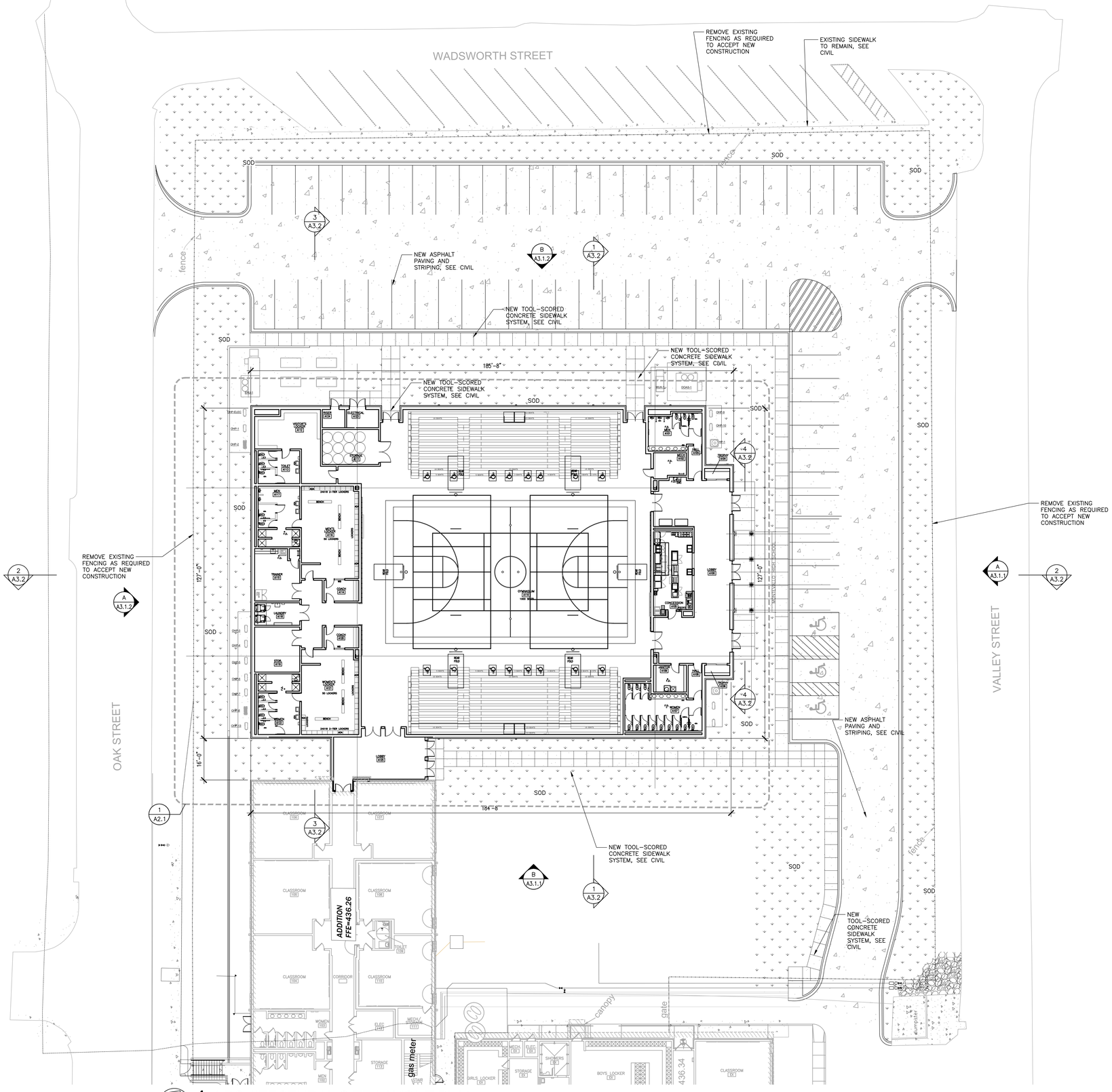
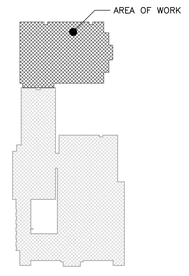


1 ARCHITECTURAL SITE LAYOUT PLAN

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



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ARCHITECTURAL SITE LAYOUT PLAN

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

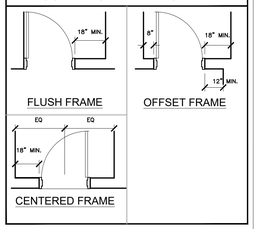
PROJ. MGR.: H. RASCO
DRAWN: ELM
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A1.0
1 OF 29

0 1" 2"

	WALL TIES @ 16" O.C.
CMU WALL	8" OR 12" CONCRETE MASONRY WALL SEE PLAN FOR WALL WIDTH CHANGES SEE LIFE SAFETY PLAN FOR FIRE RATING
SOUND ATTENUATION PARTITION	8" OR 12" CONCRETE MASONRY WALL WITH SOUND ATTENUATION
GYP. BD. METAL STUD PARTITION	3 5/8" METAL STUDS WITH 2 LAYERS OF 5/8" GYPSUM BOARD EACH SIDE

DOOR PLACEMENT LEGEND



DOOR FIRE RATING LEGEND

DOOR TYPE	(2)	NO RATING	
DOOR TYPE + A	(2A)	20 MINUTE RATING	
DOOR TYPE + B	(2B)	45 MINUTE RATING	
DOOR TYPE + C	(2C)	60 MINUTE RATING	
DOOR TYPE + D	(2D)	90 MINUTE RATING	
DOOR TYPE + E	(2E)	180 MINUTE RATING	

SYMBOLS LEGEND

DOOR TYPE / DOOR RATING / HARDWARE SYMBOL / HOLD OPEN		DOOR TYPE / DOOR RATING / HARDWARE SYMBOL	
DOOR TYPE / DOOR RATING / HARDWARE SYMBOL / ACCESS CONTROL		DOOR TYPE / DOOR RATING / HARDWARE SYMBOL / MANUAL HOLD OPEN	
DOOR TYPE / DOOR RATING / HARDWARE SYMBOL / ROUGH IN ELECTRICAL		SECT. MARK / SHEET NUMBER	
ELEV. MARK / SHEET NUMBER		ELEV. MARK / SHEET NUMBER / INT. ELEVATION	
NEW DOOR AND SWING		EXTERIOR WINDOW	
EWC ELECTRIC WATER COOLER		STOREFRONT	
TB TACK BOARD		INTERIOR WINDOW	
MB MARKER BOARD		AREA OF CONCRETE	
FEC RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER		F.D. FLOOR DRAIN	
A200 ROOM NUMBER		CJ CONTROL JOINT	
EJ EXPANSION JOINT		WA WIND ANGLE	
FE SURFACE MOUNT FIRE EXTINGUISHER			

LATHAN McKEE ARCHITECTS

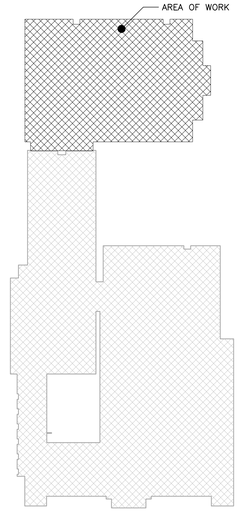
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PARTIAL FLOOR PLAN

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

PROJ. MGR.:	H. RASCO
DRAWN:	--
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
A2.1
2 OF 29



KEY PLAN
SCALE: N.T.S.

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

WALL TYPE LEGEND

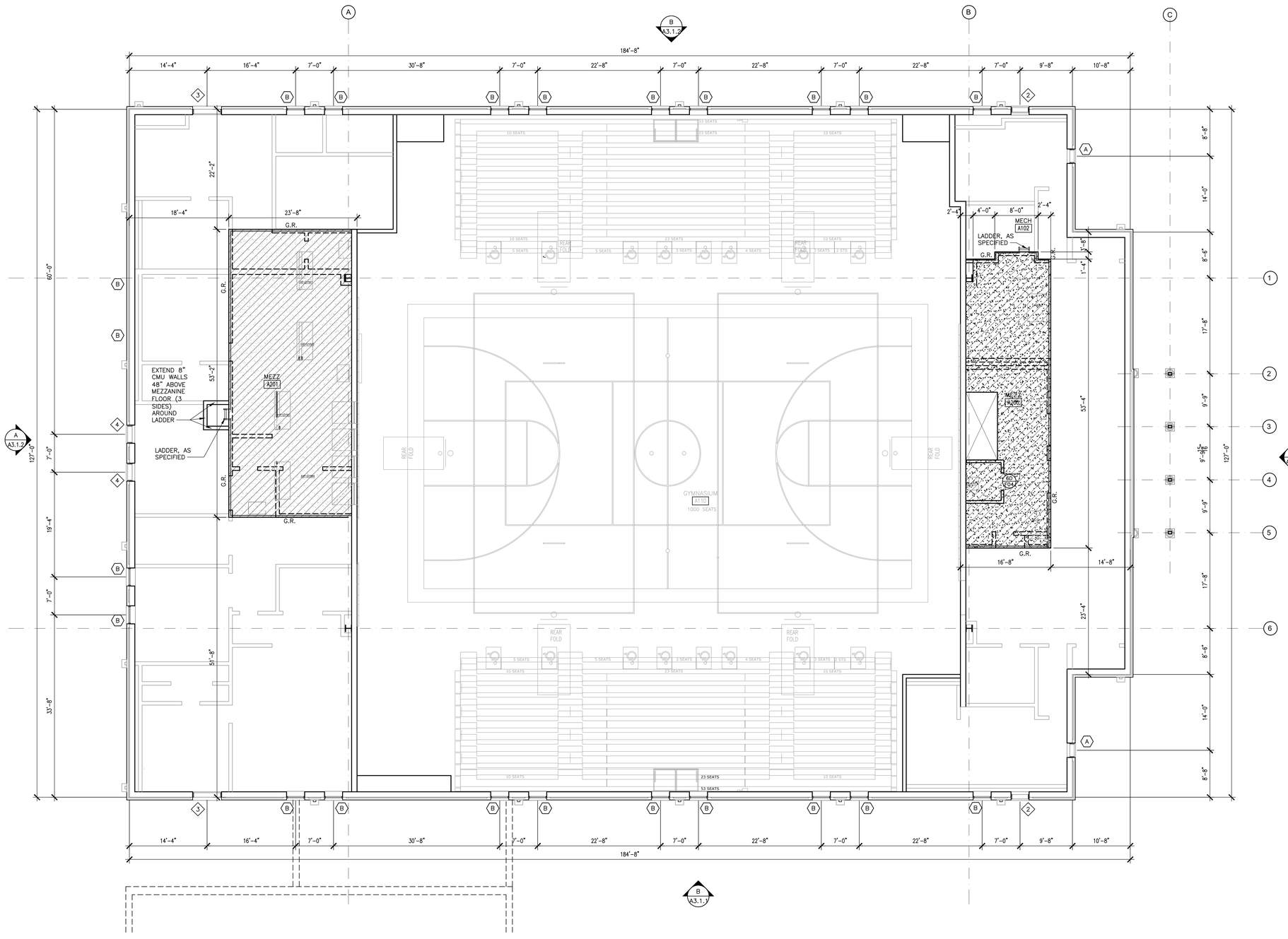
EXTERIOR WALL	NEW 4" BRICK VENEER W/ AIR SPACE AND RIGID INSULATION ON REINFORCED CMU WITH DAMPPROOFING, PROVIDE BRICK WALL TIES @ 16" O.C.
CMU WALL	8" OR 12" CONCRETE MASONRY WALL SEE PLAN FOR WALL WIDTH CHANGES SEE LIFE SAFETY PLAN FOR FIRE RATING
SOUND ATTENUATION PARTITION	8" OR 12" CONCRETE MASONRY WALL WITH SOUND ATTENUATION
GYP. BD. METAL STUD PARTITION	3.5/8" METAL STUDS WITH 2 LAYERS OF 5/8" GYPSUM BOARD EACH SIDE

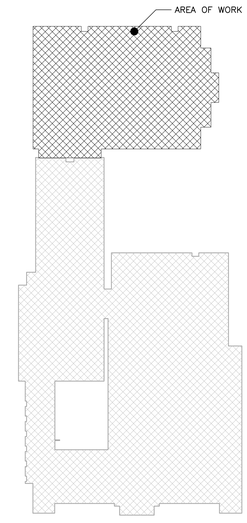
DOOR FIRE RATING LEGEND

DOOR TYPE	(2)	NO RATING
DOOR TYPE + A	(2A)	20 MINUTE RATING
DOOR TYPE + B	(2B)	45 MINUTE RATING
DOOR TYPE + C	(2C)	60 MINUTE RATING
DOOR TYPE + D	(2D)	90 MINUTE RATING
DOOR TYPE + E	(2E)	180 MINUTE RATING

SYMBOLS LEGEND

TC / A — DOOR TYPE, DOOR RATING, HARDWARE SYMBOL, HOLD OPEN	TC / A — DOOR TYPE, DOOR RATING, HARDWARE SYMBOL
TC / A — DOOR TYPE, DOOR RATING, HARDWARE SYMBOL, ACCESS CONTROL	TC / A — DOOR TYPE, DOOR RATING, HARDWARE SYMBOL, MANUAL HOLD OPEN
TC / A — DOOR TYPE, DOOR RATING, HARDWARE SYMBOL, ROUGH IN ELECTRICAL	1 / A1.1 — SECT. MARK, SHEET NUMBER
A / A1.1 — ELEV. MARK, SHEET NUMBER	5 / A5.1 — ELEV. MARK, SHEET NUMBER, INT. ELEVATION
NEW DOOR AND SWING	A — EXTERIOR WINDOW
EWC — ELECTRIC WATER COOLER	1 — STOREFRONT
TB — TACK BOARD	A — INTERIOR WINDOW
MB — MARKER BOARD	AREA OF CONCRETE
FEC — RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER	F.D. — FLOOR DRAIN
A200 — ROOM NUMBER	CJ — CONTROL JOINT
EJ — EXPANSION JOINT	WA — WIND ANGLE
FE — SURFACE MOUNT FIRE EXTINGUISHER	





1 PARTIAL ROOF PLAN

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

KEY PLAN

SCALE: N.T.S.

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MEZZANINE FLOOR PLAN

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

PROJ. MGR.: H. RASCO
DRAWN: ELM
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A2.2
3 OF 29

B TPO ROOF SCOPE OF WORK

1. PROVIDE TAPERED POLYISOCYANURATE INSULATION SYSTEM WITH 5" MINIMUM START FULLY ADHERED IN MANUFACTURER'S RECOMMENDED ADHESIVE AS SPECIFIED.
2. PROVIDE COVER BOARD FULLY ADHERED IN MANUFACTURER'S APPROVED SEALANT AS SPECIFIED.
3. PROVIDE ICE AND WATER SHIELD ALONG PARAPET WALLS AS INDICATED IN SPECIFICATIONS.
4. PROVIDE TPO ROOFING SYSTEM AS SPECIFIED. INSTALL IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE FLASHING AS REQUIRED AT ALL MECHANICAL, PLUMBING, AND ELECTRICAL PENETRATIONS WHETHER INDICATED OR NOT. MAKE ALL PENETRATIONS WEATHER TIGHT COORDINATE WITH ENGINEERING.
6. PROVIDE PREFINISHED SHEET METAL AND FLASHING COMPONENTS INCLUDING: EDGE METAL, PIPE FLASHING, EAVE DRIPS, COPING CAPS, REGLET FLASHING, ETC.

A NEW STANDING SEAM ROOF SCOPE OF WORK

1. PROVIDE ROOF DECKING SYSTEM AS INDICATED BY STRUCTURAL.
2. PROVIDE BLOCKING, FASCIA BOARDS, ETC. AS INDICATED AND REQUIRED.
3. PROVIDE ICE AND WATER SHIELD IN ALL VALLEYS, PERIMETERS, AND ALONG PARAPET WALLS REGARDLESS OF SLOPE AS INDICATED IN SPECIFICATIONS.
4. PROVIDE 1" POLYISO INSULATION FULLY ADHERED IN MANUFACTURER'S APPROVED ADHESIVE AS SPECIFIED.
5. PROVIDE STANDING SEAM ROOFING SYSTEM AS SPECIFIED. INSTALLED IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
6. PROVIDE PREFINISHED METAL FLASHING SYSTEM AT CONNECTOR TO THE EXISTING BUILDING AS REQUIRED.

ROOF LEGEND

DETAIL NUMBER / ROOF DETAIL MARKER / SHEET NUMBER

DIRECTION OF DOWNWARD SLOPE (1/4:12) / ROOF SLOPE MARKER / RISE: RUN

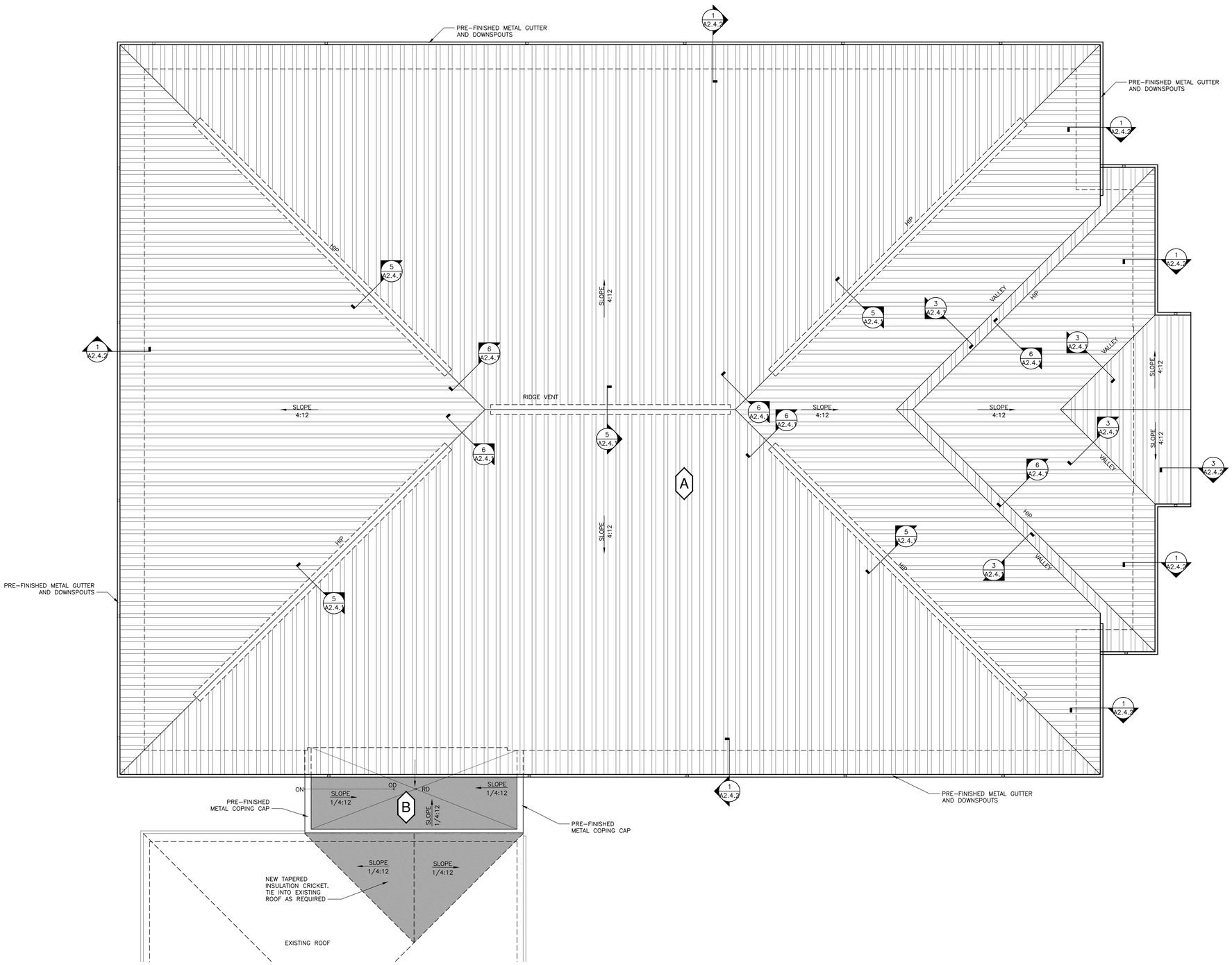
A — NEW ASPHALT SHINGLE ROOF SYSTEM

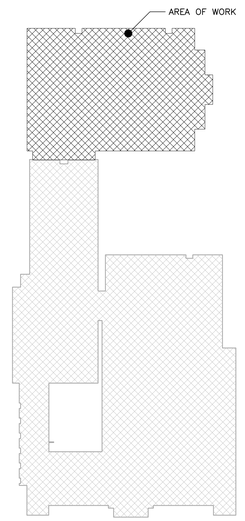
B — NEW TPO ROOFING SYSTEM

DS	DOWNSPOUT	N.I.C.	NOT IN CONTRACT
G	GUTTER	PV	PLUMBING VENT
GEJ	GUTTER EXPANSION JOINT	SB	SPLASH BLOCK
BT	BOOT	RD	ROOF DRAIN
EJ	EXPANSION JOINT	OD	OVERFLOW DRAIN
		ON	OVERFLOW NOZZLE

GENERAL ROOF NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO BIDDING.
2. DO NOT SCALE DRAWINGS.
3. CONTRACTOR SHALL FIELD VERIFY QUANTITY, TYPE, AND LOCATION OF ALL ROOF PENETRATIONS PRIOR TO BIDDING.
4. VERIFY ALL BUILDING UTILITIES, PLUMBING & ELECTRICAL SERVING ROOF TOP EQUIPMENT PRIOR TO START OF WORK. SHOULD EXISTING UTILITIES POSE A SAFETY THREAT OR INTERFERE WITH THE PERFORMANCE OF THE WORK, THE CONTRACTOR SHALL TEMPORARILY REMOVE AND REPLACE, IN SCHEDULED COORDINATION WITH THE BUILDING OWNER, TO PROVIDE WORK IN PROXIMITY AND ENDEAVOR TO MINIMIZE BUILDING UTILITY DOWN-TIME. ROOF-TOP EQUIPMENT SHALL REMAIN FUNCTIONAL PER ORIGINAL CONDITION UPON COMPLETION OF THE WORK.
5. NEW WORK SHALL ALIGN/ BLEND WITH AND TIE TO EXISTING REMAINING WORK AS IF PROVIDED ORIGINALLY.
6. ALL MATERIALS SHALL BE NEW EXCEPT WHERE NOTED OTHERWISE.
7. DO NOT CONCENTRATE MATERIAL LOADS ON THE EXISTING ROOF.
8. ASSUME THE ADJACENT BUILDING WILL BE OCCUPIED AND MUST BE MAINTAINED OPERATIONAL; MAINTAIN TRAFFIC FLOW AND AVOID DISRUPTIONS TO THE OCCUPANTS DURING THE WORK.
9. DO NOT IMPAIR SCHOOL OPERATIONS WITH ROOFING OPERATION/COORDINATE ANY PLANNED OUTAGES, DO NOT BLOCK EXITS, ETC.
10. ENSURE MINIMUM INTERFERENCE WITH THE DAILY OPERATIONS OF THE FACILITY; MAINTAIN CLEAR EXITS, SIDEWALKS, & DRIVES. REMOVE OR CONTAIN DEBRIS DAILY. COORDINATE TO AVOID DISRUPTION OF THE OCCUPANT'S SPECIAL EVENTS. COORDINATE DELIVERY SCHEDULE TO AVOID TRAFFIC CONFLICT WITH THE OCCUPANTS.
11. PERFORM THE WORK SYSTEMATICALLY AS REQUIRED TO PROTECT EXISTING BUILDING INTERIOR AND CONTENTS FROM WEATHER DAMAGES AND THEFT INTRUSION.
12. MAINTAIN THE EXISTING BUILDING DRIED- IN DAILY AS REQUIRED TO FULLY KEEP RAIN FROM ENTERING, REGARDLESS OF FAVORABLE WEATHER FORECASTS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WEATHER TIGHTNESS. GC SHALL INSPECT AND ACCEPT ALL SUBSTRATE AND PENETRATION CONDITIONS PRIOR TO COMMENCING WITH REROOFING WORK.
14. DOWNSPOUTS ARE INDICATED ON THE ROOF PLAN IN GENERAL LOCATION, VERIFY QUANTITY AND EXACT LOCATION WITH THOSE INDICATED ON FLOOR PLANS AND ELEVATIONS.
15. PROTECT EXISTING LANDSCAPING AND GROUNDS TO REMAIN.
16. REMOVE AND LEGALLY DISPOSE OF ALL CONSTRUCTION DEBRIS FROM ROOF AND GROUNDS DAILY.
17. PROVIDE CLEAN-UP AND CORRECT ANY DAMAGES TO EXISTING BUILDING AND GROUNDS; MAGNET SWEEP THE GROUNDS THOROUGHLY UPON DEMOLITION AND AGAIN UPON COMPLETION OF WORK.
18. DO NOT STORE MATERIALS ON ROOF.
19. PROVIDE CRICKET ON UP-SLOPE SIDE OF ALL CURBS OVER 30".
20. ALL ROOF PENETRATIONS SHALL BE MADE WEATHERTIGHT WITH SYSTEM COMPATIBLE FLASHING.
21. ALL CURBS ARE MIN. 8" ABOVE ROOFING SYSTEM.





1 PARTIAL ROOF PLAN

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

KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

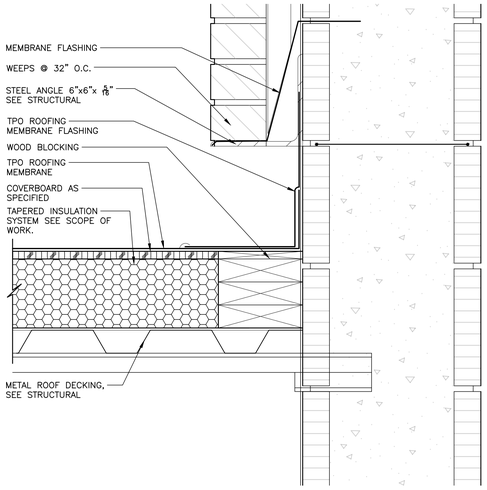
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE: PARTIAL ROOF PLAN

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

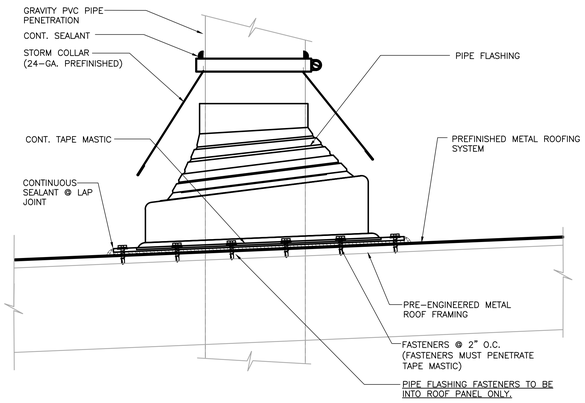
PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33
SHEET NO: A2.3
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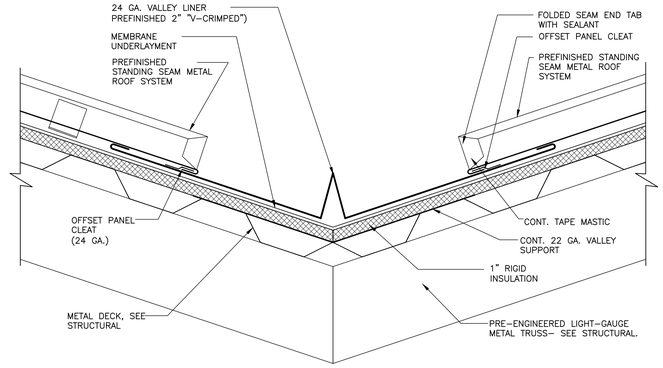
1 WALL TO ROOF FLASHING

SCALE: 3" = 1'-0"



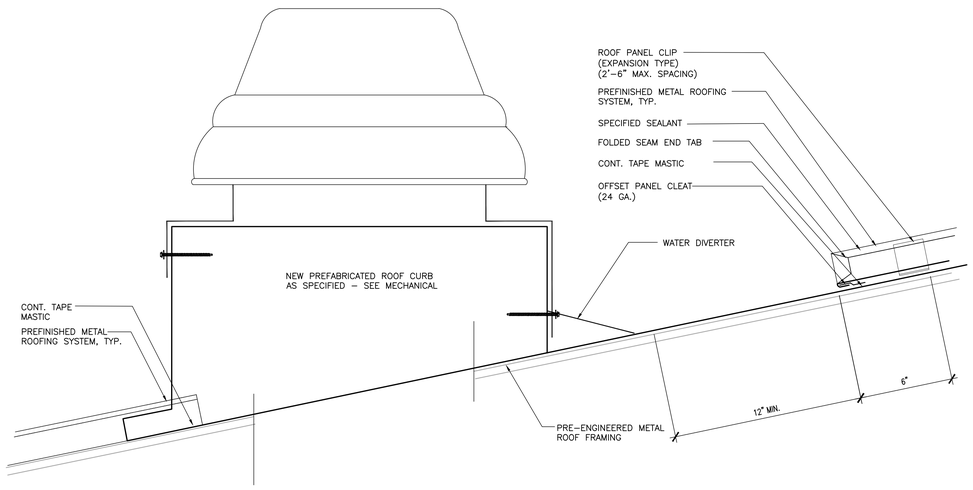
2 PIPE FLASHING

SCALE: 3" = 1'-0"



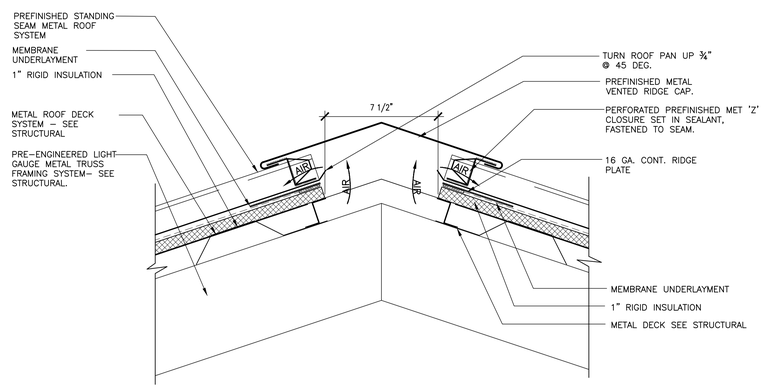
3 VALLEY FLASHING

SCALE: 3" = 1'-0"



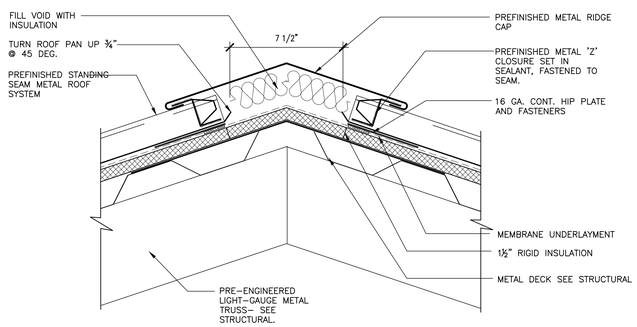
4 EQUIPMENT FLASHING

SCALE: 3" = 1'-0"



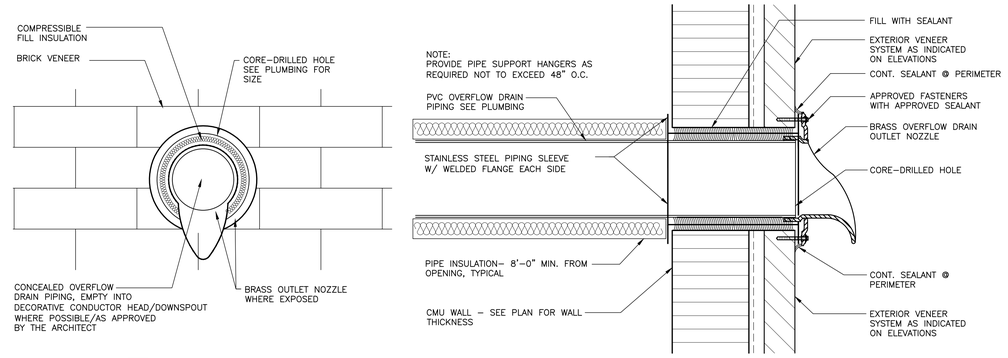
5 RIDGE VENT DETAIL

SCALE: 3" = 1'-0"



6 HIP FLASHING DETAIL

SCALE: 3" = 1'-0"



7 OVERFLOW DRAIN DETAIL

SCALE: 3" = 1'-0"

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

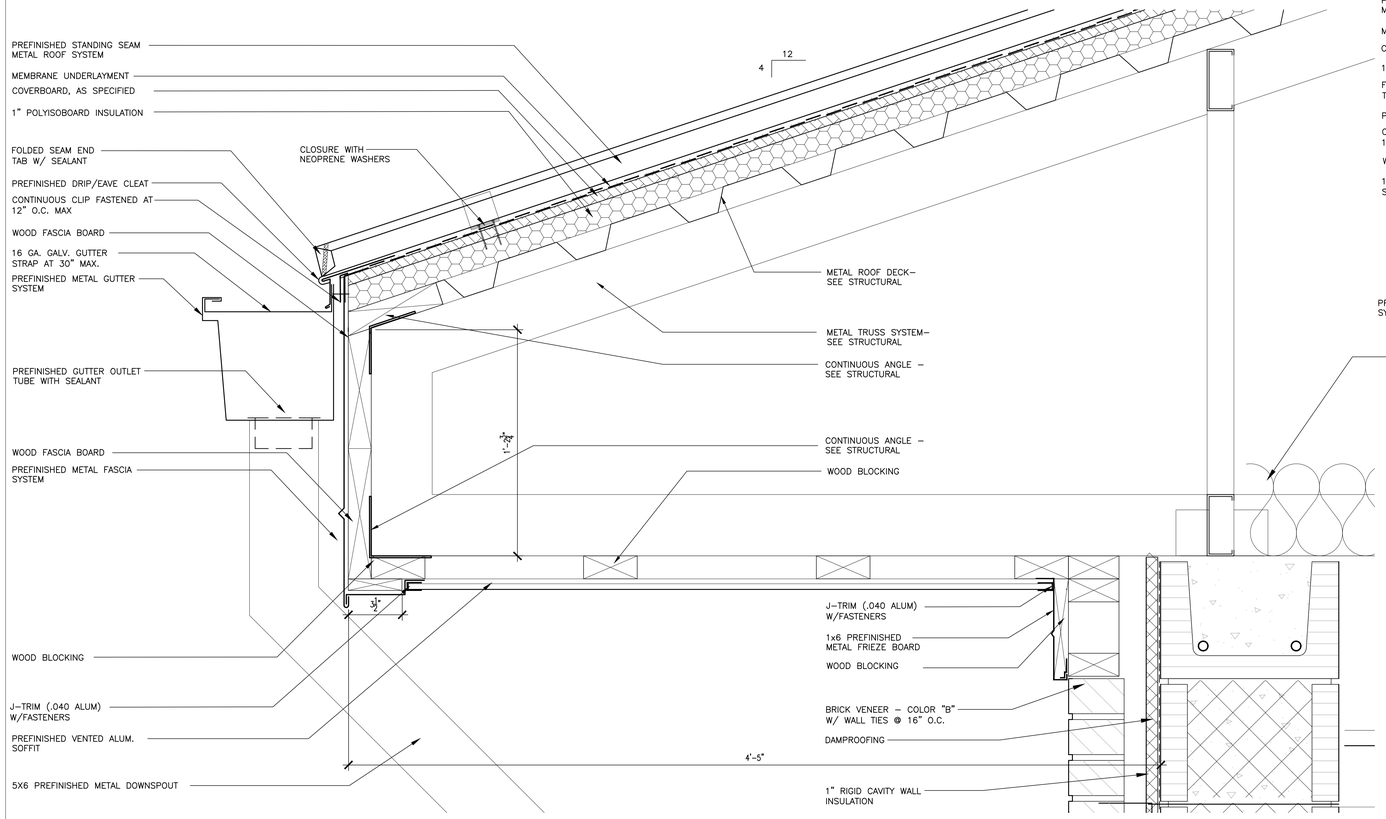
SHEET TITLE:
TYPICAL ROOF DETAILS

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

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

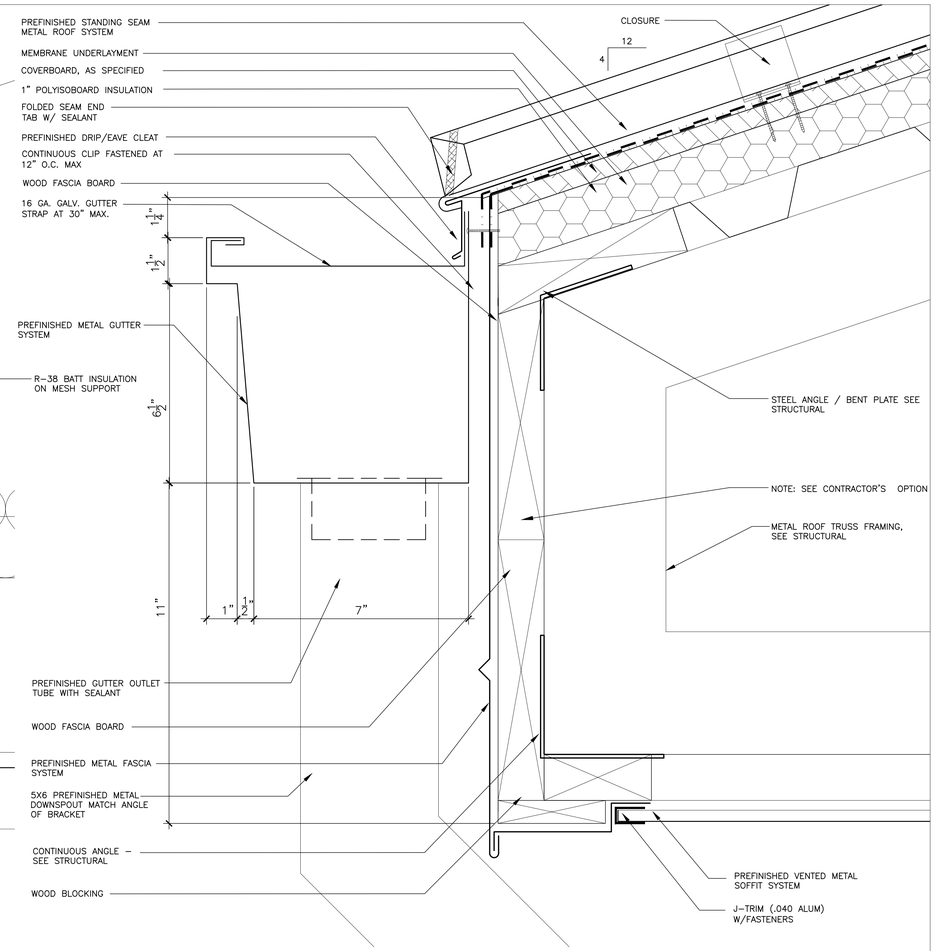
JOB NO. 25-33
SHEET NO:
A2.4.1
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0 1" 2"



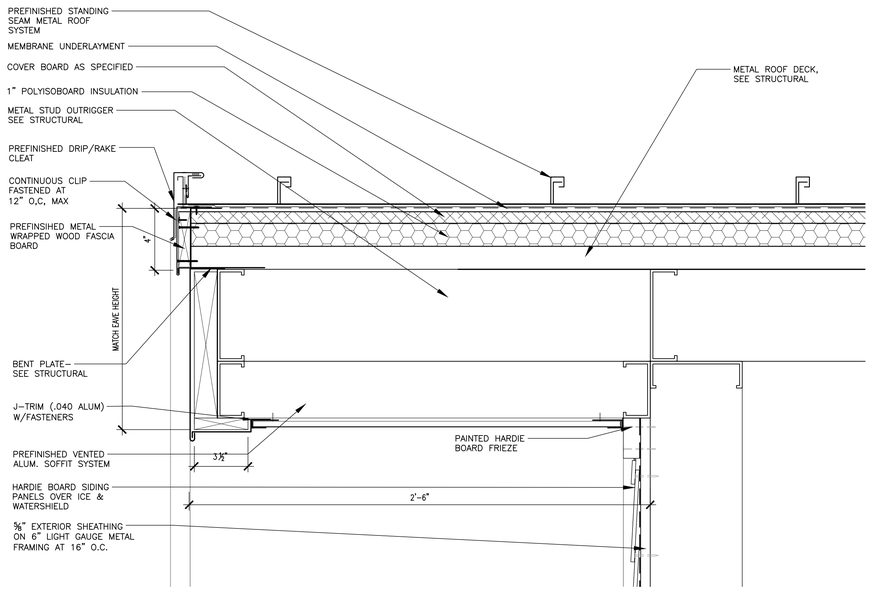
1 ROOF DETAIL

SCALE: 3" = 1'-0"



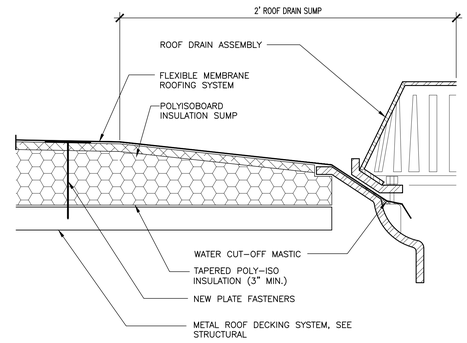
2 ROOF DETAIL

SCALE: 6" = 1'-0"



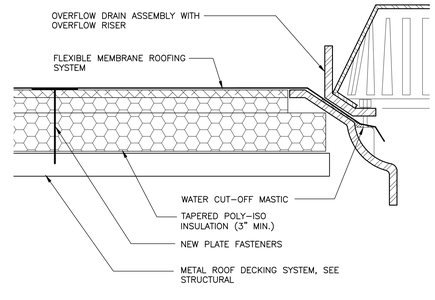
3 ROOF DETAIL

SCALE: 3" = 1'-0"



4 ROOF DRAIN DETAIL

SCALE: 3" = 1'-0"



5 OVERFLOW ROOF DRAIN DETAIL

SCALE: 3" = 1'-0"

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF DETAILS

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

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

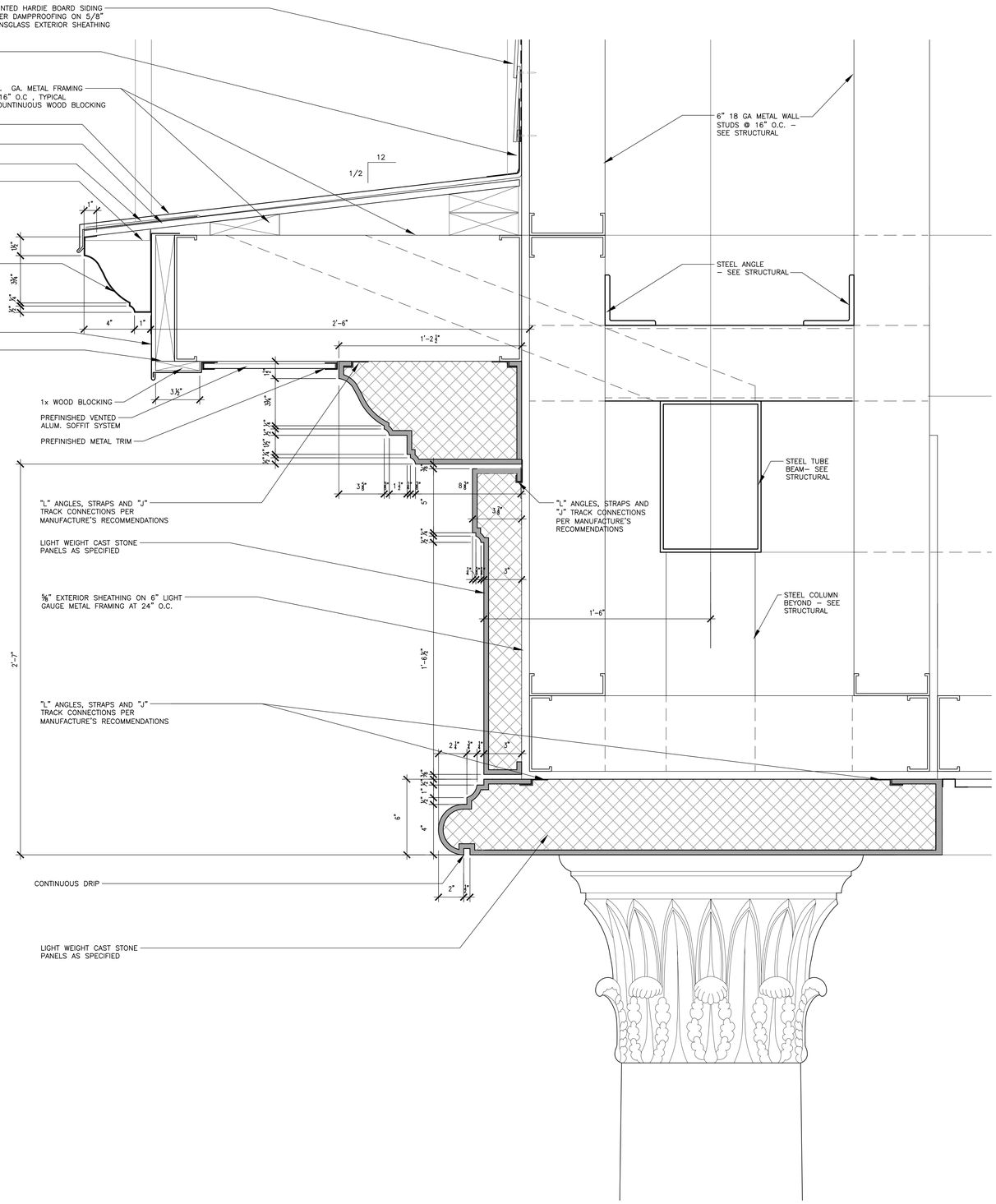
JOB NO. 25-33

SHEET NO:

A2.4.2

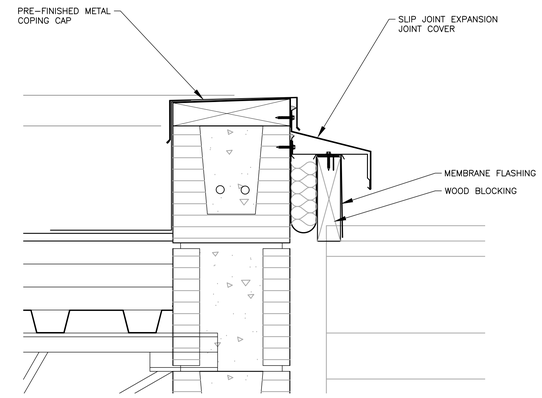
6 OF 29

0 1" 2"



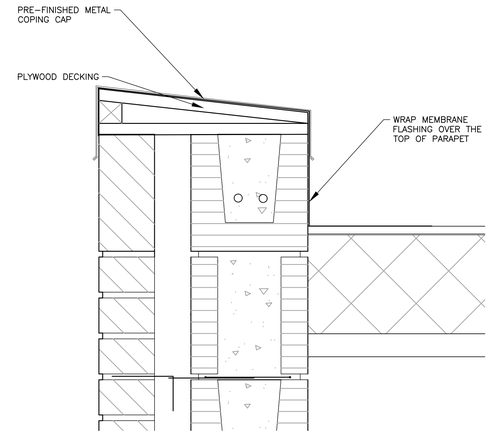
1 ROOF DETAIL

SCALE: 3" = 1'-0"



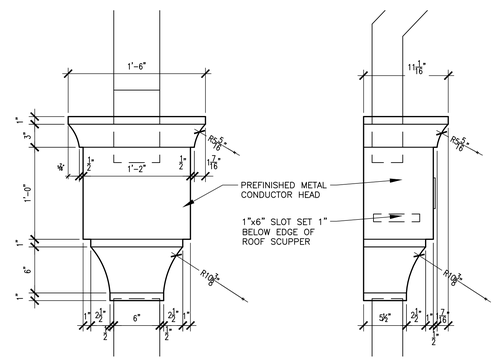
2 PARAPET DETAIL

SCALE: 3" = 1'-0"



3 PARAPET DETAIL

SCALE: 3" = 1'-0"



4 CONDUCTOR HEAD DETAIL

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
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SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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JOB NO. 25-33

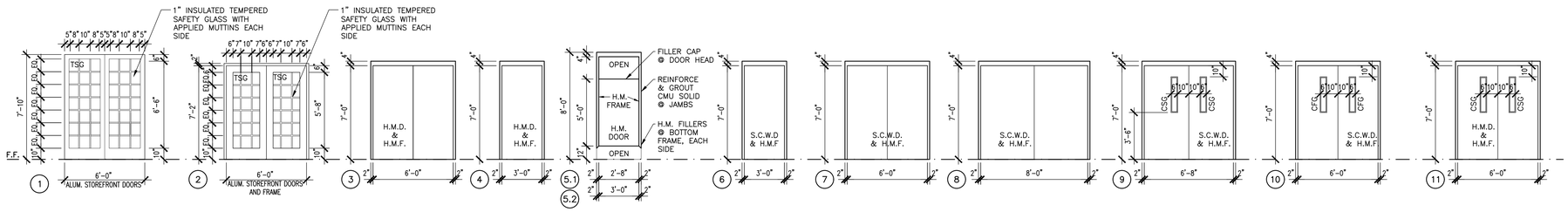
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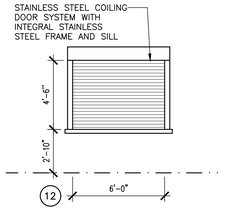
A2.4.3

7 OF 29

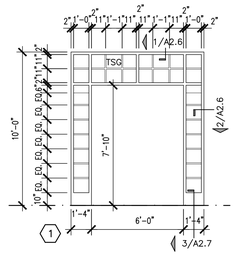
0 1" 2"

DOOR AND WINDOW LEGEND	
AL	PREFINISHED ALUMINUM LOUVER SYSTEM AS SPECIFIED
CSG	1/4" THICK CLEAR TEMPERED SAFETY GLASS.
CFG	CLEAR FIRE RATED SAFETY GLASS AS SPECIFIED.
TSG	1" TINTED INSULATED LOW-E TEMPERED SAFETY GLASS AS SPEC.
SCWD	SOLID CORE WOOD DOOR
HMD	HOLLOW METAL DOOR
HMF	HOLLOW METAL FRAME
ASE	PREFINISHED ALUMINUM STOREFRONT ENTRANCE SYSTEM AS SPECIFIED.
ASF	PREFINISHED ALUMINUM STOREFRONT FRAME SYSTEM AS SPECIFIED.

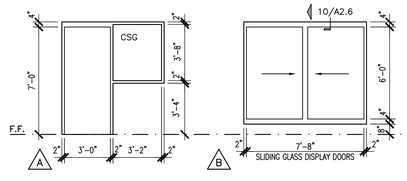




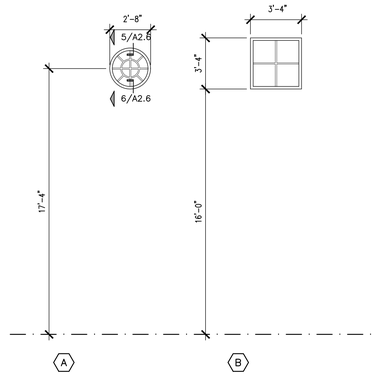
1 DOOR SCHEDULE
SCALE: 1/4" = 1'-0"



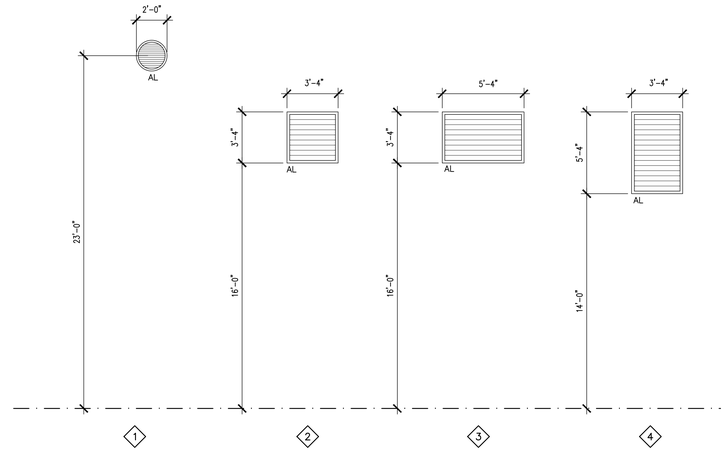
2 STOREFRONT SCHEDULE
SCALE: 1/4" = 1'-0"



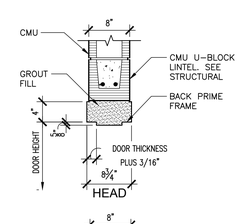
3 HOLLOW NETAL FRAME SCHEDULE
SCALE: 1/4" = 1'-0"

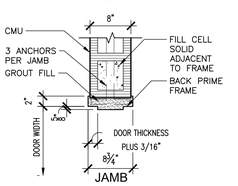


4 WINDOW SCHEDULE
SCALE: 1/4" = 1'-0"

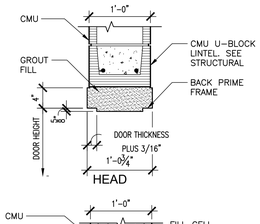


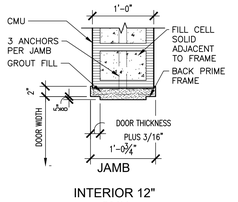
5 LOUVER SCHEDULE
SCALE: 1/4" = 1'-0"



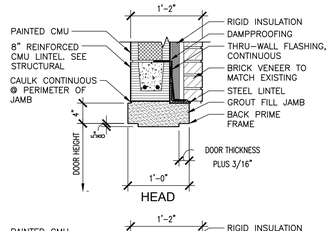


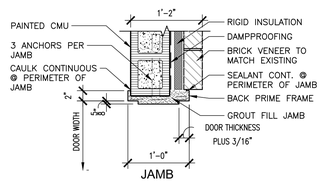
INTERIOR 8" CMU



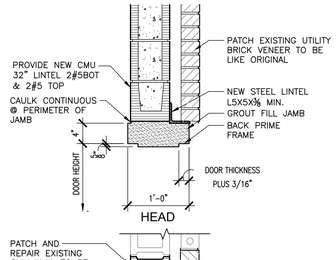


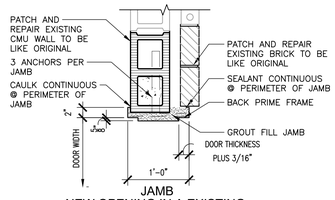
INTERIOR 12" CMU



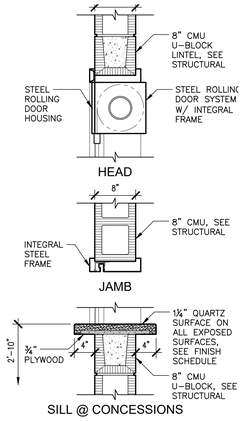


EXTERIOR 8" CMU W/ BRICK VENEER





NEW OPENING IN A EXISTING EXTERIOR WALL



INTERIOR ROLL UP DOOR W/ INTEGRAL FRAME

6 H.M.F. DETAILS
SCALE: 1 1/2" = 1'-0"

LATHAN McKEE ARCHITECTS

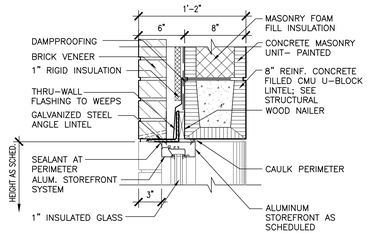
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
DOOR AND WINDOW SCHEDULES AND DETAILS

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

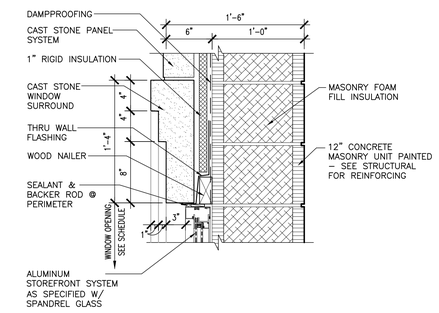
PROJ. MGR.: H. RASCO
DRAWN: ELM
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A2.5
8 OF 29
0 1" 2"



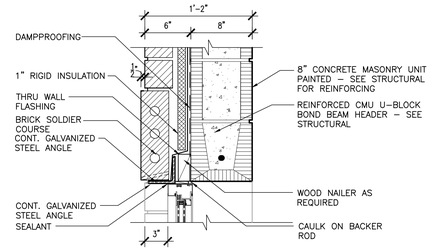
1 STOREFRONT HEAD DETAIL

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



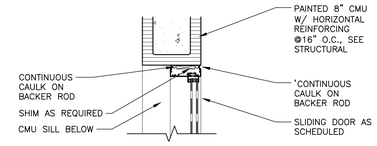
5 LOUVER HEAD DETAIL

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



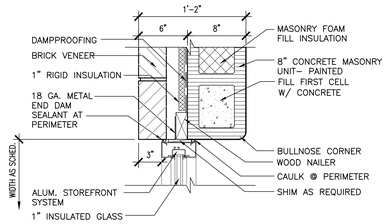
7 STOREFRONT HEAD DETAIL

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



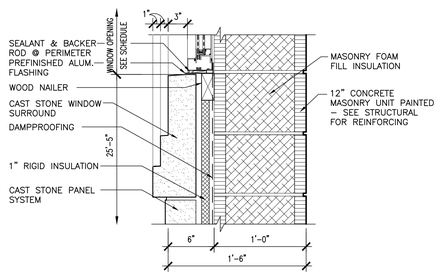
10 DISPLAY CASE DETAIL

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



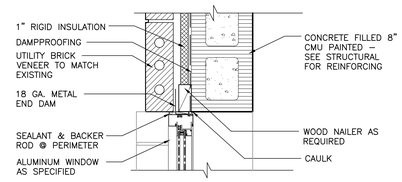
2 STOREFRONT JAMB DETAIL

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



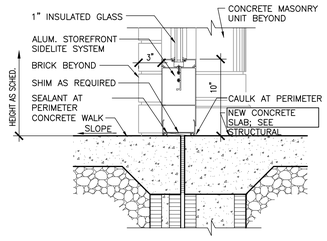
6 LOUVER SILL DETAIL

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



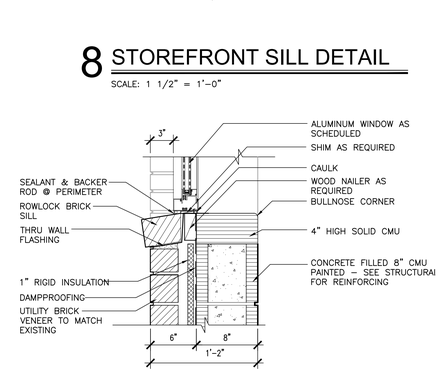
8 STOREFRONT SILL DETAIL

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



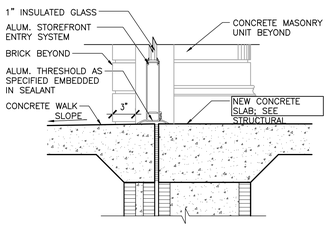
3 STOREFRONT SILL DETAIL

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



9 STOREFRONT SILL DETAIL

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



4 STOREFRONT SILL DETAIL

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

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
DOOR AND WINDOW DETAILS

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

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

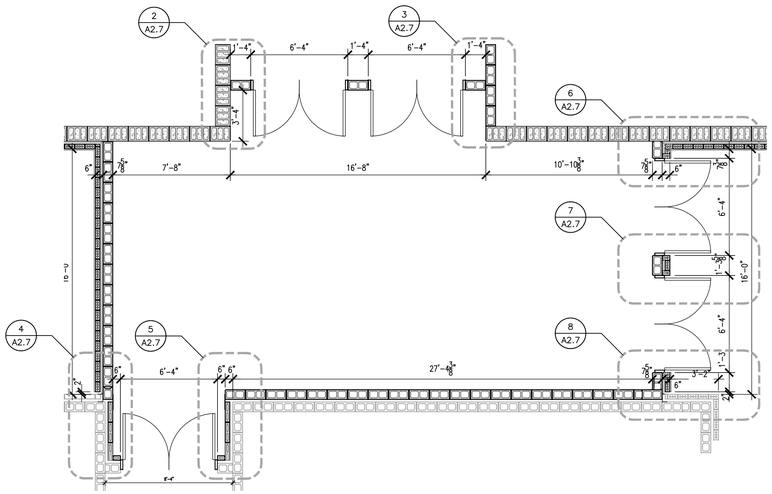
JOB NO. 25-33

SHEET NO:

A2.6

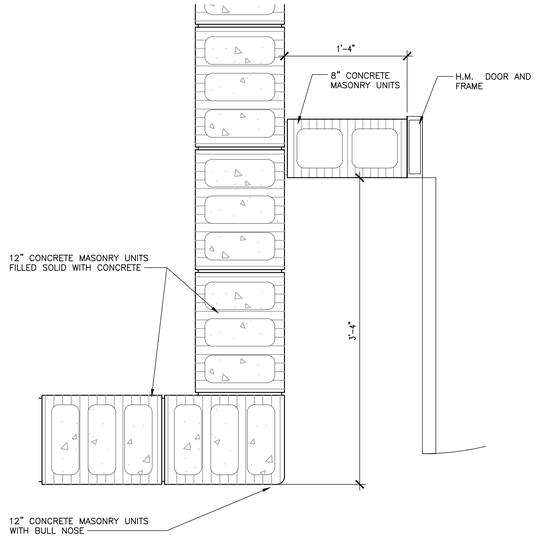
9 OF 29

0 1" 2"



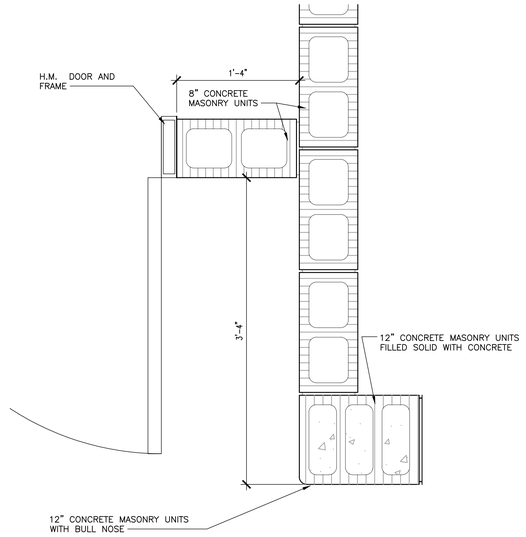
1 PLAN DETAIL

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



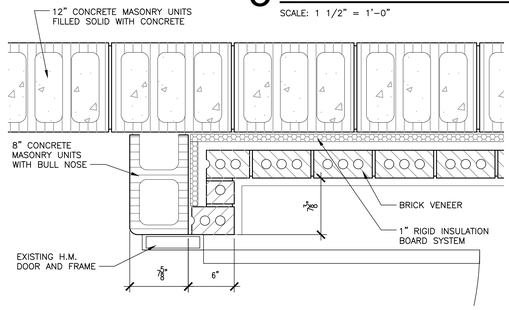
2 PLAN DETAIL

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



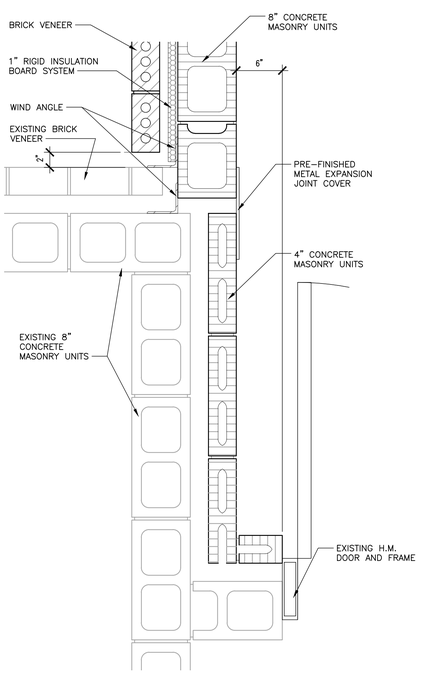
3 PLAN DETAIL

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



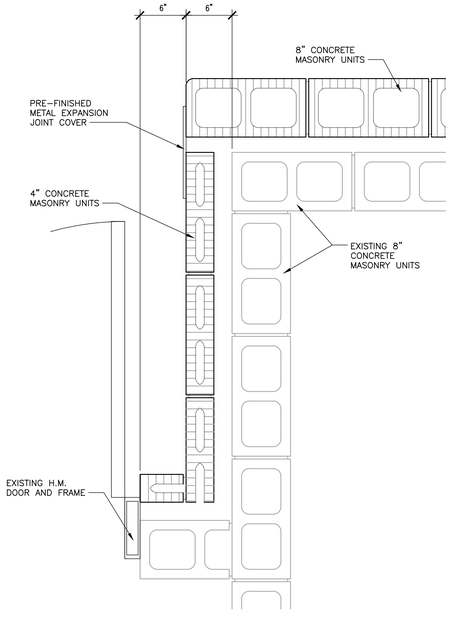
6 PLAN DETAIL

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



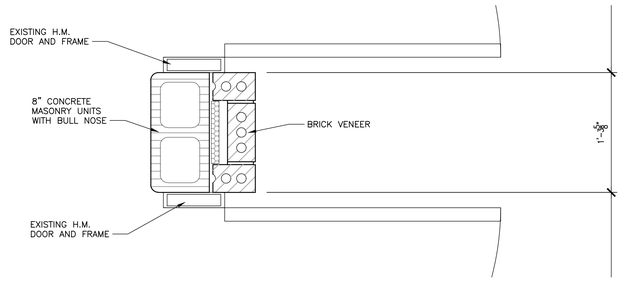
4 PLAN DETAIL

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



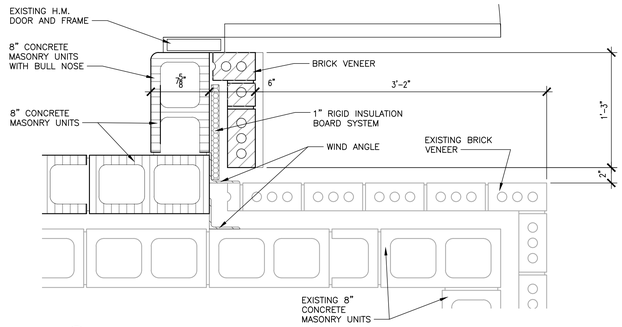
5 PLAN DETAIL

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



7 PLAN DETAIL

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



8 PLAN DETAIL

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLAN DETAILS

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

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

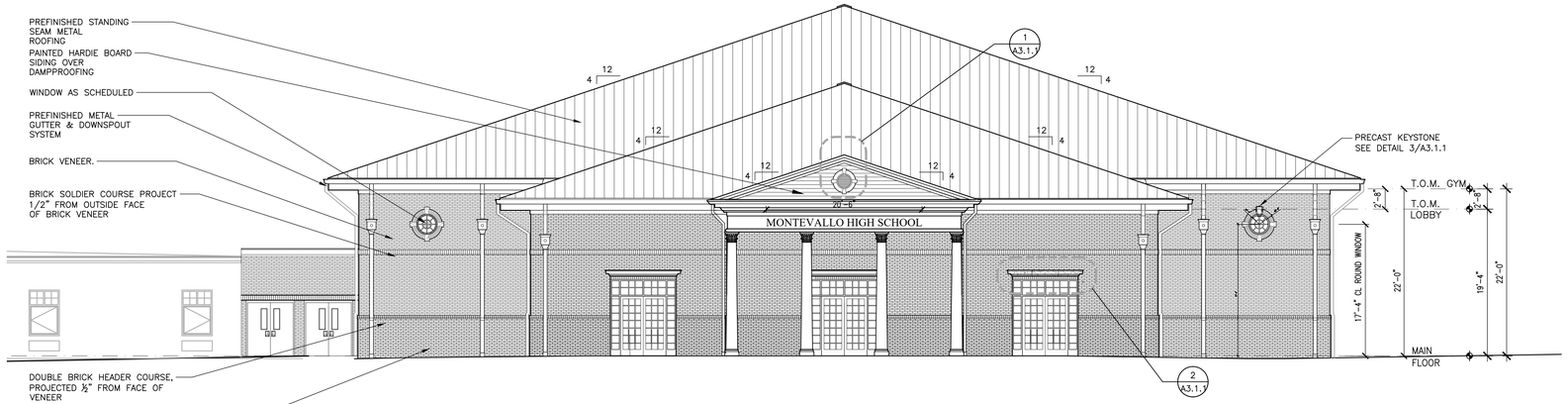
JOB NO. 25-33

SHEET NO:

