CONCESSIONS AND TOILET ROOM FACILITY FOR THE CITY OF HAMILTON

HAMILTON, AL CITY OF HAMILTON

OWNER CITY OF HAMILTON

P.O. BOX 188

HAMILTON, ALABAMA 35570

LATHAN ASSOCIATES ARCHITECTS, P.C.

300 CHASE PARK SOUTH SUITE 200

HOOVER, ALABAMA 35244

EMAIL: RFI@LATHANASSOCIATES.COM

STRUCTURAL STRUCTURAL DESIGN GROUP

300 CHASE PARK SOUTH

SUITE 125

HOOVER, ALABAMA 35244

DEWBERRY ENGINEERING PLUMBING & MECHANICAL RIVERCHASE OFFICE PLAZA #2

SUITE 205

HOOVER, ALABAMA 35244

LANDSCAPE HNP LANDSCAPE ARCHITECTURE

1914 28TH AVENUE SOUTH

BIRMINGHAM, ALABAMA 35209

ELECTRICAL STEWART ENGINEERING

P.O. BOX 2233

ANNISTON, ALABAMA 36202

DRAWING INDEX (SET - 36 TOTAL SHEETS)

GENERAL

(2 SHEETS)

(9 SHEETS)

- TITLE AND INDEX

LS1.0 - LIFE SAFETY PLAN

(1 SHEETS)

- GRADING AND DRAINAGE

ARCHITECTURAL DRAWINGS (13 SHEETS)

- FLOOR PLANS, DOOR SCHEDULE, AND WINDOW SCHEDULE
- ROOF PLAN AND DETAILS
- BUILDING ELEVATIONS
- BUILDING SECTIONS - WALL SECTIONS
- ENLARGED STAIR PLANS, SECTIONS, AND DETAILS

LANDSCAPE DRAWINGS

- REFLECTED CEILING PLANS
- ENLARGED TOILET PLANS, INTERIOR ELEVATIONS
- **A5.2** - DETAILS
- A6.1 - INTERIOR ELEVATIONS AND DETAILS
- REFLECTED CEILING PLANS, LEGEND, DETAIL, AND NOTES
- FINISH FLOOR PLANS, LEGENDS, DETAILS, AND SCHEDULE
- ROOM SIGNAGE PLANS, LEGENDS, AND DETAILS

STRUCTURAL DRAWINGS

- GENERAL NOTES
- GENERAL NOTES CONTINUED
- TYPICAL DETAILS
- TYPICAL DETAILS - TYPICAL DETAILS
- FDN & SECOND FLR FRAMING PLAN
- ROOF FRAMING PLAN
- SECTIONS AND DETAILS
- SECTIONS AND DETAILS

PLUMBING DRAWINGS

- PLUMBING SCHEDULES AND NOTES
- PLUMBING- NON-PRESSURE FLOOR PLANS
- PLUMBING -PRESSURE FLOOR PLANS
- PLUMBING RISER DIAGRAMS

MECHANICAL DRAWINGS

(5 SHEETS)

(3 SHEETS)

(4 SHEETS)

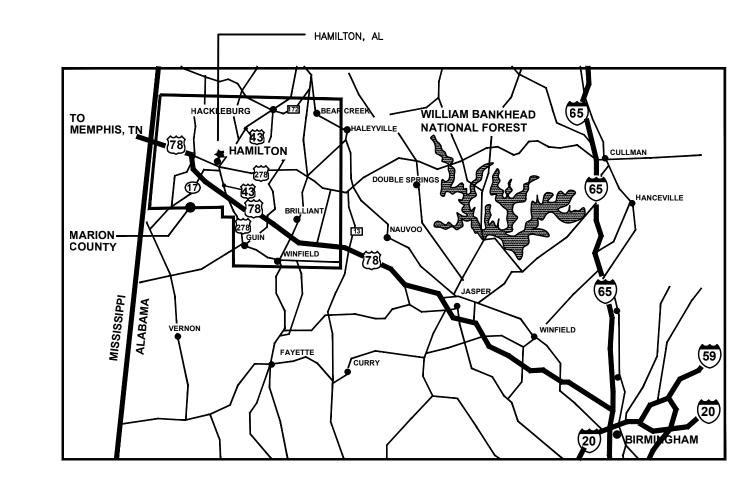
- MECHANICAL LEGENDS
- M0.2 - MECHANICAL SCHEDULES - MECHANICAL CONTROLS
- M0.3 - MECHANICAL DETAILS
- MECHANICAL FLOOR PLANS M1.0

ELECTRICAL DRAWINGS

- SCHEDULES, SYMBOLS, AND NOTES
- SITE PLAN AND SINGLE LINE DIAGRAM
- E3.1 - ELECTRICAL PLAN

HAMILTON, AL -280/231 AREA MAP

STATE OF ALABAMA





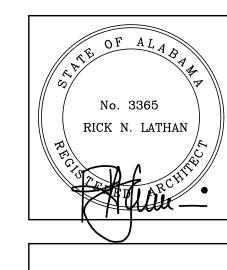
VICINITY MAP

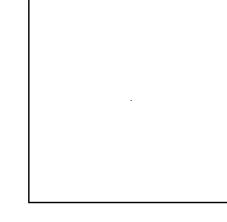


CONCESSIONS AND TOILET RO

CITY OF HAMILTON

CITY OF HAMILTON



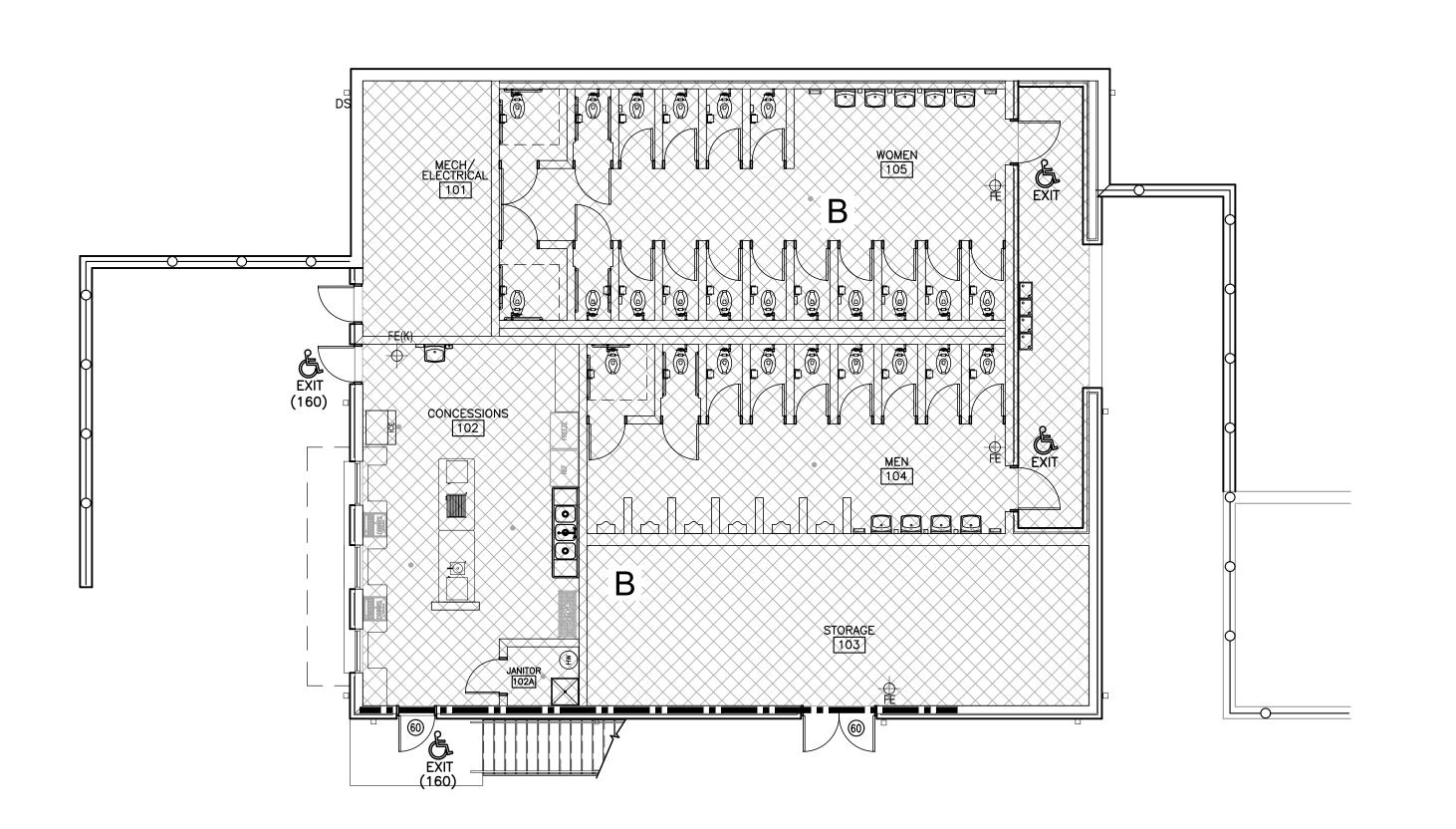


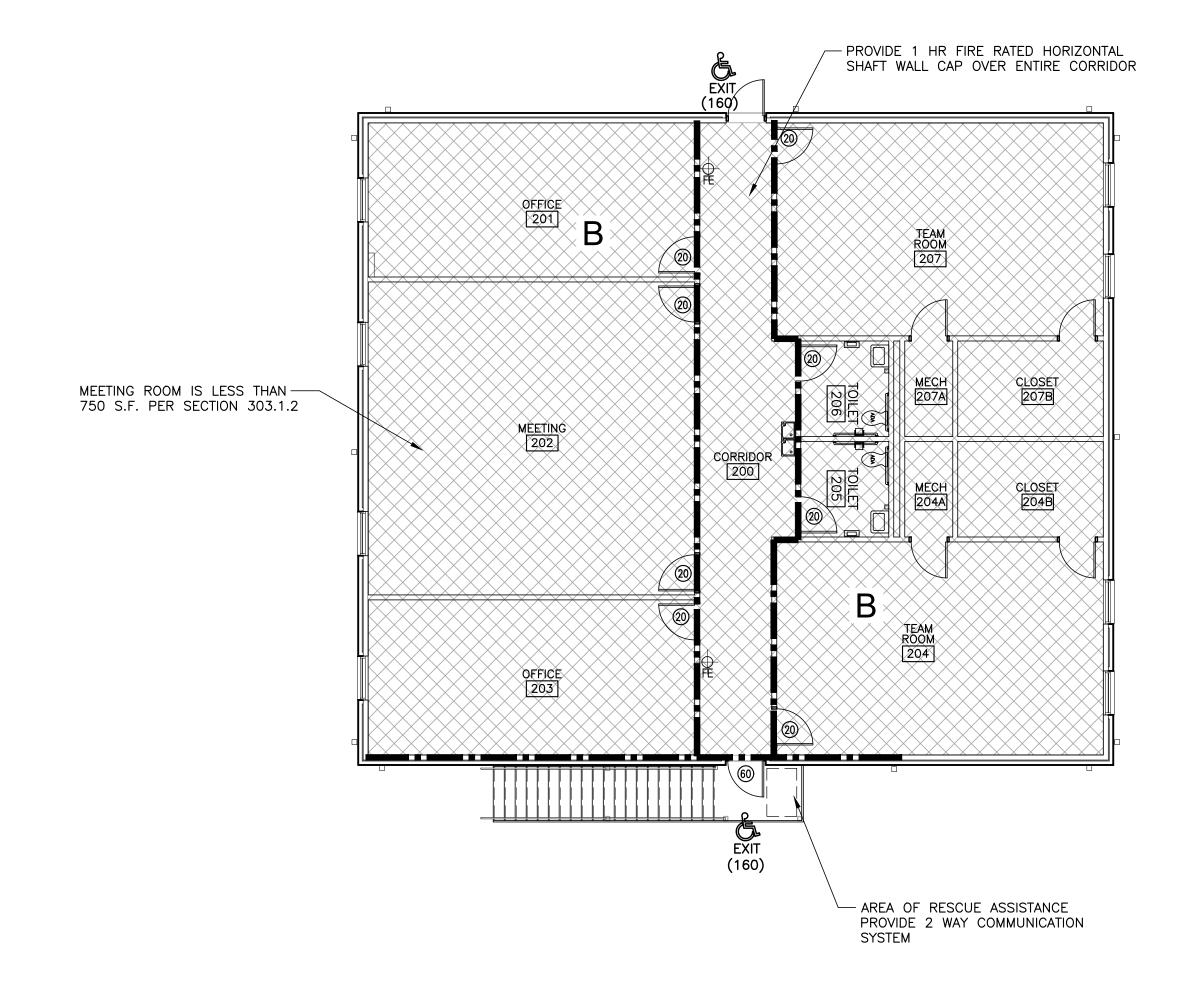
SHEET TITLE: TITLE AND INDEX

PROJ. MGR.: S. CALMA DRAWN: WW DATE: MAY 7, 2024 REVISIONS

> JOB NO. **24-24** SHEET NO:

1 OF 2





2 SECOND FLOOR LIFE SAFETY PLAN

1/8" = 1'-0"



LIFE SAFI	ETY NOTES
FIRE EXTINGUISHER AND (PROVIDE FIRE RATED CA	CABINET ABINETS IN RATED WALLS.)
FE FIRE EXTINGUISHER	ACCESSIBLE
FE(K) K-TYPE FIRE EXTINGUISHER	EXIT——EXIT (320)——EXIT CAPACITY
EXTEND AND KEY ALL RATED WAL AND/OR BOTTOM OF ROOF ASSE	•
STENCIL LABEL ALL RATED WALLS ABOVE CEILING EACH SIDE @ 20'-	
ALL RATED DOORS AND FRAMES EMBOSSED LABELS INDICATING R	
PROVIDE FOAM FILL INSULATION A BETWEEN TOILETS AND CLASSRO	
COORDINATE W/ ELECTRICAL & M CONCRETE EQUIPMENT PAD AS R	
HE - HORIZONTAL EXIT	
FB - FIRE BARRIER	
FP - FIRE PARTITION	
FW - FIRE WALL	
XFB - EXISTING FIRE BARRIER	
XFP - EXISTING FIRE PARTITION	
XFW - EXISTING FIRE WALL	

OCCUPANCY USE LEGEND
GROUP B

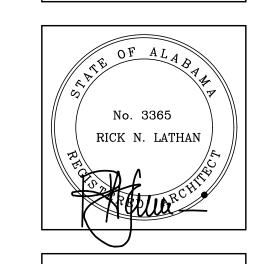
2021 INTERNATIONAL BUILDING NON SPRINKLER		RC	;H	
OCCUPANCY CLASSIFICATION:	GROUP I	3		
TYPE OF CONSTRUCTION :	TYPE V	B (NS)		
FIRST FLOOR AREA:	3,173	S.F.		
SECOND FLOOR AREA:	3,226	S.F.		
TABLE 504.4 ALLOWABLE NUMBER OF STORIES:	ALLOWABLE STORIES: 2	ACT	TUAL STORIE 2	S:
TABLE 506.2 ALLOWABLE AREA:	AREA FACTOR: NS		9,000 S.F.	
TABLE 601 AND 705.5	CONSTRUCTION TYPE:		VB	
FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:	STRUCTURAL FRAME:		0	
	BEARING WALLS:		0	
	T. 705.5 EXTERIOR:		< 5' ≥ 5'< 10' ≥ 10'< 30' > 30'	1hr 1hr 0
	INTERIOR:		l -	0
	NONBEARING WALLS:			
	T. 705.5 EXTER	IOR:	< 5' ≥ 5'< 10' ≥ 10'< 30' ≥ 30'	1hr 1hr 0
	INTERIOR:		0	<u> </u>
	FLOOR CONSTRUCTION	N:	0	
	ROOF CONSTRUCTION	:	0	
TABLE 1020.2 CORRIDOR FIRE-RESISTANCE RATING PARTITIONS AND OPENING PROTECTIVES	GROUP B, NS LESS THAN 30 PERSO	ONS	0	

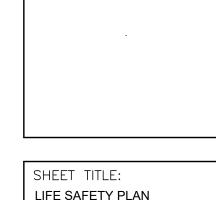
С	HAP	TER	29 -	PLUM	IBING	SYS	TEM	S				
occu	PANCY	V	VATERO	CLOSETS			LAVA1	TORIES		DRINKIN FOUNTA	-	SERVICE SINKS
USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	ALL	ALL
A5		1/75 FIRST 1,500 1/120 REMAINDER EXCEEDING 1,500.		1/40 FIRST 1,520 1/60 REMAINDER EXCEEDING 1,520.	16.09	1/200	3.22	1/150	4.29	1/1000	1.29	
В		1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.		1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	.85	1/40 FIRST 80 1/80 EXCEED 80.	.53	1/40 FIRST 80 1/80 EXCEED 80.	.53	1/100	.43	1
REQU TOTAL			9.43		16.94		3.75		4.82		1.72	1
PROV TOTAL			16		18		5		6		4	1

WALL RATI	ING LEGEND
	1 HR WALL 2 HR WALL
-S-S-S-S-S-S-S-S-S-S-S-S-S-S	S-S-S- SMOKE TIGHT WALL
WALL TYF	PE LEGEND
HE - HORIZONTAL EXIT	
FB - FIRE BARRIER	
FP - FIRE PARTITION	
FW - FIRE WALL	
XFB - EXISTING FIRE BARRIER	
XFP - EXISTING FIRE PARTITION	I
XFW - EXISTING FIRE WALL	
DOOR/WINDOW	/ RATING LEGEND
 20 MINUTE DOOR AND FRAME 45 MINUTE DOOR AND FRAME 	60 MINUTE DOOR AND FRAME 90 MINUTE DOOR AND FRAME



