NEW CLASSROOM ADDITION FOR

ASHVILLE HIGH SCHOOL

33215 US-231 SOUTH, ASHVILLE, ALABAMA 35953

ST. CLAIR COUNTY BOARD OF EDUCATION

ST. CLAIR COUNTY BOARD OF EDUCATION	
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410 ROY DRIVE
ASHVILLE, ALABAMA 35953

ARCHITECT LATHAN ASSOCIATES ARCHITECTS, P.C.
dba LATHAN McKEE ARCHITECTS
300 CHASE PARK SOUTH
SUITE 200
HOOVER, ALABAMA 35244
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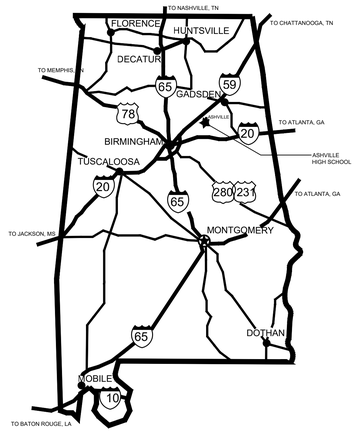
CIVIL CCI PLANNING & ENGINEERING
3528 VANN ROAD
SUITE 105
BIRMINGHAM, ALABAMA 35235–3271

MECHANICAL / PLUMBING DEWBERRY ENGINEERS, INC.
RIVERCHASE OFFICE PLAZA #2
SUITE 205
HOOVER, ALABAMA 35244

STRUCTURAL STRUCTURAL DESIGN GROUP
300 CHASE PARK SOUTH
SUITE 125
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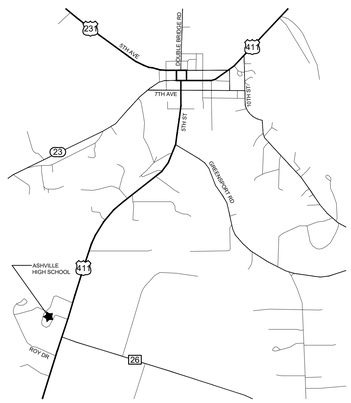
ELECTRICAL STEWART ENGINEERING
P.O. BOX 2233
ANNISTON ALABAMA 36202

PSCA NO. 9563



AREA MAP

STATE OF ALABAMA



VICINITY MAP

ASHVILLE, ALABAMA

DRAWING INDEX (SET - 62 TOTAL SHEETS)

GENERAL (3 SHEETS)

- T1 - TITLE AND INDEX
- LS1.1 - LIFE SAFETY PLAN
- SH1.1 - TORNADO STORM SHELTER PLANS

CIVIL DRAWINGS (8 SHEETS)

- C1.0 - LAYOUT PLAN
- C2.0 - DEMOLITION PLAN
- C3.0 - GRADING PLAN
- C4.0 - STORM DRAINAGE PLAN
- C5.0 - UTILITY PLAN
- C6.0 - EROSION CONTROL PLAN
- C7.0 - SECTION AND DETAILS
- C8.0 - SIGNED AND SEALED SURVEY

ARCHITECTURAL DRAWINGS (21 SHEETS)

- A1.0 - ARCHITECTURAL SITE PLAN
- A1.1 - DEMOLITION FLOOR PLAN
- A1.2 - DEMOLITION ROOF PLAN
- A2.0 - FLOOR PLAN
- A2.1 - ENLARGED PLAN DETAILS AND BOLLARD DETAIL
- A2.2 - ROOF PLAN AND DETAILS
- A2.3 - ROOF DETAILS
- A2.4 - DOOR AND WINDOW SCHEDULES AND LADDER DETAIL
- A3.0 - BUILDING ELEVATIONS
- A3.1 - BUILDING SECTIONS
- A3.2 - WALL SECTIONS
- A3.3 - WALL SECTIONS
- A5.1 - ENLARGED TOILET PLANS, TOILET ELEVATIONS, AND ADA DETAILS
- A6.1 - MAIN LEVEL CASEWORK PLAN
- A6.2 - INTERIOR ELEVATIONS
- A6.3 - DETAILS
- A7.1 - REFLECTED CEILING PLAN
- A8.1 - FINISH FLOOR PLAN
- A8.2 - ENLARGED FLOOR FINISH PLANS AND TRANSITION DETAILS
- A8.3 - FINISH SCHEDULE AND LEGEND
- A9.1 - SIGNAGE PLAN

STRUCTURAL DRAWINGS (10 SHEETS)

- S1.0 - GENERAL NOTES
- S1.1 - GENERAL NOTES CONTINUED
- S1.2 - TYPICAL DETAILS
- S1.3 - TYPICAL DETIALS
- S1.4 - TYPICAL DETAILS
- S2.1 - FOUNDATION PLAN
- S2.2 - ROOF FRAMING PLAN
- S3.1 - SECTIONS AND DETAILS
- S4.1 - SECTIONS AND DETAILS
- S4.2 - SECTIONS AND DETIALS

PLUMBING DRAWINGS (6 SHEETS)

- P0.1 - PLUMBING - SCHEDULES, DETAILS, & NOTES
- P1.0 - PLUMBING - DEMOLITION FLOOR PLAN
- P1.1 - PLUMBING - DEMOLITION ROOF PLAN
- P2.0 - NON-PRESSURE - RENOVATION FLOOR PLAN
- P3.0 - PRESSURE - RENOVATION FLOOR PLAN
- P4.0 - PLUMBING - RENOATION ROOF PLAN

MECHANICAL DRAWINGS (8 SHEETS)

- M0.1 - MECHANICAL - SCHEDULES AND LEGENDS
- M0.2 - MECHANICAL - DETAILS
- M0.3 - MECHANICAL - CONTROLS
- M1.1 - MECHANICAL - DEMOLITION FLOOR PLAN
- M1.2 - MECHANICAL - DEMOLITION ROOF PLAN
- M2.1 - HVAC - RENOVATION FLOOR PLAN
- M2.2 - HVAC - RENOVATION ROOF PLAN
- M3.1 - PIPING - RENOVATION FLOOR PLAN

ELECTRICAL DRAWINGS (6 SHEETS)

- E1.1 - SCHEDULES, SYMBOLS, AND NOTES
- E2.1 - MASTER PLAN AND SINGLE LINE DIAGRAM
- E3.1 - FLOOR PLAN - LIGHTING
- E4.1 - FLOOR PLAN - POWER
- E4.2 - ROOF PLAN - POWER
- E5.1 - FLOOR PLAN - AUXIILIARIES

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

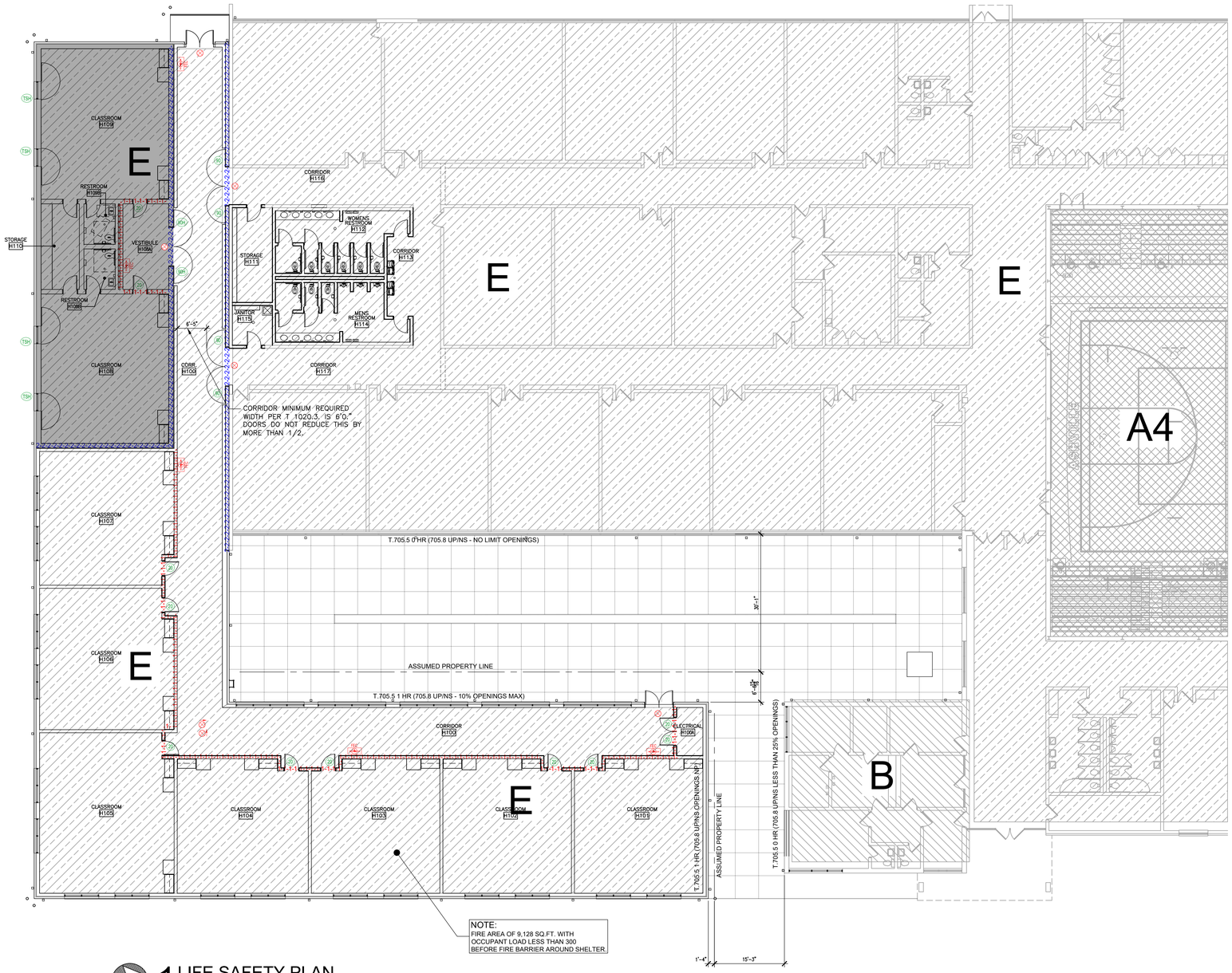
SHEET TITLE:
TITLE AND INDEX

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: –
DATE: JULY 31, 2025
REVISIONS

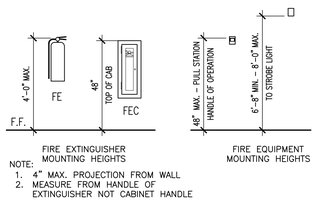
JOB NO. 24-106
SHEET NO:
T1
1 OF 3

0 1" 2"



1 LIFE SAFETY PLAN

SCALE: 3/32" = 1'-0"



FIRE EXTINGUISHER MOUNTING HEIGHTS

FIRE EQUIPMENT MOUNTING HEIGHTS

NOTE:
1. 4" MAX. PROJECTION FROM WALL
2. MEASURE FROM HANDLE OF EXTINGUISHER NOT CABINET HANDLE

MOUNTING HEIGHTS

SCALE: 3/8" = 1'-0"

2021 IBC POST RENOVATION AND ADDITION BUILDING DATA

OCCUPANCY CLASSIFICATION:	EXISTING - GROUP E		
	NEW - GROUP E		
TYPE OF CONSTRUCTION:	EXISTING - TYPE IIB (NS)		
	NEW - TYPE IIB (NS)		
BUILDING AREA:	EXISTING - 48,897 S.F.		
	NEW - 11,721 S.F.		
TABLE 504.4 ALLOWABLE NUMBER OF STORIES:	ALLOWABLE STORIES: 2	ACTUAL STORIES: 1	
TABLE 506.2 ALLOWABLE AREA:	AREA FACTOR: NS	14,500 S.F.	
TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:	CONSTRUCTION TYPE:	IIB	
	STRUCTURAL FRAME:	0	
	BEARING WALLS:		
		EXTERIOR: 0	
		INTERIOR: 0	
	NONBEARING WALLS:		
		EXTERIOR: SEE 705.5	
		INTERIOR: 0	
	FLOOR CONSTRUCTION:	0	
	ROOF CONSTRUCTION:	0	
TABLE 705.5 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS:	OCCUPANCY:	GROUP E	
	SEPARATION DISTANCE:	< 5'	1
		≥ 5'< 10'	1
		≥ 10'< 30'	0
		≥ 30'	0
TABLE 1020.2 CORRIDOR FIRE-RESISTANCE RATING PARTITIONS AND OPENING PROTECTIVES	GROUP E UNSPRINKLERED	1	

DOOR/WINDOW RATING LEGEND

- (20) 20 MINUTE DOOR AND FRAME
- (45) 45 MINUTE DOOR AND FRAME
- (60) 60 MINUTE DOOR AND FRAME
- (90) 90 MINUTE DOOR AND FRAME
- (XXX) 90 MINUTE RATING AND TORNADO IMPACT RATED
- (TSH) TORNADO IMPACT SHUTTER

WALL TYPE LEGEND

- 1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1- 1 HR WALL
- 2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2- 2 HR WALL
- 4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4- 4 HR WALL

LIFE SAFETY NOTES

- FE(HC) FIRE EXTINGUISHER AND CABINET (PROVIDE FIRE RATED CABINETS IN RATED WALLS.)
- FE FIRE EXTINGUISHER
- FE(K) K-TYPE FIRE EXTINGUISHER
- EXIT SIGN DIRECTION
- ACCESSIBLE
- EXIT (320) EXIT CAPACITY

EXTEND AND KEY ALL RATED WALLS TO SHAFT WALL SYSTEM, AND/OR BOTTOM OF ROOF ASSEMBLY

STENCIL LABEL ALL RATED WALLS & DRAFT STOPS ABOVE CEILING EACH SIDE @ 20'-0" O.C. MAX.

ALL RATED DOORS AND FRAMES TO BE LABELED WITH EMBOSSED LABELS INDICATING RATING IN MINUTES

PROVIDE FOAM FILL INSULATION AS SPECIFIED IN ALL WALLS BETWEEN TOILETS AND CLASSROOMS.

HE - HORIZONTAL EXIT	XHE - EXISTING HORIZONTAL EXIT
FB - FIRE BARRIER	XFB - EXISTING FIRE BARRIER
FP - FIRE PARTITION	XFP - EXISTING FIRE PARTITION
FW - FIRE WALL	XFW - EXISTING FIRE WALL

EGRESS TRAVEL DISTANCE — 200' DISTANCE, START, PATH, DIRECTION

OCCUPANCY USE LEGEND

- A4 GROUP A4
- E GROUP E
- B GROUP B
- LOCATION OF TORNADO STORM SHELTER

CHAPTER 29 - PLUMBING SYSTEMS

OCCUPANCY		WATERCLOSETS				LAVATORIES				DRINKING FOUNTAINS		SERVICE SINKS
USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	ALL	ALL
												1
A3	70.11	1/125	.28	1/65	.54	1/200	.18	1/200	.18	1/500	.14	
A4	711	1/75 FIRST 1,500 1/120 REMAINDER EXCEEDING 1,500	4.74	1/40 FIRST 1,520 1/60 REMAINDER EXCEEDING 1,520.	8.89	1/200	1.78	1/150	2.37	1/1000	.71	
B	21.76	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	.44	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	.44	1/40 FIRST 80 1/80 EXCEED 80.	.27	1/40 FIRST 80 1/80 EXCEED 80.	.27	1/100	.22	
E	1093.48	1/50	10.93	1/50	10.93	1/50	10.93	1/50	10.93	1/100	10.93	
S1,S2	7.96	1/100	.04	1/100	.04	1/100	.04	1/100	.04	1/1000	.01	
REQUIRED TOTALS			16.43		20.84		13.2		13.79		12.01	1
PROVIDED TOTALS			21		21		14		17		13	2

NOTE:
PLUMBING FIXTURE COUNT BASED ON THE EXISTING SCHOOL AND NEW ADDITION

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
LIFE SAFETY PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: HDR
hdr
DATE: JULY 31, 2025
REVISIONS

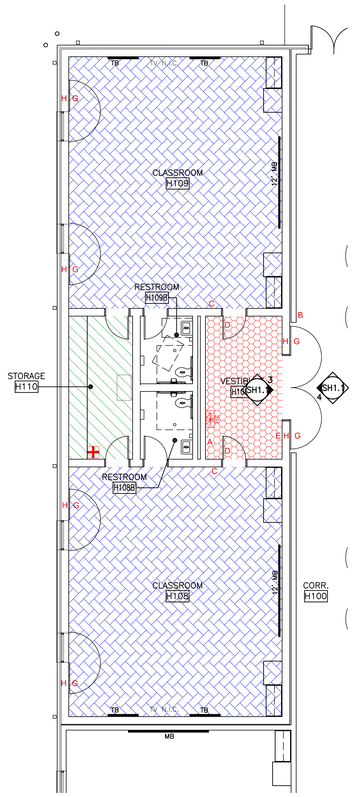
JOB NO. 24-106
SHEET NO:
LS1.1
2 OF 3

0 1" 2"



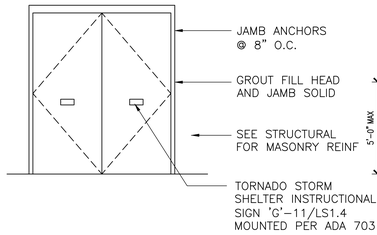
1 SHELTER ACCESS PLAN

SCALE: 3/32" = 1'-0"



2 TORNADO STORM SHELTER PLAN

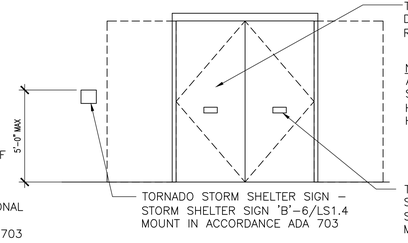
SCALE: 1/8" = 1'-0"



3 TORNADO DOOR ELEVATION

SCALE: 3/8" = 1'-0"

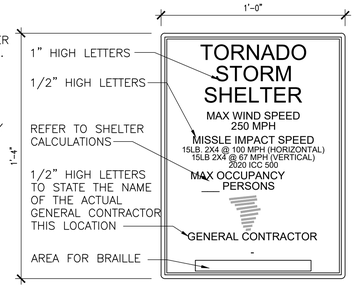
INDICATED IN CLOSED POSITION INSIDE SHELTER



4 TORNADO DOOR ELEVATION

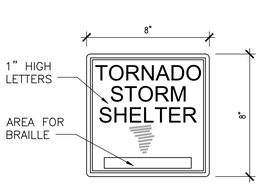
SCALE: 3/8" = 1'-0"

INDICATED IN CLOSED POSITION OUTSIDE SHELTER



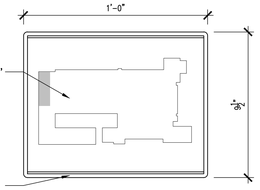
5 TORNADO STORM SHELTER PLAQUE- A

SCALE: 3" = 1'-0"



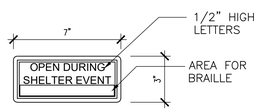
6 TORNADO STORM SHELTER SIGN - B

SCALE: 3" = 1'-0"



7 TORNADO STORM SHELTER LOCATION SIGN FRAME - C

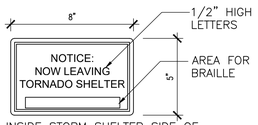
SCALE: 3" = 1'-0"



INSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION

8 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -D

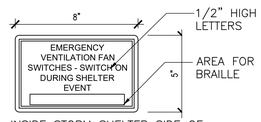
SCALE: 3" = 1'-0"



INSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION

9 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -E

SCALE: 3" = 1'-0"



INSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION

10 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -F

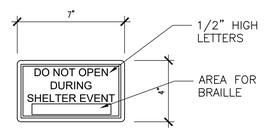
SCALE: 3" = 1'-0"



INSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION

11 TORNADO STORM SHELTER INSTRUCTIONAL SIGN - G

SCALE: 3" = 1'-0"



OUTSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION

12 TORNADO STORM SHELTER INSTRUCTIONAL SIGN - H

SCALE: 3" = 1'-0"

USEABLE FLOOR AREA LEGEND

CLEAR USEABLE FLOOR SPACE	GROSS FLOOR AREA MINUS 35%	GROSS FLOOR AREA MINUS 50%

SHELTER LEGEND

LOCATION	DOOR TYPE	TRAVEL DISTANCE
	90 MINUTE TORNADO IMPACT RATED DOOR AND FRAME. (90M); TORNADO IMPACT RATED SHUTTER (TSH)	START, B, PATH, DIRECTION
2 HR FIRE BARRIER	2-2-2-2-2-2-2-2-2-2-2-2-	
FIRE EXT. & CAB.	FEC	

TORNADO STORM SHELTER CALCULATION

2020 ICC 500 (DCM Bulletin #23-02 Updated Guidance on Tornado Storm Shelter Requirements for Public K-12 School November 22,2022 and Department of Finance DCM Bulletin #23-01 Updated Guidance on Mandatory Tornado Storm Shelters Required by IBC November 21, 2022)

GROSS AREA OF CLASSROOM/INSTRUCTIONAL SPACE:	7,783.32 S.F.
REQUIRED OCCUPANT CAPACITY (STUDENT AND FACULTY) :	7,783.32 / 30 = 259.44 PERSONS + 10% 25.94 = 285.38(286)
REQUIRED USEABLE SHELTER FLOOR AREA:	284(5) = 1,420 S.F + 20 S.F. (2- WHEELCHAIRS) = 1,440 S.F.
USEABLE SHELTER FLOOR AREA PROVIDED:	CLASSROOM SPACE MINUS 35% : 1,820.8 S.F.-35% = 1,183.52 S.F. CLEAR FLOOR SPACE (100% USEABLE) = 185 S.F. STORAGE SPACE MINUS 50%: 155 S.F. - 50% = 77.5 TOTAL USEABLE PROVIDED = 1,446.02 S.F.
ACTUAL CAPACITY OF STORM SHELTER:	287 : 285(5) + 2 WHEELCHAIRS (20) = 1,445 S.F.

TABLE 702.3 SANITATION FACILITIES

REQUIRED SANITATION FACILITIES COMMUNITY TORNADO STORM SHELTER > 50: CAPACITY OF SHELTER IS 286 PERSONS	
REQUIRED TOILET FACILITIES	2
PROVIDED TOILET FACILITIES	2
REQUIRED LAVATORIES	1
PROVIDED LAVATORIES	2

FLOOR AREA CALCULATION LEGEND

GENERAL INSTRUCTION SPACE AT 30 S.F. GROSS PER STUDENT	AUXILIARY SUPPORT CONFERENCE AREA

SHELTER SIGN LEGEND

SYMBOL	DESCRIPTION
A	SECTION 508 STORM SHELTER PLAQUE WALL MOUNTED PER ADA 703 (5/SH1.1)
B	SECTION 508 STORM SHELTER SIGN WALL MOUNTED PER ADA 703 (6/SH1.1)
C	SECTION 508 STORM SHELTER LOCATION SIGN WALL MOUNTED PER ADA 703 (7/SH1.1)
D	SIGN "D" OPEN DURING SHELTER (8/SH1.1)
E	SIGN "E" LEAVING SHELTER SIGN (9/SH1.1)
F	SIGN "F" FAN SWITCH SIGN (10/SH1.1)
G	SIGN "G" CLOSE DURING SHELTER EVENT SIGN (11/SH1.1)
H	SIGN "H" DO NOT OPEN DURING SHELTER EVENT SIGN (12/SH1.1)
+	FIRST AID KIT

NOTE: FINAL PLACEMENT OF ALL SIGNS SHALL BE COORDINATED WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

FIRE RATED WALLS:

FIRE RATED WALLS INDICATED ON THIS SHEET ARE TORNADO STORM SHELTER WALLS ONLY. SEE LIFE SAFETY PLANS ON SHEET LS1.1 FOR ALL OTHER REQUIRED FIRE RATED WALLS.

NOTE:
1. ALL PENETRATIONS 2" OR GREATER MUST BE PROTECTED WITH A STORM SHELTER BAFFLE OR STORM SHELTER LOUVER SYSTEM. SEE ENGINEER FOR CONDITIONS AND DETAILS.
2. PROVIDE A COLD JOINT AT ALL AREAS WHERE STORM SHELTER SLAB MEETS THE NORMAL SLAB CONDITION, SEE STRUCTURAL.
3. ALL SIGNS SHALL BE IN ACCORDANCE WITH 2010 ADA STANDARD. VERIFY EXACT PLACEMENT WITH ARCHITECT PRIOR TO INSTALLATION.
4.ALL TORNADO REISTANT DOOR, FRAMES, AND WINDOWS SHALL RECIEVE BOTH FEMA 361/ICC-500 2020 LABEL AND THE 90 MINUTE FIRE LABEL.

LATHAN McKEE ARCHITECTS

ASHVILLE HIGH SCHOOL

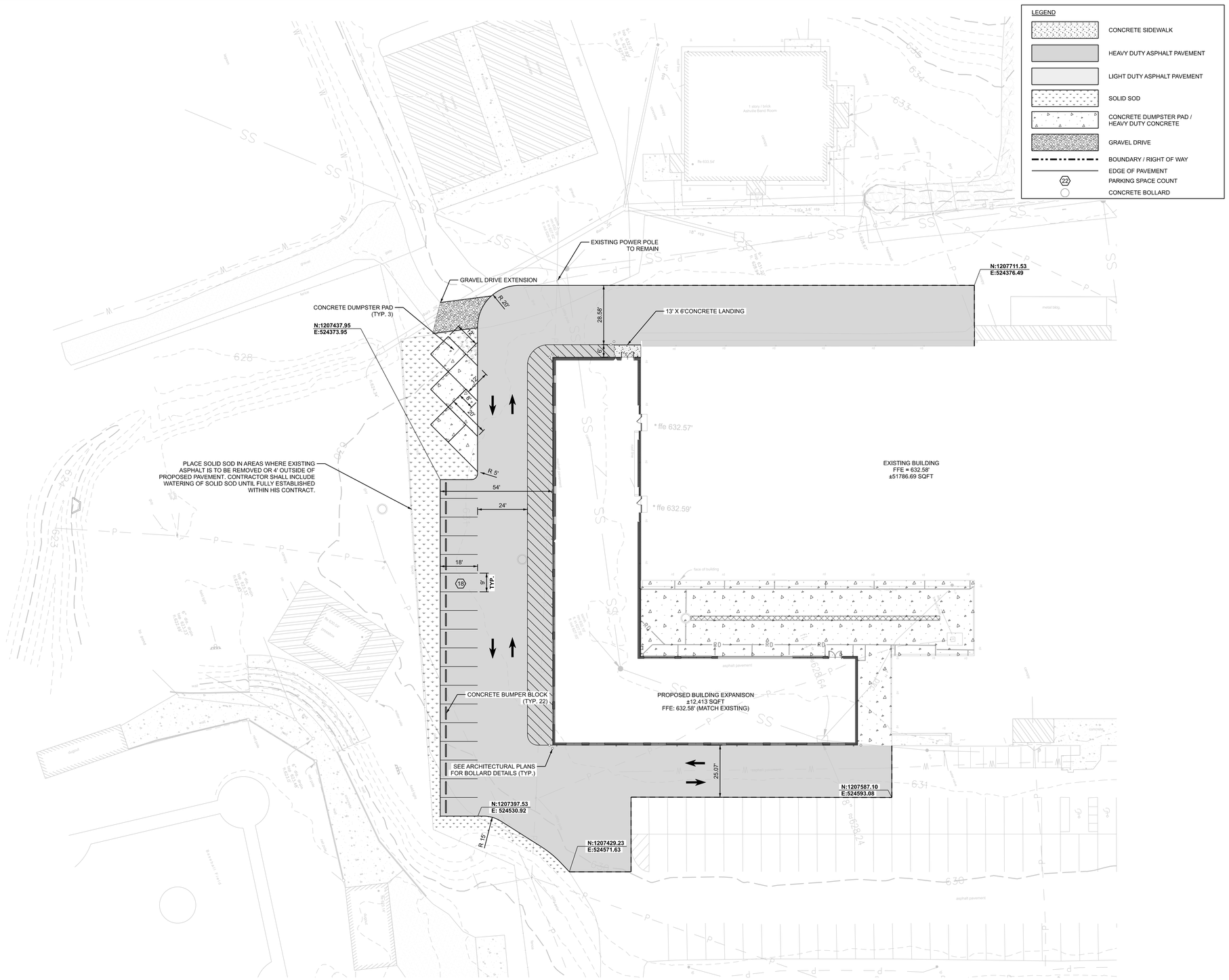
NEW CLASSROOM ADDITION FOR
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE: TORNADO STORM SHELTER PLANS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: HDR
hdr
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
SH1.1
3 OF 3



0 10 20 40

SCALE IN FEET
1" = 20'

GENERAL NOTES:

1. JOB SITE SAFETY AND COMPLIANCE WITH APPLICABLE SAFETY REGULATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY PROTECTIVE DEVICES, AND FOR THE IMPLEMENTATION OF ALL SAFETY MEASURES INCLUDING, BUT NOT LIMITED TO: THE PROTECTION OF LIFE, INJURY, PROPERTY, AND SITE IMPROVEMENTS; THE PROTECTION OF EXISTING UTILITY LINES AND STRUCTURES; AND THE PROVISION AND COORDINATION OF ALL TEMPORARY TRAFFIC CONTROL EFFORTS AND MEASURES.

2. ALL NECESSARY PERMITS AND APPROVALS FROM AGENCIES GOVERNING THIS WORK SHALL BE SECURED PRIOR TO BEGINNING CONSTRUCTION.

3. ALL CONSTRUCTION SHOWN SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS FOR THIS PROJECT AND SHALL CONFORM TO ALL CODES, ORDINANCES, RESTRICTIONS, SPECIFICATIONS, AND STANDARDS OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THE SITE. CONTRACTOR WILL ONLY PERFORM CONSTRUCTION ACTIVITIES BASED ON PLANS AND SPECIFICATIONS WHICH HAVE BEEN PROPERLY ISSUED FOR CONSTRUCTION PURPOSES.

4. CONTRACTOR IS RESPONSIBLE FOR PROTECTION OF ALL PROPERTY CORNERS AND BENCHMARKS. ALL PROPERTY PINS OR BENCHMARKS ELIMINATED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN LIKE KIND BY CONTRACTOR.

5. BOUNDARY AND TOPOGRAPHIC INFORMATION WAS OBTAINED FROM A SURVEY PROVIDED BY ARRINGTON ENGINEERING DATED 06/24/2025, PHONE: (205) 985-9315. CIVIL CONSULTANTS IS NOT RESPONSIBLE FOR THE ACCURACY OF THE SURVEY.

6. EXISTING UTILITY LINES SHOWN ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINE LOCATIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DEVIATIONS FROM THE DESIGN LOCATIONS SHALL BE REPORTED TO THE OWNER OR THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY CONTACTS 48 HOURS PRIOR TO EXCAVATION IN AREAS WHERE UTILITIES MAY EXIST. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM AND SANITARY SEWER STRUCTURES, STORM AND SANITARY PIPES AND ALL OTHER EXISTING UTILITIES AND IRRIGATION LINES PRIOR TO BEGINNING CONSTRUCTION.

7. CONTRACTOR SHALL COORDINATE THE INSTALLATION, ADJUSTMENT OR RELOCATION OF ALL UTILITIES WITH THE APPROPRIATE UTILITY COMPANIES AND HIS WORK. ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, STORM SEWER, ELECTRICAL CONDUIT, GAS & TELEPHONE, IRRIGATION SLEEVES, ETC. SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF BASE COURSE MATERIAL.

8. CONTRACTOR SHALL REFERENCE ARCHITECTURAL PLANS FOR ANY SITE LIGHTING LOCATIONS, IF PROVIDED, AND COORDINATE INSTALLATION WITH PROPOSED IMPROVEMENTS TO AVOID CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS AND STORM DRAINAGE SYSTEM.

9. THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE CAUSED BY CONSTRUCTION SHALL BE REPAIRED TO ITS ORIGINAL CONDITION.

10. EROSION CONTROL DEVICES SHALL BE INSTALLED PRIOR TO LAND DISTURBING ACTIVITIES. EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION UNTIL PERMANENT GROUND COVER IS ESTABLISHED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR PREVENTING SILTS OR DEPOSITS OF SOIL, DUST OR MATERIALS FROM BEING TRANSPORTED OFF THE CONSTRUCTION SITE BY EROSIVE FORCES

11. CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS FOR ACTUAL BUILDING DIMENSIONS AND DETAILS. CONTRACTOR SHALL VERIFY THAT THE COORDINATE POINTS PROVIDED FOR THE TWO OUTSIDE BUILDING CORNERS PRECISELY MATCH THE ARCHITECT'S PLANS. IF A DISCREPANCY EXISTS WITH RESPECT TO THE BUILDING CORNERS, THEN CONTACT THE ENGINEER AND ARCHITECT FOR A RESOLUTION BEFORE EXCAVATING FOR FOUNDATIONS.

12. IN THE EVENT THAT A CONFLICT ARISES BETWEEN THE SITE CONSTRUCTION DRAWINGS AND STRUCTURES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT AND ENGINEER AND SHALL NOT PROCEED WITH CONSTRUCTION OF ANY AREA WHERE A CONFLICT HAS BEEN DISCOVERED UNTIL SUCH TIME AS THE CONFLICT HAS BEEN CLEARLY RESOLVED.

13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FLUSH AND SMOOTH TRANSITION BETWEEN ALL NEW CONSTRUCTION AND ALL EXISTING CONDITIONS. ALL TRANSITION GRADES, CONSTRUCTION MATERIALS, AND FINISHES SPECIFICALLY AT DRIVEWAY ENTRANCE LOCATIONS, ARE SUBJECT TO APPROVAL BY THE OWNER, ARCHITECT OR ENGINEER.

14. CONTRACTOR SHALL COORDINATE WITH CONTRACTORS OF ADJACENT WORK TO MINIMIZE THE DISRUPTION OF ITS WORK AND THE WORK OF OTHERS.

LAYOUT NOTES:

1. FOR BUILDING DIMENSIONS REFER TO ARCHITECTURAL PLANS. ALL DIMENSIONS AND COORDINATES TO BUILDING ARE MEASURED FROM OUTSIDE FACE, UNLESS OTHERWISE NOTED.

2. ALL DIMENSIONS IN PAVED AREAS ARE MEASURED FROM THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.

3. ALL RADII AND COORDINATES ARE DIMENSIONED FROM/TO THE EDGE OF PAVEMENT.

4. IF FOR ANY REASON A WRITTEN DIMENSION DOES NOT COINCIDE WITH A SCALED DIMENSION, THE WRITTEN DIMENSION SHALL GOVERN. DO NOT SCALE CRITICAL DIMENSIONS FROM THIS DRAWING. SEEK CLARIFICATION FROM ARCHITECT/ENGINEER IF NEEDED.

5. COORDINATES SHOWN IN THESE PLANS ARE GIVEN IN U.S. SURVEY FEET AND ARE BASED ON THE STATE PLANE COORDINATE SYSTEM.

6. PRIOR TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR IS TO VERIFY THE LOCATION, ELEVATION AND RELATIVITY OF THE COORDINATES ASSIGNED TO BLDG. CORNERS, PROPERTY LINES, INLETS, STORM MANHOLES, SANITARY MANHOLES, PIPES, ETC. IF THERE IS A DISCREPANCY OR INCONGRUITY BETWEEN THE COORDINATES THEN NOTIFY THE ENGINEER IMMEDIATELY FOR CLARIFICATION.

LIST OF CONTACTS

OWNER

ST. CLAIR COUNTY BOARD OF EDUCATION
Phone:(205) 594-7131
Contact: Justin Burns
410 Roy Dr.
Ashville, AL 35953

SURVEYING

ARRINGTON ENGINEERING
Phone: (205) 985-9315
Contact: Jeff D. Arrington
2032 Valleydale Road
Birmingham, AL 35244

CIVIL ENGINEERING

CIVIL CONSULTANTS, INC.
Phone: (205) 655-1991
Contact: Will Dailey, P.E.
3528 Vann Road, Suite 105
Birmingham, Alabama 35235

GEOTECHNICAL

TERRACON
Phone: (205) 443-5209
Contact: Bryan Ritenour, P.E.
2147 Riverchase Office Road
Birmingham, AL 35244

INDEX OF SHEETS

SHEET NUMBER	DESCRIPTION
C-1.0	LAYOUT PLAN
C-2.0	DEMOLITION PLAN
C-3.0	GRADING PLAN
C-4.0	DRAINAGE PLAN
C-5.0	UTILITY PLAN
C-6.0	EROSION AND SEDIMENT CONTROL PLAN
C-7.0	SECTIONS AND DETAILS
C-8.0	SURVEY (TOPOGRAPHIC SURVEY ASHVILE HIGH SCHOOL BY ARRINGTON ENGINEERING) FOR INFORMATION ONLY

CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

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Birmingham, AL 35235
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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE: LAYOUT PLAN

ALABAMA LICENSED Bill Barry No. 55231 PROFESSIONAL ENGINEER WILLIAM DAVID DAILEY 07/31/2025

PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1. ISSUE FOR BID

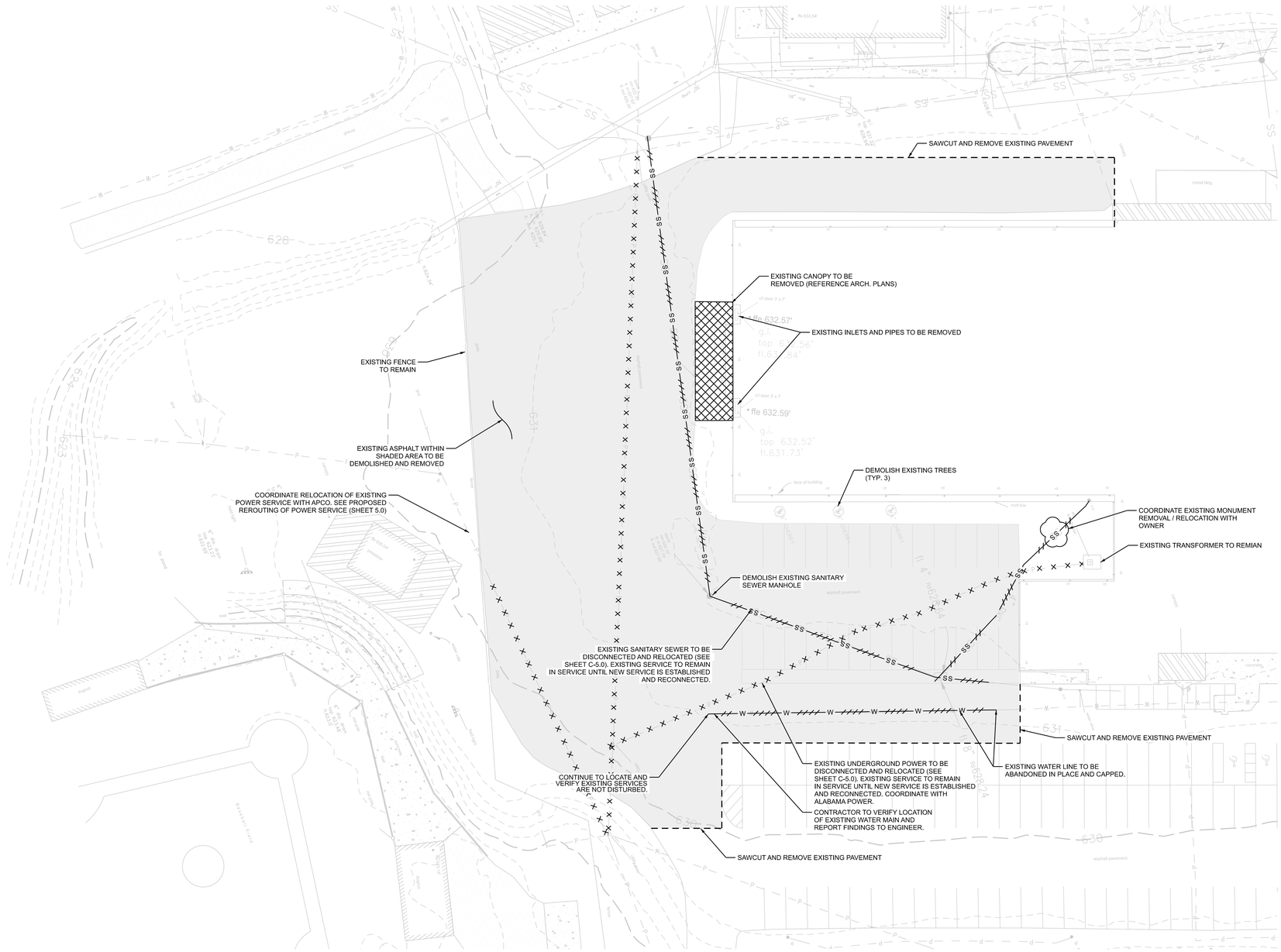
JOB NO. 24-106
SHEET NO:
C-1.0
1 OF 8
0 1" 2"

LEGEND

- DEMOLISH BUILDING
- DEMOLISH SANITARY SEWER
- DEMOLISH UTILITY/MISC.
- DEMOLISH ASPHALT PAVEMENT AND REMOVE FROM SITE
- SAWCUT LINE

N

SCALE IN FEET
0 10 20 40
1" = 20'



DEMOLITION NOTES

1. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE ADEQUACY AND INSTALLATION OF ALL TEMPORARY SHORING & BRACING SYSTEMS USED DURING THE PERFORMANCE OF THIS WORK.
2. WORK SHALL BE PERFORMED BY SKILLED AND PROPERLY EQUIPPED PERSONNEL. PROMPTLY REPAIR DAMAGES CAUSED BY DEMOLITION OPERATIONS.
3. REMOVE EXISTING CONSTRUCTION TO THE EXTENT NECESSARY FOR THE PROPER INSTALLATION OF NEW CONSTRUCTION AND JUNCTION WITH EXISTING WORK. CUT BACK FINISHED SURFACES TO STRAIGHT, PLUMB, OR LEVEL LINES AS REQUIRED.
4. WHERE OPENINGS ARE CUT OVERSIZED OR AT IMPROPER LOCATIONS AS DETERMINED BY THE ENGINEER, REPLACE THE EXCESS REMOVED MATERIAL AS INSTRUCTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
5. COORDINATE DEMOLITION WITH OTHER TRADES TO ASSURE THE PROPER SEQUENCE, LIMITS, METHODS AND TIME OF PERFORMANCE. SCHEDULE WORK SO AS TO IMPOSE A MINIMUM HARDSHIP ON THE PERFORMANCE OF WORK OF OTHER TRADES.
6. DEMOLITION SCHEDULE IN GENERAL, MATERIALS SHALL BE REMOVED AS FOLLOWS:
   A. REMOVE EXISTING BUILDINGS, FOUNDATIONS, CONCRETE PADS AND OTHER STRUCTURES. REMOVE ANY LEAD BASED PAINTS OR ASBESTOS CONTAINING MATERIALS PRIOR TO STRUCTURE DEMOLITION. PROVIDE FULL DEPTH SAWCUT AT ALL PAVEMENT REMOVALS.
   B. ASPHALT PAVEMENT AND PORTLAND CEMENT CONCRETE WHICH ARE INDICATED FOR REMOVAL: SAW CUT TO CLEAN, STRAIGHT, PERPENDICULAR LINES, UNLESS OTHERWISE SHOWN ON DRAWINGS. JACK HAMMERING IS NOT ACCEPTABLE, UNLESS INDICATED ON PLANS. CUT BACK CONCRETE WHEN NEW WORK WILL JOIN EXISTING TO PROVIDE KEY. PROVIDE WET VACUUM EQUIPMENT AS REQUIRED FOR CONTROL WASTE COOLING WATER.
   C. CURB: SAW CUT TO CLEAN, STRAIGHT, PERPENDICULAR LINES.
   D. REMOVE CONCRETE STRUCTURES OR PORTIONS OF STRUCTURES EXTENDING BELOW GRADE COMPLETELY.
   E. DEMOLITION SCHEDULE CAN BE ADJUSTED BY CONTRACTOR AS NECESSARY TO BEST FIT COORDINATION EFFORTS, HOWEVER, UTILITY SERVICE DISCONNECTS TO BE PERFORMED IN INITIAL DEMOLITION PLANS IF REQUIRED. DEPRESSIONS LEFT BY FOUNDATIONS, PIPE OR STRUCTURE REMOVALS SHALL BE BACKFILLED WITH STRUCTURAL FILL AND PROPERLY COMPACTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
7. WORK NOT MENTIONED TO BE REMOVED THAT INTERFERES WITH NEW CONSTRUCTION SHALL BE CUT AND REMOVED TO PROVIDE FOR PROPER INTERFACE WITH NEW CONSTRUCTION, OR PATCHING AND REPAIR, AS REQUIRED.
8. ALL MATERIALS INCLUDING DEBRIS FROM CLEARING AND BUILDING DEMOLITION SHALL BE DISPOSED OF IN AN APPROPRIATE OFF-SITE LOCATION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR BOTH DEMOLITION WORK AND WASTE MATERIAL DISPOSAL INCLUDING ANY ADDITIONAL TESTING FOR LEAD BASED PAINT AND/OR ASBESTOS.
9. CERTAIN BUILDINGS ARE KNOWN TO CONTAIN ASBESTOS CONTAINING MATERIALS. REMOVE AND DISPOSE OF ASBESTOS CONTAINING MATERIALS IN ACCORDANCE WITH ST.CLAIR COUNTY HEALTH DEPARTMENT. BUILDINGS REQUIRING DEMOLITION AS SHOWN ON THIS SHEET HAVE HAD AN ASBESTOS INVESTIGATION COMPLETED. THESE DOCUMENTS WILL BE PROVIDED TO THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AN ASBESTOS INVESTIGATION FOR THESE BUILDINGS.
10. CITY OF ASHVILLE WATER AND SEWER AND ALABAMA GAS CORPORATION IS RESPONSIBLE FOR ALL WATER AND GAS DEMOLITION AND/OR RELOCATION. CONTRACTOR IS RESPONSIBLE FOR COORDINATING HIS DEMOLITION SCHEDULES WITH CITY OF CULLMAN WATER & WASTEWATER DEPARTMENT AND CULLMAN-JEFFERSON GAS. CITY OF CULLMAN WATER & WASTEWATER AND CULLMAN-JEFFERSON GAS WILL ABANDON IN PLACE ALL GAS AND WATER MAINS AND SERVICES THAT ARE CALLED TO BE RELOCATED OR REMOVED. IN ADDITION CITY OF CULLMAN WATER & WASTEWATER AND CULLMAN-JEFFERSON GAS WILL CAP ABANDONED WATER AND GAS MAINS AT 5 FEET EACH SIDE OF ALL PROPOSED UNDERGROUND UTILITIES AFTER NEW MAIN IS INSTALLED.
11. ALL WATER AND GAS VALVES THAT ARE NOT REMOVED OR RELOCATED SHALL BE ADJUSTED TO GRADE BY CITY OF ASHVILLE WATER AND SEWER AND ALABAMA GAS CORPORATION.

CAUTION NOTICE TO CONTRACTOR:

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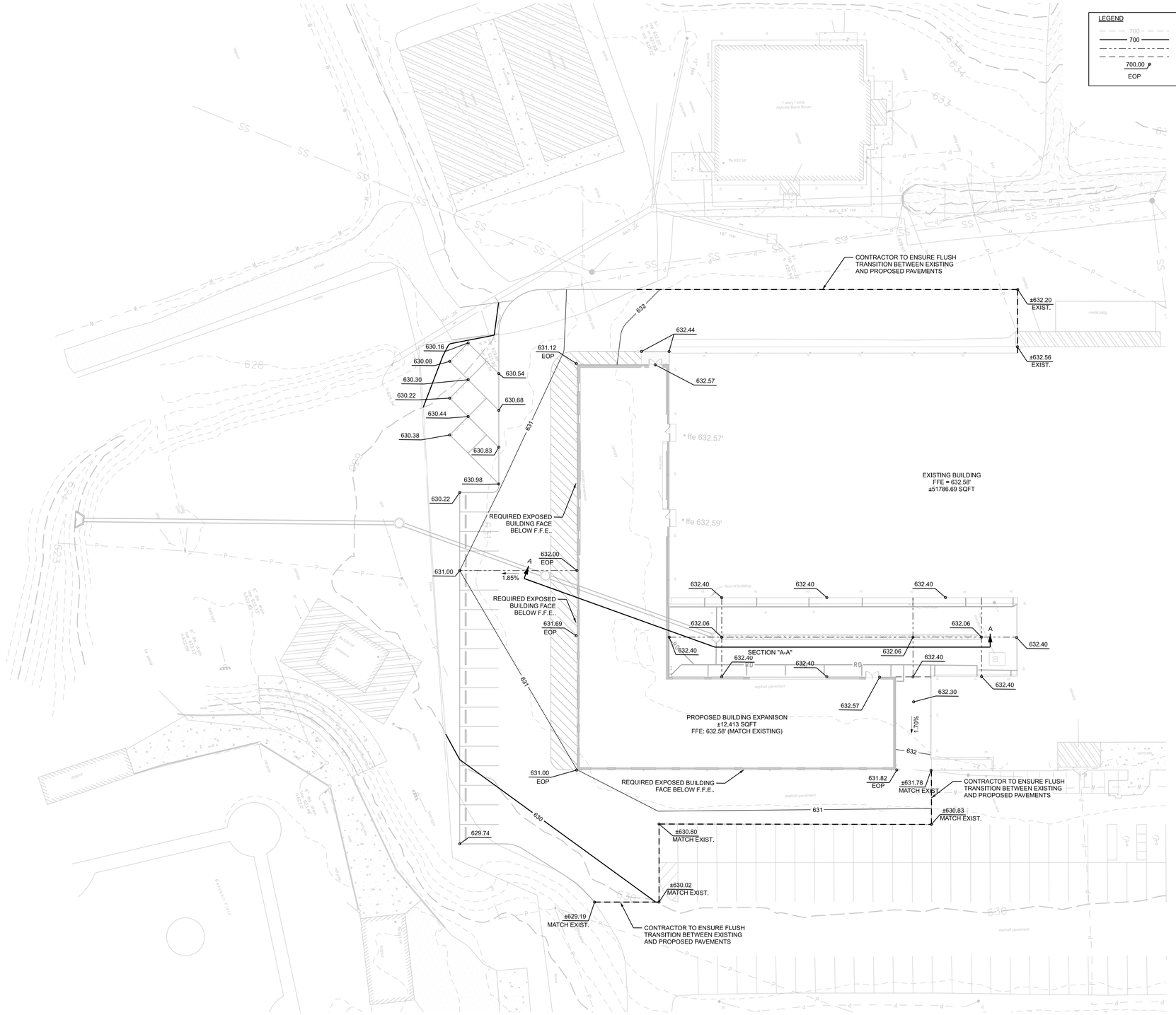
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
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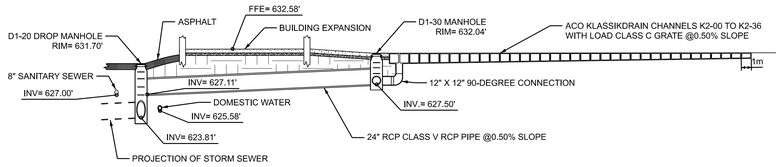
SHEET TITLE: DEMOLITION PLAN

ALABAMA LICENSED No. 55231 PROFESSIONAL ENGINEER WILLIAM DAVID DARTER
7/31/2025

PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1, ISSUE FOR BID

JOB NO. 24-106
SHEET NO: C-2.0
2 OF 8





TYPICAL SECTION A-A

N.T.S.

0 10 20 40

SCALE IN FEET
1" = 20'

GRADING NOTES:

1. REFERENCE GENERAL NOTES- DRAWING C-1.0

2. CLEARING AND GRUBBING LIMITS SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. ANY CLEARING REQUIRED FOR THIS CONSTRUCTION SHALL BE INCIDENTAL TO THE OVERALL SITE WORK.

3. ANY GRADED OR DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL WITH SOD, FERTILIZER, AND WATER APPLIED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL SLOPES 3:1 OR STEEPER SHALL BE SODDED.

4. GRADES SHOWN ARE FINISHED PAVEMENT & TOP OF GRASS GRADE ELEVATIONS. REFERENCE ARCHITECTURAL PLANS TO DETERMINE BUILDING SUBGRADE ELEVATIONS. FOR SUBGRADE ELEVATIONS IN PAVED AND SIDEWALK AREAS, REFERENCE SECTIONS & DETAILS.

5. CONTRACTOR SHALL MAINTAIN POSITIVE GRADE FALL AWAY FROM THE BUILIDNG AND ALL DOORS, DO NOT GRADE AREAS AROUND THE ENTIRE BUILDING TO ALLOW STORMWATER TO FLOW TOWARD THE BUILDINGS OR DOORS

6. SITE CONTRACTOR SHALL PROVIDE SUBGRADE FOR BUILDING PAD PER ARCHITECTURAL SPECIFICATIONS. REFERENCE ARCHITECTURAL PLAN FOR SUBGRADE ELEVATION.

7. CONTRACTOR SHALL OBTAIN AND BE FAMILIAR WITH GEOTECHNICAL INVESTIGATION PREPARED BY TERRACON (DATED MAY 13, 2025) AND ALL SUBSEQUENT REVISIONS.

8. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AS NECESSARY TO ACCOMMODATE NEW PAVEMENTS AND CURB & GUTTER AND ASSURE A SMOOTH FIT AND CONTINUOUS GRADE

9. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CODES AND SPECIFICATIONS OF THE MUNICIPALITY HAVING JURISDICTION OVER THE SITE.

10. THE LOCATION AND ELEVATION OF EXISTING UTILITIES, AS SHOWN ON THESE PLANS, SHOULD NOT BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM SEWER STRUCTURES, PIPES AND UTILITIES PRIOR TO CONSTRUCTION. ANY DEVIATIONS FROM PLAN INFORMATION SHOULD BE DISCUSSED WITH ENGINEER AND OWNERS REPRESENTATIVE. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY CONTACTS 48 HOURS PRIOR TO EXCAVATION IN AREAS WHERE UTILITIES MAY EXIST.

11. ANY EXCESS MATERIAL AT THE END OF THE GRADING OPERATIONS, SHALL BE REMOVED AND DISPOSED OF IN A LEGAL MANNER OFF-SITE.

12. NO SLOPES SHALL BE STEEPER THAN 3-HORIZONTAL TO 1-VERTICAL, UNLESS OTHERWISE NOTED ON THE PLAN OR APPROVED BY ENGINEER.

13. ALL TOPSOIL REQUIRED FOR THE SITE SHALL BE OBTAINED FROM THE SITE BEFORE ANY IS BORROWED FROM OFF SITE. CONTRACTOR IS TO COORDINATE ON SITE TOPSOIL ACQUISITION AND STOCK PILES.

14. ALL SPOT ELEVATIONS ARE AT EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

15. PRIOR TO PLACING FILL, THE EXISTING TREES, BRUSH, VEGETATION, TOPSOIL, SURFACE DEBRIS, AND ANY OTHER DELETERIOUS MATERIAL SHOULD BE REMOVED. AFTER CLEARING AND GRUBBING ANY REQUIRED CUTS TO THE FINISHED SUBGRADE SHOULD BE PERFORMED. AFTER EXCAVATION, THE EXPOSED SUBGRADE SHOULD BE PROOF-ROLLED WITH AN ADEQUATELY LOADED VEHICLE SUCH AS A FULLY LOADED TANDEM-AXLE DUMP TRUCK. THE PROOF-ROLLING SHOULD BE PERFORMED UNDER THE DIRECTION OF THE GEOTECHNICAL ENGINEER. AREAS EXCESSIVELY DEFLECTING UNDER THE PROOF-ROLL SHOULD BE DELINEATED AND SUBSEQUENTLY ADDRESSED BY THE GEOTECHNICAL ENGINEER. REMEDIATION FOR SOILS FAILING THE PROOF-ROLL WILL BE HIGHLY DEPENDENT ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION BUT MAY INCLUDE UNDERCUTTING OR MOISTURE CONDITIONING AND RE-COMPACTION.

16. THE SITE GRADING CONTRACTOR SHALL REFERENCE THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON DATED MAY 13, 2025 FOR ALL FILL MATERIAL REQUIREMENTS, COMPACTION REQUIREMENTS, UTILITY TRENCH BACKFILL (SPECIFICALLY THOSE TRENCHES BENEATH THE BUILDING) AND PAVEMENT TO SUBGRADE REQUIREMENTS.

17. ALL UTILITY TRENCHES IN THE BUILDING AND PARKING/DRIVE AREAS MUST BE BACKFILLED AND COMPACTED IN THE MANNER SPECIFIED FOR STRUCTURAL FILL. REDUCE LIFT THICKNESS TO 4 TO 6 INCHES (LOOSE MEASURE), IN ORDER TO ACHIEVE COMPACTION USING HAND OPERATED EQUIPMENT. DENSITY TEST TO BE PERFORMED AT LEAST EVERY 200 FT. ALONG THE TRENCH FOR EACH LIFT.

18. OWNER SHALL PROVIDE EARTHWORK TESTING IN ACCORDANCE WITH THE RECOMMENDATIONS WITHIN THE GEOTECHNICAL ENGINEERING REPORT PREPARED BY TERRACON.

19. PROPERTY LINES AND EASEMENTS ARE SHOWN ON THE CONSTRUCTION PLANS AS PROVIDED BY THE SURVEY. STRUCTURES SUCH AS WALLS, SIGNS, FENCES, BUILDINGS, ETC. OR PLANTS SUCH AS TREES OR SHRUBS SHALL NOT BE PLACED IN THE RIGHT OF WAYS, EASEMENTS, OR OUTSIDE PROPERTY WITHOUT PROPER APPROVAL.

CAUTION NOTICE TO CONTRACTOR:

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NEW CLASSROOM ADDITION FOR
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33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

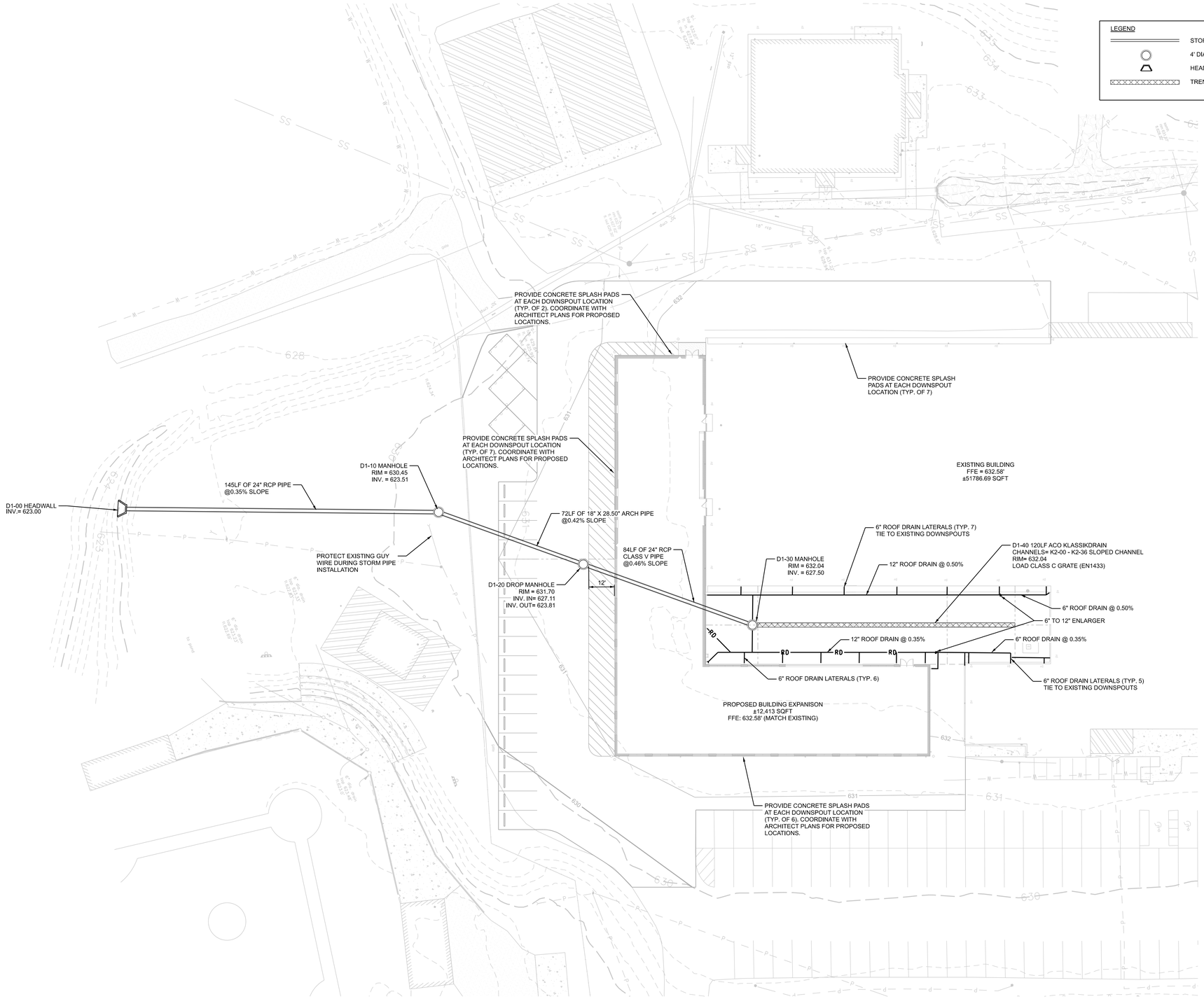
SHEET TITLE:
GRADING PLAN

ALABAMA LICENSED No. 55231 PROFESSIONAL ENGINEER WILLIAM DAVID DALLAS
7/31/2025

PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1. ISSUE FOR BID

JOB NO. 24-106
SHEET NO:
C-3.0
3 OF 8

0 1" 2"



0 10 20 40

SCALE IN FEET
1" = 20'

STORM DRAINAGE NOTES:

1. STORM PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP), CONFORMING TO ASTM C-76, B OR C WALL, CLASS III OR CLASS V, (UNLESS NOTED OTHERWISE ON PLAN). JOINTS SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT, WHICH MUST BE SEALED WITH RUBBER GASKETS CONFORMING TO ASTM 443 OR FLEXIBLE GASKETS CONFORMING TO AASHTO M 198, UNLESS NOTED OTHERWISE.

2. ALL ROOF COLLECTORS SHALL BE PVC OR HDPE. SIZE SHALL BE AS CALLED OUT ON THIS SHEET. CONTRACTORS SHALL PROVIDE A WATERTIGHT CONNCECTION FROM ROOF DRAIN TO COLLECTOR WHERE ROOF DRAIN EXITS BUILDING FOUNDATION.

3. ALL PIPE ENTERING STORM SEWER STRUCTURES SHALL BE GROUTED TO ASSURE THE CONNECTION AT THE STRUCTURE IS WATER TIGHT.

4. ALL STORM SEWER MANHOLES AND INLETS SHALL BE PRECAST OR CAST IN PLACE AND MEET THE SPECIFICATIONS OF ASTM C478.

5. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH THE PAVEMENT AND SHALL HAVE TRAFFIC BEARING LIDS.

6. ALL STORM SEWER MANHOLE LIDS SHALL BE LABELED "STORM SEWER". OR PER CITY STANDARDS.

7. ALL STORM DRAINAGE PIPE AND STRUCTURES SHALL BE CLEANED OF SILT, TRASH AND DEBRIS PRIOR TO DEMOBILIZATION FROM THE SITE.

8. CONTRACTOR IS TO BEGIN STORM DRAINAGE CONSTRUCTION FROM THE MOST DOWN STREAM POINT OF THE SYSTEM.

9. PIPE LENGTH AND SLOPES ARE APPROXIMATE. PIPE LENGTH ARE HORIZONTAL PROJECTIONS AND ARE MEASURED FROM THE MIDDLE OF THE STRUCTURE. DISTANCES ARE ROUNDED TO THE NEAREST WHOLE FOOT.

10. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING STORM STRUCTURES, PIPES AND UTILITIES PRIOR TO CONSTRUCTION. ANY DEVIATIONS OR CONFLICTS FROM THE LOCATIONS SHOWN SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.

