

CLASSROOM ADDITION TO ELVIN HILL ELEMENTARY SCHOOL

201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION



SHELBY COUNTY BOARD OF EDUCATION

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COLUMBIANA, ALABAMA 35051

CIVIL ENGINEER TTL, INC.
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STRUCTURAL ENGINEER STRUCTURAL DESIGN GROUP, INC.
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SUITE 125
HOOVER, ALABAMA 35244

ARCHITECT LATHAN ASSOCIATES ARCHITECTS, P.C.
dba LATHAN McKEE ARCHITECTS
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HOOVER, ALABAMA 35244
EMAIL: RFI@LATHANASSOCIATES.COM

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

ELECTRICAL ENGINEER STEWART ENGINEERING, INC.
P.O. BOX 2233
ANNISTON, ALABAMA 36202

DRAWING INDEX (SET - 80 TOTAL SHEETS)

GENERAL (4 SHEETS)

- T1 - TITLE AND INDEX
- LS1.1 - LIFE SAFETY PLAN
- SH1.1 - TORNADO SHELTER PLANS
- SH1.2 - SHELTER SIGNS

CIVIL DRAWINGS (12 SHEETS)

- C0.1 - CIVIL NOTES
- C1.0 - SITE DEMOLITION PLAN
- C2.0 - SITE LAYOUT PLAN BASE BID
- C3.0 - GRADING PLAN BASE BID
- C3.1 - DRAINAGE PLAN BASE BID
- C4.0 - EROSION CONTROL PLAN BASE BID
- C5.0 - SITE UTILITY PLAN BASE BID
- C6.0 - SITE LAYOUT AND UTILITY PLAN ALTERNATE
- C6.1 - GRADING, DRAINAGE, & EROSION CONTROL PLAN - ALT.
- C7.0 - CIVIL DETAILS
- C7.1 - CIVIL DETAILS
- C7.2 - CIVIL DETAILS

ARCHITECTURAL DRAWINGS (22 SHEETS)

- A0.1 - ARCHITECTURAL SITE PLAN
- A1.0 - DEMOLITION PLAN
- A2.0 - FLOOR PLAN - BASE BID
- A2.0.1 - FLOOR PLAN ADDITION/ALTERNATE
- A2.1 - ROOF PLAN
- A2.2 - ROOF DETAILS
- A2.3 - DOOR AND WINDOW SCHEDULE
- A2.4 - ALTERNATE RAMP AND DETAILS
- A3.0 - ELEVATIONS
- A3.1 - BUILDING SECTIONS
- A3.2 - WALL SECTIONS
- A3.3 - WALL SECTIONS
- A3.4 - WALL SECTIONS
- A5.1 - ENLARGED TOILET PLANS, LEGEND & INTERIOR ELEVATIONS
- A5.2 - DETAILS
- A6.1 - INTERIOR ELEVATIONS AND DETAILS
- A7.1 - REFLECTED CEILING PLAN, LEGEND, NOTES, AND DETAILS - BASE BID
- A7.1.1 - REFLECTED CEILING PLAN, LEGEND AND NOTES - ALTERNATE
- A8.1 - FINISH FLOOR PLAN, LEGENDS, FINISH SCHEDULE, AND DETAILS - BASE BID
- A8.1.1 - FINISH FLOOR PLAN, LEGENDS, AND FINISH SCHEDULE - ALTERNATE
- A9.1 - ROOM SIGNAGE PLAN, DETAILS AND LEGEND - BASE BID
- A9.1.1 - ROOM SIGNAGE PLAN, DETAILS, AND LEGEND - ALTERNATE

STRUCTURAL DRAWINGS (16 SHEETS)

- S1.0 - GENERAL NOTES
- S1.1 - GENERAL NOTES CONTINUED
- S1.2 - GENERAL NOTES CONTINUED
- S1.3 - TYPICAL DETAILS
- S1.4 - TYPICAL DETAILS
- S1.5 - TYPICAL DETAILS
- S1.6 - TYPICAL DETAILS
- S2.0 - FOUNDATION PLAN
- S2.0A - FOUNDATION PLAN - ALTERNATE
- S2.1 - ROOF FRAMING PLAN
- S2.1A - ROOF FRAMING PLAN - ALTERNATE
- S3.1 - SECTIONS & DETAILS
- S3.2 - SECTIONS & DETAILS
- S4.1 - SECTIONS & DETAILS
- S4.2 - SECTIONS & DETAILS
- S4.3 - SECTIONS & DETAILS

PLUMBING DRAWINGS (6 SHEETS)

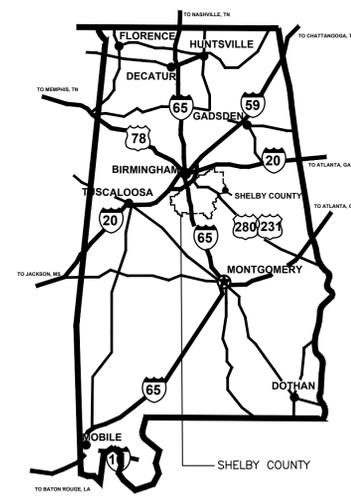
- P0.1 - PLUMBING SCHEDULE, DETAILS, AND NOTES
- P1.0 - PLUMBING - FLOOR PLAN - DEMOLITION
- P1.1 - NON-PRESSURE PIPING - FLOOR PLAN - BASE BID
- P1.2 - PRESSURE PIPING - FLOOR PLAN - BASE BID
- P2.0 - NON-PRESSURE PIPING - FLOOR PLAN - ALTERNATE
- P2.1 - PRESSURE PIPING - FLOOR PLAN - ALTERNATE

MECHANICAL DRAWINGS (14 SHEETS)

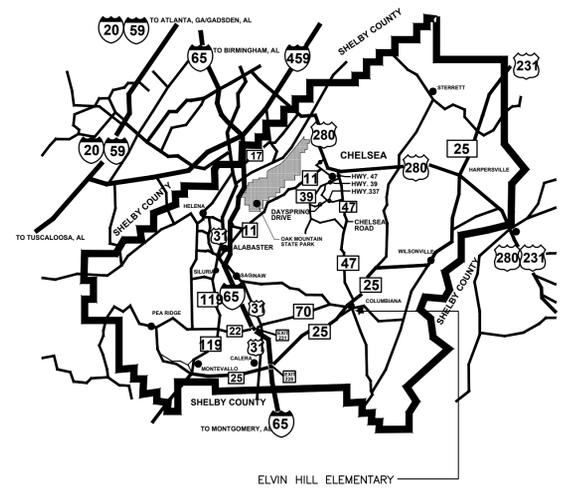
- M0.1 - MECHANICAL LEGEND, SCHEDULES, AND NOTES
- M0.2 - MECHANICAL SCHEDULES
- M0.3 - MECHANICAL DETAILS
- M0.4 - MECHANICAL DETAILS
- M0.5 - MECHANICAL CALCULATIONS AND CONTROLS
- M0.6 - MECHANICAL CONTROLS
- M1.0 - MECHANICAL - FLOOR PLAN - DEMOLITION
- M1.1 - MECHANICAL - FLOOR PLAN - BASE BID
- M1.2 - MECHANICAL - FLOOR PLAN - ALTERNATE
- M1.3 - MECHANICAL - ROOF PLAN
- M2.0 - MECHANICAL PIPING - FLOOR PLAN - BASE BID
- M2.1 - MECHANICAL PIPING - FLOOR PLAN - ALTERNATE
- M2.2 - MECHANICAL PIPING - ROOF PLAN - BASE BID
- M2.3 - MECHANICAL PIPING - ROOF PLAN - ALTERNATE

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
- E5.1 - FLOOR PLAN - AUXILIARIES
- E6.1 - TENNIS COURT PLAN - LIGHTING



AREA MAP
STATE OF ALABAMA



VICINITY MAP
SHELBY COUNTY, ALABAMA

CLASSROOM ADDITION TO
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201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TITLE AND INDEX

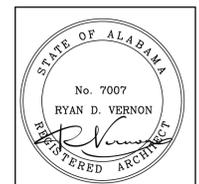


PROJ. MGR.: H. RASCO
DRAWN: JWW
DATE: NOV. 7, 2025
REVISIONS

JOB NO. 25-34
SHEET NO:
T1
1 OF 4



SHEET TITLE:
TORNADO SHELTER PLANS

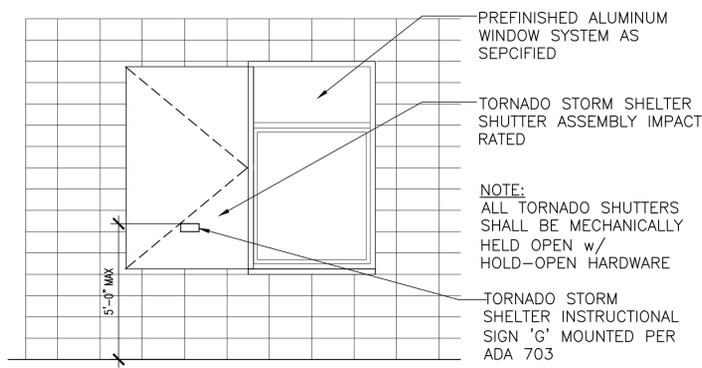


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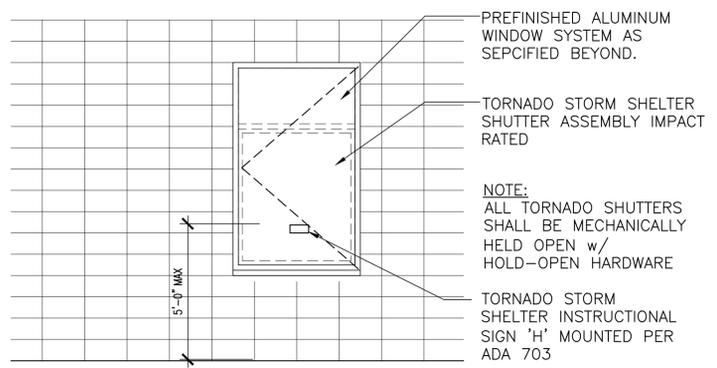
JOB NO. **25-34**
SHEET NO:
SH1.1
3 OF 4



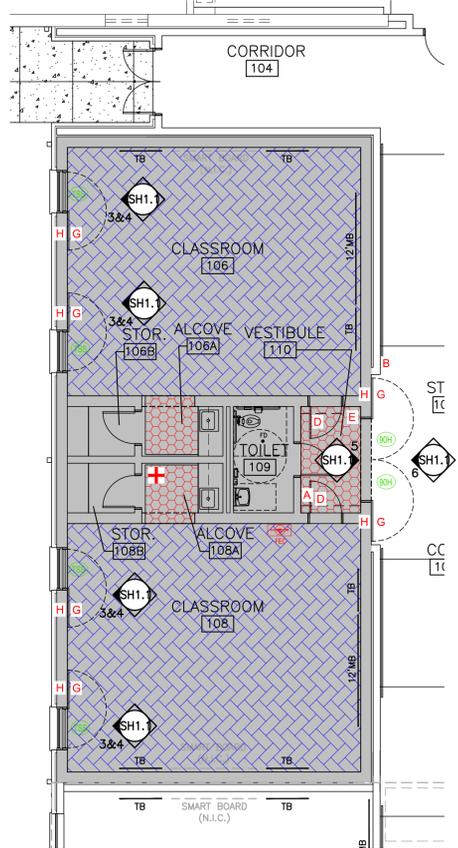
1 SHELTER ACCESS PLAN
SCALE: 3/32" = 1'-0"



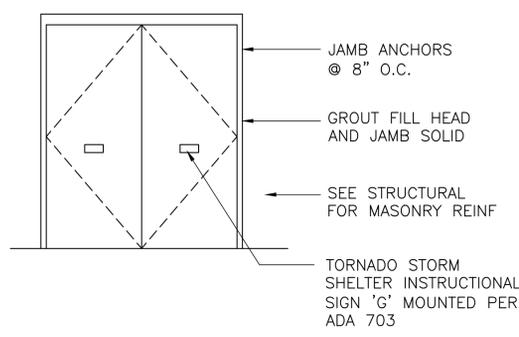
3 TORNADO DOOR ELEVATION
SCALE: 3/8" = 1'-0" INDICATED IN OPEN POSITION INSIDE SHELTER



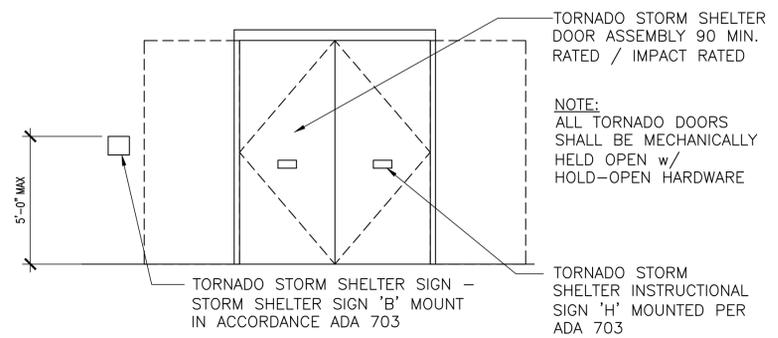
4 TORNADO DOOR ELEVATION
SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION INSIDE SHELTER



2 TORNADO STORM SHELTER PLAN
SCALE: 1/8" = 1'-0"



5 TORNADO DOOR ELEVATION
SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION INSIDE SHELTER



6 TORNADO DOOR ELEVATION
SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION OUTSIDE SHELTER

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	START
	TORNADO IMPACT RATED SHUTTER	PATH
		DIRECTION

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:	5,090.65 S.F.
REQUIRED OCCUPANT CAPACITY (STUDENT AND FACULTY):	5,090.65 / 30 = 169.69 PERSONS + 10% 16.97 = 186.66(187)
REQUIRED USEABLE SHELTER FLOOR AREA:	186(5) = 930 S.F. + 10 S.F. (1 WHEELCHAIR) = 940 S.F.
USEABLE SHELTER FLOOR AREA PROVIDED:	CLASSROOM SPACE MINUS 35% : 1,291.42 S.F.-35% = 839.42 S.F. CLEAR FLOOR SPACE (100% USEABLE) = 110.73 S.F. TOTAL USEABLE PROVIDED = 950.15 S.F.
ACTUAL CAPACITY OF STORM SHELTER:	189 : 188(5) + 1 WHEELCHAIR (10) = 950 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

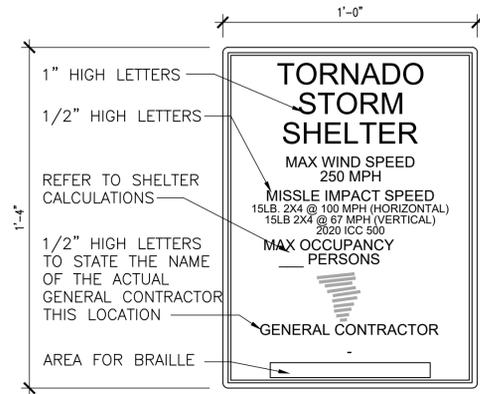
FLOOR AREA CALCULATION LEGEND	
GENERAL INSTRUCTION SPACE AT 30 S.F. GROSS PER STUDENT	AUXILIARY SUPPORT CONFERENCE AREA

SHELTER SIGN LEGEND	
SYMBOL	DESCRIPTION
A	SECTION 508 STORM SHELTER PLAQUE WALL MOUNTED PER ADA 703 (1/SH1.2)
B	SECTION 508 STORM SHELTER SIGN WALL MOUNTED PER ADA 703 (2/SH1.2)
C	SECTION 508 STORM SHELTER LOCATION SIGN WALL MOUNTED PER ADA 703 (3/SH1.2)
D	SIGN "D" OPEN DURING SHELTER (4/SH1.2)
E	SIGN "E" LEAVING SHELTER SIGN (5/SH1.2)
F	SIGN "F" FAN SWITCH SIGN (6/SH1.2)
G	SIGN "G" CLOSE DURING SHELTER EVENT SIGN (7/SH1.2)
H	SIGN "H" DO NOT OPEN DURING SHELTER EVENT SIGN (8/SH1.2)
+	FIRST AID KIT

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

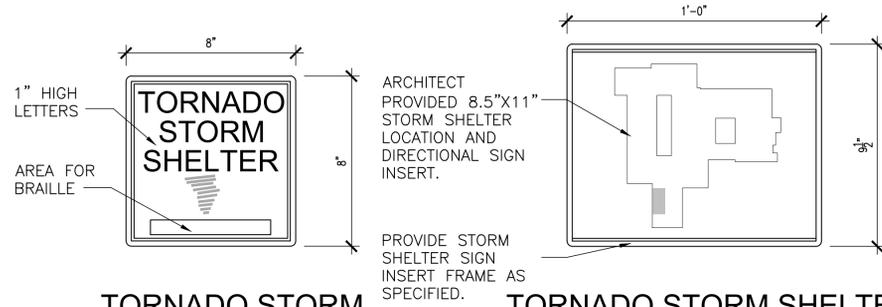
FIRE RATED WALLS:
FIRE RATED WALLS INDICATED ON THIS SHEET ARE TORNADO STORM SHELTER WALLS ONLY. SEE LIFE SAFETY PLANS ON SHEET LS1.1 FOR ALL OTHER REQUIRED FIRE RATED WALLS.

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 RESISTANT DOOR, FRAMES, AND WINDOWS SHALL RECEIVE BOTH FEMA 361/ICC-500 2020 LABEL AND THE 90 MINUTE FIRE LABEL.



1 TORNADO STORM SHELTER PLAQUE-A

SCALE: 3" = 1'-0"

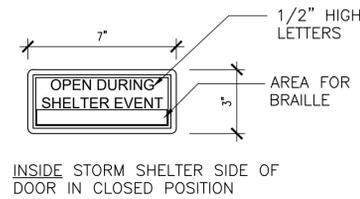


2 TORNADO STORM SHELTER SIGN - B

SCALE: 3" = 1'-0"

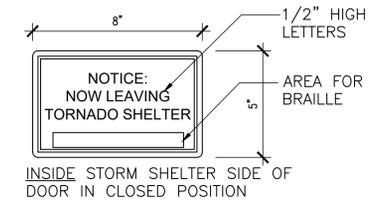
3 TORNADO STORM SHELTER LOCATION SIGN FRAME - C

SCALE: 3" = 1'-0"



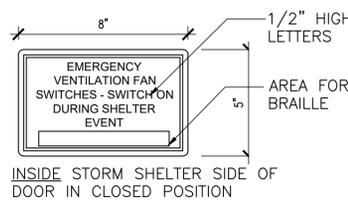
4 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -D

SCALE: 3" = 1'-0"



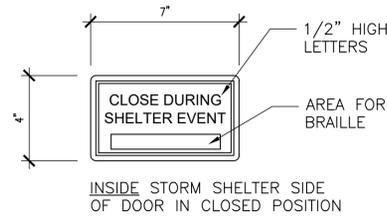
5 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -E

SCALE: 3" = 1'-0"



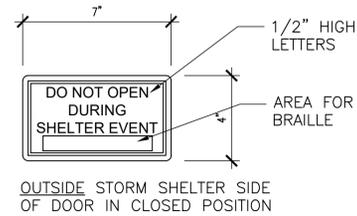
6 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -F

SCALE: 3" = 1'-0"



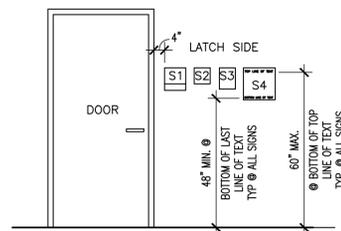
7 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -G

SCALE: 3" = 1'-0"



8 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -H

SCALE: 3" = 1'-0"



SIGNAGE LEGEND:
A - OFFICES, CLASSROOMS, INSTRUCTIONAL AREAS SIGNAGE
B - OTHER INTERIOR DOOR SIGNAGE
C - RESTROOM SIGNAGE W/ PICTOGRAM
D - EXTERIOR SIGNAGE

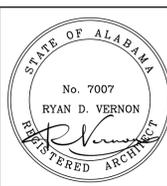
NOTE:
1. TYPICAL SIGNAGE LOCATION AND HEIGHTS SHOWN. SEE SPECIFICATIONS FOR SIGN SIZE AND REQUIREMENTS.
2. ALIGN TOP OF ALL SIGNS AS SHOWN, TYPICAL UNLESS OTHERWISE REQUIRED BY THE AMERICANS WITH DISABILITIES ACT.
3. SEE TORNADO SHELTER PLANS FOR SHELTER SIGNAGE IF APPLICABLE.

9 SIGN MOUNTING HEIGHTS

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

CLASSROOM ADDITION TO
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201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SHELTER SIGNS



PROJ. MGR.: H. RASCO

DRAWN: JWW

DATE: NOV. 7, 2025

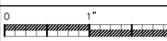
REVISIONS

JOB NO. 25-34

SHEET NO:

SH1.2

4 OF 4



GENERAL PROJECT NOTES:

- TTL, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE OR BUILDING CONTRACTOR'S WORK OR RESPONSIBILITIES. TTL IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION.
- THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AS PROVIDED BY UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES "POTHOLING" THEM BEFORE COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE ALABAMA ONE-CALL, LOCAL WATER AUTHORITIES, AND UTILITY PROVIDERS, ETC. FOR UTILITY LOCATES. IN THE EVENT OF ANY DAMAGE TO IN-PLACE UTILITIES, THEY SHALL BE REPAIRED AND REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE.
- BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY THE OWNER AND PERFORMED BY ARRINGTON ENGINEERING & LAND SURVEYING CO., INC. TOPOGRAPHIC INFORMATION WAS PERFORMED VIA GROUND RUN FORMAT DATED JULY 17, 2025.
- THE CONTRACTOR SHALL FIELD VERIFY SITE BOUNDARY AND EXISTING TOPOGRAPHY PRIOR TO CONSTRUCTION. NOTIFY TTL OF ANY DISCREPANCIES.
- THE CONTRACTOR MUST OBTAIN ALL REQUIRED PERMITS AND PAY ALL PERMIT FEES PRIOR TO CONSTRUCTION.
- ANY EXISTING PROPERTY CORNERS (I.E. IRON PIPES, CAPPED PIPES, CAPPED MONUMENTS, ETC), DISPLACED OR DAMAGED DURING CONSTRUCTION SHALL BE RESET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND SHALL BE A FINAL PUNCH LIST/CLOSEOUT ITEM.
- THE CONTRACTOR MUST MAINTAIN ACCESSIBLE DRIVES AND PUBLIC ROADWAYS. ANY ADDITIONAL STONE, GRADING, INSTALLATION, ETC. TO MAKE SIDEWALKS, DRIVES, AND ROADWAYS ACCESSIBLE DURING CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
- THE CONTRACTOR SHALL KEEP THE PROJECT RIGHTS-OF-WAY CLEAN FROM TRASH AND DEBRIS. PLACEMENT/DISCARDING OF TRASH AND REFUSE IN UTILITY TRENCHES AND/OR OTHER EXCAVATIONS ASSOCIATED WITH THE PROJECT SHALL BE PROHIBITED. THE CONTRACTOR SHALL PROVIDE TRASH RECEPTACLES FOR WORKER USE. THE ROADWAYS AND SIDEWALKS SHALL BE SWEEPED AND WASHED DOWN TO LIMIT THE TRACKING OF DIRT FROM THE PROJECT ONTO PUBLIC RIGHTS-OF-WAY DAILY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
- CONFLICTS MAY ARISE BETWEEN EXISTING AND PROPOSED UNDERGROUND FACILITIES. CROSSINGS OF REQUIRED AND EXISTING GRAVITY UTILITIES SHALL BE EXCAVATED AND ELEVATIONS VERIFIED AT THE BEGINNING OF THE PROJECT BEFORE ANY UTILITIES ARE INSTALLED TO MAKE THESE AREAS NO CONFLICTS. WHEN THESE CONFLICTS ARE IDENTIFIED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE. ADJUSTMENTS AS SPECIFIED BY THE OWNER'S REPRESENTATIVE SHALL BE MADE IN THE PROPOSED AND/OR EXISTING FACILITIES. IF CONFLICTS OCCUR WHILE INSTALLING GRAVITY UTILITIES AND THE CONTRACTOR DID NOT IDENTIFY ELEVATIONS AT CROSSINGS IN ADVANCE, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE CORRECTIVE ACTION, INCLUDING BUT NOT LIMITED TO, REMOVING AND INSTALLING THE MAIN AND/OR STRUCTURES. WITH THE NUMEROUS EXISTING UTILITIES ON-SITE, IT IS IMPERATIVE THAT THESE BE VERIFIED BEFORE INSTALLATION OF PROPOSED WORK.
- AT THE END OF THE PROJECT THE CONTRACTOR SHALL POWER WASH ALL CONCRETE SURFACES (I.E., CURB AND GUTTERS, SIDEWALK, DRIVES, STORM SEWER BOXES, BRICK PAVERS, EXISTING BUILDING BRICK, ETC.), SPECIFICALLY EXISTING CONCRETE ABUTTING REQUIRED CONCRETE SURFACES WITHIN THE PROJECT RIGHT-OF-WAY TO ELIMINATE STAINING FROM EARTHEN MATERIAL, CONSTRUCTION EQUIPMENT, OILS, PAINTS, ETC. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
- EXISTING LANDSCAPED AREAS PARALLEL TO THE PROJECT IMPACTED/DAMAGED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
- ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE ADA COMPLIANT.
- ALL TEMPORARY STONE FOR ROADWAY, SIDEWALK, DRIVES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO TEMPORARY STONE SHALL BE WASTED ON THE SITE SPECIFICALLY IN THE FINAL SUBGRADE LAYER AND TOPSOIL. EXCESSIVE STONE WILL INHIBIT THE GROWTH OF THE LANDSCAPE. ALL STONE SHALL BE REMOVED FROM AREAS TO RECEIVE TOPSOIL, NO EXCEPTIONS.
- THE CONTRACTOR SHALL INSTALL TEMPORARY ASPHALT PATCHING WITHIN 24 HOURS AFTER THE COMPLETED INSTALLATION OF UTILITY CROSSINGS ON ROADWAYS OPEN TO TRAFFIC. IF THE ROADWAY IS CLOSED TO LOCAL TRAFFIC THEN ALL ASPHALT CUT LOCATIONS SHALL BE PATCHED BEFORE THE ROADWAY IS REOPENED. THE CONTRACTOR SHALL NOT BE ALLOWED TO INSTALL ALL UTILITIES AND THEN TEMPORARY ASPHALT PATCH AT ALL ON TIME. TEMPORARY ASPHALT PATCHING MUST OCCUR PERIODICALLY PHASED AS REFERENCED ABOVE.
- WHEN TEMPORARY ASPHALT PATCHING OCCURS THE MIX SHALL BE HOT MIXED AS SPECIFIED IN THE PLANS. ASPHALT COLD MIXES SHALL NOT BE ACCEPTED. POORLY PATCHED CROSSINGS DISPLAYING NONUNIFORM, UNSMOOTH FINISHES SHALL NOT BE ACCEPTED AND SHALL BE REMOVED AT ONCE. THE REPATCH OF THE AREA SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTE EXISTING STORM DRAIN AND STORM DRAIN STRUCTURES TO BE RETAINED AS PART OF THIS PROJECT. THIS EXISTING INFRASTRUCTURE SHALL BE USED TO DRAIN THE PROJECT DURING PHASES OF CONSTRUCTION. PROPER EROSION CONTROL METHODS SHALL BE USED TO PROTECT THIS INFRASTRUCTURE AT ALL TIMES.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH ELVIN HILL ELEMENTARY SCHOOL, SHELBY COUNTY SCHOOLS, PRIVATE UTILITY COMPANIES, AND ANY OTHER OWNER OR GOVERNING AGENCY WITH EXISTING INFRASTRUCTURE OR JURISDICTION IN THIS AREA.

DEMOLITION NOTES:

- THE PROJECT DEMOLITION, CLEARING AND GRUBBING GENERAL AREAS HAVE BEEN REFLECTED ON THE DEMOLITION PLAN. THE AREA IS GENERAL IN NATURE AND IS INTENDED TO GIVE THE CONTRACTOR AN APPROXIMATE AREA OF DEMOLITION. REGARDLESS OF THE AREA SHOWN, THE CONTRACTOR SHALL DEMOLISH, CLEAN AND GRUB ALL AREAS AND EXISTING INFRASTRUCTURE (ABOVE AND BELOW GROUND) NECESSARY TO COMPLETE ALL FINAL IMPROVEMENTS AS SHOWN ON THE CIVIL, ARCHITECTURAL, LANDSCAPE/IRRIGATION, ETC. CONSTRUCTION PLANS.
- ALL AREAS DISTURBED BY THE CONTRACTOR, INCLUDING BUT NOT LIMITED TO ACTUAL IMPROVED AREAS, LAYDOWN AREAS, AREAS DISTURBED BY MOVING EQUIPMENT SHALL BE IMPROVED PER THE REQUIREMENTS OF THE PLANS, NO EXCEPTIONS.
- ANY PERMANENT AND/OR CONSTRUCTION FENCING (EXISTING OR REQUIRED PER THE PLANS) REQUIRED TO BE REMOVED/RESET FOR INSTALLATION OF SITE, UTILITY, BUILDING, ETC. IMPROVEMENTS SHALL BE DONE SO AT NO ADDITIONAL COST TO THE PROJECT AND IS CONSIDERED INCIDENTAL. THE PLANS HAVE BEEN NOTED WITH GENERAL AREAS THIS IS TO OCCUR IN. THE REMOVAL AND/OR REPLACEMENT LIMITS WILL BE DETERMINED IN THE FIELD.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO ANY DEMOLITION REGARDING ITEMS TO BE SALVAGED, RECYCLED, AND/OR REUSED. CONTRACTOR SHALL REMOVE ITEMS TO BE SALVAGED WITH EXTREME CAUTION TO PREVENT DAMAGE AND RETURN THOSE ITEMS TO THE OWNER.
- CONTRACTOR SHALL COORDINATE WITH THE OWNER AND UTILITY PROVIDER PRIOR TO DISCONNECTING OR REMOVAL OF ANY UTILITY SERVICE TO EXISTING FACILITIES. 48 HOUR MINIMUM NOTICE REQUIRED. ALL UTILITIES TO BE REMOVED SHALL BE CAPPED OR PLUGGED OR TERMINATED ACCORDING TO THE UTILITY COMPANY'S REQUIREMENTS.

GRADING NOTES:

- ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" TOPSOIL APPLIED, BE GRASSED AND MULCHED, AND/OR SODDED AS SOON AS FINAL GRADING IS COMPLETE. REFER TO EROSION CONTROL NOTES FOR TEMPORARY GRASSING AND MULCHING DURING GRADING OPERATIONS.
- ALL ENGINEERED FILL MATERIALS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE WELL IN ADVANCE OF FILL OPERATIONS. THE CONTRACTOR SHALL IDENTIFY ALL BORROW SOURCES FOR SAMPLES TO BE TAKEN AND EVALUATED. ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE COMPACTED IN LOOSE 8" LIFTS AS PER THE OWNER'S REPRESENTATIVE'S REQUIREMENTS. SEE THE GEOTECHNICAL REPORT AND/OR PROJECT SPECIFICATIONS FOR THIS INFORMATION.
- THE CONTRACTOR SHALL CLEAR AND GRUB AS NECESSARY WHERE GRADING OPERATIONS ARE TO BE PERFORMED.
- BEFORE FINAL GRADING THE CONTRACTOR SHALL MAKE SURE UTILITIES INCLUDING STORM DRAIN, SANITARY, WATER DISTRIBUTION AND FIRE PROTECTION, ELECTRICAL, VIDEO, IRRIGATION, ETC. IMPROVEMENTS HAVE BEEN INSTALLED.
- THE CONTRACTOR SHALL NOTE CHANGE IN GRADES AND REQUIRED RAMPS WHEN LAYING OUT SCORING AND HANDICAP RAMPS. ALL ADA ACCESSIBLE RAMP GRADES AND SIDEWALK CROSS SLOPE SHALL MEET ADA REQUIREMENTS.
- GRADING OPERATIONS SHALL INCLUDE TOPSOIL STRIPPING AND REMOVAL THROUGHOUT THE PROJECT SITE. UNCLASSIFIED EXCAVATION, AND BORROW EXCAVATION, ROCK REMOVAL, ETC. TO BRING THE SITE TO FINISHED SUBGRADE (ONLY LEAVING PAVEMENTS AND TOPSOIL TO REACH FINAL FINISHED GRADE) AS SHOWN ON THE CONSTRUCTION PLANS. NO EXTRA PAYMENT WILL BE MADE FOR EXCESS MATERIAL BROUGHT ON-SITE, MATERIAL REQUIRED TO BE MOVED MULTIPLE TIMES BECAUSE OF CONSTRUCTION PHASING, OR EXCESS MATERIAL TO BE REMOVED FROM THE SITE UPON GRADING COMPLETION.
- THERE SHALL BE NO DEBRIS (ROOTS, ROCKS, ETC.) IN THE TOPSOIL LARGER THAN 1/2" IN DIAMETER. THERE ALSO SHALL BE NO WASTED TEMPORARY GRAVEL, CONCRETE, OR ANY OTHER BUILDING MATERIALS FOUND IN THE TOPSOIL. ANY FOUND DEBRIS SHALL BE REMOVED IMMEDIATELY.
- ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE PLACED IN MAXIMUM LOOSE 8" LIFTS TO 98% OF THE STANDARD PROCTOR MAXIMUM (ASTM D 698) DRY DENSITY, AS DIRECTED BY THE GEOTECHNICAL REPRESENTATIVE. SEE THE GEOTECHNICAL REPORT AND/OR PROJECT SPECIFICATIONS FOR ALL COMPACTION REQUIREMENTS.
- SUBGRADE SHALL BE PROOF-ROLLED WITH A HEAVILY LOADED DUMP TRUCK AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY ORGANIC, SOFT, WET, OR LOOSE MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SUBGRADE AFTER IT HAS BEEN INITIALLY PREPPED DUE TO INCLEMENT WEATHER AND CONSTRUCTION TRAFFIC AT NO ADDITIONAL COST.
- COORDINATING THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.
- PROPOSED GRADES INDICATED ON THE PLANS ARE TO FINISH GRADE. THE CONTRACTOR SHALL MAKE ADJUSTMENTS FOR SUBGRADE OF TOPSOIL, PAVING, BUILDING PAD, ETC.
- FILL SLOPES SHALL BE BENCHMARKED INTO THE EXISTING SLOPES AND SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER FOR BENCH DETAILS (HEIGHT AND DEPTH OF BENCH INTO THE SLOPE).
- GRADING ADJACENT TO THE BUILDING SHALL BE COORDINATED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS FOR FOUNDATION WALLS, STEM WALLS, DRAINS, AND OTHER CONDITIONS.
- DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUNDWATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REDROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATION AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUNDWATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED. IF GROUNDWATER DEWATERING IS REQUIRED, CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED PRIOR TO DISCHARGE OF EFFLUENT FROM DEWATERING.
- THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT AND ALL PROJECT SPECIFICATIONS IN THEIR ENTIRETY FOR THIS PROJECT.

STORM DRAIN NOTES:

- STORM DRAIN STRUCTURE RINGS AND COVERS AND STEPS SHALL BE INSTALLED ON THE STRUCTURE WALL FREE OF PIPING AND/OR INLET THROAT.
- STORM DRAIN STRUCTURES MEASURING FOUR (4) FEET OR GREATER IN DEPTH FROM THE FINISHED TOP OF THE STORM STRUCTURE TO THE INVERT OUT ELEVATION SHALL HAVE STEPS INSTALLED.
- ALL REQUIRED STORM SEWER STRUCTURE RING AND COVER TOPS SHALL MATCH TOP OF CURB, ROADWAY AND/OR VEGETATED FINISHED GRADE ELEVATIONS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION PLANS. ANY ADJUSTMENTS TO LEVEL RING AND COVER TOP ELEVATIONS WITH FINAL ASPHALT, SODDING, ETC. SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION OF THE STORM DRAIN STRUCTURE INSTALLATION. CONTRACTOR SHALL COORDINATE WITH THE LOCAL MUNICIPALITY REGARDING CUSTOM WORDING ON ALL COVERS.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STORMWATER FLOW IN EXISTING AND PROPOSED STORM SEWERS WITHIN THE PROJECT LIMITS AND, IF AFFECTED BY CONSTRUCTION ACTIVITIES, OUTSIDE THE PROJECT LIMITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY AND ALL MATERIAL AND LABOR REQUIRED FOR TEMPORARY STORM SEWERS AND/OR PUMPS THAT MAY BE REQUIRED FOR BYPASSING. THE OWNER OR ITS REPRESENTATIVES SHALL NOT ACCEPT ANY RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY, OR ACCEPT ANY RESPONSIBILITY FROM CLAIMS OR DAMAGES RESULTING FROM THE FAILURE OF THE CONTRACTOR'S TEMPORARY STORM SEWER BYPASS FACILITIES.
- ALL STORM DRAIN STRUCTURES ARE REQUIRED TO HAVE REBAR REINFORCEMENT IN THE WALLS, BOTTOM, AND TOP.
- WHEN TYING TO EXISTING UTILITY PIPING WITH STORM DRAIN, THE CONTRACTOR SHALL USE EXTREME CARE ONLY EXCAVATING AND REMOVING THE NECESSARY AMOUNT OF PIPING TO INSTALL THE REQUIRED STRUCTURE. DAMAGE TO THE EXISTING UTILITY PIPING DUE TO OVEREXCAVATION OR POOR EXCAVATION WORK SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE/REPLACE AT HIS COST.
- CONTRACTOR SHALL MAKE SURE THAT THERE IS FLEXIBILITY IN EACH STORM STRUCTURE CONICAL SECTION AND RING AND COVER TO ENSURE FINAL RING ELEVATION MATCHES FINAL PAVEMENT ELEVATION. FAILURE TO DO SO WILL REQUIRE REMOVAL OF AS MUCH STRUCTURE AS NECESSARY TO ALLOW TOP RING AND COVER TO BE FLUSH PAVEMENT.
- THE CONTRACTOR MAY USE PRECAST CONCRETE STORM STRUCTURES FOR THE STANDARD/SPECIAL STRUCTURES REQUIRED ON THE CONSTRUCTION PLANS.
- THE CONTRACTOR SHALL NOTE EXISTING STORM DRAIN AND STORM DRAIN STRUCTURES TO BE RETAINED AS PART OF THIS PROJECT. THIS EXISTING INFRASTRUCTURE SHALL BE USED TO DRAIN THE PROJECT DURING PHASES OF CONSTRUCTION. PROPER EROSION CONTROL METHODS SHALL BE USED TO PROTECT THIS INFRASTRUCTURE.
- THE CONTRACTOR SHALL BACKFILL THE SPACE (WHEN BETWEEN 6 INCHES AND 2 FEET) BETWEEN STORM DRAIN AND SANITARY SEWER MAINS WHEN CROSSING WITH NO. 57 STONE MECHANICALLY CONSOLIDATED IN-PLACE TO PREVENT ANY SETTLEMENT AT THE CROSSING. THIS STONE SHALL EXTEND THE WIDTH OF THE UTILITY TRENCH TO APPROXIMATELY FOUR (4) FEET TO EITHER SIDE OF THE CROSSING.
- THE CONTRACTOR SHALL GROUT OR PLUG AS NECESSARY ALL LIFTING HOLES IN STORM DRAIN PIPING SECTIONS BEFORE BACKFILL. THIS SHALL BE REQUIRED REGARDLESS IF PREFABRICATED LIFTING PLUGS ARE USED OR NOT. THE COMBINATION OF THE TWO (2) IS RECOMMENDED TO ENSURE THAT THE LIFTING HOLES DO NOT REMAIN OPEN ALLOWING EARTHEN MATERIAL TO ENTER THE DRAIN POSSIBLY CAUSING A SINK HOLE AT THE SURFACE.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL STORM PIPE MATERIALS PRIOR TO INSTALLATION AND/OR FABRICATION.
- ALL PROPOSED STORM INLETS SHALL BE LOCATED AT THE LOW POINTS. GRADING SHALL BE TO DIRECT RUNOFF TO THESE INLETS. NOTIFY TTL OF ANY DISCREPANCIES.
- STORM DRAINAGE SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE CAST IRON DOWNSPOUT BOOTS, CLEANOUTS, AND COLLECTOR LINES FROM ALL EXTERIOR DOWNSPOUTS TO CONNECT TO PRIMARY STORM DRAINAGE SYSTEM. COORDINATE WITH EXTERIOR ELEVATIONS AND ROOF PLANS FOR DOWNSPOUT LOCATIONS. COORDINATE DOWNSPOUT BOOT MODEL WITH THE ARCHITECT.
- CONTRACTOR SHALL COORDINATE ROOF DRAIN COLLECTOR LINES, DOWNSPOUTS AND BOOTS WITH FOOTING ELEVATIONS ON THE STRUCTURAL PLANS PRIOR TO POURING FOOTINGS.

SANITARY SEWER NOTES:

- THE CONTRACTOR SHALL REFERENCE THE PLUMBING PLANS FOR ANY SEWER PLUMBING BENEATH THE PROPOSED BUILDING FOOTPRINT.
- THE CONTRACTOR SHALL VERIFY CONNECTIONS FOR FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER PIPING AND MANHOLE INVERTS BEFORE INSTALLING ANY REQUIRED SANITARY SEWER STRUCTURES AND PIPING.
- GRAVITY SEWER SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION.
- SANITARY STRUCTURE RINGS AND COVERS AND STEPS SHALL BE INSTALLED ON THE STRUCTURE WALL FREE OF PIPING.
- SANITARY STRUCTURES MEASURING FOUR (4) FEET OR GREATER IN DEPTH FROM THE FINISHED TOP OF THE SANITARY STRUCTURE TO THE INVERT OUT ELEVATION SHALL HAVE STEPS INSTALLED.
- ALL REQUIRED SANITARY STRUCTURE TOPS WITHIN A PAVED AREA SHALL MATCH ASPHALT FINISHED GRADES. TOPS NOT INSTALLED FLUSH SHALL BE RESET AT NO ADDITIONAL COST.
- ANY EXISTING SANITARY STRUCTURES RETAINED AS PART OF THIS PROJECT SHALL BE THOROUGHLY CLEANED, WALLS WIPED WITH GROUT TO MAKE WATER TIGHT, INVERTS FORMED IF NECESSARY, EXISTING PIPING/DRAINS REGROUTING, ETC.
- WHEN TYING TO EXISTING UTILITY PIPING WITH SANITARY SEWER STRUCTURES, THE CONTRACTOR SHALL USE EXTREME CARE ONLY EXCAVATING AND REMOVING THE NECESSARY AMOUNT OF PIPING TO INSTALL THE REQUIRED STRUCTURE. DAMAGE TO THE EXISTING UTILITY PIPING DUE TO OVEREXCAVATION OR POOR EXCAVATION WORK SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE/REPLACE AT HIS COST.
- THE CONTRACTOR SHALL MAKE SURE THAT THERE IS FLEXIBILITY IN EACH SANITARY SEWER CONICAL SECTION AND RING AND COVER TO ENSURE FINAL RING ELEVATION IS FLUSH WITH FINAL PAVEMENT. FAILURE TO DO SO WILL REQUIRE REMOVAL OF AS MUCH STRUCTURE AS NECESSARY TO ALLOW TOP RING AND COVER TO MATCH PAVEMENT.
- THE CONTRACTOR SHALL KEEP ALL LIVE SANITARY MAINS AND LATERALS FLOWING CONTINUOUSLY BY WHATEVER MEANS NECESSARY INCLUDING BYPASS PUMPING, TIE-INS AT NIGHT, OR ON WEEKENDS, ETC.
- ALL MANHOLE AND MAIN INSTALLATIONS SHALL BE TESTED PER THE LOCAL SEWER AUTHORITY'S REQUIREMENTS. TESTING IS CONSIDERED INCIDENTAL TO THE PROJECT.

GENERAL UTILITY NOTES:

- THE CONTRACTOR SHALL BE PREPARED TO CAMERA ANY DISCOVERED UTILITY MAIN FOUND DURING CONSTRUCTION NOT SHOWN ON THE PLANS TO VERIFY IF THE MAIN SHOULD BE TIED TO THE PROPOSED SYSTEMS OR BE ABANDONED AND/OR REMOVED.
- ALL STORM DRAIN AND SANITARY SEWER SYSTEM STRUCTURES AND PIPING SHALL REMAIN ACTIVE UNTIL PROPOSED PROJECT UTILITIES ARE INSTALLED AND CAN COME INTO SERVICE. THIS APPLIES TO AREA INLETS IN YARDS AND/OR ROOF DRAINS. ANY WATER OR SEWER DAMAGE TO PRIVATE PROPERTY DUE TO FAILURE OF THE CONTRACTOR TO COORDINATE REMOVAL OF EXISTING UTILITIES AND TIE-INS TO REQUIRED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR INCLUDING ALL CLEANUP AND ADDITIONAL WORK REQUIRED TO CORRECT THE DAMAGE.
- THE CONTRACTOR SHALL REMOVE/RESET/RAISE ALL PRIVATE UTILITY COMPANY BOXES, MANHOLE RING AND COVER, ETC. IF THESE ITEMS ARE BEING RETAINED. ANY ITEMS DAMAGED DURING THIS WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
- THE SITE CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL UTILITY SERVICES FROM THE POINT THE RESPECTIVE UTILITY COMPANY COMPLETES THEIR WORK TO THE POINT OF CONNECTION AT THE BUILDING.
- REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL PLANS FOR ALL UTILITY POINTS OF CONNECTION AT THE BUILDING.
- BACKFLOW PREVENTION AND METERING SHALL BE PROVIDED ON THE FIRE, DOMESTIC, AND IRRIGATION SERVICES IN ACCORDANCE WITH THE LOCAL UTILITY COMPANY AND FIRE DEPARTMENT REQUIREMENTS. CONTRACTOR SHALL PROVIDE A GRAVITY DRAIN LINE FROM ALL BELOW GRADE UTILITY VAULTS TO THE NEAREST STORM DRAIN OR DAYLIGHT AT GRADE.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING TAMPER SWITCHES AND ASSOCIATED CONDUIT, WRING, ETC. ON FIRE SERVICE POST INDICATOR VALVES AND VALVES IN FIRE BACKFLOW PREVENTOR ASSEMBLIES. COORDINATE WITH FIRE PREVENTION AND ELECTRICAL PLANS.
- WATER MAINS AND SERVICES SHALL BE A MINIMUM OF 10 FEET HORIZONTAL AND 2 FEET VERTICAL FROM ALL SANITARY SEWER MAINS AND LATERALS.
- WATER MAINS AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS. ALL MAINS AND SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" UNLESS OTHERWISE NOTED ON THE PLANS.
- GAS SERVICE SHALL BE PER LOCAL GAS COMPANY REQUIREMENTS. COORDINATE WITH THE MECHANICAL ENGINEER AND GAS COMPANY.
- WHERE UTILITIES ARE TO BE INSTALLED IN AREAS OF EXISTING PAVING, HARDSCAPE, ETC., CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING PAVING OR HARDSCAPE, BACKFILL FULL DEPTH WITH NO. 57 STONE, AND REPLACE IN LIKE KIND AND RE-STRIPPE AS NECESSARY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ELEVATIONS OF ALL AT-GRADE STRUCTURES AND UTILITY VAULTS TO REMAIN TO MATCH PROPOSED FINISHED GRADES.

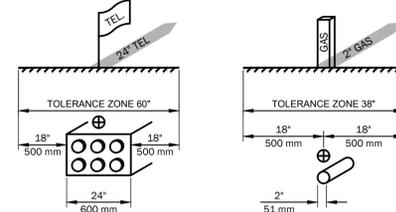
EXISTING UTILITY NOTES

APWA UNIFORM COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES

- WHITE - Proposed Elevation
- PINK - Temporary survey markings
- RED - Electric Power Lines, Cables, Conduit and Lighting Cables
- YELLOW - Gas, Oil, Steam, Petroleum or Gaseous Materials
- BLUE - Potable Water
- PURPLE - Reclaimed Water, Irrigation and Slurry Lines
- GREEN - Sewers and Drain Lines

TO HAVE UNDERGROUND UTILITY LINES LOCATED DIAL:

- 811 (INSIDE ALABAMA)
- (800) 292-8525 (INSIDE AND OUTSIDE OF ALABAMA)



ANY EXCAVATION WITHIN THE TOLERANCE ZONE SHOULD BE PERFORMED WITH NON-POWERED HAND TOOLS OR NON-INVASIVE METHODS UNTIL THE MARKED FACILITY IS EXPOSED. THE WIDTH OF THE TOLERANCE ZONE MAY BE SPECIFIED IN LAW OR CODE. IF NOT, 500 mm (18") IS REQUIRED FROM EACH SIDE OF THE FACILITY. THE TOLERANCE ZONE INCLUDES THE WIDTH OF THE FACILITY PLUS 18" (500 mm) MEASURED HORIZONTALLY FROM EACH SIDE OF THE FACILITY.

PAVING, SIGNING AND STRIPING NOTES:

- THE CONTRACTOR SHALL SAW-CUT ALL EXISTING PAVEMENTS TO BE REMOVED WITH A STRAIGHT, CLEAN REMOVAL JOINT TO ENSURE PROPOSED PAVEMENTS JOIN TO EXISTING CLEANLY.
- ALL COMBINATION CURB AND GUTTER SHALL BE ONE AND A HALF (1.5) FEET IN WIDTH UNLESS OTHERWISE SHOWN ON THE CONSTRUCTION PLANS. EXISTING CURB AND GUTTER MAY VARY IN WIDTH AND PROPOSED CURB AND GUTTER SHALL BE TAPERED TO JOIN TO IT OVER A MINIMUM DISTANCE OF FIVE (5) FEET TO ENSURE A SMOOTH TRANSITION.
- ALL TEMPORARY AND/OR PERMANENT STRIPING, MARKINGS, ETC. SHALL BE OF COLOR AND TYPE SHOWN AND SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ALABAMA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
- ALL PERMANENT SIGNS AND POSTS SHALL BE PER THE MUTCD.
- ALL TEMPORARY CONSTRUCTION SIGNS SHALL MEET THE REQUIREMENTS SET FORTH IN THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TEMPORARY CONSTRUCTION SIGN POSTS SHALL BE #3 "U" CHANNEL POSTS, ALDOTE 710B.
- ALL TRAFFIC STRIPES SHALL BE 4" WIDE UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTE THE DIFFERENT PAVEMENT TYPICAL SECTIONS FOR THE PROJECT.
- CONCRETE CONTROL JOINTS SHALL BE MEASURED FOR DEPTH. THEY MUST BE INSTALLED PROPERLY FOR CONTROL CRACKING OF THE CONCRETE PAVEMENT. IMPROPERLY INSTALLED CONCRETE SHALL BE REMOVED/REPLACED AT THE CONTRACTOR'S EXPENSE.
- ALL TEMPORARY STRIPING DURING CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. TEMPORARY STRIPING SHALL BE REQUIRED TO CLEARLY DELINEATE WHERE TRAFFIC BOTH PEDESTRIAN AND MOTOR VEHICLE KNOW HOW TO NAVIGATE THE WORK AREA. DURING PAVEMENT CURING TEMPORARY STRIPING SHALL BE APPLIED FOR TRAFFIC CONTROL.
- THE FINAL PAVEMENT FINISH IS VERY IMPORTANT FOR THE PROJECT AND THE OWNER. THE CONTRACTOR SHALL MAKE ALL PAVEMENT ARE FINISHED OUT SMOOTHLY AND CLEANLY. IRREGULARITIES, "BIRD BATHS", RANDOM CRACKING, ETC. SHALL BE REMOVED/REPLACED AT THE CONTRACTOR'S EXPENSE.

EROSION CONTROL NOTES:

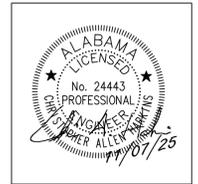
- ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
- REGARDLESS IF AN NPDES PERMIT IS REQUIRED OR NOT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR USING BEST MANAGEMENT PRACTICES (BMPs) FOR EROSION AND SEDIMENT CONTROL THROUGHOUT CONSTRUCTION. AN EROSION CONTROL PLAN IS PROVIDED AS A MINIMUM GUIDE FOR PROVIDING STRUCTURAL BMPs, PHASING, TEMPORARY GRASSING, AND OTHER METHODS AS PROVIDED IN THE ALABAMA HANDBOOK FOR EROSION CONTROL. SEDIMENT CONTROL, AND STORM WATER MANAGEMENT, SHALL BE UTILIZED TO MINIMIZE EROSION. NO EXTRA COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR MAINTAINING EROSION CONTROL ITEMS OR ADDITIONAL EROSION CONTROL ITEMS REQUIRED TO COMPLY WITH THE NPDES PERMIT.
- THE DESIGN OF THE CBMP, IF REQUIRED, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR'S QCP. IN THE EVENT THAT SEDIMENT BASINS ARE REQUIRED BY THE DESIGN, NO ADDITIONAL COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR STOCKPILING MATERIAL TO LATER FILL THE BASINS, ADDITIONAL GRADING TO FILL THE BASINS, TEMPORARY PIPING, RESEEDING AND REMULCHING, RESTORING PERMANENT DRAINAGE STRUCTURES AND GRADES TO THEIR PERMANENT REQUIREMENTS, OR ANY OTHER ITEMS OF WORK THAT ARE REQUIRED BY THE PHASING OF CONSTRUCTION OR THE CBMP.
- ANY FINES INCURRED DUE TO FAILURE TO MAINTAIN EROSION CONTROL MEASURES SHALL BE PAID FOR BY THE CONTRACTOR. ANY ADDITIONAL WORK AND MATERIALS REQUIRED TO COMPLY WITH ANY VIOLATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- ALL TEMPORARY RIPRAP USED FOR EROSION CONTROL PURPOSES SHALL BE INCLUDED IN THE PRICE OF EROSION CONTROL. TEMPORARY RIPRAP BERMS SHALL BE SPREAD OUT IN AREAS WHERE PERMANENT RIPRAP IS REQUIRED AND SHALL BE SPREAD IN A MANNER TO NOT IMPEDE FLOW OF STORM DRAINS AFTER THE SITE IMPROVEMENTS ARE COMPLETE AND THE PROJECT IS STABILIZED. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR TEMPORARY RIPRAP OR SPREADING IT UPON COMPLETION OF THE SITE IMPROVEMENTS. ALL TEMPORARY RIPRAP THAT IS SPREAD FOR USE AS PERMANENT RIPRAP SHALL BE PLACED ON THE SUBGRADE AND WATER FABRICS AS SHOWN IN THE DETAILS. COSTS FOR STONE AND FILTER FABRIC PLACED UNDERNEATH ALL TEMPORARY RIPRAP THAT IS SPREAD IN PERMANENT LOCATIONS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EROSION CONTROL MANAGEMENT AND MAINTENANCE, OR IF THERE ARE NO UNIT PRICES, THE COST SHALL BE INCIDENTAL TO THE PROJECT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP CLEAN ALL EROSION & SEDIMENT CONTROL STRUCTURES UNTIL THE NPDES PERMIT IS ACCEPTED AS COMPLETE BY THE QCP & ADEM, AND IS TERMINATED BY THE CONTRACTOR.
- SILT FENCES SHALL HAVE SEDIMENT DEPOSITS REMOVED IF THEY REACH A DEPTH OF FIFTEEN INCHES (15") OR 1/2 THE HEIGHT OF THE FENCE. SEDIMENT REMOVED FROM THE SILT FENCE SHALL BE PLACED ONSITE AND STABILIZED.
- THE PROJECT AREA SHALL REMAIN CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO KEEP THE PROJECT AREA CLEAN, INCLUDING MOTORIZED STREET SWEEPERS, WATER AND VACUUM TRUCKS, HAND SWEEPING AND SHOVELING, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADDRESS THIS ISSUE EACH DAY INCLUDING WEEKENDS AND SPECIFICALLY PRE AND POST RAIN EVENTS.
- THE CONTRACTOR SHALL IDENTIFY WORK AREA ENTRANCE/EXIT LOCATIONS FOR EQUIPMENT AND INSTALL TEMPORARY GRAVEL DRIVES TO REDUCE TRACKING ONTO PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL STREETS CLEAN OF ANY SEDIMENT FROM THE CONSTRUCTION SITE ON A DAILY BASIS, NO EXCEPTIONS.
- ALL DISTURBED AREAS, INCLUDING THE EARTHEN STOCKPILES, SHALL BE MULCHED UPON COMPLETION OF GRADING OPERATIONS. ADEM REGULATIONS REQUIRE ALL DISTURBED AREAS NOT UNDERGOING ACTIVE DISTURBANCE OR ACTIVE CONSTRUCTION FOR LONGER THAN THIRTEEN (13) DAYS TO BE PROVIDED WITH TEMPORARY GROUND COVER.
- THE CONTRACTOR SHALL INSTALL WATTLES, SANDBAGS, AND/OR SILT FENCE TRENCHED THROUGH PAVEMENT AFTER SAW-CUTTING THE ASPHALT TO AVOID RUNOFF INTO OTHER ROADWAYS, DRIVES, AND AREAS PARALLEL AND ADJACENT TO THE PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADDRESS THIS ISSUE EACH DAY INCLUDING WEEKENDS AND SPECIFICALLY PRE AND POST RAIN EVENTS.
- WATTLES FOR SEDIMENT CONTROL SHALL HAVE A MINIMUM DIAMETER OF 12".
- THE CONTRACTOR SHALL INSTALL STONE AND/OR STALLIZE ENTRANCE/EXIT, SIDEWALKS, ROADWAY/DRIVES, ETC. AS NECESSARY. ALL STONES FOR CONSTRUCTION ENTRANCE/EXIT, SIDEWALKS, ROADWAY/DRIVES, ETC. ARE CONSIDERED INCIDENTAL REGARDLESS THE NUMBER OF TIMES FRESH STONE IS REQUIRED FOR EROSION CONTROL MEASURES. AT THE END OF THE PROJECT, ALL STONE SHALL BE REMOVED AND NOT WASTED ON THE PROJECT SITE.
- WHEN INSTALLING SILT FENCE OR OTHER BMPs, THE CONTRACTOR SHALL USE THE LOCATIONS PROVIDED ON THE DRAWINGS OR THE CBMP. WASTEFUL AND/OR POORLY PLANNED INSTALLATIONS SHALL NOT RECEIVE ADDITIONAL PAY FOR REINSTALLATION AFTER MOVING TO ANOTHER PHASE OF THE WORK.
- ADEM CLOSELY MONITORS DEVELOPMENTS FOR EROSION & SEDIMENT CONTROL VIOLATIONS. VIOLATIONS CAN LEAD TO THEM ISSUING A STOP WORK ORDER. THE PROJECT SHALL FALL UNDER THE SAME GUIDELINES. ANY FINES AND LEGAL FEES ASSOCIATED WITH THE CONTRACTOR'S FAILURE TO PROPERLY INSTALL AND MAINTAIN EROSION CONTROL MEASURES SHALL BE PAID FOR BY THE CONTRACTOR INCLUDING ANY ADDITIONAL REQUIREMENTS PLACED ON THE PROJECT BY THE FINING AGENCY. THERE SHALL BE NO CLAIMS CONSIDERED OF LOST CONTRACT TIME, MONEY, ETC. DURING THE STOP WORK PERIOD. THIS IS A SITUATION TOTALLY IN THE CONTROL OF THE CONTRACTOR AND HE WILL MEET HIS RESPONSIBILITIES TO MAINTAIN A STABILIZED CONSTRUCTION SITE.
- ALL INLETS/STRUCTURES SHALL BE COVERED BY DOME INLET PROTECTORS DURING CONSTRUCTION UNLESS OTHERWISE NOTED TO AVOID SEDIMENT RUNOFF. THESE UNITS SHALL BE KEPT CLEAN DURING CONSTRUCTION. IF THE INLET/STRUCTURE IS TOO LARGE, THEN SEDIMENT LOGS OR SILT FENCE SHALL BE USED TO PROTECT THE INLET.
- ALL NECESSARY SHALL BE USED TO ESTABLISH TEMPORARY EROSION CONTROL INCLUDING EROSION CONTROL NETTING, SODDING, REPEATED SEEDING AND MULCHING, ETC.
- A BEST MANAGEMENT PLAN SHALL AT A MINIMUM RETURN ALL EXPOSED OR DISTURBED AREAS TO ORIGINAL OR BETTER CONDITION WITH AT LEAST A GOOD STAND OF GRASS AND/OR SOD. EROSION CONTROL MEASURES INCLUDING CONSTRUCTION EXIT PADS, SHOWN HEREIN TO PREVENT EROSION AND SEDIMENT RUNOFF ARE A MINIMUM AND SHALL NOT BE INTERPRETED AS BEING ALL THAT IS REQUIRED FOR THE PROJECT. CONTRACTOR SHALL BE MINDFUL DURING ALL PHASES OF CONSTRUCTION AND INSTALL AND UTILIZE ANY AND ALL ADDITIONAL ITEMS NECESSARY TO CONTROL ALL EROSION AND SEDIMENTATION ON THE PROJECT AT ALL TIMES AS REQUIRED BY ADEM AND THE ALABAMA HANDBOOK FOR EROSION CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, MOST RECENT EDITION.
- OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO DIRECT ADDITIONAL ITEMS OR REVISE IN-FIELD PLACEMENT OF EROSION CONTROL ITEMS AS DEEMED NECESSARY DURING ALL PHASES OF THE PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT ALL SANITARY OR STORM SEWER MAINS AND MANHOLES ON A CONTINUAL BASIS IF CONSTRUCTION DEBRIS ENTERS SUCH MAINS. IN NO EVENT SHALL CONTRACTOR DISPOSE OF ANY DEBRIS OR MATERIALS IN SEWERS. CONTRACTOR SHALL IMMEDIATELY REMOVE ANY SUCH DEBRIS OR MATERIAL TO SATISFACTION OF OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL BE OBSERVANT OF FORECASTED RAIN EVENTS AND PROMPTLY REPAIR, MAINTAIN, INSTALL NECESSARY EROSION CONTROL ITEMS PRIOR TO SUCH RAIN EVENTS. CONTRACTOR SHALL PROMPTLY MEDIATE, CLEAN UP, REMOVE ANY EROSION OR SEDIMENTATION FROM ALL EROSION CONTROL ITEMS, STRUCTURES, TRAPS, BASINS, ETC. AND REPAIR, MAINTAIN, RE-INSTALL, SUPPLEMENT SUCH IMMEDIATELY FOLLOWING EACH RAIN EVENT OR AS DIRECTED BY OWNER'S REPRESENTATIVE.
- ALL CONCRETE WASHOUT WATER SHALL BE COLLECTED IN A LEAK PROOF CONTAINER SO THAT IT DOES NOT REACH THE SOIL SURFACE AND THEN MIGRATE TO SURFACE WATERS OR INTO GROUNDWATER. ALL OF THE COLLECTED CONCRETE WASHOUT WATER AND SOLIDS SHALL BE RECYCLED.

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SHEET TITLE:
CIVIL NOTES

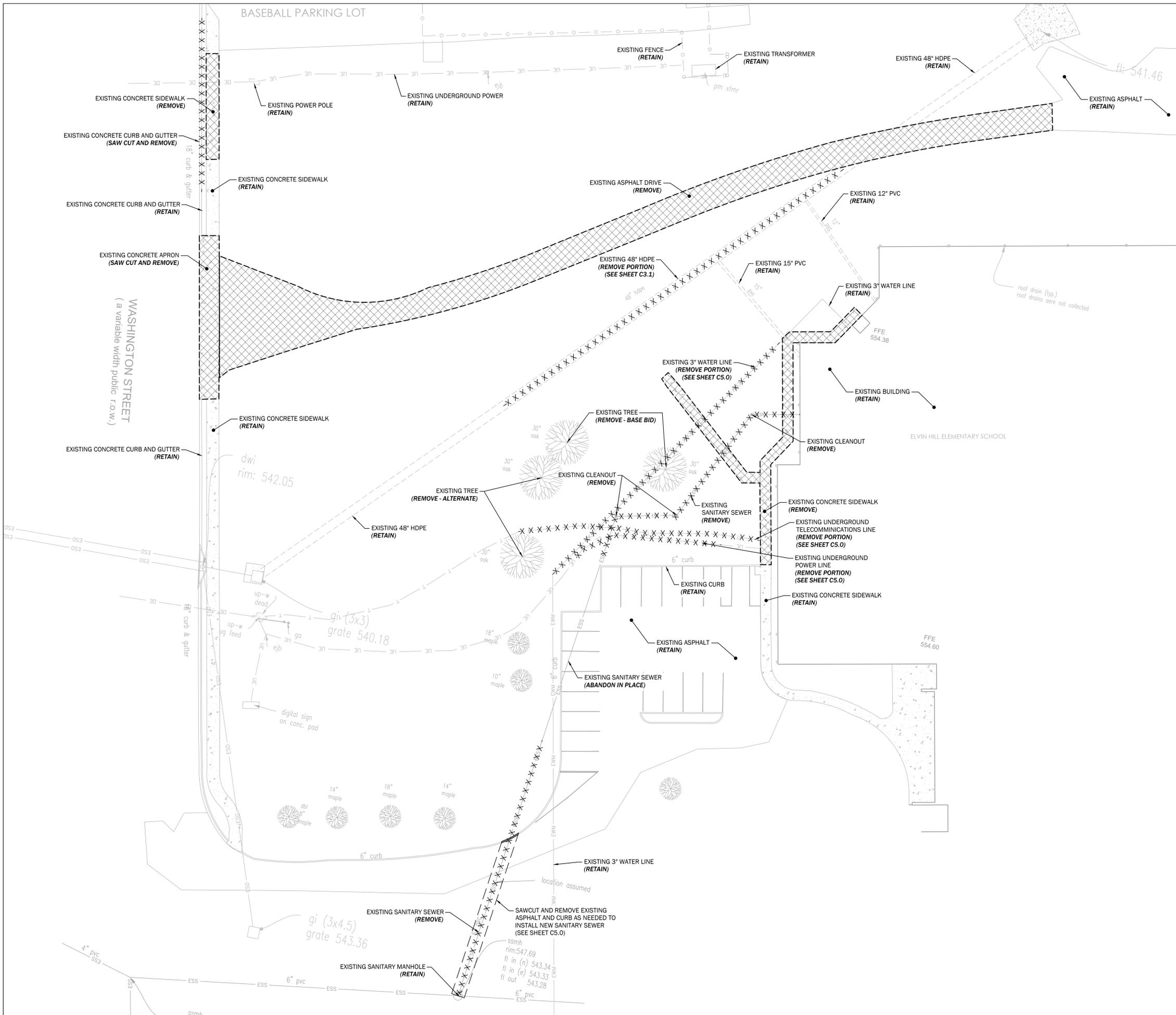


PROJ. MGR.: CAH
 DRAWN: EKL

DATE: 11/07/2025
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SHEET NO:
C0.1
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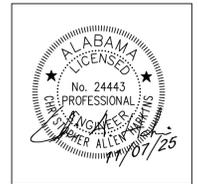


DEMOLITION LEGEND

- APPROXIMATE LIMITS OF ASPHALT & CONCRETE PAVEMENT REMOVAL
- EXISTING BUILDING DEMOLITION
- EXISTING FENCE DEMOLITION
- EXISTING UTILITY DEMOLITION/SLURRY FILL

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SHEET TITLE:
 SITE DEMOLITION
 PLAN

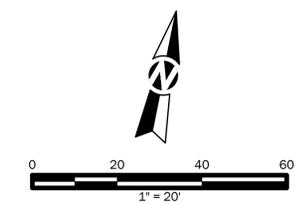


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DATE: 11/07/2025
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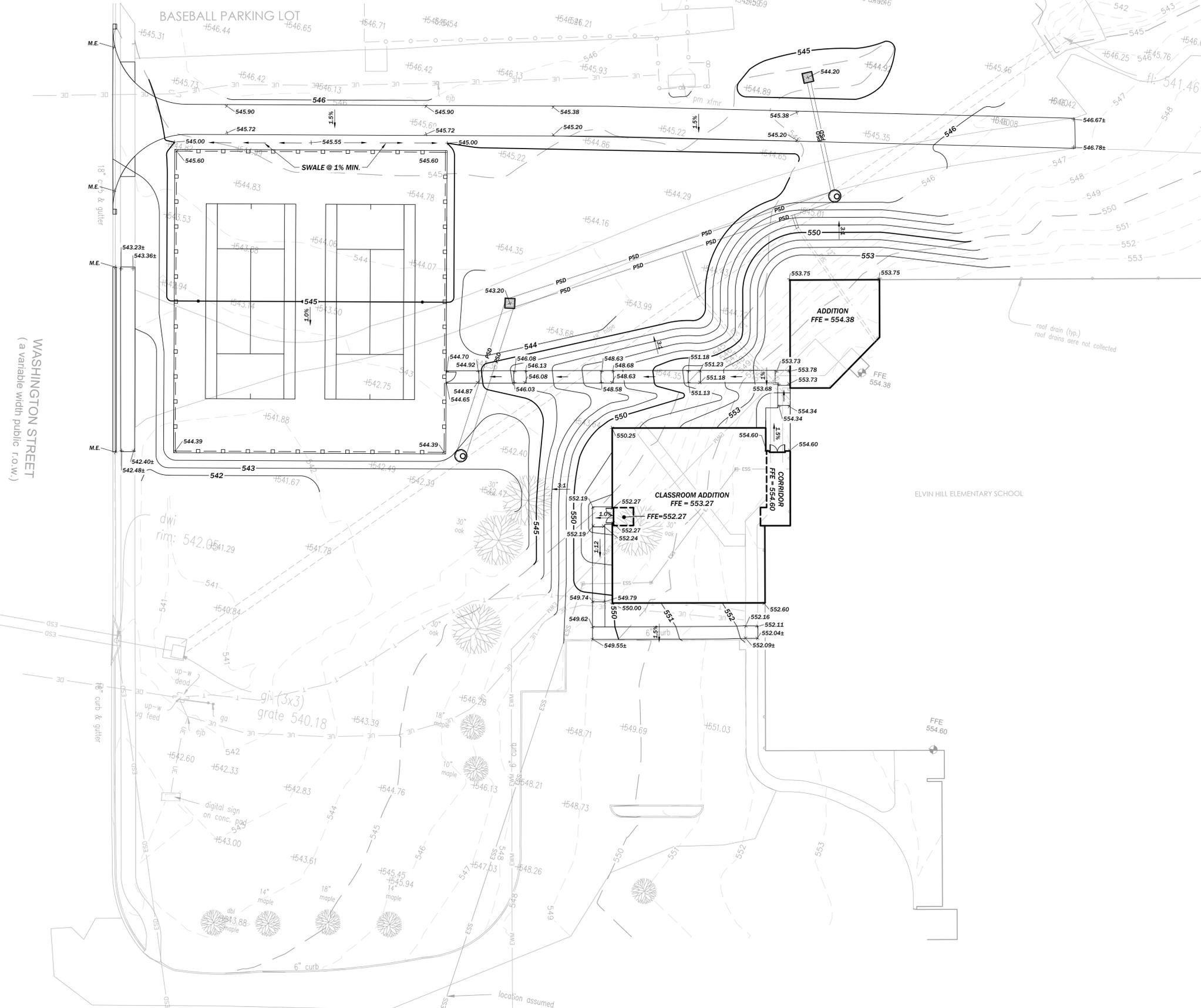
JOB NO. **25-34**
 SHEET NO:
C1.0
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NOTES:
 1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.



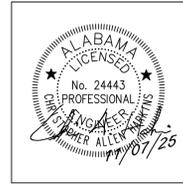
GRADING LEGEND

150	REQ'D CONTOUR 5' INTERVAL
149	REQ'D CONTOUR 1' INTERVAL
*TW1:170.00 *TC1:170.00 *150.00	REQ'D TOP OF WALL, TOP OF CURB, FINISH GRADE



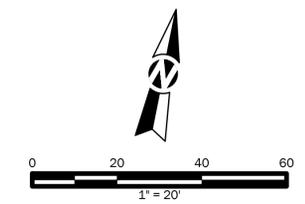
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SHEET TITLE:
 GRADING PLAN
 BASE BID



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 DATE: 11/07/2025
 REVISIONS

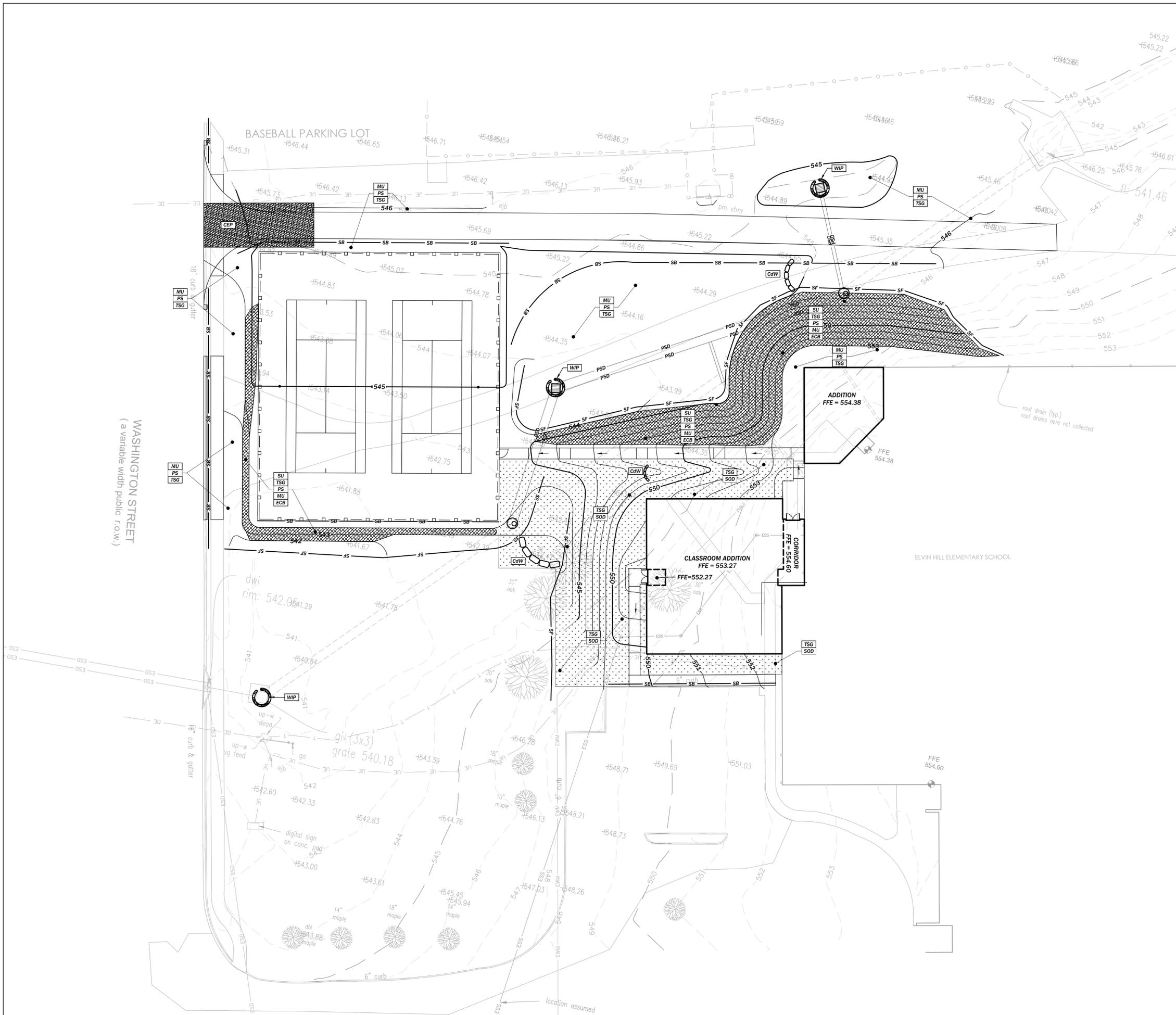
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- SEE SHEET CO.1 FOR ALL APPLICABLE NOTES.