A2.7

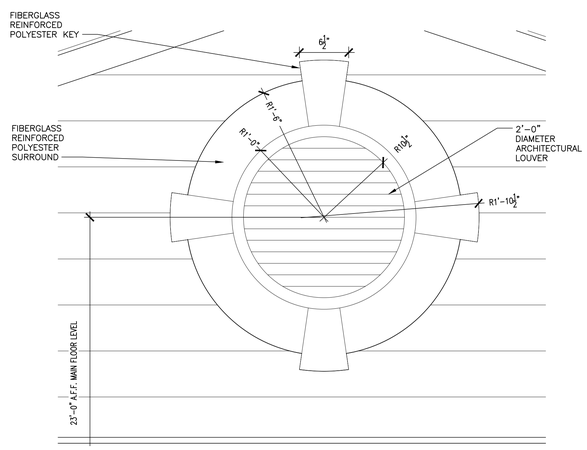
10 OF 29

0 1" 2"



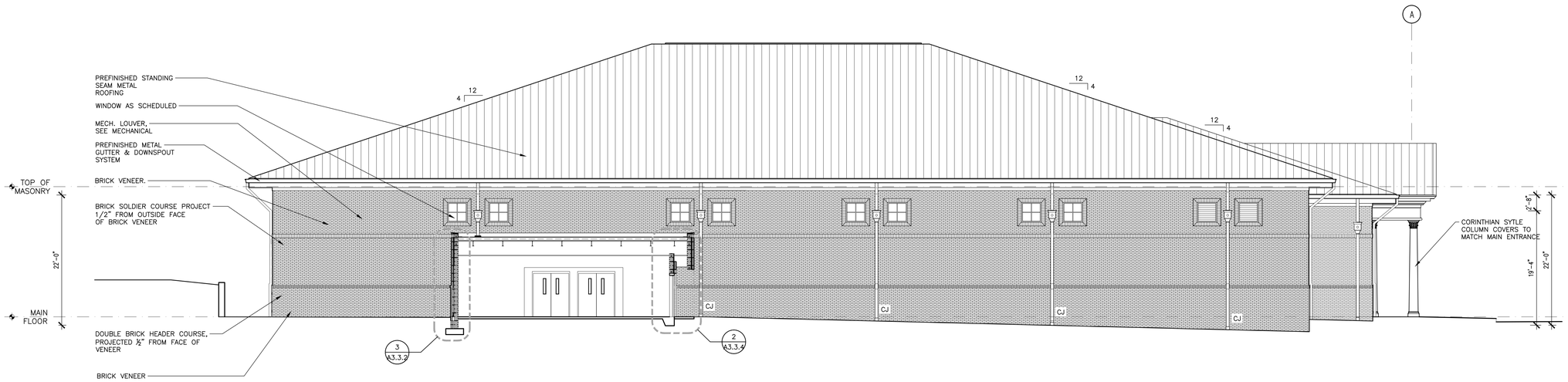
A SOUTH EAST EXTERIOR ELEVATION

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



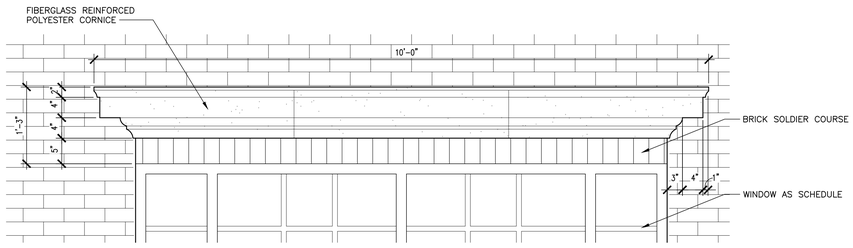
1 FRP LOUVER SURROUND DETAIL

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



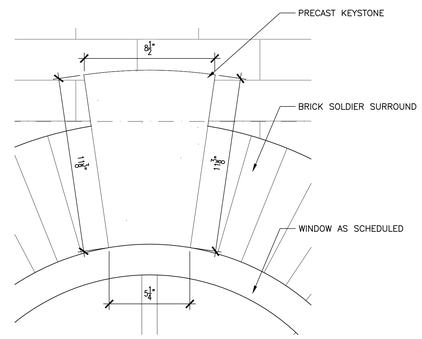
B SOUTH WEST EXTERIOR ELEVATION

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



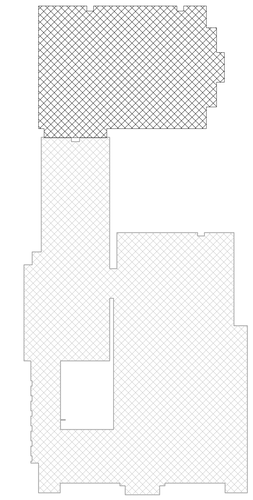
2 FRP DETAIL

SCALE: 1" = 1'-0"



3 PRECAST DETAIL

SCALE: 3" = 1'-0"



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

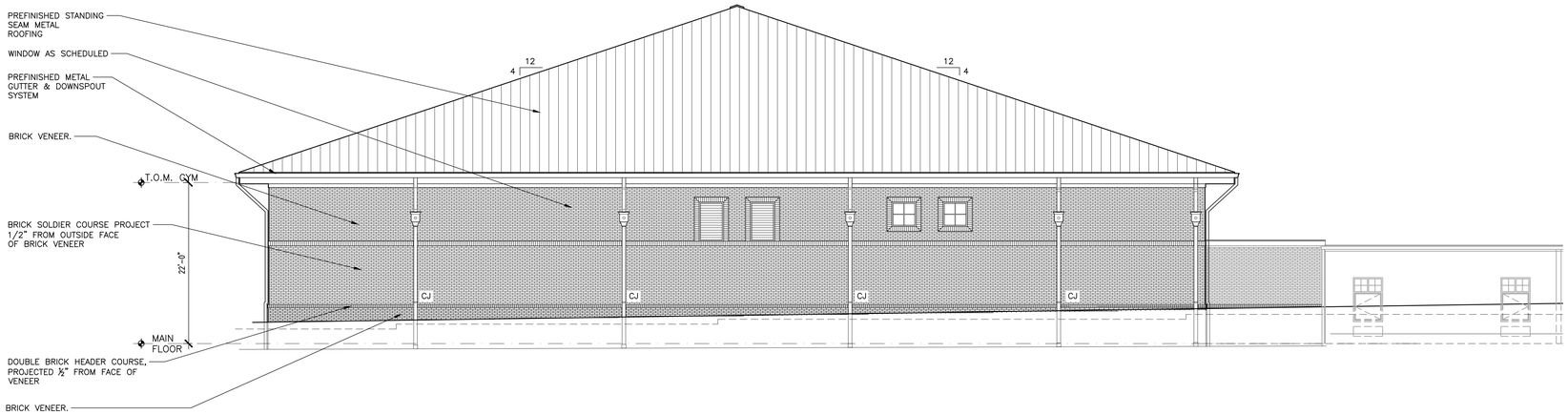
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
EXTERIOR ELEVATIONS

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

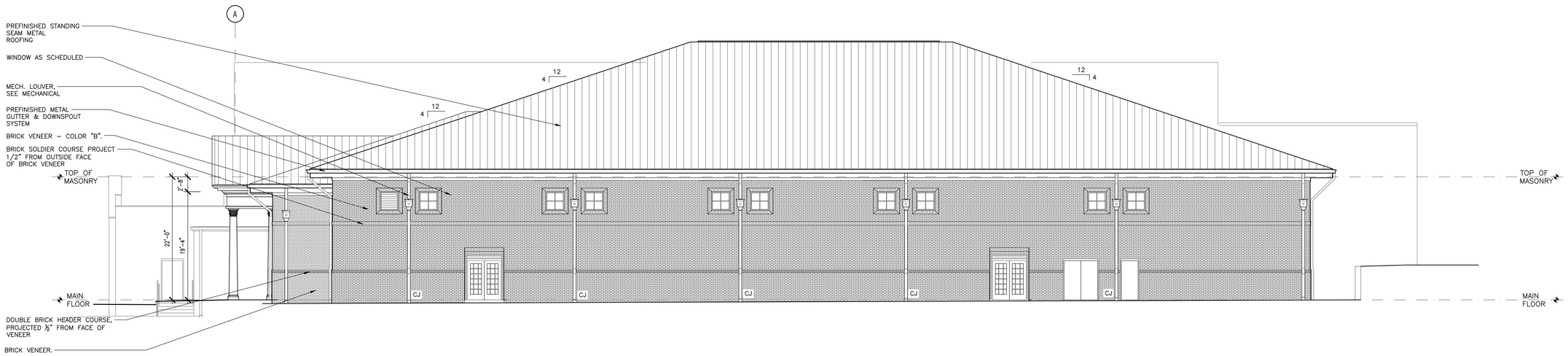
PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
A3.1.1
11 OF 29



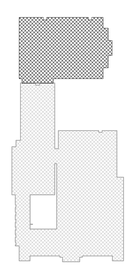
A NORTH WEST EXTERIOR ELEVATION

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



B SOUTH WEST EXTERIOR ELEVATION

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



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

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

PROJ. MGR.:	H. RASCO
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DATE:	10-23-2025
REVISIONS	

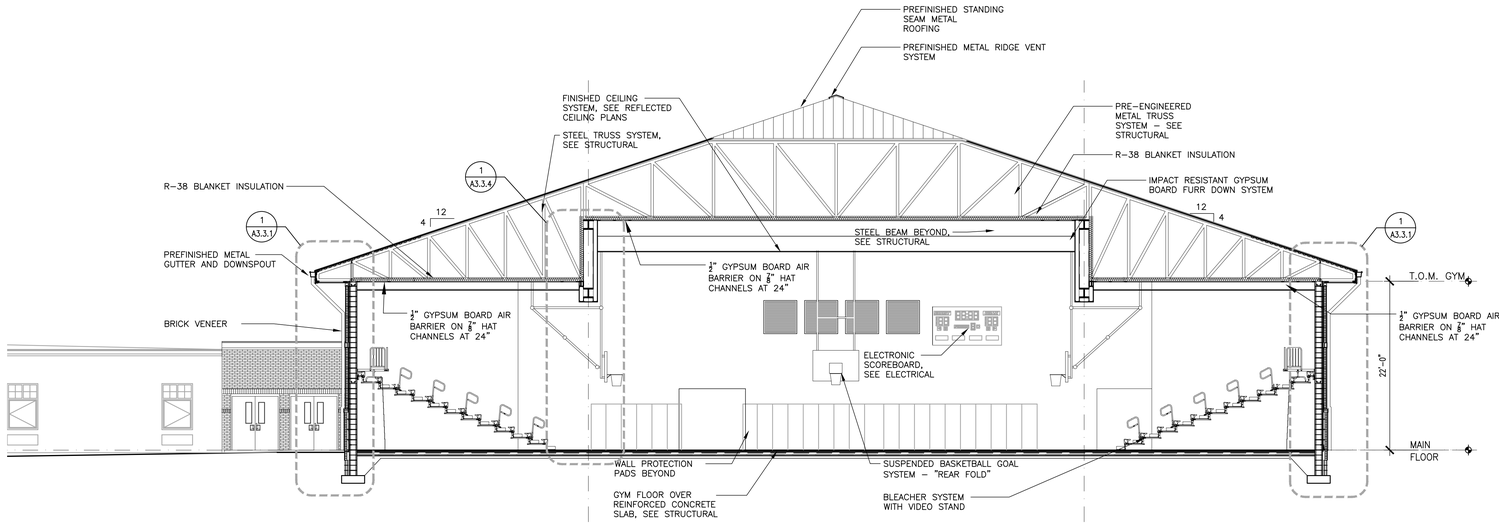
JOB NO. 25-33

SHEET NO:

A3.1.2

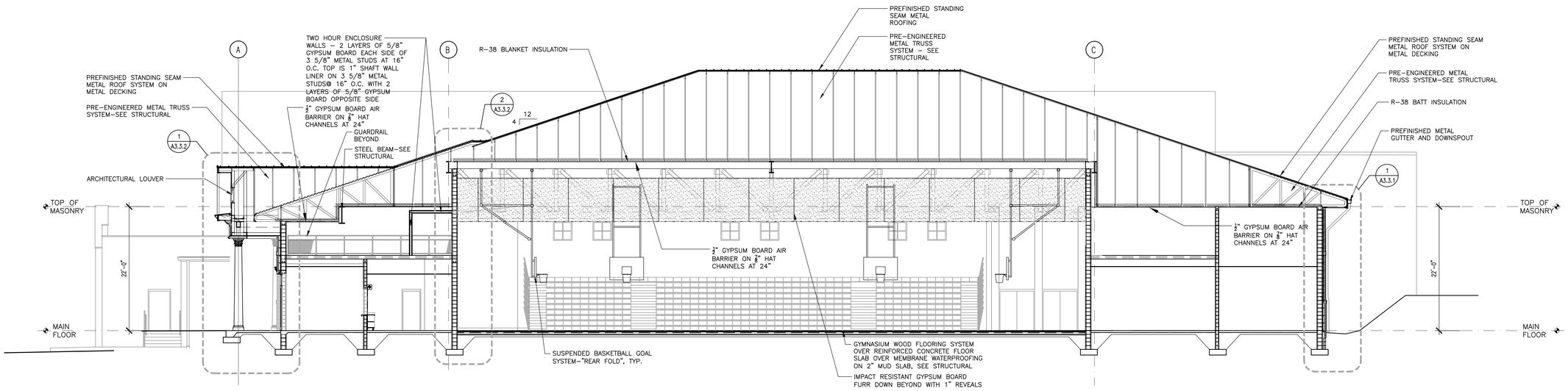
12 OF 29

0 1" 2"



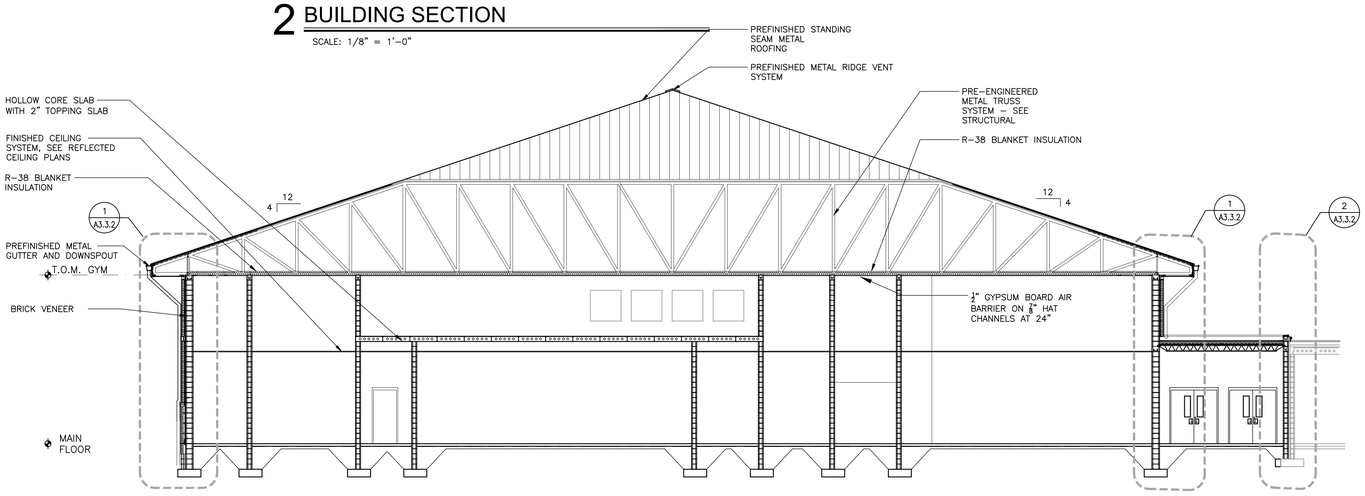
1 BUILDING SECTION

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



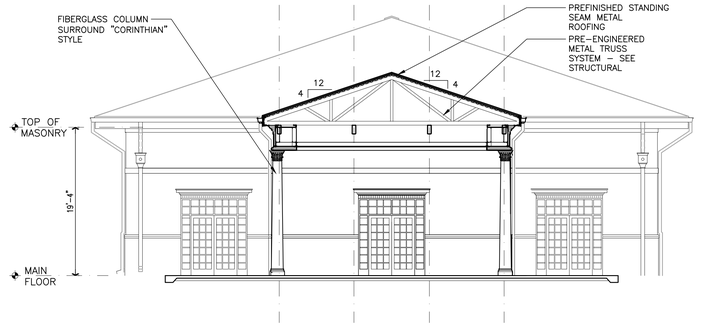
2 BUILDING SECTION

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



3 BUILDING SECTION

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



4 BUILDING SECTION

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
BUILDING SECTIONS

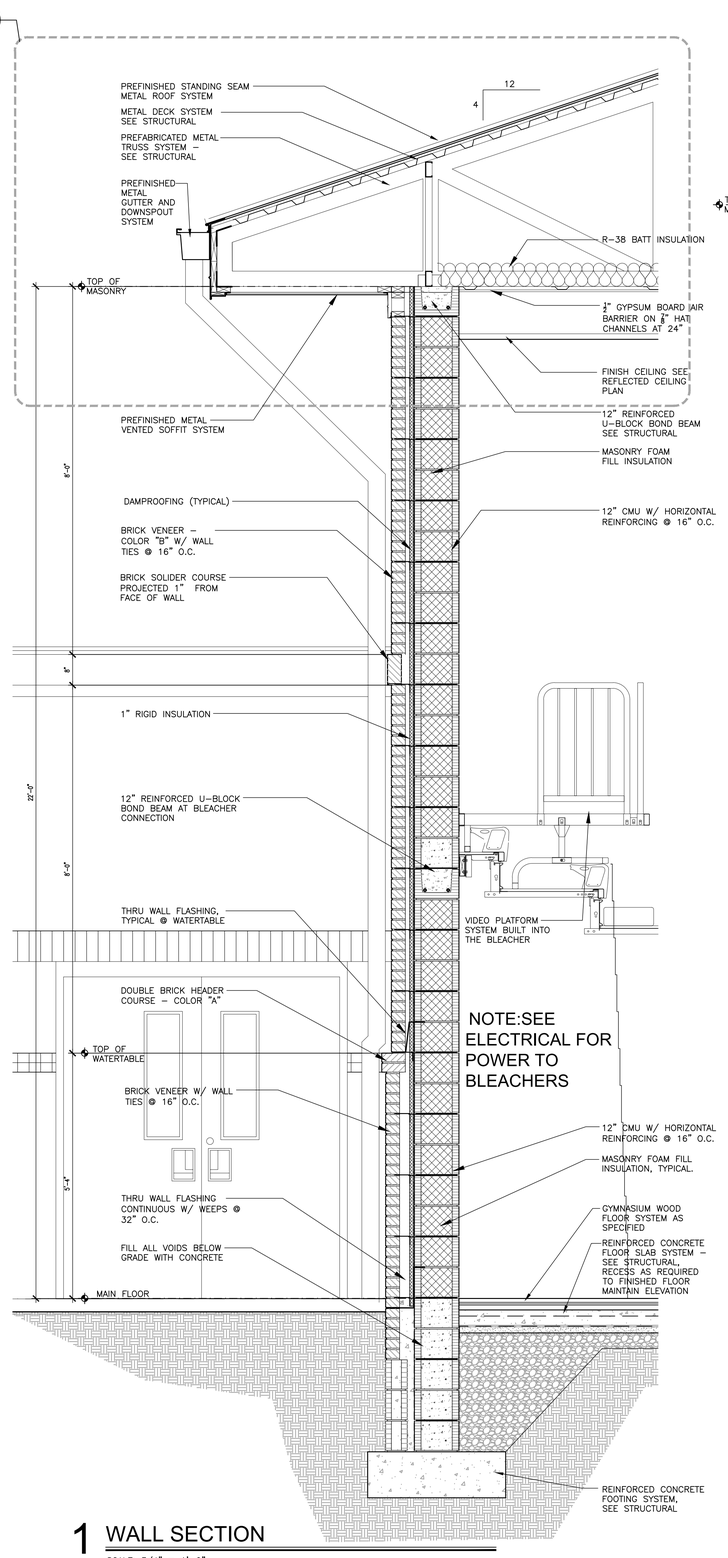
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33

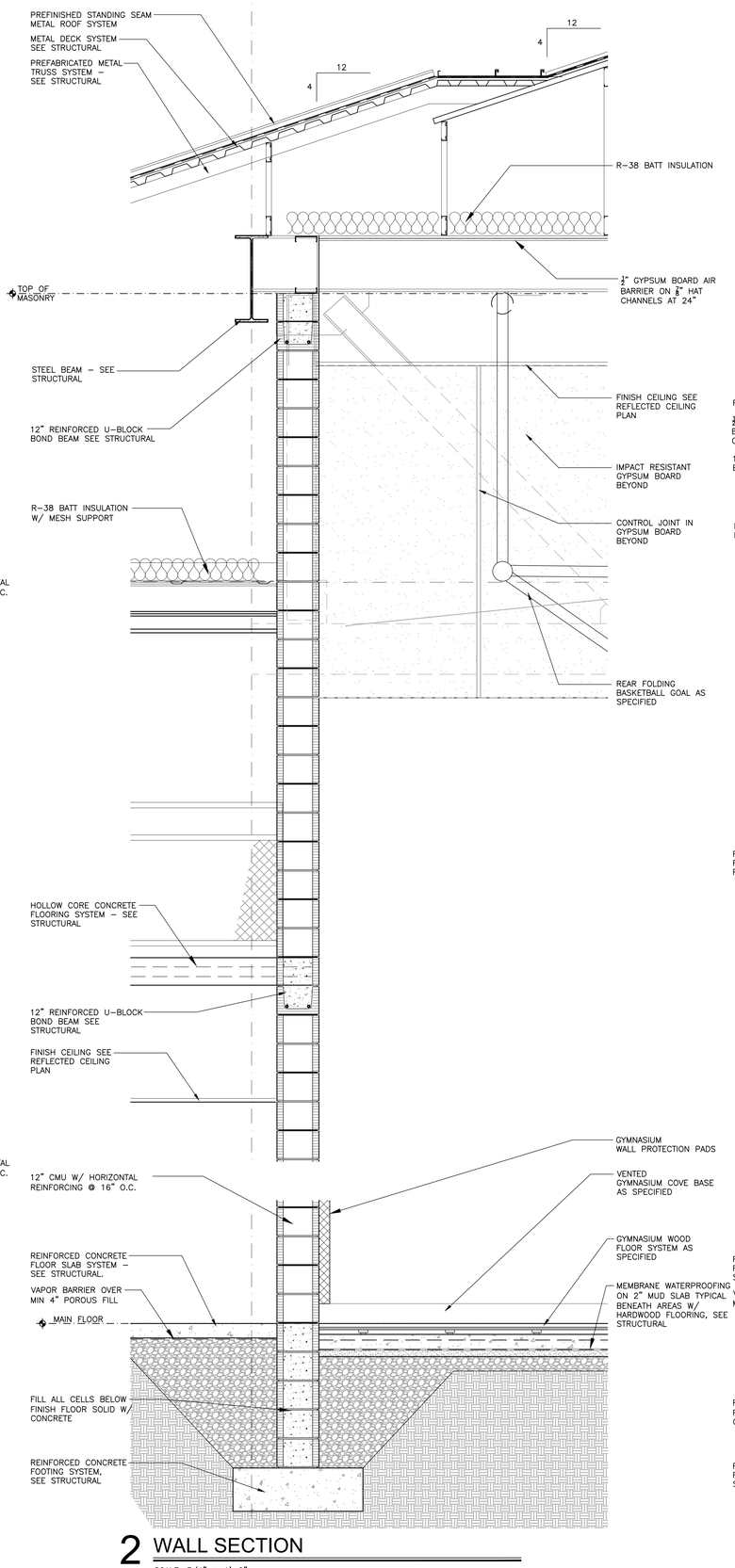
SHEET NO:
A3.2
13 OF 29

0 1" 2"



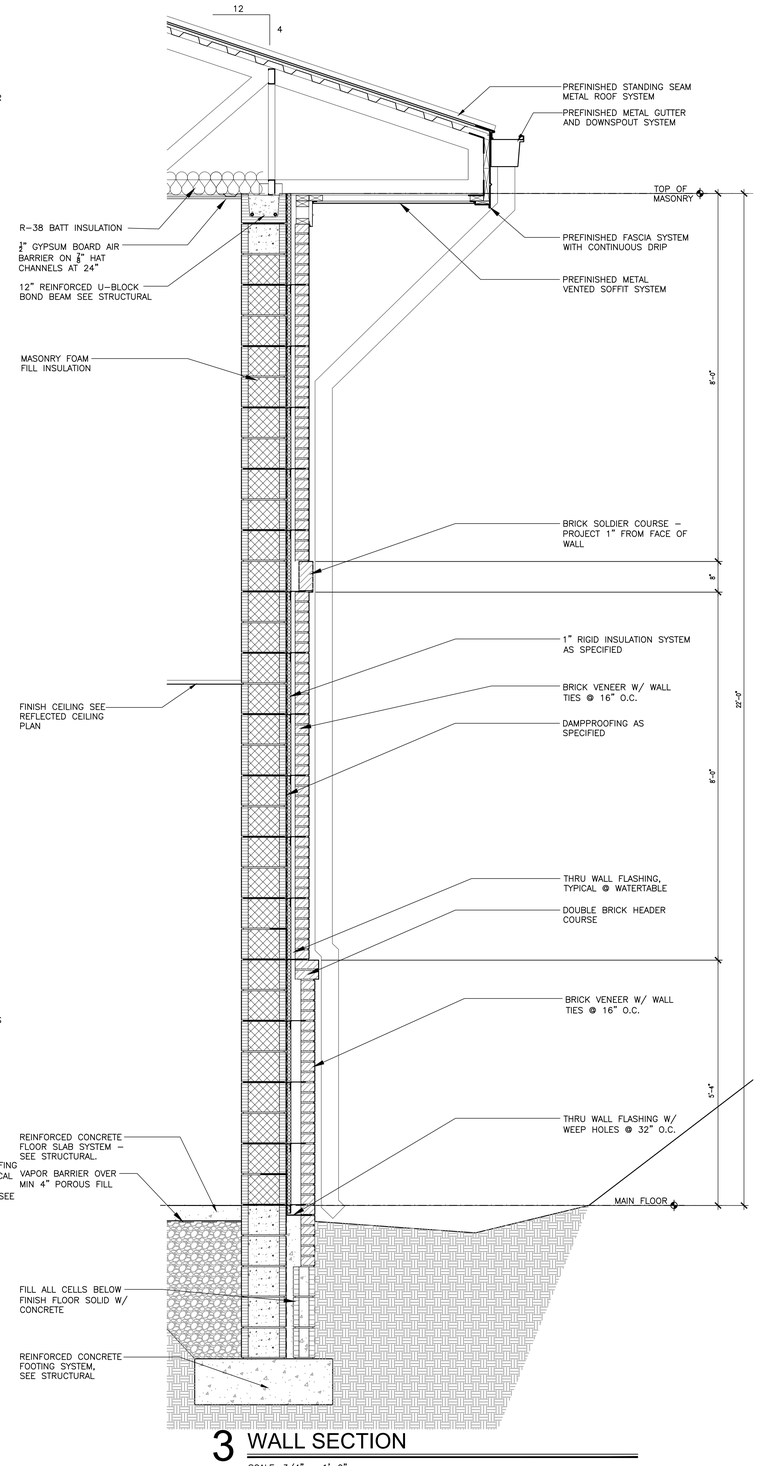
1 WALL SECTION

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



2 WALL SECTION

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



3 WALL SECTION

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

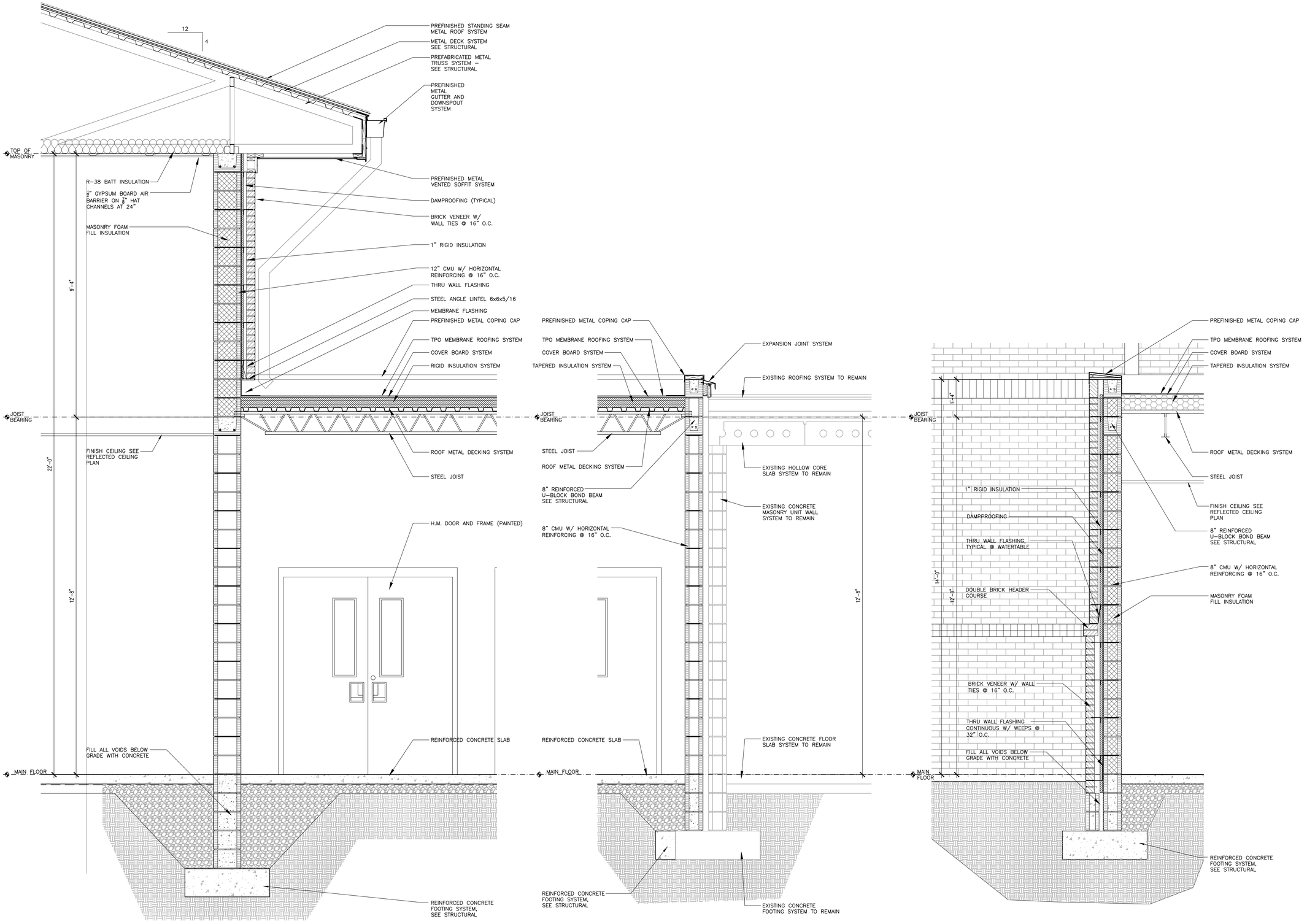
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33

SHEET NO:
A3.3.1
14 OF 29

0 1" 2"



1 WALL SECTION

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

2 WALL SECTION

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

3 WALL SECTION

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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PROJ. MGR.:	H. RASCO
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DATE:	10-23-2025
REVISIONS	

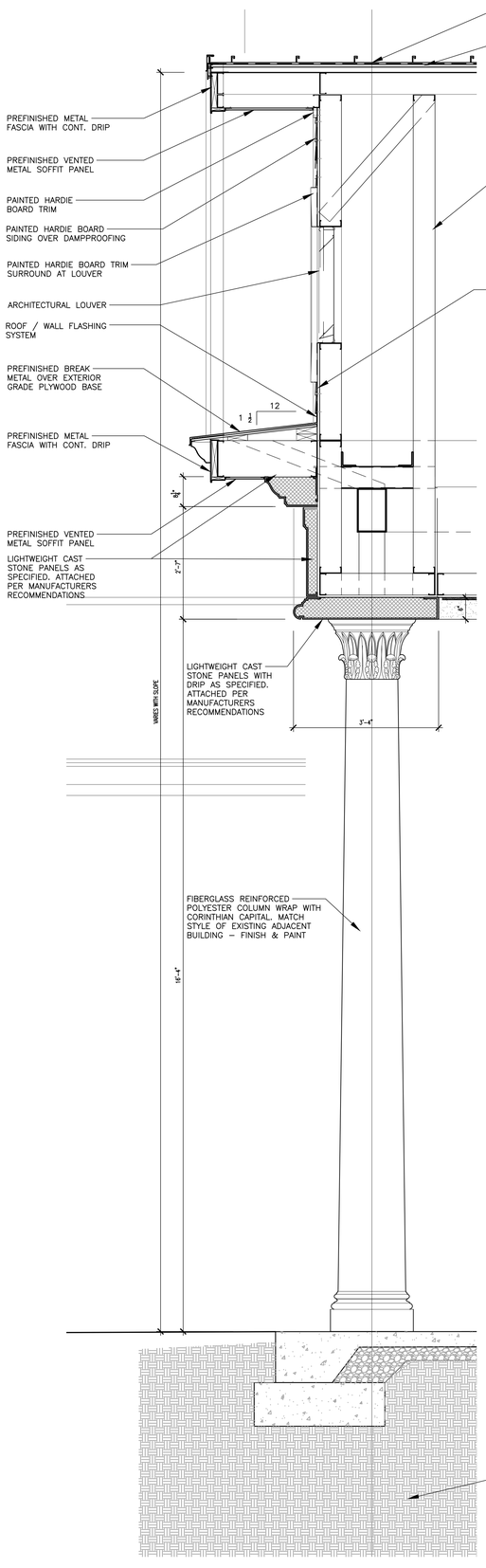
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SHEET NO:

A3.3.2

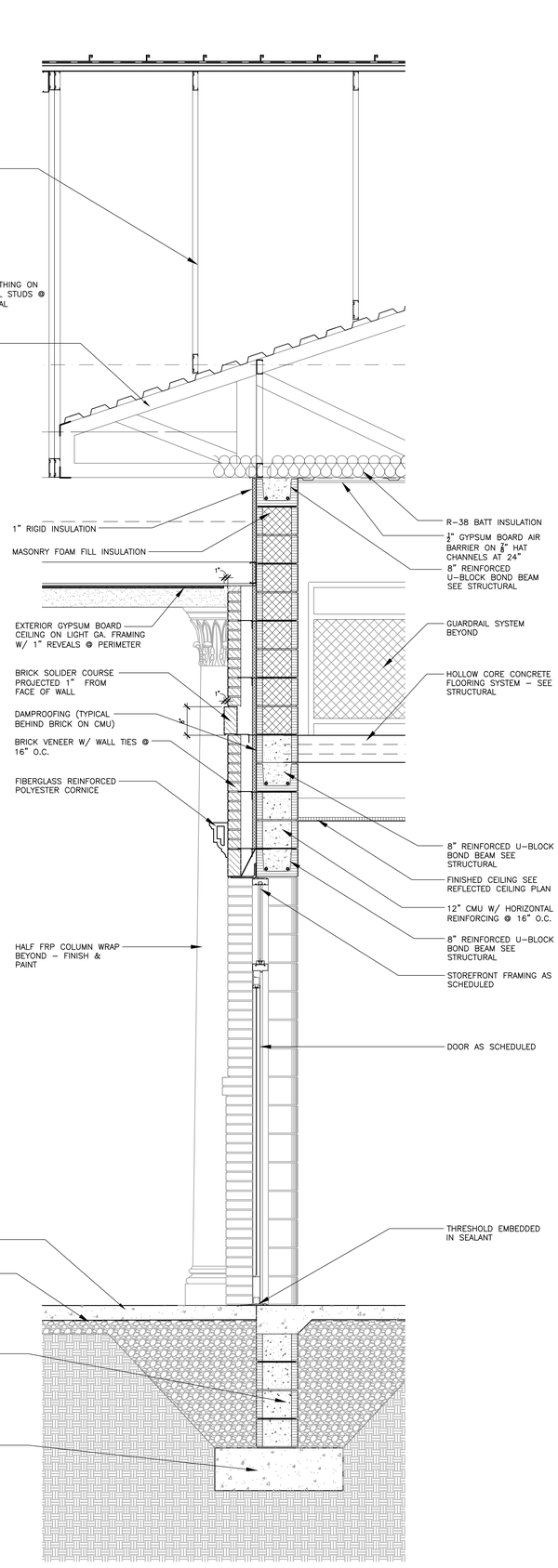
15 of 29

0 1" 2"



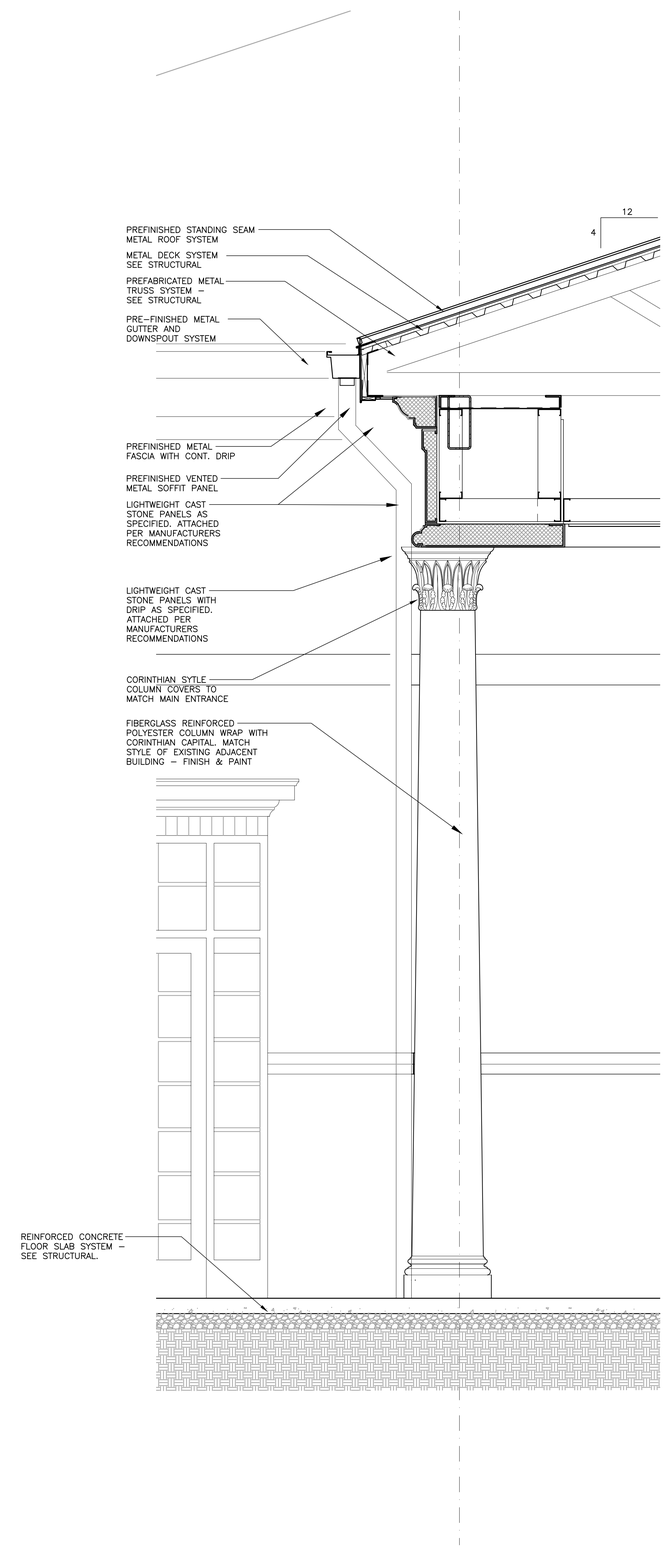
1 WALL SECTION

SCALE: 3/4" = 1'–0"



2 WALL SECTION

SCALE: 3/4" = 1'–0"



3 WALL SECTION

SCALE: 3/4" = 1'–0"

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

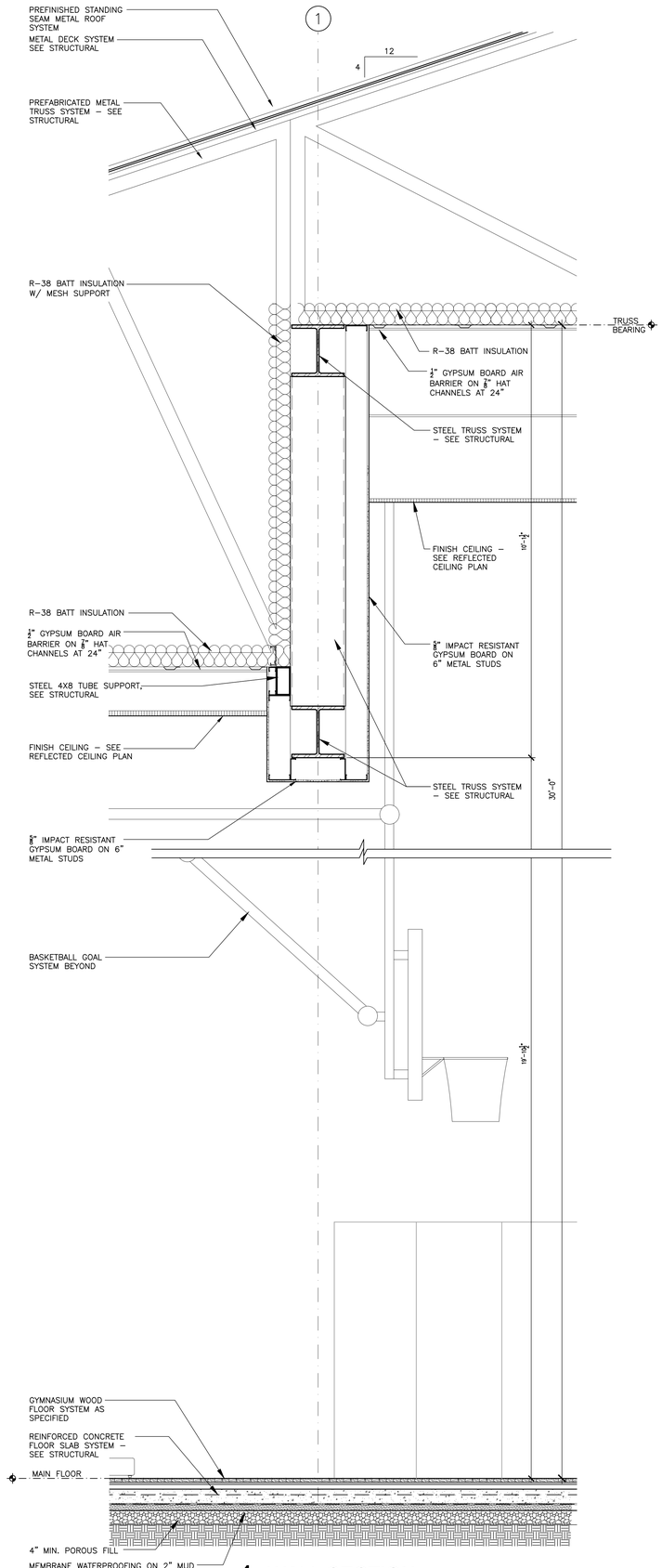
SHEET TITLE:
WALL SECTIONS

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

PROJ. MGR.: H. RASCO
DRAWN: ELM
DATE: 10–23–2025
REVISIONS

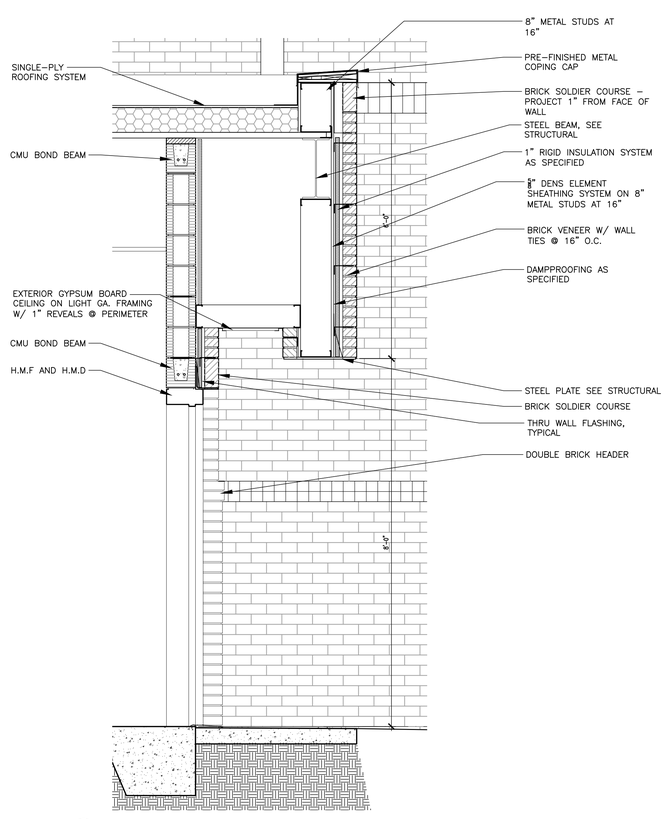
JOB NO. 25-33
SHEET NO:
A3.3.3
16 of 29

0 1" 2"



1 WALL SECTION

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



2 WALL SECTION

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

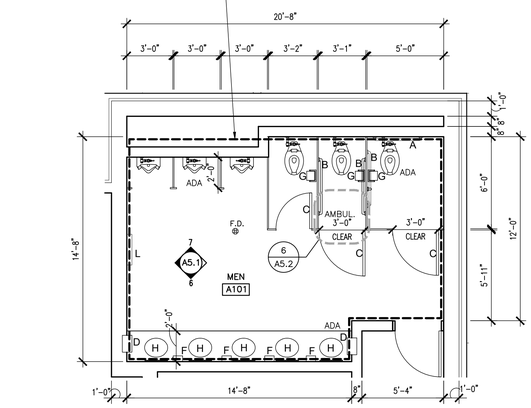
SHEET TITLE:
WALL SECTIONS

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

PROJ. MGR.:	H. RASCO
DRAWN:	ELM
DATE:	10-23-2025
REVISIONS	

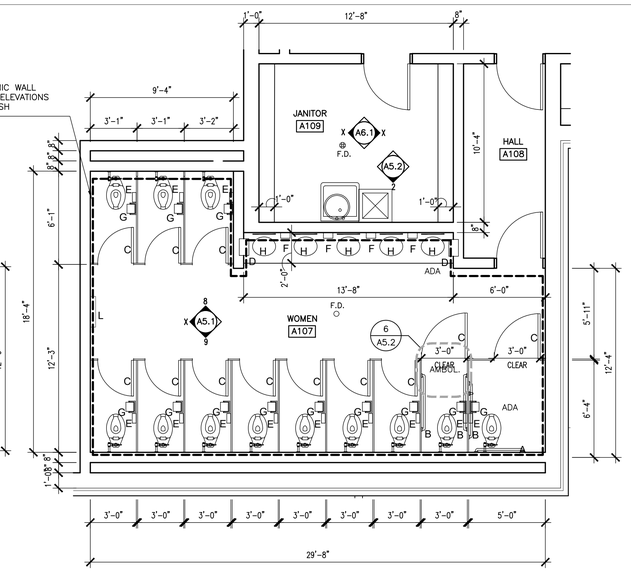
JOB NO. 25-33
SHEET NO:
A3.3.4
17 OF 29

0 1" 2"



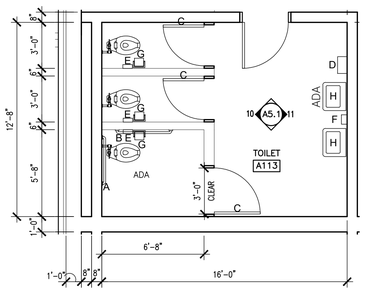
1 ENLARGED TOILET PLAN @ MEN A101

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



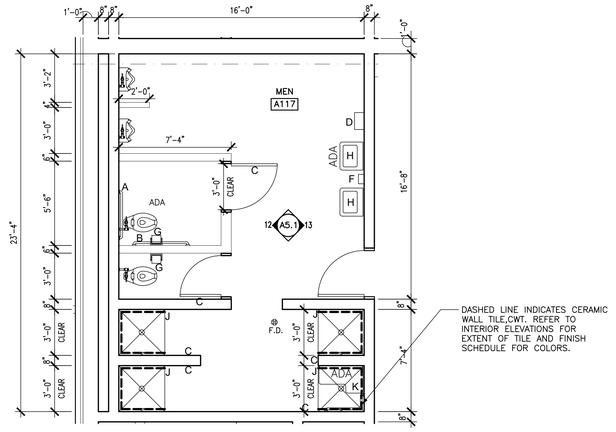
2 ENLARGED TOILET PLAN @ WOMEN A107

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



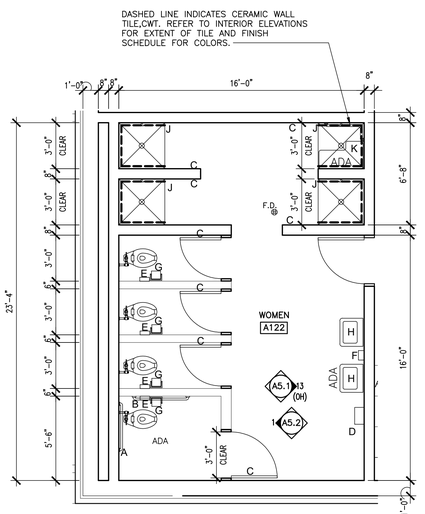
3 ENLARGED TOILET PLAN @ TOILET A113

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



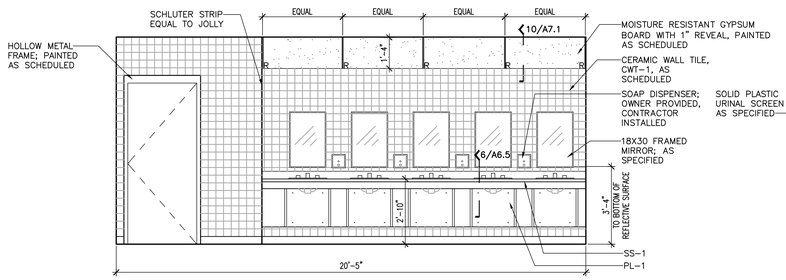
4 ENLARGED TOILET PLAN @ MEN A117

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



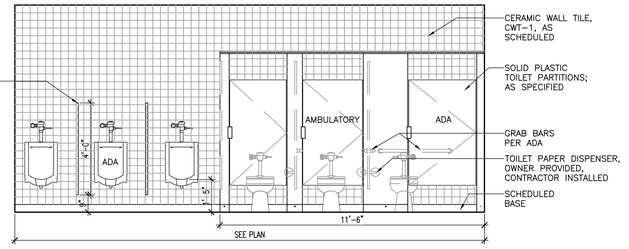
5 ENLARGED TOILET PLAN @ WOMEN A122

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



6 INTERIOR ELEVATION @ MEN A101

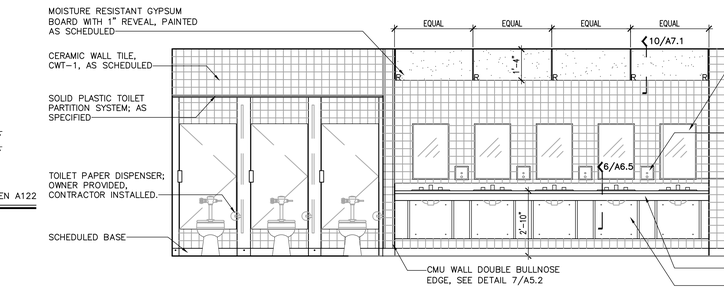
SCALE: 3/8" = 1'-0"



7 INTERIOR ELEVATION @ MEN A101

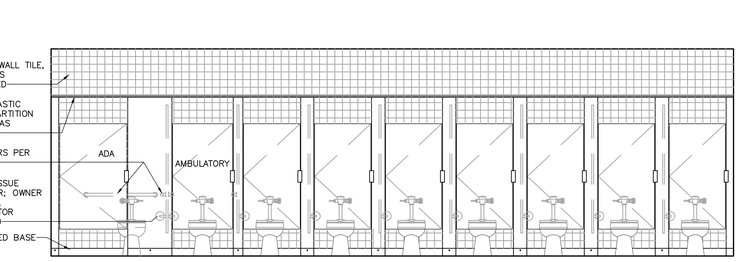
SCALE: 3/8" = 1'-0"

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"
J	SHOWER CURTAIN AND ROD
K	SHOWER SEAT PER ADA
L	BABY CHANGING TABLE
NOTE:	AT ALL OUTSIDE WALL CORNERS AND EDGES PROVIDE A SCHULTER STRIP EQUAL TO JOLLY, AS SPECIFIED



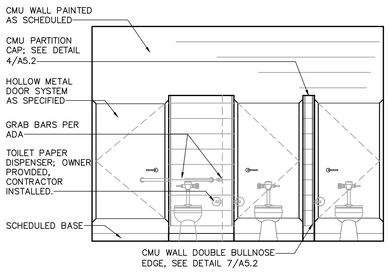
8 INTERIOR ELEVATION @ WOMEN A107

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



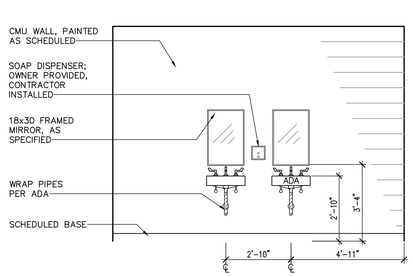
9 INTERIOR ELEVATION @ WOMEN A107

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



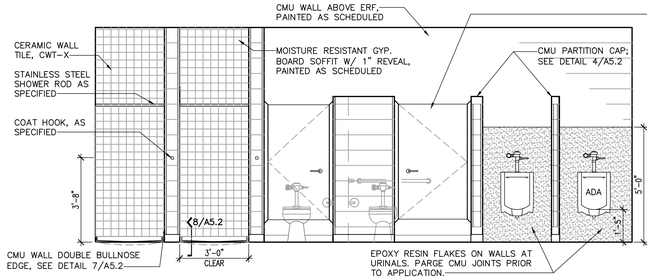
10 INTERIOR ELEVATION @ TOILET A113

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



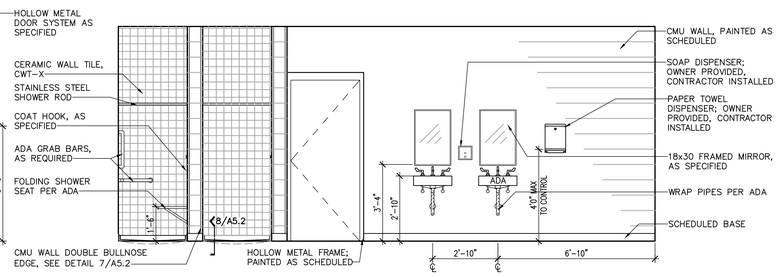
11 INTERIOR ELEVATION @ TOILET A113

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



12 INTERIOR ELEVATION @ MEN A117

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



13 INTERIOR ELEVATION @ WOMENS A122 AND MEN A117 (OH)

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

LATHAN McKEE ARCHITECTS

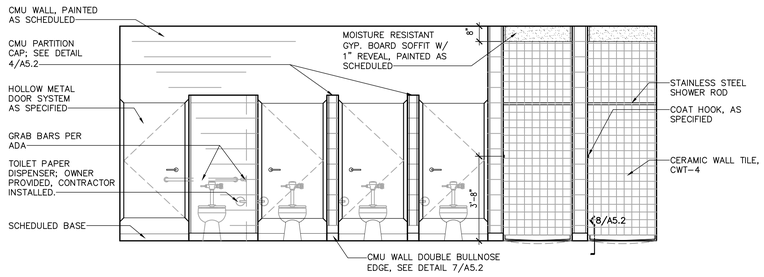
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ENLARGED TOILET PLANS AND TOILET ELEVATIONS

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

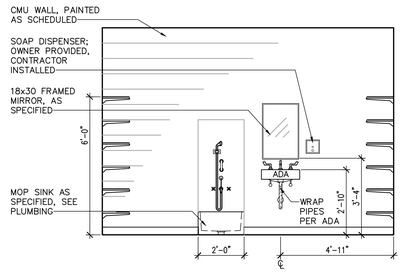
PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A5.1
18 OF 29



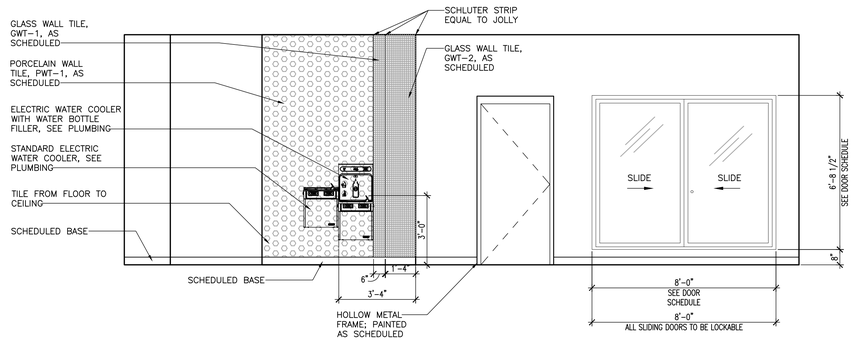
1 INTERIOR ELEVATION @ WOMEN A122

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



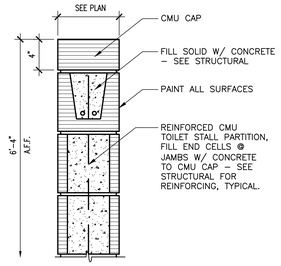
2 INTERIOR ELEVATION @ JANITOR A109

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



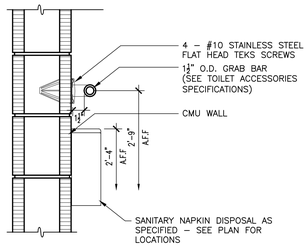
3 INTERIOR ELEVATION @ EWC IN LOBBY A100

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



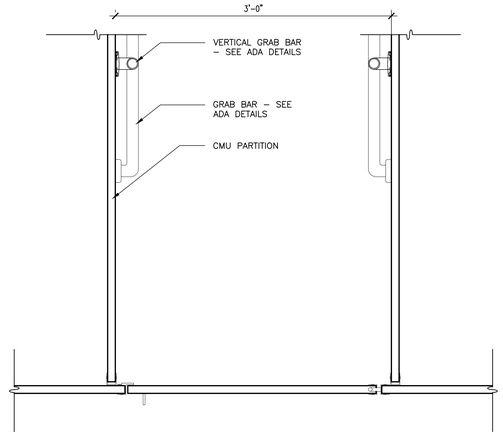
4 DETAIL @ CMU WALL PARTITION CAP

1-1/2 = 1'-0"



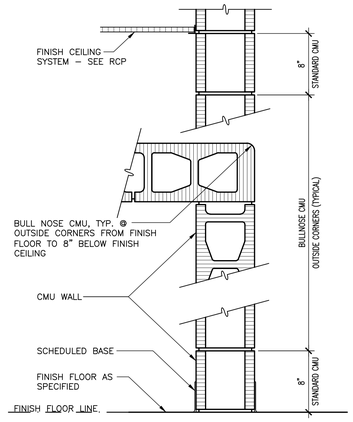
5 DETAIL @ CMU GRAB BAR

1-1/2 = 1'-0"



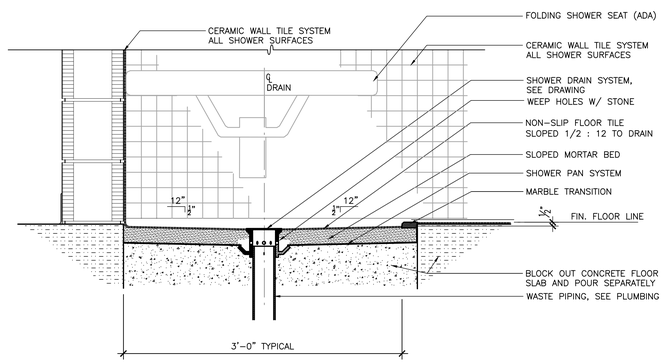
6 DETAIL @ AMBULATORY STALL

1-1/2 = 1'-0"



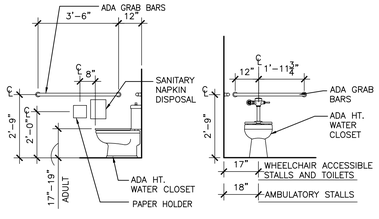
7 DETAIL @ CMU DOUBLE BULLNOSE

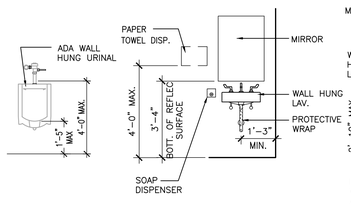
1-1/2 = 1'-0"

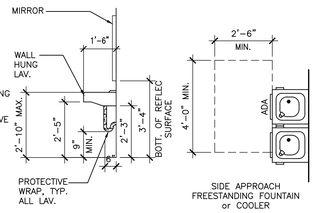


8 DETAIL @ SHOWER

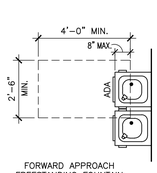
1-1/2 = 1'-0"



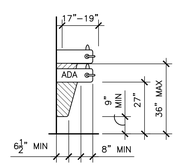




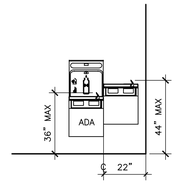
SIDE APPROACH FREESTANDING FOUNTAIN or COOLER



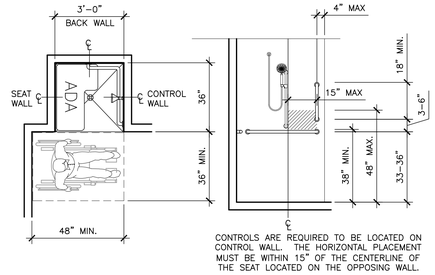
FORWARD APPROACH FREESTANDING FOUNTAIN or COOLER



SPOUT HEIGHT AND KNEE CLEARANCE
NOTE: EQUIPMENT PERMITTED IN SHADED AREA



SPOUT HEIGHT AND KNEE CLEARANCE
NOTE: EQUIPMENT PERMITTED IN SHADED AREA



CONTROLS ARE REQUIRED TO BE LOCATED ON CONTROL WALL. THE HORIZONTAL PLACEMENT MUST BE WITHIN 15" OF THE CENTERLINE OF THE SEAT LOCATED ON THE OPPOSING WALL.