CAUTION NOTICE TO CONTRACTOR:

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SHEET TITLE:
STORM DRAINAGE PLAN

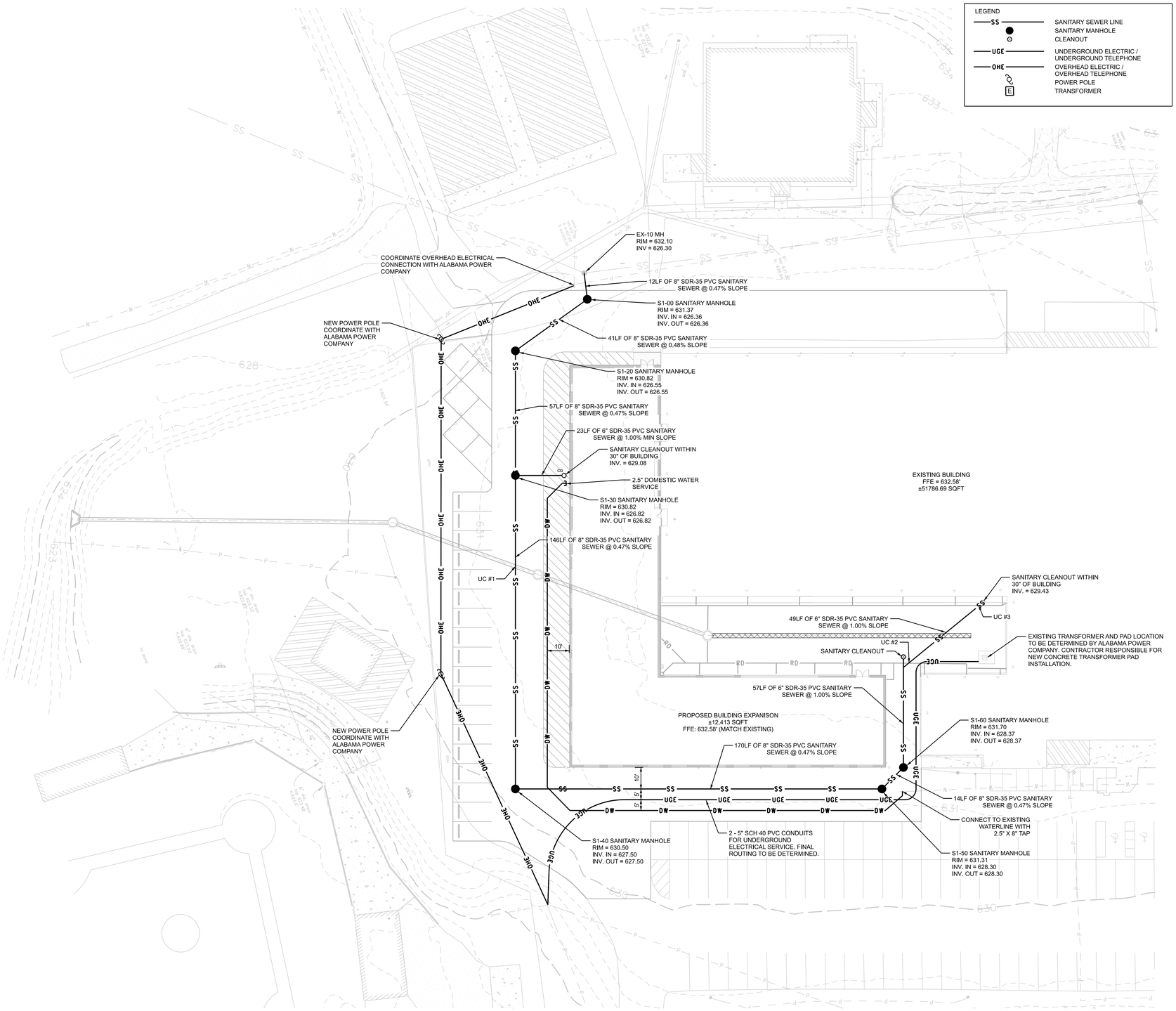
ALABAMA LICENSED No. 55231 PROFESSIONAL ENGINEER WILLIAM DAVID DALEY
Bill Daley 7/31/2025

PROJ. MGR.:	R. VERNON
DRAWN:	SAB
DATE:	7/31/2025
REVISIONS	
1.	ISSUE FOR BID

JOB NO. 24-106

SHEET NO:
C-4.0
4 OF 8

0 1" 2"



N

0 10 20 40

SCALE IN FEET
1" = 20'

SANITARY SEWER NOTES

1. REFERENCE GENERAL NOTES AND ARCHITECTURAL/PLUMBING PLANS.
2. DIMENSIONS SHOWN ARE TO THE CENTERLINE OF PIPE OR TO CENTERLINE OF MANHOLE.
3. ALL CLEANOUTS SHALL BE A SHALL BE FLUSH WITH EXISTING/PROPOSED GRADE ELEVATIONS.
4. SANITARY SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF ASHVILLE WATER AND SEWER REQUIREMENTS.
5. CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL BUILDING ENTRANCES. TO INCLUDE SANITARY SEWER SERVICE, DOMESTIC & IRRIGATION SERVICE, ELECTRICAL TELEPHONE & GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES SUCH THAT PROPER DEPTHS ARE ACHIEVED, AS WELL AS COORDINATING WITH THE APPROPRIATE UTILITIES AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.

POWER NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL SCHEDULE 40 GRAY PVC UNDERGROUND CONDUIT ASSOCIATED WITH POWER AND TELEPHONE DISTRIBUTION AND SERVICE.
2. CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY PULL BOXES FOR POWER AND UTILITY CONSTRUCTION.
3. ALL BENDS FOR POWER AND TELEPHONE CONDUITS (HORIZONTAL AND VERTICAL) SHALL BE LONG SWEEPING ELLS.
4. POWER CONDUITS SHALL BE INSTALLED WITH A MINIMUM OF 4 FEET OF COVER FROM FINISHED GRADE TO TOP OF THE CONDUIT.
5. A MINIMUM OF 1 FOOT OF HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN POWER AND TELEPHONE CONDUITS.
6. THE MINIMUM SPACING BETWEEN PRIMARY AND SPARE CONDUITS IS THE DIAMETER OF THE CONDUITS.
7. ALL CONDUITS SHALL BE PROVIDED WITH PULL STRING.
8. THE BUILDING ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR PULLING ALL SECONDARY CONDUCTORS AS WELL AS MAKING THE ASSOCIATED SECONDARY TERMINATIONS WITHIN THE TRANSFORMER. UNLESS OTHERWISE NOTED.

WATER NOTES

1. REFERENCE GENERAL NOTES.
2. ALL DOMESTIC LEADS TO BUILDING SHALL END WHERE NOTED ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUGS AT END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY). COORDINATE EXTENSION OF WATER LINE WITH PROJECT PLUMBING CONTRACTOR.
3. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
4. SITE CONTRACTOR SHALL COORDINATE TAPS WITH CITY OF ASHVILLE WATER AND SEWER. CONTRACTOR IS RESPONSIBLE FOR ALL CHARGES, FEES ETC. ASSOCIATED WITH WATER CONNECTION. CONTRACTOR SHALL PROVIDE AND INSTALL DOMESTIC SERVICE PER CITY OF ASHVILLE WATER AND SEWER.
5. THE CONTRACTOR SHALL COORDINATE ALL UTILITY INSPECTIONS WITH THE GOVERNING AUTHORITIES PRIOR TO COVERING TRENCHES DURING INSTALLATION.
6. CONTRACTOR SHALL MAINTAIN A 24" HORIZONTAL AND 18" VERTICAL SEPARATION BETWEEN WATER SERVICE AND OTHER UTILITIES, EXCEPT FOR SANITARY SEWER. POTABLE WATER PIPING SHALL BE LAID AT LEAST TEN FEET HORIZONTALLY FROM SANITARY SEWER LINES. THE DISTANCE SHALL BE MEASURED FROM EDGE OF PIPE TO EDGE OF PIPE. WHERE CROSSINGS ARE NECESSARY, CASE ONE OF THE PIPES WITH A CONTINUOUS PIPE OF SUFFICIENT LENGTH, LOCATED SUCH THAT A MINIMUM FIVE (5)-FOOT SEPARATION EXISTS BETWEEN EACH END OF THE CASING PIPE AND THE UNCASED PIPE. POTABLE WATER PIPING CROSSING SANITARY SEWER LINES SHALL BE LAID TO PROVIDE MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE POTABLE WATER PIPING AND THE OUTSIDE OF THE SEWER LINE. THE 18 INCH SEPARATION SHALL APPLY WHETHER THE POTABLE WATER PIPING IS OVER OR UNDER THE SEWER LINE. LAY POTABLE WATER PIPING AT CROSSINGS OF SEWER LINES SO A FULL LENGTH OF PIPE IS CENTERED ON THE SEWER LINE WHENEVER POSSIBLE.
7. CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL BUILDING ENTRANCES. TO INCLUDE SANITARY SEWER SERVICE, DOMESTIC & IRRIGATION SERVICE, ELECTRICAL TELEPHONE & GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES SUCH THAT PROPER DEPTHS ARE ACHIEVED, AS WELL AS COORDINATING WITH THE APPROPRIATE UTILITIES AS TO LOCATION AND SCHEDULING OF TIE-INS/CONNECTIONS TO THEIR FACILITIES.
8. INSPECTION WILL BE BY CITY OF ASHVILLE INSPECTOR. NOTIFY CITY OF ASHVILLE WATER AND SEWER A MINIMUM OF 24 HOURS PRIOR TO ANY WORK ON SERVICE LINES.
9. DOMESTIC WATER LINE SHALL BE TYPE K COPPER CONFORMING WITH ASTM B88 PROVIDE WITH SOLDER JOINTS CONFORMING WITH ASME B16.18 OR ASME B16.22.
10. ALL WATER TAPS SHALL BE PROVIDED WITH GATE VALVE PER CITY OF ASHVILLE WATER AND SEWER REQUIREMENTS.

UTILITY CONFLICTS

UC #1:	8" SANITARY TOP = ±627.67
	8" SANITARY BOTTOM = ±627.00
	18" X 28.50" ARCH STORM TOP = ±625.27
	18" X 28.50" ARCH STORM BOTTOM = ±623.77
UC #2:	6" SANITARY TOP = ±629.48
	6" SANITARY BOTTOM = ±628.98
	6" STORM TOP = ±628.86
	6" STORM BOTTOM = ±628.36
UC #3:	6" SANITARY TOP = ±629.90
	6" SANITARY BOTTOM = ±629.40
	6" STORM TOP = ±629.20
	6" STORM BOTTOM = ±628.70

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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE: UTILITY PLAN

ALABAMA LICENSED Bill Bartley No. 55231 PROFESSIONAL ENGINEER 7/31/2025 WILLIAM DAVID BARTLEY

PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1, ISSUE FOR BID

JOB NO. 24-106
SHEET NO: C-5.0
5 OF 8
0 1" 2"

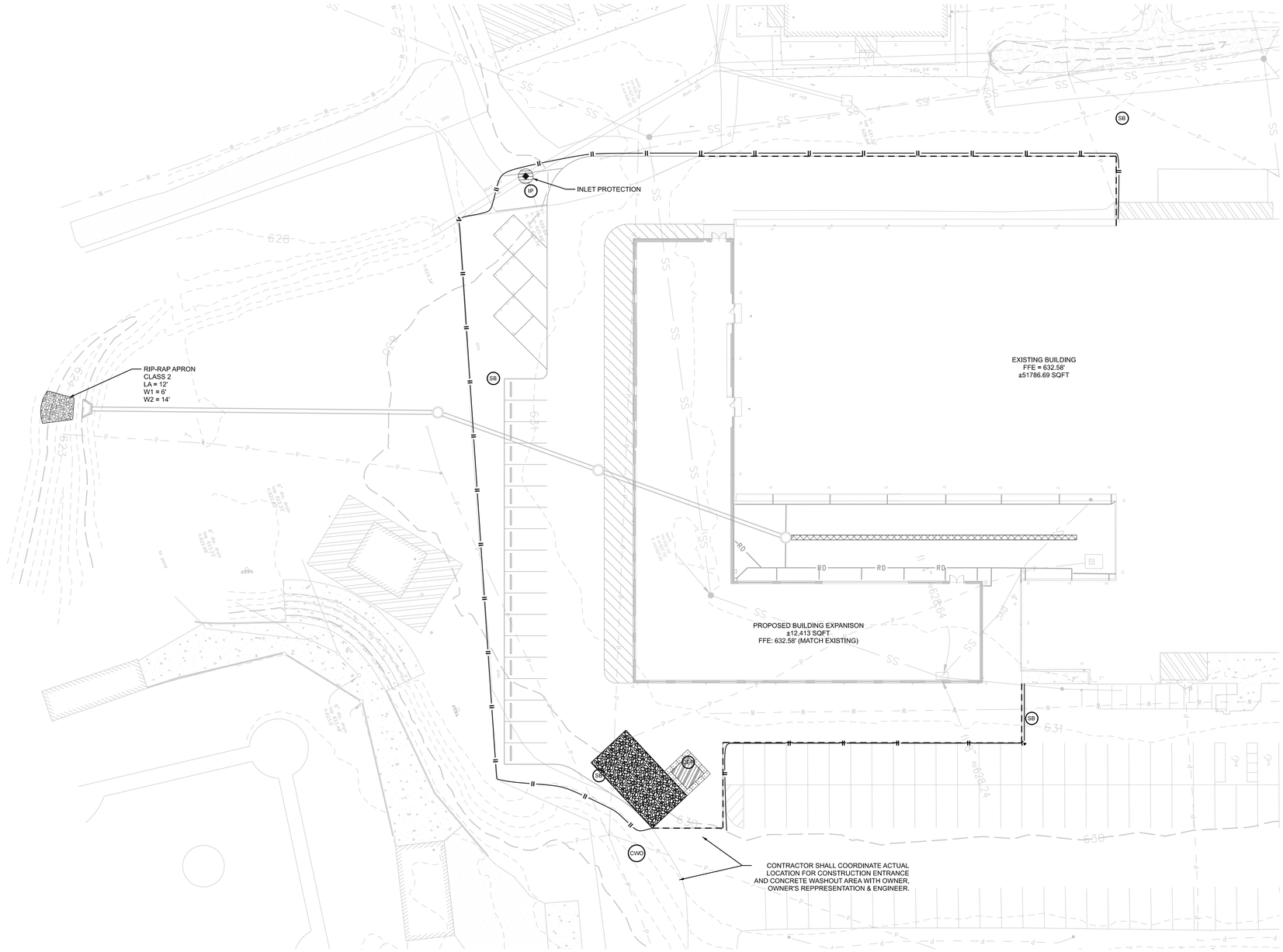
EROSION CONTROL LEGEND

- CEP — CONSTRUCTION EXIT PAD
- SB — SEDIMENT BARRIER - WATTLE
- IP — INLET PROTECTION
- CWO — CONCRETE WASHOUT PIT

N

0 10 20 40

SCALE IN FEET
1" = 20'



EROSION & SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLANS DOES NOT PROVIDE SUFFICIENT EROSION AND SEDIMENT CONTROL, ADDITIONAL CONTROL MEASURES SHALL BE IMPLEMENTED IMMEDIATELY TO PREVENT SILT OR SEDIMENT FROM ESCAPING THE SITE AT NO ADDITIONAL COST TO OWNER. CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL DEVICES AFTER EACH RAINFALL AND PERFORM NECESSARY REPAIRS AND MAINTENANCE. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING EROSION AND SEDIMENT CONTROL DEVICES WHICH BECOME INEFFECTIVE. NO ADDITIONAL PAYMENT WILL BE MADE FOR ADDITIONAL EROSION CONTROL DEVICES OR MEASURES AS DEEMED NECESSARY BY THE ENGINEER, OWNER OR REGULATORY AUTHORITIES TO COMPLY WITH CONSTRUCTION DOCUMENTS OR GOVERNING AUTHORITY.
2. CONTRACTOR SHALL REMOVE THE BUILD UP OF SILT AND SEDIMENT FROM BEHIND SEDIMENT BARRIERS, SEDIMENT TRAPS AND INLET PROTECTION WHEN SILT AND SEDIMENT HAS REACHED 1/3 THE TOTAL HEIGHT OF THE EROSION AND SEDIMENT CONTROL DEVICE.
3. THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH ANY FINES LEVIED AGAINST THE SITE FOR VIOLATIONS OF EROSION CONTROL REGULATIONS AND PERMITS.
4. ALL EROSION CONTROL MEASURES SHALL MEET THE GUIDELINES SET FORTH IN THE "ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, VOLUME 1". PUBLISHED BY THE ALABAMA SOIL AND WATER CONSERVATION COMMITTEE, MONTGOMERY, ALABAMA.
5. CONTRACTOR SHALL INSTALL, MAINTAIN AND INSPECT ALL EROSION AND SEDIMENT DEVICES AND MEASURES IN ACCORDANCE WITH THE "ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS VOLUME 2". PUBLISHED BY THE ALABAMA SOIL AND WATER CONSERVATION COMMITTEE, MONTGOMERY, ALABAMA.
6. THE LIMITS OF DISTURBANCE SHALL INCLUDE ALL AREAS DISTURBED BY GRADING OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL AREAS OUTSIDE THE LIMITS OF DISTURBANCE. ANY DAMAGE OUTSIDE THE LIMITS OF CONSTRUCTION CAUSED BY THE CONTRACTOR OR CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED TO ITS ORIGINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR THE CLEANUP AND REMOVAL OF ANY BUILDUP OF SEDIMENT WHICH ESCAPES FROM THE SITE.
7. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT AND SEDIMENT FROM THE SITE (IF NOT REUSABLE ON SITE) AND FOR CORRECTING HORIZONTAL AND VERTICAL ALIGNMENT OF SLOPES & DITCHES, IF NECESSARY AT THE COMPLETION OF CONSTRUCTION AND WITHIN THE ONE YEAR WARRANTY PERIOD.
8. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SILT, SEDIMENT AND DEBRIS OUT OF ALL STORM DRAINAGE STRUCTURES UPON THE COMPLETION OF CONSTRUCTION AND ONE WEEK AFTER ALL PAVING, LANDSCAPE AND FINISH WORK HAS BEEN COMPLETED.
9. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED.
10. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER HANDLING AND STORAGE OF HAZARDOUS MATERIALS SUCH AS: PAINTS, FUELS FERTILIZERS, POISONS, ETC., DURING CONSTRUCTION. APPROPRIATE SPILL PREVENTION SHOULD BE IMPLEMENTED TO REDUCE THE POSSIBILITY OF CONTAMINATING STORM WATER RUNOFF.
11. CONTRACTOR SHALL PROVIDE TEMPORARY GROUND COVER FOR ALL AREAS WITH EXPOSED SOIL WHICH WILL NOT BE DISTURBED BY GRADING OPERATIONS FOR A PERIOD OF 13 DAYS OR MORE.

INITIAL EROSION CONTROL:

1. INSTALL SEDIMENT BARRIER AND CONSTRUCTION EXIT PAD.
2. CLEAR, GRUB AND STRIP TOPSOIL.

INTERMEDIATE EROSION CONTROL:

1. PROVIDE FABRIC INLET PROTECTION WITH SEDIMENT TRAPS IMMEDIATELY FOLLOWING INLET INSTALLATION AND MAINTAIN WHILE SOIL SUBGRADE IS EXPOSED.
2. REMOVE SOFT, YEILDING OR UNSUITABLE MATERIAL.
3. BEGIN GRADING FOR BUILDING PAD & PARKING; MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.

FINAL EROSION CONTROL:

1. CONVERT INLET PROTECTION TO GRATE INLET PROTECTION.
2. PROVIDE LANDSCAPING OR SODING OF NON PAVED DISTURBED AREAS.
3. AFTER ALL AREAS ARE STABILIZED, REMOVE CONSTRUCTION ENTRANCES, SILT BARRIERS, AND OTHER TEMPORARY SEDIMENT CONTROL DEVICES.
4. REFER TO LANDSCAPE PLAN FOR ALL PERMANENT STABILIZATION MEASURES OUTSIDE OF PAVED AREAS.

CAUTION NOTICE TO CONTRACTOR:

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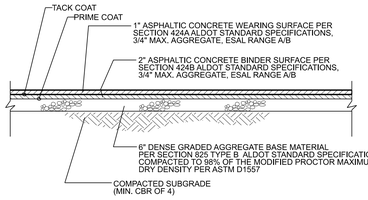
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
EROSION CONTROL PLAN

ALABAMA LICENSED No. 55231 PROFESSIONAL ENGINEER WILLIAM DAVID DALLAS
7/31/2025

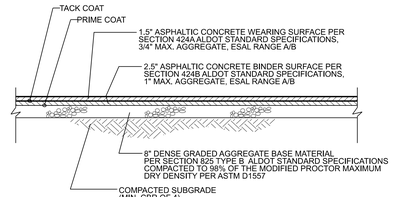
PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1. ISSUE FOR BID

JOB NO. 24-106
SHEET NO:
C-6.0
6 OF 8



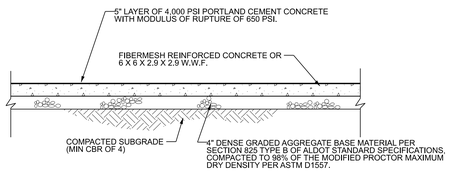
LIGHT-DUTY ASPHALT PAVING SECTION

N.T.S.



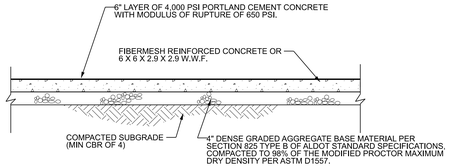
HEAVY-DUTY ASPHALT PAVING SECTION

N.T.S.



SIDEWALK AND CORRIDOR SECTION

N.T.S.



DUMPSTER PAD SECTION

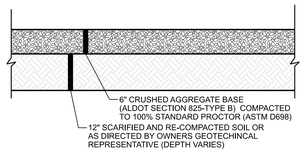
N.T.S.

PAVEMENT SECTION NOTES:

1. THE COMPACTION, QUALITY AND GRADATION OF THE GAB CRUSHED STONE BASE WILL DIRECTLY AFFECT THE QUALITY AND LIFE OF THE PAVEMENT SECTION. CONSEQUENTLY, WE RECOMMEND A MINIMUM COMPACTION OF 98 PERCENT OF THE MAXIMUM DRY DENSITY FOR THE GAB CRUSHED STONE MATERIAL AS DETERMINED BY EITHER THE MODIFIED PROCTOR COMPACTION TEST (ASTM D 1557, METHOD D) OR THE MODIFIED AASHTO (T-180).

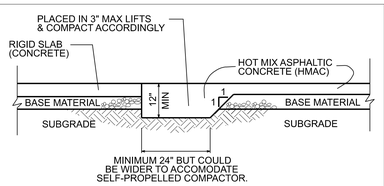
2. A SOIL ENGINEERING TECHNICIAN WORKING UNDER THE DIRECTION OF A GEOTECHNICAL ENGINEER SHOULD OBSERVE PLACEMENT AND COMPACTION OF THE BASE COURSE MATERIAL AND PERFORM DENSITY TESTS TO CONFIRM THAT THE MATERIAL HAS BEEN PLACED IN ACCORDANCE WITH CONTOUR'S RECOMMENDATIONS.

3. THE CONCRETE PAVEMENT SHOULD HAVE THE MINIMUM THICKNESS LISTED ABOVE. THE PAVEMENT SHOULD INCLUDE TEMPERATURE REINFORCEMENT AND HAVE A MAXIMUM JOINT SPACING AS RECOMMENDED BY ACI 330. THE CONCRETE PAVEMENT SHOULD HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER INCH (PSI) WITH A MODULUS RUPTURE OF 630 PSI. PLACING THE 4-INCH CRUSHED STONE BASE COURSE BENEATH THE PAVEMENT WILL PREVENT THE PUMPING OF THE SOIL FINES THROUGH THE CONSTRUCTION JOINTS.



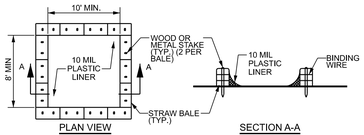
STANDARD GRAVEL PAVING SECTION

N.T.S.



TYPICAL ASPHALT TO CONCRETE TRANSITION

N.T.S.

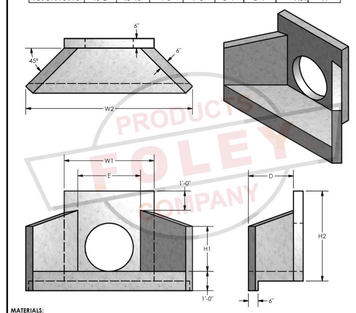


NOTES:
1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF.
2. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE BACKFILLED AND REPAIRED.
3. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 4 IN. FOR ABOVE GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
4. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
5. WASHOUT PIT MAY NOT BE LOCATED WITHIN 50' OF SURFACE WATER.

CONCRETE WASHOUT PIT

N.T.S.

HEADWALL SIZE	W1	W2	H1	H2	D	E	TONS	BLOCKS
12"	2'-5"	3'-9"	0'-7"	2'-5"	1'-5"	1'-0"	0.55	N/A
15", 18"	3'-2"	4'-9"	1'-3"	3'-2"	1'-2"	1'-9"	0.92	1
24"	4'-2"	6'-2"	2'-0"	4'-2"	1'-8"	2'-9"	1.73	3
30", 36"	4'-8"	8'-8"	2'-4"	4'-8"	2'-4"	3'-3"	1.92	3
42", 48"	5'-8"	10'-11"	3'-6"	5'-9"	3'-0"	4'-3"	3.33	4
54", 60"	6'-5"	12'-6"	4'-0"	6'-5"	3'-5"	5'-0"	3.77	7
66", 72"	8'-5"	13'-5"	5'-7"	8'-0"	3'-0"	7'-0"	5.30	9
78", 84", 90", 96"	10'-2"	15'-10"	4'-0"	9'-0"	3'-4"	8'-4"	7.31	11

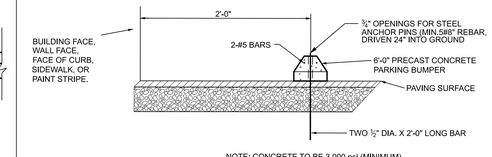


MATERIALS:
CONCRETE: 4,000 PSI, TYPE II/II CEMENT

NOTES:
SEE PAGE 3.4 FOR HEADWALL SIZING

PARTS SHOWN:
30" HEADWALL FOR Ø18" RCP

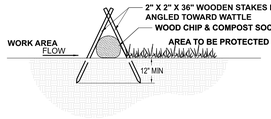
PRODUCTS FOLEY COMPANY | REINFORCED CONCRETE PIPE | 3.5
HEADWALLS

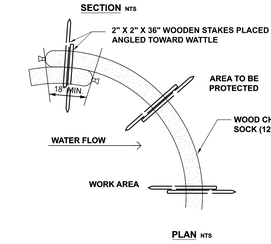


NOTE: CONCRETE TO BE 3,000 psi (MINIMUM).

PRECAST CONCRETE BUMPER BLOCK

N.T.S.



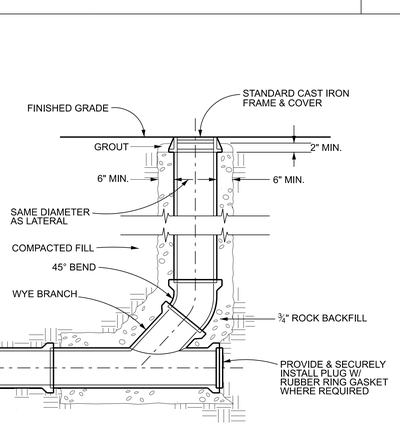


NOTES:
1. FILL FABRIC SOCK WITH COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
2. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

WOOD CHIP & COMPOST SOCK (WATTLE) SEDIMENT CONTROL

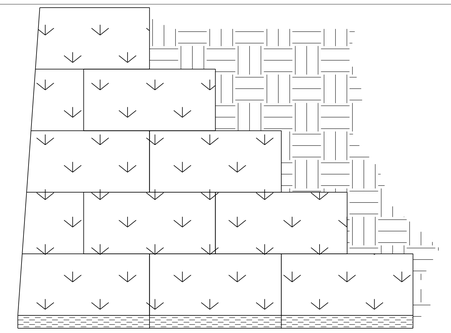
NTS

SEDIMENT BARRIER (WATTLE)



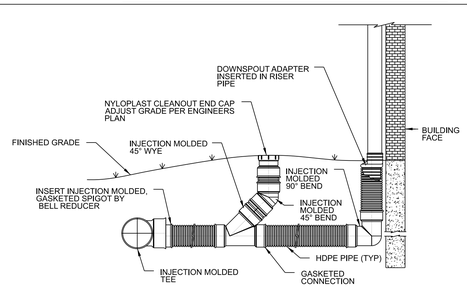
STANDARD CLEANOUT

N.T.S.



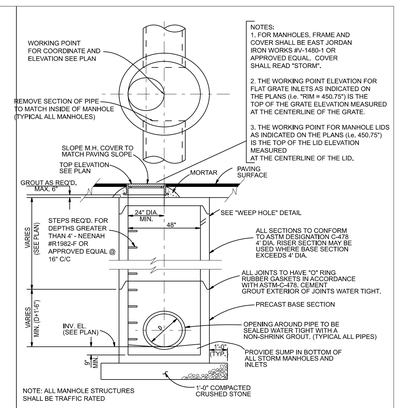
NOTES:
1. FIRST ROW OF SOD TO BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PARALLEL TO AND BUTTING TIGHTLY AGAINST EASCH OTHE. STAGGER STRIPS IN A BRICK-LIKE PATTERN.
2. INSTALL STRIPS OF SOD WITH THE LONGEST DIMENSION PERPENDICULAR TO THE SLOPE.
3. SECURE SOD WITH PEGS OR STAPLES ON SLOPES GREATER THAN 3:1, IN GRASS SWALES, AND ANYWHERE EROSION MAY BE A PROBLEM.

TYPICAL INSTALLATION OF GRASS SOD



ROOF DRAIN LATERAL DETAIL

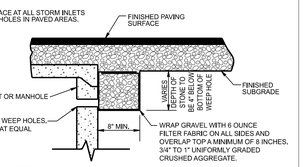
N.T.S.



NOTES:
1. FOR MANHOLES, FRAME AND COVER SHALL BE EAST JORDAN IRON WORKS #V-1480-1 OR APPROVED EQUAL. COVER SHALL READ "STORM".
2. THE WORKING POINT ELEVATION FOR FLAT GRATE INLETS AS INDICATED ON THE PLANS (i.e. "RIM = 450.75") IS THE TOP OF THE GRATE ELEVATION MEASURED AT THE CENTERLINE OF THE GRATE.
3. THE WORKING POINT FOR MANHOLE LIDS AS INDICATED ON THE PLANS (i.e. 450.75') IS THE TOP OF THE LID ELEVATION MEASURED AT THE CENTERLINE OF THE LID.

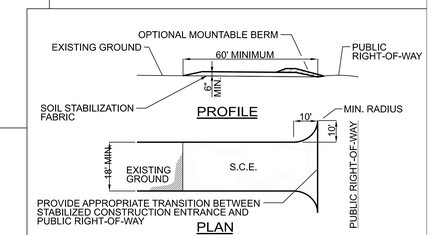
PRECAST STORM MANHOLE/INLET

N.T.S.



STORM INLET & MANHOLE WEEP HOLE DETAIL

N.T.S.

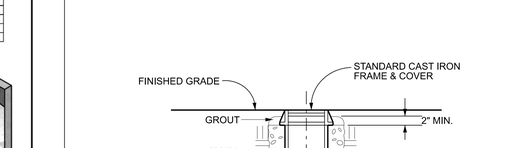


CONSTRUCTION SPECIFICATIONS

1. STONE SIZE: #4 WASHED STONE.
2. LENGTH: AS EFFECTIVE, BUT NOT LESS THAN 60 FT. (WITH THE EXCEPTION OF
3. THICKNESS: NOT LESS THAN 6 INCHES.
4. WIDTH: 18 FT. MIN., BUT NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS AND EGRESS.
5. STABILIZATION FABRIC: WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER: ALL SURFACE WATER FLOWING OF DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES IS PERMITTED.
7. WASHING: WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF SILT FENCES, ROCK BARRIERS OR OTHER APPROVED METHODS.
8. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

CEP STABILIZED CONSTRUCTION ENTRANCE

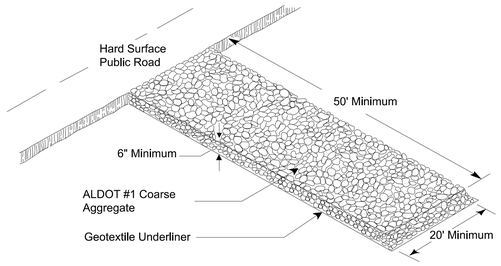
N.T.S.



NOTES:
1. FOR ROCK OR OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHALL BE OVEREXCAVATED A MINIMUM OF 6" AND REFILLED WITH GRANULAR MATERIAL
2. O.D. = OUTSIDE DIAMETER.

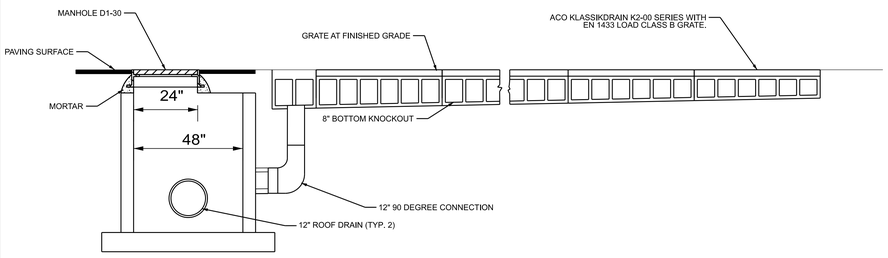
PIPE (RCP) BEDDING DETAIL

N.T.S.



CONSTRUCTION EXIT PAD

CEP



TRENCH DRAIN/ROOF DRAIN COLLECTOR DETAIL

N.T.S.

CAUTION NOTICE TO CONTRACTOR:

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL AT LEAST 48 HOURS BEFORE ANY SITE DISTURBANCE OR EXCAVATION TO REQUEST FIELD LOCATION OF UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

ALABAMA Know what's below. 811 Call before you dig.

CCI PLANNING & ENGINEERING
3528 Vann Road
Suite 105
Birmingham, AL 35235
Phone: (205) 655-1991
www.ccipe.com

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
SECTION AND DETAILS

ALABAMA LICENSED PROFESSIONAL ENGINEER Brad Bailey No. 55231 7/31/2025 BRADLEY DAVID BAILEY

PROJ. MGR.: R. VERNON
DRAWN: SAB
DATE: 7/31/2025
REVISIONS
1. ISSUE FOR BID

JOB NO. 24-106
SHEET NO:
C-7.0
7 OF 8

0 1" 2"

TOPOGRAPHIC SURVEY
ASHVILLE HIGH SCHOOL

33215 U.S. # 231, ASHVILLE, AL.35953

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

(GPS OBSERVATION)

ABBREVIATIONS

FFE	FINISH FLOOR ELEVATION
C/L	CENTERLINE
N.T.S.	NOT TO SCALE
P.O.C.	POINT OF BEGINNING
P.O.B.	POINT OF COMMENCEMENT
(M)	MEASURED
(D)	DEED
(P)	PLAT
ROW	RIGHT OF WAY
FL	FLOWLINE
FLG	FLOWLINE GUTTER
INV.	INVERT
INV.G	INVERT GUTTER
SWI	SINGLE WING INLET
DWI	DOUBLE WING INLET
CI	CURB INLET
GI	GRATE INLET
YI	YARD INLET
STMH	STORM MANHOLE
SSMH	SANITARY MANHOLE
RCP	REINFORCED CONCRETE PIPE
CMP	CORRUGATED METAL PIPE
PVC	POLY-VINYL CHLORIDE PIPE
CPP	CORRUGATED PLASTIC PIPE
VC	VITRIFIED CLAY
BOW	BOTTOM OF WALL
TOW	TOP OF WALL
BOC	BOTTOM OF CURB
TOC	TOP OF CURB
HC	HANDICAP SIGN

SURVEY CONTROL

THE BEARINGS AND OR COORDINATES SHOWN ON THIS SURVEY ARE BASED ON ALABAMA STATE PLANE EAST ZONE, GRID NORTH, NAD 83(ADJUSTED 2011). THE VERTICAL DATUM IS NAVD 88 (GEOID 18). ELEVATION AND POSITION WAS OBTAINED FROM R.T.K OBSERVATION USING THE ALDOT CORS NETWORK AS CONTROL.

SURVEYORS' NOTES:

1. NO TITLE SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM AND LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS AND/OR RIGHTS OF WAYS, RECORDED OR UNRECORDED. THE PARCEL SHOWN HEREON IS SUBJECT TO SETBACKS, EASEMENTS, ZONING, AND RESTRICTIONS THAT MAY BE FOUND IN THE PUBLIC RECORD OF SAID COUNTY.
2. ALL BEARINGS AND/OR ANGLES, AND DISTANCES ARE DEED AND ACTUAL UNLESS OTHERWISE NOTED: DEED=(D); MEASURED=(M); RECORD MAP/PLAT=(P); CALCULATED=(C).
3. UNDERGROUND PORTIONS OF FOUNDATIONS, FOOTINGS, OR OTHER UNDERGROUND STRUCTURES WERE NOT LOCATED UNLESS OTHERWISE NOTED.
4. UPSTREAM PROPERTY OWNERS POSSESS A NATURAL EASEMENT ACROSS THE SUBJECT PROPERTY FOR SURFACE WATER FLOWING IN IT'S NATURAL COURSE.
5. THIS SURVYOR MADE NO DETERMINATION REGARDING ANY REGULATORY WATERS OF THE UNITED STATES AS DEFINED BY SECTION 404 OF THE CLEAN WATER ACT THAT MAY EXIST ON THE SUBJECT PROPERTY.
6. ANY PUBLIC UTILITY LINES AND EQUPMENT SHOWN ON THIS SURVEY MAY BE SUBJECT TO EASEMENTS FOR OPERATION AND MAINTENANCE OF SAME
7. THIS SURVEY IS VALID ONLY WITH AN ORIGINAL SIGNATURE AND A LEGIBLE SEAL.

811
Know what's below.
Call before you dig.
Call 2 working days before digging.
It's the Law!

I HEREBY STATE THAT ALL PARTS OF THIS SURVEY AND DRAWING HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF ALABAMA TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

SURVEYOR:

JEFF D. ARRINGTON
ALABAMA NO. 18664

DATE: 6-24-2025

ARRINGTON ENGINEERING
Civil Engineers - Surveyors - Land Planners
OFFICE: (205) 985-9315
Fax: (205) 985-9385
2032 Valleydale Road
Birmingham AL 35244

DRAWING TITLE	TOPOGRAPHIC SURVEY ASHVILLE HIGH SCHOOL
LOCATION & DESCRIPTION	33215 U.S. # 231, ASHVILLE, AL.35953

STATE OF ALABAMA REGISTERED #18664 PROFESSIONAL LAND SURVEYOR JEFF D. ARRINGTON

DRAWN BY	JDA
CHECKED BY:	JDA
DATE:	6-24-2025
SCALE:	1" = 40'
PARTY CHIEF	JJ-KS
PROJECT NO.:	84890
SHEET	1 OF 1

G:\2025 PROJECTS\59- St Clair County Schools\84890 - Ashville HS\DWG\84890-6-24-2025.dwg

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE: SIGNED AND SEALED SURVEY

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 55231 WILLIAM DAVID DAILEY 7/31/2025

PROJ. MGR.:	R. VERNON
DRAWN:	SAB
DATE:	7/31/2025
REVISIONS	
1.	ISSUE FOR BID

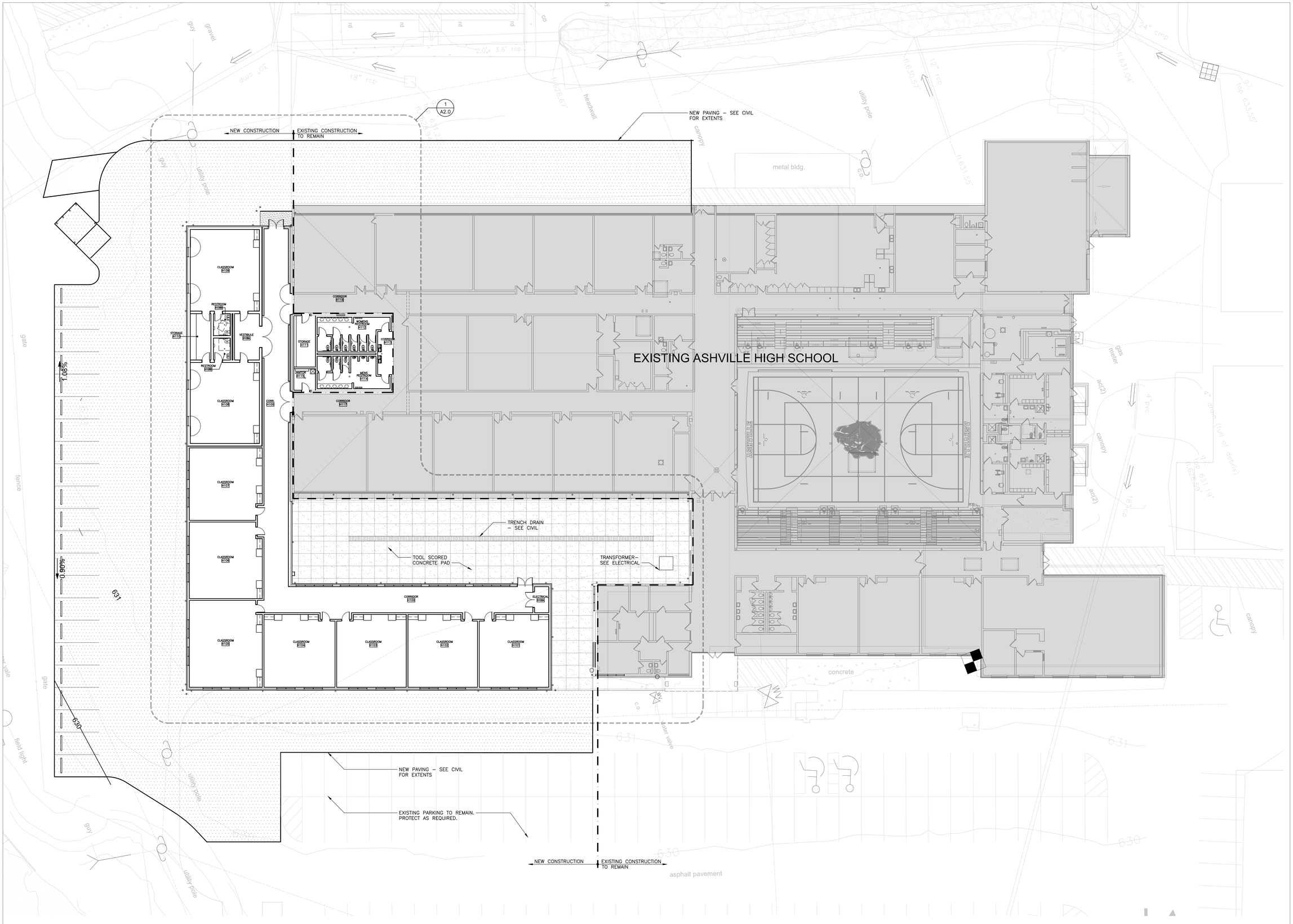
JOB NO. 24-106

SHEET NO:

C-8.0

8 OF 8

0 1" 2"



1 ARCHITECTURAL SITE PLAN

SCALE: 1/16" = 1'-0"

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR

ASHVILLE HIGH SCHOOL

33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ARCHITECTURAL SITE PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
	rdv
DATE:	JULY 31, 2025
REVISIONS	

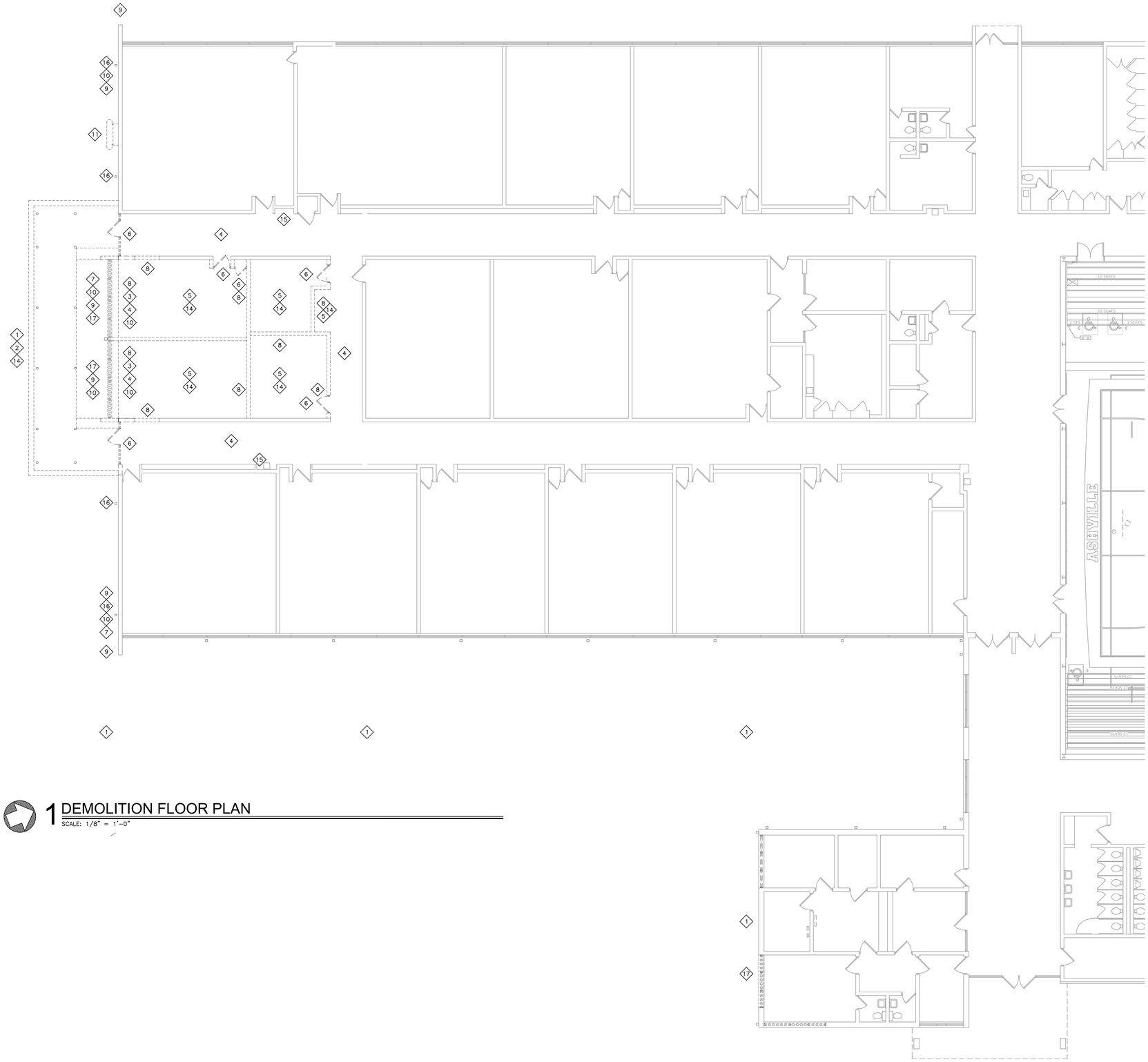
JOB NO. 24-106

SHEET NO:

A1.0

1 OF 21

0 1" 2"



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

GENERAL DEMOLITION NOTES

1. PROVIDE ALL DEMOLITION WORK, WHETHER INDICATED OR NOT, AS REQUIRED TO PROVIDE NEW CONSTRUCTION.

   DASHED LINES INDICATE GENERAL EXISTING CONSTRUCTION TO BE REMOVED. CONTACT ARCHITECT FOR DEMOLITION CLARIFICATION IF UNCLEAR ON WHICH ITEMS ARE TO BE REMOVED.

2. GENERAL CONTRACTOR SHALL REMOVE ALL ABANDONED ARCHITECTURAL, PLUMBING, MECHANICAL , ELECTRICAL CONSTRUCTION. PROTECT ITEMS TO BE RELOCATED OR DESIGNATED AS SALVAGED.

3. CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION & SYSTEMS TO REMAIN AND CORRECT ANY DAMAGE RESULTING FROM DEMOLITION WORK. MAINTAIN AND REROUTE EXISTING MP&E IN THE PATH OF DEMOLITION AND SERVING THAT TO REMAIN OPERATIONAL. PROTECT FIRE ALARM SYSTEM AND MAINTAIN OPERATIONAL. MAINTAIN EXISTING FIRE WALLS FUNCTIONAL.

4. COORDINATE WITH FINISH LEGEND AND SCHEDULE TO DETERMINE EXISTING SURFACES TO RECEIVE NEW FINISHES REMOVE EXISTING FINISHES AS REQUIRED AND MAKE EXISTING SURFACES READY TO RECEIVE NEW FINISHES. PATCH AND/OR REPAIR EXISTING ADJACENT CONSTRUCTION TO REMAIN.

5. CONTACT AND COORDINATE W/ ARCHITECT & STRUCTURAL ENGINEER BEFORE REMOVING OR ALTERING ANY STRUCTURAL COMPONENTS.

   SEE RESPECTIVE CIVIL, STRUCTURAL, PLUMBING, HVAC AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

6. COORDINATE WITH THE OWNER BEFORE REMOVING ANY SALVAGEABLE MATERIALS & EQUIPMENT.

7. DEMOLITION WORK SHALL NOT CHANGE THE INTEGRITY OF EXISTING STRUCTURE, FIRE ALARM SYSTEM & FIRE RATED CONSTRUCTION TO REMAIN. ANY EXISTING FIRE RATED CONSTRUCTION TO REMAIN WHICH HAS BEEN AFFECTED BY DEMOLITION WORK MUST BE CORRECTED AND MADE TO MEET THE ORIGINAL RATING.

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9. COORDINATE ALL UTILITY OUTAGES OVER WEEKENDS OR HOLIDAYS WITH OWNER PRIOR TO DEMOLITION.

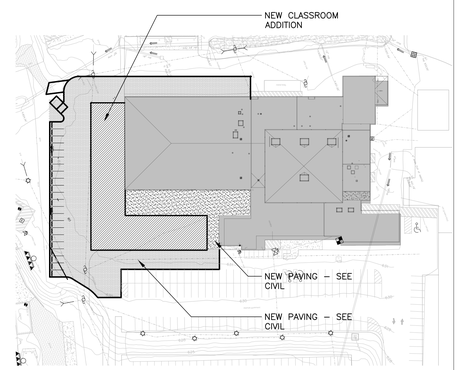
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3. REMOVE AND REPLACE EXISTING CONCRETE SLAB IN THIS AREA.
4. REMOVE EXISTING BASE AND FLOORING, PREPARE AND MODIFY THE WORK AS REQUIRED TO ACCEPT NEW WORK.
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6. REMOVE EXISTING DOOR, FRAME AND ALL ASSOCIATED CONSTRUCTION, PREPARE AND MODIFY AS REQUIRED TO ACCEPT NEW WORK. SEE STRUCTURAL FOR SHORING.
7. SELECTIVELY REMOVE EXISTING BRICK VENEER AS REQUIRED TO ACCEPT NEW WORK.
8. SELECTIVELY REMOVE EXISTING CMU WALL AS REQUIRED TO ACCEPT NEW WORK, CUT AND TOOTH NEW CMU FOR SEAMLESS INTEGRATED INFILL, APPLY FINISHES AS REQUIRED TO MATCH NEW WORK. SEE STRUCTURAL FOR SHORING.
9. SELECTIVELY REMOVE GUTTER AND AND DOWNSPOUTS AS REQUIRED TO ACCEPT NEW WORK.
10. REMOVE EXISTING WALL MOUNTED ALARM SYSTEM, BELLS, TACKBOARDS, MARKERBOARDS, CHALKBOARDS, SOUND SYSTEM, CAMERAS/SECURITY SYSTEM, PIPING, CONDUIT/RACEWAYS, TV'S, DATA CABLING, SIGNAGE, ETC. AS REQUIRED AS REQUIRED FOR NEW CONSTRUCTION. COORDINATE WITH OWNER ON ANY SALVAGEABLE MATERIALS. PATCH AND REPAIR WALL AS REQUIRED. IN SOME LOCATIONS PATCH AND REPAIR ANY DAMAGED, LOSS, OR MISSING WALL TILE AS REQUIRED FOR A SEAMLESS TRANSITION.
11. REMOVE EXISTING ROOF ACCESS LADDER
12. EXISTING MECHANICAL TO BE REMOVED – SEE MECHANICAL DRAWINGS.
13. REMOVE EXISTING TPO ROOFING SYSTEM AND ANY ASSOCIATED CONSTRUCTION AS REQUIRED, PREPARE AND MODIFY THEY WORK AS REQUIRED TO ACCEPT NEW CONSTRUCTION.
14. COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF ANY SALVAGEABLE MATERIALS SUCH AS BUT NOT LIMITED TO CAMERAS, SPEAKERS AND LIGHT FIXTURES. ALL SALVAGED MATERIAL TO BE STOCKPILED AND PROTECTED THROUGHOUT CONSTRUCTION.
15. REMOVE EXISTING STRUCTURAL GLAZED TILE FROM CMU WALL AT DRINKING FOUNTAIN LOCATION. REMOVE ALL ADHESIVE AND SETTING MATERIALS TO EXPOSE CLEAN CMU SURFACE.REMOVE EXISTING DRINKING FOUNTAIN IN ITS ENTIRETY, INCLUDING ASSOCIATED PLUMBING CONNECTIONS. CAP PLUMBING LINES AS REQUIRED. ELECTRICAL POWER SERVING THE DRINKING FOUNTAIN SHALL REMAIN IN PLACE AND OPERABLE FOR FUTURE USE. PROTECT WIRING AND JUNCTION BOXES DURING DEMOLITION. CLEARLY LABEL AND SECURE POWER CONNECTION IN ACCESSIBLE LOCATION. PATCH AND PREPARE CMU SUBSTRATE AS REQUIRED TO RECEIVE NEW FINISH. FILL VOIDS, SMOOTH SURFACE IRREGULARITIES, AND ENSURE A CLEAN, UNIFORM APPEARANCE. FINAL WALL FINISH TO MATCH ADJACENT SURFACES
16. REMOVE EXISTING DOWNSPOUT AND ASSOCIATED CONSTRUCTION AS REQUIRED TO ACCEPT NEW WORK
17. REMOVE EXISTING WINDOW AND ASSOCIATED CONSTRUCTION AS REQUIRED TO ACCEPT NEW WORK

DEMOLITION LEGEND

	EXISTING CONSTRUCTION TO BE REMOVED
	EXISTING CONSTRUCTION TO REMAIN
	EXISTING DOOR AND ASSOCIATED CONSTRUCTION TO BE REMOVED
	EXISTING DOOR TO REMAIN



2 KEYPLAN
SCALE: NTS

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

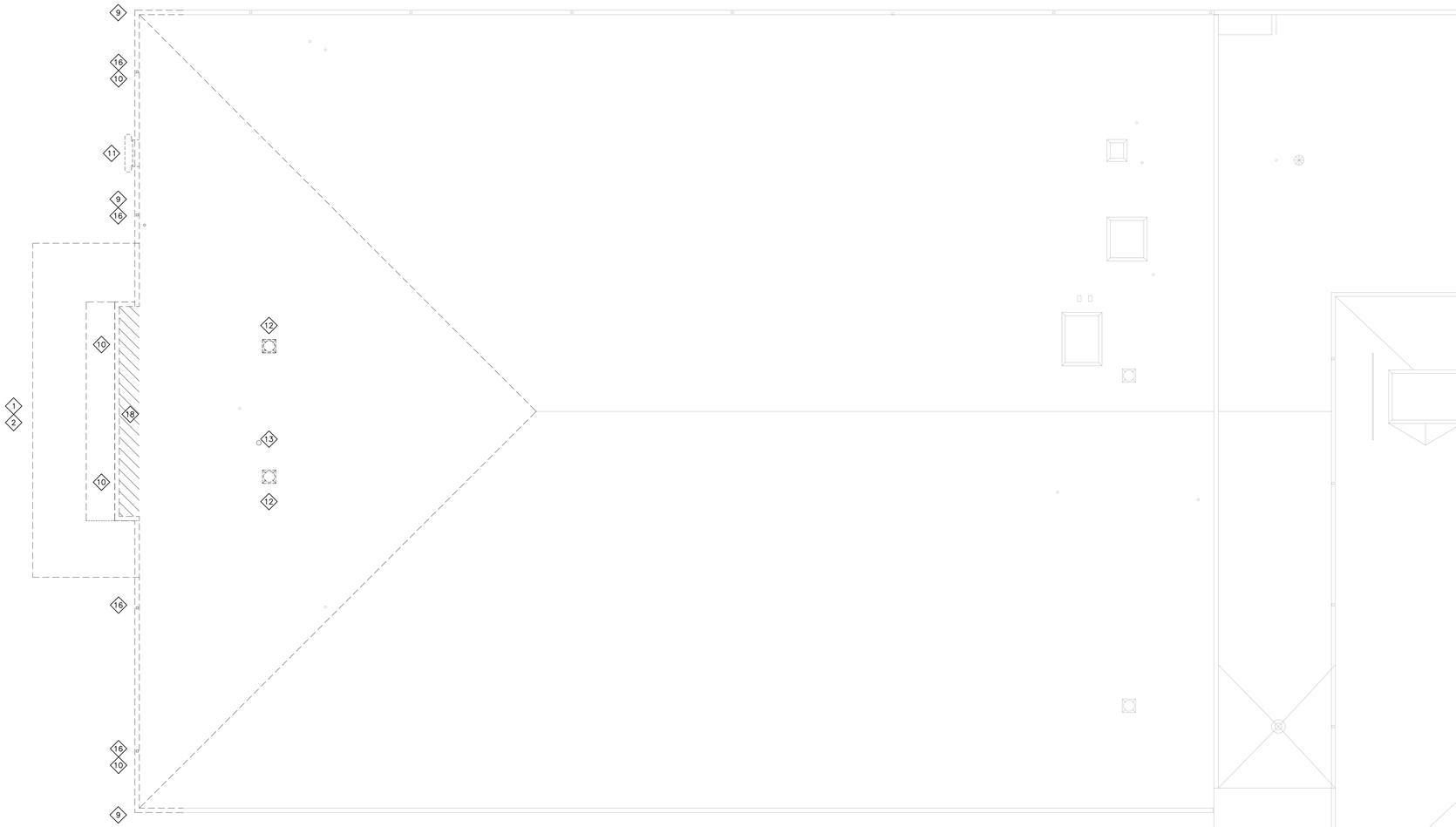
SHEET TITLE:
DEMOLITION FLOOR PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
A1.1
2 OF 21

0 1" 2"



GENERAL DEMOLITION NOTES

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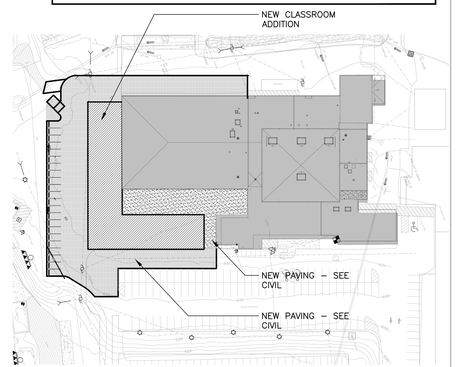
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5. REMOVE EXISTING CEILING SYSTEM IN THIS AREA, INCLUDING ANY ASSOCIATED COMPONENTS AND OBSTRUCTIONS ENCOUNTERED. COORDINATE WITH ALL ENGINEERING DRAWINGS FOR ADDITIONAL DEMOLITION AND RELATED REQUIREMENTS. IF COMPLETE REMOVAL OF THE CEILING SYSTEM IS NOT REQUIRED, SELECTIVELY REMOVE EXISTING CEILING AS REQUIRED AND MODIFY AND PREPARE TO ACCEPT NEW WORK.
6. REMOVE EXISTING DOOR, FRAME AND ALL ASSOCIATED CONSTRUCTION, PREPARE AND MODIFY AS REQUIRED TO ACCEPT NEW WORK. SEE STRUCTURAL FOR SHORING.
7. SELECTIVELY REMOVE EXISTING BRICK VENEER AS REQUIRED TO ACCEPT NEW WORK.
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14. COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF ANY SALVAGEABLE MATERIALS SUCH AS BUT NOT LIMITED TO CAMERAS, SPEAKERS AND LIGHT FIXTURES. ALL SALVAGED MATERIAL TO BE STOCKPILED AND PROTECTED THROUGHOUT CONSTRUCTION.
15. REMOVE EXISTING STRUCTURAL GLAZED TILE FROM CMU WALL AT DRINKING FOUNTAIN LOCATION. REMOVE ALL ADHESIVE AND SETTING MATERIALS TO EXPOSE CLEAN CMU SURFACE.REMOVE EXISTING DRINKING FOUNTAIN IN ITS ENTIRETY, INCLUDING ASSOCIATED PLUMBING CONNECTIONS. CAP PLUMBING LINES AS REQUIRED. ELECTRICAL POWER SERVING THE DRINKING FOUNTAIN SHALL REMAIN IN PLACE AND OPERABLE FOR FUTURE USE. PROTECT WIRING AND JUNCTION BOXES DURING DEMOLITION. CLEARLY LABEL AND SECURE POWER CONNECTION IN ACCESSIBLE LOCATION. PATCH AND PREPARE CMU SUBSTRATE AS REQUIRED TO RECEIVE NEW FINISH. FILL VOIDS, SMOOTH SURFACE IRREGULARITIES, AND ENSURE A CLEAN, UNIFORM APPEARANCE. FINAL WALL FINISH TO MATCH ADJACENT SURFACES
16. REMOVE EXISTING DOWNSPOUT AND ASSOCIATED CONSTRUCTION AS REQUIRED TO ACCEPT NEW WORK
17. REMOVE EXISTING WINDOW AND ASSOCIATED CONSTRUCTION AS REQUIRED TO ACCEPT NEW WORK
18. SELECTIVELY REMOVE SECTION OF EXISTING ROOF AND FRAMING AS REQUIRED FOR NEW ADDITION. COORDINATE WITH STRUCTURAL FOR SHORING REQUIREMENTS.

DEMOLITION LEGEND

	EXISTING CONSTRUCTION TO BE REMOVED
	EXISTING CONSTRUCTION TO REMAIN
	EXISTING DOOR AND ASSOCIATED CONSTRUCTION TO BE REMOVED
	EXISTING DOOR TO REMAIN



1 DEMOLITION ROOF PLAN
SCALE: 1/8" = 1'-0"

2 KEYPLAN
SCALE: NTS

LATHAN McKEE ARCHITECTS

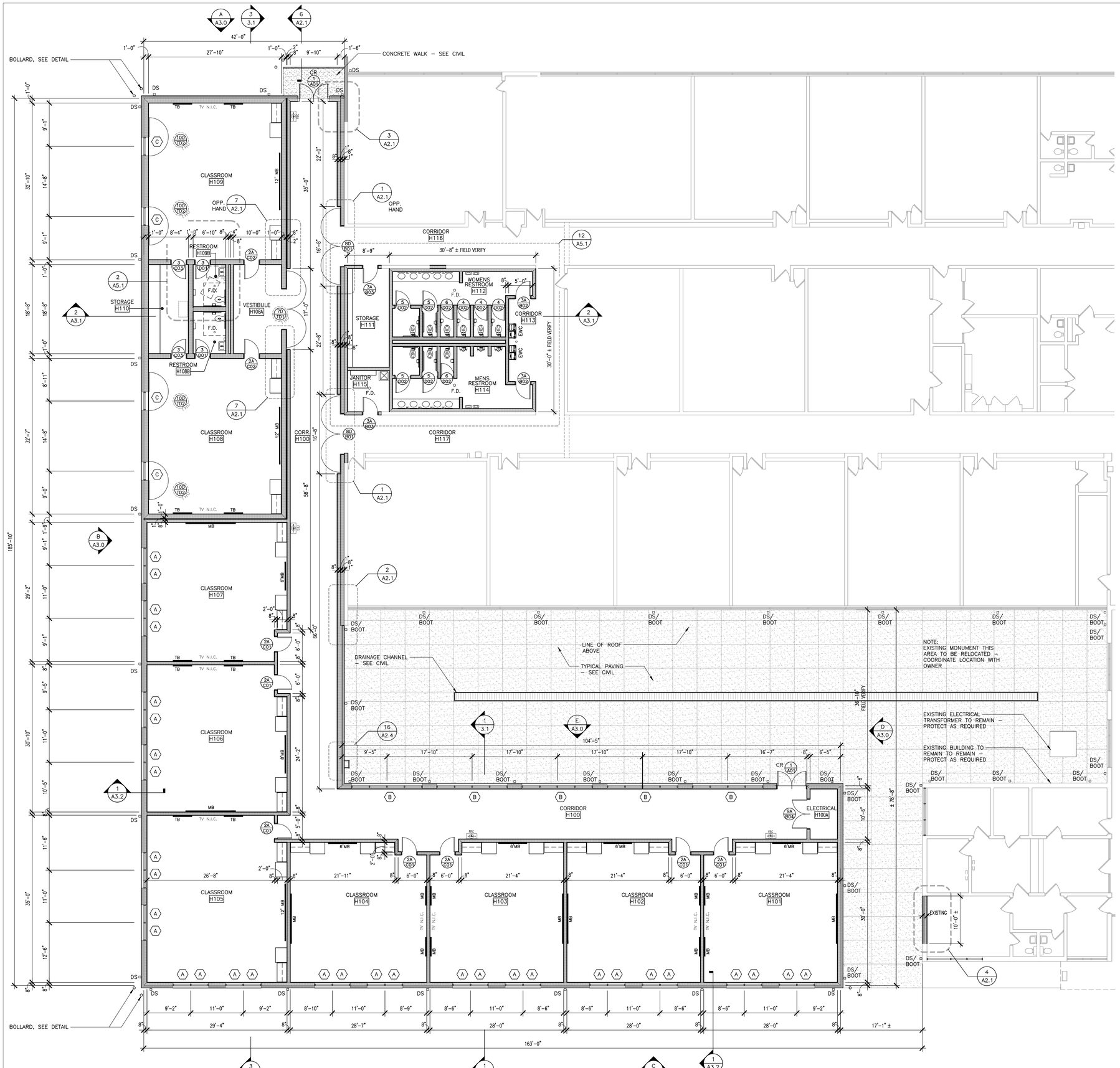
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
DEMOLITION ROOF PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
A1.2
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1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES

- PROVIDE SLOPE FOR POSITIVE DRAINAGE IN AREAS WITH FLOOR DRAINAGE SYSTEM.
- EXTEND & KEY RATED WALLS TO BOTTOM OF DECK OR RATED ASSEMBLY ABOVE - SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS. EXTEND ALL NON-RATED WALLS TO BOTTOM OF STRUCTURE ABOVE.
- SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS. PROVIDE DOWNSPOUT & BOOTS
- SEE CIVIL DRAWINGS FOR EXTENTS OF SITE RELATED WORK.
- PLAN DIMENSIONS ARE TYPICALLY SHOWN FACE TO FACE OF CMU
- SLOPE ALL SIDEWALKS AWAY FROM BUILDING AND BUILDING ENTRIES SEE CIVIL FOR SLOPE.
- TYPICAL BRICK POCKET IS 6" UNLESS NOTED.