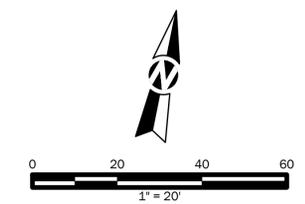
JOB NO. **25-34**
 SHEET NO:
C3.0
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EROSION CONTROL LEGEND

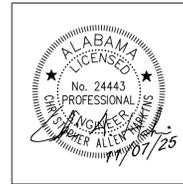
-  SF — SF — SILT FENCE
 -  SB — SB — SEDIMENT CONTROL LOG
 -  SNOW FENCE
 -  TREE PROTECTION
 -  DIVERSION CHANNEL
 -  HAY BALES/SANDBAGS
 -  RIPRAP CHECK DAM
 -  DOME INLET PROTECTOR
 -  SEDIMENT BASIN/TRAP
 -  FLOW DIRECTION
 -  TEMPORARY POND SKIMMER (SEE DETAIL)
 -  EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR APPROVED EQUAL)
 -  STONE CONSTRUCTION ENTRANCE/EXIT
 -  REQ'D SOLID SOD
-
-  CEP CONSTRUCTION EXIT PAD
 -  TSG TOPSOILING
 -  ECB EROSION CONTROL BLANKET
 -  MU MULCHING
 -  PS PERMANENT SEEDING
 -  SOD SODDING
 -  TS TEMPORARY SEEDING
 -  CDW CHECK DAM
 -  OP OUTLET PROTECTION
 -  SB SEDIMENT BARRIER



NOTES:
 1. SEE SHEET CO.1 FOR ALL APPLICABLE NOTES.

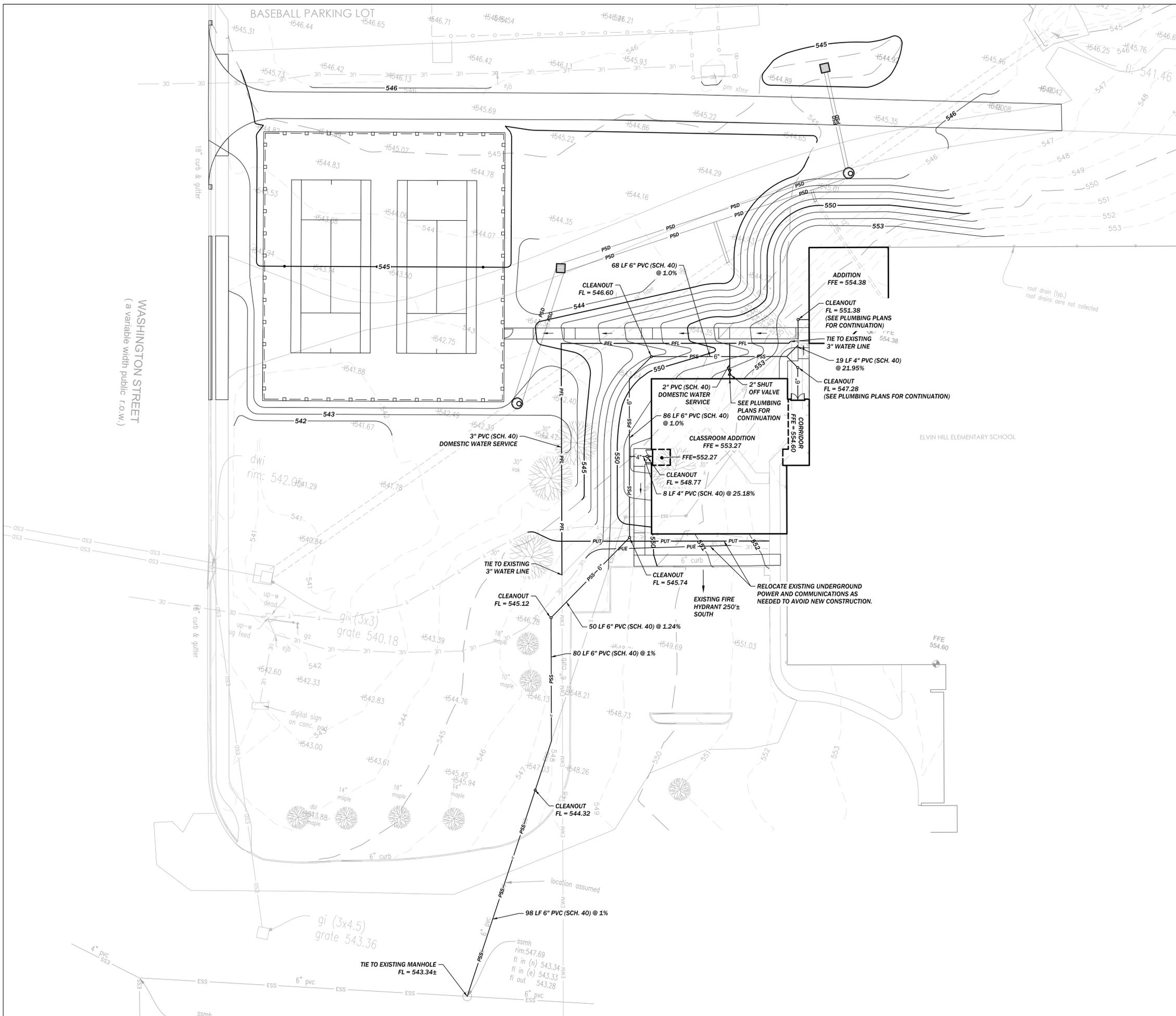


SHEET TITLE:
 EROSION CONTROL
 PLAN - BASE BID



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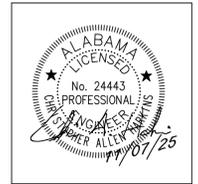


UTILITY LEGEND

PGM	REQ'D GAS MAIN
PSS	REQ'D SANITARY SEWER MAIN
---	REQ'D STORM DRAIN
PWM	REQ'D WATER MAIN
PGM	REQ'D GAS MAIN
PUT	REQ'D UNDERGROUND COMM.
PUE	REQ'D UNDERGROUND POWER
o	REQ'D SANITARY SEWER CLEANOUT
o	REQ'D WATER VALVE
o	REQ'D FIRE HYDRANT
o	REQ'D POST MOUNTED SIAMESE CONNECTION
o	REQ'D GAS METER
o	REQ'D GAS VALVE

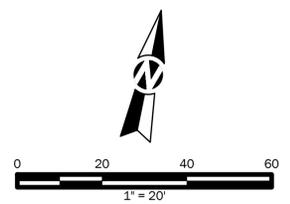
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SHEET TITLE:
 SITE UTILITY PLAN
 BASE BID

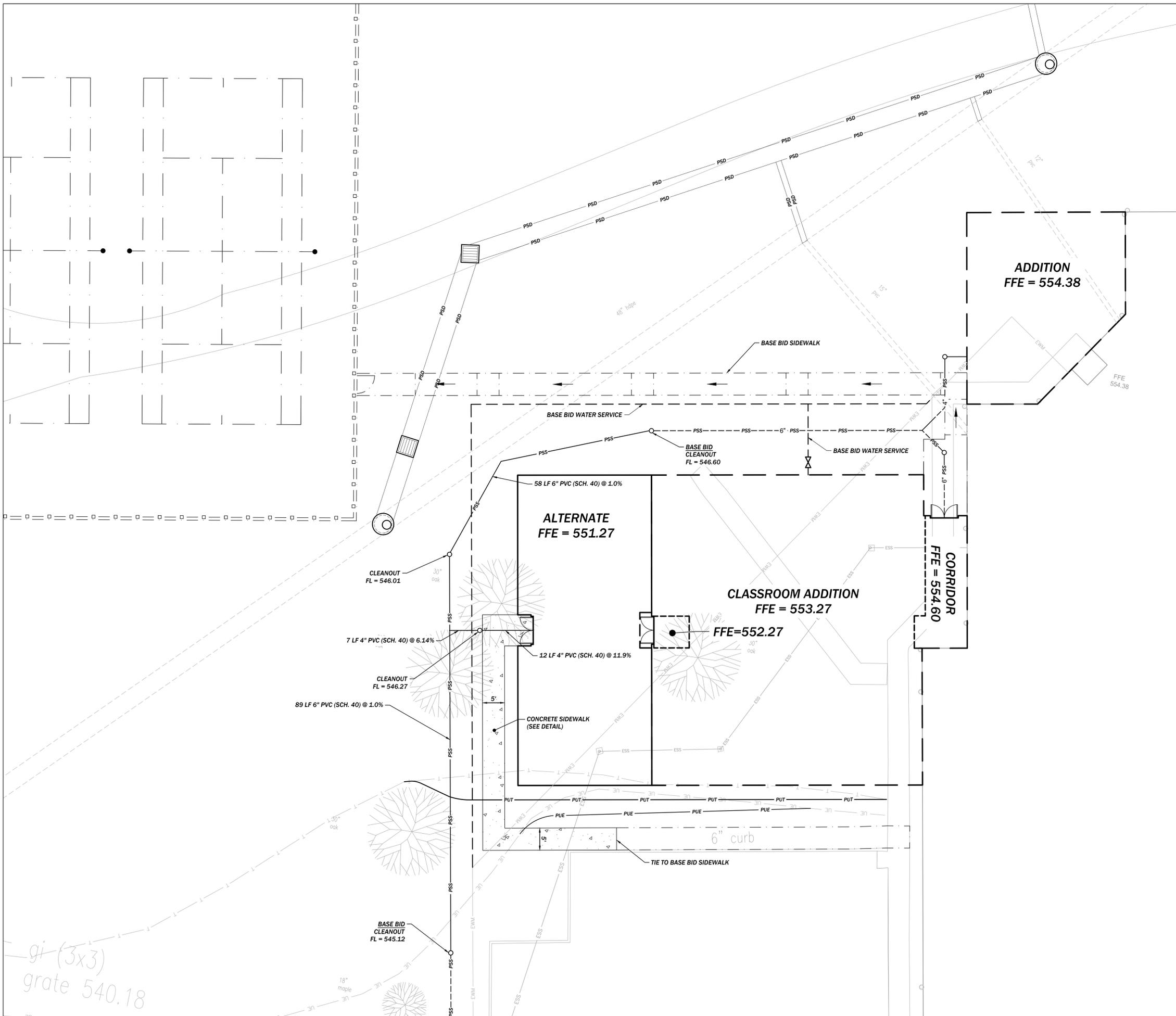


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 DRAWN: EKL
 DATE: 11/07/2025
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NOTES:
 1. SEE SHEET CO.1 FOR ALL APPLICABLE NOTES.



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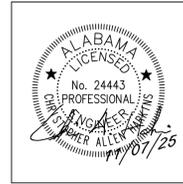
PAVING LEGEND

- REQ'D ASPHALT PAVEMENT (HEAVY DUTY) (SEE DETAILS)
- REQ'D CONCRETE SIDEWALK (SEE DETAILS)
- TENNIS COURTS PLEXIPAVE SURFACING (OWNER TO DETERMINE COLOR) (SEE NOTE #2)

UTILITY LEGEND

- PSS — REQ'D SANITARY SEWER
- PSS — BASE BID SANITARY SEWER
- PSD — BASE BID STORM DRAIN
- PSD — BASE BID WATER MAIN
- PGM — BASE BID GAS MAIN
- PUT — BASE BID UNDERGROUND COMM.
- PUE — BASE BID UNDERGROUND POWER
- REQ'D SANITARY SEWER CLEANOUT
- REQ'D WATER VALVE
- REQ'D FIRE HYDRANT

SHEET TITLE:
 SITE LAYOUT AND
 UTILITY PLAN
 ALTERNATE



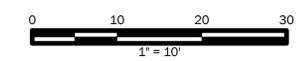
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DATE: 11/07/2025

REVISIONS

NO.	DESCRIPTION

- NOTES:
- SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.
 - SEE ARCHITECTURAL PLANS FOR INTERNAL RAMPING.



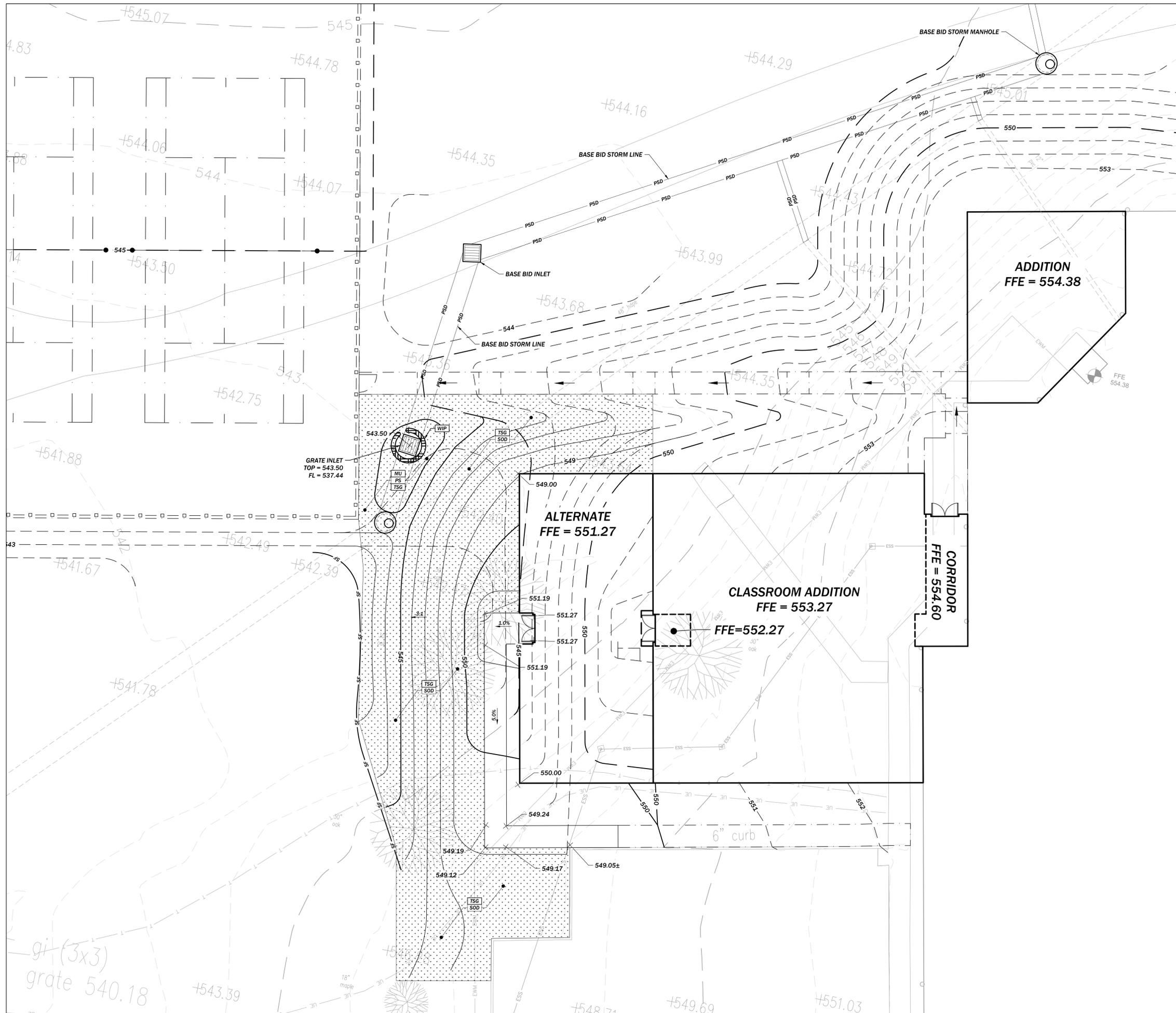
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JOB NO. 25-34

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GRADING LEGEND

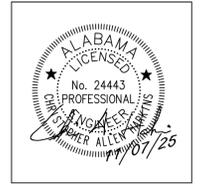
---	150	REQ'D ALT CONTOUR 5' INTERVAL
---	149	REQ'D ALT CONTOUR 1' INTERVAL
---		REQ'D BASE CONTOUR 5' INTERVAL
---		REQ'D BASE CONTOUR 1' INTERVAL
---		REQ'D TOP OF WALL, TOP OF CURB, FINISH GRADE

EROSION CONTROL LEGEND

---	SF	SF	SILT FENCE
---	SB	SB	SEDIMENT CONTROL LOG
---			HAY BALES/SANDBAGS
---			EROSION CONTROL BLANKET (NORTH AMERICAN GREEN S75 OR APPROVED EQUAL)
---			REQ'D SOLID SOD

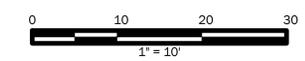
CEP	CONSTRUCTION EXIT PAD
TSG	TOPSOILING
ECB	EROSION CONTROL BLANKET
MU	MULCHING
PS	PERMANENT SEEDING
SOD	SODDING
TS	TEMPORARY SEEDING
CDW	CHECK DAM
OP	OUTLET PROTECTION
SB	SEDIMENT BARRIER

SHEET TITLE:
 GRADING, DRAINAGE &
 EROSION CONTROL
 PLAN - ALTERNATE

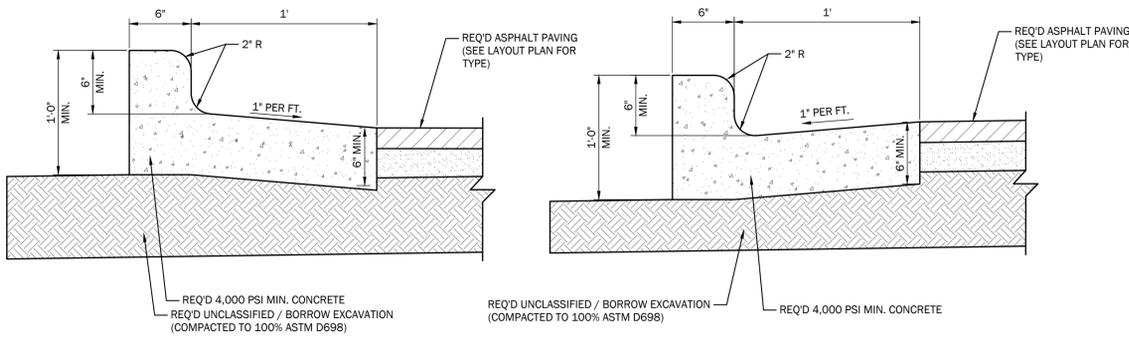


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 DATE: 11/07/2025
 REVISIONS

- NOTES:
- SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.
 - SEE ARCHITECTURAL PLANS FOR INTERNAL RAMPING.



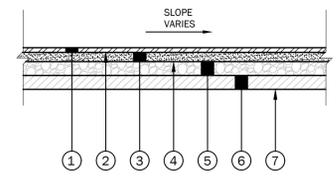
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18" CURB & GUTTER (INVERTED)
NOT TO SCALE

18" CURB & GUTTER
NOT TO SCALE

NOTES:
 1. THE CONTRACTOR SHALL BE PERMITTED TO USE MACHINE PLACEMENT. THE MACHINE SHALL BE SO DESIGNED TO PLACE, SPREAD, CONSOLIDATE, SCREED, AND FINISH THE CONCRETE IN ONE (1) COMPLETE PASS IN SUCH A MANNER THAT A MINIMUM OF HAND FINISHING WILL BE NECESSARY TO PROVIDE A DENSE AND HOMOGENOUS CONCRETE SECTION. THE MACHINE SHALL SHAPE, VIBRATE, AND/OR EXTRUDE THE CONCRETE FOR THE FULL REQUIRED CONCRETE SECTION BEING PLACED.
 2. EXPANSION JOINTS REQ'D. @ 50' INTERVALS (IF HAND FORMED), AT ALL RADI POINTS AT CONCRETE ENTRANCES AND CURB RETURNS, AT DROP INLETS, AT END OF WORK DAYS, AND/OR ALL COLD JOINTS. FILLER MATERIAL SHALL CONFORM TO ASTM C920 AND BE FURNISHED IN A SINGLE ONE-HALF INCH (1/2") THICK PIECE FOR FULL DEPTH AND WIDTH OF THE JOINT.
 3. CONTRACTION JOINTS MAY BE SAWCUT OR HANDFORMED. JOINTS SHALL BE 1/4" x CONCRETE THICKNESS IN DEPTH BY 1/8" WIDE AND SHALL BE 10' O.C.
 4. SEE SPECIFICATIONS FOR SUBGRADE REQUIREMENTS.

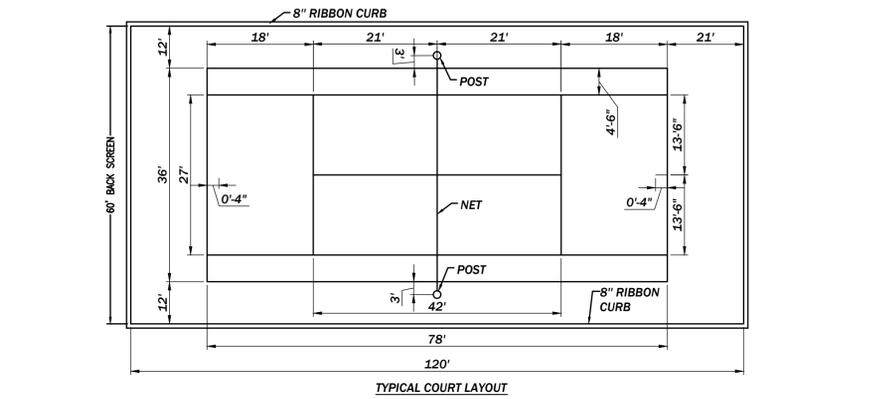


TYPICAL ASPHALT PAVEMENT (HEAVY DUTY)
NOT TO SCALE

- ① REQ'D: SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 1/2" MAXIMUM AGGREGATE SIZE MIX (ALDOT 424A)(1.5" COMPACTED THICKNESS)
- ② REQ'D: TACK COAT (TRACKLESS TACK) (ALDOT 405A)(0.10 GAL/SY)
- ③ REQ'D: SUPERPAVE BITUMINOUS CONCRETE BINDER UPPER LAYER, 1" MAXIMUM AGGREGATE SIZE MIX (ALDOT 424B)(2" COMPACTED THICKNESS)
- ④ REQ'D: PRIME COAT "A" (ALDOT SECTION 401D)
- ⑤ REQ'D: CRUSHED AGGREGATE STONE BASE COURSE (ALDOT 825B)(8" COMPACTED THICKNESS) (COMPACTED TO 100% ASTM D 698)
- ⑥ REQ'D: SUBGRADE (COMPACTED TO 98% ASTM D 698)
- ⑦ REQ'D: UNCLASSIFIED/BORROW EXCAVATION (COMPACTED TO 98% ASTM D 698)

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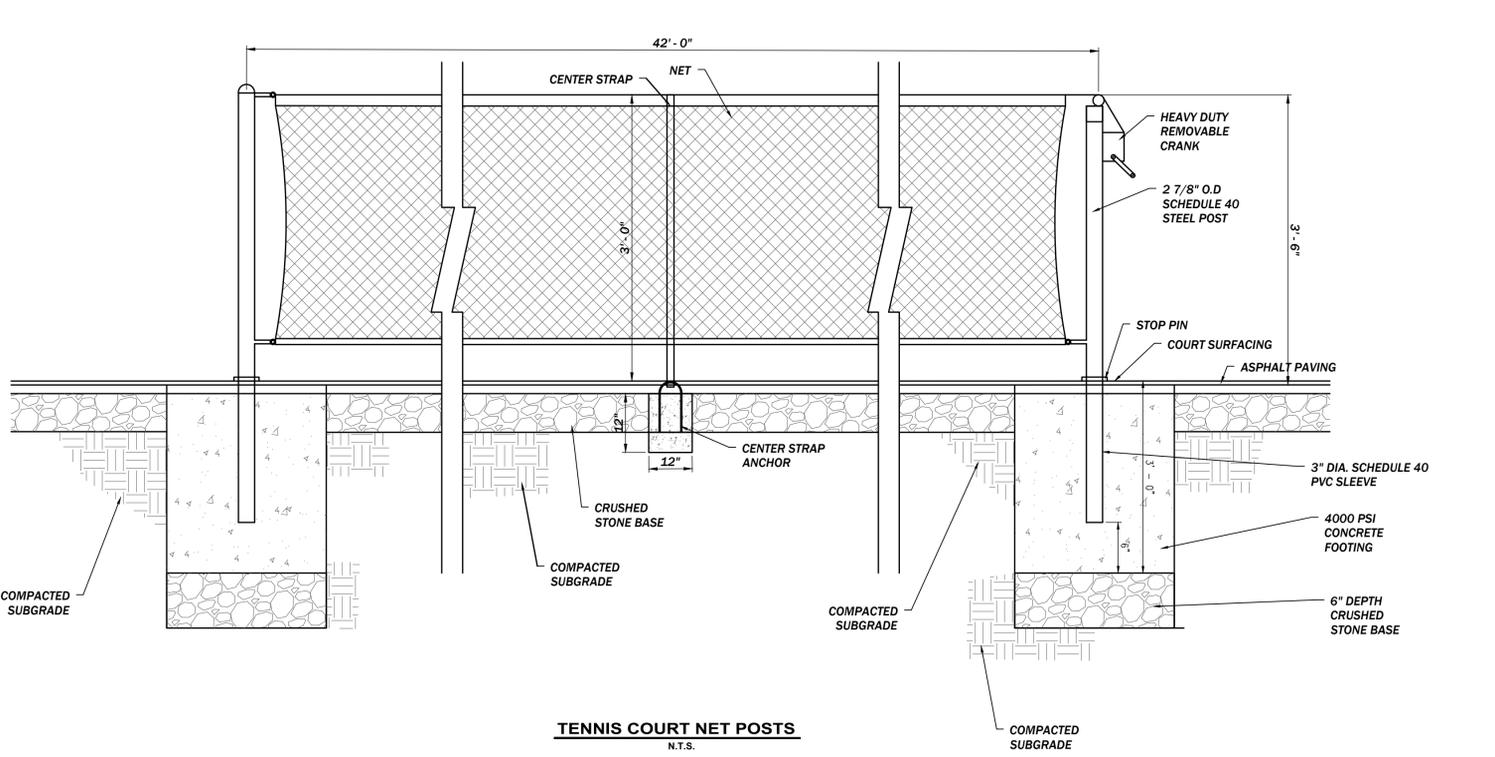
**LATHAN
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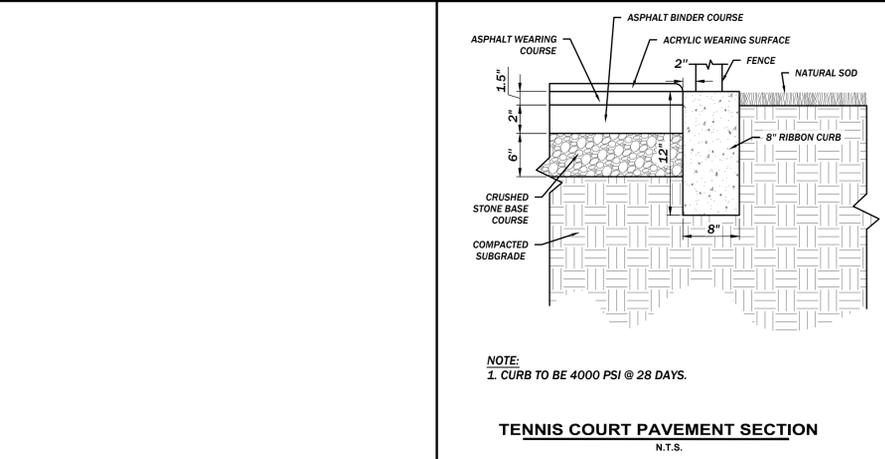
TYPICAL COURT LAYOUT

- SPECIFICATIONS FOR CONSTRUCTION OF TENNIS COURTS**
1. **SLOPE:**
THE SLOPE SHALL BE A MAXIMUM OF 1% - ALL IN ONE PLANE. (SEE GRADING PLAN)
 2. **FENCE:**
THE FENCE SHALL BE 10' HIGH BLACK VINYL COATED CHAIN LINK WITH 2" MESH, 9 GA. WIRE; 3" SCHEDULE 40 TERMINAL POSTS; 2-1/2" SCHEDULE 40 LINE POSTS (MAX. OF 10' ON CENTER); 1 1/2" CONTINUOUS TOPRAIL AND MIDRAIL; #6 GAUGE COIL SPRING TENSION WIRE; 4' BY 7' GATES (2 GATES MINIMUM). A 9' TALL WINDSCREEN SHALL BE INSTALLED STARTING AT THE TOP OF THE FENCE. THE SCREEN SHALL BE PVC VINYL COATED POLYESTER (VCP) WITH AIR VENTS EVERY 10', GROMMETS EVERY 12" AND REINFORCED HEMS. THE FENCE FABRIC SHALL BE PLACED ON THE INSIDE (COURT SIDE) OF THE POSTS.
 3. **PLAYING SURFACE:**
 - CLEAN ASPHALT SURFACE OF GREASE, OILS AND FOREIGN MATERIALS. HIGH PRESSURE WATER WASH SURFACE TO REMOVE LOOSE MATERIAL, DIRT, STAINS AND MILDEW.
 - FILL DEPRESSIONS AND IRREGULARITIES WITH COURT PATCH BINDER TO A TOLERANCE OF 1/8" INCH. CRACK FILLER AND COURT PATCH MANUFACTURED BY CALIFORNIA PRODUCTS CORPORATION.
 - APPLY ONE OR MORE COATS AS REQUIRED OF ACRYLIC RESURFACER TO PROVIDE A SMOOTH, UNIFORM DENSE BASE. ACRYLIC RESURFACER MANUFACTURED BY CALIFORNIA PRODUCTS CORPORATION.
 - APPLY 3 APPLICATIONS OF FORTIFIED PLEXIPAVE WITH RUBBER BLADED SQUEEGEE. ALLOW SURFACE TO THOROUGHLY CURE BETWEEN APPLICATIONS. FORTIFIED PLEXIPAVE MANUFACTURED BY CALIFORNIA PRODUCTS CORPORATION. USE "FLORIDA GREEN" COLOR UNLESS OTHERWISE SPECIFIED BY THE OWNER/ ARCHITECT.
 - ACCURATELY LOCATE AND MARK LINES. PAINT 2" WIDTH LINES BY BRUSH USING TAPE TO MASK AREA. LINE PAINT SHALL BY PLEXICOLOR, 100% ACRYLIC LATEX WHITE LINE PAINT AS MANUFACTURED BY CALIFORNIA PRODUCTS CORPORATION. THE WHITE LINE LAYOUT SHALL CONFORM TO U.S. TENNIS ASSOCIATION SPECIFICATIONS.

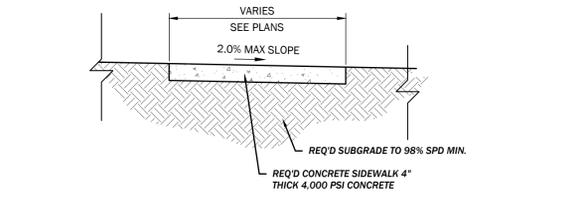
TENNIS COURT
N.T.S.



TENNIS COURT NET POSTS
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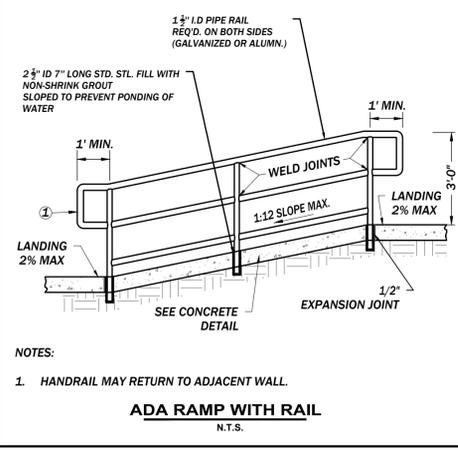


TENNIS COURT PAVEMENT SECTION
N.T.S.



CONCRETE SIDEWALK
NOT TO SCALE

- NOTES:
 1. EXPANSION JT. REQ'D. @ 40' MAX. INTERVALS BUT NOT LESS THAN 30' WITH EXPANSION JOINT MATERIAL.
 2. CONTRACTION JOINTS SHALL BE HAND-TOOLED ONLY IN LOCATIONS AS INDICATED BY THE SCORING PATTERN SHOWN IN THE CONSTRUCTION PLANS. JOINTS SHALL BE INSTALLED AT A DEPTH OF 1/4" THICKNESS OF THE SLAB MIN. NO SAW-CUT OF JOINTS IS ALLOWED.
 3. SIDEWALKS SHALL HAVE AN EXPANSION JOINT INSTALLED IN ALL LOCATIONS WHERE NEW IMPROVEMENTS MEET EXISTING INFRASTRUCTURE.
 4. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
 5. THE CONTRACTOR SHALL PROVIDE 3 MOCKUP PANELS (AT MINIMUM 3' X 3' IN SIZE) THAT HE FLOATS LIGHT BROOM, MEDIUM BROOM, AND HEAVY BROOM. THE OWNER WILL CHOOSE THE FINISH THEY DESIRE FOR THE PROJECT AND THE CONTRACTOR WILL PROCEED AS DIRECTED.
 6. EXPANSION JOINT MATERIAL SHALL BE PUSHED DOWN 1/8" FROM TOP OF SIDEWALK.
 7. EXPANSION JOINT MATERIAL SHALL BE CONTINUOUS THROUGH THE OVERALL DEPTH OF THE SIDEWALK.

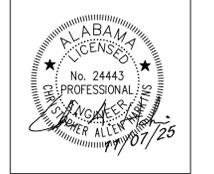


ADA RAMP WITH RAIL
N.T.S.

- NOTES:
 1. HANDRAIL MAY RETURN TO ADJACENT WALL.

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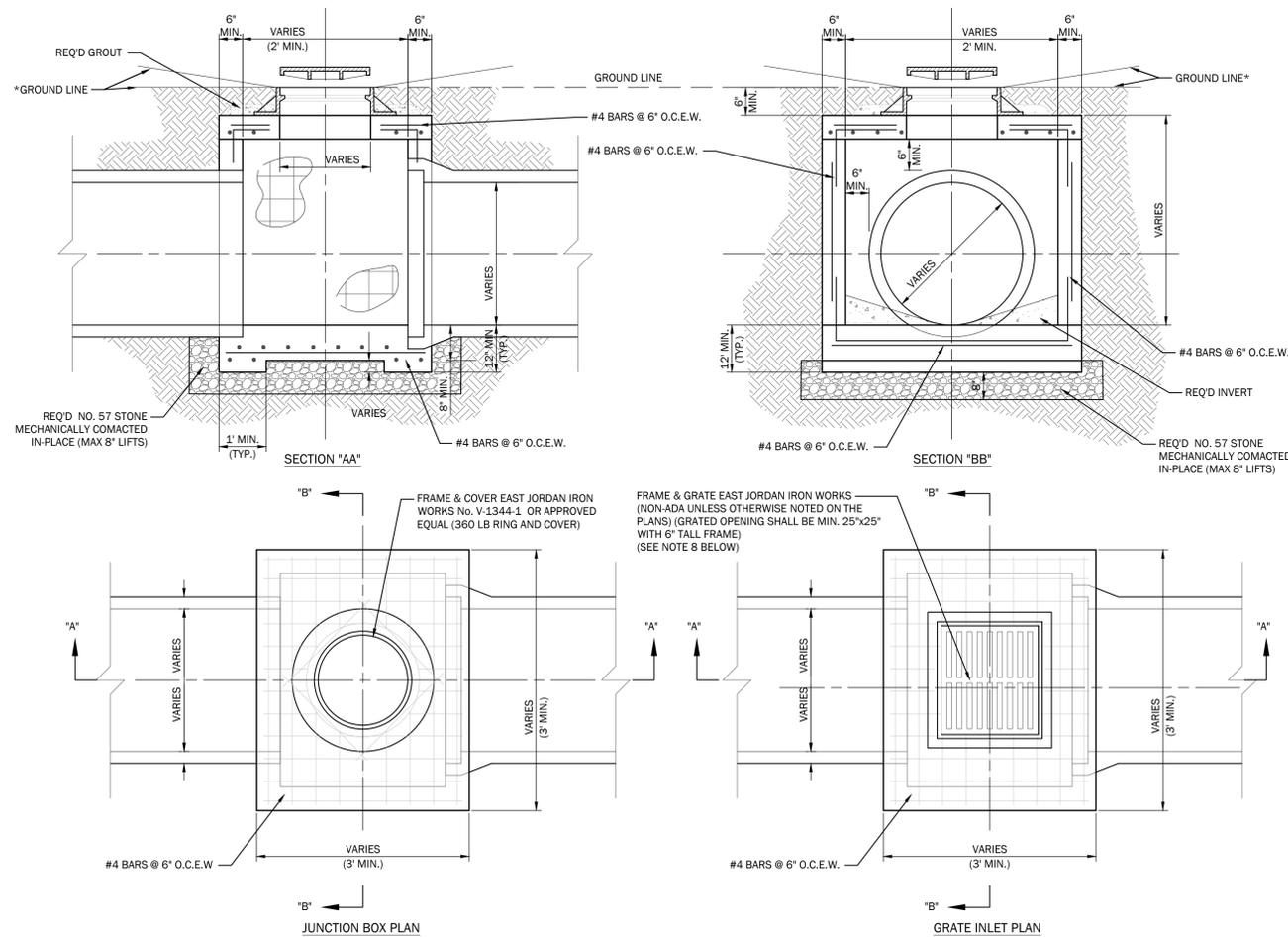
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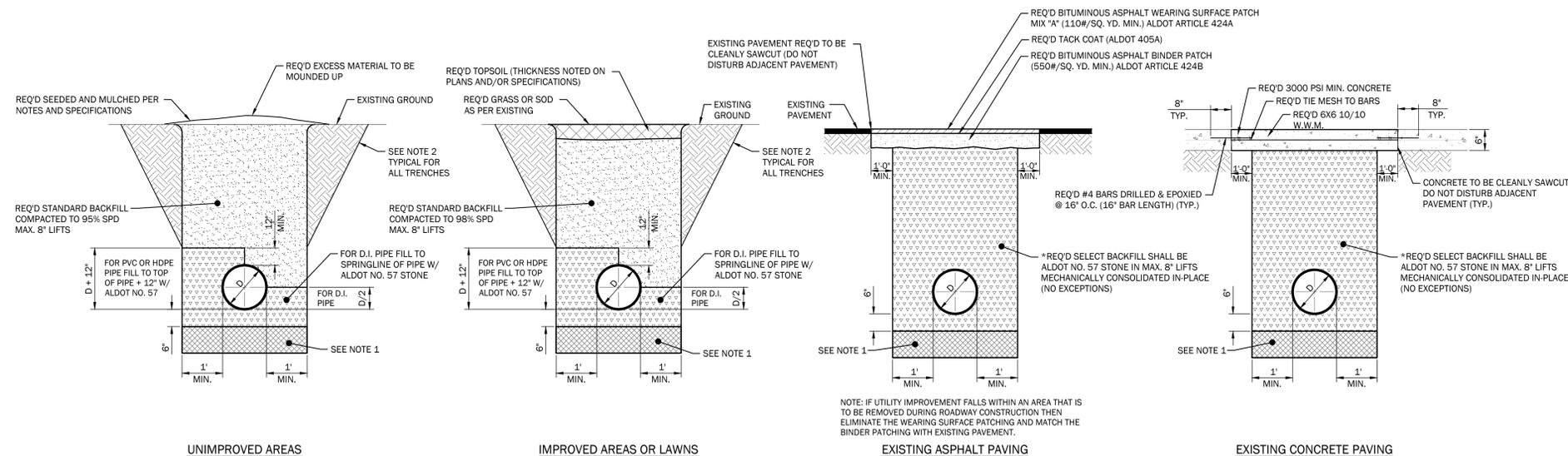
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 0 1" 2"



- NOTES FOR ALL CONCRETE STORM DRAIN STRUCTURES:**
- USE MIN. 3000 P.S.I. CONCRETE AND DEFORMED REINFORCING STEEL TO CONSTRUCT THIS ITEM.
 - SHAPE BOTTOM TO FLOW LINE OF PIPES.
 - STEPS ARE REQUIRED FOR ALL STRUCTURES OVER 4 FEET IN DEPTH MEASURED FROM TOP OF BOX TO INVERT OUT. STEP SPACING SHALL BE AS DIRECTED BY THE ENGINEER.
 - ALL CONCRETE BOXES SHALL INCLUDE FORMED INVERTS AND RING AND COVERS OF THE TYPE SPECIFIED.
 - *5. GROUND LINE SHALL BE SLOPED TOWARD GRATE INLET TOP. GROUND LINE SHALL BE SLOPED AWAY FROM JUNCTION BOX TOP.
 - THE CONTRACTOR SHALL REFER TO SPECIAL DRAWING NO. JB-620-B OF THE ALDOT SPECIAL AND STANDARD DRAWINGS, LATEST EDITION, FOR DIMENSIONS AND OTHER INFORMATION NECESSARY TO CONSTRUCT THIS ITEM.
 - WHEN INSTALLING A SOLID TOP FOR JUNCTION BOX OR HOLED TOP FOR GRATE INLET ON AN EXISTING STRUCTURE, THE CONTRACTOR SHALL DOWEL INTO THE TOP OF THE EXISTING STRUCTURE WALLS WITH 12" LONG #5 BARS AT 6" O.C. ALONG THE PERIMETER OF THE STRUCTURE TO ATTACH THE NEW TOP. THE CONTRACTOR SHALL APPLY AN APPROVED EPOXY FOR THE DOWEL INSTALLATIONS. THE TOP REINFORCEMENTS SHALL THEN BE TIED TO THESE DOWELS. PREPARATION OF THE EXISTING CONCRETE SHALL FOLLOW THE CONCRETE SPECIFICATIONS.
 - FRAME SHALL BE EIJW MODEL V5626-2 & GRATE SHALL BE EIJW MODEL V5726, OR APPROVED EQUAL.
 - IF THE CONTRACTOR CHOOSES TO USE A STANDARD PRECAST MANHOLE FOR THE DRAINAGE STRUCTURE, THEN HE SHALL REFERENCE THE STANDARD PRECAST MANHOLE DETAIL FOR ALL REQUIREMENTS.

JUNCTION BOX & GRATE INLET
 NOT TO SCALE

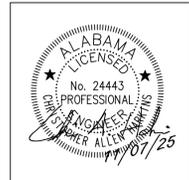


TRENCH DETAILS - GRAVITY PIPE (SANITARY AND STORM)
 NOT TO SCALE

TRENCH DETAIL NOTES

- TRENCH FOUNDATION REQUIRED IF DIRECTED BY THE ENGINEER. DEPTH VARIES.
- THERE IS NO ADDITIONAL PAY FOR TRENCH LAY BACK, BENCHING, SHORING, TRENCH BOXES, ETC. THIS IS CONSIDERED A SUBSIDIARY OBLIGATION TO THE UTILITY INSTALLATION.
- THE CONTRACTOR SHALL MECHANICALLY CONSOLIDATE ALL STONE BACKFILL IN MAXIMUM 8' LIFTS AS NOTED. FAILURE TO DO SO SHALL RESULT IN THE STONE BEING REMOVED/REINSTALLED AT THE CONTRACTOR'S EXPENSE OR ONLY PARTIAL PAYMENT BEING MADE FOR THE BID ITEM. STONE SHALL BE PLACED IN APPROPRIATE THICKNESS AND COMPACTED IN THE FOLLOWING SEQUENCE:
 (1) BEDDING (6" MIN.)
 (2) SPRINGLINE OF PIPE
 (3) ONE FOOT ABOVE TOP OF PIPE
 (4) 8' LIFTS FOR REMAINING TRENCH DEPTH
- UNIMPROVED AREAS SHALL BE CONSIDERED AREAS WHERE NO PREVIOUS DEVELOPMENT HAS OCCURRED AND THE AREA IS NOT MAINTAINED REGULARLY SUCH AS A WOODED/FORESTED AREA OR OPEN FIELD.
- IMPROVED AREAS OR LAWNS SHALL BE CONSIDERED AREAS WHERE REGULAR MAINTENANCE OCCURS SUCH AS IN PUBLIC RIGHT-OF-WAYS AND ON PRIVATE PROPERTIES. SETTLEMENT OF ANY KIND IN THESE AREAS IS UNACCEPTABLE AND MAXIMUM EFFORT SHALL BE GIVEN TO ENSURE THE IMPROVED/LANDSCAPE AREAS ARE RETURNED TO THEIR PREVIOUS STATE, UNLESS FURTHER IMPROVED BY THE PROJECT.
- PAVEMENT AREAS (ASPHALT OR CONCRETE) SHALL BE CONSIDERED ANY ROADWAY, DRIVE, SIDEWALK, PAVERS, PARKING LOT, ETC. WHERE THE EXISTING OR FINAL FINISH GRADE IS AN ASPHALT OR CONCRETE SURFACE.
- THE OWNER'S REPRESENTATIVE'S DETERMINATION OF WHAT IS AN UNIMPROVED AREA, IMPROVED AREA, OR PAVEMENT AREA IS FINAL. IF THE CONTRACTOR IS UNSURE OF WHERE UNIMPROVED, IMPROVED, OR PAVED AREAS ARE LOCATED ON A PROSPECTIVE PROJECT, THEN THEY SHALL REQUEST CLARIFICATION DURING THE BIDDING OF THE PROJECT. THERE SHALL BE NO CLAIMS CONSIDERED AFTER THE PROJECT HAS BEEN BID.
- IN AREAS OF EXISTING PAVEMENT, THE TRENCH SHALL BE BACKFILLED COMPLETELY WITH STONE AS SHOWN ON THE EXISTING PAVEMENT TRENCH DETAILS. THESE AREAS INCLUDE CROSSING OF EXISTING ROADWAYS, PARKING LOTS, SIDEWALKS, ETC. AND ARE AREAS WHERE EXCAVATED WIDTHS DO NOT ALLOW FOR COMPACTION AND TESTING OF STANDARD BACKFILL. THESE CONFINED AREAS TYPICALLY CANNOT BE BENCHED BACK AND REQUIRE TALLER TRENCH BOXES TO MAINTAIN OSHA REQUIREMENTS. IN THE EVENT THAT THE EXISTING PAVEMENT AREA IS BEING COMPLETELY REMOVED TO A LIMIT THAT PROVIDES SUFFICIENT SPACE TO ALLOW PROPER VIBRATORY EQUIPMENT AND, IF NECESSARY, BENCHING OF SIDE SLOPES AS REQUIRED IN THE PROJECT EARTHWORK SPECIFICATIONS (BENCHING IS REQUIRED ON SLOPES GREATER THAN 4:1 SLOPE), THEN THE CONTRACTOR MAY FOLLOW THE TRENCH DETAIL FOR PAVED AREAS (NEW CONSTRUCTION). THIS DETAIL ALLOWS FOR THE USE OF EARTHEN BACKFILL AND WOULD ALSO REQUIRE THE CONTRACTOR TO ALLOW SUFFICIENT WIDTH THAT THE OWNER'S GEOTECHNICAL REPRESENTATIVE COULD TAKE PERIODIC COMPACTION TESTS. IF THE CONTRACTOR IS UNSURE OF WHERE STONE OR EARTHEN BACKFILL IS TO BE INSTALLED ON A PROSPECTIVE PROJECT, THEN THEY SHALL REQUEST CLARIFICATION DURING THE BIDDING OF THE PROJECT. THERE SHALL BE NO CLAIMS CONSIDERED AFTER THE PROJECT HAS BEEN BID.

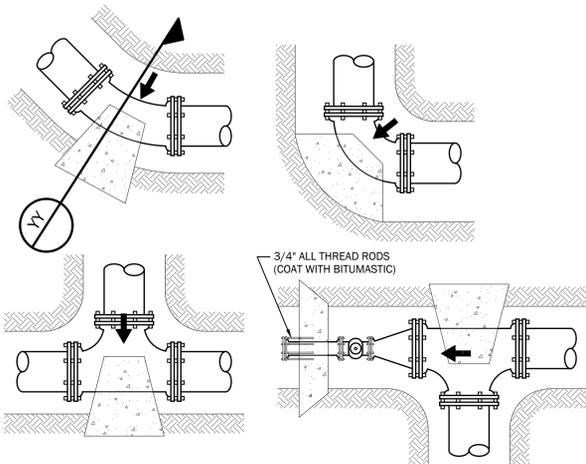
SHEET TITLE:
 CIVIL DETAILS



PROJ. MGR.: CAH
 DRAWN: EKL
 DATE: 11/07/2025
 REVISIONS

JOB NO. 25-34
 SHEET NO:

C7.1



- NOTES:**
- THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
 - CONCRETE SHALL BE KEPT CLEAR OF JOINT AND JOINT ACCESSORIES.
 - BEARING AREA OF THRUST BLOCKS ARE BASED ON 150 PSI TEST PRESSURE AND AN ALLOWABLE SOIL BEARING OF 2000 PSF. BEARING AREA VALUES SHALL BE ADJUSTED IF THE SPECIFICATIONS REQUIRE A DIFFERENT TEST PRESSURE OR ALLOWABLE SOIL BEARING. PROVIDE ADDITIONAL AREA IF DICTATED BY THE CONDITIONS ACTUALLY ENCOUNTERED.
 - ANY SPECIAL THRUST BLOCKING DETAILED ON THE PLANS SHALL SUPERSEDE THIS DETAIL.
 - VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME GREATER THAN 5 C.Y. REQUIRE SPECIAL BLOCKING DETAILS.
 - ALL PRESSURE PIPE 3 INCHES IN DIAMETER AND OVER SHALL BE PROVIDED WITH CONCRETE THRUST RESTRAINTS.

THRUST BLOCKING DETAILS & NOTES
NOT TO SCALE

TABLE "A"
BEARING AREA FOR THRUST BLOCKS SHALL BE ADJUSTED TO MATCH FIELD CONDITIONS ENCOUNTERED.

DIA. (IN.)	MINIMUM BEARING AREA OF THRUST BLOCKS (SQ. FT.)				
	TEE, WYE, PLUG, CAP	90° BEND PLUGGED CROSS	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1.3	2.0	1.0	—	—
6	2.8	4.0	2.0	1.0	—
8	4.8	6.8	3.7	1.9	1.0
10	7.3	10.3	5.9	2.8	1.4
12	10.3	14.5	7.8	4.0	2.0
14	13.8	19.5	10.6	5.4	2.7
16	17.8	25.2	13.6	6.9	3.5
18	22.4	31.7	17.1	8.7	4.4
20	27.5	38.9	21.0	10.7	5.4
24	39.2	55.4	30.0	15.3	7.7
30	60.3	85.3	46.2	23.5	11.8
36	86.4	122.2	66.1	33.7	16.9
42	116.6	164.9	89.3	45.5	22.8
48	152.0	214.9	116.3	59.3	29.7
54	192.0	271.6	147.0	74.9	37.6

MINIMUM REQUIRED BEARING AREA FOR CONCRETE THRUST BLOCKS

HORIZONTAL

FITTING SIZE	BEND ANGLE		
	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.7
10	6.0	2.3	0.9
12	8.5	3.2	1.3
14	11.5	4.3	1.8
16	14.8	5.6	2.3

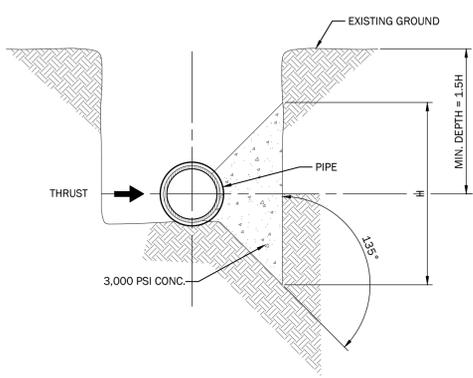
MINIMUM VOLUME OF THRUST BLOCK IN CUBIC YARDS (VERTICAL BENDS)

FITTING SIZE	BEND ANGLE		
	45° BEND	22 1/2° BEND	11 1/4° BEND
4	1.1	0.4	0.2
6	2.7	1.0	0.4
8	4.0	1.5	0.7
10	6.0	2.3	0.9
12	8.5	3.2	1.3
14	11.5	4.3	1.8
16	14.8	5.6	2.3

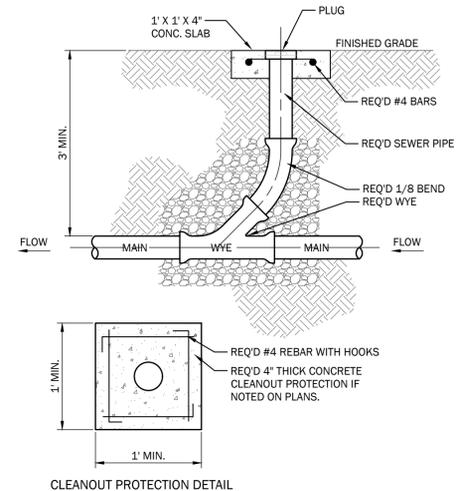
VERTICAL

STEEL RODS OVER FITTING AND EMBEDDED IN CONCRETE. COAT WITH BITUMASTIC. (SEE TABLE TO THE RIGHT FOR SIZES AND EMBEDMENT.)

FITTING SIZE	ROD SIZE	EMBEDMENT SIZE
12" and less	6	30"
14" - 16"	8	36"

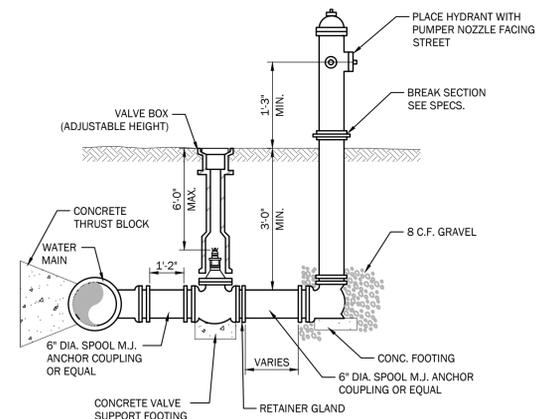


TYP. SECTION @ THRUST BLOCKS
NOT TO SCALE



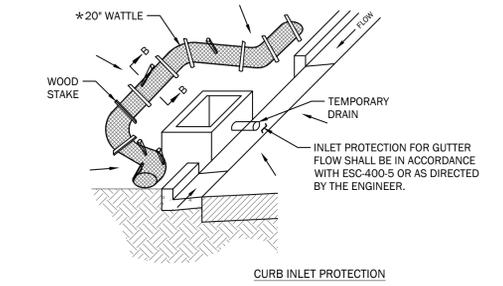
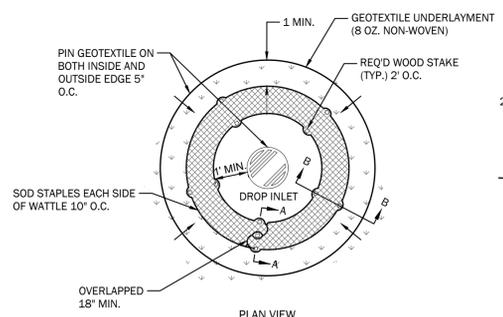
- NOTES:**
- CLEANOUT CONCRETE PROTECTION SHALL BE USED AS NOTED ON THE PLANS.
 - CLEANOUTS LOCATED IN PAVED AREAS (SIDEWALK, ROADWAYS, ETC.) SHALL HAVE TRAFFIC RATED TOPS.

CLEANOUT DETAIL
NOT TO SCALE



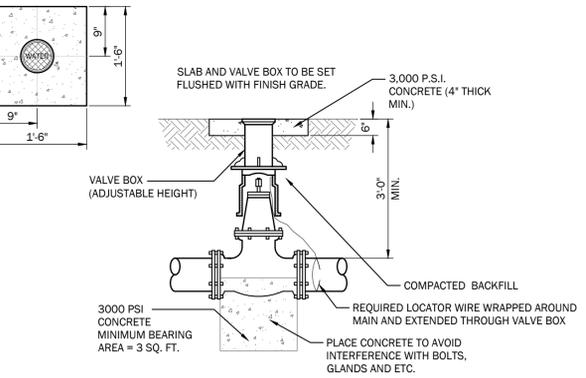
- NOTES:**
- PLACE CONCRETE TO AVOID INTERFERENCE WITH BOLTS, GLANDS, ETC.

FIRE HYDRANT ASSEMBLY DETAIL
NOT TO SCALE

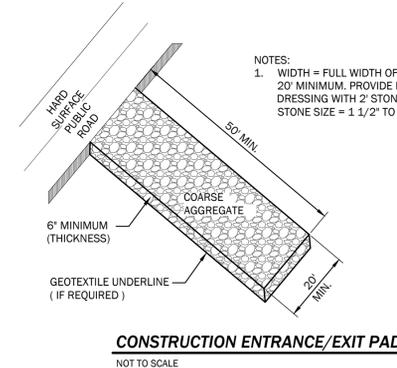


- NOTES:**
- ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF TWO FEET.
 - OVERLAP ENDS OF WATTLES PER MANUFACTURERS RECOMMENDATIONS (18" MIN, 3" MAX).
 - SILT FENCE OR SAND BAGS MAY ALSO BE USED FOR THIS APPLICATION. HAY BALES NOT ACCEPTABLE DURING THIS STAGE.

WATTLE INLET PROTECTION
NOT TO SCALE

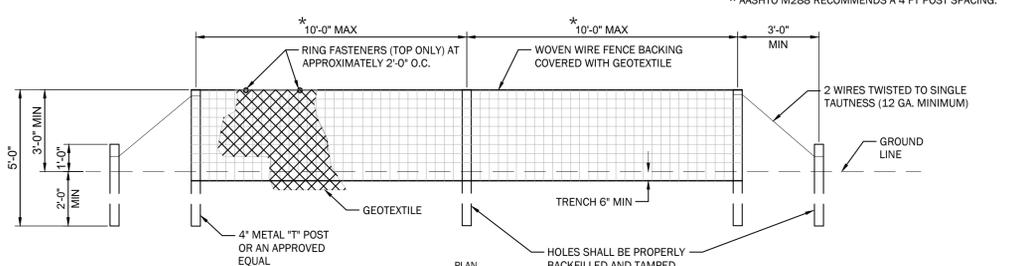


GATE VALVE AND BOX DETAIL
NOT TO SCALE

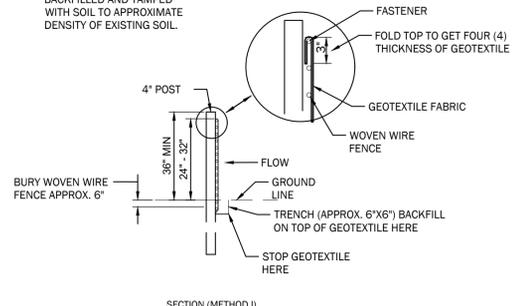


- NOTES:**
- WIDTH = FULL WIDTH OF VEHICULAR ACCESS. 20\"/>

CONSTRUCTION ENTRANCE/EXIT PAD
NOT TO SCALE



- NOTES:**
- SILT FENCES ARE TEMPORARY EROSION CONTROL ITEMS, THAT SHALL BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
 - SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT OF WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR A BACK UP FENCE IF FIRST BECOMES FULL.
 - WHEREVER POSSIBLE SILT FENCES SHALL BE CONSTRUCTED ACROSS A FLAT AREA IN THE SHAPE OF A HORSESHOE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATES SEDIMENTATION.
 - AFTER THE CONSTRUCTION AREA IS STABILIZED AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.
 - RING FASTENERS USED TO SECURE GEOTEXTILES TO WOVEN WIRE SHALL BE 13 GA. (AMERICAN).
 - IF WOOD POSTS ARE USED, STAPLES FOR SECURING WOVEN WIRE TO POSTS SHALL BE (9) GAUGE, GALVANIZED, 1-1/2\"/>



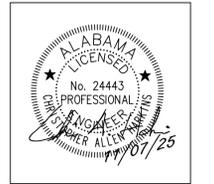
SILT FENCE - TYPE "A"
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SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
CIVIL DETAILS



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GENERAL DEMOLITION KEY NOTES

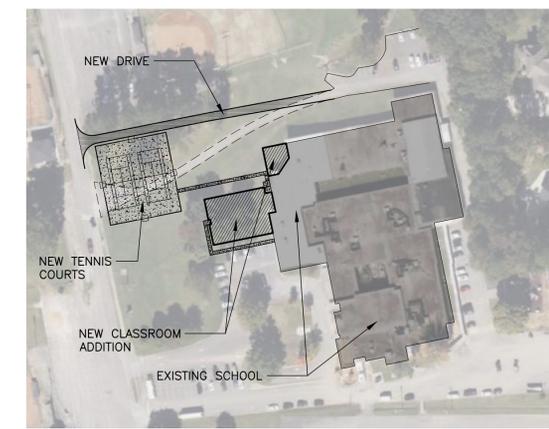
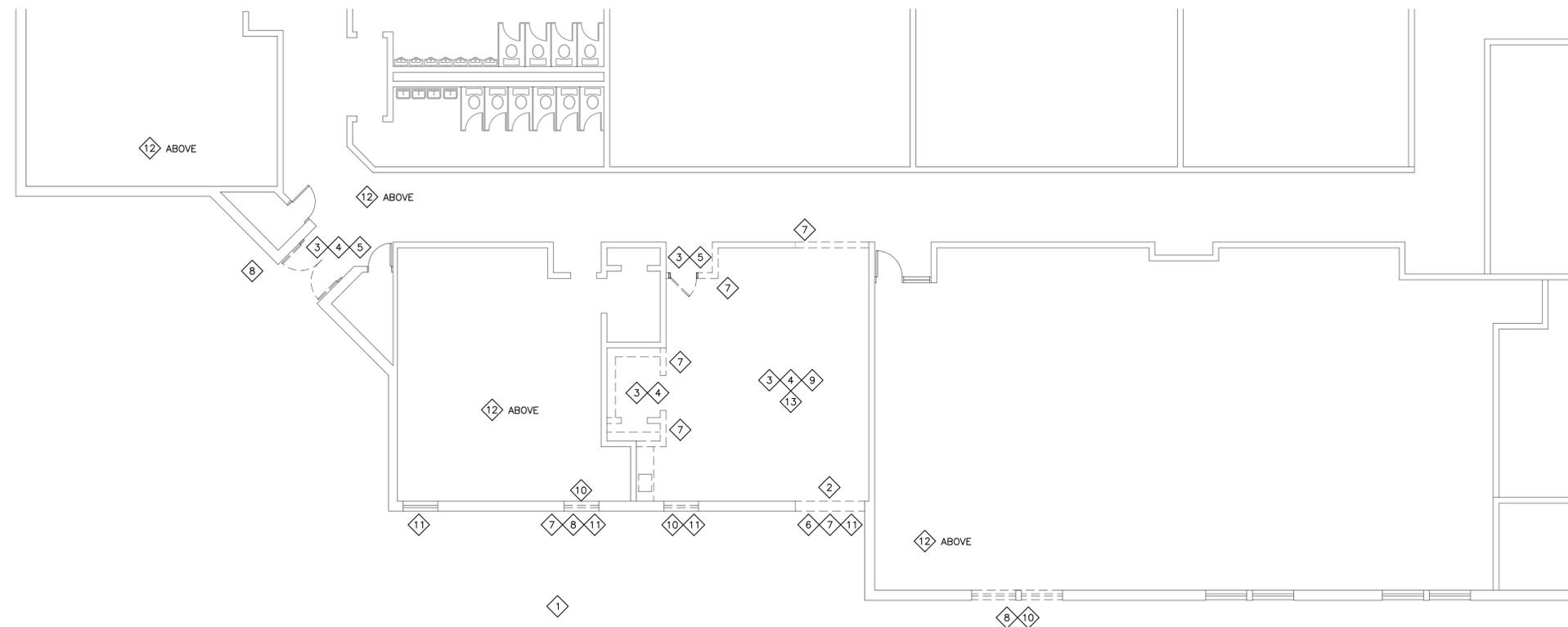
1. REFER TO CIVIL DRAWINGS FOR EXTENTS OF SITE DEMOLITION. CONTRACTOR SHALL COORDINATE ARCHITECTURAL AND CIVIL DEMOLITION REQUIREMENTS.
2. REMOVE AND REPLACE EXISTING CONCRETE SLAB IN THIS AREA.
3. REMOVE EXISTING BASE AND FLOORING, PREPARE AND MODIFY THE AREA AS REQUIRED TO ACCEPT NEW CONSTRUCTION.
4. 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.
5. REMOVE EXISTING DOOR, FRAME AND ALL ASSOCIATED CONSTRUCTION, PREPARE AND MODIFY AS REQUIRED TO ACCEPT NEW CONSTRUCTION. SEE STRUCTURAL FOR SHORING.
6. SELECTIVELY REMOVE EXISTING BRICK VENEER AS REQUIRED TO ACCEPT NEW CONSTRUCTION.
7. SELECTIVELY REMOVE EXISTING CMU WALL AS REQUIRED TO ACCEPT NEW CONSTRUCTION. CUT AND TOOTH NEW CMU FOR SEAMLESS INTEGRATED INFILL, APPLY FINISHES AS REQUIRED TO MATCH NEW CONSTRUCTION. SEE STRUCTURAL FOR SHORING.
8. SELECTIVELY REMOVE GUTTER AND DOWNSPOUTS AS REQUIRED TO ACCEPT NEW CONSTRUCTION.
9. REMOVE EXISTING WALL MOUNTED ALARM SYSTEM, BELLS, TACK BOARDS, MARKER BOARDS, CHALKBOARDS, SOUND SYSTEM, CAMERAS/SECURITY SYSTEM, PIPING, CONDUIT/RACEWAYS, TV'S, DATA CABLING, SIGNAGE, ETC. 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.
10. REMOVE EXISTING WINDOWS AND ASSOCIATED CONSTRUCTION, INFILL WITH CMU AS REQUIRED.
11. EXISTING MECHANICAL TO BE REMOVED - SEE MECHANICAL DRAWINGS.
12. REMOVE EXISTING ROOFING SYSTEM AND ANY ASSOCIATED CONSTRUCTION AS REQUIRED, TO PREPARE AND MODIFY THE AREA AS REQUIRED TO ACCEPT NEW CONSTRUCTION.
13. 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.

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. ACCEPT NEW WORK.
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.
8. COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL, PLUMBING & ELECTRICAL DRAWINGS TO DETERMINE LIMITS OF DEMOLITION REQUIRED FOR NEW CONSTRUCTION.
9. COORDINATE ALL UTILITY OUTAGES OVER WEEKENDS OR HOLIDAYS WITH OWNER PRIOR TO DEMOLITION.
10. CONTRACTOR SHALL VISIT THE SITE PRIOR TO COMMENCING WORK AND THOROUGHLY REVIEW ALL EXISTING CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR REMOVING, PREPARING, AND MODIFYING ANY EXISTING CONSTRUCTION AS REQUIRED TO ACCOMMODATE NEW WORK, WHETHER OR NOT SPECIFICALLY INDICATED ON THE DRAWINGS. ALL REMOVALS AND MODIFICATIONS SHALL BE PERFORMED IN A MANNER THAT DOES NOT COMPROMISE ADJACENT CONSTRUCTION AND SHALL RESULT IN CONDITIONS SUITABLE FOR NEW CONSTRUCTION.

DEMOLITION LEGEND

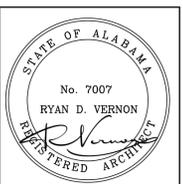
	EXISTING CONSTRUCTION TO BE REMOVED
	EXISTING CONSTRUCTION TO REMAIN
	EXISTING DOOR AND ASSOCIATED CONSTRUCTION TO BE REMOVED
	EXISTING DOOR TO REMAIN



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

2 KEYPLAN

SHEET TITLE:
DEMOLITION PLAN

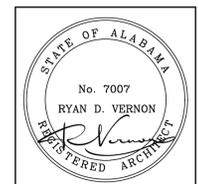


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DRAWN: JWW
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SHEET NO:
A1.0
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SHEET TITLE:
FLOOR PLAN - BASE BID



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DATE: NOV. 7, 2025
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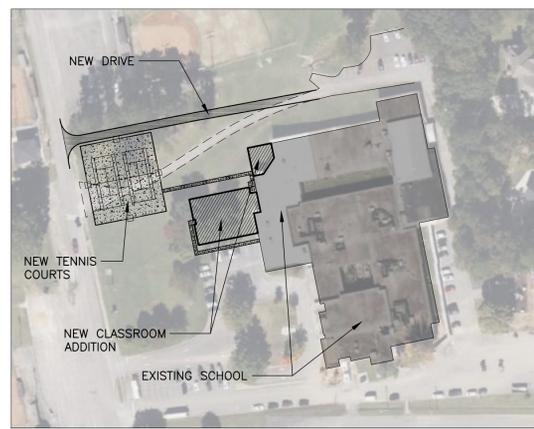
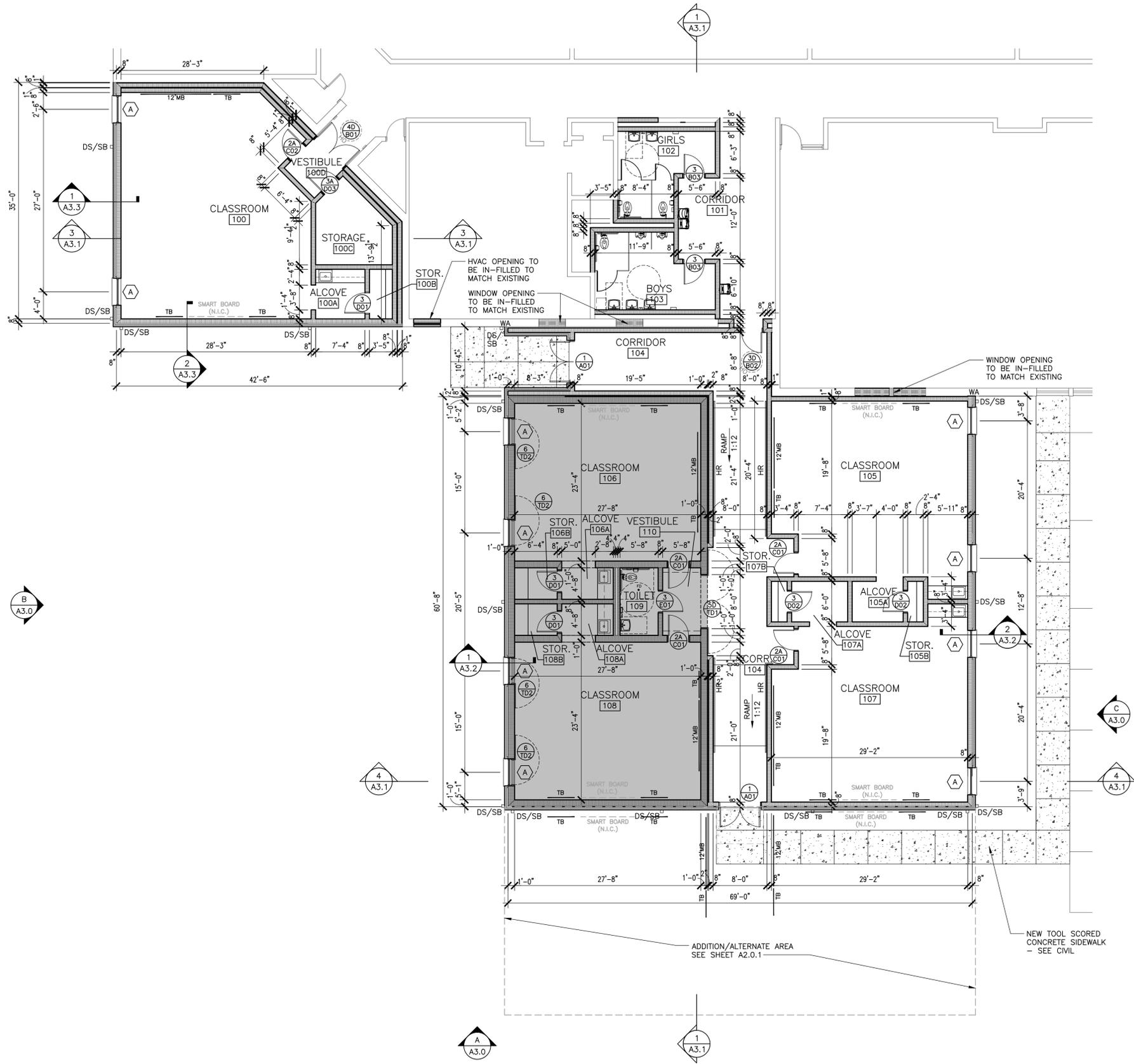
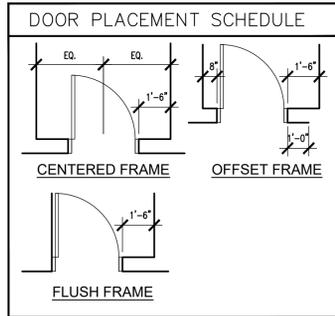
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SHEET NO. A2.0
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GENERAL NOTES	
PROVIDE SLOPE FOR POSITIVE DRAINAGE IN AREAS WITH FLOOR DRAINAGE SYSTEM.	
EXTEND & KEY RATED WALLS TO BOTTOM OF RATED ASSEMBLY ABOVE. SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS. EXTEND ALL NON-RATED WALLS TO BOTTOM OF STRUCTURE ABOVE.	
SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS. PROVIDE DOWNSPOUT & SPLASHBLOCKS.	
SEE CIVIL DRAWINGS FOR EXTENTS OF SITE RELATED WORK.	
PLAN DIMENSIONS ARE TYPICALLY SHOWN FACE TO FACE OF CMU AND FACE OF STUD WALL UNLESS NOTED OTHERWISE.	
SLOPE ALL SIDEWALKS AWAY FROM BUILDING AND BUILDING ENTRIES SEE CIVIL FOR SLOPE.	
BRICK POCKET SHALL BE 6" UNLESS NOTED OTHERWISE.	