ADA DETAILS

NOT TO SCALE

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

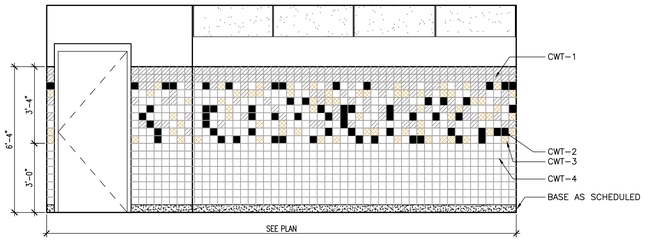
SHEET TITLE:
TOILET ELEVATIONS AND DETAILS

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

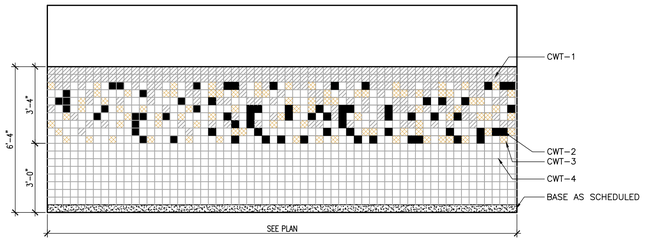
JOB NO. 25-33
SHEET NO:
A5.2
19 OF 29

0 1" 2"



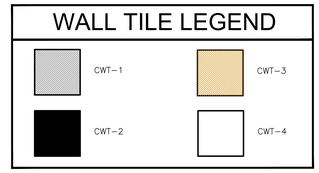
1 INTERIOR ELEVATION @ MEN A101

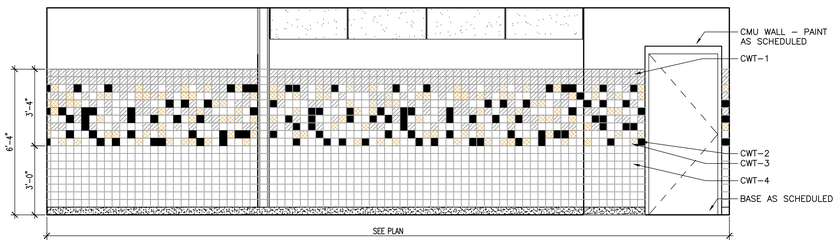
SCALE: 3/8" = 1'-0"



2 INTERIOR ELEVATION @ MEN A101

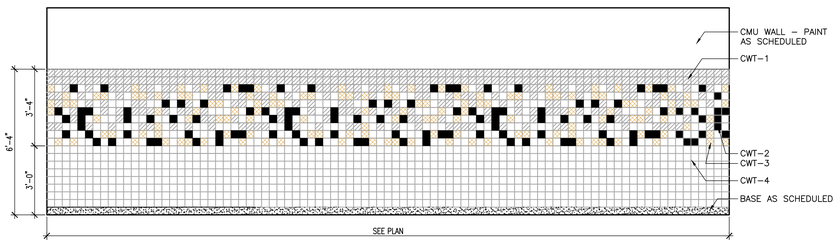
SCALE: 3/8" = 1'-0"





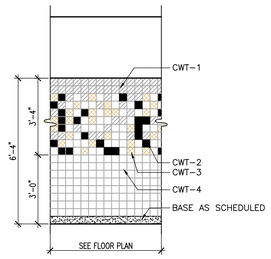
3 INTERIOR ELEVATION @ WOMEN A107

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



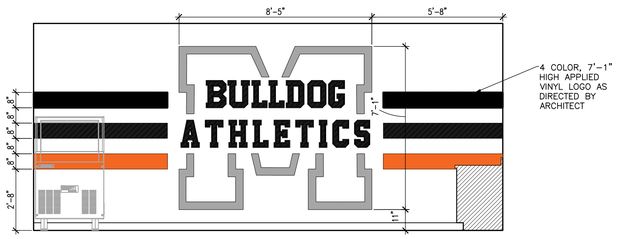
4 INTERIOR ELEVATION @ WOMEN A107

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



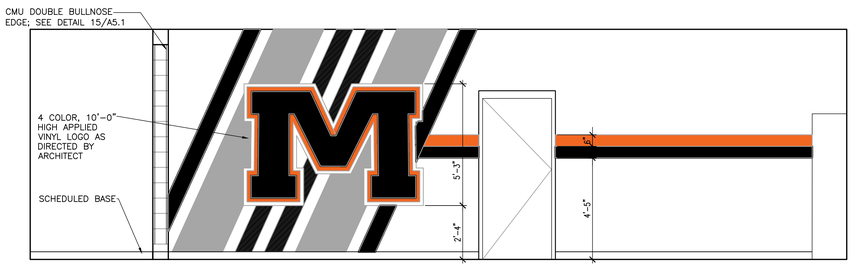
5 INTERIOR ELEVATION @ WOMEN A107

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



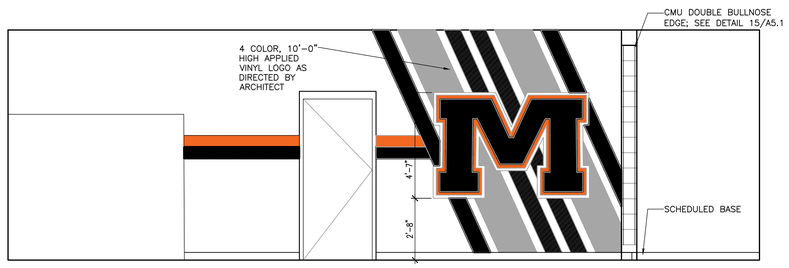
6 INTERIOR ELEVATION @ TRAINER A115

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



7 INTERIOR ELEVATION @ MENS LOCKER ROOM A116

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



8 INTERIOR ELEVATION @ WOMENS LOCKER ROOM A121

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

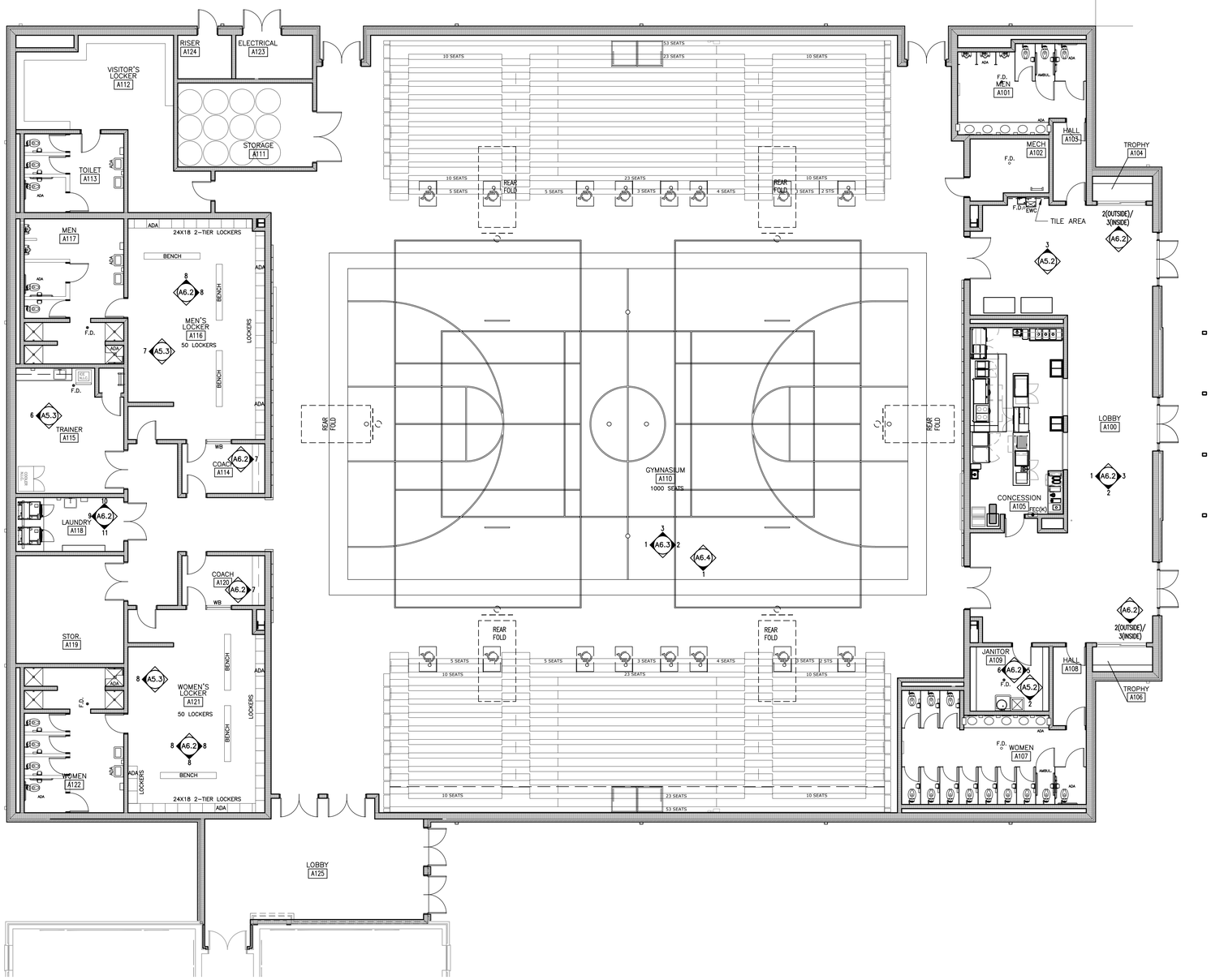
SHEET TITLE:
TOILET ELEVATIONS WITH TILE PATTERN

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A5.3
20 OF 29

0 1" 2"



1 CASEWORK PLAN

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

LATHAN McKEE ARCHITECTS

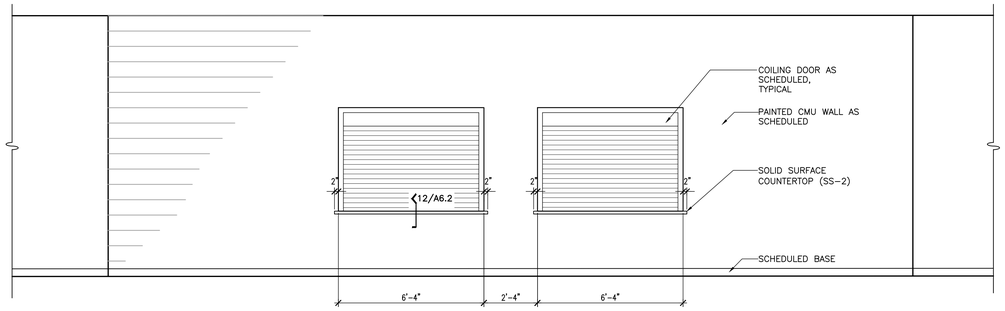
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
CASEWORK PLAN

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

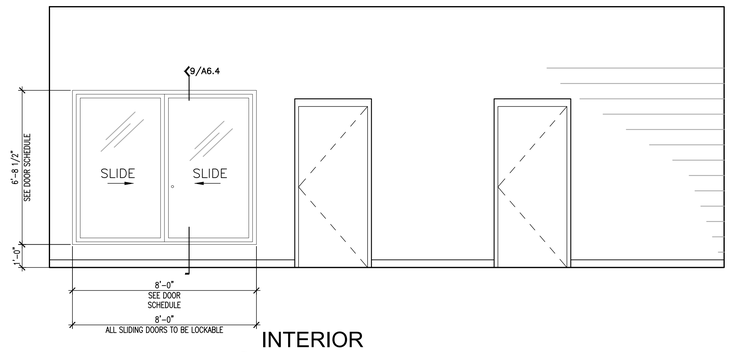
PROJ. MGR.:	H. RASCO
DRAWN:	BFL
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
A6.1
21 OF 29



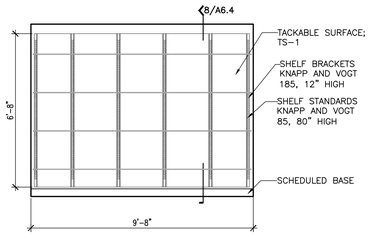
1 INTERIOR ELEVATION @ LOBBY A100

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



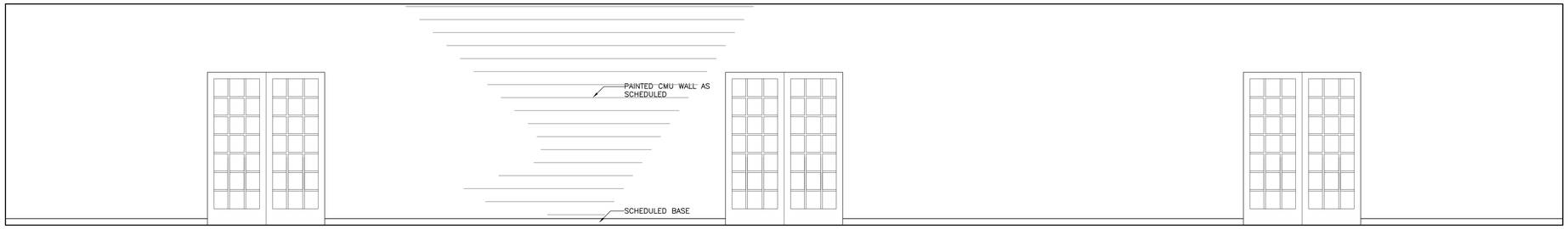
2 INTERIOR ELEVATION @ LOBBY A100

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



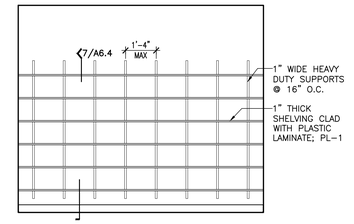
3 INTERIOR ELEVATION @ TROPHY CASE INTERIOR

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



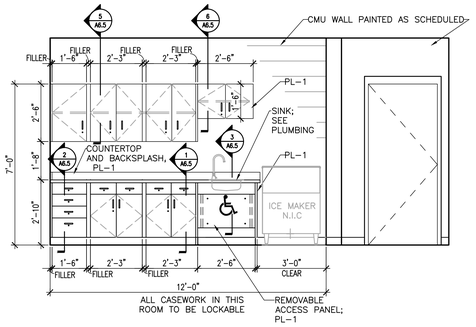
4 INTERIOR ELEVATION @ LOBBY A100

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



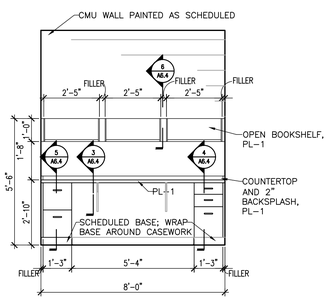
5 INTERIOR ELEVATION @ JANITOR A109

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



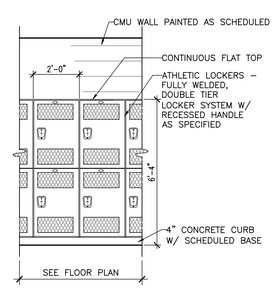
6 INTERIOR ELEVATION @ TRAINER A115

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



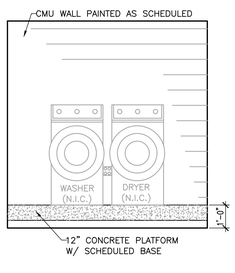
7 INTERIOR ELEVATION @ COACH A114 AND COACH A120

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



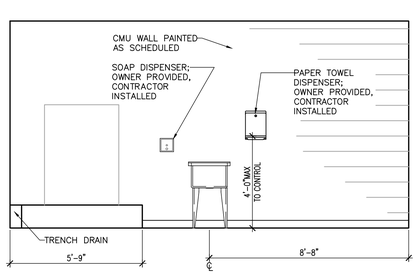
8 INTERIOR ELEVATION @ MEN'S LOCKER A116, & WOMEN'S LOCKER A121

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



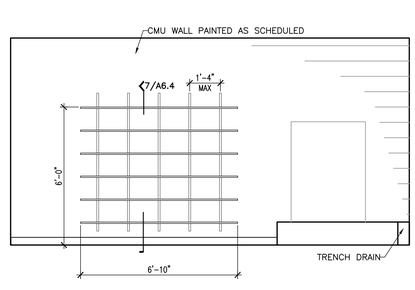
9 INTERIOR ELEVATION @ LAUNDRY A118

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



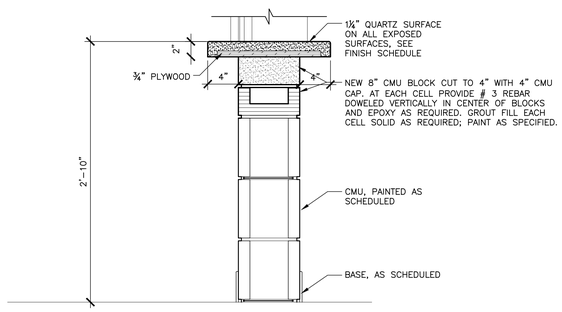
10 INTERIOR ELEVATION @ LAUNDRY A118

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



11 INTERIOR ELEVATION @ LAUNDRY A118

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



12 SECTION @ CONCESSION A105

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

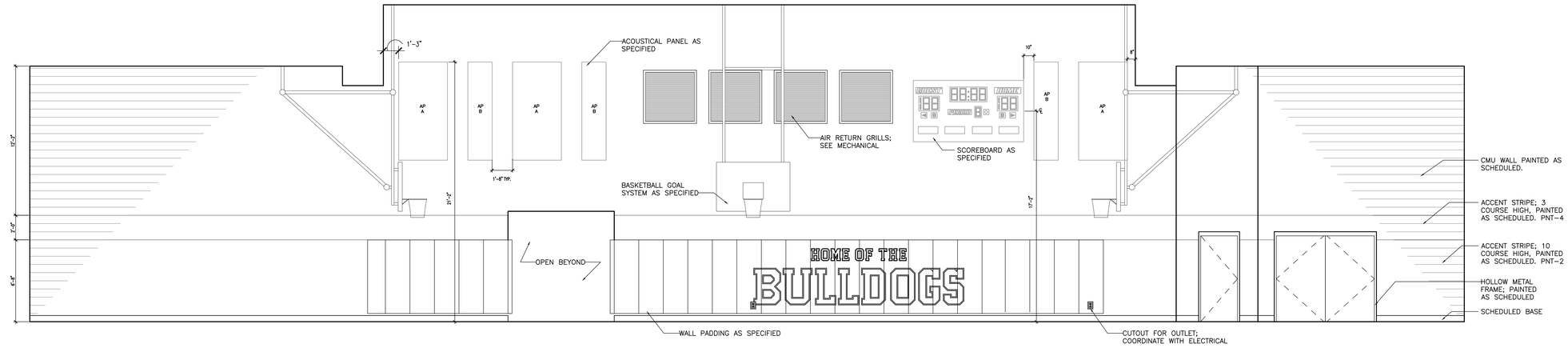
SHEET TITLE:
INTERIOR ELEVATIONS AND DETAILS

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

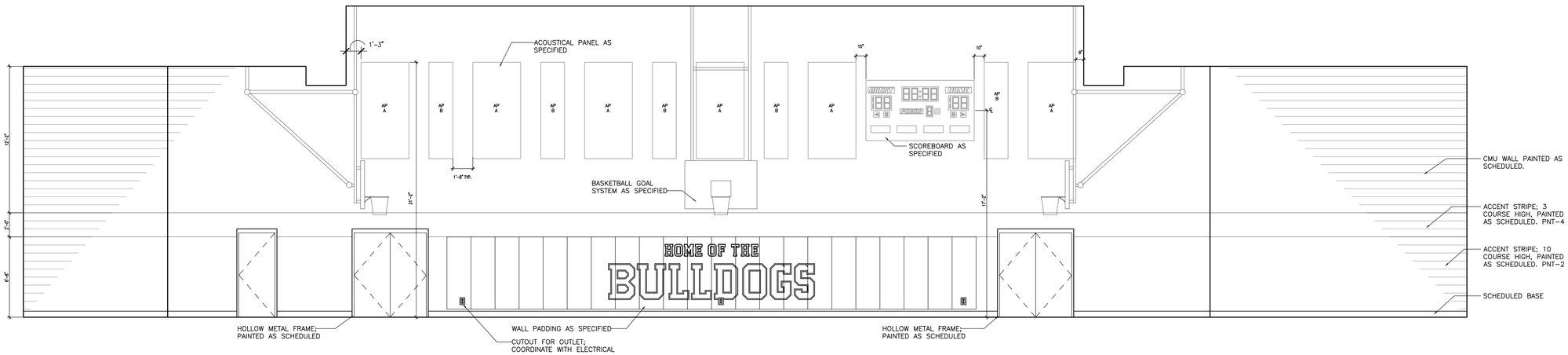
JOB NO. 25-33
SHEET NO:
A6.2
22 OF 29

0 1" 2"



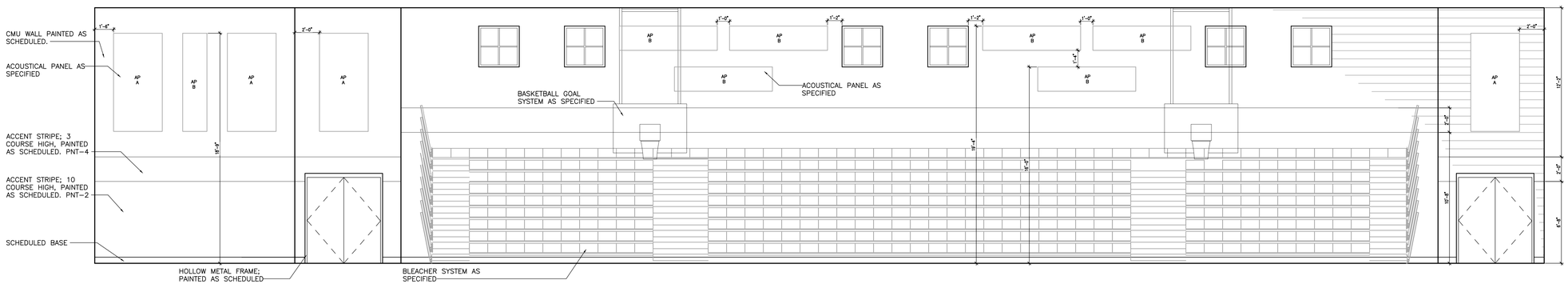
1 INTERIOR ELEVATION @ GYMNASIUM A110

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



2 INTERIOR ELEVATION @ GYMNASIUM A110

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



3 INTERIOR ELEVATION @ GYMNASIUM A110

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

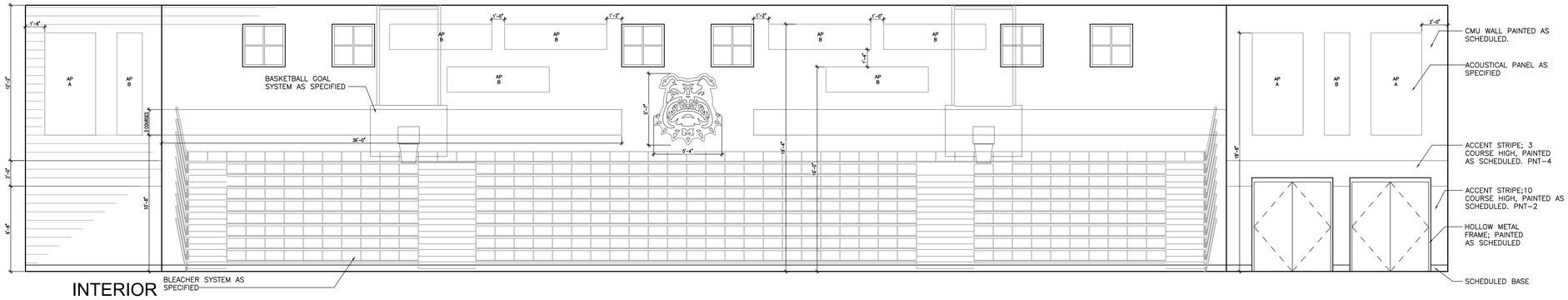
SHEET TITLE:
INTERIOR ELEVATIONS

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

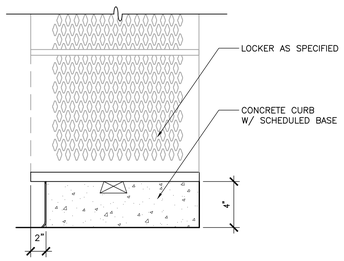
JOB NO. 25-33
SHEET NO:
A6.3
23 OF 29

0 1" 2"



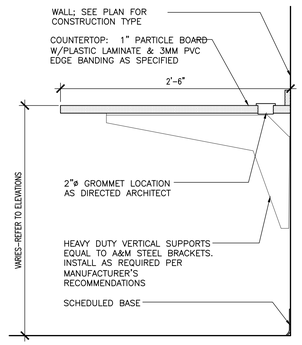
1 INTERIOR ELEVATION @ GYMNASIUM A110

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



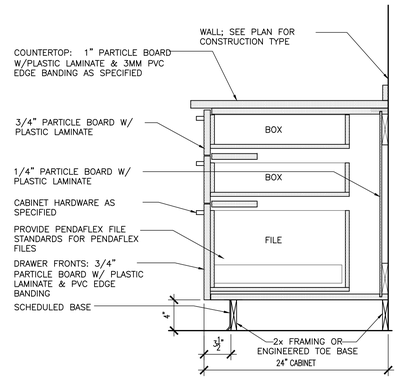
2 DETAIL @ LOCKER W/ CONCRETE CURB

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



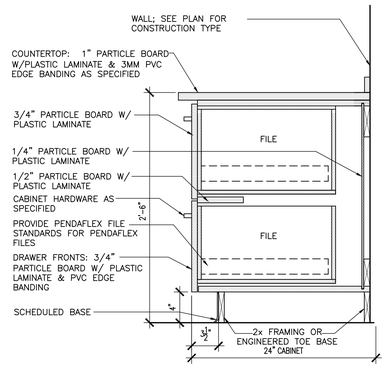
3 DETAIL @ TYPICAL COUNTER SECTION

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



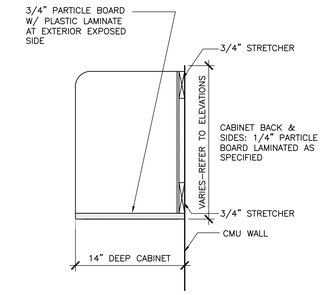
4 DETAIL @ TYPICAL BOX/BOX/FILE

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



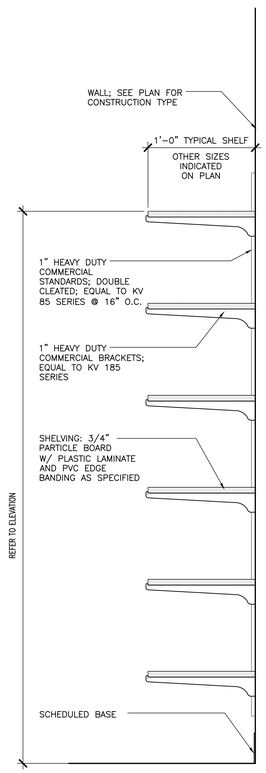
5 DETAIL @ TYPICAL FILE/FILE

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



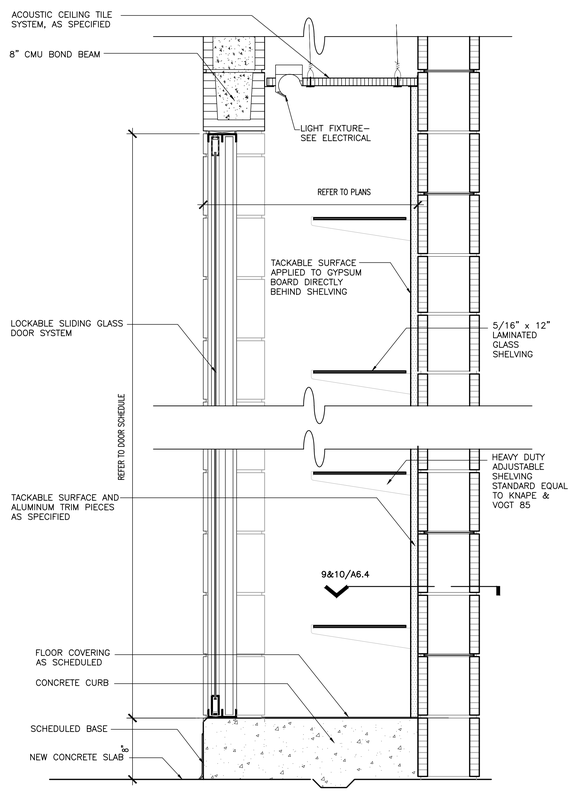
6 DETAIL @ TYPICAL OPEN BOOKSHELF

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



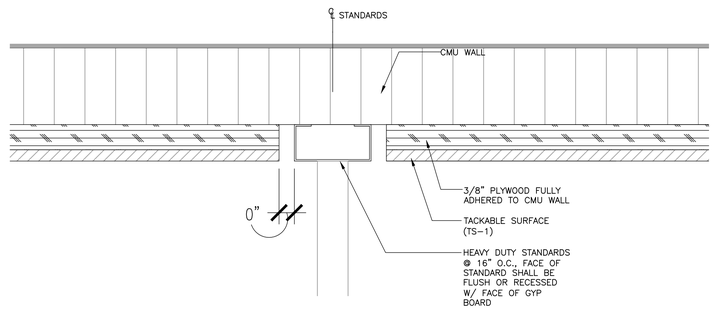
7 DETAIL @ ADJUSTABLE SHELVING

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



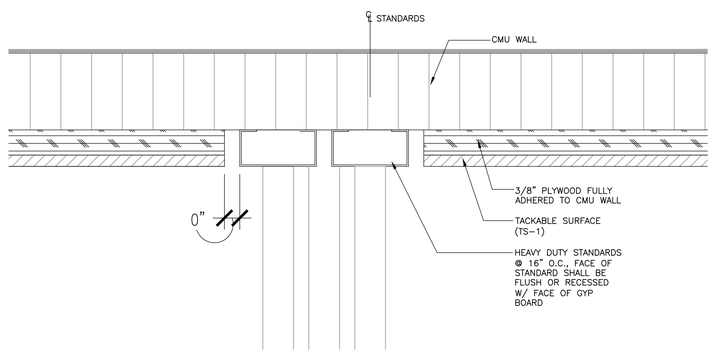
8 DETAIL @ TROPHY CASE

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



9 DETAIL @ DISPLAY CASE DETAIL AT SINGLE STANDARD

SCALE: 12" = 1'-0"



10 DETAIL @ DISPLAY CASE DETAIL AT DOUBLE STANDARD

SCALE: 12" = 1'-0"

LATHAN McKEE ARCHITECTS

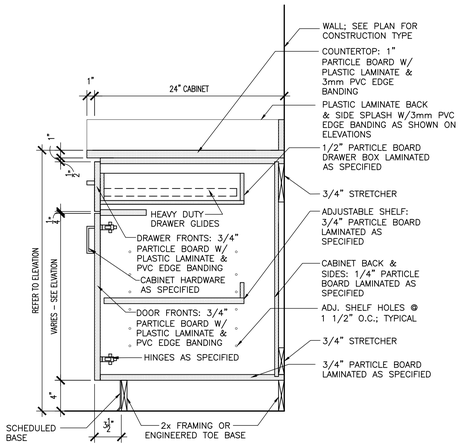
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
INTERIOR ELEVATIONS AND DETAILS

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

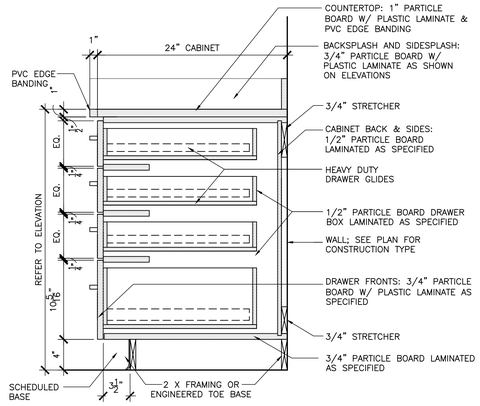
PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A6.4
24 OF 29



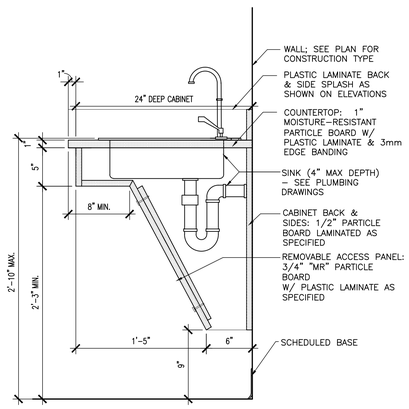
1 SECTION @ TRAINER A115

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



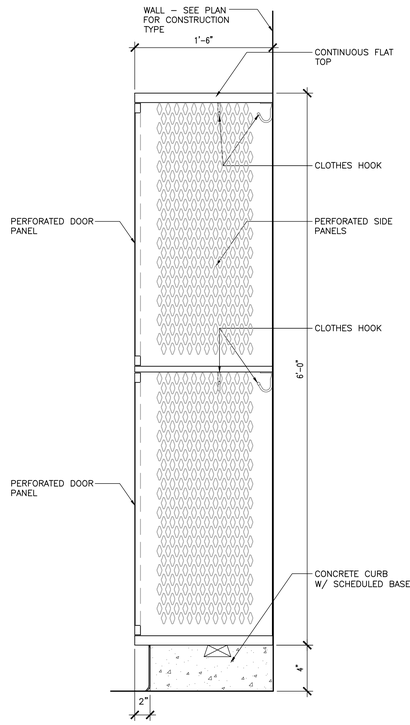
2 SECTION @ TRAINER A115

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



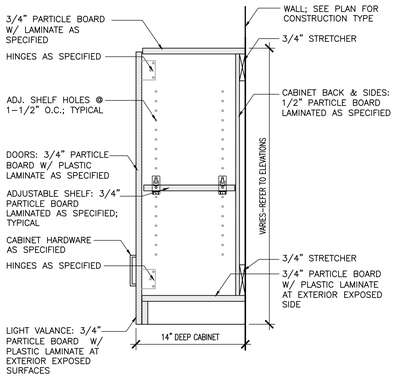
3 SECTION @ TRAINER A115

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



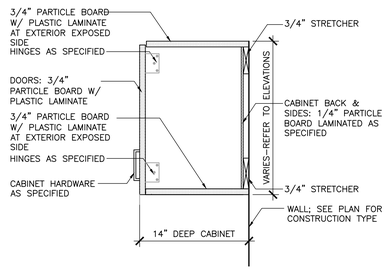
4 SECTION @ MEN'S LOCKER A116 AND @ WOMEN'S LOCKER A121

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



5 SECTION @ TRAINER A115

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



6 SECTION @ TRAINER A115

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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

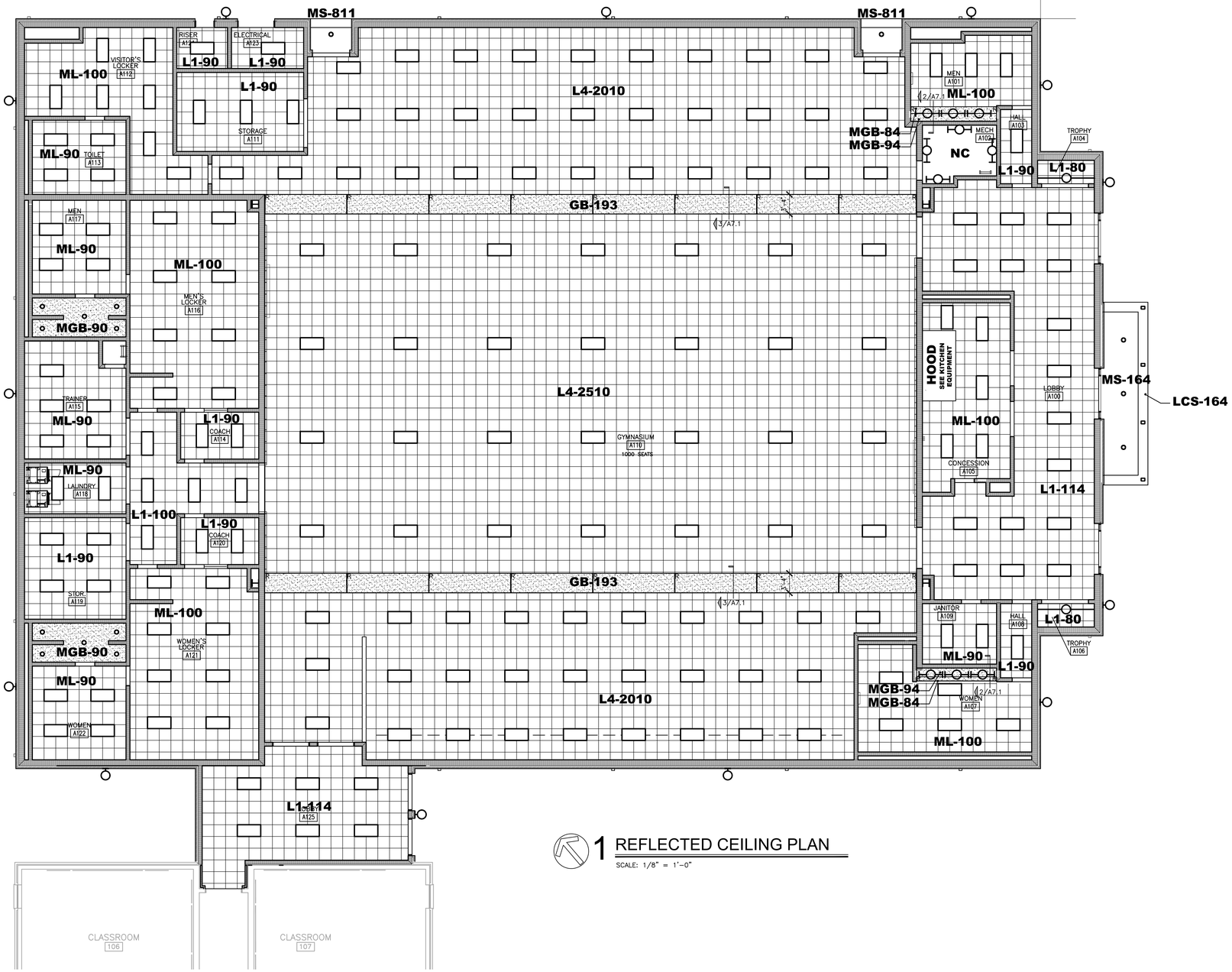
SHEET TITLE:
INTERIOR DETAILS

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A6.5
25 OF 29

0 1" 2"



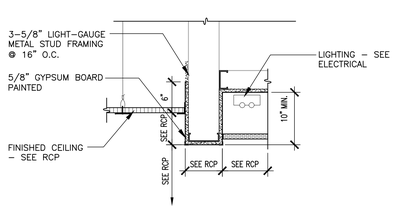
1 REFLECTED CEILING PLAN

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

CEILING LEGEND	
FIXTURE TYPES - SEE ELECTRICAL	
CEILING TYPE	CEILING HEIGHTS
GB-GYPSUM BOARD	E = MAINTAIN EXIST. CEILING HEIGHT
MGB - MOISTURE RESISTANT GYPSUM BOARD	80 = 8'-0" AFF
EG - EXTERIOR GYPSUM BOARD	84 = 8'-4" AFF
L1 - 2 x 2 LAY-IN ACOUSTICAL CEILING TILE, AS SPECIFIED	811 = 8'-11" AFF
L4 - 2 x 2 LAY-IN ACOUSTICAL CEILING TILE, AS SPECIFIED	90 = 9'-0" AFF
ML - 2 x 2 MOISTURE RESISTANT LAY-IN	94 = 9'-4" AFF
NC - NO CEILING	100 = 10'-0" AFF
V - VARIES	114 = 11'-4" AFF
R" Y" REVEAL: HORIZONTAL AS SHOWN, EXTEND VERTICAL	164 = 16'-4" AFF
MS - METAL SOFFIT	193 =19'-3" AFF
LCS - LIGHTWEIGHT CAST STONE	2010 = 20'-10" AFF
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS	

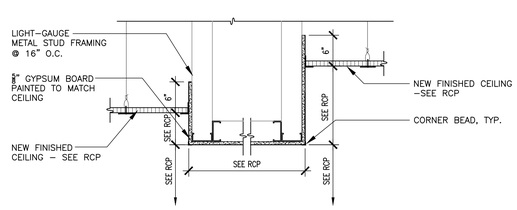
CEILING TYPE — GB—90 — CEILING HEIGHT

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



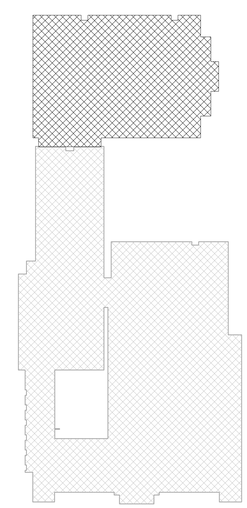
2 CEILING DETAIL @ BATHROOM SOFFIT

SCALE: 1" = 1'-0"



3 CEILING DETAIL @ GYMNASIUM

SCALE: 1" = 1'-0"



KEY PLAN

SCALE: N.T.S.

LATHAN ▪ McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
REFLECTED CEILING PLAN

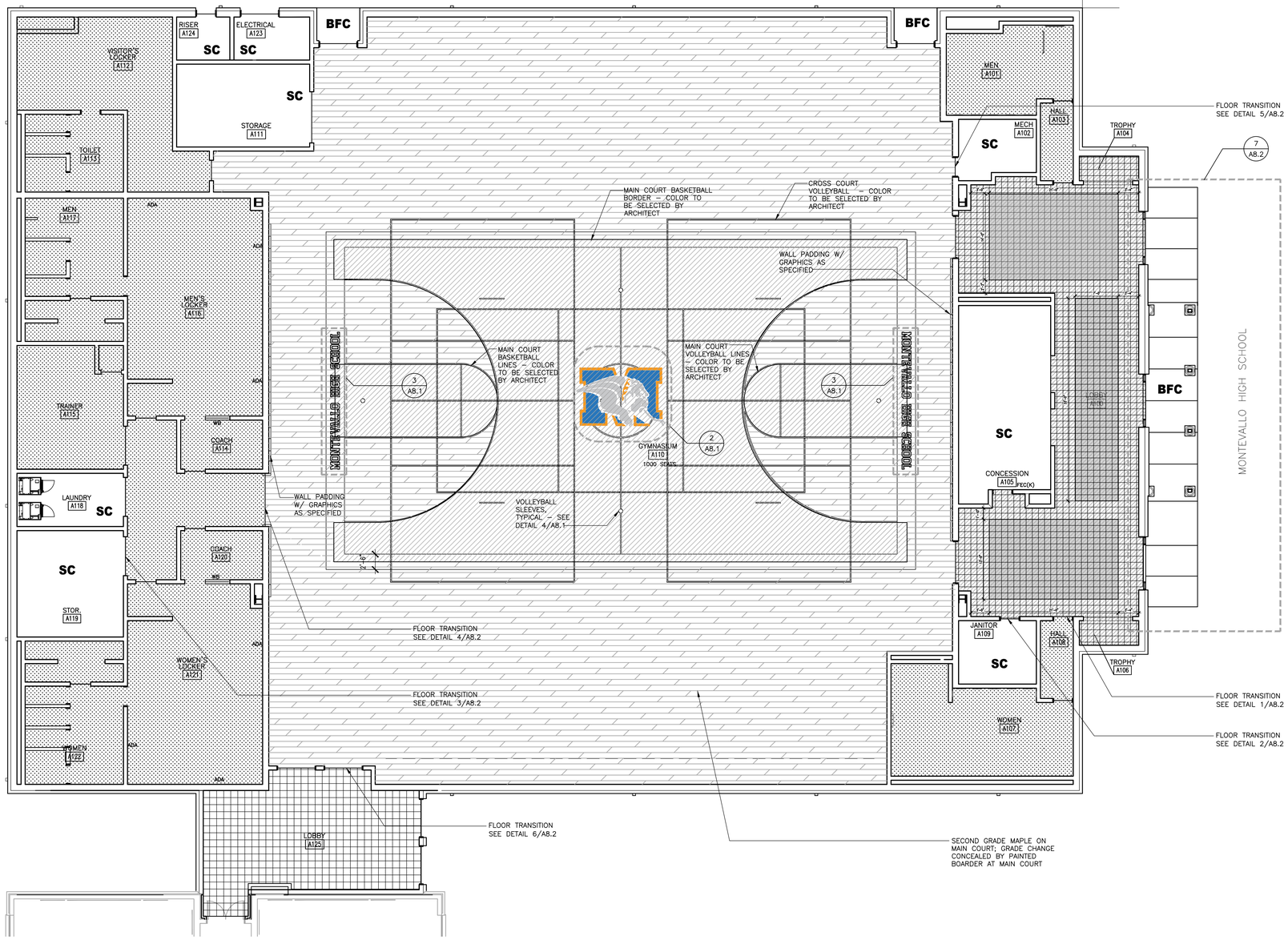
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H. RASCO
DRAWN:	BFL
DATE:	10-23-2025
REVISIONS	

JOB NO. 25-33

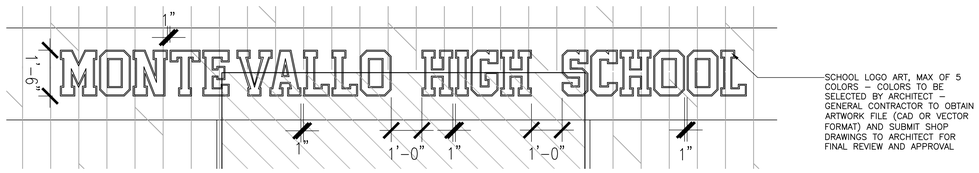
SHEET NO:
A7.1
26 OF 29

0 1" 2"



1 FINISH FLOOR PLAN

SCALE: 1/8" = 1'–0"

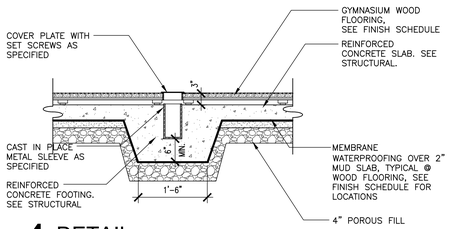


SCHOOL LOGO ART, MAX OF 5 COLORS – COLORS TO BE SELECTED BY ARCHITECT – GENERAL CONTRACTOR TO OBTAIN ARTWORK FILE (CAD OR VECTOR FORMAT) AND SUBMIT SHOP DRAWINGS TO ARCHITECT FOR FINAL REVIEW AND APPROVAL

3 PARTIAL ENLARGED PLAN @GYMNASIUM A110

SCALE: 1/2" = 1'–0"

ENLARGED ARTWORK ROTATED FOR CLARITY – SEE OVERALL FINISH PLAN FOR PLACEMENT AND LAYOUT

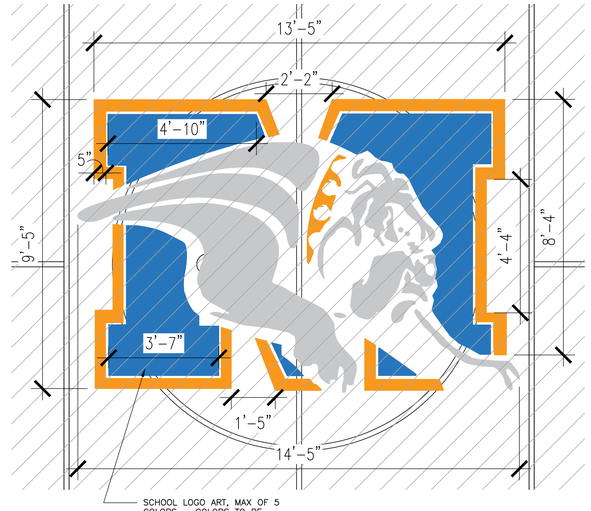


4 DETAIL @ VOLLEYBALL SLEEVE

3/4 = 1'–0"

FINISH PATTERN LEGEND

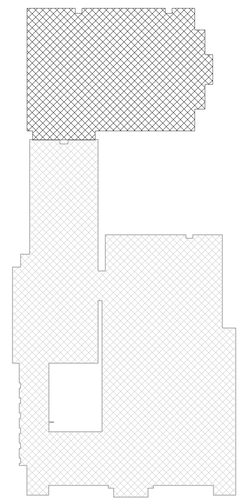
ERF–1 EPOXY RESIN FLOOR	VCT–1 VINYL COMPOSITION TILE	BFC	BFC–1 BROOM FINISH CONCRETE
WD–1 WOOD FLOOR	VCT–2 VINYL COMPOSITION TILE		
WD–2 WOOD FLOOR	SC	SC–1 SEALED CONCRETE	



SCHOOL LOGO ART, MAX OF 5 COLORS – COLORS TO BE SELECTED BY ARCHITECT – GENERAL CONTRACTOR TO OBTAIN ARTWORK FILE (CAD OR VECTOR FORMAT) AND SUBMIT SHOP DRAWINGS TO ARCHITECT FOR FINAL REVIEW AND APPROVAL

2 PARTIAL ENLARGED PLAN @GYMNASIUM A110

1/2" = 1'–0"



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FINISH FLOOR PLAN

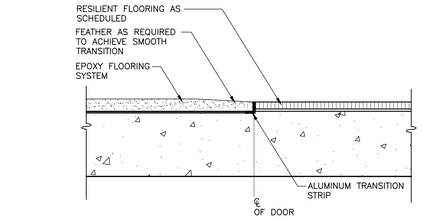
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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PROJ. MGR.:	H. RASCO
DRAWN:	BFL
DATE:	10–23–2025
REVISIONS	

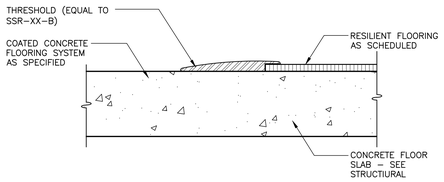
JOB NO. 25-33

SHEET NO:
A8.1
27 OF 29

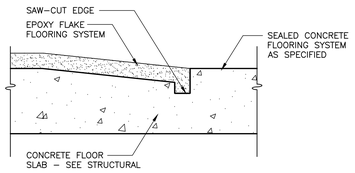
0 1" 2"



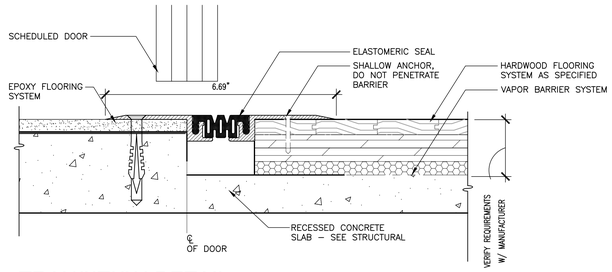
1 TRANSITION DETAIL @ EPOXY TO RESILIENT FLOOR
NOT TO SCALE



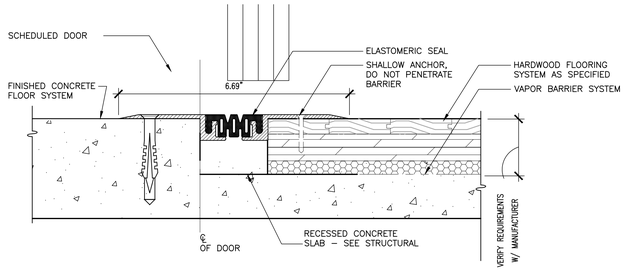
2 TRANSITION DETAIL @ CONCRETE TO RESILIENT FLOOR
NOT TO SCALE



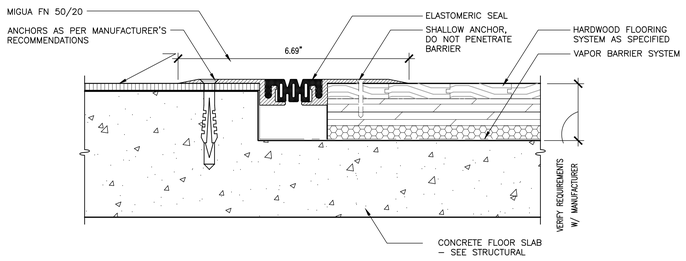
3 TRANSITION DETAIL @ EPOXY TO CONCRETE
NOT TO SCALE



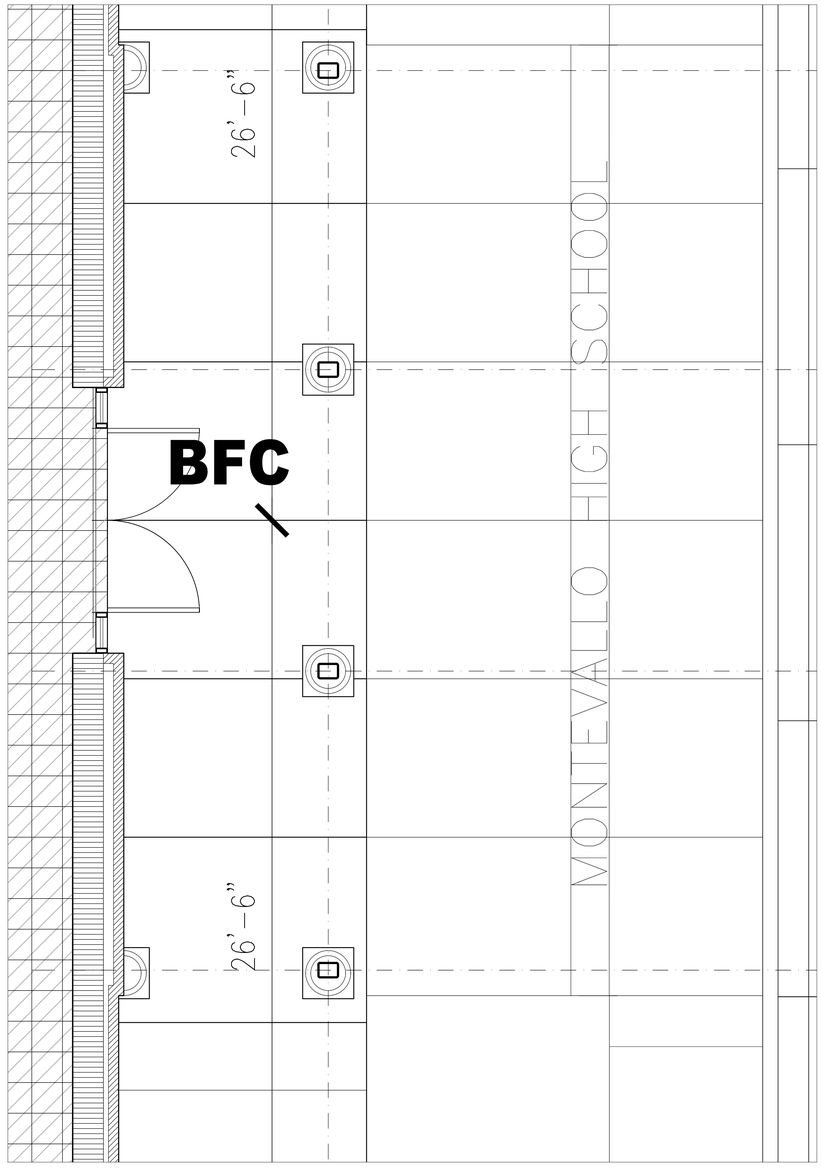
4 TRANSITION DETAIL @ EPOXY TO WOOD FLOOR
NOT TO SCALE



5 TRANSITION DETAIL @ CONCRETE TO WOOD FLOOR
NOT TO SCALE



6 TRANSITION DETAIL @ RESILIENT TO WOOD FLOOR
NOT TO SCALE



7 PARTIAL ENLARGED PLAN @----------
1/2" = 1'-0"

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK FACE	MILLWORK TOP	WALLS NORTH	WALLS SOUTH	WALLS EAST	WALLS WEST	DOOR FRAME	CEILING/ SOFFIT PAINT	NOTES
A100	LOBBY	VCT-1, VCT-2	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A101	MEN	ERF-1	ERB-1	PL-1	SS-1	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A102	MECHANICAL ROOM	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A103	HALL	VCT-1, VCT-2	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A104	TROPHY	VCT-2	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A105	CONCESSION	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A106	TROPHY	VCT-2	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A107	WOMEN	ERF-1	ERB-1	PL-1	SS-1	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-1 AND CMT-1,2,3,4	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A108	HALL	VCT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A109	JANITOR	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A110	GYMNASIUM	WD-1, WD-2	VCB-1	-	-	PNT-1,3,4,5	PNT-1,3,4,5	PNT-1,3,4,5	PNT-1,3,4,5	PNT-2	PNT-3	SEE A6.3 & A6.4 FOR ACCENT STRIPES.
A111	STORAGE	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A112	VISITORS LOCKER	ERF-1	ERB-1	-	-	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A113	VISITORS TOILET	ERF-1	ERB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A114	MENS COACH	ERF-1	ERB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A115	TRAINER	ERF-1	ERB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A116	MENS LOCKER	ERF-1	ERB-1	-	-	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A117	MENS TOILET & SHOWER	ERF-1	ERB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A118	LAUNDRY	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A119	STORAGE	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A120	WOMENS COACH	ERF-1	ERB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A121	WOMENS LOCKER	ERF-1	ERB-1	-	-	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-1,2,4,5	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A122	WOMENS TOILET	ERF-1	ERB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT WET LOCATIONS
A123	ELECTRICAL ROOM	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A124	RISER ROOM	SC	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
A125	LOBBY	VCT-1, VCT-2	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	

CONCRETE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
SC	SHERWIN WILLIAMS	SEE SPEC	MECHANICAL, ELECTRICAL, JANITOR, CONCESSIONS, RISER, STORAGE

BASE (RUBBER/CERAMIC/PORCELAIN/WOOD)

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
RB-1	TARKETT	TRADITIONAL WALL BASE COLOR:63 BURNT UMBER, 4" HIGH	SEE FINISH SCHEDULE
ERB-1	TORGINOL	BLEND ID: CFS-1028845; 1/8" FLAKE - 4" HIGH	RESTROOMS, LOCKER ROOMS AND COACHES' OFFICES
VCB-1	ROBBINS	SEE SPEC	GYMNASIUM

WALL TILE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
CWT-1	DALTILE	4X4 COLORWHEEL GRAY	RESTROOMS, SHOWERS
CWT-2	DALTILE	4X4 COLORWHEEL SEABREEZE	RESTROOMS, SHOWERS
CWT-3	DALTILE	4X4 COLORWHEEL ORANGE BURST	RESTROOMS, SHOWERS
CWT-4	DALTILE	4X4 COLORWHEEL ARCTIC WHITE	RESTROOMS, SHOWERS
PWT-1	GLAZZIO SURFACES	NEBULA COLLECTION COLOR: PERIXO 10 IN X 11.38 IN	MAIN TILE BEHIND WATER FOUNTAIN IN LOBBY
GWT-1	SIOS	WATERGLASS COLOR: BLUESTREAK 19 15 MM X 15 MM	ACCENT BEHIND WATER FOUNTAIN IN LOBBY
GWT-2	SIOS	WATERGLASS COLOR: AMBER 03 15 MM X 15MM	ACCENT BEHIND WATER FOUNTAIN IN LOBBY

VINYL COMPOSITION TILE

VCT-1	ARMSTRONG	STANDARD EXCELON STERLING 51904	LOBBY, TROPHY
VCT-2	ARMSTRONG	STANDARD EXCELON MARINA BLUE 51820	LOBBY, TROPHY

FINISH ABBREVIATION LEGEND

APF	ACOUSTIC PANEL FABRIC	PL	PLASTIC LAMINATE	SC	SEALED CONCRETE
CC	COATED CONCRETE	PLW	PLYWOOD	STC	STAINED CONCRETE
CWT	CERAMIC WALL TILE	PNT	PAINT	SS	SOLID SURFACE
ERB	EPOXY RESIN BASE	PT	PORCELAIN TILE	TS	TACKABLE SURFACE
ERF	EPOXY RESIN FLOOR	PTB	PORCELAIN TILE BASE	TWP	TECTUM WALL PANEL
ESD	STATIC CONTROL TILE	QT	QUARRY TILE	VCB	VENTED COVE BASE
GYP	GYPSUM BOARD	RB	RUBBER BASE	VCT	VINYL COMP. TILE
IC	IMPRINTED CONCRETE	RF	RUBBER FLOOR	VFS	VCT FEATURE STRIP
		RST	RUBBER STAIR TREAD	WF	WOOD FLOOR

PAINT

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PNT-1	SHERWIN WILLIAMS	COLOR:SW 7015 REPOSE GRAY	WALL PAINT
PNT-2	SHERWIN WILLIAMS	COLOR:SW 7018 DOVETAIL	TRIM PAINT
PNT-3	SHERWIN WILLIAMS	COLOR:SW 7007 CEILING BRIGHT WHITE	SOFFIT PAINT
PNT-4	SHERWIN WILLIAMS	COLOR:SW 6884 OBSTINATE ORANGE	ACCENT STRIPE AT GYM AND TECTUM PANELS
PNT-5	SHERWIN WILLIAMS	COLOR:SW 6966 BLUEBLOOD	ACCENT STRIPE AT GYM AND TECTUM PANELS
PNT-6	SHERWIN WILLIAMS	COLOR:SW 7665 WALL STREET	ACCENT PAINT IN LOGOS

TECTUM WALL PANELS

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
TWP-1	ARMSTRONG	TECTUM 47-3/4" X 96", 2" THICK	GYMNASIUM
TWP-2	ARMSTRONG	TECTUM 23-3/4" X 96", 2" THICK	GYMNASIUM

EPOXY RESIN FLOOR

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
ERF-1	TORGINOL	BLEND ID: CFS-1028845; 1/8" FLAKE; 7% SQUASH, 8% TRUE BLUE, 25% FUNCTIONAL GRAY, 25% SEMI-TRANSPARENT WHITE, 20% WHITE, 15% ONLINE.	RESTROOMS, LOCKER ROOMS, COACHES' OFFICES

WOOD FLOOR

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
WF-1	ROBBINS	SEE SPECIFICATION	GYMNASIUM
WF-2	ROBBINS	SEE SPECIFICATION	GYMNASIUM

PLASTIC LAMINATE

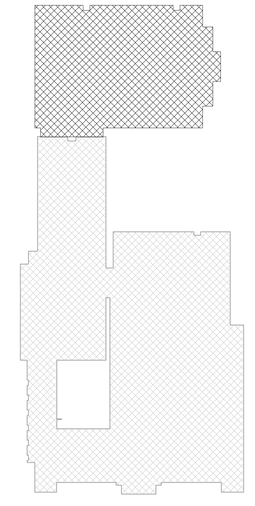
ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
PL-1	WILSONART	PARK ELM 7970K-12 SOFT GRAIN FINISH	RESTROOMS, TRAINER, COACHES' OFFICES

SOLID SURFACE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
SS-1	CORIAN	ASH AGGREGATE	RESTROOMS
SS-2	CORIAN QUARTZ	CLOUD WHITE	CONCESSIONS WINDOWS

FINISH NOTES

ALL WALLS TO BE PAINTED PNT-1 UNLESS NOTED OTHERWISE.
ALL WALLS AND CEILINGS IN WET AREAS SHALL HAVE EPOXY BASED PAINT.
ALL SOFFITS SHALL BE PAINTED PNT-3 UNLESS NOTED OTHERWISE.



KEY PLAN
SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

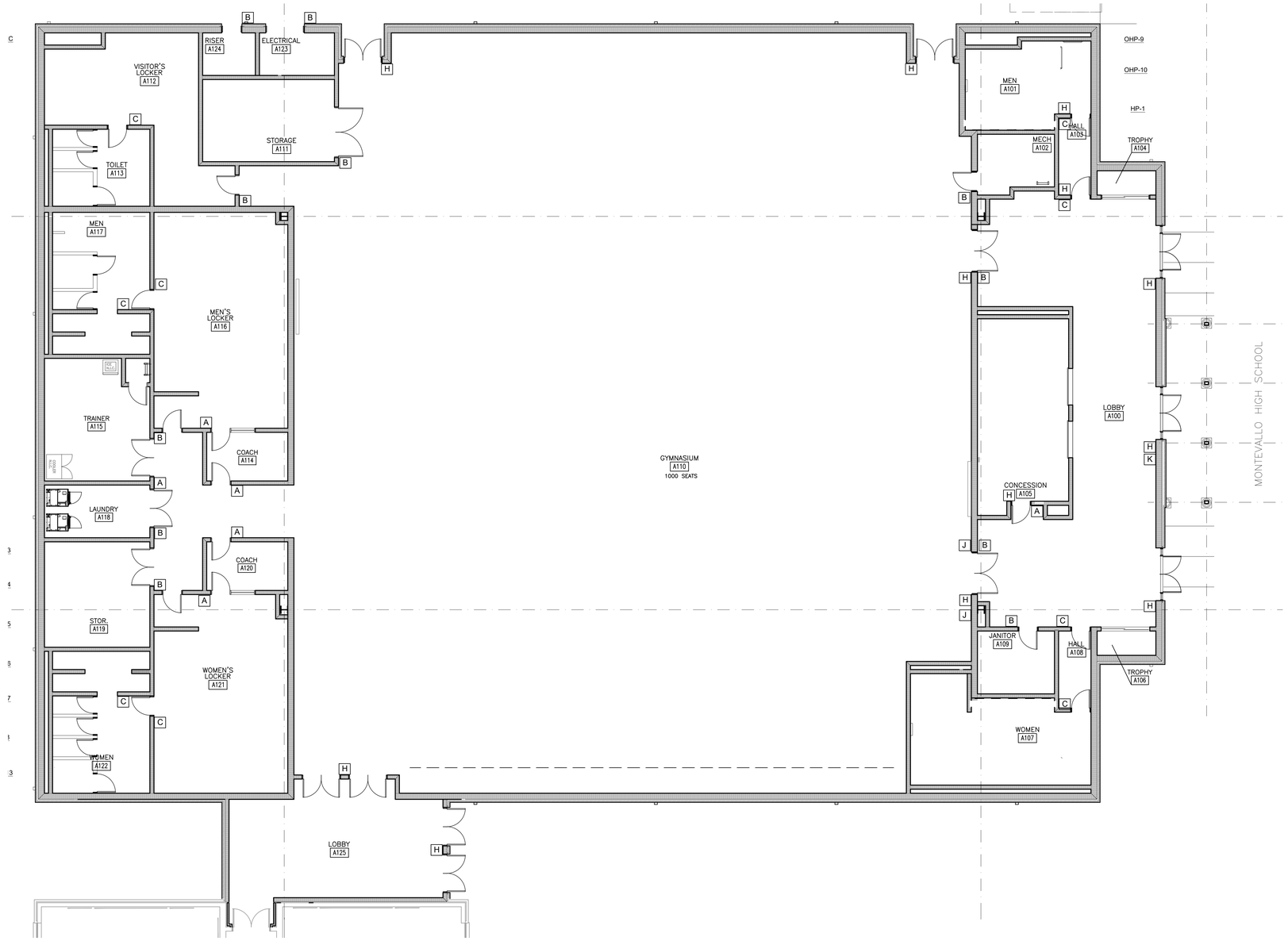
SHEET TITLE: FINISH SCHEDULE

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

PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
A8.2
28 OF 29

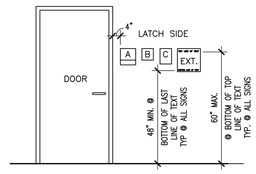
0 1" 2"



1 SIGNAGE PLAN

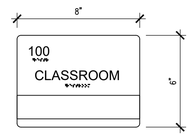
SCALE: 1/8" = 1'-0"

INTERIOR SIGNAGE LEGEND	
A	SIGN WITH MESSAGE STRIP (OFFICES/CLASSROOM/INSTRUCTIONAL AREA)
B	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC)
C	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE
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



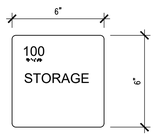
SIGNAGE LEGEND:
A – OFFICES, CLASSROOMS, INSTRUCTIONAL AREAS SIGNAGE
B – OTHER INTERIOR DOOR SIGNAGE
C – RESTROOM SIGNAGE W/ PICTOGRAM
EXT – EXTERIOR SIGNAGE

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.



INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



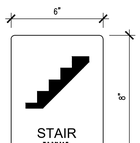
INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3" = 1'-0"



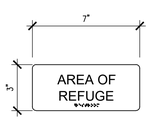
INTERIOR SIGNAGE (SIGN TYPE - D)

SCALE: 3" = 1'-0"



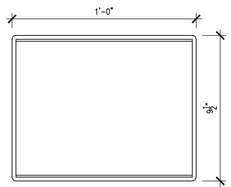
INTERIOR SIGNAGE (SIGN TYPE - E)

SCALE: 3" = 1'-0"



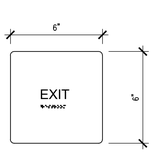
INTERIOR SIGNAGE (SIGN TYPE - F)

SCALE: 3" = 1'-0"



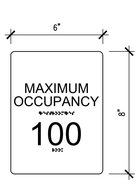
INTERIOR SIGNAGE (SIGN TYPE - G)

SCALE: 3" = 1'-0"



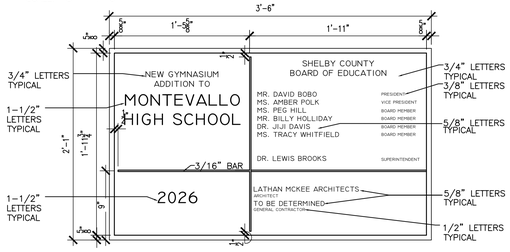
INTERIOR SIGNAGE (SIGN TYPE - H)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN - TYPE J)

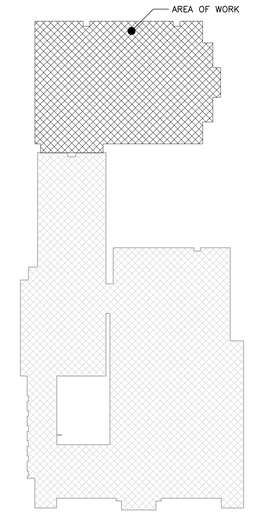
SCALE: 3" = 1'-0"



BUILDING PLAQUE (SIGN - TYPE K)

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

FINAL VERBIAGE SHALL BE VERIFIED PRIOR TO FABRICATION



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE: SIGNAGE PLAN

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

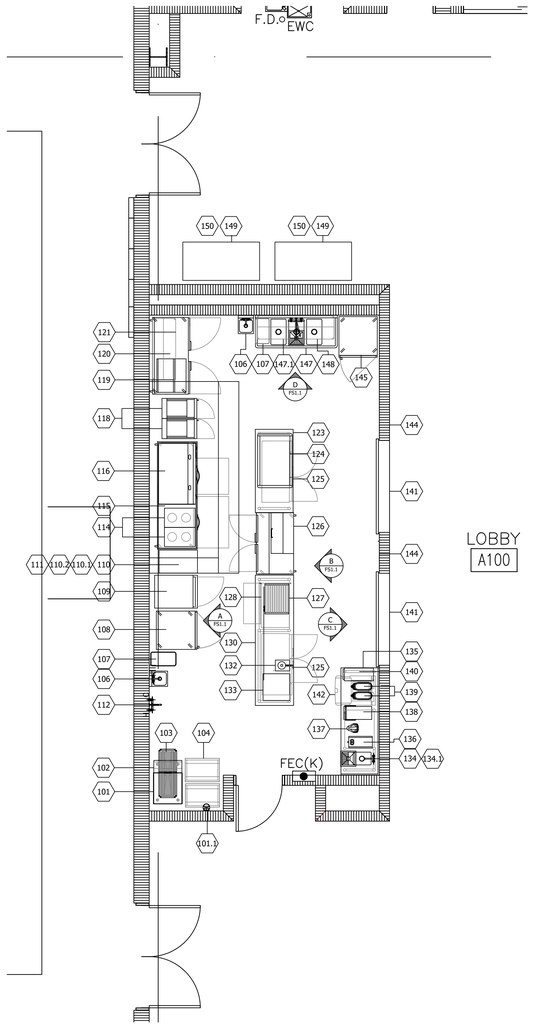
PROJ. MGR.: H. RASCO
DRAWN: BFL
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO: A9.1
29 OF 29

FOOD EQUIPMENT MECHANICAL SCHEDULE

	ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)	ELEC REMARKS	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER GPH	HOT WATER AFF (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN AFF (IN)	INDIR DRAIN SIZE (IN)	GAS SIZE (IN)	MBTUH	GAS AFF (IN)	PLUMBING REMARKS	ITEM NO
*	101	1	ICE MAKER-SMALL CUBE (R290)	SCOTSMAN	MCO522SA 32	BY KEC	5.9			208	1	60	X			78"		3/8"	84"						3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	101
	101.1	1	WATER FILTER	SCOTSMAN	AP1-P	BY KEC																							CONNECT TO ICE MAKER ITEM 101	101.1
	102	1	ICE BIN	SCOTSMAN	B-322S	BY KEC																			3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	102
	103	1	FLOOR TROUGH W/FIBERGLASS GRATE	ATL. CUSTOM FAB.	CUSTOM	BY KEC																	4"						STUB UP	103
	104	1LOT	BUN/BREAD RACKS-MOBILE			BY OWNER/VENDER																								104
	105		OPEN ITEM																											105
	106	2	HAND SINK	KROWNE	HS-30L													1/2"	24"	1/2"	24"		1-1/2"	20"					SHUT OFF VALVES BY PROJECT PLUMBER	106
	107	2	TRASH RECEPTACLE	RUBBERMAID	SLIM JIM	BY OWNER																								107
	108	1	REFRIGERATOR	BEVERAGE AIR	HBR27 HG-1-G	BY KEC	3.0		1/4	115	1	60		X	5-15P	90"														108
	109	1	CABINET, MOBILE,WARMING & HOLDING	CRES-COR	H-135-WUA-11	BY KEC	16.0			120	1	60			6-20P	66"														109
*	110	1	EXHAUST HOOD W/RETURN AIR PLENUM	ACCUREX	XKC-DCV-S-11-1-0	BY KEC											REFER TO HOOD DRWGS FS3.1													110
	110.1	1	FIRE PROTECTION SYSTEM	ACCUREX/ACCUREX	R-102 WET CHEMICAL	BY KEC																								110.1
	110.2	1	HOOD WALL FLASHING-S/S	ACCUREX		BY KEC																								110.2
	111	1LOT	HOOD FAN SYSTEM	-	-	BY MECHANICAL																								111
	112	1	SERVICE FAUCET	KROWNE	16-127	BY KEC												1/2"	36"	1/2"	36"								HOSE& NOZZLE BY OWNER	112
	113	1	LANDING TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC											PROV. CONV. OUTLET OUT OF WALL @50" AFF													113
	114	2	HOT PLATE	GARLAND	ED-15THSE	BY KEC	19.2			208	1	60		X	L6-30P	30"														114
	115	1	FREEZER BASE-MOBILE 4 DRAWER (R290)	BEVERAGE AIR	WTFCS 84 HC	BY KEC	6.9			115	1	60		X	5-15P	12"														115
	116	1	GRIDDLE	GARLAND	E24-48G	BY KEC	77.0			208	1	60	X			30"														116
	117	"	OPEN ITEM															1/4"	60"											117
	118	2	FRYER	DEAN	SR114E	BY KEC	68.0			208	1	60	X			30"														118
	119	1	FOOD WARMER	HATCO	GRFHS26	BY KEC	10.0			115	1	60		X	5-15P	36"														119
	120	1	WORK TOP FREEZER (R290)	BEVERAGE AIR	WTF60HAC FIP	BY KEC	7.0		1/2	115	1	60		X	5-15P	12"	PROV. CONV. OUTLET OUT OF WALL @50" AFF													120
	121	1LOT	WIRE SHELF, WALL MOUNTED	ADVANCE/TABCO	GREEN EPOXY SERIES	BY KEC																								121
	122		OPEN ITEM																											122
	123	1	SERVING TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC																								123
*	124	1	DOUBLE DISPLY CASE, HEATED	HATCO	GR2SDH-36D	BY KEC	10.2			120	1	60		X	5-15P	6"	STUB UP OUTLET														124
	125	2	BOTTLE COOLER - SLIDING GLASS DOORS (R290)	BEVERAGE AIR	BB48GSYS-1-B	BY KEC	5.0			115	1	60		X	5-15P	6"	STUB UP OUTLET														125
	126	1	SANDWICH REFRIGERATOR 8 PAN (R290)	BEVERAGE-AIR	SPE48HC-12	BY KEC	2.0		1/6	115	1	60		X	5-15P	6"	STUB UP OUTLET														126
	127		HOT DOG GRILL	APW-WYOTT	HR-31S	BY KEC	8.3			115	1	60		X	5-15P	6"	STUB UP OUTLET														127
	128	2	BUNN WARMER	APW-WYOTT	BW-50	BY KEC	3.3			115	1	60		X	5-15P	6"	STUB UP OUTLET														128
	129		OPEN ITEM																											129
	130	1	SERVING TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC																								130
	131		OPEN ITEM																											131
	132	1	DISPENSPER, HEATED BUTTER PUMP	SERVER	86540	BY KEC	4.3			120	1	60		X	5-15P	6"	STUB UP OUTLET														132
	133	1	POPCORN MAKER	GOLD MEDAL PRODUCTS	2600	BY KEC	1700W			120	1	60		X	5-15P	50"	STUB UP OUTLET														133
	134	1	BEVERAGE TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	134
	134.1	1	FAUCET DECK MOUNT	KROWNE	15-401L	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	134.1
	135	1LOT	WIRE SHELF, WALL MOUNTED	ADVANCE	GREEN EPOXY SERIES	BY KEC																								135
	136	1	COFFEE BREWER (REFERENCE ONLY)	BUNN	41400.0000	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER											CONNECT THRU WATER FILTER TO BREWER	136
	137	1	COFFEE AIRPOT (REFERENCE ONLY)	BUNN	32125.0100	BY OWNER/VENDER											VERIFY WITH OWNER														137
	138	1	ICE TEA BREWER (REFERENCE ONLY)	BUNN	36700.0301	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER											CONNECT THRU WATER FILTER TO BREWER	138
	139	2	ICE TEA DISPENSER 3.5 GALLON (REFERENCE ONLY)	BUNN	39600.0001	BY OWNER/VENDER											VERIFY WITH OWNER														139
	140	1	CUP DISPENSER	ANTUNES	DACS-20	BY KEC																								140
	141	2	PASS THRU WINDOW			BY ARCHITECT																								141
*	142	1	ICE TRANSPORT	CAMBRO	ICS125L110	BY KEC																								142
	143		OPEN ITEM																											143
	144	2	SNACK BOARD			BY ARCHITECT																								144
	145	1	REFRIGERATOR (BEVERAGE BACK UP) R290	BEVERAGE AIR	HBR27 HG-1-G	BY KEC	3.0		1/4	115	1	60		X	5-15P	90"														145
	146		OPEN ITEM																											146
	147	1	THREE COMPARTMENT POTSINK	ADVANCE	K7-CS-32	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	147
	147.1	1	PRE-RINSE WITH ADD ON FAUCET	KROWNE	17-109WL	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	147.1
	148	1LOT	WIRE SHELF, WALL MOUNT	ADVANCE	GREEN EPOXY SERIES	BY KEC																								147
	149	2	CONDIMENT COUNTER	ATL. CUSTOM FAB.	CUSTOM	BY KEC																								148
	150	2	CONDIMENT DISPENSERS			BY OWNER											PROV. CONV. OUTLET OUT OF WALL @50" AFF													149

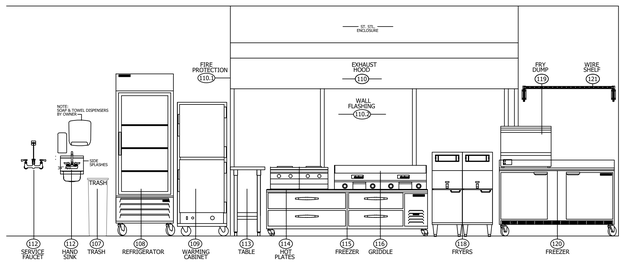
* REVISED MODEL NUMBER, ELECTRICAL REVISION



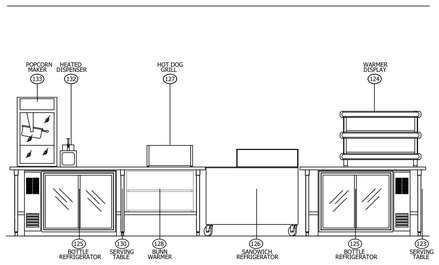
1 FS1.1 FOOD EQUIPMENT PLAN
1/4" = 1'-0"

NOTE:

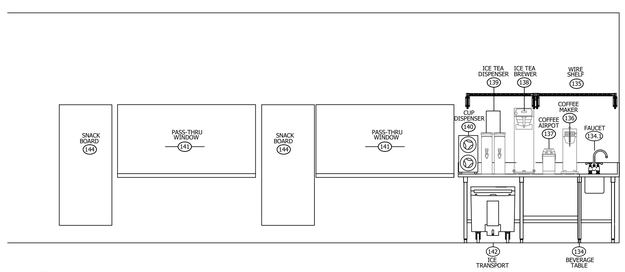
1. ALL CONNECTIONS SHOWN IN THE SCHEDULE ARE SIZED AS THEY ACTUALLY OCCUR ON THE EQUIPMENT.
2. CONNECTIONS SHOWN ARE FOR ONE UNIT. TO DETERMINE TOTAL REQUIREMENTS, MULTIPLY BY NUMBER IN QUANTITY COLUMN.
3. ELECTRIC CONTRACTOR AND PLUMBING CONTRACTOR TO VERIFY UTILITIES ON EXISTING EQUIPMENT.
4. WHERE INDICATED TO CONNECT IN OR THROUGH A VALVE COMPARTMENT, CONTRACTOR SHALL STUB-UP INTO VALVE COMPARTMENT AT HEIGHT INDICATED ON ROUGH-IN PLAN, CAP HIS WORK AND MAKE FINAL CONNECTIONS AFTER EQUIPMENT IS IN PLACE.
5. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS REGARDING ELECTRICAL PRE-WIRING AND PLUMBING PRE-PIPING IS TO HAVE THE K.E.C. EXTEND TO AND TERMINATE ALL CONNECTIONS FOR THE EQUIPMENT IN THE LOCATIONS INDICATED IN THE EQUIPMENT SCHEDULE AND SPOT PLANS.
6. ELECTRICAL, PLUMBING AND MECHANICAL CONTRACTORS TO PROVIDE ALL ROUGH-IN BUILDING SERVICES AND FINAL CONNECTION TO ALL FOOD SERVICE EQUIPMENT.



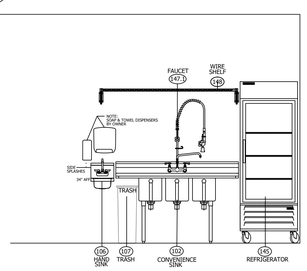
A FS1.1 PREP. AND COOKING EQUIPMENT
SCALE: 1/2"=1'-0"



B FS1.1 SERVICE EQUIPMENT
SCALE: 1/2"=1'-0"



C FS1.1 BEVERAGE EQUIPMENT
SCALE: 1/2"=1'-0"



D FS1.1 WASHING & SODA EQUIPMENT
SCALE: 1/2"=1'-0"

LATHAN McKEE ARCHITECTS

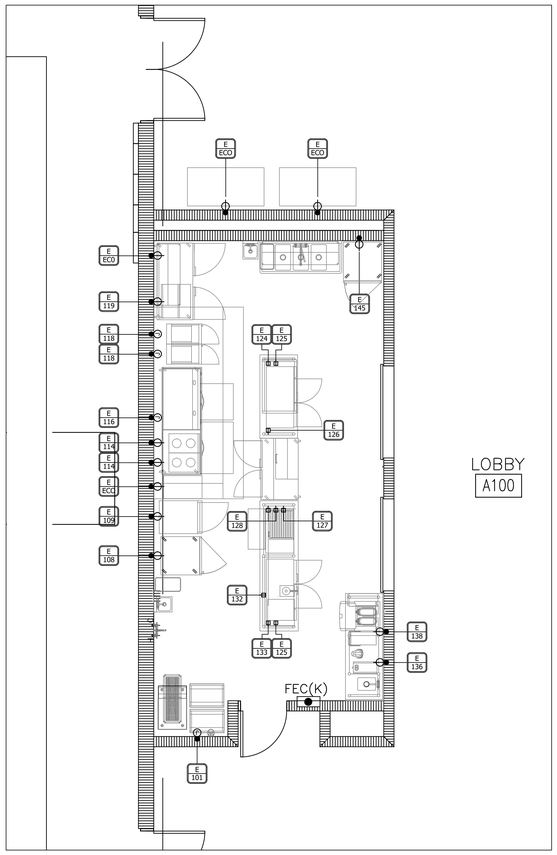
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FOOD SERVICE EQUIPMENT FLOOR PLAN & MECHANICAL SCHEDULE

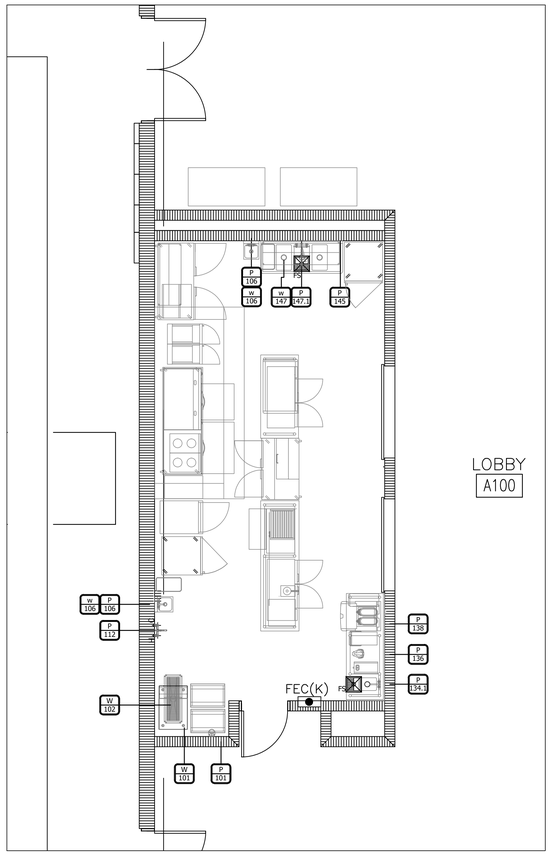
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H. RASCO
DRAWN:
DATE: 10-23-2025
REVISIONS

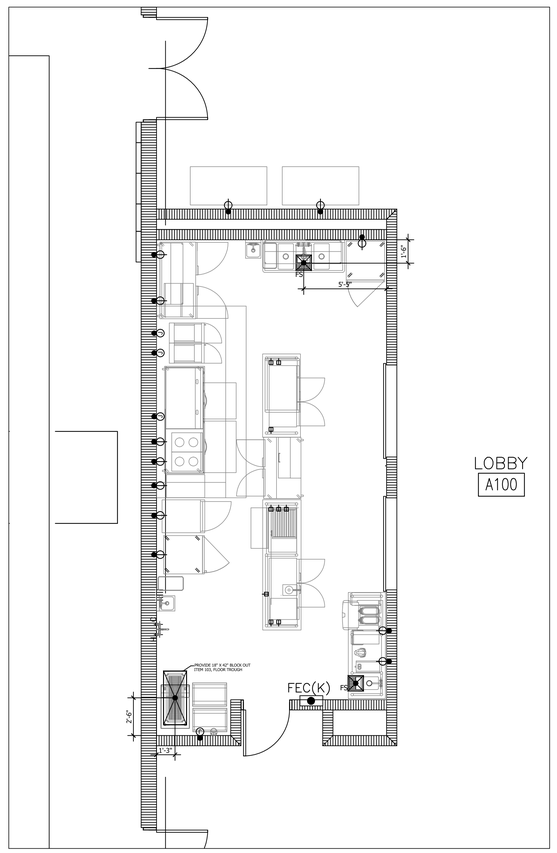
JOB NO. 25-33
SHEET NO:
FS1.1
1 OF 2
0 1" 2"



1 FS2.1 FOOD EQUIPMENT ELECTRICAL PLAN
1/4" = 1'-0"

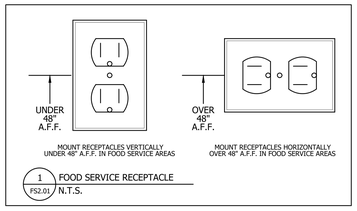


1 FS2.1 FOOD EQUIPMENT PLUMBING PLAN
1/4" = 1'-0"



1 FS2.1 FOOD EQUIPMENT PLAN
1/4" = 1'-0"

CURRENT RATING	TYPE	2 POLE - WIRE NO GROUND 125V	2 POLE - WIRE NO GROUND 250V	2 POLE - 3 WIRE GROUNDING 125V	2 POLE - 3 WIRE GROUNDING 250V	1 POLE 4 WIRE GROUNDING 125/250V
15A	STRAIGHT BLADE	1-15R	2-15R	5-15R	6-15R	
	TWIST LOCK	L1-15R		L5-15R	L6-15R	
20A	STRAIGHT BLADE		2-20R	5-20R	6-20R	14-20R
	TWIST LOCK		L2-20R	L5-20R	L6-20R	L14-20R
30A	STRAIGHT BLADE		2-30R	5-30R	6-30R	14-30R
	TWIST LOCK			L5-30R	L6-30R	L14-30R
50A	STRAIGHT BLADE			5-50R	6-50R	14-50R
	TWIST LOCK					CS6364/65
60A	STRAIGHT BLADE					14-60R



1 FS2.01 FOOD SERVICE RECEPTACLE
N.T.S.

NOTE:
REFER TO SHEET FS1.1 FOOD EQUIPMENT MECHANICAL SCHEDULE FOR ELECTRICAL UTILITY REQUIREMENT VOLTAGES, AMPERAGE, PHASE, TYPE CONNECTION, HEIGHTS AND ELECTRICAL NOTES.

ELECTRICAL LEGEND			
SYMBOLS		ABBREVIATIONS	
J	JUNCTION BOX (J-BOX)	A	AMPERES
	EQUIPMENT INTERCONNECTION BY E.C.	V	VOLTS
	ELECTRICAL ROUGH-IN	W	WATTS
	SINGLE ELECTRICAL OUTLET (SCO)	PH	PHASE
	DUPLEX ELECTRICAL OUTLET (DCO)	AFF	ABOVE FINISHED FLOOR
	FLUORESCENT LIGHT FIXTURE	DN	DOWN FROM ABOVE
	INCANDESCENT LIGHT INDICATION	BTC	BRANCH TO CONNECTION POINT AND CONNECT EQUIPMENT
	BREAKER PANELBOARD	HP	HORSE POWER
$	SWITCH AS NOTED	KW	KILOWATTS
	TELEPHONE OUTLET	DC	DIRECT CONNECTION
	FOUR PLEX ELECTRICAL OUTLET (DCO)	K.E.C.	KITCHEN EQUIPMENT CONTRACTOR
D	DATA LINE CONNECTION	E.C.	ELECTRICAL CONTRACTOR
		CONV	CONVENIENCE OUTLET 120V 1PH 20.0A

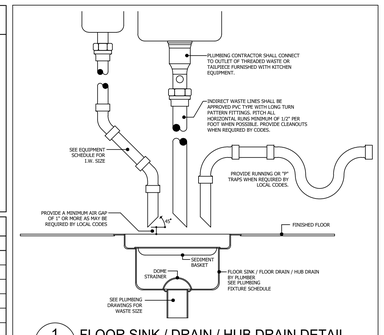
PLUMBING GENERAL NOTES

1. SEE EQUIPMENT PLAN AND SCHEDULE FOR ADDITIONAL INFORMATION.
2. P.C. TO PROVIDE ALL ROUGH-IN AND FINAL CONNECTIONS TO ALL EQUIPMENT SHOWN HEREIN.
3. SOLID DOT REPRESENTS ROUGH-IN LOCATION. (FURNISHED BY P.C.)
   DOTTED LINE REPRESENTS FINAL CONNECTION. (FURNISHED BY P.C.)
   CIRCLE REPRESENTS CONNECTION TO EQUIPMENT. (FURNISHED BY P.C.)
4. PLUMBING CONTRACTOR (P.C.) TO KEEP ALL PLUMBING LINES CLEAR OF WALLBACKING AREAS.
5. P.C. TO INSTALL REGULATORS AS REQUIRED.
6. P.C. TO VERIFY PLUMBING REQUIREMENTS AND LOCATIONS FOR EQUIPMENT SUPPLIED BY OTHERS.

PLUMBING LEGEND

SYMBOLS		ABBREVIATIONS	
	HOT	HW	HOT WATER
	COLD	CW	COLD WATER
	DRAIN	DR	DRAIN
	CONNECTION	AFF	ABOVE FINISHED FLOOR
	FLOOR SINK HALF GRATE	FD	FLOOR DRAIN
	FLOOR SINK FULL GRATE	FS	FLOOR SINK
	FLOOR DRAIN AS NOTED	FT	FLOOR TROUGH
	HUB DRAIN AS NOTED	HD	HUB DRAIN
	GAS LINE	GPH	GALLONS PER HOUR
	GAS CONNECTION	GPM	GALLONS PER MINUTE
	FLEX CONNECT HOSE	BTC	BRANCH TO CONNECT
	INDIRECT WASTE LINE	PSI	POUNDS PER SQUARE INCH
	PLUMBING INTERCONNECTION	DN	DOWN FROM ABOVE
	STEAM RETURN	S	STEAM
	STEAM SUPPLY	SR	STEAM RETURN

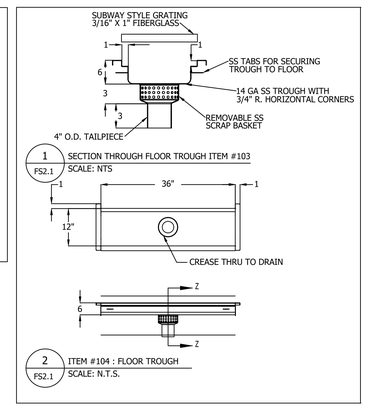
NOTE:
REFER TO SHEET FS1.1 FOOD EQUIPMENT MECHANICAL SCHEDULE FOR ELECTRICAL,PLUMBING UTILITY REQUIREMENT HOT & COLD WATER, GAS, TYPE CONNECTION, HEIGHTS AND NOTES..



1 FS3.01 FLOOR SINK / DRAIN / HUB DRAIN DETAIL
NOT TO SCALE

SPECIAL CONDITIONS NOTES

1 CONTRACTOR SHALL INSURE ALL WALLS AND/OR CEILINGS ARE PROPERLY REINFORCED TO SUPPORT ALL WALL AND/OR CEILING SUPPORTED EQUIPMENT.
2 CONTRACTOR SHALL PROVIDE 4" (VERIFY) DEEP +/- DEPRESSION FROM ROUGH SLAB TO FINISHED FLOOR TO RECEIVE WALK-IN BOX PANELS PER MANUFACTURER'S "BUILT-IN INSULATED FLOOR" DETAIL.
3 CONTRACTOR SHALL PITCH FLOOR TO AREA DRAINS AT A MINIMUM OF 1/8" PER FOOT. THIS CONDITION IS APPLICABLE IN WET SPACES SUCH AS CART WASH, TRASH ROOM, DISH ROOM AND POT WASH AREAS.
4 CONTRACTOR SHALL INSURE THAT WALL DEPTH IS SUFFICIENT TO RECEIVE RECESSED EQUIPMENT PROVIDED BY KEC.
5 CONTRACTOR SHALL PROVIDE 2" DIA RACEWAY (PVC, EMT, OR OTHER MATERIAL REQUIRED BY CODE) FOR RUN OF COMPUTER GRADE CONDUIT. ALL BENDS TO BE EASY SWEEPS (18" RADIUS MIN).
6 CONTRACTOR SHALL PROVIDE CLEAR OPENING IN WALL TO RECEIVE FOODSERVICE EQUIPMENT BY KEC. CONTRACTOR TO ALLOW 1/4" CLEARANCE ON EACH SIDE AND TOP(S) OF UNIT(S). KEC TO PROVIDE ALL NECESSARY S/S TRIM FOR BOTH SIDES OF WALL.
7 CONTRACTOR SHALL VERIFY INSTALLATION HEIGHT OF FINISHED CEILING WITH FOODSERVICE EQUIPMENT.
8 CONTRACTOR SHALL INSURE STRUCTURAL FLOOR IS ADEQUATE TO SUPPORT HEAVY EQUIPMENT SUCH AS PIZZA OVEN, ICEMAKER, AND REMOTE REF. SYSTEM.



1 FS2.1 SECTION THROUGH FLOOR TROUGH ITEM #103
SCALE: NTS

2 FS2.1 ITEM #104 : FLOOR TROUGH
SCALE: N.T.S.

2. DO NOT SLOPE FLOOR TO FLOOR SINKS (FS) HUB DRAINS (HD) OR FLOOR TROUGHS (FT).

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FOOD SERVICE EQUIPMENT CONNECTION PLAN

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

PROJ. MGR.: H. RASCO
DRAWN:
DATE: 10-23-2025
REVISIONS

JOB NO. 25-33
SHEET NO:
FS2.1
2 OF 2
0 1" 2"

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 402-16)

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

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 PERIBC SECTION 1607.5.

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

FLOOR (REDUCIBLE)----------100
STORAGE----------125
STAIRS & EXITWAYS----------100
MECHANICAL MEZZANINE----------150

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

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)----------117MPH
RISK CATEGORY----------III
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 (GROUP E OCCUPANCIES WITH OCCUPANCY > 250)
SEISMIC IMPORTANCE FACTOR----------1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
SS----------0.266
S1----------0.104
SITE CLASS----------C
SPECTRAL RESPONSE COEFFICIENTS:
SDS----------0.231
SD1----------0.104
SEISMIC DESIGN CATEGORY----------B
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR----------195 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs----------0.0823
RESPONSE MODIFICATION FACTOR, R----------3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

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.

3.0 FOUNDATIONS

3.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TERRACON, TITLED "PROPOSED GYMNASIUM MONTEVALLO HIGH SCHOOL PROJECT NO.E1255091" 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 PRESSURE PER GEOTECHNICAL REPORT: 2500 PSF.

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

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

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

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

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

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

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

3.9 WHERE CONCRETE WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

3.10 WHERE SPREAD FOOTINGS ARE AT THE SAME ELEVATION AS CONTINUOUS WALL FOOTINGS, REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS. WHERE SPREAD FOOTINGS ARE BELOW CONTINUOUS WALL FOOTINGS, CONTINUOUS WALL FOOTINGS ARE TO STEP DOWN ONTO SPREAD FOOTINGS.

3.11 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

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

3.13 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.

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

4.0 CONCRETE

4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

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

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

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

B. EXPOSURE CLASS DESCRIPTIONS:

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

4.3 REINFORCING BARS: ASTM A615 GRADE 60.

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

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

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

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

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

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

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

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

4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

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

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

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

4.13 EARTH SUPPORTED SLABS:

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

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

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

4.14 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.

4.15 CAST IN PLACE ALL SLEEVES AND INSERTS.

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

4.17 IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO ENSURE THAT PREVENTIVE MAINTENANCE IS PERFORMED THROUGHOUT THE SERVICE LIFE OF THE STRUCTURE. THE MAINTENANCE WILL INCLUDE SUCH THINGS AS CRACK SEALING, JOINT SEALING, EXPANSION JOINT REPAIRS, SEALER REPAIRS, SCALING REPAIRS, DRAINAGE INSPECTIONS, AND OTHER REPAIRS.

4.18 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 PRECAST CONCRETE

5.1 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE, AND THE DESIGN OF THE TOPPING SLAB 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.

5.2 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.

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

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

5.5 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.

6.0 ARCHITECTURAL PRECAST CONCRETE

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

6.2 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.

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.

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.

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

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

6.6 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.

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

6.8 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.

7.0 PRECAST CONCRETE HOLLOW CORE SLABS

7.1 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 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.

7.2 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.

COLLATERAL DEAD LOAD ----------20 PSF
LIVE LOAD ----------150 PSF
WALL & OTHER LOADS ---------- SEE DRAWINGS

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

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

7.3 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.

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

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

7.6 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.

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

7.8 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.

7.9 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.

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

7.11 CONTRACTOR SHALL FILL ALL VOIDS / GAPS BETWEEN PRECAST PANELS AND TOP OF WALL WITH NON-SHRINK, HIGH STRENGTH GROUT PRIOR TO PLACING TOPPING SLAB.

8.0 STRUCTURAL STEEL

8.1 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).

8.2 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.

8.1 STRUCTURAL STEEL: ASTM a992 FOR W

GENERAL NOTES CONTINUED

8.14 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.

9.0 STEEL JOISTS

9.1 DESIGN, FABRICATE, AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE STEEL JOIST INSTITUTE (SJI).

9.2 PROVIDE A MINIMUM END BEARING 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.

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

9.4 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 TWO-INCH EMBEDMENT INTO WALL.

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

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

9.7 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 BY JOISTS. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATIONS. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS, SUCH AS FIRE PROTECTION, SHALL BE COORDINATED BY THE GENERAL CONTRACTOR.

9.8 JOIST SEATS FOR JOIST BEARING ON BEAMS OR WALLS IN LINE WITH LATERAL FRAMES OR SHEAR WALLS SHALL BE DESIGNED FOR A ROLLOVER FORCE EQUAL TO 30% OF THE DEAD LOAD OF THE JOIST REACTION, UNLESS NOTED OTHERWISE. IN NO CASE SHALL THE ROLLOVER FORCE BE LESS THAN 200 PLF PERPENDICULAR TO THE JOIST SEAT.

9.9 JOISTS AND JOIST SEATS SHALL BE DESIGNED FOR AXIAL LOADS WHERE INDICATED IN THE STRUCTURAL DRAWINGS.

9.10 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.

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

10.0 STEEL DECK

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

10.2 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.

10.3 STEEL ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE WITH #12 TEK SCREWS IN A 36/4 PATTERN, SEE TYPICAL DETAILS AND/OR PLAN/SECTION NOTES. SIDE LAP FASTENERS SHALL BE #10 TEK SCREWS PROVIDE THREE SIDELAP FASTENER PER SPAN.

A. AVAILABLE PRODUCTS: SIMPSON SELF-DRILLING X METAL SCREW OR HILTI S-MD 12-24x1-5/8 M HWH5 (RACING TIP 5) SCREW.

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

10.5 GYM ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 20 GAGE, 1-1/2" DEEP, GALVANIZED.

10.6 LOW ROOF DECK: WIDE RIB TYPE "WR", STEEL ROOF DECK, 22 GAGE, 1-1/2" DEEP, GALVANIZED.

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

10.8 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-MD 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".

10.9 NAILABLE SUBSTRATE SHALL BE FASTENED TO STEEL ROOF DECK WITH #8 ROUND HEAD, ZINC PLATED SELF-TAPPING SCREWS AT 12" O.C. EACH WAY. AT CORNER ZONES, ATTACH SCREWS AT 6" O.C. - SEE TYPICAL DETAILS FOR CORNER ZONES.

11.0 MASONRY

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

11.2 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.

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

11.4 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.

11.5 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.

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

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

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

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

11.8 ALL MASONRY SHALL BE STACK BOND, UNLESS NOTED.

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

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

11.11 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 INITTALS 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.

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

11.13 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.

11.14 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.

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

11.16 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.

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

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

11.19 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.

11.20 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".

11.21 PROVIDE DOVETAIL ANCHORS AT 16" O.C., UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.

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

11.23 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.

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

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

11.26 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".

11.27 PROVIDE 2 COURSES OF GROUT FILLED OPEN BOTTOM BOND BEAM BLOCKS REINFORCED WITH 2#5 BARS CONTINUOUS AT ALL STEEL STAIR ATTACHMENT LOCATIONS, UNLESS NOTED OTHERWISE. CONTRACTOR COORDINATE EXACT LOCATIONS WITH STEEL STAIR DESIGNER.

11.28 TOP OF WALL BEARING PLATES TO BE SET FLUSH WITH TOP OF WALL ELEVATION(S). CONTRACTOR IS TO NOTCH TOP OF WALL AS REQUIRED TO INSET BEARING PLATES.

12.0 COLD-FORMED STEEL TRUSSES

12.1 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.

12.2 GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL COLD-FORMED STEEL TRUSSES AND RAFTERS, SEE SPECIFICATION 05400.

12.3 IN ADDITION TO PROVIDING THE COLD-FORMED STEEL TRUSS SYSTEM CALLED FOR IN THESE DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:

A. DESIGN OF THE TRUSS SYSTEM AND RAFTER SYSTEM, COLLECTIVELY THE 'TRUSSES'.

B. ENGINEERING PROVIDED BY MANUFACTURER SHALL BE A COMPLETE PACKAGE SIMILAR TO THE "WORKS" PACKAGE PROVIDED BY AEGIS METAL FRAMING OR EQUAL.

C. DESIGN OF ALL TRUSSES & THEIR COMPONENTS, TEMPORARY AND PERMANENT BRACING, TRUSS TO TRUSS CONNECTIONS, TRUSS TO STRUCTURE CONNECTIONS, MISCELLANEOUS STEEL CLOSURE PLATES, ETC.

D. WHERE TRUSSES ARE SUPPORTED BY CONCRETE AND THE TRUSS TO STRUCTURE CONNECTION DESIGNED BY THE CONTRACTOR CALLS FOR EMBED STEEL PLATES, SUCH PLATES SHALL ALSO BE DESIGNED BY THE CONTRACTOR. THE DESIGN SHALL MEET THE PROVISIONS OF ACI 318-19 CHAPTER 17.

E. DIMENSIONED TRUSS FRAMING PLAN.

F. TRUSS ERECTION PLAN.

G. PLAN SHOWING LAYOUT AND DETAILS OF ANY TEMPORARY AND PERMANENT BRACING REQUIRED.

H. DETAILED AND DIMENSIONED PLAN SHOWING THE LOCATION AND TYPE OF EMBEDS OR CONNECTION MATERIAL REQUIRED TO ANCHOR THE TRUSSES TO THE STRUCTURE. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED TO ANCHOR THE TRUSSES TO THE STRUCTURE.

I. CALCULATIONS FOR THE ABOVE 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. THE ENGINEER SHALL HAVE PERSONALLY SUPERVISED THE DESIGN AND PREPARATIONS OF THE CALCULATIONS. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH THE CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

12.4 TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS:

A. TOP CHORD DEAD LOAD ----------10 PSF
B. BOTTOM CHORD DEAD LOAD ----------10 PSF
C. TOP CHORD LIVE LOAD ----------20 PSF

12.5 DEFLECTION LIMITS FOR MEMBERS:

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

12.6 DESIGN TRUSSES TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENTS AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

12.7 IN ADDITION TO THE ABOVE LOADS, TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED BY TRUSSES. 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.

12.8 ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR TRUSSES SHALL BE DETAILED ON THE TRUSS MANUFACTURER'S ERECTION PLANS. BRACING MEMBERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

12.9 TEMPORARY BRACING SHALL NOT IMPOSE ANY FORCE ON THE SUPPORTING STRUCTURE. PERMANENT BRACING FORCES SHALL BE TRANSFERRED TO THE ROOF DIAPHRAGM BY THE BRACING DESIGN PROVIDED BY THE TRUSS MANUFACTURER.

12.10 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.

13.0 COLD-FORMED STEEL FRAMING (NON-LOAD BEARING)

13.1 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.

13.2 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.

13.3 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.

13.4 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		

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

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

13.7 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.

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

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

13.10 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.

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

13.12 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.

14.0 POST-INSTALLED REINFORCING, ANCHORS AND FASTENERS

14.1 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.

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

14.3 FOR ANCHORING INTO CONCRETE:

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

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

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

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

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

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

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

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

14.4 FOR ANCHORING INTO MASONRY:

A. SOLID-GROUTED CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC01 OR ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "TITEN-HD" & "STAINLESS STEEL TITEN HD" (ICC-ES ESR-1056)
b. SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-UES ER-240)
c. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
d. SIMPSON STRONG-TIE "TITEN TURBO" (IAMPO-UES ER-716)
e. HILTI KH-EZ, KH-EZ CRC, KH-EZ SS316, KH-EZ C, AND KH-EZ P SCREW ANCHORS (ICC ESR-3056)
f. HILTI KWIK BOLT-1 EXPANSION ANCHOR (ICC ER-677)
g. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR (ICC ESR-4561)
h. DEWALT "SCREW-BOLT+" (ICC-ES ESR 4042)
i. DEWALT "POWER-STUD+ SD1" (ICC-ES ESR 2966)

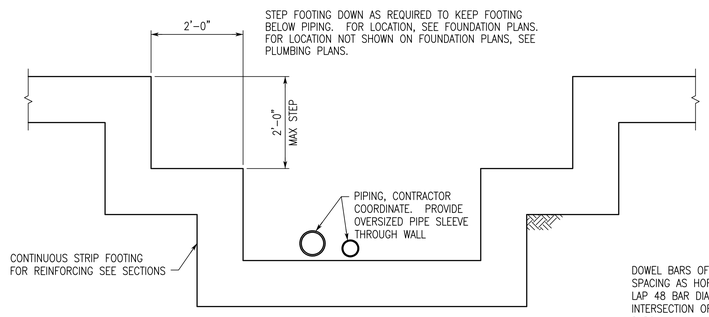
2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281)
b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
c. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL

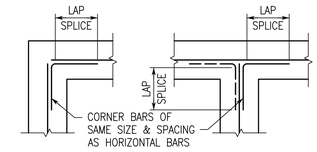
SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 25-103

LATHAN McKEE ARCHITECTS

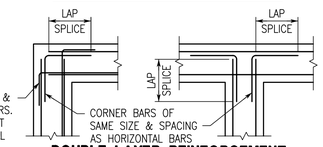
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION



FOOTING/FOUNDATION WALL AT PIPING
TYPICAL



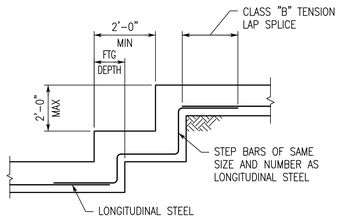
SINGLE LAYER REINFORCEMENT



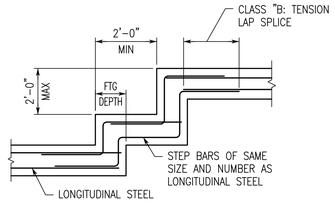
DOUBLE LAYER REINFORCEMENT

NOTE: ALL LAP SPLICES CLASS "B" TENSION

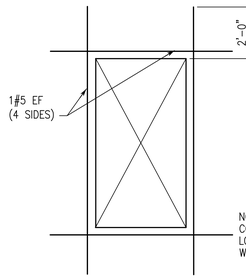
WALL CORNER REINFORCING DETAIL
TYPICAL



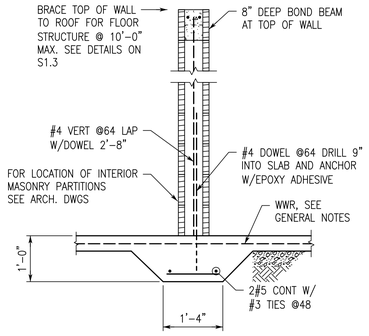
FOOTING STEP DETAIL
TYPICAL



FOOTING STEP DETAIL
TYPICAL

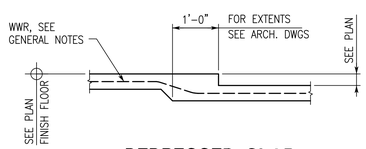


WALL OPENING REINFORCMENT DETAIL
TYPICAL

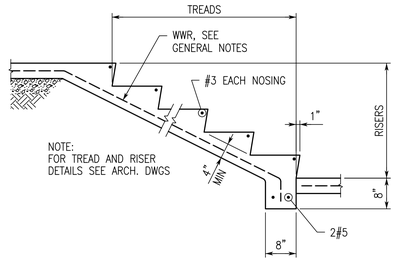


INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL
TYPICAL

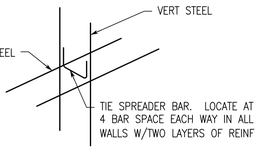
NOTE:
CONTRACTOR COORDINATE W/ARCHITECT FOR ALL DEPRESSED SLAB AREAS BEFORE SLAB ON GRADE IS PLACED.



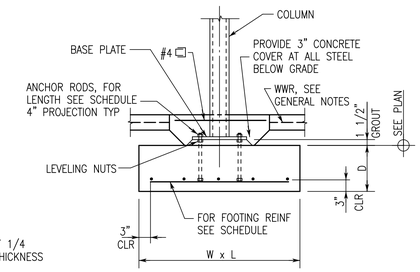
DEPRESSED SLAB ON GRADE DETAIL
TYPICAL



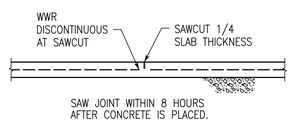
STAIR ON GRADE DETAIL
TYPICAL



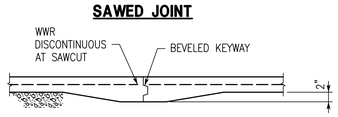
WALL STEEL TIE-SPREADER DETAIL
TYPICAL



COLUMN BASE AND FOOTING DETAIL
TYPICAL



SAWED JOINT



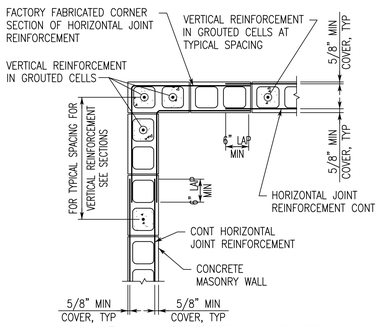
KEYED JOINT

SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL

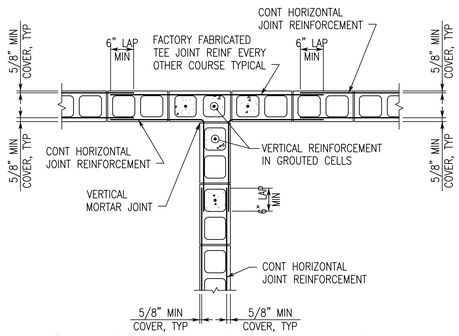
TENSION LAP SPLICE LENGTHS

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

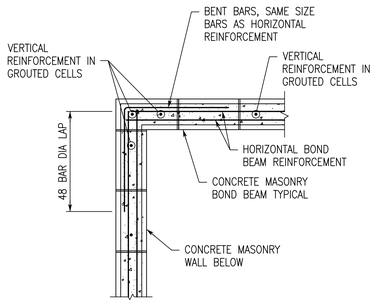
TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.



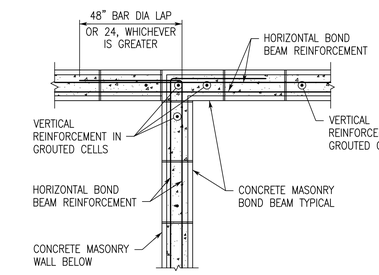
PLAN SHOWING JOINT REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION
TYPICAL



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING BOND BEAM AT STRUCTURAL WALL INTERSECTION
TYPICAL

VENEER LINTEL SCHEDULE

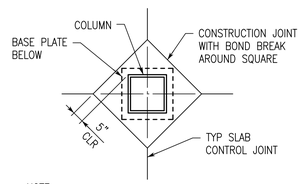
MAXIMUM OPENING WIDTH	STEEL FOR EACH 4" OF WALL THICKNESS
2'-0"	L3 1/2x3 1/2x3/8
4'-0"	L3 1/2x3 1/2x3/8
6'-0"	L5x5x3/8
8'-0"	L6x4x3/8 (LONG LEG VERTICAL)
LARGER	CONTACT ENGINEER

1. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
2. ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.

MASONRY REINFORCING LAP SPLICE LENGTHS

BAR SIZE (#)	CENTERED (IN.)	EDGE (IN.)
3	16.0	17.0
4	21.0	29.0
5	26.0	45.0
6	43.0	85.0
7	60.0	115.0
8	92.0	173.0
9	119.0	220.0
10	154.0	279.0
11	194.0	344.0

NOTES:
1. LAP SPLICE LENGTHS APPLY TO BOTH HORIZONTAL AND VERTICAL REINFORCING.



NOTE:
ISOLATION JOINTS SHALL BE PLACED AT CONTRACTORS OPTION WHERE NOT SPECIFICALLY INDICATED ON PLANS.

ISOLATION JOINT DETAIL
TYPICAL

LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

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

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 1#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

NON-LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

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

1. DO NOT USE THIS SCHEDULE IF WALL IS LOAD BEARING SUPPORTING ANYTHING OTHER THAN WALL WEIGHT ONLY. IF WALL IS LOAD BEARING USE THE LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE.
2. PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
3. ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.
4. 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.
5. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
6. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 1#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 2'-0" PAST OPENING ON EACH SIDE OF OPENING.

SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER
H. CRAIG WILLIAMS, P.E.
10-23-2025

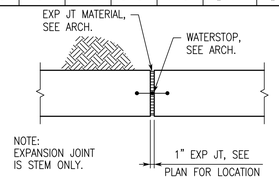
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
S1.2
3 OF 13

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5300
fax 205-824-5280
Job Number 25-103

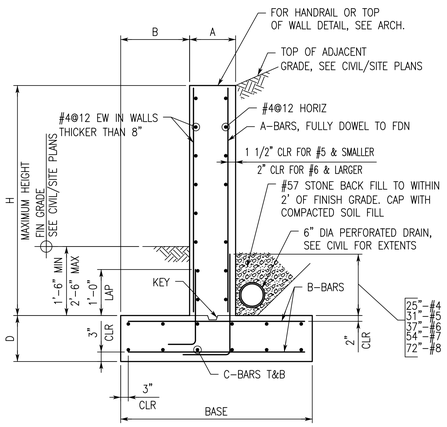
RETAINING WALLS ON SOIL

DIMENSIONS					REINFORCEMENT		
H	A	B	BASE	D	A-BARS	B-BARS	C-BARS
2'-0"	8"	6"	2'-0"	1'-0"	#4@12	#4@12	2#5
4'-0"	8"	6"	4'-3"	1'-0"	#4@12	#4@12	4#5
6'-0"	8"	1'-6"	6'-9"	1'-0"	#5@12	#5@12	6#5
8'-0"	8"	1'-6"	9'-3"	1'-0"	#5@6	#5@6	9#5



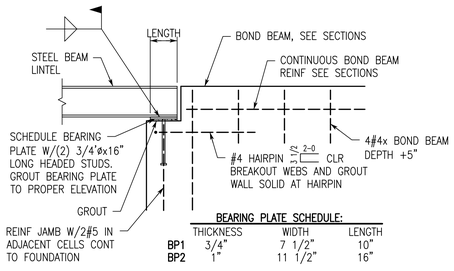
SITE WALL EXPANSION JOINT DETAIL

NOTE: PROVIDE WALL EXPANSION JOINTS AT 25'-0" MAXIMUM.



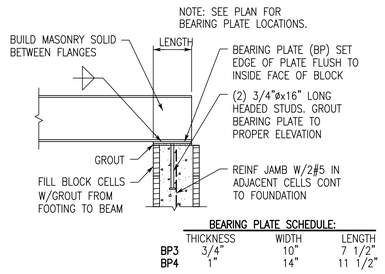
SITE RETAINING WALL SECTION

FOR BACKFILL MATERIAL, SEE GENERAL NOTES.



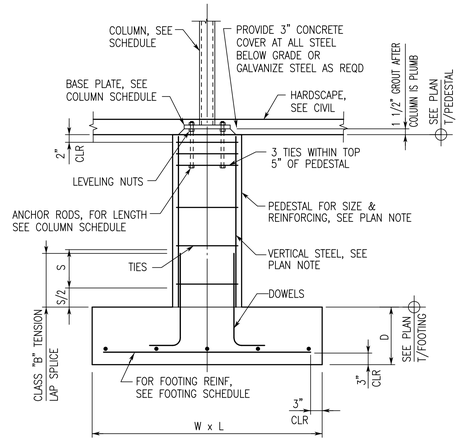
BEAM BEARING DETAIL IN LINE WITH CMU WALL

TYPICAL



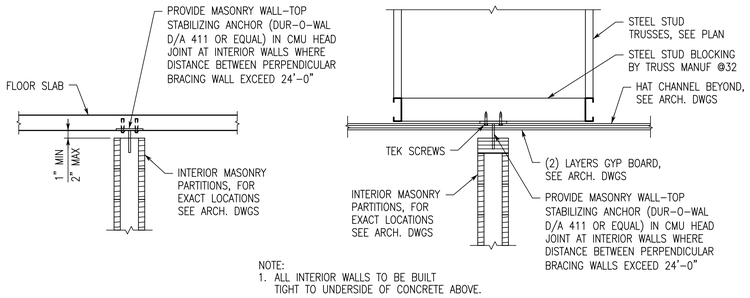
BEAM BEARING DETAIL

TYPICAL



COLUMN BASE, PEDESTAL AND FOOTING DETAIL

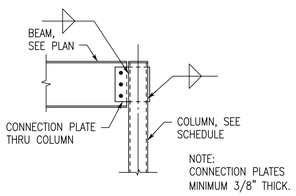
TYPICAL



NOTE:
1. ALL INTERIOR WALLS TO BE BUILT TIGHT TO UNDERSIDE OF CONCRETE ABOVE.

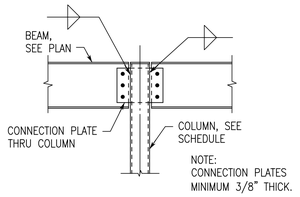
INTERIOR MASONRY WALL BRACING DETAILS

TYPICAL



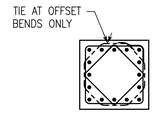
BEAM TO COLUMN CONNECTION DETAIL

TYPICAL



BEAM TO COLUMN CONNECTION DETAIL

TYPICAL



NOTE: ALTERNATE POSITION OF TIE HOOKS IN PLACING SUCCESSIVE SETS OF TIES

COLUMN TIE DETAILS

TYPICAL

PIPING WEIGHTS

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

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

COLUMN SCHEDULE

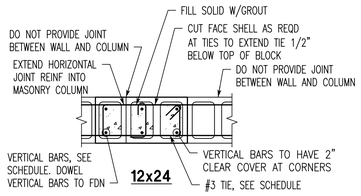
COLUMN DESIGNATION		C1	C2
COLUMN	SIZE	W14x90	HSS 6x6x3/8
	BASE PLATE	1 1/2x20x20	3/4x12x12
	ANCHOR RODS	(4) 1"ø W/ 1'-0" EMBEDMENT	(4) 3/4"ø W/ 9" EMBEDMENT
	NOTES	1	1

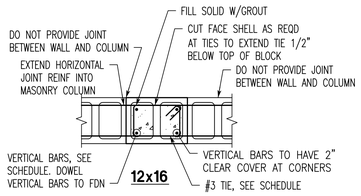
NOTES:
1. STEEL DETAILER TO PROVIDE 2" CLEARANCE FROM EDGE OF BASE PLATE TO EDGE OF HOLE. INCREASE BASE PLATE SIZE AS REQUIRED TO MAINTAIN CLEARANCE AND FIT-UP OF BOLTS.

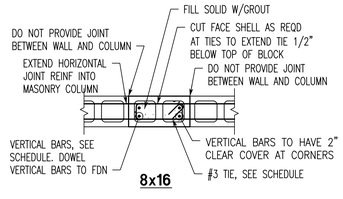
FOOTING SCHEDULE

FOOTING DESIGNATION		F5.0	F8.0
FOOTING	SIZE (LxW)	5'-0"x5'-0"	8'-0"x8'-0"
	DEPTH (D)	1'-0"	1'-6"
	REINF EW (BOT)	6#5	8#7
	NOTES	1	1

NOTES:
1. PROVIDE SCHEDULED REINFORCEMENT ON TOP AND BOTTOM OF FOOTING.







MASONRY COLUMN (MC)

TYPICAL

MASONRY COLUMN SCHEDULE (MC)

COLUMN DESIGNATION		MC1	MC2	MC3
COLUMN	SIZE	8x16	12x16	24x24
	VERTICALS	4#5	4#5	12#5
	TIES	#3@8	#3@8	#3@8
	NOTES	1,2,3	1,2,3	1,2,3

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

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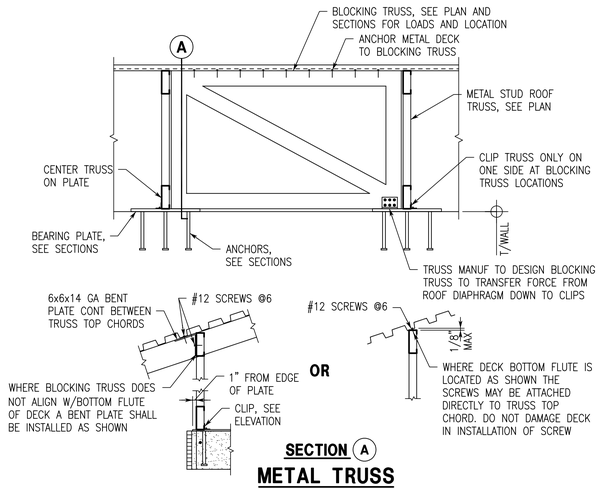
SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED PROFESSIONAL ENGINEER
No. 22596
H. Craig Winn P.E.
12-23-2025

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
S1.3
4 OF 13

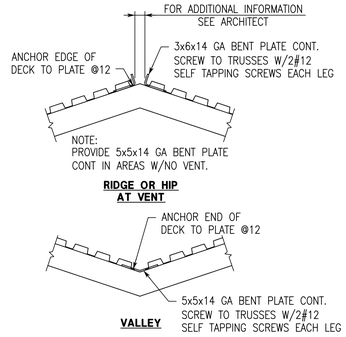
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SECTION (A)

METAL TRUSS BLOCKING TRUSS DETAIL

NOT TO SCALE
ALTERNATE CONDITION



RIDGE, HIP AND VALLEY SUPPORTS FOR METAL DECK

TYPICAL

COMPONENTS AND CLADDING WIND LOADS FOR WALLS (PSF)

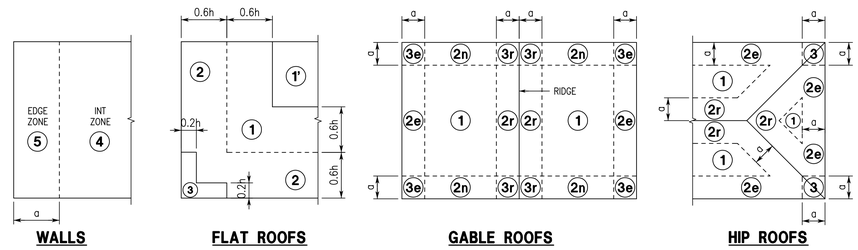
H = 36'-0" 4:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	117 MPH VELOCITY (3-SEC. GUST) ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	35.9	-38.9	-48.1
	20	34.3	-37.3	-44.9
	50	32.1	-35.1	-40.6
	100	30.5	-33.5	-37.4
	200	28.9	-31.9	-34.1
	500	26.8	-29.8	-29.8

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 12'-8".
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 ROOF (PSF)

117 MPH VELOCITY (3-SEC. GUST)		ROOF				OVERHANG			
H = 36'-0" 4:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	Positive Max. Net Pressure 'p' (PSF)	Zone 1 (Int.) (PSF)	Zone 2r (Edge) (PSF)	Zone 2e & 3 (Corner) (PSF)	Zone1 (Int) - Max. Net Pressure 'p' (PSF)	Zone 2r (Edge) - Max. Net Pressure 'p' (PSF)	Zone 2e (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)
	10	26.8	-60.2	-78.5	-84.5	-69.9	-88.2	-94.3	-112.5
	20	23.1	-60.2	-70.7	-76.1	-69.9	-84.0	-89.4	-99.8
	50	18.3	-46.4	-60.5	-64.9	-64.8	-78.4	-82.8	-83.0
	100	16.0	-35.9	-52.8	-56.5	-60.8	-74.2	-77.9	-70.3
	200	16.0	-35.9	-45.0	-48.1	-60.8	-69.9	-73.0	-57.8
	500	16.0	-35.9	-45.0	-48.1	-60.8	-69.9	-73.0	-57.8

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 12'-8".
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. CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF FRAMING MEMBERS AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.
6. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.



WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS

TYPICAL

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SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
H. Craig Winn, P.E.
10-23-2025

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
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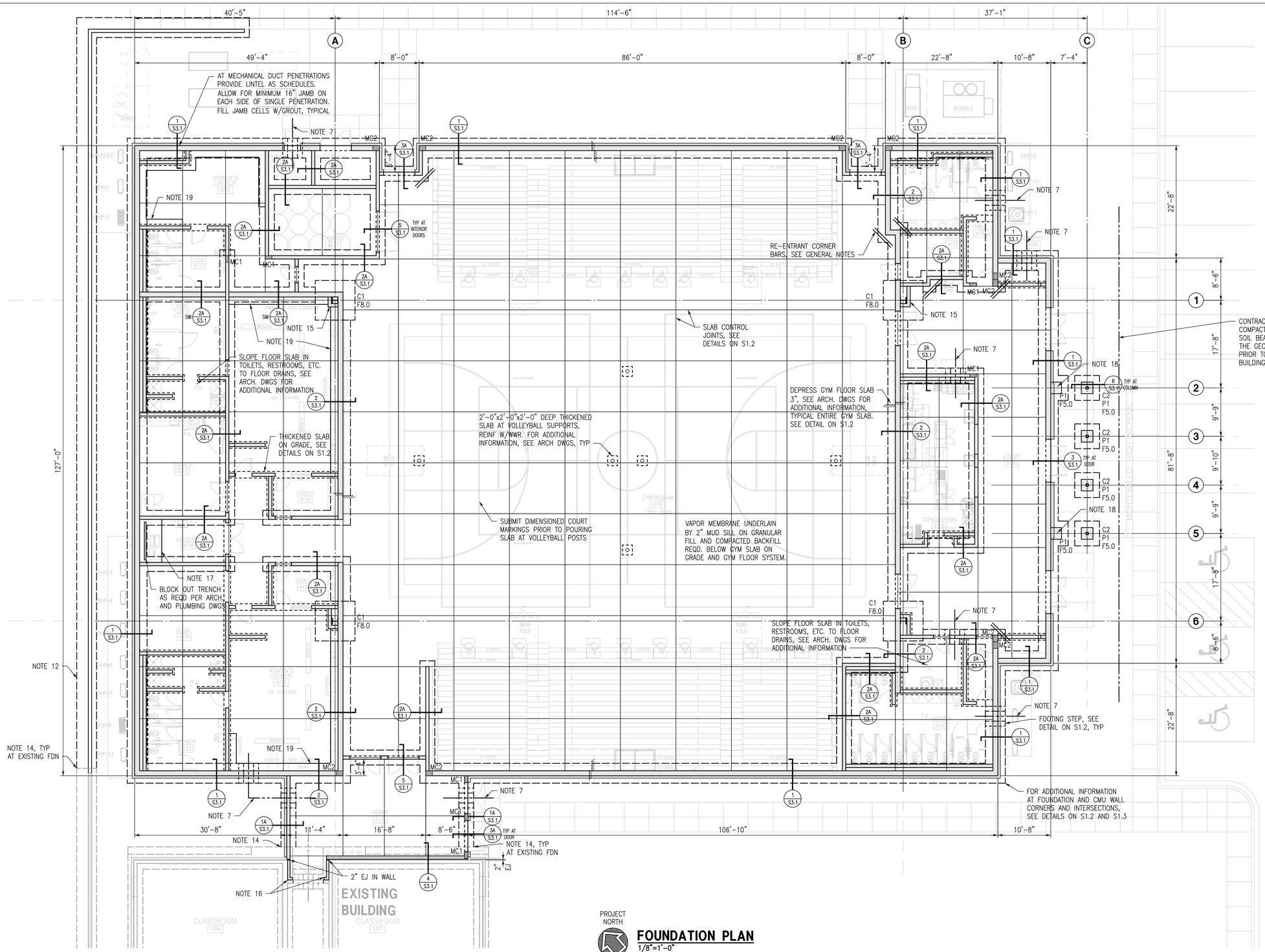
JOB NO. 25-33
SHEET NO:
S1.4
5 OF 13

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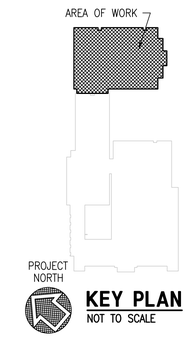
SHEET TITLE:
FOUNDATION PLAN



PROJECT NORTH

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

1. FINISH FLOOR (TOP OF SLAB) ELEVATION 0'-0" (436.26'), UNLESS NOTED.
2. TOP OF INTERIOR FOOTING -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
3. TOP OF EXTERIOR FOOTING -2'-0" BELOW FINISH FLOOR, UNLESS NOTED.
4. FOR SLAB ON GRADE CONSTRUCTION, SEE PLAN, GENERAL NOTES AND TYPICAL DETAILS.
5. FOR SLAB RECESS, DEPRESSIONS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
7. INVERT AND FOOTING STEP ELEVATIONS AND LOCATIONS ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND UTILITY DRAWINGS.
8. SEE TYPICAL DETAIL FOR THICKENED SLAB UNDER MASONRY WALLS NOT SHOWN ON PLAN. COORDINATE LAYOUT WITH ARCHITECTURAL PLAN.
9. C# INDICATES STEEL COLUMN, SEE SCHEDULE ON S1.3 AND COLUMN BASE AND FOOTING DETAIL ON S1.2.
10. F# INDICATES CONCRETE SPREAD FOOTING. SEE SCHEDULE ON S1.3.
11. "P1" INDICATES 2'-4"x2'-4" REINFORCED CONCRETE PEDESTAL WITH 16#6 VERTICAL REINFORCING BARS AND #3 TIES AT 12" ON CENTER. SEE COLUMN BASE, PEDESTAL AND FOOTING TYPICAL DETAIL AND COLUMN TIE DETAIL ON SHEET S1.3. TOP OF PEDESTAL -0'-4" BELOW FINISH FLOOR. DOWEL PEDESTAL TO FOOTING WITH #6 REINFORCING BARS AT EACH VERTICAL.
12. FOR SITE RETAINING WALL LOCATION AND RETAINED HEIGHT, REFERENCE CIVIL CONTRACT DRAWINGS. SEE DETAIL AND SCHEDULE ON S1.3 FOR ADDITIONAL INFORMATION.
13. 'MCx' INDICATES MASONRY COLUMN, SEE SCHEDULE AND DETAILS ON S1.3.
14. 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.
15. PROVIDE 8" CMU LOAD BEARING WALL REINFORCE WITH #5@32. TOP OF WALL AT HOLLOW CORE BEARING.
16. PROVIDE 6" CMU INFILL REINFORCED WITH #4@64. DRILL AND PLACE VERTICAL BARS WITH EPOXY ADHESIVE MINIMUM 3" EMBEDMENT INTO SLAB ON GRADE. SEE ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTEND OF 6" CMU INFILL.
17. PROVIDE RAISED HOUSEKEEPING PAD PER ARCHITECT, REINFORCED WITH #4@12 EACH WAY. ROUGHEN SURFACE OF SLAB ON GRADE AND APPLY CONCRETE BONDING AGENT PRIOR TO POURING HOUSEKEEPING PAD.
18. SEE ARCHITECTURAL FOR COLUMN FACADE. BEAR ON PEDESTAL AND TIE BACK TO CMU WALL PER MANUFACTURER'S STANDARDS. CONTRACTOR SHALL NOT ATTACH FACADE TO VENEER.
19. PROVIDE 4" TICK CURB PER ARCHITECTURAL DRAWINGS. REINFORCE CURB WITH #4@12 EACH WAY MID HEIGHT. PRIOR TO POURING CURB ROUGHEN EXISTING SLAB AND APPLY CONCRETE BONDING AGENT.