SYMBOLS LEGEND

A300	ROOM NUMBER	FC / A	DOOR TYPE / DOOR RATING / HARDWARE SYMBOL
FEC	RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER	A / A1.1	ELEV. MARK / SHEET NUMBER
F.D.	FLOOR DRAIN	1 / A1.1	WALL SECT. MARK / SHEET NUMBER
MB	MARKER BOARD	1 / A1.1	BLDG. SECT. MARK / SHEET NUMBER
TB	TACK BOARD	5 / A5.1	ELEV. MARK / SHEET NUMBER INT. ELEVATION
DS	DOWNSPOUT		NEW DOOR AND SWING
DS/BT	DOWNSPOUT / BOOT		
A	WINDOW MARK		
1	STOREFRONT MARK		
CR	CARD READER		

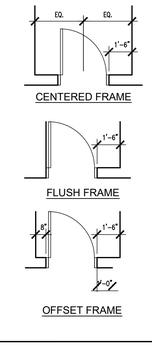
WALL TYPE LEGEND

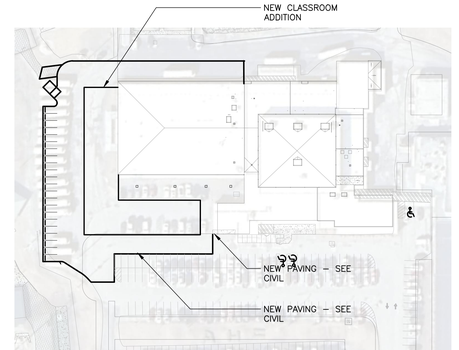
CMU PARTITION	CONCRETE MASONRY UNIT WALL, SEE PLAN FOR WALL SIZE
EXTERIOR WALL	NEW BRICK VENEER W/ AIR SPACE AND REINFORCED CMU W/ DAMPROOFING. PROVIDE WALL TIES @ 16" O.C.

DOOR AND WINDOW LEGEND

DOOR TYPE (1)	NO RATING
DOOR TYPE + A (1A)	20 MINUTE RATING
DOOR TYPE + D (1D)	90 MINUTE RATING

DOOR PLACEMENT SCHEDULE





2 KEYPLAN

LATHAN McKEE ARCHITECTS

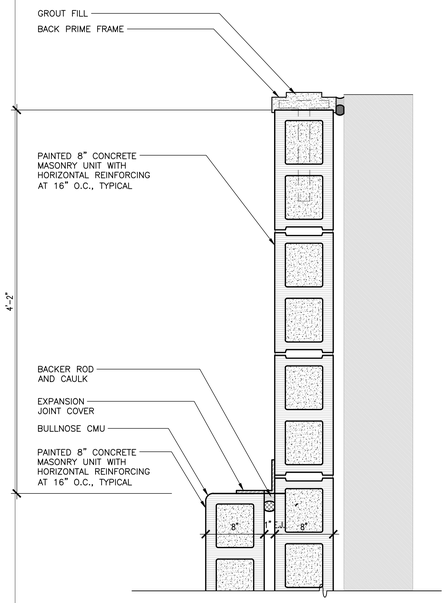
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33125 US-231, ASHVILLE, AL 35953
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SHEET TITLE: FLOOR PLAN

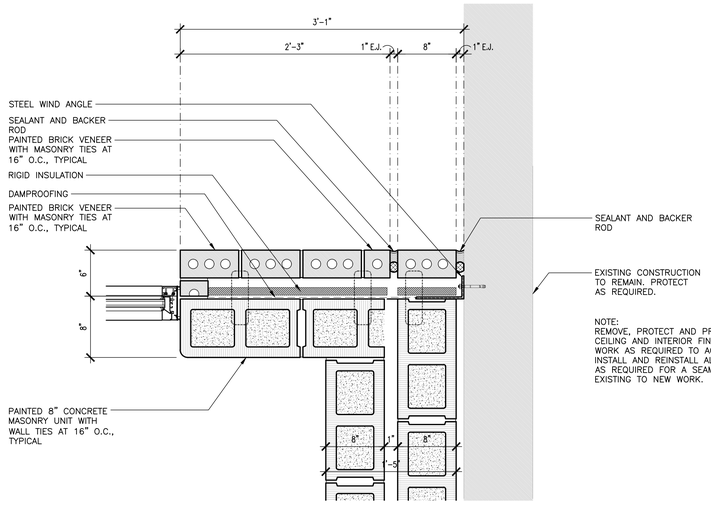
STATE OF ALABAMA
No. 7007
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PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
DATE: JULY 31, 2025
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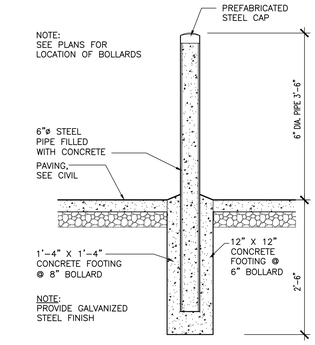
JOB NO. 24-106
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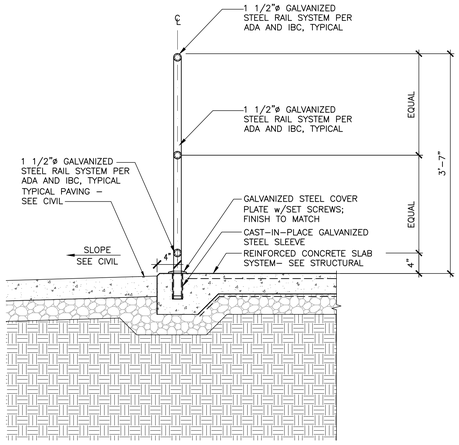
1 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



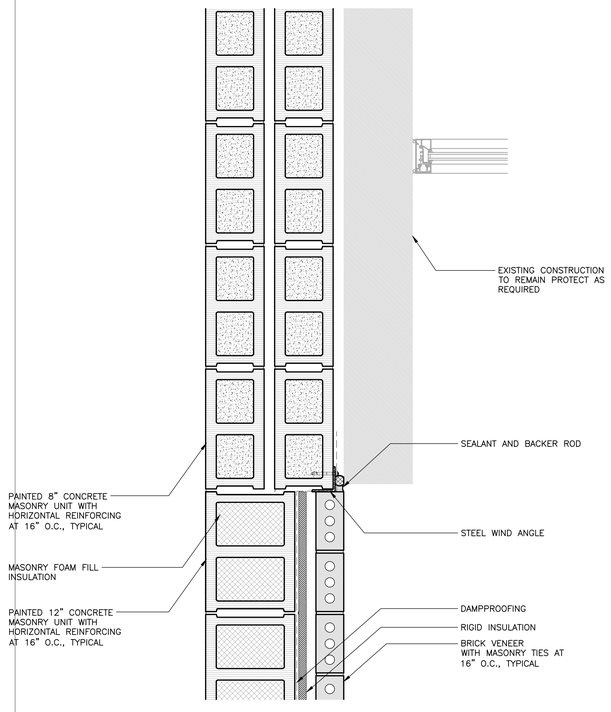
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SCALE: 1 1/2" = 1'-0"



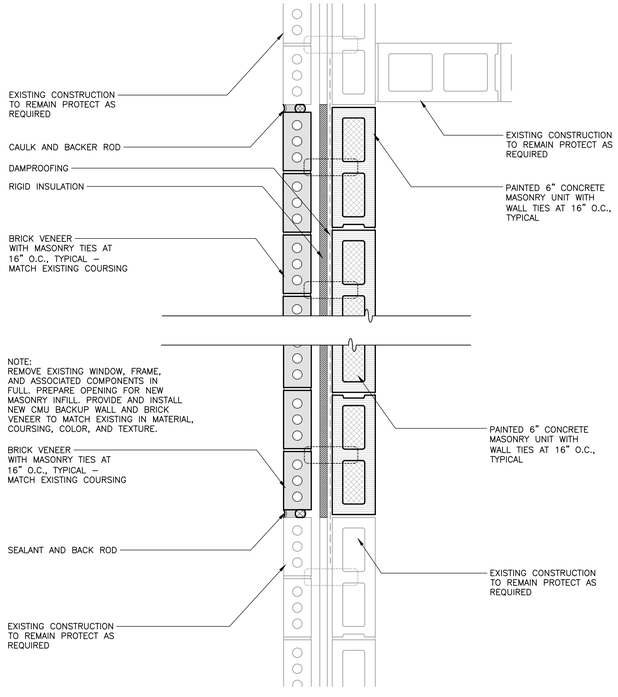
5 BOLLARD DETAIL
SCALE: 1 1/2" = 1'-0"



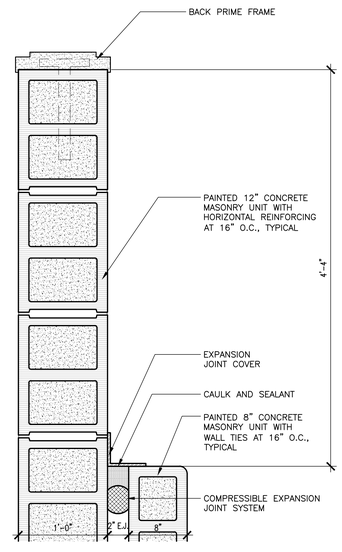
6 BOLLARD DETAIL
SCALE: 1" = 1'-0"



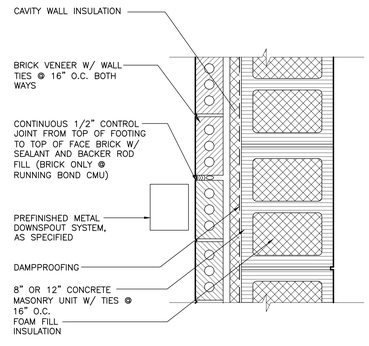
2 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



4 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



7 PLAN DETAIL
SCALE: 1 1/2" = 1'-0"



8 TYPICAL CONTROL JOINT DETAIL
SCALE: 1 1/2" = 1'-0"

LATHAN McKEE ARCHITECTS

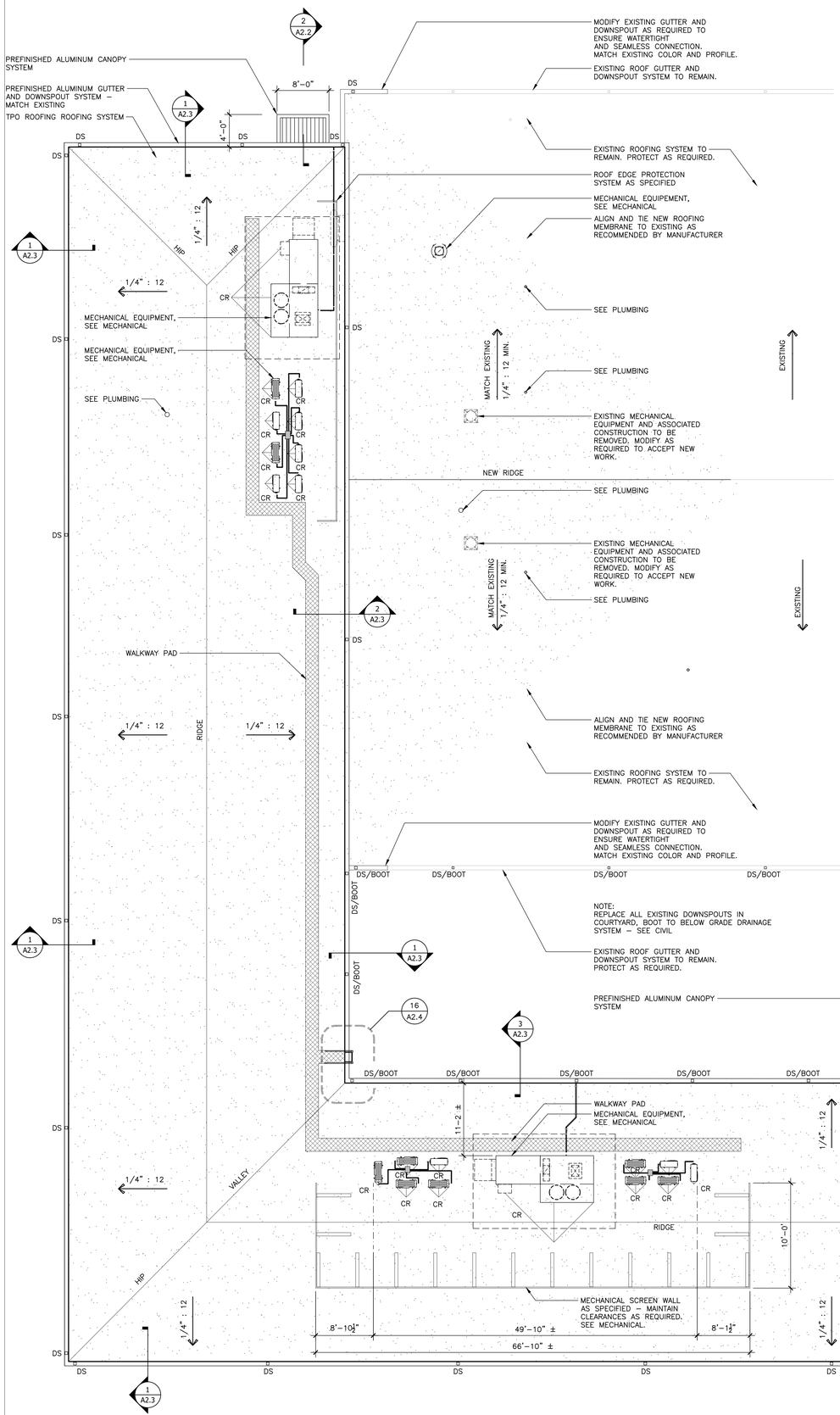
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
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SHEET TITLE:
ENLARGED PLAN DETAILS AND BOLLARD DETAIL

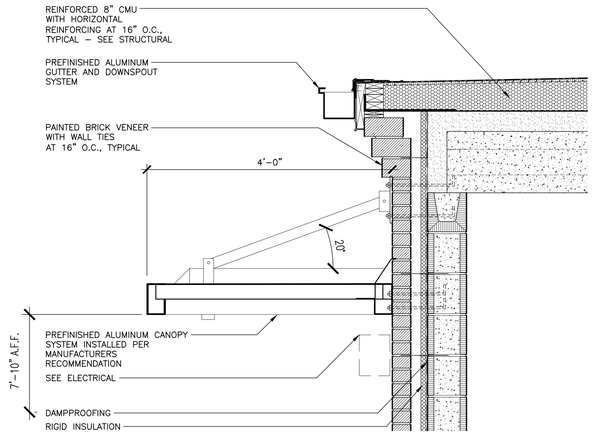
STATE OF ALABAMA
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PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
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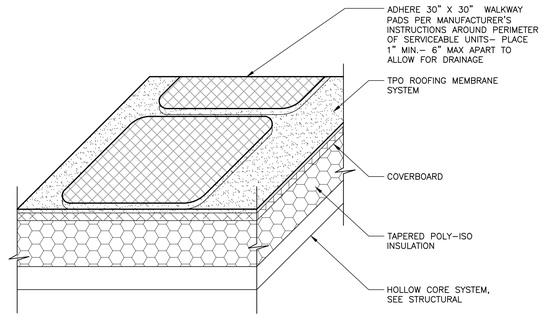
JOB NO. 24-106
SHEET NO:
A2.1
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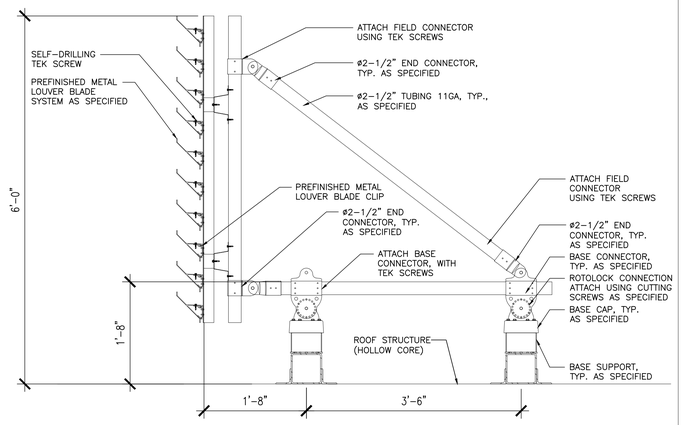
1 ROOF PLAN
SCALE: 1/8" = 1'–0"



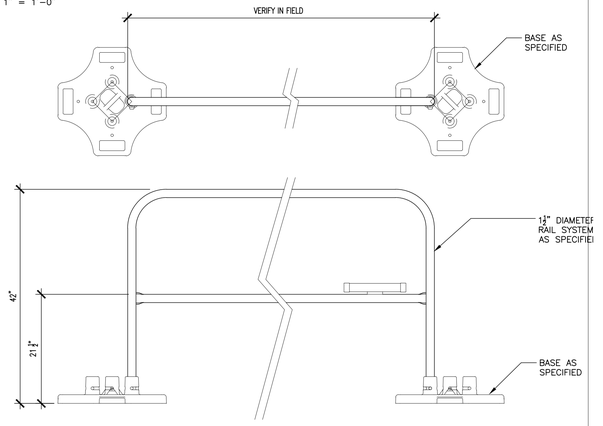
2 CANOPY DETAIL
SCALE: 1" = 1'–0"



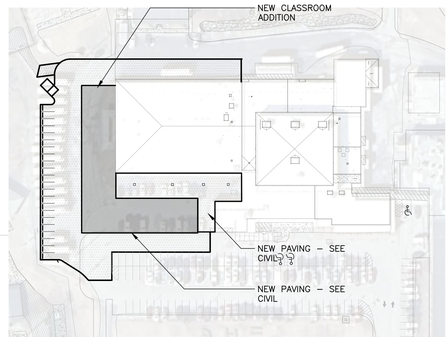
3 WALKWAY DETAIL
SCALE: 1" = 1'–0"



4 SCREENWALL DETAIL
SCALE: 1" = 1'–0"



5 GUARDRAIL DETAIL
SCALE: 1" = 1'–0"



6 KEYPLAN

ROOF LEGEND

DETAIL NUMBER / SHEET NUMBER — ROOF DETAIL MARKER	TPO ROOF SYSTEM
DIRECTION OF DOWNWARD SLOPE / RISE:RUN — ROOF SLOPE MARKER	WALK PAD SYSTEM

DS	DOWNSPOUT	PV	PLUMBING VENT
CR	CRICKET	SB	SPLASH BLOCK

GENERAL ROOF NOTES

1. CONTRACTOR SHALL PROVIDE NECESSARY MEANS TO FULLY PROTECT EXISTING CONSTRUCTION FROM DAMAGE DURING THE COURSE OF THE WORK.
2. DO NOT STORE MATERIALS ON ROOF.
3. DO NOT CONCENTRATE MATERIAL LOADS ON ROOF.
4. GUTTERS SHALL NOT EXCEED 50'–0" IN LENGTH WITHOUT A GUTTER EXPANSION JOINT.
5. INSURE ADEQUATE CIRCULATION IS PROVIDED FOR ALL AREAS, INSURE UNOBSTRUCTED SOFFIT VENTS AND PROPERLY OPERATING ATTIC EXHAUST FANS.
6. PROVIDE NEW PREFINISHED SHEET METAL AND FLASHING COMPONENTS INCLUDING: EDGE METAL, PIPE FLASHING, EAVE DRIPS, FASCIA METAL, REGLET FLASHING, ETC.
7. ALL GUTTERS SHALL HAVE POSITIVE DRAINAGE TO DOWNSPOUT LOCATIONS. PREP AND SEAL ALL GUTTER JOINTS AND OUTLET TUBES AS REQUIRED.
8. PROVIDE CLEAN–UP AND CORRECT ANY DAMAGES TO EXISTING BUILDING AND GROUNDS.
9. PROVIDE FLASHING AS REQUIRED AT ALL MECHANICAL, PLUMBING AND ELECTRICAL PENETRATIONS WHETHER INDICATED OR NOT. MAKE ALL PENETRATIONS WEATHERTIGHT UNDER ROOFING SCOPE OF WORK.
10. SEE MECHANICAL, PLUMBING AND ELECTRICAL FOR ADDITIONAL ROOF WORK AND PENETRATIONS; MAKE ALL PENETRATIONS WEATHERTIGHT UNDER ROOFING SCOPE OF WORK.
11. ALL DOWNSPOUTS TO EXIT ON GRADE UNLESS NOTED OTHERWISE. PROVIDE SPLASH BLOCKS AT EACH DOWNSPOUT LOCATION. COORDINATE WITH CIVIL.
12. NEW DOWNSPOUTS SHOWN ON THIS SHEET ARE SHOWN AS REFERENCE ONLY. CONTRACTOR TO SEE ELEVATIONS FOR DOWNSPOUT LOCATIONS. AVOID ANY CONFLICT WITH DOORS, WINDOWS, AND HEAVY TRAFFIC AREAS.
13. CONTRACTOR SHALL REMOVE EXISTING ROOFING AS REQUIRED TO ACCOMMODATE NEW WORK. WHERE EXISTING ROOFING IS TO REMAIN, CONTRACTOR SHALL MODIFY AND PREPARE EXISTING CONDITIONS AS NECESSARY TO ACCEPT NEW WORK. ALL TRANSITIONS BETWEEN EXISTING AND NEW WORK SHALL BE FULLY INTEGRATED AND DETAILED TO ENSURE A CONTINUOUS, WATERTIGHT, AND VISUALLY SEAMLESS ASSEMBLY. CONTRACTOR IS SOLELY RESPONSIBLE FOR VISITING THE SITE, VERIFYING EXISTING CONDITIONS AND BECOMING GENERALLY FAMILIAR WITH LOCAL CONDITIONS UNDER WHICH WORK IS TO BE PERFORMED AND CORRELATE PERSONAL OBSERVATIONS WITH THE REQUIREMENTS OF THE CONSTRUCTION DRAWINGS.
14. PROVIDE CRICKETS AT ALL REQUIRED LOCATIONS, CRICKET SLOPES SHALL BE 1/4" : 12" MIN., TYPICAL.

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF PLAN AND DETAILS

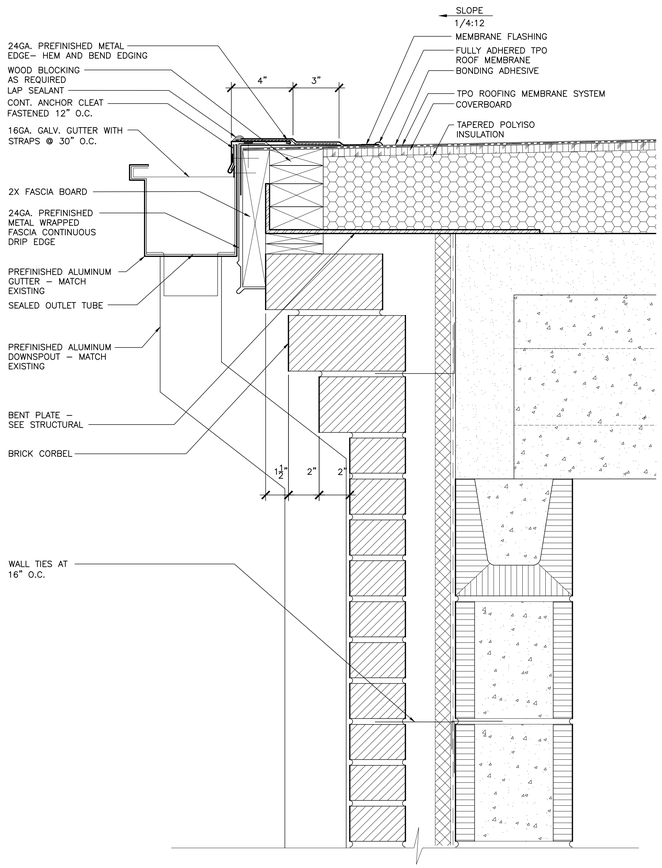
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
	rdv
DATE:	JULY 31, 2025
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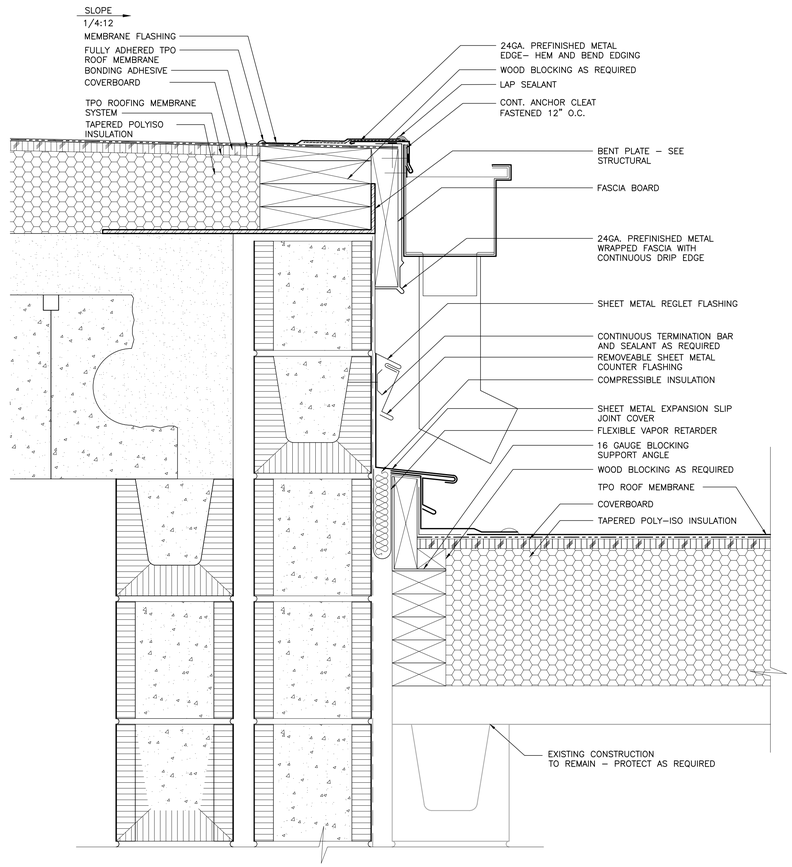
JOB NO. 24-106

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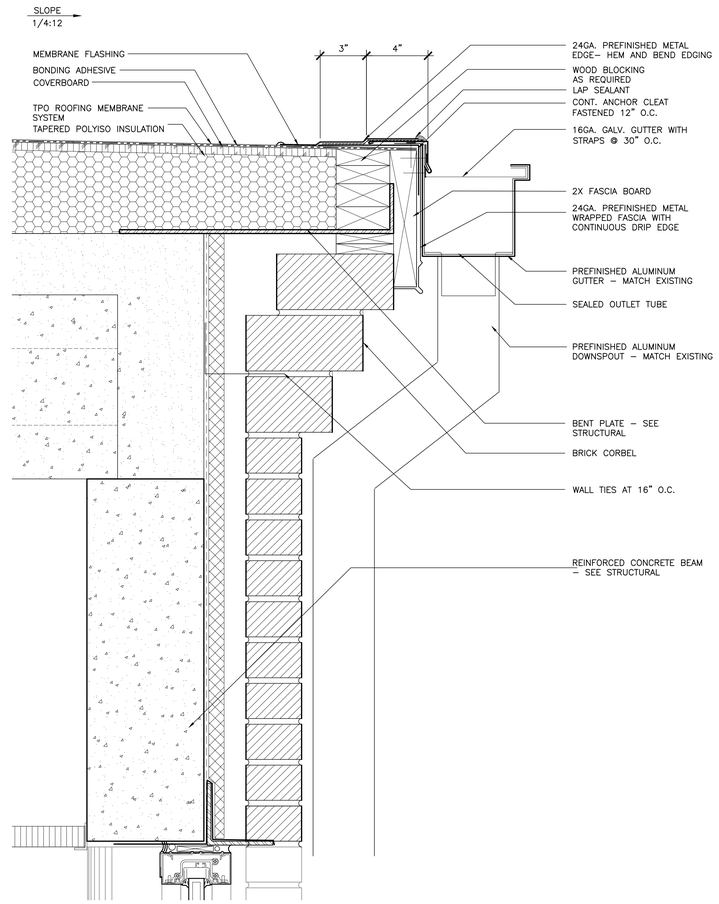
0 1" 2"



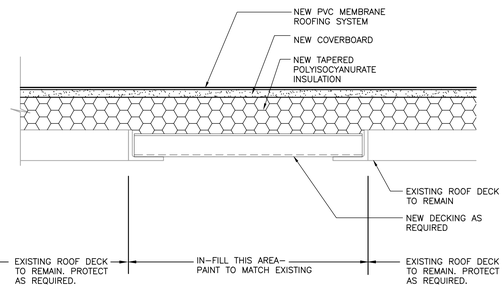
1 GUTTER DETAIL
SCALE: 3" = 1'–0"



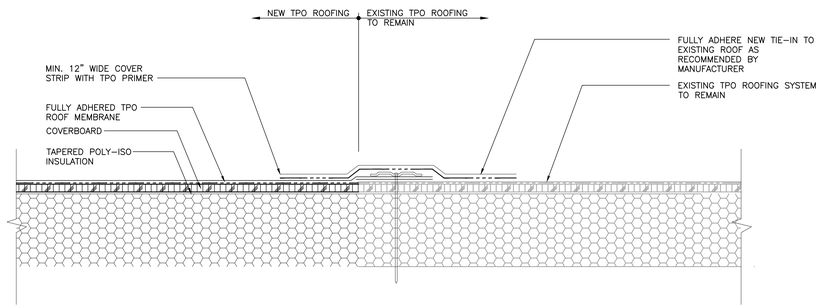
2 WALL TO WALL DETAIL
SCALE: 3" = 1'–0"



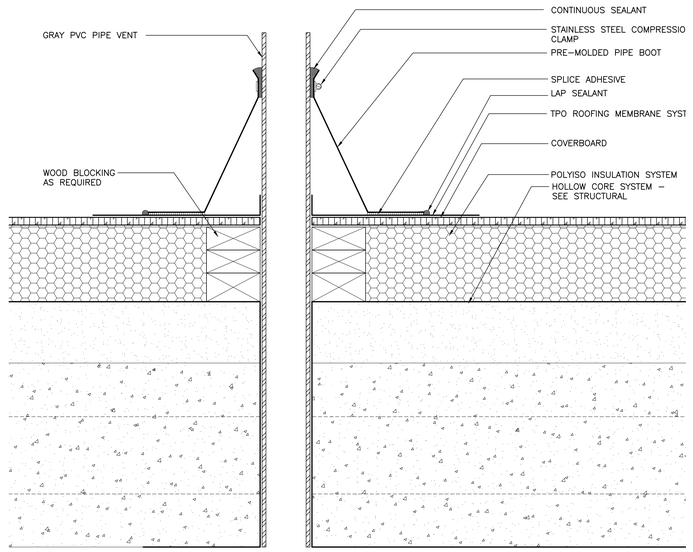
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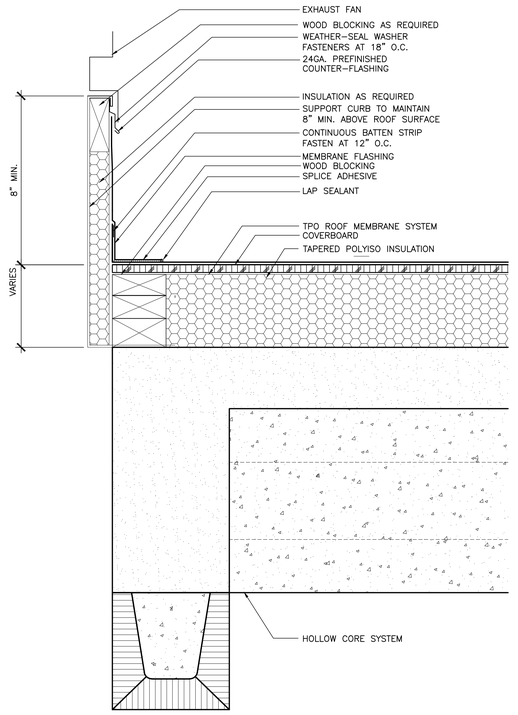
5 INFILL DETAIL
SCALE: 3" = 1'–0"



4 TPO TRANSITION DETAIL
SCALE: 3" = 1'–0"



6 PIPE PENETRATION DETAIL
SCALE: 3" = 1'–0"



7 CURB DETAIL
SCALE: 3" = 1'–0"

LATHAN McKEE ARCHITECTS

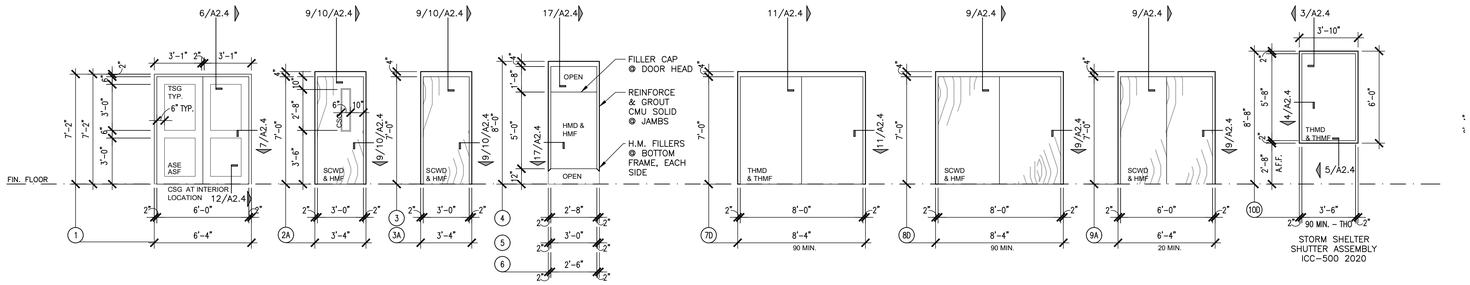
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
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SHEET TITLE:
ROOF DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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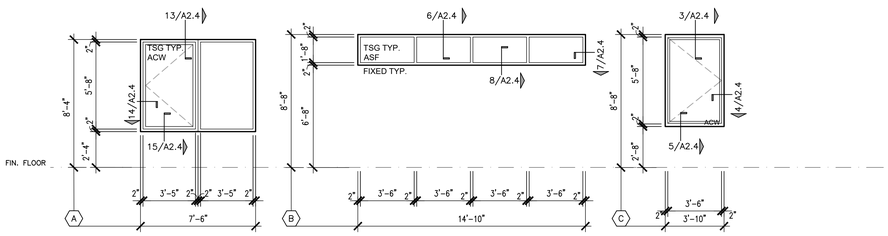
PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
	rvdr
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
A2.3
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0 1" 2"



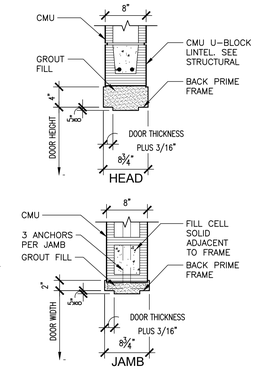
1 DOOR SCHEDULE

SCALE: 1/4" = 1'-0"



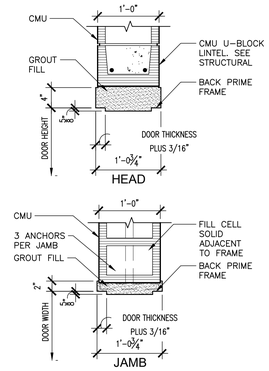
2 WINDOW SCHEDULE

SCALE: 1/4" = 1'-0"



9 DETAIL

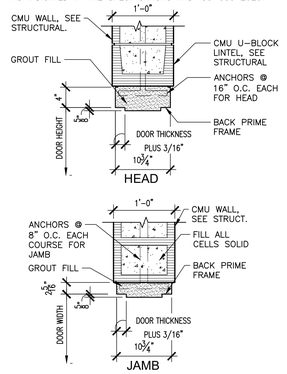
SCALE: 1/4" = 1'-0"



10 DETAIL

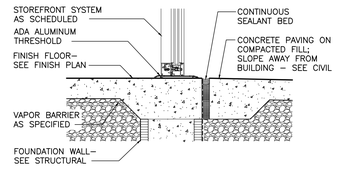
SCALE: 1/4" = 1'-0"

NOTE: SEE STRUCTURAL FOR TORNADO STORM SHELTER CMU AND REINFORCING INFORMATION. DOORS AND FRAMES MUST HAVE BOTH THE FEMA 361/ICC-500 2020 LABEL AND THE 90 MIN. FIRE LABEL AS SPECIFIED. MEET ALL TORNADO STORM SHELTER DOOR AND FRAME REQUIREMENTS AS INDICATED IN THE SPECIFICATIONS AND ICC-500 2020.



11 DETAIL

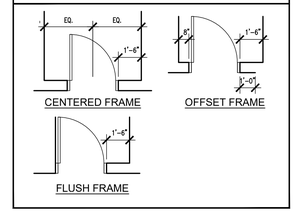
SCALE: 1/4" = 1'-0"



12 DETAIL

SCALE: 1" = 1'-0"

DOOR PLACEMENT SCHEDULE



DOOR AND WINDOW LEGEND

CSG	1/4" THICK CLEAR TEMPERED SAFETY GLASS.
CFG	CLEAR FIRE RATED SAFETY GLASS AS SPECIFIED.
TSG	1" TINTED INSULATED LOW-E TEMPERED SAFETY GLASS AS SPEC.
SCWD	SOLID CORE WOOD DOOR
ASE	PREFINISHED ALUMINUM STOREFRONT ENTRANCE SYSTEM AS SPECIFIED.
ASF	PREFINISHED ALUMINUM STOREFRONT FRAME SYSTEM AS SPECIFIED.
THMD	TORNADO RATED HOLLOW METAL DOOR
THMF	TORNADO RATED HOLLOW METAL FRAME

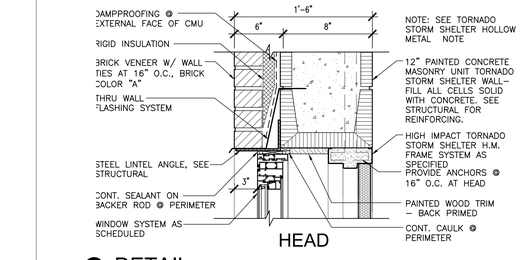
NOTES:
1. PROVIDE CFG WHERE GLASS IS INDICATED IN RATED DOORS AND WINDOWS.
2. ALL EXTERIOR WINDOW AND STOREFRONT GLAZING SHALL BE 1" INSULATED SAFETY GLAZING.
3. OVERALL DIMENSIONS INDICATE ROUGH OPENING / MASONRY OPENING.

DOOR AND WINDOW LEGEND

DOOR TYPE (1)	NO RATING
DOOR TYPE + A (1A)	20 MINUTE RATING
DOOR TYPE + D (1D)	90 MINUTE RATING
HMF	HOLLOW METAL FRAME
HMD	HOLLOW METAL DOOR
SCWD	SOLID CORE WOODEN DOOR
ACW	PREFINISHED ALUMINUM CASEMENT WINDOW SYSTEM

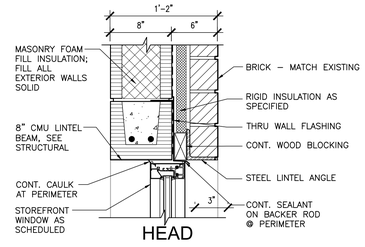
DOOR AND WINDOW LEGEND

DOOR TYPE (1)	NO RATING
DOOR TYPE + A (1A)	20 MINUTE RATING
DOOR TYPE + D (1D)	90 MINUTE RATING



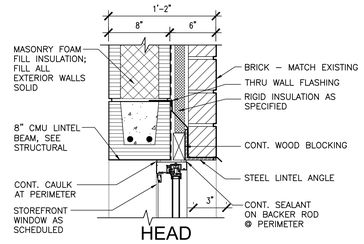
3 DETAIL

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



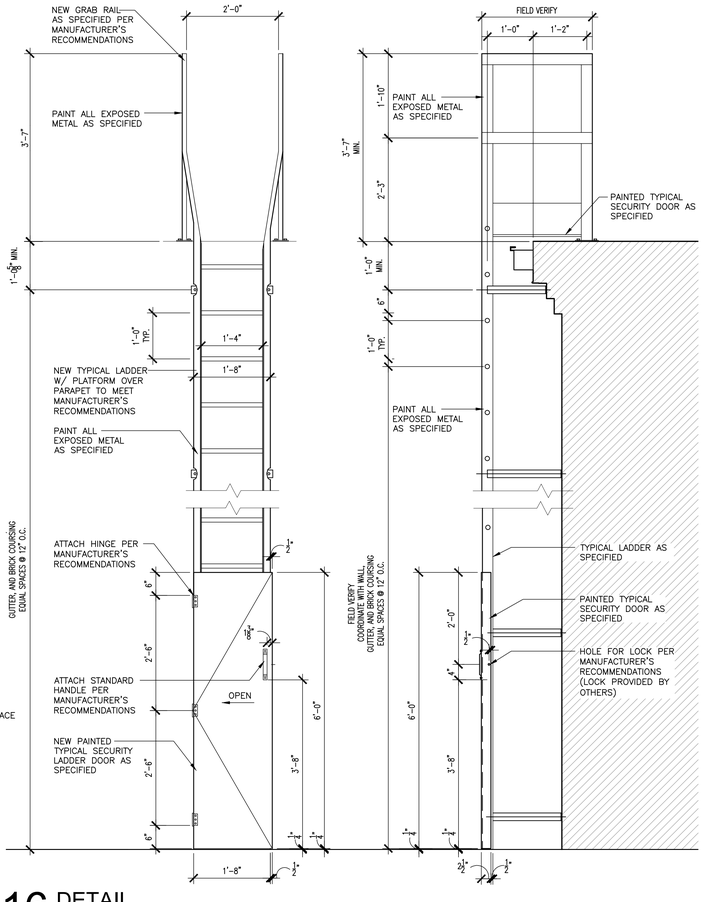
6 DETAIL

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



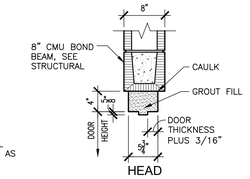
13 DETAIL

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



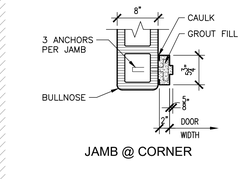
16 DETAIL

SCALE: 3/4" = 1'-0"



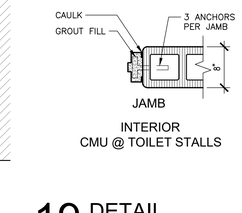
17 DETAIL

SCALE: 1" = 1'-0"



18 DETAIL

SCALE: 1" = 1'-0"

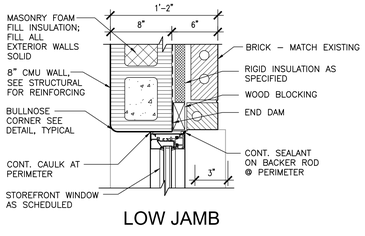


19 DETAIL

SCALE: 1" = 1'-0"

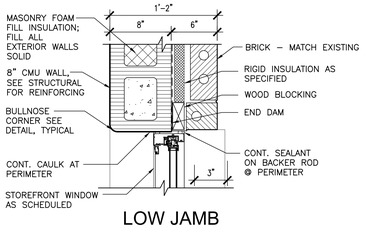
4 DETAIL

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



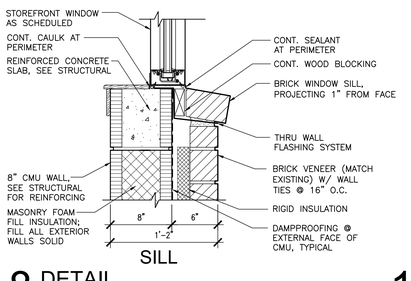
7 DETAIL

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



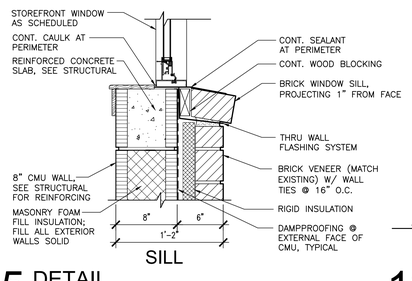
14 DETAIL

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



8 DETAIL

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



15 DETAIL

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

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR

ASHVILLE HIGH SCHOOL

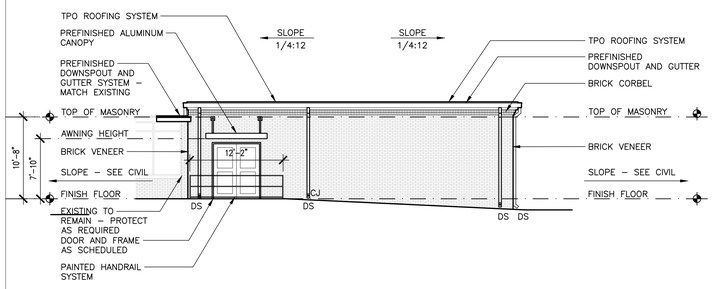
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
DOOR AND WINDOW SCHEDULES AND LADDER DETAIL

PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
DATE: JULY 31, 2025
REVISIONS

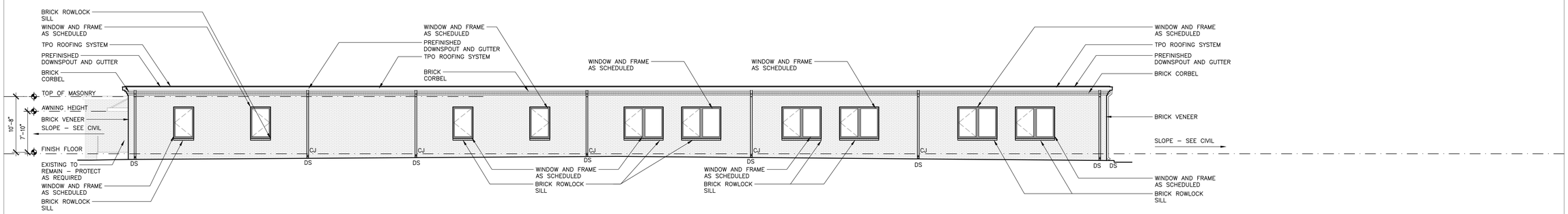
JOB NO. 24-106
SHEET NO:
A2.4
8 OF 21

0 1" 1' 2"



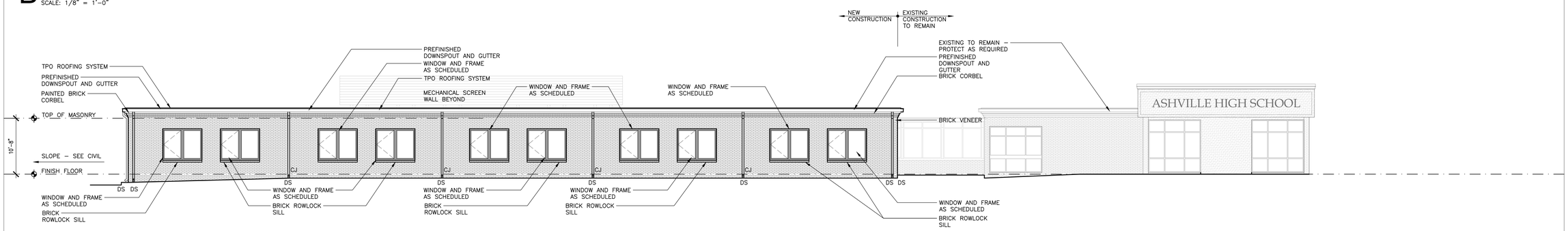
A ELEVATION

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



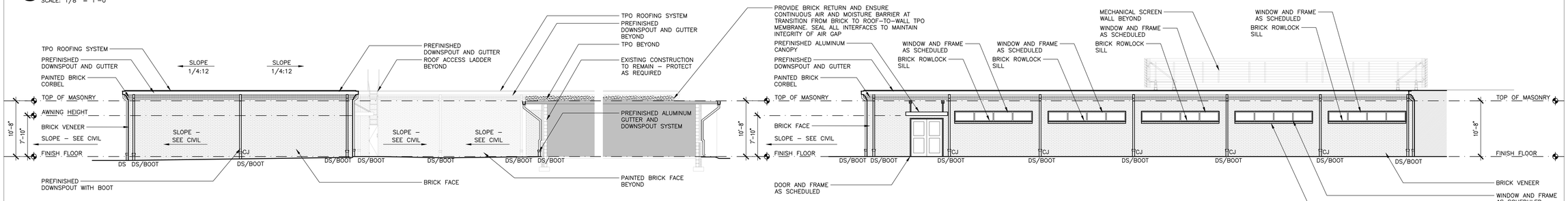
B ELEVATION

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



C ELEVATION

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



D ELEVATION

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

E ELEVATION

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

LATHAN ▪ McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
BUILDING ELEVATIONS

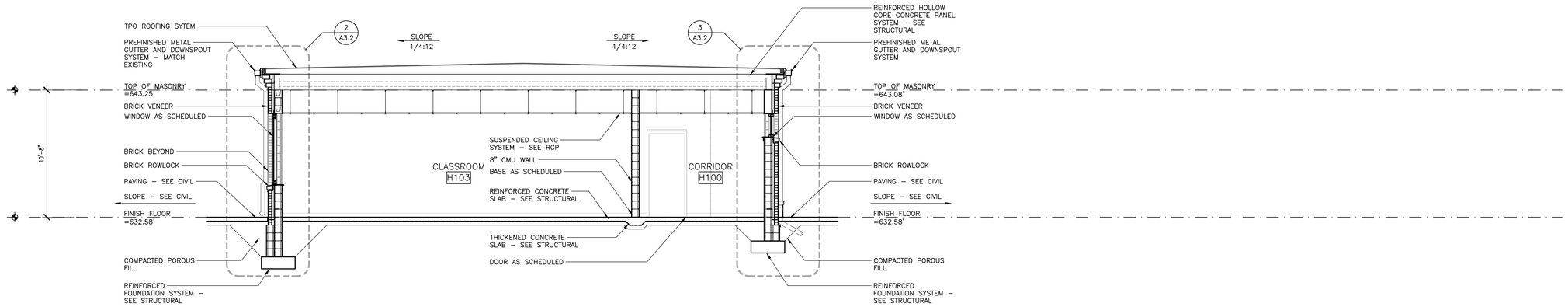
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
Ydr	
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

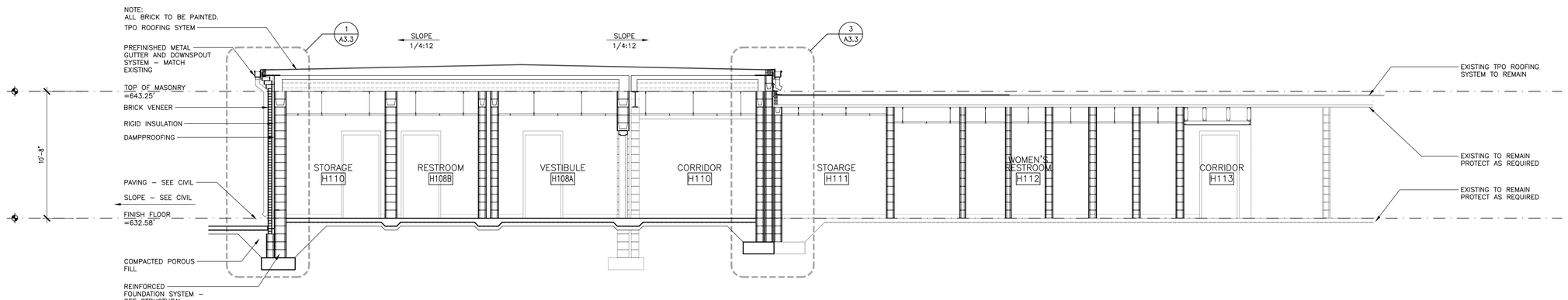
SHEET NO:
A3.0
9 OF 21

0 1" 2"



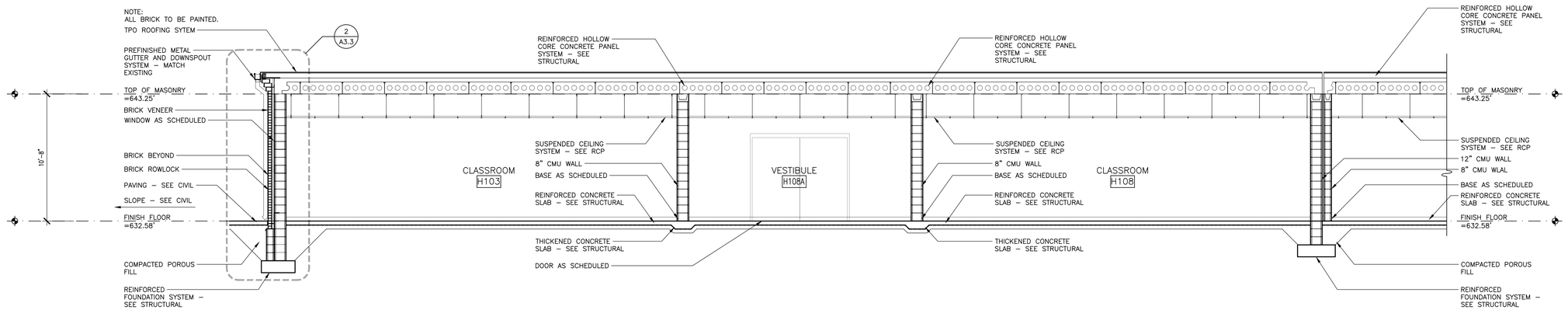
1 BUILDING SECTION

SCALE: 1/4" = 1'–0"



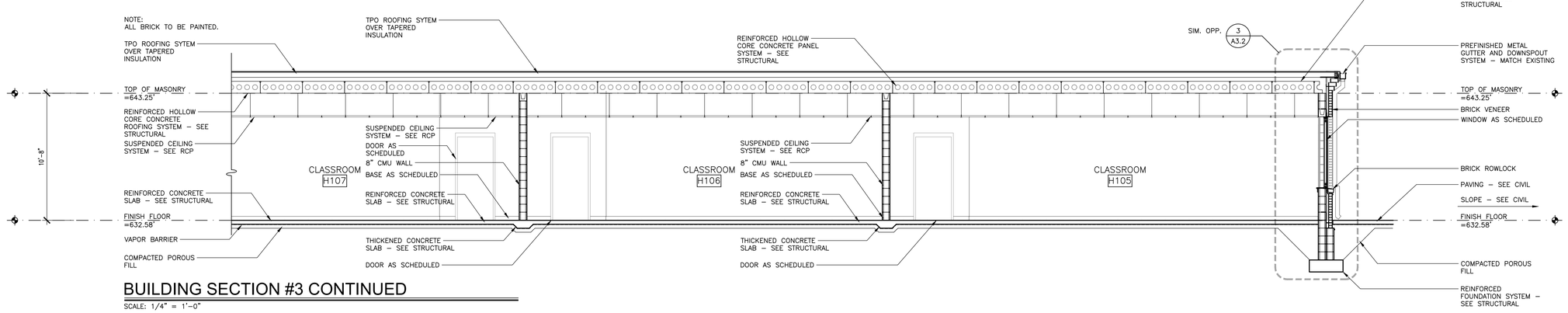
2 BUILDING SECTION

SCALE: 1/4" = 1'–0"



3 BUILDING SECTION

SCALE: 1/4" = 1'–0"



BUILDING SECTION #3 CONTINUED

SCALE: 1/4" = 1'–0"

LATHAN ▪ McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

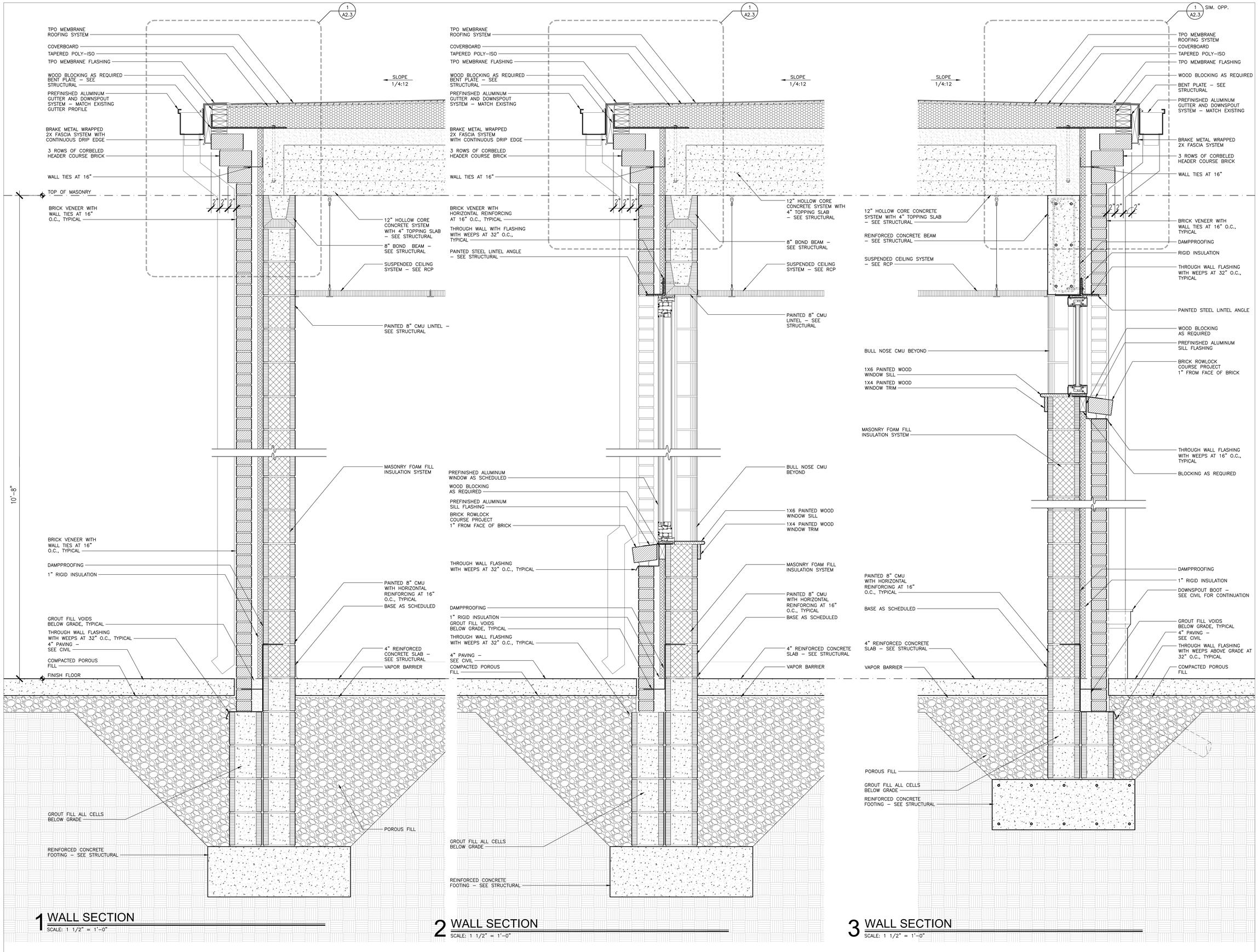
SHEET TITLE:
BUILDING SECTIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
A3.1
10 OF 21

0 1" 2"



LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

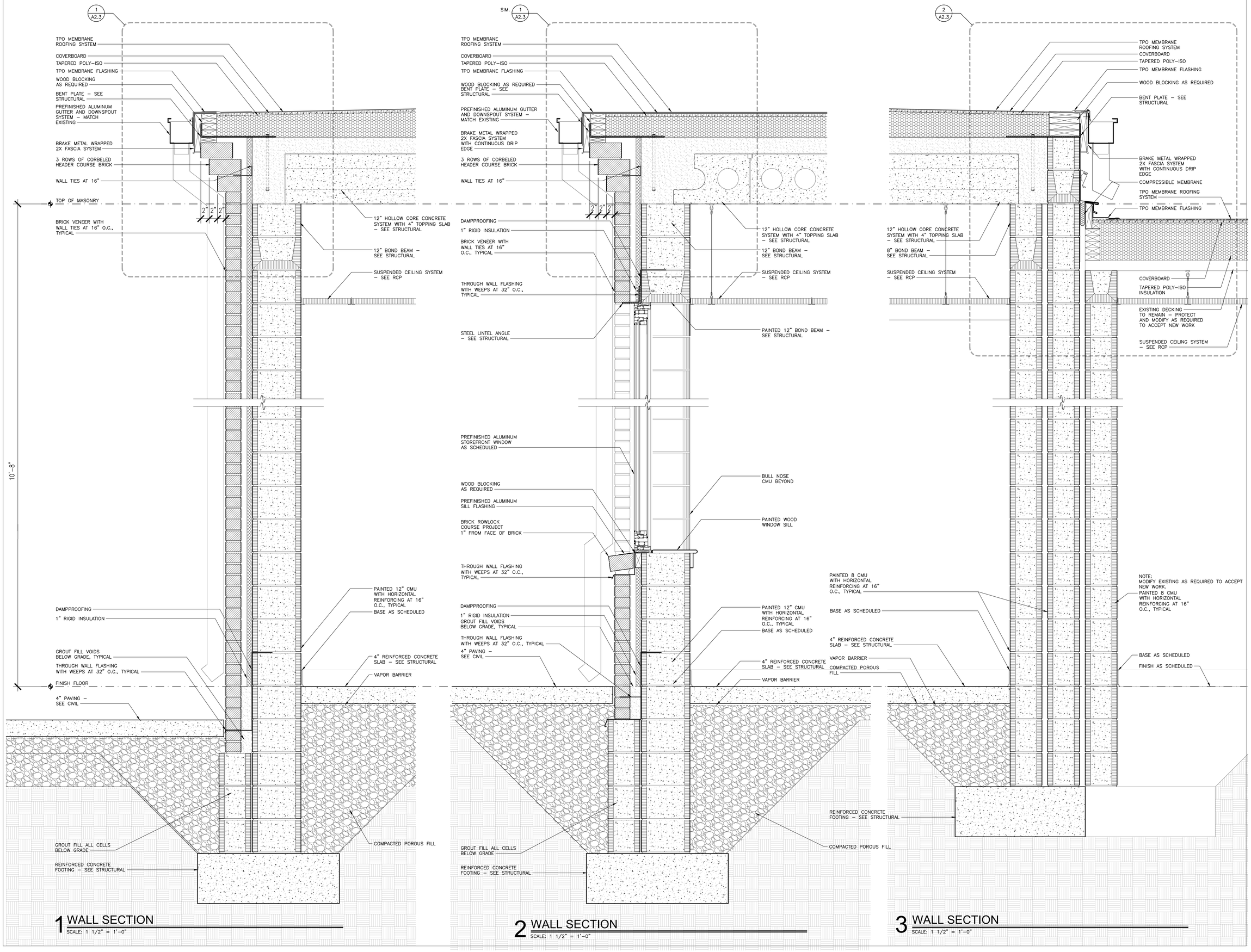
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

SHEET NO:
A3.2
11 OF 21

0 1" 2"



LATHAN ▪ McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

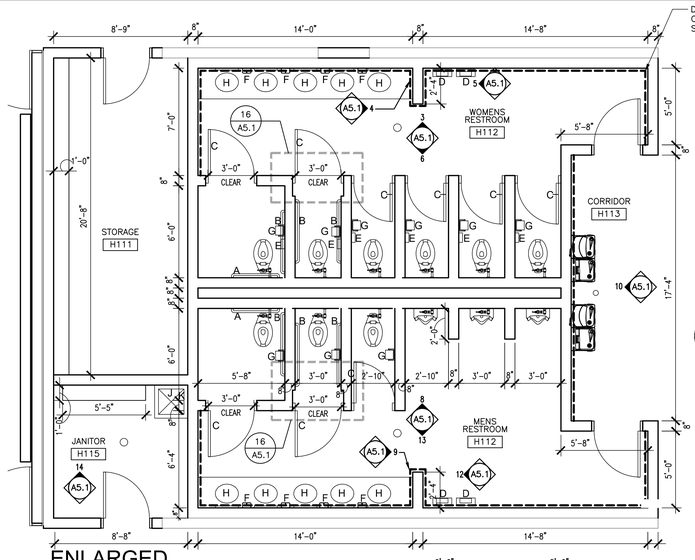
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

SHEET NO:
A3.3
12 OF 21

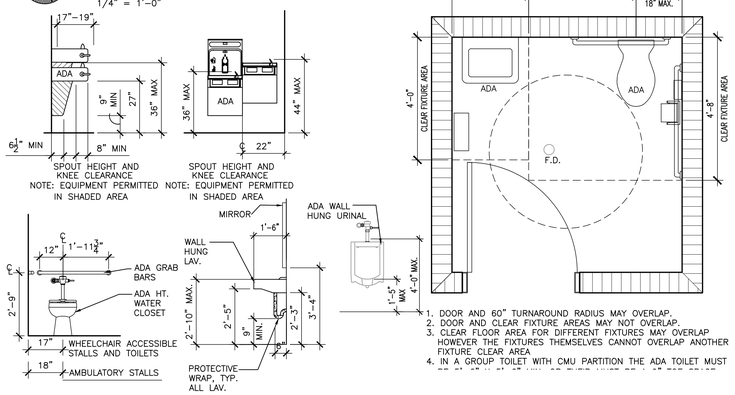
0 1" 2"

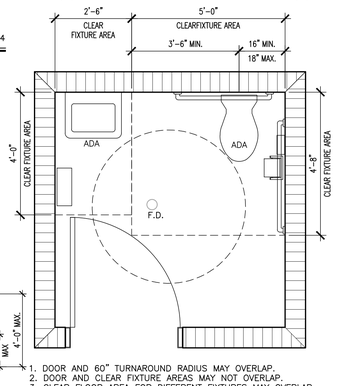


1 ENLARGED TOILET PLAN

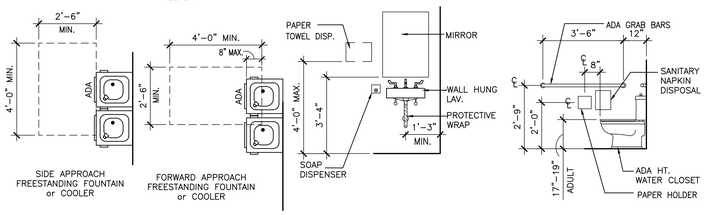
@ WOMEN'S RESTROOM H112 AND MEN'S RESTROOM H114

1/4" = 1'-0"



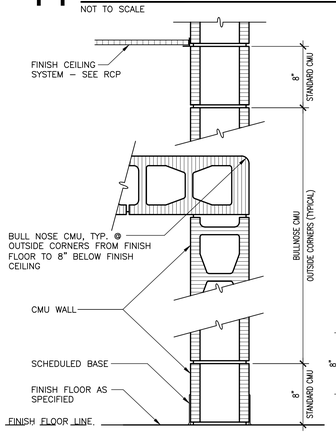


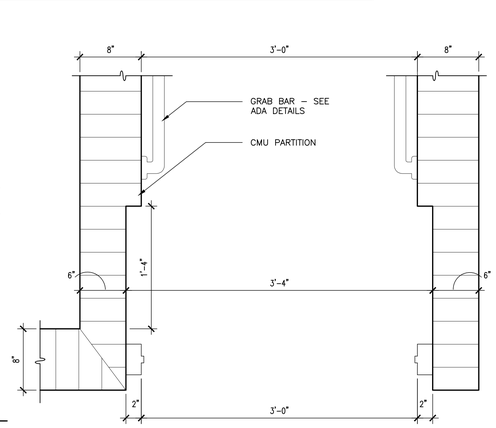
1. DOOR AND 60" TURNAROUND RADIUS MAY OVERLAP.
2. DOOR AND CLEAR FIXTURE AREAS MAY NOT OVERLAP.
3. CLEAR FLOOR AREA FOR DIFFERENT FIXTURES MAY OVERLAP HOWEVER THE FIXTURES THEMSELVES CANNOT OVERLAP ANOTHER FIXTURE CLEAR AREA
4. IN A GROUP TOILET WITH CMU PARTITION THE ADA TOILET MUST