SYMBOLS LEGEND			
A300	ROOM NUMBER	1A	DOOR TYPE
FE	SURFACE MOUNT FIRE EXTINGUISHER	A	HARDWARE SYMBOL
F.D.	FLOOR DRAIN	A.1	HOLD OPEN
MB	MARKER BOARD	A	ELEV. MARK
OH	OPPOSITE HAND	A.1	SHEET NUMBER
DS/BT/SB	DOWNSPOUT / BOOT/SPLASHBLOCK	1	SECT. MARK
A	WINDOW MARK	1	SHEET NUMBER
1	STOREFRONT MARK	5	EXT. ELEVATION
HR	HANDRAIL	5	ELEV. MARK
1	LIGHTING - SEE ELECTRICAL	AS.1	SHEET NUMBER
CR	CARD READER	INT.	INT. ELEVATION
		WA	NEW DOOR AND SWING
			WINDSTOP ANGLE

WALL TYPE LEGEND	
CMU PARTITION	CONCRETE MASONRY UNIT WALL. SEE PLAN FOR WIDTH.
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
HMF	HOLLOW METAL FRAME
HMD	HOLLOW METAL DOOR
SCWD	SOLID CORE WOODEN DOOR

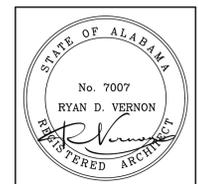


2 KEYPLAN

1 FLOOR PLAN/BASE BID
1/8" = 1'-0"



SHEET TITLE:
FLOOR PLAN
ADDITION/ALTERNATE



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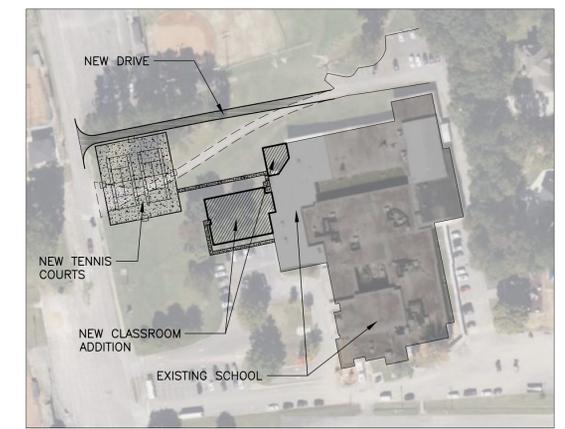
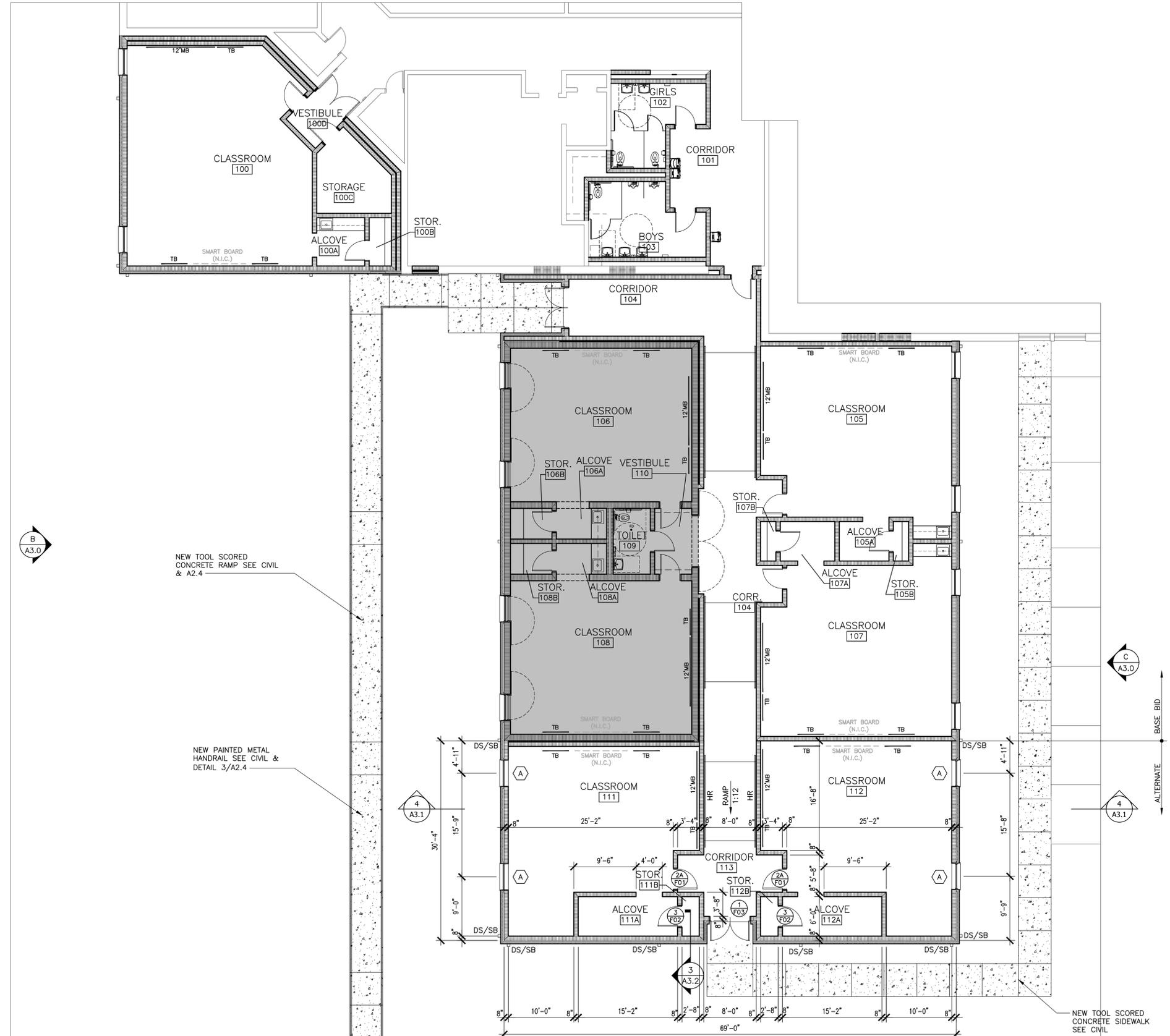
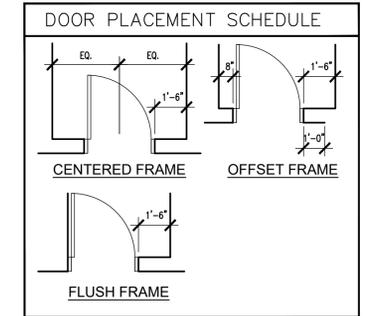
JOB NO. 25-34
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GENERAL NOTES	
PROVIDE SLOPE FOR POSITIVE DRAINAGE IN AREAS WITH FLOOR DRAINAGE SYSTEM.	
EXTEND & KEY RATED WALLS TO BOTTOM OF RATED ASSEMBLY ABOVE. SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS. EXTEND ALL NON-RATED WALLS TO BOTTOM OF STRUCTURE ABOVE.	
SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS. PROVIDE DOWNSPOUT & SPLASHBLOCKS.	
SEE CIVIL DRAWINGS FOR EXTENTS OF SITE RELATED WORK.	
PLAN DIMENSIONS ARE TYPICALLY SHOWN FACE TO FACE OF CMU AND FACE OF STUD WALL UNLESS NOTED OTHERWISE.	
SLOPE ALL SIDEWALKS AWAY FROM BUILDING AND BUILDING ENTRIES SEE CIVIL FOR SLOPE.	
BRICK POCKET SHALL BE 6" UNLESS NOTED OTHERWISE.	

SYMBOLS LEGEND			
A300	ROOM NUMBER	1A	DOOR TYPE
FE	SURFACE MOUNT FIRE EXTINGUISHER	A	RATING
F.D.	FLOOR DRAIN	A	HARDWARE SYMBOL
MB	MARKER BOARD	A	HOLD OPEN
OH	OPPOSITE HAND	A	ELEV. MARK
DS/BT/SB	DOWNSPOUT / BOOTSPASHBLOCK	A	SHEET NUMBER
A	WINDOW MARK	1	SECT. MARK
1	STOREFRONT MARK	5	SHEET NUMBER
HR	HANDRAIL	5	EXT. ELEVATION
LC	LIGHTING - SEE ELECTRICAL	5	ELEV. MARK
CR	CARD READER	AS.1	SHEET NUMBER
		INT.	INT. ELEVATION
		NEW DOOR AND SWING	
		WA	WINDSTOP ANGLE

WALL TYPE LEGEND	
CMU PARTITION	CONCRETE MASONRY UNIT WALL. SEE PLAN FOR WIDTH.
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
HMF	HOLLOW METAL FRAME
HMD	HOLLOW METAL DOOR
SCWD	SOLID CORE WOODEN DOOR

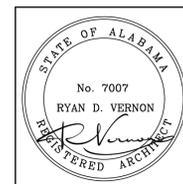


1 FLOOR PLAN ADDITION/ALTERNATE
1/8" = 1'-0"

2 KEYPLAN



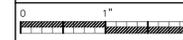
SHEET TITLE:
ROOF PLAN



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DRAWN: JWW
DATE: NOV. 7, 2025
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SHEET NO:

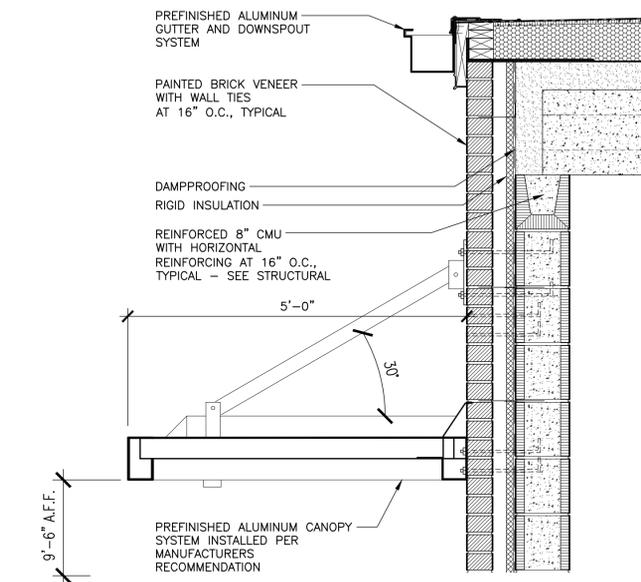
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GENERAL ROOF NOTES

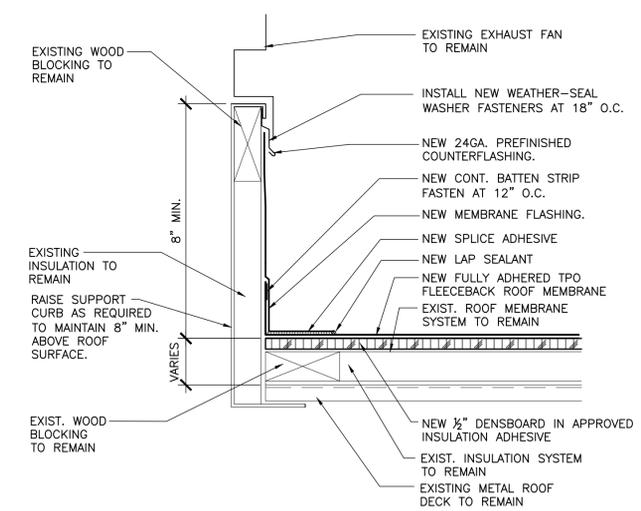
1. CONTRACTOR SHALL PROVIDE NECESSARY MEANS TO FULLY PROTECT EXISTING CONSTRUCTION FROM DAMAGE DURING THE COURSE OF THE WORK.
2. DO NOT STORE MATERIALS ON ROOF.
3. DO NOT CONCENTRATE MATERIAL LOADS ON ROOF.
4. GUTTERS SHALL NOT EXCEED 50'-0" IN LENGTH WITHOUT A GUTTER EXPANSION JOINT.
5. INSURE ADEQUATE 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.

ROOF LEGEND			
	DETAIL NUMBER		NEW ROOF SYSTEM
	SHEET NUMBER		WALK PAD SYSTEM
	ROOF DETAIL MARKER		
	DIRECTION OF DOWNWARD SLOPE		
	RISE:RUN		
	ROOF SLOPE MARKER		
DS	DOWNSPOUT	PV	PLUMBING VENT
CR	CRICKET	SB	SPLASH BLOCK
GEJ	GUTTER EXPANSION JOINT		



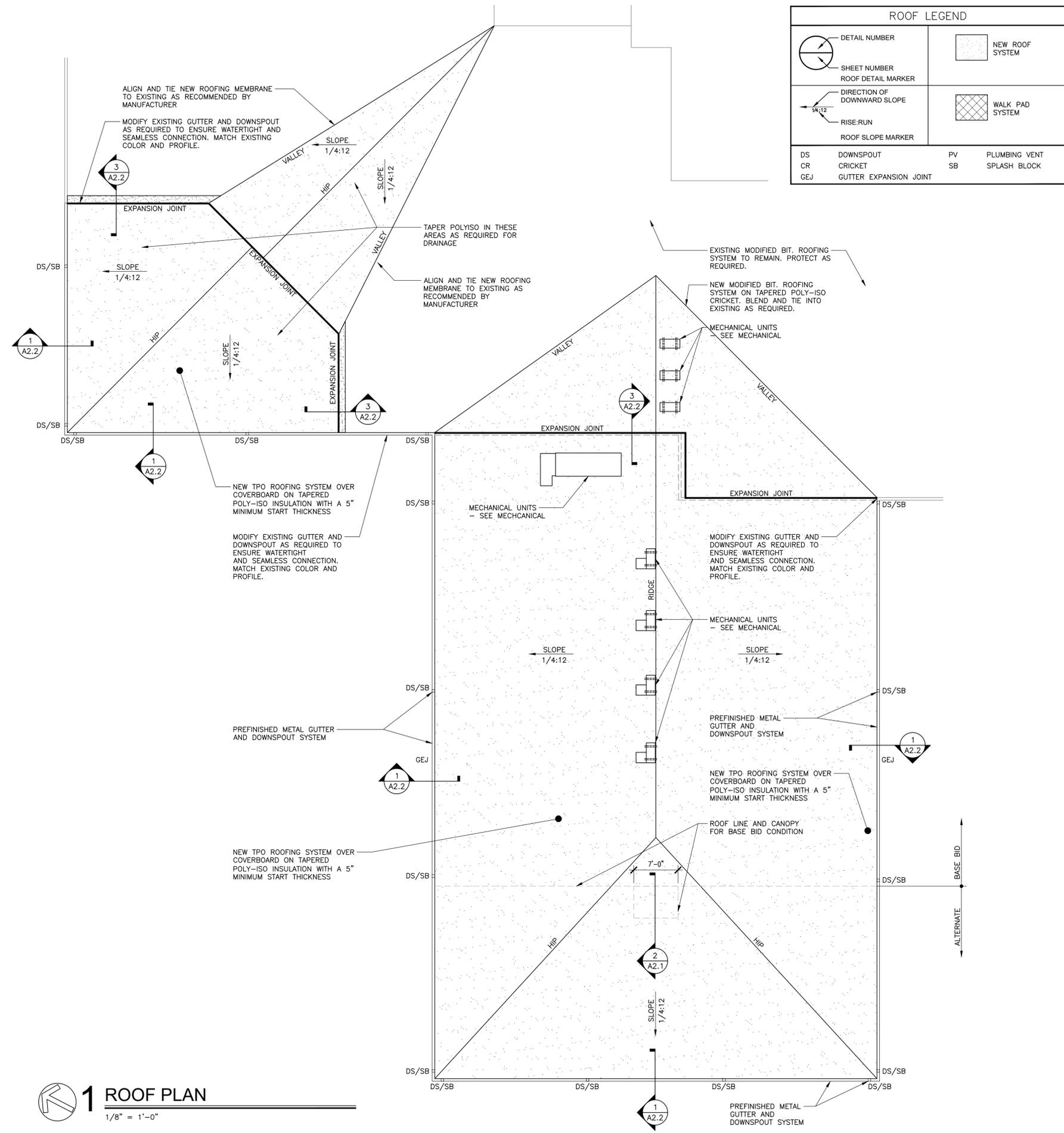
2 CANOPY DETAIL

SCALE: 1" = 1'-0"



3 ROOF CURB FLASHING DETAIL

SCALE: 3" = 1'-0"



1 ROOF PLAN

1/8" = 1'-0"





SHEET TITLE:
ROOF DETAILS



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DRAWN: JWW

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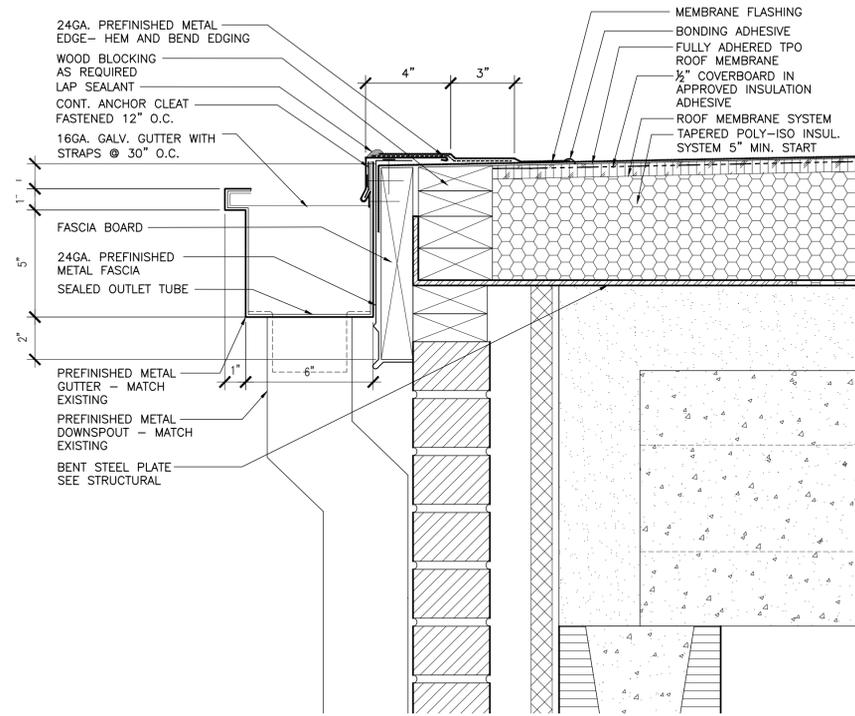
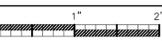
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JOB NO. 25-34

SHEET NO:

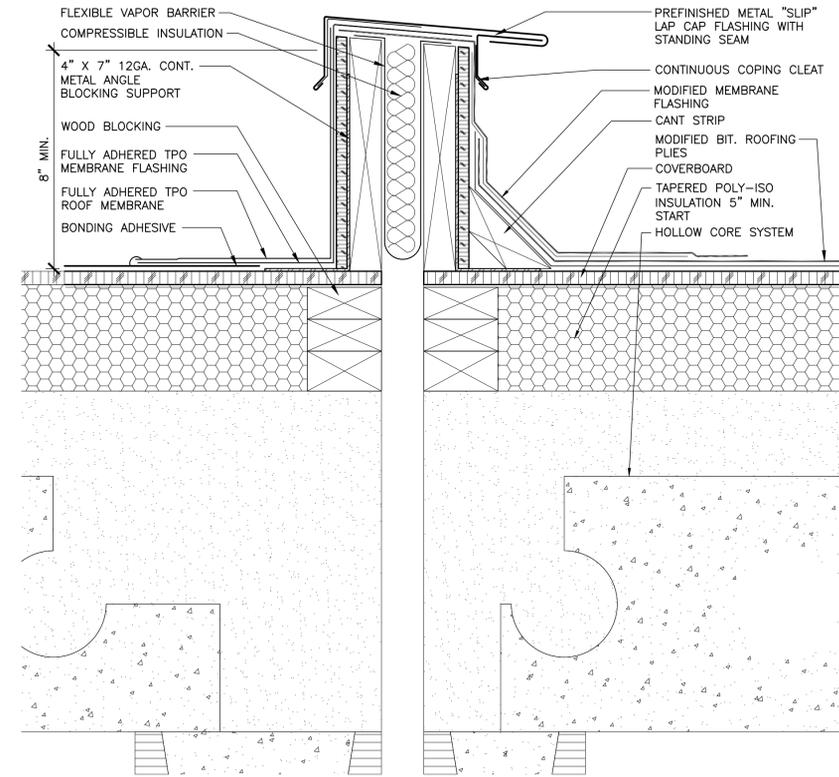
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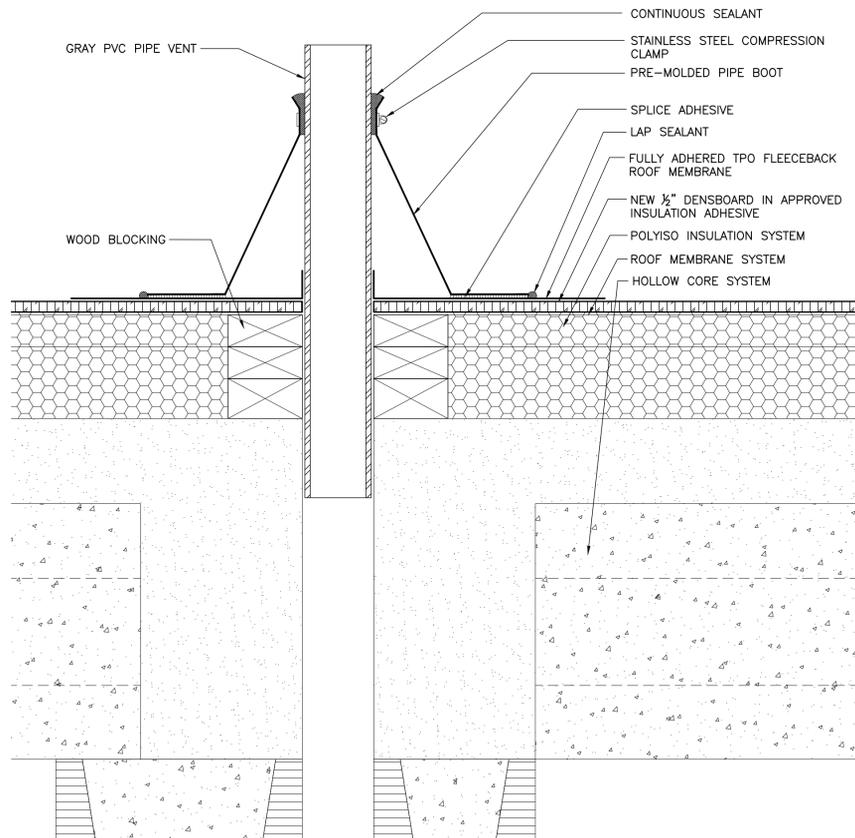
1 ROOF DETAIL

3" = 1'-0"



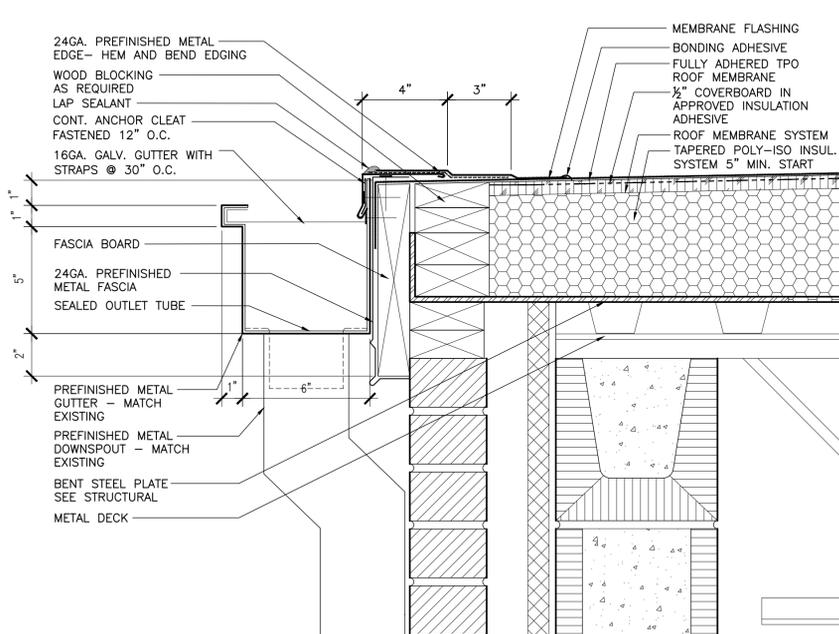
3 EXPANSION JOINT DETAIL

3" = 1'-0"



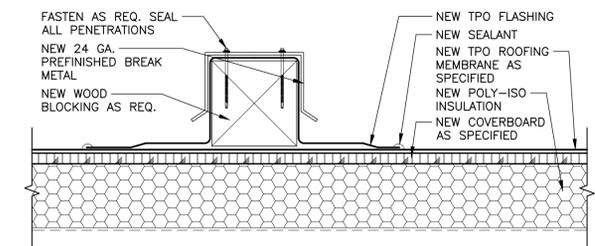
2 ROOF PIPE PENETRATION DETAIL

3" = 1'-0"



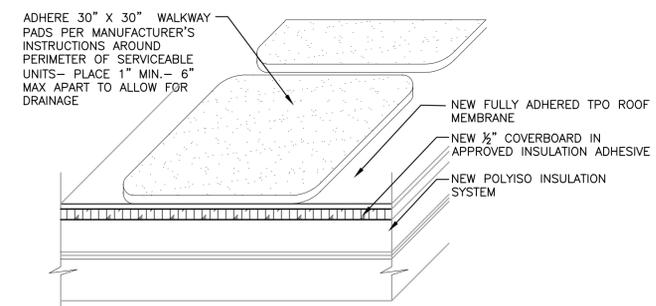
4 GUTTER DETAIL

3" = 1'-0"



5 CONDENSING UNIT SUPPORT DETAIL

3" = 1'-0"

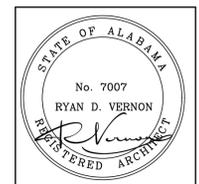


6 WALKING PAD DETAIL

3" = 1'-0"



SHEET TITLE:
DOOR AND WINDOW SCHEDULE



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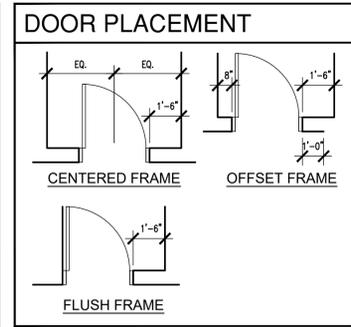
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SHEET NO:

A2.3

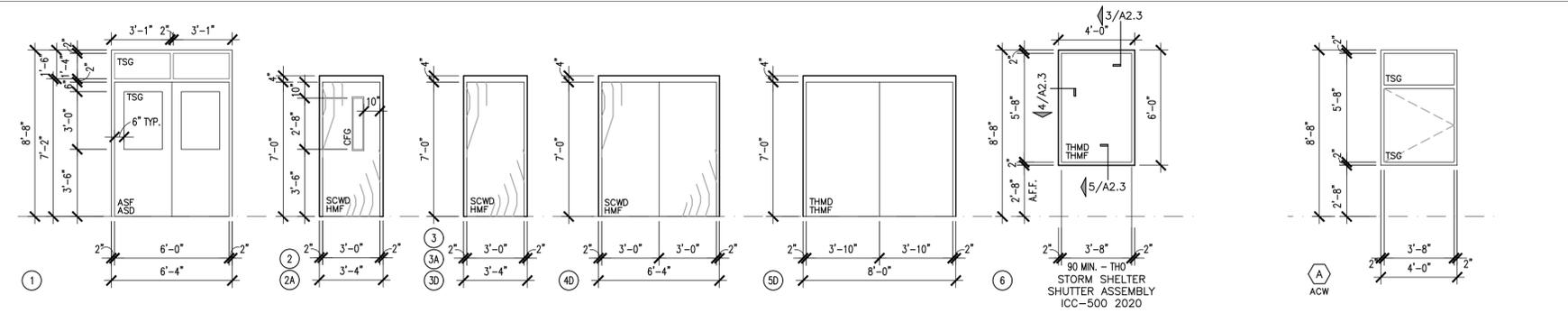


DOOR AND WINDOW LEGEND	
CFG	CLEAR FIRE RATED SAFETY GLASS AS SPECIFIED.
TSG	1" TINTED INSULATED LOW-E TEMPERED SAFETY GLASS AS SPEC.
SCWD	SOLID CORE WOOD DOOR
THMD	TORNADO RATED HOLLOW METAL DOOR
THMF	TORNADO RATED HOLLOW METAL FRAME
ACW	PREFINISHED ALUMINUM CASEMENT WINDOW
HMF	HOLLOW METAL FRAME
ASF	PREFINISHED ALUMINUM STOREFRONT
ASD	PREFINISHED ALUMINUM DOOR

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

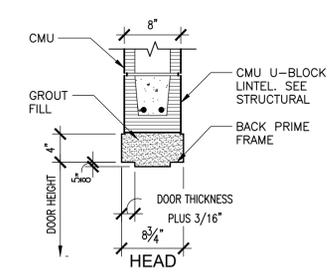
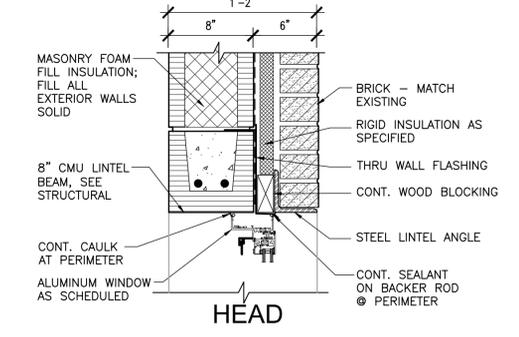
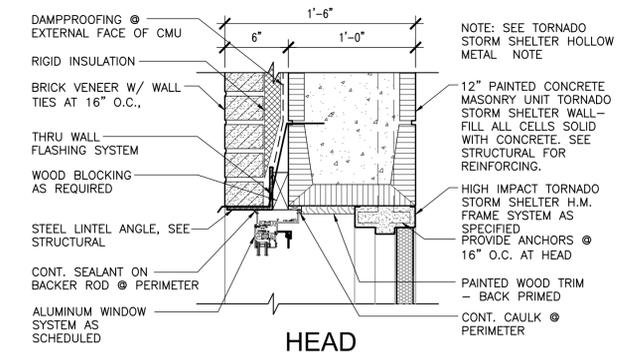


1 DOOR SCHEDULE

2 WINDOW SCHEDULE

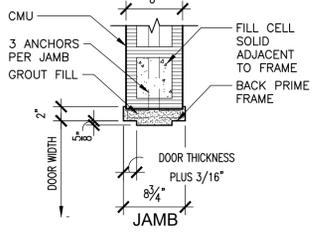
1/4" = 1'-0"

1/4" = 1'-0"



3 DETAIL

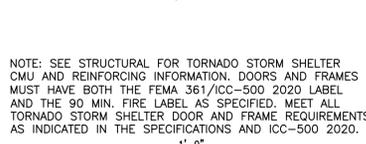
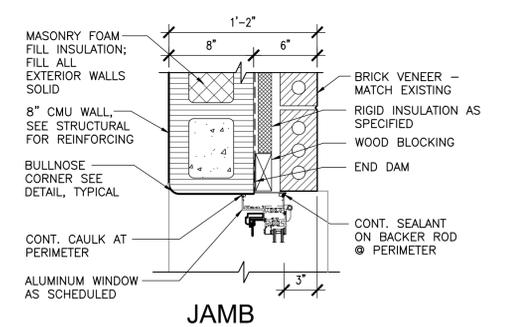
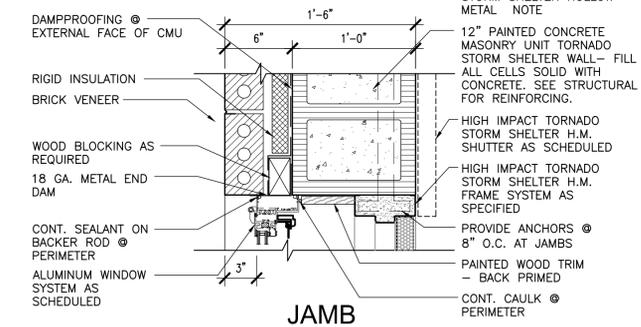
6 DETAIL



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

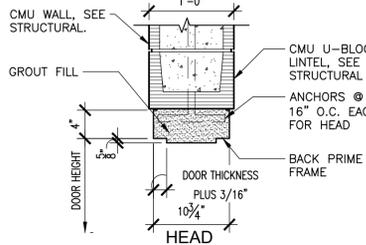
SCALE: 1 1/2" = 1'-0"

9 DETAIL



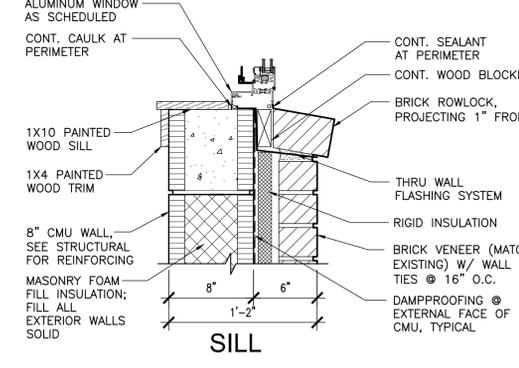
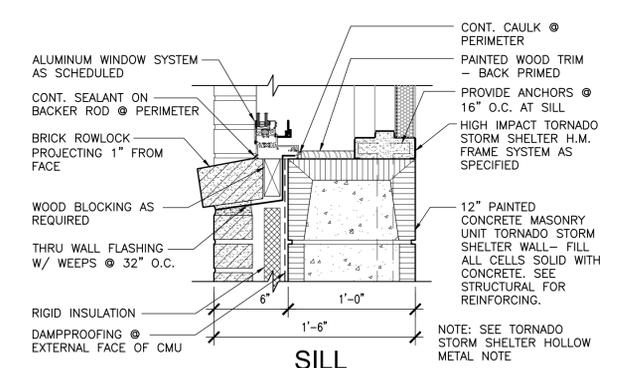
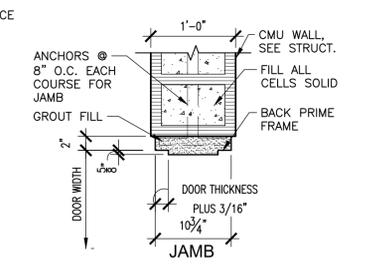
4 DETAIL

7 DETAIL



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

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



5 DETAIL

8 DETAIL

10 DETAILS

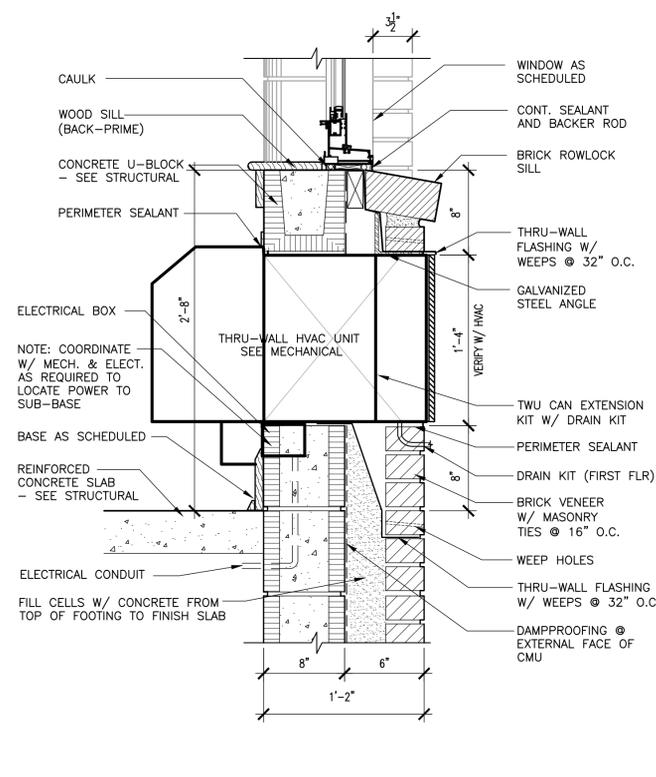
SCALE: 1 1/2" = 1'-0"

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

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

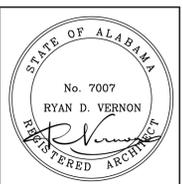
11 THROUGH WALL MECHANICAL DETAIL

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



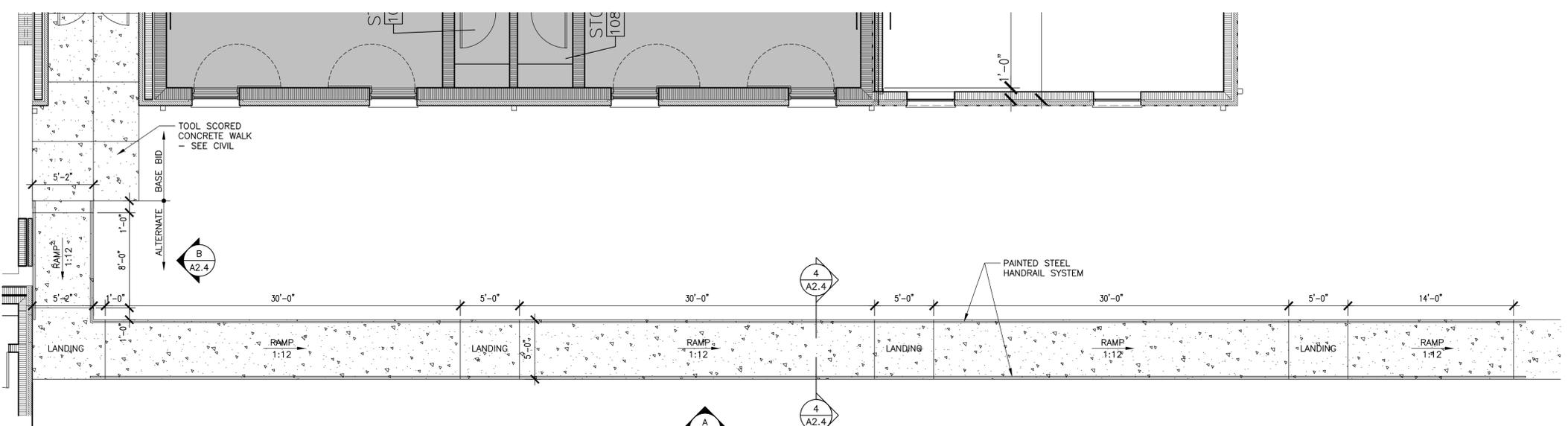


SHEET TITLE:
ALTERNATE RAMP AND
DETAILS

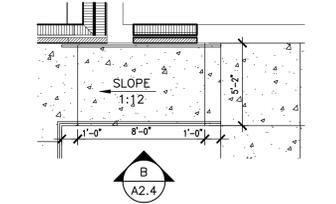


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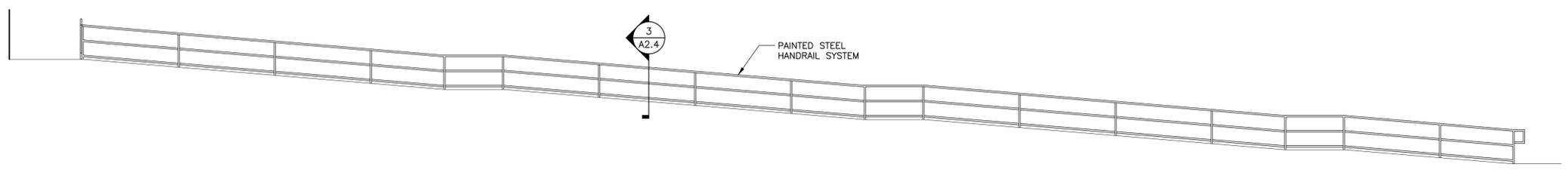
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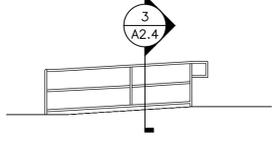
1 RAMP PLAN VIEW - ALTERNATE
3/16" = 1'-0"



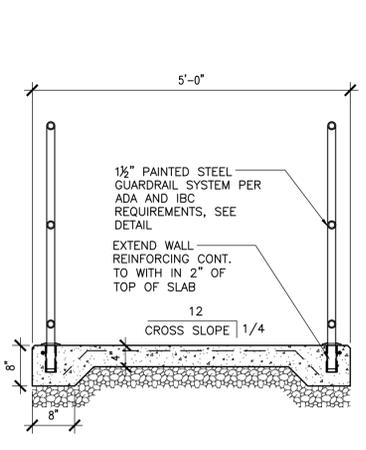
2 RAMP PLAN VIEW
3/16" = 1'-0"



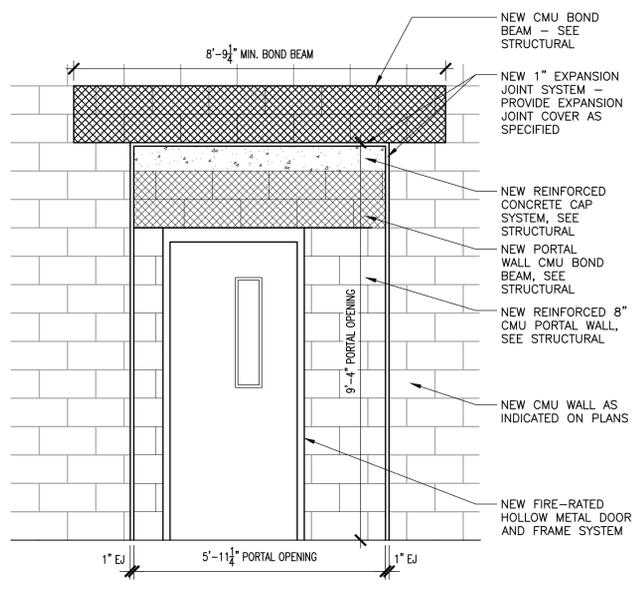
A RAMP ELEVATION - ALTERNATE
3/16" = 1'-0"



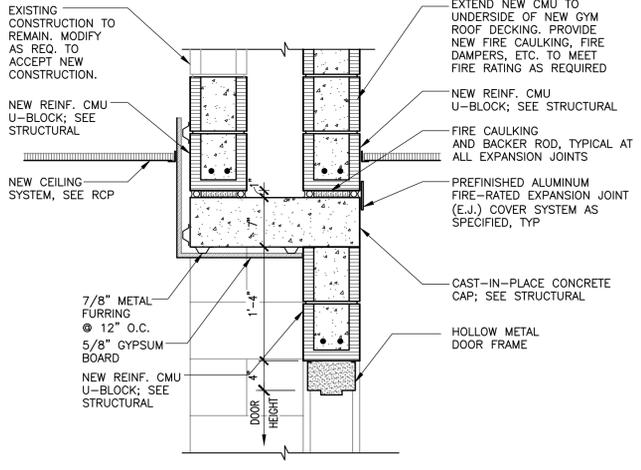
B RAMP ELEVATION - ALTERNATE
3/16" = 1'-0"



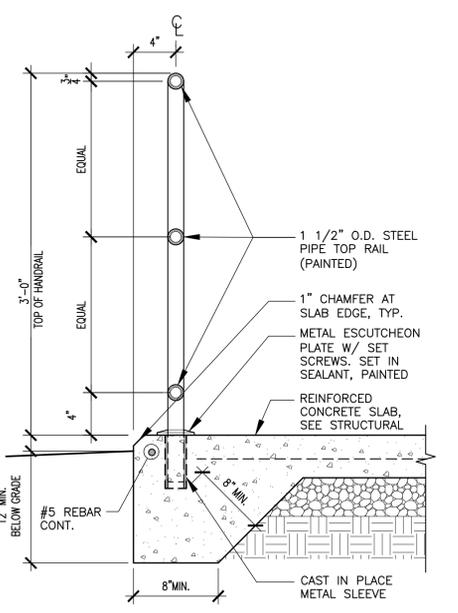
2 RAMP SECTION
3/4" = 1'-0"



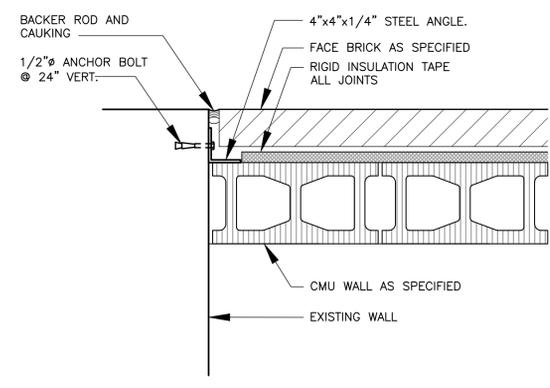
5 PORTAL FRAME DOOR DETAIL
1/2" = 1'-0"



6 PORTAL FRAME SECTION DETAIL
1" = 1'-0"



3 HANDRAIL DETAIL
1 1/2" = 1'-0"



4 WIND STOP DETAIL
1 1/2" = 1'-0"



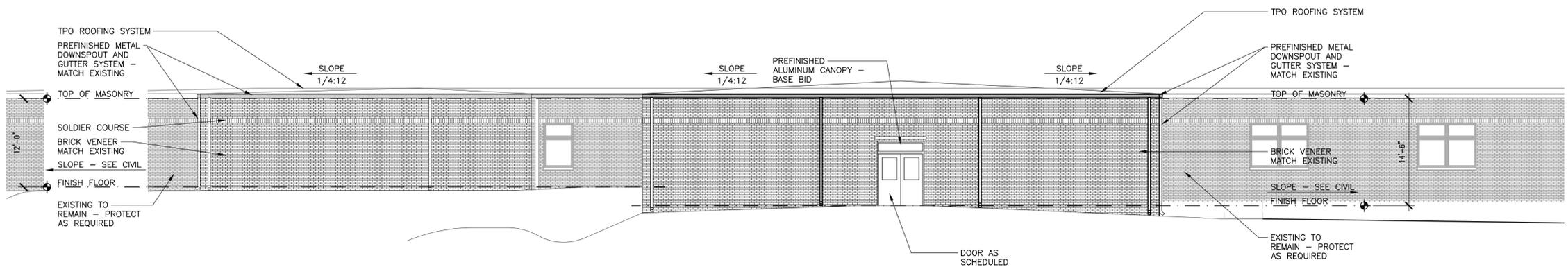


SHEET TITLE:
ELEVATIONS

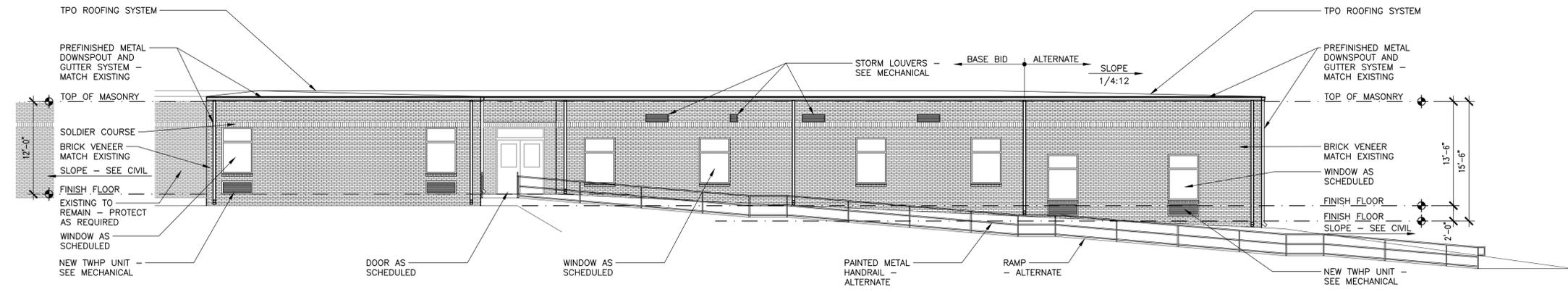


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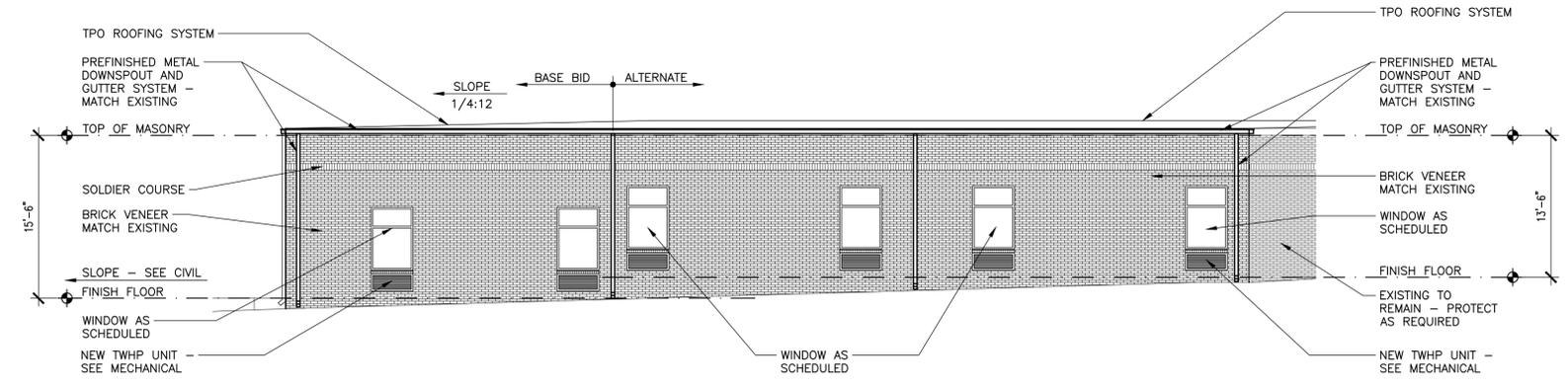
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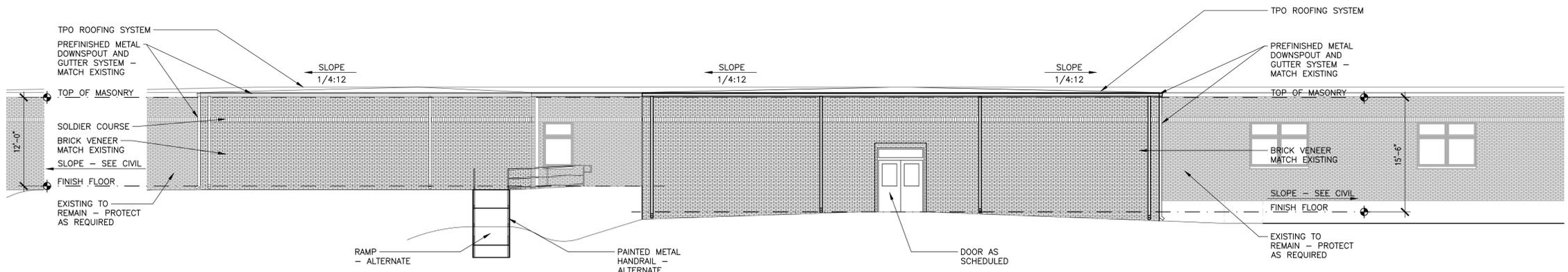
A ELEVATION - BASE BID
1/8" = 1'-0"



B ELEVATION - BASE BID
1/8" = 1'-0"



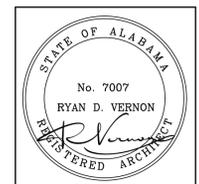
C ELEVATION - BASE BID
1/8" = 1'-0"



D ELEVATION - ALTERNATE
1/8" = 1'-0"

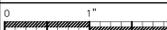
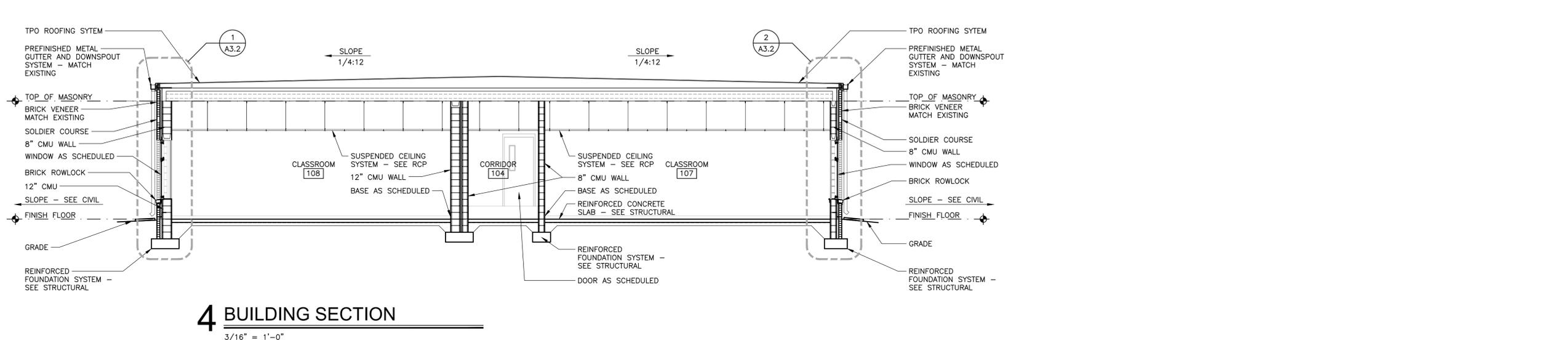
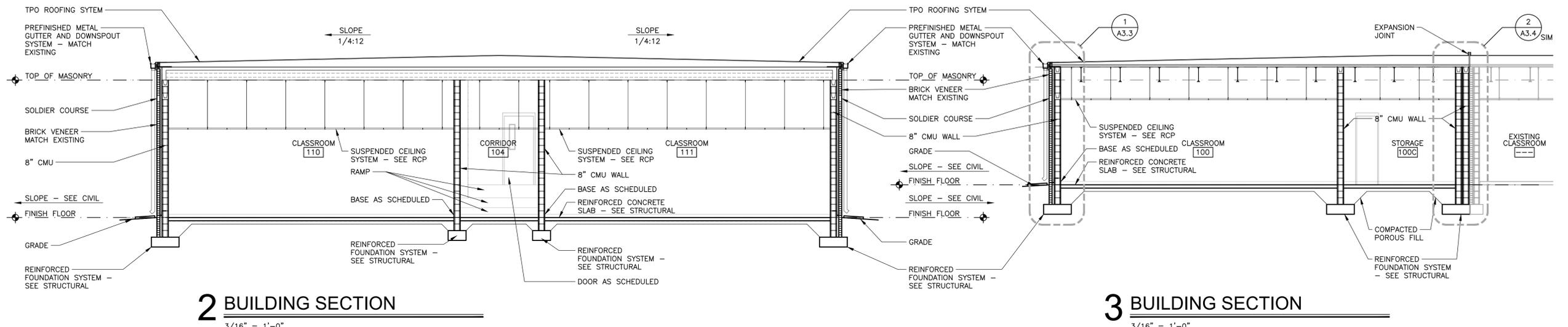
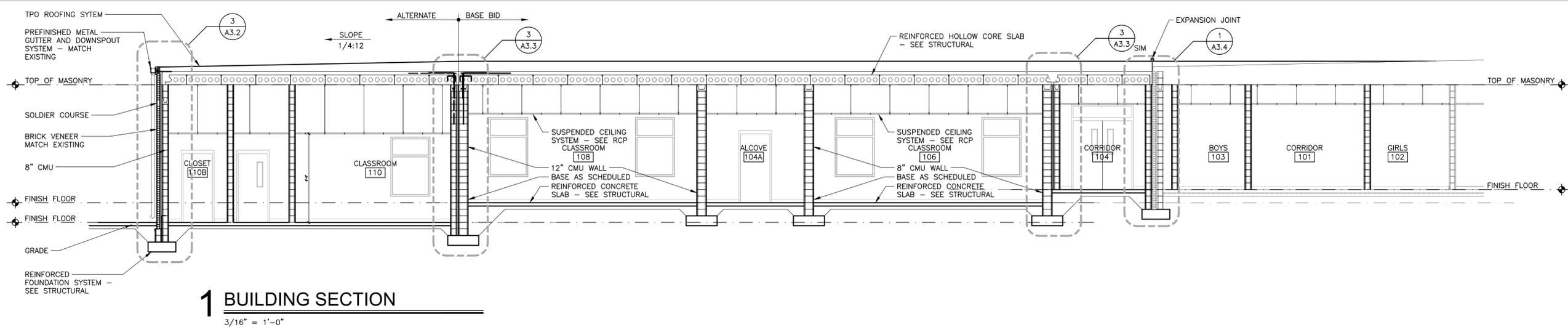


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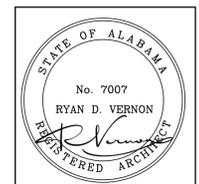
PROJ. MGR.: H. RASCO
DRAWN: JWW
DATE: NOV. 7, 2025
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SHEET NO:
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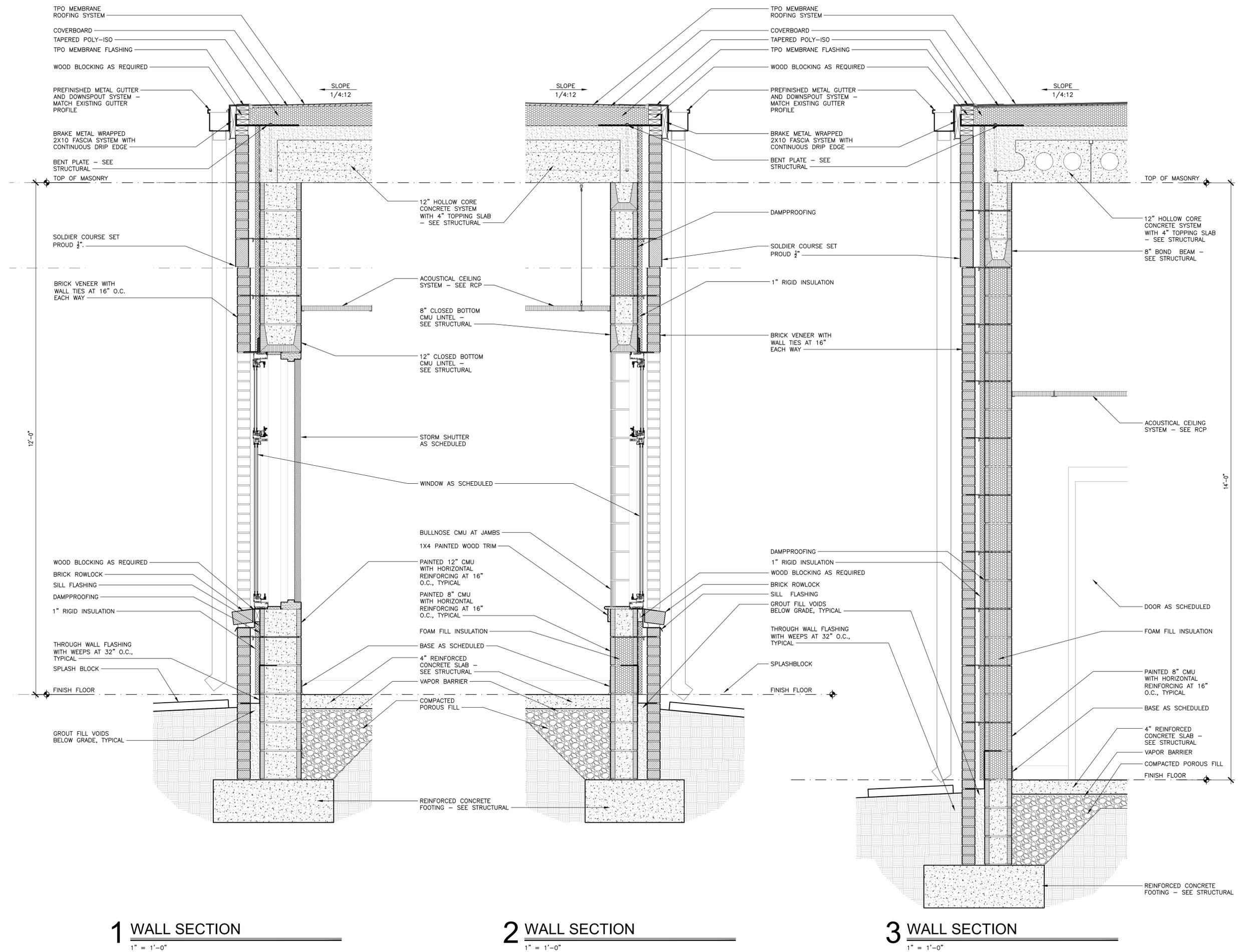


SHEET TITLE:
WALL SECTIONS



PROJ. MGR.: H. RASCO
DRAWN: JWW
DATE: NOV. 7, 2025
REVISIONS

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SHEET NO:
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SHEET TITLE:
WALL SECTIONS



PROJ. MGR.: H. RASCO

DRAWN: JWW

DATE: NOV. 7, 2025

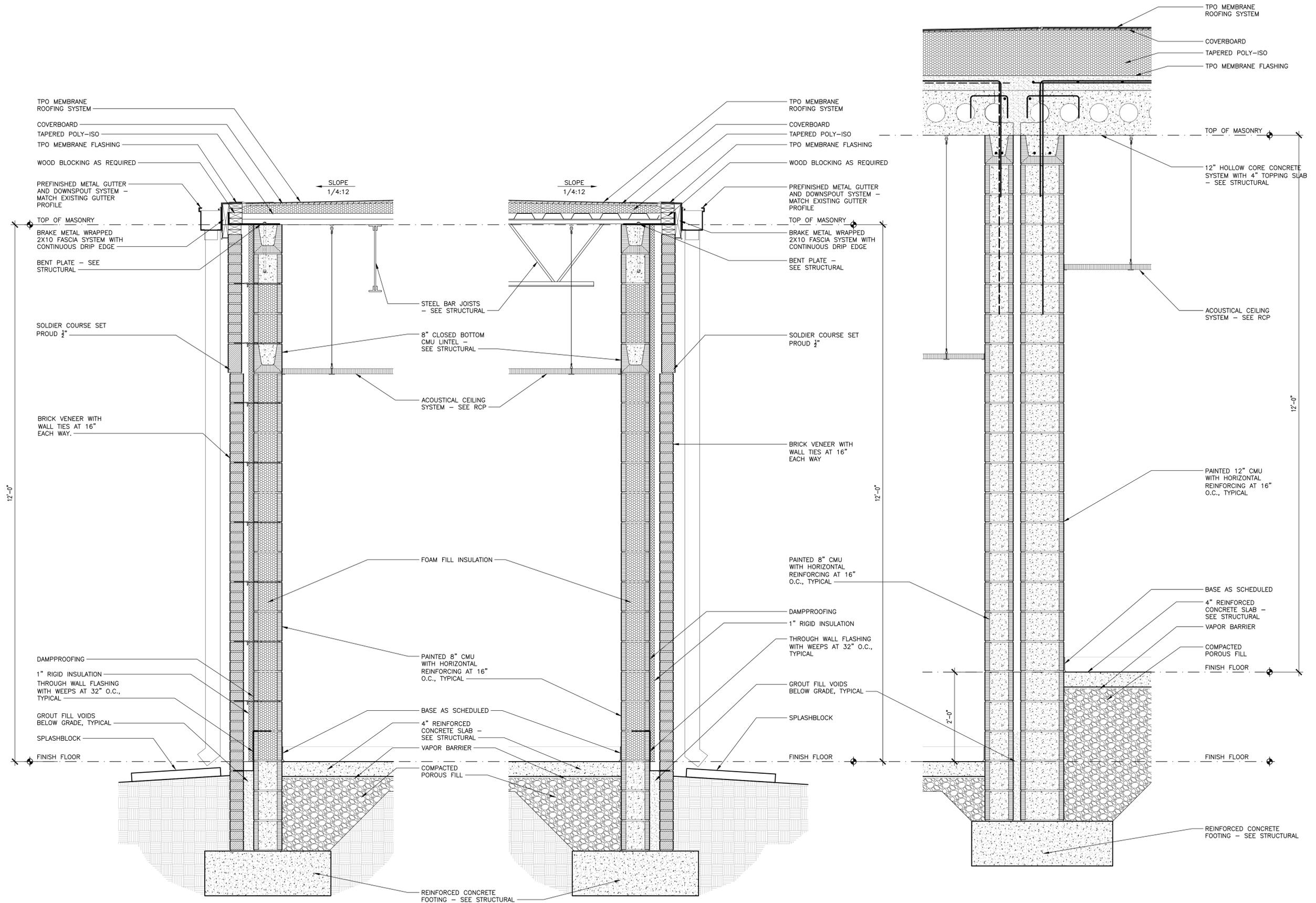
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SHEET NO:

A3.3

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SHEET TITLE:
WALL SECTIONS



PROJ. MGR.: H. RASCO

DRAWN: JWW

DATE: NOV. 7, 2025

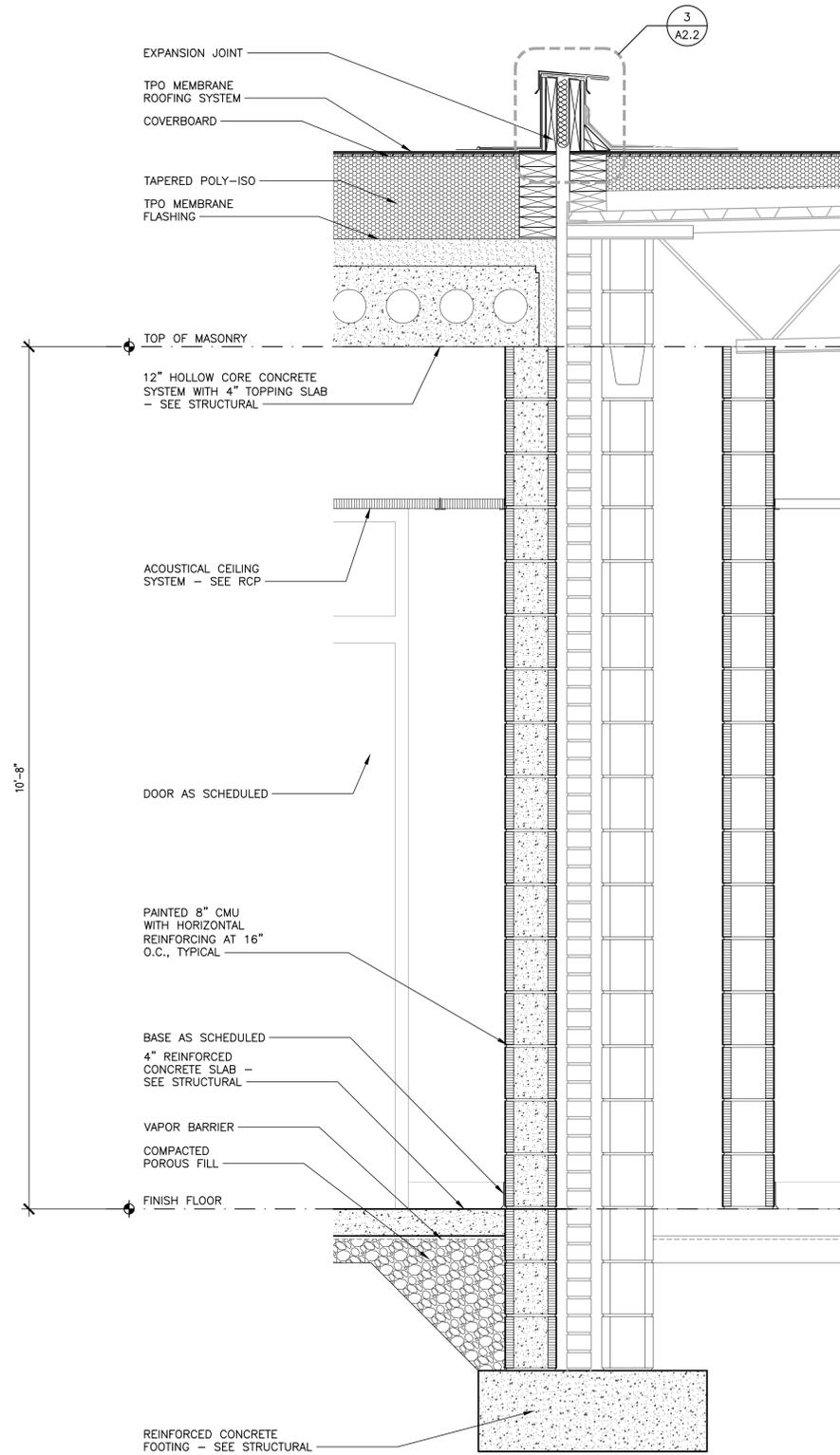
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JOB NO. 25-34

SHEET NO:

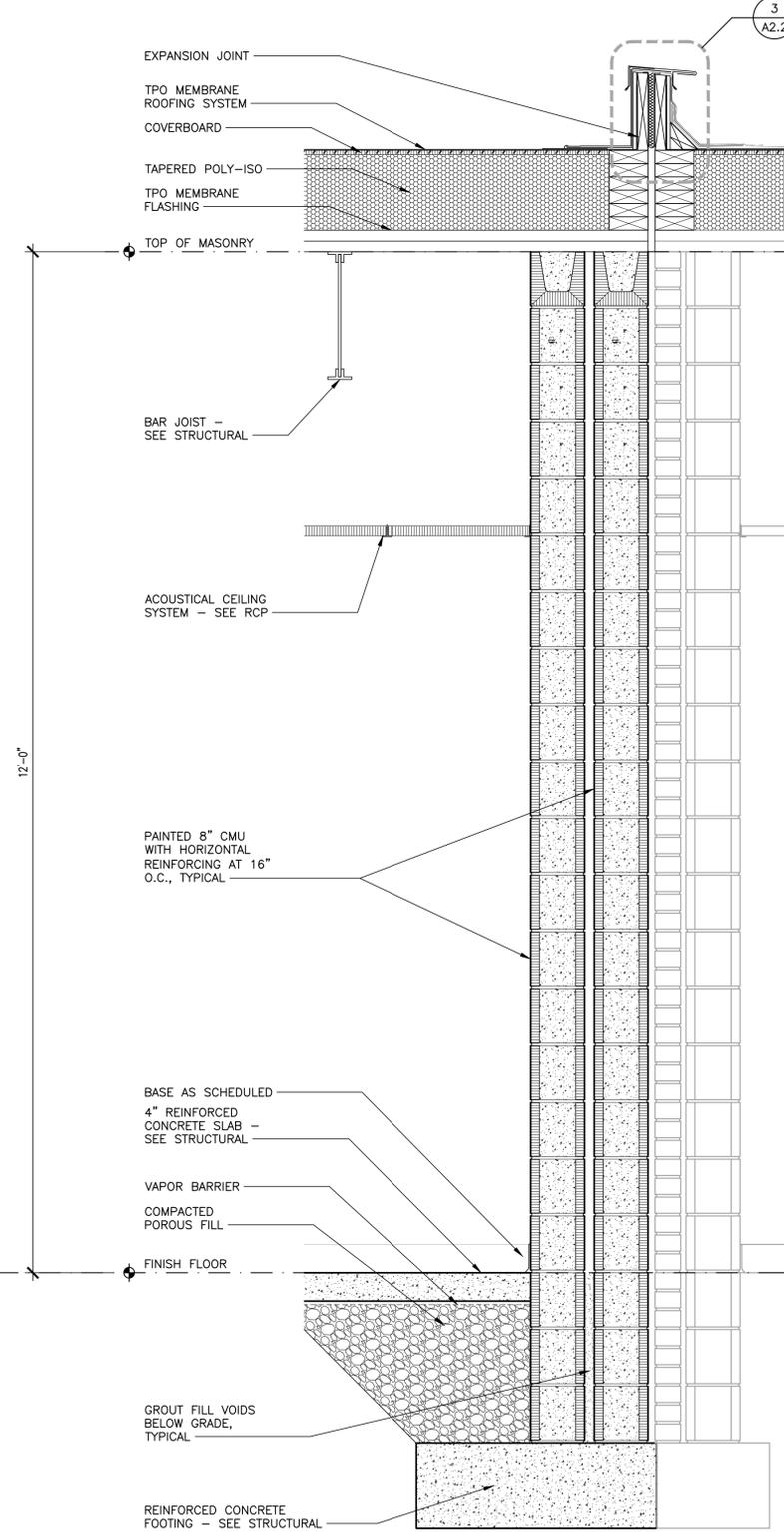
A3.4

13 OF 22



1 WALL SECTION

1" = 1'-0"



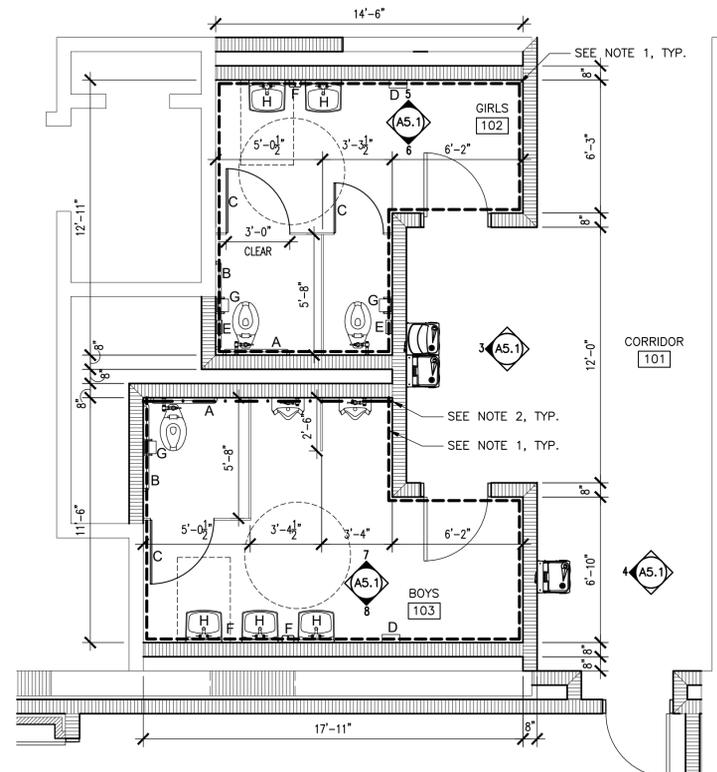
2 WALL SECTION

1" = 1'-0"

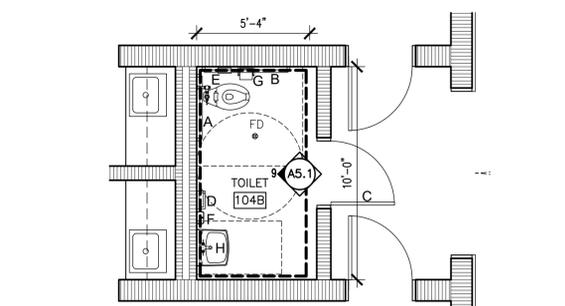


TOILET ACCESSORY LEGEND	
A	36" S.S. GRAB BAR
B	42" S.S. GRAB BAR
C	COAT HOOK (MOUNTED ON INTERIOR STALL DOOR)
D	PAPER TOWEL DISPENSER - OWNER PROVIDED, CONTRACTOR INSTALLED
E	FEMININE NAPKIN DISPOSAL
F	SOAP DISPENSER - OWNER PROVIDED, CONTRACTOR INSTALLED
G	TOILET TISSUE DISPENSER - OWNER PROVIDED, CONTRACTOR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