NCESSIONS AND TOILET ROOM FACILITY FOR TITY OF HAMILTON, AL





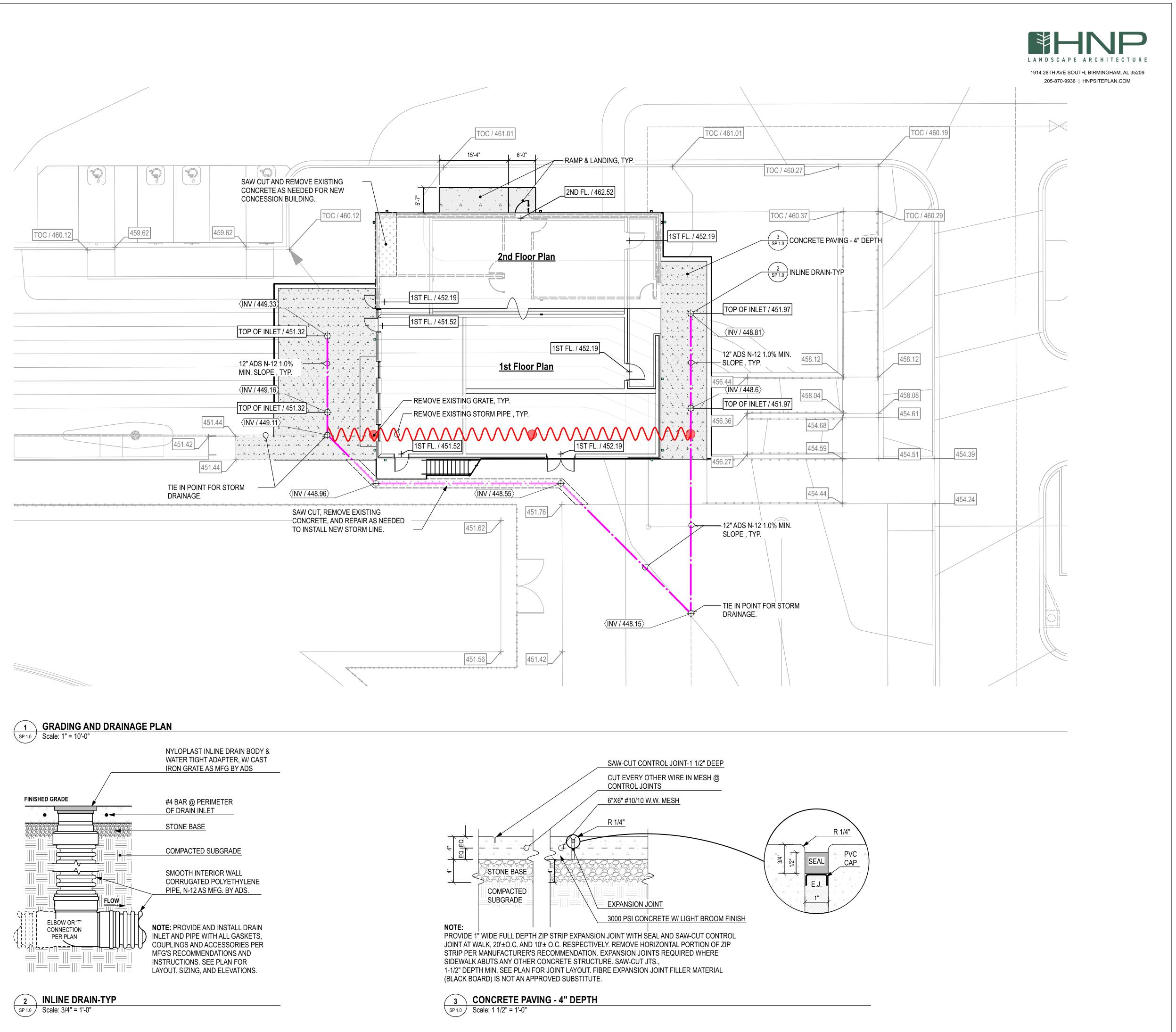
SHEET TITLE:
LIFE SAFETY PLAN

PROJ.	MGR.: S. CA	LMA
DRAWN	:	
hdr		
DATE:	MAY 7, 20	24
REVISION	DNS	

JOB NO. **24-2**4

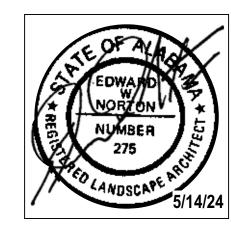
LS1.0

2 OF 2

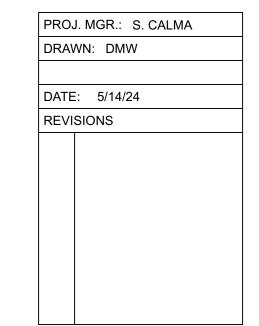




SNCESSIONS AND TOILET ROOM FACILITY FOR THE SITY OF HAMILTON, ALAMILTON, ALAMILTON



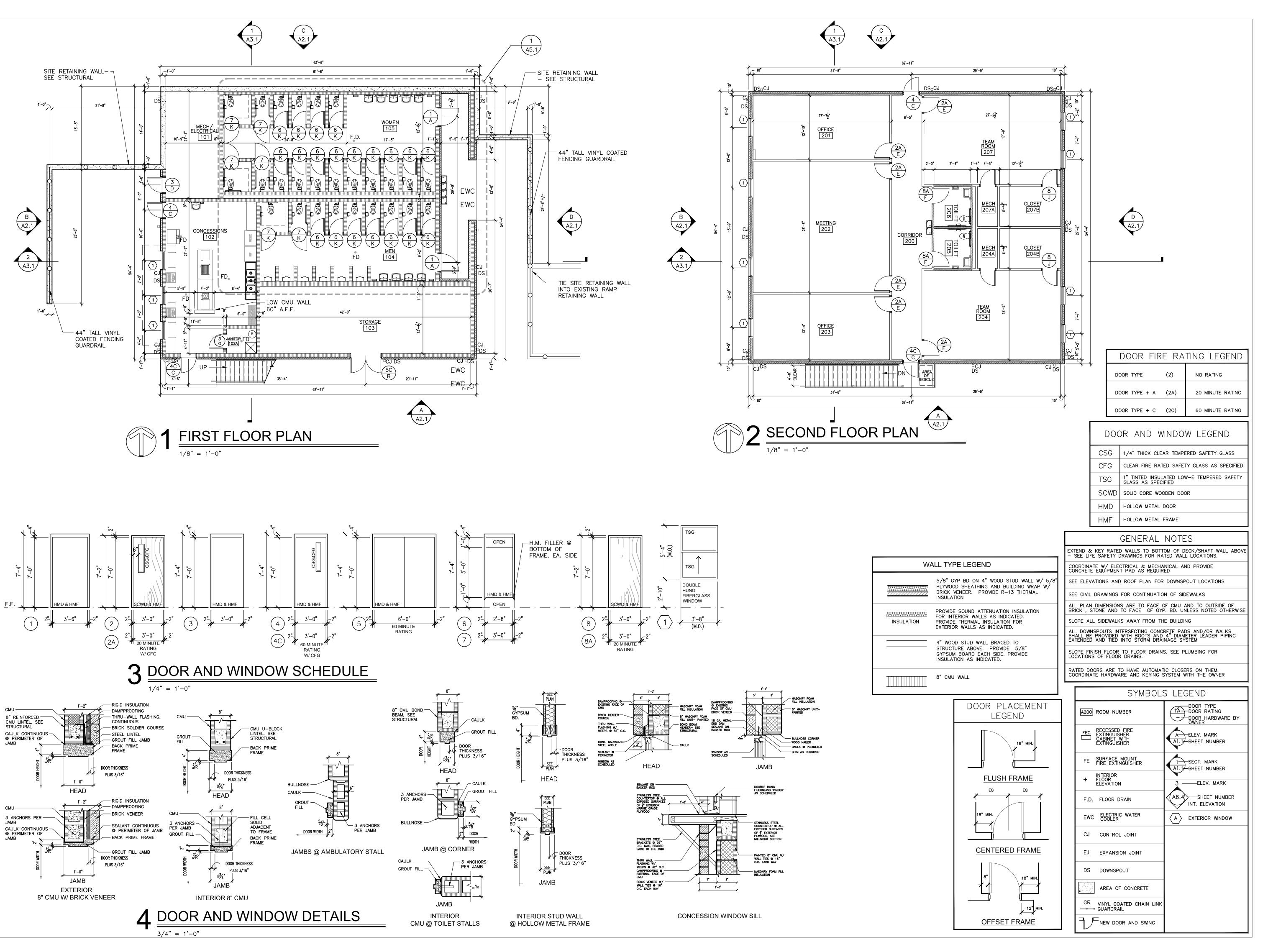
SHEET TITLE:
GRADING AND
DRAINAGE



30B NO. 24-24

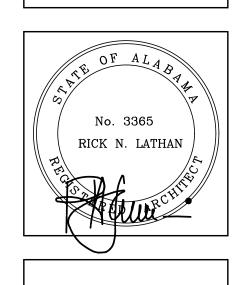
SHEET NO:

SP 1.0





NCESSIONS AND TOILET ROOM FACILITY FOR THE ITY OF HAMILTON, AL



SHEET TITLE:
FLOOR PLANS, DOOR
SCHEDULE, AND WINDOW
SCHEDULE

PROJ. MGR.: S. CALMA

DRAWN:

hdr

DATE: MAY 7, 2024

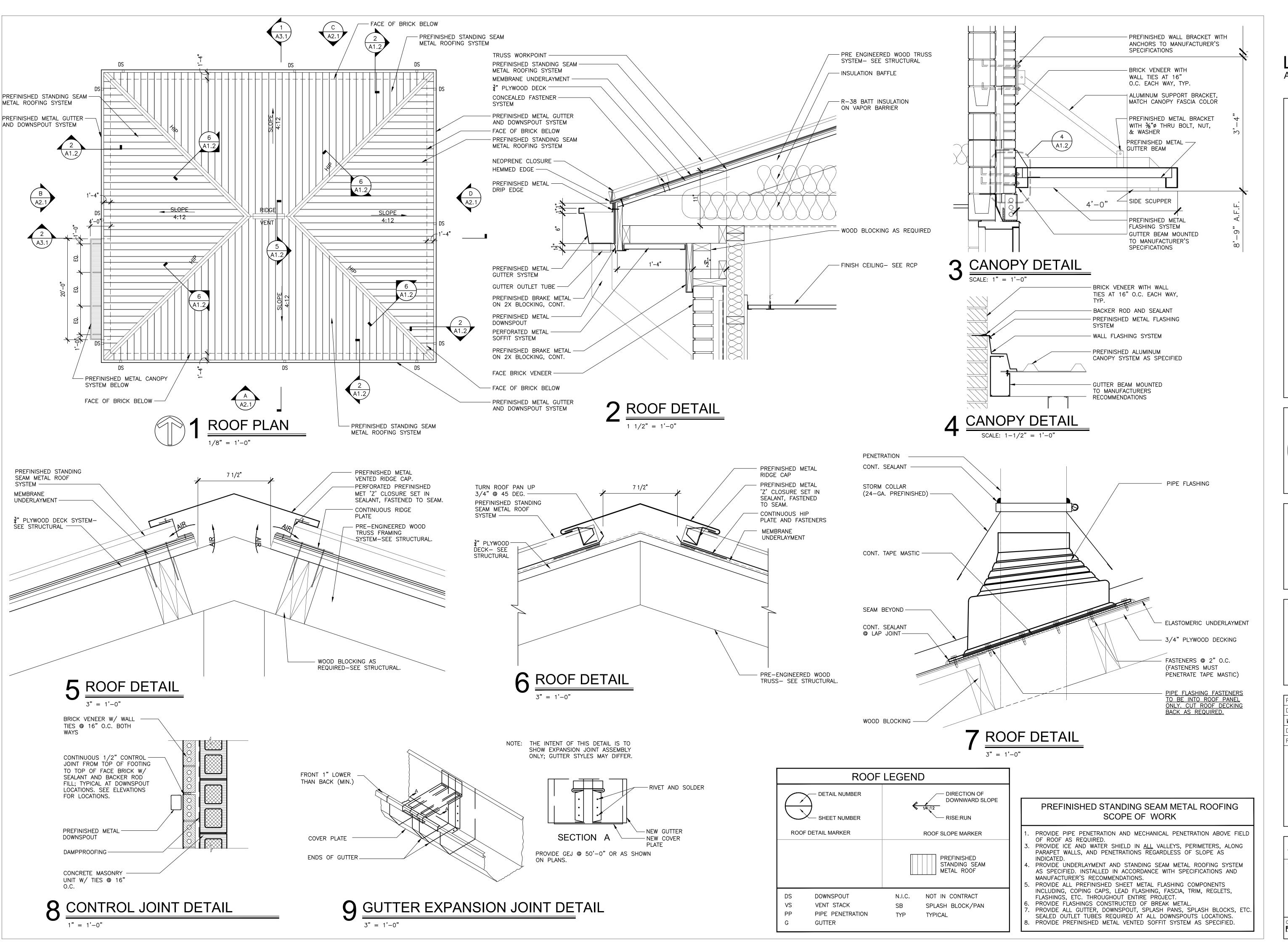
REVISIONS

JOB NO. 24-24

SHEET NO:

A 1.1

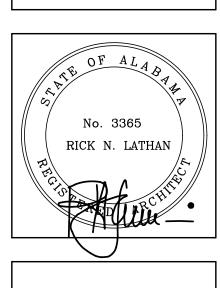
1 OF 13

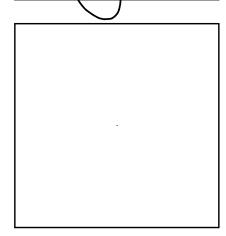




CONCESSIONS AND TOILET ROOM FACILITY FOR THE

CITY OF HAMILTON
HAMILTON, AL





SHEET TITLE:
ROOF PLAN AND DETAILS

PROJ.	MGR.:	S.	CALMA
DRAWN	l:		
hdr			
DATE:	MAY	7,	2024
REVISION	SNC		

JOB NO. 24-24

SHEET NO:

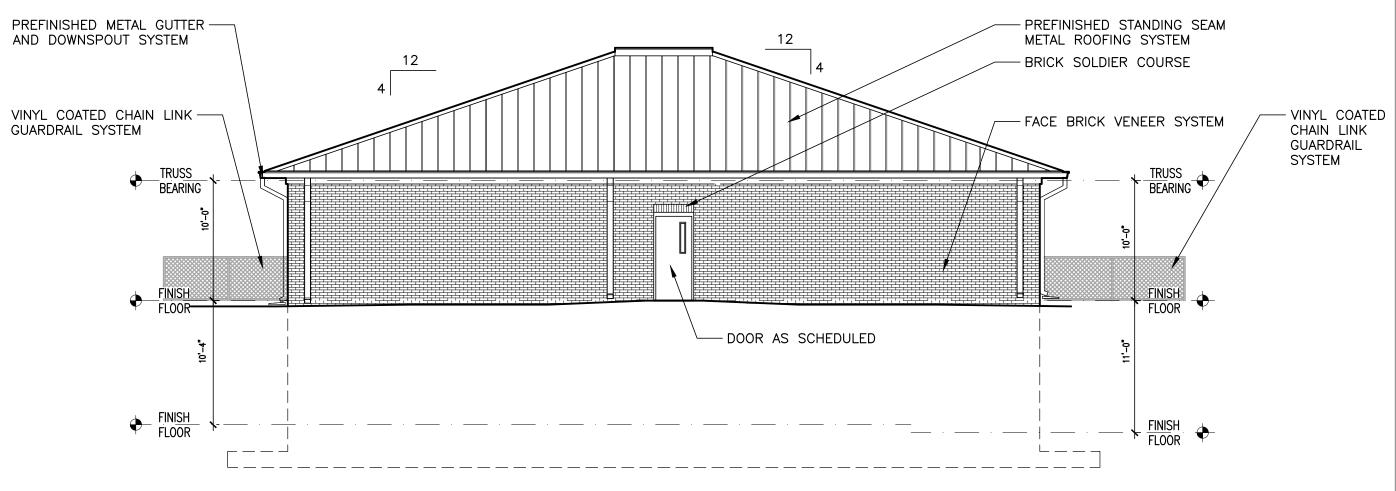
A1.2

2 OF 13

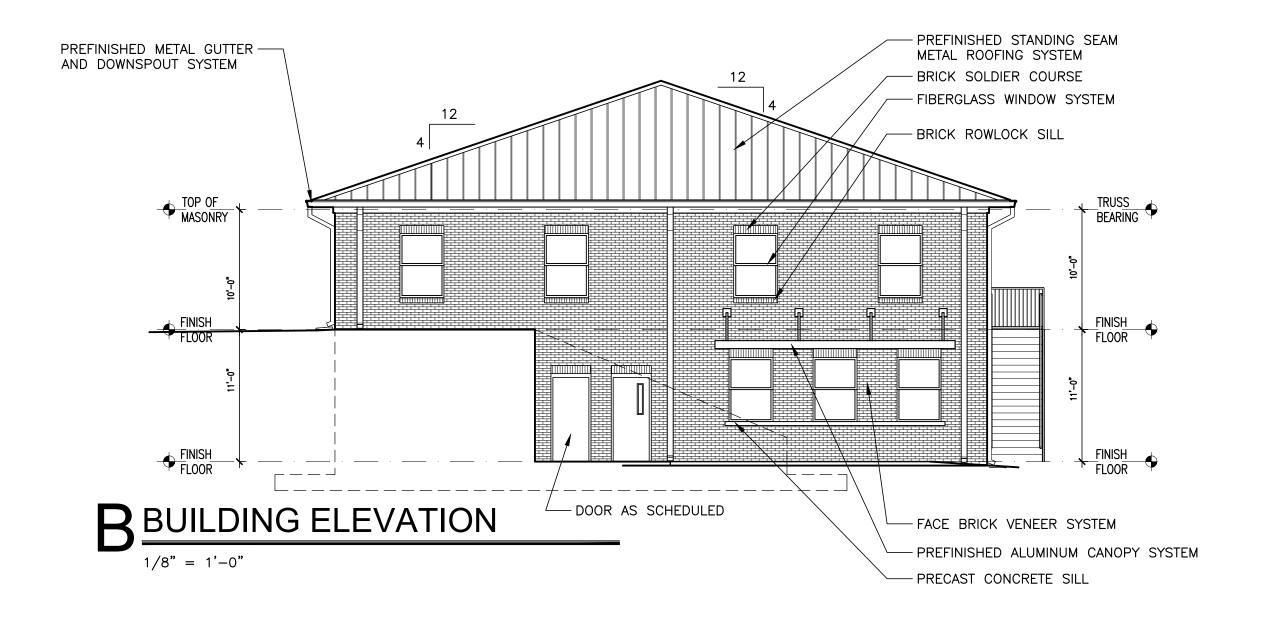
PREFINISHED STANDING SEAM METAL ROOFING SYSTEM PREFINISHED METAL GUTTER AND DOWNSPOUT SYSTEM TRUSS BEARING FINISH FROOF FRO