KEY PLAN
NOT TO SCALE

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER
H. Craig Wilson, P.E.
11-23-2025

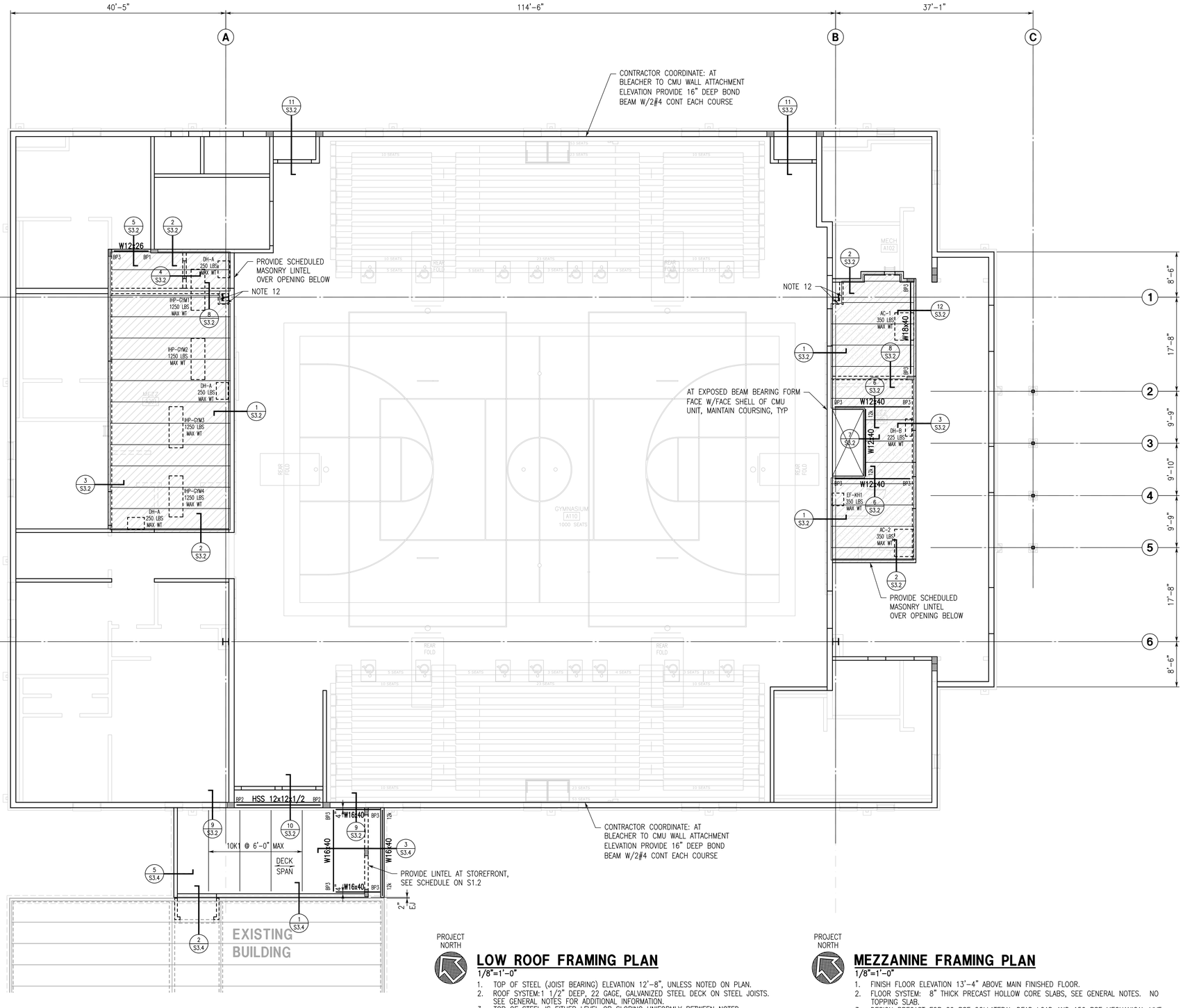
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33

SHEET NO:
S2.1
6 OF 13

0 1" 2"

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PROJECT NORTH

LOW ROOF FRAMING PLAN

1/8"=1'-0"

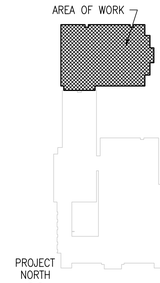
1. TOP OF STEEL (JOIST BEARING) ELEVATION 12'-8", UNLESS NOTED ON PLAN.
2. ROOF SYSTEM:1 1/2" DEEP, 22 GAGE, GALVANIZED STEEL DECK ON STEEL JOISTS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
3. TOP OF STEEL IS EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
4. BEAMS PARALLEL TO JOISTS ARE 2 1/2" HIGHER THAN SUPPORTING MEMBERS.
5. SPACE STEEL JOISTS EQUALLY BETWEEN WALLS, UNLESS NOTED.
6. HANGER LOCATIONS FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY GENERAL CONTRACTOR WITH THE JOIST MANUFACTURER. FOR PIPING WEIGHTS SEE TABLE ON SHEET S1.3.
7. JOIST MANUFACTURER PROVIDE HORIZONTAL BRIDGING WHERE MECHANICAL DUCT IS LOCATED BETWEEN JOISTS TO ALLOW CLEARANCE FOR DUCT RUNS IN SPACE.
8. PROVIDE CMU LINTEL OVER OPENINGS. SEE SCHEDULE ON S1.2 FOR ADDITIONAL INFORMATION.

PROJECT NORTH

MEZZANINE FRAMING PLAN

1/8"=1'-0"

1. FINISH FLOOR ELEVATION 13'-4" ABOVE MAIN FINISHED FLOOR.
2. FLOOR SYSTEM: 8" THICK PRECAST HOLLOW CORE SLABS, SEE GENERAL NOTES. NO TOPPING SLAB.
3. DESIGN PRECAST FOR 20 PSF COLLATERAL DEAD LOAD AND 150 PSF MECHANICAL LIVE LOAD. IN ADDITION TO CONCENTRATED MECHANICAL UNIT LOADS NOTED ON PLAN.
4. PRECAST HOLLOW CORE SLAB LAYOUT SHOWN IS FOR SCHEMATIC PURPOSES ONLY. PRECAST MANUFACTURER TO VERIFY ACTUAL LAYOUT.
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.
8. PROVIDE LOAD BEARING MASONRY LINTEL AT ALL MASONRY LINTEL LOCATIONS SUPPORTING PRECAST HOLLOW CORE SLABS. SEE SCHEDULE ON S1.2.
9. "BP" INDICATES BEAM BEARING PLATE, SEE TYPICAL DETAIL ON SHEET S1.3.
10. BEAM REACTIONS SHALL BE DESIGNED FOR A MINIMUM 12 KIPS IN SHEAR (SERVICE).
11. PRECAST MANUFACTURER SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ANY EMBEDS REQUIRED AT GUARD RAIL LOCATIONS.
12. AT HOLLOW CORE BEARING SEE SECTIONS 2/S3.2 AND 3/S3.2 FOR DETAILS AT TOP OF CMU WALL. NO WALL ABOVE HOLLOW CORE AT NOTED LOCATIONS.



KEY PLAN

NOT TO SCALE

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
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SHEET TITLE:
MEZZANINE AND LOW ROOF FRAMING PLAN

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WILLIAMS P.E.
10-23-2025

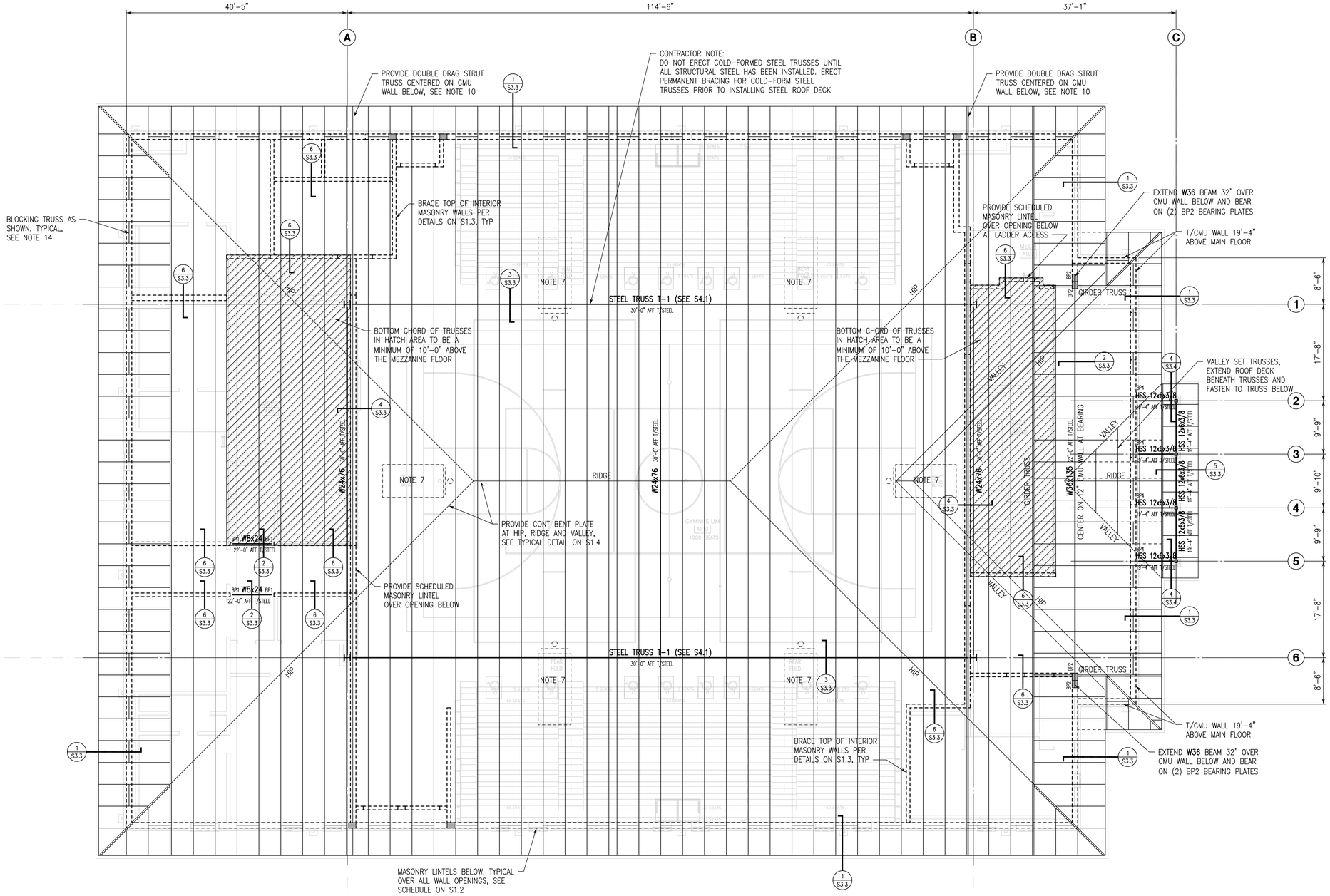
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JOB NO. 25-33

SHEET NO:
S2.2
7 OF 13

0 1" 2"

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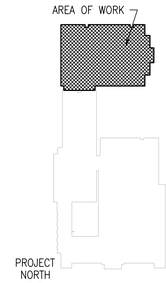


PROJECT NORTH

ROOF FRAMING PLAN

1/8"=1'-0"

1. TOP OF CMU WALL ELEVATION 22'-0" ABOVE MAIN LEVEL ELEVATION, UNLESS NOTED.
2. ROOF SYSTEM: 1 1/2" METAL DECK ON PRE-MANUFACTURED METAL STUD TRUSSES AT 4'-0" ON CENTER. SEE GENERAL NOTES.
3. TOP OF CMU IS EITHER LEVEL OR SLOPING UNIFORMILY BETWEEN NOTED ELEVATIONS.
4. TRUSS MANUFACTURER TO COORDINATE DRAFT STOP TRUSS LOCATIONS WITH ARCHITECTURAL DRAWINGS.
5. FOR WALL LOCATIONS, SEE ARCHITECTURAL DRAWINGS.
6. GENERAL CONTRACTOR SHALL COORDINATE THE LOAD MAGNITUDE AND LOCATION OF ANY EQUIPMENT SUPPORTED FROM THE METAL STUD TRUSSES. THESE LOADS AND LOCATIONS ARE TO BE SHOWN ON THE TRUSS SHOP DRAWINGS. ANY ATTACHMENT OF EQUIPMENT TO THE TRUSSES SHALL BE BY THE EQUIPMENT SUPPLIERS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF BASKETBALL GOAL SUPPORTS AND THEIR ATTACHMENT TO THE ROOF STRUCTURE. SUBMIT SHOP DRAWINGS SHOWING DETAILING OF GOAL SUPPORTS SIGNED BY A REGISTERED PROFESSIONAL ENGINEER. COORDINATE LOADS WITH METAL STUD TRUSS MANUFACTURER.
8. "BP" INDICATES BEAM BEARING PLATE, SEE TYPICAL DETAIL ON SHEET S1.3.
9. BEAM REACTIONS ARE INDICATED AT ENDS OF BEAMS AS "Xk" WHERE "X" IS THE MAGNITUDE OF THE WORKING LOAD SHEAR REACTIONS IN KIPS. REACTIONS SHOWN ON PLANS DO NOT INCLUDE VERTICAL COMPONENT OF AXIAL FORCES IN BRACES. IF REACTIONS ARE NOT SHOWN, DESIGN CONNECTION FOR A MINIMUM OF 12 KIPS.
10. PROVIDE DRAG STRUT TRUSS AS NOTED ON PLAN. TRUSS MANUFACTURER TO DESIGN TRUSS AND CONNECTION TO STRUCTURE FOR A SERVICE LOAD OF 250PLF (SERVICE) FOR THE LENGTH OF THE TRUSS.
11. PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS, SEE SCHEDULES ON S1.2.
12. GENERAL CONTRACTOR SHALL COORDINATE METAL STUD TRUSS LAYOUT WITH MECHANICAL EQUIPMENT AND DUCT LOCATIONS.
13. TRUSS MANUFACTURER TO PROVIDE ALL MISC STEEL CLOSURE PLATES, SUCH AS RIDGE, HIP AND VALLEY PLATES.
14. BLOCKING TRUSS/PLATE SHALL BE LOCATED AS SHOWN ON PLAN. TRUSS/PLATE SHALL BE DESIGNED BY TRUSS MANUFACTURER TO TRANSFER 1000 LBS (SERVICE) OF FORCE DOWN TO TOP OF WALL. SEE DETAIL ON S1.4. ANCHOR TOP CHORD OF BLOCKING TRUSS TO ROOF DECK AS DIRECTED BY TRUSS MANUFACTURER TO TRANSFER 250 LBS/FT (SERVICE) SHEAR FORCE.
15. METAL STUD SOFFIT FRAMING SHALL BE DESIGNED BY CONTRACTOR TO HANG FROM ROOF STRUCTURE. CONTRACTOR SHALL ENGAGE METAL STUD ENGINEER AND PROVIDE CALCULATIONS AND SHOP DRAWINGS FOR SOFFIT DESIGN. DESIGN SOFFIT FOR DEAD WEIGHT PLUS ANY SUSPENDED EQUIPMENT AND A 5 PSF HORIZONTAL LOAD OVER SURFACE. TRUSS MANUFACTURER TO DESIGN TRUSSES IN THIS AREA FOR MINIMUM 250 PLF DEAD WEIGHT FROM SOFFIT.
16. HANGER LOCATIONS FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE TRUSS MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON S1.3.
17. BLOCKING TRUSSES/PLATES, BRIDGING, PERMANENT BRACING, MISCELLANEOUS STEEL CLOSURE PLATES, ETC. SHALL BE DESIGNED AND INDICATED ON THE TRUSS LAYOUT SHOP DRAWINGS. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES.
18. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALL SHOULD BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REINFORCING SHOP DRAWINGS.
19. METAL STUD SUPPORT FRAMING SHALL BE DESIGNED BY CONTRACTOR TO SUPPORT INTAKE HOODS, RELIEF HOODS, ETC. CONTRACTOR SHALL ENGAGE METAL STUD ENGINEER AND PROVIDE CALCULATIONS AND SHOP DRAWINGS FOR ALL NECESSARY METAL STUD FRAMING DESIGNS.
20. ▨ HATCH PATTERN INDICATES MECHANICAL ATTIC IN THE PLANE OF THE TRUSSES. PREFABRICATED CFS TRUSS MANUFACTURER SHALL DESIGN TRUSSES AS REQUIRED TO PROVIDE MAXIMUM HEAD HEIGHT IN THESE AREAS. FOR ADDITIONAL INFORMATION, SEE ARCHITECTURAL AND MECHANICAL DWGS.



KEY PLAN
NOT TO SCALE

LATHAN McKEE ARCHITECTS

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SHEET TITLE:
ROOF FRAMING PLAN

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG W. LAY
H. Craig Lay P.E.
10-23-2025

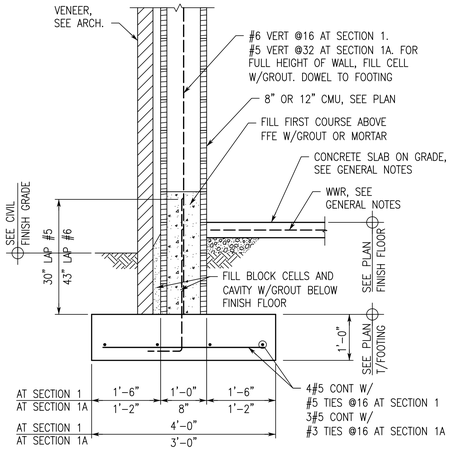
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33

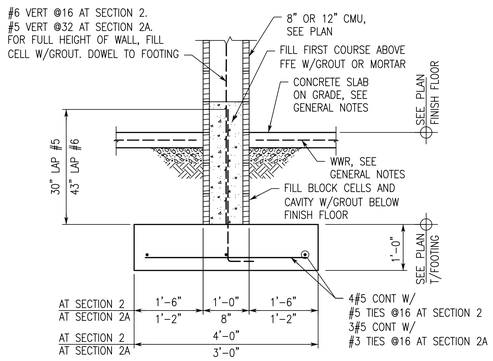
SHEET NO:
S2.3
8 OF 13

0 1" 2"

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STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5300
fax 205-824-5280
Job Number 25-103

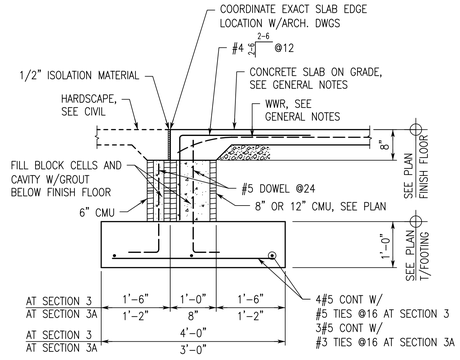


SECTION 1/S3.1 1A/S3.1
3/4"=1'-0"

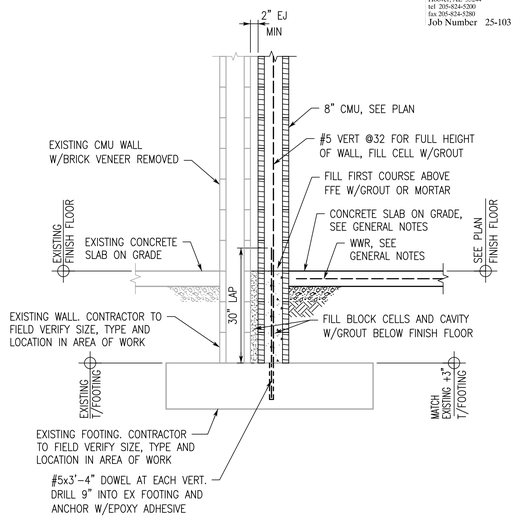


SECTION 2/S3.1 2A/S3.1
3/4"=1'-0"

NOTE:
AT SIM LOCATION, CMU WALL IS 12" CENTERED ON 3'-0" WIDE FOOTING.



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



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

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

SECTION 6/S3.1
3/4"=1'-0"

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SECTIONS AND DETAILS

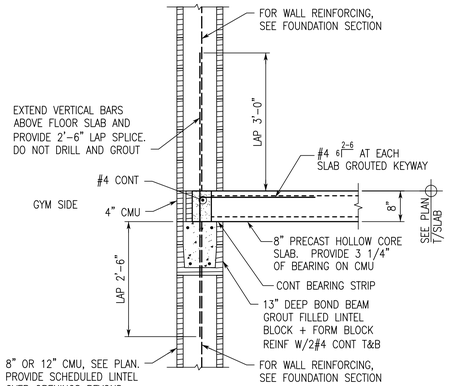
ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
H. Craig Winn P.E.
10-23-2025

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

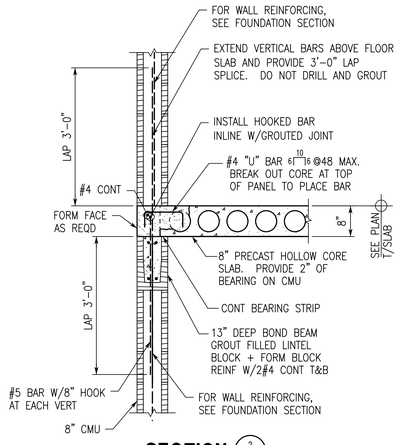
JOB NO. 25-33
SHEET NO:
S3.1
9 OF 13
0 1" 2"

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tel 205-824-5200
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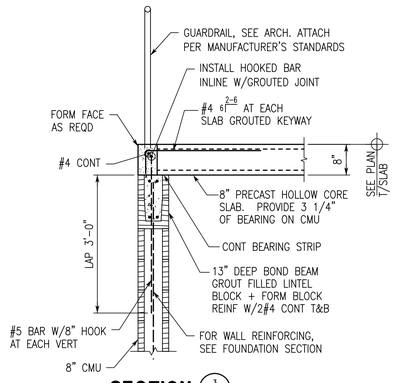
LATHAN McKEE ARCHITECTS



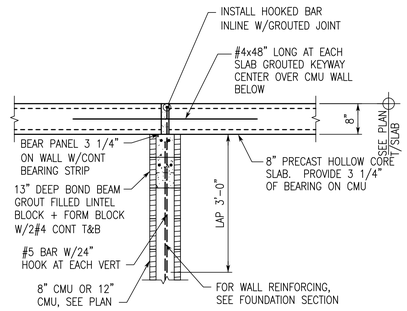
SECTION 1/S3.2
3/4"=1'-0"



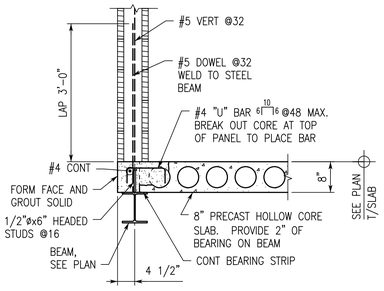
SECTION 2/S3.2
3/4"=1'-0"



SECTION 3/S3.2
3/4"=1'-0"

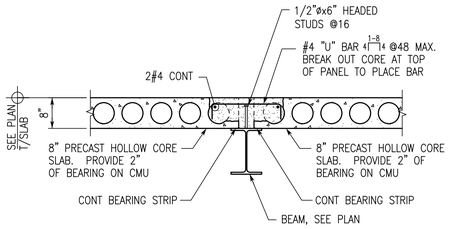


SECTION 4/S3.2
3/4"=1'-0"

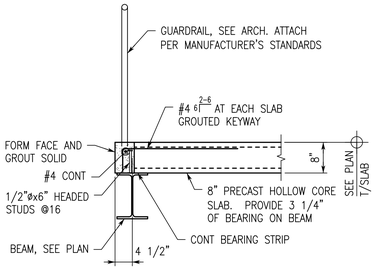


SECTION 5/S3.2
3/4"=1'-0"

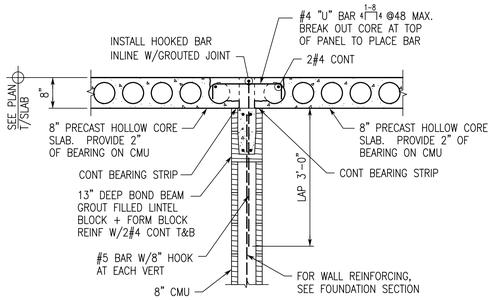
NOTE:
CMU WALL ABOVE NOT REQUIRED AT SIMILAR CONDITION.



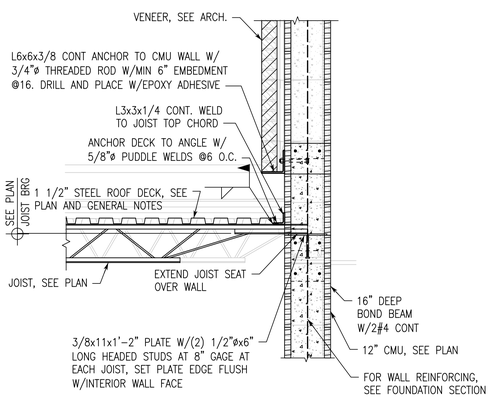
SECTION 6/S3.2
3/4"=1'-0"



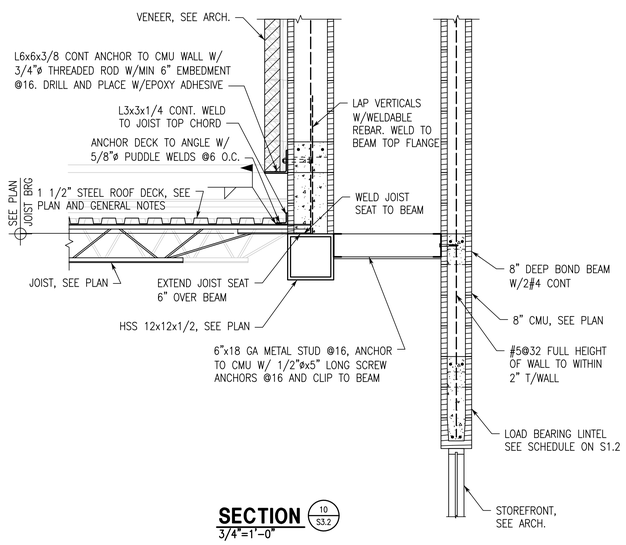
SECTION 7/S3.2
3/4"=1'-0"



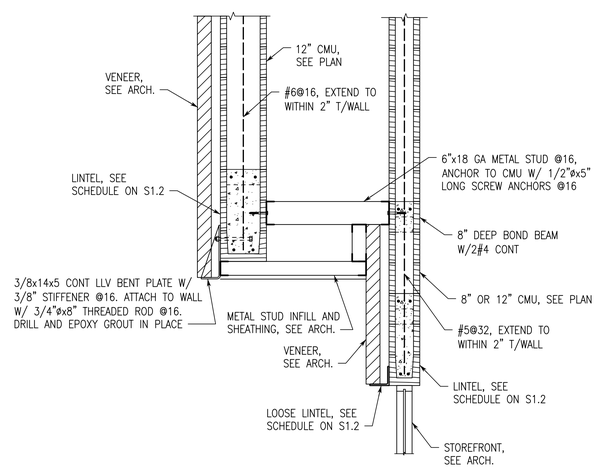
SECTION 8/S3.2
3/4"=1'-0"



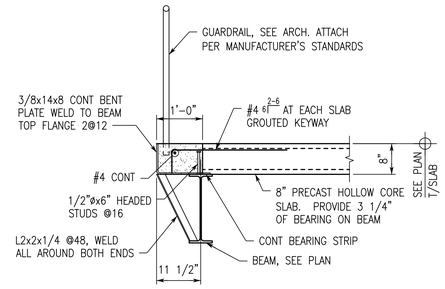
SECTION 9/S3.2
3/4"=1'-0"



SECTION 10/S3.2
3/4"=1'-0"



SECTION 11/S3.2
3/4"=1'-0"



SECTION 12/S3.2
3/4"=1'-0"

PRECAST NOTES

TYPICAL AT ALL PRECAST

1. IF PRECAST DOES NOT BEAR SOLID ON CMU, DUE TO CAMBER IN PANEL, GROUT GAP SOLID PRIOR TO PLACING REMAINDER OF WALL.
2. WHERE CELLS ARE REQUIRED TO BE BROKEN AT REBAR BREAK CELLS OUT MAXIMUM 4" WIDE. FLOOD ROUND HOLLOW CORE RUNNING PERPENDICULAR TO REBAR SOLID WITH GROUT (APPLIES TO SECTION 1/S3.2 AND SIMILAR SECTIONS WHERE PANEL IS PARALLEL TO WALL.)
3. WHERE PANEL IS PERPENDICULAR TO WALL. FILL CORES TO PREVENT GROUT FROM ENTERING HOLLOW CORE.

NEW GYMNASIUM ADDITION TO
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SHELBY COUNTY BOARD OF EDUCATION

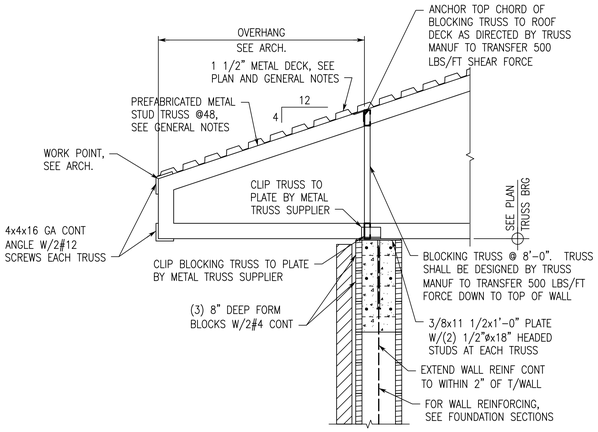
SHEET TITLE:
SECTIONS AND DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG WINN
H. Craig Winn P.E.
10-23-2025

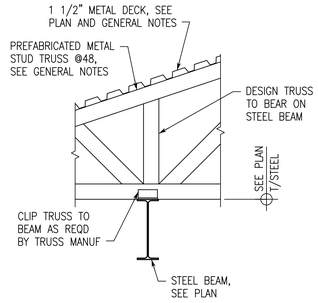
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
S3.2
10 OF 13
0 1" 2"

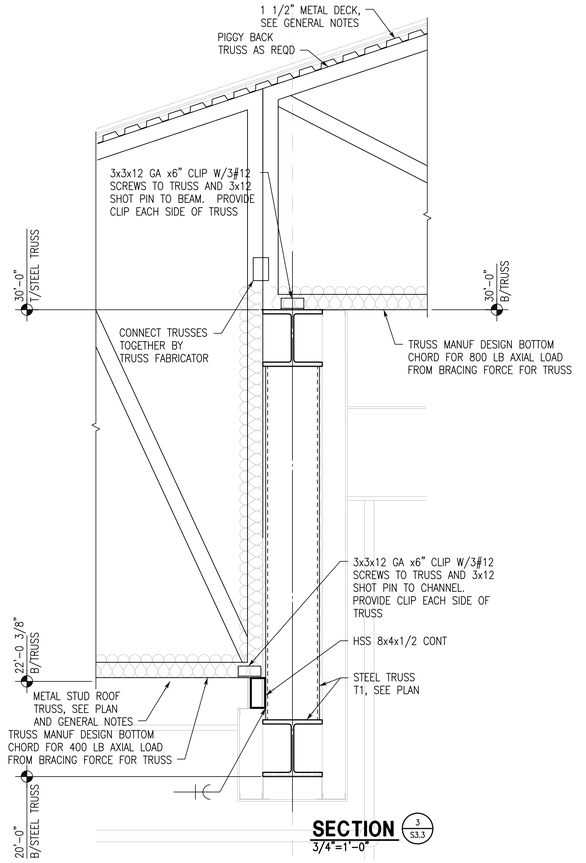
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STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
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Job Number 25-103



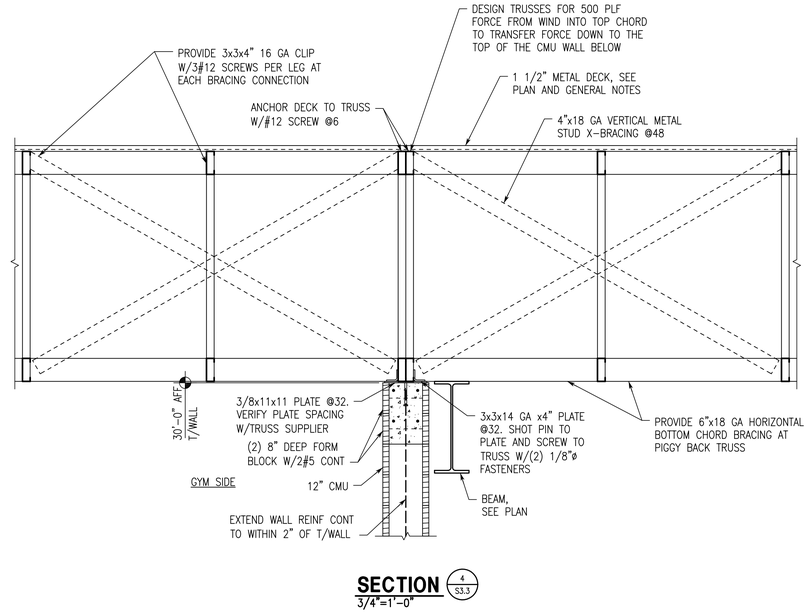
SECTION 1/S3.3
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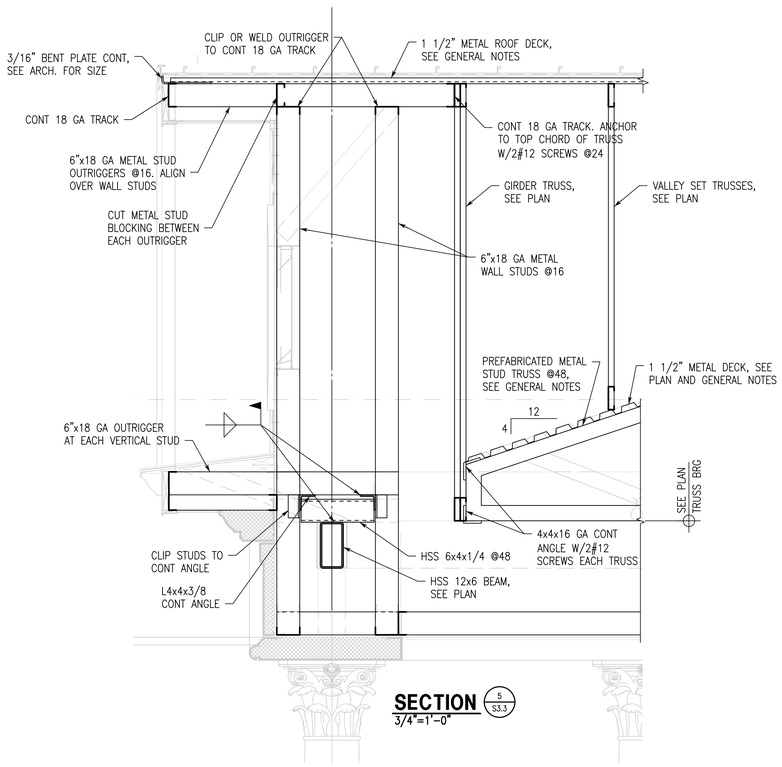
SECTION 2/S3.3
3/4"=1'-0"



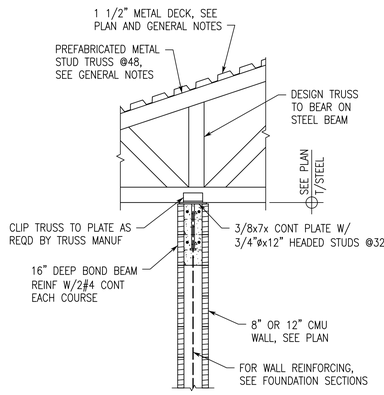
SECTION 3/S3.3
3/4"=1'-0"



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



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



SECTION 6/S3.3
3/4"=1'-0"

LATHAN ▪ McKEE ARCHITECTS

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980 OAK STREET, MONTEVALLO, ALABAMA 35115
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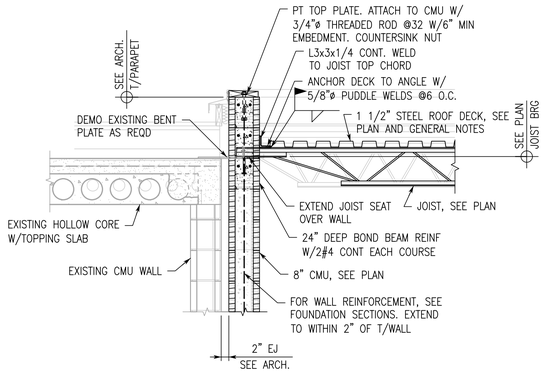
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SECTIONS AND DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG WINN
H. Craig Winn, P.E.
12-23-2025

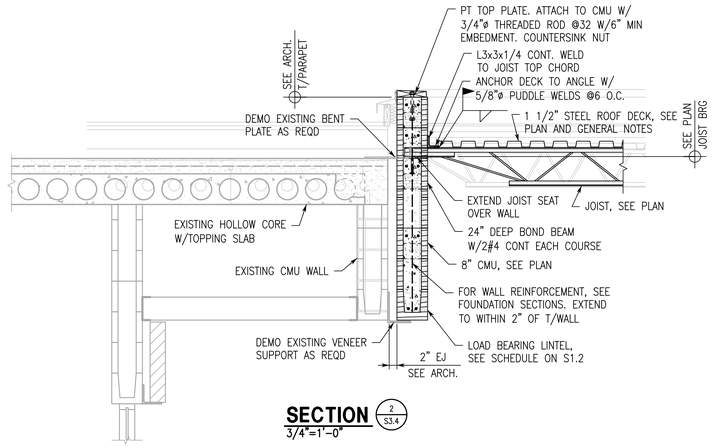
PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
S3.3
11 OF 13
0 1" 2"

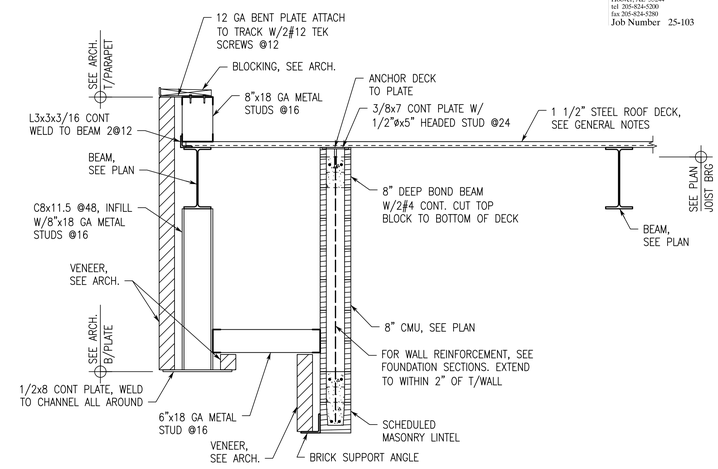
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fax 205-824-5280
Job Number 25-103



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



SECTION 2/S3.4
3/4"=1'-0"



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

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

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

LATHAN McKEE ARCHITECTS

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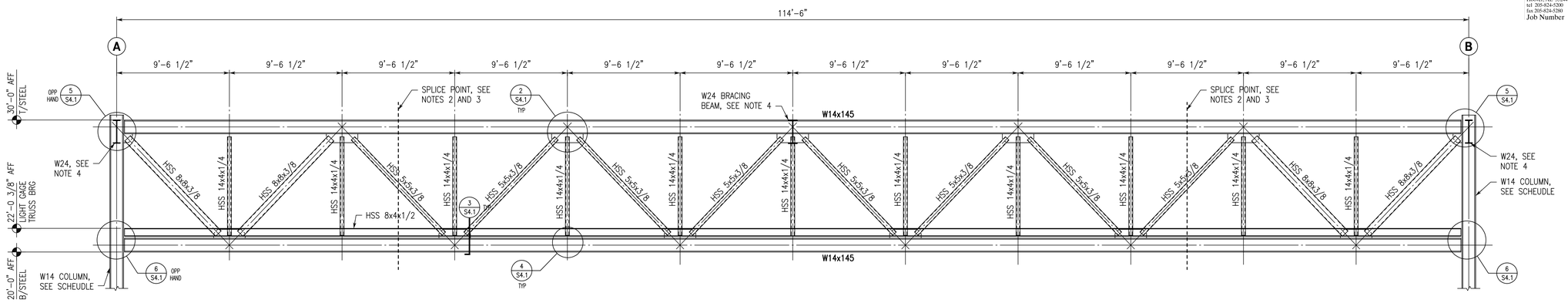
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10-23-2025

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JOB NO. 25-33
SHEET NO:
S3.4
12 OF 13
0 1" 2"

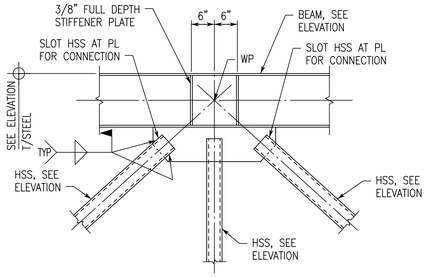
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HSS 5x5x3/8 = AXIAL FORCE 115k
HSS 8x8x3/8 = AXIAL FORCE 193k
HSS 14x4x1/4 = AXIAL FORCE 21k

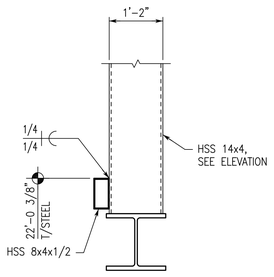
TRUSS T-1 ELEVATION
1/4"=1'-0"

1. ALL TRUSS CHORD MEMBERS SHALL BE ASTM A992 GRADE 50 STRUCTURAL STEEL. ALL TRUSS WEB MEMBERS SHALL BE ASTM A500 GRADE B STRUCTURAL STEEL.
2. SPLICE TRUSS AT LOCATIONS SHOWN. PROVIDE COMPLETE JOINT PENETRATION WELDS OR BOLTED CONNECTION AT CONTRACTORS OPTION AT SPLICE. WELD DETAIL OF SPLICE SHALL BE OBSERVED BY TESTING AGENT AND SHALL BE TESTED AS NECESSARY TO VERIFY CONNECTION.
3. PROVIDE WELDED CONNECTIONS OF ALL MEMBERS TO DEVELOP FULL AXIAL FORCES SHOWN FOR ALL MEMBERS.
4. PROVIDE FULL-DEPTH DOUBLE ANGLE CONNECTION AT BRACING BEAMS.

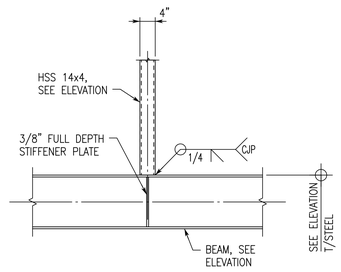


NOTE:
CONNECTION TO BE DESIGNED FOR FORCES INDICATED ON TRUSS T1 ELEVATIONS.

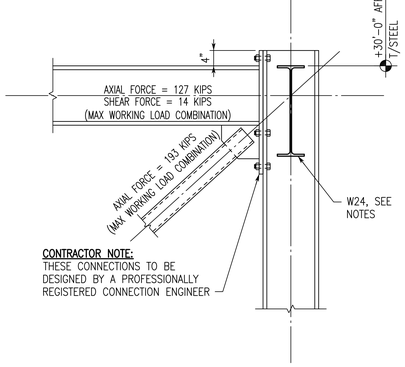
DETAIL 2/S4.1
3/4"=1'-0"



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

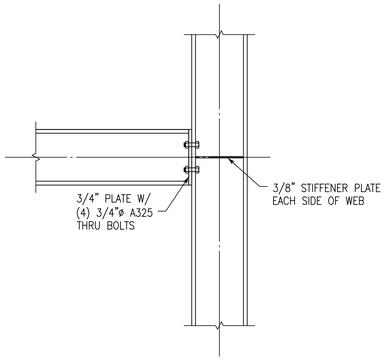


DETAIL 4/S4.1
3/4"=1'-0"



CONTRACTOR NOTE:
THESE CONNECTIONS TO BE DESIGNED BY A PROFESSIONALLY REGISTERED CONNECTION ENGINEER

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



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

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TRUSS ELEVATION AND DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER CRAIG WITHEE
H. Craig Withee, P.E.
10-23-2025

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCT 23, 2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
S4.1
13 OF 13
0 1" 2"

FIRE PROTECTION SHOP DRAWINGS AND SUBMITTALS

1. PROVIDE A NFPA 13 COMPLIANT SYSTEM TO PROVIDE COVERAGE TO NEW WORK AREA. CONTRACTOR RESPONSIBLE TO PROVIDE DETAILED SHOP DRAWINGS AND CALCULATIONS COMPLETE.
2. SHOP DRAWINGS SHALL INCLUDE:
   - A. A REFLECTED CEILING PLAN INDICATING LOCATION OF SPRINKLER HEADS, LIGHTS, CEILING DEVICES, GRILLES, AUDIO VISUAL, AND ANY DEVICES ATTACHED TO LIFT OUT CEILINGS. ALL SPRINKLER HEADS IN LAY-IN CEILINGS TO BE CENTERED IN TILES. COORDINATE EXACT LOCATION OF SPRINKLER HEADS IN HARD CEILINGS WITH ARCHITECT AND ENGINEER.
   - B. PREPARE A WORKING PIPE SHOP DRAWING BASED ON HYDRAULIC CALCULATIONS. THE PIPING DRAWINGS SHALL INDICATE THE ELEVATION OF THE PIPE, THE CONFIGURATION OF THE PIPING AND HANGERS, SIZE OF THE PIPE AND COORDINATION OF PIPING WITH OTHER DISCIPLINES, STRUCTURE AND DUCTWORK.
   - C. HYDRAULIC CALCULATIONS ARE TO BE PREPARED USING A FLOW TEST WITHIN 90 DAYS.
   - D. THE CONTRACTORS RESPONSIBLE FOR INCORPORATING LOCAL AUTHORITY HAVING JURISDICTION COMMENTS FOR COMPLIANCE.
   - E. ALL ADDITIONAL MATERIALS TO BE INDICATED ON SHOP DRAWINGS.
   - F. ALL LOW-POINT DRAIN DOWN LOCATION AND PENETRATIONS OF BUILDING STRUCTURE TO BE INDICATED ON SHOP DRAWINGS.
3. CONTRACTOR SHALL BE LICENSED IN THE STATE IN WHICH THE WORK IS PREFORMED. THE CONTRACTOR SHALL BE A NICET LEVEL III OR LEVEL IV OR SPECIAL HAZARD SUPPRESSION SYSTEMS. THE NICET LEVEL III DESIGNER SHALL BE AN EMPLOYEE OF FIRE PROTECTION CONTRACTOR.
4. ALL ELECTRICAL FIRE ALARM REQUIREMENTS TO BE COORDINATED WITH THE ELECTRICAL THE FLOW AND TAMPER SWITCHES TO BE PROVIDED UNDER FIRE PROTECTION CONTRACT. CONDUIT, ALARM WIRING AND PROGRAMMING THE RESPONSIBILITY OF THE FIRE ALARM CONTRACT AND SHALL BE COORDINATED WITH ELECTRICAL. NICET LEVEL III DESIGNER SHALL INSPECT PROJECT.
5. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS WITHIN 45 DAYS PRIOR TO THE START OF THE SPRINKLER SYSTEM INSTALLATION.
6. HYDRAULIC CALCULATIONS AND SPRINKLER SHOP DRAWINGS SHALL BE PREPARED UNDER THE SUPERVISION OF AN ENGINEER LICENSED IN THE STATE AND BEAR HIS OR HER SEAL WITH SIGNATURE AND DATE.
7. MAXIMUM DESIGN VELOCITY SHALL BE 30 FEET PER SECOND.

FIRE PROTECTION GENERAL NOTES

1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO BID. CONTRACTOR SHALL VERIFY EXACT SIZE, LOCATION, ELEVATION OF EXISTING STRUCTURE, CEILINGS, MECHANICAL, AND ELECTRICAL PRIOR TO INSTALLING ANY NEW PIPE.
2. CONTRACTOR SHALL COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH ALL STRUCTURAL, ELECTRICAL, AND MECHANICAL FEATURES OF THE BUILDING.
3. ALL HORIZONTAL PIPING IS RAN ABOVE THE CEILING OR IN JOIST SPACE. ALL PIPING SHALL DRAIN DOWN AS REQUIRED BY NFPA 13. PIPING TO BE INSTALLED TO CONCEAL AS MUCH AS POSSIBLE.
4. INSTALL ALL FIRE PROTECTION MATERIALS IN AREAS WITH EXPOSED CEILINGS IN A NEAT FIRST CLASS MANNER. ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH INDUSTRY BEST PRACTICES. PIPING SHALL BE INSTALLED PARALLEL AND/OR PERPENDICULAR TO BUILDING STRUCTURE UNLESS INDICATED OTHERWISE.
5. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING PROJECT ENGINEERS FOR INSPECTION AND TESTING. PROVIDE A MINIMUM OF A WEEK.
6. CONTRACTOR TO REFER TO ARCHITECTURAL DRAWINGS FOR NEW WORK AREAS, CEILING HEIGHTS, SECTIONS, AND RATED WALLS.
7. CONTRACTOR RESPONSIBLE FOR COORDINATION OF PIPING WEIGHT AND LOCATION PRIOR TO INSTALLATION OF ANY PIPE.
8. PIPING LAYOUT AND SIZING SHOWN ON PLANS IS DIAGRAMMATIC AND SHOWN FOR SPACE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR LAYOUT SHOP DRAWINGS, CALCULATIONS, SUBMITTAL DATA, TESTING, OWNER TRAINING AND CERTIFYING SYSTEM MEETS NFPA 13 AND CONTRACT DOCUMENTS.
9. CONTRACTOR SHALL OBTAIN APPROVAL FROM ARCHITECT PRIOR TO INSTALLING ANY SPRINKLER HEADS DIFFERENT FROM THE SPECIFIED SPRINKLERS HEADS.
10. CONTRACTOR SHALL OBTAIN APPROVAL OF "SPRINKLER HEAD TYPE" FROM ARCHITECT PRIOR TO INSTALLING ANY SPRINKLER HEADS.
11. CONTRACTOR SHALL PAINT ALL EXPOSED PIPING TO MATCH STRUCTURE. COORDINATE EXACT COLOR WITH ARCHITECT.

FIRE PROTECTION LEGEND

FIRE MAIN (F)	F — F
FIRE DRAIN LINE	FD — FD
BALL VALVE	
OS&Y VALVE (WITH TAMPER SWITCH)	TS — COORDINATE WITH ELECTRICAL FIRE ALARM SIGNAL TO BUILDING ALARM PANEL
FLOW SWITCH	FS — COORDINATE WITH ELECTRICAL FIRE ALARM SIGNAL TO BUILDING ALARM PANEL
	PIPE DOWN
	PIPE UP
GPM	GALLONS PER MINUTE
PSI	POUNDS PER SQUARE INCH
(S)P	RECESSED PENDENT SPRINKLER HEAD (PENDENT HEADS SHALL BE WHITE W/ WHITE ESCUTCHEON UNLESS APPROVED BY ARCHITECT)
(S)C	CONCEALED PENDENT SPRINKLER HEAD (COVER SHALL BE FACTORY PAINTED W/ COLOR APPROVED BY ARCHITECT)
(S)U	UPRIGHT SPRINKLER HEAD
HT (S)P	HIGH TEMPERATURE RECESSED PENDENT SPRINKLER HEAD (PENDENT HEADS SHALL BE WHITE W/ WHITE ESCUTCHEON UNLESS APPROVED BY ARCHITECT)
ARCHITECT TO SELECT COLORS ON ALL SPINKLER HEADS	

FIRE PROTECTION DESIGN ANALYSIS

REFER TO ARCHITECTURAL PLANS FOR COMPLIANCE NFPA 101

TYPE OF CONSTRUCTION: REFER TO ARCHITECTURAL

OCCUPANCY: REFERENCE ARCHITECTURAL LIFE SAFETY PLAN

FIRE DESIGN CODES /STANDARDS

APPLICABLE CODES AND STANDARDS:

INTERNATIONAL BUILDING CODE (IBC)
INTERNATIONAL FIRE CODE (IFC)
INTERNATIONAL PLUMBING CODE (IPC)
NATIONAL ELECTRIC CODE (NEC)
NATIONAL FIRE ALARM CODE NFPA 72
NATIONAL ENERGY CODE
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13,24,101

FIRE PROTECTION HYDRAULIC DEMANDS

1. SPRINKLER PROTECTION
   - A. ALL OFFICES, TEACHER WORKROOMS, LOBBIES, VESTIBULES, CLASSROOMS, GYMNASIUMS, CAFETERIAS, TOILETS, COMMON AREAS, CORRIDORS: LIGHT HAZARD 0.10 GPM OVER HYDRAULICALLY MOST REMOTE 1500 SQ. FT.
   - B. MECHANICAL EQUIPMENT ROOMS, TRANSFORMER ROOMS, GENERAL PURPOSE STORAGE LESS THAN 100 SQ. FT.: ORDINARY HAZARD, GROUP 2, 0.20 GPM OVER HYDRAULICALLY MOST REMOTE 2000 SQ. FT.
   - C. GENERAL STORAGE, STORAGE HEIGHT LIMIT LESS THAN 12FT, LIMITED COMBUSTIBLES LESS THAN 25 GALLONS: ORDINARY GROUP 1 PER NFPA 13, 0.15 GPM PER 1500 SQ. FT.
2. HYDRAULIC CALCULATION SHALL BE CALCULATED WITH 10% SAFETY FACTOR OF SUPPLY CURVE.
3. FLOW DATA TO BE RESPONSIBILITY OF CONTRACTOR.

FIRE PROTECTION FLOW DATA

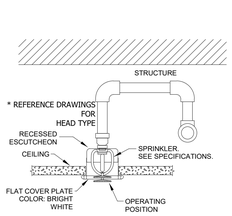
HYDRANT NUMBER: UNKNOWN
STATIC PRESSURE: 62 PSI
RESIDUAL PRESSURE: 32 PSI

OUTLET COEFFICIENT: UNKNOWN
OUTLET SIZE: UNKNOWN
HYDRANT FLOW: 920 GPM

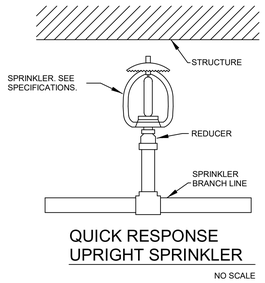
AVAILABLE GPM@ 20 PSI: 1288 GPM

DATE OF TEST: UNKNOWN
LOCATION: INTERSECTION OF OAK ST. AND WADSWORTH ST.

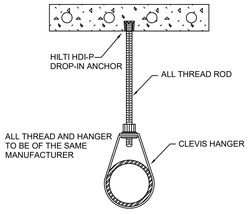
CONTRACTOR RESPONSIBLE FOR WATER FLOW TEST



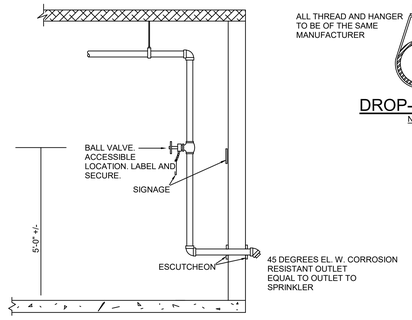
QUICK RESPONSE CONCEALED SPRINKLER
NO SCALE



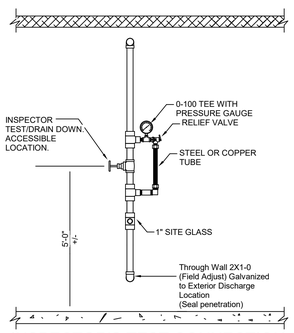
QUICK RESPONSE UPRIGHT SPRINKLER
NO SCALE



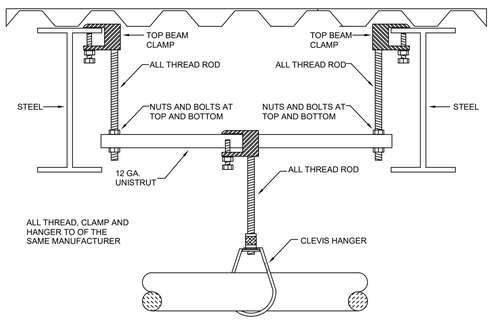
DROP-IN DETAIL
NO SCALE



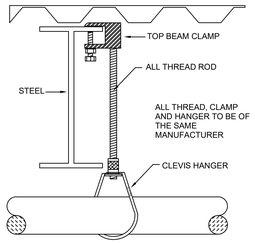
LOW POINT DRAIN DOWN DETAIL (EXTERIOR)
NO SCALE



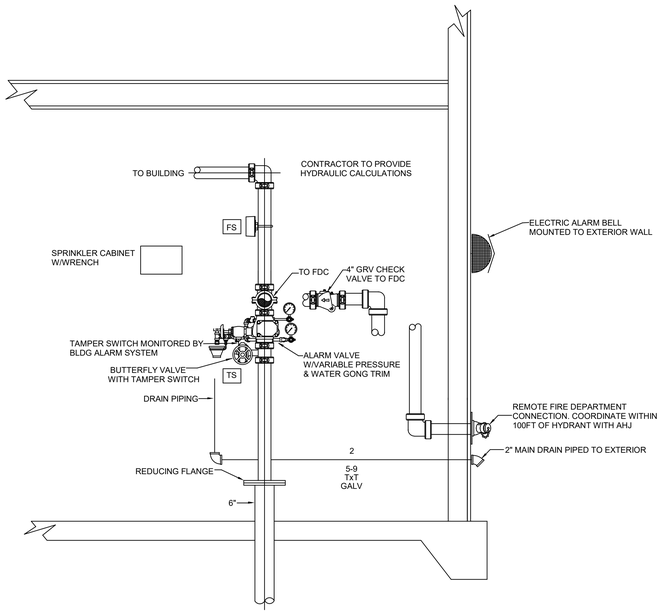
INSPECTOR'S TEST CONNECTION
NO SCALE



TRAPEZE HANGER DETAIL - UNISTRUT
NO SCALE



TOP BEAM CLAMP DETAIL
NO SCALE



FIRE SERVICE ENTRY - BUILDING
NO SCALE

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

Project Number : 50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FIRE PROTECTION SCHEDULE, DETAILS AND NOTES

ALABAMA
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO: FP0.1
1 OF 3

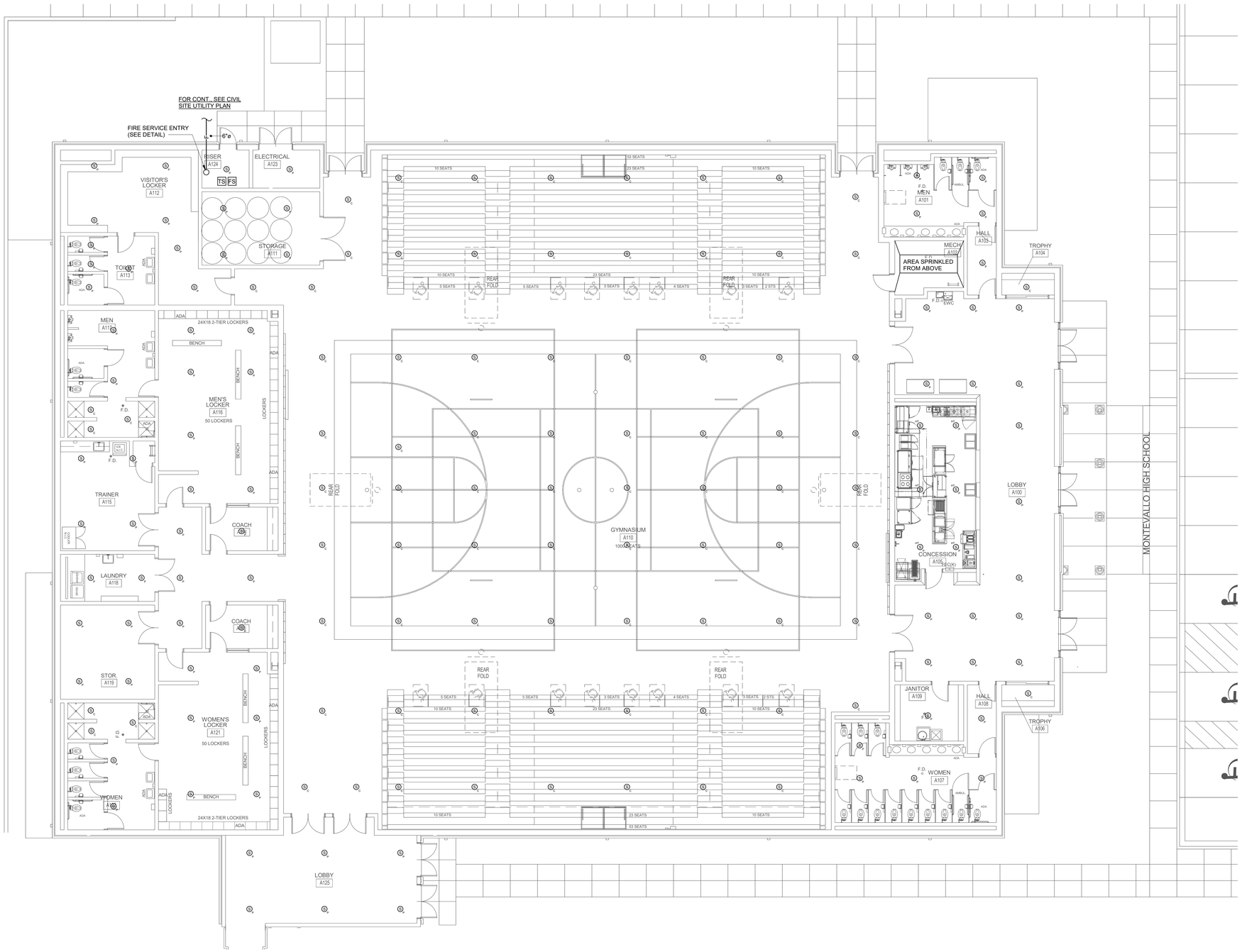
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NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FIRE PROTECTION - FLOOR PLAN



1 FIRE PROTECTION - FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"

KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

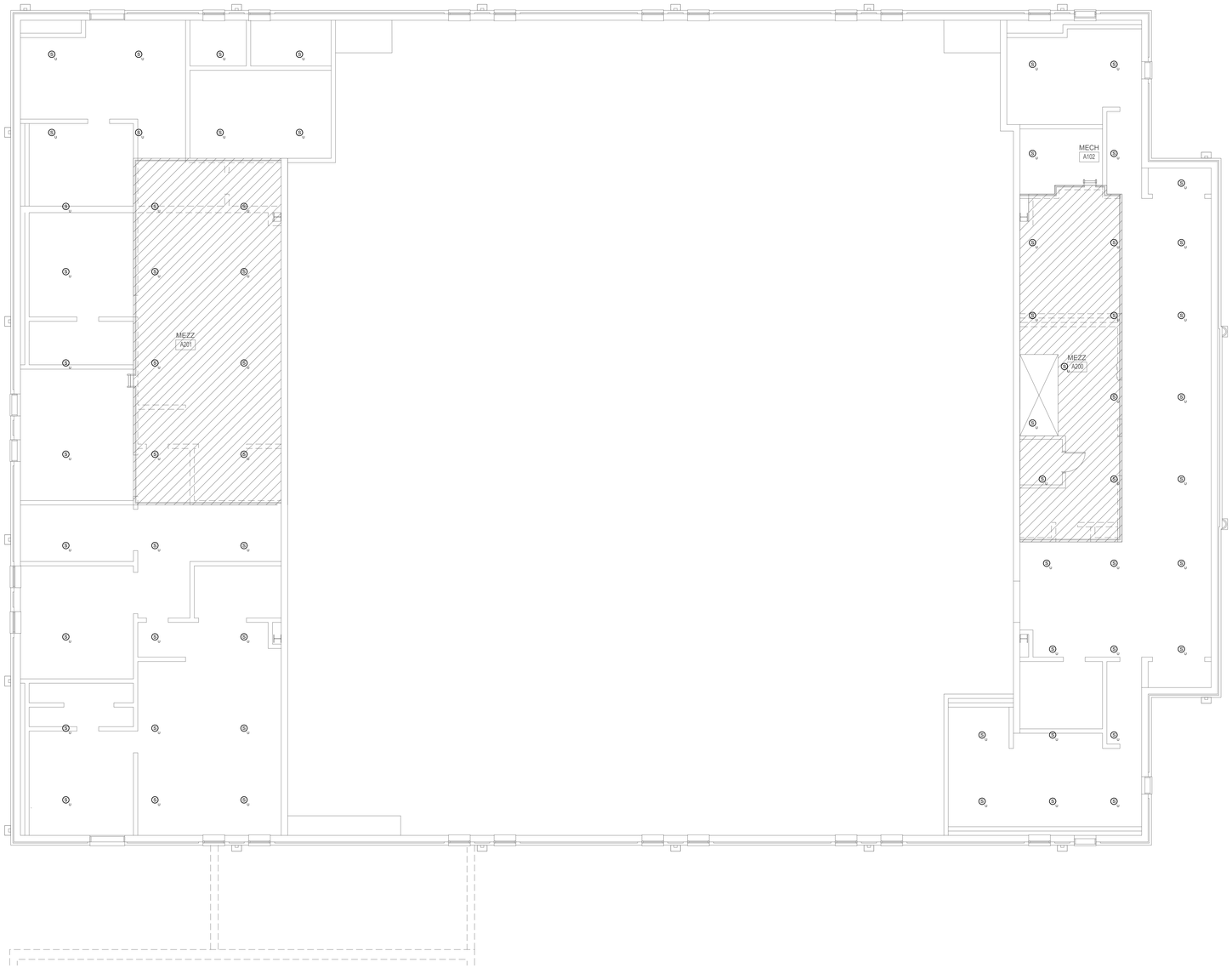
JOB NO. 25-33
SHEET NO:
FP1.0
2 OF 3

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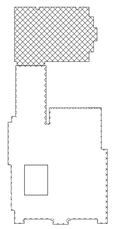
LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION



1 FIRE PROTECTION - MEZZANINE FLOOR PLAN
1/8" = 1'-0"

0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



KEY PLAN
NOT TO SCALE
NORTH

SHEET TITLE:
FIRE PROTECTION - MEZZANINE FLOOR PLAN

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
FP1.1
3 OF 3

GENERAL NOTES

1. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
3. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18" X 18" X 6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
4. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
5. ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
6. ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
7. ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
8. ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OF FINISH FLOOR UNLESS OTHERWISE NOTED.
9. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
10. NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANIAL AND GENERAL CONTRACTORS.
11. DOMESTIC WATER PIPING AND FIRE PROTECTION PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
12. CONTRACTOR SHALL COORDINATE MECHANICAL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
13. CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
14. CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
15. PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
16. INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
17. ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
18. ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.
19. INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
20. NO JOINTS IN WATER PIPING BELOW SLAB.
21. 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.
22. WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
23. 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.
24. 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.
25. COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
26. NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
27. 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.
28. VENTS THRU ROOF MUST BE LOCATED A MINIMUM OF 10'-0" AWAY FROM ANY OUTSIDE AIR INTAKE.
29. SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
30. ALL FOOTINGS AT PLUMBING CHASE WALLS SHALL BE MIN 24" BELOW FINISHED GRADE TO COORDINATE WITH WASTE PIPING IN SLAB.
31. FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
32. OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
33. 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

	DOMESTIC COLD WATER		BALANCE VALVE
	DOMESTIC HOT WATER SUPPLY		BALL VALVE
	DOMESTIC HOT WATER RETURN		CHECK VALVE
G	NATURAL GAS		GAS VALVE
	SANITARY		GAS PRESSURE REGULATOR
	VENT	AFF	ABOVE FINISHED FLOOR
GW	GREASE WASTE	BFF	BELOW FINISHED FLOOR
	PIPE TURNING DOWN	CW	COLD WATER
	PIPE TURNING UP	DN	DOWN
	TEE DOWN	GPM	GALLONS PER MINUTE
	TEE UP	VSTR	VENT THROUGH ROOF
	UNION	EX	EXISTING
CO	CLEANOUT		

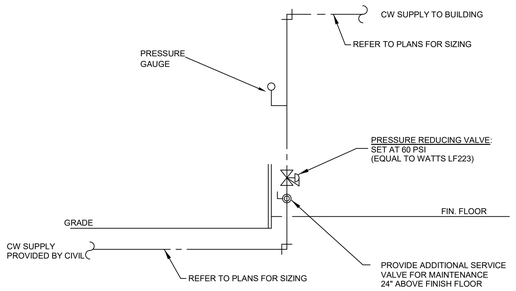
PLUMBING FIXTURE SCHEDULE

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.
FS-1	FLOOR SINK	4"	-	-	J.R. SMITH #3100, 8" SQUARE, PORCELAIN ENAMELED CAST IRON INTERIOR WITH 3/4 CAST IRON PORCELAIN ENAMELED GRATE AND DOME BOTTOM STRAINERS. PROVIDE WITH J.R. SMITH TRAP INSERT.
FS-2	FLOOR SINK	4"	-	-	J.R. SMITH #3200, 16" SQUARE, PORCELAIN ENAMELED CAST IRON INTERIOR WITH 3/4 CAST IRON PORCELAIN ENAMELED GRATE AND DOME BOTTOM STRAINERS. PROVIDE WITH J.R. SMITH TRAP INSERT.
HB	HOSE BIBB	-	3/4"	-	ZURN Z1321 NARROW WALL HYDRANT WITH INTEGRAL BACKFLOW PREVENTER. PROVIDE OWNER WITH ONE(1) LOOSE KEY PER HOSE BIBB. INSTALL BELOW LAVATORY WHERE SHOWN ON DRAWINGS.
LTD	TRENCH DRAIN	4"	-	-	H&M COMPANY POLYPROPYLENE DRAIN TROUGH WITH LINT FILTER. SIZE TROUGH TO MATCH LENGTH OF WASHER. TROUGH LID TO BE FLUSH WITH FINISH FLOOR.
MFD	MECHANICAL FLOOR DRAIN	3"	-	-	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	3"	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	3"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET.
P-5	LAVATORY	1 1/4"	1/2"	1/2"	COUNTERTOP - KOHLER K-2196-4 COMPLETE, SYMMONS S-20-0 FAUCET, MCGUIRE #8872 P-TRAP. MCGUIRE 165 SUPPLIES WITH STOPS. INSULATE ALL WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 MIXING VALVE MOUNTED BELOW LAVATORY UNLESS OTHERWISE NOTED ON THE DRAWINGS.
P-6	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-7	LAVATORY	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET.
P-8	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY # EZSTL8WSSK BI-LEVEL WATER COOLER WITH BOTTLE FILLER STATION. COMPLETE WITH STAINLESS STEEL CABINET AND WATERWAYS THAT ARE MANUFACTURED OF 100% LEAD FREE MATERIAL. J.R. SMITH #834 FIXTURE SUPPORT EBC TA150 P-TRAP AND EBC LA10 STOP WITH SUPPLY. FULLY INSULATE P-TRAP WITH EBC IK INSULATOR. INSTALL WITH LOWER SPOUT OUTLET MAXIMUM 36" AFF. MUST MEET A.D.A. INSTALL WITH BOTTLE FILLER. INSTALL COMPLETE. PROVIDE WITH ELKAY MODEL #LKAPREZL CANE APRON AS REQUIRED.
P-9	MOP SINK	3"	1/2"	1/2"	STERN WILLIAMS #SBC-1700 (24" X 24") COMPLETE, T-35 HOSE WITH WALL HOOK, STAINLESS STEEL BACKSPLASH AND CHICAGO FAUCET #897 FAUCET.
P-10	UTILITY SINK	1 1/2"	1/2"	1/2"	ADVANCE TABCO #4-41-36, K-1 FAUCET, K-5 DRAIN, MCGUIRE #8912 P-TRAP.
P-11	WASHING MACHINE BOX (COMMERCIAL)	1 1/2"	1/2"	1/2"	GUY GRAY # WB-200. PROVIDE SHOCK ARRESTORS PDI SIZE "B" ABOVE CEILING ON HOT AND COLD WATER LINES.
P-12	SHOWER VALVE - ADA COMPLIANT	SD	1/2"	1/2"	CHICAGO FAUCET 1907-CP THERMOSTATIC/PRESSURE BALANCING SHOWER VALVE, 151-ACP HAND SHOWER AND GRAB BAR, 763-CP DIVERTER VALVE, FIXED SHOWER HEAD, WITH BLADE HANDLE, AND TRIM. ADJUST FOR 109°F MAXIMUM TEMP. PROVIDE BACK PLATE.
P-13	SHOWER VALVE	SD	1/2"	1/2"	CHICAGO FAUCET 1907-CP THERMOSTATIC/PRESSURE BALANCING SHOWER VALVE, FIXED SHOWER HEAD, WITH BLADE HANDLE, AND TRIM. ADJUST FOR 109°F MAXIMUM TEMP. PROVIDE BACK PLATE.
P-14	DRAIN BOX	1 1/2"	-	-	PROVIDE A SIOUX CHIEF MODEL #696-3F DRAIN BOX, #696-LC LOUVERED COVER, #696-CF SECONDARY DRAINAGE FUNNEL, AND J.R. SMITH TRAP SEAL INSERT. BOX TO COME COMPLETE WITH WALL FLANGE AND LOUVER. COORDINATE WITH MECHANICAL TO RECEIVE CONDENSATE WASTE. COORDINATE EXACT MOUNTING HEIGHT AND LOCATION WITH ARCHITECT.
P-15	SINK	1 1/4"	1/2"	1/2"	ELKAY LRAD-2219 DRAIN OFFSET TO BACK, LK-35 STRAINER, CHICAGO FAUCET #786-FC RIGID FAUCET, MCGUIRE #1912 P-TRAP AND #165 STOPS WITH SUPPLIES.
P-16	ICE MACHINE	-	1/2"	-	FURNISHED AND INSTALLED UNDER ANOTHER SECTION, ROUGH AND CONNECT COMPLETE, PROVIDE BALL VALVE STOP ON SUPPLY AND PIPE WASTE(S) TO FLOOR DRAIN. PROVIDE WATTS LF9D ON COLD WATER SUPPLY IF REQUIRED BY LOCAL CODES. PIPE RELIEF FULL SIZE TO FS.
SD	SHOWER DRAIN	2"	-	-	J.R. SMITH #2010 WITH 4" ROUND STRAINER. PROVIDE WITH J.R. SMITH TRAP INSERT.
WH	WALL HYDRANT	-	3/4"	-	J.R. SMITH #5509-QT, WITH INTEGRAL BACKFLOW PREVENTER, LATCHING COVER, FREEZE-PROOF AND OF PROPER LENGTH FOR WALL IN WHICH INSTALLED. ALL BRONZE BOX. VALVE SEAT MUST BE ON BUILDING SIDE OF EXTERIOR WALL INSULATION. INSTALL WITH CENTER LINE 24" ABOVE FINISH GRADE. PROVIDE OWNER WITH ONE (1) LOOSE KEY FOR EACH WALL HYDRANT.