11 TYPICAL ADA DETAILS

NOT TO SCALE





15 DETAIL

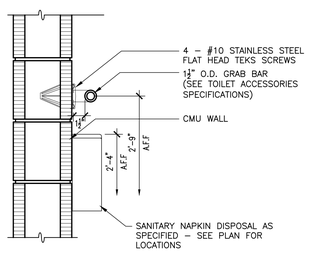
@ CMU DOUBLE BULLNOSE EDGE

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

16 DETAIL

@ AMBULATORY STALL

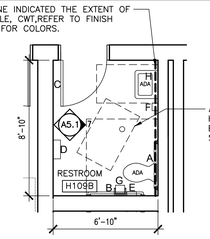
1-1/2" = 1'-0"

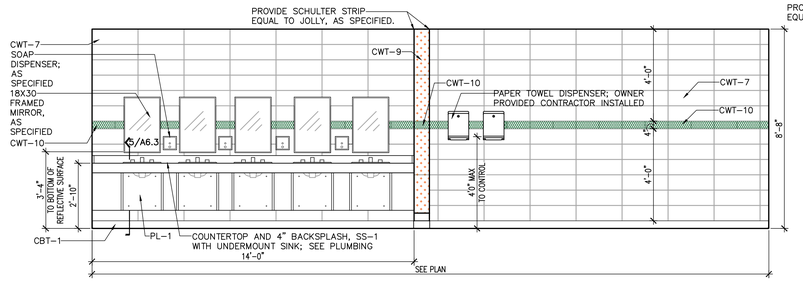


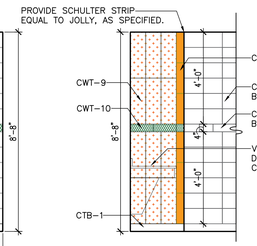
17 DETAIL

@ GRAB BAR WITH SANITARY NAPKIN AT CMU WALL

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



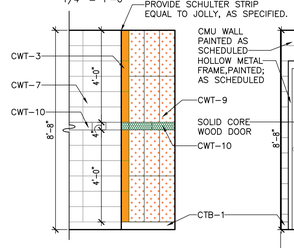




2 ENLARGED TOILET PLAN

@ RESTROOM H109B, H108B (OH)

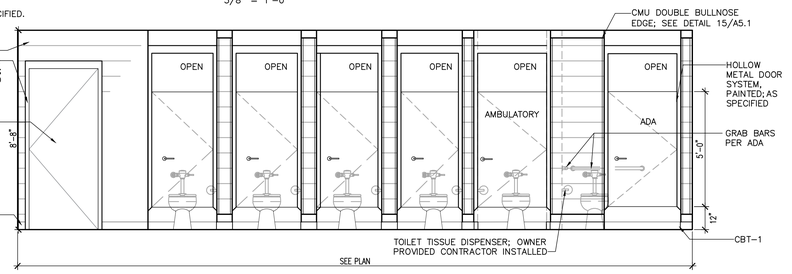
1/4" = 1'-0"



3 INTERIOR ELEVATION

@ WOMEN'S RESTROOM H112

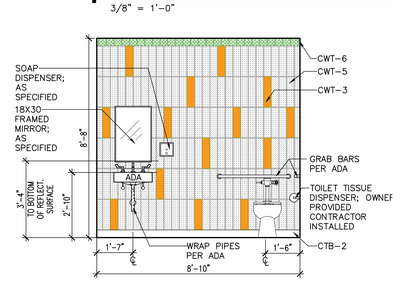
3/8" = 1'-0"



4 INTERIOR ELEVATION

@ WOMEN'S RESTROOM H112

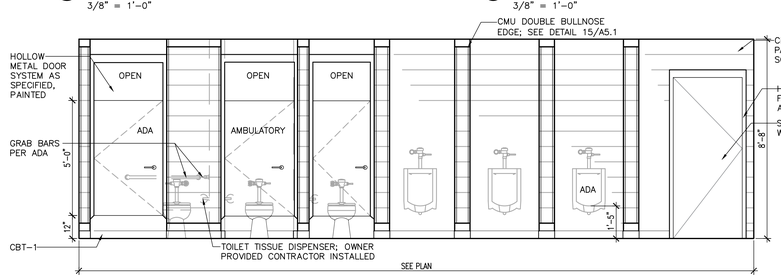
3/8" = 1'-0"



5 INTERIOR ELEVATION

@ WOMEN'S RESTROOM H112

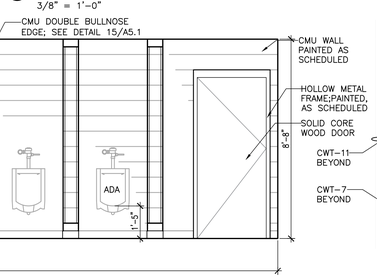
3/8" = 1'-0"

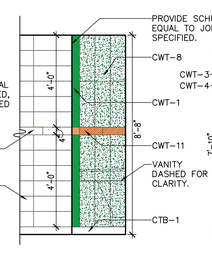


6 INTERIOR ELEVATION

@ WOMEN'S RESTROOM H112

3/8" = 1'-0"

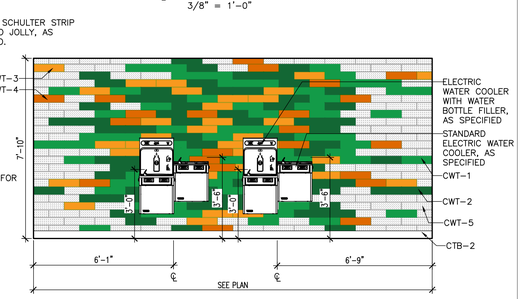




7 INTERIOR ELEVATION

@ RESTROOM H109B, H108B (OH)

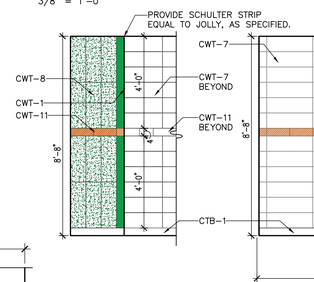
3/8" = 1'-0"



8 INTERIOR ELEVATION

@ MEN'S RESTROOM H114

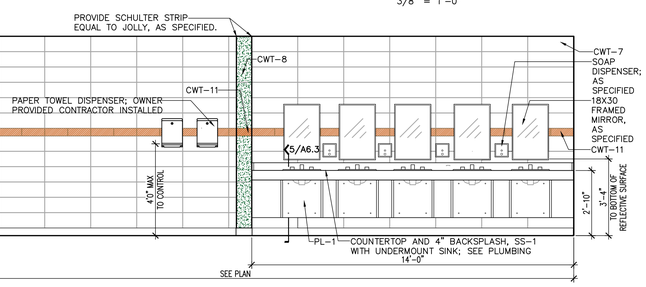
3/8" = 1'-0"



9 INTERIOR ELEVATION

@ MEN'S RESTROOM H114

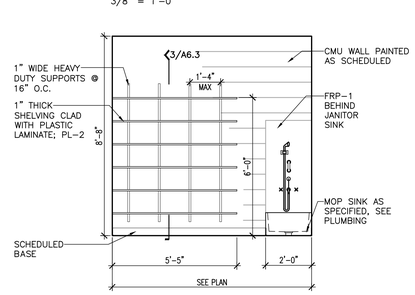
3/8" = 1'-0"



10 INTERIOR ELEVATION

@ CORRIDOR H113

3/8" = 1'-0"



12 INTERIOR ELEVATION

@ MEN'S RESTROOM H114

3/8" = 1'-0"

13 INTERIOR ELEVATION

@ MEN'S RESTROOM H114

3/8" = 1'-0"

14 INTERIOR ELEVATION

@ JANITOR H115

3/8" = 1'-0"

CERAMIC TILE LEGEND

CWT-1 GLOSSY 4X16	NO HATCH	CWT-7 GLOSSY 8X24	
CWT-2 MATTE 4X16		CWT-8 GLOSSY 8X24	
CWT-3 GLOSSY 4X16		CWT-9 GLOSSY 8X24	
CWT-4 MATTE 4X16		CWT-10 GLOSSY 4X12	
CWT-5 GLOSSY 4X16		CWT-11 GLOSSY 4X12	
CWT-6 GLOSSY 4X4		CWT-12 GLOSSY 4X16	

TOILET ACCESSORY LEGEND

A	36" S.S. GRAB BAR
B	42" S.S. GRAB BAR
C	COAT HOOK (MOUNTED ON INTERIOR STALL DOOR)
D	PAPER TOWEL DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
E	FEMININE NAPKIN DISPOSAL
F	SOAP DISPENSER
G	TOILET TISSUE DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
H	FRAMED MIRROR 18" X 30"
J	MOP HOLDER

NOTE: AT ALL OUTSIDE WALL CORNERS AND EDGES PROVIDE A SCHULTER STRIP EQUAL TO JOLLY, AS SPECIFIED

LATHAN ▪ McKEE ARCHITECTS

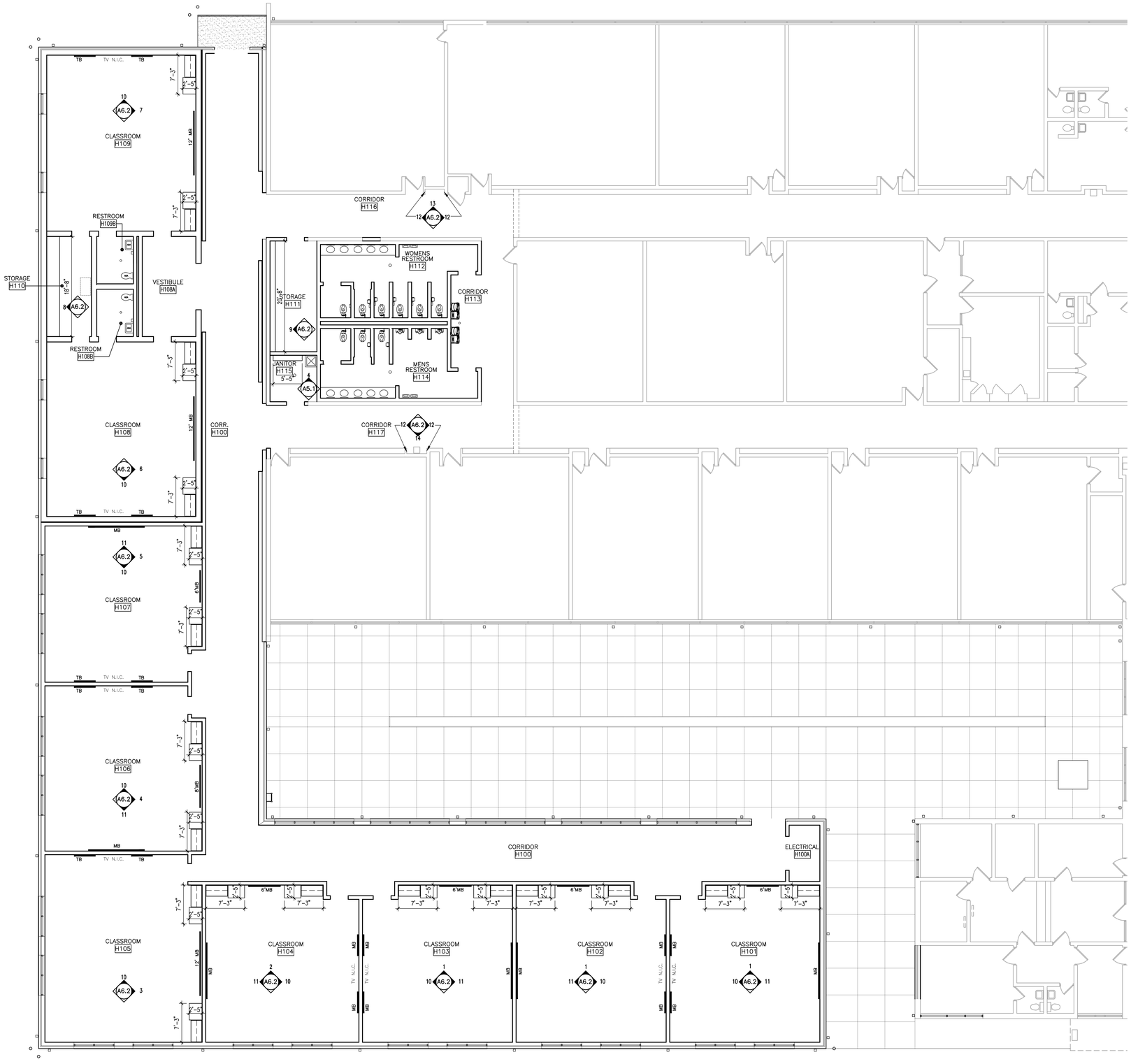
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL. 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ENLARGED TOILET PLANS, TOILET ELEVATIONS, AND ADA DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: LKB
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
A5.1
13 OF 21



1 MAIN LEVEL CASEWORK PLAN

1/8" = 1'-0"

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
MAIN LEVEL CASEWORK PLAN

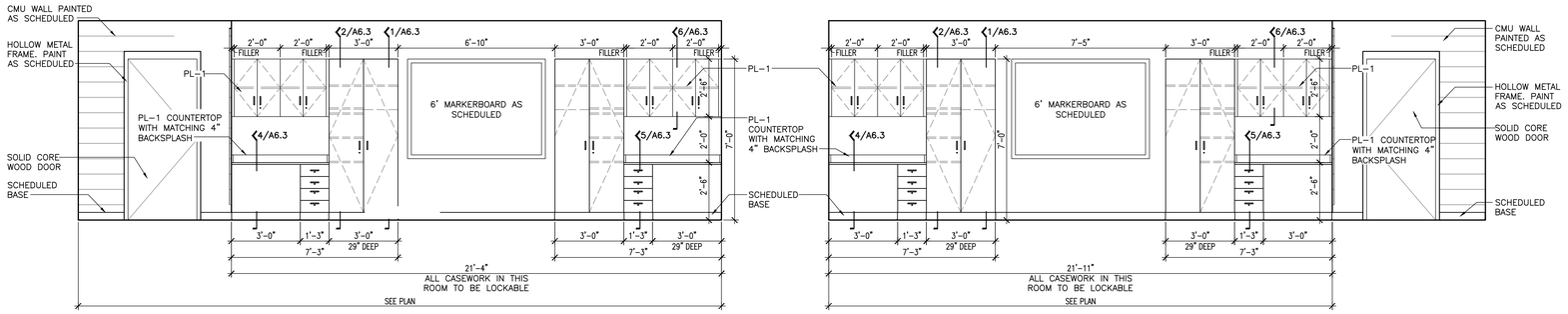
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	LKB
Init	
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

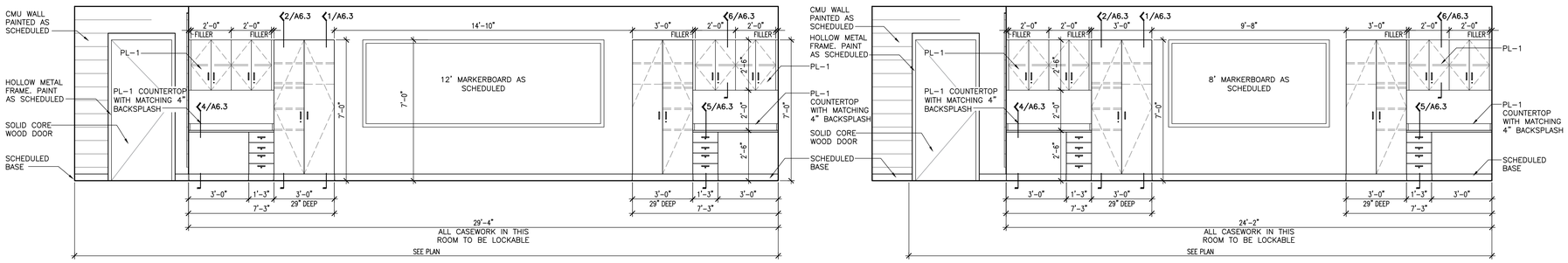
SHEET NO:
A6.1
14 OF 21

0 1" 2"



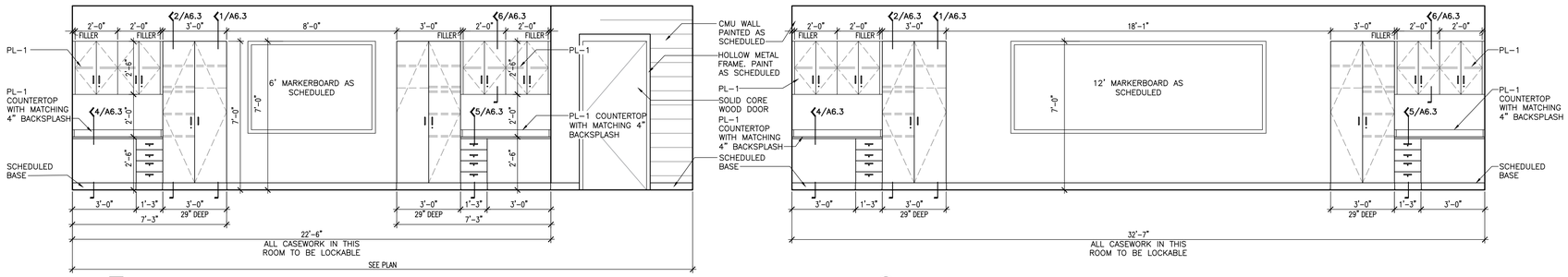
1 INTERIOR ELEVATION @ CLASSROOM H101, H102 (O.H.), AND H103
3/8" = 1'-0"

2 INTERIOR ELEVATION @ CLASSROOM H104
3/8" = 1'-0"



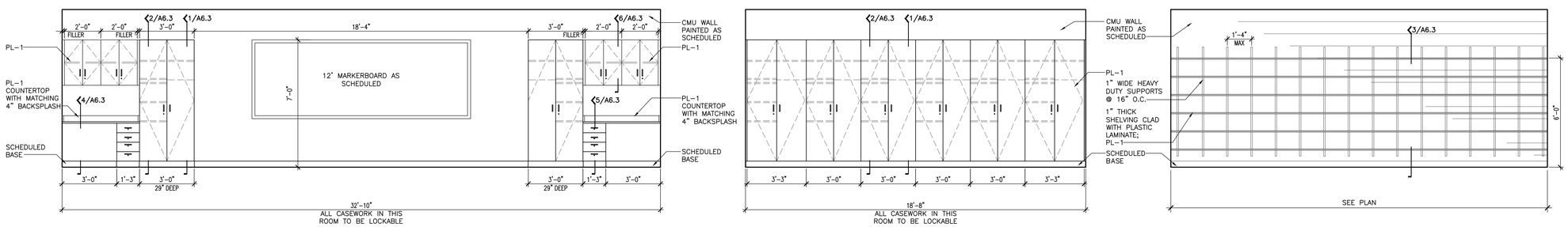
3 INTERIOR ELEVATION @ CLASSROOM H105
3/8" = 1'-0"

4 INTERIOR ELEVATION @ CLASSROOM H106
3/8" = 1'-0"



5 INTERIOR ELEVATION @ CLASSROOM H107
3/8" = 1'-0"

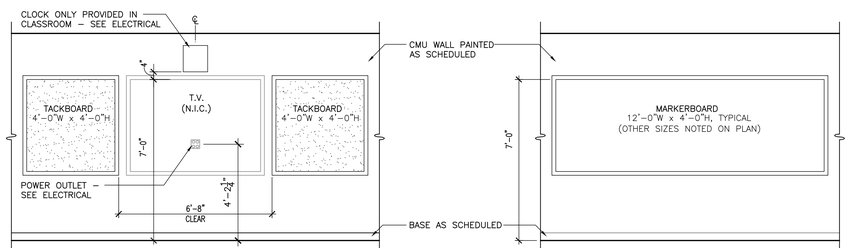
6 INTERIOR ELEVATION @ CLASSROOM H108
3/8" = 1'-0"



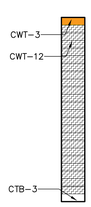
7 INTERIOR ELEVATION @ CLASSROOM H109
3/8" = 1'-0"

8 INTERIOR ELEVATION @ STORAGE H110
3/8" = 1'-0"

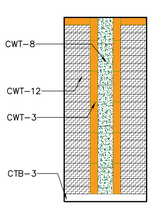
9 INTERIOR ELEVATION @ STORAGE H111
3/8" = 1'-0"



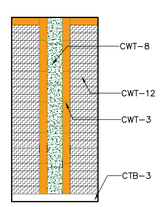
10 INTERIOR ELEVATION @ TYPICAL TEACHING WALL
3/8" = 1'-0"



11 INTERIOR ELEVATION @ MARKERBOARD
3/8" = 1'-0"



12 INTERIOR ELEVATION @ CORRIDOR 116 AND CORRIDOR 117
3/8" = 1'-0"



13 INTERIOR ELEVATION @ CORRIDOR H116
3/8" = 1'-0"

14 INTERIOR ELEVATION @ CORRIDOR H117
3/8" = 1'-0"

CERAMIC TILE LEGEND

CWT-1 GLOSSY 4X16		NO HATCH	CWT-7 GLOSSY 8X24
CWT-2 MATTE 4X16		CWT-8 GLOSSY 8X24	
CWT-3 GLOSSY 4X16		CWT-9 GLOSSY 8X24	
CWT-4 MATTE 4X16		CWT-10 GLOSSY 4X12	
CWT-5 GLOSSY 4X16		CWT-11 GLOSSY 4X12	
CWT-6 GLOSSY 4X4		CWT-12 GLOSSY 4X16	

LATHAN McKEE ARCHITECTS

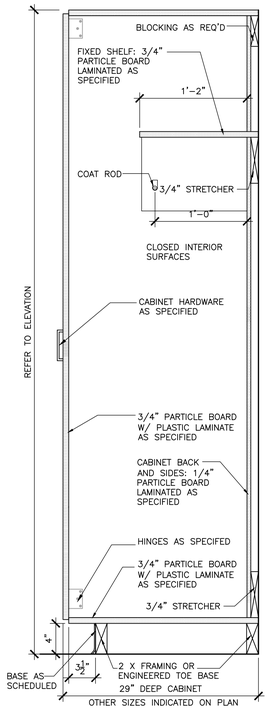
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE: INTERIOR ELEVATIONS

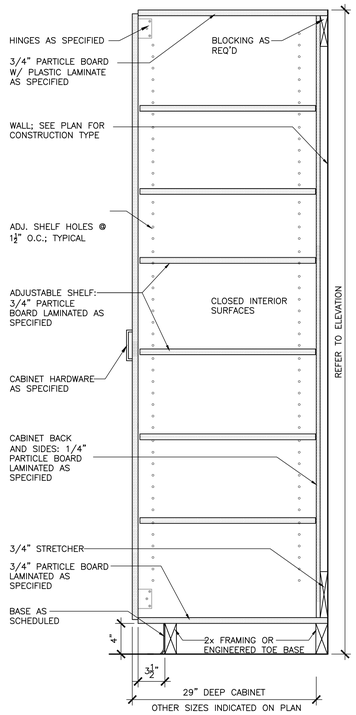
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	LKB
Vndr	
DATE:	JULY 31, 2025
REVISIONS	

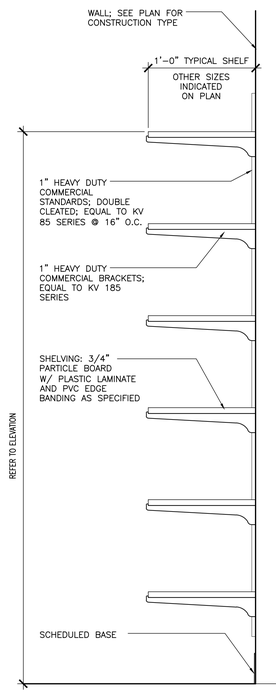
JOB NO. 24-106
SHEET NO: A6.2
15 OF 21



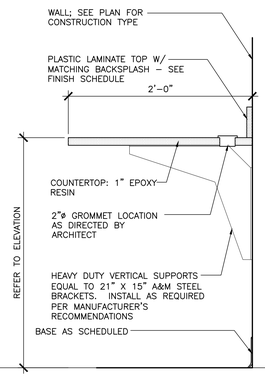
1 DETAILS @ TEACHER'S WARDROBE
SCALE: 1-1/2" = 1'-0"



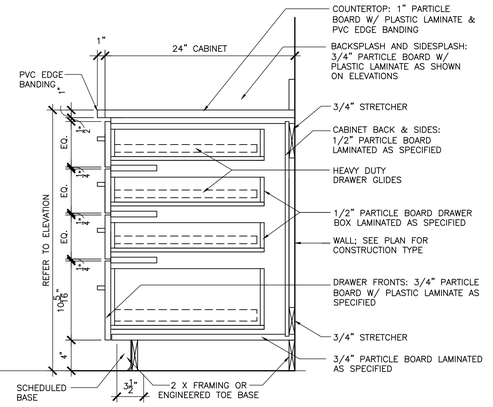
2 DETAILS @ TEACHER'S WARDROBE
SCALE: 1-1/2" = 1'-0"



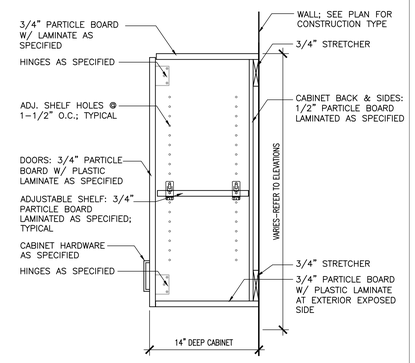
3 DETAILS @ ADJUSTABLE SHELVES
SCALE: 1-1/2" = 1'-0"



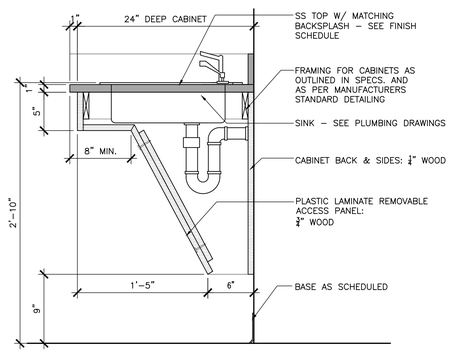
4 DETAILS @ TYPICAL BASE CABINET
SCALE: 1-1/2" = 1'-0"



5 DETAILS @ 4-DRAWER BASE
SCALE: 1-1/2" = 1'-0"



6 DETAILS @ TYPICAL WALL CABINET
SCALE: 1-1/2" = 1'-0"



7 DETAILS @ ADA SINK BASE WITH SOLID SURFACE
SCALE: 1-1/2" = 1'-0"

LATHAN ▪ McKEE ARCHITECTS

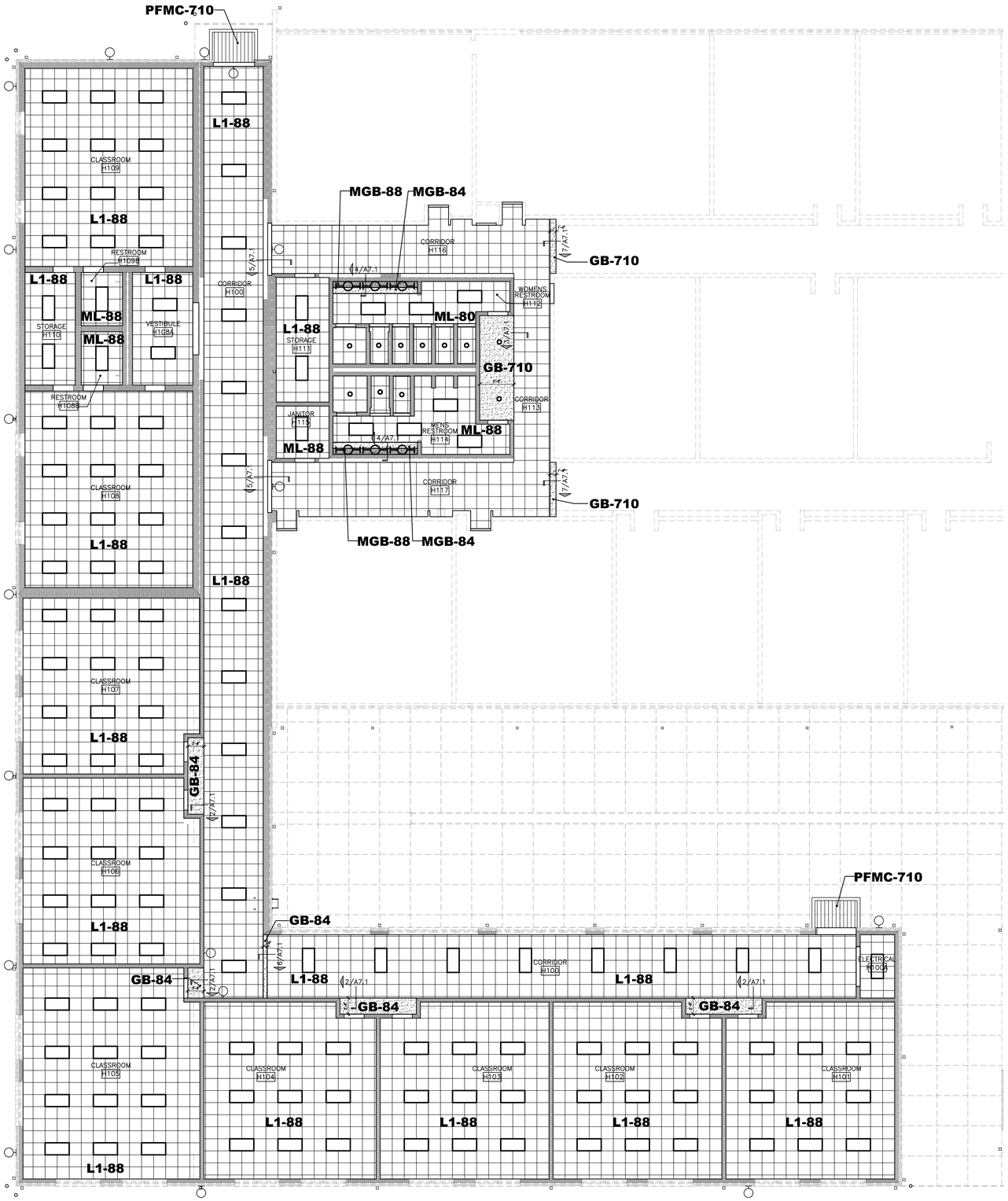
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL. 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

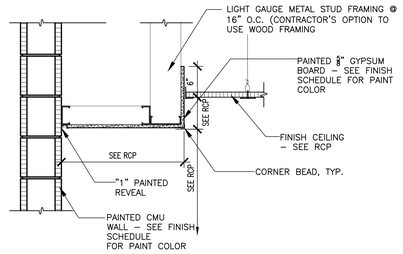
PROJ. MGR.: R. VERNON
DRAWN: LKB
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
A6.3
16 OF 21
0 1" 2"



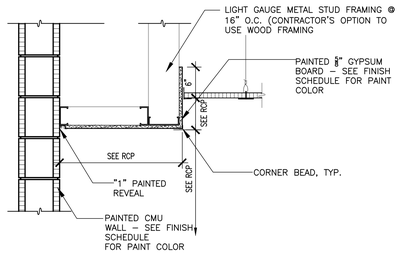
1 REFLECTED CEILING PLAN

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



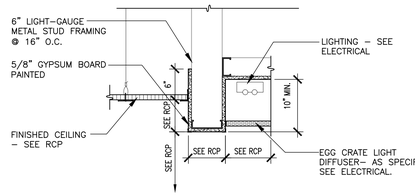
2 CEILING DETAIL @ LIGHT COVE

1" = 1'-0"



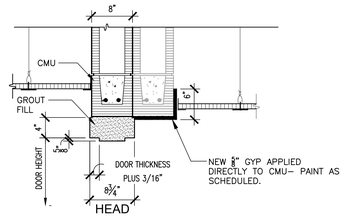
3 CEILING DETAIL @ CORRIDOR H113

1" = 1'-0"



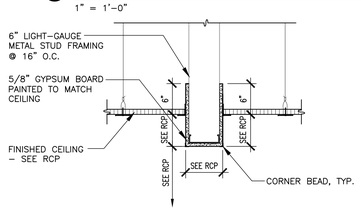
4 CEILING DETAIL @ WOMENS RESTROOM H112 AND MENS RESTROOM H114

1" = 1'-0"



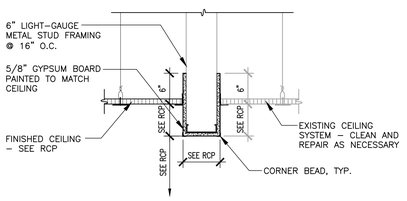
5 CEILING DETAIL @ CORRIDOR H116 AND CORRIDOR H117

1" = 1'-0"



6 CEILING DETAIL @ CORRIDOR H100

1" = 1'-0"



7 CEILING DETAIL @ CORRIDOR H116 AND CORRIDOR H117

1" = 1'-0"

CEILING LEGEND

FIXTURE TYPES - SEE ELECTRICAL

CEILING TYPE	CEILING HEIGHTS
GB-GYPSUM BOARD	710 = 7'-10" AFF
MGB - MOISTURE RESISTANT GYPSUM BOARD	84 = 8'-4" AFF
EG - EXTERIOR GYPSUM BOARD	88 = 8'-8" AFF
L1 - 2 x 2 LAY-IN ACOUSTICAL CEILING TILE, AS SPECIFIED	
ML - 2 x 2 MOISTURE RESISTANT LAY-IN	
PFMC- PRE-FINISHED METAL CANOPY	
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS	

CEILING TYPE — GB–90 — CEILING HEIGHT

CEILING NOTES

1. ALL RATED GYPSUM BOARD CEILINGS TO BE TYPE "X" FIRE RATED GYPSUM BOARD. ALL GYPSUM BOARD WITHIN GYMNASIUM TO BE IMPACT RESISTANT
2. COORDINATE W/ MECH, PLUMBING, & ELECTRICAL DRAWINGS AND PROVIDE FRAMING AS REQUIRED TO ACCOMMODATE MECHANICAL, PLUMBING, & ELECTRICAL SYSTEMS.
3. AFF - ABOVE FINISHED FLOOR
4. ALL CEILING HEIGHTS INDICATED ARE FROM ADJACENT FINISHED FLOOR.
5. REFER TO ELECTRICAL DRAWINGS FOR FIXTURE TYPES.
6. ALL AREAS INDICATING NEW CEILING TO IMPLY DEMOLITION OF EXISTING CEILING SYSTEMS AS REQ'D THAT AREA.
7. ALL CEILING GRIDS ARE CENTERED IN ROOMS UNLESS NOTED OTHERWISE.
8. ALL MECHANICAL, ELECTRICAL AND PLUMBING ITEMS LOCATED IN ESA (EXPOSED STRUCTURE ABOVE) SHALL BE PAINTED AS DIRECTED BY ARCHITECT

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
REFLECTED CEILING PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
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FINISH PATTERN LEGEND

- RES-1 — RES-1 RESUFLOR-HTS
- RES-2 — RES-2 RESUFLOR-HTS
- RES-3 — RES-3 RESUFLOR-HTS
- RES-4 — RES-4 RESUFLOR-HTS
- SC — SC SEALED CONCRETE

1 FINISH FLOOR PLAN

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

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

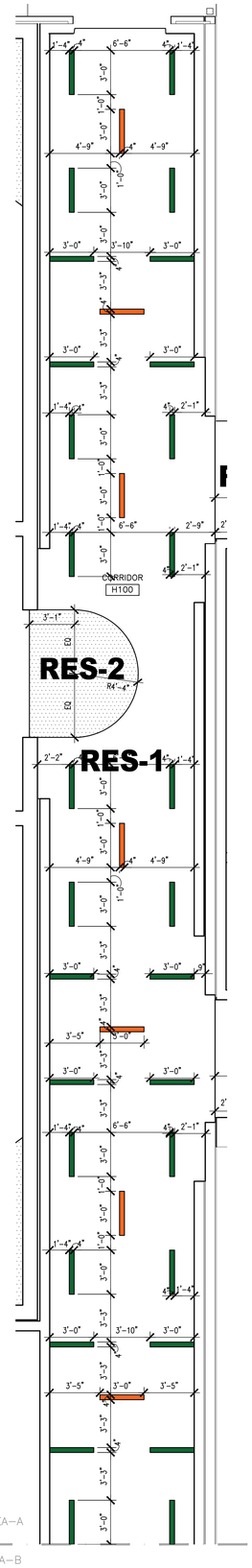
SHEET TITLE:
FLOOR FINISH PLAN

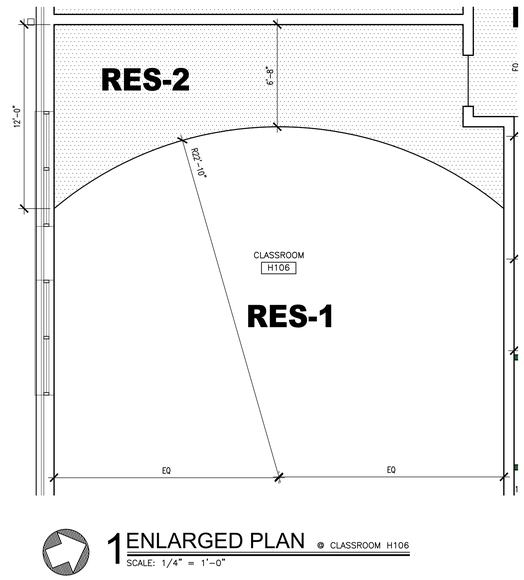
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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PROJ. MGR.: R. VERNON
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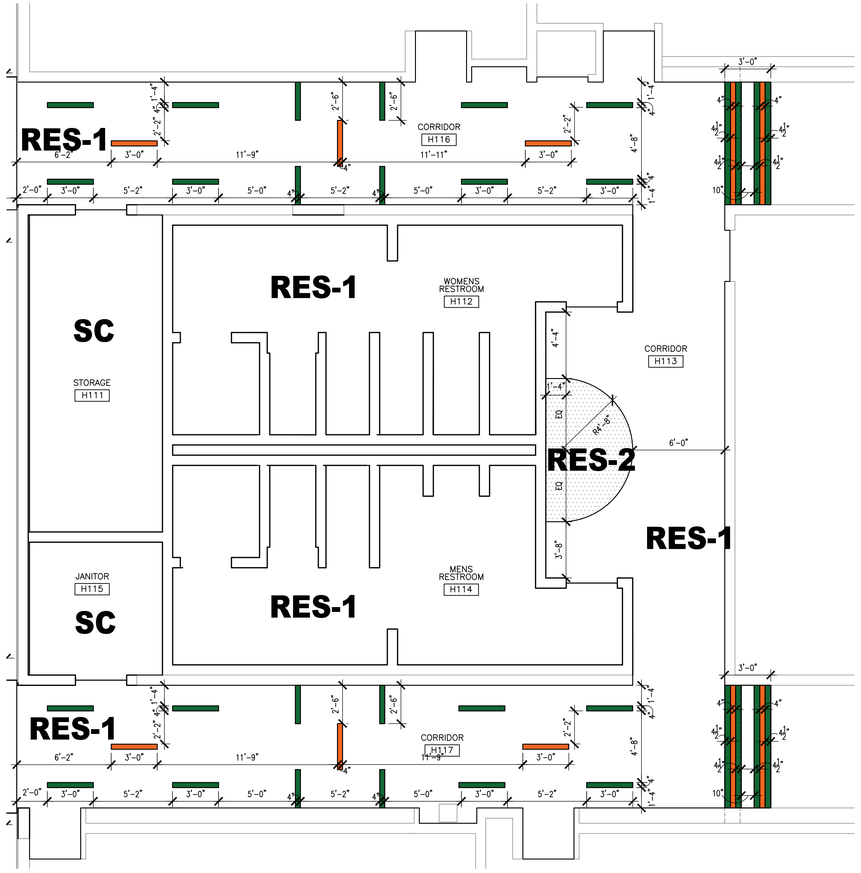
JOB NO. 24-106
SHEET NO:
A8.1
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0 1" 2"





1 ENLARGED PLAN @ CLASSROOM H106
SCALE: 1/4" = 1'–0"

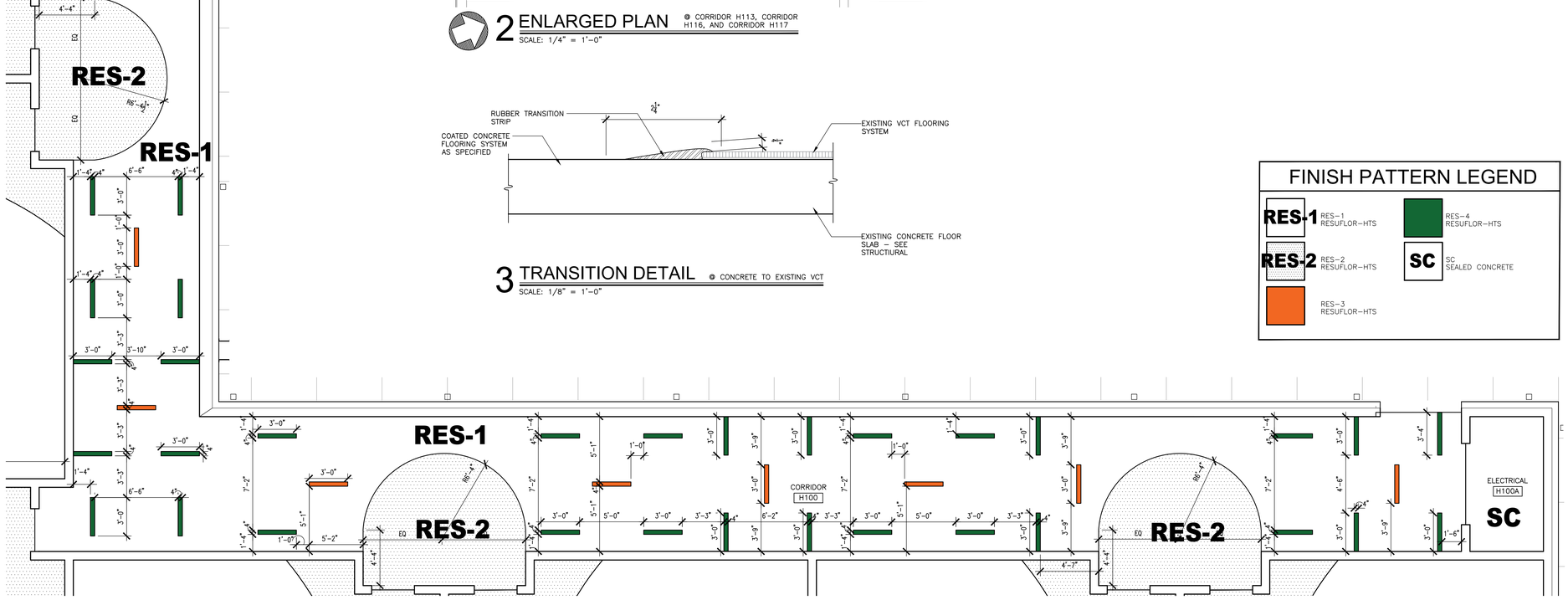


2 ENLARGED PLAN @ CORRIDOR H113, CORRIDOR H116, AND CORRIDOR H117
SCALE: 1/4" = 1'–0"

3 TRANSITION DETAIL @ CONCRETE TO EXISTING VCT
SCALE: 1/8" = 1'–0"

FINISH PATTERN LEGEND

- RES-1 — RES-1 RESUFLOR–HTS
- RES-2 — RES-2 RESUFLOR–HTS
- RES-3 — RES-3 RESUFLOR–HTS
- RES-4 — RES-4 RESUFLOR–HTS
- SC — SC SEALED CONCRETE



4 ENLARGED PLAN @ CORRIDOR H100
SCALE: 1/4" = 1'–0"

5 ENLARGED PLAN @ CORRIDOR H100
SCALE: 1/4" = 1'–0"

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ENLARGED FLOOR FINISH PLANS AND TRANSITION DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
Initials	
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
A8.2
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FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK		WALLS				DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
				FACE	TOP	NORTH	SOUTH	EAST	WEST			
MAIN LEVEL												
H100	CORRIDOR	RES-1/2/3/4	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	GYP SOFFIT @ CLASSROOM ENTRIES SHALL BE PNT-3
H100A	ELECTRICAL	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H101	CLASSROOM	RES-1/2	RB-1	PL-1	PL1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H102	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H103	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H104	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H105	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H106	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H107	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H108	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H108A	VESTIBULE	RES-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H108B	RESTROOM	RES-1	CTB-2	-	-	PNT-1	PNT-1	CWT	PNT-1	PNT-2		EPOXY PAINT ON ALL WALLS/ SEE ELEVATION 7/A5.1 FOR TILE PATTERN
H109	CLASSROOM	RES-1/2	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H109B	RESTROOM	RES-1	CTB-2	-	-	PNT-1	PNT-1	CWT	PNT-1	PNT-2		EPOXY PAINT ON ALL WALLS/ SEE ELEVATION 7/A5.1 FOR TILE PATTERN
H110	STORAGE	RES-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H111	STORAGE	RES-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
H112	WOMENS RESTOOM	RES-1	CTB-1	PL-1	SS-1	CWT	PNT-1	CWT	CWT	PNT-2	PNT-3	EPOXY PAINT ON ALL WALLS/ SEE ELEVATION 1,4,5/A5.1 FOR TILE PATTERN
H113	CORRIDOR	RES-1/2	RB-1	-	-	CWT	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	GYP AT RESTROOM ENTRY/SEE ELEVATION 10/A5.1 FOR TILE PATTERN
H114	MENS RESTROOM	RES-1	CTB-1	PL-1	SS-1	PNT-1	CWT	CWT	CWT	PNT-2	PNT-3	EPOXY PAINT ON ALL WALLS/ SEE ELEVATION 9,12,13/A5.1 FOR TILE PATTERN
H115	JANITOR	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT ON ALL WALLS
H116	CORRIDOR	RES-1/2/3/4	RB-1/CBT-3	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		CTB-3 @ AREA OF CERAMIC TILE ONLY
H117	CORRIDOR	RES-1/2/3/4	RB-1/CBT-3	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		CTB-3 @ AREA OF CERAMIC TILE ONLY

FINISH LEGEND

BASE (RUBBER/PORCELAIN)

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
RB-1	MANNINGTON	4" BURKE BASE COLOR:BLACK/BROWN	SEE FINISH SCHEDULE
CTB-1	DALTILE	4" COLOR WHEEL CLASSIC BASE COLOR:ARCTIC WHITE	SEE FINISH SCHEDULE
CTB-2	DALTILE	4" COLOR WHEEL CLASSIC BASE COLOR:SUEDE GRAY	SEE FINISH SCHEDULE
CTB-3	DALTILE	4" COLOR WHEEL CLASSIC BASE COLOR:ORANGE BURST	SEE FINISH SCHEDULE

CONCRETE FLOORING (RES/SC)

ITEM	MANUFACTURER	ITEM NUMBER/NAME
RES-1	SEE SPECIFICATIONS	COLOR: GRAY
RES-2	SEE SPECIFICATIONS	COLOR: DARK GRAY
RES-3	SHERWIN WILLIAMS	COLOR: ORANGE (SW6886/INVIGORATE)
RES-4	SHERWIN WILLIAMS	COLOR: GREEN (SW6740/KILKENNY)
SC	SHERWIN WILLIAMS	COLOR: GRAY

CERAMIC TILE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
CWT-1	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:EMERALD 0115 SIZE: 4" X 16"	SEE FINISH SCHEDULE
CWT-2	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:EMERALD MATTE 0715 SIZE: 4" X 16"	SEE FINISH SCHEDULE
CWT-3	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:ORANGE BURST 1097 SIZE: 4" X 16"	SEE FINISH SCHEDULE
CWT-4	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:ORANGE BURST MATTE 7080 SIZE: 4" X 16"	SEE FINISH SCHEDULE
CWT-5	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:SUEDE GRAY 0182 SIZE: 4" X 16"	SEE FINISH SCHEDULE
CWT-6	DALTILE	COLLECTION: COLOR WHEEL CLASSIC COLOR:EMERALD 0115 SIZE:4X4	SEE FINISH SCHEDULE
CWT-7	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:ARCTIC WHITE 0190 SIZE:8X24	SEE FINISH SCHEDULE
CWT-8	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:EMERALD 0115 SIZE:8X24	SEE FINISH SCHEDULE
CWT-9	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:ORANGE BURST 1097 SIZE:8X24	SEE FINISH SCHEDULE
CWT-10	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:EMERALD 0115 SIZE:4X12	SEE FINISH SCHEDULE
CWT-11	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR:ORANGE BURST 1097 SIZE:4X12	SEE FINISH SCHEDULE
CWT-12	DALTILE	COLLECTION: COLOR WHEEL LINEAR COLOR: ARTIC WHITE 0190 SIZE: 4X16	SEE FINISH SCHEDULE

PAINT

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PNT-1	SHERWIN WILLIAMS	COLOR: AGREEABLE GRAY SW7029	GENERAL WALLS
PNT-2	SHERWIN WILLIAMS	COLOR:URBAN BRONZE SW7048	GENERAL TRIM
PNT-3	SHERWIN WILLIAMS	COLOR:CEILING BRIGHT WHITE SW7007	GENERAL CEILING AND SOFFIT

PLASTIC LAMINATE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PL-1	WILSONART	COLOR:NEWLANDS LAMINATE WITH MATCHING EDGEBANDING	SEE FINISH SCHEDULE

SOLID SURFACE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
SS-1	BPI DURASEIN	COLOR:ICY GREY	SEE FINISH SCHEDULE

FIBERGLASS REINFORCED PLASTIC

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
FRP-1	CRANE COMPOSITES	COLOR: TBD	SEE FINISH SCHEDULE

FINISH ABBREVIATION LEGEND

APF	ACOUSTIC PANEL FABRIC	FRP	FIBERGLASS REINFORCED PLASTIC	RST	RUBBER STAIR TREAD
BFC	BROOM FINISHED CONCRETE	GYP	GYPSUM BOARD	SC	SEALED CONCRETE
CC	COATED CONCRETE	LVT	LUXURY VINYL TILE	SS	SOLID SURFACE
CFT	CERAMIC FLOOR TILE	PC	POLISHED CONCRETE	ST	STAIN
CWT	CERAMIC WALL TILE	PL	PLASTIC LAMINATE	STC	STAINED CONCRETE
CTB	CERAMIC TILE BASE	PNT	PAINT	TP	TACKABLE ACOUSTIC PANEL
CM	CROWN MOLDING	PFT	PORCELAIN FLOOR TILE	TS	TACKABLE SURFACE
CPT	CARPET	PTB	PORCELAIN TILE BASE	VCT	VINYL COMP. TILE
CR	CHAIR RAIL	PWT	PORCELAIN WALL TILE	WB	WOOD BASE
DP	DIGITAL ACOUSTIC PANEL	PWF	PRE-ENG. WOOD	WC	WALLCOVERING
ERB	EPOXY RESIN BASE	QRF	QUARTZ RESIN FLOOR	WD	WOOD FLOORING (GYM)
ERF	EPOXY RESIN FLOOR	QRB	QUARTZ RESIN BASE	WF	WOOD FLOORING (STAGE)
ESD	STATIC CONTROL TILE	RES	RESUFLOOR-HITS	WP	WOOD PANELING
		RB	RUBBER BASE	WV	WOOD VENEER
				ZA	ZINTRA ACOUSTICS

FINISH NOTES

ALL WALLS TO BE PAINTED PNT -1 UNLESS NOTED OTHERWISE.

ALL WALLS AND CEILINGS LOCATED IN WET AREAS SHALL HAVE EPOXY BASED PAINT

ALL NEW EXTERIOR WINDOWS SHALL RECEIVE MINI BLINDS AS SPECIFIED

ALL SOFFITS SHALL BE PAINTED PNT-3 UNLESS OTHERWISE DIRECTED.

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR

ASHVILLE HIGH SCHOOL

33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

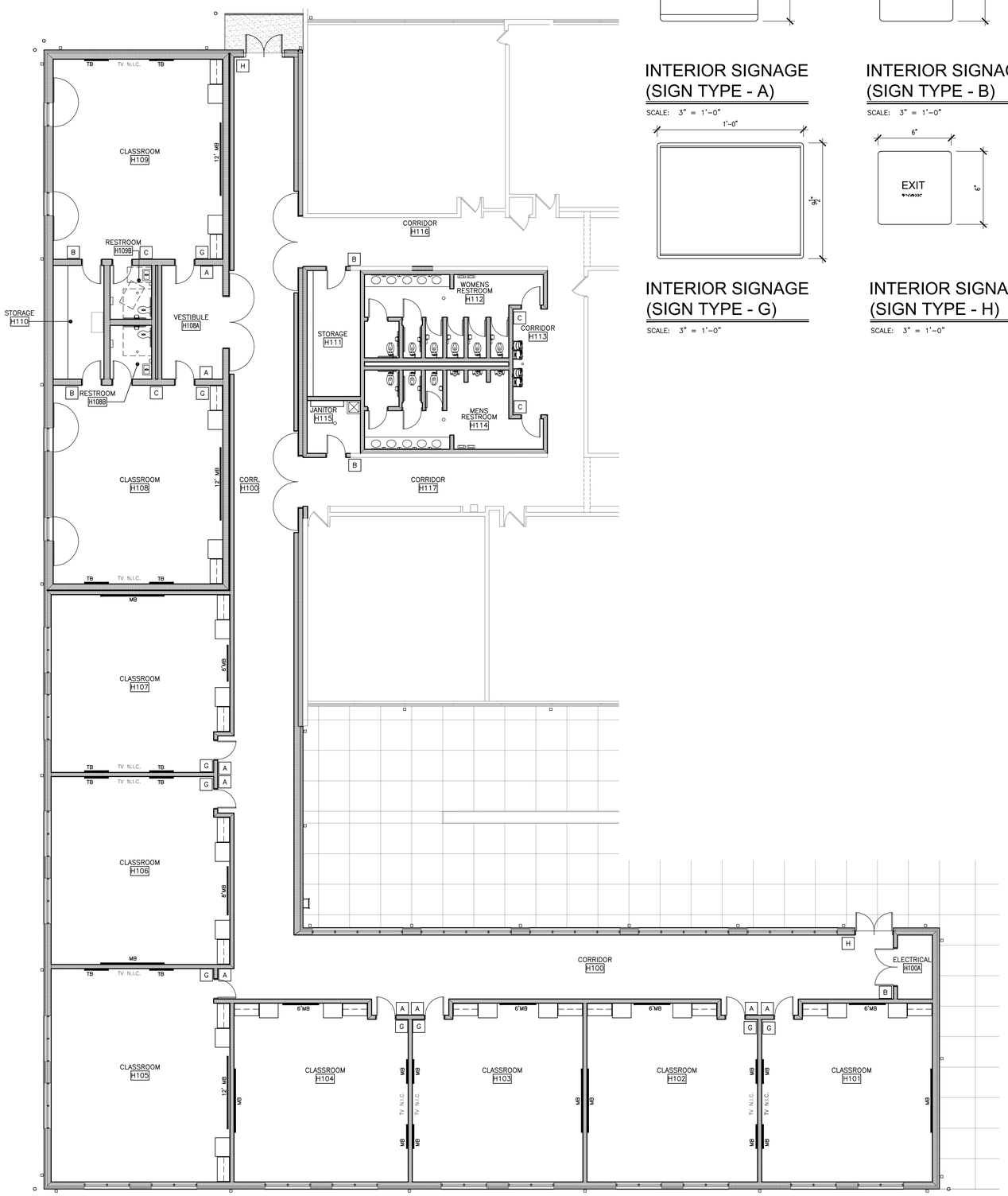
SHEET TITLE:
FINISH SCHEDULE AND LEGEND

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: R. VERNON
DRAWN: C.L. BRYANT
DATE: JULY 31, 2025
REVISIONS

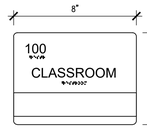
JOB NO. 24-106
SHEET NO:
A8.3
20 OF 21

0 1" 2"



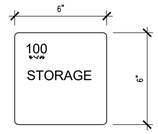
1 MAIN LEVEL SIGNAGE PLAN

1/8" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3" = 1'-0"

INTERIOR SIGNAGE (SIGN TYPE - G)

SCALE: 3" = 1'-0"

INTERIOR SIGNAGE (SIGN TYPE - H)

SCALE: 3" = 1'-0"

INTERIOR SIGNAGE LEGEND	
A	SIGN WITH MESSAGE STRIP (OFFICES/CLASSROOM/INSTRUCTIONAL AREA)
B	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC)
C	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE
G	FRAMED CLEAR VIEW SIGNAGE (8.5X11)
H	TACTILE EXIT SIGN TO EXTERIOR (EXIT)

NOTE: FOR REQUIRED SHELTER SIGNAGE SEE SHEET SH1.1

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
SIGNAGE PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	R. VERNON
DRAWN:	C.L. BRYANT
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

SHEET NO:

A9.1

21 OF 21

0 1" 2"

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 25-062

GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODES AND SPECIFICATIONS:

A. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2021 EDITION

B. CONCRETE:
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)

C. PRECAST CONCRETE:
PCI DESIGN HANDBOOK, LATEST EDITION

PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTIONS FOR PRECAST CONCRETE PRODUCTS, LATEST EDITION

D. ARCHITECTURAL PRECAST CONCRETE:
PCI MNL-122 ARCHITECTURAL PRECAST CONCRETE, LATEST EDITION

PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF ARCHITECTURAL PRECAST CONCRETE PRODUCTS, LATEST EDITION

E. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (ANSI/AISC 360-16)

F. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS

G. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)

BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16)

NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY", LATEST EDITION

H. COLD-FORMED STEEL FRAMING:
NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE (AISI S100-16(2020) w/S2-20)

OTHER APPLICABLE AISI STANDARDS, AMERICAN IRON AND STEEL INSTITUTE, LATEST EDITION

I. STORM SHELTER SAFE SPACE:
ICC/NSSA STANDARD FOR THE DESIGN AND CONSTRUCTION OF STORM SHELTERS (ICC 500-2020)

1.2 DESIGN GRAVITY LOADS (PSF):

A. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

B. FLOOR LIVE LOADS:
NON-REDUCTIBLE PARTITION LIVE LOAD OF 20 PSF HAS BEEN INCLUDED PER IBC SECTION 1607.5.

LIVE LOAD REDUCTIONS AS DETERMINED BY IBC SECTION 1607.12 HAVE BEEN TAKEN WHERE PERMITTED.

FLOOR (REDUCIBLE)----------100
STORAGE----------125
CORRIDORS----------100
MECHANICAL ROOM AND ATTIC----------125
EXITWAYS----------100

C. ROOF LIVE LOADS:
WHERE PERMITTED ROOF LIVE LOADS ARE REDUCED FROM THE BASE VALUE SHOWN BELOW IN ACCORDANCE WITH IBC SECTION 1607.14.

ROOF----------20
MECHANICAL----------125
SHELTER ROOF (UNREDUCIBLE)----------100
SHELTER COLLAPSE LOAD (UNREDUCIBLE)----------100

D. ROOF SNOW LOADS:
GROUND SNOW LOAD (Pg)----------5.0
IMPORTANCE FACTOR (I)----------1.1
EXPOSURE FACTOR (Ce)----------1.0
THERMAL FACTOR (Ct)----------1.0

1.3 DESIGN LATERAL LOADS:

A. WIND LOADS:
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)----------113MPH
NOMINAL WIND SPEED (3-SECOND GUST)----------90MPH
RISK CATEGORY----------III
WIND IMPORTANCE FACTOR (I)----------1.00
WIND EXPOSURE CATEGORY----------C
ENCLOSURE CATEGORY----------ENCLOSED
INTERNAL PRESSURE COEFFICIENTS---------- +/- 0.18
SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS

B. SEISMIC LOADS:
OCCUPANCY CATEGORY III
SEISMIC IMPORTANCE FACTOR----------1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
SS----------0.263
S1----------0.099
SITE CLASS----------D
SPECTRAL RESPONSE COEFFICIENTS:
SDS----------0.279
SD1----------0.159
SEISMIC DESIGN CATEGORY----------B
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR:
ADDITION----------65 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs----------0.1742
RESPONSE MODIFICATION FACTOR, R----------3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

C. STORM SHELTER SAFE SPACE WIND LOADS:
TYPE OF SHELTER----------TORNADO
SHELTER DESIGN WIND SPEED----------250 MPH
WIND IMPORTANCE FACTOR (I)----------1.0
WIND EXPOSURE CATEGORY----------C
INTERNAL PRESSURE COEFFICIENTS (GCpi)---------- +/- 0.55
TOPOGRAPHIC FACTOR (Kzt)----------1.0
DIRECTIONALITY FACTOR (Kd)----------1.0

HOST BUILDING CONNECTIONS TO SHELTER HAVE BEEN DESIGNED PER INTENT OF ICC 500.

STORM SHELTER HAS NOT BEEN CONSTRUCTED IN AN AREA SUSCEPTIBLE TO FLOODING PER ICC 500 SECTION 402.1.

PER ICC 500, SPECIAL INSPECTION AND QUALITY ASSURANCE REQUIREMENTS HAVE BEEN INCLUDED WITHIN THE PROJECT SPECIFICATIONS - REFER TO SPEC. SECTION 01410.

PER ICC 500, THE STORM SHELTER ENVELOPE MEETS THE STATIC AND CYCLIC PRESSURE AND IMPACT TEST REQUIREMENTS. APPLICABLE INFORMATION CAN BE FOUND BASED ON THE FOLLOWING:

WALLS: FULLY GROUTED 12" CMU WALLS WITH #5@8" O.C. (MINIMUM) AND HORIZONTAL REINFORCING AT 16" O.C. TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUILDING ASSEMBLIES" SUBMITTED TO N.I.S.T. (AUGUST 2006) -- TABLE A.5 - TEST NO. 1 (PAGE A-32)

ROOF: 12" DEEP PRECAST HOLLOW CORE SLAB PANELS WITH 4" (3" MINIMUM WITH CAMBER) CONCRETE TOPPING SLAB (W/ #4 @12 EW) TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUILDING ASSEMBLIES" SUBMITTED TO N.I.S.T. (AUGUST 2006) -- TABLE A.6 - TEST NO. 35 (PAGE A-48) UF MS THESIS "LARGE WIND MISSILE IMPACT PERFORMANCE OF PUBLIC AND COMMERCIAL BUILDING ASSEMBLIES" (CHRISTOPHER P. BRADEN) (2004) -- TABLE 3.7 - TEST NAME "E(60)M3--8HC" (PAGE 39)

2.0 GENERAL CONDITIONS

2.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL DESIGN GROUP.

2.2 ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES, AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY STRUCTURAL DESIGN GROUP AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF STRUCTURAL DESIGN GROUP. STRUCTURAL DESIGN GROUP SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERETO.

2.3 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

2.4 WHERE SHOP DRAWINGS, CALCULATIONS, OR SUBMITTALS ARE CALLED FOR IN THE PROJECT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND ARE NOT PROVIDED BY THE CONTRACTOR, THE CONTRACTOR ASSUMES TOTAL RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED WORK.

2.5 ENGINEER'S SHOP DRAWING REVIEW IS LIMITED TO REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT REFLECTED IN THE STRUCTURAL PORTION OF THE CONTRACT DOCUMENTS. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS OR OTHER PROJECT CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED OR IMPLIED FOR THE CORRECTNESS OF DIMENSIONS OR DETAILS. THIS REVIEW DOES NOT AUTHORIZE CHANGES TO THE CONTRACT SUM UNLESS STATED IN A SEPARATE WRITTEN FORM OR CHANGE ORDER. CONTRACTOR SHALL CONFIRM AND CORRELATE ALL QUANTITIES AND DIMENSIONS, SELECT FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATE HIS WORK WITH THAT OF OTHER TRADES, AND PERFORM HIS WORK IN A SAFE AND SATISFACTORY MANNER. CONTRACTOR SHALL ALSO REFER TO THE REQUIREMENTS OF THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS.

2.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

2.7 VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY RELATED WORK.

2.8 THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY JOB SITE SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY DURING CONSTRUCTION AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.

2.9 STRUCTURAL DESIGN GROUP IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, SAFETY PROCEDURES, CONSTRUCTION SUPERVISION OR SITE SAFETY, AND DOES NOT HAVE THE AUTHORITY TO STOP WORK FOR THESE ITEMS. DRAWINGS FURTHER DO NOT PROVIDE ENGINEERING CONTROLS FOR SILICA STANDARD OR ANY OTHER SAFETY STANDARD.

2.10 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, DEWATERING OF EXCAVATION FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, TEMPORARY AND EXISTING STRUCTURES, AND PARTIALLY COMPLETED PORTIONS OF THE WORK TO ASSURE THE SAFETY OF ANY PERSON COMING IN CONTACT WITH THE WORK.

2.11 THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER OF RECORD ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY BRACING, GUYS, ETC. TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. ANY QUESTIONS REGARDING TEMPORARY BRACING REQUIREMENTS SHOULD BE FORWARDED TO A STRUCTURAL ENGINEER FOR REVIEW.

2.12 MECHANICAL UNITS AND ANY OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

2.13 WHERE NOTED IN DRAWINGS AND SPECIFICATIONS TO INSTALL PRODUCTS PER THE MANUFACTURER'S RECOMMENDATIONS, IT SHALL BE REQUIRED THAT THE CONTRACTOR FOLLOWS THE MANUFACTURER'S RECOMMENDATIONS.

2.14 STRUCTURAL OBSERVATION IS VISUAL OBSERVATION OF THE IN PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT DOCUMENTS.