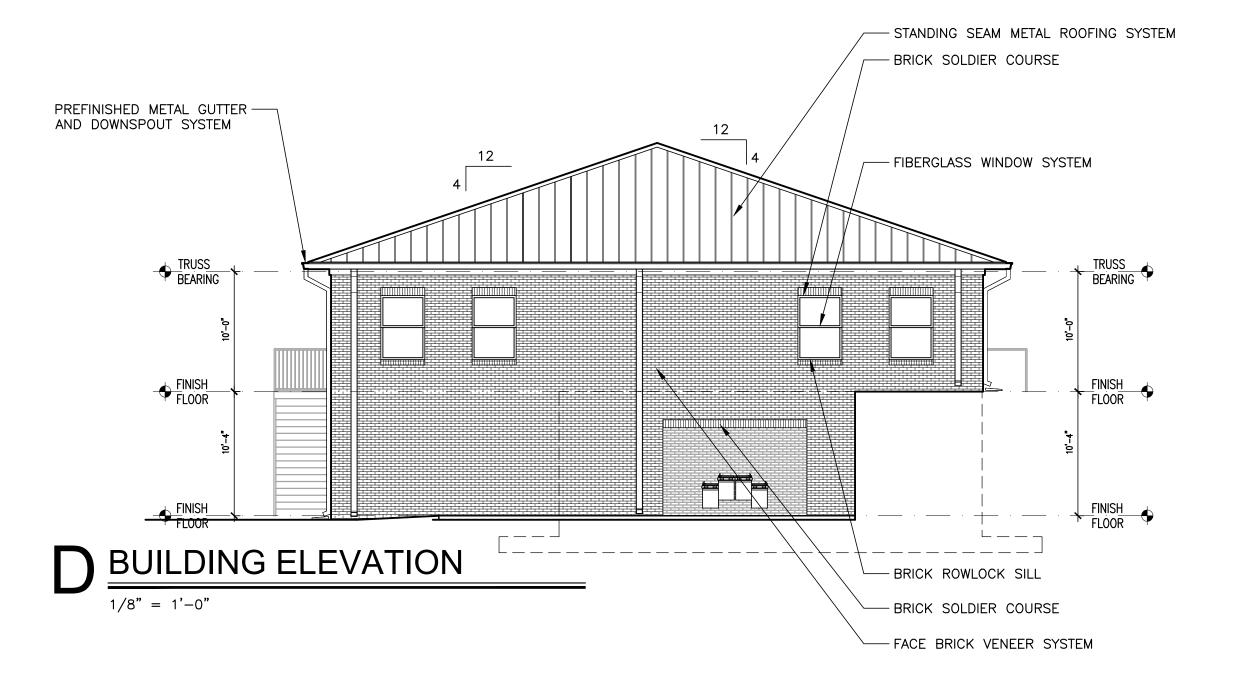
▲ BUILDING ELEVATION

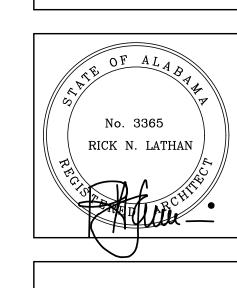
1/8" = 1'-0"

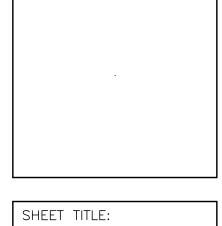












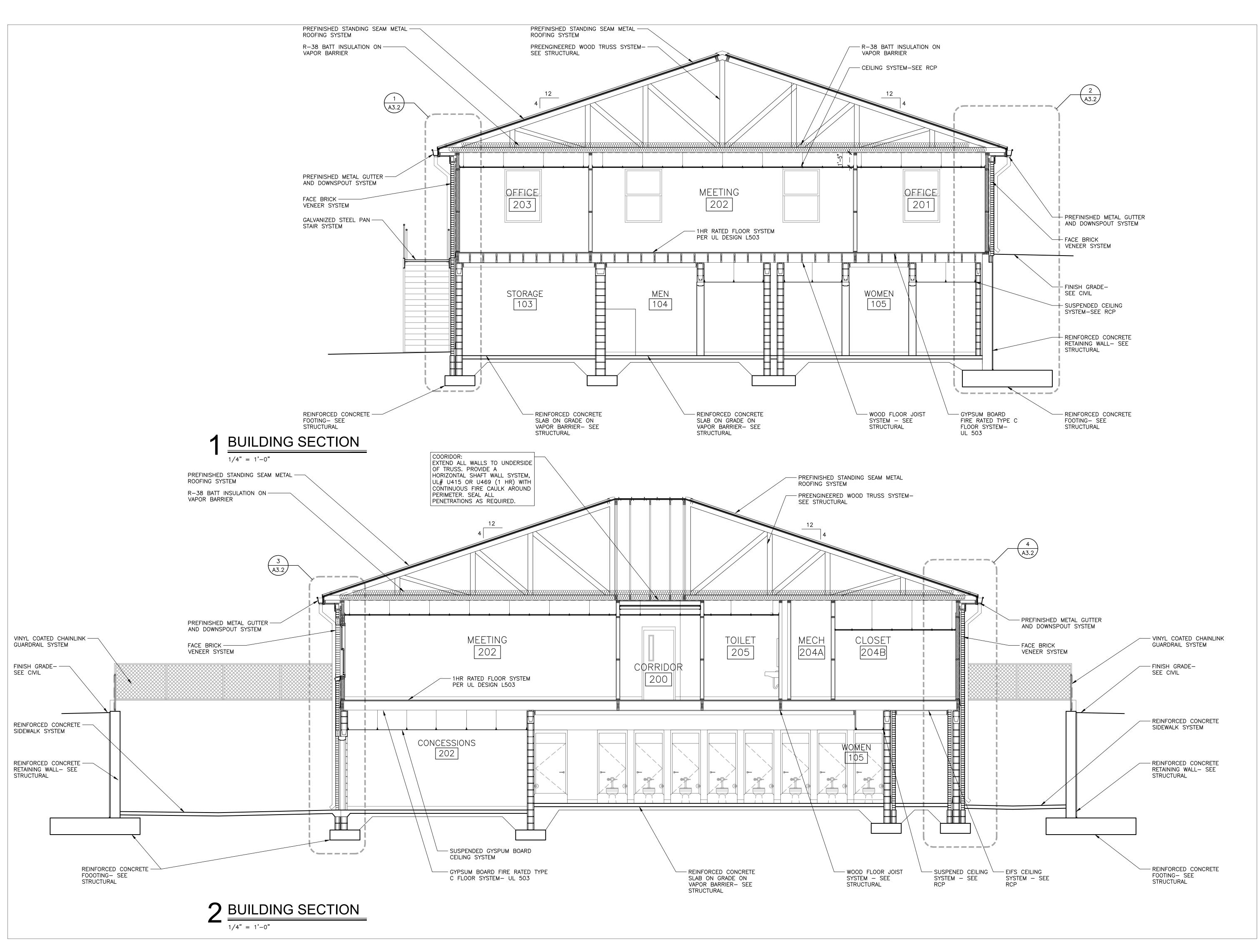
SHEET TITLE:
BUILDING ELEVATIONS

DRAWN: hdr DATE: MAY 7, 2024 REVISIONS
DATE: MAY 7, 2024
REVISIONS

JOB NO. **24-24**SHEET NO:

A2.1

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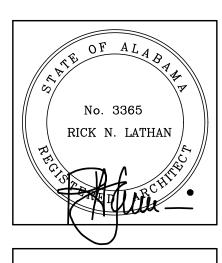


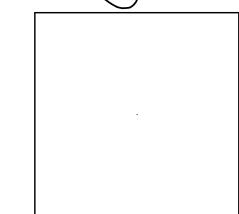


CONCESSIONS AND TOILET ROOM FACILITY FOR THE

CITY OF HAMILTON

CITY OF HAMILTON





SHEET TITLE:
BUILDING SECTIONS

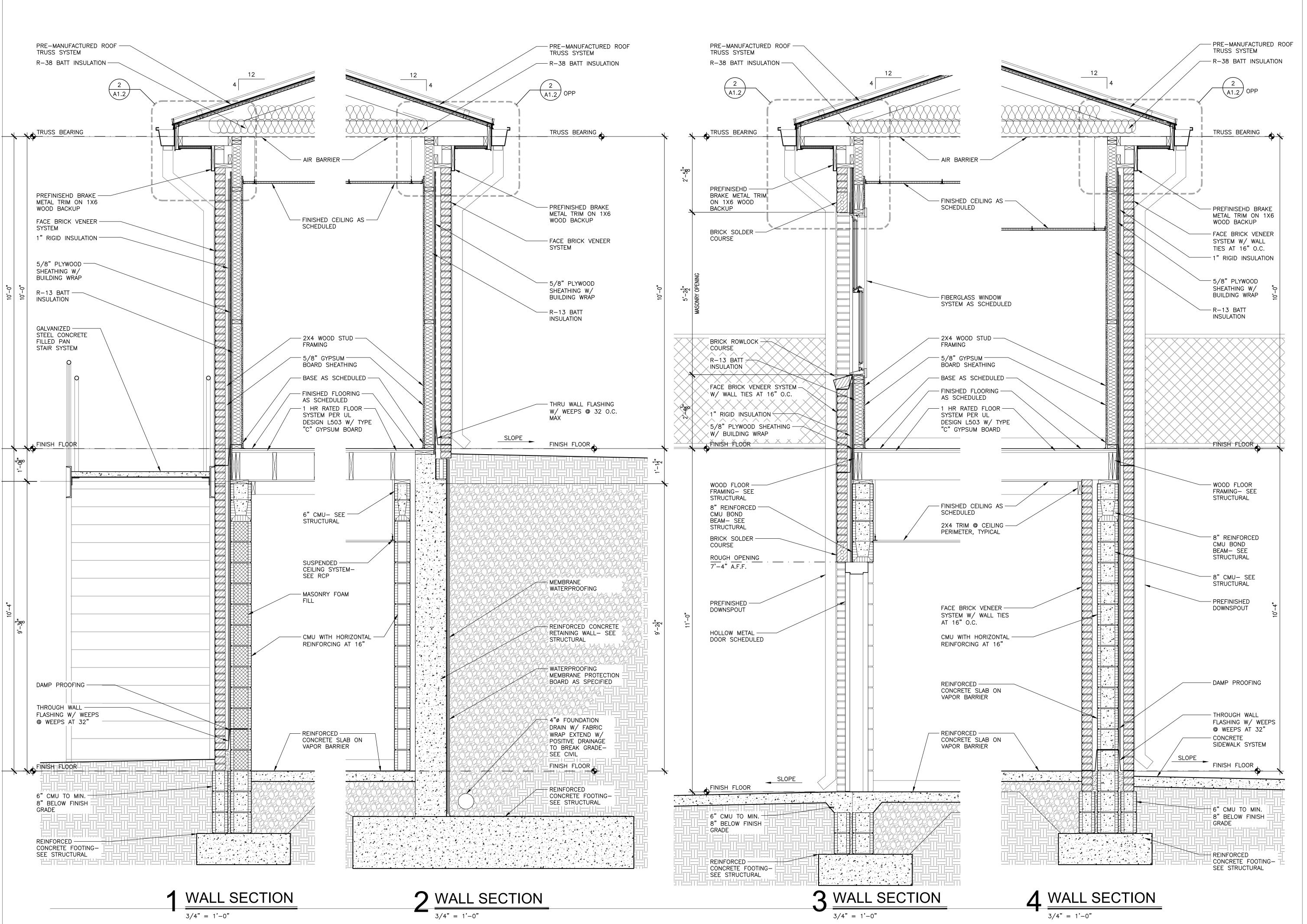
PROJ. MGR.: S. CALMA
DRAWN:
hdr
DATE: MAY 7, 2024
REVISIONS

JOB NO. 24-24

SHEET NO:

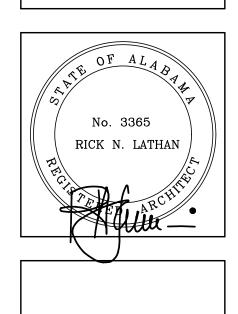
A3.1

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CONCESSIONS AND TOILET ROOM FACILITY FOR THE COLOR THE COLOR OF HAMILTON, AL SITY OF HAMILTON



SHEET TITLE:
WALL SECTIONS

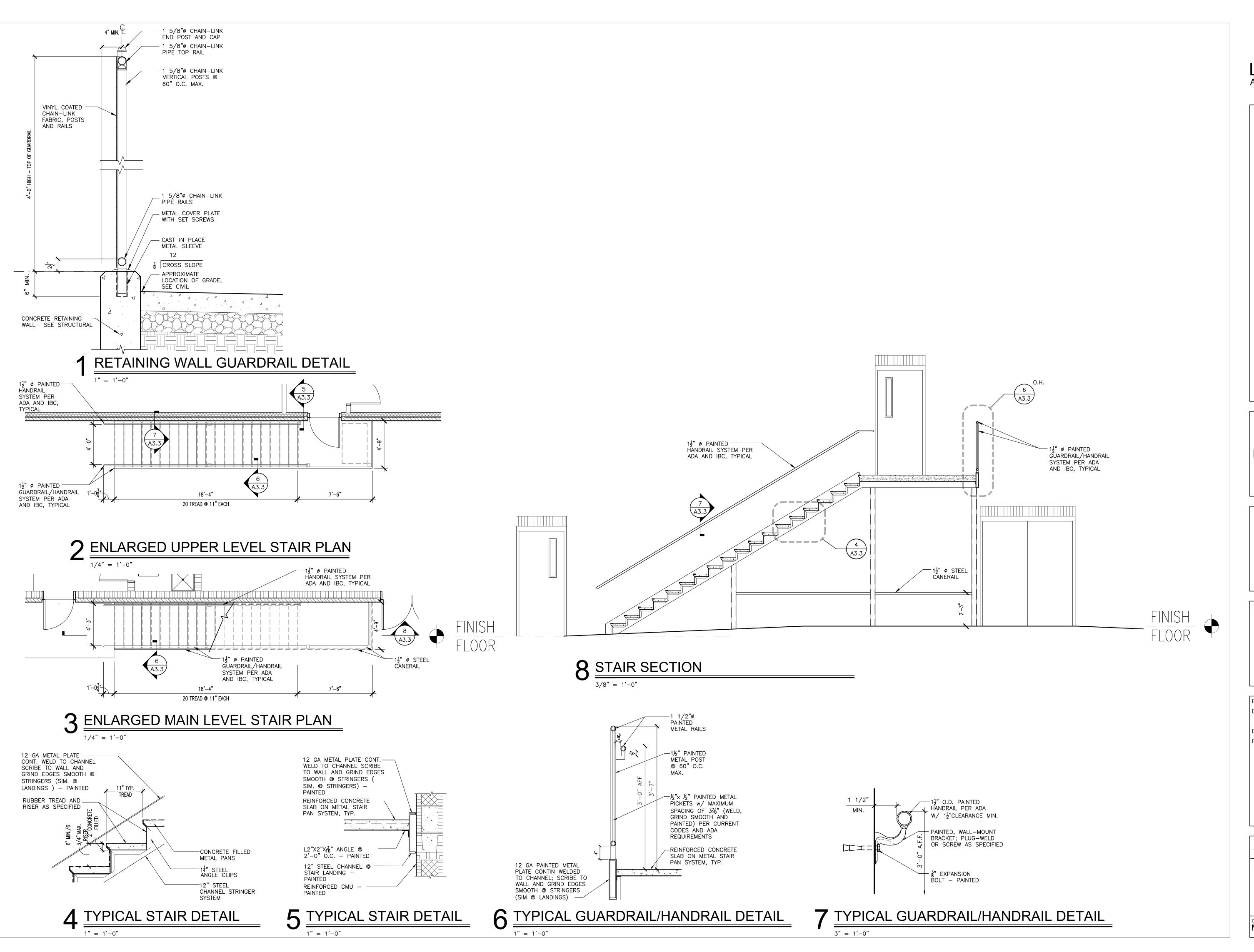
		5.	CALMA	
DRAWN	1:			
hdr				
DATE:	MAY	7,	2024	
REVISI	ONS			

JOB NO. 24-24

SHEET NO:

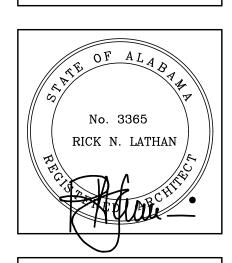
A3.2

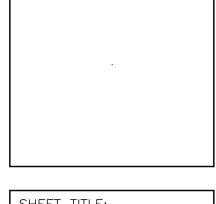
5 OF 13





ICESSIONS AND TOILET ROOM FACILITY FOR THE TY OF HAMILTON





SHEET TITLE:
ENLARGED STAIR PLANS,
SECTIONS, AND DETAILS

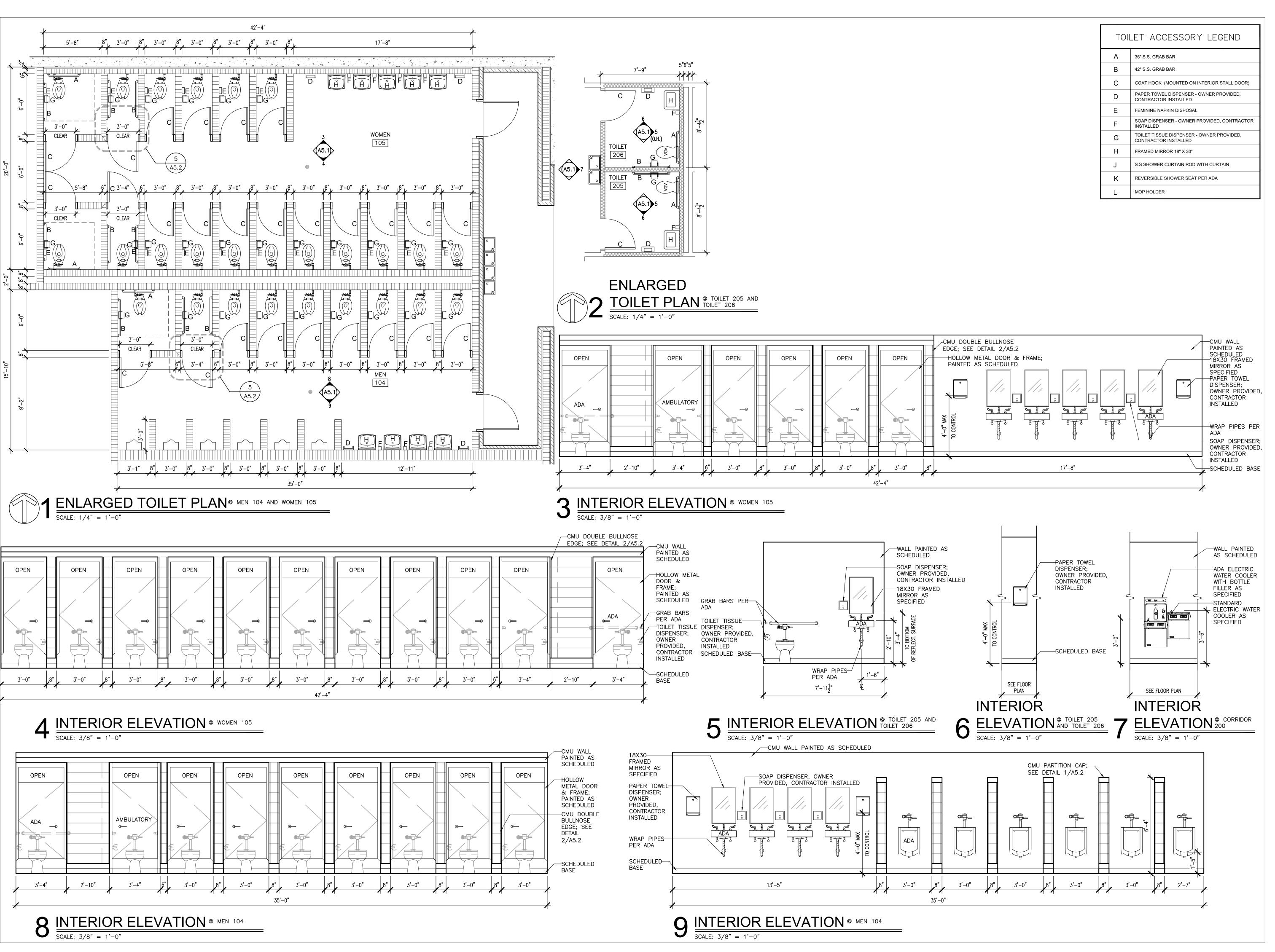
PROJ.	MGR.: S. CALMA	
DRAWN	l :	
hdr		
DATE:	MAY 7, 2024	
REVISI	ONS	

