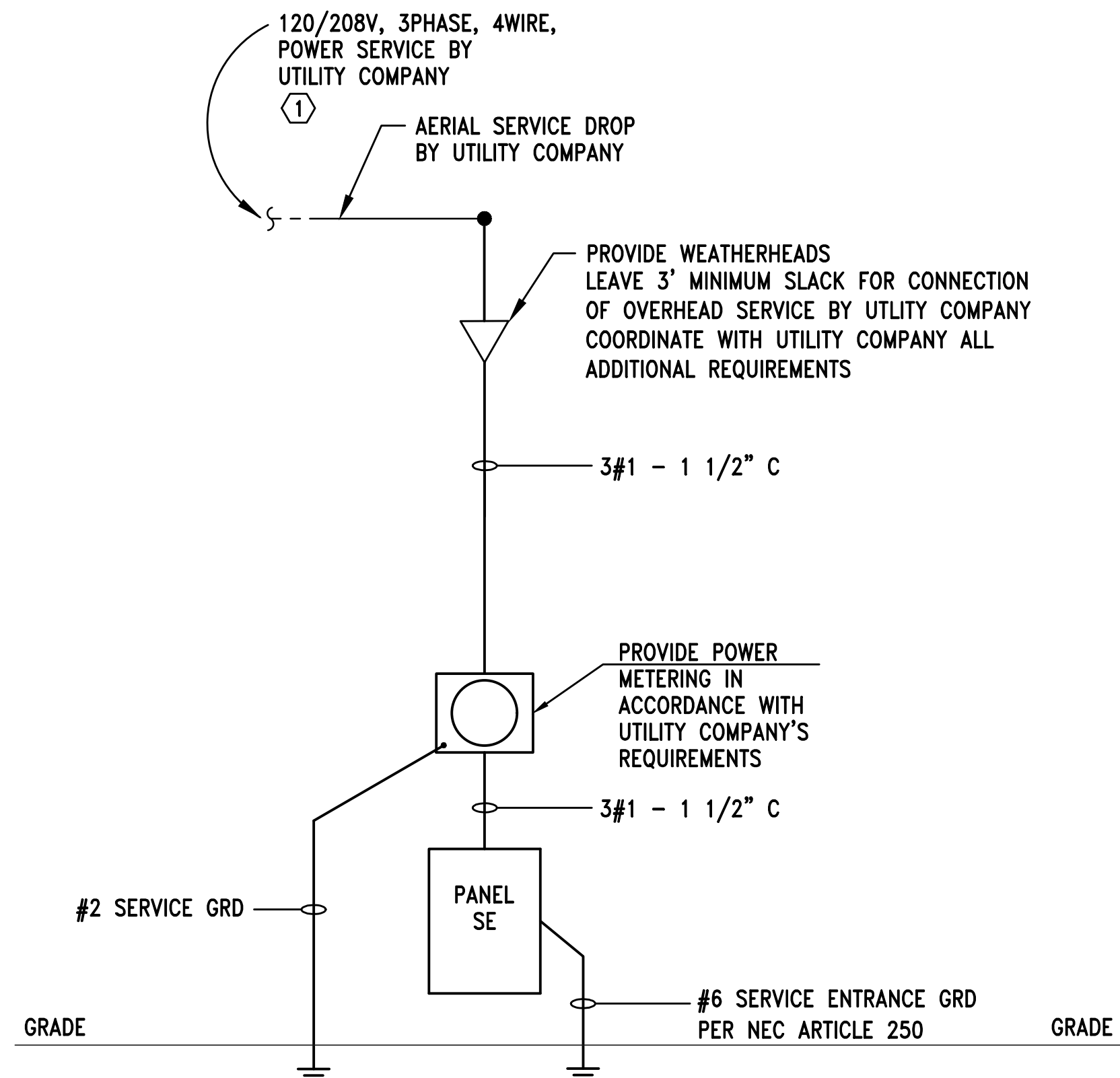
3 E-2 NO SCALE  
DETAIL - TYPICAL PANELBOARD NAMEPLATE

POWER RISER DIAGRAM NOTES:

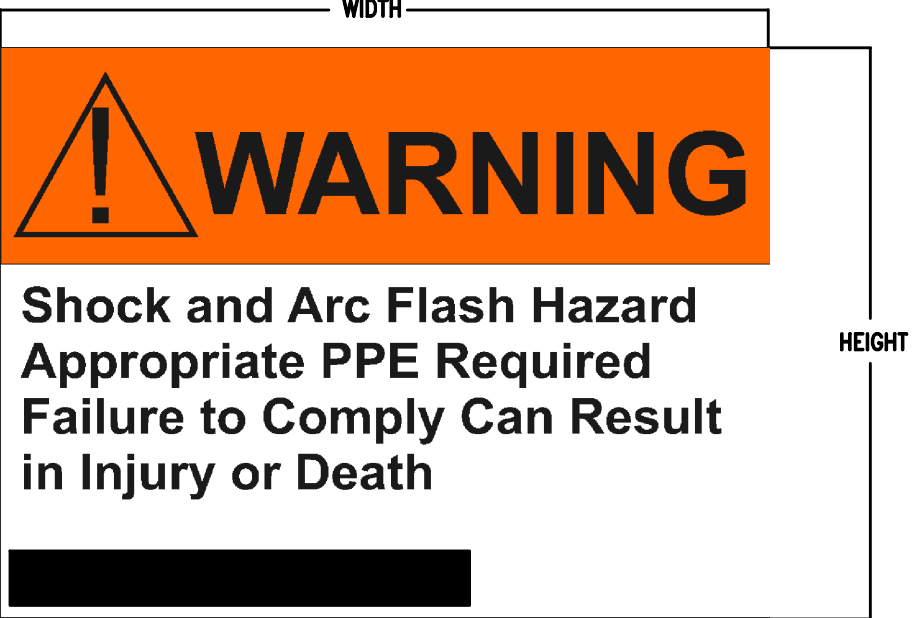
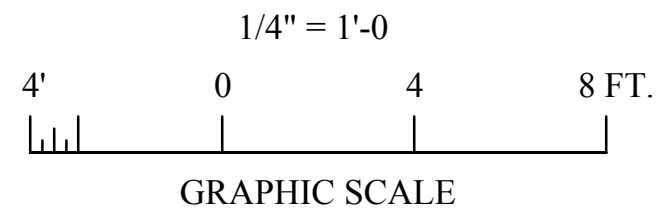
- INSTALLATION AND CONNECTION OF ALL DEVICES SHALL BE IN ACCORDANCE WITH NEC, MANUFACTURER'S RECOMMENDATIONS, AND STATE AND LOCAL CODES.
- CONTRACTOR IS RESPONSIBLE FOR THE CONNECTING, INSTALLATION, AND MARKING OF ALL POWER FEEDER CONDUCTORS FOR THE PROPER PHASE SEQUENCE AND LOADING. CONTRACTOR SHALL TEST EACH FEEDER AND EQUIPMENT FEEDERS WITH A PHASE METER PRIOR TO CONNECTING LOADS.
- 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.
- SEAL ALL CONDUITS FROM THE EXTERIOR WITH A SEALING COMPOUND, ONCE ALL CABLING HAS BEEN INSTALLED.
- LOCAL UTILITY COMPANY WILL BE FURNISHING THE OVERHEAD SECONDARY TO THE WEATHERHEADS COORDINATE WITH LOCAL UTILITY ALL REQUIREMENTS SET FORTH BY THE UTILITY COMPANY AND PAY FOR ALL FEES TO GET POWER CONNECTED TO BUILDING. COORDINATE PRIOR TO BID AND BID ACCORDINGLY.
- PROVIDE UNISTRUT SUPPORT ACROSS STRUCTURE WITH ANCHOR BOLT TO SUPPORT THE MOUNTING OF WEATHERHEADS TO THE SIDE OF THE BUILDING.

SHEET NOTES:

- COORDINATE WITH LOCAL UTILITY COMPANY FOR OVERHEAD SECONDARY TO BE BROUGHT TO BUILDING AND PAY ALL ASSOCIATED FEES. COORDINATE PRIOR TO BIDS AND PAY ALL ASSOCIATED FEES. COORDINATE PRIOR TO BIDS AND BID ACCORDINGLY.



5 E-2 NOT TO SCALE  
POWER RISER DIAGRAM - SERVICE TO "SE"



NOTES:

- PROVIDE SELF-ADHESIVE VINYL LABEL TO AFFIX TO ELECTRICAL EQUIPMENT TO WARN OF ARC FLASH HAZARDS.
- THE LABEL FORMAT AND TEXT SHALL BE IN ACCORDANCE WITH THE FIGURE.
- THE LABEL SHALL BE LOCATED ON THE EQUIPMENT TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
- THE SIZE OF THE LABEL SHALL BE:  
EQUIPMENT TYPE HEIGHT WIDTH  
INDOOR 4" 6"  
OUTDOOR 4" 6"

ARC FLASH WARNING LABELS

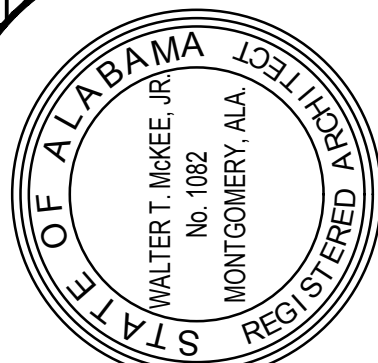
NO SCALE

MECHANICAL & ELECTRICAL IMPROVEMENTS

FOR THE

LAWRENCE COUNTY BOE

LAWRENCE COUNTY, ALABAMA



SHEET TITLE : FLOOR PLAN - POWER

MCKEE JOB # : 17.189

DRAWN BY : J. TILLERY

DATE : 09.21.17

REVISED DATE:

REVISED DATE:

REVISED DATE:

SHEET NO. : E-2

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