2.15 OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

2.16 ALL SUBMITTALS: IF THERE ARE QUESTIONS, CLARIFICATIONS, MODIFICATIONS, OR ITEMS WHERE INFORMATION, A RESPONSE, OR APPROVAL IS REQUESTED, SUCH ITEMS SHALL BE WRITTEN ON THE TRANSMITTAL OR COVER SHEET. INDICATING SUCH ITEMS ON THE SHOP DRAWINGS, WITHIN ANY CALCULATIONS, OR PRODUCT DATA IS NOT SUFFICIENT, WHERE SUCH ITEMS ARE NOT SPECIFICALLY LISTED ON THE TRANSMITTAL OR COVER SHEET IN ACCORDANCE WITH THESE GENERAL NOTES AND THE SPECIFICATIONS, SUCH ITEMS ARE NOT TO BE CONSIDERED APPROVED OR CONSIDERED. IF A QUESTION, CLARIFICATION, MODIFICATION, OR REQUEST FOR INFORMATION IS MADE AND NOT SPECIFICALLY RESPONDED TO BY STRUCTURAL DESIGN GROUP, NO APPROVAL OR CONSENT SHALL BE ASSUMED. THE CONTRACTOR SHALL ASSUME TOTAL LIABILITY AND RESPONSIBILITY IN ALL CASES WHERE SPECIFIC WRITTEN RESPONSE FROM STRUCTURAL DESIGN GROUP IS NOT OBTAINED, REGARDLESS OF ANY OTHER ACTIONS TAKEN BY STRUCTURAL DESIGN GROUP.

3.0 FOUNDATIONS

3.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TERRACON, TITLED "ASHVILLE HIGH SCHOOL CLASSROOM ADDITION, PROJECT NO. E1255061, DATED MAY 13, 2025" ALONG WITH ANY SUPPLEMENTAL CORRESPONDENCE. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS. GEOTECHNICAL RECOMMENDATIONS SHALL TAKE PRECEDENCE OVER THE ITEMS THAT FOLLOW IN THIS SECTION OF THE STRUCTURAL GENERAL NOTES.

3.2 MAXIMUM ALLOWABLE BEARING PRESSURES (PSF) PER GEOTECHNICAL REPORT:
BUILDING FOUNDATIONS----------2500

NOTE: ALL FOOTING BEARING ELEVATIONS SHALL BE BEARING IN SIMILAR MATERIAL (NATIVE SOILS OR WEATHERED BEDROCK), EXTEND FOOTINGS AS NECESSARY WITH LEAN CONCRETE OR FLOWABLE FILL.

3.3 ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

3.4 COMPACTED FILL WITHIN THE BUILDING AREA (AND EXTENDING 10'-0" OUTSIDE THE EXTERIOR BUILDING LINE) SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.

3.5 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING TO WITHIN 18" OF FINISH GRADE ON EXTERIOR AND TO UNDERSIDE OF SLAB ON INTERIOR. AT EXTERIOR, CAP GRANULAR BACKFILL WITH 18" OF SOIL.

3.6 GRANULAR BACKFILL SUPPORTING A FOOTING SHALL BE COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. PROVIDE A 12" THICK CAP OF PROPERLY COMPACTED CRUSHER RUN STONE BETWEEN THE FOOTING AND THE PROPERLY COMPACTED GRANULAR BACKFILL. EXTEND CRUSHER RUN CAP TWO FEET BEYOND THE PERIMETER OF THE FOOTING OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

3.7 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.

3.8 DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST SEVEN DAYS AND HAVE ATTAINED 75% OF DESIGN STRENGTH.

3.9 REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS AT THE SAME ELEVATION AS WALL FOOTING. STEP WALL FOOTING DOWN ON SPREAD FOOTING WHERE SPREAD FOOTING IS BELOW CONTINUOUS WALL FOOTINGS.

3.10 SUBGRADE AND GRANULAR FILL SUPPORTING SLABS ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT AND COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. SEE SPECIFICATIONS FOR VAPOR RETARDER BENEATH SLABS ON GRADE

3.11 GRANULAR FILL BENEATH SLABS, UNLESS NOTED OTHERWISE, SHALL BE 4" COMPACTED #57 STONE.

3.12 VAPOR RETARDER BENEATH SLABS ON GRADE, UNLESS NOTED, SHALL MEET ASTM E 1745, CLASS A, 15 MIL MINIMUM THICKNESS WITH MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE AND PIPE BOOTS, SUCH AS W.R. MEADOWS INC. PRODUCT PERMINATOR 15.

3.13 NO EXCAVATION SHALL BE CLOSER THAN AT A SLOPE OF 2:1 (TWO HORIZONTAL TO ONE VERTICAL) TO A FOOTING.

4.0 CONCRETE

4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

4.2 CONCRETE STRENGTH AND DURABILITY REQUIREMENTS: MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM WATER/CEMENTITIOUS RATIO, AIR CONTENT, SLUMP, AND CONCRETE USE:

STRENGTH TYPE	MAX W/C	AIR	SLUMP	USE	EXPOSURE CATEGORY
3000	NORMAL WT.	0.57	----	3" TO 5"	FOOTINGS	C1
3500	NORMAL WT.	0.50	----	3" TO 5"	SLABS	F0
4000	NORMAL WT.	0.45	4-6%	3" TO 5"	UNLESS NOTED	C0

A. CONCRETE MIX DESIGN SHALL BE WORKABLE WITH LOWEST TOTAL WATER PER CUBIC YARD USING LARGEST PRACTICAL MAXIMUM SIZE OF COURSE AGGREGATE.

B. EXPOSURE CLASS DESCRIPTIONS:

F0: CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES AND PROTECTED FROM MOISTURE.
C0: CONCRETE DRY AND PROTECTED FROM MOISTURE
C1: CONCRETE EXPOSED TO MOISTURE BUT NOT TO DEICING CHEMICALS.

4.3 REINFORCING BARS: ASTM A615 GRADE 60.

4.4 WATERSTOPS: FLEXIBLE PVC WATERSTOPS, CE CRD-C 572, UNLESS NOTED OTHERWISE, WITH FACTORY-INSTALLED METAL EYELETS, FOR EMBEDDING IN CONCRETE TO PREVENT PASSAGE OF FLUIDS THROUGH JOINTS. FACTORY FABRICATE CORNERS, INTERSECTIONS, AND DIRECTIONAL CHANGES. ACCEPTABLE MANUFACTURER IS THE GREENSTREAK GROUP, INC, 800-325-9504, OR EQUAL. PROFILE SHALL BE FLAT, DUMBBELL WITH CENTER BULB WITH DIMENSIONS OF 6 INCHES BY 3/8 INCH THICK.

A. FLEXIBLE WATERSTOP INSTALLATION: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED TO FORM A CONTINUOUS DIAPHRAGM. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.

4.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

4.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.

4.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED, UNLESS NOTED OR APPROVED BY THE ENGINEER.

4.8 ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.9 ALL REINFORCING MARKED "CONT." INDICATES REINFORCING SHALL BE "CONTINUOUS" AND SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.10 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS, OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.

4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

FOOTINGS----------2" TOP & 3" BOTTOM & SIDES
SLAB FACES NOT EXPOSED TO WEATHER OR EARTH----------3/4"
SLAB FACES EXPOSED TO WEATHER
A. #5 AND LESS----------1-1/2"
B. #6 AND GREATER----------2"

NOTE: SLAB ON GRADE WWR OR REINFORCEMENT EACH WAY SHALL BE 2" CLEAR FROM TOP OF SLAB. SEE EARTH SUPPORTED SLABS SECTION BELOW.

4.12 WELDED WIRE REINFORCEMENT (WWR): ASTM A1064, MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.

4.13 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.

4.14 EARTH SUPPORTED SLABS:

4" THICK (UNLESS NOTED), REINFORCED WITH 6X6 W2.9/W2.9 WWR FLAT SHEETS SUPPORTED 2" CLEAR OF TOP OF SLAB, UNLESS NOTED. WWR TO BE CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.

PROVIDE CONTROL AND CONSTRUCTION JOINTS AT 3-4 TIMES SLAB THICKNESS IN FEET MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING PER ACI RECOMMENDATIONS. AS AN EXAMPLE, FOR A 4" THICK SLAB PROVIDE JOINTS SPACED 12 - 16 FEET MAXIMUM. PANELS TO BE RECTANGULAR WITH LONG SIDE NOT TO EXCEED 1-1/2 TIMES SHORT SIDE. CUTTING SHOULD BE STARTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM BEING DISLODGE. CONTRACTOR SUBMIT PLAN SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS.

FLOOR DESIGN AND CONSTRUCTION BASIS IS ACI 302 AND 360, AND IT IS UNREALISTIC TO EXPECT CRACK-FREE OR CURL-FREE FLOORS. IT IS NORMAL TO EXPECT SOME AMOUNT OF CRACKING AND CURLING IN THE SLAB ON GRADE, AND SUCH OCCURRENCE DOES NOT NECESSARILY REFLECT ADVERSELY ON EITHER THE ADEQUENCY OF THE FLOOR DESIGN OR THE QUALITY OF ITS CONSTRUCTION.

EARTH SUPPORTED SLABS SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CURING COMPOUNDS, UNLESS NOTED, SHALL BE A MINIMUM OF CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND MEETING ASTM C 309, TYPE 1, CLASS B, SELF-DISSIPATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.

WHERE CONTROL JOINTS TERMINATE INTO NON-PARALLEL CONTROL JOINTS, PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB PERPENDICULAR TO TERMINAL CONTROL JOINT.

PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB AT REENTRANT CORNERS.

WHERE CONTROL JOINTS TERMINATE AT EMBEDDED STEEL ELEMENTS (SUCH AS EDGE REINFORCEMENT AT LOADING DOCKS), PROVIDE JOINT IN STEEL ELEMENT.

4.15 CONTRACTION JOINTS IN WALLS: WALL JOINTS SHALL NOT BE SPACED FARTHER THAN 15 FEET FOR 8" WALLS, 20 FEET FOR 10" WALLS AND 30 FEET FOR 12" WALLS. WALL JOINTS SHALL ADDITIONALLY NOT BE LOCATED WITHIN 4'-0" OF EMBED PLATES OR CORNERS OF THE WALL. DISCONTINUE 50% OF THE WALL HORIZONTAL REINFORCING THROUGH JOINTS; TRIMMING BACK THE REINFORCING BARS 2" FROM THE CONTROL JOINT LOCATION. LOCATE CONTROL JOINTS EACH SIDE OF THE WALL. SEAL JOINTS WITH ELASTOMERIC SEALANT. SEE WALL CONTRACTION JOINT TYPICAL DETAIL.

4.16 WALL AND SLAB OPENINGS AND SLEEVES SMALLER THAN 12" (IN LARGER DIMENSION) ARE NOT SHOWN ON PLANS. CONTRACTOR SHALL SUBMIT ALL OPENINGS (SIZE AND LOCATIONS) AS A SINGLE COORDINATED SLEEVE PLAN FOR REVIEW AND APPROVAL.

4.17 CAST IN PLACE ALL SLEEVES AND INSERTS.

4.18 SLAB CRACKS THAT DEVELOP ON EXPOSED LEVELS SHOULD BE INJECTED WITH EPOXY TO LIMIT DETERIORATION OF THE REBAR.

4.19 FOR ALL CONCRETE EXPOSED TO VIEW IN THE FINISHED CONFIGURATION OF THE STRUCTURE, PROVIDE RUBBED FINISH AT A MINIMUM. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

5.0 ARCHITECTURAL AND STRUCTURAL PRECAST CONCRETE

5.1 REFER TO ARCHITECT'S DRAWINGS AND SPECIFICATIONS FOR DIMENSIONAL, FINISHING, AND OTHER REQUIREMENTS OF THE ARCHITECTURAL PRECAST.

5.2 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE AS WELL AS THE DESIGN OF THE ANY REQUIRED TOPPING SLABS FOR GRAVITY AND LATERAL LOADS. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

5.3 ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER.

A. CONNECTIONS OF THE PRECAST TO THE STRUCTURE SHALL NOT RESTRAIN THE STRUCTURE'S 1" DOWNWARD MOVEMENT AT ALL BEAMS AND 1" UPWARD MOVEMENT AT ROOF BEAMS.

5.4 ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.

5.5 PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES AND SIMILAR MISCELLANEOUS METALS, AS REQUIRED, FOR ALL PRECAST WORK.

5.6 ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS AND BOLTS IN CONJUNCTION WITH ALL PRECAST CONCRETE SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.

5.7 ADJUSTMENT AND POSSIBLY RESETTING OF PRECAST MAY BE REQUIRED TO ALIGN PRECAST DUE TO SUPPORT DEFLECTION AND/OR ROTATION.

5.8 SUPPORTING BEAMS AND STRUCTURE WILL DEFLECT AND/OR ROTATE. PRECAST MANUFACTURER AND ERECTOR SHALL COORDINATE CONNECTION/ERECTION SEQUENCE TO ACCOUNT FOR THIS MOVEMENT AND MAKE FINAL ADJUSTMENTS TO ALIGN AND PLUMB PRECAST. THIS MAY REQUIRE ADJUSTING CONNECTIONS OR RECONNECTING.

6.0 PRECAST CONCRETE HOLLOW CORE SLABS

6.1 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

A. PRECAST MANUFACTURER SHALL LIMIT USE TO 2" MAXIMUM OF THE TOPPING SLAB FOR COMPOSITE ACTION IN THE DESIGN OF THE PRECAST PANELS TO ALLOW FOR A 1" MAXIMUM CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION.

1. THE REMAINING 1" OF THE TOPPING SLAB IS TO BE APPLIED AS SUPERIMPOSED DEAD LOAD TO THE PRECAST PANELS.

2. PRECAST MANUFACTURER IS TO PROVIDE ANTICIPATED CAMBER & DEFLECTION CALCULATIONS FOR ALL PRECAST PANELS SO THAT IT CAN BE VERIFIED THAT THE POSITIVE CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION HAS BEEN LIMITED TO 1" MAXIMUM.

3. PRECAST MANUFACTURER IS RESPONSIBLE FOR ADDING AND INCLUDING IN THE BASE BID ANY ADDITIONAL REINFORCING STEEL IN THE TOPPING SLAB AS MAY BE REQUIRED TO CONTROL LONG-TERM CREEP ISSUES WITH THE PRESTRESSED SLAB PANELS.

4. STORM SHELTER PRECAST PANELS SHALL BE DESIGNED FOR 100 PSF SHELTER ROOF LIVE LOAD + SHELTER COLLAPSE LOAD IN ADDITION TO OTHER LOADS (SW, DL, CDL, & WL).

PER ICC 500, THE STORM SHELTER ENVELOPE MEETS THE STATIC AND CYCLIC PRESSURE AND IMPACT TEST REQUIREMENTS. APPLICABLE INFORMATION CAN BE FOUND BASED ON THE FOLLOWING:

ROOF: 12" DEEP PRECAST HOLLOW CORE SLAB PANELS WITH 4" (3" MINIMUM WITH CAMBER) CONCRETE TOPPING SLAB (W/ #4 @12 EW) TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUIL

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
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Job Number 25-062

GENERAL NOTES CONTINUED

7.12 ALL STEEL EXPOSED TO WEATHER, INCLUDING STEEL LINTELS FOR MASONRY OPENINGS, EXCEPT WHERE FABRICATED OF APPROVED CORROSION-RESISTANT STEEL OR OF STEEL HAVING A CORROSION RESISTANT OR OTHER APPROVED COATING, SHALL BE PROTECTED AGAINST CORROSION WITH AN APPROVED COAT OF PAINT, ENAMEL, OR OTHER APPROVED PROTECTION.

7.13 ALL HANDRAILS, GUARDRAILS, AND EMBEDS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE NOTED ABOVE, BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CALCULATIONS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT/ENGINEER AND SHALL BE INCLUDED WITH THE SHOP DRAWINGS.

8.0 MASONRY

8.1 MASONRY CONSTRUCTION SHALL CONFORM TO TMS 602-16 SPECIFICATION.

8.2 ALL MASONRY MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICA (BIA) AND NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) AND MINIMUM REQUIREMENTS ESTABLISHED BY THE LOCAL BUILDING CODE.

8.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT ($f'm$) SHALL BE 2000 PSI AT 28 DAYS.

8.4 NET COMPRESSIVE STRENGTH FOR EACH CMU UNIT SHALL MEET OR EXCEED 2000 PSI AT 28 DAYS. FOR TYPE N MORTAR, NET COMPRESSIVE STRENGTH FOR BLOCK SHALL BE GREATER THAN 2650 PSI.

8.5 GROUT COMPRESSIVE STRENGTH SHALL BE 2500 PSI AT 28 DAYS. GROUT SHALL ADDITIONALLY COMPLY WITH TABLE 6 OF TMS 602 FOR DIMENSIONS OF GROUT SPACES AND POUR HEIGHTS. COURSE GROUT SHALL BE USED WHERE POSSIBLE.

8.6 ALL MASONRY SHALL BE NORMAL WEIGHT IN ACCORDANCE WITH ASTM C90.

8.7 MORTAR: EXCEPT OTHERWISE SET FORTH HERIN ALL MORTARS AND THE MATERIALS THERIN SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR MORTAR OF MASONRY UNITS, ASTM C270.

A. THE TYPE OF MORTAR BASED ON CONSIDERATION OF THE LOCATION OF THE UNIT MASONRY CONSTRUCTION SHALL BE AS FOLLOWS:

USE OF LOCATION	TYPE OF MORTAR
BELOW GRADE FOUNDATION AND WALLS	M
RETAINING WALLS	M
FIRE RESISTIVE WALLS RATED 2 HOURS OR MORE	M OR S
EXTERIOR WALLS AND LOAD BEARING WALLS	M OR S
PARTITIONS	M, S OR N
SOLID MASONRY UNITS	ONE CLASSIFICATION LESS THAN THE ABOVE
MORTAR OR GROUT UNDER CONCENTRATED LOADS	M
FENCES OR SITE WALLS	M OR S

8.8 ALL MASONRY SHALL BE STACK BOND. VERIFY WITH ARCHITECT PRIOR TO CONSTRUCTION.

8.9 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.

8.10 MASONRY REINFORCING LAP SPLICE LENGTHS PER SCHEDULE, SEE MASONRY LAP SPLICE LENGTHS TYPICAL DETAIL.

8.11 THE CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS OF THE CMU REINFORCEMENT.

A. SHOP DRAWINGS SHALL INCLUDE AN ELEVATION VIEW OF EACH REINFORCED (LOAD BEARING OR NON-LOAD BEARING) WALL WITH ALL VERTICAL AND HORIZONTAL REINFORCING AS WELL AS WALL OPENINGS/PENETRATIONS SHOWN. REINFORCING SHOP DRAWINGS NOT CONTAINING THESE ELEVATION DRAWINGS WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL.

B. SHOP DRAWINGS SHALL UNDERGO A QUALITY REVIEW BY THE REBAR DETAILER & SUPERVISOR, AS WELL AS THE CONTRACTOR. SUBMITTALS SHALL INCLUDE ALL OPENINGS, REINFORCING, AND ELEVATIONS NOTED. SUBMITTALS REVIEWED MORE THAN A 2ND TIME MAY RESULT IN DELAYS TO THE CONTRACTOR. ANY ADDITIONAL TIME REQUIRED TO REVIEW A SUBMITTAL FOR A 3RD OR MORE TIME WILL BE BILLED TO THE CONTRACTOR AS ADDITIONAL SERVICES.

C. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A REBAR DETAILER CAPABLE OF HAVING THE SAME TEAM OF DETAILERS THROUGHOUT THE PROJECT. A LETTER WITH A LIST OF THE DETAILERS AND THE QUALITY SUPERVISOR AND THEIR INITALS SHALL BE SUBMITTED BEFORE ANY SHOP DRAWINGS HAVE BEEN SUBMITTED. THE INTIALS OF THE DETAILS AND THE QUALITY SUPERVISOR SHALL BE NOTED ON EACH SHOP DRAWINGS.

8.12 MODIFY CMU BLOCKS AS REQUIRED TO INSTALL REINFORCING AS NOTED/SHOWN.

8.13 PROVIDE CONTRACTION (CONTROL) JOINTS IN ALL CONCRETE MASONRY WALLS AT LOCATIONS APPROVED BY THE ARCHITECT AT A MAXIMUM SPACING OF 2.0 TIMES THE WALL HEIGHT OR 25'-0", WHICHEVER IS LESS.

8.14 CONTROL JOINTS IN CMU WALLS SHALL BE DISCONTINUOUS AT MASONRY BOND BEAMS. BOND BEAM REINFORCING SHALL EXTEND CONTINUOUS WITH MASONRY LAP SPLICES AND CORNER BARS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

8.15 WHEN REINFORCING IS SPECIFIED, PROVIDE REINFORCING AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.

8.16 EXTEND REBAR AT WALL OPENINGS A MINIMUM OF 2'-0" PAST THE OPENING AT ALL CORNERS, UNLESS NOTED OTHERWISE. AT WINDOWS, PROVIDE A MINIMUM OF 2#4 BARS AT THE SILLS OF THE WINDOWS, UNLESS NOTED OTHERWISE.

8.17 AT CMU PARTITIONS OVER 8'-0" TALL, SUPPORTED BY SLAB ON GRADE, PROVIDE THICKENED SLAB PER TYPICAL DETAILS.

8.18 WHERE ANY CMU WALL IS NOT SUPPORTED AT THE TOP, PROVIDE MINIMUM #5@16 VERTICAL REINFORCING, UNLESS NOTED OTHERWISE.

8.19 PROVIDE WALL TOP SUPPORT AT 8'-0" O.C. FOR ALL INTERIOR NON-LOAD BEARING CMU WALLS WHERE CONTINUOUS WALL SPAN BETWEEN PERPENDICULAR BRACING WALLS EXCEEDS 20'-0". SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

8.20 PROVIDE HORIZONTAL JOINT REINFORCING IN REINFORCED MASONRY WALLS AS DIRECTED BY THE ARCHITECT. AT WALL CORNERS AND INTERSECTIONS, PROVIDE PREFABRICATED T AND L SHAPES, FIELD BENDING IS NOT PREMITTED. MINIMUM OF LADDER TYPE ZINC COATED CONFORMING TO ASTM A82 HOHMANN & BARNARD 220 LADDER-MESH OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE FOOTING. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES, NO. 9 GAUGE OR LARGER, WELDED WITH NO. 9 GAUGE OR LARGER CROSS WIRES. LAP SPLICE HORIZONTAL JOINT REINFORCING A MINIMUM OF 12".

8.21 PROVIDE GROUT FILLED LINTEL BLOCKS AT TOP OF ALL CMU WALLS REINFORCED WITH 2#4 BARS CONTINUOUS, UNLESS NOTED OTHERWISE.

8.22 CONDUITS, REFRIGERANT PIPING (WITH ANY REQUIRED INSULATION INCLUDED), CONDENSATE DRAIN LINES, ETC. UP TO 2" IN OUTSIDE DIAMETER MAY EXTEND CONTINUOUS THRU MASONRY WALLS & BOND BEAMS. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING, ETC. DRAWINGS FOR SIZE AND LOCATION. DO NOT INTERRUPT CONTINUOUS REINFORCING STEEL IN PLACEMENT OF CONDUITS, PIPING, DRAIN LINES, ETC.

8.23 WHERE MASONRY WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

8.24 WHERE TOP OF FOOTING SUPPORTING MASONRY WALLS IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6 AT 16" O.C., UP TO THE FIRST COURSE ABOVE FINISH FLOOR ELEVATION, IN ADDITION TO THE SPECIFIED REINFORCEMENT, UNLESS NOTED OTHERWISE.

8.25 THE MASONRY WALLS ARE "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE. BRACING SHALL BE PER THE FOLLOWING, AND CONTRACTOR SHALL PROVIDE ADDED REINFORCING AND GROUT IF REQUIRED BY THE BRACING.

A. THE "2012 STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION".
B. THE "MASONRY WALL BRACING HANDBOOK" AS PUBLISHED BY THE MASON CONTRACTORS ASSOCIATION OF AMERICA (MCAA) SHOULD BE USED IN CONJUNCTION WITH THE "STANDARD PRACTICE".

9.0 COLD-FORMED STEEL FRAMING

9.1 STRUCTURAL PROPERTIES OF COLD-FORMED STEEL FRAMING SHALL BE COMPUTED IN ACCORDANCE WITH AISI "NORTH AMERICAN STANDARD FOR COLD-FORMED STEEL FRAMING" AND OTHER APPLICABLE AISI STANDARDS, LATEST EDITIONS.

9.2 UNLESS SPECIFICALLY DESIGNED AND DETAILED IN DRAWINGS, GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL COLD-FORMED STEEL FRAMING. SEE ARCHITECTURAL DETAILS FOR FRAMING LAYOUT AND SECTIONS. COLD-FORMED STEEL FRAMING SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SUBMITTED FOR FILES OF THE STRUCTURAL ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

9.3 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL COLD-FORMED STEEL FRAMING. SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR FRAMING LAYOUT, SIZES, SPACING, AND SECTIONS. THE GAGE OF THE STUDS, IF SHOWN, SHALL NOT BE REVISED UNLESS IT IS REQUIRED TO BE INCREASED AS DIRECTED BY THE COLD-FORMED STEEL DESIGN ENGINEER. COLD-FORMED STEEL FRAMING SHOP DRAWINGS AND DESIGN CALCULATIONS SHALL BE SUBMITTED FOR FILES OF THE STRUCTURAL ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE CONTRACTOR SHALL INCLUDE THE COST OF SHOP DRAWINGS AND CALCULATIONS, INCLUDING ENGINEERING FEES, IN THE BASE BID OF THE CONTRACT.

9.4 DEFLECTION LIMITS FOR MEMBERS:

A.	SOFFITS:	DL L/240	LL L/240	TL L/180
B.	WALL SUPPORTING BRICK:	HORIZONTAL DEFLECTION OF L/600		
C.	WALL SUPPORTING STUCCO:	HORIZONTAL DEFLECTION OF L/360		
D.	WALL SUPPORTING EIFS:	HORIZONTAL DEFLECTION OF L/240		
E.	WALL PARTITIONS:	HORIZONTAL DEFLECTION OF L/180		

9.5 COLD-FORMED STEEL FRAMING MEMBERS SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

9.6 COLD-FORMED STEEL FRAMING MEMBERS ABUTTING STRUCTURE SHALL HAVE VERTICAL SLIP TRACKS TO ACCOMMODATE UP TO 1-1/2" VERTICAL MOVEMENT UP OR DOWN.

9.7 PROVIDE WALL BRACING, CONNECTION DETAILS, WINDOW/DOOR HEADERS, ETC AS RECOMMENDED BY THE STUD MANUFACTURER FOR COLD-FORMED STEEL FRAMING MEMBERS.

9.8 TRACK SHALL BE SCREWED TO STUD WITH 2#8 TEK SCREWS EACH FLANGE, OR AS REQUIRED BY DESIGN.

9.9 VERTICAL STUDS INTERRUPTED BY WALL OPENINGS SHALL BE LOCATED EQUALLY ON EACH SIDE OF THE OPENING. PROVIDE EVEN NUMBER OF FULL HEIGHT STUDS ON EACH SIDE OF OPENING. WELD STUD FLANGES TOGETHER WITH 1/8" FILLET WELD 1" LONG SPACED AT 6" O.C.

9.10 WELDED CONNECTIONS: E60XX ELECTRODES, MINIMUM SIZE FILLET WELD 1/8". WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.3, THE STRUCTURAL WELDING CODE - SHEET STEEL.

9.11 PROVIDE SHOP DRAWINGS SHOWING PLANS, ELEVATIONS AND CONNECTION DETAILS FOR ALL NON-LOAD BEARING COLD-FORMED STEEL FRAMING.

9.12 ALL CONNECTIONS OF THE COLD-FORMED STEEL FRAMING MEMBERS TO THE STRUCTURE SHALL BE FULLY DETAILED ON THE COLD-FORMED STEEL FRAMING SHOP DRAWINGS. ANY SPECIAL LOADING IMPOSED ON THE STRUCTURE SHALL BE CLEARLY INDICATED ON THE SHOP DRAWINGS.

10.0 POST-INSTALLED REINFORCING, ANCHORS AND FASTENERS

10.1 POST-INSTALLED ANCHORS AND/OR REINFORCING SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS AND/OR REINFORCING IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS AND/OR REINFORCING.

10.2 THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS.

10.3 FOR ANCHORING INTO CONCRETE:

A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713 & IAPMO-UES ER-493)
2. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
3. SIMPSON STRONG-TIE "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
4. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-712) - FOR UNCRACKED CONCRETE ONLY
5. HILTI KWIK HUS-EZ (KH-EZ), KH-EZ CRC, KH-EZ SS316, KH-EZ C, KH-EZ E, KH-EZ-I, AND KH-EZ P SCREW ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM (ICC ESR-3027)
6. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-4266)
7. HILTI KWIK BOLT 1 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-678)
8. HILTI HDA UNDERCUT ANCHORS (ICC ESR 1546)
9. HILTI HSL-4 EXPANSION ANCHORS (ICC ESR 4386)
10. DEWALT SCREW-BOLT+ (ICC-ES ESR-3889)
11. DEWALT POWER-STUD+ SD2 (ICC-ES ESR-2502)
12. DEWALT POWER-STUD SD1 (ICC-ES ESR-2818)
13. DEWALT HANGERMATE+ (ICC-ES ESR-3889)
14. DEWALT CCU+ UNDERCUT (ICC-ES ESR-4810)
15. DEWALT POWER-BOLT+ (ICC-ES ESR-3260)

B. MECHANICAL ANCHORS FOR USE IN THE UNDER SIDE OF NORMAL WEIGHT HOLLOW CORE AND POST TENSION SLAB WHERE EMBEDMENT DEPTH MUST NOT EXCEED ¾". PRE-APPROVED PRODUCTS INCLUDE:

1. DEWALT MINI-UNDERCUT+ (ICC-ES ESR-3912)
2. HILTI HDP-P TZ DROP-IN ANCHOR (ICC ESR-4236)

C. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS, SUCH AS HORIZONTAL TO UPWARD INCLINED ORIENTATION UNDER SUSTAINED TENSION LOADING, SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-19 26.7.2 & 26.7.2(e). INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-19 26.7.2 & 26.7.2(e). PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
2. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-263)
3. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
4. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-4868)
5. HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-3814)
6. HILTI KWIK-X DUAL ACTION ANCHOR SAFESET SYSTEM WITH KHC CAPSULE ADHESIVE AND KWIK-HUS EZ (ICC ESR-5065)
7. DEWALT PURE110+ FOR WARM WEATHER/SLOW CURE (ICC-ES ESR-3298); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-3298
8. DEWALT AC200+ FOR COLD WEATHER/RAPID CURE (ICC-ES ESR-4027); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-4027

D. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
2. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
3. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
4. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
5. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

10.4 FOR ANCHORING INTO MASONRY:

A. SOLID-GROUTED CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC01 OR ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "TITEN-HD" & "STAINLESS STEEL TITEN HD" (ICC-ES ESR-1056)
   b. SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-UES ER-240)
   c. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
   d. SIMPSON STRONG-TIE "TITEN TURBO" (IAMPO-UES ER-716)
   e. HILTI KH-EZ, KH-EZ CRC, KH-EZ SS316, KH-EZ C, AND KH-EZ P SCREW ANCHORS (ICC ESR-3056)
   f. HILTI KWIK BOLT-1 EXPANSION ANCHOR (ICC ER-677)
   g. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR (ICC ESR-4561)
   h. DEWALT "SCREW-BOLT+" (ICC-ES ESR 4042)
   i. DEWALT "POWER-STUD+ SD1" (ICC-ES ESR 2966)
2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281)
   b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
   c. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
   d. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4878)
   e. DEWALT AC100+ GOLD (ICC-ES ESR-3200)
3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
   b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
   c. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
   d. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

B. HOLLOW CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
   b. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-716)
2. ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC58. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
   b. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
   c. DEWALT AC100+ GOLD (ICC-ES ESR-3200)
3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:
   a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
   b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
   c. HILTI "DRYWALL TRACK FASTENERS" X-DW (ICC ESR-1663)

C. UNREINFORCED BRICK MASONRY (URM): ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC60. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "ET-HP" (ICC-ES ESR-3638)
2. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
3. DEWALT "AC100+ GOLD" (ICC-ES ESR-4105)

10.5 FOR FASTENING INTO STEEL: POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

A. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
B. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
C. HILTI FASTENERS IN LIEU OF #12 TEK SCREWS:

1. HILTI S-MD 12-24X1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ TF ≤ 1/4"
2. HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ TF ≤ 3/8"
3. HILTI X-ENP 19 L15 PINS FOR BEAMS TF ≥ 1/4".

D. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
E. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

10.6 REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS.

10.7 SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW NO LESS THAN TWO WEEKS PRIOR TO BID. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.

10.8 INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), OR AS INCLUDED IN THE ANCHOR PACKAGING.

10.9 THERE IS TO BE NO GAP BETWEEN CONNECTED PARTS, UNLESS SHIMS ARE PROVIDED. ANCHORS ARE TO SECURE CONNECTED PARTS TOGETHER SNUGLY AND SECURELY.

10.10 OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE MANUFACTURER'S INSTRUCTIONS AND INSTALLER MUST BE ACI CERTIFIED.

10.11 THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.

10.12 THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S SPECIAL INSPECTION AGENCY FOR CONTINUOUS SPECIAL INSPECTION OF ADHESIVE ANCHORS AND PERIODIC INSPECTION OF MECHANICAL ANCHORS, SEE SPECIAL INSPECTION SCHEDULE FOR ADDITIONAL INFORMATION.

10.13 ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

10.14 EXISTING REINFORCING BARS AND/OR CONDUIT IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS AND/OR REINFORCING TO AVOID CONFLICTS WITH EXISTING REBAR AND/OR CONDUIT. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS OF THE CONCRETE ANCHORS BY GPR, X-RAY, HILTI PS 1000 X-SCAN, CHIPPING, OR OTHER MEANS.

11.0 PREFABRICATED CANOPY

11.1 PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE CONSIDERED A DEFERRED SUBMITTAL TO THE BUILDING INSPECTION AGENCY.

11.2 PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE FULLY ENGINEERED BY THE CANOPY MANUFACTURER AND CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

11.3 CALCULATIONS SHALL ACCOMPANY THE SHOP DRAWINGS AND SHALL INCLUDE DESIGN OF ALL WALKWAY/CANOPY SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO, FOOTINGS, MEMBERS, CONNECTIONS AND ATTACHMENT TO STRUCTURE.

11.4 PROTECTIVE COVER WALKWAY AND PREFABRICATED CANOPY SHOP DRAWINGS SHALL BE SUBMITTED TO INCLUDE A FULL DESCRIPTION OF ALL CANOPY MEMBERS, INCLUDING COLUMNS, BEAMS, FOOTINGS, FACIA, ETC. SHOP DRAWINGS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

11.5 IF PROTECTIVE COVER WALKWAYS AND PREFABRICATED CANOPIES SHALL BE ATTACHED TO THE BUILDING, MINIMUM 16" DEEP BOND BEAM IS TO BE PROVIDED WITHIN THE LOAD-BEARING MASONRY WALL FOR WALKWAY AND CANOPY ANCHORAGE AS REQUIRED. MINIMUM 16" DEEP BOND BEAM IS TO BE CONSTRUCTED ON (2) 8" DEEP FORM BLOCKS WITH 2#5 CONTINUOUS IN EACH COURSE. CONNECTIONS TO BUILDING BY CANOPY MANUFACTURER, CONTRACTOR COORDINATE. DO NOT ANCHOR WALKWAY AND CANOPY TO VENEER. ANCHOR WALKWAY AND CANOPY INTO LOAD-BEARING MASONRY WALL WITH THREADED RODS IN PIPE SLEEVES. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL DRAWINGS.

LATHAN ■ McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES CONTINUED

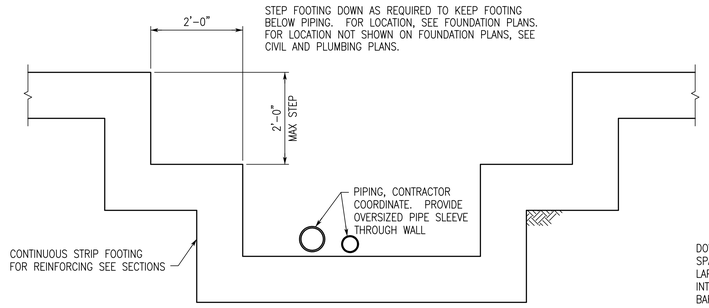
ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER
H. Craig White, P.E.
6/20/2025

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	JUNE 20, 2025
REVISIONS	

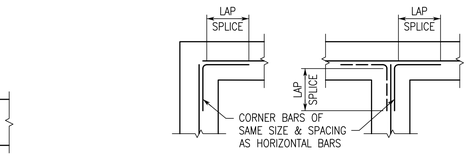
JOB NO. 24-106
SHEET NO:
S1.1
2 OF 10
0 1" 2"

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 25-062

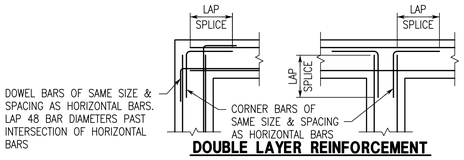
LATHAN
McKEE
ARCHITECTS



FOOTING/FOUNDATION WALL AT PIPING
TYPICAL



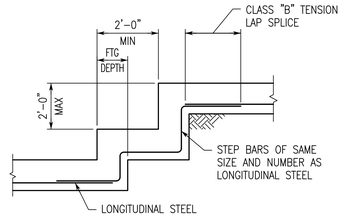
SINGLE LAYER REINFORCEMENT



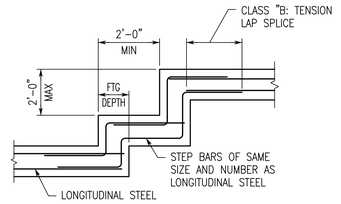
DOUBLE LAYER REINFORCEMENT

NOTE: ALL LAP SPLICES CLASS "B" TENSION

FOOTING, SLAB OR WALL CORNER REINFORCING DETAIL
TYPICAL



FOOTING STEP DETAIL
TYPICAL

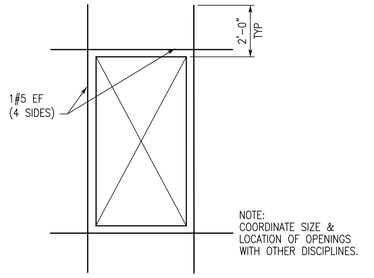


FOOTING STEP DETAIL
TYPICAL

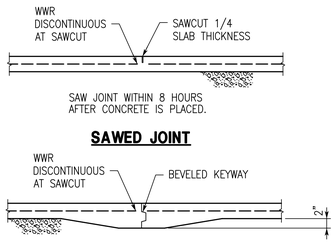
CONCRETE REINFORCING TENSION LAP SPLICE LENGTHS

BAR SIZE	f_c= 3000 PSI				f_c= 4000 PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B
#3	22"	28"	17"	22"	19"	24"	15"	19"
#4	29"	37"	22"	29"	25"	32"	19"	25"
#5	36"	47"	28"	36"	31"	40"	24"	31"
#6	43"	56"	33"	43"	37"	48"	29"	37"
#7	63"	81"	48"	63"	54"	70"	42"	54"
#8	72"	93"	55"	72"	62"	80"	48"	62"
#9	81"	105"	62"	81"	70"	91"	54"	70"
#10	91"	118"	70"	91"	79"	102"	61"	79"
#11	101"	131"	78"	101"	87"	113"	67"	87"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.



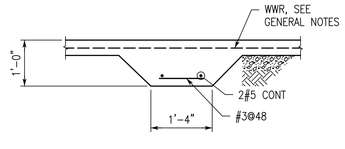
WALL OPENING REINFORCMENT DETAIL
TYPICAL



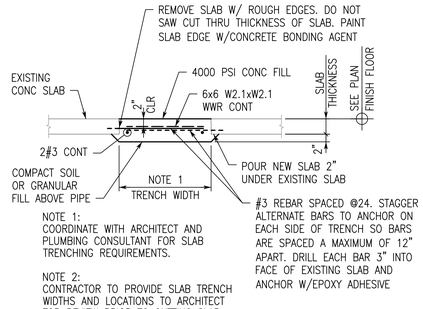
SAWED JOINT

KEYED JOINT

SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL



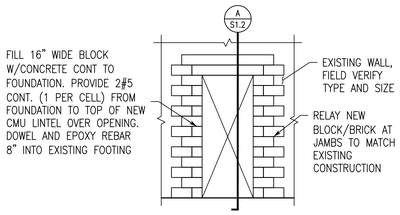
THICKENED SLAB ON GRADE DETAIL
TYPICAL



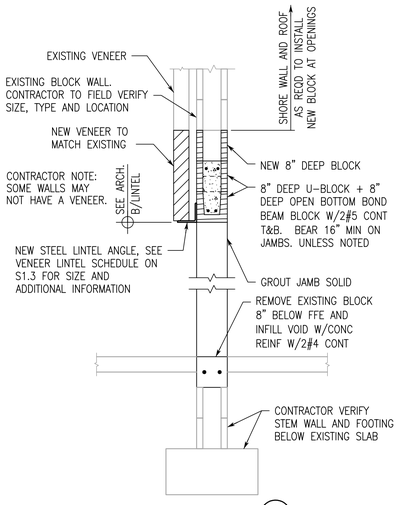
NOTE 1:
COORDINATE WITH ARCHITECT AND PLUMBING CONSULTANT FOR SLAB TRENCHING REQUIREMENTS.

NOTE 2:
CONTRACTOR TO PROVIDE SLAB TRENCH WIDTHS AND LOCATIONS TO ARCHITECT FOR REVIEW PRIOR TO CUTTING SLAB.

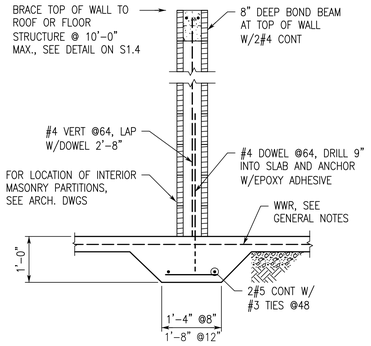
SLAB TRENCHING DETAIL
TYPICAL



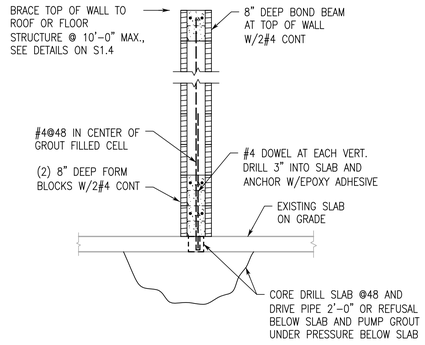
ELEVATION AT NEW OPENING IN EXISTING WALL
1/4"=1'-0"



SECTION A S1.2
3/4"=1'-0"



INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL
TYPICAL



NEW WALL BEARING ON EXISTING SLAB
TYPICAL

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
TYPICAL DETAILS

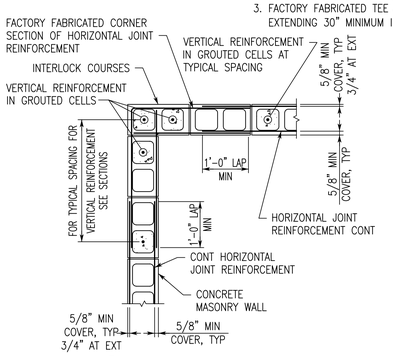
ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG W. HIM
H. Craig Him P.E.
6/20/2025

PROJ. MGR.:	HCW
DRAWN:	TRM
DATE:	JUNE 20, 2025
REVISIONS	

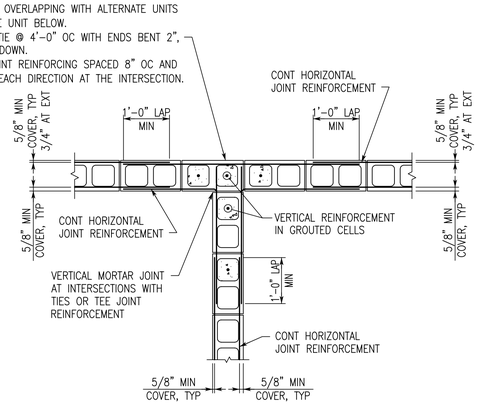
JOB NO. 24-106
SHEET NO:
S1.2
3 OF 10
0 1" 2"

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5300
fax 205-824-5280
Job Number 25-062

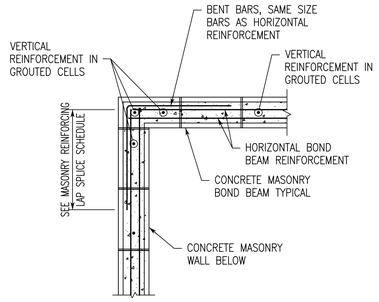
ANCHOR WALLS BY:
1. INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.
2. GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS BENT 2", ALTERNATING ENDS UP AND DOWN.
3. FACTORY FABRICATED TEE JOINT REINFORCING SPACED 8" OC AND EXTENDING 30" MINIMUM IN EACH DIRECTION AT THE INTERSECTION.



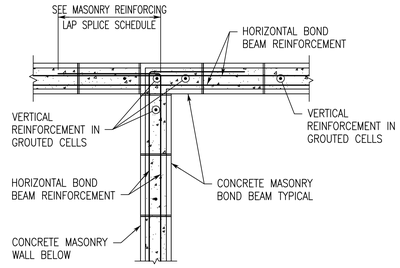
PLAN SHOWING JOINT REINFORCEMENT AT WALL CORNER
TYPICAL



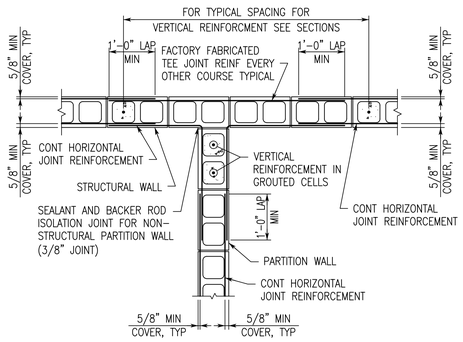
PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION
TYPICAL



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING BOND BEAM AT STRUCTURAL WALL INTERSECTION
TYPICAL



PARTITION WALLS ABUTTING STRUCTURAL WALLS
TYPICAL

STORM SHELTER LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING	
	DEPTH	12" WALL
4'-0"	24	2#5 BOT & 2#5 TOP
6'-0"	--	SEE PLAN AND NOTES
8'-0"	--	SEE PLAN AND NOTES
10'-0"	--	SEE PLAN AND NOTES

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH MINIMUM 1#5 BAR CONTINUOUS. (JAMB BARS OF SAME SIZE AS VERTICAL WALL REINFORCING BARS.)
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 16" DEEP BOND BEAM REINFORCED WITH 2#5 CONTINUOUS TOP AND BOTTOM AT THE BOTTOM OF ALL STORM SHELTER OPENINGS (DOORS, WINDOWS, LOUVERS, ETC.). EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

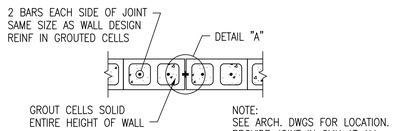
MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING		
	DEPTH	8" WALL	12" WALL
4'-0"	24	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP
6'-0"	32	2#5 BOT & 2#5 TOP	2#6 BOT & 2#6 TOP
8'-0"	32	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP
10'-0"	48	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP
12'-0"	48	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS. (JAMB BARS OF SAME SIZE AS VERTICAL WALL REINFORCING BARS.)
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#5 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

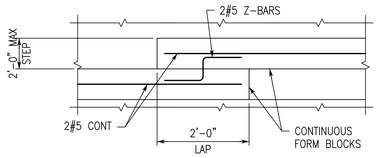
NON-LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING				
	DEPTH	8" WALL		12" WALL	
		REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL	REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL
2'-0"	8	1#4 BOT	20'-0"	1#4 BOT	22'-0"
4'-0"	8	1#4 BOT	10'-0"	2#4 BOT	9'-4"
6'-0"	8	1#5 BOT & 1#4 TOP	4'-0"	2#5 BOT & 2#4 TOP	4'-8"
8'-0"	16	1#6 BOT & 1#5 TOP	15'-4"	2#5 BOT & 2#4 TOP	16'-0"
10'-0"	16	1#7 BOT & 1#5 TOP	10'-0"	2#6 BOT & 2#4 TOP	12'-0"
12'-0"	16	1#8 BOT & 1#5 TOP	7'-4"	2#7 BOT & 2#5 TOP	10'-8"

1. DO NOT USE THIS SCHEDULE IF WALL IS LOAD BEARING SUPPORTING ANYTHING OTHER THAN WALL WEIGHT ONLY. IF WALL IS LOAD BEARING USE THE LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE.
2. PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
3. WHERE MAXIMUM HEIGHT OF WALL ABOVE LINTEL IS EXCEEDED, PROVIDE ADDITIONAL LINTELS EQUALLY SPACED ABOVE TO LIMIT WALL HEIGHTS ABOVE LINTEL TO THAT SHOWN IN THE TABLE ABOVE.
4. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
5. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 2'-0" PAST OPENING ON EACH SIDE OF OPENING.



PLAN MASONRY CONTROL JOINT
3/4"=1'-0'



MASONRY BOND BEAM STEP DETAIL
TYPICAL

MASONRY REINFORCING LAP SPLICE LENGTHS

BAR SIZE (#)	CENTERED (IN.)	EDGE (IN.)
3	18.0	18.0
4	24.0	29.0
5	30.0	45.0
6	43.0	54.0
7	60.0	63.0
8	72.0	72.0
9	82.0	82.0

NOTES:
1. LAP SPLICE LENGTHS APPLY TO BOTH HORIZONTAL AND VERTICAL REINFORCING.
2. REINFORCEMENT LARGER THAN NO. 9 BAR SHALL BE SPLICED USING MECHANICAL CONNECTIONS IN ACCORDANCE WITH ACI 530 & ACI 530.1.

PIPING WEIGHTS

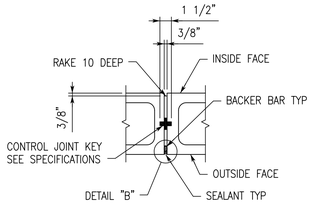
PIPE DIAMETER	PIPE WT PER/FOOT (PLF)	FLUID WT PER/FOOT (PLF)	INSULATION & HANGERS (PLF)	TOTAL WT PER/FOOT (PLF)
4"	10.80	6.10	2.00	18.90
6"	19.00	13.80	3.00	35.80
8"	28.60	23.90	4.00	56.50
10"	40.50	37.50	4.00	82.00
12"	49.60	54.00	5.00	108.60
14"	54.60	65.70	5.00	125.30
16"	62.60	87.10	5.00	154.70

NOTES:
1. FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.
2. ALL PIPES ASSUMED TO BE SCHEDULE 40.
3. FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.
4. PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING DRAWINGS FOR PIPING SUPPORT AND THRUST BRACING REQUIREMENTS.
5. FOR PIPE SIZES NOT LISTED, CONTACT STRUCTURAL ENGINEER.

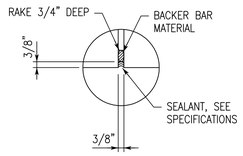
VENEER LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	STEEL FOR EACH 4" OF WALL THICKNESS
2'-0"	L5x5x3/8 MINIMUM
4'-0"	L5x5x3/8 MINIMUM
6'-0"	L5x5x3/8 MINIMUM
8'-0"	L5x5x3/8 MINIMUM
LARGER	CONTACT ENGINEER

1. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
2. ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.
3. CONTRACTOR TO COORDINATE DIMENSION OF OUTSTANDING LEG WITH MINIMUM VENEER SUPPORT REQUIREMENT(S) AND WITH DETAILS INDICATED ON ARCH. DWGS.



DETAIL "A" MASONRY CONTROL JOINT
1 1/2"=1'-0"



DETAIL "B" MASONRY CONTROL JOINT
3"=1'-0"

LATHAN
McKEE
ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER
H. Craig Wilson P.E.
CRAIG WILSON
6/12/2025

PROJ. MGR.:	HCW
DRAWN:	TRM
DATE:	JUNE 20, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
S1.3
4 OF 10
0 1" 2"

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 25-062

COMPONENTS AND CLADDING WIND LOADS FOR STORM SHELTER WALLS (PSF)

H = 15'-11" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	250 MPH VELOCITY (3-SEC. GUST)		
		ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	199.3	-211.7	-248.8
	20	192.7	-205.0	-235.8
	50	184.0	-196.2	-218.4
	100	177.4	-189.6	-205.3
	200	170.9	-183.0	-192.2
	500	162.2	-174.5	-174.5

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
5. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR HOST BUILDING WALLS (PSF)

H = 15'-11" 3:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	114 MPH VELOCITY (3-SEC. GUST)		
		ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	28.7	-31.1	-38.4
	20	27.4	-29.8	-35.8
	50	25.7	-28.1	-32.4
	100	24.4	-26.8	-29.8
	200	23.1	-25.5	-27.3
	500	21.4	-23.8	-23.8

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
5. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR STORM SHELTER ROOF (PSF)

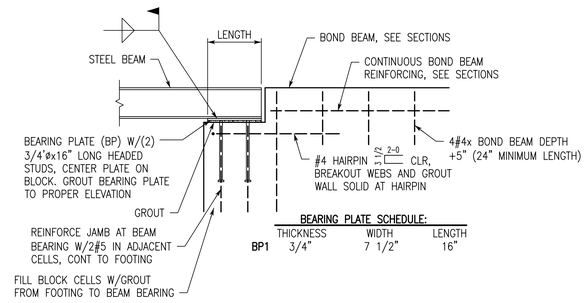
250 MPH VELOCITY (3-SEC. GUST)		ROOF					OVERHANG				
H = 15'-11" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.) (PSF)	Zone 1 (Int.) (PSF)	Zone 2 (Edge) (PSF)	Zone 3 (Corner) (PSF)	Zone 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)		
	10	116.8	-199.3	-309.2	-391.7	-515.4	-233.6	-316.1	-439.8		
	20	112.7	-199.3	-292.2	-369.8	-471.6	-229.5	-286.9	-388.7		
	50	107.2	-199.3	-269.7	-340.8	-413.6	-224.0	-248.3	-321.1		
	100	103.1	-199.3	-252.6	-318.9	-369.8	-219.9	-219.0	-269.9		
	200	103.1	-178.6	-235.6	-297.0	-325.9	-184.4	-189.8	-218.8		
	500	103.1	-151.3	-213.0	-268.0	-268.0	-137.4	-151.2	-151.2		

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
5. HOLLOW CORE MANUFACTURER IS TO DESIGN SLAB PANELS FOR DEAD LOADS, LIVE LOADS, AND WIND LOADS (DOWNWARD AND UPLIFT) AS INDICATED IN GENERAL NOTES, TYPICAL DETAILS, PLAN NOTES, AND SECTION NOTES. IN ADDITION TO 20 PSF COLLATERAL LOAD AND SELF-WEIGHTS.
6. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

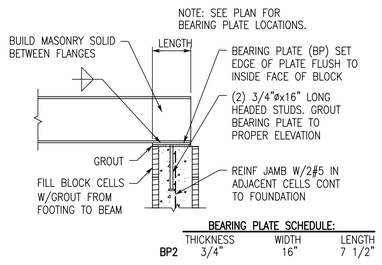
COMPONENTS AND CLADDING WIND LOADS FOR HOST BUILDING ROOF (PSF)

114 MPH VELOCITY (3-SEC. GUST)		ROOF					OVERHANG				
H = 15'-11" 3:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	Positive Max. Net Pressure 'p' (PSF)	Zone 1 (Int.) (PSF)	Zone 2 (Edge) (PSF)	Zone 3 (Corner) (PSF)						
	10	16.0	-36.0	-43.2	-74.8						
	20	16.0	-34.5	-40.3	-68.2						
	50	16.0	-32.6	-36.4	-59.5						
	100	16.0	-31.1	-33.5	-53.0						
	200	16.0	-31.1	-33.5	-53.0						
	500	16.0	-31.1	-33.5	-53.0						

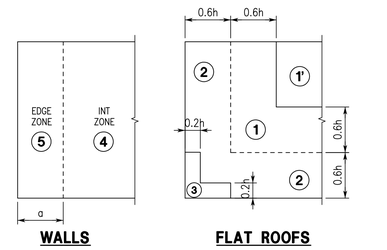
NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
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5. HOLLOW CORE MANUFACTURER IS TO DESIGN SLAB PANELS FOR DEAD LOADS, LIVE LOADS, AND WIND LOADS (DOWNWARD AND UPLIFT) AS INDICATED IN GENERAL NOTES, TYPICAL DETAILS, PLAN NOTES, AND SECTION NOTES, IN ADDITION TO 20 PSF COLLATERAL LOAD AND SELF-WEIGHTS.
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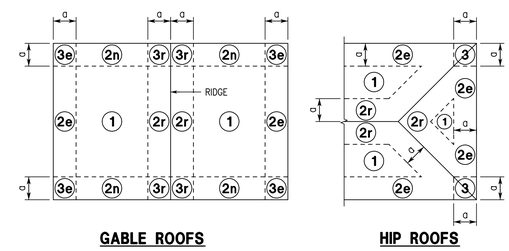


BEAM BEARING DETAIL IN LINE WITH CMU WALL
TYPICAL

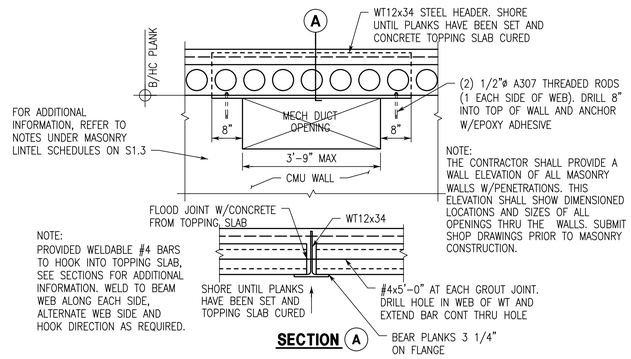


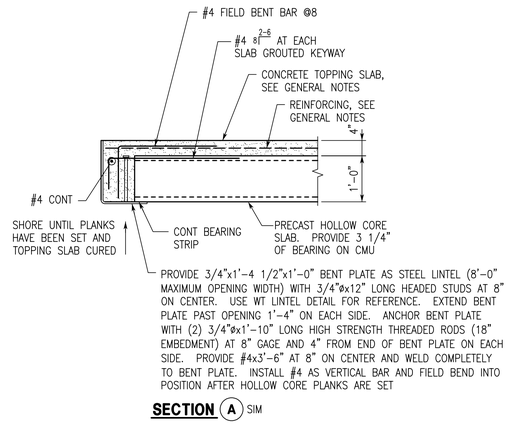
BEAM BEARING DETAIL
TYPICAL



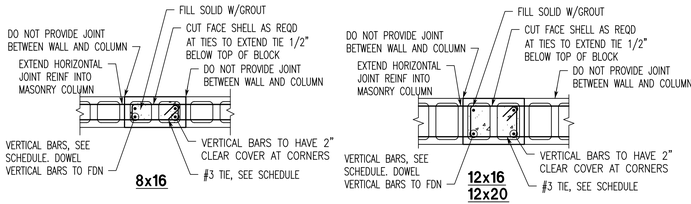


WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS
TYPICAL

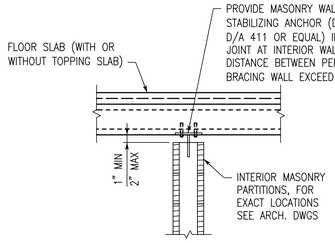




DETAIL AT MECH DUCT OPENING BELOW HOLLOW CORE PANELS
NOT TO SCALE



MASONRY COLUMN (MC)
TYPICAL



INTERIOR MASONRY WALL BRACING DETAILS
TYPICAL

MASONRY COLUMN SCHEDULE (MC)

COLUMN DESIGNATION		MC1	MC2	MC3
COLUMN	SIZE	12x16	12x20	8x16
	VERTICALS	4#5	4#5	4#5
	TIES	#3@8	#3@8	#3@8
	NOTES	1,2,3	1,2,3	1,2,3

NOTES:
1. SEE COLUMN TIE DETAIL THIS SHEET.
2. DOWEL VERTICAL STEEL INTO FOOTING THE THICKNESS OF THE FOOTING MINUS 3" WITH STANDARD HOOK. LAP DOWELS WITH VERTICALS 72 BAR DIA.
3. EXTEND VERTICALS FULL HEIGHT OF WALL, UNLESS NOTED.

LATHAN ▪ McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

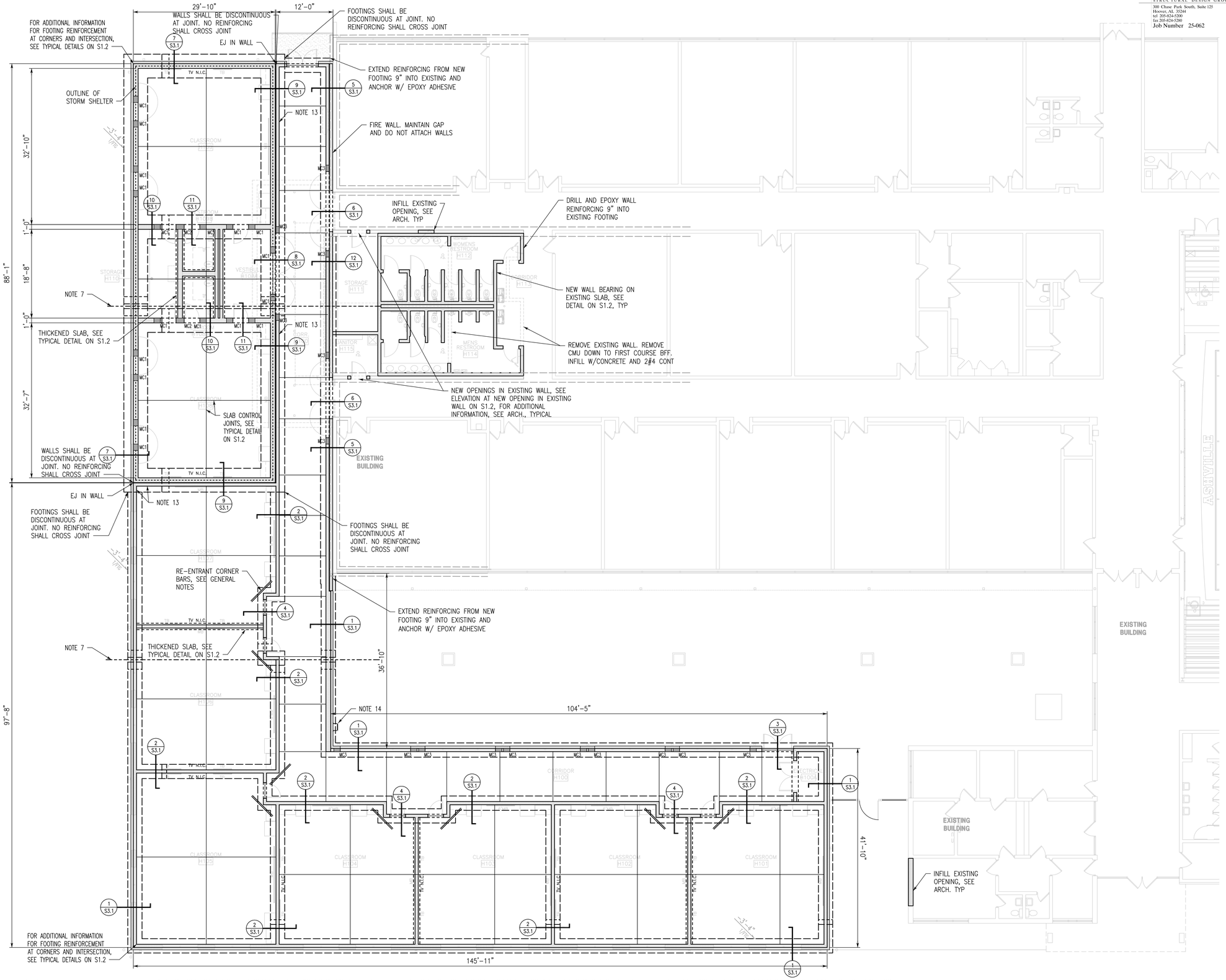
SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG W. HOWELL P.E.
6/20/2025

PROJ. MGR.:	HCW
DRAWN:	TRM
DATE:	JUNE 20, 2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
S1.4
5 OF 10

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5300
fax 205-824-5280
Job Number 25-062



PROJECT NORTH

FOUNDATION PLAN

1/8"=1'-0"

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0", UNLESS NOTED.
2. TOP OF FOOTING ELEVATION -2'-0", UNLESS NOTED.
3. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS.
4. FOR SLAB RECESS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
5. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS
6. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL CMU WALLS. NOTE ALL EXTERIOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF CMU ABOVE WATERTABLE.
7. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND UTILITY DRAWINGS. FOR FOOTING STEP AT UTILITIES, SEE DETAIL ON S1.2.
8. FOOTING WIDTHS INDICATED ON PLAN MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
9. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS.
10. CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURER INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
11. GENERAL CONTRACTOR COORDINATE FOOTING ELEVATIONS AND STEP NEW FOOTINGS AS REQUIRED TO MATCH EXISTING FOOTING ELEVATIONS. DOWEL CONTINUOUS REINFORCING 9" INTO EXISTING FOOTING BY DRILLING AND ANCHORING WITH EPOXY ADHESIVE.
12. THE ----------LINE ON THE PLAN INDICATES AREA TO BE USED AS STORM SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
13. VERTICAL DOWELS AT INDICATED LOCATIONS ARE TO ONLY EXTEND ABOVE TOP OF FOOTING ELEVATIONS BY 1'-0". LAP DOWELS 1'-0" INTO WALL OR MASONRY COLUMN. PROVIDE DECREASED LAP LENGTH WHEN DOWELING NON-STORM SHELTER WALLS OR MASONRY COLUMNS TO STORM SHELTER WALL FOOTINGS.
14. WALL MOUNTED STEEL LADDER SYSTEM, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. CONNECTIONS TO BUILDING AND CONNECTION DESIGN BY LADDER MANUFACTURER/FABRICATOR, CONTRACTOR TO COORDINATE. DO NOT ANCHOR LADDER TO VENEER. ANCHOR LADDER INTO LOAD BEARING MASONRY WALL WITH THREADED RODS IN PIPE SLEEVES.
15. "MCx" INDICATES MASONRY COLUMN. SEE SCHEDULE ON S1.4 FOR ADDITIONAL INFORMATION.