JOB NO. 24-24

SHEET NO:

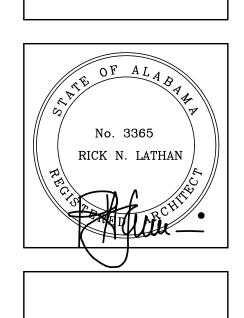
A3.3

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SIONS AND TOILET ROOM FACILITY FOR THE OF HAMILTON



SHEET TITLE:
ENLARGED TOILET PLANS,
INTERIOR ELEVATIONS

PROJ. MGR.: S. CALMA
DRAWN: K. JOINER

hdr

DATE: MAY 7, 2024

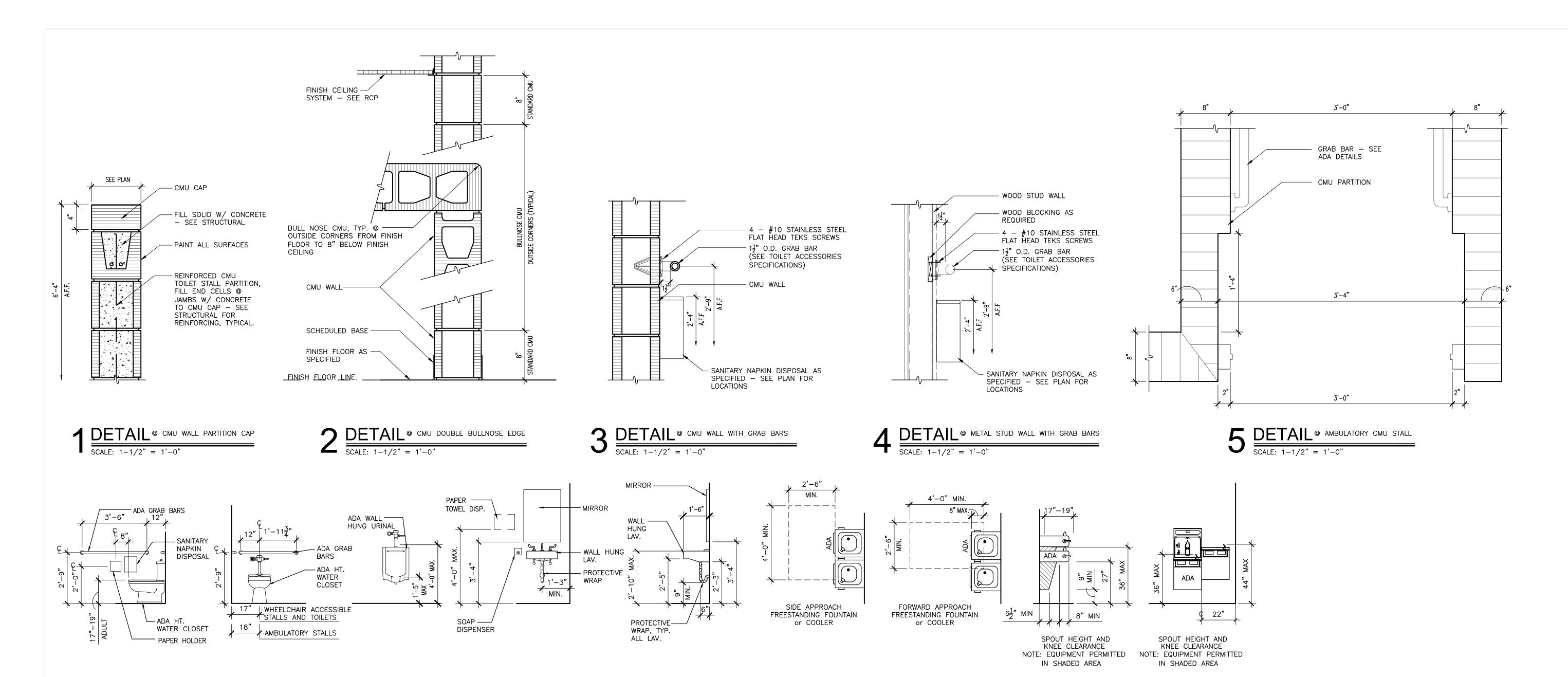
REVISIONS

JOB NO. 24-24

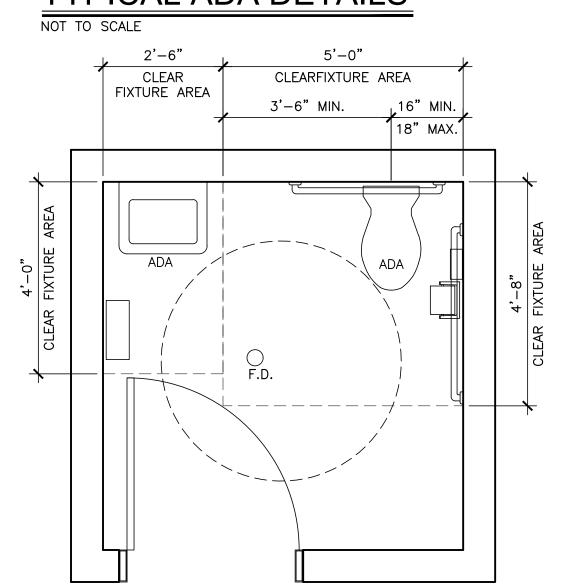
SHEET NO:

A5.1

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TYPICAL ADA DETAILS



DOOR AND 60" TURNAROUND RADIUS MAY OVERLAP.
 DOOR AND CLEAR FIXTURE AREAS MAY NOT OVERLAP.
 FIXTURE AREA FOR DIFFERENT FIXTURES MAY NOT OVERLAP.
 IN A GROUP TOILET WITH CMU PARTITION THE ADA TOILET MUST BE 5'-6" X 5'-6" MIN. OR THEIR MUST BE A 9" TOE SPACE PROVIDED AT THE PARTITIONS.

TYPICAL ADA DETAIL

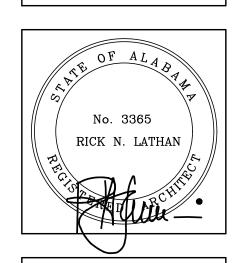
SCALE: 1/2" = 1'-0"

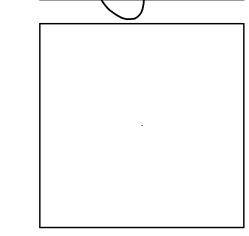


CONCESSIONS AND TOILET ROOM FACILITY FOR THE

CITY OF HAMILTON

CITY OF HAMILTON





SHEET TITLE:
DETAILS

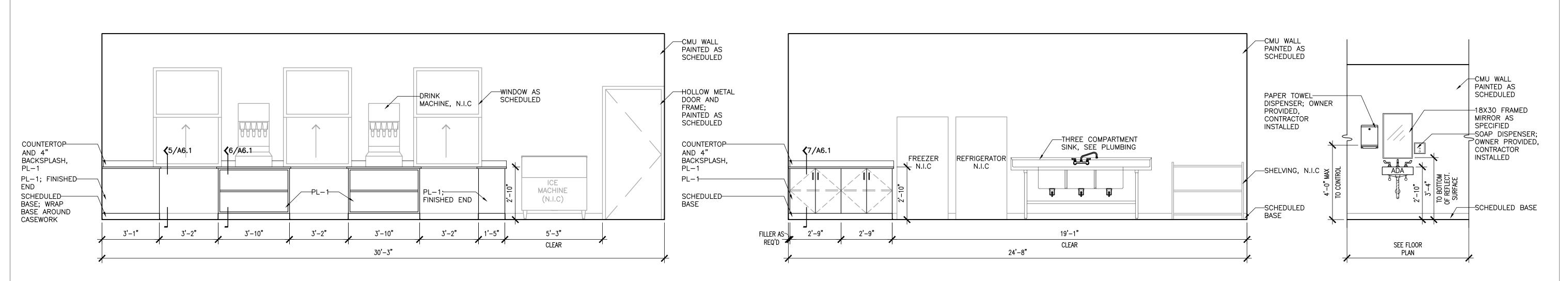
PROJ. MGR.: S. CALMA	— 4
DRAWN: K. JOINER	
hdr	
DATE: MAY 7, 2024	
REVISIONS	

JOB NO. **24-24**SHEET NO:

A5.2

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1" 2"



1 INTERIOR ELEVATION® CONCESSIONS 102

INTERIOR ELEVATION® JANITOR 102A

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

2 INTERIOR ELEVATION® CONCESSIONS 102

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

3 INTERIOR ELEVATION® CONCESSIONS 102

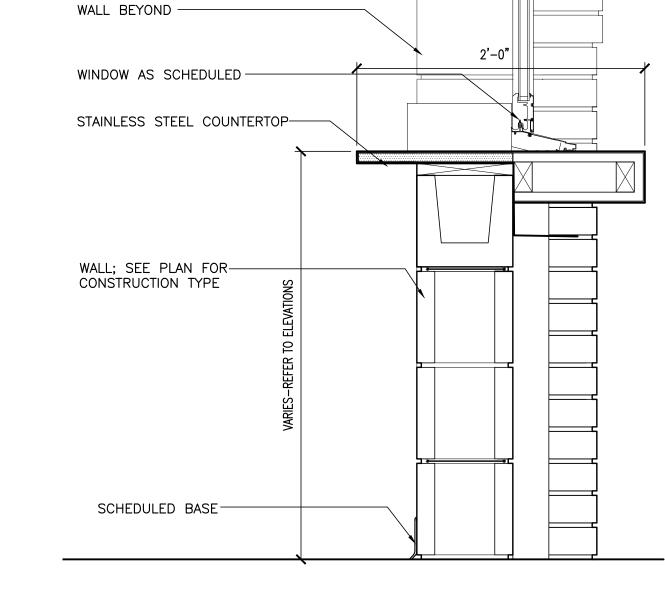
SCALE: 3/8" = 1'-0"

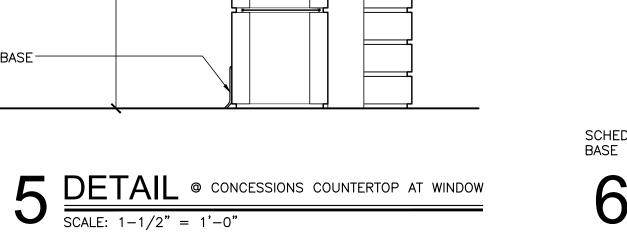
CMU WALL
PAINTED AS
SCHEDULED

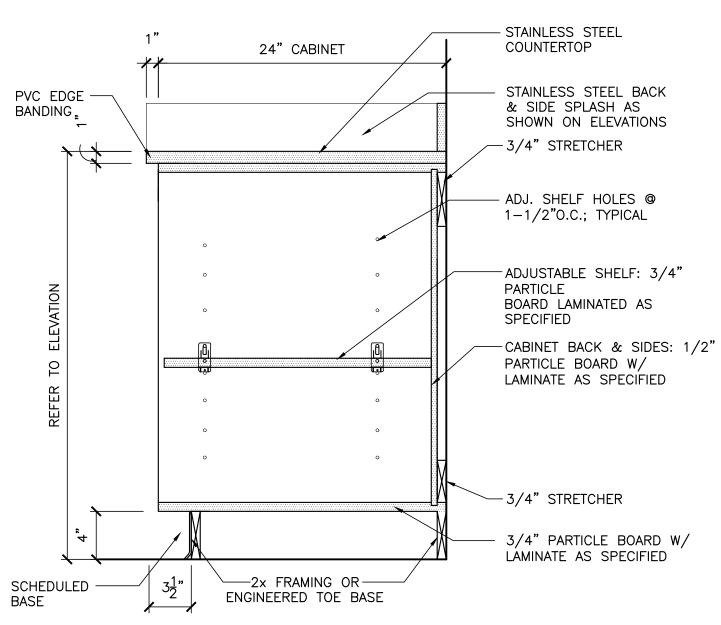
FRP-1
BEHIND JANITOR
SINK

MOP SINK AS
SPECIFIED, SEE
PLUMBING

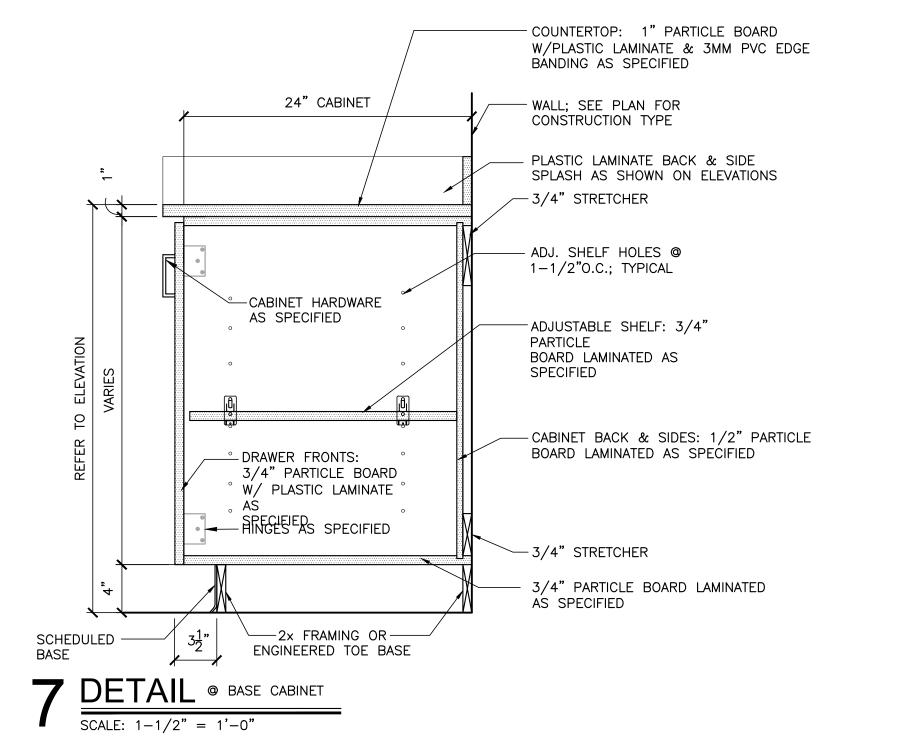
2'-0"
SEE
FLOOR PLAN











SHEET TITLE:
INTERIOR ELEVATIONS AND
DETAILS

LATHAN ARCHITECTS

AMIL.

T AND

RE OF ALABA

No. 3365

RICK N. LATHAN

PROJ. MGR.: S. CALMA
DRAWN: K. JOINER

hdr

DATE: MAY 7, 2024

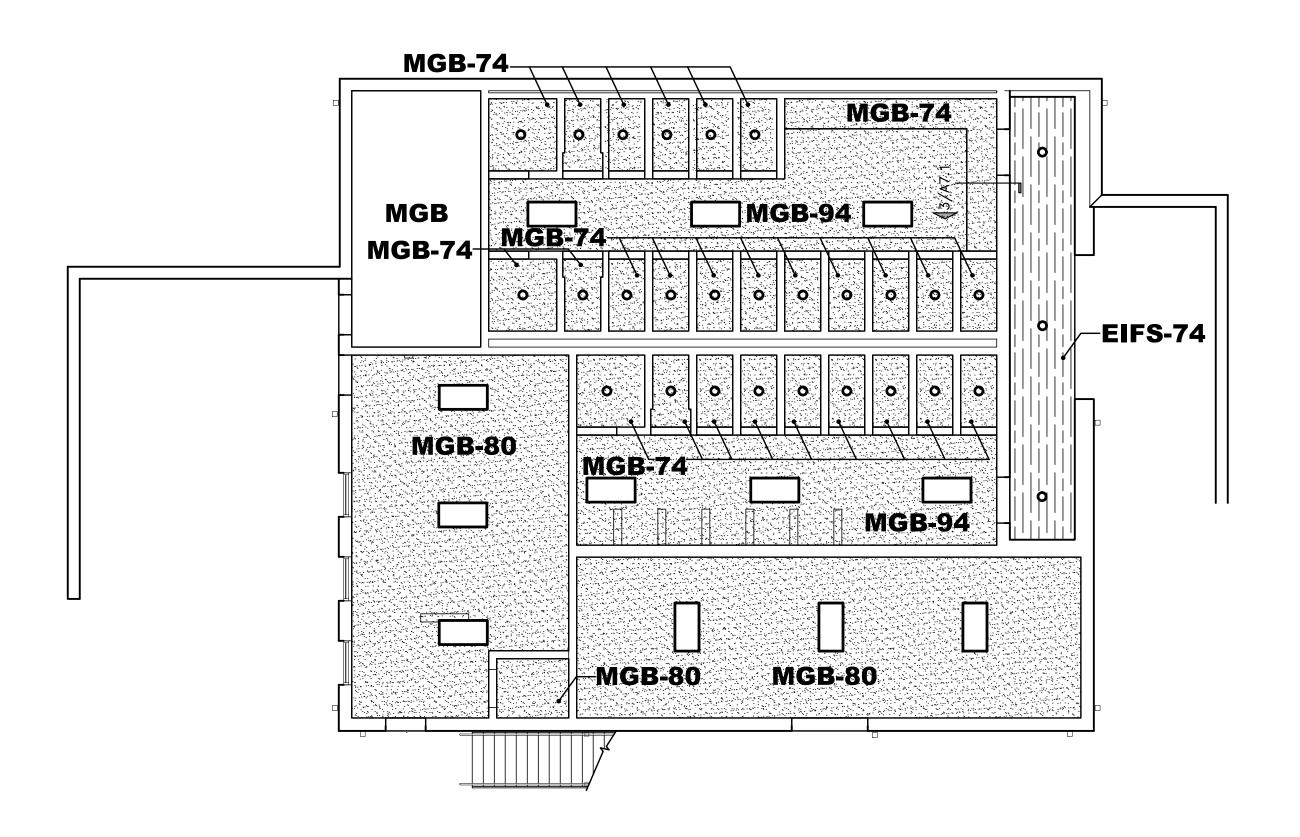
REVISIONS

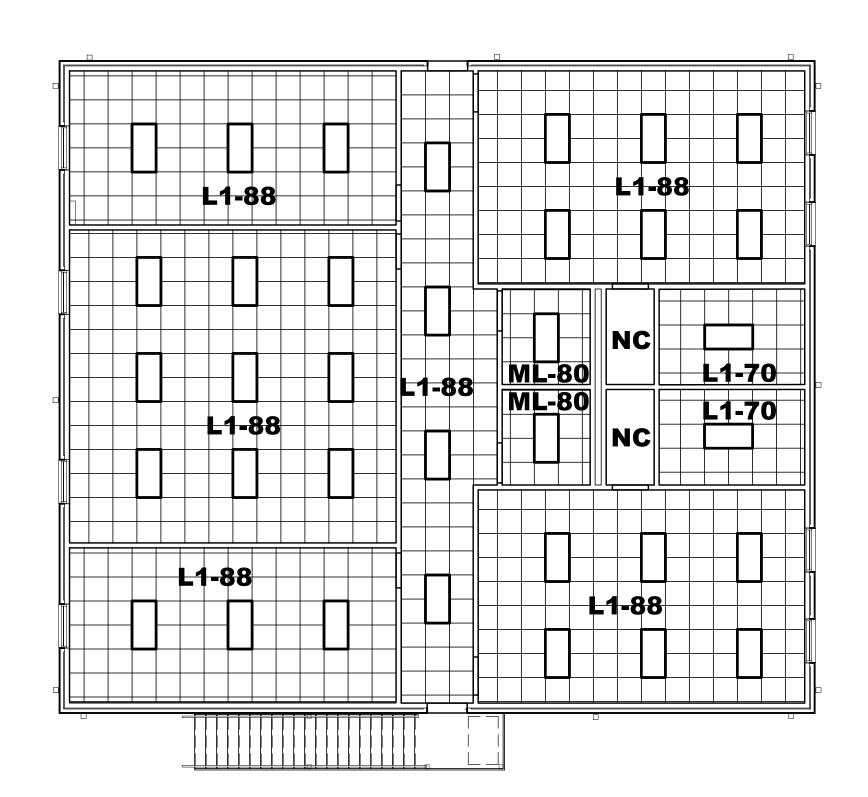
JOB NO. 24-24

SHEET NO:

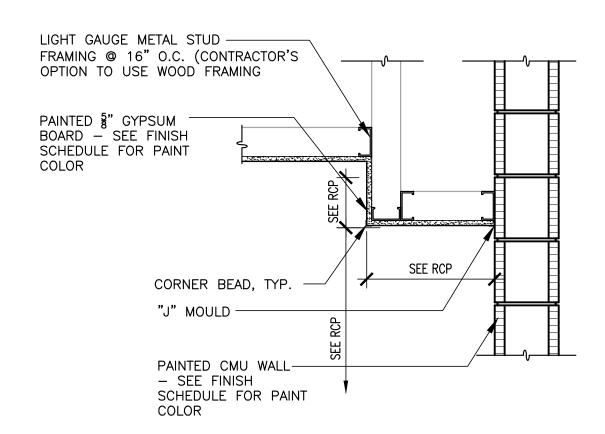
A6.1

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3 DETAIL® GYPSUM SOFFIT AT GYPSUM CEILING

SCALE: 1" = 1'-0"

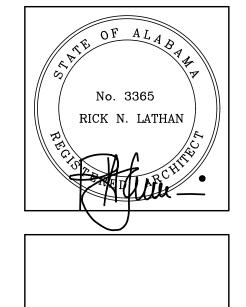


CEILING LEGEND	1
FIXTURE TYPES - SEE ELECTRICAL	
CEILING TYPE	CEILING HEIGHTS
NC - NO CEILING	70 = 7'-0" AFF
MGB - MOISTURE RESISTANT GYPSUM BOARD	74 = 7'-4" AFF
L1 - 2 x 2 LAY-IN ACOUSTIC CEILING TILE;	80 = 8'-0" AFF
SEE SPEC	88 = 8'-8" AFF
EIFS - EXTERIOR INSULATED FINISH SYSTEM	94 = 9'-4" AFF
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS CEILING L1-90 TYPE CEILING HEIGHT	

	CEILING NOTES
AFF = ABOVE	E FINISH FLOOR
ALL CEILING	HEIGHTS ARE FROM ADJACENT FINISHED FLOOR
W/ PLUMBIN	GHTS INDICATED ARE MINIMUM HEIGHTS. COORDINATE G, MECHANICAL, AND ELECTRICAL TO INSTALL B HIGH AS POSSIBLE.
	GRIDS ARE TO BE CENTERED IN ROOM UNLESS NOTED OTHERWISE
THAN 12" AT	-IN CEILING TILES CUT TO FIT AT ALL LOCATIONS LESS PERIMETER OF ROOM. WHERE 2x4 TILES OCCUR THEY CH SPECIFIED TILE AS INDICATED FOR EACH ROOM.
DRAWINGS A	E W/ PLUMBING, MECHANICAL AND PLUMBING AND PROVIDE FRAMING AS REQUIRED TO ATE MECHANICAL AND PLUMBING SYSTEMS
1" REVEAL S	HALL BE REQUIRED AT ALL AREAS WHERE GYPSUM



CESSIONS AND TOILET ROOM FACILITY FOR THE **TY OF HAMILTON** ILTON, AL OF HAMILTON



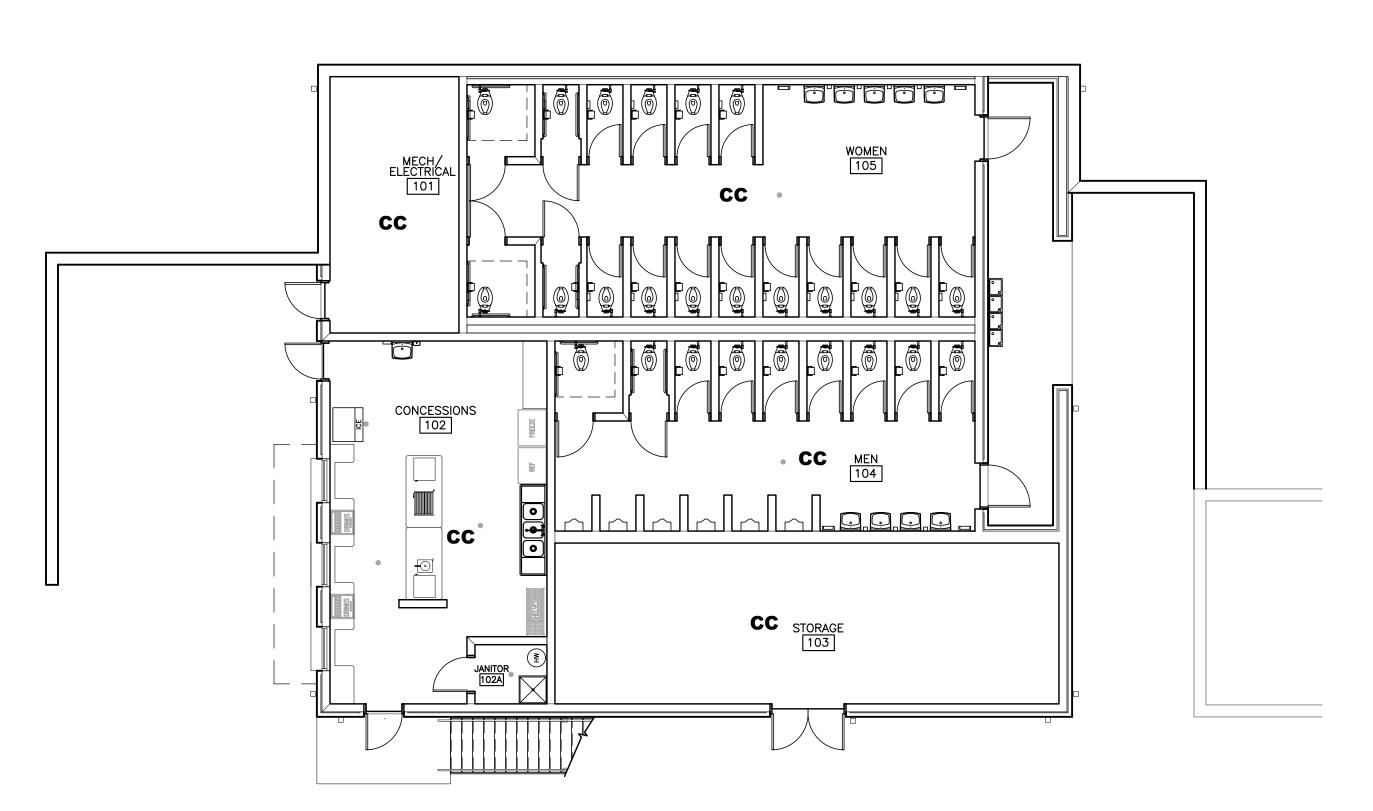
SHEET TITLE:
REFLECTED CEILING PLANS,
LEGEND, DETAIL AND NOTES

PRO	J. MGR.: S .	. CALMA
DRAV	WN: K. JO	INER
hdr		
DATE	: MAY 7,	, 2024
REVIS	SIONS	
	I	

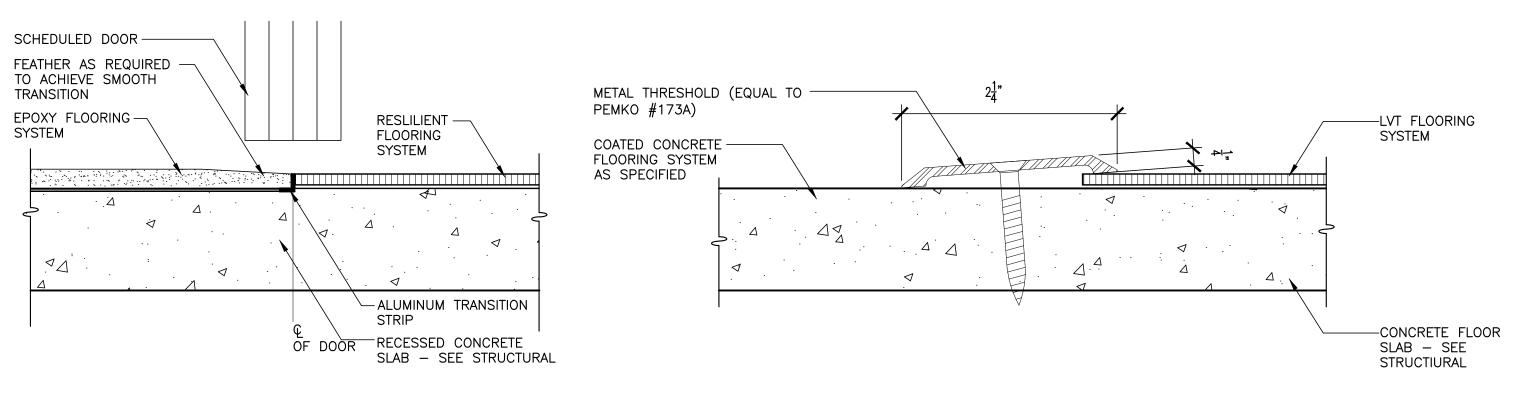
JOB NO. **24-24**SHEET NO:

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0 1" 2'







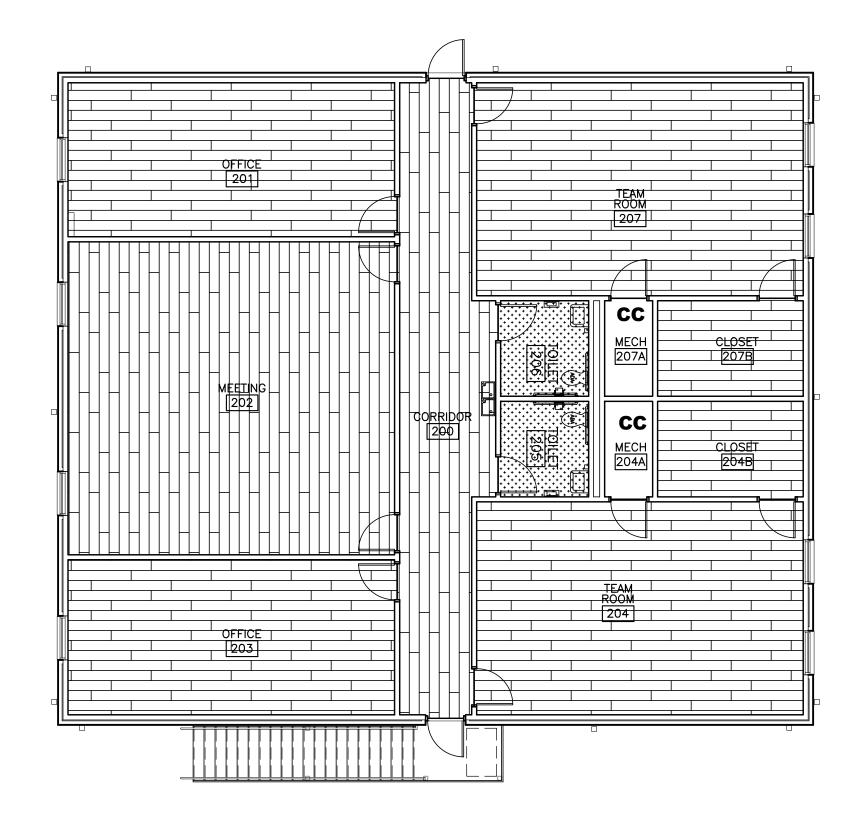


4 DETAIL @ CONCRETE TO LVT

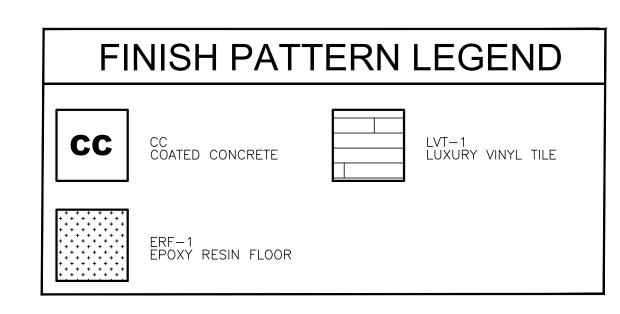
NOT TO SCALE

				FINI	SH S	SCHE	DULE					
ROOM NO.	ROOM NAME	FLOOR	BASE		WORK TOP	NORTH	WALL SOUTH		WEST	DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
FIRST	FLOOR											
101	MECHANICAL/ELECTRICAL	СС	NO BASE	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
102	CONCESSIONS	СС	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT ALL WET WALLS
102A	JANITOR	СС	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT ALL WET WALLS
103	STORAGE	СС	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	
104	MEN	СС	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT ALL WET WALLS
105	WOMEN	СС	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-3	EPOXY PAINT AT ALL WET WALLS
SECON	ND FLOOR											
200	CORRIDOR	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
201	OFFICE	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
202	MEETING	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
203	OFFICE	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
204	TEAM ROOM	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
204A	MECHANICAL	СС	NO BASE	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
204B	CLOSET	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
205	TOILET	ERF-1	ERB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT AT ALL WET WALLS
206	TOILET	ERF-1	ERB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT AT ALL WET WALLS
207	TEAM ROOM	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
207A	MECHANICAL	СС	NO BASE	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
207B	CLOSET	LVT-1	RB-1	-	-	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		

				PAINT	-		
BASE		1	_	ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION	PNT-1	SHERWIN WILLIAMS	COLOR:	GENERAL WALLS
RB-1	MANNINGTON	4" BURKE BASE COLOR:	SEE FINISH SCHEDULE	PNT-2	SHERWIN WILLIAMS	COLOR:	GENERAL TRIM
				PNT-3	SHERWIN WILLIAMS	COLOR: CEILING BRIGHT WHITE SW7007	GENERAL CEILING AND SOFFIT
ERB-1	MATCH TO ERF-1	MATCH TO ERF-1	SEE FINISH SCHEDULE	CONC	RETE		
_UXU	RY VINYL TILE	Ξ		ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION	СС	SHERWIN WILLIAMS	SEE SPEC	SEE FINISH FLOOR PLAN
		COLLECTION: LEVEL SET — NATURAL WOOD GRAINS	SEE FINISH FLOOR PLAN	EPOXY			
		=*		ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
				ERF-1	TORGINOL	COLLECTION: COLOR FLAKES COLOR: CUSTOM COLOR – 4 COLOR MAX SIZE: 1/4" SCALE	SEE FINISH FLOOR PLAN
FINIS	H ABBREVIAT	TION LEGEND		FINISH	NOTES	•	
AP ACOUSTIC PANEL BFC BROOM FINISHED CONCRETE CO						IT -1 UNLESS NOTED OTHERWIS CATED IN WET AREAS SHALL HA	