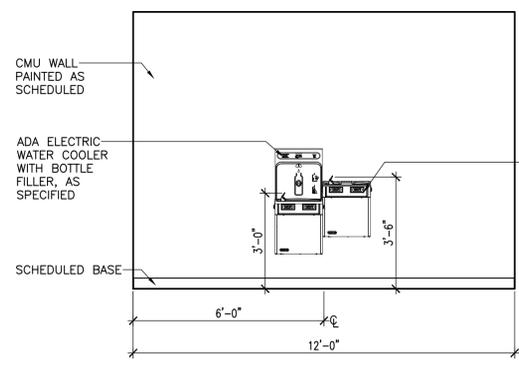
NOTE:
1. DASHED LINE INDICATES CERAMIC WALL TILE, CWT-1, AS INDICATED ON FINISH SCHEDULE. REFER TO INTERIOR ELEVATIONS FOR EXTEND OF TILE
2. DASHED DOT LINE INDICATES EPOXY WAINSCOTING. REFER TO INTERIOR ELEVATIONS FOR EXTEND OF EPOXY



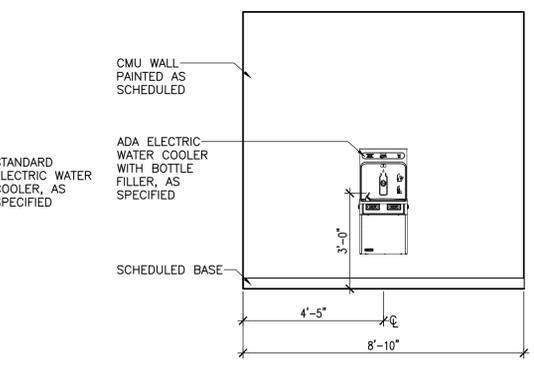
1 ENLARGED TOILET PLAN @ CORRIDOR 101, GIRLS 102, AND BOYS 103
SCALE: 1/4" = 1'-0"



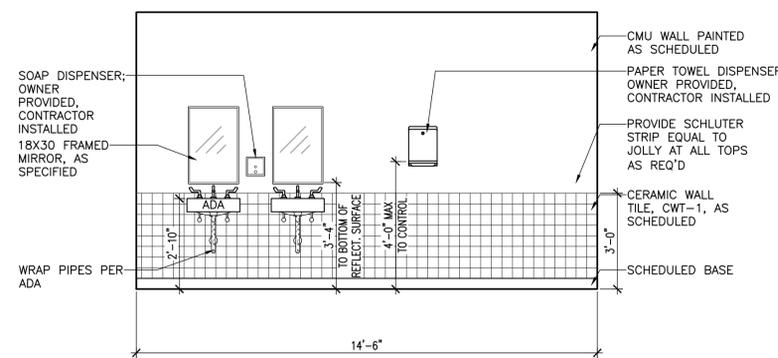
2 ENLARGED TOILET PLAN @ TOILET 104B
SCALE: 1/4" = 1'-0"



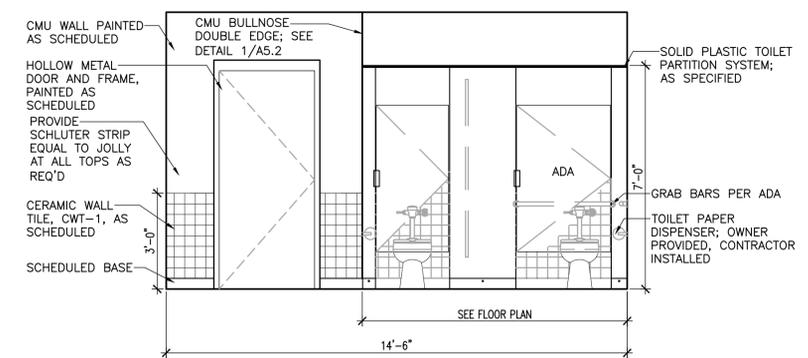
3 INTERIOR ELEVATION @ CORRIDOR 101
SCALE: 3/8" = 1'-0"



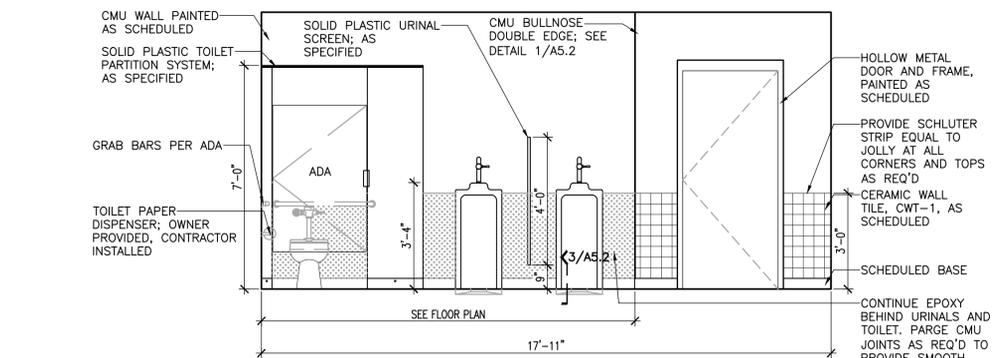
4 INTERIOR ELEVATION @ CORRIDOR 101
SCALE: 3/8" = 1'-0"



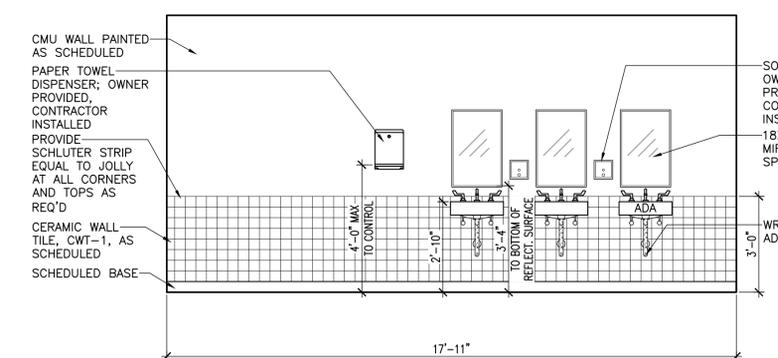
5 INTERIOR ELEVATION @ GIRLS 102
SCALE: 3/8" = 1'-0"



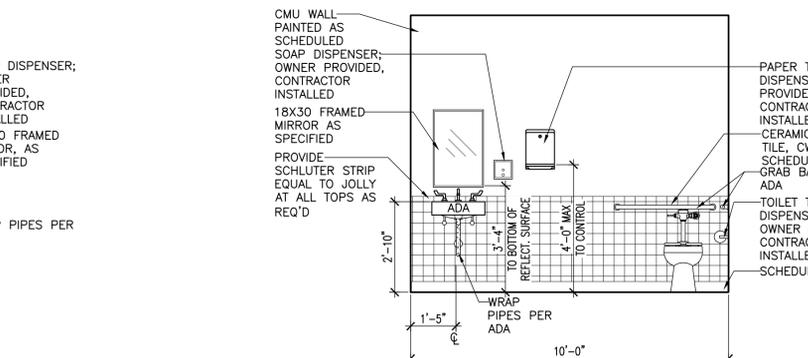
6 INTERIOR ELEVATION @ GIRLS 102
SCALE: 3/8" = 1'-0"



7 INTERIOR ELEVATION @ BOYS 103
SCALE: 3/8" = 1'-0"

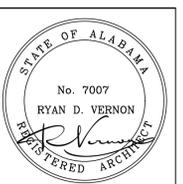


8 INTERIOR ELEVATION @ BOYS 103
SCALE: 3/8" = 1'-0"

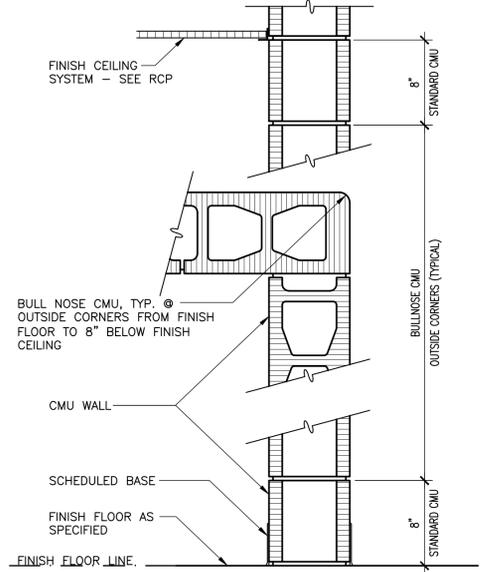


9 INTERIOR ELEVATION @ TOILET 104B
SCALE: 3/8" = 1'-0"

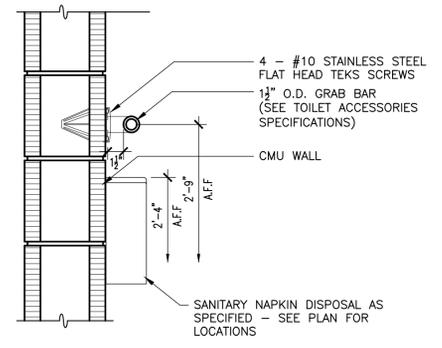
SHEET TITLE:
ENLARGED TOILET PLANS,
LEGEND, AND INTERIOR
ELEVATIONS



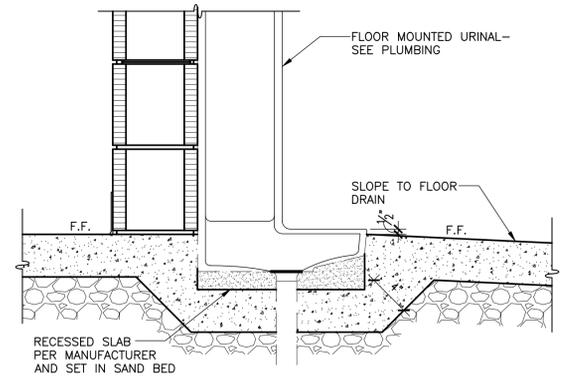
PROJ. MGR.: H. RASCO
DRAWN: K. JOINER
DATE: NOV. 7, 2025
REVISIONS



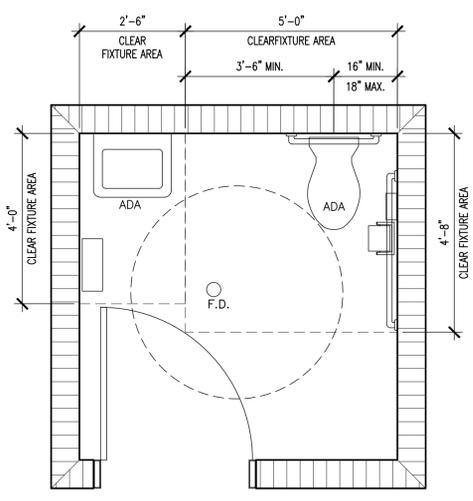
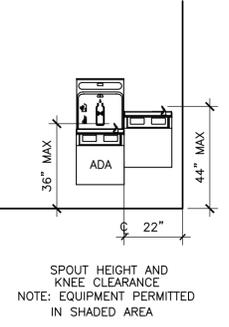
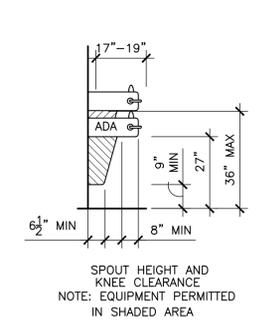
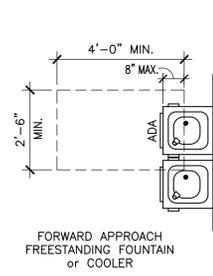
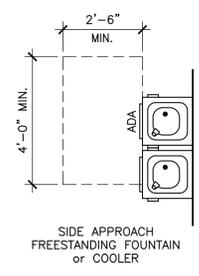
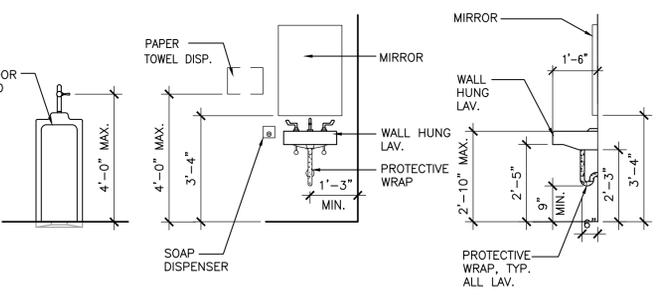
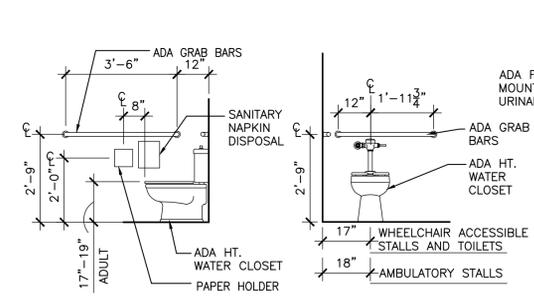
1 DETAIL • DOUBLE BULLNOSE EDGE AT CMU WALL
SCALE: 1-1/2" = 1'-0"



2 DETAIL • GRAB BAR WITH SANITARY NAPKIN AT CMU WALL
SCALE: 1-1/2" = 1'-0"



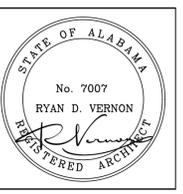
3 DETAIL • FLOOR MOUNTED URINAL ON CONCRETE SLAB
SCALE: 1-1/2" = 1'-0"



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 BE 5'-6" X 5'-6" MIN. OR THEIR MUST BE A 9" TOE SPACE PROVIDED AT THE PARTITIONS.

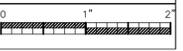
TYPICAL ADA DETAILS
NOT TO SCALE

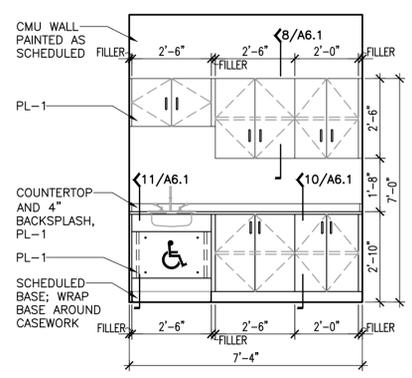
SHEET TITLE:
DETAILS



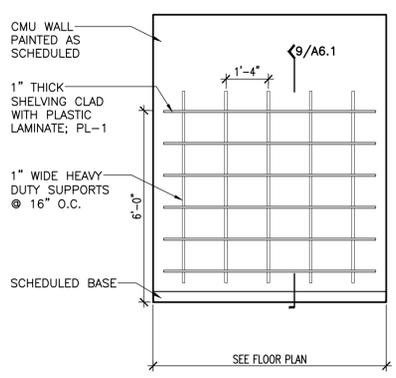
PROJ. MGR.: H. RASCO
DRAWN: K. JOINER
DATE: NOV. 7, 2025
REVISIONS

JOB NO. **25-34**
SHEET NO:
A5.2
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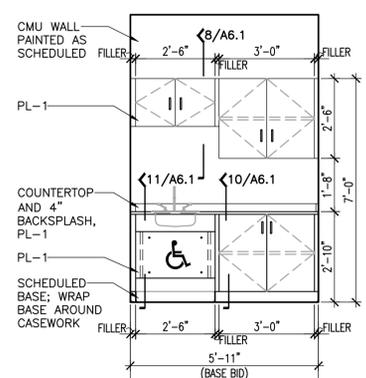




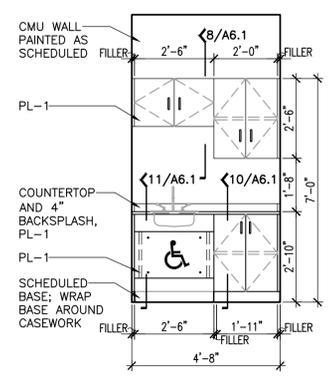
1 INTERIOR ELEVATION @ ALCOVE 100A
SCALE: 3/8" = 1'-0"



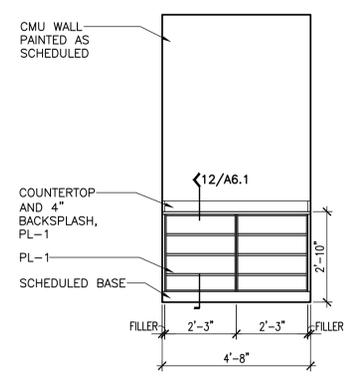
2 INTERIOR ELEVATION @ TYPICAL ADJUSTABLE STORAGE
SCALE: 3/8" = 1'-0"



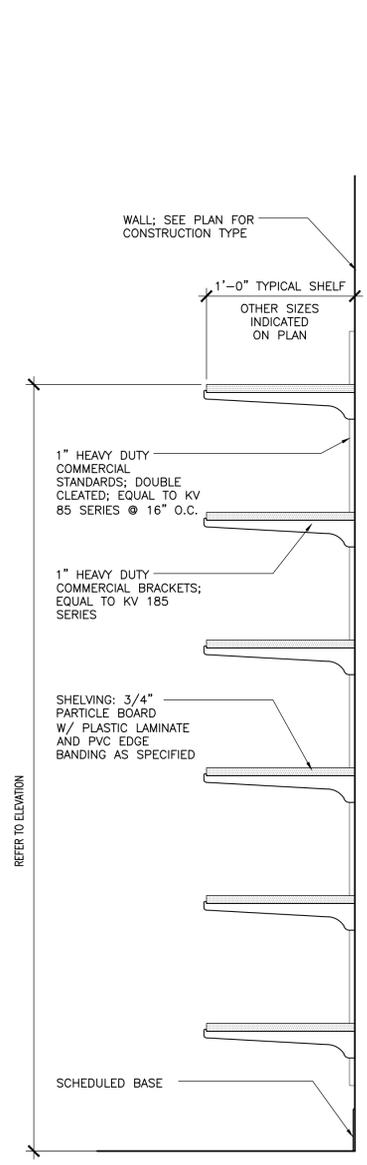
3 INTERIOR ELEVATION @ CLASSROOM 105 AND CLASSROOM 107 (BASE BID), ALT. ALCOVE 110A AND ALT ALCOVE 111A (ALTERNATE)
SCALE: 3/8" = 1'-0"



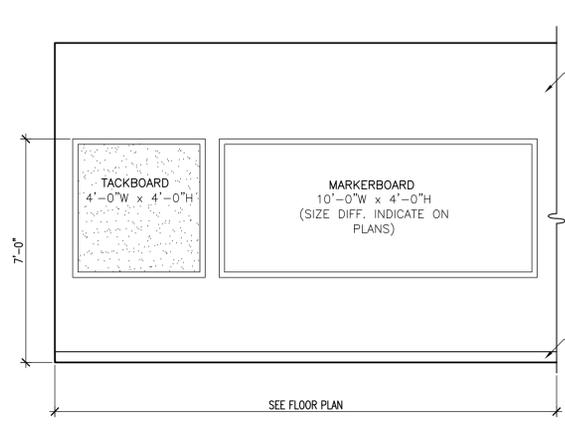
4 INTERIOR ELEVATION @ ALCOVE 106A AND ALCOVE 108A
SCALE: 3/8" = 1'-0"



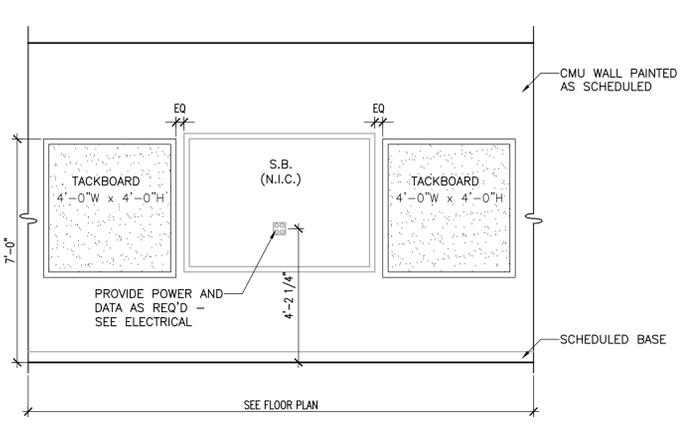
5 INTERIOR ELEVATION @ STORAGE 106B AND STORAGE 108B
SCALE: 3/8" = 1'-0"



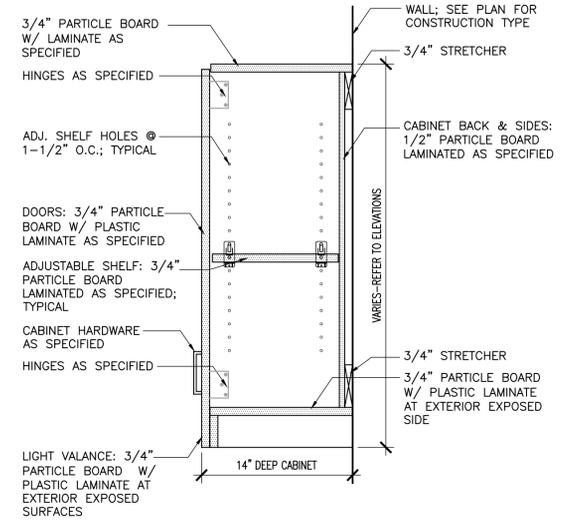
9 DETAIL @ ADJUSTABLE STORAGE
SCALE: 1-1/2" = 1'-0"



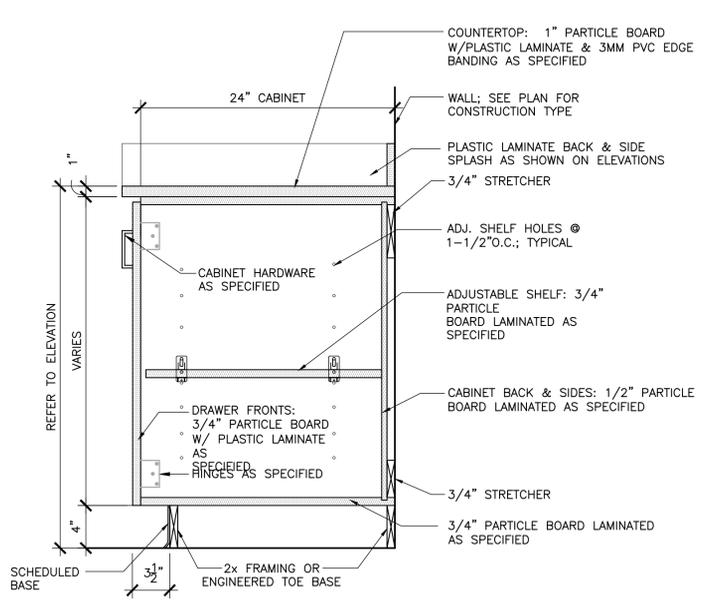
6 INTERIOR ELEVATION @ TYPICAL MARKERBOARD/TACKBOARD
SCALE: 3/8" = 1'-0"



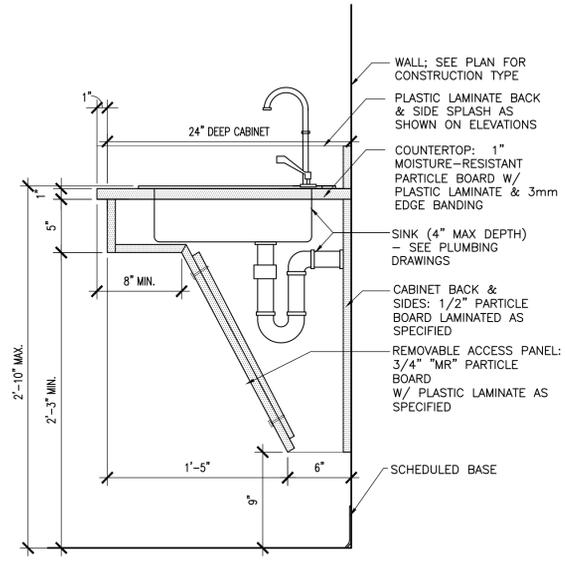
7 INTERIOR ELEVATION @ TYPICAL TACKBOARD/SMARTBOARD
SCALE: 3/8" = 1'-0"



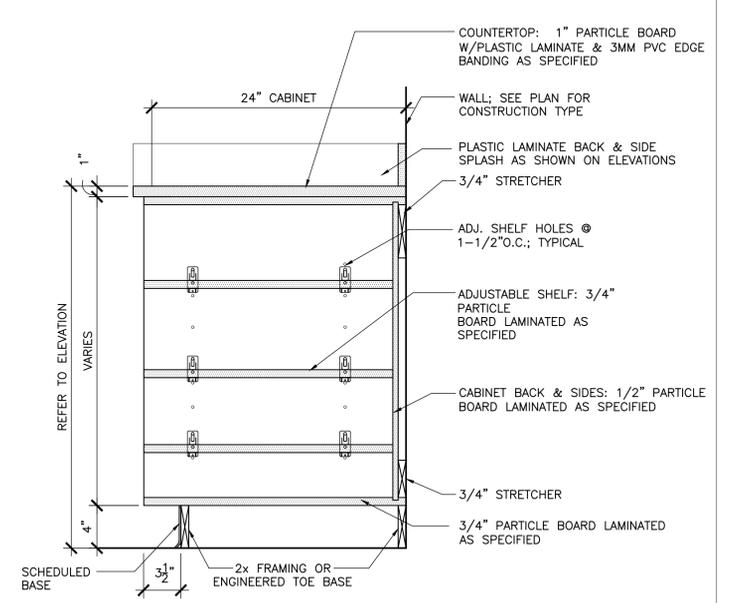
8 DETAIL @ TYPICAL BASE CABINET
SCALE: 1-1/2" = 1'-0"



10 DETAIL @ TYPICAL BASE CABINET
SCALE: 1-1/2" = 1'-0"



11 DETAIL @ ADA SINK BASE
SCALE: 1-1/2" = 1'-0"



12 DETAIL @ OPEN BASE WITH ADJUSTABLE SHELVING
SCALE: 1-1/2" = 1'-0"



CEILING LEGEND	
FIXTURE TYPES - SEE ELECTRICAL	
CEILING TYPE	CEILING HEIGHTS
GB - GYPSUM BOARD	V = VARIES
L1 - 2 x 2 LAY-IN ACOUSTIC CEILING TILE; SEE SPEC	88 = 8'-6" AFF
R - 1" REVEAL AT ALL GYPSUM SOFFITS; HORIZONTAL AS SHOWN, EXTEND VERTICAL - PAINTED TO MATCH SOFFIT	90 = 9'-0" AFF
ML - MOISTURE RESISTANT LAY-IN	100 = 10'-0" AFF
ETR - EXISTING TO REMAIN	106 = 10'-6" AFF
	110 = 11'-0" AFF
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS	
CEILING TYPE	L1-90
CEILING HEIGHT	

CEILING NOTES

AFF = ABOVE FINISH FLOOR

ALL CEILING HEIGHTS ARE FROM ADJACENT FINISHED FLOOR

CEILING HEIGHTS INDICATED ARE MINIMUM HEIGHTS.

COORDINATE W/ PLUMBING, MECHANICAL, AND ELECTRICAL TO INSTALL CEILINGS AS HIGH AS POSSIBLE.

ALL CEILING GRIDS ARE TO BE CENTERED IN ROOM UNLESS SHOWN OR NOTED OTHERWISE

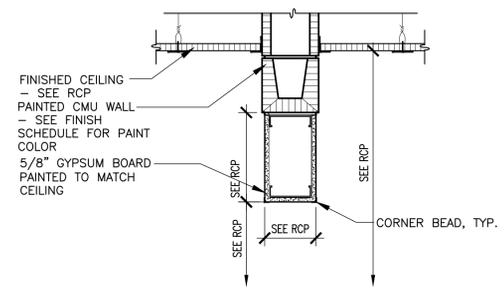
USE 2x4 LAY-IN CEILING TILES CUT TO FIT AT ALL LOCATIONS LESS THAN 12" AT PERIMETER OF ROOM. WHERE 2x4 TILES OCCUR THEY SHALL MATCH SPECIFIED TILE AS INDICATED FOR EACH ROOM.

COORDINATE W/ PLUMBING, MECHANICAL AND PLUMBING DRAWINGS AND PROVIDE FRAMING AS REQUIRED TO ACCOMMODATE MECHANICAL AND PLUMBING SYSTEMS

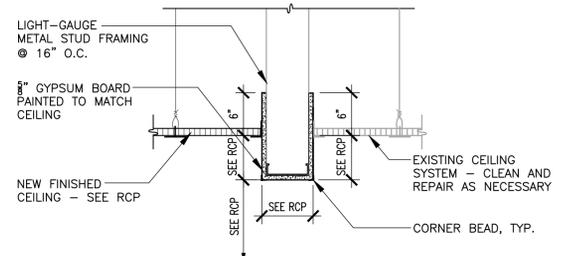
1" REVEAL SHALL BE REQUIRED AT ALL AREAS WHERE GYPSUM INTERSECTS CMU.

LIGHTING/ELECTRICAL NOTES

COORDINATE LIGHTING LAYOUTS WITH ELECTRICAL DRAWINGS. CONTACT ARCHITECT WITH ANY DISCREPANCIES



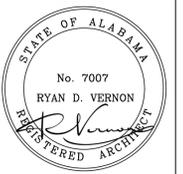
2 DETAIL © CMU LINTEL & SOFFIT WITH NEW LAY-IN ON BOTH SIDES
1" = 1'-0"



3 DETAIL © SOFFIT WITH NEW LAY-IN AND EX. LAY-IN
1" = 1'-0"

1 REFLECTED CEILING PLAN
1/8" = 1'-0" (BASE BID)

SHEET TITLE:
REFLECTED CEILING PLAN,
LEGEND, NOTES, AND
DETAILS - BASE BID



PROJ. MGR.: H. RASCO
DRAWN: K. JOINER
DATE: NOV. 7, 2025
REVISIONS

JOB NO. **25-34**

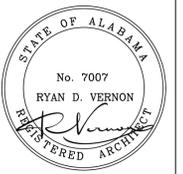
SHEET NO:

A7.1

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SHEET TITLE:
REFLECTED CEILING PLAN,
LEGEND, AND NOTES -
ALTERNATE



PROJ. MGR.: H. RASCO
DRAWN: K. JOINER
DATE: NOV. 7, 2025
REVISIONS

JOB NO. **25-34**

SHEET NO:

A7.1.1

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CEILING LEGEND	
FIXTURE TYPES - SEE ELECTRICAL	
CEILING TYPE	CEILING HEIGHTS
GB - GYPSUM BOARD	V = VARIES
L1 - 2 x 2 LAY-IN ACOUSTIC CEILING TILE; SEE SPEC	86 = 8'-6" AFF 88 = 8'-8" AFF
R - 1" REVEAL AT ALL GYPSUM SOFFITS; HORIZONTAL AS SHOWN, EXTEND VERTICAL - PAINTED TO MATCH SOFFIT	90 = 9'-0" AFF 100 = 10'-0" AFF
ML - MOISTURE RESISTANT LAY-IN	106 = 10'-6" AFF
ETR - EXISTING TO REMAIN	110 = 11'-0" AFF
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS	
CEILING TYPE	L1-90 CEILING HEIGHT

CEILING NOTES

AFF = ABOVE FINISH FLOOR

ALL CEILING HEIGHTS ARE FROM ADJACENT FINISHED FLOOR

CEILING HEIGHTS INDICATED ARE MINIMUM HEIGHTS.

COORDINATE W/ PLUMBING, MECHANICAL, AND ELECTRICAL TO INSTALL CEILINGS AS HIGH AS POSSIBLE.

ALL CEILING GRIDS ARE TO BE CENTERED IN ROOM UNLESS SHOWN OR NOTED OTHERWISE

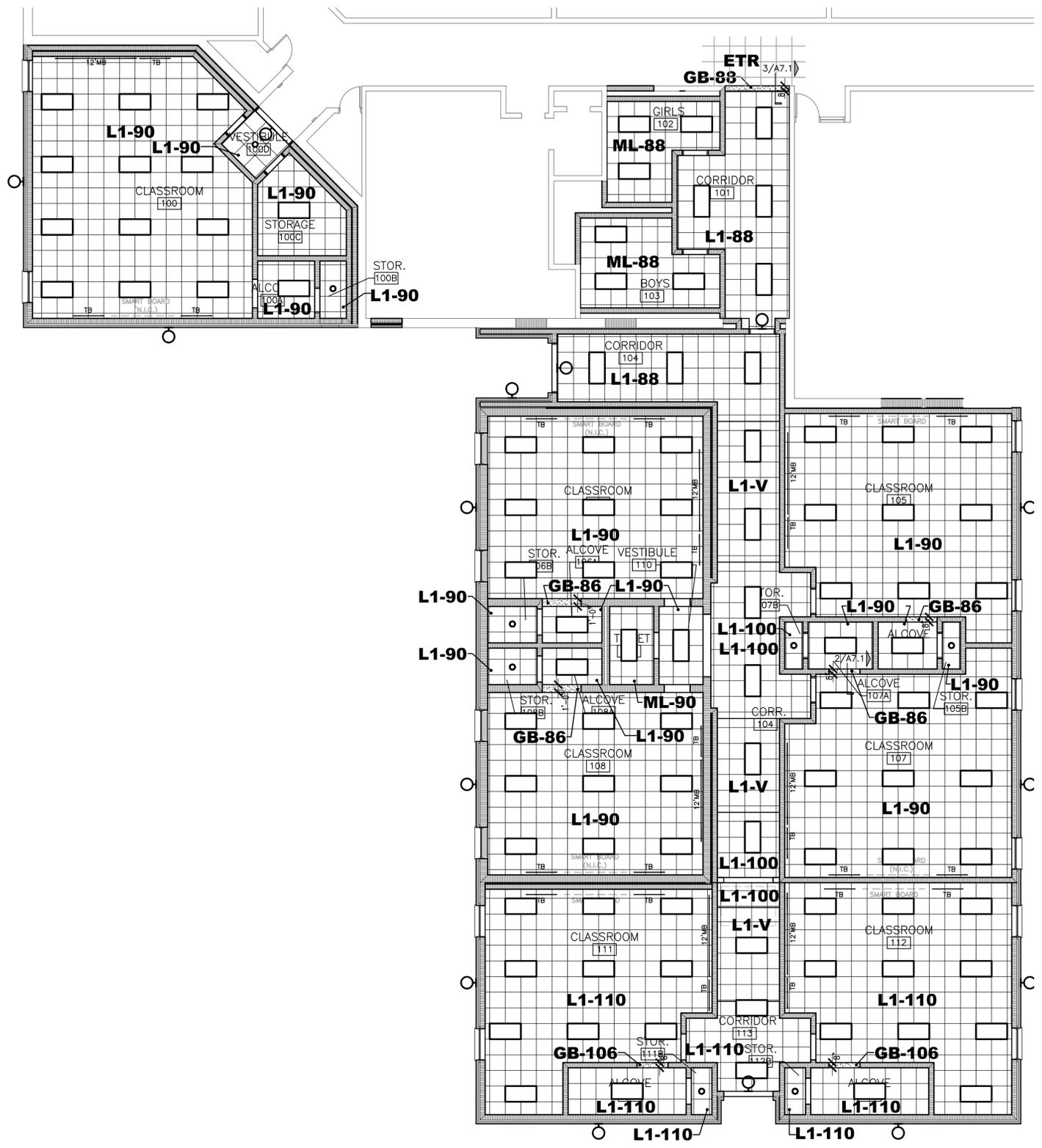
USE 2x4 LAY-IN CEILING TILES CUT TO FIT AT ALL LOCATIONS LESS THAN 12" AT PERIMETER OF ROOM. WHERE 2x4 TILES OCCUR THEY SHALL MATCH SPECIFIED TILE AS INDICATED FOR EACH ROOM.

COORDINATE W/ PLUMBING, MECHANICAL AND PLUMBING DRAWINGS AND PROVIDE FRAMING AS REQUIRED TO ACCOMMODATE MECHANICAL AND PLUMBING SYSTEMS

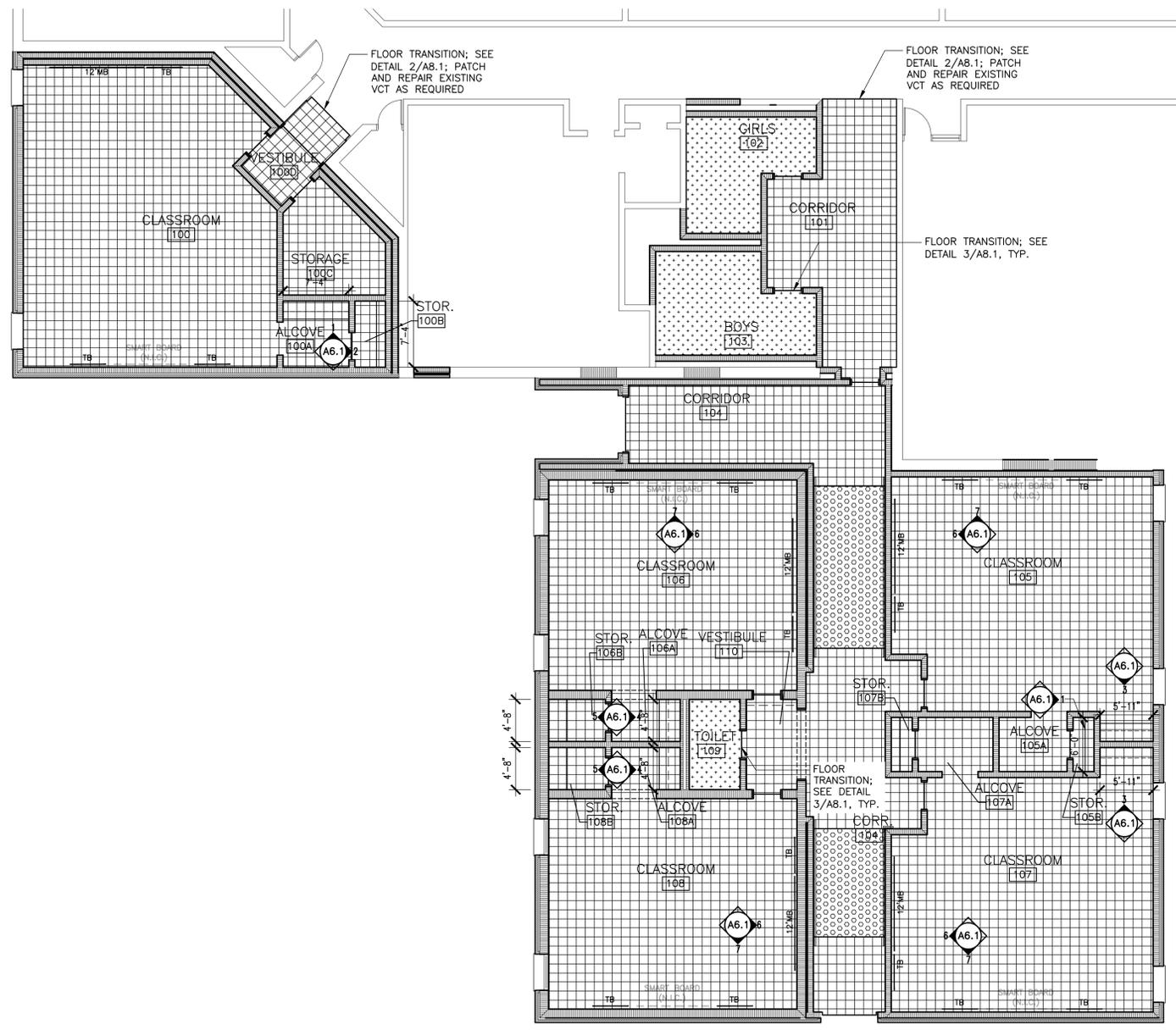
1" REVEAL SHALL BE REQUIRED AT ALL AREAS WHERE GYPSUM INTERSECTS CMU.

LIGHTING/ELECTRICAL NOTES

COORDINATE LIGHTING LAYOUTS WITH ELECTRICAL DRAWINGS. CONTACT ARCHITECT WITH ANY DISCREPANCIES



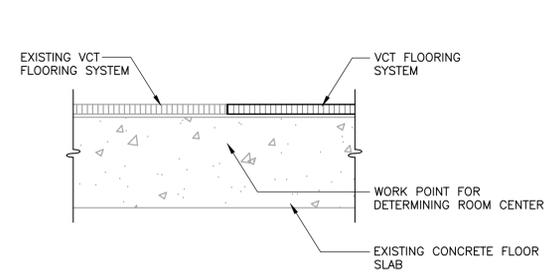
1 REFLECTED CEILING PLAN
1/8" = 1'-0" (ALTERNATE)



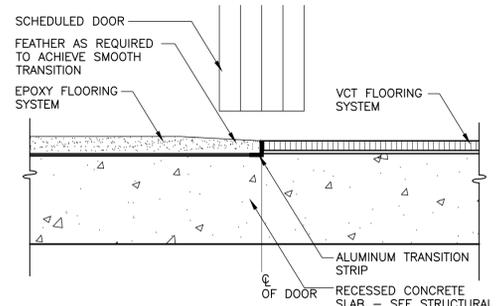
FINISH SCHEDULE												
ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK FACE TOP	WALLS			DOOR FRAME	CEILING/SOFFIT PAINT	NOTES		
					SOUTH	EAST	WEST					
BASE BID												
100	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3		
100A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3		
100B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
100C	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
100D	VESTIBULE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
101	CORRIDOR	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			EPOXY PAINT AT ALL WET WALLS
102	GIRLS	ERF-1	ERB-1	-	-	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-2		REFER TO ELEVATION FOR EXTENT OF CWT; EPOXY PAINT AT ALL WET WALLS
103	BOYS	ERF-1	ERB-1	-	-	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-2		REFER TO ELEVATION FOR EXTENT OF CWT; EPOXY PAINT AT ALL WET WALLS
104	CORRIDOR	VCT-1/RF-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
105	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
105A	ALCOVE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
105B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
106	CLASSROOM	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3		EPOXY PAINT AT ALL WET WALLS
106A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
106B	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3		EPOXY PAINT AT ALL WET WALLS
107	CLASSROOM	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
107A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
107B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
108	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
108A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			
108B	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-2			
109	TOILET	ERF-1	ERB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			REFER TO ELEVATION FOR EXTENT OF CWT; EPOXY PAINT AT ALL WET WALLS
110	VESTIBULE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-2			

BASE				PAINT			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	TYPE/LOCATION
PNT-1	SHERWIN WILLIAMS	COLOR: MATCH BENJAMIN MOORE EDGEComb GREY #HC-172	GENERAL WALLS	PNT-1	SHERWIN WILLIAMS	COLOR: MATCH BENJAMIN MOORE CHELSEA GREY #HC-168	GENERAL TRIM
PNT-2	SHERWIN WILLIAMS	COLOR: MATCH BENJAMIN MOORE CHELSEA GREY #HC-168	GENERAL TRIM	PNT-3	SHERWIN WILLIAMS	COLOR: CEILING BRIGHT WHITE SW7007	GENERAL CEILING AND SOFFIT
ERF-1	MATCH ERF-1	MATCH ERF-1, 4" HIGH	SEE FINISH SCHEDULE				
VINYL COMPOSITE TILE				CERAMIC WALL TILE			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION
VCT-1	ARMSTRONG	COLLECTION: STANDARD EXCELON IMPERIAL TEXTURE COLOR: 12X12	SEE FINISH FLOOR PLAN	CWT-1	DALTILE	COLLECTION: COLOR WHEEL CLASSIC COLOR: ARCTIC WHITE 0190 SIZE: 4X4	SEE FINISH FLOOR PLAN
EPOXY				PLASTIC LAMINATE			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION
ERF-1	TORGINAL	CUSTOM COLOR MAX 4 COLORS BLEND 1/4" SCALE	SEE FINISH FLOOR PLAN	PL-1	WILSONART	COLOR: --- PREMIUM LAMINATE WITH MATCHING EDGE BANDING	SEE FINISH FLOOR PLAN
RUBBER FLOOR				FINISH NOTES			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ALL WALLS TO BE PAINTED PNT-1 UNLESS NOTED OTHERWISE			
RF-1	MANNINGTON	COLOR: PROFILE: RAISED ROUNDS	RAMP	ALL WALLS AND CEILINGS LOCATED IN WET AREAS SHALL HAVE EPOXY BASED PAINT			
FINISH ABBREVIATION LEGEND							
AP	ACOUSTIC PANEL	ESD	STATIC CONTROL TILE	RB	RUBBER BASE		
BFC	BROOM FINISHED CONCRETE	ERB	EPOXY RESIN FLOOR	SS	SOLID SURFACE		
CC	COATED CONCRETE	ERF	EPOXY RESIN FLOOR	ST	STAIN		
CM	CROWN MOLDING	GYP	GIPSUM BOARD	TP	TACKABLE ACOUSTIC PANEL		
CPT	CARPET	LVT	LUXURY VINYL TILE	VCT	VINYL COMP. TILE		
CR	CHAIR RAIL	PNT	PAINT	WB	WOOD BASE		
DP	DIGITAL ACOUSTIC PANEL	PPT	PORCELAIN TILE	WC	WALLOVERING		
CWT	CERAMIC WALL TILE	PTB	PORCELAIN TILE BASE	WF	WOOD FLOORING		
CTB	CERAMIC TILE BASE	PWT	PORCELAIN WALL TILE	WP	WOOD PANELING		
		PWF	PRE-ENG. WOOD	WV	WOOD VENER		

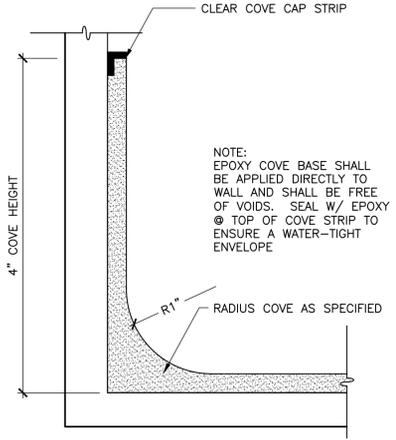
1 FINISH FLOOR PLAN
1/8" = 1'-0" (BASE BID)



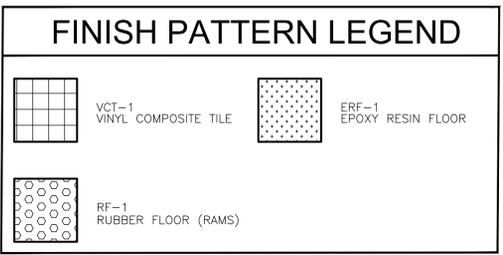
2 FLOOR TRANSITION @ EXISTING VCT TO NEW VCT
NOT TO SCALE

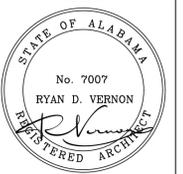


3 FLOOR TRANSITION @ NEW VCT TO NEW EPOXY
NOT TO SCALE



4 DETAIL @ EPOXY COVE BASE
NOT TO SCALE





FINISH PATTERN LEGEND			
	VCT-1 VINYL COMPOSITE TILE		ERF-1 EPOXY RESIN FLOOR
	RF-1 RUBBER FLOOR (RAMS)		BFC BFC BROOM FINISHED CONCRETE

FINISH SCHEDULE														
ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK				WALLS				DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
				FACE	TOP	NORTH	SOUTH	EAST	WEST	NORTH	SOUTH			
BASE BID														
100	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
100A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
100B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
100C	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
100D	VESTIBULE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
101	CORRIDOR	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT ALL WET WALLS
102	GIRLS	ERF-1	ERB-1	-	-	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-2		REFER TO ELEVATIONS FOR EXTEND OF CWT. EPOXY PAINT AT ALL WET WALLS
103	BOYS	ERF-1	ERB-1	-	-	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-1/CWT-1	PNT-2		REFER TO ELEVATIONS FOR EXTEND OF CWT. EPOXY PAINT AT ALL WET WALLS
104	CORRIDOR	VCT-1/RF-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
105	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
105A	ALCOVE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
105B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
106	CLASSROOM	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
106A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
106B	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
107	CLASSROOM	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
107A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
107B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
108	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
108A	ALCOVE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
108B	STORAGE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
109	TOILET	ERF-1	ERB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
110	VESTIBULE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
ALTERNATE														
111	CLASSROOM	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
111A	ALCOVE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
111B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
112	CLASSROOM	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
112A	ALCOVE	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
112B	STORAGE	VCT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
113	CORRIDOR	VCT-1/RF-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		

BASE				PAINT			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	TYPE/LOCATION
RB-1	MANNINGTON COMMERCIAL	COLOR:	SEE FINISH SCHEDULE	PNT-1	SHERWIN WILLIAMS	COLOR: MATCH BENJAMIN MOORE EDGE/COMB GREY #HC-173	GENERAL WALLS
ERB-1	MATCH ERF-1	MATCH ERF-1, 4" HIGH	SEE FINISH SCHEDULE	PNT-2	SHERWIN WILLIAMS	COLOR: MATCH BENJAMIN MOORE CHELSEA GREY #HC-166	GENERAL TRIM
				PNT-3	SHERWIN WILLIAMS	COLOR: CEILING BRIGHT WHITE SW7007	GENERAL CEILING AND SOFFIT
VINYL COMPOSITE TILE				CERAMIC WALL TILE			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION
VCT-1	ARMSTRONG	COLLECTION: STANDARD EXCELON IMPERIAL TEXTURE COLOR: SIZE: 12X12	SEE FINISH FLOOR PLAN	CWT-1	DALTILE	COLLECTION: COLOR WHEEL CLASSIC COLOR: ARCTIC WHITE 0190 SIZE: 4X4	SEE FINISH FLOOR PLAN
EPOXY				PLASTIC LAMINATE			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION
ERF-1	TORGAL	CUSTOM COLOR MAX 4 COLORS BLEND 1/4" SCALE	SEE FINISH FLOOR PLAN	PL-1	WILSONART	COLOR: --- PREMIUM LAMINATE WITH MATCHING EDGE/BANDING	SEE FINISH FLOOR PLAN
CONCRETE				RUBBER FLOOR			
ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION	ITEM	MANUFACTURER	ITEM NUMBERNAME	LOCATION
BFC	SEE SPEC	SEE SPEC	SEE FINISH FLOOR PLAN	RF-1	MANNINGTON	COLOR: PROFILE: RAISED ROUNDS	RAMPS
FINISH ABBREVIATION LEGEND				FINISH NOTES			
AP	ACOUSTIC PANEL	ESD	STATIC CONTROL TILE	RB	RUBBER BASE	ALL WALLS TO BE PAINTED PNT-1 UNLESS NOTED OTHERWISE.	
BFC	BROOM FINISHED CONCRETE	ERB	EPOXY RESIN BASE	SS	SOLID SURFACE	ALL WALLS AND CEILINGS LOCATED IN WET AREAS SHALL HAVE EPOXY BASED PAINT	
CC	COATED CONCRETE	ERF	EPOXY RESIN FLOOR	ST	STAIN		
CM	CROWN MOLDING	GYP	GYP SUM BOARD	TP	TACKABLE ACOUSTIC PANEL		
CPT	CARPET	LVT	LUXURY VINYL TILE	VCT	VINYL COMP. TILE		
CR	CHAIR RAIL	PL	PLASTIC LAMINATE	WB	WOOD BASE		
DP	DIGITAL ACOUSTIC PANEL	PNT	PAIN	WC	WALLCOVERING		
CWT	CERAMIC WALL TILE	PFT	PORCELAIN TILE	WF	WOOD FLOORING		
CTB	CERAMIC TILE BASE	PTB	PORCELAIN TILE BASE	WP	WOOD PANELING		
		PWT	PORCELAIN WALL TILE	WV	WOOD VENEER		
		PWF	PRE-ENG. WOOD				



1 FINISH FLOOR PLAN
1/8" = 1'-0" (ALTERNATE)



SHEET TITLE:
ROOM SIGNAGE PLAN,
DETAILS, AND LEGEND -
ALTERNATE



PROJ. MGR.: H. RASCO

DRAWN: K. JOINER

DATE: NOV. 7, 2025

REVISIONS

JOB NO. **25-34**

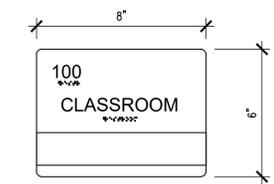
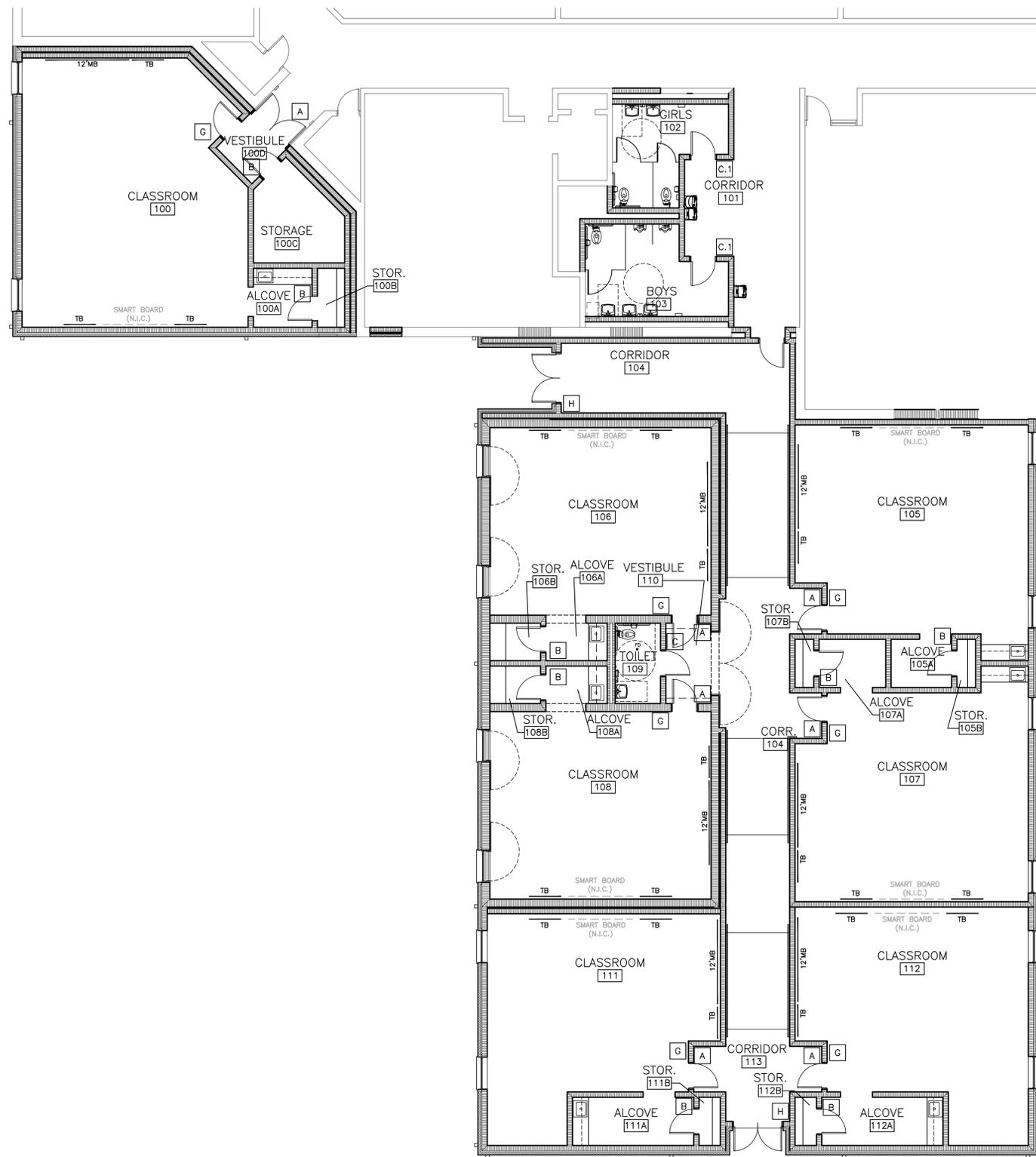
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A9.1.1

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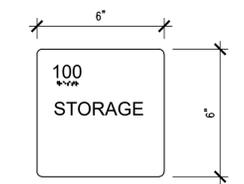


INTERIOR SIGNAGE LEGEND	
A	SIGN WITH MESSAGE STRIP (OFFICE/CLASSROOM/INSTRUCTIONAL AREA)
B	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC.)
C	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE
D	ELEVATOR SIGNAGE WITH PICTOGRAM/BRAILLE
E	STAIR SIGNAGE WITH PICTOGRAM/BRAILLE
F	AREA OF REFUGE SIGN
G	FRAMED CLEAR VIEW SIGNAGE (8.5X11)
H	TACTILE EXIT SIGN TO EXTERIOR (EXIT)
J	OCCUPANT LOAD SIGN (ASSEMBLY SPACES)
K	BUILDING DEDICATION PLAQUE



INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



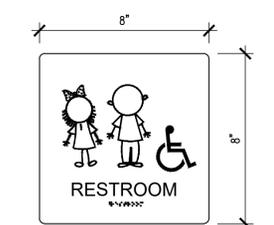
INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



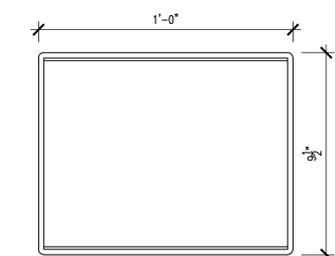
INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3" = 1'-0"



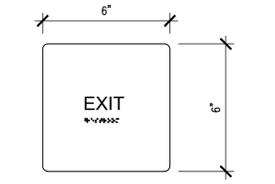
INTERIOR SIGNAGE (SIGN TYPE - C.1)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - G)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - H)

SCALE: 3" = 1'-0"

1 ROOM SIGNAGE PLAN
1/8" = 1'-0"



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. OPEN WEB STEEL JOISTS:
STANDARD SPECIFICATIONS AND LOAD TABLES FOR STEEL JOISTS AND JOIST GIRDERS, STEEL JOIST INSTITUTE, LATEST EDITION
- G. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS
- H. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)

BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 602-16)

NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY", LATEST EDITION
- I. 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
- J. 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-REDUCIBLE 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)-----116MPH
NOMINAL WIND SPEED (3-SECOND GUST)-----93MPH
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-----0.265
S1-----0.093
SITE CLASS-----D

SPECTRAL RESPONSE COEFFICIENTS:
SDS-----0.281
SD1-----0.148
SEISMIC DESIGN CATEGORY-----C
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR:
ADDITION (STORM SHELTER)-----65 KIPS
ADDITION (PLAN SOUTH-BASE)-----25 KIPS
ADDITION (PLAN SOUTH-ALT)-----40 KIPS
ADDITION (PLAN WEST)-----10 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs-----0.1001
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 ENSURING 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 "PROPOSED CLASSROOM ADDITIONS ELVIN HILL ELEMENTARY SCHOOL", PROJECT NO. E1255093, DATED JULY 07, 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: SHALLOW FOUNDATIONS ----- 2000 PSF.

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, DUMBELL 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"
FOUNDATION RETAINING WALLS-----2" BOTH FACES

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.

CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES



PROJ. MGR.: HCW
DRAWN: ABS

DATE: NOV 7, 2025
REVISIONS

JOB NO. 25-34
SHEET NO:
S1.0
1 OF 16
0 1" 2"

GENERAL NOTES CONTINUED



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 ADEQUACY 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 2" 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 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)

B. PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR DETERMINING AND VERIFY ANY NECESSARY STEPS, SUCH AS THE ROUGHENING OF PRECAST PANELS AND/OR THE USE OF A CONCRETE BONDING AGENT, IN ORDER TO OBTAIN COMPOSITE ACTION OF THE PRECAST PANELS WITH THE STRUCTURAL TOPPING SLAB. ANY NECESSARY STEPS SHALL BE INDICATED ON THE SUBMITTED CALCULATIONS AND SHOP DRAWINGS BY THE PRECAST MANUFACTURER.

C. PRECAST MANUFACTURER IS TO PROVIDE WEEP HOLES IN ALL CORES AT EACH END OF ALL PRECAST PANELS. CONTRACTOR HAS THE OPTION TO FIELD INSTALL WEEP HOLES PER PRECAST MANUFACTURER'S WRITTEN INSTRUCTIONS.

6.2 PRECAST MANUFACTURER SHALL DESIGN HOLLOW CORE SLABS FOR THE SUPERIMPOSED LOADS LISTED BELOW PLUS SELF-WEIGHT PLUS ALL MASONRY BLOCK WEIGHTS, LIVE LOADS, WIND LOADS, OTHER LOADS SHOWN IN THESE DRAWINGS. DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI-318 AND PCI DESIGN HANDBOOK, LATEST EDITION.

4" TOPPING SLAB -----50 PSF
COLLATERAL DEAD LOAD -----20 PSF

FOR LIVE LOADS, SEE GENERAL NOTES 1.2.B & 1.2.C, PLAN NOTES, AND SECTION NOTES

FOR WIND LOADS, SEE GENERAL NOTE 1.3.C, COMPONENTS AND CLADDING WIND LOAD TABLES ON SL.6, TYPICAL DETAILS, PLAN NOTES, AND SECTION NOTES

FOR HOUSEKEEPING PADS UNDER MECHANICAL UNITS, COORDINATE SIZE AND LOCATION OF HOUSEKEEPING PADS WITH MECHANICAL DRAWINGS

6.3 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.

6.4 STORM SHELTER:
REINFORCE 4" TOPPING SLAB WITH #4 BARS @12" O.C. EACH WAY AT MID-DEPTH OF TOPPING.

NON-SHELTER:
REINFORCE 4" TOPPING SLAB WITH 6X6 W1.4/W1.4 WWR FLAT SHEETS AT MID-DEPTH OF TOPPING.

A. CONDUITS AND PIPING SHALL NOT BE PLACED IN THE TOPPING SLAB.

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

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

6.7 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.

6.8 PRECAST CONCRETE HOLLOW CORE SLAB LOCATIONS SHOWN ON THE DRAWINGS ARE ESTIMATED AND SHALL BE VERIFIED BY THE PRECAST MANUFACTURER.

6.9 CONTRACTOR IS TO COORDINATE (MECHANICAL, ELECTRICAL, PLUMBING, ETC.) OPENINGS IN HOLLOW CORE PRECAST CONCRETE SLAB PANELS WITH PRECAST MANUFACTURER.

A. ALL FIELD CUT OPENINGS THROUGH HOLLOW CORE PRECAST CONCRETE SLAB PANELS SHALL BE LOCATED TO AVOID CUTTING PRESTRESS STRANDS, UNLESS GIVEN APPROVAL BY THE PRECAST MANUFACTURER PRIOR TO COMMENCING WORK.

6.10 ALL OPENINGS IN THE PRECAST PANELS SHALL BE SHOWN ON THE PRECAST PANEL SHOP DRAWINGS. EXACT LOCATIONS AND OPENING DIMENSIONS SHALL BE INDICATED. ANY DETAILING NECESSARY FOR THE SUPPORT OF THE PANELS AT THE OPENINGS SHALL BE INDICATED ON THE SHOP DRAWINGS. ANY ADDITIONAL STEEL FRAMING REQUIRED AT SLAB OPENINGS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND INCLUDED IN THE BASE BID AND SHALL BE PROVIDED AT NO ADDITIONAL EXPENSE TO THE OWNER.

6.11 BEARING STRIPS SHALL BE RANDOM ORIENTED FIBER REINFORCED MATERIAL CAPABLE OF SUPPORTING A COMPRESSIVE STRESS OF 3000 PSI WITH NO CRACKING, SPLITTING, OR DELAMINATION.

7.0 STRUCTURAL STEEL

7.1 FABRICATE AND ERECT ALL STRUCTURAL STEEL IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS". FABRICATOR SHALL BE QUALIFIED BY PARTICIPATING IN THE AISC QUALITY CERTIFICATION PROGRAM AND HOLD THE AISC BUILDING FABRICATOR QMS CERTIFICATION (BU).

7.2 THE STEEL FRAME IS "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL THE REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE.

7.3 STRUCTURAL STEEL: ASTM A992 FOR WIDE FLANGE BEAMS AND COLUMNS AND STEEL CHANNELS; A572 FOR S, M, HP SHAPES AND STEEL ANGLES; ASTM A36 FOR STIFFENER PLATES, BASE PLATES, COLUMN CAP PLATES, BEAM CONNECTION PLATES.

7.4 HOLLOW STRUCTURAL SECTIONS (HSS): ASTM A500, GRADE C.

7.5 WELDED CONNECTIONS: E70XX ELECTRODES, MINIMUM SIZE FILLET WELD 3/16". WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.1, THE STRUCTURAL WELDING CODE - STEEL.

7.6 THREADED AND PLAIN STEEL RODS: ASTM A36

7.7 HIGH STRENGTH THREADED RODS: ASTM A193 B7

7.8 ANCHOR RODS: ASTM F1554 GRADE 36 ANCHOR AND HEAVY HEX NUT OR ASTM F1554 GRADE 55 ANCHOR AND HEAVY HEX NUT WITH SUPPLEMENTARY REQUIREMENT S1, UNLESS OTHERWISE INDICATED.

A. IF ANCHOR ROD ASSEMBLIES ARE NOT ENCASED IN MINIMUM OF 3" OF CONCRETE, ANCHOR ROD ASSEMBLIES ARE TO BE HOT-DIP GALVANIZED.

7.9 HEADED STUDS: TYPE B SHEAR STUD CONNECTORS MADE FROM ASTM A108, GRADE 1015 OR 1020, COLD-FINISHED CARBON, AND COMPLYING WITH AWS D1.1.

7.10 CONNECTIONS:

A. BEARING TYPE A325-N ACCORDANCE WITH RCSC (LRFD OR ASD VERSION) "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHERWISE, BOLTS SHALL BE 3/4" DIAMETER.

B. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.

C. ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, BY THE CONTRACTOR.

1. WHERE BEAM REACTIONS ARE SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL DEVELOP THE REACTIONS SHOWN. WHERE CONNECTIONS ARE SUBJECT TO ECCENTRICITY, SUCH ECCENTRICITY SHALL BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTION.

2. WHERE BEAM REACTIONS OR DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT STRUCTURAL DESIGN GROUP FOR DIRECTION.

D. DESIGN CALCULATIONS FOR THE CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

7.11 ALL STRUCTURAL STEEL, INCLUDING EXPOSED BOLTS, NUTS, WASHERS OR ANCHOR RODS, EXPOSED TO WEATHER IN THE FINAL CONFIGURATION OF THE STRUCTURE SHALL BE HOT-DIP GALVANIZED, UNLESS NOTED, PER ASTM A 123/A 123M. VENT HOLES SHALL BE FILLED AND GROUND SMOOTH AFTER GALVANIZING. DAMAGE TO GALVANIZING SHALL BE PAINTED WITH GALVANIZING REPAIR PAINT, SSPC-PAINT 20. SEE 05120 SPECIFICATION FOR PAINT REQUIREMENTS FOR STEEL THAT IS GALVANIZED AND PAINTED.

7.12 WHERE STEEL BEAMS ARE CONTINUOUS OVER COLUMNS, PROVIDE WEB STIFFENER PLATES EACH SIDE OF BEAM WEB, OF THICKNESS EQUAL TO BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES OR CENTER LINE OF HSS COLUMNS.

7.13 PROVIDE 3/4" THICK CLOSURE PLATES ON THE ENDS OF HSS BEAMS. SHOP WELD ALL AROUND TO BEAM WITH 1/4" PARTIAL PENETRATION WELDS.

7.14 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.

7.15 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 STEEL JOISTS

8.1 DESIGN, FABRICATE, AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE SJI.

8.2 PROVIDE A MINIMUM END BRACING ON STEEL SUPPORTS AS REQUIRED BY SJI. STAGGER THE ENDS OF JOIST IF NECESSARY. GENERAL CONTRACTOR COORDINATE METAL DECK SPLICE LOCATION TO CENTER OVER JOIST.

8.3 PROVIDE HORIZONTAL AND DIAGONAL BRIDGING IN ACCORDANCE WITH SJI TO PROVIDE ADEQUATE JOIST CHORD BRACING.

8.4 AT JOIST PARALLEL TO MASONRY WALL, WELD EACH BRIDGING ROW TOP AND BOTTOM TO AN ANGLE 3x3x3/16x0'-6". ANCHOR ANGLE WITH TWO 3/8" DIAMETER SLEEVE ANCHORS WITH A TWO-INCH EMBEDMENT INTO WALL.

8.5 AT JOISTS PARALLEL TO BEAMS, ANCHOR BRIDGING ROWS BY WELDING TO BEAMS.

8.6 DESIGN ROOF JOISTS TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENT AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

8.7 IN ADDITION TO THE LOADS INDICATED IN THE STRUCTURAL DRAWINGS, JOISTS SHALL BE DESIGNED FOR CONCENTRATED LOADS IN EXCESS OF 100 LB HUNG FROM OR SUPPORTED ON JOISTS. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS, SUCH AS FIRE PROTECTION, SHALL BE COORDINATED BY THE GENERAL CONTRACTOR.

8.8 JOIST SEATS FOR JOISTS BEARING ON BEAMS OR WALLS IN LINE WITH LATERAL FRAMES OR SHEAR WALLS SHALL BE DESIGNED FOR A ROLL OVER FORCE EQUAL TO 30% OF THE DEAD LOAD OF THE JOIST REACTION UNLESS NOTED. IN NO CASE SHALL THE ROLLOVER FORCE BE LESS THAN 350 PLF PERPENDICULAR TO THE JOIST.

8.9 JOIST AND JOIST SEATS SHALL BE DESIGNED FOR AXIAL LOAD WHERE INDICATED IN THE STRUCTURAL DRAWINGS.

8.10 DESIGN CALCULATIONS SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND STRUCTURAL ENGINEER FOR JOISTS WITH CANTILEVERS OR CONCENTRATED LOADS AND FOR JOIST SIZES FOR WHICH STANDARD SJI LOAD TABLES ARE NOT APPLICABLE. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING JOISTS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

8.11 LIGHTGAGE METAL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, PIPING OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE JOIST BRIDGING.

9.0 STEEL DECK

9.1 DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE (SDI).

9.2 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS. WHERE DECK SPANS LESS THAN THREE SPANS ARE REQUIRED, THEY SHOULD BE CLEARLY MARKED ON THE SHOP DRAWINGS.

9.3 ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE AS SHOWN IN THE TYPICAL DETAILS AND/OR PLAN NOTES.

A. MANUFACTURER SHALL VERIFY ROOF DECK ATTACHMENT IS ADEQUATE TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENTS AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

9.4 WELDED CONNECTIONS: E60XX ELECTRODES; WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.3, THE STRUCTURAL WELDING CODE - SHEET STEEL.

9.5 COLD-FORMED STEEL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, PIPING, AND/OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

9.6 ROOF DECK:

A. WHERE NOTED AS 1-1/2", WIDE RIB TYPE "WR", STEEL ROOF DECK, SEE PLANS FOR GAGE, 1-1/2" DEEP, GALVANIZED.

9.7 CONTRACTOR OPTION TO USE HILTI S-SLC 02 M HWH IN LIEU OF #10 SIDELAP SCREWS AND HILTI FASTENERS IN LIEU OF #12 TEK SCREWS AS FOLLOWS: HILTI S-M 12-24x1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ tf ≤ 1/4" HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ tf ≤ 3/8" HILTI X-ENP 19 L15 PINS FOR BEAMS tf ≥ 1/4".

10.0 MASONRY

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

10.2 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.

10.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (F'm) SHALL BE 2000 PSI AT 28 DAYS.

10.4 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.

10.5 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.

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

10.7 MORTAR: EXCEPT OTHERWISE SET FORTH HERIN ALL MORTARS AND THE MATERIALS THEREIN 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 OR S
FENCES OR SITE WALLS	M OR S

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

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

CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES CONTINUED



PROJ. MGR.: HCW
DRAWN: ABS

DATE: NOV 7, 2025

REVISIONS

JOB NO. **25-34**
SHEET NO:
S1.1
2 OF 16
0 1" 2"

GENERAL NOTES CONTINUED

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

10.11 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 INITIALS SHALL BE SUBMITTED BEFORE ANY SHOP DRAWINGS HAVE BEEN SUBMITTED. THE INITIALS OF THE DETAILS AND THE QUALITY SUPERVISOR SHALL BE NOTED ON EACH SHOP DRAWINGS.

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

10.13 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.

10.14 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.

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

10.16 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.

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

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

10.19 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.

10.20 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 PERMITTED. 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".

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

10.22 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.

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

10.24 WHERE TOP OF FOOTING SUPPORTING MASONRY WALLS IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #5 AT 16" O.C., UP TO THE FIRST COURSE ABOVE FINISH FLOOR ELEVATION, IN ADDITION TO THE SPECIFIED REINFORCEMENT, UNLESS NOTED OTHERWISE.

10.25 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".

11.0 COLD-FORMED STEEL FRAMING

11.1 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.

11.2 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.

11.3 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.

11.4 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

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

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

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

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

11.9 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.

11.10 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.

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

11.12 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.

12.0 POST-INSTALLED REINFORCING, ANCHORS AND FASTENERS

12.1 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.

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

12.3 FOR ANCHORING INTO CONCRETE:

- A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.4 AND ICC-ES AC108 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 S5316, 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-T22 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+ S02 (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 3/4". PRE-APPROVED PRODUCTS INCLUDE:
 - 1. DEWALT MINI-UNDERCUT+ (ICC-ES ESR-3912)
 - 2. HILTI HDP-P T2 DROP-IN ANCHOR (ICC ESR-4236)

C. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 308.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 308.4 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-36" (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 SAFEST 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)

12.4 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" (IAPMO-UES ER-716)
- e. HILTI KH-EZ, KH-EZ CRC, KH-EZ S5316, 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-T22 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)

12.5 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 HHW5 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)

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

12.7 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.

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

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

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

12.11 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.

12.12 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.

12.13 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.

12.14 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.

CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
201 WASHINGTON STREET, COLUMBIA, ALABAMA 36501
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES
CONTINUED

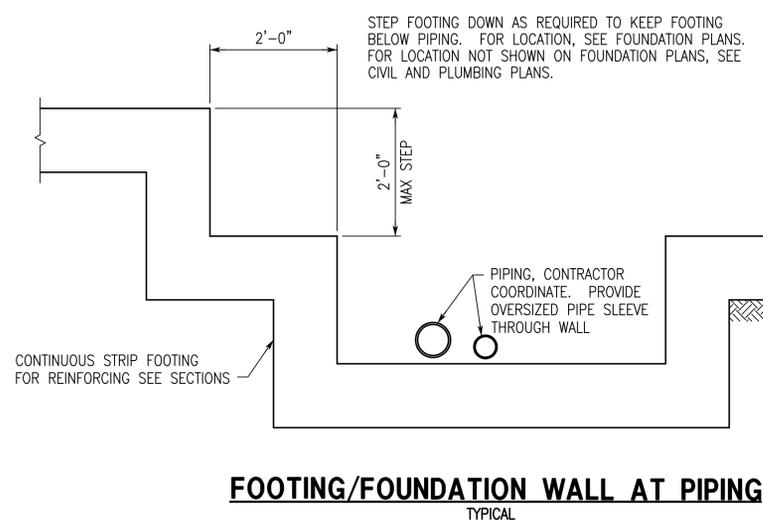


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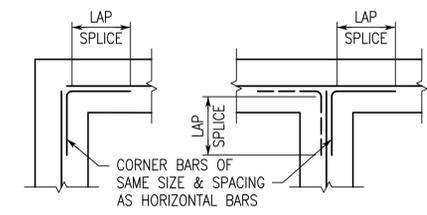
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REVISIONS

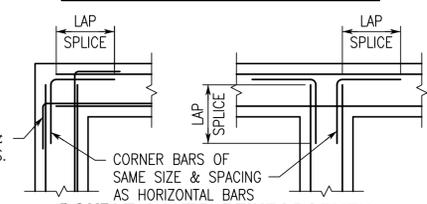
JOB NO. 25-34
SHEET NO:
S1.2
3 OF 16
0 1" 2"



FOOTING/FOUNDATION WALL AT PIPING
TYPICAL



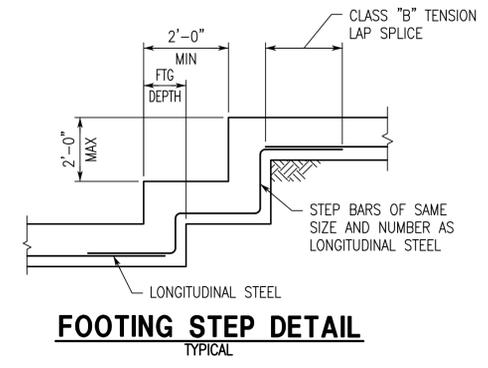
SINGLE LAYER REINFORCEMENT



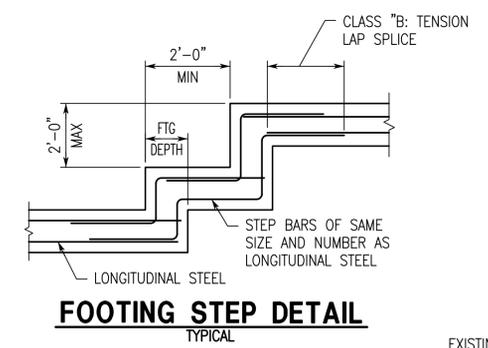
DOUBLE LAYER REINFORCEMENT

NOTE: ALL LAP SPLICES CLASS "B" TENSION

FOOTING, SLAB OR WALL CORNER REINFORCING DETAIL
TYPICAL



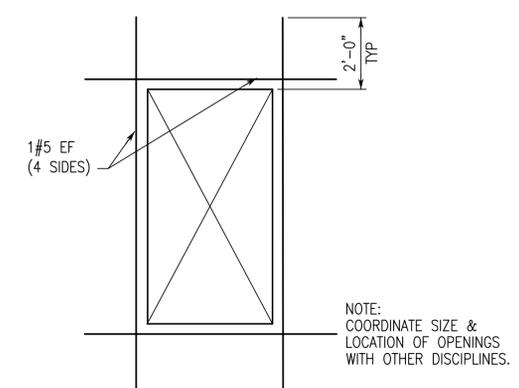
FOOTING STEP DETAIL
TYPICAL



FOOTING STEP DETAIL
TYPICAL

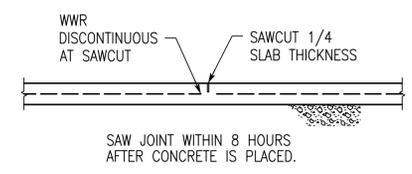
BAR SIZE	$f_c = 3000$ PSI				$f_c = 4000$ PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B
#3	22"	28"	17"	22"	19"	24"	15"	19"
#4	29"	37"	22"	29"	25"	32"	19"	25"
#5	36"	47"	28"	36"	31"	40"	24"	31"
#6	43"	56"	33"	43"	37"	48"	29"	37"
#7	63"	81"	48"	63"	54"	70"	42"	54"
#8	72"	93"	55"	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.

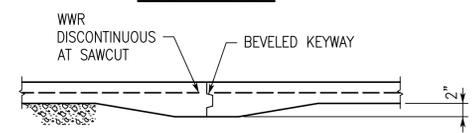


WALL OPENING REINFORCEMENT DETAIL
TYPICAL

NOTE: COORDINATE SIZE & LOCATION OF OPENINGS WITH OTHER DISCIPLINES.

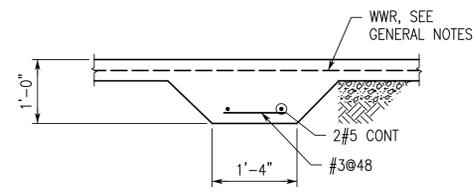


SAWED JOINT

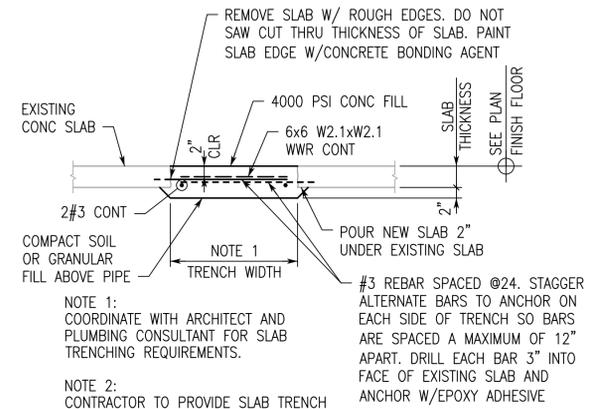


KEYED JOINT

SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL

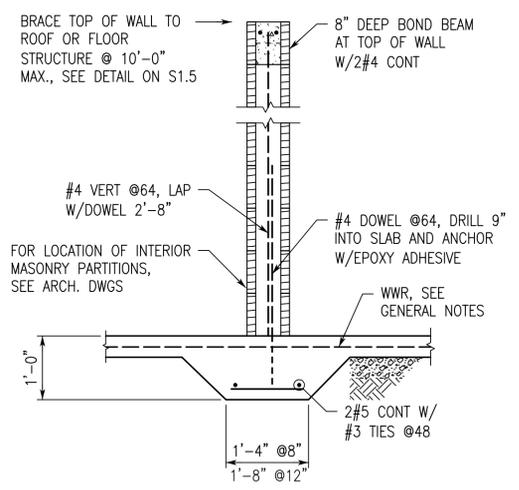


THICKENED SLAB ON GRADE DETAIL
TYPICAL

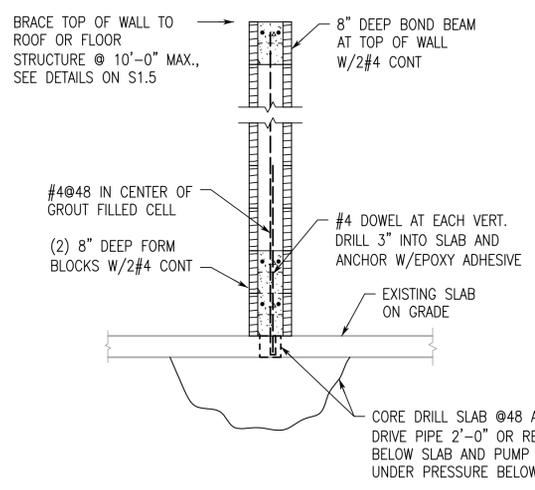


SLAB TRENCHING DETAIL
TYPICAL

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.

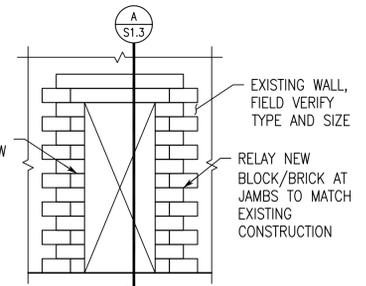


INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL
TYPICAL

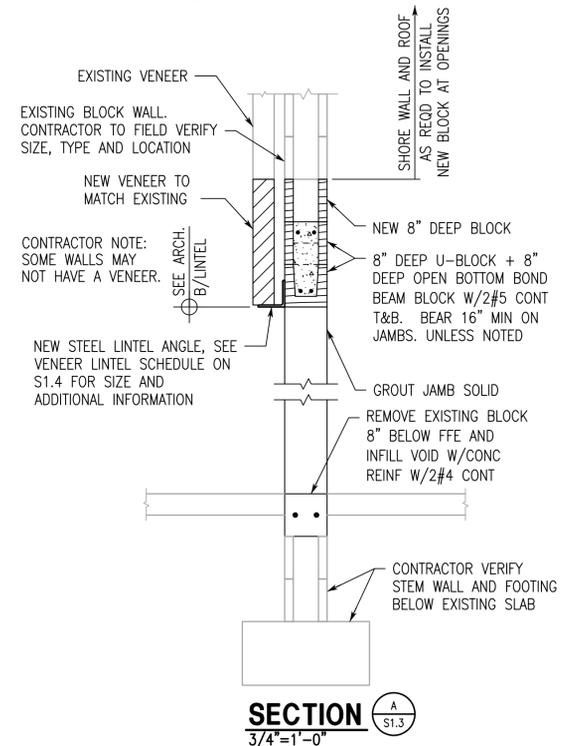


NEW WALL BEARING ON EXISTING SLAB
TYPICAL

FILL 16" WIDE BLOCK W/CONCRETE CONT TO FOUNDATION. PROVIDE 2#5 CONT. (1 PER CELL) FROM FOUNDATION TO TOP OF NEW CMU LINTEL OVER OPENING. DOWEL AND EPOXY REBAR 8" INTO EXISTING FOOTING



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



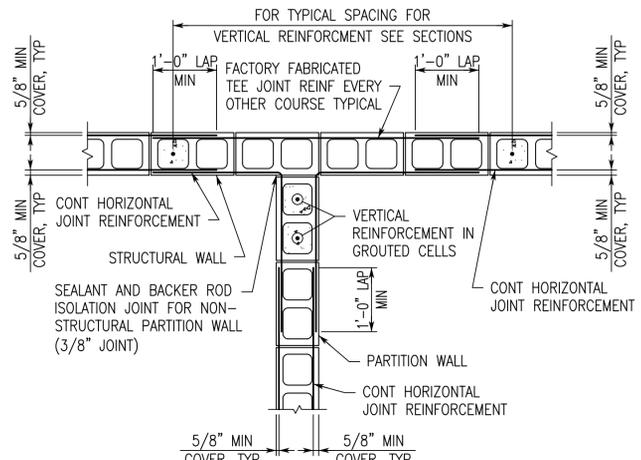
SECTION A S1.3
3/4"=1'-0"

SHEET TITLE:
TYPICAL DETAILS

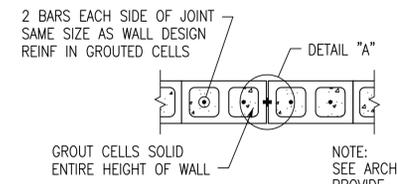


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DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

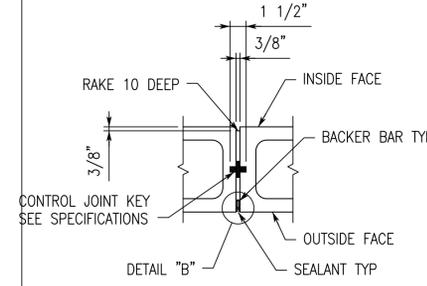
JOB NO. 25-34
SHEET NO. S1.3
4 OF 16



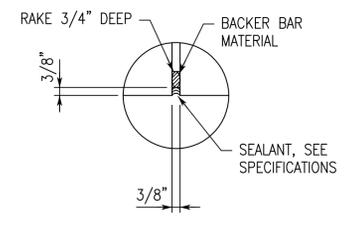
**PARTITION WALLS
ABUTTING STRUCTURAL WALLS**
TYPICAL



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

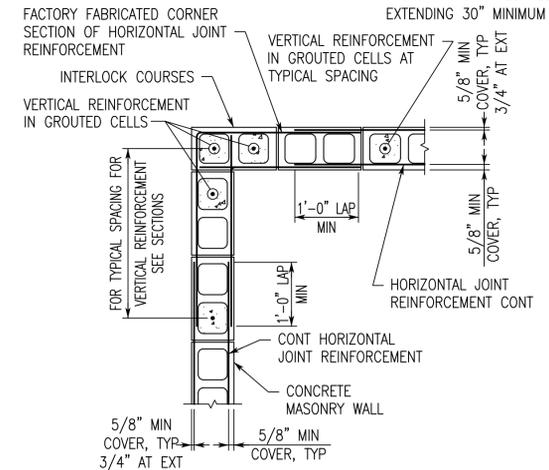


**DETAIL "A"
MASONRY CONTROL JOINT**
1 1/2"=1'-0"

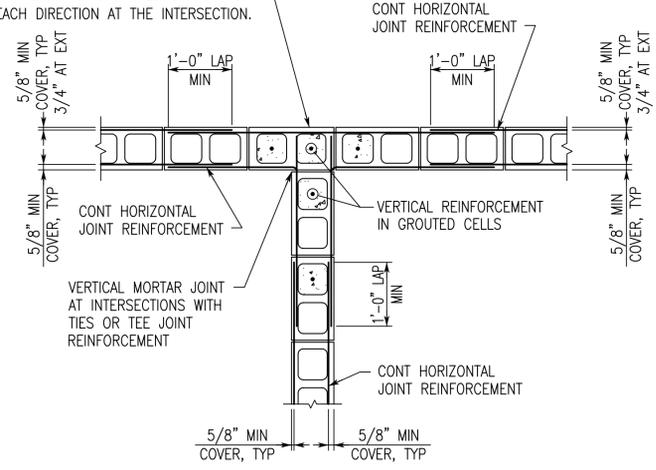


**DETAIL "B"
MASONRY CONTROL JOINT**
3"=1'-0"

- ANCHOR WALLS BY:
- INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.
 - GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS BENT 2", ALTERNATING ENDS UP AND DOWN.
 - 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

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

- 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.)
- SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
- 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

- 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.)
- SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
- 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"

- 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.
- PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
- 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.
- SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
- 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.

MASONRY REINFORCING LAP SPICE LENGTHS

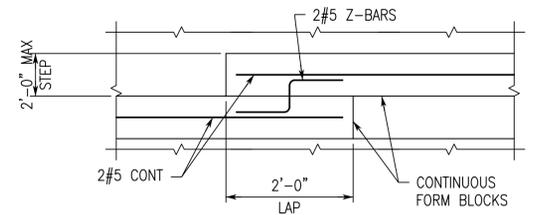
BAR SIZE (#)	CENTERED (IN.)	EDGE (IN.)
3	18.0	18.0
4	24.0	29.0
5	30.0	45.0
6	43.0	54.0
7	60.0	63.0
8	72.0	72.0
9	82.0	82.0

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

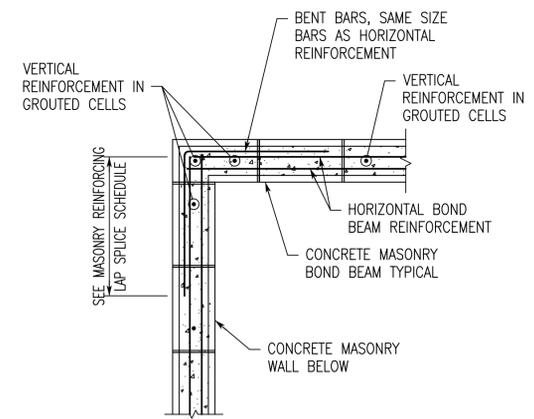
PIPING WEIGHTS

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

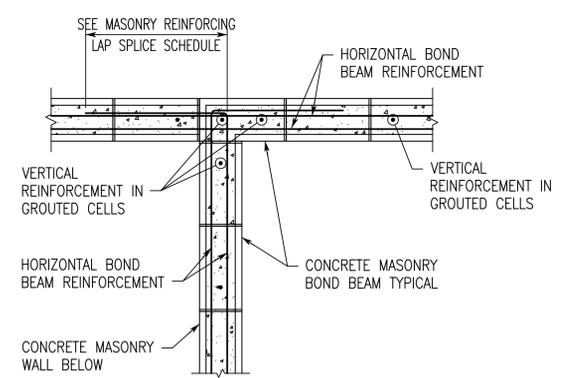
- NOTES:
- FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.
 - ALL PIPES ASSUMED TO BE SCHEDULE 40.
 - FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.
 - PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING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



MASONRY BOND BEAM STEP DETAIL
TYPICAL



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



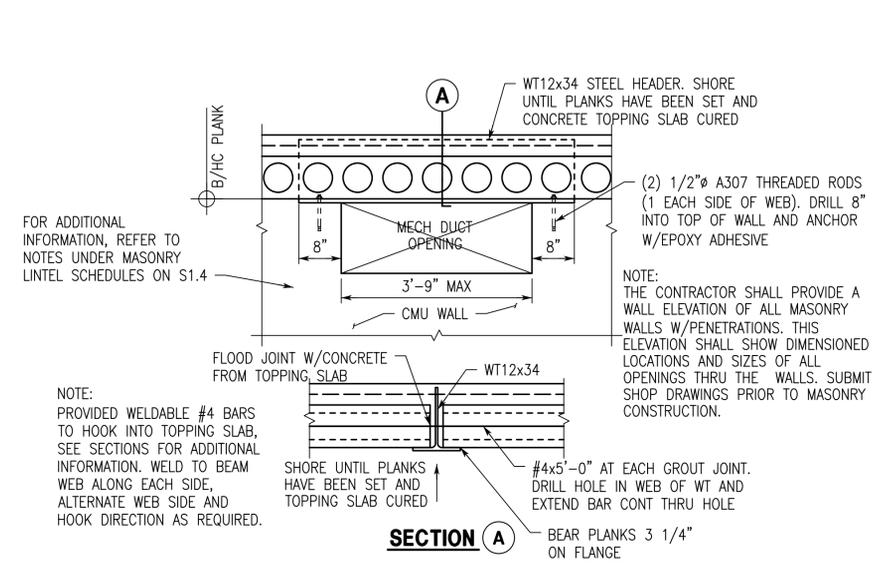
PLAN SHOWING BOND BEAM REINFORCEMENT AT STRUCTURAL WALL INTERSECTION
TYPICAL

SHEET TITLE:
TYPICAL DETAILS

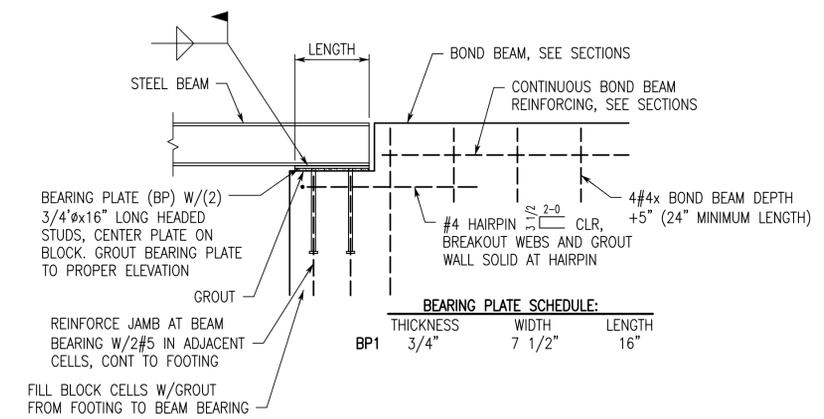
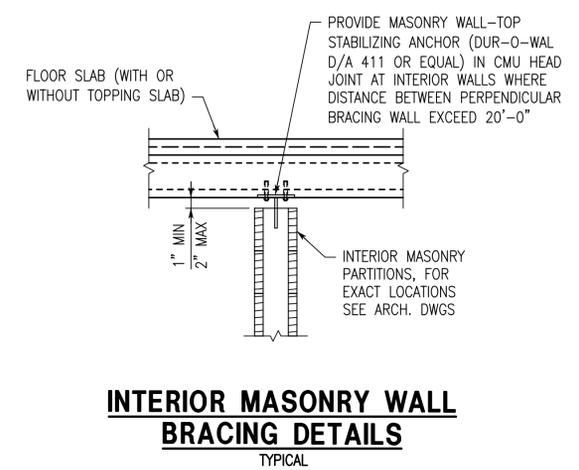
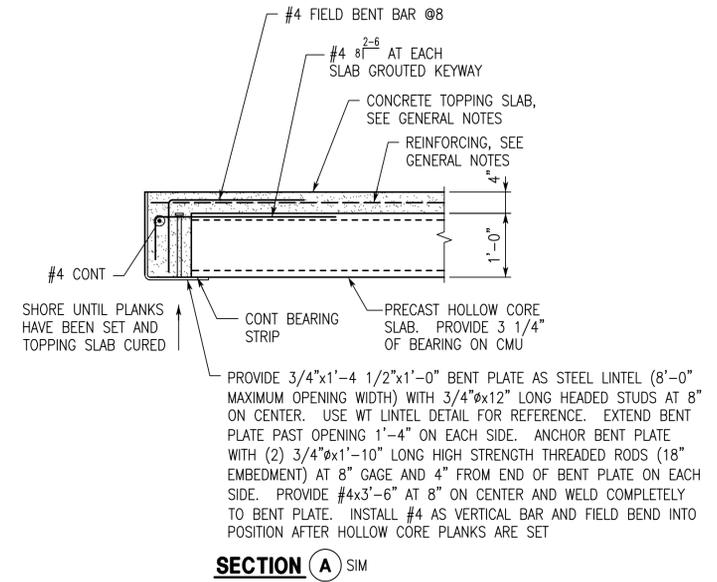


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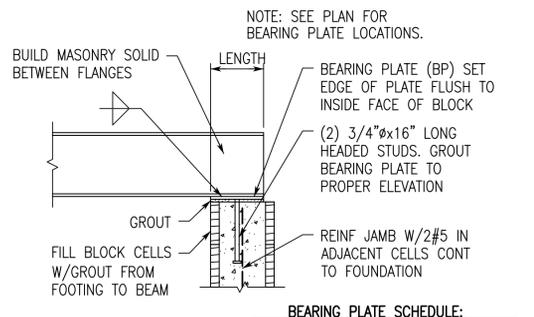
JOB NO. 25-34
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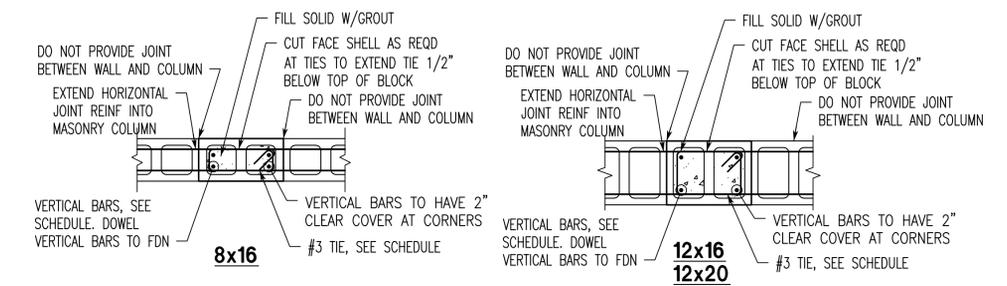
DETAIL AT MECH DUCT OPENING BELOW HOLLOW CORE PANELS
NOT TO SCALE



BEAM BEARING DETAIL IN LINE WITH CMU WALL
TYPICAL



BEAM BEARING DETAIL
TYPICAL

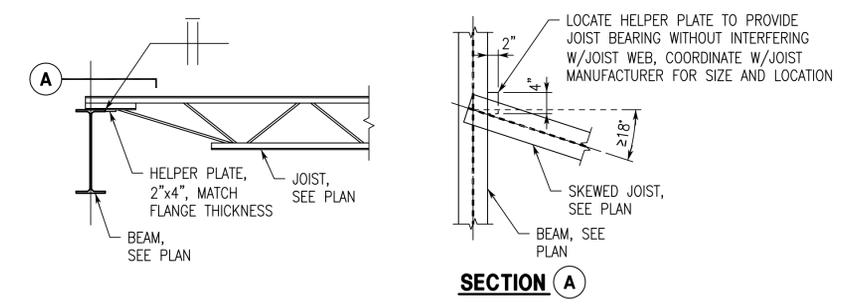


MASONRY COLUMN (MC)
TYPICAL

MASONRY COLUMN SCHEDULE (MC)

COLUMN DESIGNATION	MC1	MC2	MC3
SIZE	12x16	12x20	8x16
VERTICALS	4#6	4#6	4#5
TIES	#3@8	#3@8	#3@8
NOTES	1,2,3	1,2,3	1,2,3

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



SKEWED JOIST HELPER PLATE
TYPICAL

SHEET TITLE:
TYPICAL DETAILS



PROJ. MGR.: HCW
DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

JOB NO. 25-34
SHEET NO. S1.5

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

H = 16'-9" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT ²)	116 MPH VELOCITY (3-SEC. GUST)		
		ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
10	27.4	-29.7	-36.6	
20	26.2	-28.5	-34.2	
50	24.6	-26.9	-31.0	
100	23.4	-25.7	-28.6	
200	22.2	-24.4	-26.1	
500	20.6	-22.9	-22.9	

- NOTES:
1. WIDTH OF EDGE STRIP 'a' = 6'-2".
 2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 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 WALLS (PSF)

H = 16'-9" 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	201.4	-213.9	-251.4	
20	194.7	-207.1	-238.2	
50	185.9	-198.3	-220.7	
100	179.3	-191.6	-207.5	
200	172.7	-185.0	-194.2	
500	163.9	-176.4	-176.4	

- NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
 2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 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)

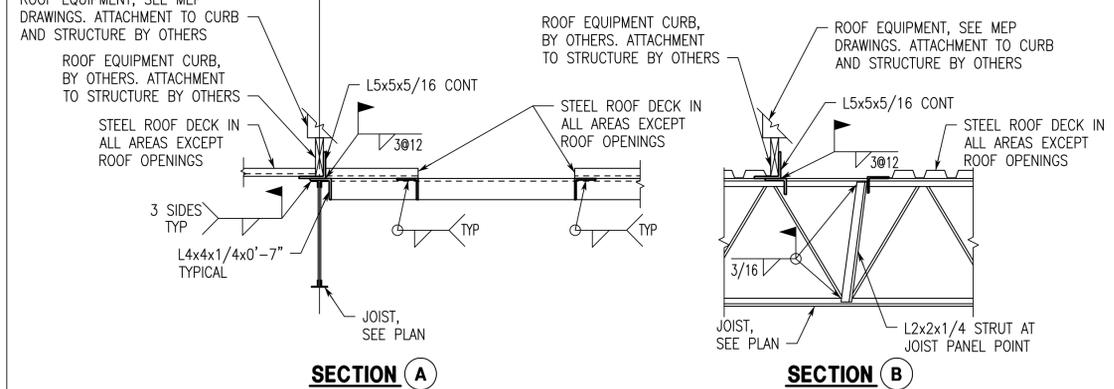
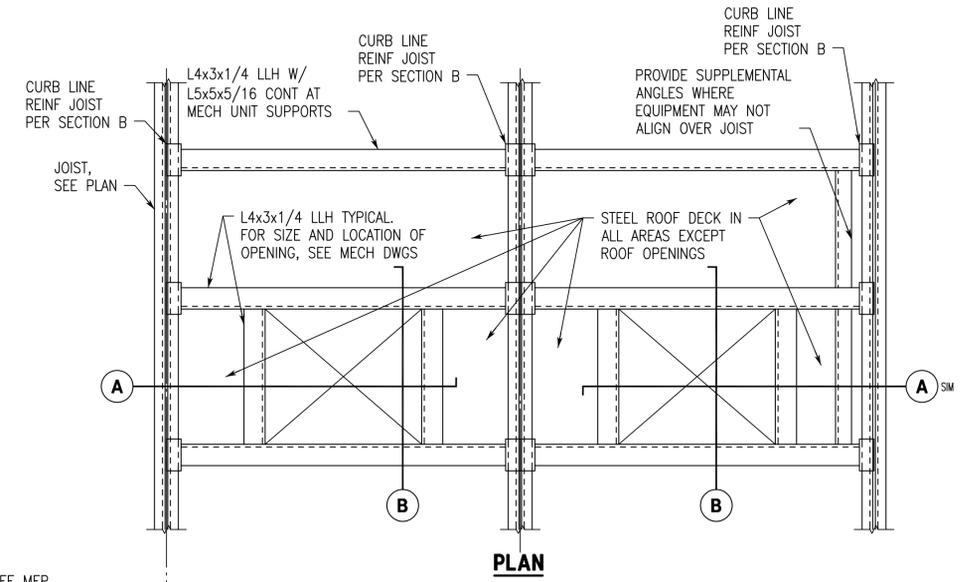
H = 16'-9" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT ²)	250 MPH VELOCITY (3-SEC. GUST)						OVERHANG		
		Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.) (PSF)	Zone 1 (Int.) (PSF)	Zone 2 (Edge) (PSF)	Zone 3 (Corner) (PSF)	Zone 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)	
10	118.0	-201.4	-312.5	-395.8	-520.8	-236.1	-319.4	-444.4		
20	113.9	-201.4	-295.3	-373.7	-476.5	-231.9	-289.9	-392.7		
50	108.3	-201.4	-272.5	-344.4	-418.0	-226.4	-250.9	-324.4		
100	104.2	-201.4	-255.3	-322.2	-373.7	-222.2	-221.3	-272.8		
200	104.2	-180.5	-238.0	-300.1	-329.4	-186.3	-191.8	-221.1		
500	104.2	-152.8	-215.3	-270.8	-270.8	-138.9	-152.8	-152.8		

- NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
 2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 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)

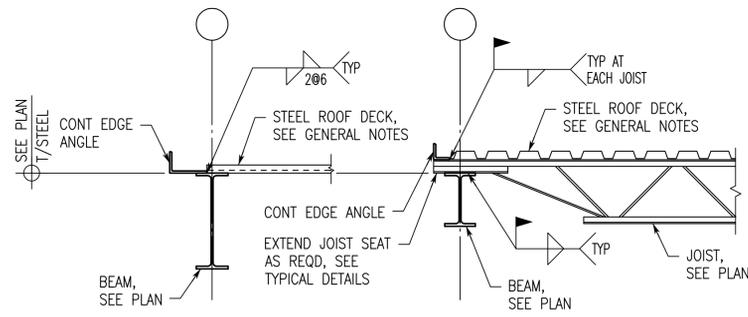
H = 16'-9" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT ²)	116 MPH VELOCITY (3-SEC. GUST)						OVERHANG		
		Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.) (PSF)	Zone 1 (Int.) (PSF)	Zone 2 (Edge) (PSF)	Zone 3 (Corner) (PSF)	Zone 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)	
10	16.0	-27.4	-47.8	-63.0	-85.9	-43.2	-58.5	-81.3		
20	16.0	-27.4	-44.6	-59.0	-77.8	-42.4	-53.1	-71.9		
50	16.0	-27.4	-40.5	-53.6	-67.1	-41.4	-45.9	-59.4		
100	16.0	-27.4	-37.3	-49.6	-59.0	-40.7	-40.5	-49.9		
200	16.0	-23.6	-34.2	-45.5	-50.9	-34.1	-35.1	-40.5		
500	16.0	-18.6	-30.0	-40.2	-40.2	-25.4	-28.0	-28.0		

- NOTES:
1. WIDTH OF EDGE STRIP 'a' = 6'-2".
 2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 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.

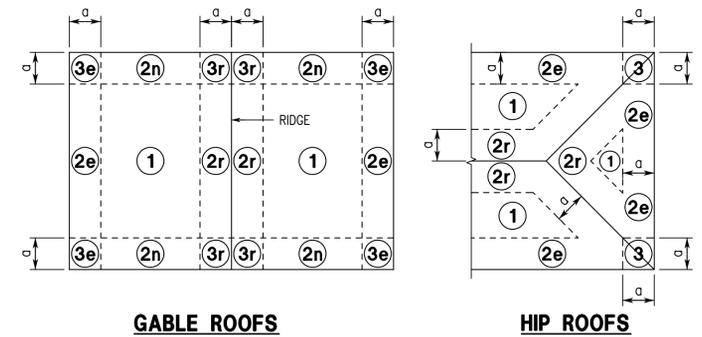
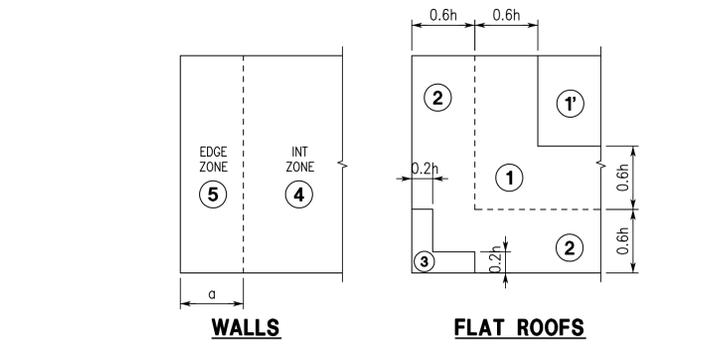


- NOTES:
1. PROVIDE L4x3x1/4 LLH FRAMES AT ALL WATER/POWER BOXES.
 2. AT ROOF DRAINS SUPPORT, PROVIDE L2x2x1/4 AT JOIST TOP CHORD.
 3. CONTRACTOR COORDINATE ROOF EQUIPMENT FRAMES WITH EQUIPMENT MANUFACTURER. DETAIL IS SCHEMATIC DEPICTION AND OTHER CONFIGURATIONS MAY BE REQUIRED.
 4. FASTEN STEEL ROOF DECK TO ALL ANGLES PER DECK FASTENING REQUIREMENT.

ROOF EQUIPMENT FRAME DETAIL
TYPICAL AT ALL OPENINGS IN ROOF LARGER THAN 8"



ROOF EDGE ANGLE AND JOIST ATTACHMENT
TYPICAL



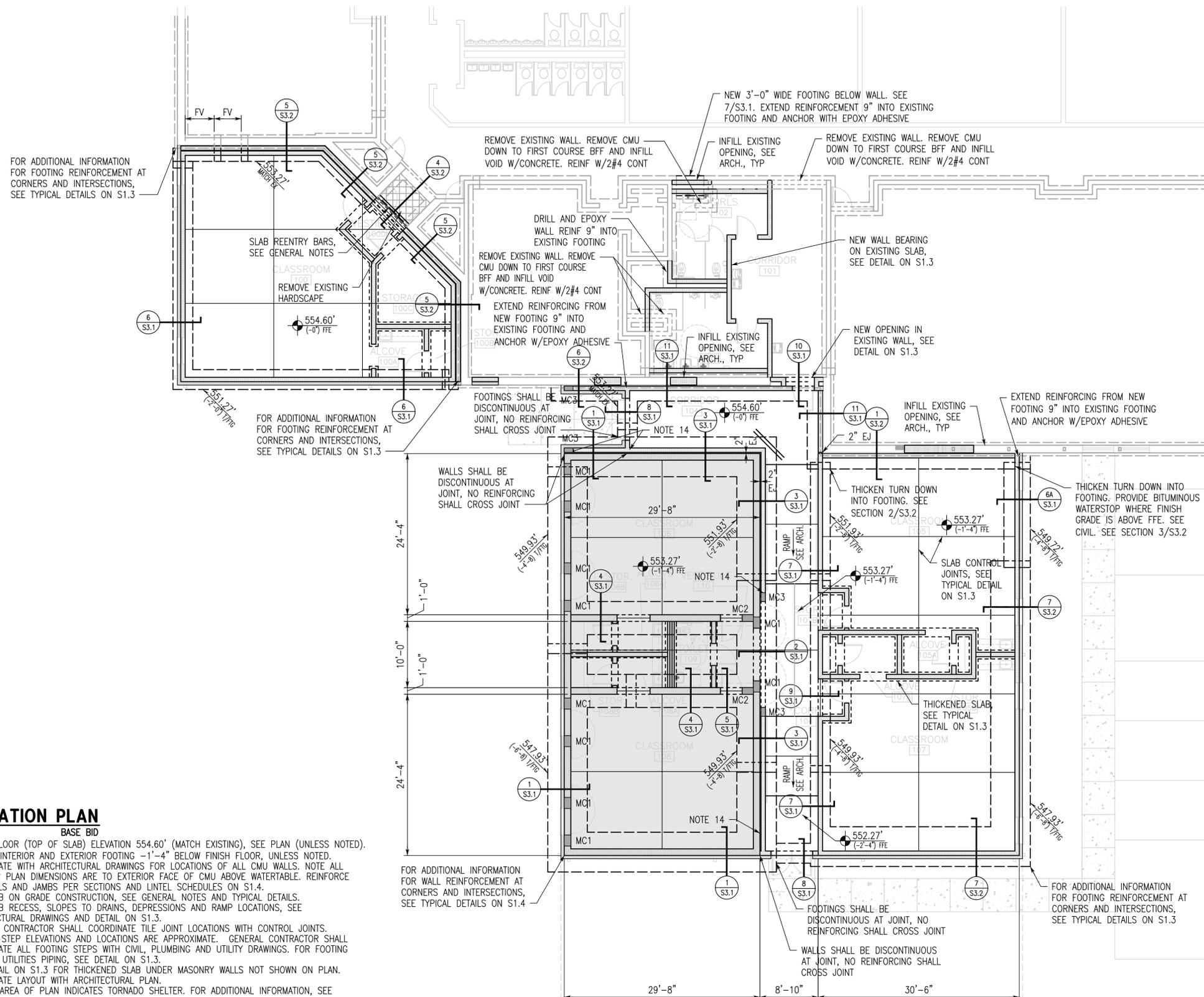
WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS
TYPICAL

SHEET TITLE:
TYPICAL DETAILS



PROJ. MGR.: HCW
DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

JOB NO. 25-34
SHEET NO. S1.6
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PROJECT
NORTH

FOUNDATION PLAN

1/8"=1'-0" BASE BID

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 554.60' (MATCH EXISTING), SEE PLAN (UNLESS NOTED).
2. TOP OF INTERIOR AND EXTERIOR FOOTING -1'-4" BELOW FINISH FLOOR, UNLESS NOTED.
3. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL CMU WALLS. NOTE ALL EXTERIOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF CMU ABOVE WATERTABLE. REINFORCE ALL WALLS AND JAMBS PER SECTIONS AND LINTEL SCHEDULES ON S1.4.
4. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS.
5. FOR SLAB RECESS, SLOPES TO DRAINS, DEPRESSIONS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS AND DETAIL ON S1.3.
6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
7. FOOTING STEP ELEVATIONS AND LOCATIONS ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND UTILITY DRAWINGS. FOR FOOTING STEP AT UTILITIES PIPING, SEE DETAIL ON S1.3.
8. SEE DETAIL ON S1.3 FOR THICKENED SLAB UNDER MASONRY WALLS NOT SHOWN ON PLAN. COORDINATE LAYOUT WITH ARCHITECTURAL PLAN.
9. SHADED AREA OF PLAN INDICATES TORNADO SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
10. 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.
11. FOOTING WIDTHS INDICATED ON PLAN MAY OR MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
12. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS.
13. FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. VERTICAL DOWELS AT INDICATED LOCATION ARE TO ONLY EXTEND ABOVE TOP OF FOOTING ELEVATIONS BY 1'-0". LAP DOWEL 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.

SHEET TITLE:
FOUNDATION PLAN



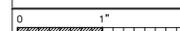
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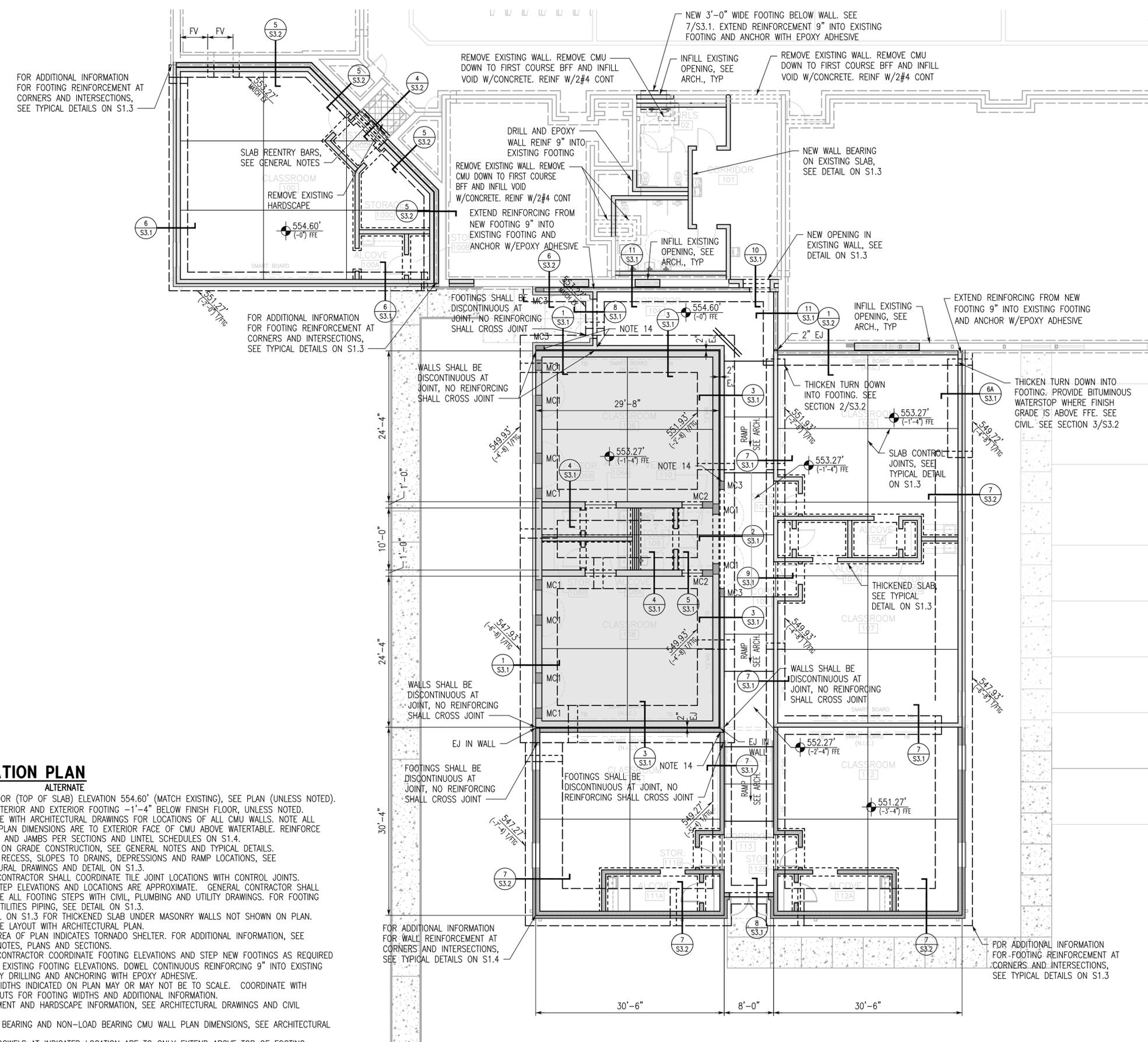
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FOUNDATION PLAN
1/8"=1'-0" ALTERNATE

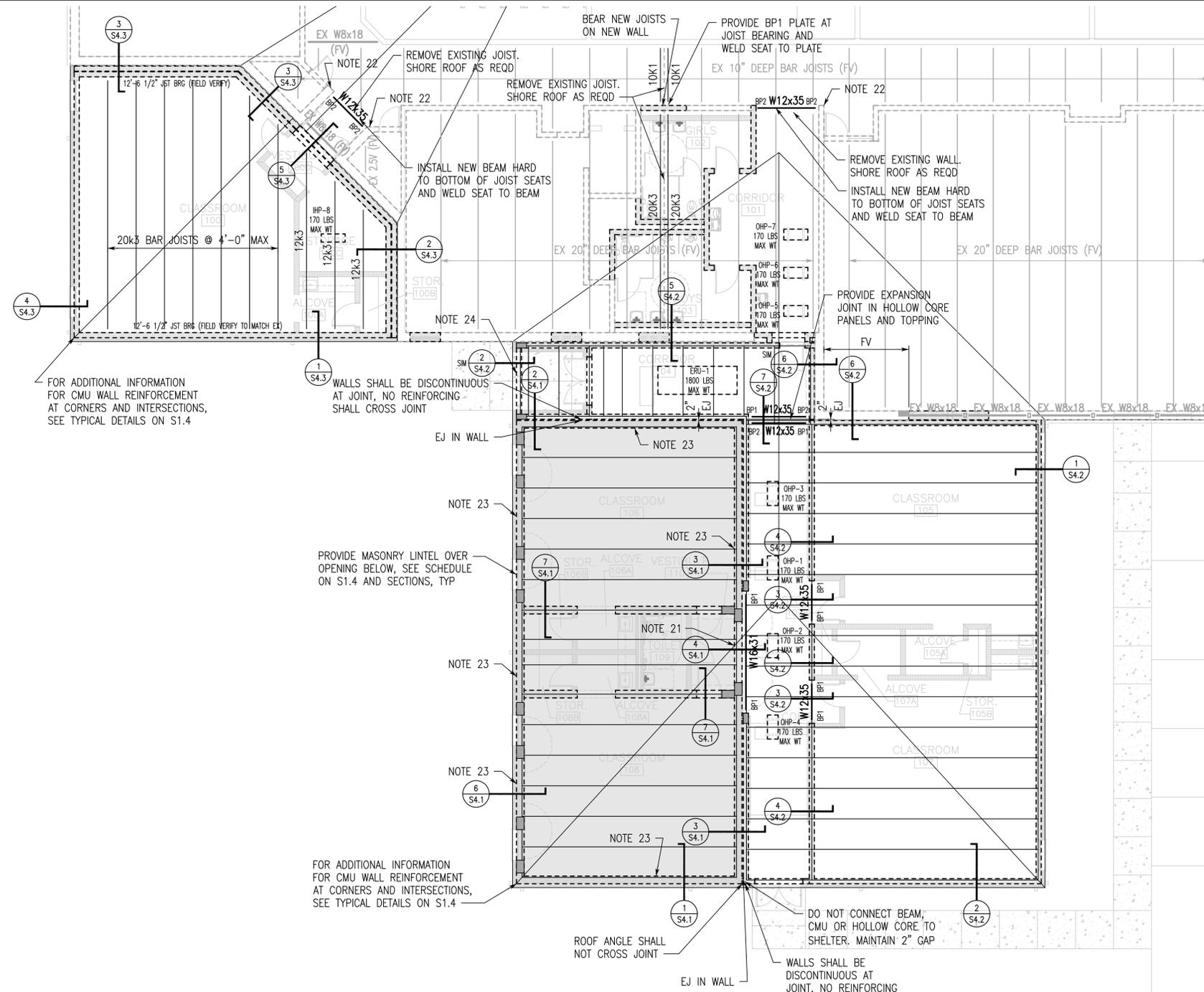
1. FINISH FLOOR (TOP OF SLAB) ELEVATION 554.60' (MATCH EXISTING), SEE PLAN (UNLESS NOTED).
2. TOP OF INTERIOR AND EXTERIOR FOOTING -1'-4" BELOW FINISH FLOOR, UNLESS NOTED.
3. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL CMU WALLS. NOTE ALL EXTERIOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF CMU ABOVE WATERTABLE. REINFORCE ALL WALLS AND JAMBS PER SECTIONS AND LINTEL SCHEDULES ON S1.4.
4. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS.
5. FOR SLAB RECESS, SLOPES TO DRAINS, DEPRESSIONS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS AND DETAIL ON S1.3.
6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
7. FOOTING STEP ELEVATIONS AND LOCATIONS ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND UTILITY DRAWINGS. FOR FOOTING STEP AT UTILITIES PIPING, SEE DETAIL ON S1.3.
8. SEE DETAIL ON S1.3 FOR THICKENED SLAB UNDER MASONRY WALLS NOT SHOWN ON PLAN. COORDINATE LAYOUT WITH ARCHITECTURAL PLAN.
9. SHADED AREA OF PLAN INDICATES TORNADO SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
10. 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.
11. FOOTING WIDTHS INDICATED ON PLAN MAY OR MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
12. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS.
13. FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. VERTICAL DOWELS AT INDICATED LOCATION ARE TO ONLY EXTEND ABOVE TOP OF FOOTING ELEVATIONS BY 1'-0". LAP DOWEL 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.

SHEET TITLE:
FOUNDATION PLAN
- ALTERNATE



PROJ. MGR.:	HCW
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DATE:	NOV 7, 2025
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JOB NO. 25-34
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S2.0A
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FOR ADDITIONAL INFORMATION FOR CMU WALL REINFORCEMENT AT CORNERS AND INTERSECTIONS, SEE TYPICAL DETAILS ON S1.4

WALLS SHALL BE DISCONTINUOUS AT JOINT, NO REINFORCING SHALL CROSS JOINT

PROVIDE MASONRY LINTEL OVER OPENING BELOW, SEE SCHEDULE ON S1.4 AND SECTIONS, TYP

FOR ADDITIONAL INFORMATION FOR CMU WALL REINFORCEMENT AT CORNERS AND INTERSECTIONS, SEE TYPICAL DETAILS ON S1.4

ROOF ANGLE SHALL NOT CROSS JOINT

DO NOT CONNECT BEAM, CMU OR HOLLOW CORE TO SHELTER. MAINTAIN 2" GAP

WALLS SHALL BE DISCONTINUOUS AT JOINT, NO REINFORCING SHALL CROSS JOINT



ROOF FRAMING PLAN
1/8"=1'-0" BASE BID

- FINISH ROOF (TOP OF SLAB) ELEVATION 566.60' (MATCH EXISTING), UNLESS NOTED. JOIST BEARING ELEVATION: 12'-6 1/2" (MATCH EXISTING) ABOVE FINISHED FLOOR, UNLESS NOTED.
- ROOF SYSTEM:
PRECAST HOLLOW CORE: 12" THICK PRECAST HOLLOW CORE SLABS WITH 4" STRUCTURAL TOPPING SLAB, SEE GENERAL NOTES.
STEEL BAR JOISTS: 1 1/2" STEEL ROOF DECK, 20 GAGE, ON STEEL JOISTS AT 4'-0" MAXIMUM ON CENTER, SEE GENERAL NOTES. ANCHOR METAL DECK TO JOISTS WITH 5/8" PUDDLE WELDS IN 36/4 PATTERN WITH 3/10 SIDELAP SCREWS BETWEEN JOISTS.
- CMU IS EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
- 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 AND 20 PSF COLLATERAL DEAD LOAD.
- CUT OR BREAK CORES OF HOLLOW CORE SLABS ONLY AS REQUIRED TO PLACE REINFORCING.
- THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT AND LOCATION OF ALL CONCENTRATED AND MECHANICAL LOADS WITH THE PRECAST MANUFACTURER.
- 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.
- PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS, SEE SCHEDULES ON S1.4.
- THE HATCHED AREA ON THE PLAN INDICATES AREA TO BE USED AS STORM SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
- CONTRACTOR NOTE: DO NOT PROVIDE MASONRY CONTROL JOINTS IN STORM SHELTER CMU WALLS.
- WHERE MECHANICAL DUCTS EXTEND THRU LOAD BEARING WALLS BELOW HOLLOW CORE SLABS, PROVIDE STEEL HEADER/LINTEL PER DETAIL ON S1.5.
- 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.

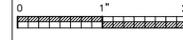
- CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURERS INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
- SPACE STEEL JOISTS EQUALLY BETWEEN FACE OF WALLS, UNLESS NOTED.
- EQUIPMENT LOCATIONS AND WEIGHTS ARE APPROXIMATE. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT, AND LOCATION OF ALL MECHANICAL UNITS WITH THE JOIST MANUFACTURER. DO NOT SCALE FROM THIS DRAWINGS. PROVIDE ROOF EQUIPMENT FRAME AT MECHANICAL UNITS. SEE DETAIL ON S1.6.
- HANGER LOCATION FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE JOIST MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAILS ON S1.4.
- AT JOISTS DESIGNATED "SP" JOIST MANUFACTURER SHALL DESIGN JOISTS FOR 25 PSF DEAD LOAD AND 20 PSF LIVE LOAD PLUS ANY ADDITIONAL LOADS SHOWN ON PLANS, NOTED IN PLAN NOTES, AND/OR SHOWN/NOTED IN SECTIONS. LIMIT DEAD LOAD DEFLECTION OF JOISTS TO 0.75" (NET AFTER CAMBER).
- PROVIDE 2 1/2" JOIST SEAT DEPTHS TYPICAL, UNLESS NOTED.
- CONTRACTOR COORDINATE ALL HANGER LOADS AND LOCATIONS WITH JOIST MANUFACTURER.
- GC COORDINATE STEEL JOISTS LAYOUT BASED ON REQUIRED EQUIPMENT LOCATIONS AND ORIENTATIONS AS WELL AS DUCT ROUTING.
- PROVIDE SPECIAL 40" DEEP MASONRY LINTEL REINFORCED WITH 2#5 EACH COURSE. EXTEND LINTEL 2' PAST OPENING. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
- SHORE EXISTING ROOF AND REMOVE EXISTING CMU DOWN TO 16" BELOW B/STEEL. DRILL AND EPOXY #5 REBAR INTO EXISTING CMU. PROVIDE BEARING PLATE PER PLAN AND TYPICAL DETAILS. CONTRACTOR NOTE THAT IS WALL IS NOT FILLED WITH GROUT, FILL CELLS WITH GROUT AND #5 REBAR TO REFUSAL.
- PROVIDE MECHANICAL STORM LOUVER FOR MECHANICAL OPENINGS. FOR ADDITIONAL INFORMATION SEE S1.5 AND MECHANICAL DRAWINGS.
- PROVIDE HOOK IN LINTEL REINFORCING AT MASONRY COLUMN, EACH END. FOR ADDITIONAL INFORMATION, SEE SCHEDULE ON S1.4.

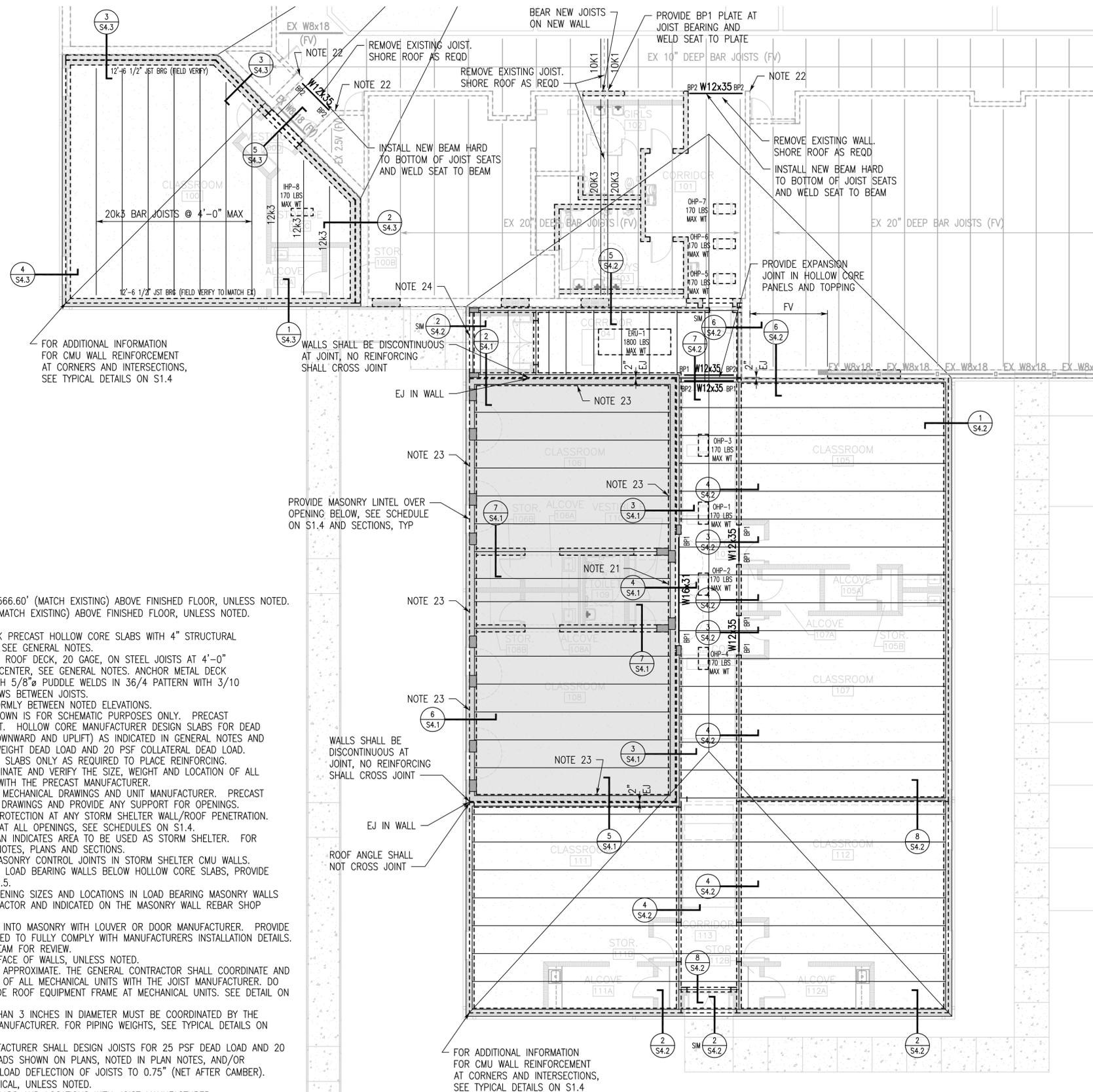
SHEET TITLE:
ROOF FRAMING
PLAN



PROJ. MGR.: HCW
DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

JOB NO. 25-34
SHEET NO. S2.1
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PROJECT
NORTH

ROOF FRAMING PLAN

1/8"=1'-0" ALTERNATE

1. FINISH ROOF (TOP OF SLAB) ELEVATION 566.60' (MATCH EXISTING) ABOVE FINISHED FLOOR, UNLESS NOTED. JOIST BEARING ELEVATION: 12'-6 1/2" (MATCH EXISTING) ABOVE FINISHED FLOOR, UNLESS NOTED.
2. ROOF SYSTEM:
PRECAST HOLLOW CORE: 12" THICK PRECAST HOLLOW CORE SLABS WITH 4" STRUCTURAL TOPPING SLAB, SEE GENERAL NOTES.
STEEL BAR JOISTS: 1 1/2" STEEL ROOF DECK, 20 GAGE, ON STEEL JOISTS AT 4'-0" MAXIMUM ON CENTER, SEE GENERAL NOTES. ANCHOR METAL DECK TO JOISTS WITH 5/8" PUDDLE WELDS IN 36/4 PATTERN WITH 3/10 SIDELAP SCREWS BETWEEN JOISTS.
3. CMU IS EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
4. 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 AND 20 PSF COLLATERAL DEAD LOAD.
5. CUT OR BREAK CORES OF HOLLOW CORE SLABS ONLY AS REQUIRED TO PLACE REINFORCING.
6. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT AND LOCATION OF ALL CONCENTRATED AND MECHANICAL LOADS WITH THE PRECAST MANUFACTURER.
7. 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.
8. PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS, SEE SCHEDULES ON S1.4.
9. THE HATCHED AREA ON THE PLAN INDICATES AREA TO BE USED AS STORM SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
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 STEEL HEADER/LINTEL PER DETAIL ON S1.5.
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. SPACE STEEL JOISTS EQUALLY BETWEEN FACE OF WALLS, UNLESS NOTED.
15. EQUIPMENT LOCATIONS AND WEIGHTS ARE APPROXIMATE. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT, AND LOCATION OF ALL MECHANICAL UNITS WITH THE JOIST MANUFACTURER. DO NOT SCALE FROM THIS DRAWINGS. PROVIDE ROOF EQUIPMENT FRAME AT MECHANICAL UNITS. SEE DETAIL ON S1.6.
16. HANGER LOCATION FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE JOIST MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAILS ON S1.4.
17. AT JOISTS DESIGNATED "SP" JOIST MANUFACTURER SHALL DESIGN JOISTS FOR 25 PSF DEAD LOAD AND 20 PSF LIVE LOAD PLUS ANY ADDITIONAL LOADS SHOWN ON PLANS, NOTED IN PLAN NOTES, AND/OR SHOWN/NOTED IN SECTIONS. LIMIT DEAD LOAD DEFLECTION OF JOISTS TO 0.75" (NET AFTER CAMBER).
18. PROVIDE 2 1/2" JOIST SEAT DEPTHS TYPICAL, UNLESS NOTED.
19. CONTRACTOR COORDINATE ALL HANGER LOADS AND LOCATIONS WITH JOIST MANUFACTURER.
20. GC COORDINATE STEEL JOISTS LAYOUT BASED ON REQUIRED EQUIPMENT LOCATIONS AND ORIENTATIONS AS WELL AS DUCT ROUTING.
21. PROVIDE SPECIAL 40" DEEP MASONRY LINTEL REINFORCED WITH 2#5 EACH COURSE. EXTEND LINTEL 2' PAST OPENING. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
22. SHORE EXISTING ROOF AND REMOVE EXISTING CMU DOWN TO 16" BELOW B/STEEL. DRILL AND EPOXY #5 REBAR INTO EXISTING CMU. PROVIDE BEARING PLATE PER PLAN AND TYPICAL DETAILS. CONTRACTOR NOTE THAT IS WALL IS NOT FILLED WITH GROUT, FILL CELLS WITH GROUT AND #5 REBAR TO REFUSAL.
23. PROVIDE MECHANICAL STORM LOUVER FOR MECHANICAL OPENINGS. FOR ADDITIONAL INFORMATION SEE S1.5 AND MECHANICAL DRAWINGS.
24. PROVIDE HOOK IN LINTEL REINFORCING AT MASONRY COLUMN, EACH END. FOR ADDITIONAL INFORMATION, SEE SCHEDULE ON S1.4.

SHEET TITLE:
ROOF FRAMING
PLAN - ALTERNATE



PROJ. MGR.: HCW
DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

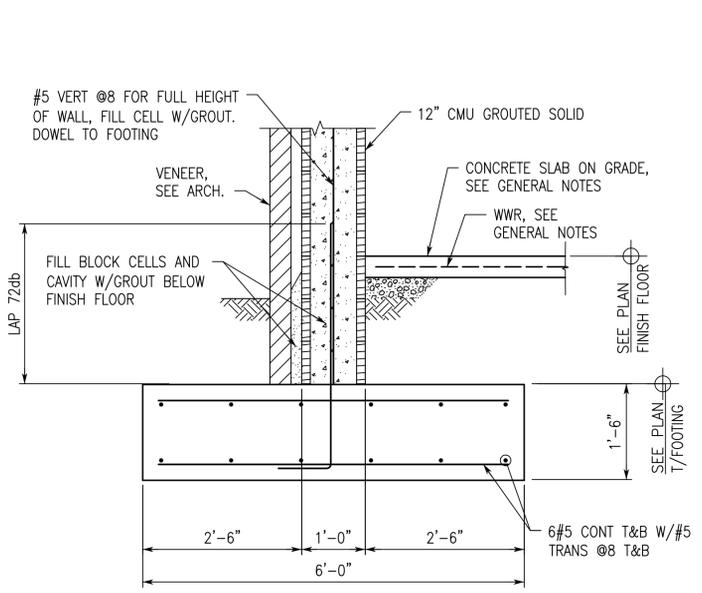
JOB NO. 25-34

SHEET NO:

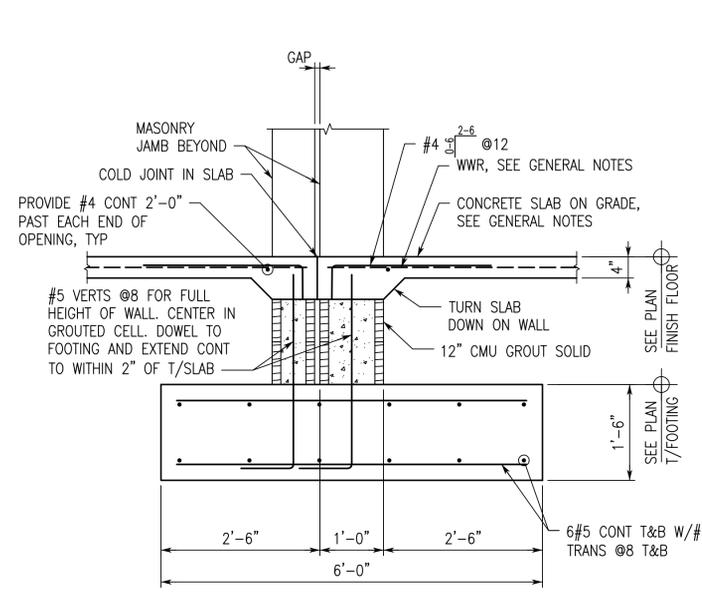
S2.1A

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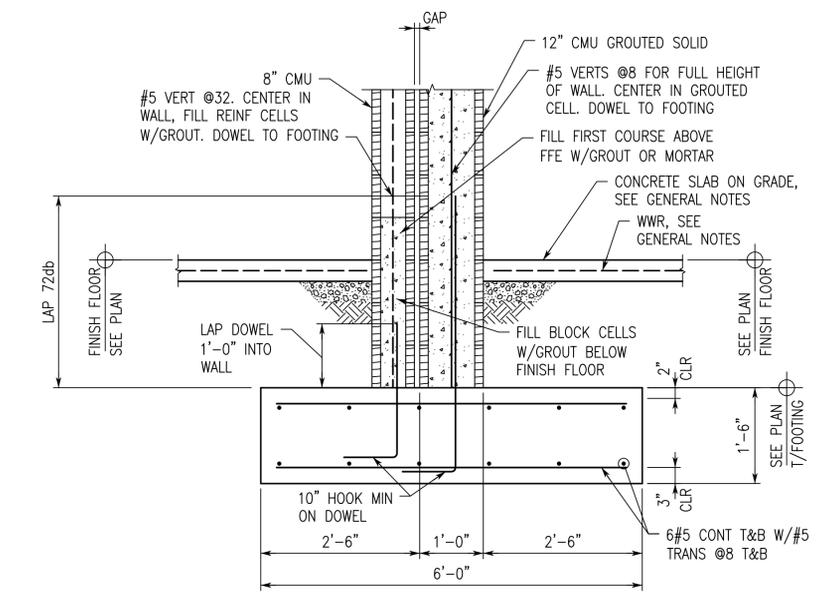




SECTION 1
3/4"=1'-0"

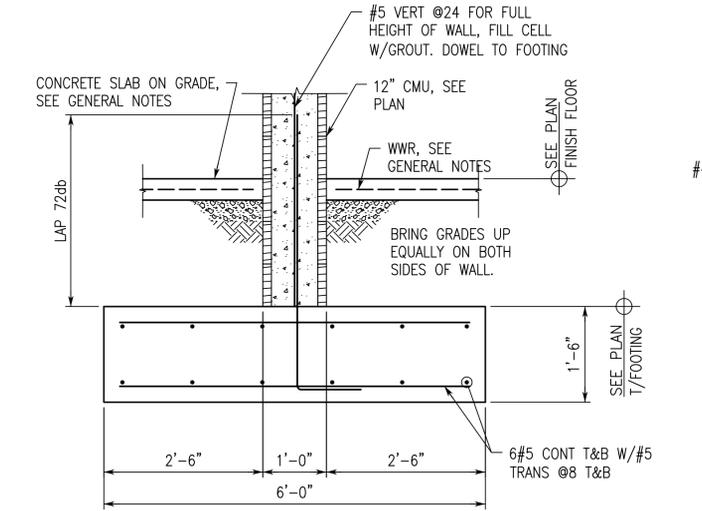


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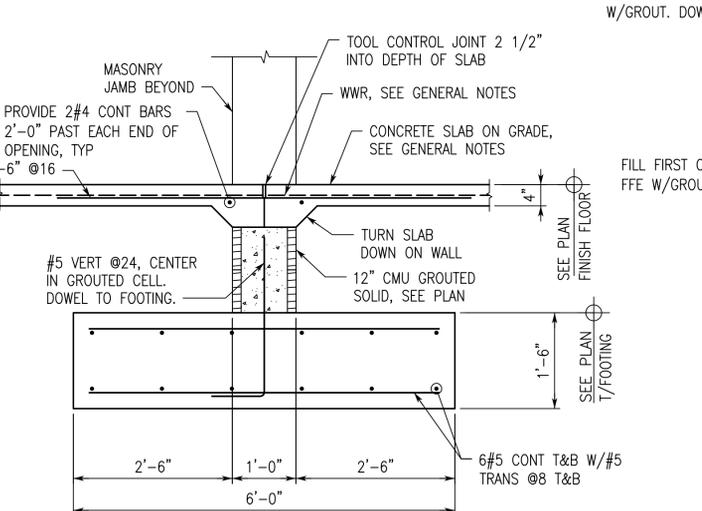


SECTION 3
3/4"=1'-0"

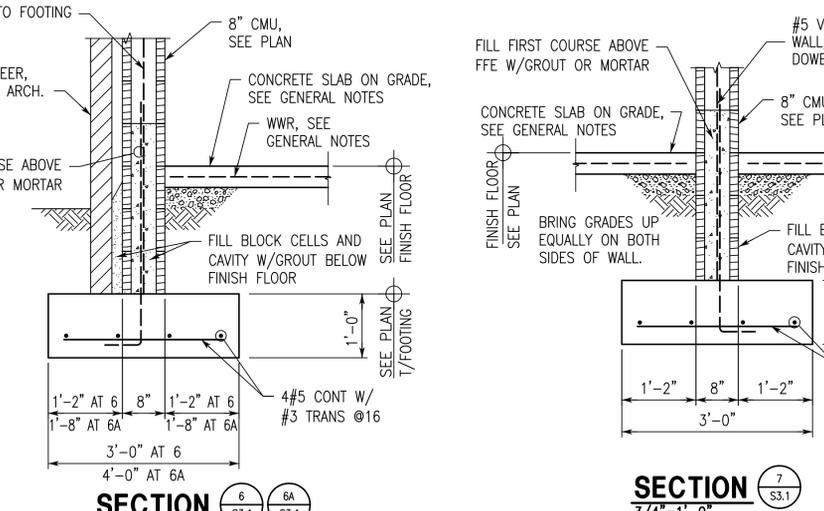
NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT.
NO REINFORCING SHALL CROSS JOINT.