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
FOUNDATION PLAN

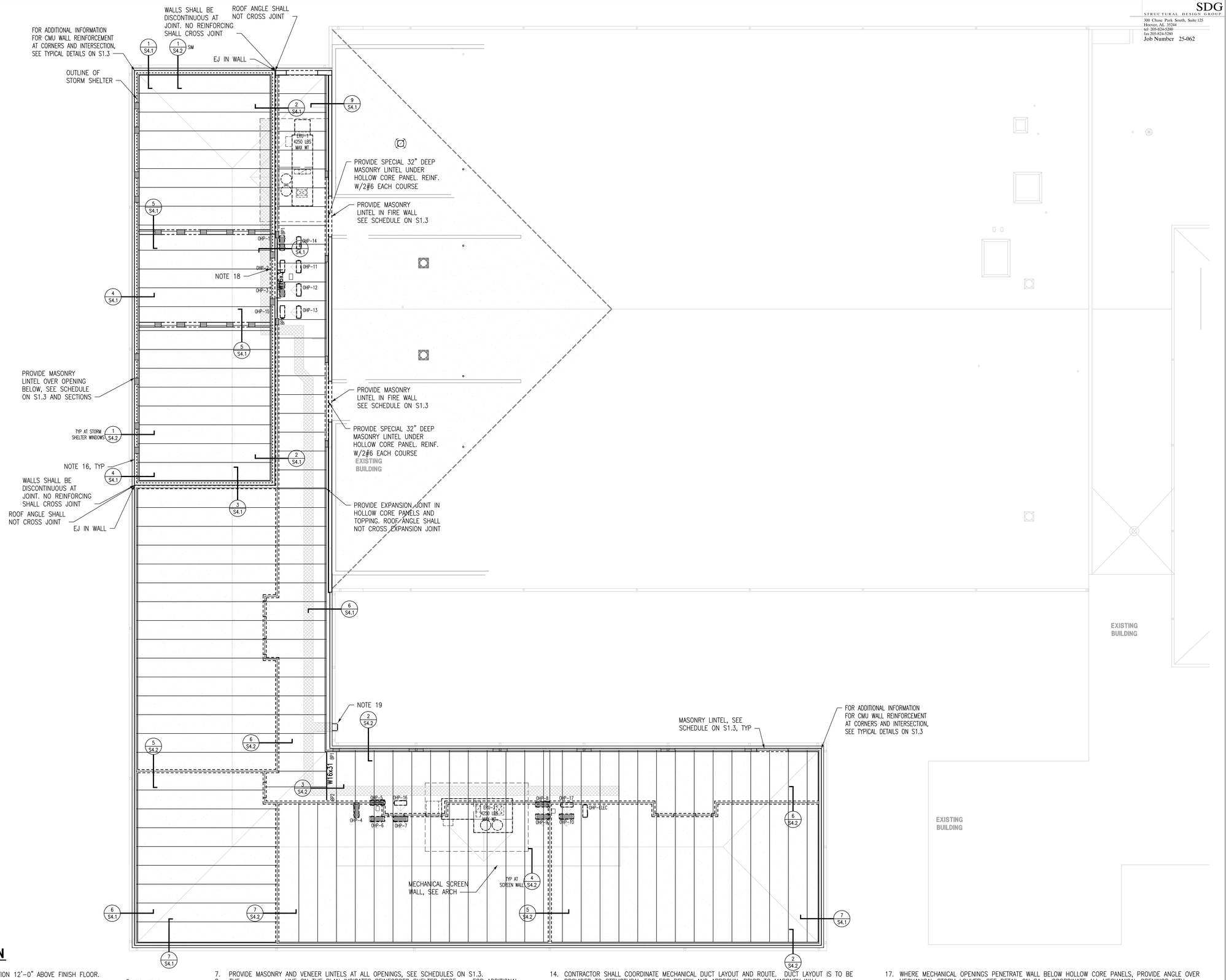
ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN P.E.
6/20/2025

PROJ. MGR.:	HCW
DRAWN:	TRM
DATE:	JUNE 20, 2025
REVISIONS	

JOB NO. 24-106

SHEET NO:
S2.1
6 OF 10

0 1" 2"



PROJECT NORTH

ROOF FRAMING PLAN

1/8"=1'-0"

1. FINISH ROOF (TOP OF SLAB) ELEVATION 12'-0" ABOVE FINISH FLOOR.
2. ROOF SYSTEM: 12" THICK PRECAST HOLLOW CORE SLABS WITH MAXIMUM 4" STRUCTURAL TOPPING SLAB, SEE GENERAL NOTES.
3. PRECAST HOLLOW CORE SLAB LAYOUT SHOWN IS FOR SCHEMATIC PURPOSES ONLY. PRECAST MANUFACTURER TO VERIFY ACTUAL LAYOUT. HOLLOW CORE MANUFACTURER DESIGN SLABS FOR DEAD LOADS, LIVE LOADS AND WIND LOADS (DOWNWARD AND UPLIFT) AS INDICATED IN GENERAL NOTES AND TYPICAL DETAILS, IN ADDITION TO SELF-WEIGHT DEAD LOAD, 20 PSF COLLATERAL DEAD LOAD AND OTHER APPLICABLE FLOOR LIVE LOADS.
4. CUT OR BREAK CORES OF HOLLOW CORE SLABS ONLY AS REQUIRED TO PLACE REINFORCING.
5. THE CENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT AND LOCATION OF ALL CONCENTRATED AND MECHANICAL LOADS WITH THE PRECAST MANUFACTURER.
6. COORDINATE MECHANICAL OPENINGS WITH MECHANICAL DRAWINGS AND UNIT MANUFACTURER. PRECAST SUPPLIER TO SHOW OPENINGS ON SHOP DRAWINGS AND PROVIDE ANY SUPPORT FOR OPENINGS. CONTRACTOR TO PROVIDE PENETRATION PROTECTION AT ANY STORM SHELTER WALL/ROOF PENETRATION.
7. PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS, SEE SCHEDULES ON S1.3.
8. THE---------- LINE ON THE PLAN INDICATES REINFORCED SHELTER ROOF. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
9. FOR DIMENSIONS SEE FOUNDATION PLAN AND ARCHITECTURAL DRAWINGS.
10. CONTRACTOR NOTE: DO NOT PROVIDE MASONRY CONTROL JOINTS IN STORM SHELTER CMU WALLS.
11. WHERE MECHANICAL DUCTS EXTEND THRU LOAD BEARING WALLS BELOW HOLLOW CORE SLABS, PROVIDE MASONRY BOND BEAM PER DETAIL/SCHEDULE ON S1.4.
12. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALLS SHOULD BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REBAR SHOP DRAWINGS.
13. CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURERS INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
14. CONTRACTOR SHALL COORDINATE MECHANICAL DUCT LAYOUT AND ROUTE. DUCT LAYOUT IS TO BE PROVIDED TO STRUCTURAL EOR FOR REVIEW AND APPROVAL PRIOR TO MASONRY WALL CONSTRUCTION. SUBMITTED LAYOUT TO HAVE ROUTE, SIZE, ELEVATION, ETC. AS WELL AS ANY REQUIRED WALL OPENINGS (LOCATION, SIZE, ETC.).
15. CONTRACTOR TO PROVIDE PENETRATION PROTECTION AT ANY AND ALL STORM SHELTER WALL/ROOF PENETRATIONS LARGER THAN 3 1/2" SQUARE INCHES IN AREA FOR RECTANGULAR PENETRATIONS OR 2 1/16" INCHES IN DIAMETER. ALL PENETRATIONS/OPENINGS (MECHANICAL, ELECTRICAL, PLUMBING, ETC.) SHALL BE A MINIMUM OF 6 INCHES CLEAR FROM EACH OTHER WHERE INSTALLED IN MULTIPLE ROWS AND/OR COLUMNS.
16. CONTRACTOR BUILD ALL CMU PARTITION WALLS (EXCEPT TOILET AND URINAL PARTITION WALLS) WITHIN THE STORM SHELTER HARD TO UNDERSIDE OF HOLLOW CORE SLAB.
17. WHERE MECHANICAL OPENINGS PENETRATE WALL BELOW HOLLOW CORE PANELS, PROVIDE ANGLE OVER MECHANICAL STORM LOUVER, SEE DETAIL ON S1.4. COORDINATE ALL MECHANICAL OPENINGS WITH MECHANICAL DRAWINGS AND CMU PROVIDER.
18. PROVIDE SPECIAL 40" DEEP MASONRY LINTEL WITH 2#6 EACH COURSE OVER STORM SHELTER OPENINGS. EXTEND LINTEL 2'-0" PAST OPENING EACH SIDE.
19. WALL MOUNTED STEEL LADDER SYSTEM, SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION. CONNECTIONS TO BUILDING AND CONNECTION DESIGN BY LADDER MANUFACTURER/FABRICATOR, CONTRACTOR TO COORDINATE. DO NOT ANCHOR LADDER TO VENEER. ANCHOR LADDER INTO LOAD BEARING MASONRY WALL WITH THREADED RODS IN PIPE SLEEVES.

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel: 205-824-5300
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Job Number 25-062

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF FRAMING PLAN

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WILLIAMS P.E.
6/20/2025

PROJ. MGR.:	HCW
DRAWN:	TRM
DATE:	JUNE 20, 2025
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JOB NO. 24-106

SHEET NO:
S2.2
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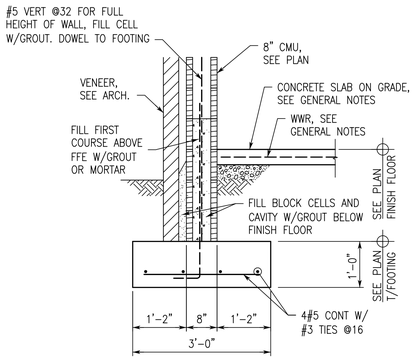
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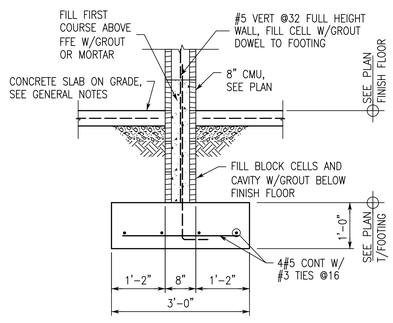
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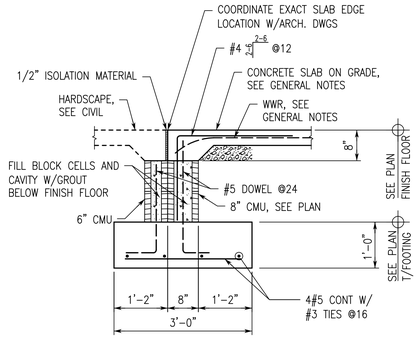
SHEET TITLE:
SECTIONS AND DETAILS



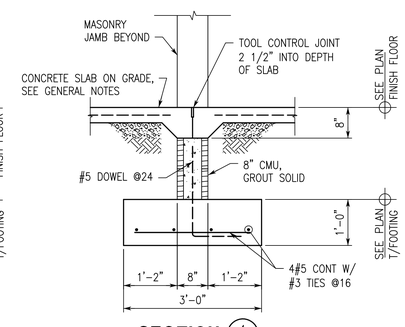
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3/4"=1'-0"



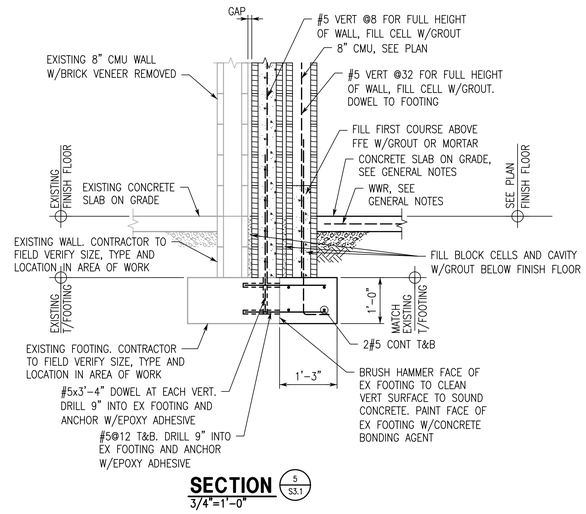
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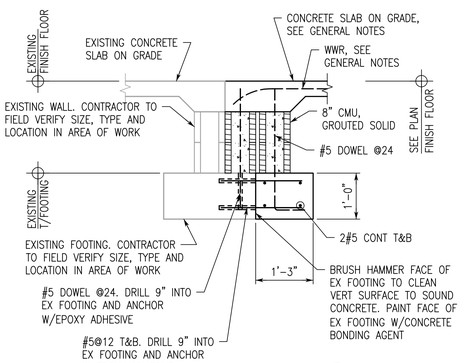
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SECTION 4/S3.1
3/4"=1'-0"



SECTION 5/S3.1
3/4"=1'-0"



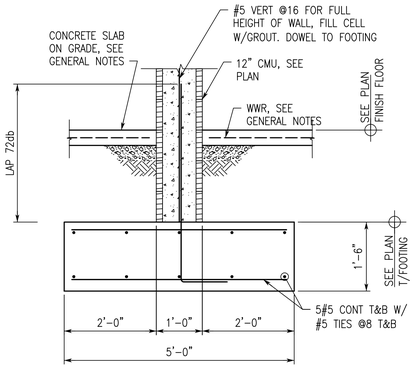
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3/4"=1'-0"

SECTION 7/S3.1
3/4"=1'-0"

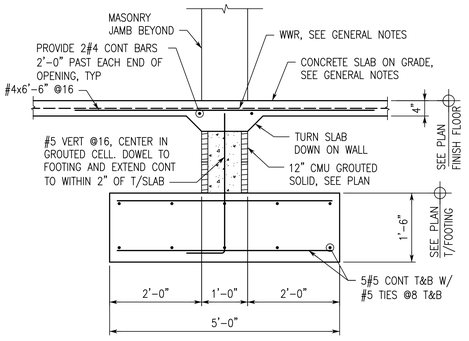
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3/4"=1'-0"

SECTION 9/S3.1
3/4"=1'-0"

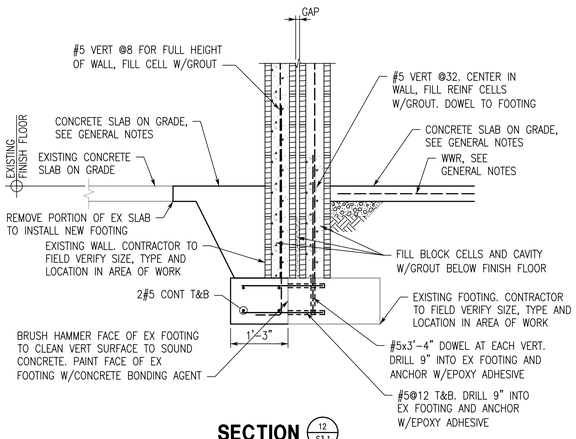
NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT.



SECTION 10/S3.1
3/4"=1'-0"



SECTION 11/S3.1
3/4"=1'-0"



SECTION 12/S3.1
3/4"=1'-0"

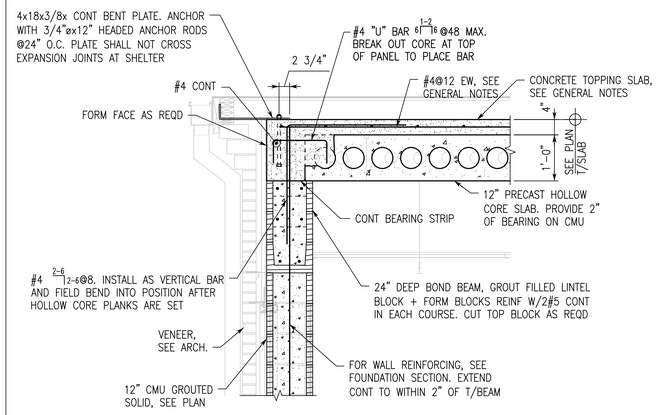
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H. Craig Winn, P.E.
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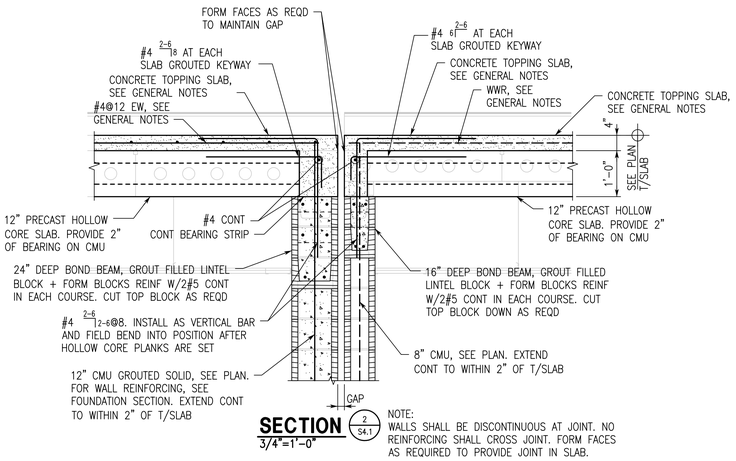
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8 OF 10

0 1" 2"

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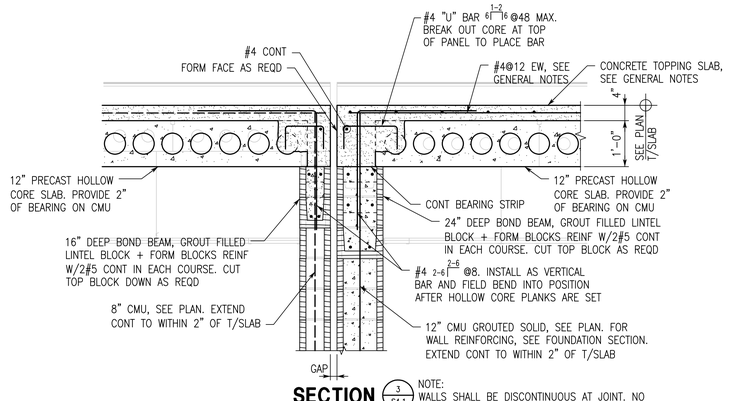


SECTION 1/S4.1
3/4"=1'-0"



SECTION 2/S4.1
3/4"=1'-0"

NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT. FORM FACES AS REQUIRED TO PROVIDE JOINT IN SLAB.



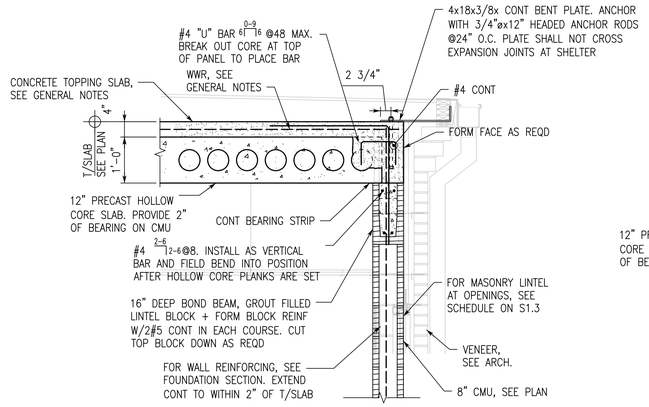
SECTION 3/S4.1
3/4"=1'-0"

NOTE:
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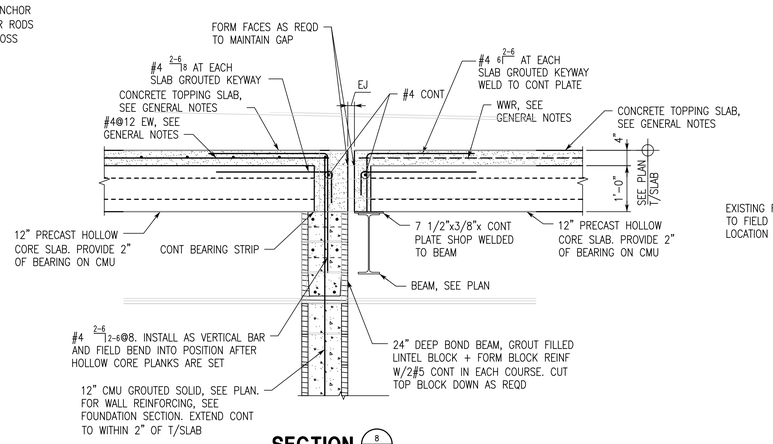
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3/4"=1'-0"

SECTION 5/S4.1
3/4"=1'-0"

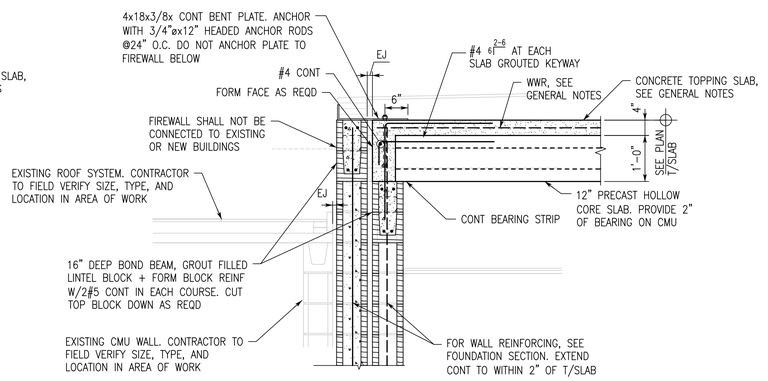
SECTION 6/S4.1
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SECTION 7/S4.1
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SECTION 8/S4.1
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SECTION 9/S4.1
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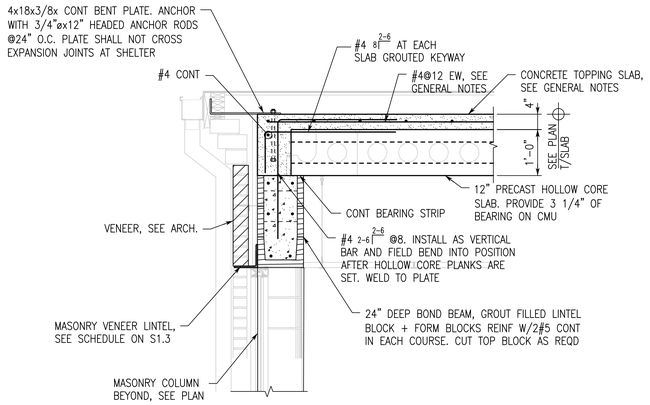
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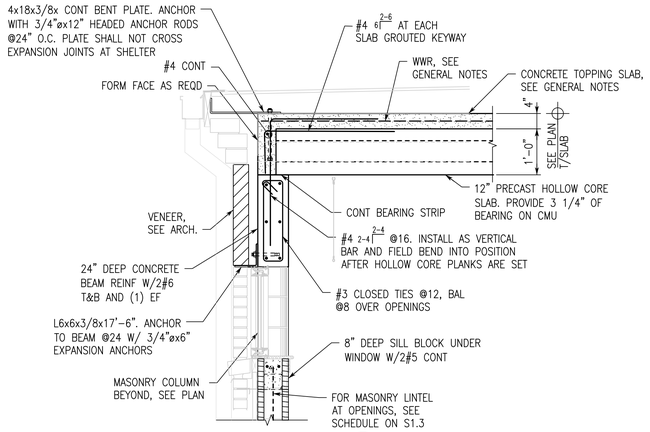
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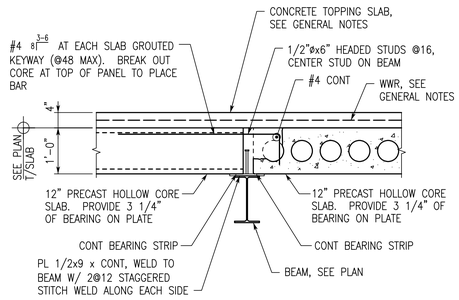
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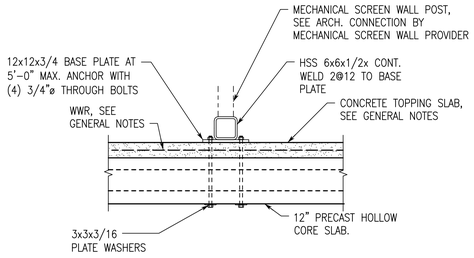
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3/4"=1'-0"



SECTION 2/S4.2
3/4"=1'-0"

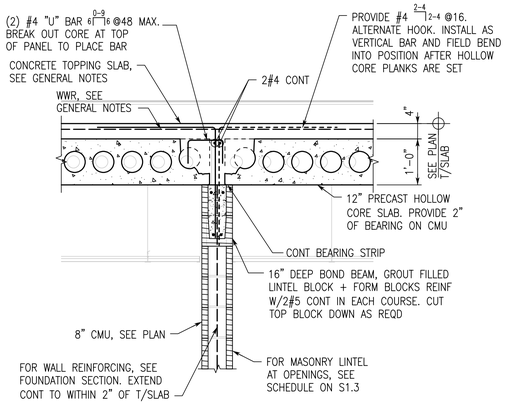


SECTION 3/S4.2
3/4"=1'-0"

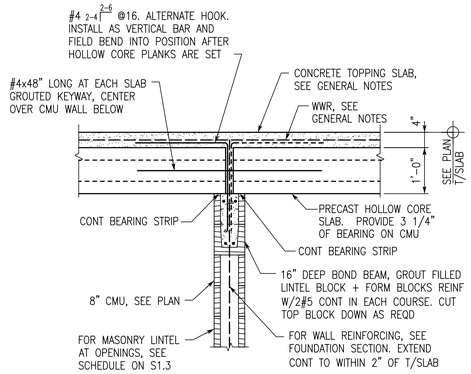


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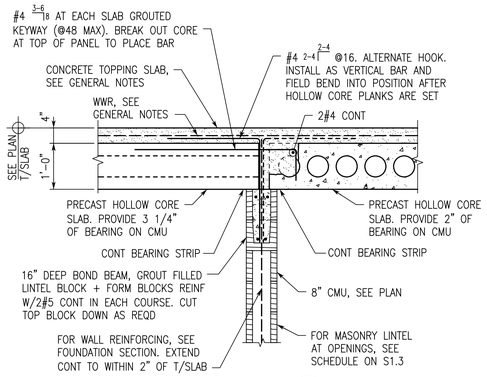
NOTE: SEE PLAN FOR PANEL ORINTATION



SECTION 5/S4.2
3/4"=1'-0"



SECTION 6/S4.2
3/4"=1'-0"



SECTION 7/S4.2
3/4"=1'-0"

PRECAST NOTES

TYPICAL AT ALL PRECAST

1. IF PRECAST DOES NOT BEAR SOLID ON CMU AFTER CASTING SLAB, DUE TO CAMBER IN PANEL, GROUT GAP SOLID PRIOR TO PLACING REMAINDER OF WALL.
2. WHERE CELLS ARE REQUIRED TO BE BROKEN AT REBAR, BREAK CELLS OUT MAXIMUM 4" WIDE. FLOOD ROUND HOLLOWCORE RUNNING PERPENDICULAR TO REBAR SOLID WITH GROUT (APPLIES TO SECTIONS WHERE PANEL IS PARALLEL TO WALL.)
3. WHERE PANEL IS PERPENDICULAR TO WALL, FILL CORES TO PREVENT GROUT FROM ENTERING HOLLOWCORE.

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
PROJECT NAME
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
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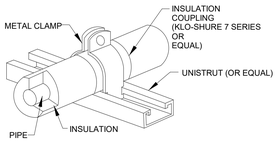
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PLUMBING LEGEND

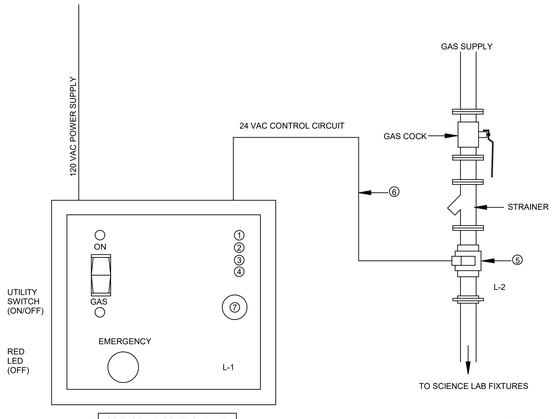
DOMESTIC COLD WATER		WH	WALL HYDRANT
DOMESTIC HOT WATER SUPPLY		DN	DOWN
DOMESTIC HOT WATER RETURN		WH - #	WATER HEATER
SOIL, WASTE, OR SANITARY SEWER		GPH	GALLONS PER HOUR
VENT		GPM	GALLONS PER MINUTE
G	NATURAL GAS	HW	HOT WATER
EX G	EXISTING NATURAL GAS	HWR	HOT WATER RETURN
	PIPE TURNING DOWN	TYP	TYPICAL
	PIPE TURNING UP	VS	VENT STACK
	TEE DOWN	VSTR	VENT THROUGH ROOF
	TEE UP	MFD	MECHANICAL FLOOR DRAIN
	UNION	EX	EXISTING
	BALL VALVE	#	RISER NUMBER
CO	CLEANOUT	BFF	BELOW FINISHED FLOOR
FD	FLOOR DRAIN		CONNECT TO EXISTING
P-#	PLUMBING FIXTURE		GAS VALVE
			PRESSURE REDUCING VALVE



NOTES:
1. APPLICATION: FOR STRUT MOUNTED, 4 INCH AND SMALLER, COVER PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
2. ALLOWED FOR HORIZONTAL OR VERTICAL INSTALLATION.
3. FOR COLD PIPE APPLICATION, APPLY ADHESIVE TO END OF FOAMED PLASTIC INSULATION PRIOR TO INSERTING INTO COUPLING.

STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL

NO SCALE

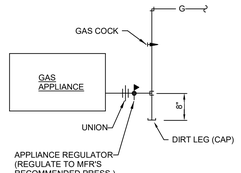


SCIENCE LAB CONTROL PANEL
ISIMET MODEL LAV 2

BASIS OF DESIGN IS ISIMET. EQUAL PRODUCTS BY E&I, LACS, OR AGS WILL BE CONSIDERED.

GAS SOLENOID VALVE ASSEMBLY
ISIMET MODEL: S-300-VA-F-U
SEE DRAWINGS FOR PIPE SIZE

EQUAL SYSTEM BY AGS



TYP. GAS CONNECTION

NO SCALE

EMERGENCY GAS SHUT-OFF SYSTEM DETAIL

GENERAL NOTES:

① UL LISTED ASSEMBLY WITH NEMA RATED 16 GAUGE CONTROL PANEL.

② PROVIDE WITH SECURE ON SWITCH.

③ PROVIDE WITH -R RESET CIRCUIT TO ISOLATE/PROTECT CIRCUIT BOARD.

④ PROVIDE WITH AUTOMATIC END OF DAY SHUTOFF FEATURE SET FOR 10 HOURS.

⑤ PROVIDE COMPLETE WITH GAS SOLENOID VALVE SUPPLIED BY ISIMET.

⑥ CONTROL CIRCUIT/ LOW VOLTAGE WIRING IS THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.

⑦ PROVIDE WITH KEYED RESET OPTION.

EMERGENCY GAS SHUT-OFF SYSTEM SPECIFICATIONS:

SYSTEM:
ISIMET LA-1.0 EMERGENCY GAS SHUT-OFF ASSEMBLY COMPLETE WITH LA-1211-R CONTROL PANEL, S-300-VA-F-U GAS SOLENOID ASSEMBLY SIZED PER PIPE SIZE ON DRAWINGS. PROVIDE WITH END OF DAY SHUT-OFF FEATURE.

CONTROL PANEL:
PANEL SHALL BE BRUSHED STAINLESS STEEL WITH CONCEALED WALL BOX PROVIDED WITH PANEL SERVICE SWITCH, LOW VOLTAGE TRANSFORMER AND FUSE BLOCK. WALL BOX SHALL BE NEMA 1 RATED. COORDINATE WITH THE ELECTRICAL SECTION.

PANEL SHALL HAVE INTEGRAL PRINTED CIRCUIT BOARD WITH LOGIC DEVICE TO PROVIDE 120-VAC OUTPUT CIRCUITS TO ACTIVATE UTILITIES AS SHOWN ON DRAWINGS. NUMBER OF OUTPUT CIRCUITS AS NOTED ON DRAWINGS. ACTIVATION OF OUTPUT CIRCUITS SHALL BE ENABLED ONLY BY SWITCH ON AND THEN KEYING. COORDINATE WITH THE ELECTRICAL SECTION.

THE PANEL SHALL BE EQUIPPED WITH A SERVICE SWITCH FOR EACH OUTPUT CIRCUIT AND A MOMENTARY ENABLING KEY SWITCH. DEACTIVATION OF OUTPUT CIRCUITS SHALL NOT REQUIRE ENGAGEMENT OF ENABLING KEY. PANEL SHALL BE PROVIDED WITH N/O MOMENTARY PANIC BUTTON ASSEMBLY TO DEACTIVATE OUTPUT CIRCUITS IN CASE OF EMERGENCY. RESET AFTER PANIC SHALL OCCUR BY RE-KEYING. COORDINATE WITH THE ELECTRICAL SECTION.

PROVIDE PANEL WITH ADDITIONAL TERMINALS FOR INTEGRATION OF OPTO-ISOLATED INPUT TERMINAL FOR INTEGRATION WITH FACILITY'S ALARM SYSTEM. A FIRE ALARM SIGNAL SHALL DEACTIVATE ALL UTILITIES CONTROLLED BY THE LA SERIES CONTROL PANEL. COORDINATE WITH THE ELECTRICAL SECTION.

PROVIDE WITH TWO (2) IP-0 REMOTE PANIC ASSEMBLIES. PROVIDE IN FLUSH MOUNTED BOX.

PROVIDE PANEL WITH DRY CONTACT TERMINALS FOR OUTPUT INTEGRATION. ISIMET "PANIC" SHALL PROVIDE A NOTIFICATION SIGNAL TO A SECONDARY ALARM MONITORING SYSTEM. RESET OF CONTROLLER SHALL WITHDRAW NOTIFICATION SIGNAL. COORDINATE WITH THE ELECTRICAL SECTION.

SOLENOIDS
FURNISH AND INSTALL ISIMET SERIES 100 NORMALLY CLOSED GENERAL SERVICE, ZERO DIFFERENTIAL SOLENOIDS AT EACH DOMESTIC WATER UTILITY SERVICE. FURNISH SERIES 300 FOR ALL NATURAL GAS SYSTEMS. SOLENOID COIL SHALL BE 120-VAC. PROVIDE A BALL VALVE UP-STREAM FROM SOLENOID AND WYE STRAINER ON ALL FLUID DELIVERY SYSTEMS. THOROUGHLY FLUSH PIPING SYSTEM PRIOR TO PLACING INTO SERVICE. FINAL CONNECTION TO COIL FROM CONTROL PANEL BY ELECTRICAL CONTRACTOR. SOLENOIDS SHALL CLOSE UPON LOSS OF OPERATING POWER AND REQUIRE RE-KEYING FOR REACTIVATION OF SERVICE. PROVIDE SOLENOIDS IN ISIMET S-SERIES ENCLOSURE, MODEL # S-300-VA-F-U. SOLENOID SIZED AS SHOWN ON DRAWINGS. COORDINATE WITH THE ELECTRICAL SECTION.

WIRING:
DO NOT INSTALL WIRING OR CABLE FOR INTEGRATED SYSTEMS, REMOTE PANIC ASSEMBLIES OR OTHER INTERFACE WIRING WITHIN CONDUIT FOR EITHER 24-VAC CONTROL OR 120-VAC LINE VOLTAGE. EACH WIRING SYSTEM SHOULD BE HOUSED IN INDEPENDENT CONDUIT AND NOT BUNDLED WITH WIRING FOR OTHER SYSTEMS. COORDINATE WITH THE ELECTRICAL SECTION.

GENERAL NOTES

1. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
3. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT UP TO GRADE AND EMBEDDED IN 18"X18"X 6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
4. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
5. ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
6. ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
7. ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
8. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
9. DOMESTIC WATER PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
10. CONTRACTOR SHALL COORDINATE MECHANICAL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
11. CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
12. CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
13. PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
14. INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
15. ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
16. INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
17. WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
18. THESE DRAWINGS NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE PROJECT, CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
19. COORDINATE PLUMBING PIPING WITH STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL. MAKE OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES WITHOUT ANY ADDITIONAL COST TO THE PROJECT.
20. COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
21. NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
22. CONTRACTOR SHALL VISIT JOB SITE AND VERIFY EXISTING CONDITIONS BEFORE SUBMITTING A PRICE, ORDERING MATERIALS OR PERFORMING ANY WORK. NOTIFY THE ARCHITECT OF ANY DEVIATION FROM PLUMBING PLAN.
23. SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
24. FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
25. DO NOT BEGIN WORK UNTIL ELEVATION OF FINAL CONNECTION POINT IS VERIFIED AND GRADING OF ENTIRE SYSTEM CAN BE DETERMINED (EVEN IF FINAL CONNECTION IS SPECIFIED UNDER ANOTHER SECTION).

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	WASTE	CW	HW	REMARKS
FD	FLOOR DRAIN	3"	-	-	J.R. SMITH #2010 WITH 6" ROUND NICKEL BRONZE GRATE. PROVIDE WITH J.R. SMITH TRAP INSERT.
P-1	WATER CLOSET - ADA COMPLIANT	4"	1"	-	FLOOR MOUNTED - KOHLER K-96057-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL # 2155 SSC SEAT.
P-2	WATER CLOSET	4"	1"	-	FLOOR MOUNTED - KOHLER K-96053-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL #2155 SSC SEAT.
P-3	URINAL - ADA COMPLIANT	2"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET. SET LIP 17" AFF.
P-4	URINAL	2"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET.
P-5	LAVATORY	1 1/4"	1/2"	1/2"	UNDERMOUNT - KOHLER K-2210 COMPLETE, SYMMONS S-20-0 FAUCET, MCGUIRE #8872 P-TRAP. MCGUIRE 165 SUPPLIES WITH STOPS. INSULATE ALL WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 MIXING VALVE MOUNTED BELOW LAVATORY UNLESS OTHERWISE NOTED ON THE DRAWINGS.
P-6	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-7	MOP SINK	3"	1/2"	1/2"	STERN WILLIAMS #SBC-1700 (24" X 24") COMPLETE, T-35 HOSE WITH WALL HOOK, STAINLESS STEEL BACKSPLASH AND CHICAGO FAUCET #897 FAUCET.
P-8	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY # EZSTL8WSSK BI-LEVEL WATER COOLER WITH BOTTLE FILLER STATION. COMPLETE WITH STAINLESS STEEL CABINET AND WATERWAYS THAT ARE MANUFACTURED OF 100% LEAD FREE MATERIAL, J.R. SMITH #834 FIXTURE SUPPORT EBC TA150 P-TRAP AND EBC LA10 STOP WITH SUPPLY. FULLY INSULATE P-TRAP WITH EBC IK INSULATOR. INSTALL WITH LOWER SPOUT OUTLET MAXIMUM 36" AFF. MUST MEET A.D.A. INSTALL WITH BOTTLE FILLER. INSTALL COMPLETE. PROVIDE WITH ELKAY MODEL #LKAPRE2L CANE APRON AS REQUIRED.
P-9	DRAIN BOX	1 1/2"	-	-	PROVIDE A SIOUX CHIEF MODEL #696-3F DRAIN BOX, #696-LC LOUVERED COVER, #696-CF SECONDARY DRAINAGE FUNNEL AND J.R. SMITH TRAP SEAL INSERT. BOX TO COME COMPLETE WITH WALL FLANGE AND LOUVER. COORDINATE WITH MECHANICAL TO RECEIVE CONDENSATE WASTE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT.
WH	WALL HYDRANT	-	3/4"	-	J.R. SMITH #5509-QT, WITH INTEGRAL BACKFLOW PREVENTER, LATCHING COVER, FREEZE-PROOF AND OF PROPER LENGTH FOR WALL IN WHICH INSTALLED, ALL BRONZE BOX. VALVE SEAT MUST BE ON BUILDING SIDE OF EXTERIOR WALL INSULATION. INSTALL WITH CENTER LINE 24" ABOVE FINISH GRADE. PROVIDE OWNER WITH ONE (1) LOOSE KEY FOR EACH WALL HYDRANT.

NOTE: TEMPERING VALVES ON LAVATORIES OF ALL PUBLIC LAVATORIES CONFORM TO ASSE 1070/CSA B125.3,2021 IPC 419.5 TEMPERED WATER FOR PUBLIC HAND-WASHING FACILITIES. TEMPERED WATER SHALL BE DELIVERED THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070/CSA B125.3.

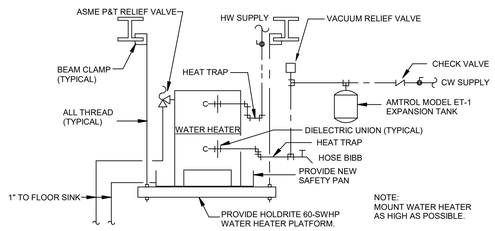
LAB FIXTURE SCHEDULE

MARK	FIXTURE	REMARKS
L-1	EMERGENCY GAS SHUT-OFF CONTROL PANEL	PROVIDE COMPLETE EMERGENCY GAS SHUT-OFF SYSTEM WITH CONTROL PANEL & SOLENOID VALVE. FLUSH MOUNTED ON WALL. SEE PLANS FOR LOCATION. COORDINATE MOUNTING HEIGHT AND LOCATION WITH GENERAL CONTRACTOR. SEE DETAIL.

WATER HEATER SCHEDULE

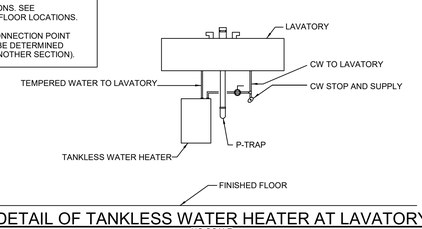
MARK	FIXTURE	ELEC INFO.	REMARKS
ET-1	EXPANSION TANK		AMTROL THERM- X-TROL #ST-5 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.
TWH-1	TANKLESS WATER HEATER	208V; 1 PHASE; 3.6 KW	EEMAX MODEL AM005240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 68°F TEMP. RISE AT 0.5 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. 208V; 1 PHASE; 3.6 KW. PIPE TO HW INLET OF FAUCET.
TWH-2	TANKLESS WATER HEATER	208V; 1 PHASE; 3.6 KW	EEMAX MODEL AM005240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 68°F TEMP. RISE AT 0.5 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. 208V; 1 PHASE; 3.6 KW. PIPE TO HW INLET OF FAUCET.
WH-1	ELECTRIC WATER HEATER	208V, 1 PHASE, 4.5 KW	LOCHINVAR LDJ-20 AK, 20 GALLON STORAGE, 19 GALLON RECOVERY AT 100°F RISE. NEW P&T RELIEF VALVE. SET OUTLET TEMPERATURE AT 125°F. INSTALL AS DETAILED ON DRAWINGS. 208V, 1 PHASE, 4.5 KW. VERIFY VOLTAGE WITH ELECTRICAL SECTION.

NOTE:
EXPANSION TANK TO BE SUPPORTED BY STRUCTURE AND MEET REQUIREMENTS OF IPC 308.10.



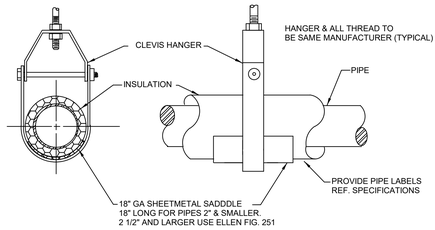
DETAIL OF PIPING AT WATER HEATER

NO SCALE



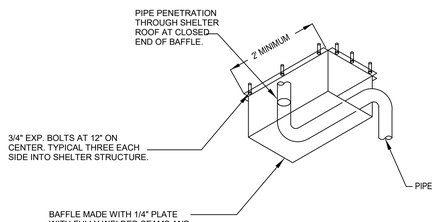
DETAIL OF TANKLESS WATER HEATER AT LAVATORY

NO SCALE



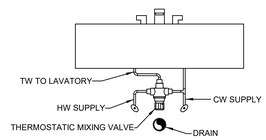
SUSPENDED PIPE SUPPORT

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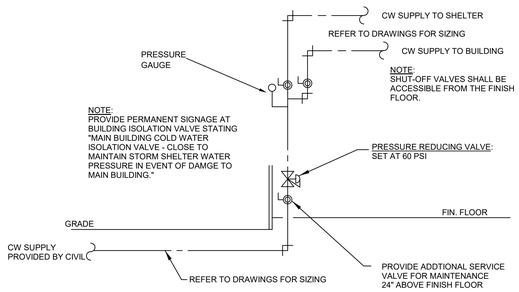
DETAIL OF PIPE PASSING THRU SHELTER ROOF

NO SCALE



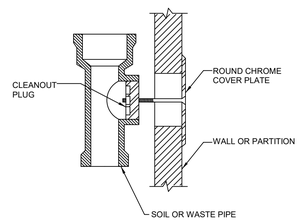
DETAIL OF TMV BELOW LAVATORY

NO SCALE



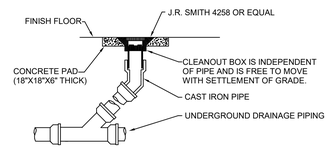
DETAIL OF WATER ENTRY IN SHELTER

NO SCALE



WALL CLEANOUT

NO SCALE



DETAIL OF CLEANOUT TO GRADE

NO SCALE

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(205) 988-2069
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Project Number :
50187307

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - SCHEDULES, DETAILS, & NOTES



PROJ. MGR.:	JWS
DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

SHEET NO:

P0.1

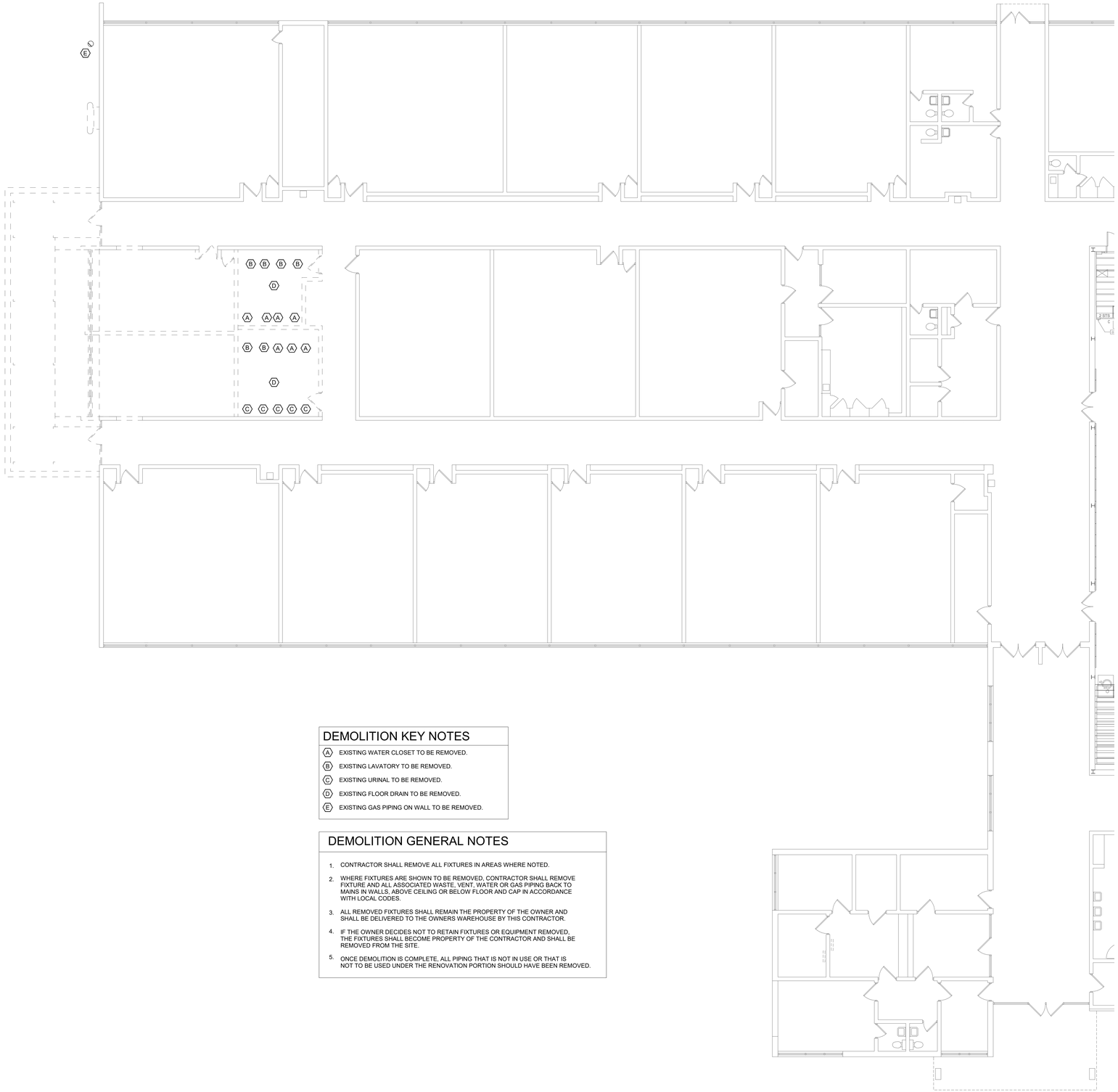
1 OF 6

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LATHAN
McKEE
ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231 , ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - DEMOLITION FLOOR PLAN



DEMOLITION KEY NOTES

- (A) EXISTING WATER CLOSET TO BE REMOVED.
- (B) EXISTING LAVATORY TO BE REMOVED.
- (C) EXISTING URINAL TO BE REMOVED.
- (D) EXISTING FLOOR DRAIN TO BE REMOVED.
- (E) EXISTING GAS PIPING ON WALL TO BE REMOVED.

DEMOLITION GENERAL NOTES

1. CONTRACTOR SHALL REMOVE ALL FIXTURES IN AREAS WHERE NOTED.
2. WHERE FIXTURES ARE SHOWN TO BE REMOVED, CONTRACTOR SHALL REMOVE FIXTURE AND ALL ASSOCIATED WASTE, VENT, WATER OR GAS PIPING BACK TO MAINS IN WALLS, ABOVE CEILING OR BELOW FLOOR AND CAP IN ACCORDANCE WITH LOCAL CODES.
3. ALL REMOVED FIXTURES SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE DELIVERED TO THE OWNERS WAREHOUSE BY THIS CONTRACTOR.
4. IF THE OWNER DECIDES NOT TO RETAIN FIXTURES OR EQUIPMENT REMOVED, THE FIXTURES SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE.
5. ONCE DEMOLITION IS COMPLETE, ALL PIPING THAT IS NOT IN USE OR THAT IS NOT TO BE USED UNDER THE RENOVATION PORTION SHOULD HAVE BEEN REMOVED.

1 PLUMBING - DEMOLITION FLOOR PLAN
1/8" = 1'-0"



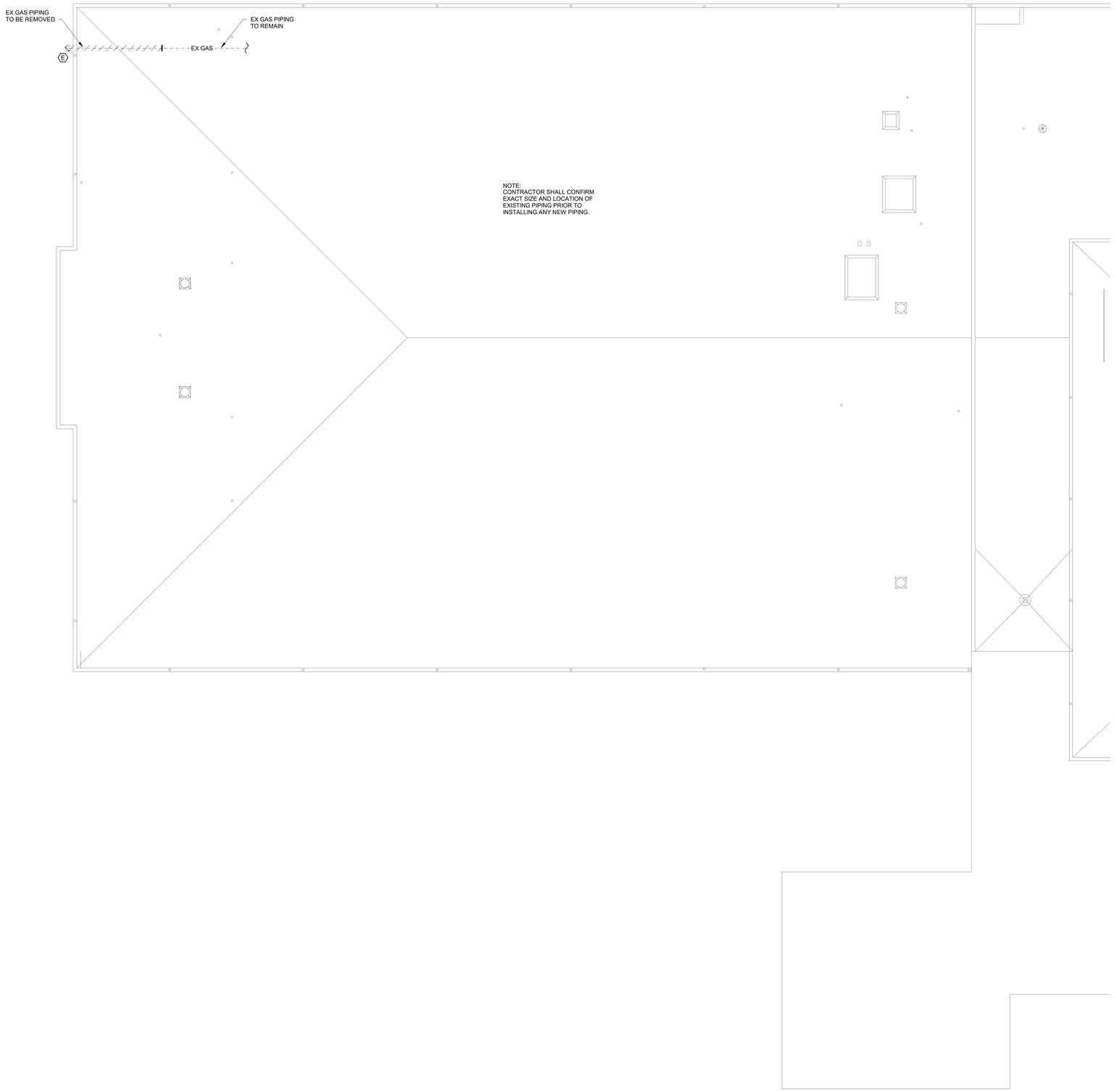
PROJ. MGR.:	JWS
DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

SHEET NO:

P1.0

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DEMOLITION KEY NOTES

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1 PLUMBING - DEMOLITION ROOF PLAN
1/8" = 1'-0"

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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
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SHEET TITLE:
PLUMBING - DEMOLITION ROOF PLAN



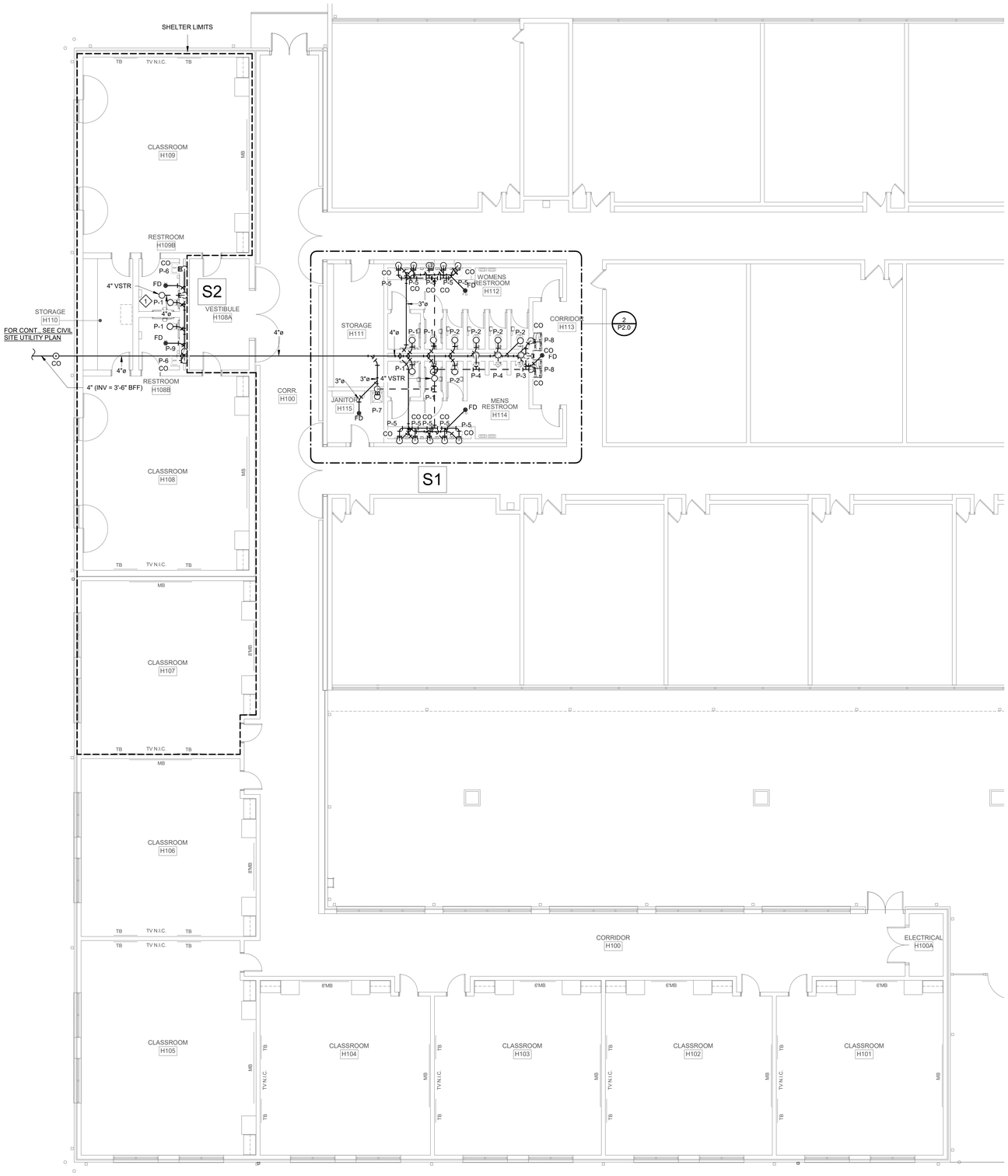
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DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

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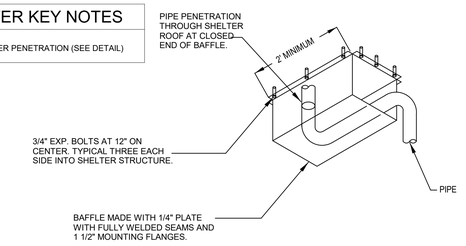
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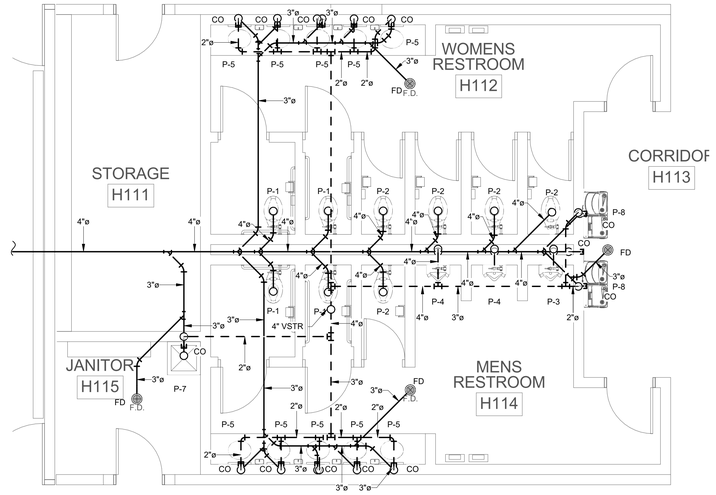
1 NON-PRESSURE - RENOVATION FLOOR PLAN
1/8" = 1'-0"

SHELTER KEY NOTES	
1	SHELTER PENETRATION (SEE DETAIL)

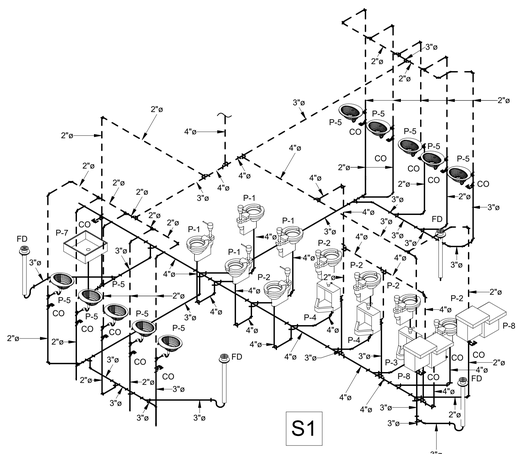


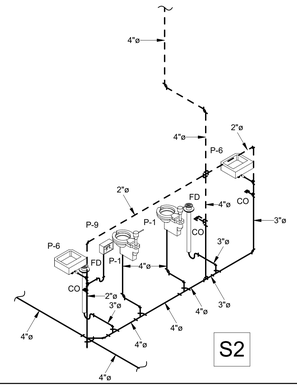
DETAIL OF PIPE PASSING THRU SHELTER ROOF

NO SCALE



2 NON-PRESSURE - RENOVATION FLOOR PLAN - Callout 1
1/4" = 1'-0"





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SHEET TITLE:
NON-PRESSURE - RENOVATION FLOOR PLAN

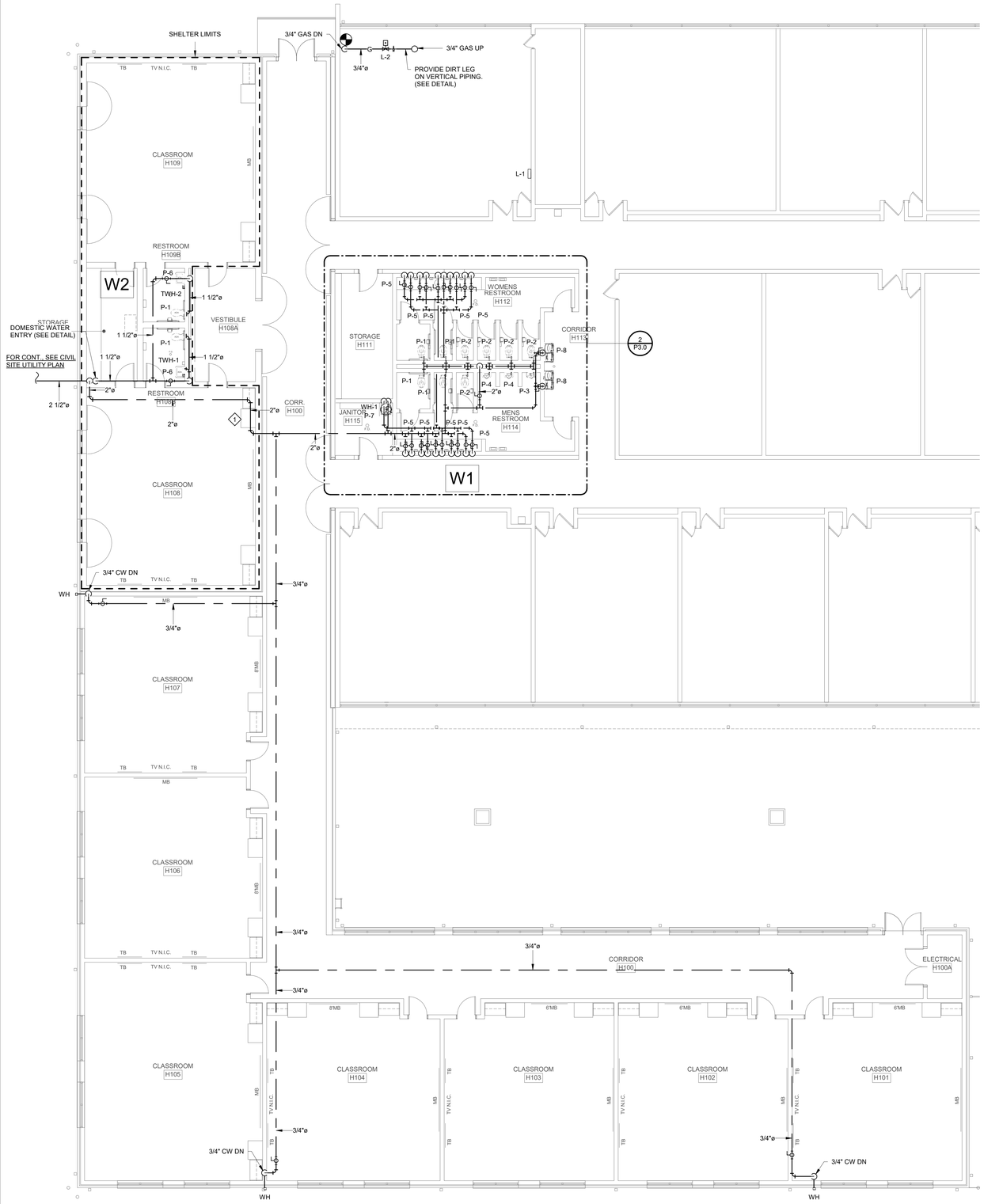
No. 24747 PROFESSIONAL 07-11-2025 ENGINEER JAMES WADE STEWART

PROJ. MGR.:	JWS
DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

SHEET NO: P2.0

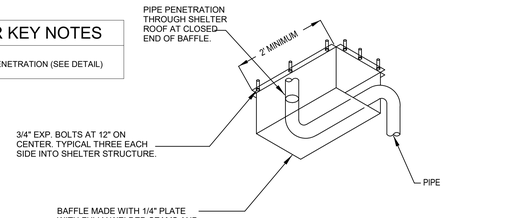
4 OF 6



1 PRESSURE - RENOVATION FLOOR PLAN
1/8" = 1'-0"

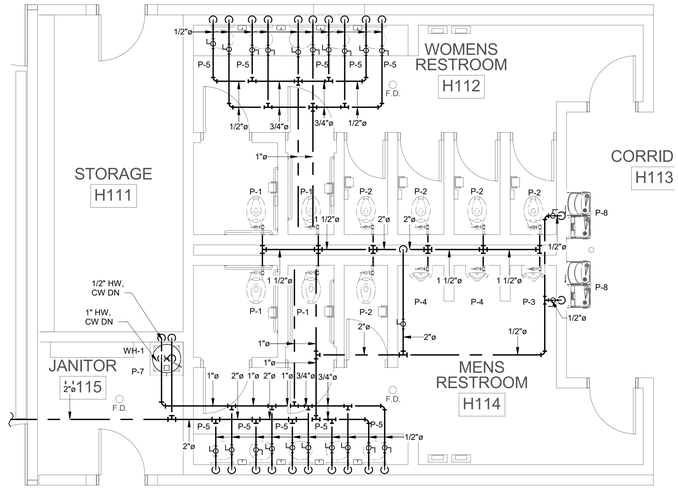
SHELTER KEY NOTES

1 SHELTER PENETRATION (SEE DETAIL)

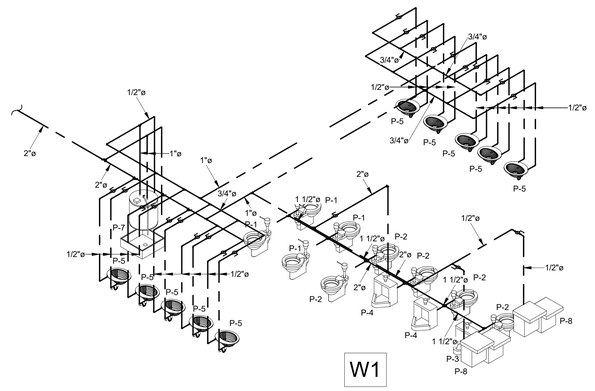


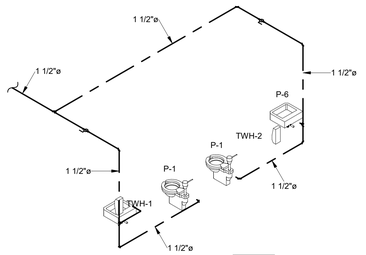
DETAIL OF PIPE PASSING THRU SHELTER ROOF

NO SCALE



2 PRESSURE - RENOVATION FLOOR PLAN - Callout 1
1/4" = 1'-0"





Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com
Project Number :
50187307

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
PRESSURE - RENOVATION FLOOR PLAN

No. 24747
PROFESSIONAL
07-11-2025
ENGINEER
JAMES W. STEWART

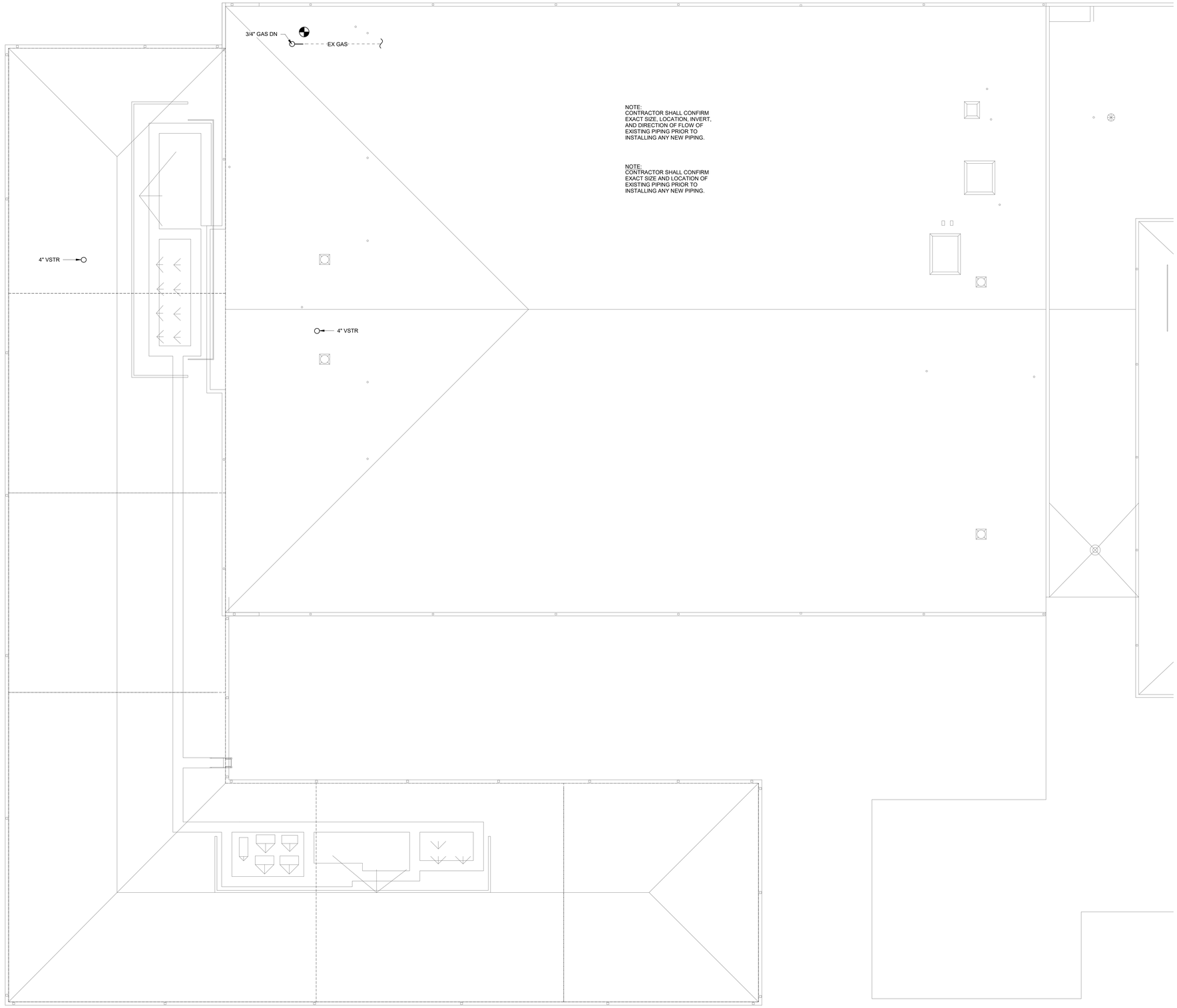
PROJ. MGR.:	JWS
DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

SHEET NO:

P3.0

5 OF 6



NOTE:
CONTRACTOR SHALL CONFIRM EXACT SIZE, LOCATION, INVERT, AND DIRECTION OF FLOW OF EXISTING PIPING PRIOR TO INSTALLING ANY NEW PIPING.