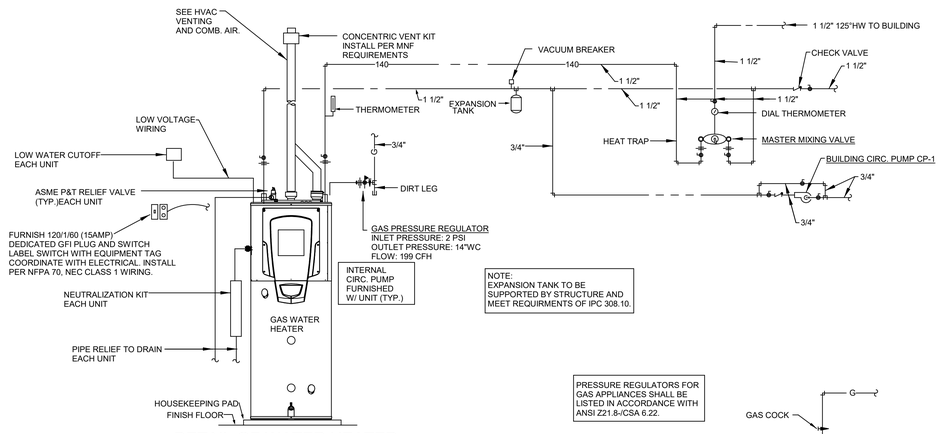
NOTE: TEMPERING VALVES ON LAVATORIES OF ALL PUBLIC LAVATORIES CONFORM TO ASSE 1070/CSA B125.3.2021 IPC 419.5 TEMPERED WATER FOR PUBLIC HAND-WASHING FACILITIES. TEMPERED WATER SHALL BE DELIVERED THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070/CSA B125.3.

WATER HEATER SCHEDULE

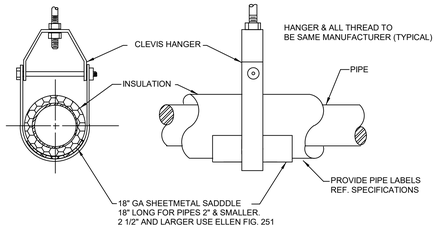
MARK	FIXTURE	ELEC INFO.	GAS INPUT	REMARKS
CP-1	CIRCULATION PUMP	1/6 HP, 115/1/60	-	ARMSTONG COMPASS. PROVIDE WITH TIMER AND AQUASTA EQUAL TO HONEYWELL L6006A.
ET-1	EXPANSION TANK	-	-	AMTROL THERM - X-TROL #ST-12 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.
MMV-1	MASTER MIXING VALVE	-	-	SYMMONS TEMPCONTROL 7-500A-W COMPLETE. WALL MOUNTING BRACKET. SET OUTLET TEMPERATURE AT 125°F.
WH-1	GAS WATER HEATER	120V CONTROL PANEL	199.9 CFH	LOCHINVAR SWR200N CAPABLE OF RAISING 233 GALLONS OF WATER FROM 40°F TO 140°F PER HOUR. 199,999 CFH. PROVIDE NEW P&T RELIEF VALVE. PROVIDE COMPLETE WITH CONDENSATE NEUTRALIZATION KIT, CONCENTRIC VENT KIT, AND LOW WATER CUTOFF. INSTALL AS DETAILED ON DRAWINGS. SET TEMPERATURE CONTROLS TO MAINTAIN WATER STORAGE TEMPERATURE OF 140°F. INSTALL AS DETAILED ON DRAWINGS. ELECTRICAL REQUIREMENTS FOR CONTROL PANEL 115/1/60. COORDINATE WITH ELECTRICAL SECTION.



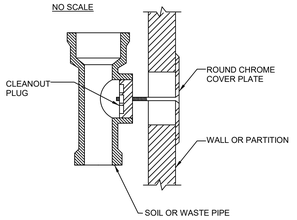
DETAIL OF WATER ENTRY
NO SCALE



DETAIL OF WATER HEATER
NO SCALE

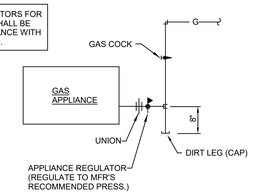


SUSPENDED PIPE SUPPORT
NO SCALE

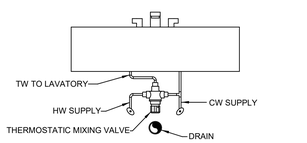


WALL CLEANOUT
NO SCALE

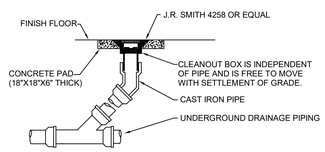
PRESSURE REGULATORS FOR GAS APPLIANCES SHALL BE LISTED IN ACCORDANCE WITH ANSI Z21.8-/CSA 6.22.



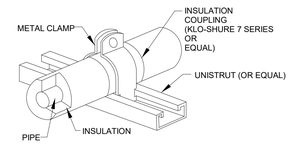
TYP. GAS CONNECTION
NO SCALE



DETAIL OF TMV BELOW LAVATORY
NO SCALE



DETAIL OF CLEANOUT TO GRADE
NO SCALE



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

STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL
NO SCALE

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

Project Number : 50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING SCHEDULE, DETAILS AND NOTES

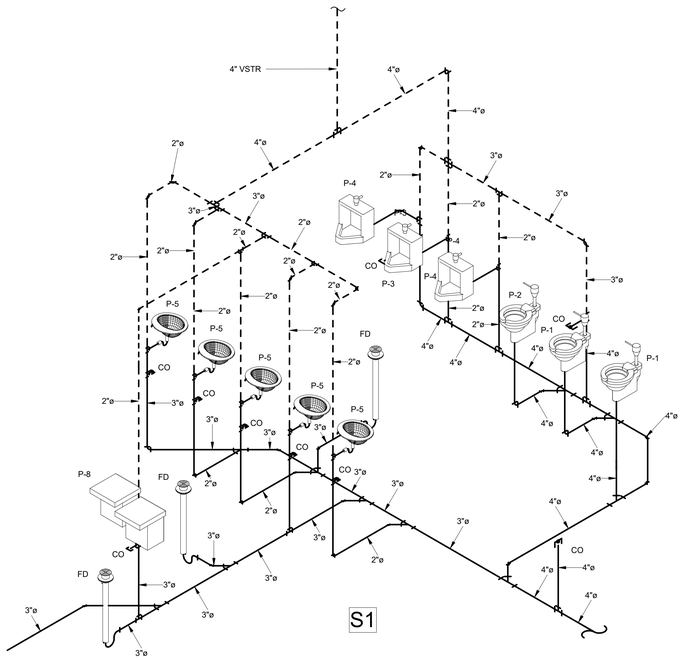
ALABAMA CHRISTOPHER L. ROBISON NO. 27475 PROFESSIONAL ENGINEER 10/23/2025

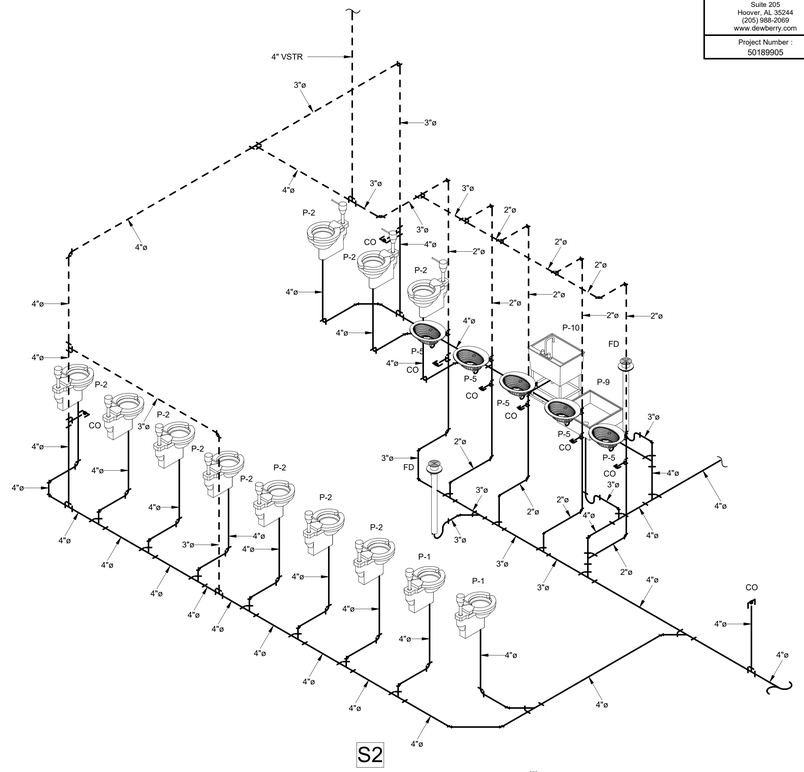
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DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

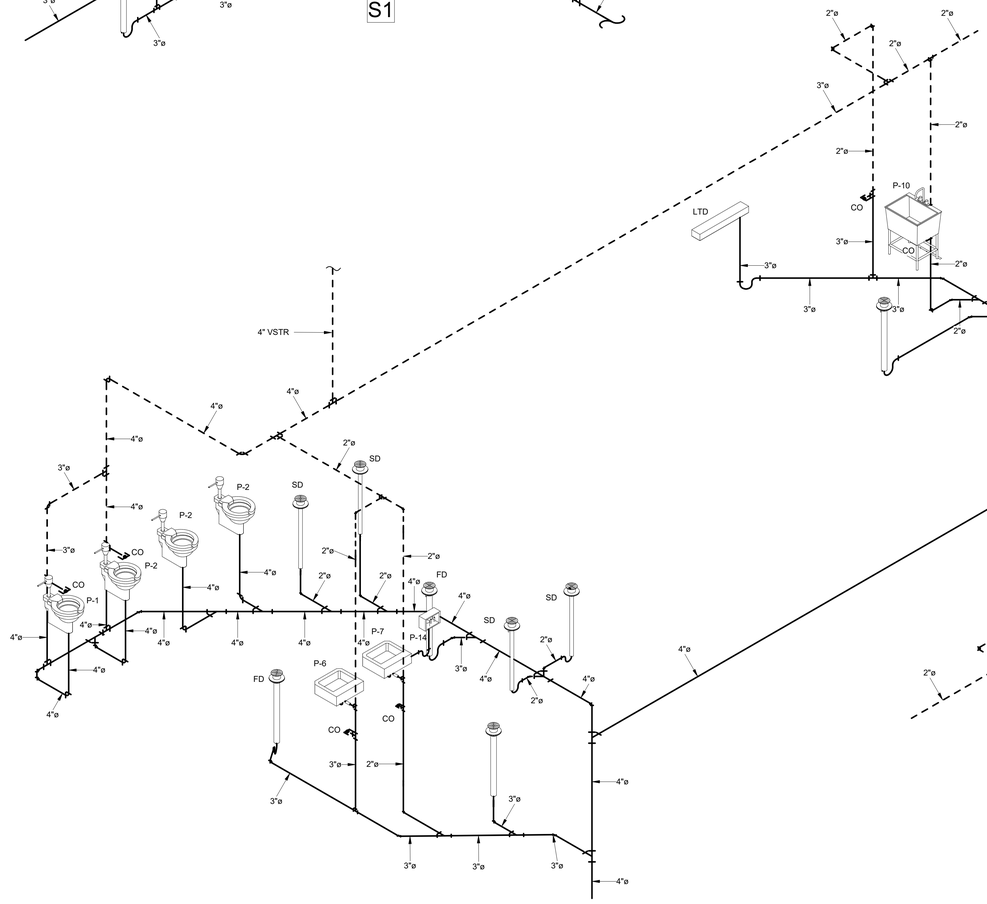
JOB NO. 25-33

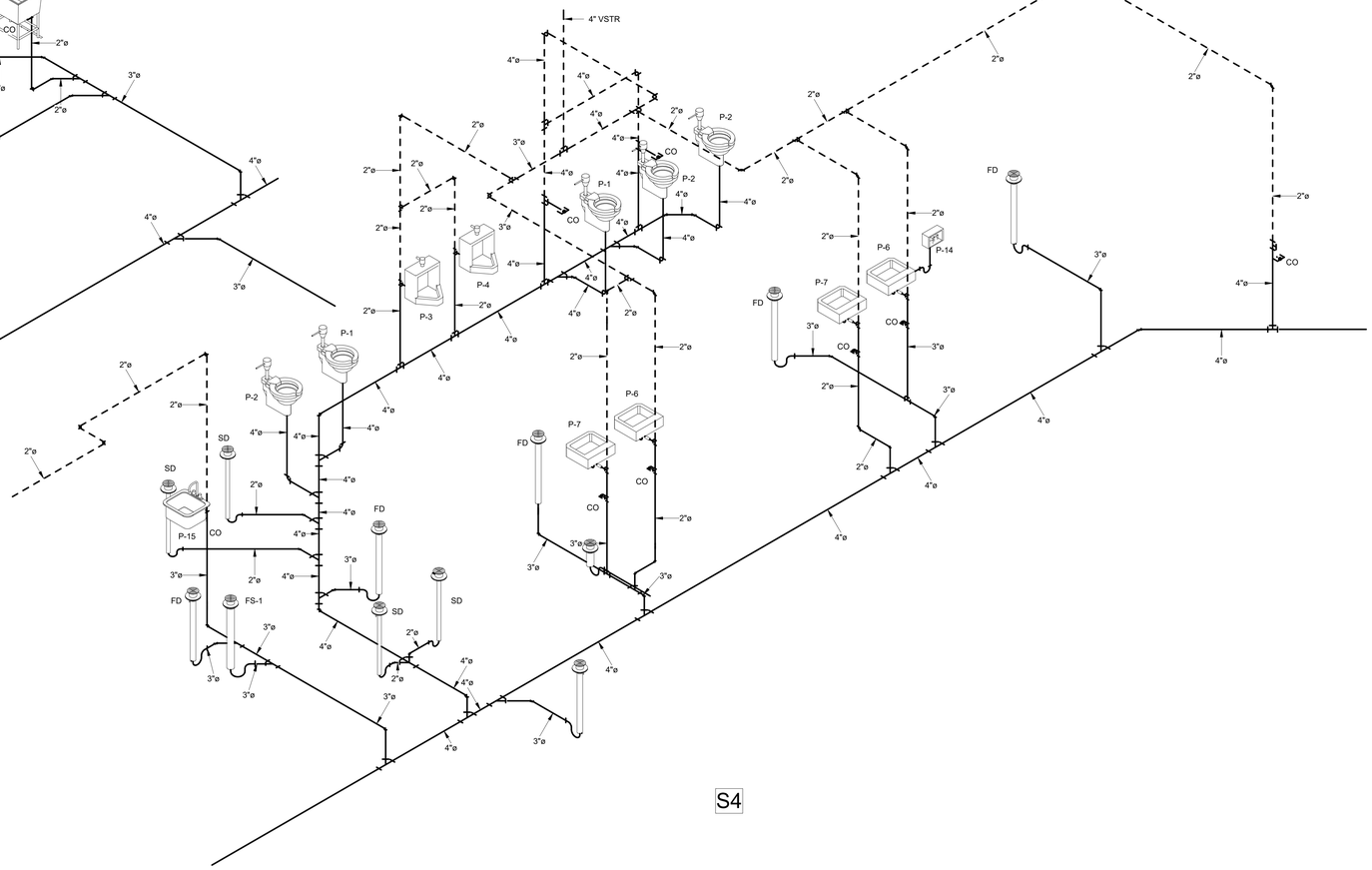
SHEET NO: P0.1

1 OF 7









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NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
NON-PRESSURE - RISERS

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
P1.0
2 OF 7

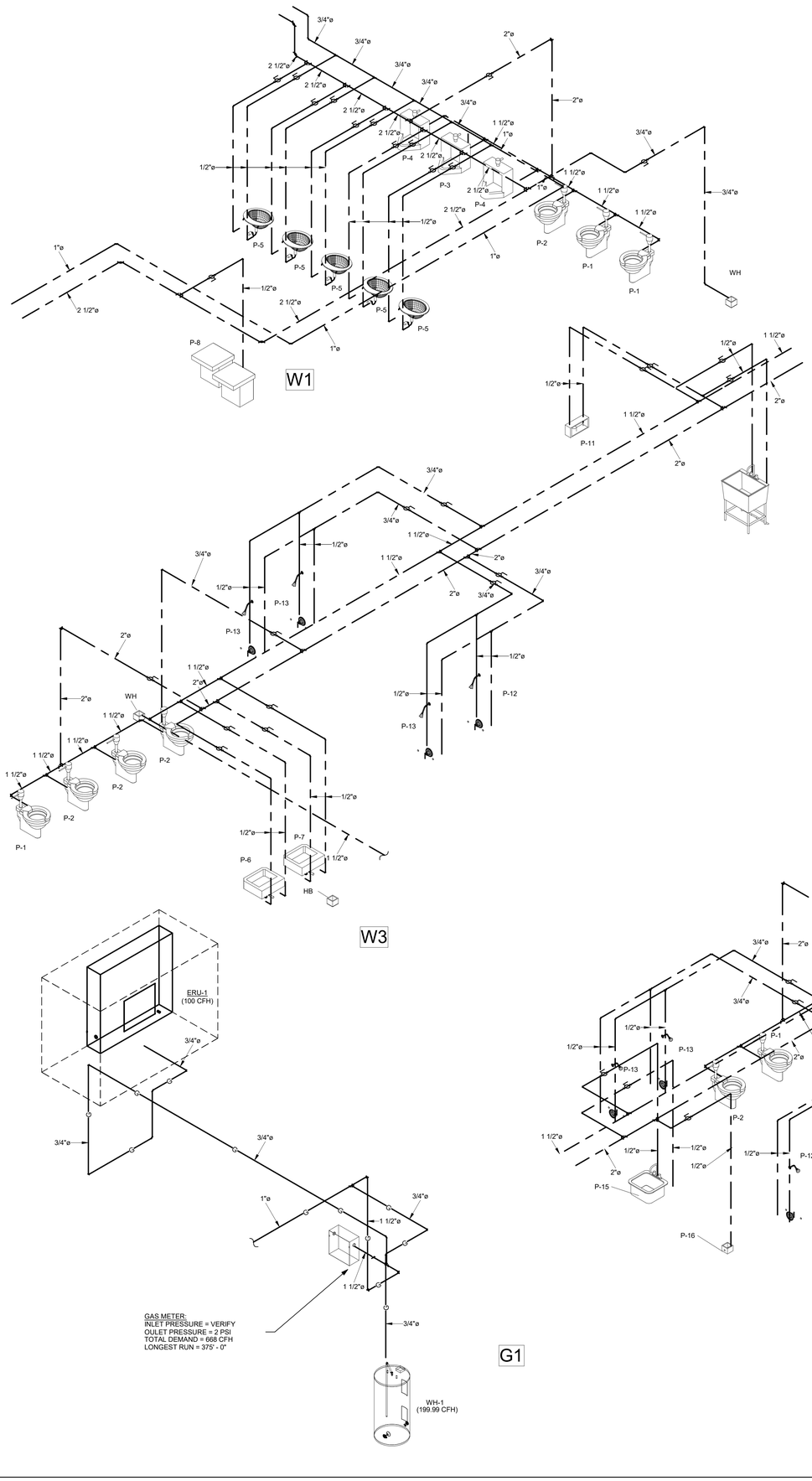
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NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PRESSURE - RISERS



ALABAMA
CHRISTOPHER L. ROBINSON
NO. 27475
PROFESSIONAL
ENGINEER
10/23/2025

PROJ. MGR.: –	CLR
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REVISIONS	

JOB NO. 25-33

SHEET NO:

P1.1

3 OF 7

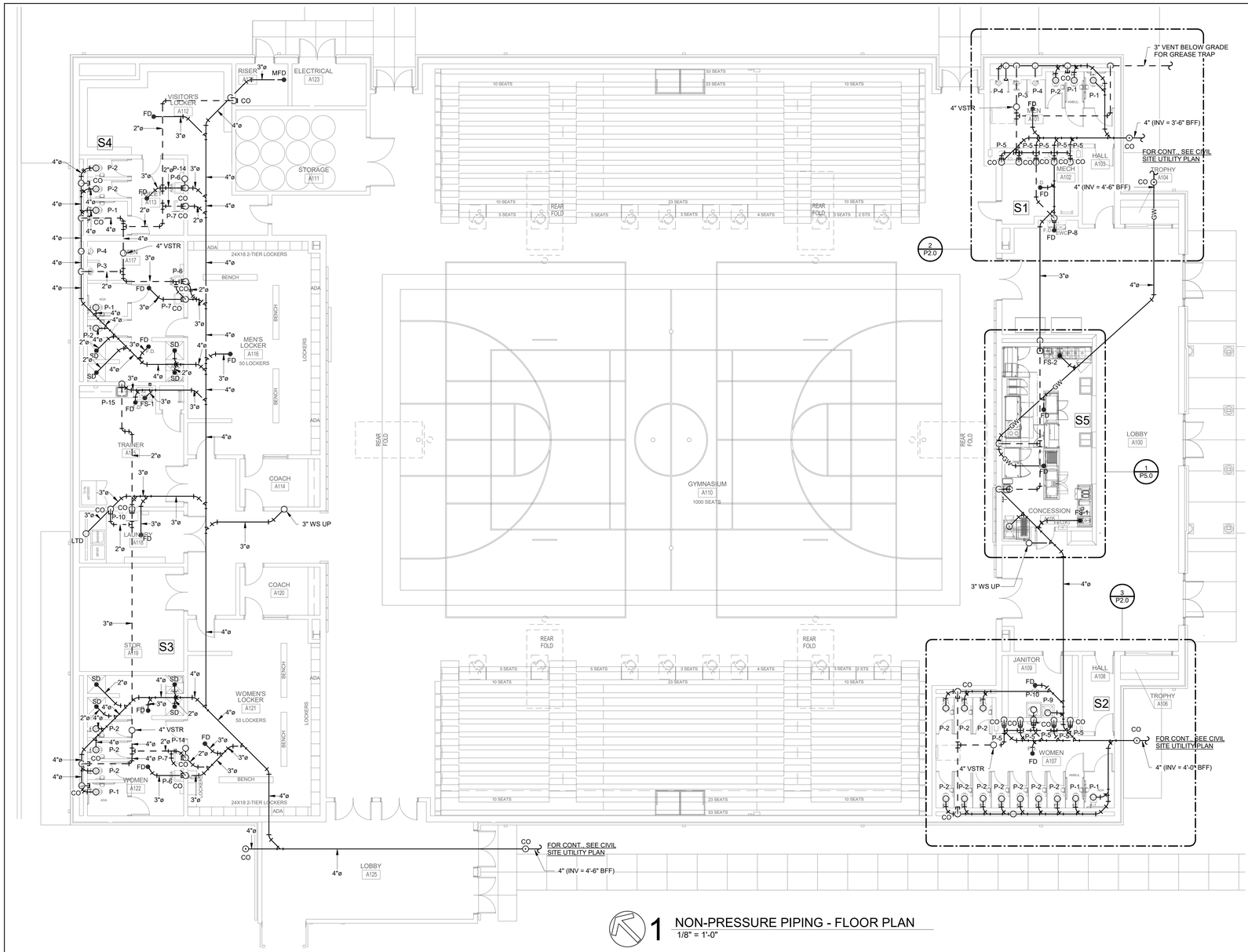
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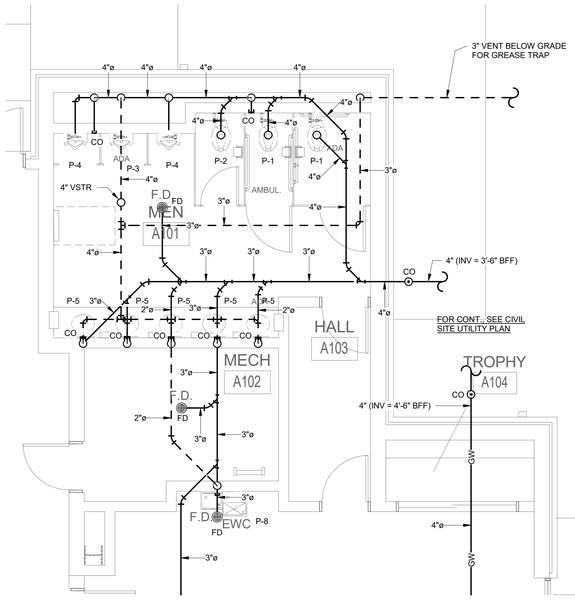
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NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

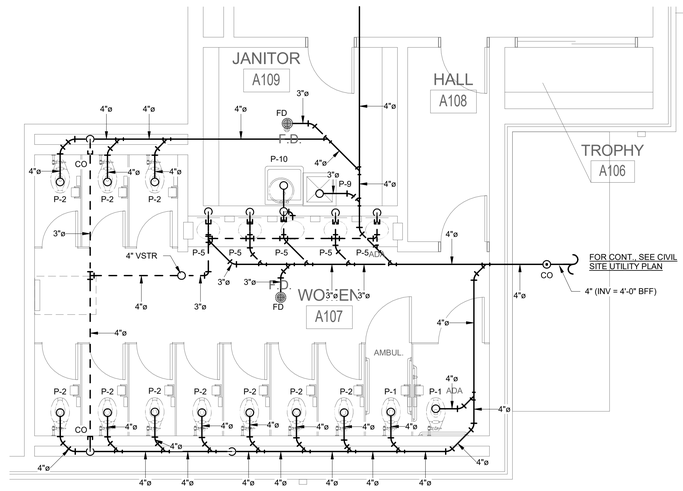
SHEET TITLE:
NON-PRESSURE PIPING - FLOOR PLAN



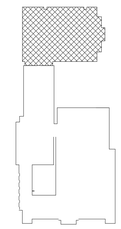
1 NON-PRESSURE PIPING - FLOOR PLAN
1/8" = 1'-0"



2 MEN A101 - ENLARGED NON-PRESSURE PIPING PLAN
1/4" = 1'-0"



3 WOMEN A107 - ENLARGED NON-PRESSURE PIPING PLAN
1/4" = 1'-0"



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
CHRISTOPHER L ROBINSON
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
P2.0
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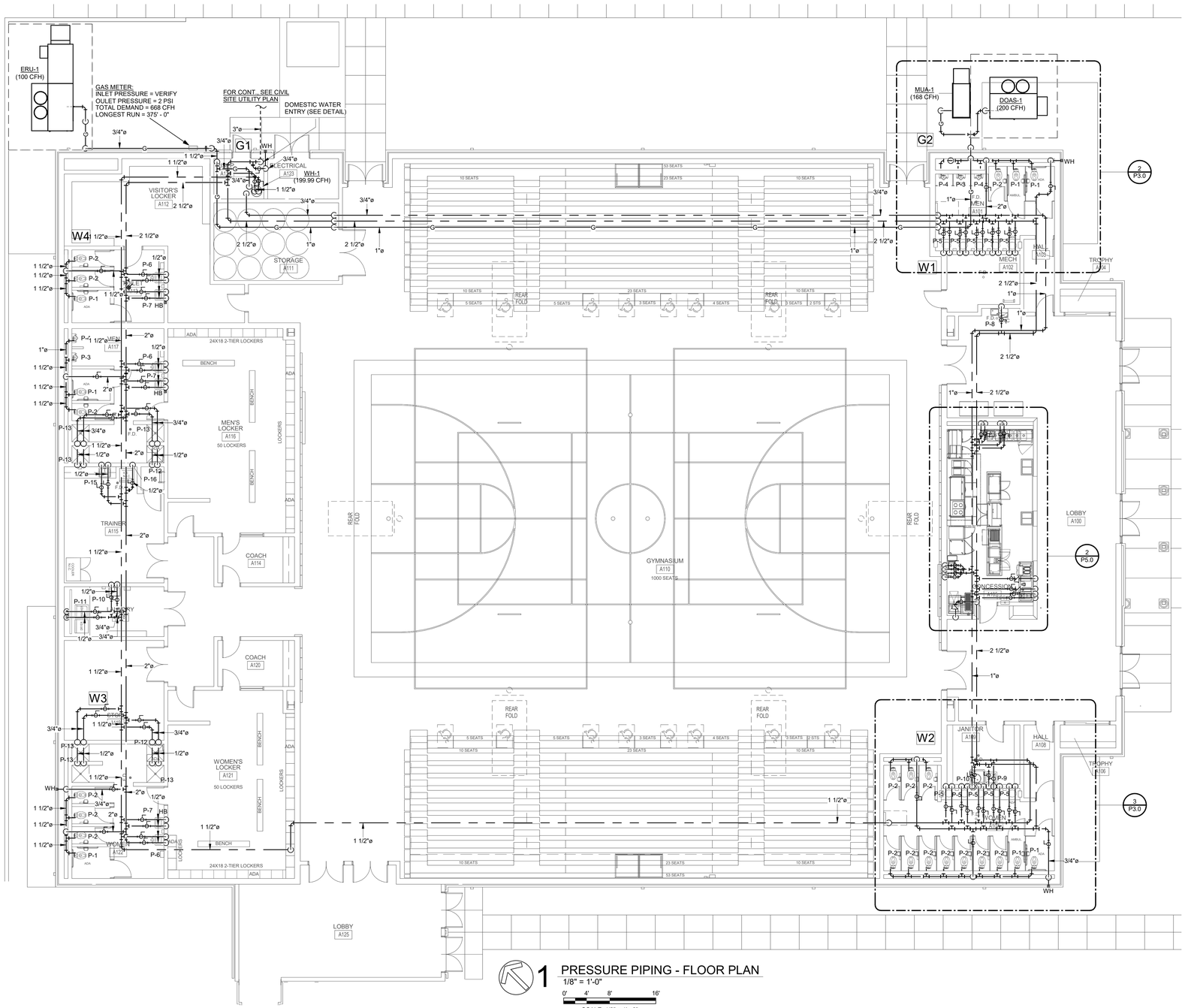
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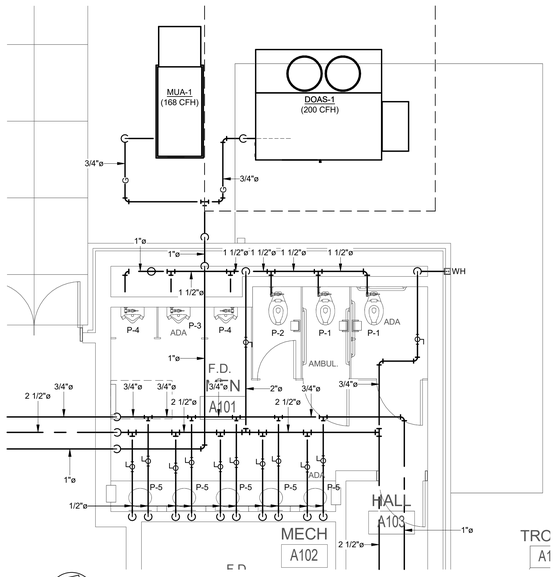
LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

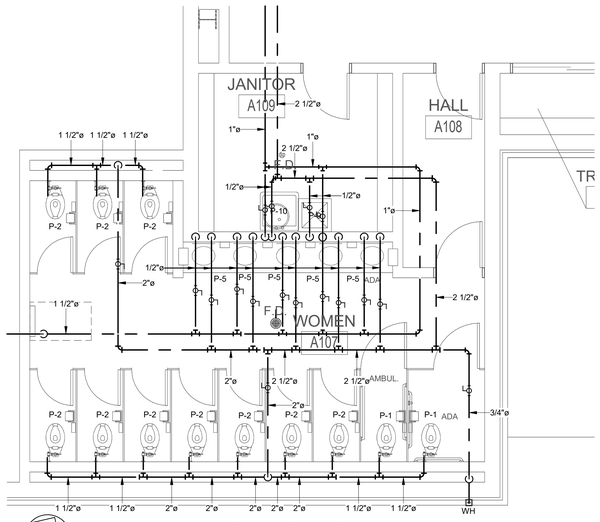
SHEET TITLE:
PRESSURE PIPING - FLOOR PLAN



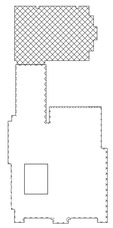
1 PRESSURE PIPING - FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



2 MEN A101 - ENLARGED PRESSURE PIPING PLAN
1/4" = 1'-0"
0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"



3 WOMEN A107 - ENLARGED PRESSURE PLAN
1/4" = 1'-0"
0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"



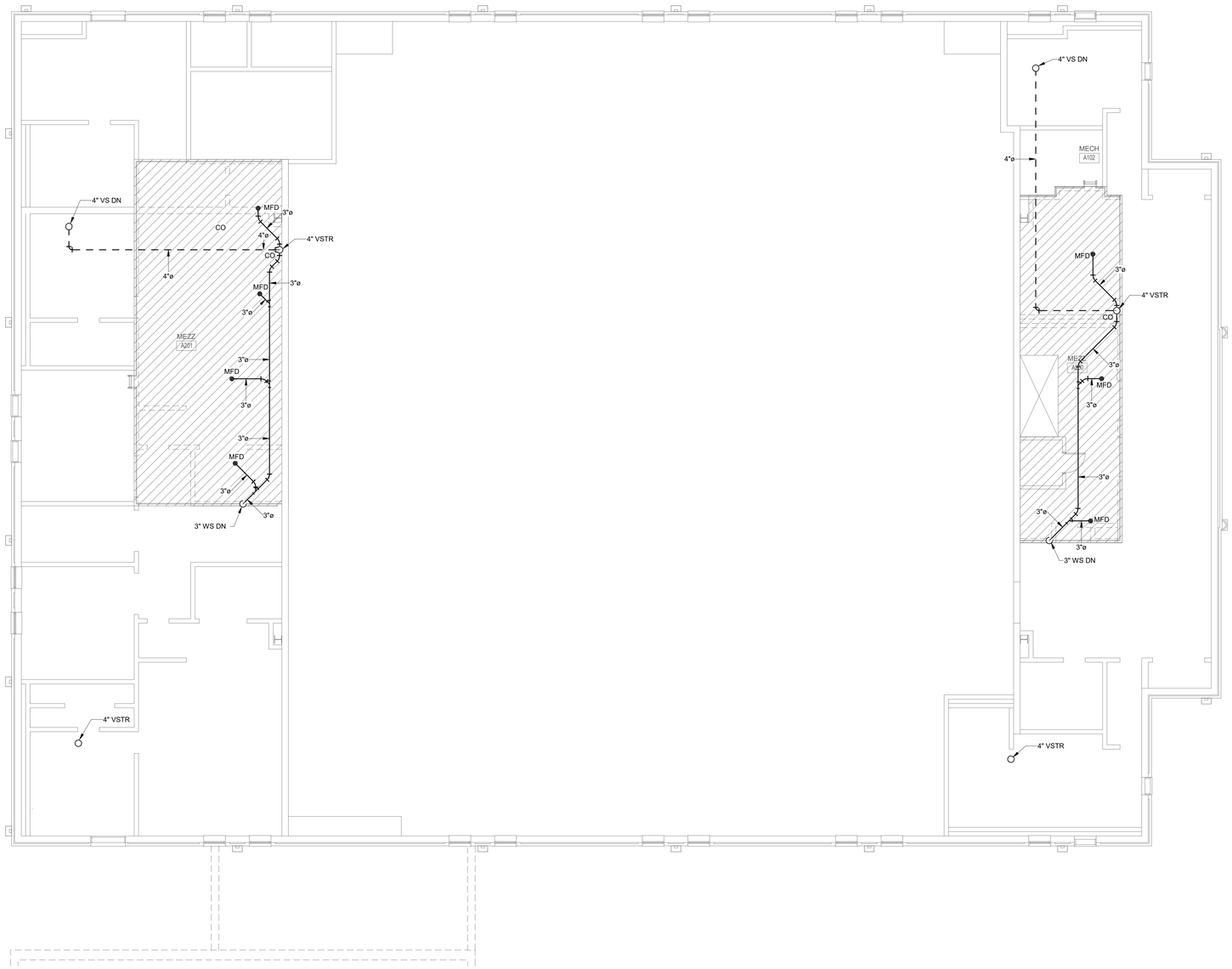
KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
INC. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L. ROBISON

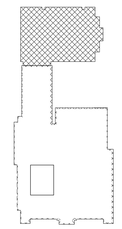
PROJ. MGR.: –	CLR
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JOB NO. 25-33
SHEET NO:
P3.0
5 OF 7

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1 PLUMBING - MEZZANINE FLOOR PLAN
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



KEY PLAN
NOT TO SCALE
NORTH

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING - MEZZANINE FLOOR PLAN

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	ZDE
DATE: –	10/23/2025
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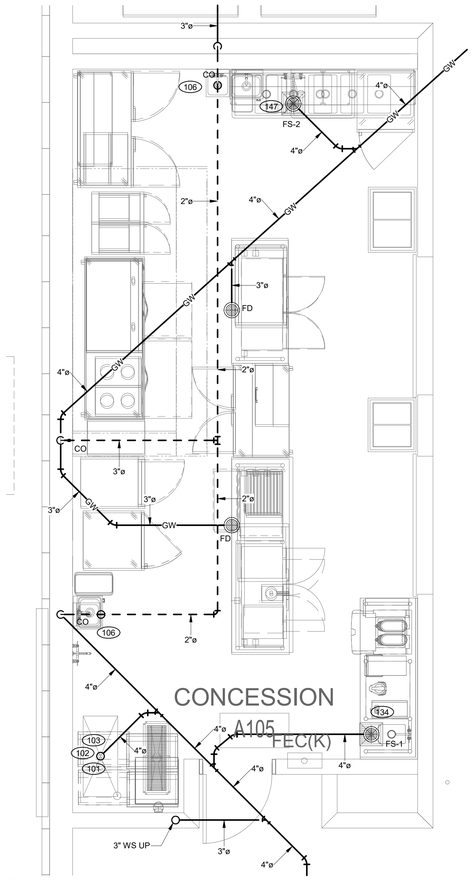
JOB NO. 25-33
SHEET NO:
P4.0
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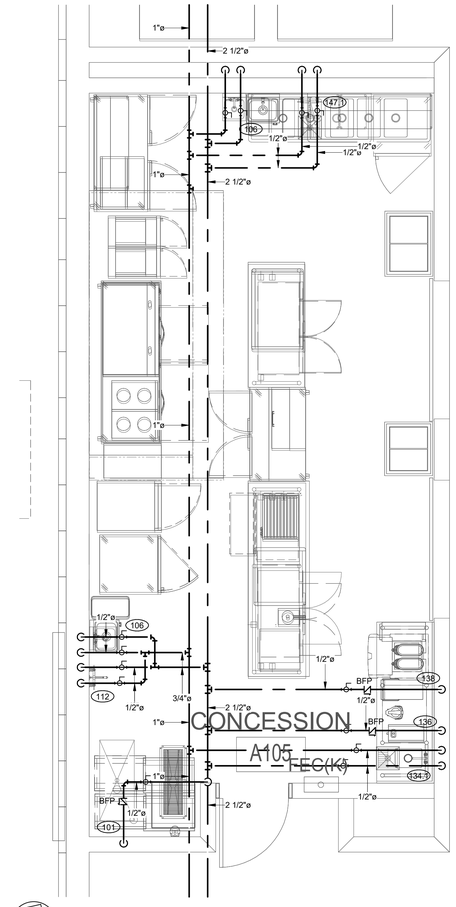
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ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
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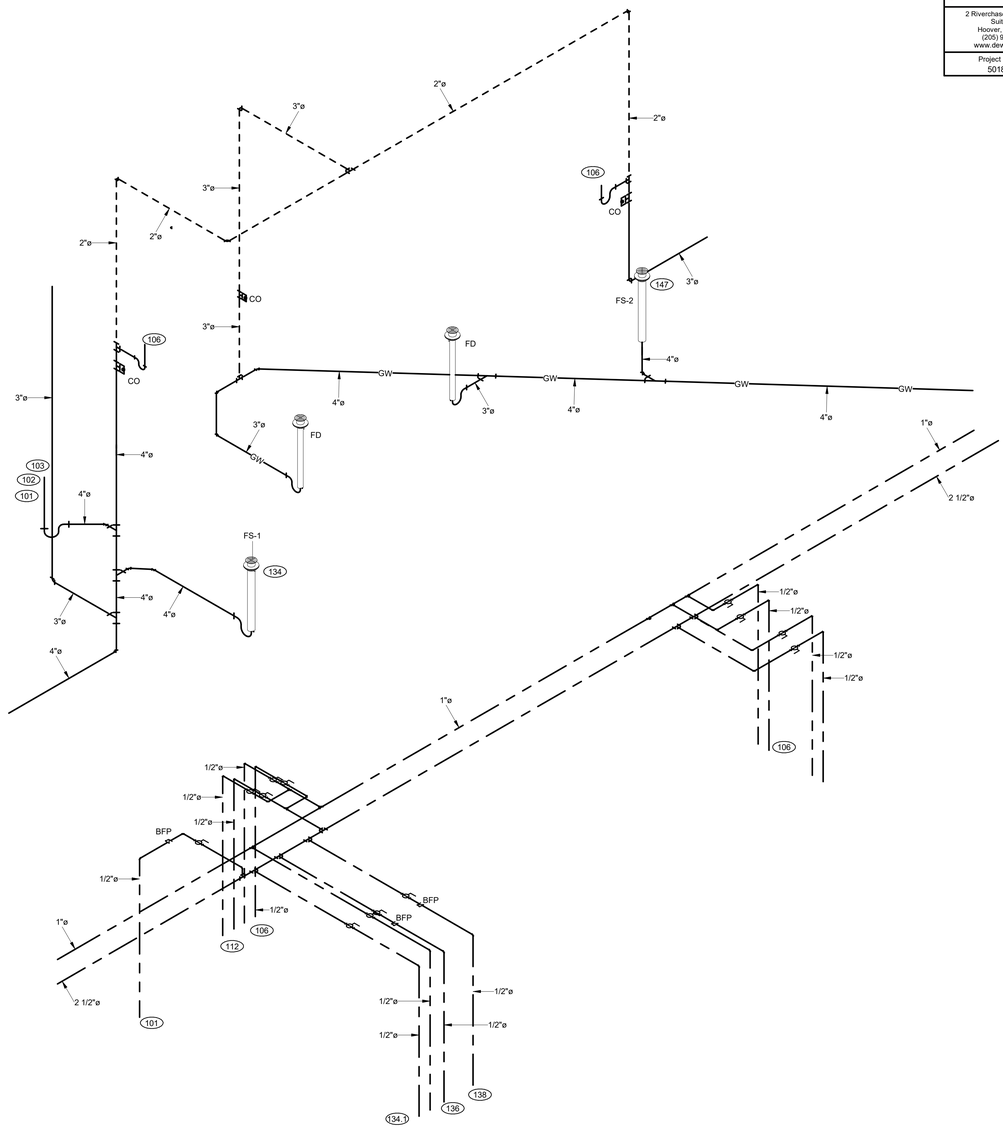
SHEET TITLE:
PLUMBING - CONCESSION FLOOR PLAN



1 NON-PRESSURE PIPING - CONCESSION ENLARGED PLAN
3/8" = 1'-0"
SCALE: 3/8" = 1' - 0"



2 PRESSURE PIPING - CONCESSION ENLARGED PLAN
3/8" = 1'-0"
SCALE: 3/8" = 1' - 0"



FOOD EQUIPMENT MECHANICAL SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)	ELEC REMARKS	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER GPH	HOT WATER AFF (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN AFF (IN)	INDIR DRAIN SIZE (IN)	GAS SIZE (IN)	MBTUH	GAS AFF (IN)	PLUMBING REMARKS	ITEM NO
101	1	ICE MAKER-SMALL CUBE (R290)	SCOTSMAN	MCO522SA 32	BY KEC	5.9			208	1	60	X			78"		3/8"	84"						3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	101
102	1	ICE BIN	SCOTSMAN	B-322S	BY KEC																			3/4"				EXTEND I.W. TO NEAREST FLOOR SINK	102
103	1	FLOOR TROUGH W/FIBERGLASS GRATE	ATL. CUSTOM FAB.	CUSTOM	BY KEC																4"							STUB UP	103
106	2	HAND SINK	KROWNE	HS-30L													1/2"	24"	1/2"	24"		1-1/2"	20"					SHUT OFF VALVES BY PROJECT PLUMBER	106
112	1	SERVICE FAUCET	KROWNE	16-127	BY KEC												1/2"	36"	1/2"	36"								HOSE& NOZZLE BY OWNER	112
116	1	GRIDDLE	GARLAND	E24-48G	BY KEC	77.0			208	1	60	X			30"														116
117	-	OPEN ITEM															1/4"	60"											117
118	2	FRYER	DEAN	SR114E	BY KEC	68.0			208	1	60	X			30"														118
134	1	BEVERAGE TABLE	ATL. CUSTOM TABLE	CUSTOM	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	134
134.1	1	FAUCET DECK MOUNT	KROWNE	15-401L	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	134.1
136	1	COFFEE BREWER (REFERENCE ONLY)	BUNN	41400.0000	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER										CONNECT THRU WATER FILTER TO BREWER	136
138	1	ICE TEA BREWER (REFERENCE ONLY)	BUNN	36700.0301	BY OWNER/VENDER	11.4			120	1	60		X	5-15P	VER	VERIFY WITH OWNER	1/4"	VER										CONNECT THRU WATER FILTER TO BREWER	138
147	1	THREE COMPARTMENT POTSINK	ADVANCE	K7-CS-32	BY KEC																			1-1/2"				EXTEND I.W. TO NEAREST FLOOR SINK	147
147.1	1	PRE-RINSE WITH ADD ON FAUCET	KROWNE	17-109WL	BY KEC												1/2"	16"	1/2"	16"								SHUT OFF VALVES BY PROJECT PLUMBER	147.1

ALABAMA
CHRISTOPHER L ROBISON
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER

PROJ. MGR.: –	CLR
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JOB NO. 25-33
SHEET NO:
P5.0
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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
ø	ROUND DUCT SYMBOL
W X H	RECTANGULAR DUCT (WIDTH X HEIGHT)
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO REMAIN.
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO BE REMOVED.
	RECTANGULAR SUPPLY DUCT TURNING UP
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN
	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)
(T)	TEMPERATURE SENSOR
(H)	HUMIDITY SENSOR
(C)	CO2 MONITOR
	CONNECT TO EXISTING, FIELD VERIFY EXACT SIZE AND LOCATION.

HVAC ABBREVIATIONS

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

HVAC CONTROLS LEGEND

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

PIPING LEGEND

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

AIR DEVICE LEGEND

MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN
"LD"	200LD / CFM	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. DIFFUSERS SHALL HAVE VERTICAL THROW PATTERN.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: 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
"R", "E", "T"	200R / CFM / R24 / SQUARE NECK SIZE	CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGCRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: CFM / NECK SIZE 0 - 100 / 6x6 101 - 200 / 8x8 201 - 350 / 10x10 351 - 500 / 12x12 501 - 750 / 14x14 751 - 950 / 16x16 951 - 1200 / 18x18 1201 - 1500 / 20x20 1501 - 2000 / 24x24	TITUS 50F
SR	SR12X6 / 200 / CFM / W x H	SIDEWALL SUPPLY REGISTER.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 272FL
WRG / WTG	WRG12X6 / 200 / CFM / W x H	WALL RETURN GRILLE / WALL TRANSFER GRILLE.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 350FL
BRG	BRG12X6 / 200 / CFM / W x H	HEAVY DUTY RETURN BAR GRILLE.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 33RL

NOTES:

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

HVAC GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

AIR PURIFICATION SCHEDULE

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

NOTES:

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

PROVIDE FOR UNITS LISTED: IHP-1,2,3,4,5,6,7,8,9,12,13 & AC-1,2

AIR PURIFICATION SCHEDULE

FLOW	GPS MODEL	GPS QUANTITY	MINIMUM NEEDLE SPACING	VOLTAGE	WATTS	MOUNTING LOCATION	MINIMUM ION DENSITY (IONS/CC)
CV	GPS-IMOD	1 PER COOLING COIL	1 EVERY 3/4"	115	15	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 MANUFACTURER'S MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER US OR ETL.
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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 UNITS LISTED: IHP-GYM1, IHP-GYM2, IHP-GYM3, & IHP-GYM4

PACKAGED OUTSIDE AIR UNIT WITH ENERGY RECOVERY

TYPE:

PACKAGED ERU WITH DX COOLING COIL, ENERGY RECOVERY CORE, AND GAS HEAT.

NOTES:

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

ACCESSORIES:

1. 2" THICK THROWAWAY FILTER, 30% EFFICIENT.
2. CONDENSER COIL GUARD.
3. DIRECT DRIVE SUPPLY W/ VFD AND EXHAUST FAN W/ VFD.
4. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
5. HINGED ACCESS DOORS.
6. STAINLESS STEEL DRAIN PAN.
7. OSA INTAKE HOOD AND EXHAUST HOOD WITH AUTO DAMPERS.
8. MODULATING HOT GAS REHEAT COIL. (CAPABLE OF 68 MBH REHEAT)
9. INDIRECT STAINLESS STEEL HEAT EXCHANGER WITH 4:1 TURNDOWN.
10. MICROPROCESSOR CONTROLLER WITH BACNET INTERFACE. CONTROLLER SHALL BE CAPABLE OF PROVIDING SEQUENCES ON CONTROLS DRAWINGS.

Mark	SUPPLY FAN			EXHAUST FAN			CORE SUMMER			CORE WINTER			ELECTRICAL					DX COOLING COIL					GAS HEAT					
	CFM	E.S.P. (IN.-W.G.)	MOTOR (HP)	CFM	E.S.P. (IN.-W.G.)	MOTOR (HP)	OUTSIDE AIR EAT (DB°F/WB°F)	OUTSIDE AIR LAT (DB°F/WB°F)	EXHAUST ENTERING (DB°F/WB°F)	OUTSIDE AIR EAT (DB°F/WB°F)	OUTSIDE AIR LAT (DB°F/WB°F)	EXHAUST ENTERING (DB°F/WB°F)	V	PH	HZ	MCA (A)	MOCP (A)	EAT (DB°F/WB°F)	LAT (DB°F/WB°F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	INPUT (MBH)	OUTPUT (MBH)	ISMRE	WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
ERU-1	2140	1	1.5	2000	1	1.5	95/78	80.8/69.3	75/62.5	15/11.9	52.8/45.7	70/58	460 V	3	60	29.6	45	80.9/69.3	50.7/50.6	118.6	66.0	10	100	81	8.1	3500	1,2,3,4,5,6,7,8,9,10	VALENT VXC

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Project Number : 50189905

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SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL LEGEND, SCHEDULES AND NOTES

ALABAMA LICENSED ENGINEER
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.:	– CLR
DRAWN:	CWM
DATE:	– 10/23/2025
REVISIONS	

JOB NO. 25-33

SHEET NO:

M0.1

1 OF 10

PACKAGED OUTSIDE AIR UNIT

TYPE:
PACKAGED 100% OUTSIDE AIR AC UNIT WITH DX COOLING COIL AND GAS HEAT.

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
2. GAS HEATING OUTPUT BASED ON 80% AFUE.

ACCESSORIES:
1. 2" THICK THROWAWAY FILTER, MERV 8
2. CONDENSER COIL GUARD.
3. DIRECT DRIVE SUPPLY FAN.
4. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
5. HINGED ACCESS DOORS.
6. STAINLESS STEEL DRAIN PAN.
7. OSA INTAKE HOOD WITH AUTO DAMPERS.
8. HOT GAS REHEAT COIL.

MARK	SUPPLY FAN			DX COOLING COIL				CIRCUITS	HOT GAS REHEAT (MBH)	ELECTRICAL					GAS HEAT		IEER/EER	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
	CFM	E.S.P. (IN.-W.G.)	MOTOR (HP)	LAT (DB °F/WB °F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS			V	PH	HZ	MCA	MOCP	INPUT (MBH)	OUTPUT (MBH)				
DOAS-1	2000	1	1	55.8 / 55.6	150.9	78.1	12.5	1	64.6	460 V	3	60	29	45	200	162	12.2 / 10.8	2500	1,2,3,4,5,6,7,8	VALENT VX

WALL HEATER SCHEDULE

HEATER TYPE:
1. ELECTRIC WALL HEATER.

ACCESSORIES:
1. SURFACE MOUNTING.
2. UNIT MOUNTED THERMOSTAT.
3. CONCEALED ON/OFF SWITCH.
4. HIGH LIMIT CONTROLS.
5. BUILT-IN CIRCUIT BREAKER.

MARK	SIZE (kW)	ELECTRICAL			ACCESSORIES	BASIS OF DESIGN
		V	PH	HZ		
EWH-A	3	208	1	60	1,2,3,4,5	MARKEL 3450

INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:
1. INDOOR, WALL MOUNT
2. INDOOR, CEILING CASSETTE
3. INDOOR, CEILING CASSETTE (2'x2')

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

ACCESSORIES:
1. 3-POLE DISCONNECT SWITCH.
2. HARD WIRED UNIT CONTROLLER.
3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS.
4. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD.
5. INTEGRAL CONDENSATE PUMP.
6. SUPPLY AIR DUCT OUTLET.
7. OUTSIDE AIR DUCT INLET.
8. AIR BLANK-OFF.

MARK	TYPE	AIRFLOW (CFM)	NOMINAL TONS	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	DIMENSIONS (IN.) (WxDxH)	ELECTRICAL				WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
							V	PH	HZ	MCA (A)			
IHP-1	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-2	2	810	2	24	29	33"x33"x11"	208 V	1	60	1	75	1,2,3,5,6	TRANE
IHP-3	2	530	1	12	20	33"x33"x10"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-4	3	335	1	12	15	23"x23"x9"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-5	2	530	1	12	20	33"x33"x10"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-6	3	335	1	12	15	23"x23"x9"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-7	2	530	1	12	20	33"x33"x10"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-8	2	810	2	24	29	33"x33"x11"	208 V	1	60	1	75	1,2,3,5,6	TRANE
IHP-9	2	530	1	12	20	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6	TRANE
IHP-10	1	385	1	12	18	35"x9"x12"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-11	1	385	1	12	18	35"x9"x12"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-12	2	530	1	12	20	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6	TRANE
IHP-13	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5	TRANE
IHP-ELEC	1	385	1	12	18	35"x9"x12"	208 V	1	60	1	50	1,2,3,5	TRANE

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		BASIS OF DESIGN
				V	PH	HZ	MCA (A)	MOCP (A)	SEER	HSPF	
OHP-1	1	18	23	208	1	60	16	27	24.7	9.8	TRANE
OHP-2	1	24	29	208	1	60	22	37	22.6	9.8	TRANE
OHP-3	1	12	20	208	1	60	16	27	24.8	10.9	TRANE
OHP-4	1	12	18	208	1	60	16	27	21.1	10.1	TRANE
OHP-5	1	12	20	208	1	60	16	27	24.8	10.9	TRANE
OHP-6	1	12	18	208	1	60	16	27	21.1	10.1	TRANE
OHP-7	1	12	20	208	1	60	16	27	24.8	10.9	TRANE
OHP-8	1	24	29	208	1	60	22	37	22.6	9.8	TRANE
OHP-9	1	12	20	208	1	60	16	27	24.8	10.9	TRANE
OHP-10	1	12	18	208	1	60	16	27	21.1	10.1	TRANE
OHP-11	1	12	18	208	1	60	16	27	21.1	10.1	TRANE
OHP-12	1	12	20	208	1	60	16	27	24.8	10.9	TRANE
OHP-13	1	18	23	208	1	60	16	27	24.7	9.8	TRANE
OHP-ELEC	1	18	23	208	1	60	16	27	24.7	9.8	TRANE

MAKE-UP AIR UNIT SCHEDULE

TYPE:
1. DIRECT FIRED GAS MAKE-UP AIR UNIT HORIZONTAL DISCHARGE

NOTES:
1. BASIS OF DESIGN: LOREN COOK HMD-3400
2. MAX DISCHARGE AIR TEMPERATURE: 55°F

ACCESSORIES:
1. AUTOMATIC INTAKE DAMPER.
2. SINGLE POINT POWER CONNECTION.
3. UNIT MOUNTED CONTROL PANEL.
4. DUCT TEMPERATURE SENSOR.
5. OUTSIDE AIR INTAKE HOOD.
6. 2" THICK THROWAWAY FILTER, MERV 8.
7. INTERNALLY ISOLATED SUPPLY FAN - BELT DRIVE.

MARK	TYPE	SUPPLY AIR FLOW (CFM)	E.S.P. (IN.-W.G.)	HEATING CAPACITY			SUPPLY FAN (HP)	ELECTRICAL			ACCESSORIES
				INPUT (MBH)	OUTPUT (MBH)	EFF.		V	PH	HZ	
MUA-1	1	2160	0.75	168	155	92%	1.5	460 V	3	60	1,2,3,4,5

INDOOR AIR HANDLING UNIT SCHEDULE

AIR HANDLER UNIT TYPE:
1. SPLIT SYSTEM AC UNIT. VERTICAL INDOOR AIR HANDLER WITH DX COIL, SUPPLY FAN, & MATCHING OUTDOOR UNIT.

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
2. UL LISTED. AHRI CERTIFIED.
3. SEE PLANS FOR AIRFLOW CONFIGURATION.

ACCESSORIES:
1. SINGLE POINT POWER CONNECTION.
2. FILTER RACK WITH 2" THICK - 30% EFF. FILTERS.
3. INTERNALLY ISOLATED SUPPLY FAN - UNITS ≤ 5T, DIRECT DRIVE; UNITS > 5T, BELT DRIVE.
4. DX COOLING COIL - MATCHED TO OUTDOOR HEAT PUMP.
5. ELECTRIC HEAT.
6. HARD WIRED UNIT CONTROLLER
7. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARE CONNECTIONS.
8. TWO SPPED SUPPLY FAN.

MARK	SERVED BY	TYPE	SUPPLY FAN			OUTSIDE AIR	DX COOLING COIL CAPACITY				DX HEATING CAPACITY			ELEC HEATER		ELECTRICAL					ACCESSORIES	BASIS OF DESIGN
			AIRFLOW	E.S.P.	MOTOR (BHP)		TOTAL (MBH)	SENSIBLE (MBH)	EAT (DB/WB) (°F)	NOMINAL TONS	TOTAL (MBH)	EAT (DB) (°F)	AMBIENT (DB) (°F)	KW	STAGES	VOLTAGE	PH	HZ	MCA	MOCP		
IHP-GYM1	OHP-GYM1	1	7500	1.5"	5.3	1,500 CFM	256	193	80/67	20	267	70	47	50	2	460	3	60	88	90	1,2,3,4,5,6,7,8	TRANE TWE
IHP-GYM2	OHP-GYM2	1	6000	1.5"	4.8	1,125 CFM	194	148	80/67	15	195	70	47	50	2	460	3	60	84	90	1,2,3,4,5,6,7,8	TRANE TWE
IHP-GYM3	OHP-GYM3	1	6000	1.5"	4.8	1,125 CFM	194	148	80/67	15	195	70	47	50	2	460	3	60	84	90	1,2,3,4,5,6,7,8	TRANE TWE
IHP-GYM4	OHP-GYM4	1	7500	1.5"	5.3	1,500 CFM	256	193	80/67	20	267	70	47	50	2	460	3	60	88	90	1,2,3,4,5,6,7,8	TRANE TWE

INDOOR HEAT PUMP UNIT SCHEDULE

AIR HANDLER UNIT TYPE:
1. SPLIT SYSTEM AC UNIT. INDOOR AIR HANDLER WITH DX COIL, AUXILIARY ELECTRIC HEATER, SUPPLY FAN, & MATCHING OUTDOOR...

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
2. HEATING CAPACITY IS NET CAPACITY @ 47°F AMBIENT.
3. UL LISTED. AHRI CERTIFIED.
4. SEE PLANS FOR AIRFLOW CONFIGURATION.

ACCESSORIES:
1. SINGLE POINT POWER CONNECTION.
2. FILTER RACK WITH 1" THICK FILTERS - MERV 8.
3. MULTI-SPEED BLOWER MOTOR.
4. ELECTRIC HEAT.
5. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICAL.