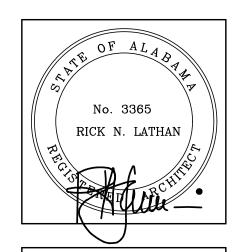


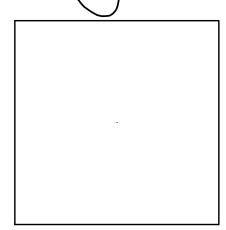




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SHEET TITLE:
FINISH FLOOR PLANS,
LEGENDS, DETAILS, AND
SCHEDULE

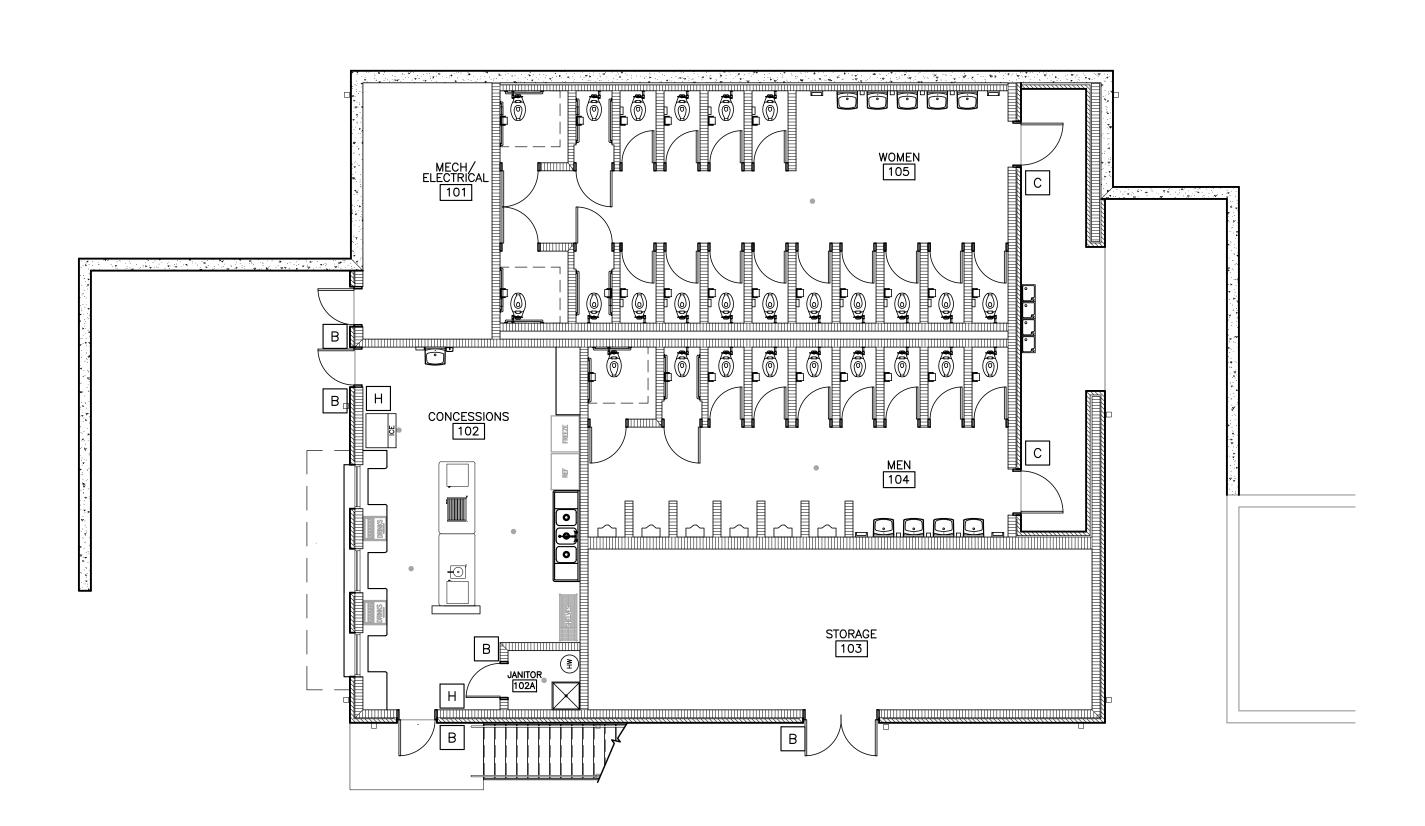
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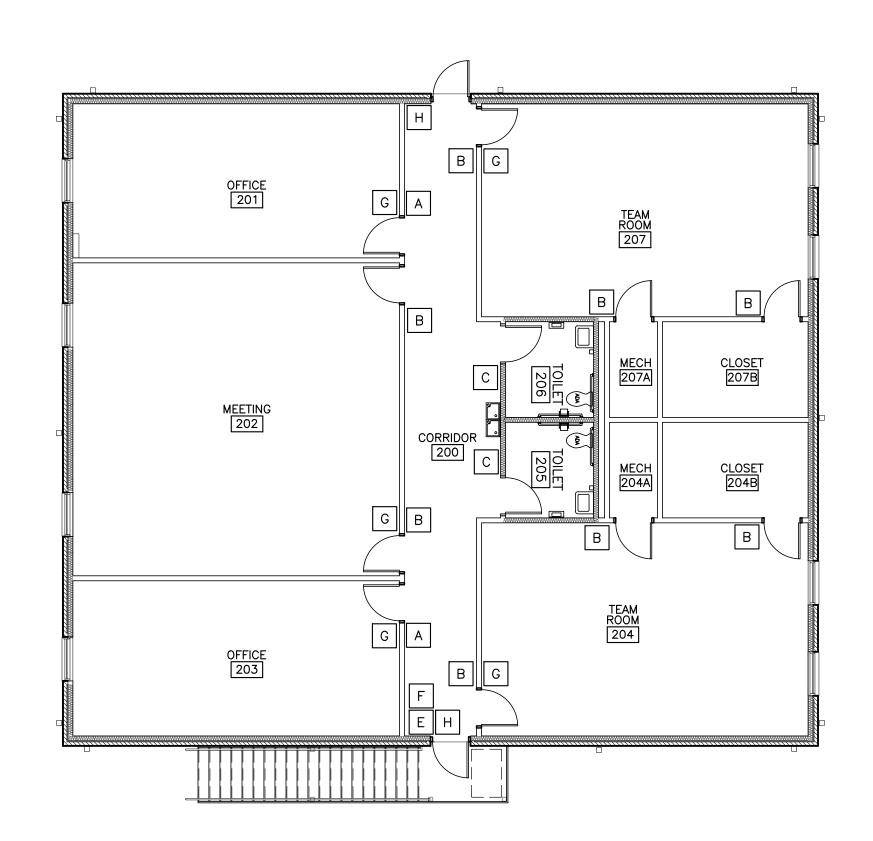
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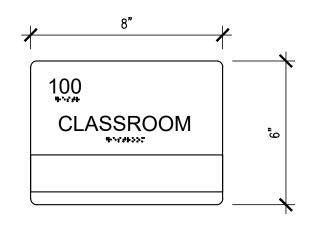
12 OF 13



FIRST FLOOR

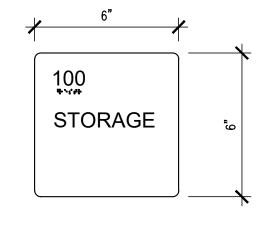






INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



ROOM SIGNAGE PLAN

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

INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



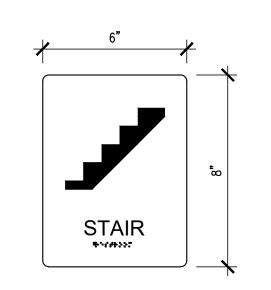
INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3'' = 1'-0''



INTERIOR SIGNAGE (SIGN TYPE - D)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - E)

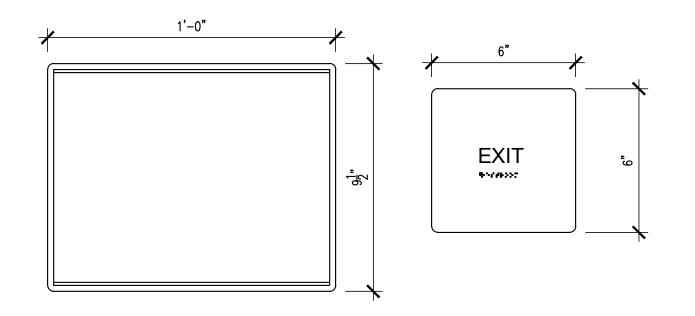
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INTERIOR SIGNAGE

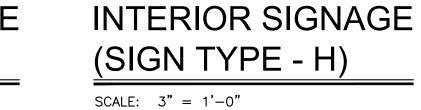
(SIGN TYPE - F)

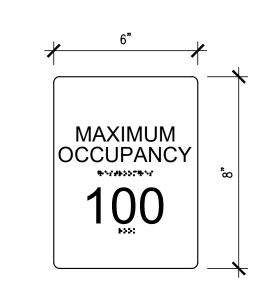
SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - G)

SCALE: 3" = 1'-0"



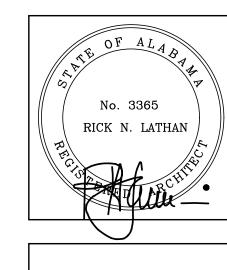


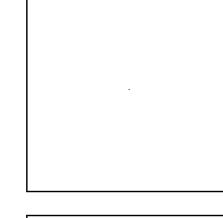
INTERIOR SIGNAGE (SIGN - TYPE J) SCALE: 3" = 1'-0"

INT	ERIOR SIGNAGE LEGEND				
Α	SIGN WITH MESSAGE STRIP (OFFICES/CLASSROOM/INSTRUCTIONAL AREA)				
В	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC)				
С	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE				
D	ELEVATOR SIGNAGE WITH PICTOGRAM/BRAILLE				
Ε	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)				



CONCESSIONS AND TOILET ROOM FACILITY FOR THE CONCESSIONS AND TOILET ROOM FACILITY FOR THE CONCESSION, ALLES TO BE HAMILTON.





SHEET TITLE:
ROOM SIGNAGE PLANS,
LEGEND, AND DETAILS

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DATE: MAY 7, 2024	DRAWN	√: K.	JOI	NER	
	hdr				
REVISIONS	DATE:	MAY	7,	2024	
	REVISI	ONS			

JOB NO. 24-24

SHEET NO:

A9.1

13 OF 13

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SHEET TITLE: GENERAL NOTES

PROJ. MGR.: DRAWN:

05/07/2024 DATE:

REVISIONS

JOB NO. **24-24**

SHEET NO:

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

D 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

E TIMBER: NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. AMERICAN FOREST AND PAPER ASSOCIATION (NDS 2018 & SDPWS 2015)

1.2 DESIGN GRAVITY LOADS (PSF):

C. ROOF LIVE LOADS:

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

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

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

FLOOR (REDUCIBLE)------100 STORAGE------125 STAIRS & EXITWAYS-----100

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

ROOF-----20

THERMAL FACTOR (Ct)-----1.0

D ROOF SNOW LOADS: GROUND SNOW LOAD (Pq)-----5.0 IMPORTANCE FACTOR (I)-----1.1 EXPOSURE FACTOR (Ce)-----1.0

1.3 DESIGN LATERAL LOADS:

A. WIND LOADS: ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)-----112MPH NOMINAL WIND SPEED (3-SECOND GUST)-----90MPH RISK CATEGORY-----II WIND IMPORTANCE FACTOR (I)-----1.00 WIND EXPOSURE CATEGORY-----C ENCLOSURE CATEGORY-----ENCLOSED INTERNAL PRESSURE COEFFICIENTS----- +/- 0.18

SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS B. SEISMIC LOADS: OCCUPANCY CATEGORY II SEISMIC IMPORTANCE FACTOR-----1.25 MAPPED SPECTRAL RESPONSE ACCELERATIONS: SITE CLASS-----D SPECTRAL RESPONSE COEFFICIENTS: SEISMIC DESIGN CATEGORY-----D BASIC SEISMIC-FORCE-RESISTING SYSTEM: INTERMEDIATE REINFORCED MASONRY SHEAR WALLS DESIGN BASE SHEAR:

SEISMIC RESPONSE COEFFICIENT, Cs------0.0851 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 A GEOTECHNICAL ENGINEER, EMPLOYED BY THE GENERAL CONTRACTOR, SHALL PROVIDE COMPACTED FILL REQUIREMENTS FOR THE BUILDING PAD AND REVIEW THE FOUNDATION BEARING SURFACE TO VERIFY THE ASSUMED ALLOWABLE BEARING PRESSURE AND SEISMIC SITE CLASS NOTED. DO NOT PLACE CONCRETE PRIOR TO GEOTECHNICAL ENGINEER'S APPROVAL

3.2 ASSUMED MAXIMUM ALLOWABLE BEARING PRESSURES (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.

CONTINUOUS WALL FOOTINGS-----2000

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"

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

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

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

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

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

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

4.0 CONCRETE

4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

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

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

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:

FO: CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES AND PROTECTED FROM

CO: 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 PEDESTALS-----1-1/2" CLEAR OF TIES COLUMNS-----1-1/2" CLEAR OF TIES 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 BEAMS-----1-1/2" CLEAR OF STIRRUPS

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 PEDESTAL, COLUMN AND WALL VERTICAL REINFORCING: DOWEL TO FOUNDATION WITH HOOKED BARS OF SAME SIZE AND SPACING AS VERTICAL REINFORCING.

4.13 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.

4.14 EARTH SUPPORTED SLABS:

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

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.

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

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

4.17 CAST IN PLACE ALL SLEEVES AND INSERTS.

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

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

5.0 STRUCTURAL STEEL

5.1 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 OMS CERTIFICATION (BU).

5.2 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.

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

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

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

5.4 THREADED AND PLAIN STEEL RODS: ASTM A36

5.5 HIGH STRENGTH THREADED RODS: ASTM A193 B7

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

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

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

5.8 CONNECTIONS:

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

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

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

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

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

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

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

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

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

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

5.13 STEEL STAIRS AND ASSOCIATED EMBEDS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST THE PROJECT DESIGN LOADS INDICATED ABOVE, BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. STAIRS SHALL BE DESIGNED IN ACCORDANCE WITH THE NAAMM METAL STAIR MANUAL AND AISC, AND AS LISTED BELOW. CALCULATIONS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE

A. STAIR FRAMING SHALL BE CAPABLE OF WITHSTANDING STRESSES RESULTING FROM

INCLUDED WITH THE STAIR SHOP DRAWINGS.

RAILING LOADS IN ADDITION TO LOADS SPECIFIED ABOVE. B. LIMIT DEFLECTION OF TREADS, PLATFORMS, AND FRAMING MEMBERS TO L/360 OR 1/4 INCH, WHICHEVER IS LESS.

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5.14 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.

C. DESIGN OF STAIR FRAMING SHALL ALSO COMPLY WITH AISC'S "STEEL DESIGN

- 6.2 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.
- 6.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (f'm) SHALL BE 2000 PSI AT 28 DAYS.
- 6.4 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.
- 6.5 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.
- 6.6 ALL MASONRY SHALL BE NORMAL WEIGHT IN ACCORDANCE WITH ASTM C90.
- 6.7 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	М
	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
۱LL	MASONRY SHALL BE RUNNING BOND, UNLESS NOTED.	

- 6.9 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR
- 6.10 MASONRY REINFORCING LAP SPLICE LENGTHS PER SCHEDULE, SEE MASONRY LAP SPLICE LENGTHS TYPICAL DETAIL.
- 6.11 THE CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS OF THE CMU REINFORCEMENT.
- A. SHOP DRAWINGS SHALL INCLUDE AN ELEVATION VIEW OF EACH REINFORCED (LOAD BEARING OR NON-LOAD BEARING) WALL WITH ALL VERTICAL AND HORIZONTAL REINFORCING AS WELL AS WALL OPENINGS/PENETRATIONS SHOWN. REINFORCING SHOP DRAWINGS NOT CONTAINING THESE ELEVATION DRAWINGS WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL.
- B. SHOP DRAWINGS SHALL UNDERGO A QUALITY REVIEW BY THE REBAR DETAILER & SUPERVISOR, AS WELL AS THE CONTRACTOR. SUBMITTALS SHALL INCLUDE ALL OPENINGS, REINFORCING, AND ELEVATIONS NOTED. SUBMITTALS REVIEWED MORE THAN A 2ND TIME MAY RESULT IN DELAYS TO THE CONTRACTOR, ANY ADDITIONAL TIME REQUIRED TO REVIEW A SUBMITTAL FOR A 3RD OR MORE TIME WILL BE BILLED TO THE CONTRACTOR AS ADDITIONAL SERVICES.
- C. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A REBAR DETAILER CAPABLE OF HAVING THE SAME TEAM OF DETAILERS THROUGHOUT THE PROJECT. A LETTER WITH A LIST OF THE DETAILERS AND THE QUALITY SUPERVISOR AND THEIR INITIALS SHALL BE SUBMITTED BEFORE ANY SHOP DRAWINGS HAVE BEEN SUBMITTED. THE INITIALS OF THE DETAILS AND THE QUALITY SUPERVISOR SHALL BE NOTED ON EACH SHOP DRAWINGS.
- 6.12 MODIFY CMU BLOCKS AS REQUIRED TO INSTALL REINFORCING AS NOTED/SHOWN.
- 6.13 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.
- 6.14 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.
- 6.15 WHEN REINFORCING IS SPECIFIED. PROVIDE REINFORCING AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.
- 6.16 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.
- 6.17 AT CMU PARTITIONS OVER 8'-0" TALL, SUPPORTED BY SLAB ON GRADE, PROVIDE THICKENED SLAB PER TYPICAL DETAILS.
- 6.18 WHERE ANY CMU WALL IS NOT SUPPORTED AT THE TOP, PROVIDE MINIMUM #5@16 VERTICAL REINFORCING, UNLESS NOTED OTHERWISE.
- 6.19 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.
- 6.20 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".
- 6.21 PROVIDE DOVETAIL ANCHORS AT 16" O.C., UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.
- 6.22 PROVIDE GROUT FILLED LINTEL BLOCKS AT TOP OF ALL CMU WALLS REINFORCED WITH 2#4 BARS CONTINUOUS, UNLESS NOTED OTHERWISE.
- 6.23 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.
- 6.24 WHERE MASONRY WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

- 6.25 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
- 6.26 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
- 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".
- 6.27 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.