NOTE:
CONTRACTOR SHALL CONFIRM EXACT SIZE AND LOCATION OF EXISTING PIPING PRIOR TO INSTALLING ANY NEW PIPING.

1 PLUMBING - RENOVATION ROOF PLAN
1/8" = 1'-0"

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ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - RENOVATION ROOF PLAN

ALABAMA
No. 24747
PROFESSIONAL
07-11-2025
ENGINEER
JAMES WADE STEWART

PROJ. MGR.:	JWS
DRAWN:	SMC
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106
SHEET NO:
P4.0
6 OF 6

DUCTWORK LEGEND

(CFM) S	SUPPLY DIFFUSER
(CFM) R	RETURN GRILLE
(CFM) E	EXHAUST GRILLE
(CFM) T	TRANSFER AIR GRILLE
(CFM) SR	SIDEWALL REGISTER
ø	ROUND DUCT SYMBOL
W X H	RECTANGULAR DUCT (WIDTH X HEIGHT)
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO REMAIN.
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO BE REMOVED.
	RECTANGULAR SUPPLY DUCT TURNING UP
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN
	ROUND DUCT TURNING DOWN
	ROUND DUCT TURNING UP
	MAXIMUM 5' FLEXIBLE DUCT ALL BRANCH DUCTS
	RECTANGULAR 90° ELBOW WITH TURNING VANES FOR SUPPLY.
	RISE OR DROP IN DUCT
	RECTANGULAR BRANCH OFF OF RECTANGULAR DUCT WITH MANUAL DAMPER
	CONICAL SPIN-IN WITH MANUAL DAMPER
MD	MANUAL DAMPER
FD	FIRE DAMPER (PROVIDE ACCESS DOOR)
AD	AUTOMATIC DAMPER
SFD	COMBINATION SMOKE/FIRE DAMPER (PROVIDE ACCESS DOOR)
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CO2 MONITOR
	CONNECT TO EXISTING, FIELD VERIFY EXACT SIZE AND LOCATION.

HVAC ABBREVIATIONS

A	AMPS
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AMB.	AMBIENT
ARCH.	ARCHITECTURAL
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DN.	DOWN
°F	DEGREES FAHRENHEIT
△P	CHANGE IN PRESSURE
△T	CHANGE IN TEMPERATURE
DIA.	DIAMETER
EA.	EXHAUST AIR
ENT.	ENTERING
EAT	ENTERING AIR TEMPERATURE
EMG	EXPANDED METAL GRILLE
EWT	EXTERNAL WATER TEMPERATURE
E.S.P.	EXTERNAL STATIC PRESSURE
EX.	EXISTING
EXT.	EXTERNAL
FPM	FEET PER MINUTE
FT.	FEET
F.V.	FACE VELOCITY
GAL.	GALLONS
GPM	GALLONS PER MINUTE
H	HEIGHT
HP	HORSEPOWER
IN.	INCHES
I.D.	INSIDE DIAMETER
KW	1000 WATTS
L	LENGTH
LBS.	POUNDS
LRA	LOCKED ROTOR AMPS
LVG.	LEAVING
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX.	MAXIMUM
MAT	MIXED AIR TEMPERATURE
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPACITY
MIN.	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
NPLV	NON-STAND PART LOAD VALUE
OSA	OUTSIDE AIR
O.D.	OUTSIDE DIAMETER
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ATMOSPHERIC
PSIG	PSI GAUGE
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
T.S.P.	TOTAL STATIC PRESSURE
TD	TRANSFER DUCT
TOD	TOP OF DUCT
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLUME
V/Ø/Hz	VOLTS/PHASE/HERTZ
W.G.	WATER GAGE
W	WIDTH
WB	WET BULB

PIPING LEGEND

D	DRAIN PIPING
	BALL VALVE
	PIPE TURNING UP.
	PIPE TURNING DOWN.
	BRANCH OFF TOP OF MAIN.
	BRANCH OFF BOTTOM OF MAIN.
	BRANCH OFF SIDE OF MAIN.
	SLOPE DOWN IN DIRECTION OF ARROW.

HVAC CONTROLS LEGEND

T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CO2 MONITOR
CP	120V HVAC CONTROLS POWER
TS	AVERAGING TEMPERATURE SENSOR
H	DUCT MOUNTED HUMIDITY SENSOR
AO	ANALOG OUTPUT
AI	ANALOG INPUT
DO	DIGITAL OUTPUT
DI	DIGITAL INPUT
DSD	DUCT MOUNTED SMOKE DETECTOR. SMOKE DETECTOR FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED IN DUCT BY MECHANICAL CONTRACTOR.
HOA	HAND-OFF-AUTO MAGNETIC STARTER
SP	DUCT STATIC PRESSURE SENSOR
DP	DIFFERENTIAL PRESSURE SENSOR
	INTERLOCK WITH FIRE ALARM SYSTEM
M	FAN/PUMP MOTOR
VFD	VARIABLE FREQUENCY DRIVE
CT	CURRENT TRANSDUCER
FS	FLOW SWITCH
	DIRECTION OF FLOW
TS	PIPE MOUNTED TEMPERATURE SENSOR
	2-WAY AUTOMATIC VALVE
	3-WAY AUTOMATIC VALVE
H-O-A	HAND-OFF-AUTO SWITCH
AFM	AIR FLOW MONITOR. (PROVIDE ACCESS DOOR AT EACH AIR FLOW MONITOR.)

HVAC GENERAL NOTES

1. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO REQUIREMENTS OF ARCHITECTURAL DRAWINGS AND CONDITIONS EXISTING IN THE FIELD. MECHANICAL DRAWINGS INDICATE GENERALLY THE LOCATION OF COMPONENTS AND ARE NOT INTENDED TO SHOW ALL FITTINGS OR ALL DETAILS OF THE WORK TO BE PERFORMED.

2. FOLLOW THE DRAWINGS CLOSELY, COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS OF SYSTEM COMPONENTS.

3. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.

4. MAKE NO CHANGES WITHOUT THE ARCHITECT'S WRITTEN PERMISSION. IN CASE OF DOUBT, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING WITH WORK. FAILURE TO FOLLOW THIS INSTRUCTION SHALL MAKE THE CONTRACTOR LIABLE FOR DAMAGE TO OTHER WORK AND RESPONSIBLE FOR REMOVING AND REPAIRING DEFECTIVE OR MISLOCATED WORK IN PROPER MANNER.

5. DO NOT SCALE DRAWINGS TO LOCATE DIFFUSERS AND EQUIPMENT. COORDINATE WITH NEW AND EXISTING LIGHTING, ELECTRICAL CONDUIT, AND ALL EXISTING FIELD CONDITIONS.

6. PRIOR TO PREPARING SUBMITTALS, VERIFY ALL EQUIPMENT VOLTAGES WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. ANY FAILURE TO DO SO WILL MAKE THE MECHANICAL CONTRACTOR RESPONSIBLE FOR ANY EQUIPMENT ORDERED WITH THE INCORRECT VOLTAGE.

7. PROTECT MECHANICAL EQUIPMENT FROM DAMAGE DURING CONSTRUCTION. WHEN INSTALLATION IS COMPLETE, CLEAN EQUIPMENT AS REQUIRED AND PROVIDE ALL NEW FILTERS.

8. INSTALL ALL EQUIPMENT TO PROVIDE NORMAL SERVICE ACCESS TO ALL COMPONENTS. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS CONFLICT WITH CONTRACT DOCUMENTS, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING.

9. FURNISH ACCESS DOORS FOR VALVES, FIRE DAMPERS, DAMPERS, CONTROLS, AIR VENTS, TRAP CLEAN OUTS, AND OTHER ITEMS LOCATED ABOVE NON-LIFTOUT CEILINGS OR BEHIND PARTITIONS OR WALLS. PROVIDE FIRE DAMPERS IN DUCTWORK, GRILLES, AND REGISTERS WITH FIRE RATING EQUAL TO RATING OF WALL OR CEILING. ALL FIRE DAMPERS MAY OR MAY NOT BE SHOWN ON MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL FIRE RATED WALL AND CEILING LOCATIONS AND RATINGS WITH ARCHITECTURAL DRAWINGS.

10. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS (SEE SPECIFICATIONS).

11. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROLS POWER TO NECESSARY CONTROL PANELS.

12. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROL POWER FOR VAV TERMINAL UNIT CONTROLS, AUTOMATIC CONTROL VALVES, AND AUTOMATIC DAMPER ACTUATORS.

13. PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL BAS CONTROLS SYSTEM.

14. COORDINATE EXACT LOCATION OF ALL WALL MOUNTED DEVICES (THERMOSTATS, HUMIDITY SENSORS, ETC.) WITH ARCHITECT PRIOR TO ROUGH IN. ALL WALL MOUNTED DEVICES SHALL BE INSTALLED 48"A.F.F. TO THE TOP OF THE DEVICE.

15. COORDINATE EXACT LOCATION ON WALL OF ALL WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS WITH ARCHITECT. WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS SHALL BE PAINTED BY OTHERS.

16. COORDINATE ALL DUCT DETECTORS, LOW VOLTAGE WIRING TO ASSOCIATED PROGRAMMING WITH FIRE ALARM CONTRACTOR TO PROVIDE A FULLY FUNCTIONING SYSTEM. VERIFY PROPER OPERATION OF ALL EXISTING DUST SMOKE DETECTORS. REPLACE AS REQUIRED. UPON SENSING SMOKE THE DUCT DETECTOR SHALL SHUT DOWN THE RESPECTIVE UNIT.

FAN SCHEDULE

FAN TYPE:
1. CEILING MOUNTED EXHAUST FAN.
2. CENTRIFUGAL SQUARE INLINE - DIRECT DRIVE.
3. CENTRIFUGAL ROOF EXHAUSTER - DIRECT DRIVE.

FAN ACCESSORIES:
1. BACKDRAFT DAMPER.
2. DISCONNECT SWITCH.
3. ALUMINUM CEILING GRILLE.
4. FAN SPEED CONTROLLER.
5. SPRING VIBRATION ISOLATORS.
6. FLEXIBLE CONNECTIONS.
7. BIRDSCREEN.
8. ROOF CURB
9. DIRECT DRIVE WITH FAN MOUNTED SOLID STATE SPEED CONTROL EC MOTOR W/ VFD FOR SOFT START.
10. WALL SWITCHES FOR CEF-1, CEF-2, VF-SS-1 & VF-SS-2 AND ALL ASSOCIATED CONTROLS TO BE ON EMERGENCY POWER.
11. PROVIDE TRANSFORMER REQUIRED TO TIE TO ROOM LIGHTS

MARK	FAN TYPE	AIRFLOW (CFM)	E.S.P. (IN.-W.G.)	WHEEL SIZE (INCHES)	SOUND CRITERIA (SONES/dBA)	RPM	MOTOR (HP / W)	ELECTRICAL V	PH	HZ	INTERLOCK WITH	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
CEF-1	1	70	0.75	8"	3 / 47	1056	40 W	120 V	1	60	LIGHTS / SHELTER SWITCH	25	1,2,3,4,10,11	LOREN COOK
CEF-2	1	70	0.75	8"	3 / 47	1056	40 W	120 V	1	60	LIGHTS / SHELTER SWITCH	25	1,2,3,4,10,11	LOREN COOK
EF-1	3	1000	0.75	13.5	9.2 / 58	1196	1/2 HP	120 V	1	60	SWITCH	100	1,2,4,7,8	LOREN COOK
VF-SS-1	2	700	0.75	10"	11.1 / 62	2194	1/3 HP	120 V	1	60	SHELTER SWITCH	175	1,2,4,5,6,9,10	LOREN COOK
VF-SS-2	2	800	0.75	10"	11.1 / 62	2037	1/3 HP	120 V	1	60	SHELTER SWITCH	175	1,2,4,5,6,9,10	LOREN COOK

AIR PURIFICATION SCHEDULE

FLOW	GPS MODEL	GPS QUANTITY	MINIMUM NEEDLE SPACING	VOLTAGE	MOUNTING LOCATION	MINIMUM ION DENSITY (IONS/CC)
CV	GPS-FC	1 PER UNIT	1 EVERY 3/4"	208	UNIT SERVED	40 MILLION PER 0.75"

NOTES:
1. BASIS OF DESIGN: GLOBAL PLASMA SOLUTIONS: APPROVED EQUALS BY PHENOMENAL AIRE, ACTIVE AIR, AIRGENICS AND BIOXGEN SUBJECT TO SPECIFICATION COMPLIANCE.
2. MOUNT GPS-FC TO AIR INLET SIDE OF COOLING COIL.
3. IF CONTRACTOR SUBSTITUTES BASIS OF DESIGN WITH ANOTHER MANUFACTURER, CONTRACTOR SHALL COORDINATE ALL ELECTRICAL AND MECHANICAL CHANGES.
4. BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE.
5. ALL MANUFACTURER'S MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER US OR ETL.
6. PROVIDE STAND ALONE ION DETECTOR TO COMMUNICATE WITH THE BAS. SYSTEMS WITHOUT ION DETECTORS SHALL NOT BE ACCEPTABLE.
7. IONIZATION BAR TO HAVE A MINIMUM OF 1 NEEDLEPOINT EVERY 0.75" OF COIL WIDTH. SYSTEMS WITH NEEDLES FURTHER APART SHALL NOT BE ACCEPTABLE.
8. IONIZATION SYSTEMS WITH MULTIPLE ION MODULES MOUNTED TO A BAR SHALL NOT BE AN ACCEPTABLE SUBSTITUTE.
9. IONIZATION SYSTEMS THAT DO NOT USE EPOXY TO PROTECT THE ION CIRCUITRY SHALL NOT BE ACCEPTABLE.
10. IONIZATION OUTPUT SHALL BE A MINIMUM OF 40 MILLION IONS/CC FOR EVERY 0.75" OF COIL WIDTH.
11. BIPOLAR IONIZATION UNIT SHALL DE-ENERGIZE UPON SYSTEM SHUTDOWN.

PROVIDE FOR ALL IHPs IN CLASSROOMS

AIR DEVICE LEGEND

MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN
"S"	200S / CFM	PLAQUE FACE CEILING DIFFUSER WITH ROUND NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE ROUND NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: CFM / NECK SIZE / RUN-OUT SIZE: 0 - 100 / 6" / 6"; 101 - 200 / 8" / 8"; 201 - 300 / 10" / 10"; 301 - 500 / 12" / 12"; 501 - 750 / 15" / 15"; 751 - 1000 / 18" / 18"	TITUS OMNI
"R", "E", "T"	200R / CFM; R24 / SQUARE NECK SIZE	CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGCRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: CFM / NECK SIZE: 0 - 100 / 6x6; 101 - 200 / 8x8; 201 - 350 / 10x10; 351 - 500 / 12x12; 501 - 750 / 14x14; 751 - 950 / 16x16; 951 - 1200 / 18x18; 1201 - 1500 / 20x20; 1501 - 2000 / 24x24	TITUS 50F
SR	SR12X6 / 200 / CFM / W x H	SIDEWALL SUPPLY REGISTER.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 272FL
WRG / WTG	WRG12X6 / 200 / CFM / W x H	WALL RETURN GRILLE / WALL TRANSFER GRILLE.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 350FL

NOTES:
1. SEE SPECIFICATIONS FOR FINISH AND CONSTRUCTION MATERIAL FOR EACH AIR DEVICE.
2. COORDINATE WITH ARCHITECT'S CEILING PLAN FOR LAY-IN OR SURFACE MOUNTING OF CEILING MOUNTED AIR DEVICES.
3. COORDINATE LOCATIONS OF CEILING MOUNTED AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER CEILING MOUNTED DEVICES. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS.

INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:
1. INDOOR, CEILING CASSETTE (33"X33")
2. INDOOR, CEILING CASSETTE (2'X2')
3. INDOOR, WALL MOUNT

NOTES:
1. AIRFLOW RATED AT HIGH FAN SPEED.
2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT.
3. COOLING CAPACITY RATED AT 95°F.
4. HEATING CAPACITY RATED AT 47°F.

ACCESSORIES:
1. 3-POLE DISCONNECT SWITCH.
2. HARD WIRED UNIT CONTROLLER.
3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS.
4. INTEGRAL CONDENSATE PUMP.

MARK	TYPE	AIRFLOW (CFM)	NOMINAL TONS	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	DIMENSIONS (IN.) (WxLxH)	ELECTRICAL V	PH	HZ	MCA (A)	WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
IHP-1	1	1118	3	36	38	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-2	2	318	0.75	9	12	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-3	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-4	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-5	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-6	1	1118	3	36	38	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-7	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-8	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-9	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-10	1	942	2.5	30	32	33"x33"x12"	208 V	1	60	1	75	1,2,3,4	FUJITSU
IHP-11	2	318	0.75	9	12	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-12	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-13	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-14	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-15	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-16	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-17	2	359	1	12	16	23"x23"x10"	208 V	1	60	1	50	1,2,3,4	FUJITSU
IHP-ELEC	3	624	1.5	18	21.6	45"x11"x14"	208 V	1	60	1	50	1,2,3,4	FUJITSU

OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:
1. OUTDOOR HEAT PUMP

NOTES:
1. REFRIGERANT PIPING SHALL BE SIZED AND ROUTED PER MANUFACTURER'S RECOMMENDATIONS.
2. POWER TO INDOOR UNITS IS PROVIDED THRU OUTDOOR UNITS
3. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS.
4. UNIT SHALL BE CAPABLE OF MINIMUM LINE LENGTH OF 65FT.

MARK	TYPE	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	ELECTRICAL V	PH	HZ	MCA (A)	MOCP (A)	EFFICIENCY SEER	HSPF	BASIS OF DESIGN
OHP-1	1	36	38	208 V	1	60	24.9	25	21.3	10.5	FUJITSU
OHP-2	1	9	12	208 V	1	60	11	15	24.4	11.8	FUJITSU
OHP-3	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-4	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-5	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-6	1	36	38	208 V	1	60	24.9	25	21.3	10.5	FUJITSU
OHP-7	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-8	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-9	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-10	1	30	32	208 V	1	60	23.7	25	22.4	10.6	FUJITSU
OHP-11	1	9	12	208 V	1	60	11	15	24.4	11.8	FUJITSU
OHP-12	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-13	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-14	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-15	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-16	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-17	1	12	16	208 V	1	60	14.2	15	23.7	11.5	FUJITSU
OHP-ELEC	1	18	21.6	208 V	1	60	19.4	20	25.5	10.1	FUJITSU

PACKAGED OUTSIDE AIR UNIT WITH ENERGY RECOVERY

TYPE:
DOWNFLOW PACKAGED AC UNIT WITH DX COOLING COIL, ENERGY RECOVERY CORE, AND GAS HEAT.

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
2. UNIT SHALL BE ASHRAE 90.1 - 2013 COMPLIANT.
3. 2" DOUBLE WALL CONSTRUCTION.
4. UL LISTED
5. FAN VIBRATION ISOLATION.

ACCESSORIES:
1. 2" THICK THROWAWAY FILTER, 30% EFFICIENT.
2. CONDENSER COIL GUARD.
3. DIRECT DRIVE SUPPLY W/ VFD AND EXHAUST FAN W/ VFD.
4. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
5. HINGED ACCESS DOORS.
6. STAINLESS STEEL DRAIN PAN.
7. OSA INTAKE HOOD AND EXHAUST HOOD WITH AUTO DAMPERS.
8. MODULATING HOT GAS REHEAT COIL.
9. FACTORY ROOF CURB
10. MICROPROCESSOR CONTROLLER WITH BACNET INTERFACE. CONTROLLER SHALL BE CAPABLE OF PROVIDING SEQUENCES ON CONTROLS DRAWINGS.

Mark	SUPPLY FAN CFM	SUPPLY FAN E.S.P. (IN.-W.G.)	SUPPLY FAN MOTOR (HP)	EXHAUST FAN CFM	EXHAUST FAN E.S.P. (IN.-W.G.)	EXHAUST FAN MOTOR (HP)	CORE SUMMER OUTSIDE AIR EAT (DB°F/WB°F)	CORE SUMMER OUTSIDE AIR LAT (DB°F/WB°F)	CORE SUMMER EXHAUST ENTERING (DB°F/WB°F)	CORE WINTER OUTSIDE AIR EAT (DB°F/WB°F)	CORE WINTER OUTSIDE AIR LAT (DB°F/WB°F)	CORE WINTER EXHAUST ENTERING (DB°F/WB°F)	ELECTRICAL V	PH	HZ	MCA (A)	MOCP (A)	DX COOLING COIL EAT (DB°F/WB°F)	DX COOLING COIL LAT (DB°F/WB°F)	DX COOLING COIL TOTAL (MBH)	DX COOLING COIL SENS (MBH)	DX COOLING COIL NOM. TONS	ELEC HEAT KW	ELEC HEAT STAGES	ISMRE	WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
ERU-1	1650	1	1.5	1000	0.75	1	95/78	84.5/71.9	75/62.4	15/11.9	45.1/36.9	72/55.7	208 V	3	60	76.5	90	84.5/71.9	48.6/48.3	115.9	60.3	10	12.3	SCR	8.1	4250	1,2,3,4,5,6,7,8,9,10	GREENHECK
ERU-2	1800	1	1	1080	0.75	1	95/78	84.7/72.1	75/62.4	15/11/9	44.5/36.4	72/55.7	208 V	3	60	103	110	84.5/71.9	50.5/50.3	119.3	62.7	10	12.3	SCR	8.1	4250	1,2,3,4,5,6,7,8,9,10	GREENHECK

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Project Number : 50187307

LATHAN McKEE ARCHITECTS

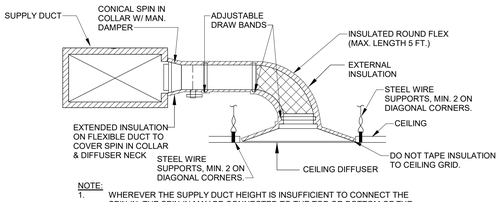
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - SCHEDULES AND LEGENDS

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 24747 PROFESSIONAL 07-11-2025 ENGINEER MADE STEWART

PROJ. MGR.:	JWS
DRAWN:	LMR
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106
SHEET NO: M0.1
1 OF 8

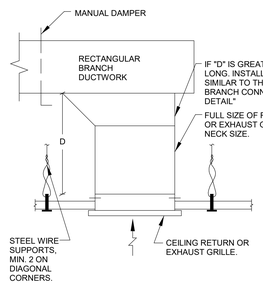


NOTE:

1. WHEREVER THE SUPPLY DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT. REFER TO SPECIFICATION FOR MAXIMUM TURNS IN FLEX DUCT.
2. PROVIDE EXTERNAL INSULATION ON ALL ROUND BRANCH DUCTWORK. SEE SPECS FOR THICKNESS AND EXTENT.
3. PROVIDE EXTERNAL INSULATION ON BACK SIDE OF CEILING DIFFUSERS. THICKNESS TO MATCH BRANCH DUCT INSULATION THICKNESS.

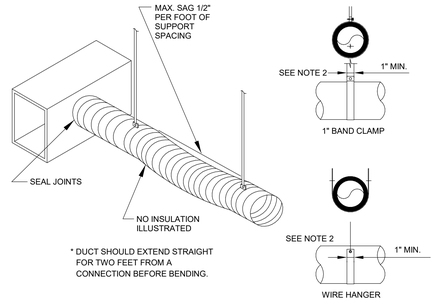
CEILING DIFFUSER INSTALLATION DETAIL

NO SCALE



CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL

NO SCALE



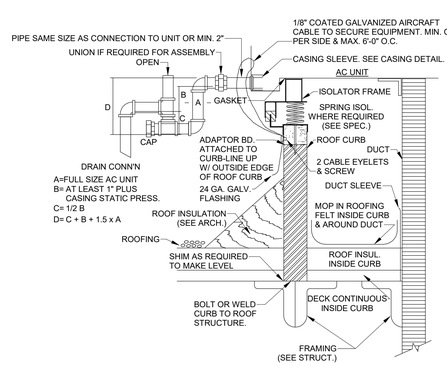
* DUCT SHOULD EXTEND STRAIGHT FOR TWO FEET FROM A CONNECTION BEFORE BENDING.

NOTES:

1. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
2. DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
3. MIN. CENTER LINE BEND LINE RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D/2).
4. FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 LINEAR FEET.

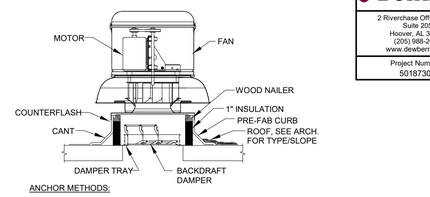
FLEXIBLE DUCT SUPPORT DETAIL

NO SCALE



ROOFTOP AC UNIT DETAIL

NO SCALE

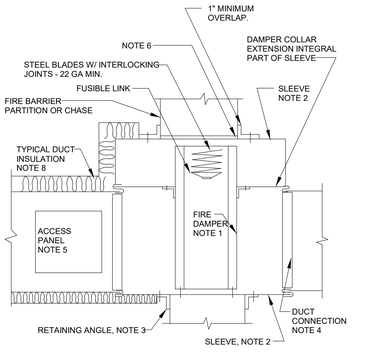


ANCHOR METHODS:

1. FOR STEEL STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 1/4"-14 SELF DRILLING SCREWS. MINIMUM OF 1/2" OF THREADS SHALL BE SHOWING ON THE UNDERSIDE OF THE STRUCTURE. PROVIDE MINIMUM (4) FASTENERS PER SIDE, (TOTAL OF 16), EQUALLY SPACED ON EACH SIDE.
2. FOR CONCRETE STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 3/8" HILTI EXPANSION ANCHORS, MINIMUM 2-1/2" ENGAGEMENT. PROVIDE MINIMUM (2) ANCHORS PER SIDE, (TOTAL OF 8), EQUALLY SPACED ON EACH SIDE.
3. ANCHOR FAN TO CURB WITH A MINIMUM OF (4) 1/4"-14 SELF DRILLING SCREWS ON EACH SIDE OF THE FAN (TOTAL OF 16 FASTENERS). ONE FASTENER SHALL BE INSTALLED 3" FROM EACH END ON THE SIDE OF THE FAN AND THE OTHER TWO SHALL BE EQUALLY SPACED ALONG THE SIDE.

CENTRIFUGAL ROOF FAN INSTALLATION DETAIL

NO SCALE

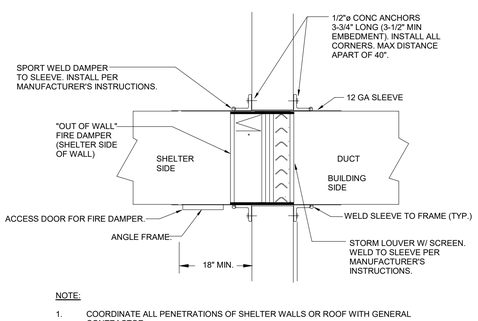


NOTES:

1. A VERTICAL DAMPER IS SHOWN. HORIZONTAL DAMPER INSTALLATION, IS SIMILAR. FOLLOW DAMPER MANUFACTURER'S INSTRUCTIONS AND SMACNA FIRE DAMPER INSTALLATION GUIDELINE, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND RETAINING ANGLES. FIRE DAMPERS MUST BE INSTALLED IN THE PARTITION OR FLOOR AND NOT OUTSIDE THE PENETRATION. ALL FIRE DAMPERS SHALL BE UL LISTED.
2. GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE TO DAMPER FRAME AND TO PERIMETER ANGLES.
3. RETAINING ANGLES: GALVANIZED STEEL, NOT LESS THAN 1-1/2" x 1-1/2", 14 GAGE, TO PROVIDE 1" MINIMUM OVERLAP OF OPENING ON ALL 4 SIDES. RETAINING ANGLES MUST NOT BE ATTACHED TO EACH OTHER AT CORNERS. SECURE RETAINING ANGLES TO FIRE DAMPER SLEEVE ONLY.
4. BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTION OF TYPES SHOWN IN SMACNA OR PER MANUFACTURER'S RECOMMENDATIONS.
5. ACCESS DOORS: SIZE AND LOCATION TO PERMIT SERVICING THE FUSIBLE LINK OR LINKS.
6. PROVIDE CLEARANCE TO PERMIT INSTALLATION & EXPANSION. PROVIDE 1/8" PER FOOT LARGER THAN THE OVERALL SIZE OF THE DAMPER/SLEEVE ASSEMBLY. THE MAXIMUM OPENING SIZE SHALL NOT EXCEED 1/8" PER FOOT + 2", NOR SHALL THE OPENING BE LESS THAN 1/4" LARGER THAN THE DAMPER/SLEEVE ASSEMBLY.
7. ALL DUCT WORK RISERS WHICH ARE RUN EXPOSED, SUCH AS THRU ATTIC FLOORS AND MECHANICAL ROOM FLOORS, SHALL BE PROVIDED WITH 4" HIGH CONCRETE CURB AROUND OPENING FOR DUCT.

FIRE DAMPER INSTALLATION DETAIL

NO SCALE

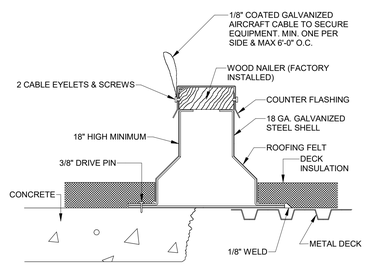


NOTES:

1. COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR ROOF WITH GENERAL CONTRACTOR.
2. SHELTER LOUVERS SHALL BE INSTALLED IN THE SHELTER WALL. SHELTER LOUVERS SHALL BE RUSKIN XP500, GREENHECK MODEL FSG, OR APPROVED EQUAL. HIGH IMPACT LOUVERS SHALL MEET THE IMPACT TESTING CRITERIA FOR TORNADO SHELTERS PER ICC 500 / FEMA 361.
3. INSTALL 1/2" MESH, 18 GA. GALVANIZED SCREEN BETWEEN SHELTER LOUVER AND FIRE DAMPER.
4. INSTALL ACCESS DOOR IN DUCTWORK FOR ACCESS TO FIRE DAMPER. ACCESS DOOR SHALL BE MINIMUM 12" X 12".

SHELTER DUCT PENETRATION DETAIL

NO SCALE

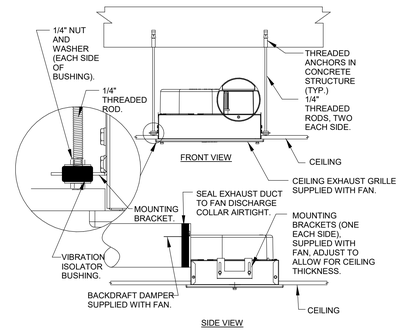


ANCHOR METHODS:

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2. FOR CONCRETE STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 3/8" HILTI EXPANSION ANCHORS, MINIMUM 2-1/2" ENGAGEMENT. PROVIDE MINIMUM (2) ANCHORS PER SIDE, (TOTAL OF 8), EQUALLY SPACED ON EACH SIDE.

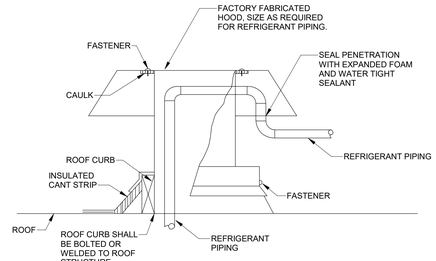
EQUIPMENT ROOF SUPPORT DETAIL

NO SCALE



CEILING EXHAUST FAN DETAIL

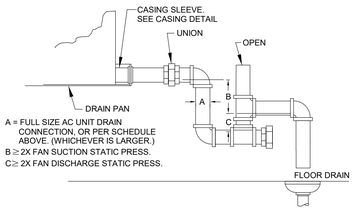
NO SCALE



PIPE PENETRATION THRU ROOF

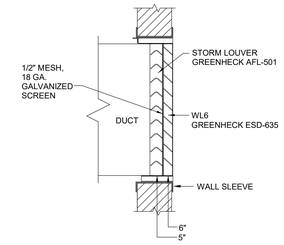
NO SCALE

MINIMUM CONDENSATE PIPE SIZE	
AC TONS	MIN. DRAIN SIZE
0 TO 20	1"
21 TO 40	1-1/4"
41 TO 60	1-1/2"
61 TO 100	2"
101 TO 250	3"
251 & LARGER	4"



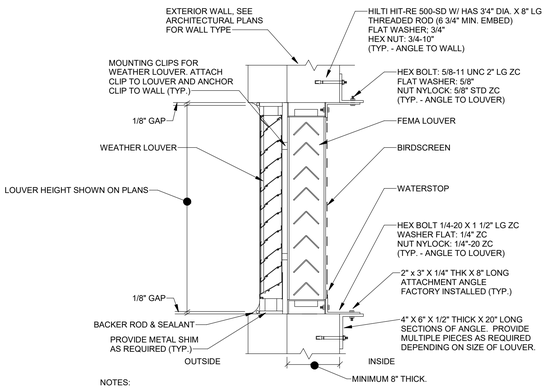
AC UNIT DRAIN TRAP DETAIL

NO SCALE



STORM SHELTER LOUVER DETAIL - OUTSIDE AIR DUCTED OPENINGS

NO SCALE

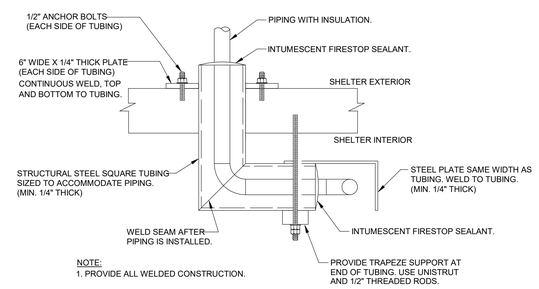


NOTES:

1. INSTALL WEATHER LOUVER AND FEMA LOUVER PER MANUFACTURER'S RECOMMENDATIONS.
2. WEATHER LOUVER SHALL HAVE DRAINABLE BLADES.
3. FEMA LOUVER SHALL BE TESTED AND MANUFACTURED TO FEMA 361 AND ICC500 SPECIFICATIONS FOR LARGE MISSILE IMPACT.
4. FEMA LOUVER SHALL HAVE A PERMANENT IDENTIFICATION TAG AFFIXED TO THE LOUVER THAT IS VISIBLE TO THE OWNER, ARCHITECT, ENGINEER, AND/OR AHJ.
5. INSTALLATION METHOD ABOVE IS ONE EXAMPLE FOR INSTALLING THE FEMA LOUVER. INSTALLING CONTRACTOR SHALL FOLLOW THIS DETAIL & ALL MANUFACTURER'S INSTALLATION GUIDELINES FOR DIFFERING WALL CONSTRUCTION.
6. ARCHITECT TO SELECT COLOR FOR WEATHER LOUVER.

WEATHER LOUVER & FEMA LOUVER INSTALLATION DETAIL

NO SCALE

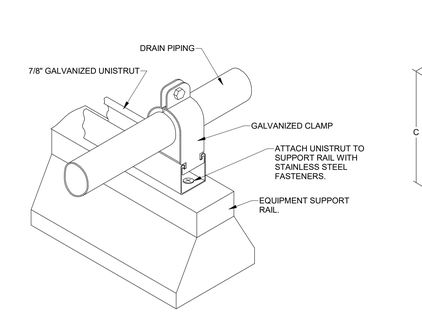


NOTE:

1. PROVIDE ALL WELDED CONSTRUCTION.

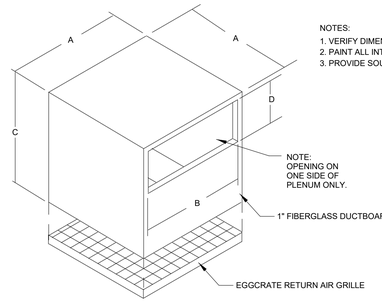
DETAIL OF PIPE PASSING THRU SHELTER WALL OR ROOF

NO SCALE



PIPING SUPPORT DETAIL

NO SCALE



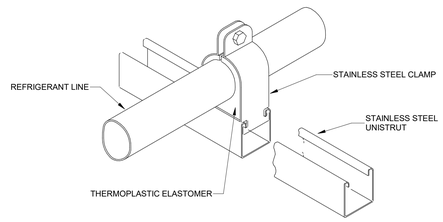
NOTES:

1. VERIFY DIMENSIONS FROM ACTUAL GRILLE SIZES. SEE SCHEDULE
2. PAINT ALL INTERIOR SURFACES FLAT BLACK.
3. PROVIDE SOUND TRAPS FOR ALL UNDUCTED RETURN GRILLES.

DIMENSIONS SCHEDULE				
MARK	"A"	"B"	"C"	"D"
R8	8"	6"	12"	6"
R12	12"	10"	16"	10"
R18	19"	16"	18"	12"
R24	24"	22"	28"	12"

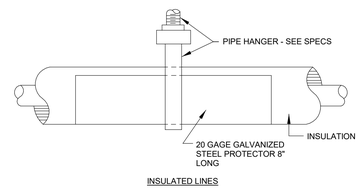
PLENUM RETURN AIR GRILLE SOUND TRAP DETAILS

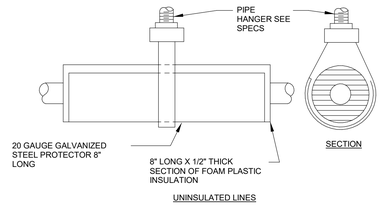
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REFRIGERANT LINE SUPPORT DETAIL

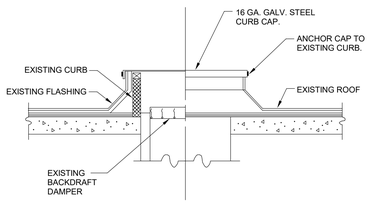
NO SCALE





REFRIGERANT PIPING HANGER DETAIL

NO SCALE



CURB CAP DETAIL

NO SCALE

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Project Number : 50187307

LATHAN McKEE ARCHITECTS

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SHEET TITLE:
MECHANICAL - DETAILS



PROJ. MGR.:	JWS
DRAWN:	LMR
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

SHEET NO:

M0.2

2 OF 8

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (ERU-1)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H100 CORRIDOR	1,363	12,263	ERU-1	R-454B	3.1	4.1	38.0	1
H108 CLASSROOM	907	8,163	ERU-1	R-454B	3.1	2.7	25.3	1
H108A VESTIBULE	129	1,161	ERU-1	R-454B	3.1	0.4	3.6	1
H108B RESTROOM	65	585	ERU-1	R-454B	3.1	0.2	1.8	1
H109 CLASSROOM	914	8,226	ERU-1	R-454B	3.1	2.7	25.5	1
H109B RESTROOM	65	585	ERU-1	R-454B	3.1	0.2	1.8	1
H110 STORAGE	155	1,395	ERU-1	R-454B	3.1	0.5	4.3	1
H111 STORAGE	179	1,611	ERU-1	R-454B	3.1	0.5	5.0	1
H115 JANITOR	75	675	ERU-1	R-454B	3.1	0.2	2.1	1
H112 WOMEN RESTROOM	351	3,159	ERU-1	R-454B	3.1	1.1	9.8	1
H113 CORRIDOR	286	2,574	ERU-1	R-454B	3.1	0.9	8.0	1
H114 MEN RESTROOM	336	3,024	ERU-1	R-454B	3.1	1.0	9.4	1
EXISTING LAB	957	8,613	ERU-1	R-454B	3.1	2.9	26.7	1
					MAXIMUM ALLOWED REFRIGERANT:		161.3	
					TOTAL REFRIGERANT CHARGE:	17.30		

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (IHPs)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H100 CORRIDOR	1,363	12,712	IHP-14 & 15	R-32	4.8	3.8	61.0	1
H108 CLASSROOM	907	8,462	IHP-3	R-32	4.8	4.4	40.6	1
H108A VESTIBULE	129	1,204	ERU-1 ONLY					
H108B RESTROOM	65	606	ERU-1 ONLY					
H109 CLASROOM	914	8,528	IHP-1	R-32	4.8	4.4	40.9	1
H109B RESTROOM	65	606	ERU-1 ONLY					
H110 STORAGE	155	1,446	IHP-2	R-32	4.8	1.9	6.9	1
H111 STORAGE	179	1,670	IHP-11	R-32	4.8	1.9	8.0	1
H115 JANITOR	75	700	ERU-1 ONLY					
H112 WOMEN RESTROOM	351	3,275	IHP-12	R-32	4.8	2.3	15.7	1
H113 CORRIDOR	286	2,668	ERU-1 ONLY					
H114 MEN RESTROOM	336	3,135	IHP-13	R-32	4.8	2.3	15.0	1
EXISTING LAB	957	8,929	ERU-1 ONLY					
					MAXIMUM ALLOWED REFRIGERANT:		188.3	
					TOTAL REFRIGERANT CHARGE:	20.90		

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (ERU-2)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H101 CLASSROOM	803	7,227	ERU-2	R-454B	3.1	2.4	22.4	1
H102 CLASSROOM	803	7,227	ERU-2	R-454B	3.1	2.4	22.4	1
H103 CLASSROOM	803	7,227	ERU-2	R-454B	3.1	2.4	22.4	1
H104 CLASSROOM	820	7,380	ERU-2	R-454B	3.1	2.5	22.9	1
H105 CLASSROOM	1,038	9,342	ERU-2	R-454B	3.1	3.1	29.0	1
H106 CLASSROOM	857	7,713	ERU-2	R-454B	3.1	2.6	23.9	1
H107 CLASSROOM	837	7,533	ERU-2	R-454B	3.1	2.5	23.4	1
H100 CORRIDOR	1,363	12,263	ERU-2	R-454B	3.1	4.1	38.0	1
					MAXIMUM ALLOWED REFRIGERANT:		204.3	
					TOTAL REFRIGERANT CHARGE:	21.91		

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.

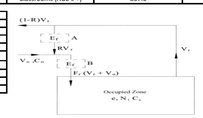
AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (IHPs)

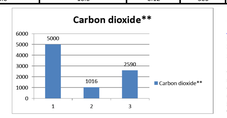
ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H101 CLASSROOM	803	7,492	IHP-10	R-32	4.8	4.4	36.0	1
H102 CLASSROOM	803	7,492	IHP-9	R-32	4.8	4.4	36.0	1
H103 CLASSROOM	803	7,492	IHP-8	R-33	4.8	4.4	36.0	2
H104 CLASSROOM	820	7,651	IHP-7	R-34	4.8	4.4	36.7	3
H105 CLASSROOM	1,038	9,685	IHP-6	R-35	4.8	4.4	46.5	4
H106 CLASSROOM	857	7,996	IHP-5	R-36	4.8	4.4	38.4	5
H107 CLASSROOM	837	7,809	IHP-4	R-37	4.8	4.4	37.5	6
H100 CORRIDOR	1,363	12,712	IHP-16 & 17	R-32	4.8	2.3	61.0	1
					MAXIMUM ALLOWED REFRIGERANT:		328.0	
					TOTAL REFRIGERANT CHARGE:	33.33		

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Voz/Ez)
TYPICAL 800 SF CLASSROOM	Educational Facilities	Classrooms (AGE 9 +)	857.0	30.0	10.0	0.12	300	103	0.8	504
										OA required per VRP

Zone Height (feet)	9.0
Desired Outside Air (Vo) IAQP	150
Supply Air (Vs)	940
Return Air (Vr)	940
Recirc. Flow Factor (R)	1.00
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	**Sedentary**
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant





***OSHA, NIOSH & WHO most conservative values used
http://www.cdc.gov/niosh/npg/npgsyn-a.html
1 = ASHRAE & NIOSH CO2 Limit
2 = CO2 Level at Ventilation Rate OA Flow Rate
3 = CO2 Level at IAQ Procedure OA Flow Rate
**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove CO2 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

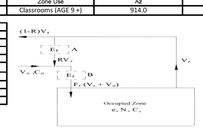
Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01111	0.00135	Yes	0.00032	50%	OSHA
Acetone	250.0	0.00159	0.00041	Yes	0.00433	50%	NIOSH
Ammonia	25.00	0.01231	0.00860	Yes	0.14210	50%	NIOSH
Benzene	1.0000	0.00252	0.00031	Yes	0.00015	50%	OSHA
2- Butanone (MEK)	200.0	0.00017	0.00007	Yes	0.00088	50%	NIOSH
Carbon dioxide**	5000	1016	2590	Yes	292	0%	NIOSH
Chloroform	2.0000	0.00011	0.00001	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	0%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00075	0.00013	Yes	0.00080	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00005	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00533	0.00065	Yes	0.00021	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00076	0.00011	Yes	0.00038	50%	NIOSH
Xylene	100.0000	0.00230	0.00028	Yes	0.00000	50%	OSHA

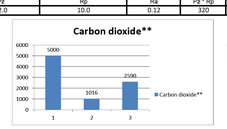
Building materials and furnishings assumed to have no VOCs and off-gassing is complete

Is IAQ acceptable at reduced outside air levels?	Yes

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Voz/Ez)
TYPICAL SHELTER CLASSROOM	Educational Facilities	Classrooms (AGE 9 +)	914.0	32.0	10.0	0.12	320	110	0.8	537
										OA required per VRP

Zone Height (feet)	9.0
Desired Outside Air (Vo) IAQP	160
Supply Air (Vs)	1,120
Return Air (Vr)	1120
Recirc. Flow Factor (R)	1.00
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	**Sedentary**
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant





***OSHA, NIOSH & WHO most conservative values used
http://www.cdc.gov/niosh/npg/npgsyn-a.html
1 = ASHRAE & NIOSH CO2 Limit
2 = CO2 Level at Ventilation Rate OA Flow Rate
3 = CO2 Level at IAQ Procedure OA Flow Rate
**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove CO2 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01111	0.00125	Yes	0.00032	50%	OSHA
Acetone	250.0	0.00159	0.00038	Yes	0.00433	50%	NIOSH
Ammonia	25.00	0.01231	0.00809	Yes	0.14210	50%	NIOSH
Benzene	1.0000	0.00252	0.00029	Yes	0.00015	50%	OSHA
2- Butanone (MEK)	200.0	0.00017	0.00006	Yes	0.00088	50%	NIOSH
Carbon dioxide**	5000	1016	2590	Yes	292	0%	NIOSH
Chloroform	2.0000	0.00011	0.00001	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00075	0.00012	Yes	0.00080	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00004	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00533	0.00060	Yes	0.00021	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00076	0.00010	Yes	0.00038	50%	NIOSH
Xylene	100.0000	0.00230	0.00026	Yes	0.00000	50%	OSHA

Building materials and furnishings assumed to have no VOCs and off-gassing is complete

Is IAQ acceptable at reduced outside air levels?	Yes

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS SUMMARY

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H100 CORRIDOR	1,363	12,263	7.8	38.0	1,2
H108 CLASSROOM	907	8,163	7.2	25.3	1,2
H108A VESTIBULE	129	1,161	0.4	3.6	1,2
H108B RESTROOM	65	585	0.2	1.8	1,2
H109 CLASSROOM	914	8,226	7.2	25.5	1,2
H109B RESTROOM	65	585	0.2	1.8	1,2
H110 STORAGE	155	1,395	2.3	4.3	1,2
H111 STORAGE	179	1,611	2.4	5.0	1,2
H115 JANITOR	75	675	0.2	2.1	1,2
H112 WOMEN RESTROOM	351	3,159	3.3	9.8	1,2
H113 CORRIDOR	286	2,574	0.9	8.0	1,2
H114 MEN RESTROOM	336	3,024	3.3	#REF!	1,2
EXISTING LAB	957	8,613	2.9	26.7	1,2
			MAXIMUM ALLOWED REFRIGERANT:	#REF!	
			TOTAL REFRIGERANT CHARGE:	38.20	

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.
2. THE MAX. ALLOWED REFRIGERANT IS THE WORST CASE BETWEEN R-32 AND R-454B.

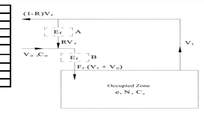
AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS SUMMARY

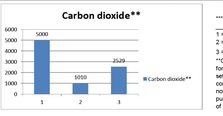
ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
H101 CLASSROOM	803	7,227	6.8	22.4	1,2
H102 CLASSROOM	803	7,227	6.8	22.4	1,2
H103 CLASSROOM	803	7,227	6.8	22.4	1,2
H104 CLASSROOM	820	7,380	6.9	22.9	1,2
H105 CLASSROOM	1,038	9,342	7.5	29.0	1,2
H106 CLASSROOM	857	7,713	7.0	23.9	1,2
H107 CLASSROOM	837	7,533	6.9	23.4	1,2
H100 CORRIDOR	1,363	12,263	6.3	38.0	1,2
			MAXIMUM ALLOWED REFRIGERANT:	204.3	
			TOTAL REFRIGERANT CHARGE:	55.24	

1. OCCUPIED SPACE COMPLIES WITH 2024 IMC CHAPTER 11, ASHRAE 15-2022, AND ASHRAE 34-2022.
2. THE MAX. ALLOWED REFRIGERANT IS THE WORST CASE BETWEEN R-32 AND R-454B.

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Voz/Ez)
H105 CLASSROOM	Educational Facilities	Classrooms (AGE 9 +)	1,038.0	35.0	10.0	0.12	350	125	0.8	593
										OA required per VRP

Zone Height (feet)	9.0
Desired Outside Air (Vo) IAQP	180
Supply Air (Vs)	1,120
Return Air (Vr)	1120
Recirc. Flow Factor (R)	1.00
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	**Sedentary**
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant





***OSHA, NIOSH & WHO most conservative values used
http://www.cdc.gov/niosh/npg/npgsyn-a.html
1 = ASHRAE & NIOSH CO2 Limit
2 = CO2 Level at Ventilation Rate OA Flow Rate
3 = CO2 Level at IAQ Procedure OA Flow Rate
**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove CO2 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01111	0.00137	Yes	0.00032	50%	OSHA
Acetone	250.0	0.00158	0.00041	Yes	0.00433	50%	NIOSH
Ammonia	25.00	0.01221	0.00861	Yes	0.14210	50%	NIOSH
Benzene	1.0000	0.00252	0.00031	Yes	0.00015	50%	OSHA
2- Butanone (MEK)	200.0	0.00017	0.00006	Yes	0.00088	50%	NIOSH
Carbon dioxide**	5000	1010	2529	Yes	292	0%	NIOSH
Chloroform	2.0000	0.00011	0.00001	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00075	0.00013	Yes	0.00080	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00005	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00532	0.00066	Yes	0.00021	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00076	0.00011	Yes	0.00038	50%	NIOSH
Xylene	100.0000	0.00230	0.00028	Yes	0.00000	50%	OSHA

Building materials and furnishings assumed to have no VOCs and off-gassing is complete

Is IAQ acceptable at reduced outside air levels?	Yes

OSA CALCULATIONS

Room	Room Type	Rp cfm / P	Pz People	Ra cfm/ft²	Az ft²	Vbz cfm	Ez	Voz cfm	Provided OSA (IAQP) cfm
H100 CORRIDOR	Corridors	0	0	0.06	1,363	82	0.80	102	120
H108 CLASSROOM	Classrooms (ages 9 plus)	10	32	0.12	907	429	0.80	536	160
H108A VESTIBULE	Corridors	0	0	0.06	129	8	0.80	10	30
H108B RESTROOM	TOILET				65			0	70
H109 CLASSROOM	Classrooms (ages 9 plus)	10	32	0.12	914	430	0.80	537	160
H109B RESTROOM	TOILET				65			0	70
H110 STORAGE	Storage Rooms	0		0.12	155	19	0.80	23	30
H111 STORAGE	Storage Rooms	0	0	0.12	179	21	0.80	27	30
H115 JANITOR	JANITOR				75			0	0
H112 WOMEN RESTROOM	TOILET				351			0	0
H113 CORRIDOR	Corridors	0	0	0.06	286	17	0.80	21	120
H114 MEN RESTROOM	TOILET				336			0	0
EXISTING LAB	Classrooms (ages 9 plus)	10	30	0.12	957	415	0.80	519	1,000
					Total Required by ERU-1:			1,154	
					Total Provided by ERU-1 using IAQP:				1,650

EXHAUST AIR CALCULATIONS

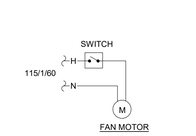
# OF FIXTURES	# OF SHOWERS	EXHAUST RATE CFM/FT²	EXHAUST RATE CFM / FIXTURE	EXHAUST RATE CFM/ SHOWER	REQUIRED EXHAUST CFM	PROVIDED EXHAUST CFM	EXHAUST PROVIDED BY
0	0	N/A	N/A	N/A	0	0	N/A
0	0	N/A	N/A	N/A	0	160	ERU-1
0	0	N/A	N/A	N/A	0	0	N/A
1	0	N/A	N/A	70	70	70	CEF-1
0	0	N/A	N/A	N/A	0	160	ERU-1
1	0	N/A	N/A	70	70	70	CEF-2
0	0	N/A	N/A	N/A	0	0	N/A
0	0	N/A	N/A	N/A	0	0	N/A
1	0	N/A	N/A	75	80	80	ERU-1
6	0	N/A	50	N/A	300	300	ERU-1
0	0	N/A	N/A	0	0	0	N/A
6	0	N/A	50	N/A	300	300	ERU-1
0	0	N/A	N/A	N/A	0	0	N/A
				TOTAL PROVIDE EXHAUST BY ERU-1:		1,000	

OSA CALCULATIONS

Room	Room Type	Rp cfm / P	Pz People	Ra cfm/ft²	Az ft²	Vbz cfm	Ez	Voz cfm	Provided OSA (IAQP) cfm
H101 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	803	396	0.80	495	150
H102 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	803	396	0.80	495	160
H103 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	803	396	0.80	495	160
H104 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	820	398	0.80	498	150
H105 CLASSROOM	Classrooms (ages 9 plus)	10	35	0.12	1,038	475	0.80	593	180
H106 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	857	403	0.80	504	150
H107 CLASSROOM	Classrooms (ages 9 plus)	10	30	0.12	837	400	0.80	501	150
H100 CORRIDOR	Corridors	0	0	0.06	1,363	82	0.80	102	720
					Total Required by ERU-2:			3,684	
					Total Provided by ERU-2 using IAQP:				1,800

EXHAUST AIR CALCULATIONS

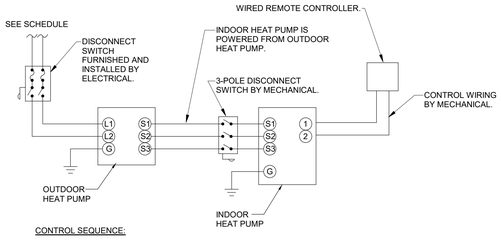
# OF FIXTURES	# OF SHOWERS	EXHAUST RATE CFM/FT²	EXHAUST RATE CFM / FIXTURE	EXHAUST RATE CFM/ SHOWER	REQUIRED EXHAUST CFM	PROVIDED EXHAUST CFM	EXHAUST PROVIDED BY
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	180	ERU-2
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	150	ERU-2
0	0	N/A	N/A	N/A	0	0	N/A
				TOTAL PROVIDE EXHAUST BY ERU-2:		1,080	



EXHAUST FAN CONTROLLED BY SWITCH. EXHAUST FAN CONTROLLED BY LIGHTING CIRCUIT.

EXHAUST FAN CONTROLS

NO SCALE



CONTROL SEQUENCE:

THE AC UNIT SHALL BE CONTROLLED BY A WIRED WALL MOUNTED REMOTE CONTROLLER. THE CONTROLLER SHALL CYCLE ON COMPRESSOR(S) TO MAINTAIN COOLING SETPOINT (74°F - ADJUSTABLE) AND HEATING SETPOINT (70°F - ADJUSTABLE). ALL MINI-SPLIT AC UNITS THAT SERVE ELECTRICAL AND IT ROOMS SHALL NOT SET THEIR TEMPERATURE BACK AT NIGHT. FOR ALL MINI-SPLIT AC UNITS THAT SERVE OFFICES, CLASSROOMS, ETC. SHALL SET THEIR TEMPERATURE BACK TO 4°F ABOVE SETPOINT IN SUMMER AND 4°F BELOW SETPOINT IN THE WINTER. COORDINATE WITH OWNER TO ESTABLISH OCCUPIED / UNOCCUPIED SCHEDULES.

DUCTLESS SPLIT SYSTEM CONTROLS

NO SCALE

REFRIGERANT LEAK DETECTION CONTROLS:

1. THE LEAK DETECTION SYSTEM SHALL CONSIST OF ONE OR MORE REFRIGERANT LEAK DETECTION SENSORS INSTALLED IN THE HVAC EQUIPMENT BY THE HVAC EQUIPMENT MANUFACTURER.

A. UTILIZE A SET POINT, NONADJUSTABLE IN THE FIELD, TO GENERATE AN OUTPUT SIGNAL TO INITIATE MITIGATION ACTIONS.

B. FIELD RECALIBRATION OF THE REFRIGERANT DETECTION SYSTEM SHALL NOT BE PERMITTED.

C. BE CAPABLE OF DETECTING THE PRESENCE OF A SPECIFIED REFRIGERANT CORRESPONDING TO THE REFRIGERANT DESIGNATION OF THE REFRIGERANT CONTAINED IN THE REFRIGERATION SYSTEM.

D. HAVE ACCESS FOR REPLACEMENT OF REFRIGERANT DETECTION SYSTEM COMPONENTS.

E. HALF SELF-DIAGNOSTICS TO DETERMINE OPERATIONAL STATUS OF THE SENSING ELEMENT.

F. ENERGIZE AIR CIRCULATION FANS OF THE EQUIPMENT UPON FAILURE OF A SELF DIAGNOSTIC CHECK.

G. GENERATE AN OUTPUT SIGNAL IN NOT MORE THAN 30 SECONDS WHEN EXPOSED TO A REFRIGERANT CONCENTRATION OF 25% LFL (+0%,-1%).