MARK	TYPE	SUPPLY FAN			OSA (CFM)	DX COOLING COIL CAPACITY				DX HEATING CAPACITY		ELEC HEAT	ELECTRICAL					ACCESSORIES	BASIS OF DESIGN
		AIRFLOW (CFM)	E.S.P. (IN.-W.G.)	MOTOR (HP)		NOMINAL TONS	TOTAL (MBH)	SENSIBLE (MBH)	EAT (DB°F/WB°F)	TOTAL (MBH)	EAT (DB°F)	KW	V	PH	HZ	MCA (A)	MOCP (A)		
AC-1	1	1600	0.75"	3/4		4	44.4	37.3	77/63	43.5	70	14.4	460 V	3	60	25.6	30	1,2,3,4,5	TRANE
AC-2	1	1600	0.75"	3/4		4	44.4	37.3	77/63	43.5	70	14.4	460 V	3	60	25.6	30	1,2,3,4,5	TRANE

OUTDOOR HEAT PUMP SCHEDULE

TYPE:
1. OUTDOOR HEAT PUMP

NOTES:
1. CAPACITY TO BALANCE RESPECTIVE INDOOR AC UNIT.
2. COOLING CAPACITY RATED AT 95°F.
3. HEATING CAPACITY RATED AT 47°F.
4. UL LISTED, AHRI CERTIFIED.
5. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING TYPE TAMPER-RESISTANT CAPS. ANY ACCESS DEVICE REQUIRED SHALL BE LEFT ON SITE WITH THE OWNER AT PROJECT CLOSE OUT.

ACCESSORIES:
1. PHASE PROTECTION.
2. MICROPROCESSOR CONTROLS.
3. ISOLATION VALVES.
4. LIQUID LINE REFRIGERANT FILTER DRIER.
5. ANTI SHORT CYCLE TIMER.
6. HAIL / VANDAL GUARDS.
7. THERMAL EXPANSION VALVE.

MARK	TYPE	NOMINAL TONS	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	ELECTRICAL					EFFICIENCY		BASIS OF DESIGN
					V	PH	HZ	MCA (A)	MOCP (A)	COOLING (EER/SEER)	HEATING (COP)	
HP-1	1	4	44.4	43.5	460 V	3	60	9.4	15	12/15.2	4.3	TRANE
HP-2	1	4	44.4	43.5	460 V	3	60	9.4	15	12/15.2	4.3	TRANE

FAN SCHEDULE

FAN TYPE:
1. CEILING MOUNTED EXHAUST FAN.
2. CENTRIFUGAL SQUARE INLINE - DIRECT DRIVE.
3. MIXED FLOW, INLINE EXHAUST FAN - BELT DRIVE.

FAN ACCESSORIES:
1. BACKDRAFT DAMPER.
2. DISCONNECT SWITCH.
3. ALUMINUM CEILING GRILLE.
4. FAN SPEED CONTROLLER.
5. SPRING VIBRATION ISOLATORS.
6. FLEXIBLE CONNECTIONS.
7. MOTOR SIDE GUARD.
8. DRAIN CONNECTION WITH GREASE TRAP.
9. STEEL DRAIN.
10. UL LISTED FOR GREASE EXHAUST.

MARK	FAN TYPE	AIRFLOW (CFM)	E.S.P. (IN.-W.G.)	WHEEL SIZE (INCHES)	SOUND CRITERIA (SONES/dBA)	RPM	MOTOR (HP / W)	ELECTRICAL			INTERLOCK WITH	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
								V	PH	HZ				
CEF-1	1	300	0.75	6"	4	1253	1/4 HP	120 V	1	60	BAS	50	1,2,3,4	LOREN COOK GC
CEF-2	1	600	0.75	6"	6	1694	1/3 HP	120 V	1	60	BAS	50	1,2,3,4	LOREN COOK GC
CEF-3	1	150	0.75	8"	4	1052	77 W	120 V	1	60	BAS	50	1,2,3,4	LOREN COOK GC
EF-K	2	350	0.75	12"	12	1845	1/3 HP	120 V	1	60	BAS	200	1,2,4,5,6	LOREN COOK SQND
EF-KH1	3	2700	1.25	13.5"	67 dBA	1868	1.5 HP	480 V	3	60	KITCHEN HOOD	400	2,5.6.7.8.9.10	LOREN COOK QMX

DEHUMIDIFIER SCHEDULE

UNIT TYPE:
1. HORIZONTAL DEHUMIDIFIER.

NOTE:
ELECTRICAL TO PROVIDE DEDICATED 15 AMP CIRCUIT.

ACCESSORIES:
1. WALL MOUNTED HUMIDITY SENSOR.
2. SPRING VIBRATION ISOLATORS.
3. MERV 13 FILTER.
4. AUXILIARY DRAIN PAN.
5. CONDENSATE PUMP.

MARK	TYPE	WATER REMOVAL	AIRFLOW (CFM)	ELECTRICAL				ACCESSORIES	UNIT WEIGHT (LBS)	BASIS OF DESIGN
				V	PH	HZ	MOCP			
DH-A	1	205 PINTS/DAY	470	120 V	1	60	15 A	1,2,3,4,5	200	SANTA FE
DH-B	1	125 PINTS/DAY	350	120 V	1	60	15 A	1,2,3,4,5	125	SANTA FE

Dewberry
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Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number : 50189905

LATHAN McKEE ARCHITECTS

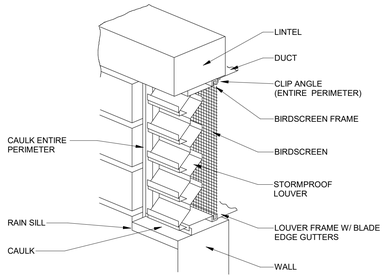
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL SCHEDULES

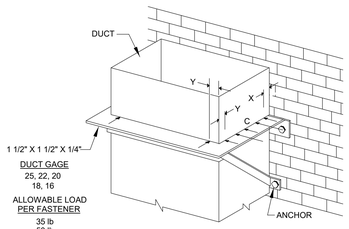
ALABAMA LICENSED PROFESSIONAL ENGINEER
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: – CLR
DRAWN: CWM
DATE: – 10/23/2025
REVISIONS

JOB NO. 25-33
SHEET NO:
M0.2
2 OF 10



HVAC WALL LOUVER
NO SCALE

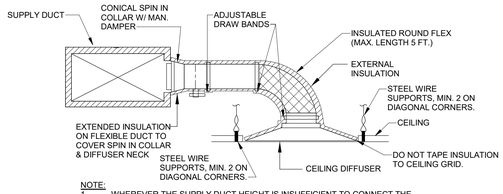


WELD, BOLT OR NO. 8 SCREW (MIN.). DEVIATION PERMITTED BY OTHER ANALYSIS. X = 1", Y = 2", ADD OTHERS TO ACCOMMODATE LOAD. MINIMUM OF 3 ON 24" WIDTH AND UP. ADD ALONG SIDES NEAREST ANCHORS.

NOTES:
1. BRACKETS ARE SIZED FOR 12 FEET OF DUCT, MAXIMUM.
2. LOCATE DUCTS AGAINST WALL OR MAXIMUM OF 2" AWAY FROM WALL.
3. EACH WALL ANCHOR SHALL SATISFY THE FOLLOWING CRITERIA UNLESS OTHER ANALYSIS IS MADE:

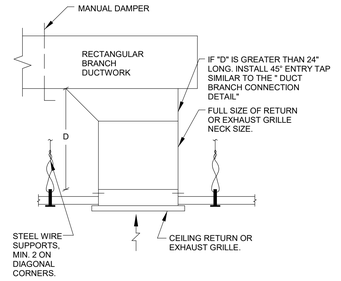
A. TENSILE LOAD = 3/8 X DUCT WEIGHT; SAFETY FACTOR OF 4.
B. SHEAR LOAD X 1/2 X DUCT WEIGHT; SAFETY FACTOR OF 4.

DUCT SUPPORT FROM WALL
NO SCALE

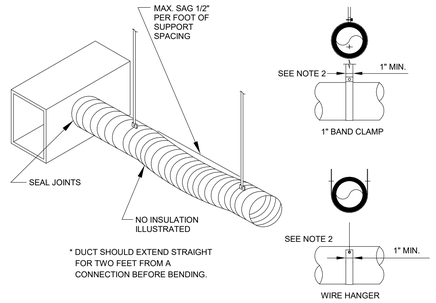


NOTE:
1. WHEREVER THE SUPPLY DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT.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

CEILING DIFFUSER INSTALLATION DETAIL
NO SCALE



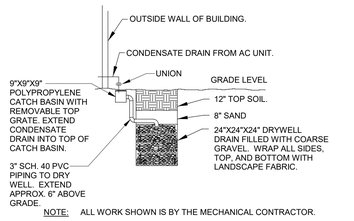
CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL
NO SCALE



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

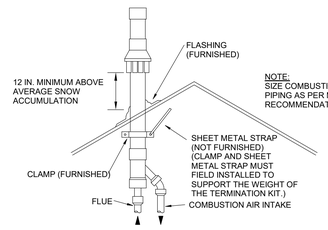
NOTES:
1. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
2. DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
3. MIN. CENTER LINE BEND LINE RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D/2).
4. FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 LINEAR FEET.

FLEXIBLE DUCT SUPPORT DETAIL
NO SCALE

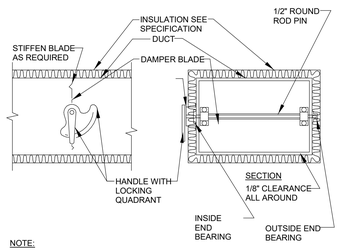


NOTE: ALL WORK SHOWN IS BY THE MECHANICAL CONTRACTOR.

DRY WELL DETAIL
NO SCALE

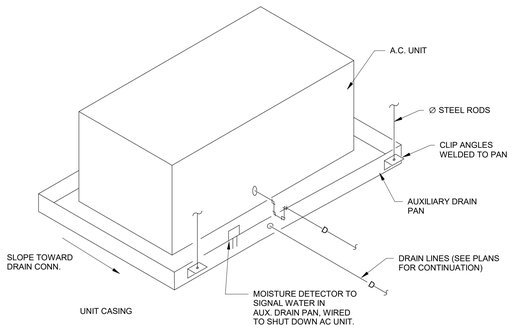


CONCENTRIC ROOF TERMINATION DETAIL
NO SCALE



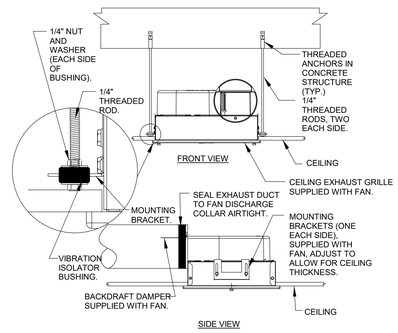
NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.
3. MANUAL DAMPERS SHALL BE EQUAL TO RUSKIN MD35 (FOR RECTANGULAR DUCTS) AND SHALL BE EQUAL TO RUSKIN MDRS25 (FOR ROUND DUCTS).

MANUAL DAMPER DETAIL
NO SCALE



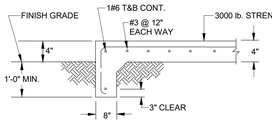
AUXILIARY DRAIN PAN SHALL BE 2" LARGER (ALL FOUR SIDES) THAN UNIT AND SHALL BE 3" DEEP WITH TOP EDGE HEMMED. FABRICATE FROM 18 GAUGE GALV. WITH ALL JOINTS AND SEAMS SOLDERED.

AUXILIARY DRAIN PAN DETAIL
NO SCALE

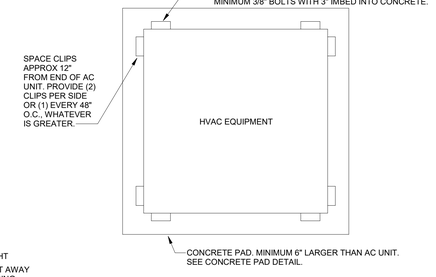


CEILING EXHAUST FAN DETAIL
NO SCALE

REFRIGERANT LINE SUPPORT DETAIL
NO SCALE



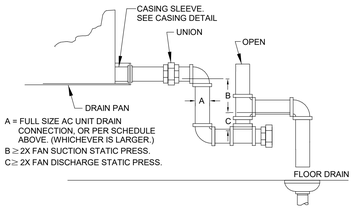
CONCRETE PAD DETAIL
NO SCALE



NOTE: PROVIDE SUBMITTALS FROM EQUIPMENT CLIP (WIND RESTRAINT) MANUFACTURER FOR THE REQUIRED CLIP STYLE FOR THE SUBMITTED AC EQUIPMENT FOR THIS PROJECT. SUBMITTAL FROM MANUFACTURER SHALL INCLUDE ALL INSTALLATION GUIDELINES TO COMPLY WITH THE REQUIREMENTS OF 2021 IMC 301.15 AND 2021 IBC 1609. SUBMITTAL SHALL INCLUDE CLIP QUANTITY, AND ANCHOR REQUIREMENTS FOR EACH SIZE AC UNIT.

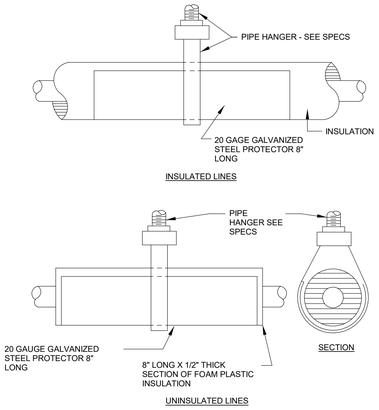
HVAC EQUIPMENT (ON GRADE) WIND RESTRAINT DETAIL
NO SCALE

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"

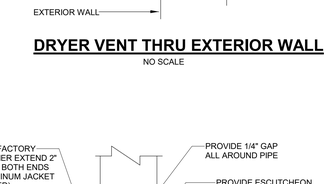


A = FULL SIZE AC UNIT DRAIN CONNECTION, OR PER SCHEDULE ABOVE. (WHICHEVER IS LARGER.)
B ≥ 2X FAN SUCTION STATIC PRESS.
C ≥ 2X FAN DISCHARGE STATIC PRESS.

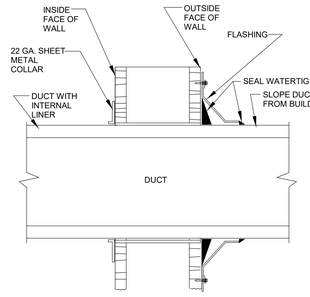
AC UNIT DRAIN TRAP DETAIL
NO SCALE



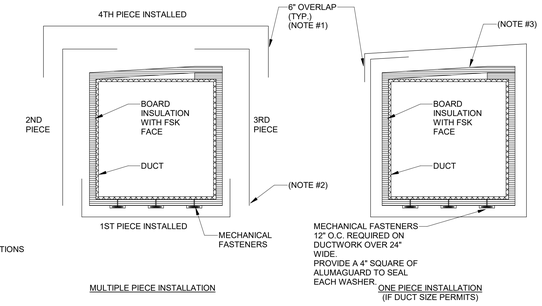
REFRIGERANT PIPING HANGER DETAIL
NO SCALE



DRYER VENT THRU EXTERIOR WALL
NO SCALE



DUCTWORK THRU OUTSIDE WALL DETAIL
NO SCALE

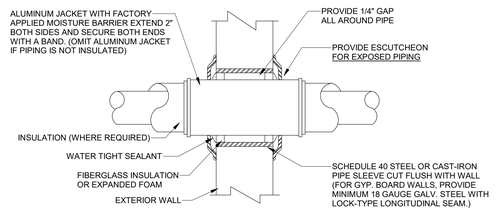


MULTIPLE PIECE INSTALLATION

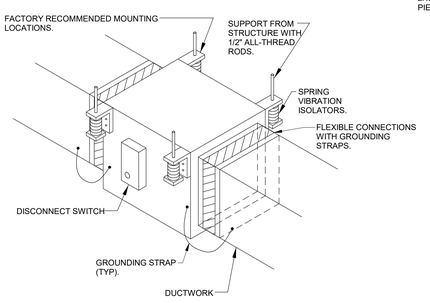
ONE PIECE INSTALLATION (IF DUCT SIZE PERMITS)

NOTES:
1. ALL OVERLAPS SHALL BE A MINIMUM OF 6".
2. PROVIDE STUCCO EMBOSSED ALUMINUM JACKET. SIDE PIECES SHOULD BE CUT FLUSH WITH THE BOTTOM CORNER AND SHOULD NOT BE FOLDED UNDER THE DUCT.
3. OVERLAP BOARD INSULATION ON TOP OF DUCT TO CREATE A SLOPED TOP TO PREVENT PONDING OF WATER. TAPE ALL INSULATION JOINTS BEFORE APPLYING WEATHER PROOFING MATERIAL.

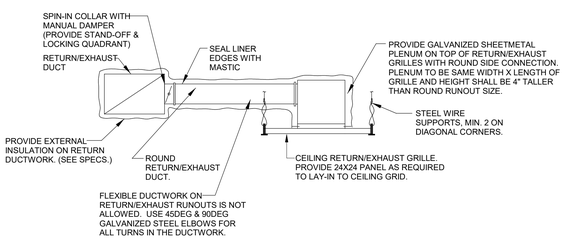
EXTERIOR DUCT INSULATION AND ALUMINUM JACKET
NO SCALE



PIPE PENETRATION DETAIL
NO SCALE



IN-LINE FAN INSTALLATION DETAIL
NO SCALE



NOTE:
WHEREVER THE RETURN/EXHAUST DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION (SEE DETAIL) OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT.

CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL (FOR BRANCH CONNECTIONS 12" & SMALLER)
NO SCALE

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
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www.dewberry.com

Project Number : 50189905

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL DETAILS

ALABAMA LICENSED PROFESSIONAL ENGINEER
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.:	CLR
DRAWN:	CWM
DATE:	10/23/2025
REVISIONS	

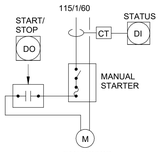
JOB NO. 25-33

SHEET NO: M0.3

3 OF 10

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FAN MOTOR

EXHAUST FAN TO BE CONTROLLED BY THE BUILDING AUTOMATION SYSTEM BASED ON AN OCCUPANCY SCHEDULE. DURING OCCUPIED HOURS, THE EXHAUST FAN SHALL RUN. DURING UNOCCUPIED HOURS, THE EXHAUST FAN SHALL BE OFF. THE BAS SHALL MONITOR THE FAN STATUS VIA A CURRENT TRANSDUCER.

NOTE, PROVIDE A RELAY TO DISABLE EF-K WHENEVER EF-KH1 RUNS.

EXHAUST FAN CONTROLS

NO SCALE

KITCHEN HOOD SYSTEM CONTROL SEQUENCES:

EF-KH1 SHALL BE INTERLOCKED WITH HEAT SENSORS TO RUN WHEN COOKING OPERATIONS OCCUR. HEAT SENSORS SHALL PROVIDED BY OTHERS, COORDINATE WITH HOOD MANUFACTURER. WHEN EF-KH1 RUNS, EF-K1 SHALL BE OFF.

PROVIDE SELECTOR SWITCH WITH PILOT LIGHT ASSEMBLY ON FACE OF HOOD OR WALL MOUNTED ADJACENT TO HOOD.

1. SELECTOR SWITCH "OFF-HEAT-VENT":

1.1. SELECTOR SWITCH IN "OFF" POSITION: MUA-K1 "OFF" AND EF-KH1 "OFF".

1.2. SELECTOR SWITCH IN "HEAT" POSITION: MUA-K1 FAN OPERATING WITH HEATING CYCLE ENERGIZED AND EF-KH1 OPERATING.

1.3. SELECTOR SWITCH IN "VENT" POSITION: MUA-K1 FAN OPERATING WITH HEATING INOPERATIVE AND EF-KH1 OPERATING.

2. PILOT LIGHTS:

2.1. MUA-K1 FAN OPERATING INDICATION (CURRENT TRANSDUCER).

2.2. MUA-K1 HEATING ENERGIZED INDICATION.

2.3. EF-KH1 OPERATING (PRESSURE SWITCH).

WHEN HOOD SYSTEM CONTROLS ARE ENERGIZED:

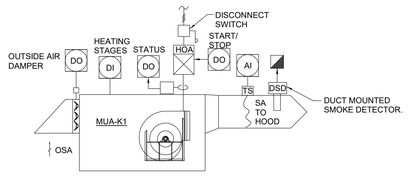
1. MUA-K1 FAN SHALL START AND THE INTAKE AUTO DAMPER SHALL OPEN SUBJECT TO:

1.1. SMOKE DETECTOR IN SUPPLY DUCT.

1.2. HOOD FIRE PROTECTION SYSTEM RELAY.

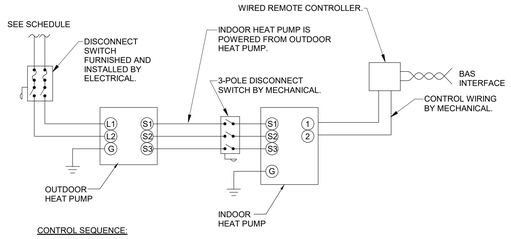
1.3. FIRE ALARM SYSTEM INTERLOCK - SEE ELECTRICAL.

WITH SELECTOR SWITCH IN "HEAT" POSITION AND MUA-KH1 UNIT FAN OPERATING, SUBJECT TO SAFETIES, THE SUPPLY AIR TEMPERATURE SENSOR SHALL STAGE GAS FURNACE TO MAINTAIN 55°F. PROVIDE DDC ROOM THERMOSTAT TO OVERRIDE DISCHARGE SENSOR TO PREVENT OVER HEATING OF ROOM.



KITCHEN HOOD SYSTEM CONTROL SEQUENCE

NO SCALE

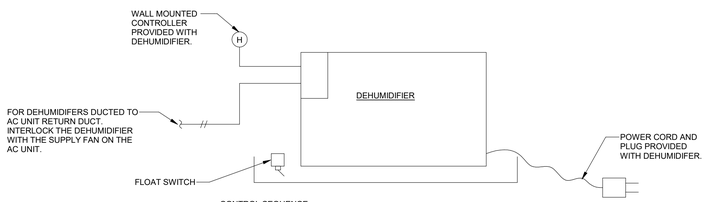


CONTROL SEQUENCE:

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

DUCTLESS SPLIT SYSTEM CONTROLS

NO SCALE

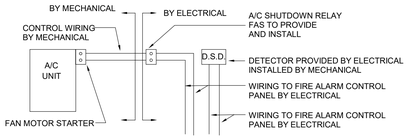


CONTROL SEQUENCE:
EACH DEHUMIDIFIER SHALL BE CONTROLLED BY A WALL MOUNTED CONTROLLER THAT SENSES RELATIVE HUMIDITY. IF THERE IS A RISE IN RELATIVE HUMIDITY ABOVE 60%RH, THE DEHUMIDIFIER SHALL START AND RUN, SUBJECT TO THE WATER LEVEL DETECTION FLOAT SWITCH (FOR DEHUMIDIFIERS SUSPENDED FROM THE STRUCTURE).

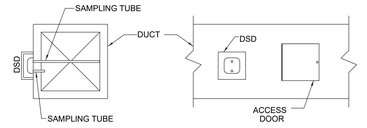
FOR DEHUMIDIFIERS DUCTED TO THE RETURN OF AN AC UNIT, THE DEHUMIDIFIER SHALL BE INTERLOCKED TO START THE AC UNIT SUPPLY FAN (REGARDLESS OF WHETHER THE AC UNIT IS IN HEATING OR COOLING MODE).

DEHUMIDIFIER CONTROLS

NO SCALE



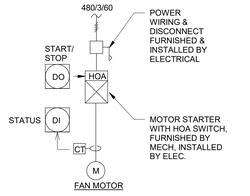
DUCT SMOKE DETECTOR CONNECTION



DUCT SMOKE DETECTOR INSTALLATION

DUCT SMOKE DETECTOR DETAIL

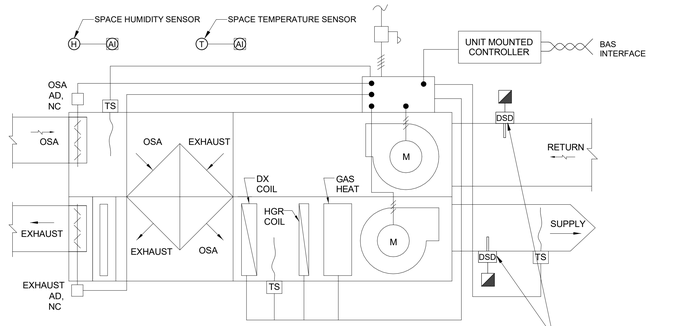
NO SCALE



FAN MOTOR

KITCHEN EXHAUST FAN CONTROLS

NO SCALE



ERU CONTROLS

NO SCALE

ENERGY RECOVERY UNIT CONTROL SEQUENCE

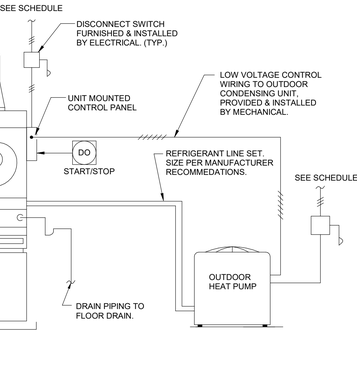
THE ENERGY RECOVERY UNIT (ERU) SHALL BE STARTED AND STOPPED BY THE UNIT MOUNTED CONTROLLER SUBJECT TO AN OWNER'S OCCUPANCY SCHEDULE AND SUBJECT TO INTERNAL UNIT SAFETIES. OCCUPIED AND UNOCCUPIED HOURS SHALL BE DETERMINED BY THE OWNER AND SHALL BE FULLY ADJUSTABLE AT THE UNIT MOUNTED CONTROLLER BY THE 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 UNIT MOUNTED CONTROLLER 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 UNIT MOUNTED CONTROLLER. THE FAN SPEED FOR THE OUTSIDE AIR AND EXHAUST AIR FANS SHALL NOT VARY. THE UNIT MOUNTED CONTROLLER SHALL STAGE ON COMPRESSORS AND OPEN/CLOSE SOLENOID VALVE(S) AT THE DX COIL TO MAINTAIN A 54degF SUPPLY AIR TEMPERATURE AS MEASURED AT THE TEMPERATURE SENSOR DOWNSTREAM OF THE DX COIL. THE HOT GAS REHEAT IN THE ERU SHALL MODULATE TO MAINTAIN A SPACE TEMPERATURE OF 72degF (SUMMER) AND 70degF (WINTER) AS MEASURED AT THE SPACE TEMPERATURE SENSOR.

IN THE WINTER, THE GAS HEAT SHALL STAGE ON TO PROVIDE A SPACE TEMPERATURE OF 70degF (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 AND GAS HEAT SHALL STAGE ON/OFF TO MAINTAIN A SPACE TEMPERATURE OF 72degF (SUMMER) AND 70degF (WINTER). ONCE THE HUMIDITY RETURNS TO BELOW 60%RH, THE ERU SHALL RETURN TO NORMAL OCCUPIED OR UNOCCUPIED MODE.



SPLIT SYSTEM CONTROL SEQUENCE

EACH AC UNIT SHALL BE STARTED AND STOPPED BY A WALL MOUNTED CONTROLLER (WITH LCD DISPLAY), SUBJECT TO FACTORY SAFETIES AND THE DUCT MOUNTED SMOKE DETECTOR (WHERE INDICATED ON PLANS OR SCHEDULE).

WHEN AC UNIT AND CORRESPONDING CONDENSING UNIT IS ENERGIZED, THE AC UNIT SUPPLY FAN SHALL START.

DURING OCCUPIED HOURS, THE THERMOSTAT SHALL ENERGIZE THE OUTDOOR HEAT PUMP CONTROLS UPON A RISE IN ROOM TEMPERATURE PROVIDE COOLING BY LOADING AND UNLOADING COMPRESSORS IN STAGES AS NEEDED TO SATISFY SPACE TEMPERATURE SETPOINT (74°F - ADJUSTABLE) DURING SUMMER MONTHS. UPON A DROP IN SPACE TEMPERATURE DURING WINTER MONTHS, THE OUTDOOR HEAT PUMP SHALL STAGE ON TO MAINTAIN SPACE TEMPERATURE SETPOINT (70°F - ADJUSTABLE). IF THE HEAT PUMP CANNOT SATISFY SPACE TEMP, THE ELECTRIC HEAT SHALL STAGE ON. OCCUPIED HOURS TO BE DETERMINED BY THE OWNER. RECOMMENDED OCCUPIED HOURS ARE MONDAY THRU FRIDAY, 7 A.M. TO 6 P.M.

THE SUPPLY FAN SHALL HAVE TWO-SPEED FAN CONTROL AND SHALL ADJUST THE FAN SPEED TO 66% OF FULL FAN SPEED BASED ON COMPRESSOR STAGES AND ECONOMIZER OPERATION.

PROVIDE NIGHTTIME SETBACK TEMPERATURE TO MAINTAIN 78°F (SUMMER), 66°F (WINTER), AFTER HOURS. UPON ACTIVATION OF NIGHT LOW LIMIT THERMOSTAT UNIT SHALL OPERATE IN OCCUPIED MODE UNTIL SATISFIED.

FOR AC UNITS WITH WALL MOUNTED CO2 MONITOR, THE OUTSIDE AIR AUTO DAMPER TO OPEN FROM A MINIMUM POSITION TO A MAXIMUM POSITION WHEN CO2 RISES ABOVE 1000 PPM. ONCE CO2 LEVELS RETURN TO 900 PPM, THE OUTSIDE AIR AUTO DAMPER SHALL RETURN TO A MINIMUM POSITION.

SPLIT SYSTEM CONTROLS (WITH BUILDING AUTOMATION SYSTEM)

NO SCALE

CONTROL SEQUENCES:

THE OUTSIDE AIR UNIT SHALL BE STARTED AND STOPPED BY THE BUILDING AUTOMATION SYSTEM.

WHENEVER THE WALL MOUNTED SWITCH FOR KITCHEN HOODS IS "ON", THE MAKE-UP AIR UNIT SHALL RUN.

UNIT MICROPROCESSOR CONTROLLER SHALL BE PROVIDED WITH REQUIRED SENSORS AND PROGRAMMING FOR THE FOLLOWING SEQUENCE. CONTROLLER SHALL BE FACTORY PROGRAMMED, MOUNTED AND TESTED. CONTROLLER SHALL HAVE A LCD READOUT FOR CHANGING SET POINTS AND MONITORING UNIT OPERATION.

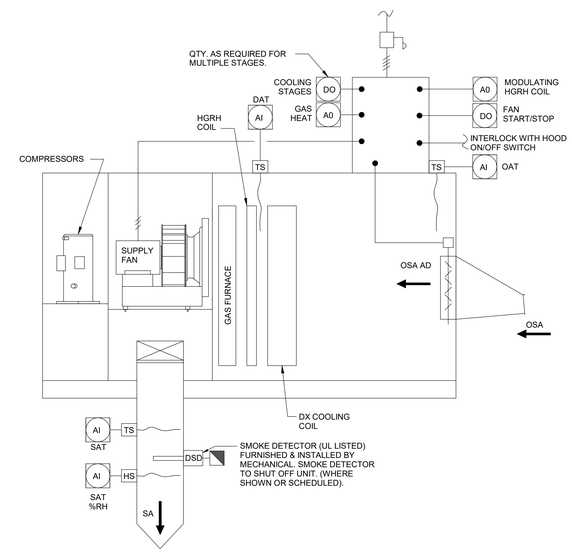
THE SUPPLY FAN SHALL START SUBJECT TO THE HIGH STATIC PRESSURE CUTOUT. THE SUPPLY FAN UNIT MOUNTED VFD SHALL RUN AT A CONSTANT SPEED AS DETERMINED BY TEST AND BALANCE CONTRACTOR TO PROVIDE THE SCHEDULED SUPPLY CFM.

THE SUPPLY FAN SHALL HAVE TWO-SPEED FAN CONTROL AND SHALL ADJUST THE FAN SPEED TO 66% OF FULL FAN SPEED BASED ON COMPRESSOR STAGES AND ECONOMIZER OPERATION.

THE UNIT CONTROLLER SHALL STAGE ON THE DX COOLING CIRCUITS TO MAINTAIN THE COOLING COIL DISCHARGE AIR TEMPERATURE (54°F-ADJUSTABLE) AT THE DAT SENSOR. THE BAS SHALL MODULATE THE HOT GAS REHEAT COIL TO MAINTAIN THE SUPPLY AIR TEMPERATURE OF 72°F (ADJ.) AT THE "SAT" SENSOR. IF THE HOT GAS REHEAT COIL CAN NOT MAINTAIN 72°F, THEN THE BAS SHALL STAGE ON THE GAS HEAT TO MAINTAIN 72°F SPACE TEMPERATURE. IF THE SUPPLY AIR %RH RISES ABOVE 55%RH THE UNIT SHALL GO INTO FULL COOLING AND THE HGRH COIL SHALL MODULATE TO MAINTAIN 72°F SUPPLY AIR TEMPERATURE.

WHEN THE OUTSIDE AIR TEMPERATURE IS BELOW 55°F, THE UNIT CONTROLLER SHALL STAGE ON THE GAS HEAT TO MAINTAIN THE SPACE TEMPERATURE SET POINT OF 70°F (ADJ.) AT THE SAT SENSOR.

ECONOMIZER:
THE UNIT WILL MEASURE THE DRY BULB SUPPLY AIR TEMPERATURE AND THE DRY BULB OUTDOOR AIR TEMPERATURE AND ECONOMIZER WILL BE ENABLED WHEN THE OUTDOOR AIR TEMPERATURE IS BELOW THE DRY BULB CHANGE OVER SETPOINT (65°F). WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN COOLING MODE, THE OUTSIDE AIR DAMPER AND RETURN AIR DAMPER WILL BE MODULATED IN TANDEM TO MAINTAIN THE SPACE TEMPERATURE SETPOINT. IF THE ECONOMIZER CANNOT MAINTAIN SPACE TEMPERATURE, THE COMPRESSORS SHALL BE ENABLED.



DEDICATED OUTDOOR AIR SYSTEM CONTROLS

NO SCALE

REFRIGERANT LEAK DETECTION CONTROLS:

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

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

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

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

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

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

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

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

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

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

B. COMPRESSOR OPERATION SHALL BE DISABLED.

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

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

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

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

5. THE REFRIGERANT SENSORS DO NOT NEED ROUTINE MAINTENANCE. USE ONLY MANUFACTURER-APPROVED SENSORS WHEN REPLACEMENT IS REQUIRED.

HVAC EQUIPMENT REFRIGERANT GENERAL NOTES:

1. THIS PROJECT IS DESIGNED WITH HVAC EQUIPMENT WHICH USE A2L REFRIGERANT.

2. THE MECHANICAL DESIGN WILL COMPLY WITH THE 2024 INTERNATIONAL MECHANICAL CODE, ASHRAE 15-2022, AND ASHRAE 34-2022.

3. THE INSTALLATION SHALL ALSO COMPLY WITH THESE STANDARDS.

4. HVAC EQUIPMENT SHALL BE MANUFACTURED TO COMPLY WITH THESE STANDARDS, AS WELL AS UL 484, UL/CSA 60335-2-40, AND UL/CSA 60355-2-89.

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL CONTROLS

ALABAMA
LIC. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER R. ROBINSON

PROJ. MGR.:	– CLR
DRAWN:	CWM
DATE:	– 10/23/2025
REVISIONS	

JOB NO. 25-33

SHEET NO:

M0.4

4 OF 10

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Project Number :
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ARCHITECTS

OSA CALCULATIONS

		Rp	Pz	Ra	Az	Vbz	Ez	Voz	Provided OSA
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
A111 STORAGE	Storage rooms	0	0	0.12	292	35	0.80	44	250
A112 VISITOR LOCKER	Sports locker rooms	0	0	0.00	652	0	0.80	0	300
A113 TOILET	Toilets-public	0	0	0.00	203	0	0.80	0	100
A115 TRAINER	Health club/weight rooms	20	2	0.06	351	61	0.80	76	120
A116 MEN LOCKER	Sports locker rooms	0	0	0.00	777	0	0.80	0	350
A117 MEN	Toilets-public	0	0	0.00	373	0	0.80	0	200
A118 LAUNDRY	Laundry rooms, central	5	2	0.12	150	26	0.80	32	80
A119 STORAGE	Storage rooms	0	0	0.12	300	36	0.80	45	80
A120 COACH	Office spaces	5	1	0.06	107	9	0.80	11	30
A121 WOMEN LOCKER	Sports locker rooms	0	0	0.00	711	0	0.80	0	320
A122 WOMEN	Toilets-public	0	0	0.00	373	0	0.80	0	280
A14 COACH	Office spaces	5	1	0.06	107	9	0.80	11	30
					Total Required for ERU-1:			220	
					Total Provided for ERU-1:				2,140

OSA CALCULATIONS

		Rp	Pz	Ra	Az	Vbz	Ez	Voz	Provided OSA (IAQP)
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
A110 GYMNASIUM	Gym, sports arena (play area)	20	1,000	0.18	13,413	22,414	0.80	28,018	5,000
GYM CORRIDOR	Corridors	0	50	0.06	338	20	0.80	25	250
					Total Required for AHU-1,2,3:			28,043	
					Total Provided for AHU-1,2,3:				5,250

OSA CALCULATIONS

		Rp	Pz	Ra	Az	Vbz	Ez	Voz	Provided OSA
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
A101 MEN	Toilets-public	0	0	0.00	287	0	0.80	0	250
A103 HALL	Corridors	0	0	0.06	68	4	0.80	5	0
A100 LOBBY	Lobbies	5	0	0.06	1,520	91	0.80	114	1,080
A105 CONCESSION	Kitchen (cooking)	7.5	5	0.12	461	93	0.80	116	120
A106 HALL	Corridors	0	5	0.06	68	4	0.80	5	0
A109 JANITOR	Janitor closets, trash rooms, recycling	0	0	0.00	131	0	0.80	0	0
A107 WOMEN	Toilets-public	0	0	0.00	447	0	0.80	0	550
					Total Required for DOAS-1:			240	
					Total Provided for DOAS-1:				2,000

EXHAUST AIR CALCULATIONS

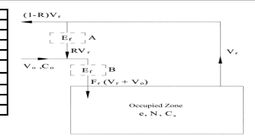
		EXHAUST RATE	EXHAUST RATE	EXHAUST RATE	REQUIRED EXHAUST	PROVIDED EXHAUST
# OF FIXTURES	# OF SHOWERS	CFM/FT²	CFM / FIXTURE	CFM/ SHOWER	CFM	CFM
0	0	N/A	N/A	N/A	0	0
0	0	0.5	N/A	N/A	326	350
3	0	N/A	50	N/A	150	200
0	0	N/A	N/A	N/A	0	0
0	0	0.5	N/A	N/A	388.5	400
4	4	N/A	50	20	280	300
0	0	N/A	N/A	N/A	0	0
0	0	N/A	N/A	N/A	0	0
0	0	0.5	N/A	N/A	355.5	370
4	4	N/A	70	20	360	380
0	0	N/A	N/A	N/A	0	0
			Total Required Exhaust		1860	
			Total Provided Exhaust			2000

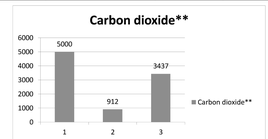
EXHAUST AIR CALCULATIONS

		EXHAUST RATE	EXHAUST RATE	EXHAUST RATE	REQUIRED EXHAUST	PROVIDED EXHAUST
# OF FIXTURES	# OF SHOWERS	CFM/FT²	CFM / FIXTURE	CFM/ SHOWER	CFM	CFM
6	0	N/A	50	N/A	300	300
0	0	N/A	N/A	N/A	0	0
0	0	N/A	N/A	N/A	0	0
0	0	0.7	N/A	N/A	322.7	350
0	0	N/A	N/A	N/A	0	0
0	0	1	N/A	N/A	131	150
12	0	N/A	50	N/A	600	600
			Total Required Exhaust		1353.7	
			Total Provided Exhaust			1400

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez)
A110 GYMNASIUM	Educational Facilities	Gym, Sports Arena (Play Area	13,413.0	1,000.0	20.0	0.18	20000	2414	0.8	28018
										OA required per VRP

Zone Height (feet)	23.0
Desired Outside Air (Vo) IAQP	5,000
Supply Air (Vs)	27,000
Return Air (Vr)	27000
Recirc. Flow Factor (R)	1.00
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	**Moderate Exercise**
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant





***OSHA, NIOSH & WHO most conservative values used
http://www.cdc.gov/niosh/npg/npgsyn-a.html
1 = ASHRAE & NIOSH C02 Limit
2 = C02 Level at Ventilation Rate OA Flow Rate
3 = C02 Level at IAQ Procedure OA Flow Rate

**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove C02 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01115	0.00159	Yes	0.00130	50%	OSHA
Acetone	250.0	0.00205	0.00136	Yes	0.01759	50%	NIOSH
Ammonia	25.00	0.02747	0.03923	Yes	0.57710	50%	NIOSH
Benzene	1.0000	0.00253	0.00038	Yes	0.00059	50%	OSHA
2- Butanone (MEK)	200.0	0.00226	0.00028	Yes	0.00359	50%	NIOSH
Carbon dioxide**	5000	912	3437	Yes	1186	0%	NIOSH
Chloroform	2.0000	0.00011	0.00002	Yes	0.00011	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00084	0.00031	Yes	0.00326	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00005	Yes	0.00004	50%	OSHA
Toluene	100.0000	0.00535	0.00078	Yes	0.00085	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00080	0.00020	Yes	0.00156	50%	NIOSH
Xylene	100.0000	0.00230	0.00031	Yes	0.00000	50%	OSHA

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

Is IAQ acceptable at reduced outside air levels?	Yes

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (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
A111 STORAGE	322	2,898	ERU-1	R-454B	3.1	1.3	9.0	1
A112 VISITOR LOCKER	652	6,520	ERU-1	R-454B	3.1	2.8	20.2	1
A113 TOILET	203	1,827	ERU-1	R-454B	3.1	0.8	5.7	1
A114 COACH	107	963	ERU-1	R-454B	3.1	0.4	3.0	1
A115 TRAINER	351	3,159	ERU-1	R-454B	3.1	1.4	9.8	1
A116 MEN LOCKER	777	7,770	ERU-1	R-454B	3.1	3.4	24.1	1
A117 MEN	373	3,357	ERU-1	R-454B	3.1	1.5	10.4	1
A118 LAUNDRY	150	1,350	ERU-1	R-454B	3.1	0.6	4.2	1
A119 STOR	300	2,700	ERU-1	R-454B	3.1	1.2	8.4	1
A120 COACH	107	963	ERU-1	R-454B	3.1	0.4	3.0	1
A121 WOMEN LOCKER	711	7,110	ERU-1	R-454B	3.1	3.1	22.0	1
A122 WOMEN	373	3,357	ERU-1	R-454B	3.1	1.5	10.4	1
					MAXIMUM ALLOWED REFRIGERANT:		130.1	
					TOTAL REFRIGERANT CHARGE:	18.30		

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
A111 STORAGE	322	2,898	1.3	9.0	1,2
A112 VISITOR LOCKER	652	6,520	7.2	20.2	1,2
A113 TOILET	203	1,827	0.8	5.7	1,2
A114 COACH	107	963	2.4	3.0	1,2
A115 TRAINER	351	3,159	5.8	9.8	1,2
A116 MEN LOCKER	777	7,770	8.8	24.1	1,2
A117 MEN	373	3,357	3.8	10.4	1,2
A118 LAUNDRY	150	1,350	5.0	4.2	1,2
A119 STOR	300	2,700	5.6	8.4	1,2
A120 COACH	107	963	2.4	3.0	1,2
A121 WOMEN LOCKER	711	7,110	8.3	22.0	1,2
A122 WOMEN	373	3,357	3.9	10.4	1,2
			MAXIMUM ALLOWED REFRIGERANT:	130.1	
			TOTAL REFRIGERANT CHARGE:	55.30	

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (IHPs)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
A112 VISITOR LOCKER	652	6,520	IHP-1	R-454B	3.1	4.4	20.2	1
A114 COACH	107	963	IHP-4	R-454B	3.1	2.0	3.0	1
A115 TRAINER	351	3,159	IHP-3	R-454B	3.1	4.4	9.8	1
A116 MEN LOCKER	777	7,770	IHP-2	R-454B	3.1	5.4	24.1	1
A117 MEN	373	3,357	IHP-2	R-454B	3.1	2.3	10.4	1
A118 LAUNDRY	150	1,350	IHP-5	R-454B	3.1	4.4	4.2	1
A119 STOR	300	2,700	IHP-7	R-454B	3.1	4.4	8.4	1
A120 COACH	107	963	IHP-6	R-454B	3.1	2.0	3.0	1
A121 WOMEN LOCKER	711	7,110	IHP-8	R-454B	3.1	5.2	22.0	1
A122 WOMEN	373	3,357	IHP-8	R-454B	3.1	2.5	10.4	1
					MAXIMUM ALLOWED REFRIGERANT:		115.5	
					TOTAL REFRIGERANT CHARGE:	37.00		

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (IHP-GYM)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
A110 GYMNASIUM	13,413	312,925	IHP-GYM1,2,3,4	R-454B	3.1	19.3	970.1	1
					MAXIMUM ALLOWED REFRIGERANT:		970.1	
					TOTAL REFRIGERANT CHARGE:	19.32		

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (DOAS-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
A100 LOBBY	1,520	17,222	DOAS-1	R-454B	3.1	13.1	53.4	1
A101 MEN	287	2,870	DOAS-1	R-454B	3.1	2.2	8.9	1
A105 CONCESSION	461	4,610	DOAS-1	R-454B	3.1	3.5	14.3	1
A107 WOMEN	373	3,730	DOAS-1	R-454B	3.1	2.8	11.6	1
					MAXIMUM ALLOWED REFRIGERANT:		88.1	
					TOTAL REFRIGERANT CHARGE:	21.60		

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
A100 LOBBY	1,520	17,222	21.7	53.4	1,2
A101 MEN	287	2,870	5.8	8.9	1,2
A105 CONCESSION	461	4,610	12.1	14.3	1,2
A107 WOMEN	373	3,730	6.7	11.6	1,2
			MAXIMUM ALLOWED REFRIGERANT:	88.1	
			TOTAL REFRIGERANT CHARGE:	46.29	

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (IHPs)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
A101 MEN	287	2,870	IHP-9	R-454B	3.1	3.6	8.9	1
A103 HALL	68	612	IHP-9	R-454B	3.1	0.8	1.9	1
A107 WOMEN	447	4,470	IHP-12	R-454B	3.1	3.9	13.9	1
A108 HALL	69	621	IHP-12	R-454B	3.1	0.5	1.9	1
					MAXIMUM ALLOWED REFRIGERANT:		26.6	
					TOTAL REFRIGERANT CHARGE:	8.80		

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

AMOUNT OF REFRIGERANT PER OCCUPIED SPACE CALCULATIONS (ACs)

ROOM	AREA (sq. ft.)	VOLUME (cu. ft.)	SERVED BY	REFRIGERANT TYPE	REFRIGERANT CONCENTRATION LIMIT (lb/MCf)	REFRIGERANT CHARGE (lb)	MAX. ALLOWED REFRIGERANT (lb)	NOTES
A100 LOBBY	1,520	17,222	AC-1	R-454B	3.1	8.6	53.4	1
A105 CONCESSION	461	4,610	AC-2	R-454B	3.1	8.6	14.3	1
					MAXIMUM ALLOWED REFRIGERANT:		67.7	
					TOTAL REFRIGERANT CHARGE:	17.20		

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

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - CALCULATIONS

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBISON

PROJ. MGR.: – CLR
DRAWN: CWM
DATE: – 10/23/2025
REVISIONS

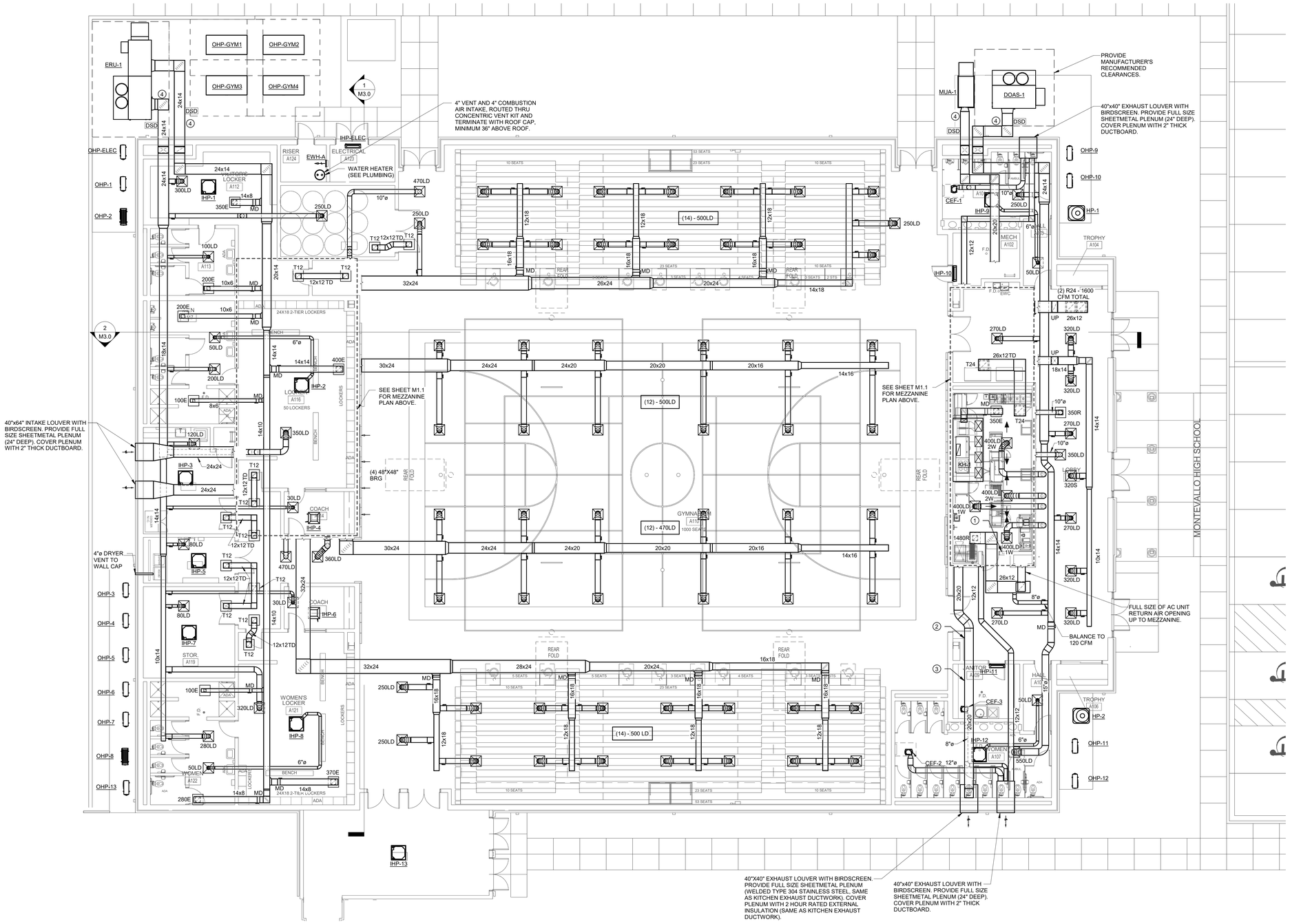
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SHEET NO:
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5 OF 10

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Project Number :
50189905

LATHAN
McKEE
ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - FLOOR PLAN



KEYED NOTES

1. KITCHEN HOOD FIRE SUPPRESSION SYSTEM MANUAL PULL STATION. LOCATE MINIMUM 10'-0" AND MAXIMUM 25'-0" FROM KITCHEN HOOD.
2. ALL GREASE EXHAUST DUCTWORK ASSOCIATED WITH THE KITCHEN HOOD SHALL BE ALL WELDED CONSTRUCTION. DUCTWORK SHALL BE TYPE 304 STAINLESS STEEL. PROVIDE 2HR FIRE RATED EXTERNAL DUCTWORK INSULATION ON ALL GREASE EXHAUST DUCTWORK. DUCTWORK SHALL BE SLOPED FROM A HIGH POINT, DOWN TO THE HOOD, AND SLOPED FROM THE HIGH POINT, DOWN TO THE EXHAUST FAN. DUCTWORK SHALL HAVE ACCESS DOORS PER THE INTERNATIONAL MECHANICAL CODE. DO NOT PROVIDE TURNING VANES IN ANY ELBOWS AND DO NOT PROVIDE MANUAL DAMPERS IN THE DUCTWORK ON ANY BRANCH DUCTS. ALL ELBOWS SHALL BE RADIUSED, NOT MITERED.
3. DUE TO ELEVATION OF KITCHEN HOOD EXHAUST FAN RELATIVE TO THE LOUVER, IT MAY REQUIRE A "HIGH POINT" LOCATED IN THE KITCHEN EXHAUST DUCT AT APPROXIMATELY THIS LOCATION. DUCTWORK SHALL SLOPE FROM THE HIGH POINT BACK TO THE KITCHEN HOOD AND FROM THE HIGH POINT OUT TO THE LOUVER.
4. ALL EXTERIOR DUCTWORK SHALL BE COVERED WITH 2" THICK DUCTBOARD AND ALUMINUM JACKET. SLOPE TOP OF DUCTWORK TO SHED WATER AND SLOPE AWAY FROM BUILDING.

GENERAL NOTES

1. DUCTWORK SERVING THE GYM IS ROUTED IN THE TRUSS SPACE. COORDINATE EXACT ROUTING WITH TRUSS MANUFACTURER. ALL DUCTWORK LOCATED IN THE TRUSS SPACE SHALL BE INSULATED WITH 3" THICK EXTERNAL FIBERGLASS BLANKET INSULATION. THIS THICKNESS REQUIREMENT FOR THE DUCTWORK IN THE TRUSS SPACE SUPERCEDES THE PROJECT SPECIFICATIONS.

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

KEY PLAN
NOT TO SCALE
NORTH

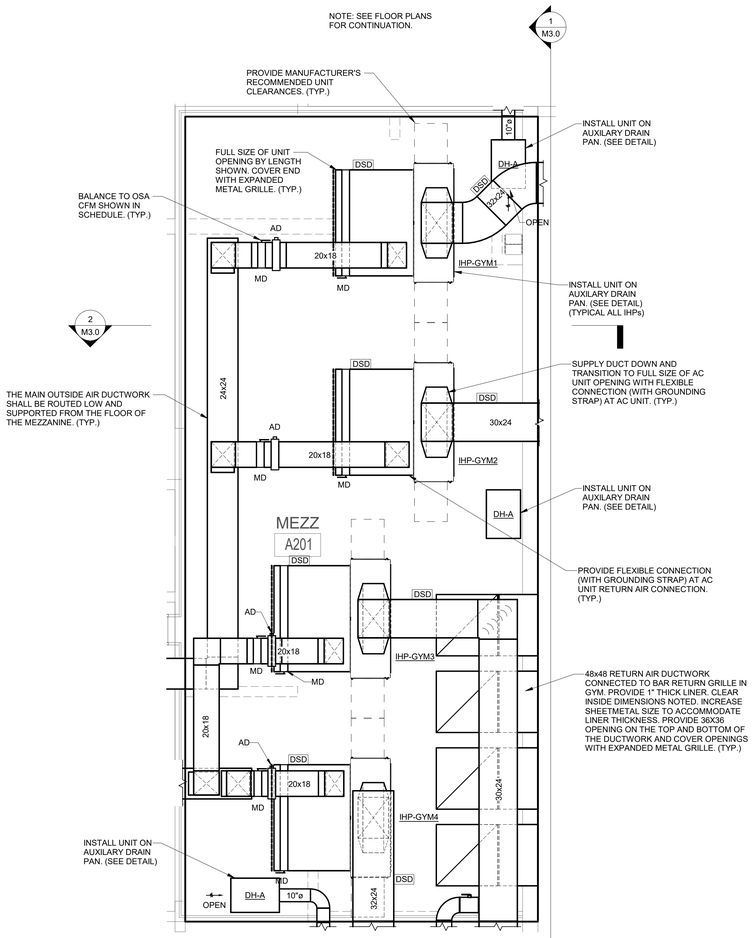
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PROJ. MGR.:	– CLR
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JOB NO. 25-33
SHEET NO:
M1.0
6 OF 10

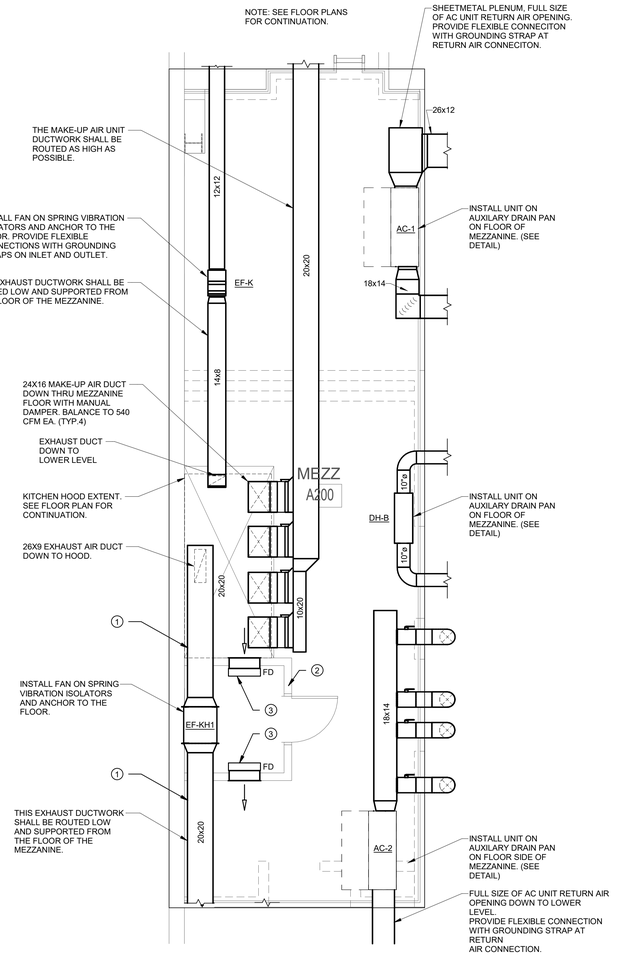
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1 MECHANICAL - MEZZANINE FLOOR PLAN 1
1/4" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"

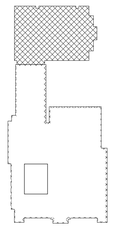


2 MECHANICAL - MEZZANINE FLOOR PLAN 2
1/4" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"

KEYED NOTES

1. ALL GREASE EXHAUST DUCTWORK ASSOCIATED WITH THE KITCHEN HOOD SHALL BE ALL WELDED CONSTRUCTION. DUCTWORK SHALL BE TYPE 304 STAINLESS STEEL. PROVIDE 2HR FIRE RATED EXTERNAL DUCTWORK INSULATION ON ALL GREASE EXHAUST DUCTWORK. DUCTWORK SHALL BE SLOPED FROM A HIGH POINT, DOWN TO THE HOOD; AND SLOPED FROM THE HIGH POINT, DOWN TO THE EXHAUST FAN. DUCTWORK SHALL HAVE ACCESS DOORS PER THE INTERNATIONAL MECHANICAL CODE. DO NOT PROVIDE TURNING VANES IN ANY ELBOWS AND DO NOT PROVIDE MANUAL DAMPERS IN THE DUCTWORK ON ANY BRANCH DUCTS. ALL ELBOWS SHALL BE RADIUSED, NOT MITERED.
2. THIS ROOM TO BE 2-HOUR RATED ENCLOSURE AROUND THE KITCHEN EXHAUST FAN TO MAINTAIN INTEGRITY OF KITCHEN GREASE EXHAUST DUCTWORK INSULATION RATING. INSTALL FAN WITHIN THE ROOM TO PROVIDE NORMAL SERVICE ACCESS.
3. 24X16 WALL TRANSFER GRILLE WITH (2 HOUR) FIRE DAMPER. NORTHERNMOST WALL GRILLE TO BE 8" A.F.F. SOUTHERNMOST WALL GRILLE TO BE 8" BELOW CEILING. TRANSFER GRILLES ARE FOR NATURAL VENTILATION OF THE ROOM.



KEY PLAN
NOT TO SCALE
NORTH

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - MEZZANINE FLOOR PLAN

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L ROBINSON

PROJ. MGR.: –	CLR
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JOB NO. 25-33
SHEET NO:
M1.1
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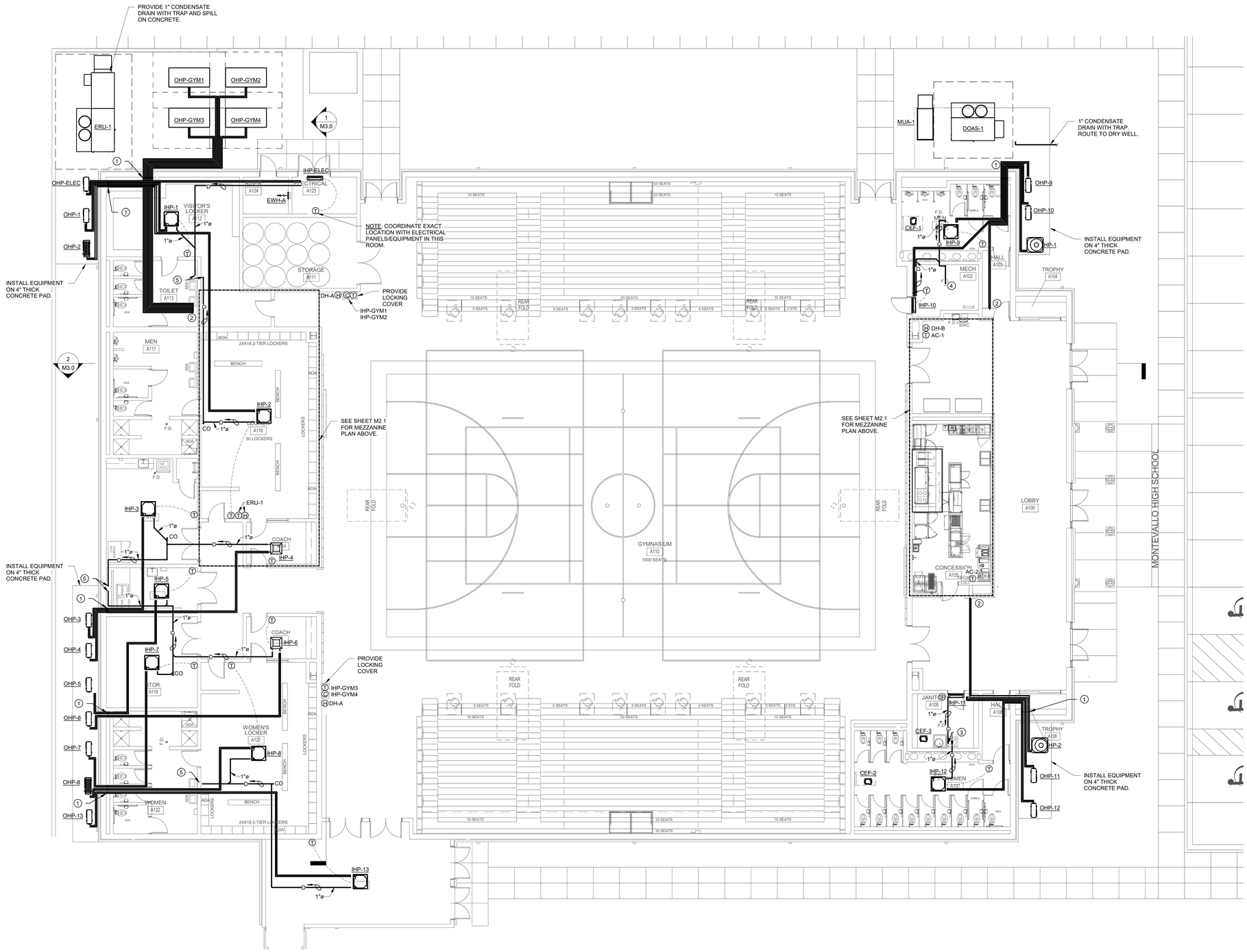
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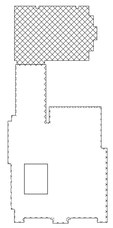
SHEET TITLE:
MECHANICAL PIPING - FLOOR PLAN



KEYED NOTES

1. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS THRU WALL LOW AND UP TO ABOVE CEILING SPACE. PROVIDE PIPE SLEEVE THRU EXTERIOR WALL AND SEAL WEATHERTIGHT PER DETAIL. UTILIZE PLUMBING CHASES OR INSIDE CORNERS OF STORAGE CLOSETS, ETC. TO ROUTE REFRIGERANT PIPING VERTICAL TO ABOVE CEILING.
2. ROUTE REFRIGERANT PIPING UP TO MEZZANINE. SEE MEZZANINE FLOOR PLAN FOR CONTINUATION.
3. ROUTE 1"ø CONDENSATE DRAIN LINE DOWN TO JANITOR'S SINK (SEE PLUMBING).
4. ROUTE 1"ø CONDENSATE DRAIN LINE TO MECHANICAL FLOOR DRAIN (SEE PLUMBING).
5. ROUTE 1"ø CONDENSATE DRAIN LINE TO CONDENSATE WALL BOX (SEE PLUMBING).