7.0 WOOD CONSTRUCTION

- 7.1 ALL SAWN LUMBER IN CONTACT WITH SOIL, MASONRY OR CONCRETE, OR EXPOSED TO WEATHER TO HAVE A PRESERVATIVE PRESSURE TREATMENT IN ACCORDANCE WITH AMERICAN WOOD PROTECTION ASSOCIATIONS (AWPA) STANDARD U1 (CURRENT EDITION).
- 7.2 CUT ENDS OR ALL TREATED LUMBER SHALL BE FIELD TREATED WITH AN APPROVED PRESERVATIVE IN ACCORDANCE WITH THE TREATMENT MANUFACTURERS INSTRUCTIONS AND AWPA STANDARD M4-08.
- 7.3 ALL LUMBER SHALL BE KILN DRIED TO A MAXIMUM MOISTURE CONTENT OF 19 PERCENT, INCLUDING PRESERVATIVE TREATED LUMBER.
- 7.4 ALL SCREWS, BOLTS, AND NAILS FOR USE WITH PRESERVATIVE TREATED WOOD SHALL BE HOT-DIPPED ZINC-COATED GALVANIZED STEEL OR STAINLESS STEEL. FASTENERS TO BE HOT-DIPPED GALVANIZED SHALL MEET THE REQUIREMENTS OF ASTM A 153, CLASS D FOR 3/8" DIAMETER OR SMALLER AND CLASS C FOR FASTENERS WITH DAIMETERS OVER 3/8".
- 7.5 FASTENERS OTHER THAN NAILS AND TIMBER RIVETS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55, MINIMUM.
- 7.6 METAL CONNECTORS SHOWN IN DOCUMENTS ARE SIMPSON STRONG TIE CONNECTORS. SUBSTITUTION WITH EQUAL CONNECTORS BY OTHER MANUFACTURERS IS ACCEPTABLE.
- 7.7 ALL HARDWARE (JOIST HANGERS, ETC.) SHALL BE GALVANIZED OR SHALL BE STAINLESS STEEL. HARDWARE TO BE HOT-DIPPED PRIOR TO FABRICATION SHALL MEET ASTM A 653, G-185 COATING. HARDWARE TO BE HOT-DIPPED AFTER FABRICATION SHALL MEET ASTM A 123.
- 7.8 FASTENER AND HARDWARE SELECTION: HOT-DIPPED GALVANIZED MATERIAL SHALL NOT BE USED IN CONTACT WITH STAINLESS STEEL MATERIAL.
- 7.9 ALL NAIL SIZES INDICATED IN DOCUMENTS ARE BASED ON COMMON WIRE NAILS. SUBSTITUTION OF DIFFERENT STYLE NAILS IS ACCEPTABLE BASED ON ACTUAL DIAMETER ONLY.
- 7.10 WOOD STUDS FOR WALLS: 2x4 #2 SPRUCE-PINE-FIR OR SOUTHERN YELLOW PINE
- 7.11 WOOD HORIZONTAL FRAMING MEMBERS: #2 SOUTHERN PINE UNLESS NOTED.
- 7.12 WOOD SILL PLATES (NON-SHEAR WALLS), UNLESS NOTED: ALL WOOD SILL PLATES TO BE ANCHORED TO CONCRETE FOUNDATION WITH 5/8" DIAMETER X 7" EMBED ANCHOR BOLTS AT 6'-0" MAX SPACING OR 1/4"X3 1/4" TITEN SCREWS AT 32" MAX SPACING.
- 7.13 DESIGN, FABRICATE AND ERECT WOOD TRUSSES IN ACCORDANCE WITH THE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES" OF THE TRUSS PLATE INSTITUTE. TRUSS ERECTION PLANS AND CALCULATIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE REVIEW OF THE STRUCTURAL ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- 7.14 FLOOR JOISTS AND BEAMS SHALL BE LATERALLY BRACED AT MAXIMUM INTERVALS OF 8'-0" BY SOLID BRIDGING OR TRANSVERSE BEAMS AND THE ENDS AT POINTS OF BEARING SHALL BE LATERALLY SUPPORTED TO PREVENT ROTATION.
- 7.15 TRUSS MANUFACTURER SHALL DESIGN FOR THE FOLLOWING SUPERIMPOSED LOADS:

Α.	ROOF TOP CHORD DEAD LOAD10 PSF
В.	ROOF BOTTOM CHORD DEAD LOAD10 PSF
С.	ROOF TOP CHORD LIVE LOAD20 PSF
D.	ROOF BOTTOM CHORD LIVE LOAD250 LBS
	(CONCENTRATED LOAD AT ANY LOCATION ALONG BOTTOM CHORD)

- 7.16 DESIGN OF ACTUAL WOOD TRUSS WEB CONFIGURATION TO BE DETERMINED BY TRUSS MANUFACTURER.
- 7.17 DESIGN WOOD TRUSSES TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENT AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.
- 7.18 IN ADDITION TO THE ABOVE LOADS, WOOD TRUSSES SHALL BE DESIGNED FOR CONCENTRATED LOADS HUNG FROM OR SUPPORTED ON 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. MAXIMUM LOAD IS 200 LBS PER CONNECTION ACCORDING TO NOTE BELOW. SUBCONTRACTOR SHALL PROVIDE HANGER SPACINGS TO NOT EXCEED 200 LBS LOAD TO TRUSS.
- 7.19 ALL TRUSS TO TRUSS CONNECTIONS SHALL BE DESIGNED BY THE TRUSS MANUFACTURER FOR THE LOADS INDICATED.
- 7.20 ALL TEMPORARY AND PERMANENT BRACING MEMBERS AND CONNECTIONS REQUIRED FOR WOOD TRUSSES SHALL BE DESIGNED AND DETAILED ON THE WOOD TRUSS MANUFACTURER'S ERECTION PLANS. BRACING MEMBERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR ACCORDING TO THE TRUSS MANUFACTURER'S ERECTION PLANS AND "GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING, AND BRACING OF METAL PLATE CONNECTED WOOD TRUSSES" BY BCSI, LATEST EDITION.
- 7.21 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.
- 7.22 ROOF SHEATHING: 3/4" PLYWOOD, APA RATED SHEATHING EXPOSURE 1, WITH PLY CLIPS AT ALL UNSUPPORTED EDGES. PANEL IDENTIFICATION INDEX 48/24.LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS.

GENERAL NOTES CONTINUED

- 7.23 ROOF SHEATHING NAILING, UNLESS NOTED: 10d NAILS AT 6 INCHES AT ALL FOUR PANEL EDGES AND 12 INCHES AT INTERMEDIATE SUPPORTS.
 - 7.24 WOOD PANEL SHEAR WALLS: 15/32" OSB, UNLESS NOTED, APA RATED SHEATHING EXPOSURE 1. LONG DIMENSION OF PANEL PARALLEL TO STUDS. ALL OSB EDGES SHALL BE BACKED WITH TWO-INCH NOMINAL OR WIDER FRAMING.
- 7.25 WOOD PANEL SHEAR WALL NAILING, SEE TYPICAL DETAIL.
- 7.26 WINDOW AND DOOR HEADERS ARE TO BE (2) 2x10 OR (3) 2x8 UNLESS NOTED.
- 7.27 METAL CONNECTORS SHOWN IN DOCUMENTS ARE SIMPSON STRONG TIE CONNECTORS. SUBSTITUTION WITH EQUAL CONNECTORS BY OTHER MANUFACTURERS IS ACCEPTABLE.
- 7.28 BUILT UP BEAMS: NAIL INDIVIDUAL PLIES TOGETHER WITH TWO ROWS OF 10d NAILS
- 7.29 FLOOR SHEATHING: 3/4" OSB OR PLYWOOD APA STRUCTURAL I RATED SHEATHING EXPOSURE I, TONGUE AND GROOVE EDGES. PANEL IDENTIFICATION INDEX 48/24. LONG DIMENSION OF PANEL PERPENDICULAR TO SUPPORTS. GLUE AND NAIL TO INCHES AT INTERMEDIATE SUPPORTS. AT CORRIDOR AREAS, USE AVANTECH+ VIP SHEATHING.
- 7.30 OSB, PLYWOOD, GYPSUM SHEATHING AND WALLBOARD, NOT PART OF SHEAR WALLS, SHALL BE ATTACHED TO STUDS IN ACCORDANCE WITH "TABLE 2304.9.1- FASTENING SCHEDULE" OF THE INTERNATIONAL BUILDING CODE.
- 7.31 AT A MINIMUM, ALL WOOD FRAMING CONNECTIONS TO COMPLY WITH "TABLE 2304.9.1-
- 7.32 VERTICAL STUDS INTERRUPTED BY WALL OPENINGS SHALL BE LOCATED EQUALLY ON EACH SIDE OF THE OPENING. SIMILAR STUDS SHALL BE LOCATED BETWEEN THE DOUBLE TOP PLATE AND BOTTOM PLATE AT THE FLOOR FRAMING LEVEL.

- A. CLEARANCE HOLE FOR SHANK WILL BE SAME DIAMETER AS SHANK AND HAVE THE
- B. LEAD HOLE FOR THREADED PORTION SHALL HAVE A DIAMETER OF 65% OF SHANK AND A LENGTH EQUAL TO OR GREATER THAN THE LENGTH OF THE THREADED
- C. THE THREADED PORTION OF THE LAG SCREW SHALL BE INSERTED BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER. SOAP OR OTHER LUBRICANT SHALL BE USED ON THE LAG SCREW IN THE LEAD HOLES TO FACILITATE INSERTION AND PREVENT DAMAGE OF THE LAG SCREW.
- 7.34 SHEETS OF DRYWALL SHOULD BE LAID FLAT ON THE FLOOR. MAXIMUM HEIGHT OF DRYWALL SHOULD BE 10". SHOULD DRYWALL SLEEPS BE USED TO KEEP THE DRYWALL OFF THE FLOOR SHEATHING, A MINIMUM OF FOUR SETS OF SLEEPERS SHOULD BE USED. LONG DIRECTION OF DRYWALL MUST BE PARALLEL TO THE TRUSSES WITH SLEEPERS BEING PLACED PERPENDICULAR TO THE TRUSSES.

8.0 POST-INSTALLED REINFORCING, ANCHORS AND

- 8.1 POST-INSTALLED ANCHORS AND/OR REINFORCING SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN ANCHORS AND/OR REINFORCING.
- 8.3 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.

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)

- 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
- 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)
- 10.DEWALT SCREW-BOLT+ (ICC-ES ESR-3889)
- 12. DEWALT POWER-STUD SD1 (ICC-ES ESR-2818)
- 13.DEWALT HANGERMATE+ (ICC-ES ESR-3889)
- 15.DEWALT POWER-BOLT+ (ICC-ES ESR-3260)
- 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:

- AT 16" STAGGERED.
- SUPPORTING MEMBERS, 10d NAILS AT 6 INCHES AT ALL FOUR PANEL EDGES AND 6
- FASTENING SCHEDULE" OF THE INTERNATIONAL BUILDING CODE,

7.33 LEAD HOLES FOR LAG SCREWS

- SAME DEPTH OF PENETRATION AS THE LENGTH OF THE UNTHREADED SHANK.
- 7.35 ALL ANCHOR BOLTS USED TO ANCHOR WOOD PLATES (THAT ARE PART OF SHEAR WALLS) TO MASONRY OR CONCRETE SHALL HAVE "X"x3" SQUARE GALVANIZED PLATE WASHERS.

- APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS AND/OR REINFORCING IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE
- 8.2 THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS.
- PRE-APPROVED PRODUCTS INCLUDE:
- 4. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-712) FOR UNCRACKED CONCRETE ONLY
- APPLICABLE SIZES (ICC ESR-4266) 7. HILTI KWIK BOLT 1 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL
- 9. HILTI HSL-4 EXPANSION ANCHORS (ICC ESR 4386)
- 11. DEWALT POWER-STUD+ SD2 (ICC-ES ESR-2502)
- 14. DEWALT CCU+ UNDERCUT (ICC-ES ESR-4810)
- 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".

- 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)
- 8.4 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)
 - WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE: a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281) b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265) c.HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR

2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE

AND VACUUM (ICC ESR-4878) e.DEWALT AC100+ GOLD (ICC-ES ESR-3200)

3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH

d. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT

- ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE: a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811) b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138) c. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
- d. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275) B. HOLLOW CONCRETE MASONRY
- 1, MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:
- a. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)

b. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-716)

MANUFACTURER PRE-APPROVED PRODUCTS INCLUDE:

- 2. ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC58. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE
- a. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265) b. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE
- c.DEWALT AC100+ GOLD (ICC-ES ESR-3200) 3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.

a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811) b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138) c. HILTI "DRYWALL TRACK FASTENERS" X-DW (ICC ESR-1663)

C. UNREINFORCED BRICK MASONRY (URM): ADHESIVE FOR REBAR AND ANCHORS WITH

SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES

AC60. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE: 1. SIMPSON STRONG-TIE "ET-HP" (ICC-ES ESR-3638) 2. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE

APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE

3. DEWALT "AC100+ GOLD" (ICC-ES ESR-4105) 8.5 FOR FASTENING INTO STEEL: POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.

A. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811) B. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)

C. HILTI FASTENERS IN LIEU OF #12 TEK SCREWS:

3. HILTI X-ENP 19 L15 PINS FOR BEAMS TF $\geq 1/4$ ".

- 1. HILTI S-MD 12-24X1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA \leq TF \leq 1/4" 2. HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" \leq TF \leq 3/8"
- D. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024) E. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

- SDG 300 Chase Park South, Suite 125 Hoover, AL 35244 tel 205-824-5200 fax 205-824-5280
- Job Number 24-097 8.6 REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS.
- 8.7 SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW NO LESS THAN TWO WEEKS PRIOR TO BID. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.
- 8.8 INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), OR AS INCLUDED IN THE ANCHOR PACKAGING.
- 8.9 THERE IS TO BE NO GAP BETWEEN CONNECTED PARTS, UNLESS SHIMS ARE PROVIDED. ANCHORS ARE TO SECURE CONNECTED PARTS TOGETHER SNUGLY AND SECURELY.
- 8.10 OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE MANUFACTURER'S

INSTRUCTIONS AND INSTALLER MUST BE ACI CERTIFIED.

- 8.11 THE CONTRACTOR SHALL ARRANGE FOR AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION THAT ALL OF THE CONTRACTOR'S PERSONNEL WHO INSTALL ANCHORS ARE TRAINED PRIOR TO THE COMMENCEMENT OF INSTALLING ANCHORS.
- 8.12 THE CONTRACTOR SHALL COORDINATE WITH THE OWNER'S SPECIAL INSPECTION AGENCY FOR CONTINUOUS SPECIAL INSPECTION OF ADHESIVE ANCHORS AND PERIODIC INSPECTION OF MECHANICAL ANCHORS, SEE SPECIAL INSPECTION SCHEDULE FOR ADDITIONAL INFORMATION.
- WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS. 8.14 EXISTING REINFORCING BARS AND/OR CONDUIT IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. CARE SHALL BE TAKEN IN PLACING POST-INSTALLED ANCHORS AND/OR REINFORCING TO AVOID CONFLICTS WITH EXISTING REBAR AND/OR CONDUIT. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE REINFORCING BARS AT THE LOCATIONS

8.13 ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND

PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE

OF THE CONCRETE ANCHORS BY GPR, X-RAY, HILTI PS 1000 X-SCAN, CHIPPING, OR

PREFABRICATED CANOPY

OTHER MEANS.

- 9.1 PREFABRICATED CANOPIES SHALL BE CONSIDERED A DEFERRED SUBMITTAL TO THE BUILDING INSPECTION AGENCY.
- 9.2 PREFABRICATED CANOPIES SHALL BE FULLY ENGINEERED BY THE SYSTEM MANUFACTURER AND CONTRACTOR UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
- 9.3 CALCULATIONS SHALL ACCOMPANY THE SHOP DRAWINGS AND SHALL INCLUDE DESIGN OF ALL WALKWAY/CANOPY SYSTEM COMPONENTS INCLUDING, BUT NOT LIMITED TO.
- 9.4 PROTECTIVE COVER WALKWAY AND PREFABRICATED CANOPY SHOP DRAWINGS SHALL BE SUBMITTED TO INCLUDE A FULL DESCRIPTION OF ALL SYSTEM MEMBERS, INCLUDING COLUMNS, BEAMS, FOOTINGS, FASCIA, ETC. SHOP DRAWINGS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS

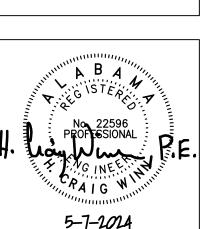
FOOTINGS, MEMBERS, CONNECTIONS AND ATTACHMENT TO STRUCTURE.

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



AMIL 0

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CONTINUED

GENERAL NOTES

SHEET TITLE:

PROJ. MGR.: DRAWN: 05/07/2024

REVISIONS

JOB NO. **24-24** SHEET NO:

2 OF 9

Hoover, AL 35244 tel 205-824-5200 fax 205-824-5280

Job Number 24-097 LATHAN ARCHITECTS

IONS AND TOILET ROOM FAC CONCESS
CITY
HAMILTON
CITY OF H

SHEET TITLE: TYPICAL DETAILS

05/07/2024

REVISIONS

JOB NO. **24-24**

SHEET NO:

LOAD BEARING RUNNING BOND MASONRY LINTEL SCHEDULE

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

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

NON-LOAD BEARING RUNNING BOND MASONRY LINTEL SCHEDULE

	LINTEL DIMENSIONS AND REINFORCING								
MAXIMUM 8" WALL		ALL	12" W	ALL					
WIDTH	DEPTH	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
- . PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND
- REINFORCE WITH 1#5 BAR CONTINUOUS.

 3. WHERE MAXIMUM HEIGHT OF WALL ABOVE LINTEL IS EXCEEDED, PROVIDE ADDITIONAL LINTELS EQUALLY
- SPACED ABOVE TO LIMIT WALL HEIGHTS ABOVE LINTEL TO THAT SHOWN IN THE TABLE ABOVE.
- 4. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED. 5. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 2'-0" PAST OPENING ON EACH SIDE OF OPENING.

MAXIMUM

OPENING

WIDTH

VENEER LINTEL SCHEDULE

L5x5x3/8 MINIMUM

4'-0" | L5x5x3/8 MINIMUM

6'-0" | L5x5x3/8 MINIMUM

8'-0" | L5x5x3/8 MINIMUM

ARGER | CONTACT ENGINEER

GALVANIZED.

STEEL FOR EACH 4" OF

WALL THICKNESS

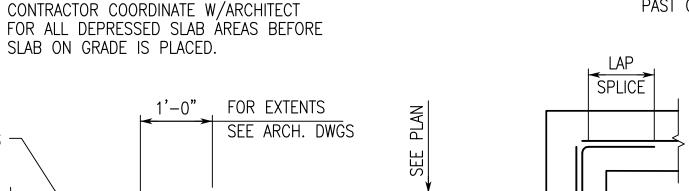
PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.

OUTSTANDING LEG WITH MINIMUM VENEER SUPPORT

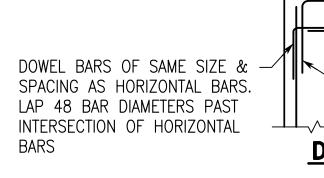
REQUIREMENT(S) AND WITH DETAILS INDICATED ON ARCH. DWGS.

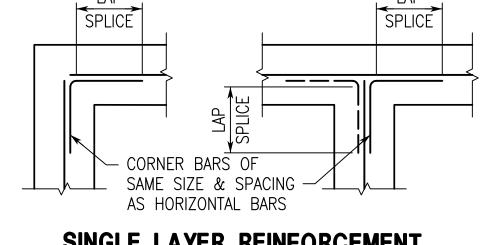
ALL EXPOSED LINTEL ANGLES TO BE HOT DIP

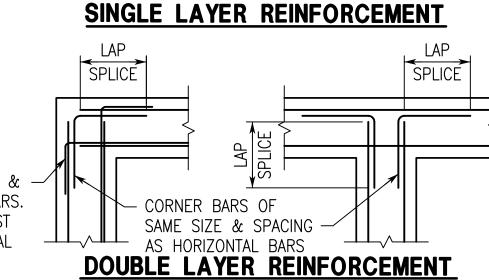
CONTRACTOR TO COORDINATE DIMENSION OF



DEPRESSED SLAB ON GRADE DETAIL **TYPICAL**









CORNER BARS OF SAME SIZE & SPACING AS HORIZONTAL BARS DOUBLE LAYER REINFORCEMENT

STRUCTURE @ 8'-0" W/2#4 CONT MAX., SEE DETAILS ON S5 #4 VERT @64, LAP W/DOWEL 2'-8" #4 DOWEL @64, DRILL 9" INTO SLAB AND ANCHOR FOR LOCATION OF INTERIOR — W/EPOXY ADHESIVE MASONRY PARTITIONS. SEE ARCH. DWGS - WWR, SEE GENERAL NOTES — 2#5 CONT W/ #3 TIES @48 1'-4"

2'-0"

MOISTURE PROOF ISOLATION

MATERIAL AROUND PIPING

BRACE TOP OF WALL→

TO ROOF OR FLOOR

CONTINUOUS STRIP FOOTING

FOR REINFORCING SEE SECTIONS -

STEP FOOTING DOWN AS REQUIRED TO KEEP

FOOTING BELOW PIPING. FOR LOCATION, SEE

ON FOUNDATION PLANS, SEE PLUMBING PLANS.