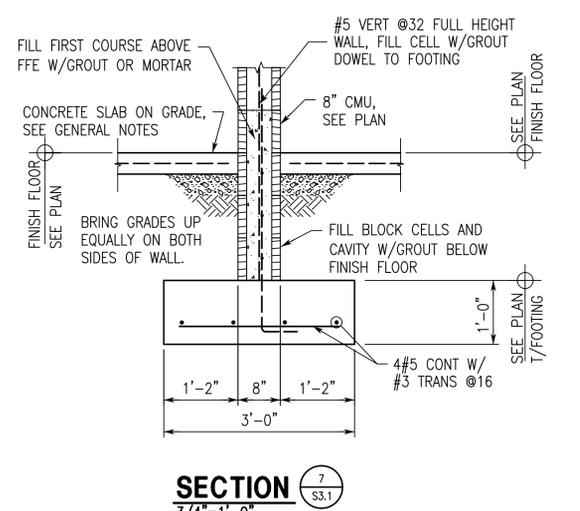
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3/4"=1'-0"



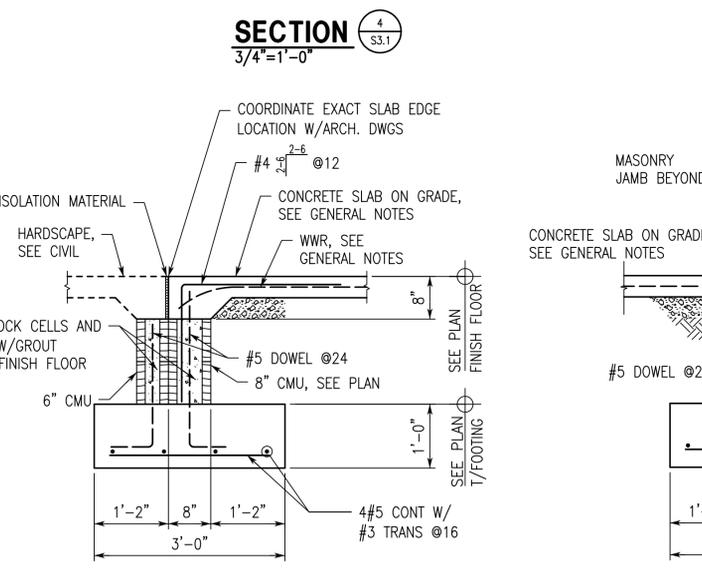
SECTION 5
3/4"=1'-0"



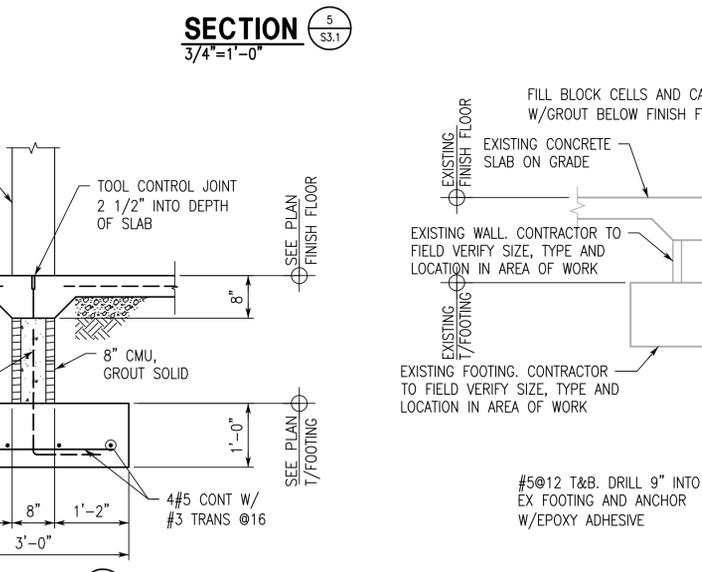
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3/4"=1'-0"



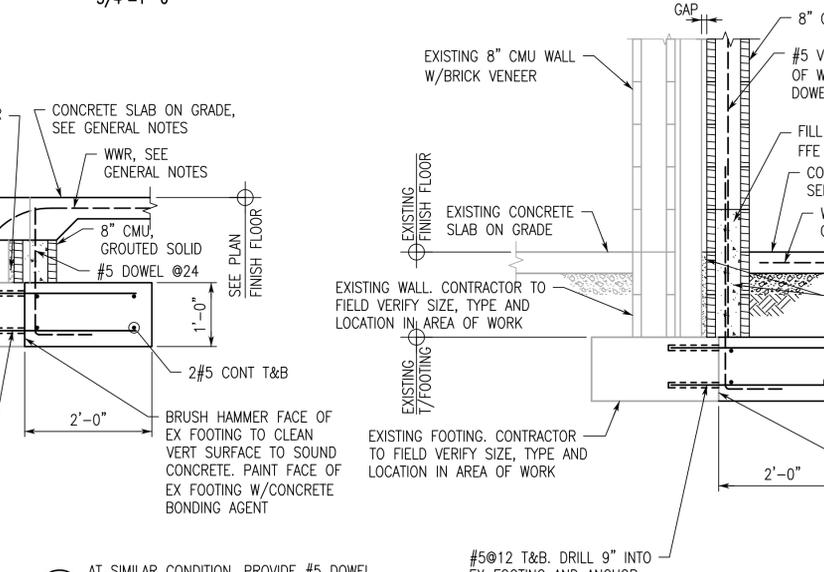
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3/4"=1'-0"



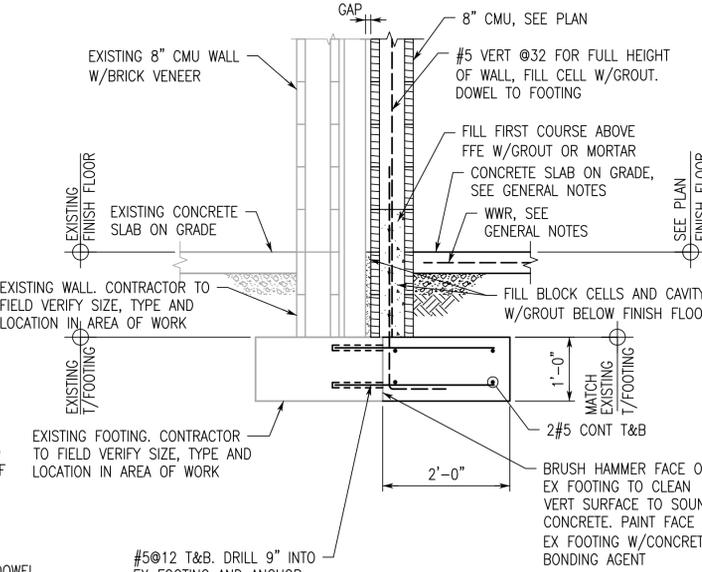
SECTION 8
3/4"=1'-0"



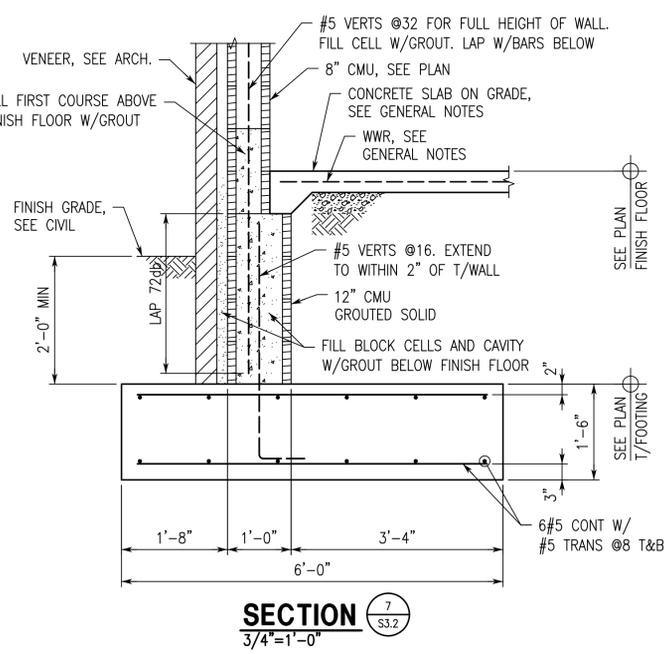
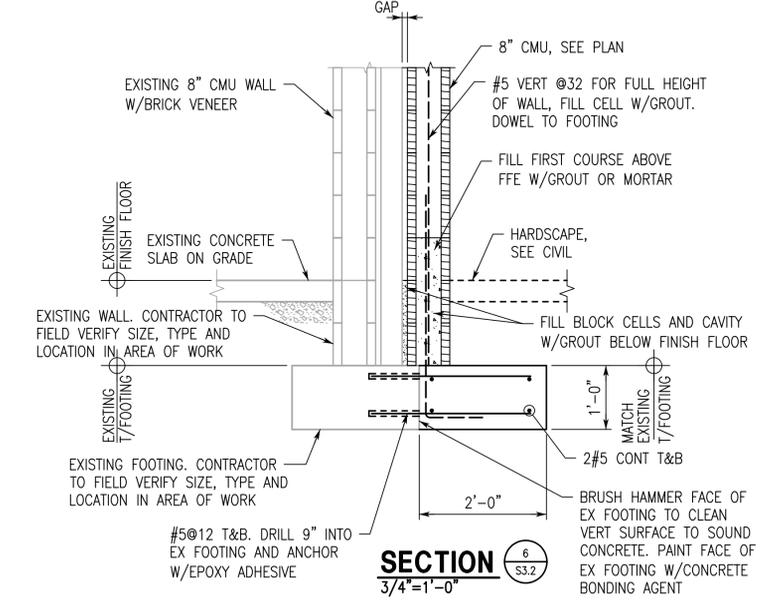
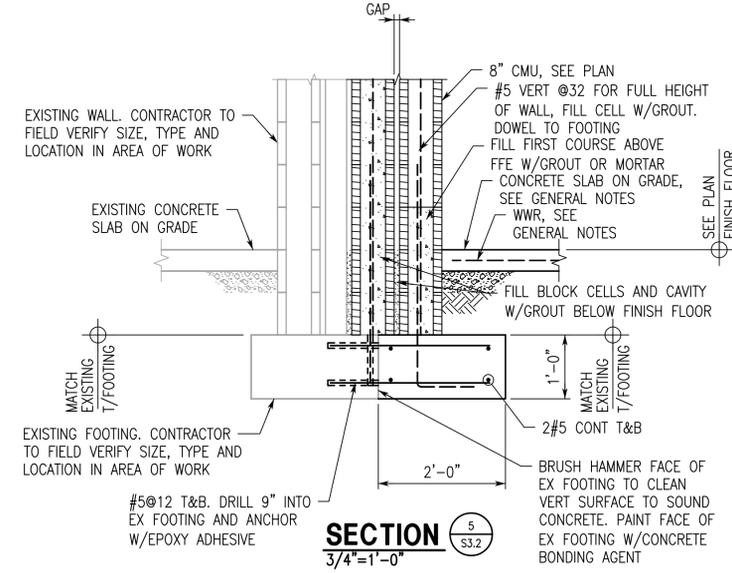
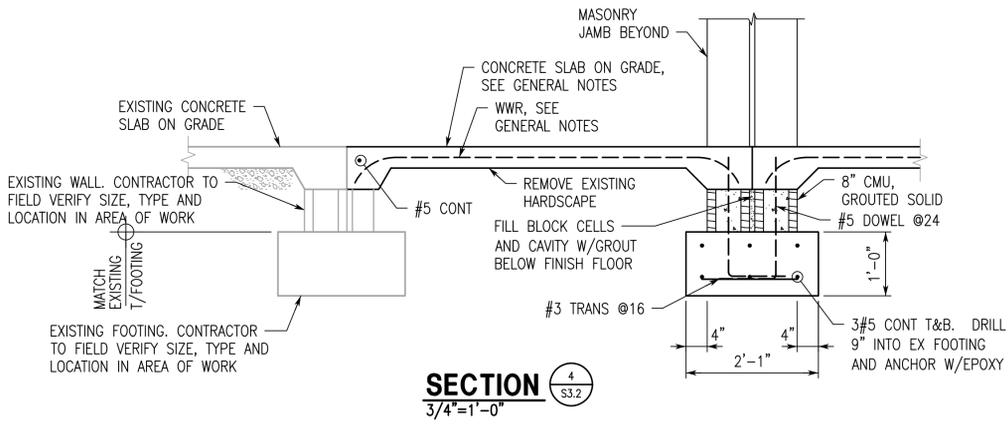
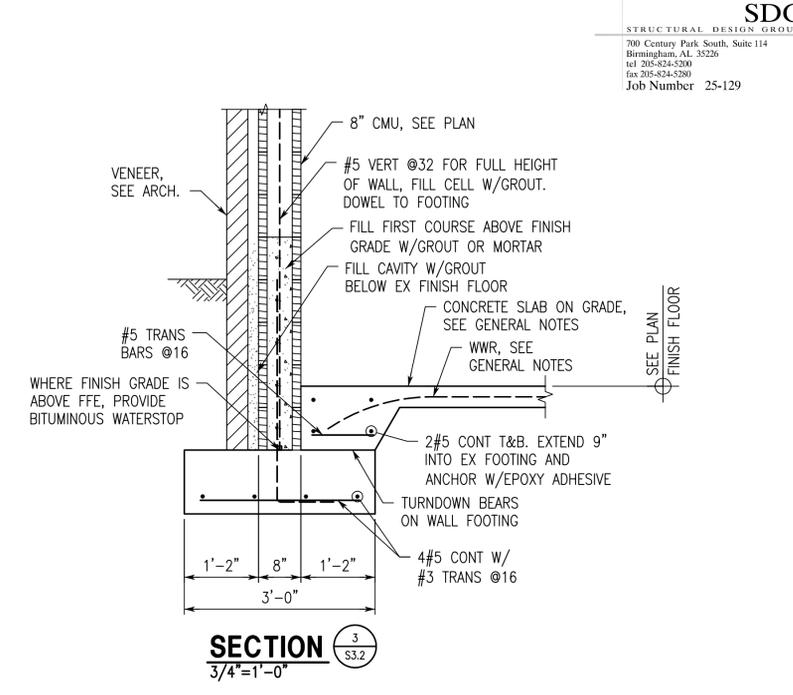
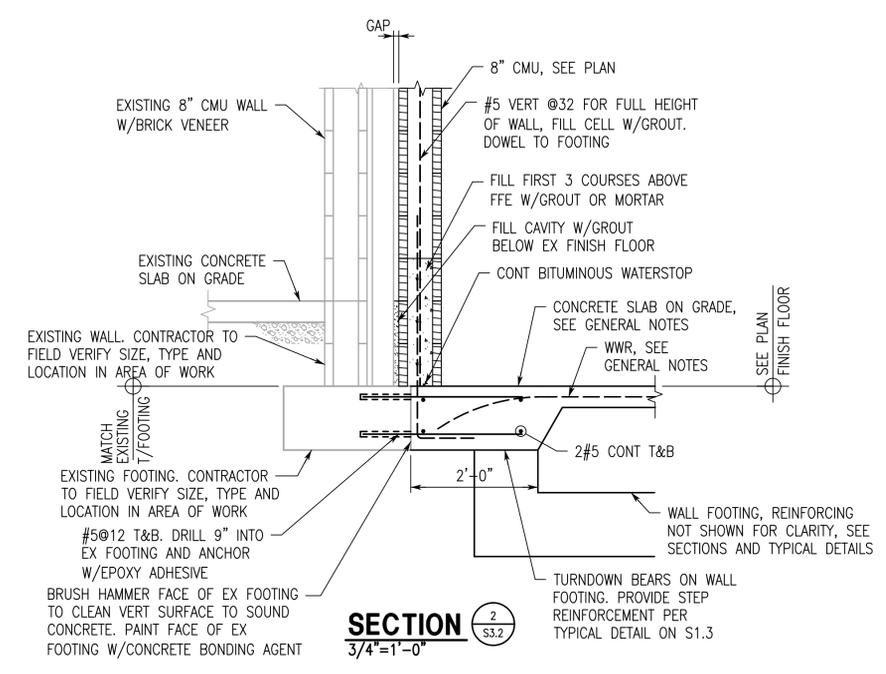
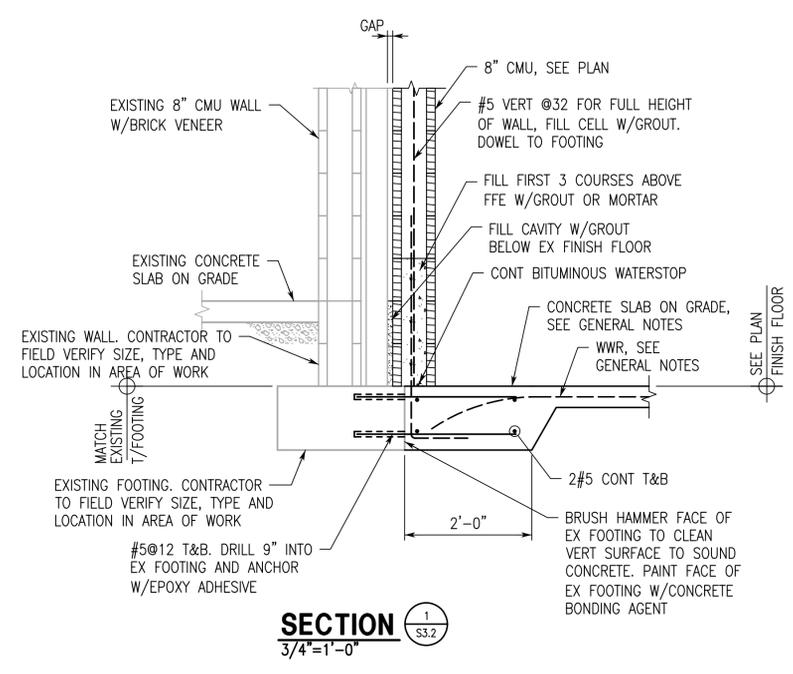
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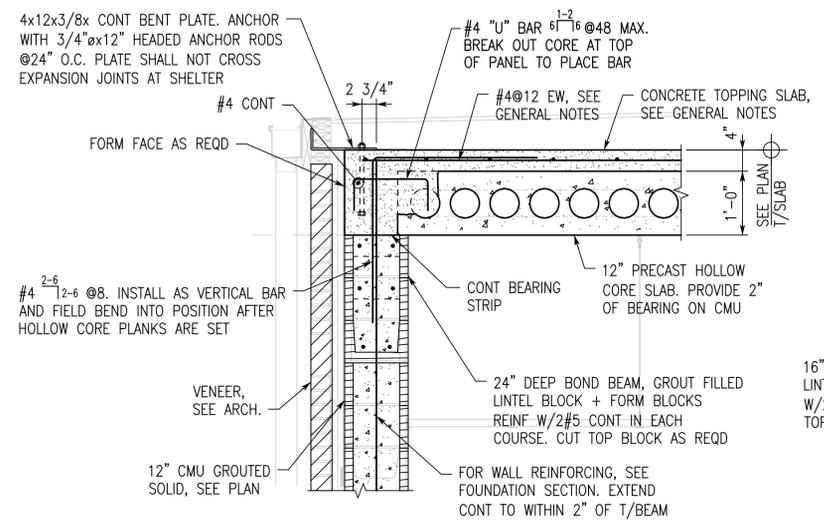


SECTION 10
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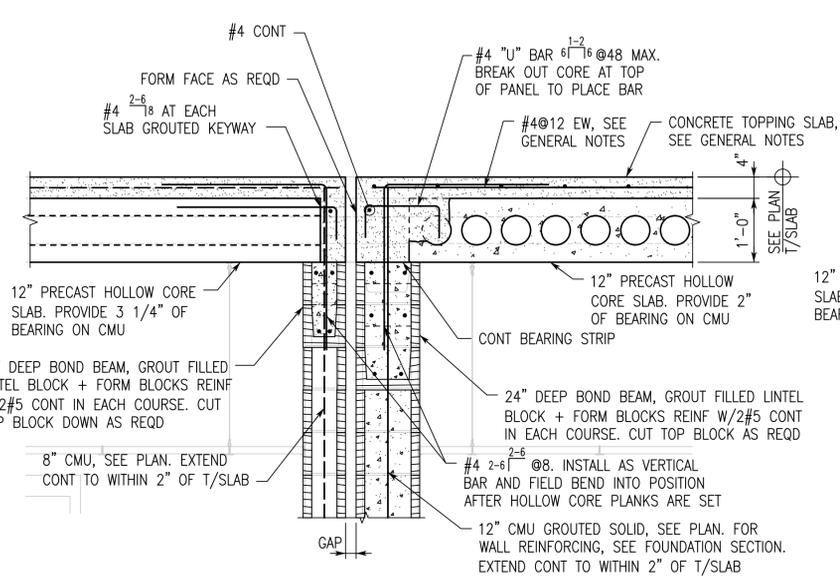


SECTION 11
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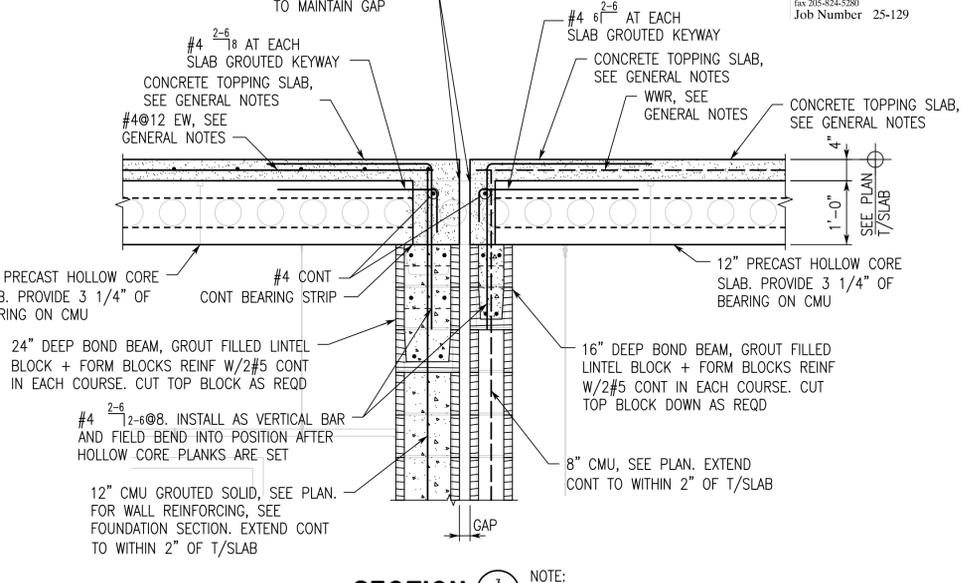




SECTION 1
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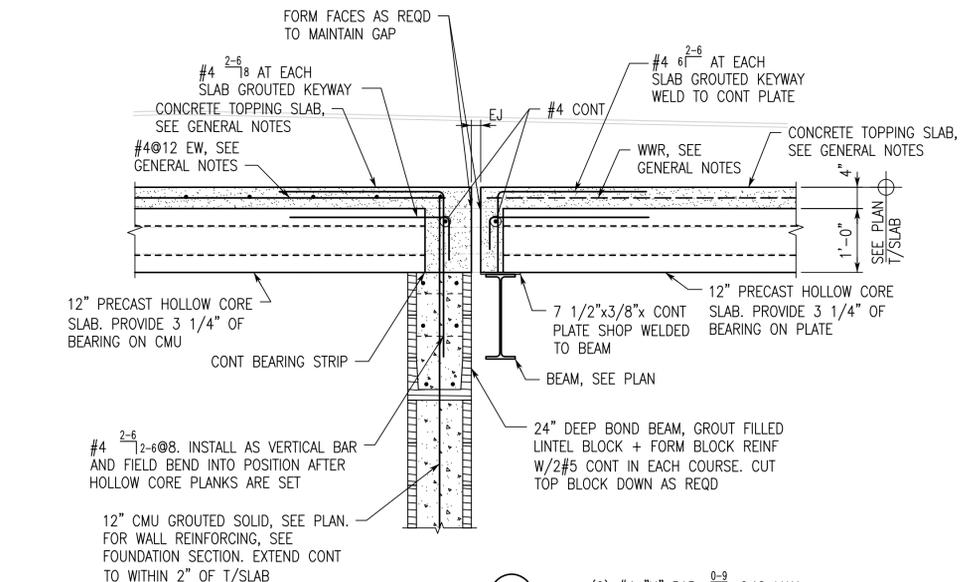


SECTION 2
3/4"=1'-0"

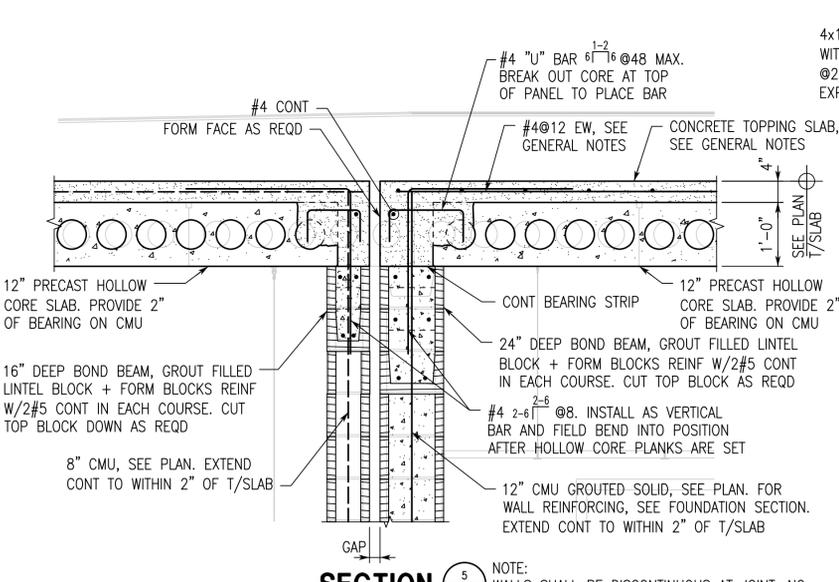


SECTION 3
3/4"=1'-0"

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

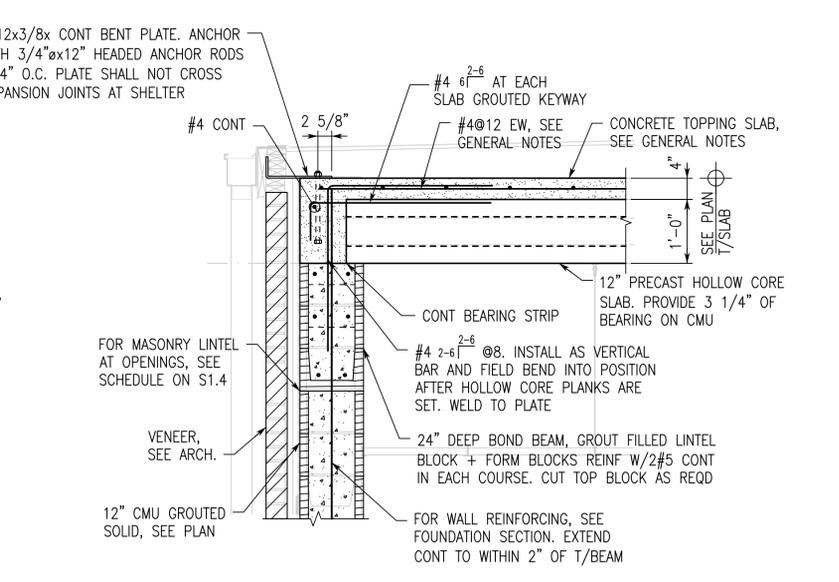


SECTION 4
3/4"=1'-0"

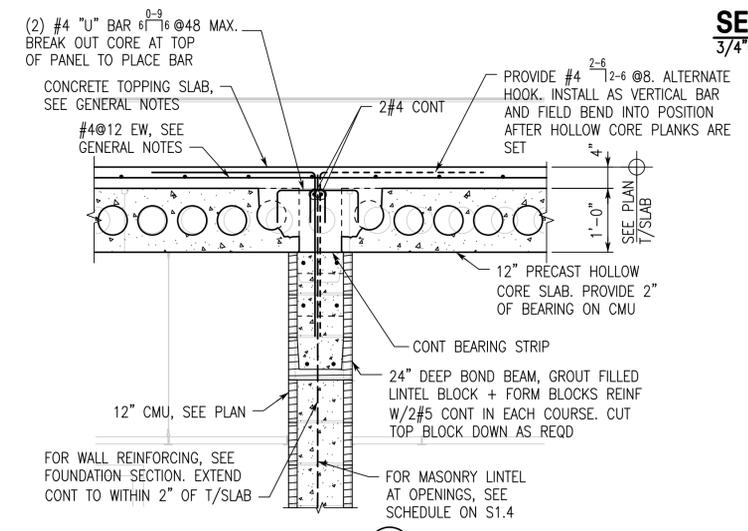


SECTION 5
3/4"=1'-0"

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



SECTION 6
3/4"=1'-0"



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

PRECAST NOTES

- TYPICAL AT ALL PRECAST
- 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.
 - 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.)
 - WHERE PANEL IS PERPENDICULAR TO WALL, FILL CORES TO PREVENT GROUT FROM ENTERING HOLLOWCORE.

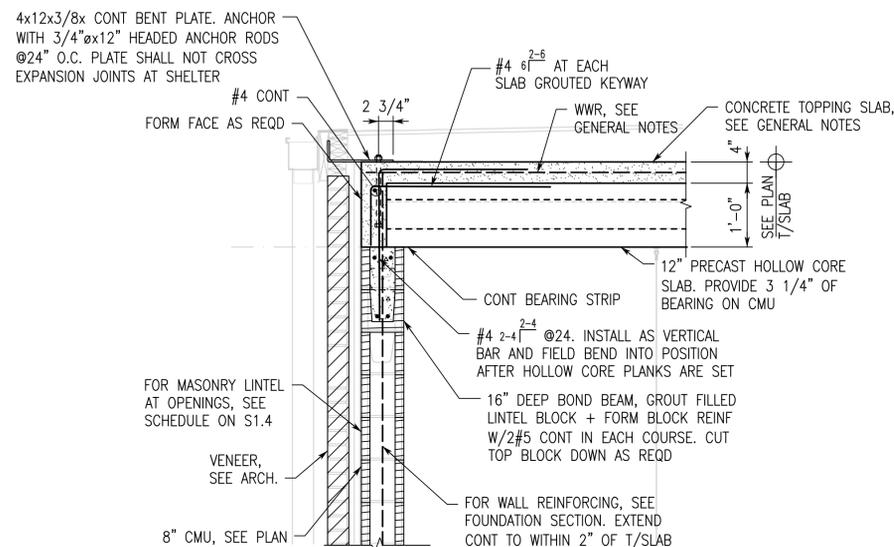
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SECTIONS & DETAILS



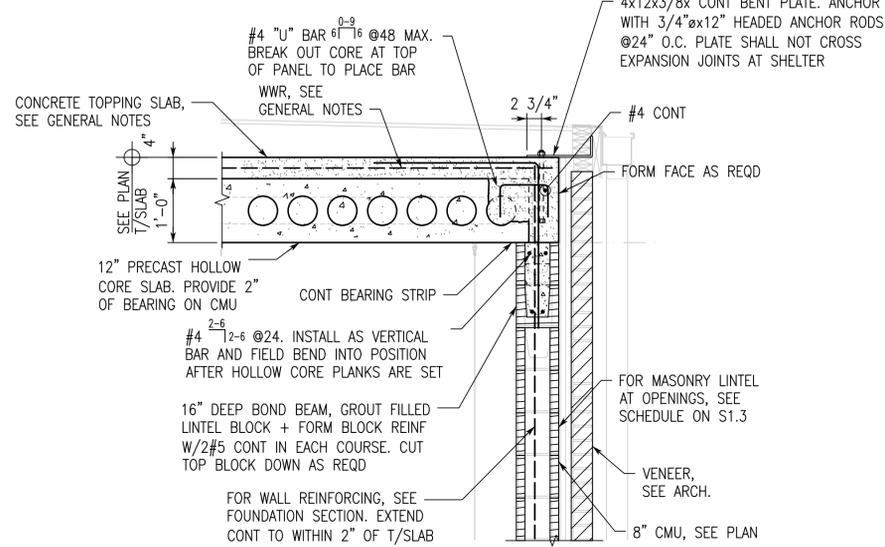
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DATE:	NOV 7, 2025
REVISIONS:	

JOB NO. 25-34
SHEET NO.

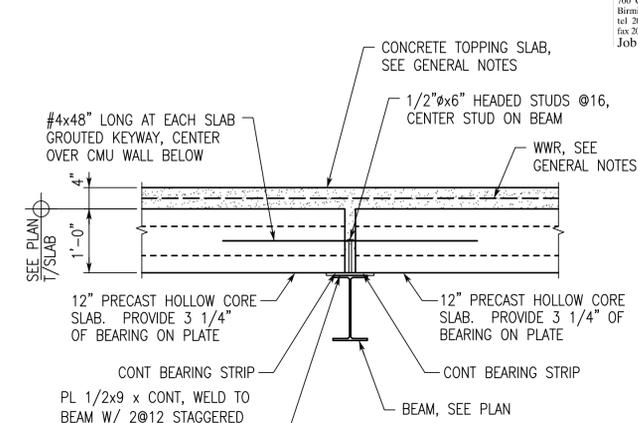
S4.1



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

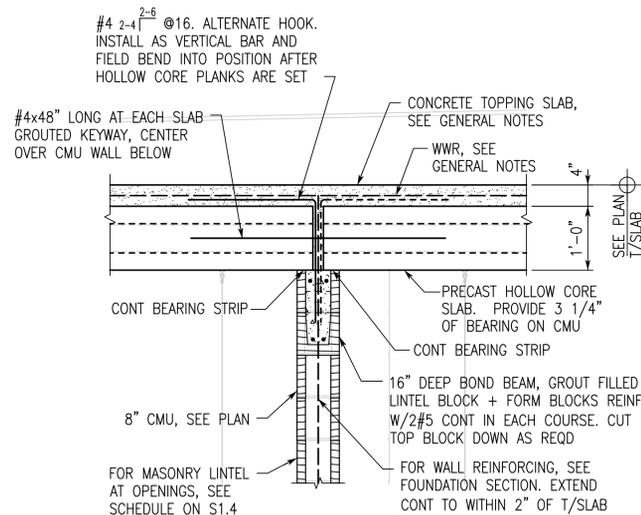


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3/4"=1'-0"

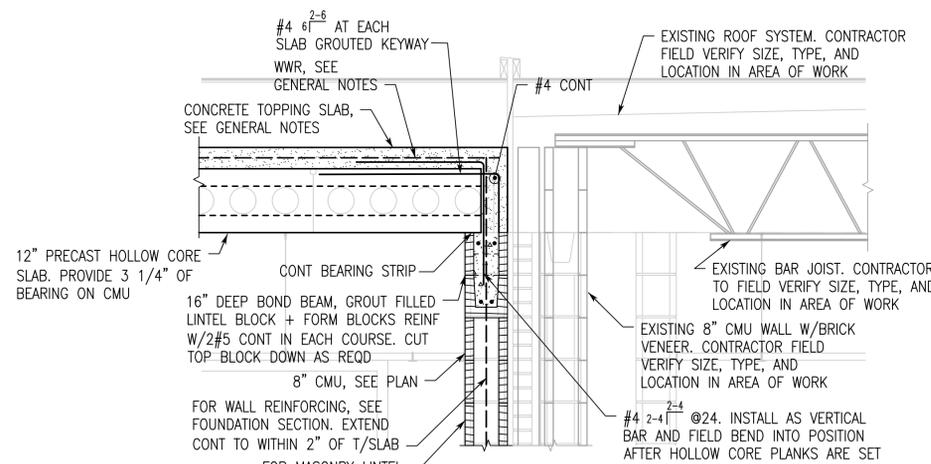


SECTION 3
3/4"=1'-0"

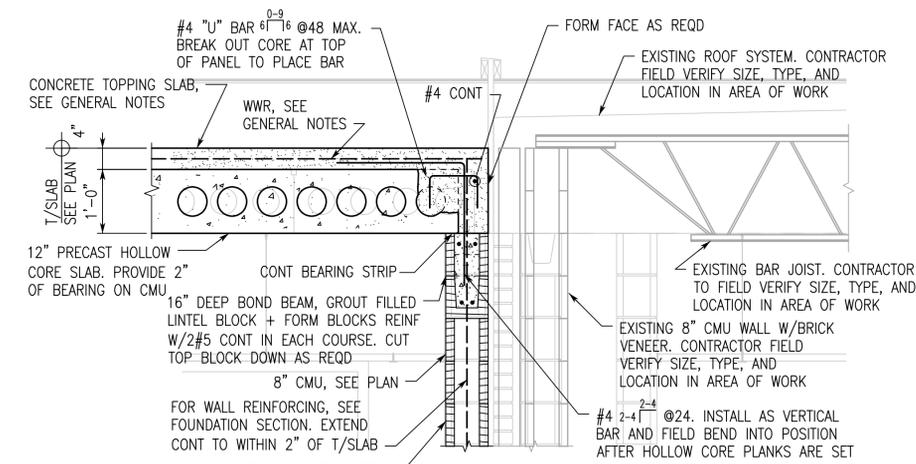
NOTE:
AT SIMILAR CONDITION, PROVIDE 32" DEEP MASONRY LINTEL OVER OPENING. ANCHOR L8x6x3/8 MASONRY LINTEL TO MASONRY LINTEL WITH 3/4" EXPANSION ANCHORS. HOOK MASONRY LINTEL REINFORCEMENT INTO MASONRY COLUMNS, BOTH ENDS.



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

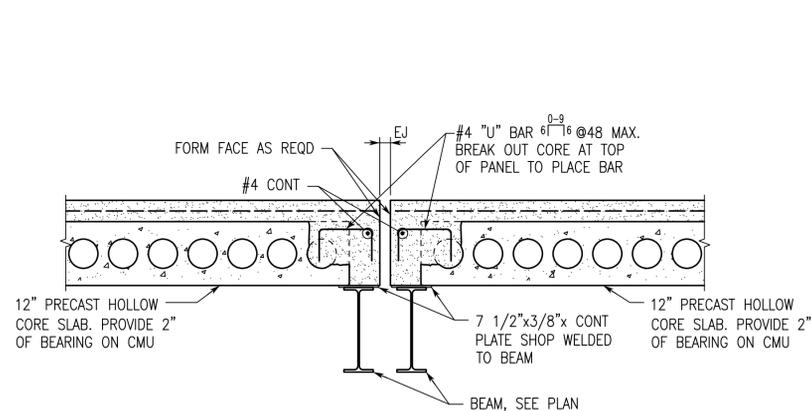


SECTION 5
3/4"=1'-0"

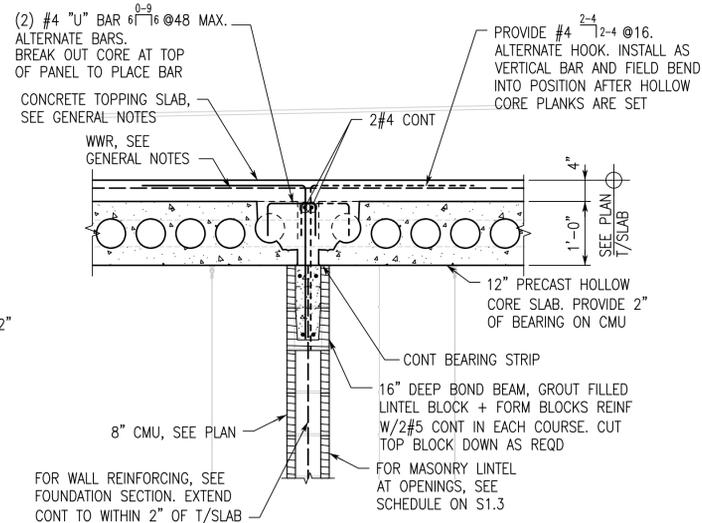


SECTION 6
3/4"=1'-0"

NOTE:
AT SIMILAR CONDITION, EXISTING BAR JOIST IS ROTATED 90°. CONTRACTOR TO FIELD VERIFY SIZE, ORIENTATION, AND LOCATION IN AREA OF WORK.



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



SECTION 8
3/4"=1'-0"

PRECAST NOTES

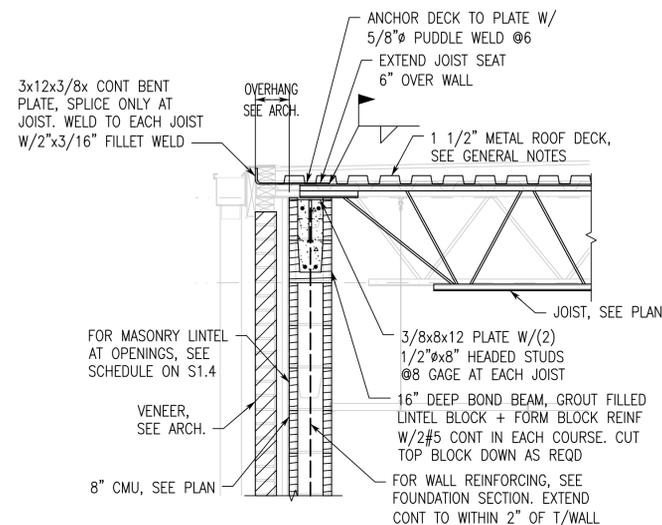
- TYPICAL AT ALL PRECAST
- IF PRECAST DOES NOT BEAR SOLID ON CMU AFTER CASTING SLAB, DUE TO CAMBER IN PANEL, GROUT GAP SOLID PRIOR TO PLACING REMAINDER OF WALL.
 - WHERE CELLS ARE REQUIRED TO BE BROKEN AT REBAR, BREAK CELLS OUT MAXIMUM 4" WIDE. FLOOD ROUND HOLLOWCORE RUNNING PERPENDICULAR TO REBAR SOLID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

SHEET TITLE:
SECTIONS & DETAILS

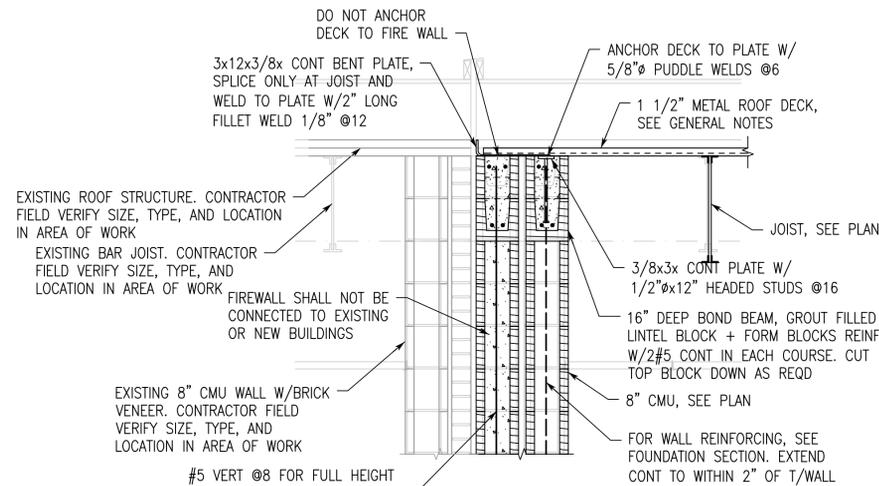


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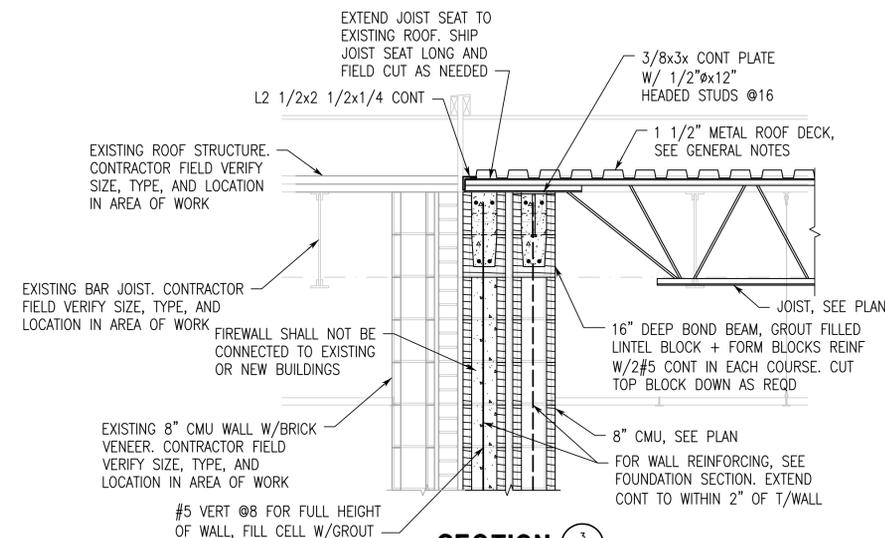
JOB NO.	25-34
SHEET NO.	S4.2
	15 OF 16



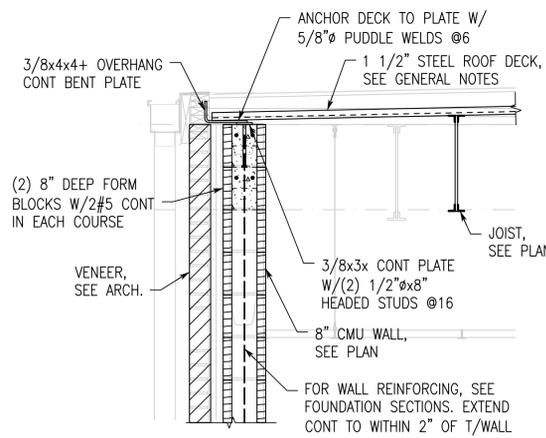
SECTION 1
3/4"=1'-0"
S4.3



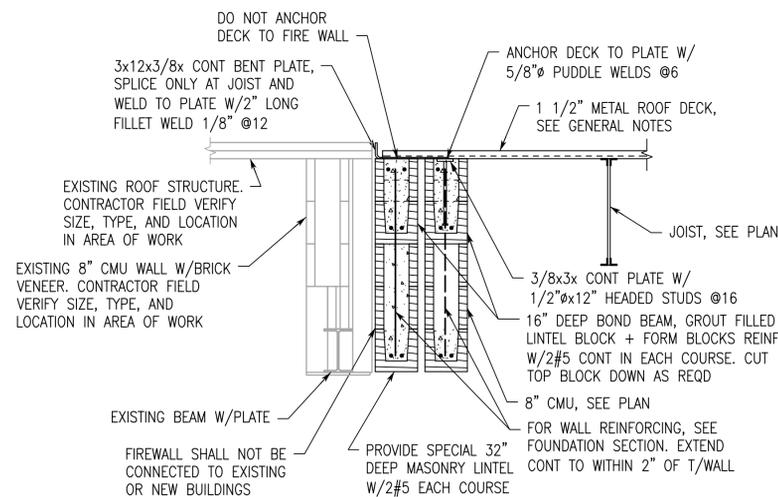
SECTION 2
3/4"=1'-0"
S4.3



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



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



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

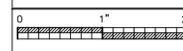
CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
201 WASHINGTON STREET, COLUMBIA, ALABAMA 36951
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SECTIONS &
DETAILS



PROJ. MGR.: HCW
DRAWN: ABS
DATE: NOV 7, 2025
REVISIONS:

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SHEET NO:
S4.3
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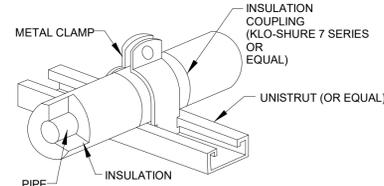


GENERAL NOTES

- LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
- CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
- ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18"X18"X6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
- WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
- ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
- ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OF FINISH FLOOR UNLESS OTHERWISE NOTED.
- ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
- NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANICAL AND GENERAL CONTRACTORS.
- DOMESTIC WATER PIPING AND FIRE PROTECTION PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
- CONTRACTOR SHALL COORDINATE MECHANICAL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
- CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
- CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
- DOMESTIC WATER PIPING SHALL NOT BE INSTALLED IN EXTERIOR WALLS.
- PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
- INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
- ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
- ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.
- INSULATION ON ALL PIPING SHALL MEET SMOKE/FLAME RATING OF 25 & 50.
- NO JOINTS IN WATER PIPING BELOW SLAB.
- THE LOCATION OF LAVATORIES AND WATER CLOSETS RELATIVE TO THE FINISHED WALL IS CRITICAL. REFER TO ARCHITECTURAL AND THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WATER CLOSETS TO BE 18" FROM FINISH WALL TO CENTER OF WATER CLOSET.
- WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- 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.
- 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.
- COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
- NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
- 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.
- SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
- ALL FOOTINGS AT PLUMBING CHASE WALLS SHALL BE MIN 24" BELOW FINISHED GRADE TO COORDINATE WITH WASTE PIPING IN SLAB.
- FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
- OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
- 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 LEGEND

	SOIL OR WASTE LINE	P-#	PLUMBING FIXTURE NUMBER
	VENT LINE	#	RISER DIAGRAM NUMBER
	COLD WATER LINE	AFF	ABOVE FINISH FLOOR
	HOT WATER LINE	CO	CLEAN OUT
	BALL VALVE	ABV	ABOVE
	UNION	WS	WASTE STACK
	PIPE TURNING UP	BFF	BELOW FINISH FLOOR
	PIPE TURNING DOWN	VSTR	VENT STACK THRU ROOF
	PRESSURE REDUCING VALVE	TMV	THERMOSTATIC MIXING VALVE
		TP	TRAP PRIMER

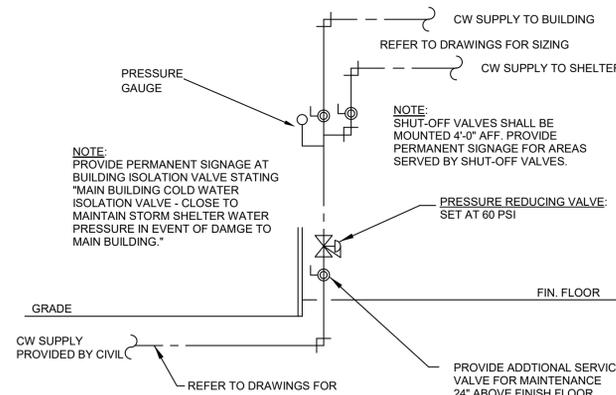


NOTES:

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

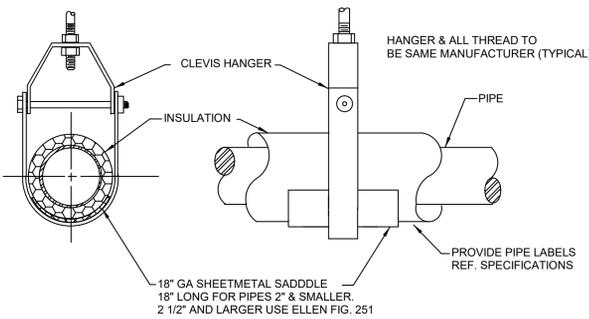
STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL

NO SCALE



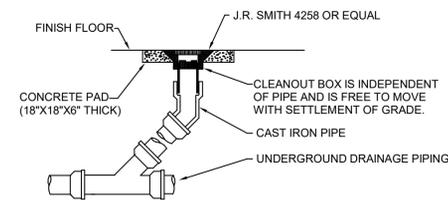
DETAIL OF WATER ENTRY #1

NO SCALE



SUSPENDED PIPE SUPPORT

NO SCALE



DETAIL OF CLEANOUT TO GRADE

NO SCALE

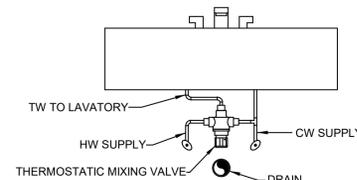
PLUMBING FIXTURE SCHEDULE

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.
MFD	MECHANICAL FLOOR DRAIN	4"	-	-	J.R. SMITH #2240 WITH SEDIMENT BUCKET. 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 - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 (0.5 GPM) 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-6	LAVATORY	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 (0.5 GPM) 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. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100" F WATER TO FAUCET.
P-7	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY EZ38. STAINLESS STEEL CABINET, WITH WATERWAYS MANUFACTURED OF 100% LEAD FREE MATERIAL. J.R. SMITH #830 FIXTURE SUPPORT, BALL VALVE STOP WITH SUPPLY, SAFETY-GARD BUBBLER, MCGUIRE #8872 P-TRAP. FULLY INSULATE P-TRAP. MOUNT WITH SPOUT OUTLET 36" ABOVE FINISH FLOOR. PROVIDE COLOR CHART FOR ARCHITECT COLOR SELECTION.
P-8	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY # EZSTLWSSK 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 #LKAPREZL CANE APRON AS REQUIRED.
P-9	SINK	1 1/2"	1/2"	1/2"	ELKAY LRAD-2219 DRAIN OFFSET TO BACK, LK-35 STRAINER, T&S BRASS MODEL #B-2866-05-VF05 (0.5 GPM) FAUCET, MCGUIRE #1912 P-TRAP AND #165 STOPS WITH SUPPLIES.
P-10	DRAIN BOX	2"	-	-	PROVIDE A SIOUX CHIEF MODEL #896-3F DRAIN BOX, #896-LC LOUVERED COVER, #896-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 #5009-OT, 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.

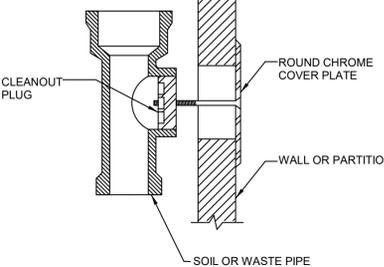
WATER HEATER SCHEDULE

MARK	FIXTURE	ELEC INFO	REMARKS
CP-1	CIRCULATION PUMP	1/12 HP, 115V/1/60	ARMSTRONG COMPASS. PROVIDE WITH AQUASTAT EQUAL TO HONEYWELL L6006A AND TIME CLOCK.
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, 1PH, 5 KW	EEMAX MODEL AM007240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 68°F TEMP. RISE AT 0.5 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. PIPE TO HW INLET OF FAUCET.
TWH-2	TANKLESS WATER HEATER	208V, 1PH, 5 KW	EEMAX MODEL AM007240T WITH INTEGRAL ASSE 1070 MIXING VALVE. PROVIDES 68°F TEMP. RISE AT 0.5 GPM. MOUNT BELOW LAVATORY WHERE SHOWN ON DRAWINGS. PIPE TO HW INLET OF FAUCET.
WH-1	ELECTRIC WATER HEATER	208V, 1PH, 4.5 KW	LOCHINVAR LDJ-20 JK, 20 GALLON STORAGE, 18 GALLON RECOVERY AT 100°F RISE. NEW P&T RELIEF VALVE. SET OUTLET TEMPERATURE AT 125°F. INSTALL AS DETAILED ON DRAWINGS. VERIFY VOLTAGE WITH ELECTRICAL SECTION.



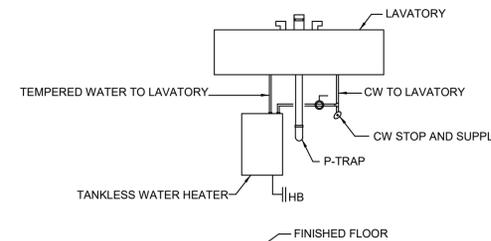
DETAIL OF TMV BELOW LAVATORY

NO SCALE



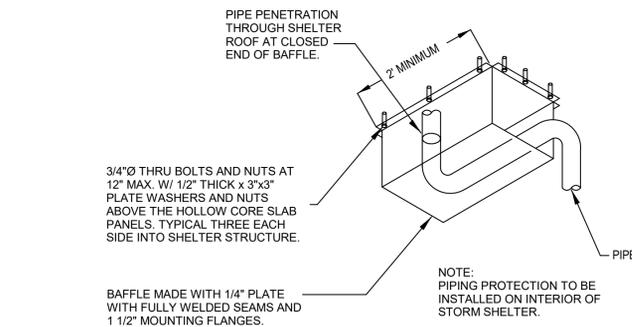
WALL CLEANOUT

NO SCALE



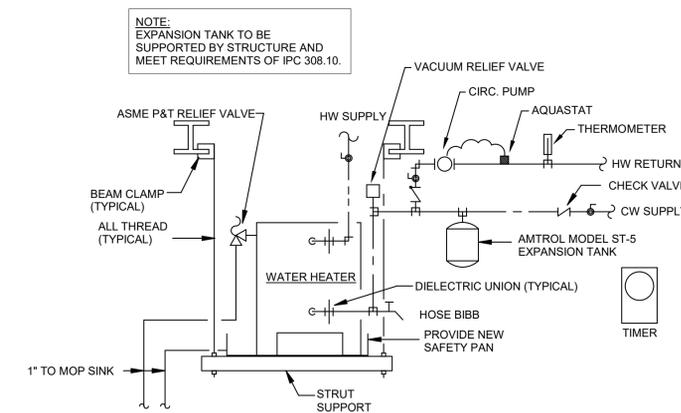
DETAIL OF TANKLESS WATER HEATER AT LAVATORY

NO SCALE



DETAIL OF PIPE PASSING THRU SHELTER ROOF/WALL

NO SCALE



DETAIL OF PIPING AT WATER HEATER

NO SCALE

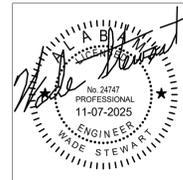


2 Riverchase Office Plaza
Suite 205
 Hoover, AL 35244
(205) 988-2069
www.dewberry.com
Project Number :
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CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING SCHEDULE,
DETAILS AND NOTES



PROJ. MGR.: JWS
DRAWN: NMP

DATE: 11-07-2025

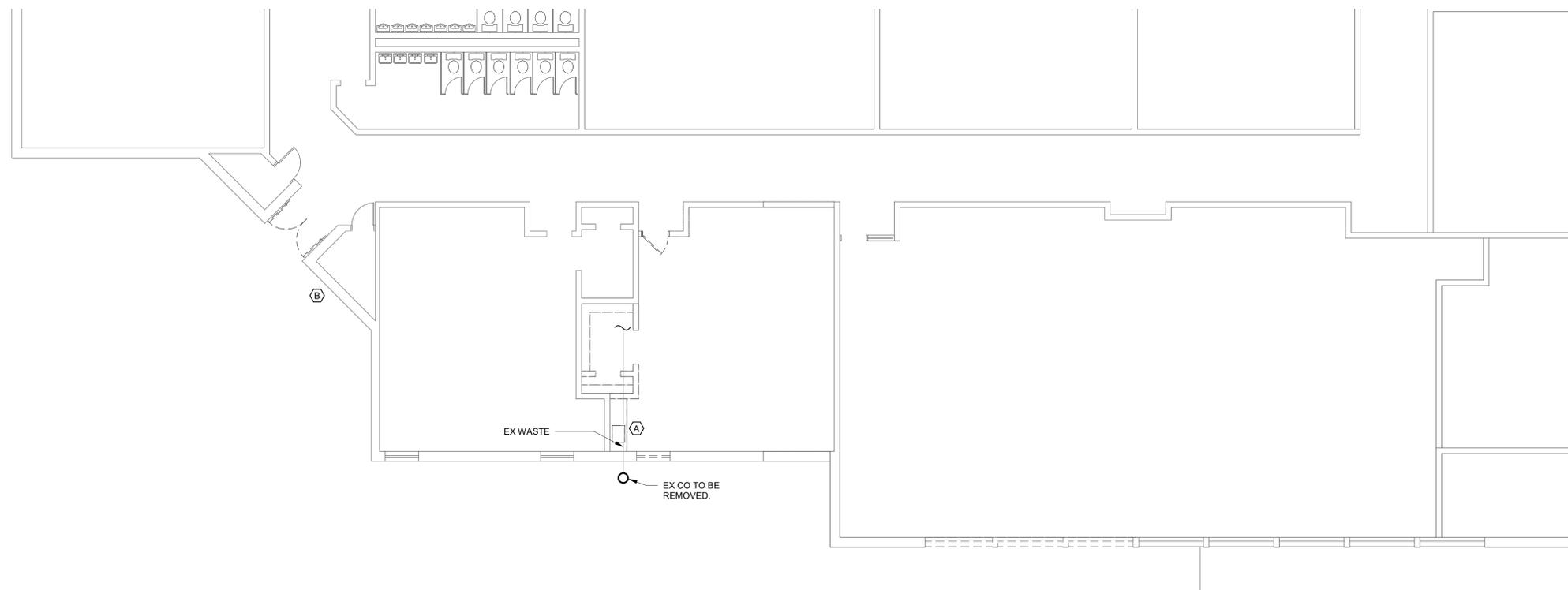
REVISIONS

JOB NO. 25-34

SHEET NO. P0.1

1 OF 6





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

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.

DEMOLITION KEY NOTES

- (A) EXISTING SINK TO BE REMOVED.
- (B) EXISTING WALL HYDRANT TO BE REMOVED.

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 SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
 PLUMBING - FLOOR PLAN -
 DEMOLITION



PROJ. MGR.: JWS
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 DATE: 11-07-2025

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JOB NO. **25-34**
 SHEET NO. **P1.0**
 2 OF 6

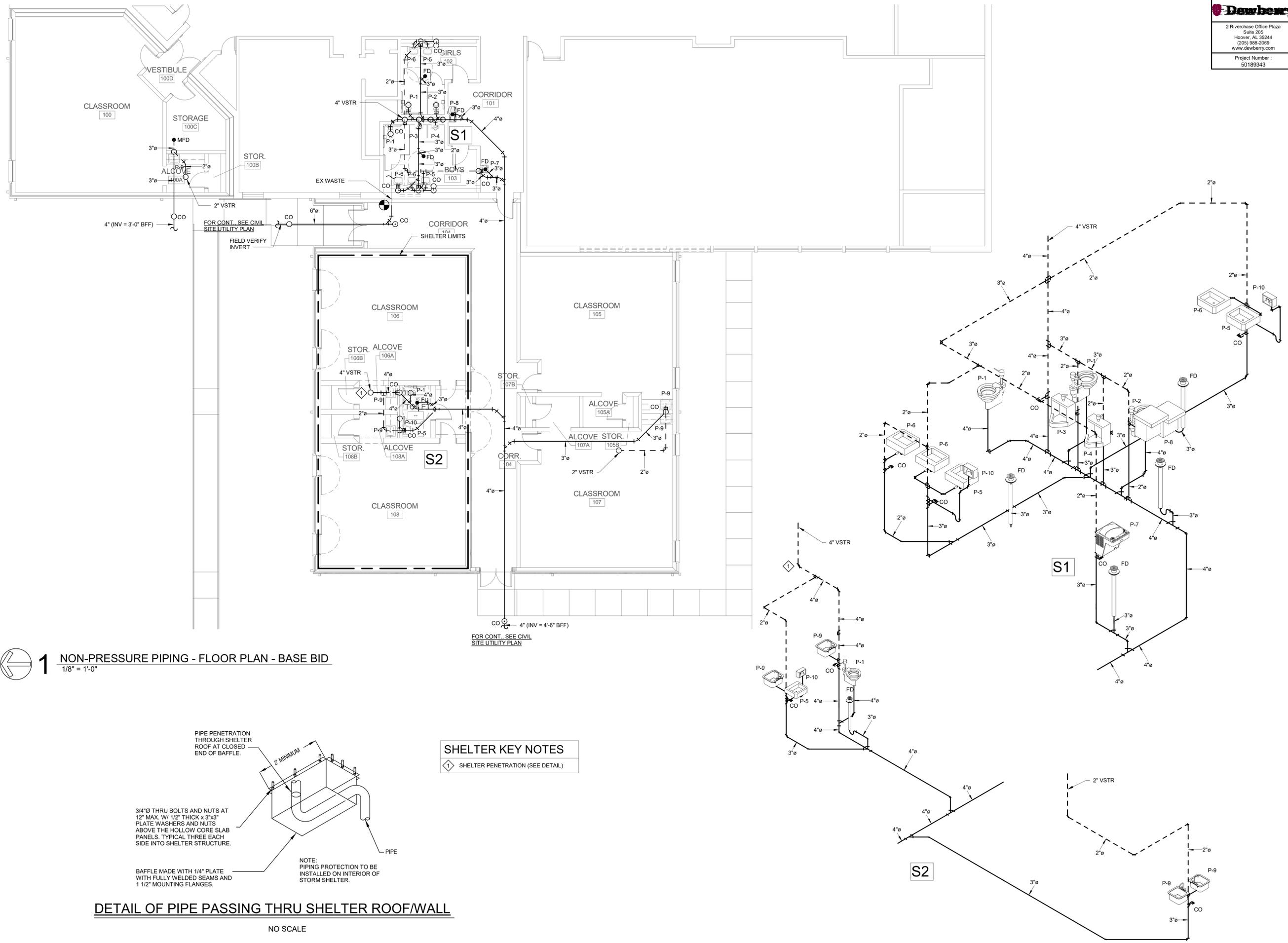
CLASSROOM ADDITION TO
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SHEET TITLE:
 NON-PRESSURE PIPING -
 FLOOR PLAN - BASE BID

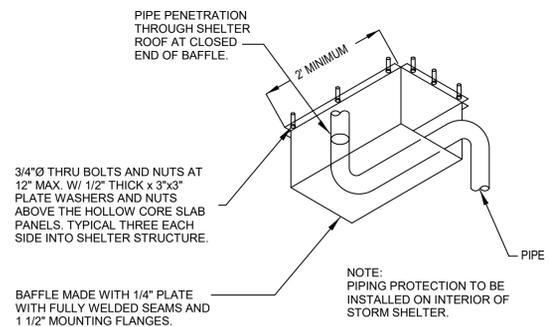


PROJ. MGR.: JWS
 DRAWN: NMP
 DATE: 11-07-2025
 REVISIONS:

JOB NO. **25-34**
 SHEET NO. **P1.1**
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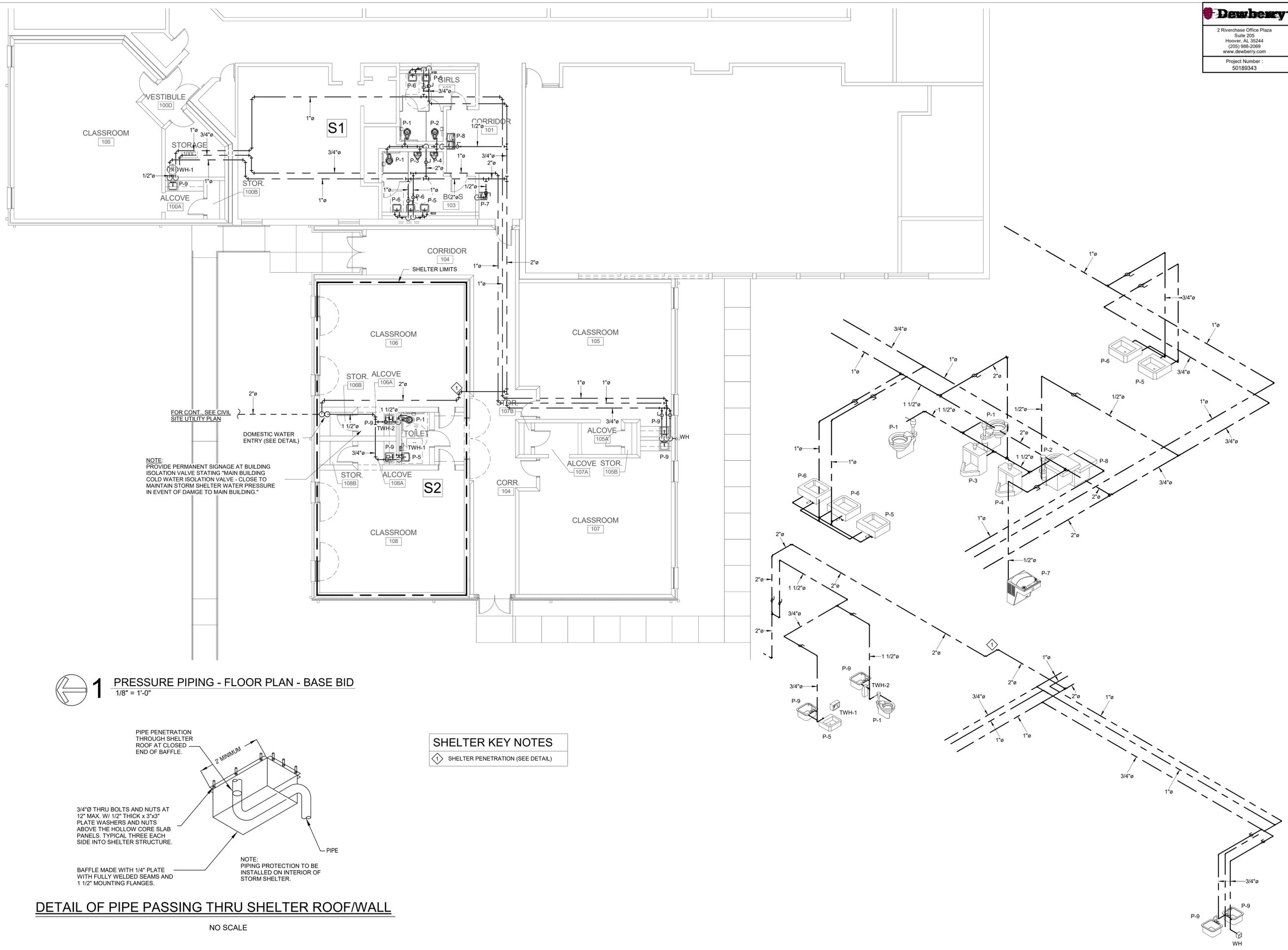
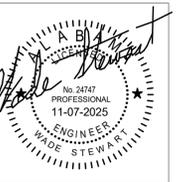


1 NON-PRESSURE PIPING - FLOOR PLAN - BASE BID
 1/8" = 1'-0"



SHELTER KEY NOTES
 ◇ SHELTER PENETRATION (SEE DETAIL)

DETAIL OF PIPE PASSING THRU SHELTER ROOF/WALL
 NO SCALE

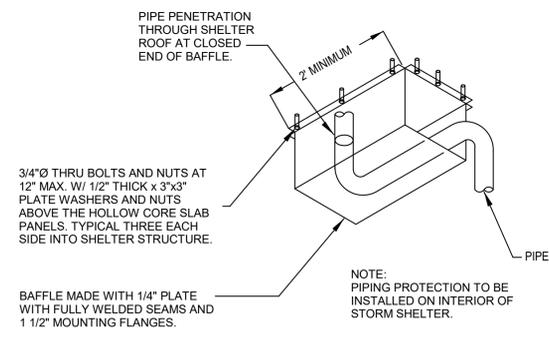


FOR CONT. SEE CIVIL SITE UTILITY PLAN

DOMESTIC WATER ENTRY (SEE DETAIL)

NOTE:
 PROVIDE PERMANENT SIGNAGE AT BUILDING ISOLATION VALVE STATING "MAIN BUILDING COLD WATER ISOLATION VALVE - CLOSE TO MAINTAIN STORM SHELTER WATER PRESSURE IN EVENT OF DAMAGE TO MAIN BUILDING."

1 PRESSURE PIPING - FLOOR PLAN - BASE BID
 1/8" = 1'-0"

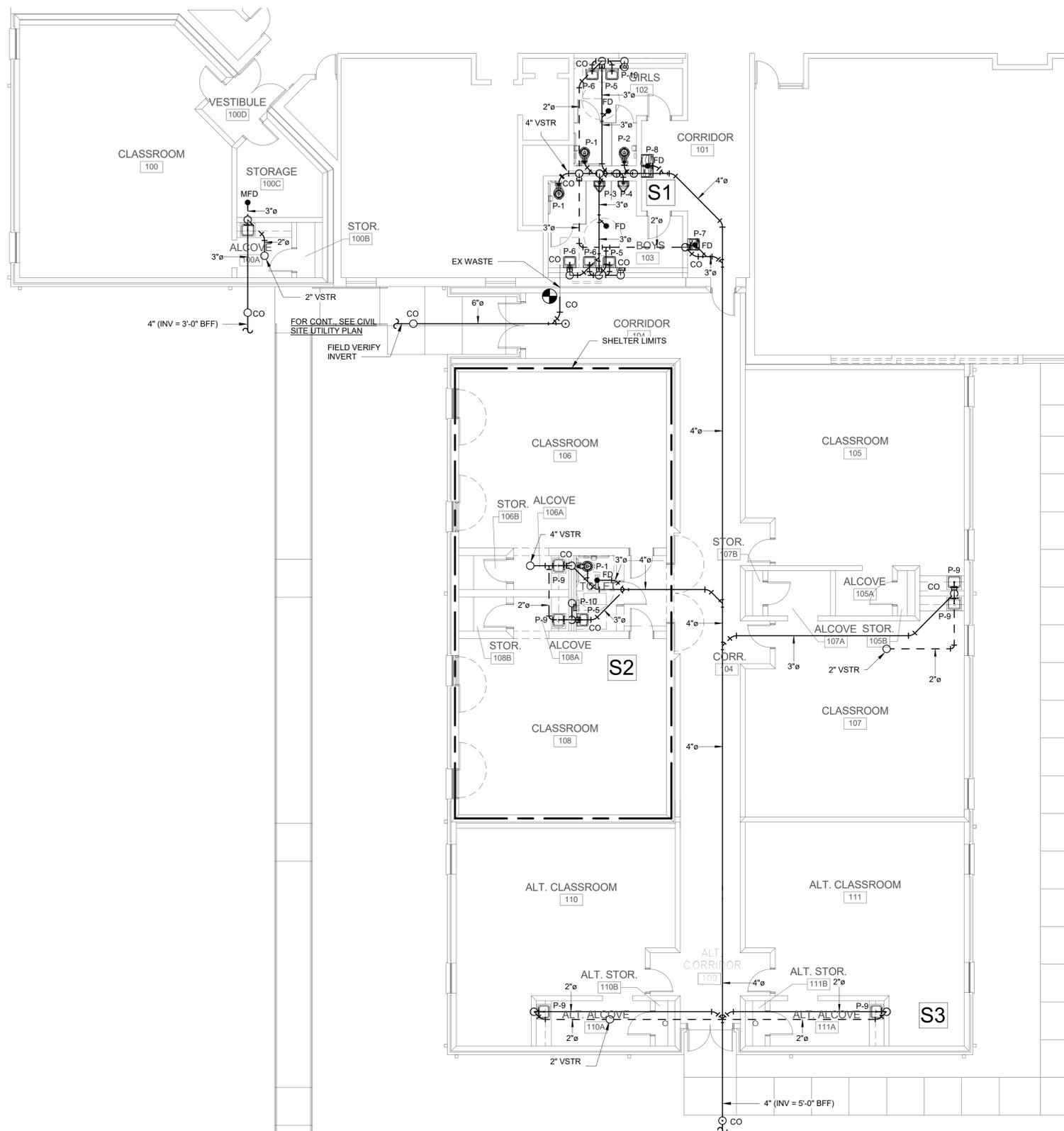


SHELTER KEY NOTES

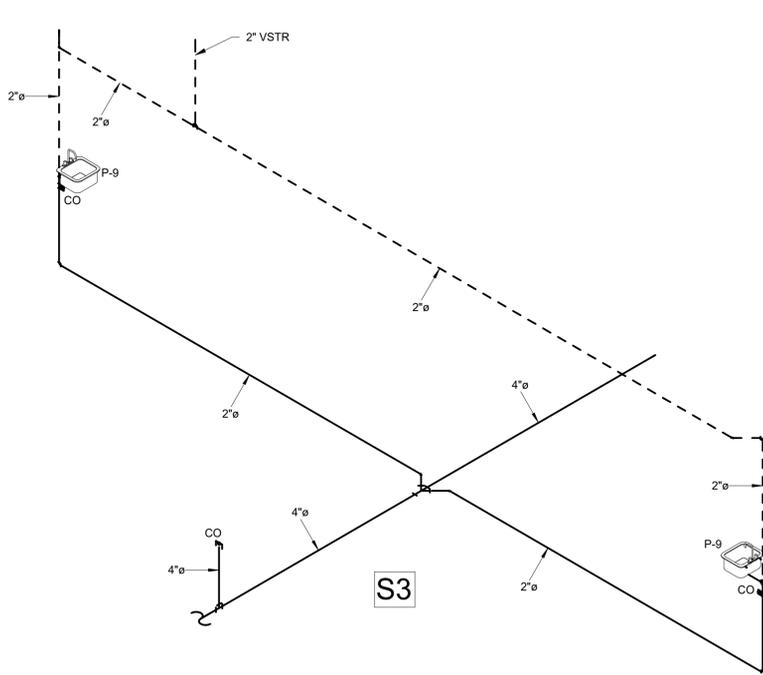
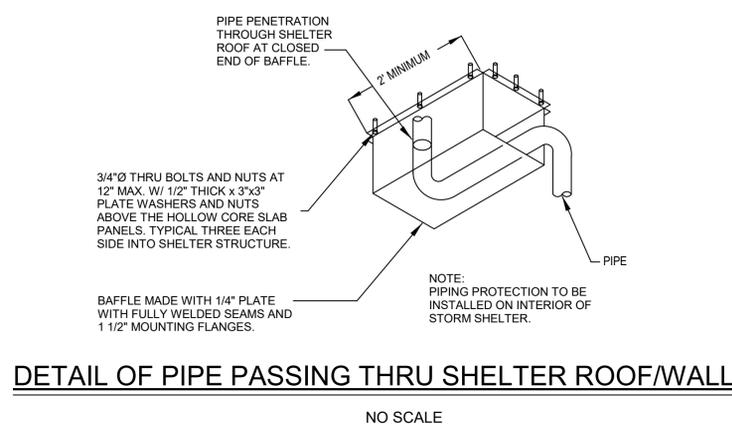
◆ SHELTER PENETRATION (SEE DETAIL)

DETAIL OF PIPE PASSING THRU SHELTER ROOF/WALL

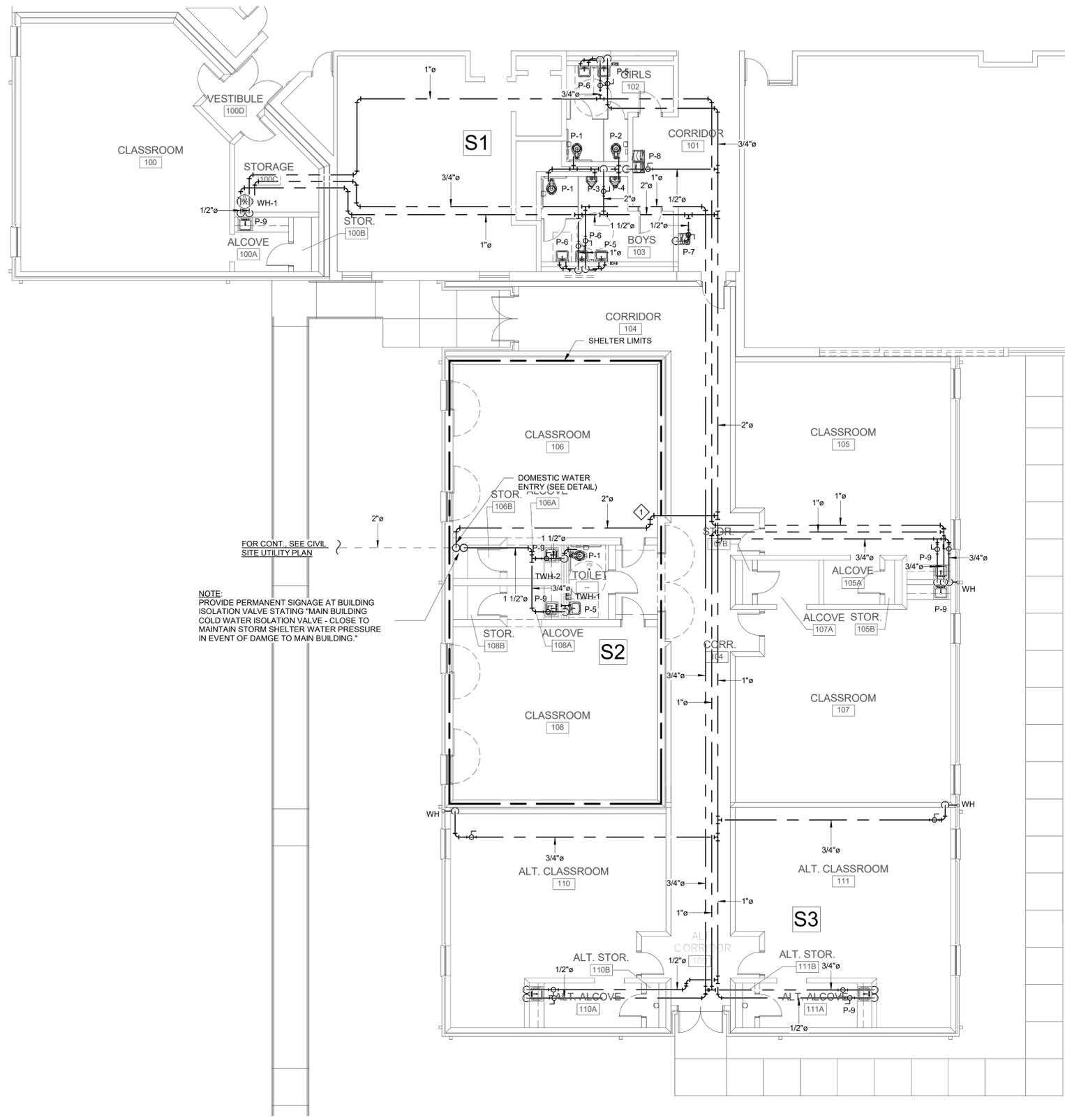
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SHELTER KEY NOTES
 1 SHELTER PENETRATION (SEE DETAIL)



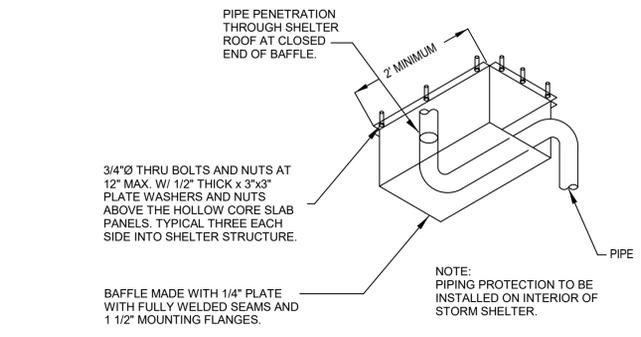
1 NON-PRESSURE PIPING - FLOOR PLAN - ALTERNATE
 1/8" = 1'-0"



NOTE:
 PROVIDE PERMANENT SIGNAGE AT BUILDING
 ISOLATION VALVE STATING "MAIN BUILDING
 COLD WATER ISOLATION VALVE - CLOSE TO
 MAINTAIN STORM SHELTER WATER PRESSURE
 IN EVENT OF DAMAGE TO MAIN BUILDING."