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



KEY PLAN
NOT TO SCALE
NORTH

ALABAMA
CHRISTOPHER L ROBINSON
NO. 27475
PROFESSIONAL
10/23/2025
ENGINEER

PROJ. MGR.:	– CLR
DRAWN:	CWM
DATE:	– 10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
M2.0
8 OF 10

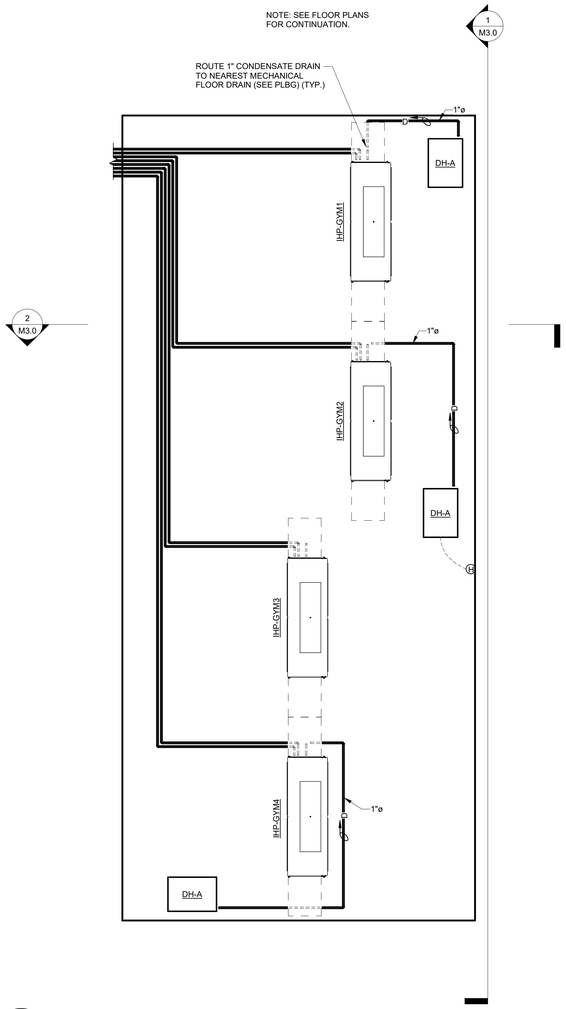
Dewberry
2 Riverchase Office Plaza
Suite 205
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(205) 988-2069
www.dewberry.com

Project Number :
50189905

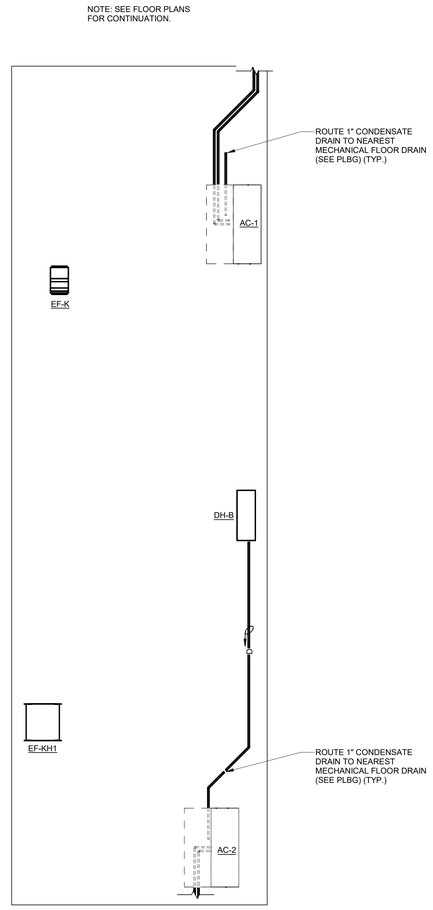
LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

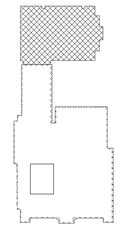
SHEET TITLE:
MECHANICAL PIPING - MEZZANINE FLOOR PLAN



1 MECHANICAL PIPING - MEZZANINE FLOOR PLAN 1
1/4" = 1'-0"
0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"



2 MECHANICAL PIPING - MEZZANINE FLOOR PLAN 2
1/4" = 1'-0"
0' 2' 4' 8'
SCALE: 1/4" = 1' - 0"



KEY PLAN
NOT TO SCALE
NORTH

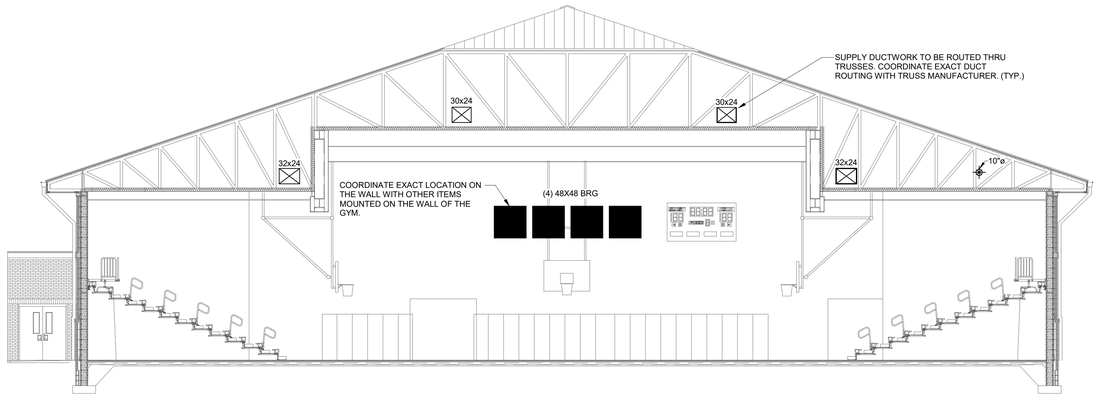
ALABAMA
REG. 27475
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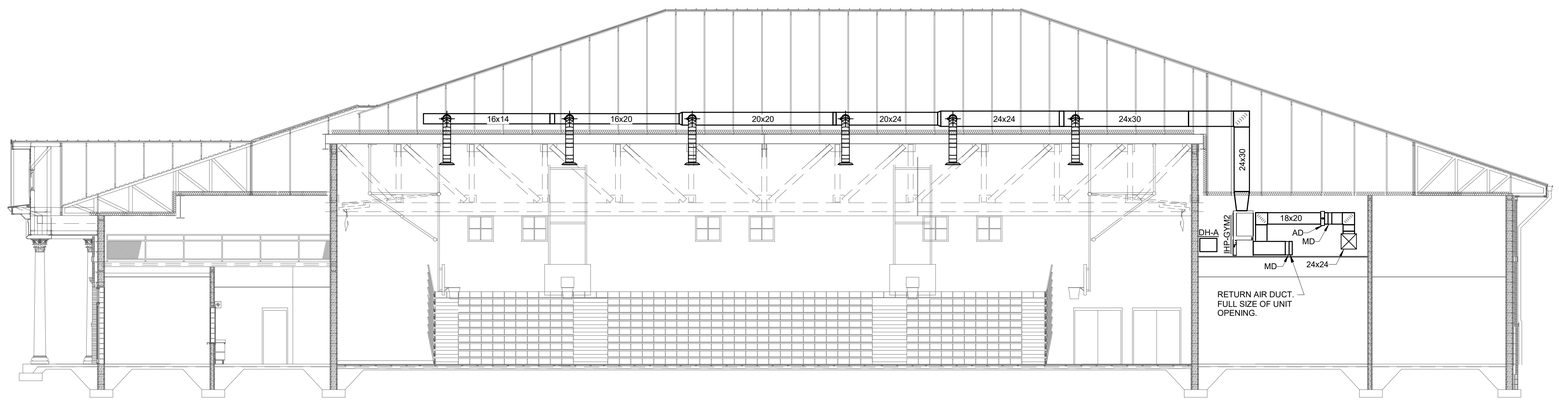
JOB NO. 25-33
SHEET NO:
M2.1
9 OF 10

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Project Number :
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LATHAN
McKEE
ARCHITECTS



1 SECTION AT GYM WALL
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"



2 SECTION AT GYM
1/8" = 1'-0"
0' 4' 8' 16'
SCALE: 1/8" = 1' - 0"

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL - SECTIONS

ALABAMA
No. 27475
PROFESSIONAL
10/23/2025
ENGINEER
CHRISTOPHER L. ROBINSON

PROJ. MGR.: –	CLR
DRAWN:	CWM
DATE: –	10/23/2025
REVISIONS	

JOB NO. 25-33
SHEET NO:
M3.0
10 OF 10

LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
A	METALUX	24CGT5535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
A (EM)	METALUX	24CGT5535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
B	METALUX	24CGT4535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
B (EM)	METALUX	24CGT4535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
C	LUMENWERX	VIA4R-WR02-LED-80-500-35-9FT-UNV-1-W	FURNISHED WITH FIXTURE			CEILING	RECESSED	3-3/4"	
D	METALUX	4SNLED-LD4-4600SL-LW-UNV-L840-CD1	FURNISHED WITH FIXTURE			CEILING	SURFACE		
D (EM)	METALUX	4SNLED-LD4-4600SL-LW-UNV-EL14-L835-CD1	FURNISHED WITH FIXTURE			CEILING	SURFACE		SEE NOTE 1
F	METALUX	24GR-LD5-180-A/WG-UNV-L840-CD1-U	FURNISHED WITH FIXTURE			CEILING	RECESSED	3-1/4"	
F (EM)	METALUX	24GR-LD5-180-A/WG-UNV-L840-CD1-U-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	3-1/4"	SEE NOTE 1
G	METALUX	24GR-LD5-72-A/WG-UNV-L840-CD1-U	FURNISHED WITH FIXTURE			CEILING	RECESSED	3-1/4"	
G (EM)	METALUX	24GR-LD5-72-A/WG-UNV-L840-CD1-U-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	3-1/4"	SEE NOTE 1
H	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA-6VLEDMD-SCLPF	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	
H (EM)	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA-6VLEDMD-SCLPF-EM	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	SEE NOTE 1
K	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR	FURNISHED WITH FIXTURE			+9'	BRACKET		
K (EM)	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR-BBB	FURNISHED WITH FIXTURE			+9'	BRACKET		SEE NOTE 1
P	NLS LIGHTING	NV-1-T4-64L-1-40K-UNV-ASA-BRZ	FURNISHED WITH FIXTURE			+35'	POLE		HAPCO POLE SSS3505-4-GC/82351 (1 HEAD) BRZ
S	HALO	SLD405-8-35-WH-UNV	FURNISHED WITH FIXTURE			CEILING	RECESSED	1.5"	
X	SURE-LITES	EUX7-R-UNV	FURNISHED WITH FIXTURE			℄ ABOVE DOOR	BRACKET		SEE NOTE 1

NOTES:
1. FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS. UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING.
2. VERIFY ALL FIXTURE COLORS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO SUBMITTALS.
3. EQUAL FIXTURES BY LITHONIA, PARKER, COLUMBIA, AND DAYBRITE WILL BE CONSIDERED APPROVED EQUALS.

GENERAL NOTES

1. SERVICE TO PROJECT IS 277/480 VOLTS, 3 PHASE, 4 WIRE.
2. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
3. VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
4. CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
5. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF COUNTERTOPS AND BACKSPLASHES ON ARCHITECTURAL DETAILS AND/OR CASEWORK SHOP DRAWINGS AND ADJUST SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED TO AVOID CONFLICTS.
6. CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
7. FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
8. SUPPORT OF ALL LIGHTING FIXTURES TO BE THE RESPONSIBILITY OF THIS CONTRACTOR. FIXTURES TO BE SUPPORTED INDEPENDENT OF CEILING FROM STRUCTURAL MEMBERS OF THE BUILDING.
9. ELECTRICAL CONTRACTOR MUST CHECK THE CORRESPONDING MECHANICAL SHEETS AND BE RESPONSIBLE FOR INCLUDING PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL ITEMS SHOWN THEREON REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
10. ALL CONDUIT CONCEALED UNLESS SPECIFICALLY SHOWN EXPOSED.
11. COORDINATE SERVICES WITH POWER AND COMMUNICATIONS COMPANIES. REMOVE OR RELOCATE ALL POWER AND COMMUNICATIONS CIRCUITS ABOVE OR BELOW GRADE THAT WOULD OBSTRUCT THE CONSTRUCTION OF THE PROJECT OR CONFLICT IN ANY MANNER WITH COMPLETION OF THE PROJECT OR ANY CODE PERTAINING THERETO. IF UTILITY COMPANY REQUIREMENTS ARE AT VARIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACT PRICE SHALL INCLUDE THE ADDITIONAL COST.
12. IT IS INTENDED THAT SPECIFICATIONS AND PLANS SHALL INCLUDE EVERYTHING REQUIRED AND NECESSARY FOR PROPER AND COMPLETE INSTALLATION OF THE COMPLETE SYSTEMS SHOWN EVEN THOUGH EVERY ITEM MAY NOT BE PARTICULARLY MENTIONED IN DETAIL. THE CONTRACTOR SHALL DELIVER TO OTHER TRADES ANY EQUIPMENT THAT MUST BE INSTALLED DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENTS AND COORDINATION OF THE PHYSICAL SIZE OF ALL EQUIPMENT WITH THE ARCHITECTURAL REQUIREMENTS OF THE SPACES INTO WHICH THE EQUIPMENT WILL BE INSTALLED.
13. THIS CONTRACTOR SHALL INSTALL EQUIPMENT GROUNDS THROUGHOUT THIS PROJECT, USING GREEN INSULATED GROUND WIRE. USE OF CONDUIT AS THE ONLY GROUND CONDUCTOR WILL NOT BE ALLOWED. (SIZE GROUND WIRES PER N.E.C.)
14. REMOVE ALL EXISTING PANELBOARDS, DISCONNECTS, FIXTURES, RECEPTACLES, AUXILIARY SYSTEM DEVICES, CONDUIT, CONDUCTORS, ETC. BEING RENDERED OBSOLETE BY THIS PROJECT.
15. WHERE EXISTING REMAINING CIRCUITS ARE BEING INTERRUPTED DUE TO STRUCTURAL AND/OR DESIGN CHANGES, THIS CONTRACTOR WILL EXTEND EXISTING CIRCUITS AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY TO REMAINING ACTIVE DEVICES.

CODE EXCEPTION NOTE

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

ELECTRICAL SYMBOLS

A^{1}_{a}	CEILING OUTLET – FIXTURE "A", CIRCUIT 1, SWITCH a.
	CEILING OUTLET – FLUORESCENT FIXTURE.
	CEILING OUTLET – FLUORESCENT INDUSTRIAL OR STRIP TYPE.
	WALL OUTLET – INCANDESCENT BRACKET TYPE.
	WALL OUTLET – FLUORESCENT BRACKET TYPE.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR – MOUNT AT 6" ABOVE COUNTER.
IG D	WALL OUTLET – ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
IG D	WALL OUTLET – ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES) MOUNT AT 6" ABOVE COUNTER
GFCI	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR.
WP GFCI	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.
J	CEILING OUTLET – JUNCTION BOX.
J	WALL OUTLET – JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT.
$	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 – GREY.("N" DENOTES NARROW)
$D	SWITCH OUTLET – FLUORESCENT DIMMER – LUTRON NOVA-T SERIES #NTF-103P.
$2	SWITCH OUTLET – AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 – GREY.
$3	SWITCH OUTLET – AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 – GREY.
$4	SWITCH OUTLET – AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 – GREY.
$M	SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
$P	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #12211LC.
	LIGHTING PANEL – SEE SPECIFICATIONS AND SCHEDULE.
	POWER PANELS – SEE SPECIFICATIONS AND SCHEDULE.
	BRANCH CIRCUIT CONCEALED IN WALL OR CEILING.
	BRANCH CIRCUIT CONCEALED IN FLOOR OR GROUND.
	HOMERUN TO PANELBOARD – ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2 # 12 & 1 # 12(G) – 1/2" CONDUIT. 3 # 12 & 1 # 12(G) – 3/4" CONDUIT. 4 # 12 & 1 # 12(G) – 3/4" CONDUIT.
E	EMPTY CONDUIT – 3/4".
	BRANCH CIRCUIT EXPOSED.
◦	CONDUIT RUN DOWN WALLS, CONCEALED
•	CONDUIT RUN UP WALLS, CONCEALED
5	MOTOR SHOWN 5hp (TYPICAL) OR 40 AMPS (TYPICAL).
F	EXHAUST FAN MOTOR – FRACTIONAL HORSEPOWER.
	MAGNETIC MOTOR STARTER.
	NON-FUSED DISCONNECT SWITCH. (RT – RAINTIGHT).
	FUSED DISCONNECT SWITCH.
A.F.F.	ABOVE FINISHED FLOOR.
VER.	VERIFY LOCATION.
N.E.C.	NATIONAL ELECTRICAL CODE.
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
WP	WEATHER PROOF
IG	ISOLATED GROUND
	FIRE ALARM – SMOKE DETECTOR – SEE SPEC.
D	FIRE ALARM – DUCT DETECTOR – SEE SPEC.
H	FIRE ALARM – HEAT DETECTOR – SEE SPEC.
F	FIRE ALARM – MANUAL PULL STATION – SEE SPEC.
F	FIRE ALARM – STROBE LIGHT – SEE SPEC.
S	FIRE ALARM – SPEAKER STROBE – SEE SPEC.
FACP	FIRE ALARM CONTROL PANEL – EXISTING – SEE SPEC.
F.A.A.	FIRE ALARM ANNUNCIATOR – SEE SPEC.
S.S.C.	MASTER SOUND CONSOLE – EXISTING – SEE SPEC.
SSR-G	SOUND SYSTEM RACK – GYMNASIUM – SEE SPEC.
S	SOUND SYSTEM – CEILING MOUNTED SPEAKER – SEE SPEC.
	SOUND SYSTEM – CALL-IN SWITCH – SEE SPEC.
T	SOUND SYSTEM – CLOCK – SEE SPEC.
S	SOUND SYSTEM – WIRING – SEE SPEC.
H S	SOUND SYSTEM – WALL MOUNTED HORN SPEAKER – SEE SPEC.
WB1	SOUND SYSTEM – WALL BOX – SEE SPEC.
S1	SOUND SYSTEM – CEILING MOUNTED GYM SPEAKER – SEE SPEC.
RF1	SOUND SYSTEM – WIRELESS ANTENNA – SEE SPEC.
FB1	SOUND SYSTEM – FLOOR BOX – SEE SPEC.
	COMPUTER OUTLET – CAT 6 CABLE WITH CAT 6 CONNECTORS – SEE SPEC. (3/4" CONDUIT UNLESS OTHERWISE SPECIFIED)
	COMPUTER OUTLET – CAT 6 CABLE WITH CAT 6 CONNECTORS – SEE SPEC. (3/4" CONDUIT UNLESS OTHERWISE SPECIFIED)–MOUNT 6" ABOVE COUNTER–SEE SPEC.
$OR	LIGHTING CONTROL PANEL OVERRIDE SWITCH – DIGITA 5-1B
$MS	WALL SWITCH WITH BUILT IN MOTION SENSOR – COOPER #OSW-P-0451-W WITH WALL PLATE
M	MOTION SENSOR WIRING – LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)
D	ROOM CONTROL DATA WIRING – CAT 6 CABLING AS REQUIRED
	CCTV SYSTEM – FUTURE CAMERA LOCATION – ABOVE CEILING SHALL BE 1 CAT 6 CABLE CONNTECTED TO IDF (IN 3/4" CONDUIT WHEN NOT ABOVE CEILING).
	FLOOR BOX – COMBINATION EMPTY / DATA / POWER OUTLET. PROVIDE WITH TWO DUPLEX OUTLETS AND EMPTY COMPARTMENTS FOR DATA AND POWER (WIREMOLD EFB10S BOX WITH EFB10SM COMPARTMENTS EFB10-B, EFB10-DP, EFB10-DEC PLATES AS REQUIRED AND EFB10S-DIVIDERS AS REQUIRED AND EFB610BTBZ COVER).
	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING–SEE SPEC.
	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING–MOUNT 6" ABOVE COUNTER–SEE SPEC.

COLOR CODE FOR ELECTRICAL WIRING

1. 277/480 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
   PHASE A–BROWN
   B–ORANGE
   C–YELLOW
   N–GRAY
2. 120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
   PHASE A–BLACK
   B–RED
   C–BLUE
   N–WHITE
3. 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 (SOUND, ETC.)	BROWN

FIRE ALARM SYSTEM NOTES

1. PROVIDE FIRE ALARM COMPLETION DOCUMENTS AT THE STATE FINAL INSPECTION. THIS ITEM WILL BE REQUIRED BY STATE BUILDING INSPECTOR AT THE TIME OF FINAL INSPECTION (OLD CERTIFICATION FORM).
2. ADDITIONS AND ALTERATIONS TO THE FIRE ALARM SYSTEM REQUIRE TESTING, A RECORD OF COMPLETION, AND RECERTIFICATION. ALL FIRE ALARM WORK SHALL BE PERFORMED BY QUALIFIED PERSONNEL AS DEFINED IN NFPA-72 (2013) 10.4.2, 10.5.2, AND 10.18.1.
3. ALL WORK SHALL BE PERFORMED BY A CERTIFIED FIRE ALARM CONTRACTOR – SEE SPECS.

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Project Number:
25111

LATHAN McKEE ARCHITECTS

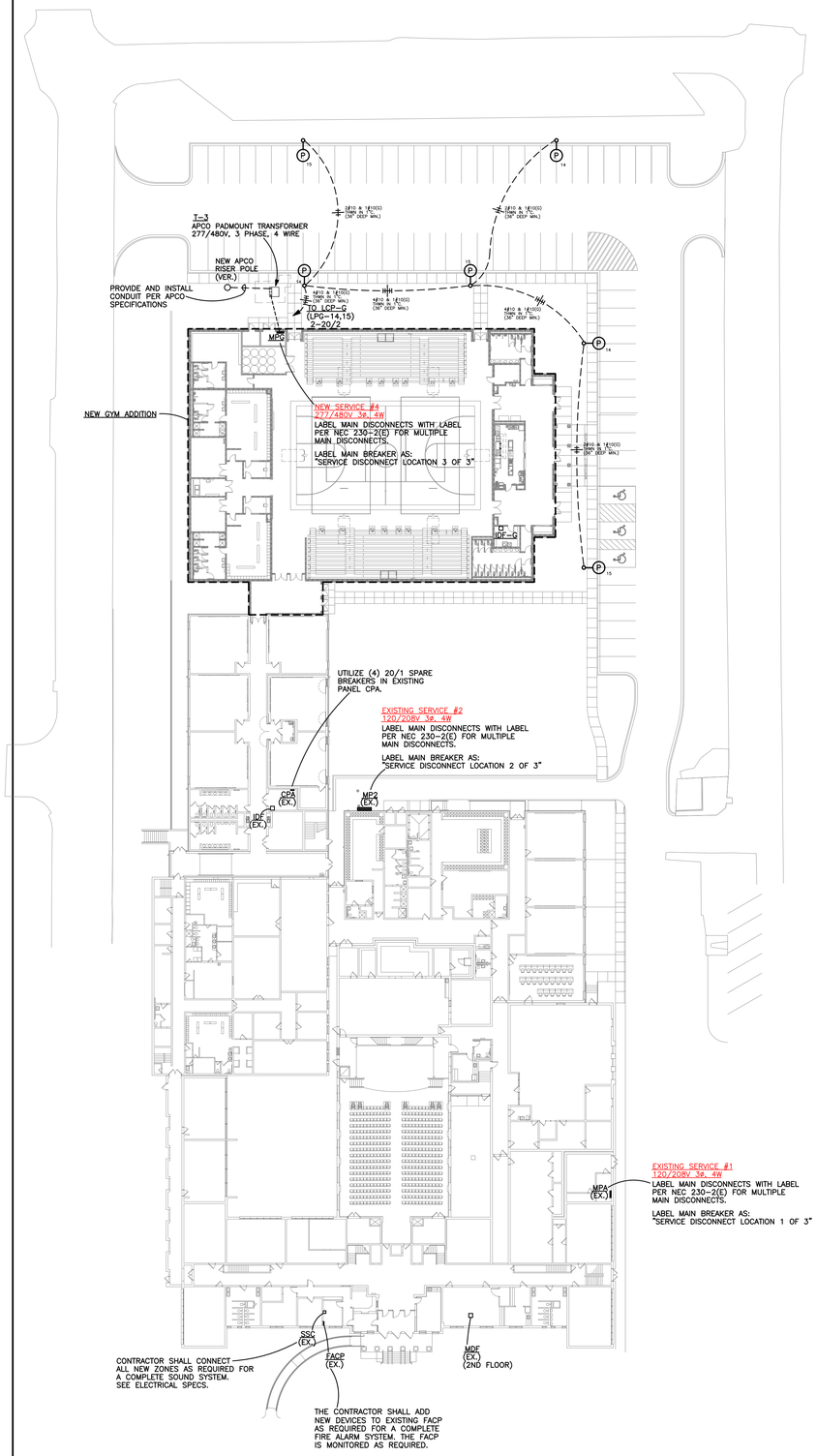
NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SCHEDULES, SYMBOLS, AND NOTES

ALABAMA LICENSED PROFESSIONAL ENGINEER J. RYAN HART No. 25340
10-23-2025

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

JOB NO. 25-33
SHEET NO:
E1.1
1 OF 8



MASTER PLAN

SCALE: 1" = 30'

NOTES:
1. NEW MAIN SERVICE IS BEING ADDED, THE EXISTING 120/208 MAIN SERVICE EQUIPMENT (MPA & MP2) HAS NO ROOM TO EXPAND. SO THE NEW SERVICE WILL BE A DIFFERENT VOLTAGE (277/480) AND THE EXISTING SERVICES ARE 120/208. THEREFORE THE EXCEPTION FOR MULTIPLE SERVICES PER NEC 230.2D WILL APPLY TO THIS BUILDING.

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					
MPG	I-LINE	M/B	1200	277/480V 3ø, 4W			1-60 3-225 1-300 1-400		5-3PS	BOTTOM	SURFACE	ELEC A123	17,000	SEE NOTES 1, 2, 3, 4, & 5
LPG	NQOD	LUGS	225	277/480V 3ø, 4W	15-20	2-20	2-20	6-20/1	11-1PS	BOTTOM	SURFACE	ELEC A123	16,000	SEE NOTES 1, 2, & 5
PPGH1	NQOD	LUGS	225	277/480V 3ø, 4W			2-40 1-45 2-60	2-20/3	21-1PS	BOTTOM	SURFACE	EXTERIOR	15,000	SEE NOTES 1, 2, & 5 NEMA 3R PANEL
PPGH2	NQOD	LUGS	400	277/480V 3ø, 4W			4-90	2-20/3	24-1PS	BOTTOM	SURFACE	MEZZ A201	15,000	SEE NOTES 1, 2, & 5
PPGH3	NQOD	LUGS	225	277/480V 3ø, 4W			4-20 2-30 1-45	2-20/3	15-1PS	BOTTOM	SURFACE	MECH A102	10,000	SEE NOTES 1, 2, & 5
DPGL1	NQOD	M/B	600	120/208V 3ø, 4W			4-225		5-3PS	BOTTOM	SURFACE	ELEC A123	10,000	SEE NOTES 1, 2, & 5
RPG1	NQOD	LUGS	225	120/208V 3ø, 4W	30-20	1-20		6-20/1	16-1PS	BOTTOM	SURFACE	ELEC A123	10,000	SEE NOTES 1, 2, & 5 54 SPACE PANEL
RPG2	NQOD	LUGS	225	120/208V 3ø, 4W	15-20	4-30		6-20/1	13-1PS	BOTTOM	SURFACE	MECH A102	10,000	SEE NOTES 1, 2, & 5
PPGL1	NQOD	LUGS	225	120/208V 3ø, 4W		10-30		6-20/1	16-1PS	BOTTOM	SURFACE	EXTERIOR	10,000	SEE NOTES 1, 2, & 5 NEMA 3R PANEL
KP1	NQOD	LUGS	225	120/208V 3ø, 4W	21-20	*1-20 **2-30 **2-90 **1-100		6-20/1	11-1PS	BOTTOM	RECESSED	CONC A105	10,000	SEE NOTES 1, 2, 5, & 6 54 SPACE PANEL *GFCI BREAKER **SHUNT TRIP/GFCI BREAKER

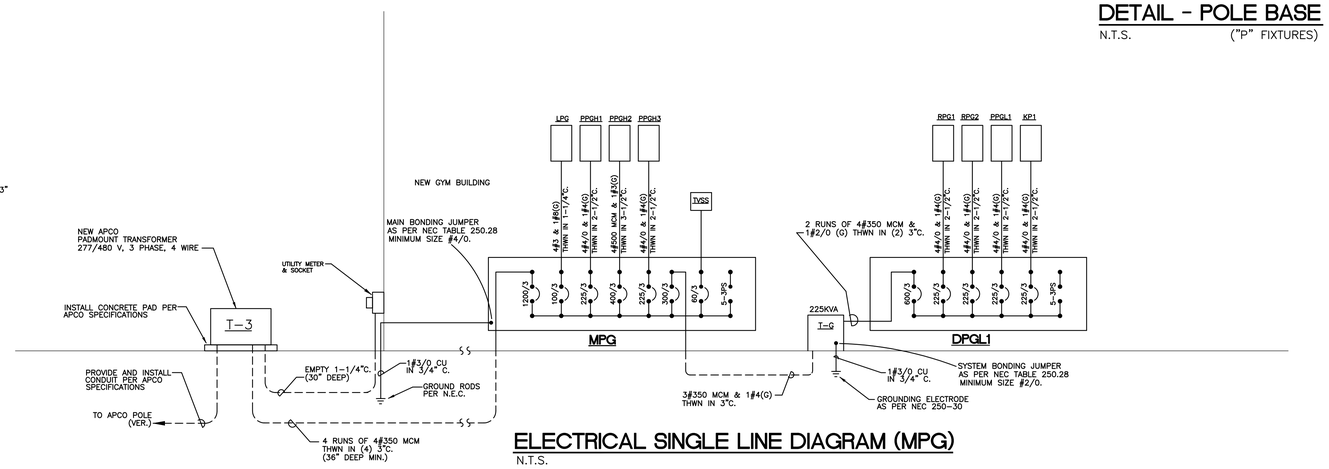
NOTES:
1. ALL PANELBOARDS SHALL BE CAPABLE OF WITHSTANDING AND INTERRUPTING THE AVAILABLE FAULT CURRENTS AS LISTED ABOVE.
2. ALL PANELBOARDS SHALL HAVE MICARTA LABELS SHOWING SWITCHBOARD/PANELBOARD DESIGNATION, AND OPERATING VOLTAGE. I-LINE PANELBOARDS SHALL ALSO HAVE MICARTA LABELS AT EACH BREAKER.
3. SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.
4. SHALL BE EQUIPPED WITH BUILT-IN SURGE PROTECTION, CAPABLE OF WITHSTANDING A TRANSIENT SURGE OF 160,000 AMPS. (60/3 BREAKER IS SHOWN FOR THIS PURPOSE IN MPG).
5. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.
6. ON ALL RECESSED PANELBOARDS, CONTRACTOR SHALL STUB (5) EMPTY 3/4" CONDUITS TO ABOVE LAY-IN CEILING.

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).

DRY TYPE TRANSFORMER SCHEDULE

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

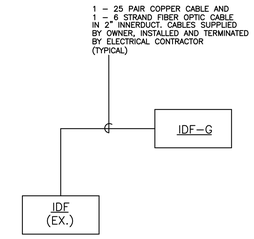
NOTES:
1. BOND TRANSFORMER LOWSIDE NEUTRAL TO THE TRANSFORMER CASE, TO THE "INCOMING" AND "OUTGOING" GROUND WIRES, AND TO GROUNDING ELECTRODE (AS PER NEC 250.30) AT EACH TRANSFORMER, USING #3/0 CU.



ELECTRICAL SINGLE LINE DIAGRAM (MPG)

N.T.S.

NOTES:
1. LABEL PANELBOARD WITH MICARTA LABEL PER NEC 230-2(E).
2. CONTRACTOR SHALL SUPPLY AND INSTALL AN INTERSYSTEM BONDING TERMINATION PROVISION AS DETAILED IN SECTION 250.94 OF THE NEC.
3. MEANS OF IDENTIFICATION OF THE UNGROUNDED BRANCH CIRCUIT AND FEEDER CONDUCTORS SHALL BE PERMANENTLY POSTED ON THE OUTSIDE OF EACH SWITCHBOARD AND/OR PANELBOARD USING A MICARTA LABEL.
4. FIELD MARK ALL ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES AVAILABLE FAULT CURRENT PER NEC 110.24.



MDF FIBER OPTIC CABLE RISER DIAGRAM

N.T.S.

APCO NOTES

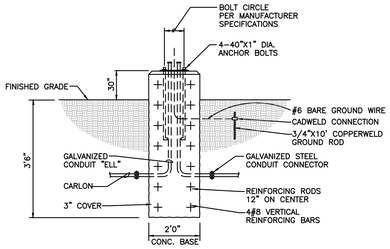
1. CONTRACTOR SHALL COORDINATE CLOSELY WITH ALABAMA POWER AND SHALL PROVIDE AND INSTALL ANY AND ALL LABOR AND OR MATERIAL, AS REQUIRED BY APCO, REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL DRAWINGS.
2. ANY AND ALL COSTS ASSOCIATED WITH PROVIDING THIS LABOR AND/OR MATERIAL SHALL BE INCLUDED IN BID PRICE.
3. CONTRACTOR SHALL OBTAIN ALL DIRECT CHARGES FROM ALABAMA POPWER, AND INCLUDE THESE CHARGES IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING APCO DURING THE BID PROCESS.

ALUMINUM NOTE

THE CONTRACTOR SHALL HAVE THE CHOICE OF INSTALLING FEEDERS WITH ALL COPPER WIRE AS SPECIFIED, OR INSTALLING ALUMINUM FEEDERS ON ALL WIRE SIZED #3/0 AND LARGER. ALL WIRING SMALLER THAN #3/0 SHALL BE COPPER WITH NO EXCEPTIONS.

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

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



DETAIL - POLE BASE

N.T.S. ("P" FIXTURES)

LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MASTER PLAN AND SINGLE LINE DIAGRAM

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 25340
J. RYAN HART
10-23-2025

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

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Alabama Reg. 14817
Project Number:
25111

JOB NO. 25-33
SHEET NO:
E2.1
2 OF 8

(5) 6"x6"x6"D RECESSED HOFFMAN BOXES (GSB-1,2,3,4,5) WITH KEYED COVER AND COOPER SWITCH STATIONS AND OVERRIDE SWITCHES MOUNTED INSIDE

COOPER SWITCH STATION (2)GDS-2TSB-W (2 ZONES) (SEE DETAIL FOR ZONES)

COOPER OVERRIDE SWITCH FOR LCP-G (1 BUTTON WITH 4HR)

WIRE TO LCP-G AS REQUIRED

CONTRACTOR SHALL PROGRAM LIGHTING RELAY CABINET FOR COMPLETE OPERATION BY OWNER. CONTRACTOR SHALL COORDINATE WITH OWNER ON ALL OVERRIDE CAPABILITIES AS WELL AS THE "NORMAL TIME OF OPERATION" FOR NORMAL DAY TO DAY TIME. CONTRACTOR SHALL INSTALL CLASS 2/FELV LOW VOLTAGE WIRING TO (2) CONTROL STATIONS.

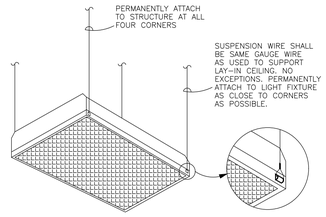
CONTRACTOR SHALL SUPPLY OWNER WITH TRAINING BY FACTORY REPRESENTATIVE FOR COMPLETE SYSTEM OPERATION AND PROGRAMMING FOR ALL LIGHTING CONTROL RELAY PANELS

SITE VISIT NOTE:
CONTRACTOR SHALL INCLUDE IN BID PRICE A TOTAL OF (3) SITE VISITS FROM FACTORY TRAINED REPRESENTATIVE FOR LIGHTING CONTROL SYSTEM INSTALLATION, PROGRAMMING, AND TRAINING.

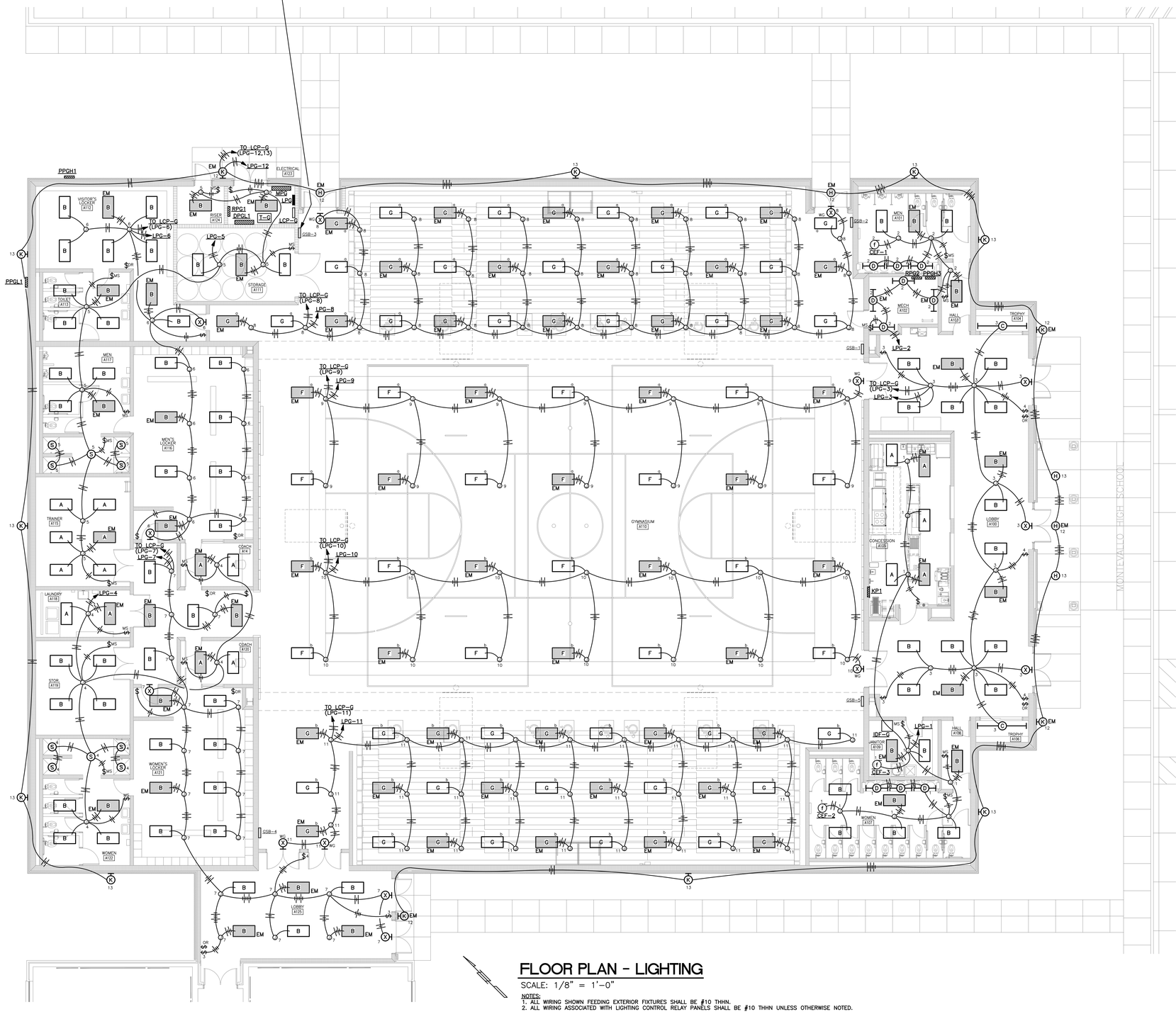
RELAY PANEL LCP-G

R	PANEL	CIRCUIT	PROGRAM MODE	
1	LPG	3	NORMAL DAY-TO-DAY	
2	LPG	6	NORMAL DAY-TO-DAY	
3	LPG	7	NORMAL DAY-TO-DAY	
4	LPG	8 ZONE 1	NORMAL DTD (SWITCH "a")	----- GYM PUSHBUTTON 1
5	LPG	9 ZONE 2	NORMAL DTD (SWITCH "a")	----- GYM PUSHBUTTON 1
6	LPG	10 ZONE 1	NORMAL DTD (SWITCH "b")	----- GYM PUSHBUTTON 2
7	LPG	11 ZONE 2	NORMAL DTD (SWITCH "b")	----- GYM PUSHBUTTON 2
8	LPG	12	EXTERIOR DUSK TO DAWN	
9	LPG	13	EXTERIOR DUSK TO MIDN.	
10	LPG	14	EXTERIOR DTD (2 POLE)	
11	LPG	15	EXTERIOR DTM (2 POLE)	
12				
13				
14				
15				
16				

COOPER GREENGATE RELAY CABINET (NETWORKABLE)
CONTROLKEEPER 16 (CKT16) WITH 16 RELAYS



DETAIL - LIGHT FIXTURE SUPPORT
N.T.S.



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

NOTES:
1. ALL WIRING SHOWN FEEDING EXTERIOR FIXTURES SHALL BE #10 THHN.
2. ALL WIRING ASSOCIATED WITH LIGHTING CONTROL RELAY PANELS SHALL BE #10 THHN UNLESS OTHERWISE NOTED.

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LATHAN McKEE ARCHITECTS

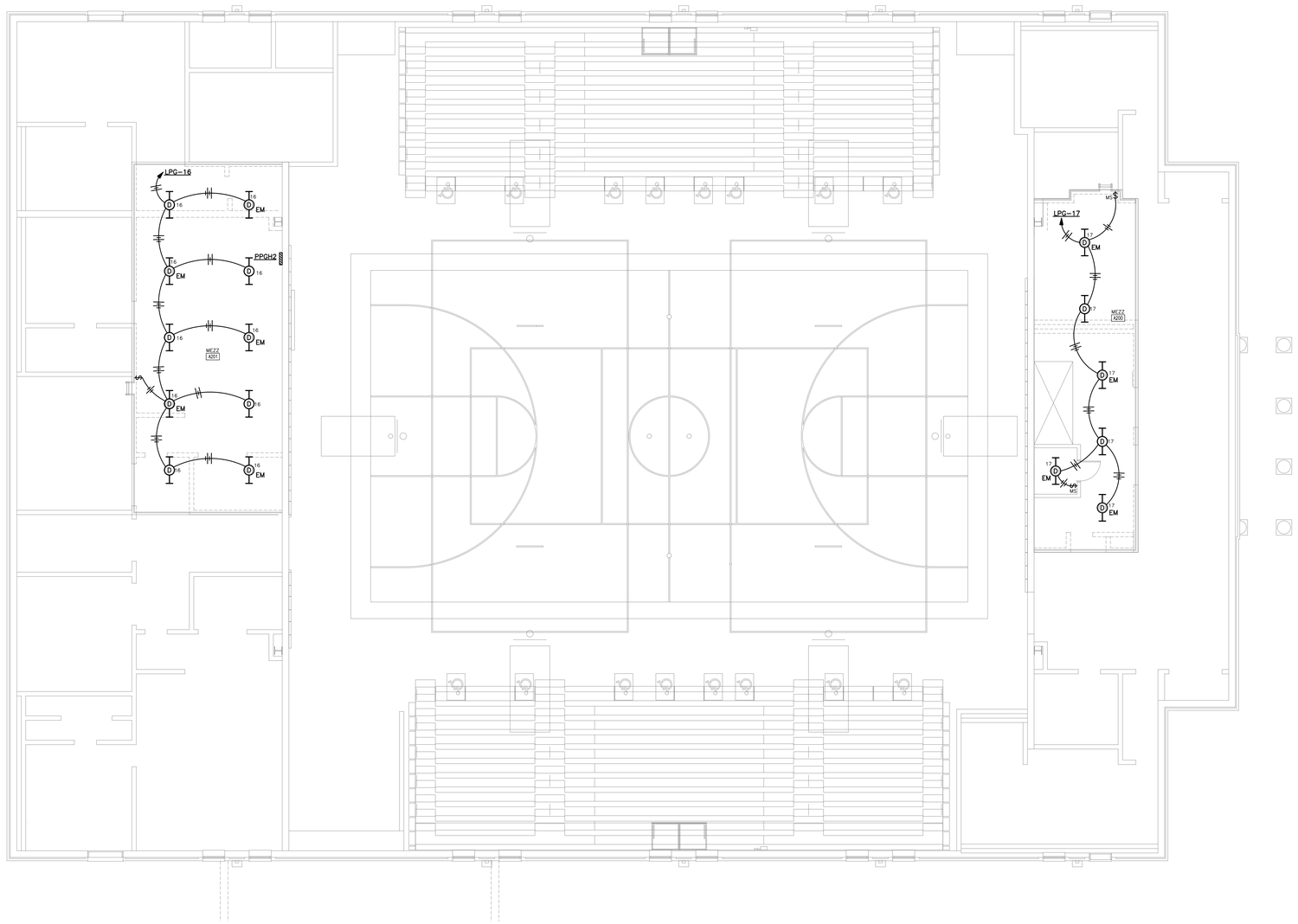
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FLOOR PLAN - LIGHTING

ALABAMA LICENSED No. 29390 PROFESSIONAL ENGINEER J. RYAN HUNT
10-23-2025

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

JOB NO. 25-33
SHEET NO:
E3.1
3 OF 8



MEZZANINE PLAN - LIGHTING

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

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NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MEZZANINE PLAN - LIGHTING

ALABAMA LICENSED PROFESSIONAL ENGINEER
J. RYAN HART
NO. 28596
10-23-2025

PROJ. MGR.:	S. CRAWFORD
DRAWN:	SEC
DATE:	OCTOBER 23, 2025
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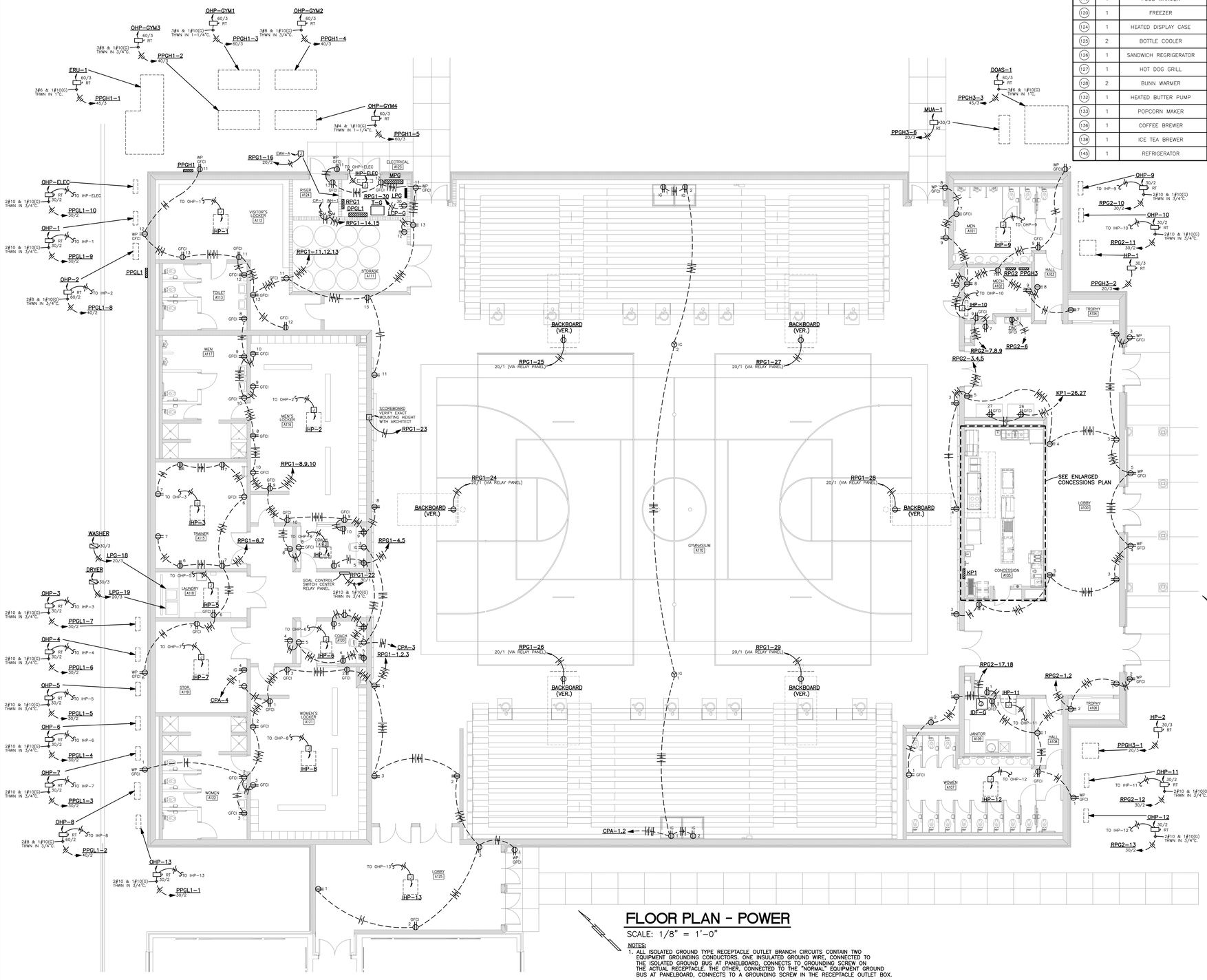
JOB NO. 25-33

SHEET NO:
E3.2
4 OF 8

0 1" 2"

CONCESSIONS EQUIPMENT SCHEDULE

MARK	QUAN.	FOOD SERVICE EQUIPMENT	ELEC. LOAD	VOLTAGE 120	VOLTAGE 208	VOLTAGE Ø	WIRE SIZE	CONDUIT SIZE	PANEL	CIRCUIT #	BREAKER SIZE	REMARKS
(101)	1	ICE MACHINE	5.9		•	1	2#12 & 1#12(G) THWN	1/2"	KP1	1	20/2	GFCI BREAKER
(108)	1	REFRIGERATOR	3A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	2	20/1	
(109)	1	WARMING CABINET	16A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	3	20/1	
(110)	1	EXHAUST HOOD – BY MECHANICAL – SEE SHEET E4.2										
(111)	1	HOOD FAN SYSTEM – BY MECHANICAL – SEE SHEET E4.2										
(114)	2	HOT PLATE	19.2A		•	1	2#10 & 1#10(G) THWN	3/4"	KP1	4,5	2@30/2	SHUNT TRIP/GFCI
(115)	1	FREEZER	10A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	6	20/1	SHUNT TRIP/GFCI
(116)	1	GRIDDLE	77A		•	1	2#3 & 1#8(G) THWN	1–1/4"	KP1	7	100/2	SHUNT TRIP/GFCI
(118)	2	FRYER	68A		•	1	2#3 & 1#8(G) THWN	1–1/4"	KP1	8,9	2@90/2	SHUNT TRIP/GFCI
(119)	1	FOOD WARMER	10A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	10	20/1	
(120)	1	FREEZER	7A		•	1	2#12 & 1#12(G) THWN	1/2"	KP1	11	20/1	
(124)	1	HEATED DISPLAY CASE	10.2A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	12	20/1	
(125)	2	BOTTLE COOLER	5A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	13,14	2@20/1	
(126)	1	SANDWICH REGRIGERATOR	2A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	15	20/1	
(127)	1	HOT DOG GRILL	8.3A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	16	20/1	
(128)	2	BUNN WARMER	3.3A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	17,18	2@20/1	
(132)	1	HEATED BUTTER PUMP	4.3A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	19	20/1	
(133)	1	POPCORN MAKER	1.7KW	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	20	20/1	
(136)	1	COFFEE BREWER	11.4A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	21	20/1	
(138)	1	ICE TEA BREWER	11.4A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	22	20/1	
(145)	1	REFRIGERATOR	3A	•		1	2#12 & 1#12(G) THWN	1/2"	KP1	23	20/1	



FLOOR PLAN – POWER

SCALE: 1/8" = 1'–0"

NOTES:

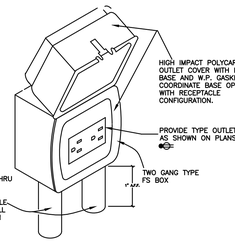
1. ALL ISOLATED GROUND TYPE RECEPTACLE OUTLET BRANCH CIRCUITS CONTAIN TWO EQUIPMENT GROUNDING CONDUCTORS. ONE INSULATED GROUND WIRE, CONNECTED TO THE ISOLATED GROUND BUS AT PANELBOARD, CONNECTS TO GROUNDING SCREW ON THE ACTUAL RECEPTACLE. THE OTHER, CONNECTED TO THE "NORMAL" EQUIPMENT GROUND BUS AT PANELBOARD, CONNECTS TO A GROUNDING SCREW IN THE RECEPTACLE OUTLET BOX.
2. COORDINATE ALL OUTLETS AT COUNTER AREAS CLOSELY WITH ARCHITECTURAL CASEWORK DRAWINGS. PLACE OUTLETS BELOW COUNTERS, AT STANDARD MOUNTING HEIGHT, WHEN KNEE SPACE PERMITS ACCESS (COORDINATE INSTALLATION OF HOLES WITH RUBBER GROMMETS IN THOSE CASES).
3. COORDINATE INSTALLATION OF OUTLETS CLOSELY WITH FURNITURE SUPPLIER.
4. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THHN.

ENLARGED CONCESSIONS PLAN – POWER

SCALE: 1/4" = 1'–0"

NOTES:

1. VERIFY EXACT LOCATION AND EXACT MOUNTING HEIGHT OF ALL ELECTRICAL EQUIPMENT AND ALL ELECTRICAL CONNECTIONS WITH ARCHITECT AND KITCHEN SUPPLIER PRIOR TO ROUGH–IN.
2. ALL 120 VOLT RECEPTACLES SHOWN IN THE CONCESSIONS AREA SHALL BE GFCI TYPE.
3. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THHN.
4. COORDINATE ALL OUTLETS AT COUNTER AREAS CLOSELY WITH ARCHITECTURAL CASEWORK DRAWINGS. PLACE OUTLETS BELOW COUNTERS, AT STANDARD MOUNTING HEIGHT, WHEN KNEE SPACE PERMITS ACCESS (COORDINATE INSTALLATION OF HOLES WITH RUBBER GROMMETS IN THOSE CASES).



STUB UP DETAIL

N.T.S.

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LATHAN McKEE ARCHITECTS

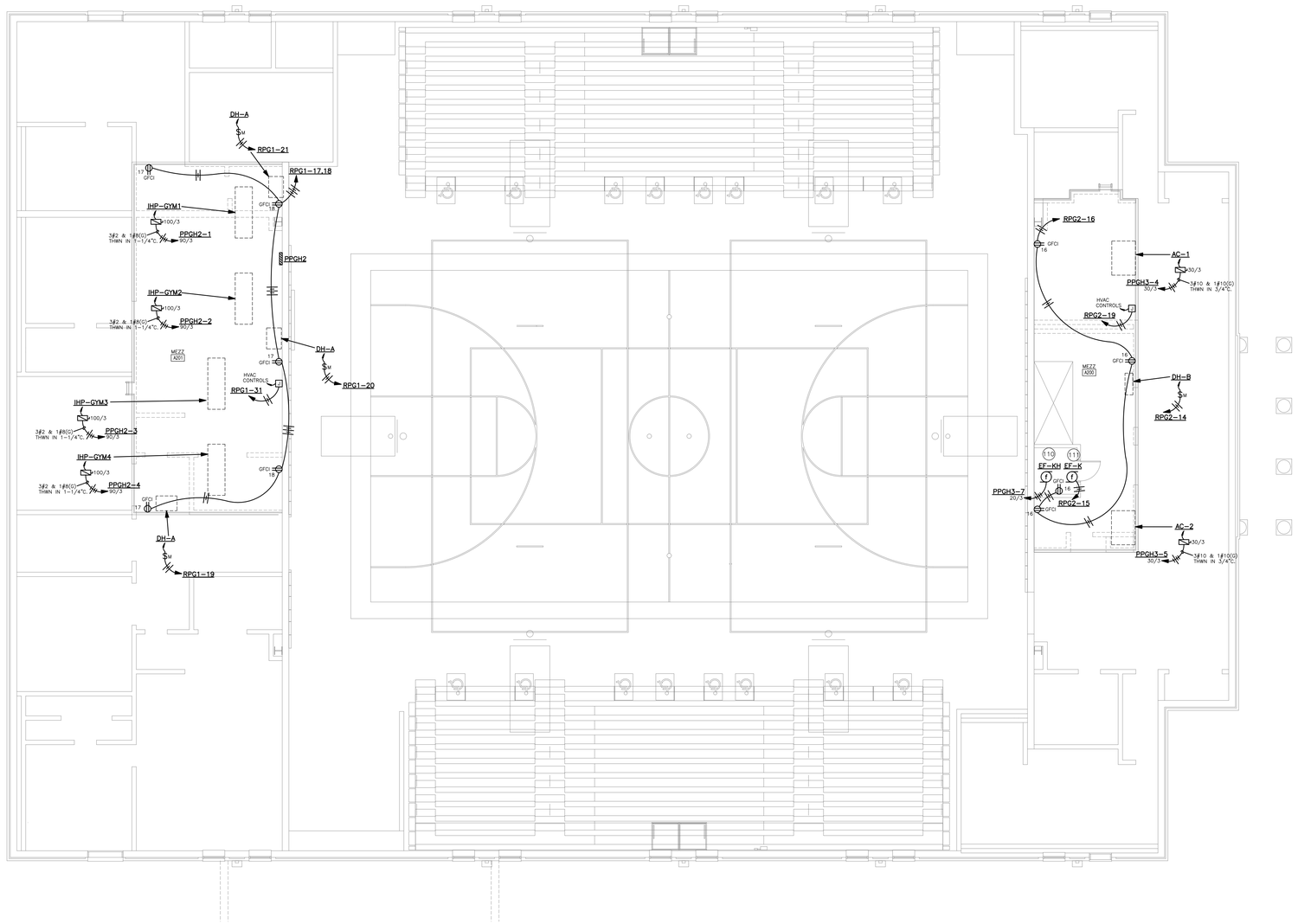
NEW GYMNASIUM ADDITION TO
MONTEVALLO HIGH SCHOOL
980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE: FLOOR PLAN – POWER

ALABAMA LICENSED NO. 29390 PROFESSIONAL ENGINEER J. LANCE JUNKIN 10-23-2025

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

JOB NO. 25-33
SHEET NO: E4.1
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MEZZANINE PLAN - POWER

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

NOTES:
1. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THHN.

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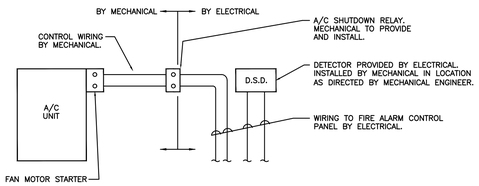
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SHEET TITLE:
MEZZANINE PLAN - POWER

ALABAMA LICENSED NO. 29390 PROFESSIONAL ENGINEER J. RYAN HART
10-23-2025

PROJ. MGR.: S. CRAWFORD
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JOB NO. 25-33
SHEET NO:
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DETAIL - DUCT SMOKE DETECTOR CONNECTION

N.T.S.

AUXILIARY CIRCUIT LEGEND

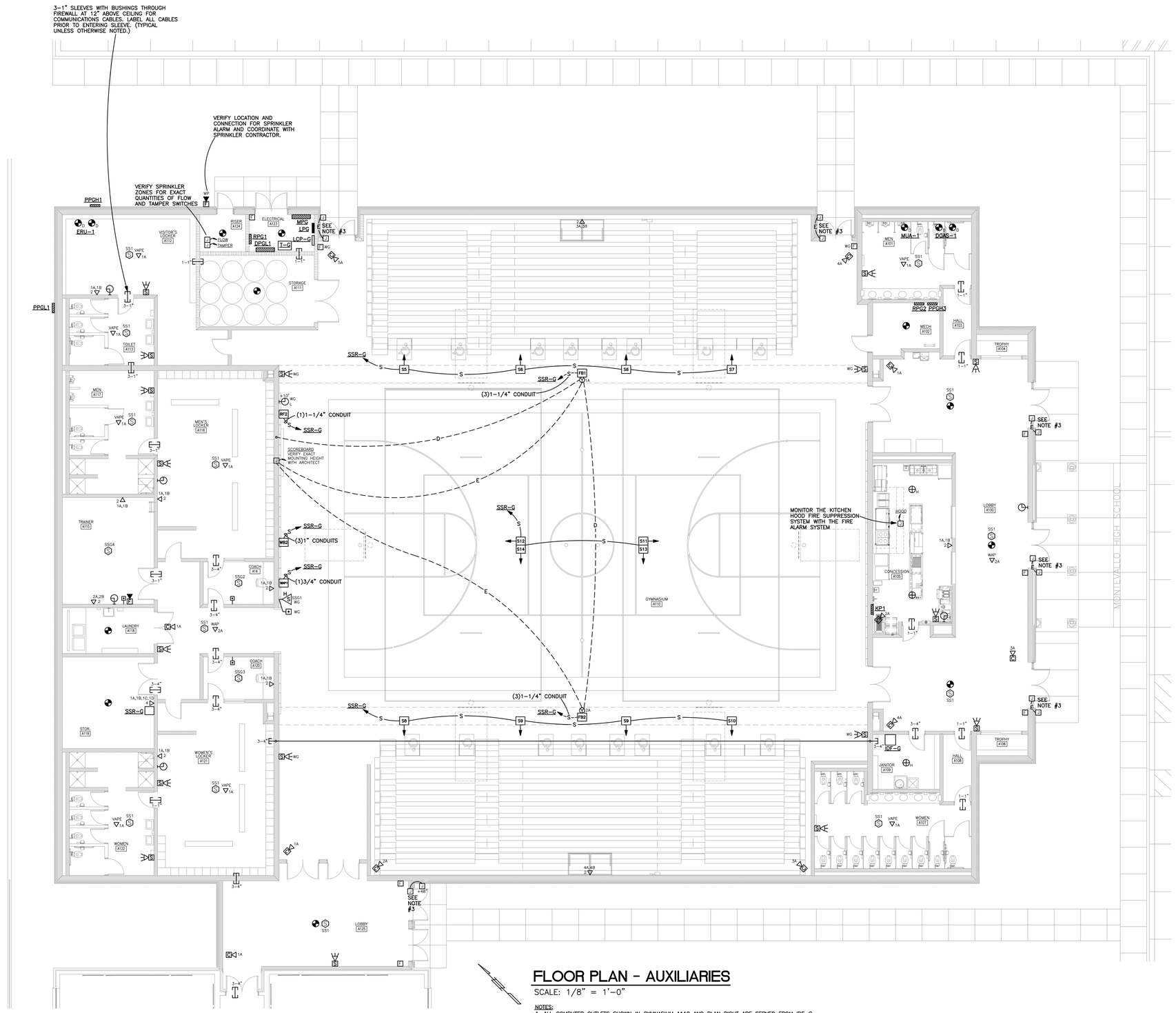
SS1 (S)	SPEAKER – FED FROM COMMON ZONE SS1
2A	DATA OUTLET 2A (1 CAT. 6 CABLE PULLED TO JUNCTION BOX AND TERMINATED, LEAVE 12" SLACK ON EACH CABLE)
SSG4 (S)	SPEAKER – SPEAKER ON INDIVIDUAL ZONE SSG4

OUTLET NUMBER:	ROOM NUMBER:
2A	A105
IDF NUMBER:	PATCH PANEL/PORT #:
IDF-G	1 / 1

DETAIL - DATA CABLE LABEL

N.T.S.

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



FLOOR PLAN - AUXILIARIES

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

NOTES:
1. ALL COMPUTER OUTLETS SHOWN IN GYMNASIUM A110 AND PLAN RIGHT ARE SERVED FROM IDF-G. ALL COMPUTER OUTLETS SHOWN PLAN LEFT OF GYMNASIUM A110 ARE SERVED FROM IDF(EX.) – SEE SHEET E2.1.
2. 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.
3. AT THESE DOOR LOCATIONS, CONTRACTOR SHALL INSTALL EMPTY JUNCTION BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING TO ABOVE LAY-IN CEILING FOR FUTURE CARD ACCESS SYSTEM. COORDINATE CLOSELY WITH ARCHITECT FOR DOOR HARDWARE CONFIGURATION.

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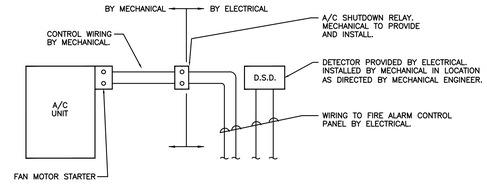
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SHEET TITLE: FLOOR PLAN – AUXILIARIES

ALABAMA LICENSED NO. 25190 PROFESSIONAL ENGINEER J. LANCE JUNKIN
10-23-2025

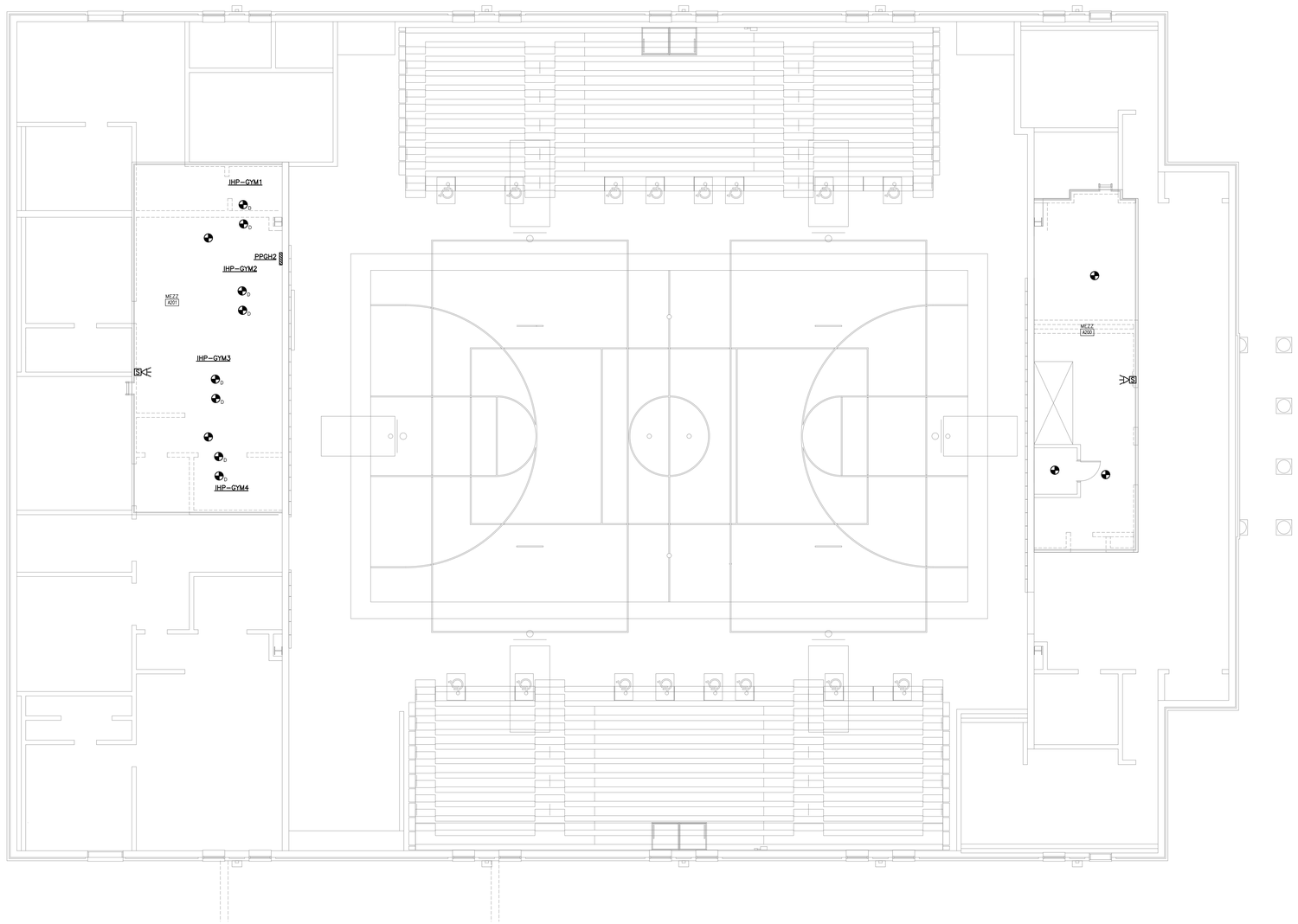
PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

JOB NO. 25-33
SHEET NO: E5.1
7 OF 8



DETAIL - DUCT SMOKE DETECTOR CONNECTION

N.T.S.



MEZZANINE PLAN - AUXILIARIES

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

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LATHAN McKEE ARCHITECTS

NEW GYMNASIUM ADDITION TO
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980 OAK STREET, MONTEVALLO, ALABAMA 35115
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MEZZANINE PLAN - AUXILIARIES

ALABAMA LICENSED NO. 28246 PROFESSIONAL ENGINEER J. RYAN HART
10-23-2025

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 23, 2025
REVISIONS

JOB NO. 25-33
SHEET NO:
E5.2
8 OF 8