2. WHEN THE SYSTEM DETECTS A LEAK, THE FOLLOWING MITIGATION ACTIONS WILL BE INITIATED UNTIL REFRIGERANT HAS NOT BEEN DETECTED FOR 5 MINUTES:

A. SUPPLY FANS SHALL BE ENERGIZED TO RUN AT 100% FAN SPEED.

B. COMPRESSOR OPERATION SHALL BE DISABLED.

C. ALL ZONING DAMPERS, SUCH AS VAV TERMINAL UNITS SHALL BE OPENED TO 100%.

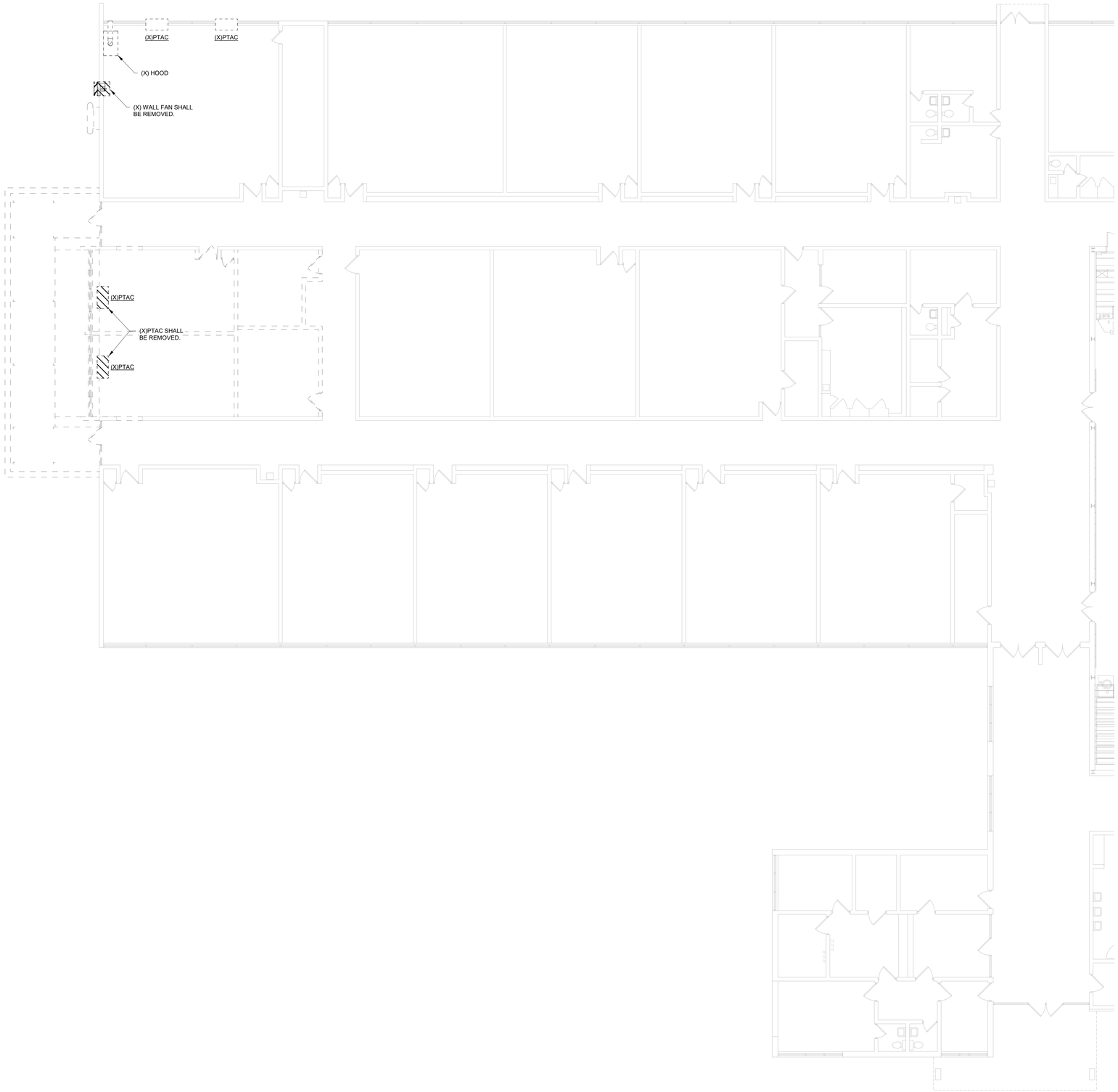
D. ALL ELECTRIC HEAT OR GAS HEAT SHALL BE DISABLED.

3. THE BUILDING FIRE AND SMOKE SYSTEMS SHALL OVERRIDE THIS FUNCTION.

4. IF THE REFRIGERANT SENSOR HAS A FAULT, IS AT THE END OF ITS USEFUL LIFE, OR IS DISCONNECTED, THE AC UNIT WILL INITIATE THE ABOVE MITIGATION ACTIONS. ADDITIONAL

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1 MECHANICAL - DEMOLITION FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - DEMOLITION FLOOR PLAN

ALABAMA
No. 24747
PROFESSIONAL
07-11-2025
ENGINEER
JOSE STEWART

PROJ. MGR.:	JWS
DRAWN:	LMR
DATE:	07.11.2025
REVISIONS	

JOB NO. 24-106

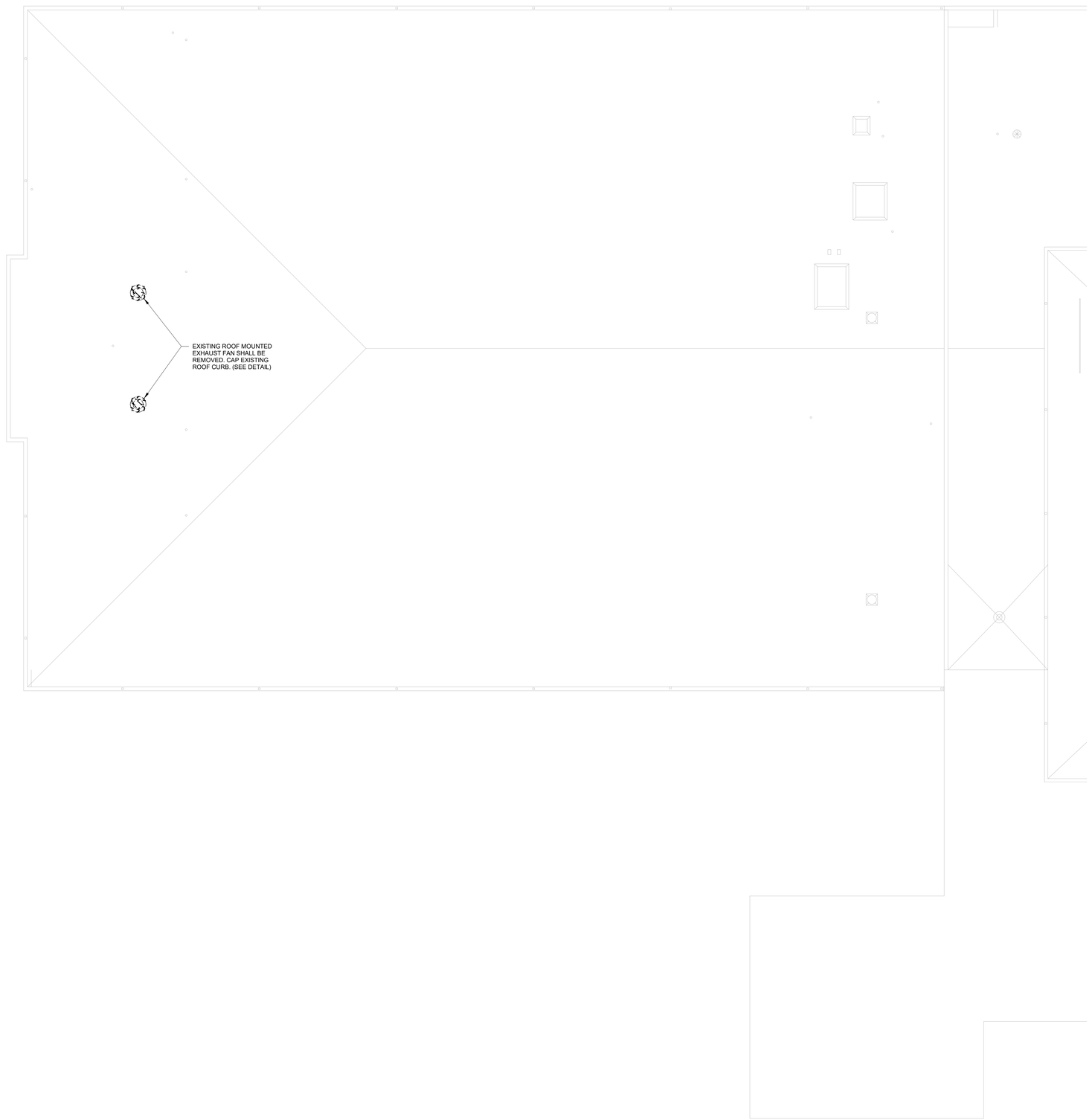
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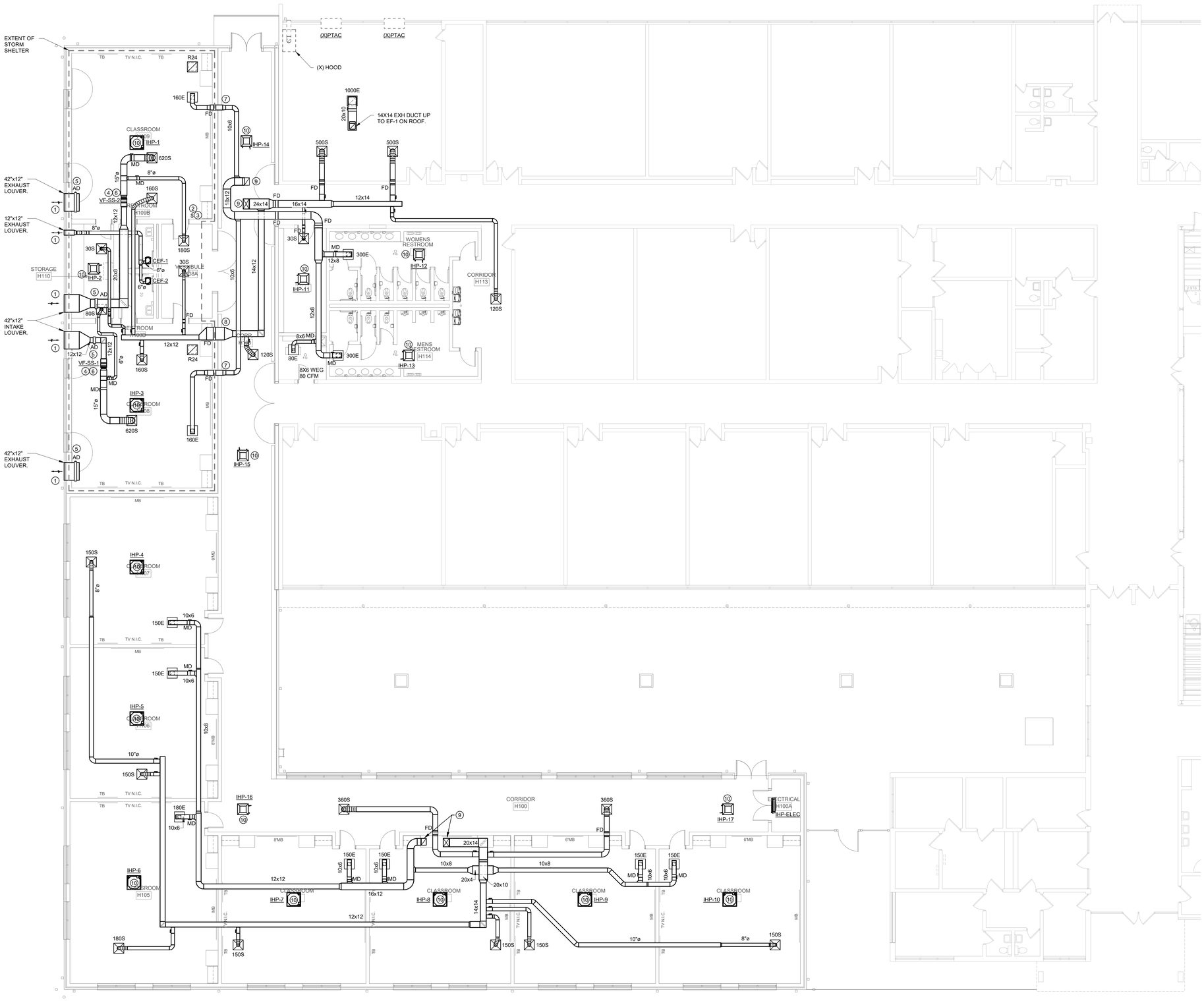
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1 HVAC - RENOVATION FLOOR PLAN

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STORM SHELTER CALCULATIONS

MECHANICAL VENTILATION SHALL BE PROVIDED FOR THE STORM SHELTER.

PER ICC-500-2020, CHAPTER 7, PART 702.4.2, "Tornado shelter that rely on mechanical ventilation shall be provided with the minimum mechanical rate of required outdoor air at a minimum rate of 5 cubic feet per minute per occupant for the design occupant capacity. The mechanical ventilation system shall be connected to a standby power system."

THE MECHANICAL VENTILATION SYSTEM CONSISTS OF USING A SUPPLY FAN AND AN EXHAUST FAN TO PROVIDE MINIMUM OUTSIDE AIR AT A RATE OF 5 CUBIC FEET PER OCCUPANT WITHIN THE SHELTER.

ALL FANS ARE ON EMERGENCY POWER AND SHALL BE CONTROLLED BY A WALL MOUNTED "ON/OFF" SWITCH.

SEE OUTSIDE AIR CALCULATIONS BELOW.

TOTAL REQUIRED OCCUPANT LOAD: 287 PEOPLE
TOTAL REQUIRED OUTSIDE AIR: 287 PEOPLE X 5 CFM = 1435 CFM
TOTAL PROVIDED OUTSIDE AIR: 1500 CFM

STORM SHELTER GENERAL NOTES

1. ALL PIPING AND DUCTWORK LOCATED WITHIN THE STORM SHELTER SHALL BE SUPPORTED WITH TRAPEZE HANGERS CONSISTING OF UNISTRUT WITH ALL-THREAD ROAD. ALL THREAD SHALL BE ATTACHED TO THE JOISTS/BEAMS IN THE SHELTER.
2. COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR PROOF WITH GENERAL CONTRACTOR.
3. DO NOT PENETRATE OR CUT BOND BEAMS. WEATHER LOUVERS SHALL BE INSTALLED IN BRICK, IN FRONT OF SHELTER LOUVERS. WEATHER LOUVERS SHALL HAVE DRAINABLE BLADE. WEATHER LOUVERS SHALL BE RUSKIN ELF375 OR APPROVED EQUAL.
4. SHELTER LOUVERS SHALL BE INSTALLED IN THE SHELTER WALL. SHELTER LOUVERS SHALL BE GREENHECK MODEL AFL-501, RUSKIN XP500, OR APPROVED EQUAL. HIGH IMPACT LOUVERS SHALL MEET THE IMPACT TESTING CRITERIA FOR TORNADO SHELTERS PER ICC 500 / FEMA 361 AND SHALL BE LABELED THAT THEY HAVE BEEN TESTED TO MEET THAT REQUIREMENT.
5. SIGNAGE FOR EMERGENCY VENTILATION FAN SWITCHES (REFER TO ARCHITECTURAL SIGNAGE SPECIFICATION FOR SIGN AND TEXT COLOR AND SIZE) (COORDINATED EXACT LOCATION WITH ARCHITECT) SIGNAGE TO SAY THE FOLLOWING:

   "EMERGENCY VENTILATION FANS TO BE SWITCHED ON UPON A LOSS OF POWER IN THE SHELTER DURING A STORM EVENT."

   "ALL SHELTER CLASSROOM AND STORAGE DOORS ARE TO BE OPENED IF EMERGENCY VENTILATION FANS ARE ON."

   "EMERGENCY VENTILATION FANS ARE TO BE SWITCHED OFF UPON POWER RESTORED."

KEYED NOTES

1. HIGH IMPACT LOUVERS AND WEATHER LOUVERS. HIGH IMPACT LOUVERS SHALL MEET IMPACT TESTING CRITERIA FOR TORNADO SHELTERS IN ICC 500/FEMA 361. LOUVER TO BE GREENHECK MODEL AFL-501 OR EQUAL. SEE DETAIL. WEATHER LOUVER SHALL BE INSTALLED ON EXTERIOR WALL WITH HIGH IMPACT LOUVER INSTALLED BEHIND WEATHER LOUVER. (EXTERIOR WALL APPLICATION ONLY). TOP OF STORM LOUVER SHALL BE INSTALLED BELOW BOND BEAMS.
2. WALL SWITCH FOR SHELTER SUPPLY FANS TO BE ACTIVATED UPON THE LOSS OF POWER DURING A STORM EVENT.
3. SIGNAGE FOR EMERGENCY VENTILATION FAN SWITCH (REFER TO ARCHITECTURAL SIGNAGE SPECIFICATIONS FOR SIGN AND TEXT COLOR AND SIZE)(COORDINATE EXACT LOCATION WITH ARCHITECT.)
4. STORM SHELTER SUPPLY FAN TO RUN WHENEVER THERE IS A STORM EVENT BY TURNING THE WALL SWITCH TO THE "ON" POSITION. NORMALLY, THE STORM SHELTER SUPPLY FAN SHALL BE "OFF".
5. AUTOMATIC DAMPER IS NORMALLY CLOSED AND SHALL OPEN WHEN POWER IS LOST. DAMPER SHALL SPRING RETURN TO OPEN POSITION.
6. SUSPEND FAN FROM STRUCTURE WITH SPRING VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTION (WITH GROUNDING STRAP) ON INLET & OUTLET OF FAN.
7. 12X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
8. 30X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
9. SA AND EXH DUCT UP AND TRANSITION TO FULL SIZE OF UNIT OPENING.
10. SUSPEND UNIT FROM STRUCTURE ABOVE.

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SHEET TITLE:
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No. 34747
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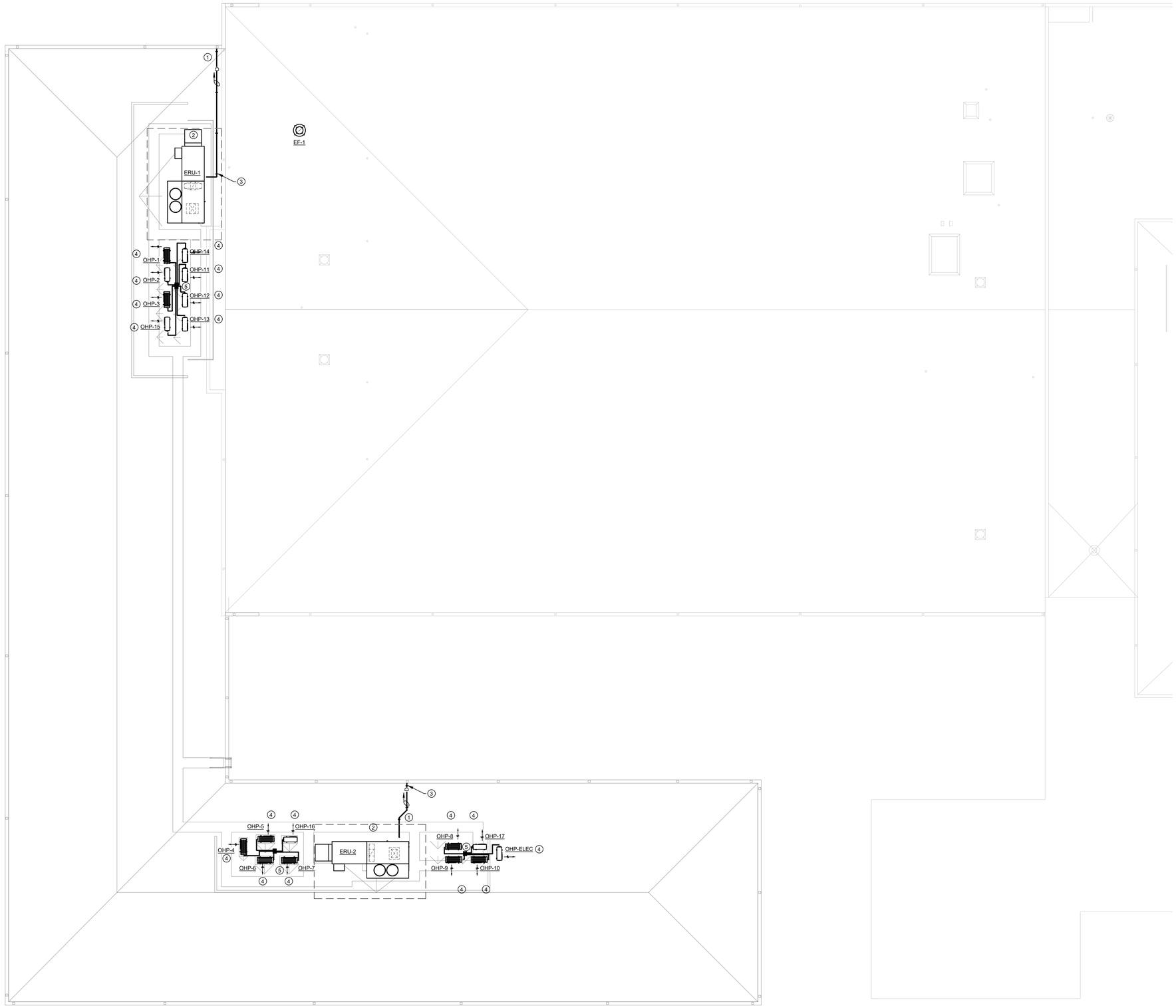
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KEYED NOTES

1. ROUTE 1-1/4"ø CONDENSATE TO NEAREST GUTTER.
2. INSTALL UNIT ON ROOF MINIMUM 10'-1" FROM EDGE OF ROOF. COORDINATE LOCATION AND ROOF PENETRATIONS WITH STRUCTURAL. PROVIDE MANUFACTURER RECOMMENDED CLEARANCES. INSTALL ON 14" HIGH ROOF CURB WITH SPRING VIBRATION ISOLATORS.
3. ROOF PIPING SUPPORTS. (MIRO INDUSTRIES MODEL 1.5) (SEE DETAIL)
4. INSTALL OHP AT LEAST 10'-1" FROM EDGE OF ROOF. INSTALL ON PATE EQUIPMENT SUPPORT RAIL (SEE DETAIL.) (TYP.)
5. ROUTE PIPING DOWN THRU HOOD. SEAL WATERTIGHT. (SEE DETAIL)

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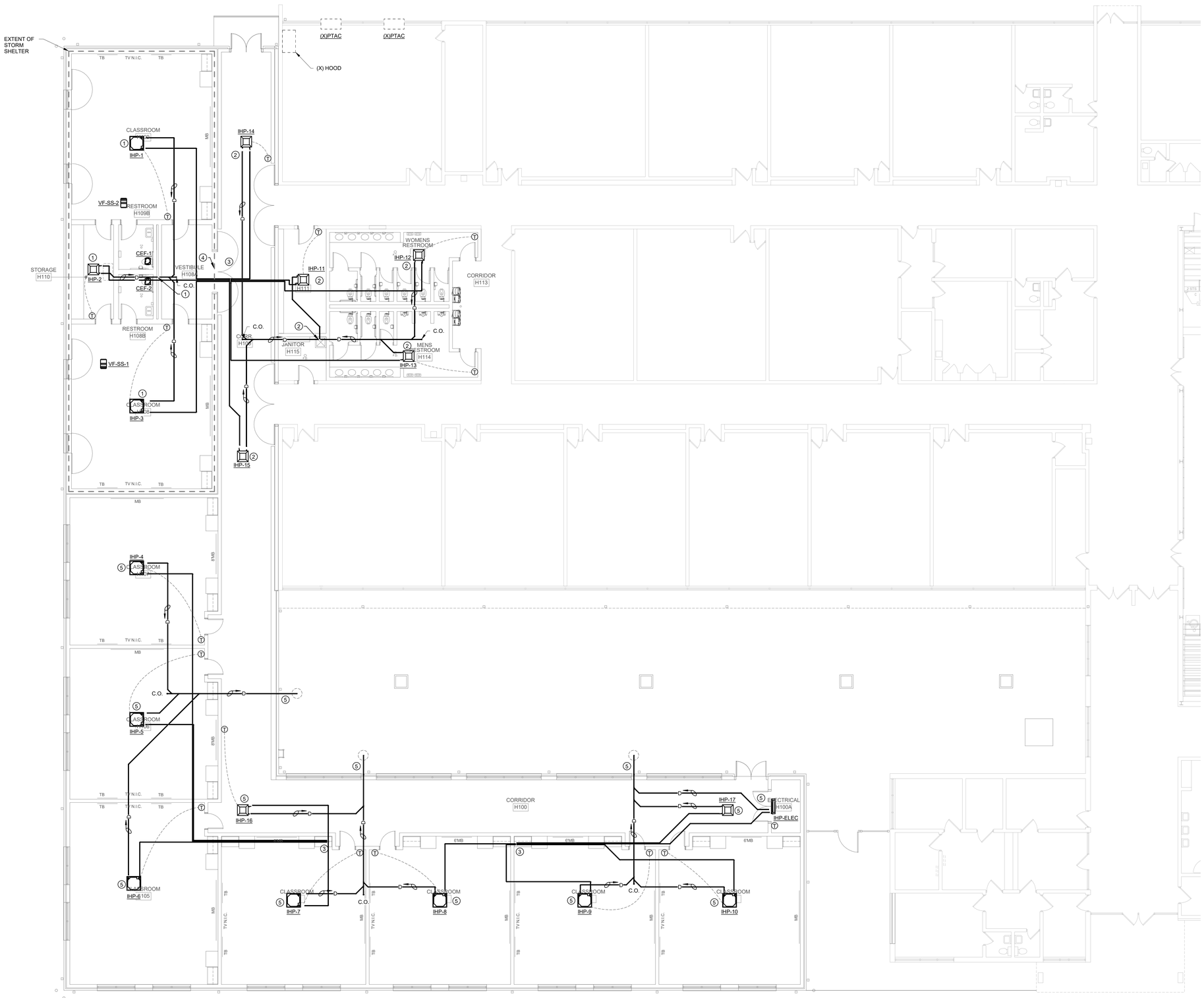
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KEYED NOTES

1. ROUTE 1" CONDENSATE DRAIN TO NEAREST CONDENSATE DRAIN BOX. (SEE PLBG)
2. ROUTE 1" CONDENSATE DRAIN TO NEAREST MOP SINK (SEE PLBG)
3. ROUTE REFRIGERANT PIPING UP THRU ROOF TO OHP ON ROOF. SUPPLY AND RETURN AIR DUCT UP AND TRANSITION TO FULL SIZE UNIT OPENING.
4. PIPE PENETRATION THRU SHELTER (SEE DETAIL)
5. ROUTE 1" CONDENSATE DRAIN DOWN IN EXTERIOR WALL TO NEAREST SPLASH BLOCK (SEE DETAIL)

1 PIPING - RENOVATION FLOOR PLAN

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0' 4' 8' 16'

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

SHEET TITLE:
PIPING - RENOVATION FLOOR PLAN



PROJ. MGR.:	JWS
DRAWN:	LMR
DATE:	07.11.2025
REVISIONS	

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LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
A	METALUX	24CGT5535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
A1 (EM)	METALUX	24CGT5535C EBPLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
B	METALUX	24CGT4535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
B (EM)	METALUX	24CGT4535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
B1 (EM)	METALUX	24CGT4535C EBPLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
C	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA-6VLEDMD-SCLPF	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	
C (EM)	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA-6VLEDMD-SCLPF-EM	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTE 1
D	METALUX	4SNLED-LD4-4600SL-LW-UNV-L840-CD1	FURNISHED WITH FIXTURE			CEILING	SURFACE		
G	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR	FURNISHED WITH FIXTURE			+9'	BRACKET		
G (EM)	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR-BBB	FURNISHED WITH FIXTURE			+9'	BRACKET		SEE NOTE 1
X	SURE-LITES	EUX7-R-UNV	FURNISHED WITH FIXTURE			℄ ABOVE DOOR	BRACKET		SEE NOTE 1

NOTES:
1. FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS. UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING.
2. VERIFY ALL FIXTURE COLORS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO SUBMITTALS.
3. EQUAL FIXTURES BY LITHONIA, PARKER, COLUMBIA, AND DAYBRITE WILL BE CONSIDERED APPROVED EQUALS.
4. FIXTURE TYPES A1(EM) AND B1(EM) ARE EMERGENCY LIGHTS LOCATED IN THE STORM SHELTER. THESE LIGHTS ARE SPECIFIED WITH SURE-LITES LED BATTERY PACKS THAT ARE 7 WATTS AND RATED TO RUN FOR 3 HOURS.

GENERAL NOTES

1. SERVICE TO PROJECT IS 120/208 VOLTS, 3 PHASE, 4 WIRE.
2. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
3. VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
4. CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
5. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF COUNTERTOPS AND BACKSPLASHES ON ARCHITECTURAL DETAILS AND/OR CASEWORK SHOP DRAWINGS AND ADJUST SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED TO AVOID CONFLICTS.
6. CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
7. FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
8. SUPPORT OF ALL LIGHTING FIXTURES TO BE THE RESPONSIBILITY OF THIS CONTRACTOR. FIXTURES TO BE SUPPORTED INDEPENDENT OF CEILING FROM STRUCTURAL MEMBERS OF THE BUILDING.
9. ELECTRICAL CONTRACTOR MUST CHECK THE CORRESPONDING MECHANICAL SHEETS AND BE RESPONSIBLE FOR INCLUDING PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL ITEMS SHOWN THEREON REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
10. ALL CONDUIT CONCEALED UNLESS SPECIFICALLY SHOWN EXPOSED. METAL WIRE MOLD IS PERMITTED WHERE SURFACE MOUNT CONDUIT IS REQUIRED.
11. COORDINATE SERVICES WITH POWER AND COMMUNICATIONS COMPANIES. REMOVE OR RELOCATE ALL POWER AND COMMUNICATIONS CIRCUITS ABOVE OR BELOW GRADE THAT WOULD OBSTRUCT THE CONSTRUCTION OF THE PROJECT OR CONFLICT IN ANY MANNER WITH COMPLETION OF THE PROJECT OR ANY CODE PERTAINING THERETO. IF UTILITY COMPANY REQUIREMENTS ARE AT VARIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACT PRICE SHALL INCLUDE THE ADDITIONAL COST.
12. IT IS INTENDED THAT SPECIFICATIONS AND PLANS SHALL INCLUDE EVERYTHING REQUIRED AND NECESSARY FOR PROPER AND COMPLETE INSTALLATION OF THE COMPLETE SYSTEMS SHOWN EVEN THOUGH EVERY ITEM MAY NOT BE PARTICULARLY MENTIONED IN DETAIL. THE CONTRACTOR SHALL DELIVER TO OTHER TRADES ANY EQUIPMENT THAT MUST BE INSTALLED DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENTS AND COORDINATION OF THE PHYSICAL SIZE OF ALL EQUIPMENT WITH THE ARCHITECTURAL REQUIREMENTS OF THE SPACES INTO WHICH THE EQUIPMENT WILL BE INSTALLED.
13. THIS CONTRACTOR SHALL INSTALL EQUIPMENT GROUNDS THROUGHOUT THIS PROJECT, USING GREEN INSULATED GROUND WIRE. USE OF CONDUIT AS THE ONLY GROUND CONDUCTOR WILL NOT BE ALLOWED. (SIZE GROUND WIRES PER N.E.C.)
14. REMOVE ALL EXISTING PANELBOARDS, DISCONNECTS, FIXTURES, RECEPTACLES, AUXILIARY SYSTEM DEVICES, CONDUIT, CONDUCTORS, ETC. BEING RENDERED OBSOLETE BY THIS PROJECT.
15. WHERE EXISTING REMAINING CIRCUITS ARE BEING INTERRUPTED DUE TO STRUCTURAL AND/OR DESIGN CHANGES, THIS CONTRACTOR WILL EXTEND EXISTING CIRCUITS AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY TO REMAINING ACTIVE DEVICES.

CODE EXCEPTION NOTE

THIS PROJECT HAS BEEN DESIGNED UNDER ASHRAE 90.1 2013, EXCEPT AS FOLLOWS: WE TAKE EXCEPTION TO SECTION 8.4.2 FOR REQUIRING CONTROLLED RECEPTACLES, AND SECTION 8.4.3 FOR REQUIRING ENERGY MONITORING. WE OFFICIALLY REQUEST THAT THIS PROJECT BE APPROVED WITHOUT THOSE ITEMS.

ELECTRICAL SYMBOLS

(A)$^{1}_{a}$	CEILING OUTLET – FIXTURE "A", CIRCUIT 1, SWITCH a.
	CEILING OUTLET – FLUORESCENT FIXTURE.
	CEILING OUTLET – FLUORESCENT INDUSTRIAL OR STRIP TYPE.
	WALL OUTLET – INCANDESCENT BRACKET TYPE.
	WALL OUTLET – FLUORESCENT BRACKET TYPE.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR – TAMPER RESISTANT.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR – TAMPER RESISTANT – MOUNT AT 6" ABOVE COUNTER.
GFCI	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR – TAMPER RESISTANT.
WP GFCI	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR – TAMPER RESISTANT. INSTALL #WIUC10-CAGV WEATHERPROOF COVER. DEVICE SHALL BE LABELED AS "EXTRA DUTY".
	WALL OUTLET – SINGLE OUTLET, 30A, 125/250V, 4W, BY HUBBELL OR APPROVED EQUAL.
•	FLOOR OUTLET – CONDUIT STUB UP.
	CEILING OUTLET – JUNCTION BOX.
	WALL OUTLET – JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT.
$	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 – GREY.("N" DENOTES NARROW)
$_2$	SWITCH OUTLET – AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 – GREY.
$_3$	SWITCH OUTLET – AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 – GREY.
$_4$	SWITCH OUTLET – AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 – GREY.
$_M$	SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
	LIGHTING PANEL – SEE SPECIFICATIONS AND SCHEDULE.
	POWER PANELS – SEE SPECIFICATIONS AND SCHEDULE.
	BRANCH CIRCUIT CONCEALED IN WALL OR CEILING.
	BRANCH CIRCUIT CONCEALED IN FLOOR OR GROUND.
	HOMERUN TO PANELBOARD – ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2 # 12 & 1 # 12(G) – 1/2" CONDUIT. 3 # 12 & 1 # 12(G) – 3/4" CONDUIT. 4 # 12 & 1 # 12(G) – 3/4" CONDUIT.
E	EMPTY CONDUIT – 3/4".
	BRANCH CIRCUIT EXPOSED.
◦	CONDUIT RUN DOWN WALLS, CONCEALED
•	CONDUIT RUN UP WALLS, CONCEALED
(5)	MOTOR SHOWN 5hp (TYPICAL) OR (20) 40 AMPS (TYPICAL).
(F)	EXHAUST FAN MOTOR – FRACTIONAL HORSEPOWER.
	MAGNETIC MOTOR STARTER.
	NON-FUSED DISCONNECT SWITCH. (RT – RAINTIGHT).
	FUSED DISCONNECT SWITCH.
TBB	TELEPHONE BACKBOARD – 4' X 4' X 3/4" – 2 COATS OF GREY ENAMEL BOTH SIDES. (OR AS NOTED).
A.F.F.	ABOVE FINISHED FLOOR.
VER.	VERIFY LOCATION.
N.E.C.	NATIONAL ELECTRICAL CODE.
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
WP	WEATHER PROOF
C.A.	CARD ACCESS SYSTEM
WG	WIRE GUARD COVER
	FIRE ALARM – SMOKE DETECTOR – SEE SPEC.
H	FIRE ALARM – HEAT DETECTOR – SEE SPEC.
	FIRE ALARM – MAGNETIC DOOR HOLDER – SEE SPEC.
F	FIRE ALARM – MANUAL PULL STATION – SEE SPEC.
	FIRE ALARM – STROBE LIGHT – SEE SPEC.
	FIRE ALARM – STROBE LIGHT/SPEAKER – SEE SPEC.
FACP	FIRE ALARM CONTROL PANEL – EXISTING – SEE SPEC.
S.S.C.	INTERCOM SOUND CONSOLE – EXISTING – SEE SPEC.
(S)	SOUND SYSTEM – CEILING MOUNTED SPEAKER – SEE SPEC.
	SOUND SYSTEM – CALL-IN SWITCH – SEE SPEC.
H	SOUND SYSTEM – DIGITAL CLOCK – SEE SPEC.
SCREEN H	SOUND SYSTEM – 22" CLOCK/MESSAGE SCREEN – CAREHAWK CLK-MSL22A
S	SOUND SYSTEM – WIRING – SEE SPEC.
▽	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING-SEE SPEC.
▽	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING-MOUNT 6" ABOVE COUNTER-SEE SPEC.
D	DATA CONDUIT – BELOW GRADE DATA CONDUIT WITH DATA CABLES (3/4" UNLESS OTHERWISE SPECIFIED)
	FUTURE CAMERA LOCATION – CONTRACTOR SHALL SUPPLY AND INSTALL 1 CAT 6 CABLE CONNECTED TO MDF/IDF RACK (IN 3/4" CONDUIT WHEN NOT ABOVE CEILING). CAMERAS WILL BE ADDED BY OWNER IN THE FUTURE. CONTRACTOR SHALL ONLY INSTALL CABLE AND LEAVE AT LOCATION AS REQUIRED.
(M)	CEILING MOUNTED MOTION DETECTOR – COOPER #OMC-P-1200-R
M	MOTION SENSOR SWITCHPACK – COOPER #SP20-MV (INSTALLED ABOVE LAY-IN CEILING)
$MS	WALL SWITCH WITH BUILT IN MOTION SENSOR – COOPER #OSW-P-0451-W WITH WALL PLATE
M	MOTION SENSOR WIRING – LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)

FIRE ALARM SYSTEM NOTES

1. PROVIDE FIRE ALARM COMPLETION DOCUMENTS AT THE STATE FINAL INSPECTION. THIS ITEM WILL BE REQUIRED BY STATE BUILDING INSPECTOR AT THE TIME OF FINAL INSPECTION (OLD CERTIFICATION FORM).
2. ADDITIONS AND ALTERATIONS TO THE FIRE ALARM SYSTEM REQUIRE TESTING, A RECORD OF COMPLETION, AND RECERTIFICATION. ALL FIRE ALARM WORK SHALL BE PERFORMED BY QUALIFIED PERSONNEL AS DEFINED IN NFPA-72 (2013) 10.4.2, 10.5.2, AND 10.18.1.
3. ALL WORK SHALL BE PERFORMED BY A CERTIFIED FIRE ALARM CONTRACTOR – SEE SPECS.

COLOR CODE FOR JUNCTION BOXES

NOTE:
PAINT ALL JUNCTION BOXES AND COVERS WITH COLORS AS SHOWN BELOW. PAINTING COVERS ONLY IS NOT ACCEPTABLE.

FUNCTION:	COLOR:
LIGHTING	BLUE
POWER	GREEN
FIRE ALARM	RED

COLOR CODE FOR ELECTRICAL WIRING

1. 120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
   PHASE A-BLACK
   B-RED
   C-BLUE
   N-WHITE
2. GROUND-GREEN

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Alabama Reg. 14817
Project Number:
2563

LATHAN ▪ McKEE ARCHITECTS

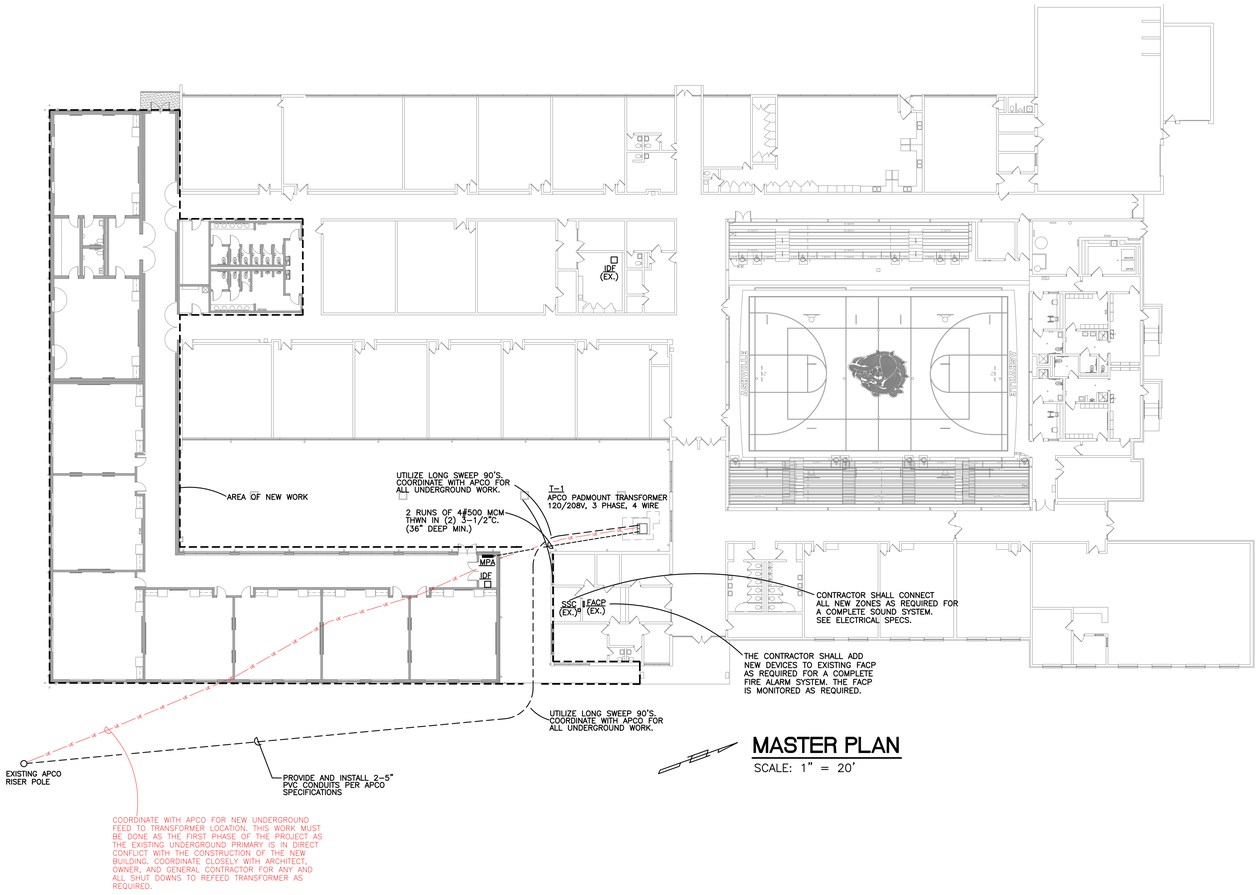
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
SCHEDULES, SYMBOLS, AND NOTES

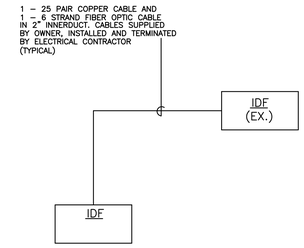
ALABAMA LICENSED No. 29110 PROFESSIONAL ENGINEER J. RYAN HART
07-31-2025

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
E1.1
1 OF 6



MASTER PLAN
SCALE: 1" = 20'



MDF FIBER OPTIC CABLE RISER DIAGRAM
N.T.S.

APCO NOTES

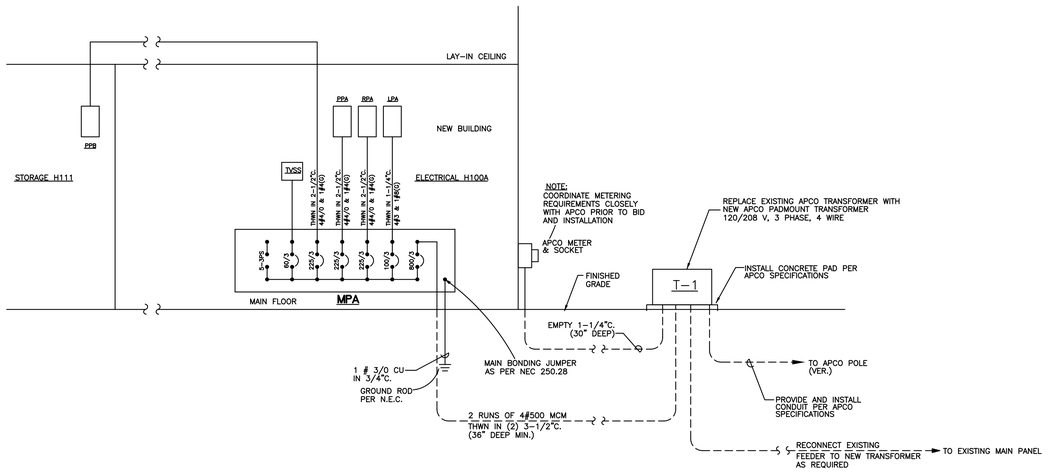
1. CONTRACTOR SHALL COORDINATE CLOSELY WITH ALABAMA POWER AND SHALL PROVIDE AND INSTALL ANY AND ALL LABOR AND OR MATERIAL, AS REQUIRED BY APCO, REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL DRAWINGS.
2. ANY AND ALL COSTS ASSOCIATED WITH PROVIDING THIS LABOR AND/OR MATERIAL SHALL BE INCLUDED IN BID PRICE.
3. CONTRACTOR SHALL OBTAIN ALL DIRECT CHARGES FROM ALABAMA POPWER, AND INCLUDE THESE CHARGES IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING APCO DURING THE BID PROCESS.

ALUMINUM NOTE

THE CONTRACTOR SHALL HAVE THE CHOICE OF INSTALLING FEEDERS WITH ALL COPPER WIRE AS SPECIFIED, OR INSTALLING ALUMINUM FEEDERS ON ALL WIRE SIZED #3/0 AND LARGER. ALL WIRING SMALLER THAN #3/0 SHALL BE COPPER WITH NO EXCEPTIONS.

COPPER SIZE:	ALUMINUM SIZE:
3/0	250 MCM
4/0	300 MCM
350 MCM	500 MCM
500 MCM	750 MCM
600 MCM	900 MCM

CONTRACTOR SHALL INCREASE CONDUIT SIZES ACCORDINGLY TO MEET N.E.C. FILL REQUIREMENTS.



ELECTRICAL SINGLE LINE DIAGRAM (MPA)
N.T.S.

PANELBOARD SCHEDULE - AREA M

MARK	TYPE	MAINS			BRANCHES					LUG LOCATION	TYPE MOUNTING	AREA PANEL LOCATED	AVAILABLE FAULT CURRENT	REMARKS
		TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES					
MPA	I-LINE	M/B	800	120/208V 3ø, 4W			1-60 1-90 1-100 1-110 3-225		5-3PS	BOTTOM	SURFACE	ELEC H100A	31,000	SEE NOTES 1, 2, 3, 4, & 5
LPA	NQOD	LUGS	100	120/208V 3ø, 4W	7-20			6-20/1	17-1PS	BOTTOM	SURFACE	ELEC H100A	20,000	SEE NOTES 1, 2, & 4
RPA	NQOD	LUGS	225	120/208V 3ø, 4W	32-20		1-60	6-20/1	13-1PS	BOTTOM	SURFACE	ELEC H100A	24,000	SEE NOTES 1, 2, & 4 54 SPACE PANEL
PPA	NQOD	LUGS	225	120/208V 3ø, 4W		3-20 7-25		6-20/1	16-1PS	BOTTOM	SURFACE	ELEC H100A	22,000	SEE NOTES 1, 2, & 4
PPB	NQOD	LUGS	225	120/208V 3ø, 4W	6-20	6-20 2-25 *1-30		6-20/1	12-1PS	TOP	SURFACE	STOR H111	10,000	SEE NOTES 1, 2, & 4

NOTES:
1. ALL PANELBOARDS SHALL BE CAPABLE OF WITHSTANDING AND INTERRUPTING THE AVAILABLE FAULT CURRENTS AS LISTED ABOVE.
2. ALL PANELBOARDS SHALL HAVE MICARTA LABELS SHOWING PANELBOARD DESIGNATION, AND OPERATING VOLTAGE. I-LINE PANELBOARDS SHALL ALSO HAVE MICARTA LABELS AT EACH BREAKER.
3. SHALL BE EQUIPPED WITH BUILT-IN SURGE PROTECTION, CAPABLE OF WITHSTANDING A TRANSIENT SURGE OF 160,000 AMPS. (60/3 BREAKER CALLED FOR IN MPA FOR THIS PURPOSE).
4. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.
5. SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.

PANELBOARD NOTES:
1. MANUFACTURER OF SWITCHBOARDS AND/OR PANELBOARDS SHALL PERFORM FAULT CURRENT CALCULATIONS, COORDINATION STUDY, AND ARC FLASH HAZARD ANALYSIS, AND LABEL ALL SWITCHBOARDS AND/OR PANELBOARDS, IN ACCORDANCE WITH NFPA 70E-2020 (ARTICLE 130) AND NFPA 70-2020 (ARTICLE 110.16).
2. CONTRACTOR SHALL FIELD MARK ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
3. CONTRACTOR SHALL FIELD MARK ELECTRICAL PANELS WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES WHERE PANELS ARE FED FROM PER NEC 408.4(B).

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Project Number:
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LATHAN McKEE ARCHITECTS

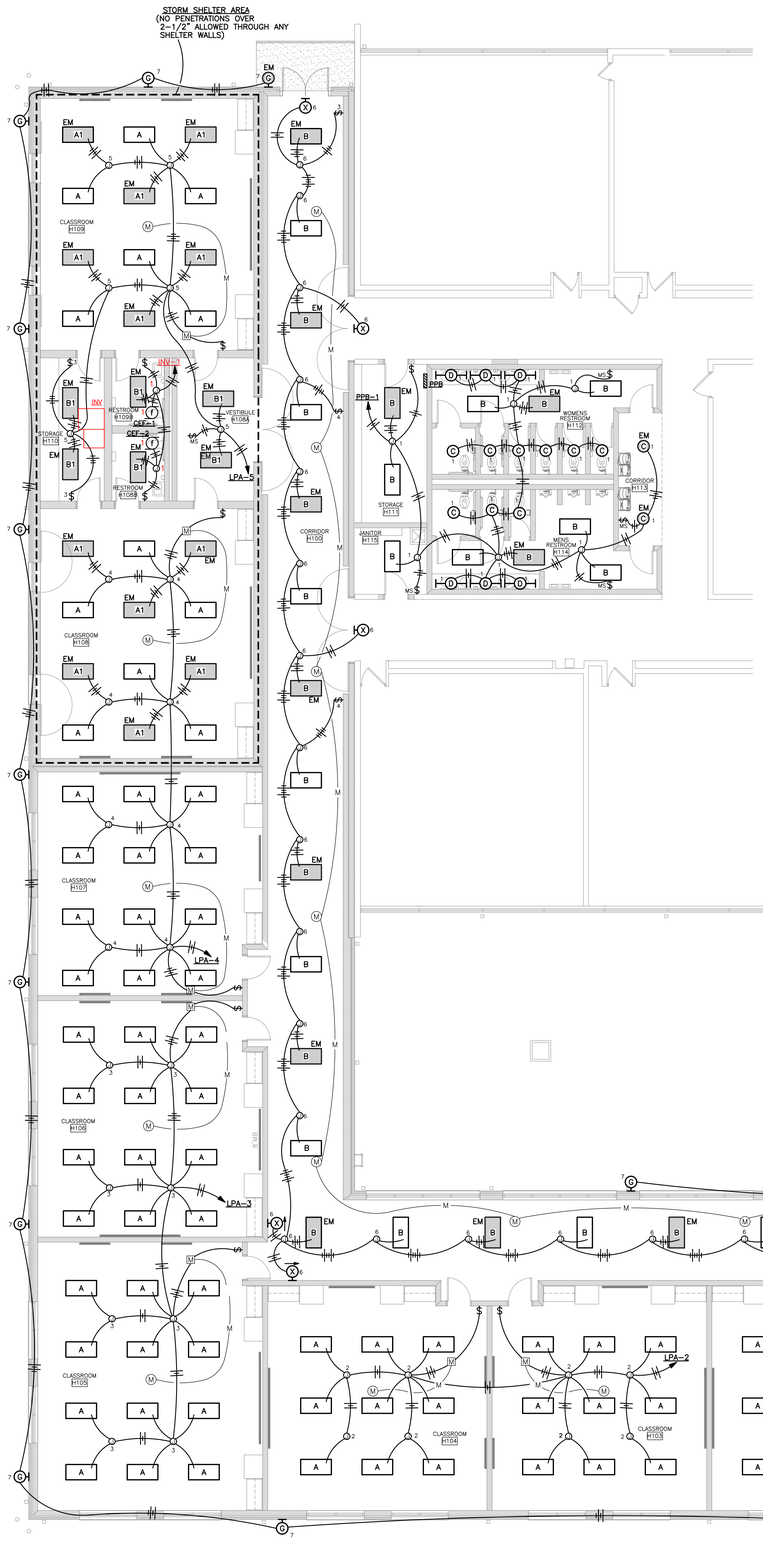
NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
MASTER PLAN AND SINGLE LINE DIAGRAM

ALABAMA LICENSED PROFESSIONAL ENGINEER RYAN HART No. 34162
07-31-2025

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: JULY 31, 2025
REVISIONS

JOB NO. 24-106
SHEET NO:
E2.1
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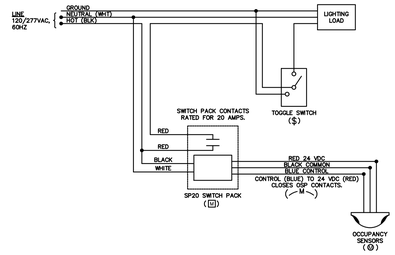
FLOOR PLAN - LIGHTING

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

NOTES:
1. ALL WIRING SHOWN FEEDING EXTERIOR FIXTURES SHALL BE #10 THWN.

ENERGY CODE NOTES:

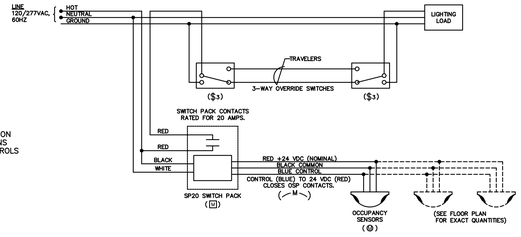
1. LIGHTING INSTALLED WITH MOTION SENSORS SHALL HAVE THE REQUIRED CONNECTION TO THE PUSH BUTTON WALL STATION AND MOTION SENSORS TO ACCOMPLISH PARTIAL-ON AND MANUAL-ON. MOTION SENSORS AND WALL STATION SHALL ALSO HAVE CONNECTIONS FOR BI-LEVEL LIGHTING WHERE REQUIRED. VERIFY ALL CONTROLS WITH LIGHTING CONTROLS MANUFACTURER DURING SITE VISIT FROM FACTORY TRAINED REPRESENTATIVE.



OCCUPANCY SENSOR - 1 WAY

WIRING DIAGRAM - SINGLE POWER PACK APPLICATION

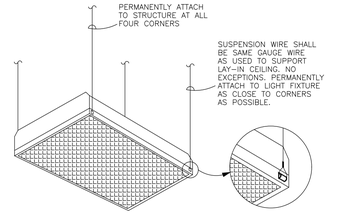
NOT TO SCALE



OCCUPANCY SENSOR - 3 WAY

USING POWER PACK SENSORS IN A 3-WAY SWITCHED CIRCUIT

NOT TO SCALE



DETAIL - LIGHT FIXTURE SUPPORT

N.T.S.

DETAIL - P.E. CELL

N.T.S.

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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
FLOOR PLAN - LIGHTING

ALABAMA LICENSED No. 29160 PROFESSIONAL ENGINEER RYAN HART
07-31-2025

PROJ. MGR.:	LANCE JUNKIN
DRAWN:	SEC
DATE:	JULY 31, 2025
REVISIONS	

JOB NO. 24-106

SHEET NO:
E3.1
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FLOOR PLAN - POWER

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

NOTES:

1. COORDINATE ALL OUTLETS AT COUNTER AREAS CLOSELY WITH ARCHITECTURAL CASEWORK DRAWINGS. PLACE OUTLETS BELOW COUNTERS, AT STANDARD MOUNTING HEIGHT, WHEN KNEE SPACE PERMITS ACCESS (COORDINATE INSTALLATION OF HOLES WITH RUBBER GROMMETS IN THOSE CASES).
2. COORDINATE INSTALLATION OF OUTLETS CLOSELY WITH FURNITURE SUPPLIER.
3. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THWN.

LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
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SHEET TITLE: FLOOR PLAN - POWER

ALABAMA LICENSED No. 29110 PROFESSIONAL ENGINEER RYAN HART
07-31-2025

PROJ. MGR.:	LANCE JUNKIN
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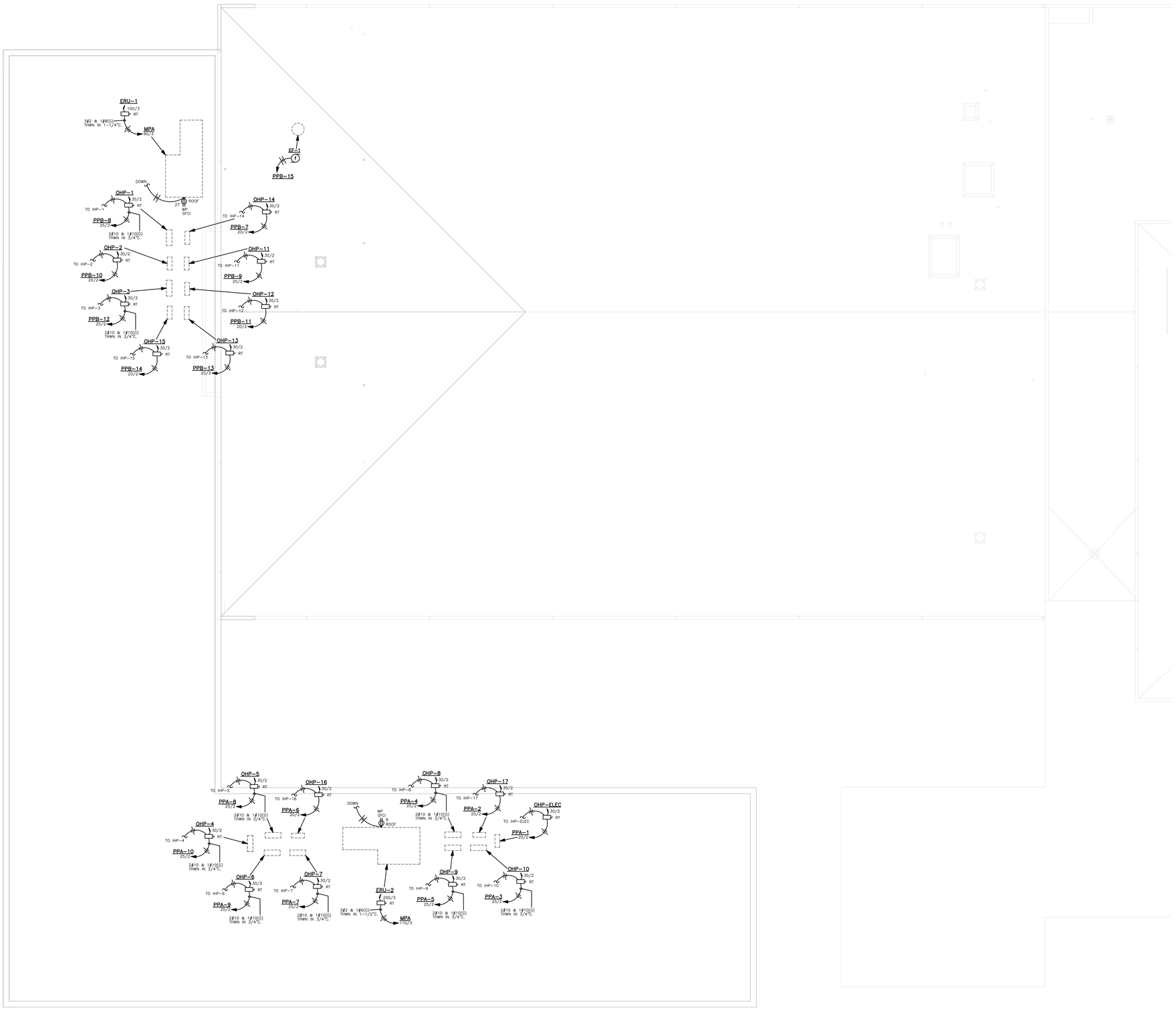
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JOB NO. 24-106

SHEET NO: E4.1

4 OF 6

0 1" 2"



ROOF PLAN - POWER

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

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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF PLAN - POWER

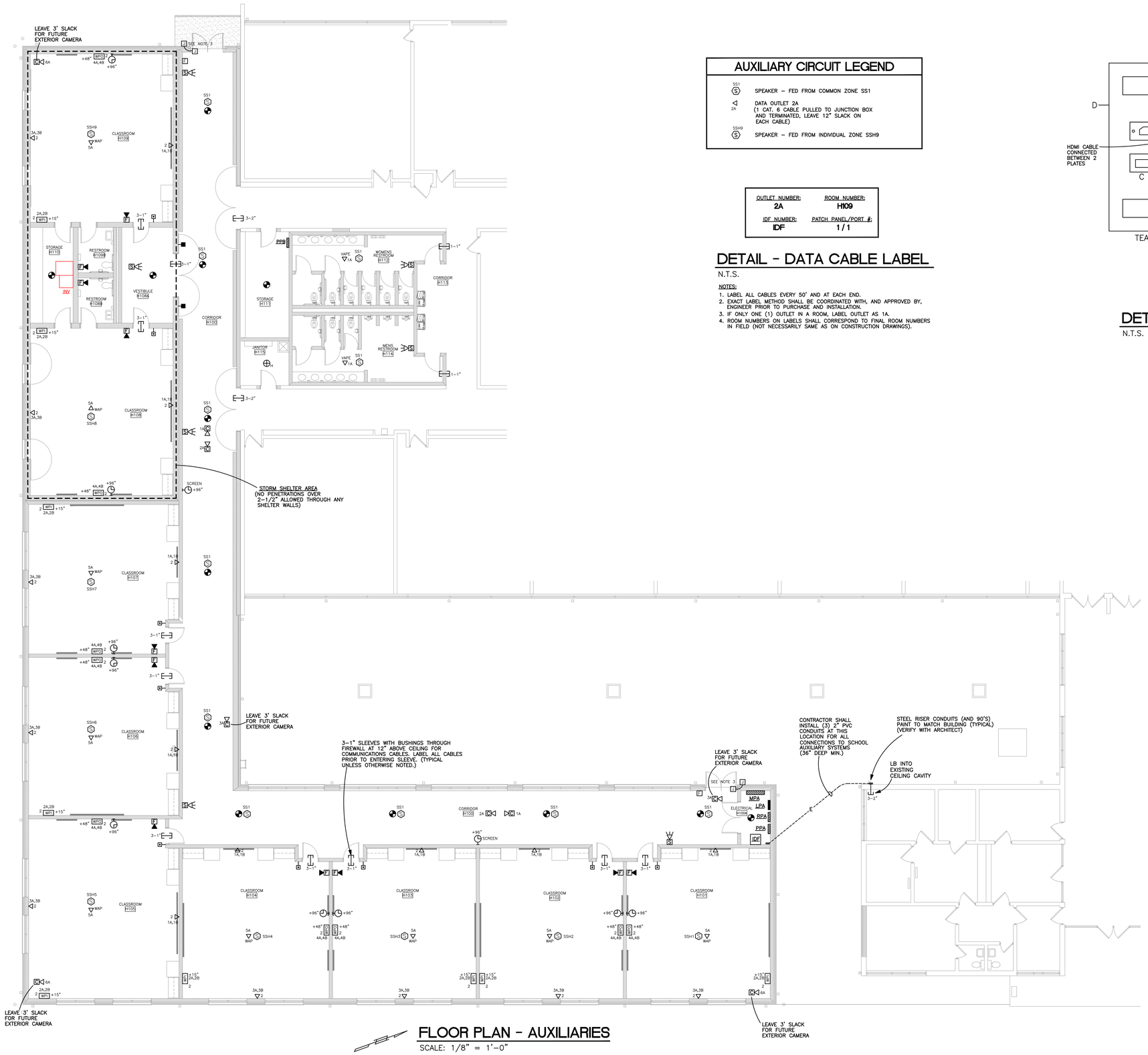
ALABAMA LICENSED No. 29110 PROFESSIONAL ENGINEER RYAN HART
07-31-2025

PROJ. MGR.:	LANCE JUNKIN
DRAWN:	SEC
DATE:	JULY 31, 2025
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JOB NO. 24-106

SHEET NO:
E4.2
5 OF 6

0 1" 2"



AUXILIARY CIRCUIT LEGEND

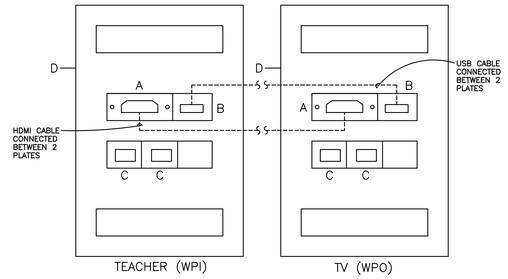
SS1 (S)	SPEAKER – FED FROM COMMON ZONE SS1
2A	DATA OUTLET 2A (1 CAT. 6 CABLE PULLED TO JUNCTION BOX AND TERMINATED, LEAVE 12" SLACK ON EACH CABLE)
SSH9 (S)	SPEAKER – FED FROM INDIVIDUAL ZONE SSH9

OUTLET NUMBER:	ROOM NUMBER:
2A	H109
IDF NUMBER:	PATCH PANEL/PORT #:
IDF	1 / 1

DETAIL - DATA CABLE LABEL

N.T.S.

NOTES:
1. LABEL ALL CABLES EVERY 50' AND AT EACH END.
2. EXACT LABEL METHOD SHALL BE COORDINATED WITH, AND APPROVED BY, ENGINEER PRIOR TO PURCHASE AND INSTALLATION.
3. IF ONLY ONE (1) OUTLET IN A ROOM, LABEL OUTLET AS 1A.
4. ROOM NUMBERS ON LABELS SHALL CORRESPOND TO FINAL ROOM NUMBERS IN FIELD (NOT NECESSARILY SAME AS ON CONSTRUCTION DRAWINGS).



A HDMI CONNECTION
B USB CONNECTION
C DATA CAT 6 CONNECTION
D S.S. PLATE

DETAIL - PROJECTION PLATES

N.T.S.

FLOOR PLAN - AUXILIARIES

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

NOTES:
1. ALL COMPUTER OUTLETS SHOWN ON THIS PLAN ARE SERVED FROM IDF.
2. COORDINATE FINAL LOCATIONS OF ALL CEILING SPEAKERS, SMOKE DETECTORS, ETC. TO AVOID CONFLICT WITH LIGHT FIXTURES AND MECHANICAL DIFFUSERS. PLACE THESE DEVICES AS CLOSE AS POSSIBLE TO LOCATION SHOWN ON THESE DRAWINGS. COORDINATE WITH FIRE ALARM SYSTEM MANUFACTURER WITH REGARD TO APPROPRIATE "MINIMUM" DISTANCE FROM DIFFUSERS.
3. AT THESE DOOR LOCATIONS, CONTRACTOR SHALL INSTALL EMPTY JUNCTION BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING TO ABOVE LAY-IN CEILING FOR FUTURE CARD ACCESS SYSTEM. COORDINATE CLOSELY WITH ARCHITECT FOR DOOR HARDWARE CONFIGURATION.

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LATHAN McKEE ARCHITECTS

NEW CLASSROOM ADDITION FOR
ASHVILLE HIGH SCHOOL
33125 US-231, ASHVILLE, AL 35953
ST. CLAIR COUNTY BOARD OF EDUCATION

SHEET TITLE:
FLOOR PLAN - AUXILIARIES

ALABAMA LICENSED No. 29760 PROFESSIONAL ENGINEER J. RYAN HART
07-31-2025

PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: JULY 31, 2025
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JOB NO. 24-106
SHEET NO:
E5.1
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