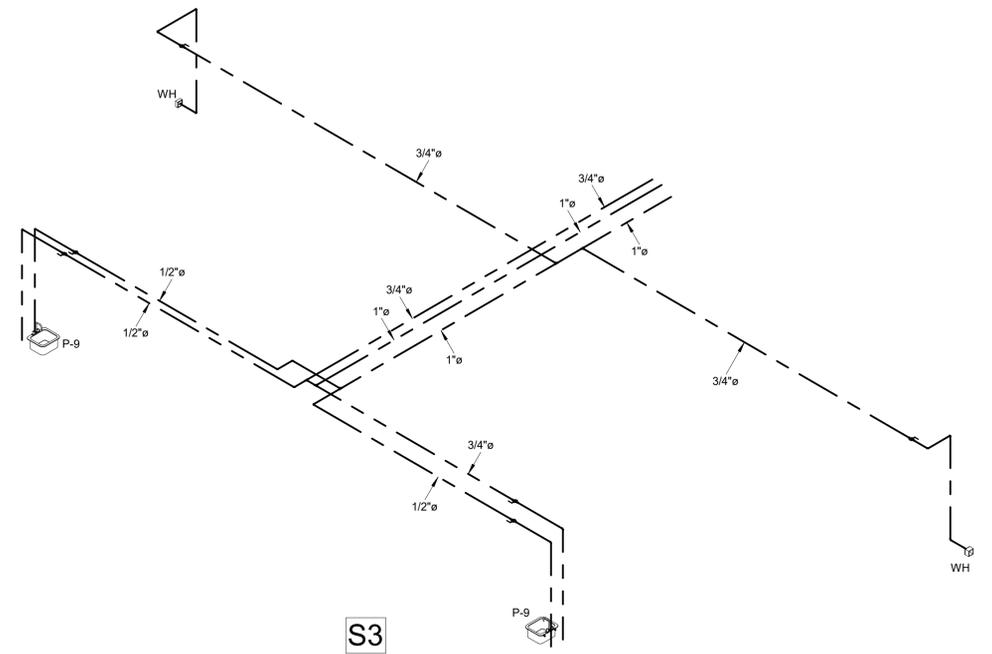
FOR CONT. SEE CIVIL
 SITE UTILITY PLAN

SHELTER KEY NOTES
 ◊ SHELTER PENETRATION (SEE DETAIL)



DETAIL OF PIPE PASSING THRU SHELTER ROOF/WALL

NO SCALE



1 PRESSURE PIPING - FLOOR PLAN - ALTERNATE
 1/8" = 1'-0"

SHEET TITLE:
 PRESSURE PIPING - FLOOR
 PLAN - ALTERNATE



PROJ. MGR.: JWS
 DRAWN: NMP
 DATE: 11-07-2025
 REVISIONS:

JOB NO. 25-34
 SHEET NO. P2.1
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DUCTWORK LEGEND

(CFM) S	SUPPLY DIFFUSER
(CFM) R	RETURN GRILLE
(CFM) E	EXHAUST GRILLE
(CFM) T	TRANSFER AIR GRILLE
(CFM) SR	SIDEWALL REGISTER
∅	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
	FLAT OVAL TURNING UP.
	FLAT OVAL 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)
⊙	TEMPERATURE SENSOR
⊕	HUMIDITY SENSOR
⊙	CO2 MONITOR
⊙	CONNECT TO EXISTING, FIELD VERIFY EXACT SIZE AND LOCATION.

HVAC ABBREVIATIONS

A	Amps	E	Exhaust Grille	LRA	Locked Rotor Amps	TOD	Top of Duct
AAV	Automatic Air Vent	EA	Exhaust Air	LSD	Linear Slot Diffuser	TS	Temperature Sensor
ACF	Air Curtain Fan	EAT	Entering Air Temp	LVG	Leaving	TSP	Total Static Pressure
AC	Air Conditioning	EBH	Electric Baseboard Heater	LWT	Leaving Water Temperature	TYP	Typical
ACCU	Air Cooled Condensing Unit	ECH	Electric Cabinet Heater	M	Fan / Pump Motor, or Motorized Damper, or Meter	UH	Unit Heater
AD	Automatic Damper	ECH	Electric Ceiling Heater	MA	Mixed Air	UNO	Unless Noted Otherwise
ADJ	Adjustable	ECM	Electronically Commutated Motor	MAT	Mixed Air Temperature	UV	Unit Ventilator
AF	Airflow	EDH	Electric Duct Heater	MAU / MUA	Make-up Air Unit	V, VOLT	Voltage
AFB	Above Finished Floor	EF	Exhaust Fan	MAX	Maximum	V	Volume
AFM	Air Flow Monitor	EHC	Electric Heating Coil	MBH	1,000 British Thermal Units per Hour	VEL	Velocity
AHU	Air Handling Unit	ELEC	Electrical	MCA	Minimum Circuit Amps	VF	Ventilation Fan
AI	Analog Input	EMCS	Energy Management Control System	MD	Manual Damper	VFD	Variable Frequency Drive
AMB	Ambient	EMG	Expanded metal grille	MERV	Minimum Efficiency Reporting Value	VAV	Variable Air Volume
AO	Analog Output	ENT	Entering	MFD / FD	Mechanical Floor Drain	VVR	Variable Volume - Reheat
AP	Air Purifier	ERU	Energy Recovery Unit (with cooling or heating)	MFG	Manufacturer	W	Width or Watts
ARCH	Architectural	ERV	Energy Recovery Ventilator (no cooling or heating)	MIN	Minimum	W/	With
AS	Air Separator	ESP	External Static Pressure	MOCP	Maximum Overcurrent Protection	WB	Wet Bulb
ASHRAE	American Society of Heating, Refrigerating, and Air-Conditioning Engineers	ET	Expansion Tank	MPC	Medium Pressure Condensate	WC	Water Column
ATV, AV	Atmospheric Vent	ETC	Etcetera	MPS	Medium Pressure Steam	WG	Water Gauge
B	Boiler	EUH	Electric Unit Heater	MU	Make-up Water	WEG	Wall Exhaust Grille
BAS	Building Automation System	EWI	Electric Wall Heater	NC	Normally Closed or Noise Criteria	WH	Wall Hydrant
BBD	Boiler Blowdown	EWT	Entering Water Temperature	NG	Natural Gas	WER	Wall Exhaust Register
BD	Backdraft Damper	EX / (X) / E	Existing	NO	Normally Open or Number	WPD	Water Pressure Drop
BHP	Brake Horsepower	F	Degrees Fahrenheit	NPLV	Non-Standard Part Load Value	WRG	Wall Return Grille
BI	Binary Input	FCU	Fan Coil Unit	NPSH	Net Positive Suction Head	WRR	Wall Return Register
BMS	Building Management System	FD	Fire Damper	NTS	Not To Scale	WSP	Water Source Heat Pump
BO	Binary Output	FOR	Fuel Oil Return	OAT / OA	Outside Air	X	Uncorrected Fraction of Outdoor Air (System)
BOD	Bottom of Duct	FOS	Fuel Oil Supply	OD	Outside Diameter	Y	Corrected Fraction of Outdoor Air (System)
BT	Buffer Tank	FPM	Feet Per Minute	OD	Occupancy Sensor	Z	Fraction of Outdoor Air (Critical Space)
BTU	British Thermal Unit	FS	Flow Switch	OS	Occupancy Sensor		
BTUH	British Thermal Unit per Hour	FT	Foot / Feet	P	Pressure or Pressure Sensor		
C / CD / CO2	Carbon Dioxide	FV	Face Velocity	PD	Pressure Drop		
C	Converter	FZ	Freeze/ast	PH	Phase		
CA	Compressed Air	GA	Gauge	PHC	Preheat Coil		
CCC	Closed Circuit Cooler	GAL	Gallons	PIU	Fan Powered Terminal Unit		
CCU / CU	Condensing Unit	GALV	Galvanized	PR / PCR	Pumped Condensate Return (Steam System)		
CD	Condensate Drain	GC	General Contractor	PRS	Steam Pressure Reducing Station		
CF	Chemical Feeder	GCHR	Chilled Water Return Piping with Glycol	PSI	Pounds per Square Inch		
CFM	Cubic Feet per Minute	GCHS	Chilled Water Supply Piping with Glycol	PSIA	PSI Atmospheric		
CH	Chiller	GDH	Gas Duct Heater	PSIG	PSI Gauge		
CHC	Chilled Water Coil	GEO	Geothermal	PRV	Pressure Reducing Valve		
CHWP / CHP	Chilled Water Pump	GHWR	Hot Water Return Piping with Glycol	PTAC	Packaged Terminal Air Conditioner		
CHWR / CHR	Chilled Water Return Piping	GHWS	Hot Water Supply Piping with Glycol	PTHHP	Packaged Terminal Heat Pump		
CHWS / CHS	Chilled Water Supply Piping	GPH	Gallons Per Hour	QTY	Quantity		
CO	Carbon Monoxide	GPM	Gallons Per Minute	R	Return Grille		
CONT	Controls, or, Continue	GSHP	Ground Source Heat Pump	R	Radius, or, Remove		
CP	Condensate Pump	GUH	Gas Fired Unit Heater	RA	Return Air		
CRU / CRAC	Computer Room Unit	H	Humidity Sensor, Humidifier, or Height	RAT	Return Air Temperature		
CR	Condensate Return	H2O	Water	RCP	Reflected Ceiling Plan		
CRU	Condensate Return Unit (Steam System)	HD	Head	RD	Refrigerant Discharge		
CT	Cooling Tower	HOA	Hand-Off-Auto	RF	Return Fan, Relief Fan		
CT	Current Transducer	HP	Horsepower, Heat Pump	RF	Refrigerant		
CU	Condensing Unit	HP	High Pressure Condensate	RH	Relative Humidity, Reheat		
CUH	Cabinet Unit Heater	HPC	High Pressure Condensate	RHC	Reheat Coil		
CV	Constant Volume	HPS	High Pressure Steam Supply	RL	Refrigerant Liquid Line		
Cv	Valve Coefficient	HRR	Heat Recovery Return	RLA	Rated Load Amps		
CVR	Constant Volume - Reheat	HRS	Heat Recovery Supply	RPM	Revolutions Per Minute		
CDWP / CWP	Condenser Water Pump	HVAC	Heating, Ventilation, and Air-Conditioning	RS	Refrigerant Suction Line		
CWR	Condenser Water Return Piping	HWC	Hot Water Coil	RTU	Roof Top Unit		
CWS	Condenser Water Supply Piping	HWP	Hot Water Pump	S	Supply Diffuser		
D	Drain Piping	HWR	Hot Water Return	S	Air / Dirt Separator		
DB	Dry Bulb	HWS	Hot Water Supply	SA	Supply Air		
DBL	Double	HWT	Heating Water Temperature	SA / DSA	Duct Mounted Sound Attenuator		
DBF	Dryer Booster Fan	HX	Heat Exchanger - plate and frame or shell and tube	SAT	Supply Air Temperature		
DEG	Degree	ID	Inside Diameter	SCH	Schedule		
DG	Door Grille	IN	Inches	SD	Smoke Damper		
DI	Digital Input	INLV	Integrated Part Load Value	SEC	Seconds		
DIA	Diameter	IRH	Infra-Red Radiant Heater	SEF	Smoke Exhaust Fan		
DL	Drum Louver	KEF	Kitchen Exhaust Fan	SF	Supply Fan, Square Foot		
DMSS	Ductless Mini-split System	KGH	Kitchen Grease Hood	SFD / FSD	Combination Smoke & Fire Damper		
DN	Down	KRH	Kitchen Range Hood	SP	Static Pressure		
DO	Digital Output	KW	Kilowatt	SR	Supply Register		
DOAS	Dedicated Outdoor Air System (No Wheel)	L	Louver	SS	Split System, Stainless Steel		
DP	Differential Pressure Sensor	LAT	Leaving Air Temperature	T&P	Temperature and Pressure		
DRE	Dryer Exhaust	LBS	Pounds	T	Thermostat or Temperature Sensor		
DSD	Duct Smoke Detector	LF	Linear Feet	T	Transfer Grille		
DTR	Dual Temperature Water Return	LIN	Linear	T, TEMP	Temperature		
DTS	Dual Temperature Water Supply	LPC	Low Pressure Condensate	T-STAT	Thermostat		
DWG	Drawing	LPR	Low Pressure Steam Return	TON	Cooling Tons (12,000 BTUH)		
DWH	Dishwasher Hood	LPS	Low Pressure Steam Supply	TD	Transfer Duct		
DWH	Domestic Water Heater						

HVAC CONTROLS LEGEND

⊙	TEMPERATURE SENSOR
⊕	HUMIDITY SENSOR
⊙	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.)

PIPING LEGEND

—CHS—	CHILLED WATER SUPPLY PIPING
—CHR—	CHILLED WATER RETURN PIPING
—HWS—	HOT WATER SUPPLY PIPING
—HWR—	HOT WATER RETURN PIPING
—D—	DRAIN PIPING
AAV-AUTO, AIR VENT (MARKED OR SHOWN)	
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	TWO-WAY AUTO CONTROL VALVE.
	THREE-WAY AUTO CONTROL VALVE.
	BUTTERFLY VALVE.
	BUTTERFLY VALVE.
	PRESSURE REDUCING VALVE.
	PIPE TURNING UP.
	PIPE TURNING DOWN.
	BRANCH OFF TOP OF MAIN.
	BRANCH OFF BOTTOM OF MAIN.
	BRANCH OFF SIDE OF MAIN.
	CALIBRATED BALANCING VALVE
	ECCENTRIC REDUCER
	STRAINER (Y)
	FLEXIBLE CONNECTION IN PIPING
	UNION
	PETES PLUG
	SLOPE DOWN IN DIRECTION OF ARROW.
	CHECK VALVE
	ASME PRESSURE RELIEF VALVE.

AIR DEVICE LEGEND

MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN																					
"S"		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: <table border="1"> <thead> <tr> <th>CFM</th> <th>NECK SIZE</th> <th>RUN-OUT SIZE</th> </tr> </thead> <tbody> <tr><td>0 - 100</td><td>6"</td><td>6"</td></tr> <tr><td>101 - 200</td><td>8"</td><td>8"</td></tr> <tr><td>201 - 300</td><td>10"</td><td>10"</td></tr> <tr><td>301 - 500</td><td>12"</td><td>12"</td></tr> <tr><td>501 - 750</td><td>15"</td><td>15"</td></tr> <tr><td>751 - 1000</td><td>18"</td><td>18"</td></tr> </tbody> </table>	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
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"																							
"LD"		LOUVER FACE CEILING DIFFUSER WITH SQUARE NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE SQUARE NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: <table border="1"> <thead> <tr> <th>CFM</th> <th>NECK SIZE</th> <th>RUN-OUT SIZE</th> </tr> </thead> <tbody> <tr><td>0 - 100</td><td>6"x6"</td><td>6"</td></tr> <tr><td>101 - 200</td><td>9"x9"</td><td>8"</td></tr> <tr><td>201 - 300</td><td>12"x12"</td><td>10"</td></tr> <tr><td>301 - 500</td><td>15"x15"</td><td>12"</td></tr> <tr><td>501 - 750</td><td>18"x18"</td><td>15"</td></tr> <tr><td>751 - 1000</td><td>21"x21"</td><td>18"</td></tr> </tbody> </table>	CFM	NECK SIZE	RUN-OUT SIZE	0 - 100	6"x6"	6"	101 - 200	9"x9"	8"	201 - 300	12"x12"	10"	301 - 500	15"x15"	12"	501 - 750	18"x18"	15"	751 - 1000	21"x21"	18"	TITUS TDCA-AA
CFM	NECK SIZE	RUN-OUT SIZE																							
0 - 100	6"x6"	6"																							
101 - 200	9"x9"	8"																							
201 - 300	12"x12"	10"																							
301 - 500	15"x15"	12"																							
501 - 750	18"x18"	15"																							
751 - 1000	21"x21"	18"																							
"R", "E", "T"		CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: <table border="1"> <thead> <tr> <th>CFM</th> <th>NECK SIZE</th> </tr> </thead> <tbody> <tr><td>0 - 100</td><td>6x6</td></tr> <tr><td>101 - 200</td><td>8x8</td></tr> <tr><td>201 - 350</td><td>10x10</td></tr> <tr><td>351 - 500</td><td>12x12</td></tr> <tr><td>501 - 750</td><td>14x14</td></tr> <tr><td>751 - 950</td><td>16x16</td></tr> <tr><td>951 - 1200</td><td>18x18</td></tr> <tr><td>1201 - 1500</td><td>20x20</td></tr> <tr><td>1501 - 2000</td><td>24x24</td></tr> </tbody> </table>	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	
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																								
SR		SIDEWALL SUPPLY REGISTER.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 272FL																					
WRG / WTG		WALL RETURN GRILLE / WALL TRANSFER GRILLE.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 350FL																					

NOTES:

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

AIR PURIFICATION SCHEDULE

FLOW	MFG MODEL NO.	GPS QUANTITY	MINIMUM NEEDLE SPACING	V/Ø	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:**
- BASIS OF DESIGN: GLOBAL PLASMA SOLUTIONS: APPROVED EQUALS BY PHENOMENAL AIRE, ACTIVE AIR, AIRGENICS AND BIOXGEN SUBJECT TO SPECIFICATION COMPLIANCE.
 - MOUNT GPS-IMOD TO AIR INLET SIDE OF COOLING COIL.
 - IF CONTRACTOR SUBSTITUTES BASIS OF DESIGN WITH ANOTHER MANUFACTURER, CONTRACTOR SHALL COORDINATE ALL ELECTRICAL AND MECHANICAL CHANGES.
 - BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE.
 - ALL MFGS MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER UL OR ETL.
 - PROVIDE STAND ALONE ION DETECTOR TO COMMUNICATE WITH THE BAS. SYSTEMS WITHOUT ION DETECTORS SHALL NOT BE ACCEPTABLE.
 - IONIZATION BAR TO HAVE A MINIMUM OF 1 NEEDLEPOINT EVERY 0.75" OF COIL WIDTH. SYSTEMS WITH NEEDLES FURTHER APART SHALL NOT BE ACCEPTABLE.
 - IONIZATION SYSTEMS WITH MULTIPLE ION MODULES MOUNTED TO A BAR SHALL NOT BE AN ACCEPTABLE SUBSTITUTE.
 - IONIZATION SYSTEMS THAT DO NOT USE EPOXY TO PROTECT THE ION CIRCUITRY SHALL NOT BE ACCEPTABLE.
 - IONIZATION OUTPUT SHALL BE A MINIMUM OF 40 MILLION IONS/CC FOR EVERY 0.75" OF COIL WIDTH.
 - BIPOLAR IONIZATION UNIT SHALL DE-ENERGIZE UPON SYSTEM SHUTDOWN.
- PROVIDE FOR ALL IHPs IN CLASSROOMS

CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
 201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
 SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
 MECHANICAL LEGEND,
 SCHEDULES AND NOTES



PROJ. MGR.: JWS
 DRAWN: JWS
 DATE: 11-07-2025
 REVISIONS:

JOB NO. **25-34**
 SHEET NO.

M0.1

FAN SCHEDULE

FAN TYPE:				FAN ACCESSORIES:											
1. CEILING MOUNTED EXHAUST FAN. 2. CENTRIFUGAL SQUARE INLINE - DIRECT DRIVE.				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 SWITCH FOR SF-1, SF-2, & EF-1 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)	MOTOR RPM	MOTOR (HP / W)	ELECTRICAL			INTERLOCK WITH	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN	
								V	PH	HZ				MANUFACTURER	MODEL NUMBER
EF-1	1	70	0.75	8	4 (SONNES)	1060	40 W	120 V	1	60	LIGHTS/SHELTER SWITCH	25	1,2,3,4,5,10,11	COOK	GC-148
SF-1	2	485	0.75	8	13 (SONES)	1725	1/4 HP	120 V	1	60	SHELTER SWITCH	75	1,2,3,4,5,6,9,10	COOK	100SQN-B
SF-2	2	485	0.75	8	13 (SONES)	1725	1/4 HP	120 V	1	60	SHELTER SWITCH	75	1,2,3,4,5,6,9,10	COOK	100SQN-B

AIR PURIFICATION SCHEDULE

FLOW	MFG MODEL NO.	GPS QUANTITY	MINIMUM NEEDLE SPACING	V/Ø	MOUNTING LOCATION	MINIMUM ION DENSITY (IONS/CC)
CV	GPS-IRIB	1 PER UNIT	1 EVERY 3/4"	265	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-IMOD 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 MFGS MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER UL 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 TWHP UNITS

PACKAGED THRU-WALL AC UNIT

TYPE:										ACCESSORIES:									
1. PACKAGED THRU-WALL HEAT PUMP WITH ELECTRIC HEAT.										1. WALL SLEEVE - COORDINATE SLEEVE DEPTH WITH WALL CONDITIONS. 2. EXTRUDED ALUMINUM ARCH. GRILLE WITH ANODIZED ALUMINUM FINISH. (COORDINATE GRILLE STYLE AND FINISH WITH ARCHITECT PRIOR TO ORDERING.) 3. CONDENSATE DRAIN KIT. 4. SUB-BASE KIT. 5. POWER DISCONNECT SWITCH									
MARK	TYPE	SUPPLY FAN AIRFLOW (CFM)	OUTSIDE AIR (CFM)	DX COOLING COIL CAPACITY TOTAL (MBH)	DX HEATING CAPACITY TOTAL (MBH)	ELEC HEAT (KW)	ELECTRICAL					EER	COP	DIMENSIONS (H x W x D)	WEIGHT (LBS.)	ACCESSORIES	QUANTITY BASE / ALTERNATE	BASIS OF DESIGN	
							V	PH	HZ	MCA (A)	MOCP (A)								
TWHP-A	1	341	75 CFM	14.2	13.3	5	208 V	1	60	27.5	30	10.4	3.1	16"x42"x21"	150	1, 2, 3, 4, 5	6/10	FRIEDRICH	

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					EFFICIENCY		WEIGHT (LBS)	BASIS OF DESIGN	
				V	PH	HZ	MCA (A)	MOCP (A)	RECOMENDED FUSE SIZE (A)	SEER			HSPF
OHP-1	1	30	32.6	208	1	60	22	37	25	21.9	10.3	170	mitsubishi
OHP-2	1	30	32.6	208	1	60	22	37	25	21.9	10.3	170	mitsubishi
OHP-3	1	30	32.6	208	1	60	22	37	25	21.9	10.3	170	mitsubishi
OHP-4	1	30	32.6	208	1	60	22	37	25	21.9	10.3	170	mitsubishi
OHP-5	1	9	12	208	1	60	13	22	15	21	11.8	170	mitsubishi
OHP-6	1	9	12	208	1	60	13	22	15	21	11.8	170	mitsubishi
OHP-7	1	30	32.6	208	1	60	22	37	25	21.9	10.3	170	mitsubishi
OHP-8	1	42	48	208	1	60	34	56	35	21	10.1	250	mitsubishi

INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:										ACCESSORIES:									
1. INDOOR, WALL MOUNT 2. INDOOR, 2x2 CEILING CASSETTE 3. INDOOR, 33x33 CEILING CASSETTE										1. 3-POLE DISCONNECT SWITCH. 2. HARD WIRED UNIT CONTROLLER. 3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS. 4. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD. 5. INTEGRAL CONDENSATE PUMP. 6. SUPPLY AIR DUCT OUTLET.									
MARK	TYPE	AIRFLOW (CFM)	NOMINAL TONS	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	DIMENSIONS (IN.) (WxLxH)	ELECTRICAL				WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN						
							V	PH	HZ	MCA (A)									
IHP-1	3	880	2.5	27	32.6	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						
IHP-2	3	880	2.5	27	32.6	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						
IHP-3	3	880	2.5	27	32.6	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						
IHP-4	3	880	2.5	27	32.6	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						
IHP-5	2	300	0.75	9	12	22"x22"x8"	208 V	1	60	1	50	1,2,3,5	mitsubishi						
IHP-6	2	300	0.75	9	12	22"x22"x8"	208 V	1	60	1	50	1,2,3,5	mitsubishi						
IHP-7	3	880	2.5	27	32.6	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						
IHP-8	3	1200	3.5	42	48	33"x33"x12"	208 V	1	60	1	75	1,2,3,5	mitsubishi						

REFRIGERANT: R454B

ENERGY RECOVERY UNIT

TYPE:										ACCESSORIES:																		
DOWNFLOW PACKAGED, CONSTANT VOLUME, WITH DX COOLING COIL, ELECTRIC HEAT, HOT GAS RE-HEAT COIL, ENERGY RECOVERY WHEEL, AND MATCHED CONDENSER.										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.... 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			EXHAUST FAN			WHEEL IN SUMMER			WHEEL IN WINTER			ELECTRICAL			ELECTRIC HEAT		DX COOLING COIL					BASIS OF DESIGN					
	CFM	"W.G. E.S.P.	HP	CFM	"W.G. E.S.P.	HP	OUTSIDE AIR		EXHAUST ENTERING (DB/WB) °F	OUTSIDE AIR		EXHAUST ENTERING (DB/WB) °F	V	PH	Hz	MCA CKT 1/ CKT 2	MOCP CKT 1/ CKT 2	KW	STAGES	LAT (DB/WB)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	ISMRE2	WEIGHT (LBS)	ACCESSORIES	MANUFACTURER	MODEL
							EAT (DB/WB) °F	LAT (DB/WB) °F		EAT (DB/WB) °F	LAT (DB/WB) °F																	
ERU-1	1575	1.1	1	1425	1.1	3/4	95/78	75/62.5	62.5/50.2	17/13.6	70/58	70/58	208	3	60	84.9	90	15.5	SCR	54.1/54.0	67.6	43.7	5.5	8.0	1800	1,2,3,4,5,6,7,8,9,10	VALENT	VXE-12-30 D-5J-1-A2

SHEET TITLE:
MECHANICAL SCHEDULES



PROJ. MGR.: JWS
DRAWN: JWS

DATE: 11-07-2025

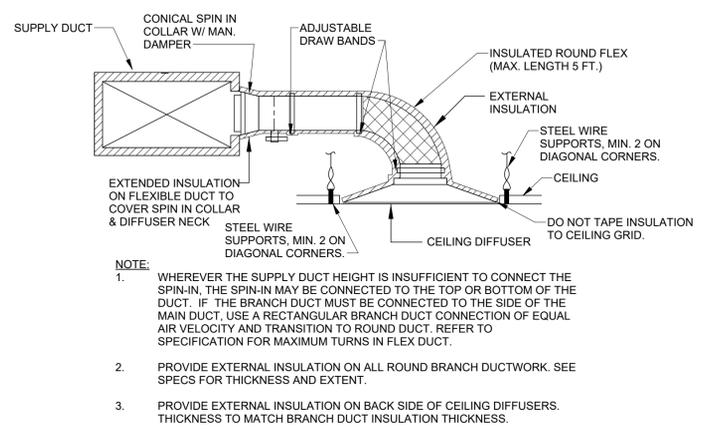
REVISIONS

JOB NO. 25-34

SHEET NO. M0.2

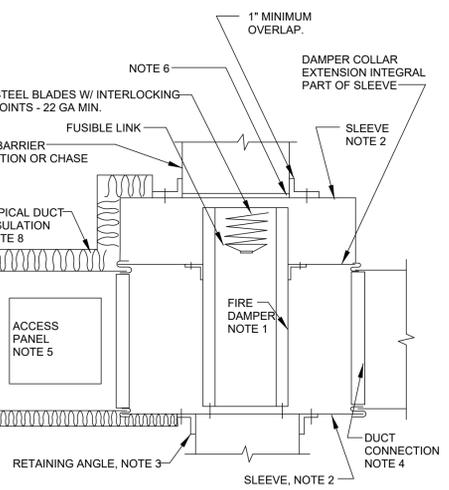
2 OF 14

0 1" 2"



CEILING DIFFUSER INSTALLATION DETAIL

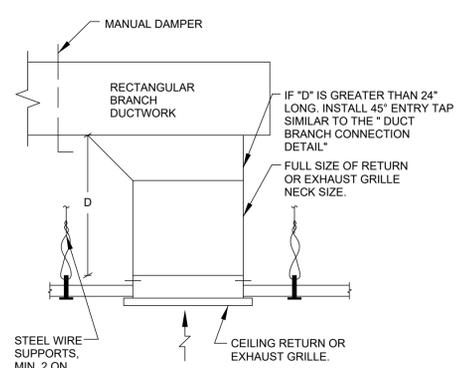
NO SCALE



- 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 FUSEABLE LINK OR LINKS. MINIMUM ACCESS DOOR SIZE SHALL BE 12"X12".
 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.

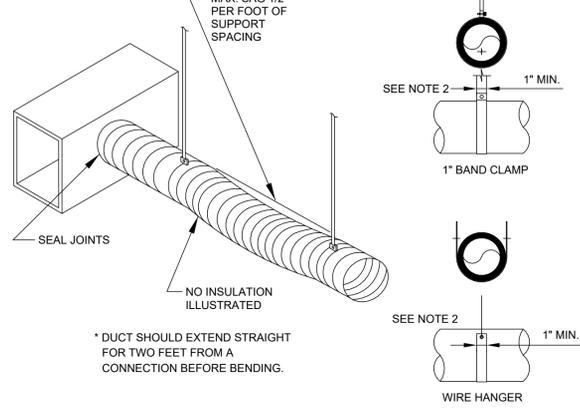
FIRE DAMPER INSTALLATION DETAIL

NO SCALE



CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL

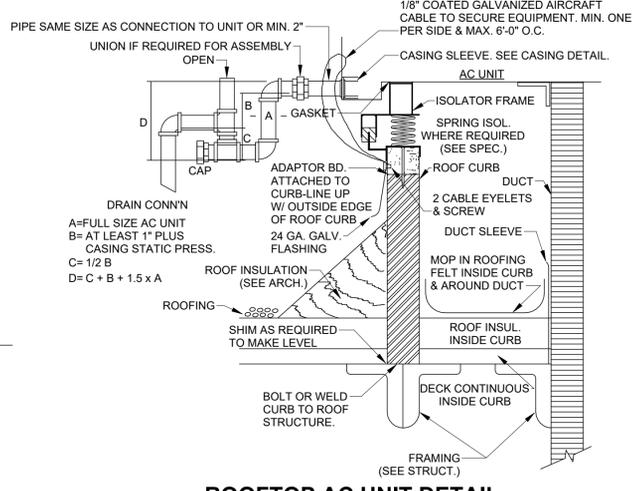
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- NOTES:**
1. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
 2. DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
 3. MIN. CENTER LINE BEND LINE RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D/2).
 4. FLEXIBLE DUCT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

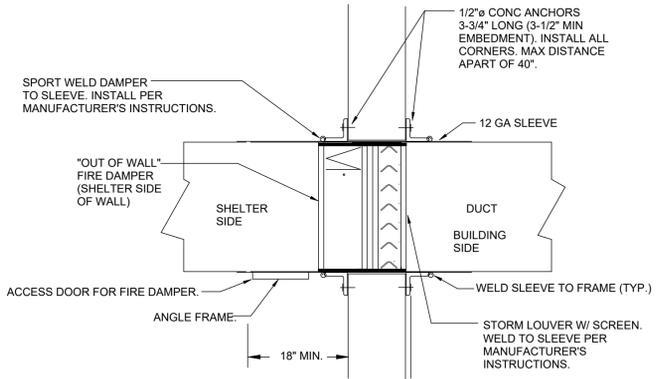
FLEXIBLE DUCT SUPPORT DETAIL

NO SCALE



ROOFTOP AC UNIT DETAIL

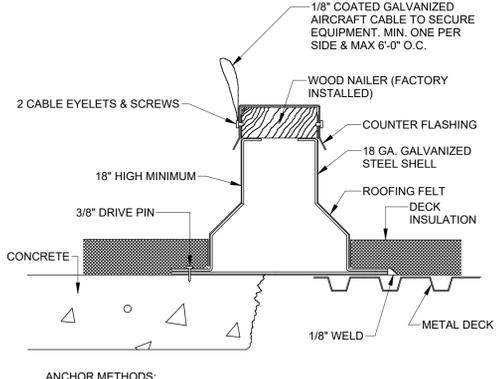
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- NOTE:**
1. COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR ROOF WITH GENERAL CONTRACTOR.
 2. SHELTER LOUVERS SHALL BE INSTALLED IN THE SHELTER WALL. SHELTER LOUVERS SHALL BE RUSKIN XP500, GREENHECK MODEL FSG, OR APPROVED EQUAL. HIGH IMPACT LOUVERS 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

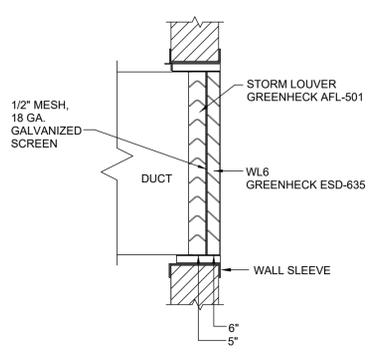


- ANCHOR METHODS:**
1. FOR STEEL STRUCTURES: ANCHOR CURB TO ROOF STRUCTURE WITH 1/4"-14 SELF DRILLING SCREWS. MINIMUM OF 1/2" OF THREADS SHALL BE SHOWING ON THE UNDERSIDE OF THE STRUCTURE. PROVIDE MINIMUM (4) FASTENERS PER SIDE, (TOTAL OF 16), EQUALLY SPACED ON EACH SIDE.
 2. FOR CONCRETE STRUCTURES: 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.

EQUIPMENT ROOF SUPPORT DETAIL

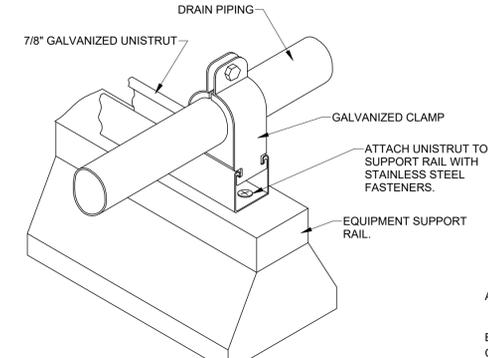
NO SCALE

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"



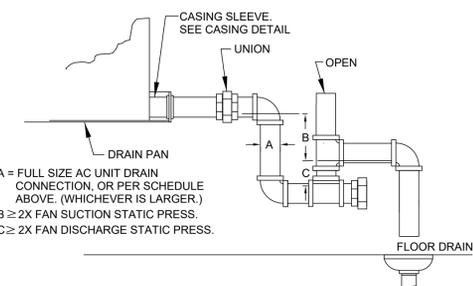
STORM SHELTER LOUVER DETAIL - OUTSIDE AIR DUCTED OPENINGS

NO SCALE



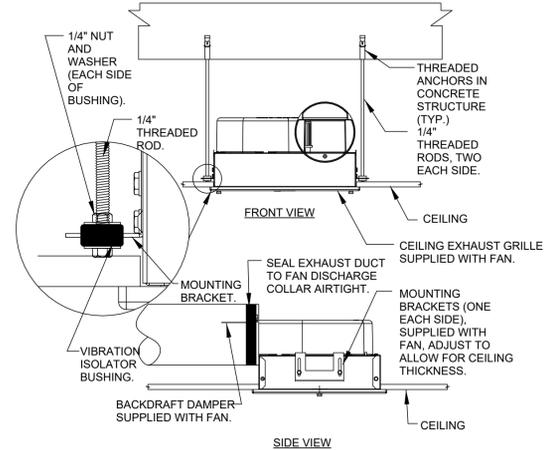
PIPING SUPPORT DETAIL

NO SCALE



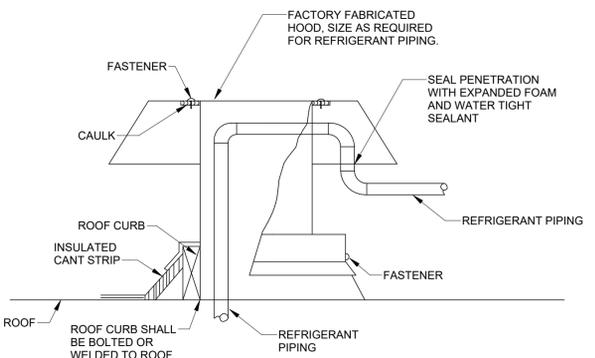
AC UNIT DRAIN TRAP DETAIL

NO SCALE



CEILING EXHAUST FAN DETAIL

NO SCALE



PIPE PENETRATION THRU ROOF

NO SCALE

Dewberry
 2 Riverchase Office Plaza
 Suite 205
 Hoover, AL 35244
 (205) 968-2069
 www.dewberry.com
 Project Number :
 50189343

**LATHAN
 McKEE
 ARCHITECTS**

CLASSROOM ADDITION TO
ELVIN HILL ELEMENTARY SCHOOL
 201 WASHINGTON STREET, COLUMBIANA, ALABAMA 35051
 SHELBY COUNTY BOARD OF EDUCATION

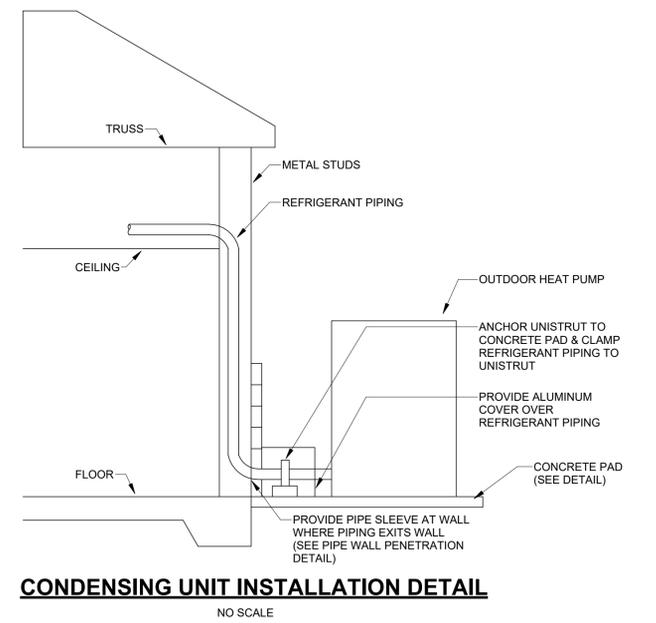
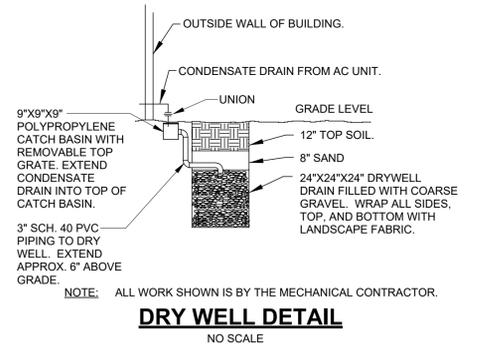
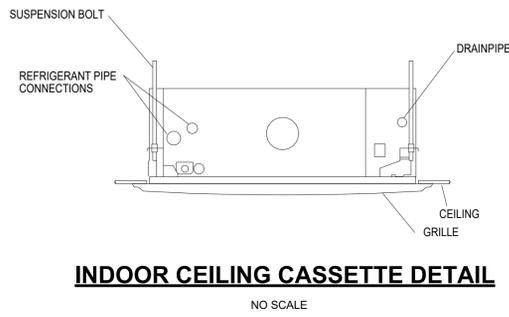
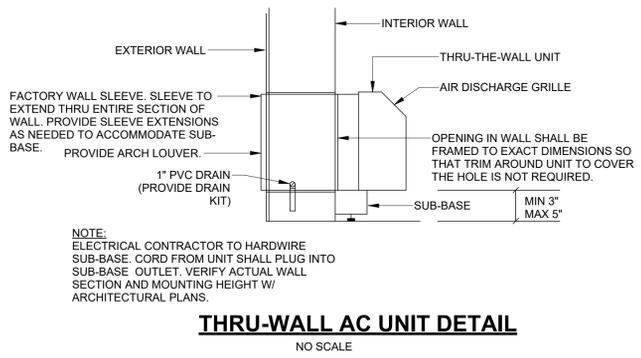
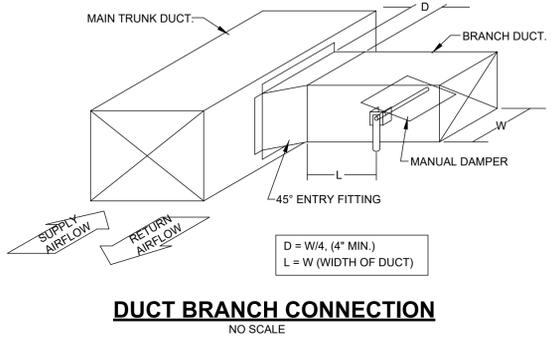
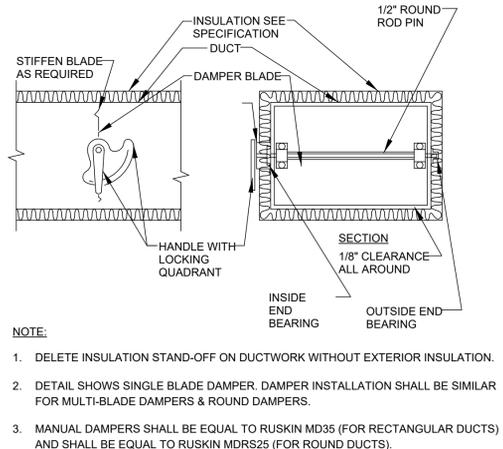
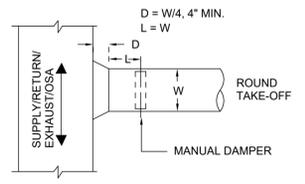
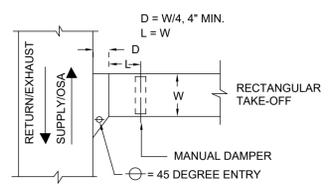
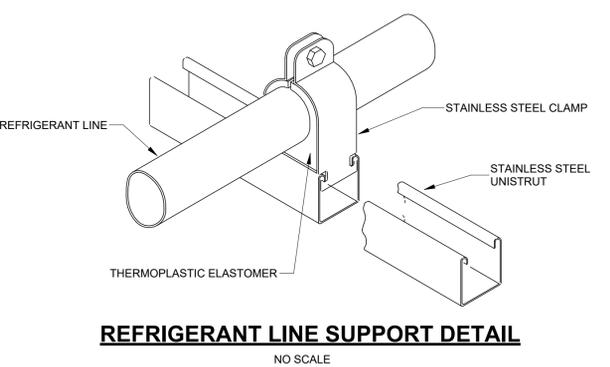
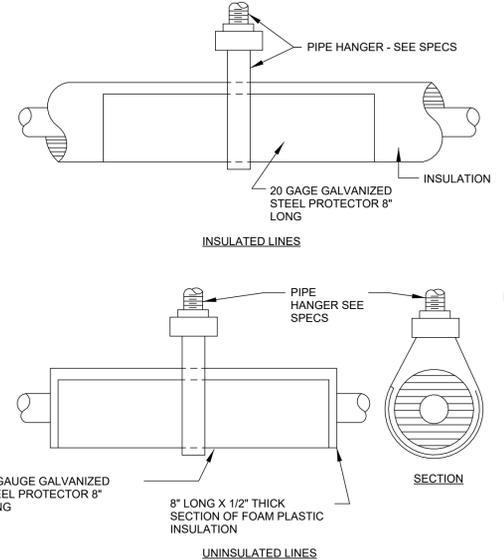
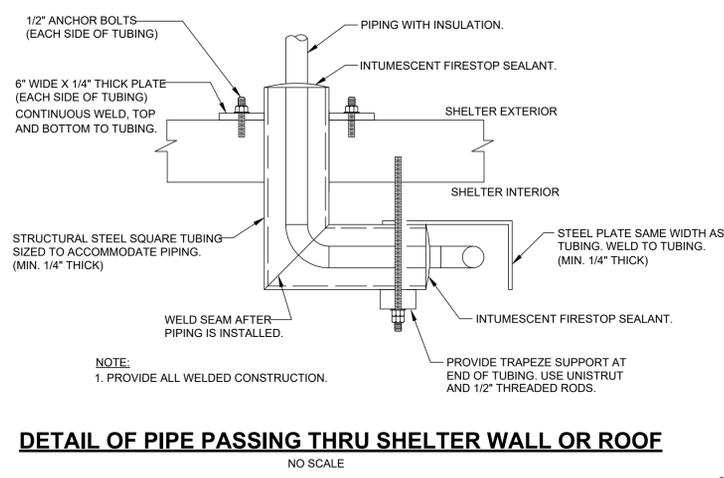
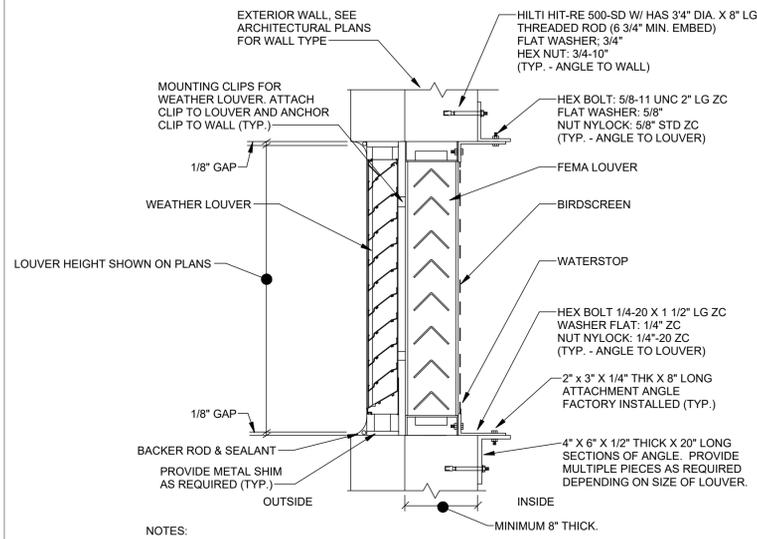
SHEET TITLE:
 MECHANICAL DETAILS

PROJ. MGR.: JWS
 DRAWN: JWS
 DATE: 11-07-2025

REVISIONS

JOB NO. 25-34
 SHEET NO.

M0.3
 3 OF 14



OSA CALCULATIONS

Room	Room Type	Rp	Pz	Ra	Az	Vbz	Ez	Voz	Provided OSA (IAQP)
		cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
CLASSROOM 1	Classrooms (ages 9 plus)	10	44	0.12	1,245	589	0.80	737	220
CLASSROOM 2	Classrooms (ages 9 plus)	10	26	0.12	750	350	0.80	438	115
CLASSROOM 3	Classrooms (ages 9 plus)	10	23	0.12	730	318	0.80	397	115
CLASSROOM 4	Classrooms (ages 9 plus)	10	23	0.12	730	318	0.80	397	115
CLASSROOM 5	Classrooms (ages 9 plus)	10	27	0.12	760	361	0.80	452	180
CLASSROOM 6	Classrooms (ages 9 plus)	10	27	0.12	760	361	0.80	452	180
BATHROOM 1	Toilets-public	0	0	0.00	180	0	0.80	0	0
BATHROOM 2	Toilets-public	0	0	0.00	150	0	0.80	0	0
BATHROOM 3	Toilets-public	0	0	0.00	65	0	0.80	0	50
CORRIDOR 1	Corridors	0	0	0.06	660	40	0.80	50	225
CORRIDOR 2	Corridors	0	0	0.06	330	20	0.80	25	375
Total Required by RTU-1:									2,946
Total Provided by RTU-1:									1,575

OSA CALCULATIONS

Room	Room Type	Rp	Pz	Ra	Az	Vbz	Ez	Voz	Provided OSA (IAQP)
		cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
CLASSROOM 1	Classrooms (ages 9 plus)	10	44	0.12	1,245	589	0.80	737	220
CLASSROOM 2	Classrooms (ages 9 plus)	10	26	0.12	750	350	0.80	438	115
CLASSROOM 3	Classrooms (ages 9 plus)	10	23	0.12	730	318	0.80	397	115
CLASSROOM 4	Classrooms (ages 9 plus)	10	23	0.12	730	318	0.80	397	115
CLASSROOM 5	Classrooms (ages 9 plus)	10	27	0.12	760	361	0.80	452	130
CLASSROOM 6	Classrooms (ages 9 plus)	10	27	0.12	760	361	0.80	452	130
CLASSROOM 7	Classrooms (ages 9 plus)	10	25	0.12	720	336	0.80	421	125
CLASSROOM 8	Classrooms (ages 9 plus)	10	25	0.12	720	336	0.80	421	125
BATHROOM 1	Toilets-public	0	0	0.00	180	0	0.80	0	0
BATHROOM 2	Toilets-public	0	0	0.00	150	0	0.80	0	0
BATHROOM 3	Toilets-public	0	0	0.00	65	0	0.80	0	50
CORRIDOR 1	Corridors	0	0	0.06	750	45	0.80	56	100
CORRIDOR 2	Corridors	0	0	0.06	330	20	0.80	25	350
Total Required by RTU-1:									3,793
Total Provided by RTU-1:									1,575

BASE BID

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
0	0	N/A	N/A	N/A	0	220
1	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	180
7	0	N/A	N/A	N/A	0	180
3	0	N/A	70	N/A	210	220
2	0	N/A	70	N/A	140	140
1	0	N/A	70	N/A	70	0
0	0	N/A	N/A	N/A	0	140
0	0	N/A	N/A	N/A	0	0
Total Required Exhaust					420	
Total Provided Exhaust						1425

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
0	0	N/A	N/A	N/A	0	220
0	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	115
1	0	N/A	N/A	N/A	0	130
1	0	N/A	N/A	N/A	0	130
0	0	N/A	N/A	N/A	0	125
0	0	N/A	N/A	N/A	0	125
3	0	N/A	70	N/A	210	220
2	0	N/A	70	N/A	140	140
1	0	N/A	70	N/A	70	0
0	0	N/A	N/A	N/A	0	0
0	0	N/A	N/A	N/A	0	0
Total Required Exhaust					420	
Total Provided Exhaust						1435

ALTERNATE BID

REFRIGERANT LEAK DETECTION CONTROLS:

- THE LEAK DETECTION SYSTEM SHALL CONSIST OF ONE OR MORE REFRIGERANT LEAK DETECTION SENSORS INSTALLED IN THE HVAC EQUIPMENT BY THE HVAC EQUIPMENT MANUFACTURER.
 - UTILIZE A SET POINT, NONADJUSTABLE IN THE FIELD, TO GENERATE AN OUTPUT SIGNAL TO INITIATE MITIGATION ACTIONS.
 - FIELD RECALIBRATION OF THE REFRIGERANT DETECTION SYSTEM SHALL NOT BE PERMITTED.
 - BE CAPABLE OF DETECTING THE PRESENCE OF A SPECIFIED REFRIGERANT CORRESPONDING TO THE REFRIGERANT DESIGNATION OF THE REFRIGERANT CONTAINED IN THE REFRIGERATION SYSTEM.
 - HAVE ACCESS FOR REPLACEMENT OF REFRIGERANT DETECTION SYSTEM COMPONENTS.
 - HALF SELF-DIAGNOSTICS TO DETERMINE OPERATIONAL STATUS OF THE SENSING ELEMENT.
 - ENERGIZE AIR CIRCULATION FANS OF THE EQUIPMENT UPON FAILURE OF A SELF DIAGNOSTIC CHECK.
 - GENERATE AN OUTPUT SIGNAL IN NOT MORE THAN 30 SECONDS WHEN EXPOSED TO A REFRIGERANT CONCENTRATION OF 25% LFL (+0%, -1%).
- WHEN THE SYSTEM DETECTS A LEAK, THE FOLLOWING MITIGATION ACTIONS WILL BE INITIATED UNTIL REFRIGERANT HAS NOT BEEN DETECTED FOR 5 MINUTES:
 - SUPPLY FANS SHALL BE ENERGIZED TO RUN AT 100% FAN SPEED.
 - COMPRESSOR OPERATION SHALL BE DISABLED.
 - ALL ZONING DAMPERS, SUCH AS VAV TERMINAL UNITS SHALL BE OPENED TO 100%.
 - ALL ELECTRIC HEAT OR GAS HEAT SHALL BE DISABLED.
- THE BUILDING FIRE AND SMOKE SYSTEMS SHALL OVERRIDE THIS FUNCTION.
- 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. MITIGATION ACTIONS SHALL BE VERIFIED BY DISCONNECTING THE SENSOR.
- THE REFRIGERANT SENSORS DO NOT NEED ROUTINE MAINTENANCE. USE ONLY MANUFACTURER-APPROVED SENSORS WHEN REPLACEMENT IS REQUIRED.

HVAC EQUIPMENT REFRIGERANT GENERAL NOTES:

- THIS PROJECT IS DESIGNED WITH HVAC EQUIPMENT WHICH USE A2L REFRIGERANT.
- THE MECHANICAL DESIGN WILL COMPLY WITH THE 2024 INTERNATIONAL MECHANICAL CODE, ASHRAE 15-2022, AND ASHRAE 34-2022.
- THE INSTALLATION SHALL ALSO COMPLY WITH THESE STANDARDS.
- HVAC EQUIPMENT SHALL BE MANUFACTURED TO COMPLY WITH THESE STANDARDS, AS WELL AS UL 484, UL/CSA 60335-2-40, AND UL/CSA 60335-2-89.

IAQP OSA CALCULATION - MULTI NEED CLR D210 / D211

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table E.1 Min. Occupant Density	Pz * Rp	Ac * Ra	Table E.2 Ventilation Effectiveness	Outdoor Air to Zone CFM with E2 correction (Max/Min)
CLASSROOM 101/102/109/107/108/111	Educational Facilities	Classrooms (AGE 9 +)	750.0	263	0.13	263	50	0.8	438

Carbon dioxide**

Indoor Contaminants Generated by People & From Outdoors

Contaminant	Maximum Threshold Value (PPM)	Steady State Using the VPP* (Predicted OA) (PPM)	Steady State Using the IAQ Method (Reduced OA) (PPM)	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority**
Acetaldehyde	100.0	0.0111	0.0034	Yes	0.0032	50%	OSHA
Acetone	250.0	0.0056	0.0018	Yes	0.0017	50%	NIOSH
Azotane	25.00	0.0128	0.0112	Yes	0.0112	50%	NIOSH
Benzene	1.0000	0.0016	0.0004	Yes	0.0016	50%	OSHA
2-Ethanol (MEK)	500.0	0.0017	0.0010	Yes	0.0010	50%	NIOSH
Carbon Dioxide	800.0	1014	287	Yes	287	0%	NIOSH
Chloroform	2.0000	0.0011	0.0003	Yes	0.0003	50%	NIOSH
Chlorine	100.0	0.0000	0.0000	Yes	0.0000	50%	OSHA
Hydrogen Sulfide	10.0	0.0000	0.0000	Yes	0.0000	50%	NIOSH
Carbon Monoxide	100.0	0.0000	0.0000	Yes	0.0000	50%	NIOSH
Methane	200.0	0.0000	0.0000	Yes	0.0000	0%	NIOSH
Methylene Chloride	100.0	0.0015	0.0002	Yes	0.0002	50%	OSHA
Propane	5.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perchloroethylene	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorocyclohexane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorodecalin	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorododecane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorohexane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorooctane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorotetralin	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Styrene	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA

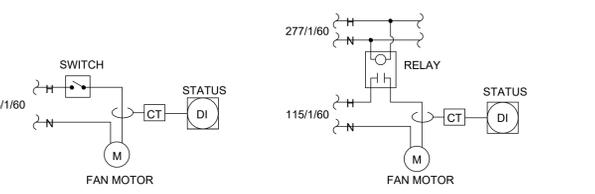
IAQP OSA CALCULATION - MULTI NEED CLR D210 / D211

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft)	Zone Max Occupancy	Table E.1 Min. Occupant Density	Pz * Rp	Ac * Ra	Table E.2 Ventilation Effectiveness	Outdoor Air to Zone CFM with E2 correction (Max/Min)
CLASSROOM 100	Educational Facilities	Classrooms (AGE 9 +)	1,245.0	0.13	418	50	0.8	737	

Carbon dioxide**

Indoor Contaminants Generated by People & From Outdoors

Contaminant	Maximum Threshold Value (PPM)	Steady State Using the VPP* (Predicted OA) (PPM)	Steady State Using the IAQ Method (Reduced OA) (PPM)	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority**
Acetaldehyde	100.0	0.0111	0.0034	Yes	0.0032	50%	OSHA
Acetone	250.0	0.0056	0.0018	Yes	0.0017	50%	NIOSH
Azotane	25.00	0.0128	0.0112	Yes	0.0112	50%	NIOSH
Benzene	1.0000	0.0016	0.0004	Yes	0.0016	50%	OSHA
2-Ethanol (MEK)	500.0	0.0017	0.0010	Yes	0.0010	50%	NIOSH
Carbon Dioxide	800.0	1014	287	Yes	287	0%	NIOSH
Chloroform	2.0000	0.0011	0.0003	Yes	0.0003	50%	NIOSH
Chlorine	100.0	0.0000	0.0000	Yes	0.0000	50%	OSHA
Hydrogen Sulfide	10.0	0.0000	0.0000	Yes	0.0000	50%	NIOSH
Carbon Monoxide	100.0	0.0000	0.0000	Yes	0.0000	50%	NIOSH
Methane	200.0	0.0000	0.0000	Yes	0.0000	0%	NIOSH
Methylene Chloride	100.0	0.0015	0.0002	Yes	0.0002	50%	OSHA
Propane	5.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perchloroethylene	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorocyclohexane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorodecalin	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorododecane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorohexane	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Perfluorotetralin	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA
Styrene	100.0000	0.0000	0.0000	Yes	0.0000	50%	OSHA



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
106 CLASSROOM	645	6,450	ERU-1	R-454B	3.1	0.7	20.0	1
108 CLASSROOM	645	6,450	ERU-1	R-454B	3.1	0.7	20.0	1
100 CLASSROOM	893	8,332	ERU-1	R-454B	3.1	1.0	25.8	1
105 CLASSROOM	712	6,843	ERU-1	R-454B	3.1	0.8	20.6	1
107 CLASSROOM	712	6,843	ERU-1	R-454B	3.1	0.8	20.6	1
110 CLASSROOM	712	6,843	ERU-1	R-454B	3.1	0.8	20.6	1
111 CLASSROOM	712	6,843	ERU-1	R-454B	3.1	0.8	20.6	1
EXISTING CLASSROOM	672	6,270	ERU-1	R-454B	3.1	0.7	19.4	1
SHELTER TOILET	54	504	ERU-1	R-454B	3.1	0.1	1.6	1
102 TOILET	146	1,362	ERU-1	R-454B	3.1	0.2	4.2	1
104 CORRIDOR	734	6,848	ERU-1	R-454B	3.1	0.8	21.2	1
103 TOILET	177	1,651	ERU-1	R-454B	3.1	0.2	5.1	1
101 EXISTING CORRIDOR	321	2,995	ERU-1	R-454B	3.1	0.3	9.3	1
109 ALT CORRIDOR								
MAXIMUM ALLOWED REFRIGERANT:							209.0	
TOTAL REFRIGERANT CHARGE:							7.80	

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS SUMMARY

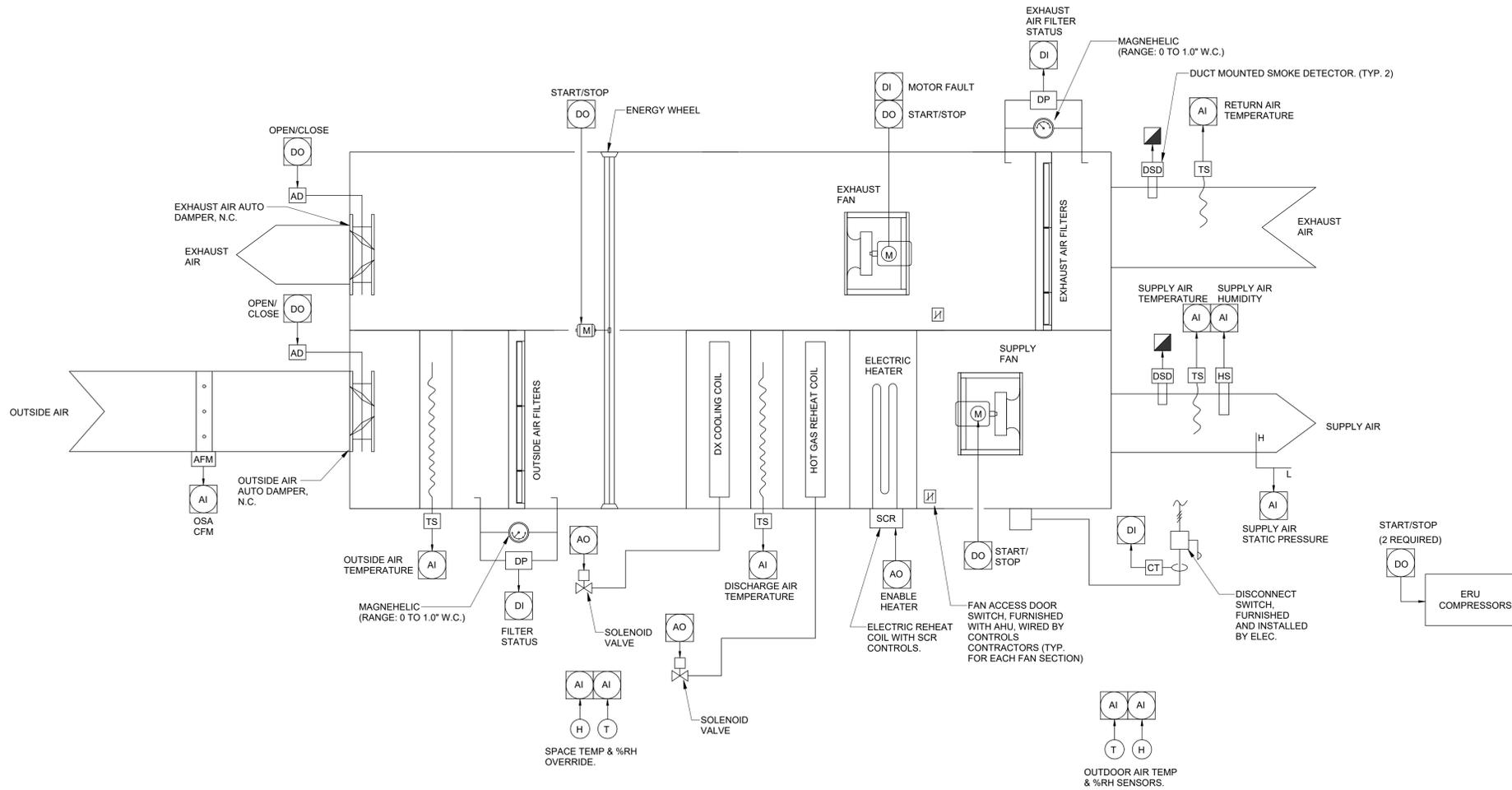
ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
106 CLASSROOM	645	6,450	8.4	20.0	1.2
108 CLASSROOM	645	6,450	8.4	20.0	1.2
100 CLASSROOM	893	8,332	4.2	25.8	1.2
105 CLASSROOM	712	6,843	4.0	20.6	1.2
107 CLASSROOM	712	6,843	4.0	20.6	1.2
110 CLASSROOM	712	6,843	4.0	20.6	1.2
111 CLASSROOM	712	6,843	4.0	20.6	1.2
EXISTING CLASSROOM	672	6,270	3.9	19.4	1.2
SHELTER TOILET	54	504	0.1	1.6	1.2
102 TOILET	146	1,362	2.4	4.2	1.2
104 CORRIDOR	734	6,848	5.3	21.2	1.2
103 TOILET	177	1,651	2.4	5.1	1.2
101 EXISTING CORRIDOR	321	2,995	0.3	9.3	1.2
109 ALT CORRIDOR	255	2,379	7.4	7.4	1.2
MAXIMUM ALLOWED REFRIGERANT:				216.4	
TOTAL REFRIGERANT CHARGE:				55.9	

SHEET TITLE:
 MECHANICAL CONTROLS



PROJ. MGR.: JWS
 DRAWN: JWS
 DATE: 11-07-2025
 REVISIONS:

JOB NO. 25-34
 SHEET NO. **M0.6**
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OUTSIDE AIR UNIT CONTROLS - ENERGY RECOVERY WHEEL, DX COOLING, WITH ELECTRIC HEAT
 NO SCALE

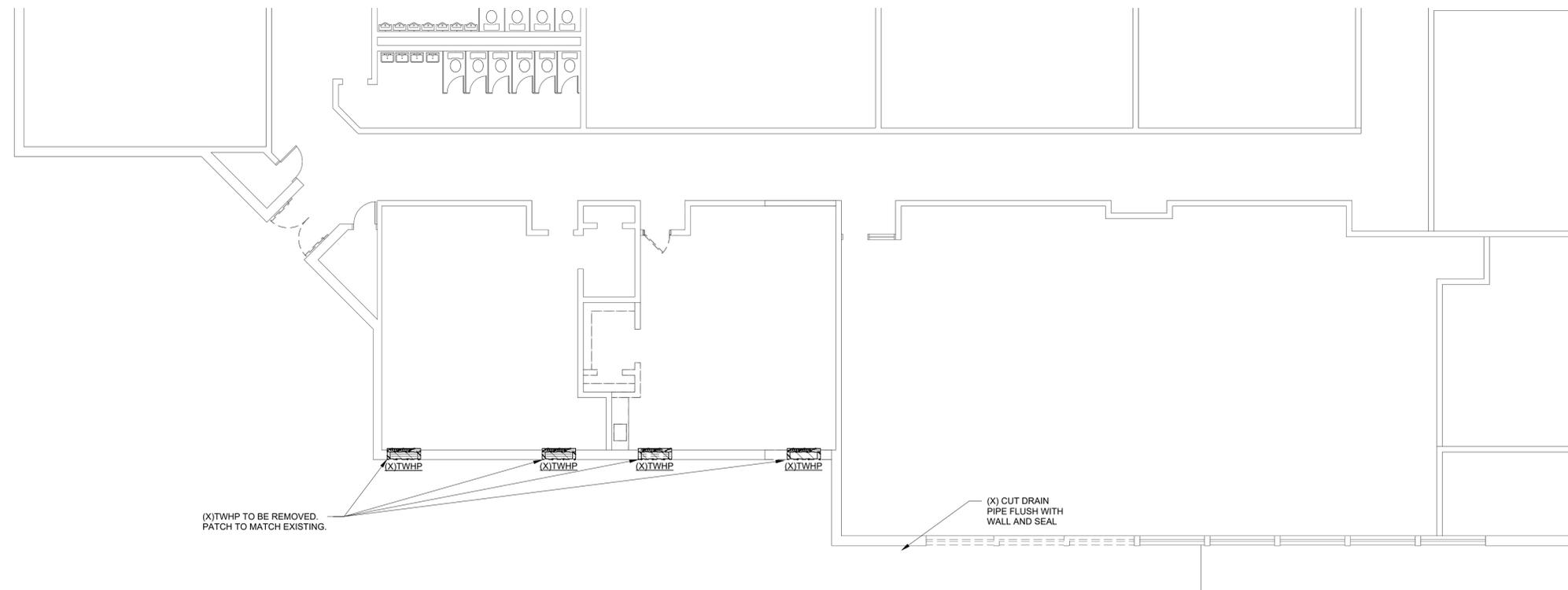
ENERGY RECOVERY UNIT CONTROL SEQUENCE:
 THE ENERGY RECOVERY UNIT (ERU) SHALL BE STARTED AND STOPPED BY THE BUILDING AUTOMATION SYSTEM SUBJECT TO AN OWNER'S OCCUPANCY SCHEDULE AND SUBJECT TO ALL INTERNAL UNIT SAFETIES. OCCUPIED AND UNOCCUPIED HOURS SHALL BE DETERMINED BY THE OWNER AND SHALL BE FULLY ADJUSTABLE AT THE BUILDING AUTOMATION SYSTEM FRONT END BY THE OWNER.

UNOCCUPIED MODE:
 DURING UNOCCUPIED MODE, THE EXHAUST AIR AND OUTSIDE AIR AUTO DAMPERS SHALL BE CLOSED AND THE EXHAUST AIR AND OUTSIDE AIR FANS SHALL BE OFF.

OCCUPIED MODE:
 DURING OCCUPIED HOURS, THE EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL OPEN. ONCE THE DAMPERS ARE PROVEN TO BE OPEN, THE SUPPLY FAN AND EXHAUST FAN SHALL BE STARTED BY THE BUILDING AUTOMATION SYSTEM AND SHALL RUN CONTINUOUSLY. TEST AND BALANCE SHALL ADJUST THE FAN SPEED AT THE VARIABLE FREQUENCY DRIVE FOR EACH FAN TO PROVIDE THE SCHEDULED OUTSIDE AIR AND EXHAUST AIR CFM. THIS FAN SPEED SHALL BE SET AND SHALL BE DISPLAYED AT THE BAS FRONT END. THE FAN SPEED FOR THE OUTSIDE AIR AND EXHAUST AIR FANS SHALL NOT VARY.

THE BAS SHALL STAGE ON COMPRESSORS AND OPEN/CLOSE SOLENOID VALVE(S) AT THE DX COIL TO MAINTAIN A 54°F SUPPLY AIR TEMPERATURE AS MEASURED AT THE TEMPERATURE SENSOR DOWNSTREAM OF THE DX COIL. THE HOT GAS REHEAT COIL IN THE ERU SHALL STAGE ON/OFF TO MAINTAIN A TEMPERATURE LEAVING THE ERU OF 72°F (SUMMER) AND 70°F (WINTER) AS MEASURED AT THE DISCHARGE AIR TEMPERATURE SENSOR. IN THE WINTER, THE ELECTRIC HEATER SHALL STAGE ON/OFF TO PROVIDE A LEAVING TEMPERATURE OF 70°F (ADJUSTABLE).

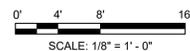
DEHUMIDIFICATION MODE:
 IF THE SPACE MOUNTED RELATIVE HUMIDITY SENSOR RISES ABOVE 60% RH FOR LONGER THAN 10 MINUTES DURING OCCUPIED OR UNOCCUPIED MODES, THE ERU SHALL GO INTO DEHUMIDIFICATION MODE. IN DEHUMIDIFICATION MODE, THE EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL BE OPEN, THE EXHAUST AIR AND OUTSIDE AIR FANS SHALL RUN, THE CONDENSING UNIT SHALL BE ON AND PROVIDING 100% COOLING, AND THE HOT GAS REHEAT COIL SHALL STAGE ON/OFF TO MAINTAIN A SPACE TEMPERATURE OF 72°F (SUMMER) AND 70°F (WINTER). ONCE THE HUMIDITY RETURNS TO BELOW 60%RH, THE ERU SHALL RETURN TO NORMAL OCCUPIED OR UNOCCUPIED MODE.



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SHEET TITLE:
 MECHANICAL - FLOOR PLAN -
 DEMOLITION

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



PROJ. MGR.: JWS
 DRAWN: JWS

DATE: 11-07-2025

REVISIONS

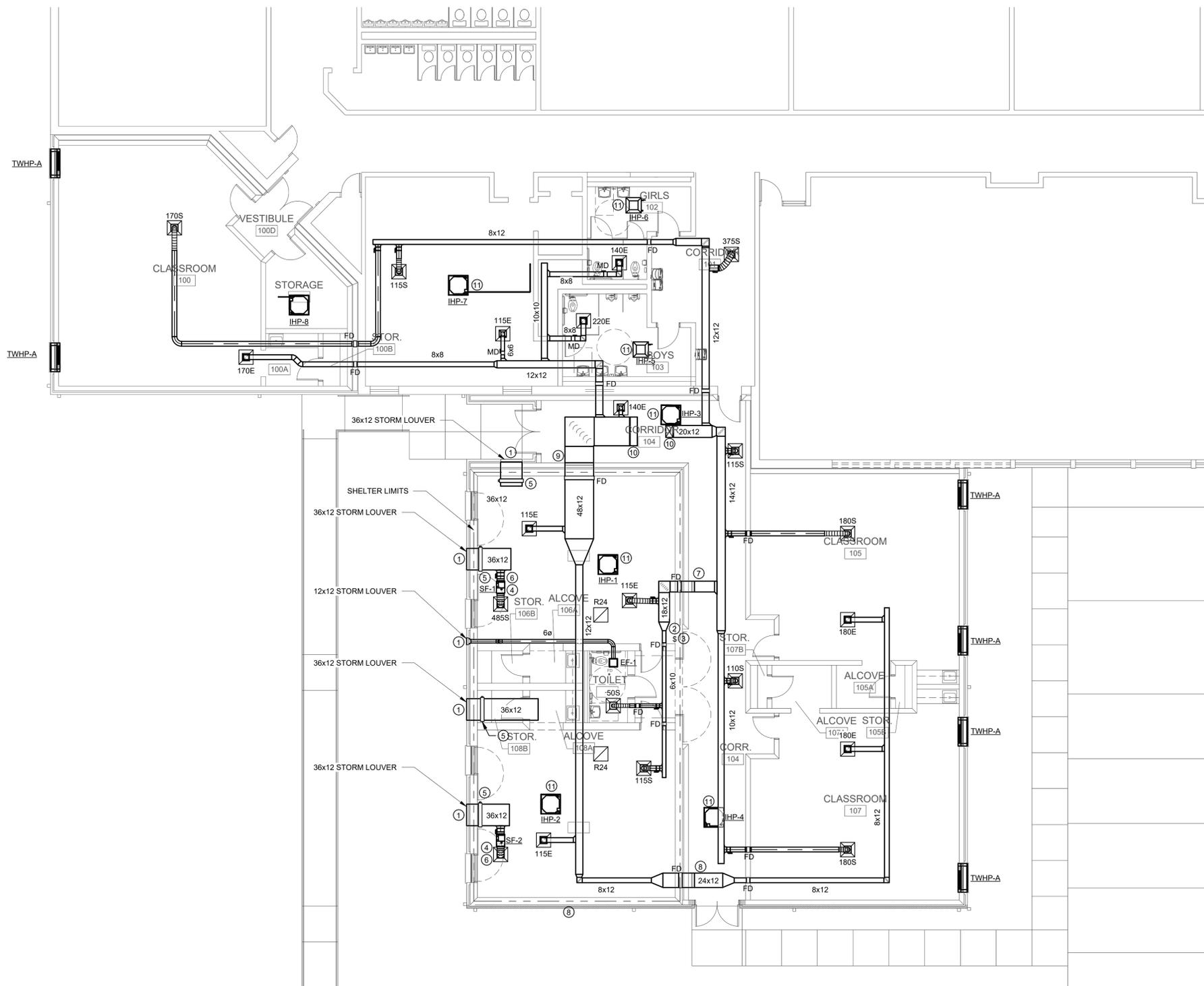
JOB NO. 25-34

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M1.0

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SHELTER OSA CALCULATIONS

Room	Room Type	Rp cfm/P	Pz People
STORM SHELTER	CLASSROOM	5	189
Total Required by SF-1.2:			945
Total Provided by SF-1.2:			970

STORM SHELTER CALCULATIONS

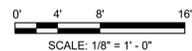
MECHANICAL VENTILATION SHALL BE PROVIDED FOR THE STORM SHELTER. PER ICC-500-2020, CHAPTER 7, PART 702.4.2.

THE MECHANICAL VENTILATION SYSTEM CONSISTS OF USING A SUPPLY FAN TO PROVIDE OUTSIDE AIR AT A RATE THAT IS 5 CFM PER OCCUPANT.

- GENERAL NOTES**
- DURING A STORM SHELTER EVENT, ALL INTERIOR DOORS TO ROOMS WITHIN SHELTER SHALL BE OPENED. PROVIDE SIGNAGE OF THIS NEXT TO FAN SWITCHES.
 - ALL PIPING AND DUCTWORK LOCATED WITHIN THE STORM SHELTER SHALL BE SUPPORTED WITH TRAPEZE HANGERS CONSISTING OF UNISTRUT WITH ALL-THREAD ROD. ALL THREAD SHALL BE ATTACHED TO THE JOISTS/BEAMS IN THE SHELTER.
 - COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR ROOF WITH GENERAL CONTRACTORS.
 - DO NOT PENETRATE OR CUT BOND BEAMS. WEATHER LOUVERS SHALL BE INSTALLED IN BRICK, IN FRONT OF SHELTER LOUVERS. WEATHER LOUVERS SHALL BE RUSKIN ELF375 OR APPROVED EQUAL.
 - 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.

- KEYED NOTES**
- 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.
 - WALL SWITCH FOR SHELTER SUPPLY FANS TO BE ACTIVATED UPON THE LOSS OF POWER DURING A STORM EVENT. SWITCH SHALL ALSO CUT POWER TO ALL AUTOMATIC INTAKE AND RELIEF DAMPERS TO CAUSE THEM TO OPEN.
 - SIGNAGE FOR EMERGENCY VENTILATION FAN SWITCH (REFER TO ARCHITECTURAL SIGNAGE SPECIFICATIONS FOR SIGN AND TEXT COLOR AND SIZE)(COORDINATE EXACT LOCATION WITH ARCHITECT.)
 - STORM SHELTER SUPPLY FAN TO RUN WHENEVER POWER IS LOST DURING A STORM EVENT BY TURNING THE WALL SWITCH TO THE "ON" POSITION. NORMALLY, THE STORM SHELTER SUPPLY FAN SHALL BE "OFF".
 - AUTOMATIC DAMPER IS NORMALLY CLOSED AND SHALL OPEN WHEN POWER IS LOST. DAMPER SHALL SPRING RETURN TO OPEN POSITION.
 - SUSPEND FAN FROM STRUCTURE WITH SPRING VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTION (WITH GROUNDING STRAP) ON INLET & OUTLET OF FAN.
 - 18X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
 - 24X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
 - 48X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
 - SA AND EXH DUCT UP AND TRANSITION TO FULL SIZE OF UNIT OPENING.
 - SUSPEND UNIT FROM STRUCTURE ABOVE.

1 MECHANICAL - FLOOR PLAN - BASE BID
 1/8" = 1'-0"



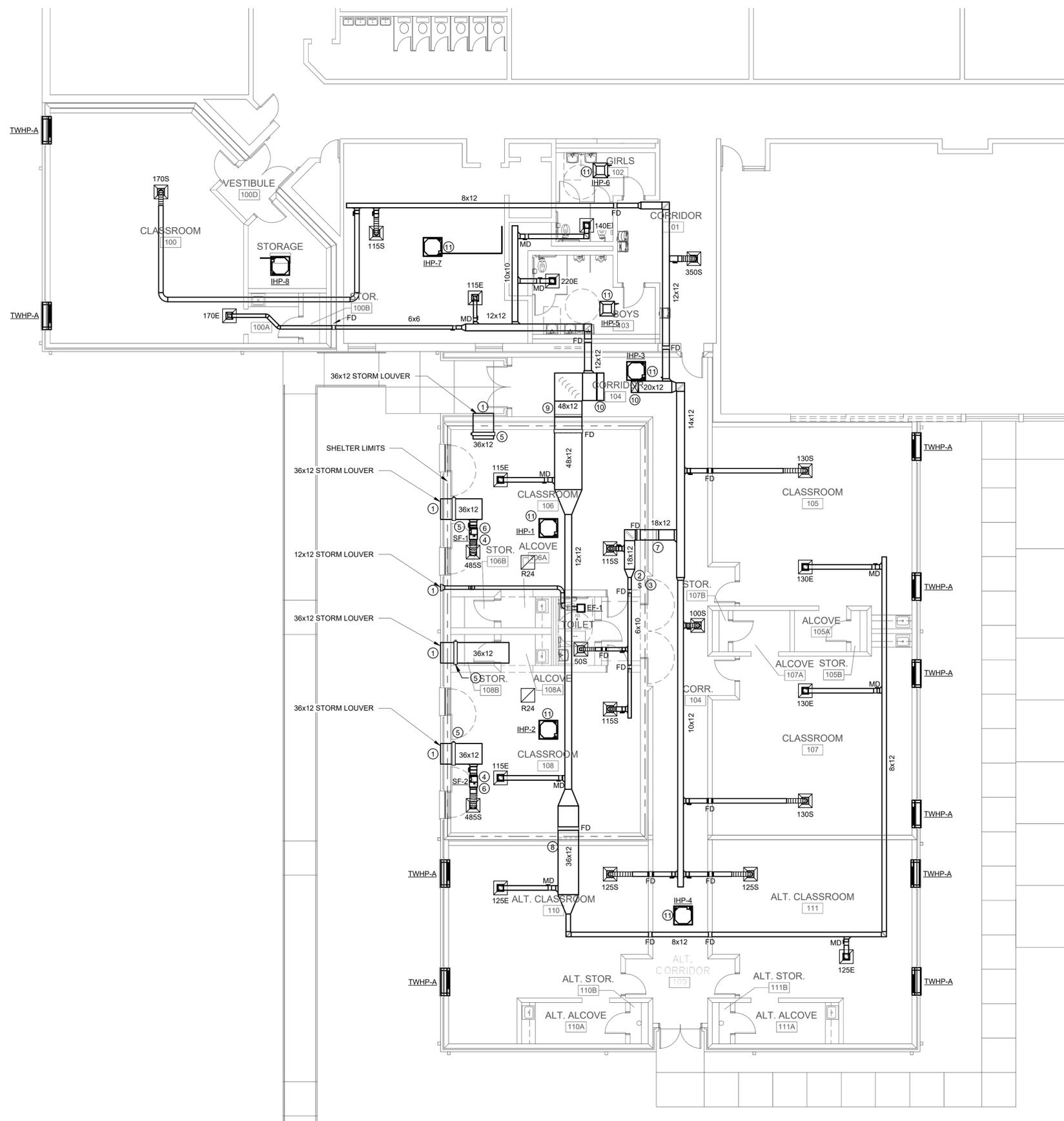
SHEET TITLE:
 MECHANICAL - FLOOR PLAN -
 BASE BID



PROJ. MGR.: JWS
 DRAWN: JWS
 DATE: 11-07-2025
 REVISIONS

JOB NO. 25-34
 SHEET NO.

M1.1



SHELTER OSA CALCULATIONS

Room	Room Type	Rp cfm/P	Pz People
STORM SHELTER	CLASSROOM	5	189
Total Required by SF-1,2:			945
Total Provided by SF-1,2:			970

STORM SHELTER CALCULATIONS

MECHANICAL VENTILATION SHALL BE PROVIDED FOR THE STORM SHELTER. PER ICC-500-2020, CHAPTER 7, PART 702.4.2.

THE MECHANICAL VENTILATION SYSTEM CONSISTS OF USING A SUPPLY FAN TO PROVIDE OUTSIDE AIR AT A RATE THAT IS 5 CFM PER OCCUPANT.

- GENERAL NOTES**
- DURING A STORM SHELTER EVENT, ALL INTERIOR DOORS TO ROOMS WITHIN SHELTER SHALL BE OPENED. PROVIDE SIGNAGE OF THIS NEXT TO FAN SWITCHES.
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 - 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.

- KEYED NOTES**
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 - 18X12 FEMA GRILLE WITH FD ON SHELTER SIDE OF GRILLE. (SEE DETAIL)
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 - SA AND EXH DUCT UP AND TRANSITION TO FULL SIZE OF UNIT OPENING.
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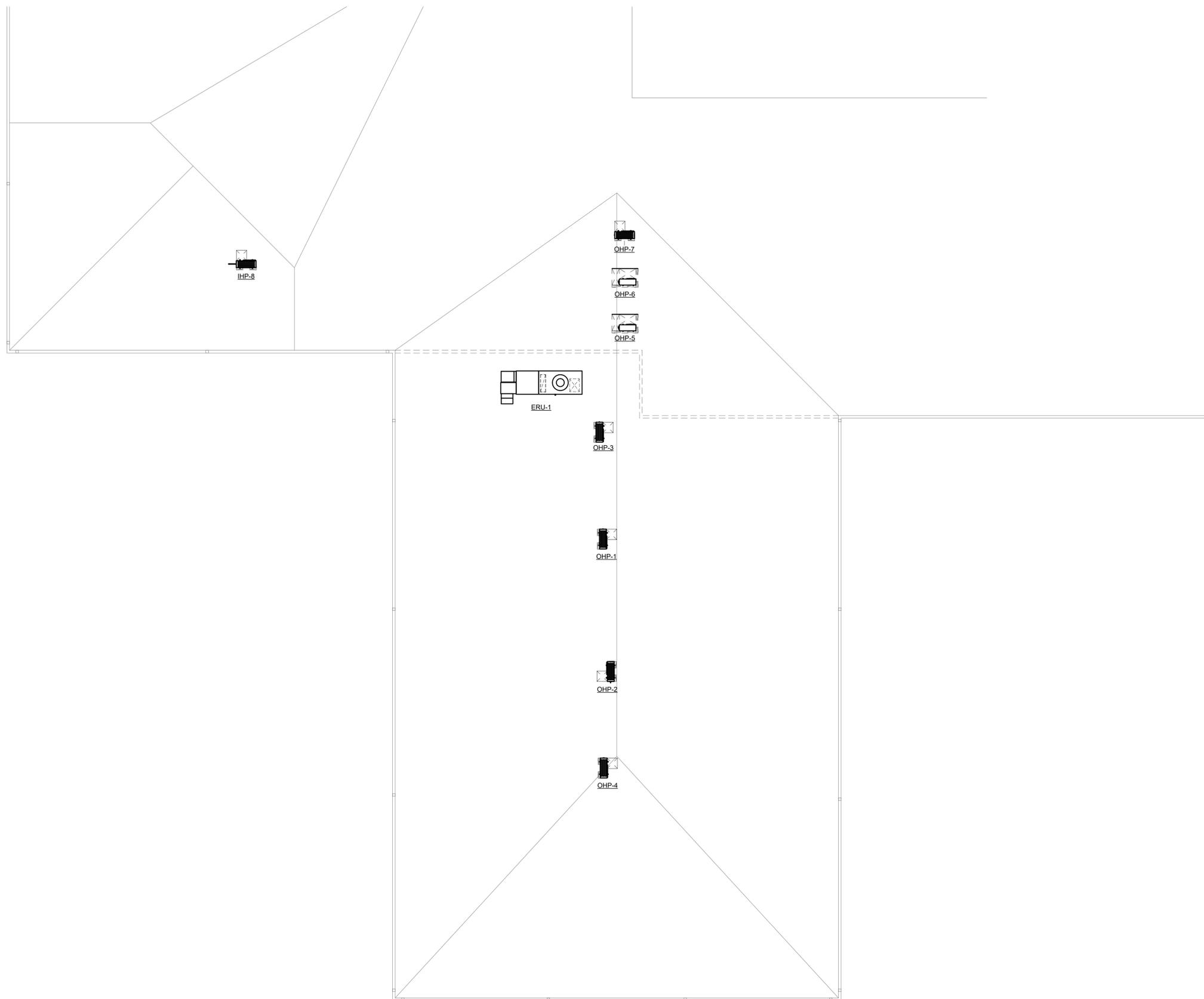
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SHEET TITLE:
 MECHANICAL - FLOOR PLAN - ALTERNATE



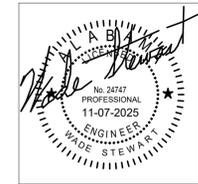
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 DATE: 11-07-2025
 REVISIONS:

JOB NO. 25-34
 SHEET NO. M1.2



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SHEET TITLE:
 MECHANICAL - ROOF PLAN



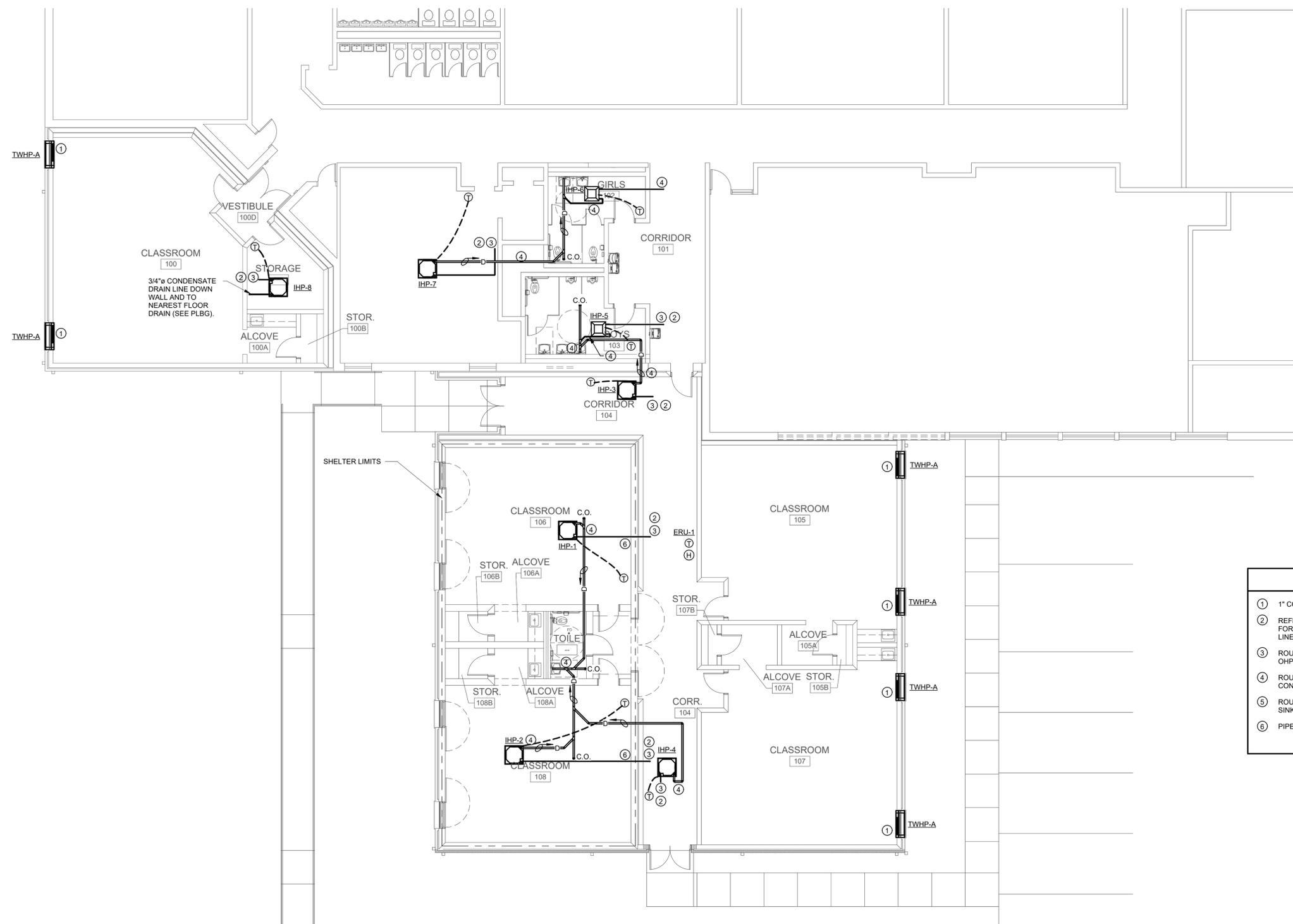
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 DATE: 11-07-2025

REVISIONS	

JOB NO. 25-34
 SHEET NO. **M1.3**
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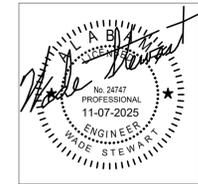
1 MECHANICAL - ROOF PLAN
 1/8" = 1'-0"
 SCALE: 1/8" = 1' - 0"





- KEYED NOTES**
- ① 1" CONDENSATE DRAIN TO DRIP ON GRADE.
 - ② REFRIGERANT LINE SETS SHOWN AS SINGLE LINE FOR CLARITY. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
 - ③ ROUTE REFRIGERANT PIPING UP THRU ROOF TO OHP ON ROOF.
 - ④ ROUTE 1" CONDENSATE DRAIN TO NEAREST CONDENSATE DRAIN BOX. (SEE PLBG)
 - ⑤ ROUTE 1" CONDENSATE DRAIN TO NEAREST MOP SINK. (SEE PLBG)
 - ⑥ PIPE PENETRATION THRU SHELTER (SEE DETAIL)

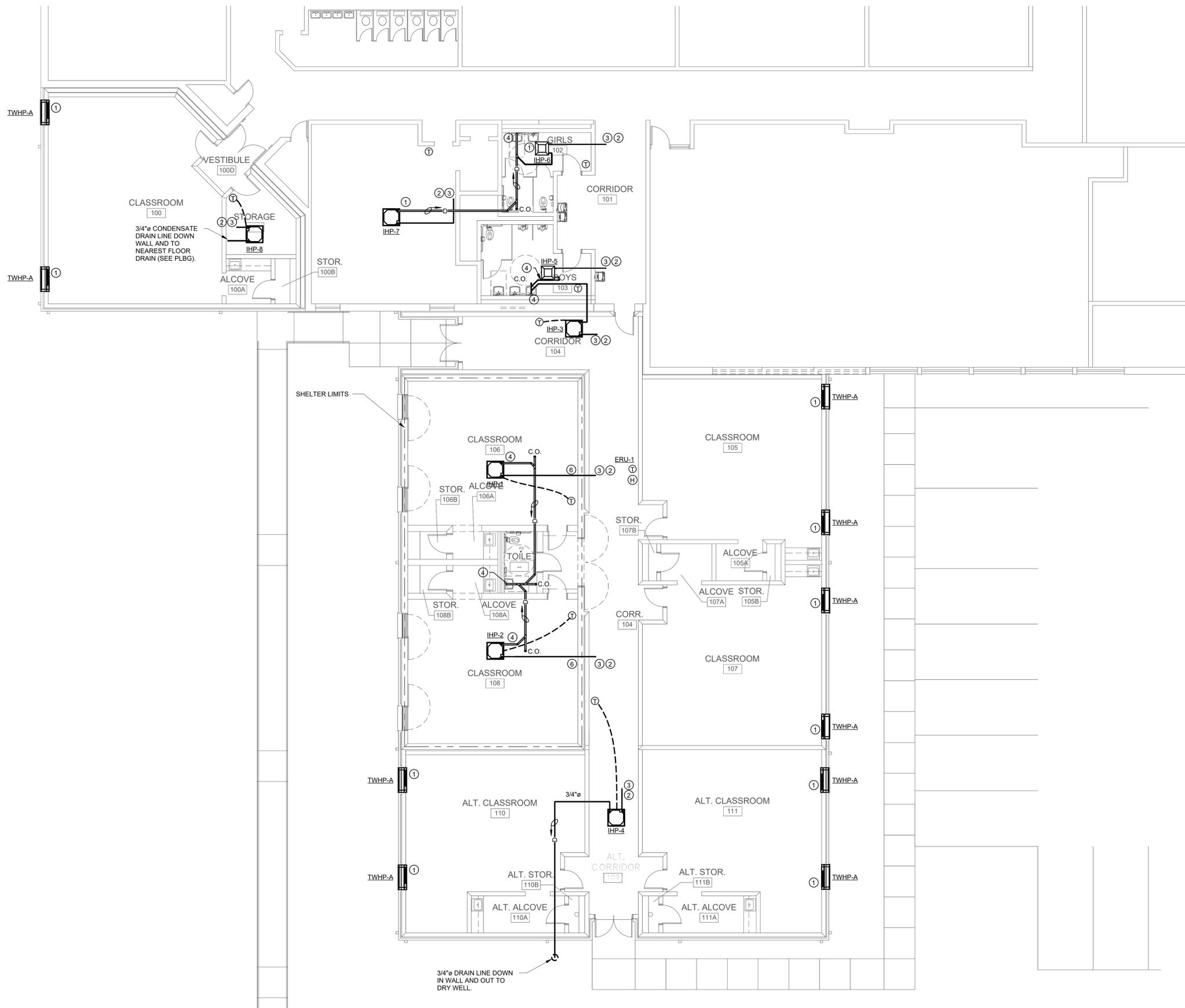
SHEET TITLE:
 MECHANICAL PIPING - FLOOR
 PLAN - BASE BID



PROJ. MGR.: JWS
 DRAWN: JWS
 DATE: 11-07-2025
 REVISIONS

JOB NO. 25-34
 SHEET NO. **M2.0**
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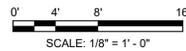
1 MECHANICAL PIPING - FLOOR PLAN - BASE BID
 1/8" = 1'-0"
 SCALE: 1/8" = 1'-0"

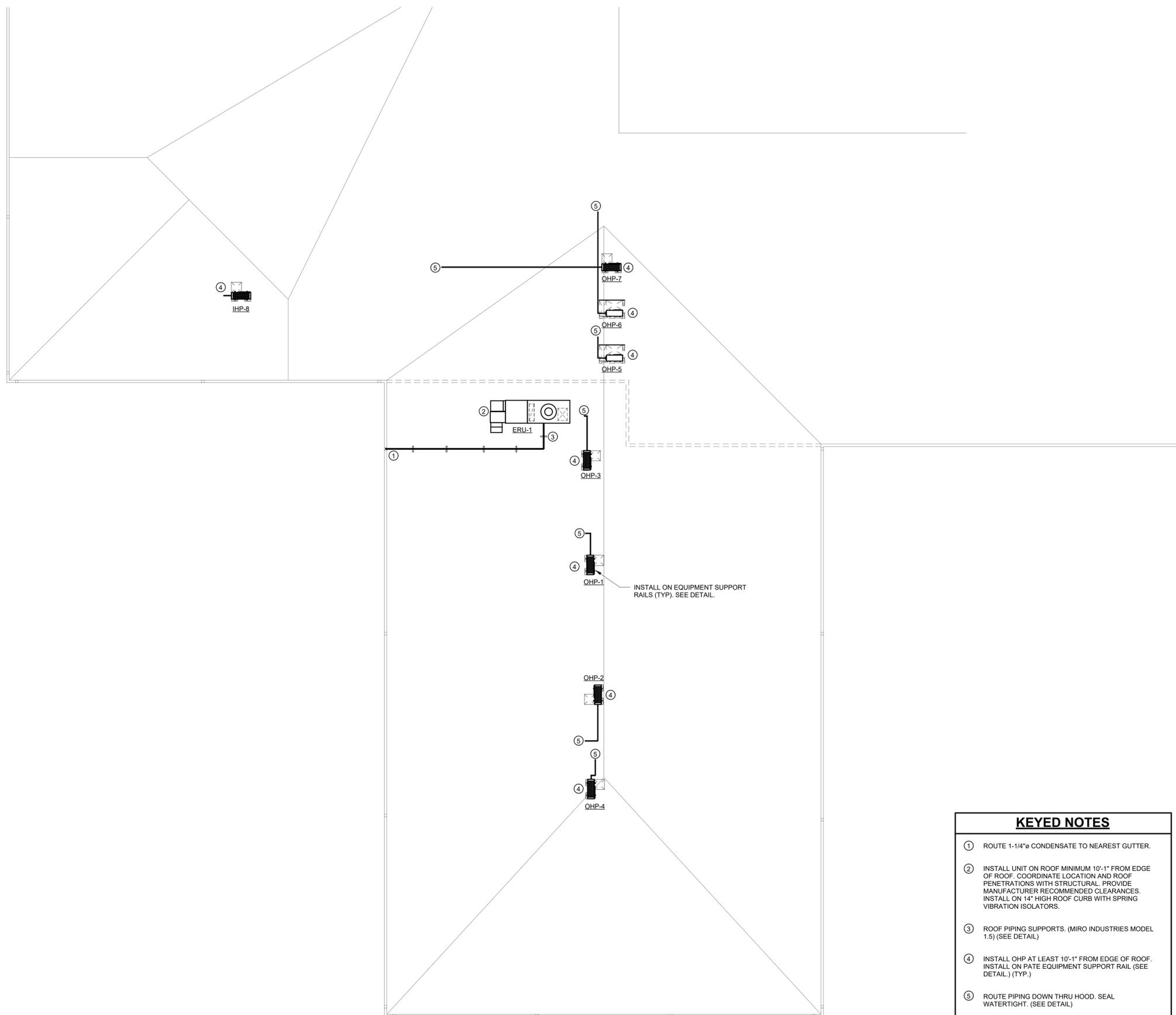


KEYED NOTES

- ① 1" CONDENSATE DRAIN TO DRIP ON GRADE.
- ② REFRIGERANT LINE SETS SHOWN AS SINGLE LINE FOR CLARITY. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
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- ⑤ ROUTE 1" CONDENSATE DRAIN TO NEAREST MOP SINK. (SEE PLBG)
- ⑥ PIPE PENETRATION THRU SHELTER (SEE DETAIL)

1 MECHANICAL PIPING - FLOOR PLAN - ALTERNATE
 1/8" = 1'-0"
 SCALE: 1/8" = 1'-0"





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)

1 MECHANICAL PIPING - ROOF PLAN - BASE BID
 1/8" = 1'-0"



SHEET TITLE:
 MECHANICAL PIPING - ROOF
 PLAN - ALTERNATE



PROJ. MGR.: JWS

DRAWN: JWS

DATE: 11-07-2025

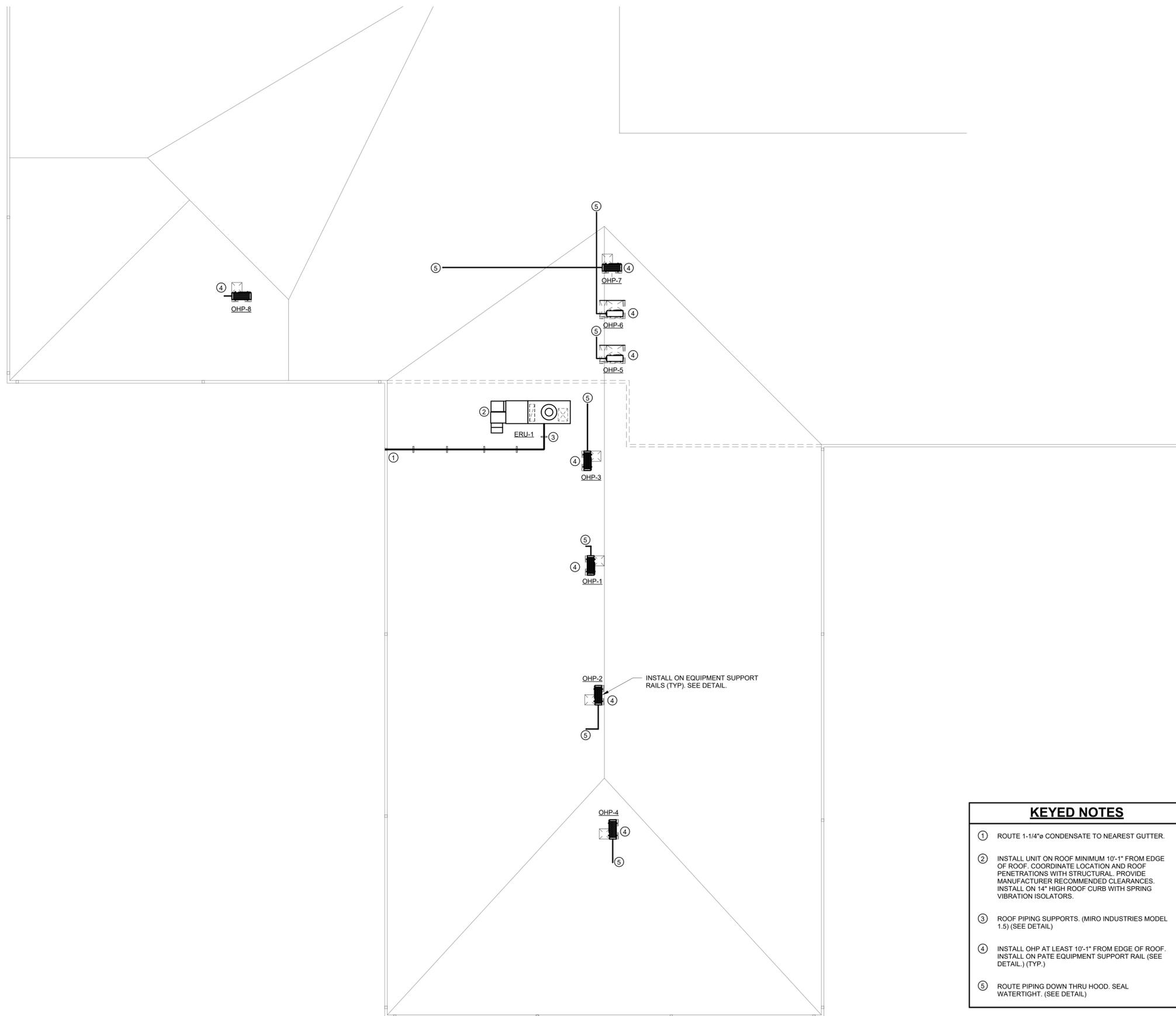
REVISIONS

JOB NO. 25-34

SHEET NO:

M2.3

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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)



1 MECHANICAL PIPING - ROOF PLAN - ALTERNATE

1/8" = 1'-0"



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

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
A	METALUX	24CGT5535C				CEILING	RECESSED	2-1/8"	
A (EM)	METALUX	24CGT5535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
A1 (EM)	METALUX	24CGT5535C EBLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
B	METALUX	24CGT4535C				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 EBLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
C	PATHWAY LIGHTING	6VFL2X-3000-35K-DA-6VLEDMD-SCLPF				CEILING	RECESSED	6"	
C (EM)	PATHWAY LIGHTING	6VFL2X-3000-35K-DA-6VLEDMD-SCLPF-EM	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTE 1
C1 (EM)	PATHWAY LIGHTING	6VFL2X-3000-35K-DA-6VLEDMD-SCLPF EBLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTES 1 & 4
D (EM)	PATHWAY LIGHTING	6VFL2X-3000-35K-DA-6VLEDMD-SCLPF-EM	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTE 1
F	MCCRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR				+9'	BRACKET		
F (EM)	MCCRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR-BBB	FURNISHED WITH FIXTURE			+9'	BRACKET		SEE NOTE 1
P1	NLS LIGHTING	VUE-34X-SP-192L-50-40K7-UNV-BLK				+20'	POLE		POLE #RSA20B5-E-BA 1 HEAD
P2	NLS LIGHTING	VUE-34X-SP-192L-50-40K7-UNV-BLK				+20'	POLE		POLE #RSA20B5-E-BA 2 HEADS AT 90°
X	SURE-LITES	EUX7-R-UNV				6" ABOVE DOOR	BRACKET		SEE NOTE 1

NOTES:

- FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS. UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING.
- VERIFY ALL FIXTURE COLORS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO SUBMITTALS.
- EQUAL FIXTURES BY LITHONIA, PARKER, COLUMBIA, AND DAYBRITE WILL BE CONSIDERED APPROVED EQUIVALS.
- FIXTURE TYPES A1(EM), B1(EM), AND C1(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

- SERVICE TO BUILDING IS 277/480 VOLTS, 3 PHASE, 4 WIRE.
- VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
- VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
- CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
- 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.
- CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
- FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
- 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.
- 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.
- ALL CONDUIT CONCEALED UNLESS SPECIFICALLY SHOWN EXPOSED.
- 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.
- 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.
- 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.)

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.

COLOR CODE FOR ELECTRICAL WIRING

- 277/480 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
PHASE A-BROWN
B-ORANGE
C-YELLOW
N-GRAY
- 120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
PHASE A-BLACK
B-RED
C-BLUE
N-WHITE
- GROUND-GREEN

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
MISC. AUXILIARIES	BROWN

ELECTRICAL SYMBOLS

	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 PTS362A-GRY WITH PT6STR PLUG TAIL CONNECTOR.
	WALL OUTLET - ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT65362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
	WALL OUTLET - ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT65362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
	WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR. MOUNT AT 6" ABOVE COUNTER.
	WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR. INSTALL #WUC10-CAGV WEATHERPROOF COVER. DEVICE SHALL BE LABELED AS "EXTRA DUTY".
	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)
	SWITCH OUTLET - FLUORESCENT DIMMER - LUTRON NOVA-T SERIES #NT-103P.
	SWITCH OUTLET - AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 - GREY.
	SWITCH OUTLET - AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 - GREY.
	SWITCH OUTLET - AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 - GREY.
	SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
	SWITCH OUTLET - AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221LC.
	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.
	EMPTY CONDUIT - 3/4".
	BRANCH CIRCUIT EXPOSED.
	CONDUIT RUN DOWN WALLS, CONCEALED
	CONDUIT RUN UP WALLS, CONCEALED
	MOTOR SHOWN Shp (TYPICAL) OR 40 AMPS (TYPICAL).
	EXHAUST FAN MOTOR - FRACTIONAL HORSEPOWER.
	MAGNETIC MOTOR STARTER.
	NON-FUSED DISCONNECT SWITCH. (RT - RAIN TIGHT).
	FUSED DISCONNECT SWITCH.
	ABOVE FINISHED FLOOR.
	VERIFY LOCATION.
	NATIONAL ELECTRICAL CODE.
	GROUND FAULT CIRCUIT INTERRUPTER
	WEATHER PROOF
	ISOLATED GROUND
	FIRE ALARM - SMOKE DETECTOR - SEE SPEC.
	FIRE ALARM - HEAT DETECTOR - SEE SPEC.
	FIRE ALARM - DUCT DETECTOR - SEE SPEC.
	FIRE ALARM - MANUAL PULL STATION - SEE SPEC.
	FIRE ALARM - STROBE LIGHT - SEE SPEC.
	FIRE ALARM - SPEAKER STROBE - SEE SPEC.
	FIRE ALARM CONTROL PANEL - EXISTING - SEE SPEC.
	SOUND SYSTEM CONSOLE - EXISTING BEING REPLACED - SEE SPEC.
	SOUND SYSTEM - CEILING MOUNTED SPEAKER - SEE SPEC.
	SOUND SYSTEM - CALL-IN SWITCH - SEE SPEC.
	SOUND SYSTEM - COMBINATION CLOCK/SPEAKER - SEE SPEC.
	SOUND SYSTEM - WALL CLOCK - SEE SPEC. (DF - DOUBLE FACE)
	WALL SWITCH WITH BUILT IN MOTION SENSOR - COOPER #OSW-P-0451-W WITH WALL PLATE
	CEILING MOUNTED MOTION DETECTOR - COOPER #OMC-P-1200-R
	MOTION SENSOR SWITCHPACK - COOPER #SP20-MV (INSTALLED ABOVE LAY-IN CEILING)
	MOTION SENSOR WIRING - LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)
	DATA CONDUIT - BELOW GRADE DATA CONDUIT WITH DATA CABLES (3/4" UNLESS OTHERWISE SPECIFIED)
	COMPUTER OUTLET - 3/4" CONDUIT WITH CABLING-SEE SPEC.
	COMPUTER OUTLET - 3/4" CONDUIT WITH CABLING-MOUNT 6" ABOVE COUNTER-SEE SPEC.
	CCTV SYSTEM - FUTURE CAMERA LOCATION - ABOVE CEILING SHALL BE 1 CAT 6 CABLE CONNTECTED TO MDF (IN 3/4" CONDUIT WHEN NOT ABOVE CEILING).

FIRE ALARM SYSTEM NOTES

- 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).
- 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.
- ALL WORK SHALL BE PERFORMED BY A CERTIFIED FIRE ALARM CONTRACTOR - SEE SPECS.

STEWART ENGINEERING ELECTRICAL CONSULTANTS	
P.O. Box 2233 (36202) 300 East 7th Street (36207) Anniston, Alabama Phone: 256/237-0891 Fax No.: 256/237-1077 Email: services@stewartengineering.org	
Engineer: J. Lance Junkin, P.E. Alabama Reg. 14817	Project Number: 25105

SHEET TITLE:
SCHEDULES, SYMBOLS,
AND NOTES



PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: NOVEMBER 7, 2025
REVISIONS:

JOB NO. **25-34**
SHEET NO:
E11
1 OF 6



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.

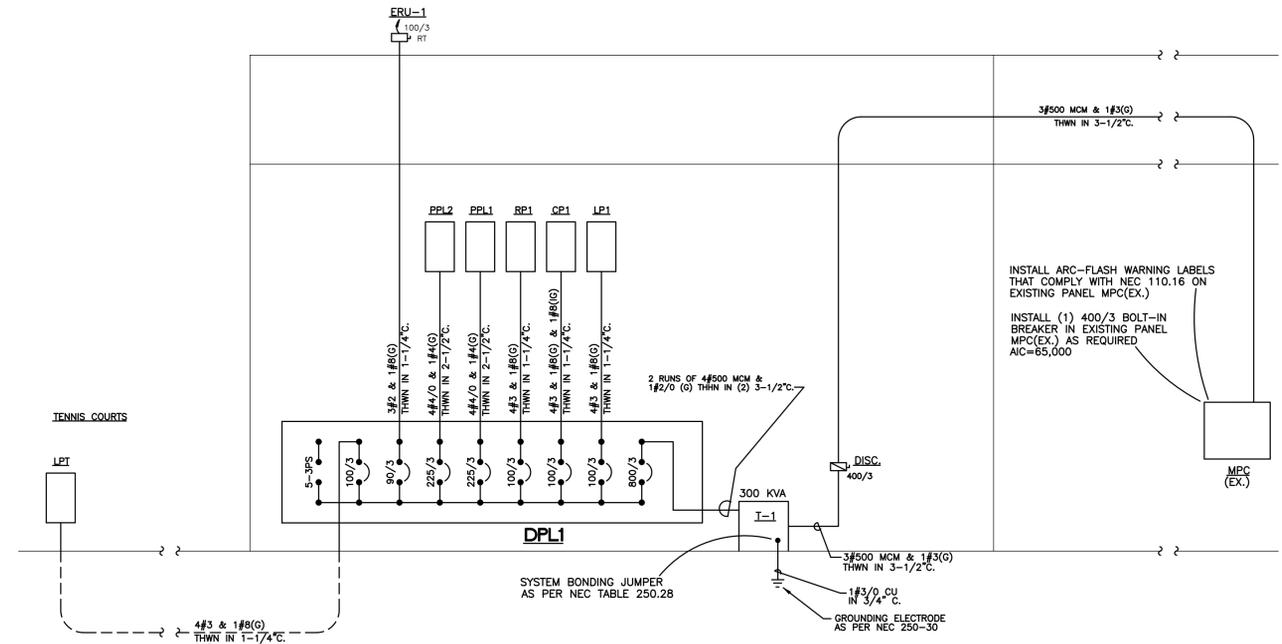
COPPER SIZE:	ALUMINUM SIZE:
3/0	250 MCM
4/0	300 MCM
350 MCM	500 MCM
500 MCM	750 MCM
600 MCM	900 MCM

CONTRACTOR SHALL INCREASE CONDUIT SIZES ACCORDINGLY TO MEET N.E.C. FILL REQUIREMENTS.

DRY TYPE TRANSFORMER SCHEDULE

MARK	SIZE	PRIMARY	SECONDARY	MANUFACTURER	CATALOG NUMBER	REMARKS
T-1	225 KVA	480V 3Ø DELTA	120/208V 3Ø, 4W, WYE	SQUARE D	225T3H	SEE NOTE 1

NOTES:
1. BOND TRANSFORMER LOWSIDE NEUTRAL TO THE TRANSFORMER CASE, TO THE "INCOMING" AND "OUTGOING" GROUND WIRES, AND TO GROUNDING ELECTRODE (AS PER NEC 250-30) AT EACH TRANSFORMER, USING #3/0 CU.



ELECTRICAL SINGLE LINE DIAGRAM
N.T.S.

THE CONTRACTOR SHALL ADD NEW DEVICES TO EXISTING FACP AS REQUIRED FOR A COMPLETE FIRE ALARM SYSTEM. THE FACP IS MONITORED AS REQUIRED.

INSTALL ARC-FLASH WARNING LABELS THAT COMPLY WITH NEC 110.16 ON EXISTING PANEL MPC(EX.)
INSTALL (1) 400/3 BOLT-IN BREAKER IN EXISTING PANEL MPC(EX.) AS REQUIRED AIC=65,000

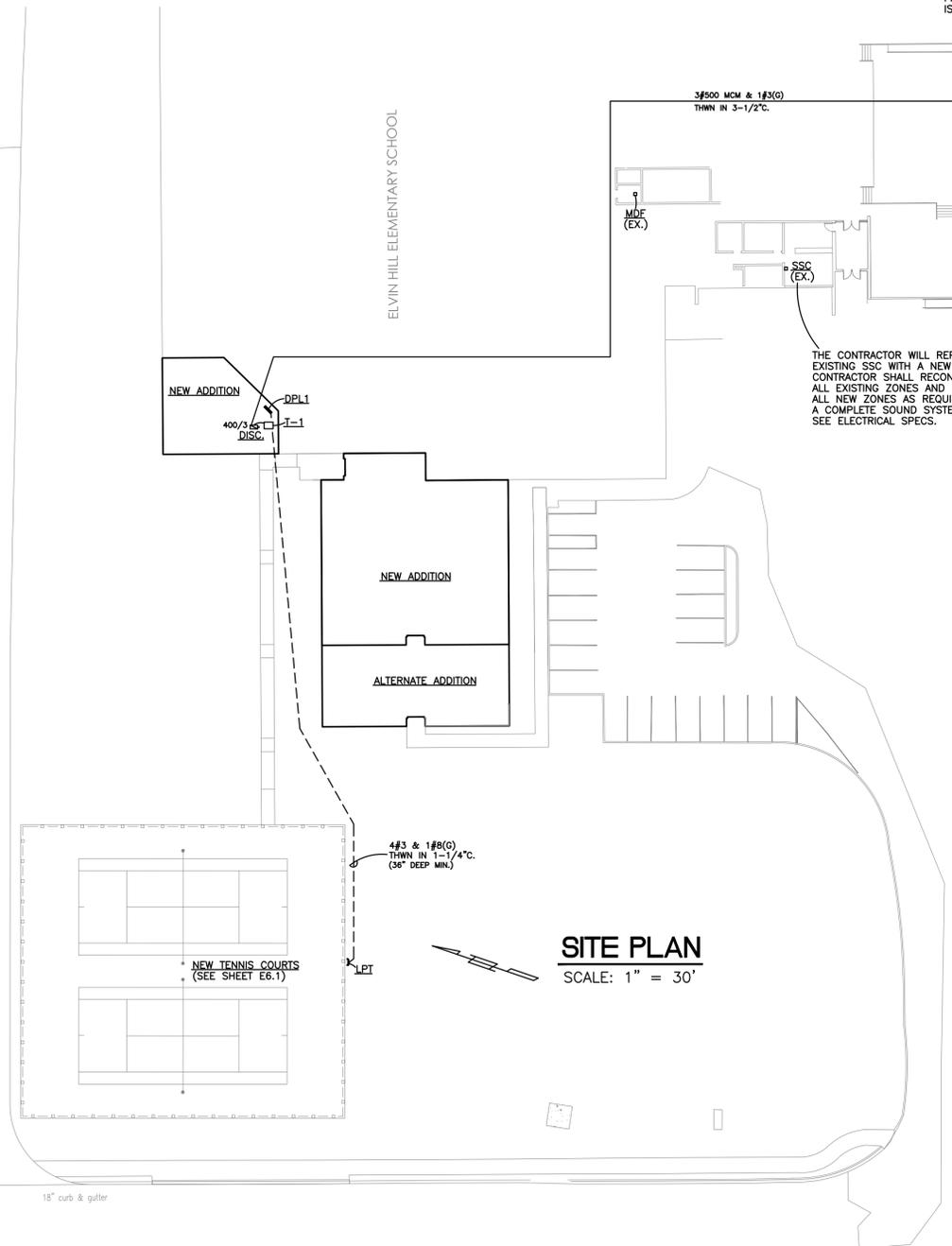
THE CONTRACTOR WILL REPLACE EXISTING SSC WITH A NEW SSC. CONTRACTOR SHALL RECONNECT ALL EXISTING ZONES AND CONNECT ALL NEW ZONES AS REQUIRED FOR A COMPLETE SOUND SYSTEM. SEE ELECTRICAL SPECS.

PANELBOARD SCHEDULE

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					
DPL1	I-LINE	M/B	800	120/208V 3Ø, 4W			1-90 4-100 2-225		5-3PS	BOTTOM	SURFACE	STORAGE	15,000	SEE NOTES 1, 2, & 4
LP1	NQOD	LUGS	100	120/208V 3Ø, 4W	7-20			6-20/1	17-1PS	BOTTOM	SURFACE	STORAGE	13,000	SEE NOTES 1, 2, & 4
RP1	NQOD	LUGS	100	120/208V 3Ø, 4W	19-20			6-20/1	5-1PS	TOP	RECESSED	CORRIDOR	10,000	SEE NOTES 1, 2, 3, & 4
CP1	NQOD	LUGS	100	120/208V 3Ø, 4W	14-20			6-20/1	10-1PS	TOP	RECESSED	CORRIDOR	10,000	SEE NOTES 1, 2, 3, & 4
PPL1	NQOD	LUGS	225	120/208V 3Ø, 4W		9-30	1-60	6-20/1	15-1PS	TOP	RECESSED	CORRIDOR	10,000	SEE NOTES 1, 2, 3, & 4
PPL2	NQOD	LUGS	225	120/208V 3Ø, 4W		2-25 3-30 5-40 1-60		6-20/1	14-1PS	BOTTOM	SURFACE	STORAGE	13,000	SEE NOTES 1, 2, & 4
LPT	NQOD	LUGS	M/B	120/208V 3Ø, 4W	3-20	3-20		6-20/1	15-1PS	BOTTOM	SURFACE	TENNIS COURTS	10,000	SEE NOTES 1, 2, & 4 NEMA 3R PANEL

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. ON ALL RECESSED PANELBOARDS, CONTRACTOR SHALL STUB (5) EMPTY 3/4" CONDUITS ABOVE LAY-IN CEILING.
4. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.

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-2009 (ARTICLE 130) AND NFPA 70-2008 (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).



SITE PLAN
SCALE: 1" = 30'

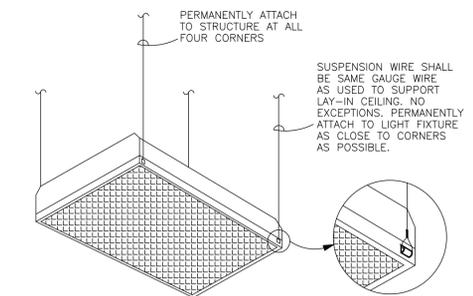
**STEWART ENGINEERING
ELECTRICAL CONSULTANTS**

P.O. Box 2233 (36202)
300 East 7th Street (36207)
Anniston, Alabama
Phone: 256/237-0891
Fax No.: 256/237-1077
Email: services@stewartengineering.org

Engineer:
J. Lance Junkin, P.E.
Alabama Reg. 14817

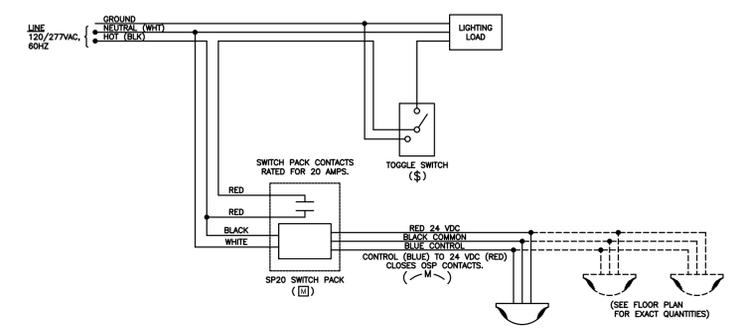
Project Number:
25105

18" curb & gutter

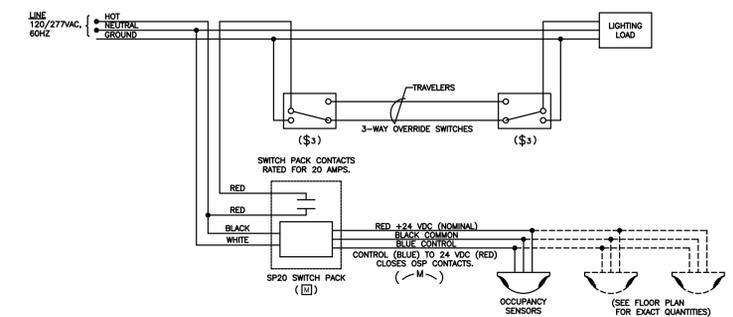


DETAIL - LIGHT FIXTURE SUPPORT
N.T.S.

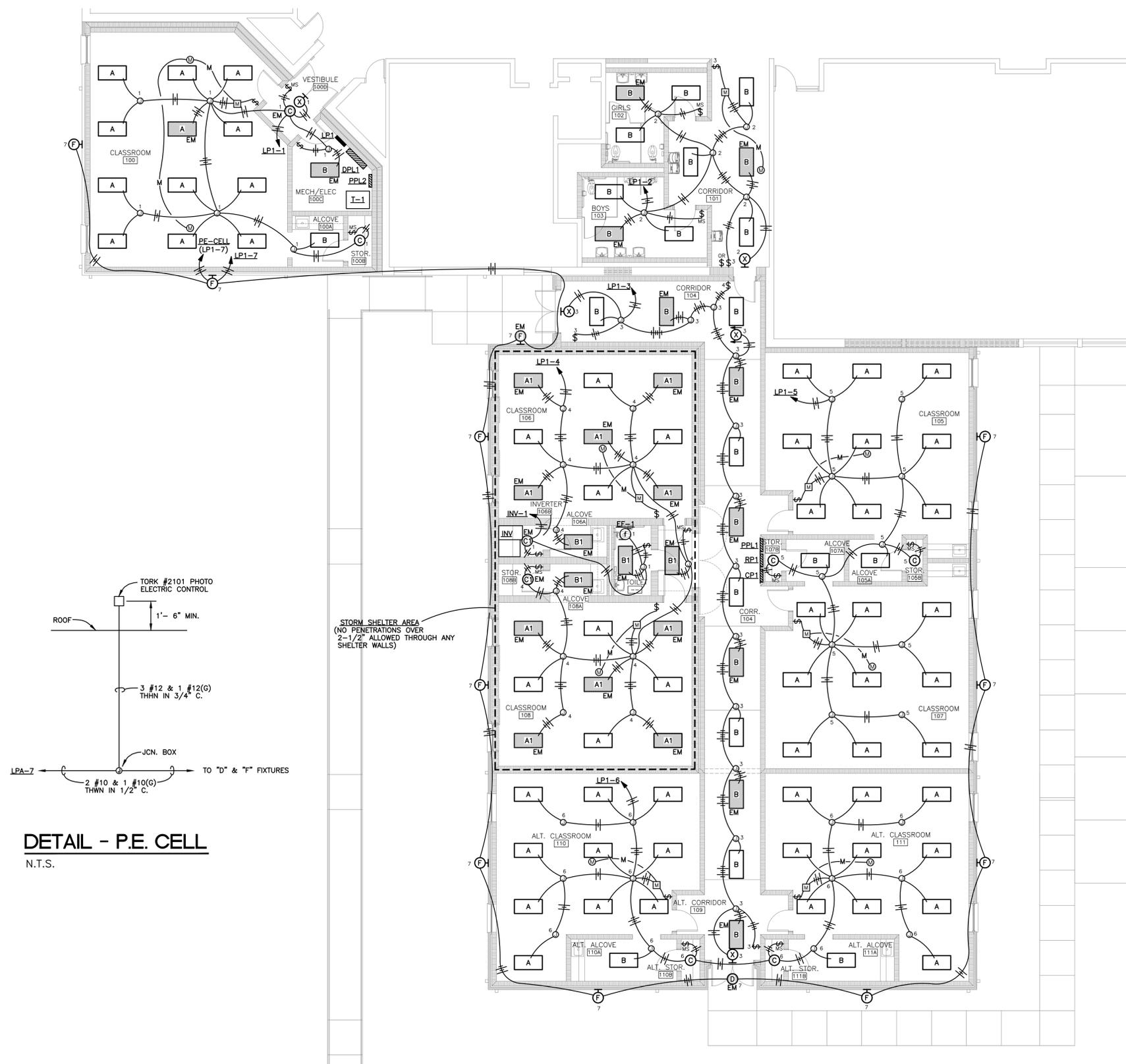
ENERGY CODE NOTES:
1. LIGHTING INSTALLED WITH ROOM CONTROLS SHALL HAVE THE REQUIRED CONNECTION TO THE WALL SWITCH AND MOTION SENSORS TO ACCOMPLISH PARTIAL-ON AND MANUAL-ON. ROOM CONTROLS AND WALL STATION SHALL ALSO HAVE CONNECTIONS FOR BI-LEVEL LIGHTING WHERE REQUIRED. VERIFY ALL CONTROLS WITH LIGHTING CONTROLS MANUFACTURER DURING SITE VISIT FROM FACTORY TRAINED REPRESENTATIVE.



OCCUPANCY SENSOR - 1 WAY
WIRING DIAGRAM - SINGLE POWER PACK APPLICATION
NOT TO SCALE

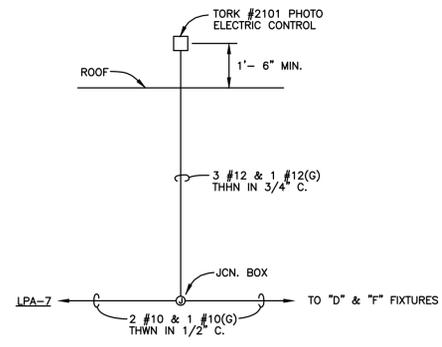


OCCUPANCY SENSOR - 3 WAY
USING POWER PACK SENSORS IN A 3-WAY SWITCHED CIRCUIT
NOT TO SCALE



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

NOTES:
1. ALL WIRING SHOWN FEEDING EXTERIOR FIXTURES SHALL BE #10 THWN.



DETAIL - P.E. CELL
N.T.S.

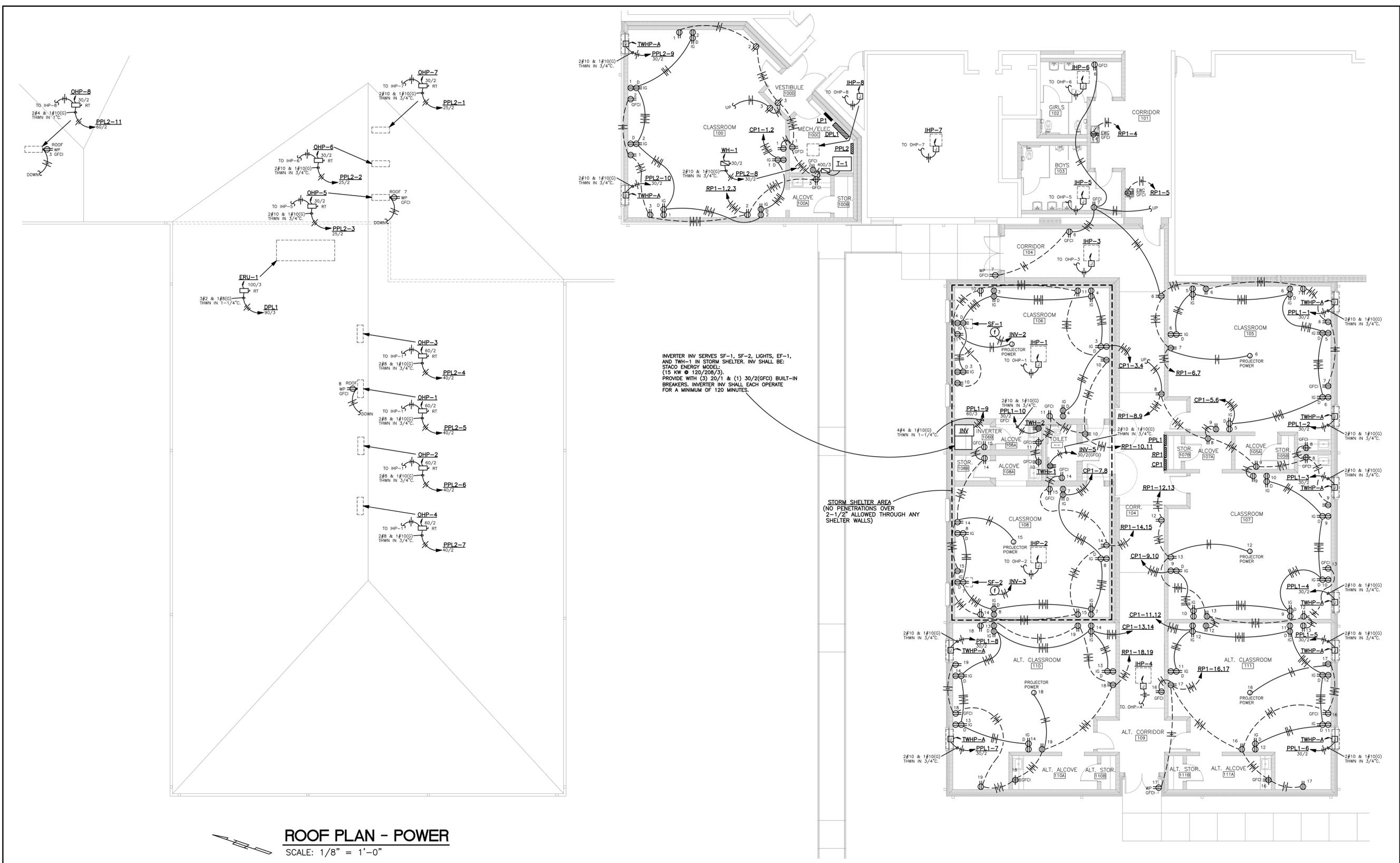
SHEET TITLE:
FLOOR PLAN -
LIGHTING



PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: NOVEMBER 7, 2025
REVISIONS:

STEWART ENGINEERING ELECTRICAL CONSULTANTS	
P.O. Box 2233 (36202) 300 East 7th Street (36207) Anniston, Alabama Phone: 256/237-0891 Fax No.: 256/237-1077 Email: services@stewartengineering.org	
Engineer: J. Lance Junkin, P.E. Alabama Reg. 14817	Project Number: 25105

JOB NO. **25-34**
SHEET NO:
E3.1
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ELECTRICAL CONSULTANTS**

P.O. Box 2233 (36202)
300 East 7th Street (36207)
Anniston, Alabama
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Alabama Reg. 14817

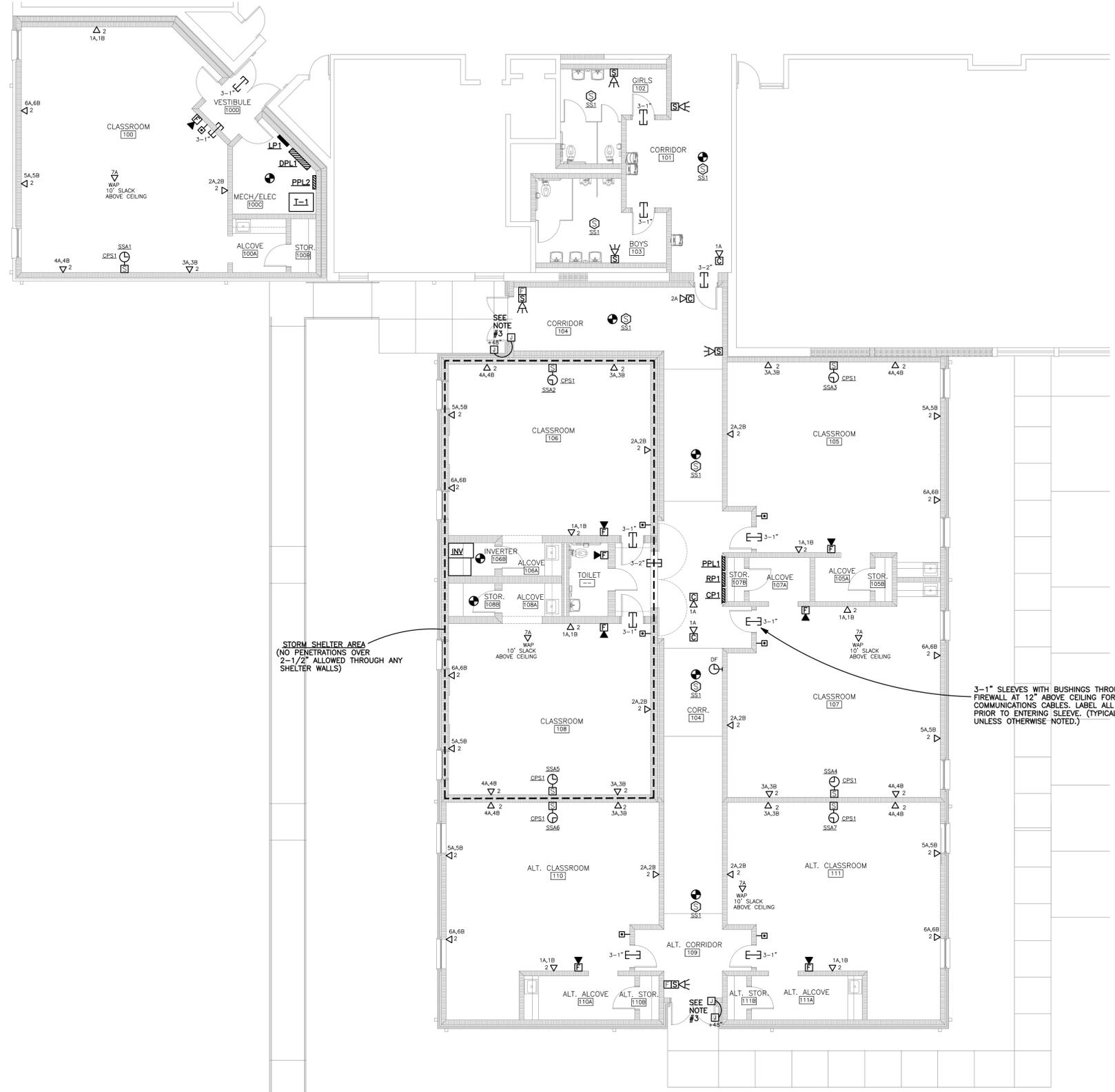
Project Number:
25105

SHEET TITLE:
FLOOR PLAN -
AUXILIARIES



PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: NOVEMBER 7, 2025
REVISIONS

JOB NO. **25-34**
SHEET NO:
E5.1
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AUXILIARY CIRCUIT LEGEND	
	SPEAKER - FED FROM COMMON ZONE SS1
	DATA OUTLET 2A (1 CAT. 6 CABLE PULLED TO JUNCTION BOX AND TERMINATED, LEAVE 12" SLACK ON EACH CABLE)
	SPEAKER/CLOCK - SPEAKER ON INDIVIDUAL ZONE SSA7 CLOCK FED FROM CPS1

OUTLET NUMBER:	ROOM NUMBER:
2A	105
IDE NUMBER:	PATCH PANEL/PORT #:
MDF	1/1

DETAIL - DATA CABLE LABEL
N.T.S.

- NOTES:
- LABEL ALL CABLES EVERY 50' AND AT EACH END.
 - EXACT LABEL METHOD SHALL BE COORDINATED WITH, AND APPROVED BY, ENGINEER PRIOR TO PURCHASE AND INSTALLATION.
 - IF ONLY ONE (1) OUTLET IN A ROOM, LABEL OUTLET AS 1A.
 - ROOM NUMBERS ON LABELS SHALL CORRESPOND TO FINAL ROOM NUMBERS IN FIELD (NOT NECESSARILY SAME AS ON CONSTRUCTION DRAWINGS).

STORM SHELTER AREA
(NO PENETRATIONS OVER
2-1/2" ALLOWED THROUGH ANY
SHELTER WALLS)

3-1" SLEEVES WITH BUSHINGS THROUGH
FIREWALL AT 12" ABOVE CEILING FOR
COMMUNICATIONS CABLES. LABEL ALL CABLES
PRIOR TO ENTERING SLEEVE. (TYPICAL
UNLESS OTHERWISE NOTED.)

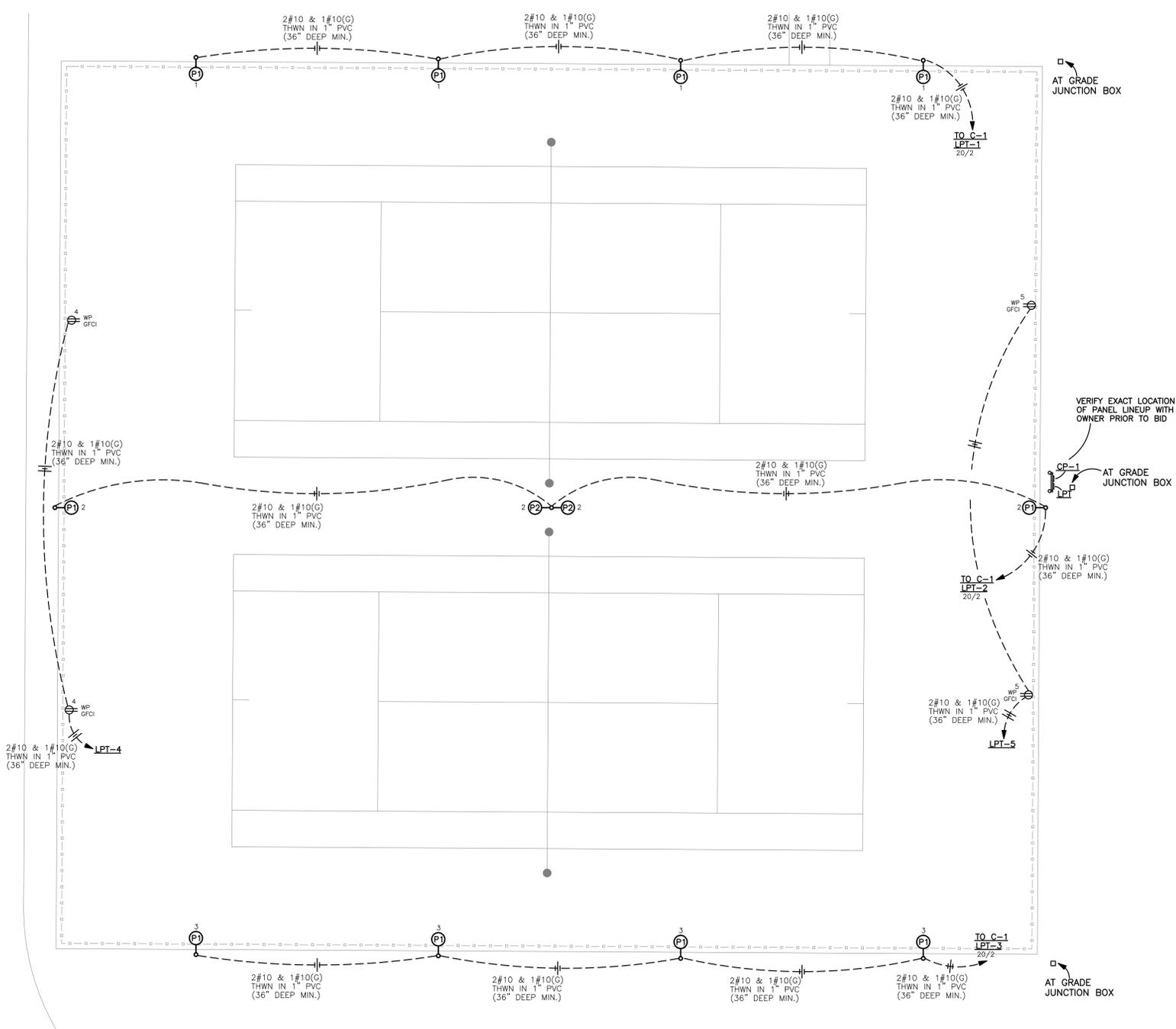
FLOOR PLAN - AUXILIARIES

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

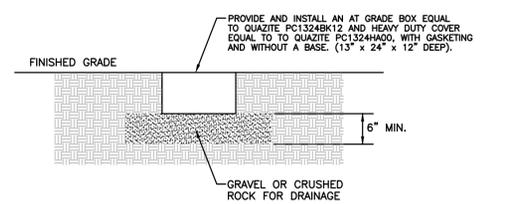
- NOTES:
- ALL COMPUTER OUTLETS SHOWN ON THIS PLAN ARE SERVED FROM MDF(EX.).
 - COORDINATE FINAL LOCATIONS OF ALL CEILING SPEAKERS, SMOKE DETECTORS, CAMERAS, ETC. TO AVOID CONFLICT WITH LIGHT FIXTURES AND MECHANICAL DIFFUSERS. PLACE THESE DEVICES AS CLOSE AS POSSIBLE TO LOCATION SHOWN ON THESE DRAWINGS. COORDINATE WITH FIRE ALARM SYSTEM MANUFACTURER WITH REGARD TO APPROPRIATE "MINIMUM" DISTANCE FROM DIFFUSERS.
 - 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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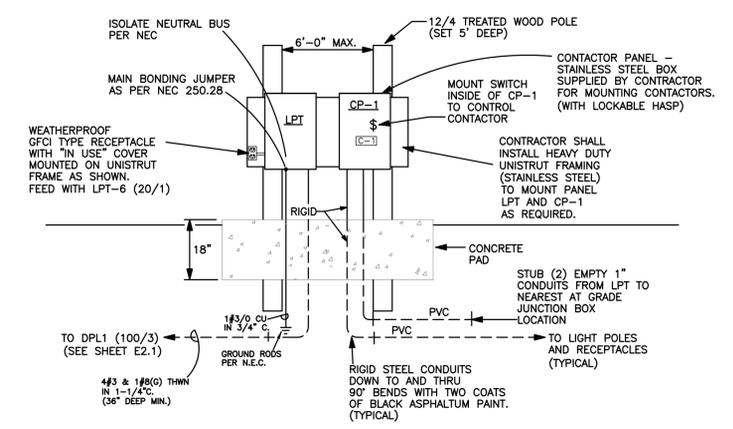




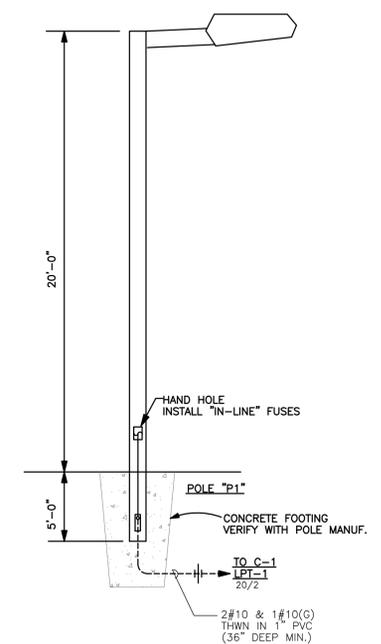
TENNIS COURT PLAN - LIGHTING
SCALE: 1/8" = 1'-0"



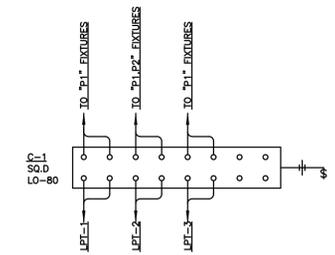
DETAIL - AT GRADE JUNCTION BOX
N.T.S.



ELECTRICAL SINGLE LINE DIAGRAM
N.T.S.



DETAIL - TENNIS COURT LIGHT POLE
N.T.S. (POLE "P2" SIMILAR)



DETAIL - CONTACTOR (C-1)
N.T.S.

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