FOUNDATION PLANS. FOR LOCATION NOT SHOWN

- PIPING, CONTRACTOR

ÍHROUGH WALL

FOOTING/FOUNDATION WALL AT PIPING

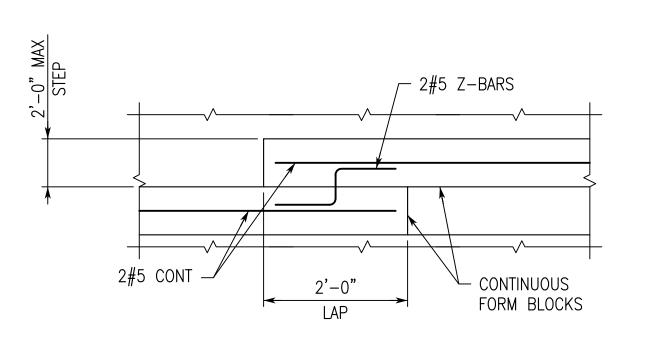
8" DEEP BOND BEAM

AT TOP OF WALL

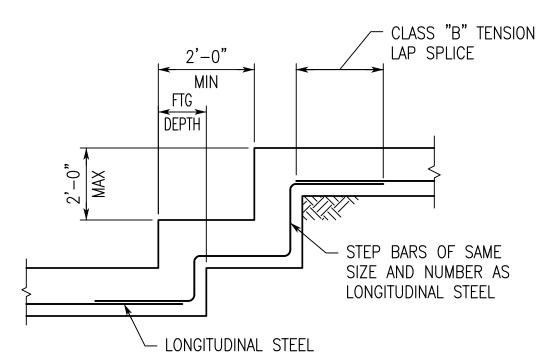
COORDINATE. PROVIDE

OVERSIZED PIPE SLEEVE

INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL



MASONRY BOND BEAM STEP DETAIL



FORMED CONCRETE WALL OR MASONRY WALL;

RÉINFORCING PER SECTIONS. WHERE FOOTING IS

GREATER THAN 4'-0" BFF, REINFORCE W/#6@16

SAWCUT 1/4

- BEVELED KEYWAY

SLAB THICKNESS

MASONRY REINFORCING

LAP SPLICE LENGTHS

(IN.)

18.0 24.0

30.0

43.0

60.0

72.0

82.0

ACI 530 & ACI 530.1.

LAP SPLICE LENGTHS APPLY TO BOTH HORIZONTAL AND VERTICAL REINFORCING.

CONNECTIONS IN ACCORDANCE WITH

REINFORCEMENT LARGER THAN NO. 9 BAR SHALL BE SPLICED USING MECHANICAL

EDGE

(IN.) 18.0

29.0 45.0

54.0

63.0

72.0

82.0

WWR, SEE

GENERAL NOTES -

BAR SIZE | CENTERED

DOWEL VERTICAL REINFORCING TO FOOTING

W/HOOKS. MATCH WALL THICKNESS AND

DISCONTINUOUS -

DISCONTINUOUS -

AT SAWCUT

SAW JOINT WITHIN 8 HOURS

AFTER CONCRETE IS PLACED.

SAWED JOINT

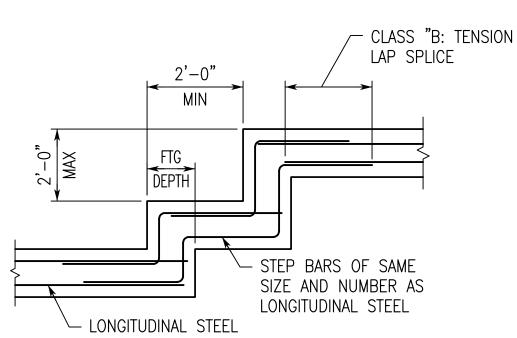
KEYED JOINT

SLAB CONTROL JOINT DETAILS

TYPICAL JOINT TYPE IS OPTIONAL

AT SAWCUT

FOOTING STEP DETAIL



FOOTING STEP DETAIL

STRUCTURAL DESIGN GROUP fax 205-824-5280



 $f_{C} = 4000 \text{ PSI}$ OTHER BARS 25" 29" 37" 54" 62**"** 54" 79**"**

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

LAP FACTORY FABRICATED

TEE JOINT REINF EVERY

OTHER COURSE TYPICAL

5/8" MIN 5/8" MIN COVER, TYP

PARTITION WALLS

ABUTTING STRUCTURAL WALLS

 $f_C = 3000 PSI$

TOP BARS

29"

36"

43"

56"

93"

105"

118"

BAR SIZE

CONT HORIZONTAL

(3/8" JOINT)

JOINT REINFORCEMENT

STRUCTURAL WALL

SEALANT AND BACKER ROD

ISOLATION JOINT FOR NON— STRUCTURAL PARTITION WALL

2. FOR TENSION LAP SPLICE LENGTHS FOR 3500 PSI CONCRETE, USE LENGTHS DESIGNATED FOR 3000 PSI CONCRETE.

FOR TYPICAL SPACING FOR

VERTICAL REINFORCMENT SEE SECTIONS

TENSION LAP SPLICE LENGTHS

29"

36"

43"

72**"**

81"

91"

TOP BARS

25"

37"

79"

MIN

CONT HORIZONTAL

JOINT REINFORCEMENT

REINFORCEMENT IN GROUTED CELLS

PARTITION WALL

CONT HORIZONTAL JOINT REINFORCEMENT

В

32"

40"

48"

80"

102"

OTHER BARS

22"

28"

33"

48"

55"

62"

70"

78**"**

PIPING WEIGHTS FLUID WT PER/FOOT (PLF) INSULATION & TOTAL WT PER/FOOT (PLF) HANGERS (PLF) PER/FOOT (PLF) DIAMETER 10.80 2.00 6.10 19.00 13.80 3.00 35.80 23.90 4.00 40.50 37.50 4.00 82.00 49.60 54.00 5.00 108.60 14" 5.00 54.60 65.70 125.30 62.60 87.10 5.00 154.70

FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.

COORDINATED BY THE GENERAL CONTRACTOR WITH THE

5. FOR PIPE SIZES NOT LISTED, CONTACT STRUCTURAL ENGINEER

FOR PIPING SUPPORT AND THRUST BRACING REQUIREMENTS.

FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.

PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE

STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING DRAWINGS

SEE ARCH. DWGS FOR LOCATION.

PROVIDE JOINT IN CMU AT ALL

ALL PIPES ASSUMED TO BE SCHEDULE 40.

WALL OPENING

COORDINATE SIZE &

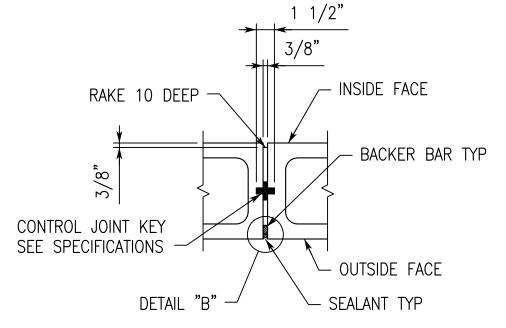
LOCATION OF OPENINGS

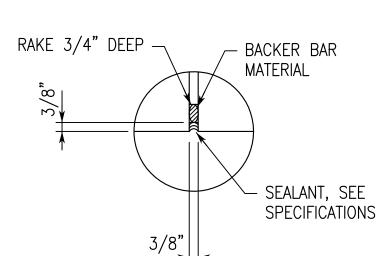
WITH OTHER DISCIPLINES.

REINFORCMENT DETAIL

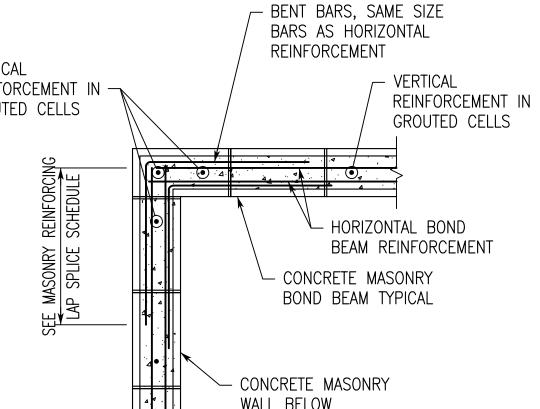
2 BARS EACH SIDE OF JOINT -SAME SIZE AS WALL DESIGN · DETAIL "A" REINF IN GROUTED CELLS

> JOINTS IN ANY BRICK. **PLAN** MASONRY CONTROL JOINT 3/4"=1'-0'

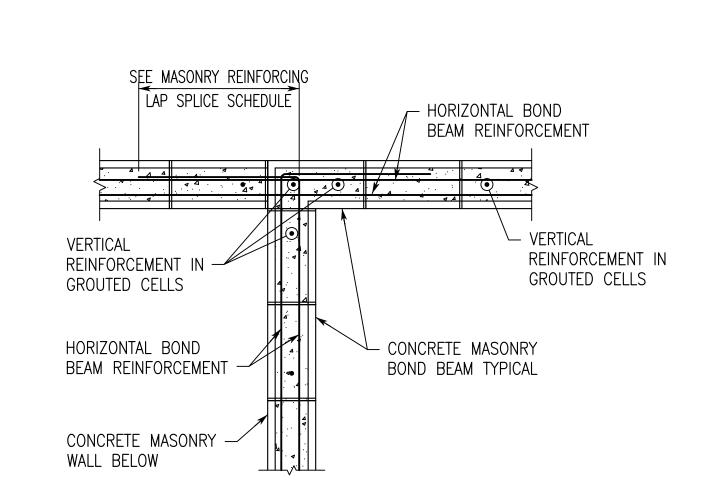




DETAIL "B" MASONRY CONTROL JOINT 3"=1'-0"



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER



PLAN SHOWING BOND BEAM AT STRUCTURAL WALL INTERSECTION

EXTERIOR SHEAR WALL PANEL CONSTRUCTION

ANCHOR WALLS BY:

THE INTERSECTION.

HORIZONTAL JOINT

REINFORCEMENT CONT

VERTICAL REINFORCEMENT IN GROUTED CELLS AT

TYPICAL SPACING

CONT HORIZONTAL

MASONRY WALL

PLAN SHOWING JOINT

REINFORCEMENT AT WALL CORNER

JOINT REINFORCEMENT

1. INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE

UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.

BENT 2", ALTERNATING ENDS UP AND DOWN.

2. GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS

3. FACTORY FABRICATED TEE JOINT REINFORCING SPACED 8" OC AND EXTENDING 30" MINIMUM IN EACH DIRECTION AT

-0.131"x2 1/2" NAILS AT

INTERMÉDIATE MÉMBERS.

└ 0.131"x2 1/2" NAILS AT EDGES.

SEE BELOW FOR SPACING

-ANCHOR BOLTS, SEE SECTIONS

1. ALL HDU4-SDS2.5 TO BE CONNECTED TO MINIMUM OF (2) STUDS.

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ALL PANEL EDGES

BACKED W/2 INCH-

NOMINAL ÓR WIDER

EDGE MEMBER -

HDU4-SDS2.5

ANCHOR AT ENDS

GALV SSTB20

FACTORY FABRICATED CORNER

REINFORCEMENT

SECTION OF HORIZONTAL JOINT

INTERLOCK COURSES -

5/8" MIN

3/4" AT EXT

COVER, TYP- COVER, TYP

VERTICAL REINFORCEMENT

IN GROUTED CELLS-

ANCHOR BOLT

(2) 2x6

FRAMING

2. PANEL EDGE NAILING SHALL BE 4" O.C.

GROUT CELLS SOLID ENTIRE HEIGHT OF WALL

1#5 EF

- NAILS INTO TREATED SILL

PLATE SHALL BE HOT

DIPPED GALVANIZED

(4 SIDES) -

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

CONT HORIZONTAL JOINT REINFORCEMENT -1'-0" LAP - VERTICAL REINFORCEMENT IN GROUTED CELLS

CONT HORIZONTAL VERTICAL REINFORCEMENT IN GROUTED CELLS AT JOINT REINFORCEMENT TYPICAL SPACING PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION

MIN

CONT HORIZONTAL

JOINT REINFORCEMENT

VERTICAL MORTAR JOINT

AT INTERSECTIONS WITH

TIES OR TEE JOINT

REINFORCEMENT

VERTICAL REINFORCEMENT IN GROUTED CELLS WALL BELOW

" P B 4" 5-7-2024

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SHEET TITLE: TYPICAL DETAILS

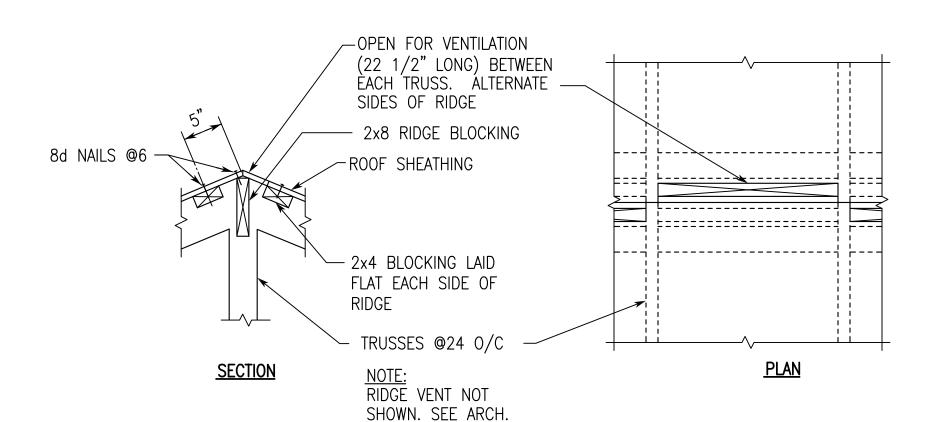
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JOB NO. **24-24**

SHEET NO:

STRUCTURAL DESIGN GROUP 300 Chase Park South, Suite 125 Hoover, AL 35244 tel 205-824-5200

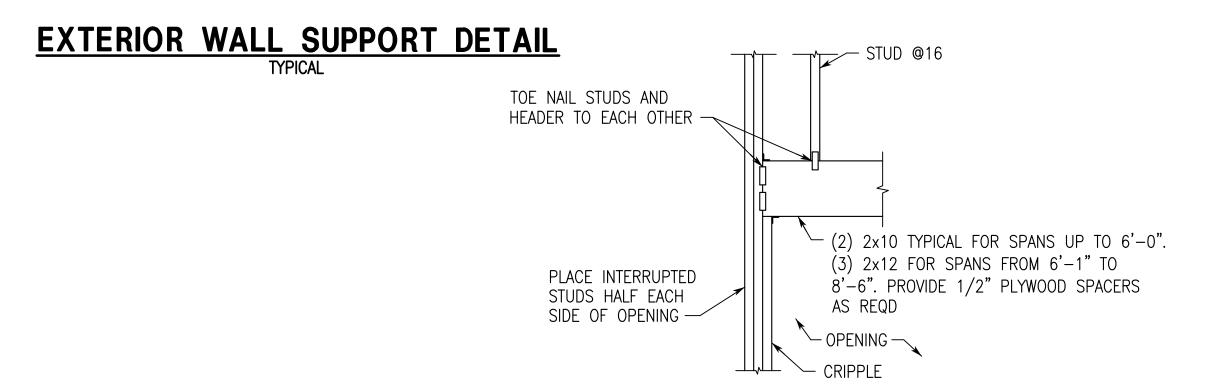


BLOCKING AT RIDGE VENT

COMPONENTS AND CLADDING WIND LOADS FOR WALLS (PSF)

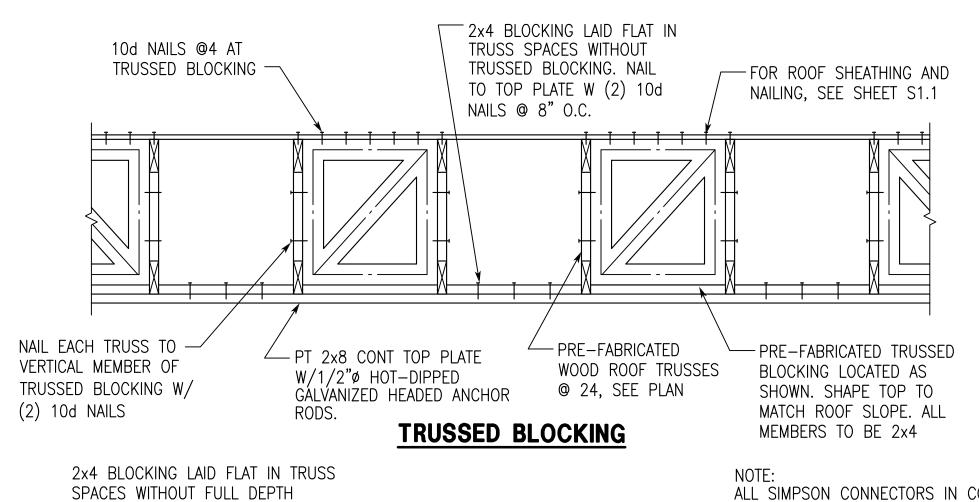
		•	,	
	EFFECTIVE	112 MPH \	/ELOCITY (3-S	EC. GUST)
H = 25'-10" 4:12 Roof Slope	WIND A REA (FT²)	ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	36.1	-39.1	-48.3
	20	34.4	-37.5	-45.1
	50	32.3	-35.3	-40.8
	100	30.7	-33.7	-37.6
	200	29.0	-32.1	-34.3
	500	26.9	-30.0	-30.0

- 1. WIDTH OF EDGE STRIP 'a' = 5'-5".
- 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. 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.



OPENING FRAMING

FOR LOAD BEARING WALLS WITH OPENINGS WIDER THAN 2'-8"



FOR ROOF SHEATHING AND

NAILING REQUIREMENTS, SEE

PREFABRICATED WOOD

└─ 2x STUD WALL

-2x4 @ 10'-0" MAX CONT

BOTTOM CHORD BRACING

OR AS REQD BY TRUSS

- 2x4 BRACING BETWEEN

TRUSSES @24. NAIL TO

TRUSS W/(2) 10d NAILS

TRU\$\$ES @24 —

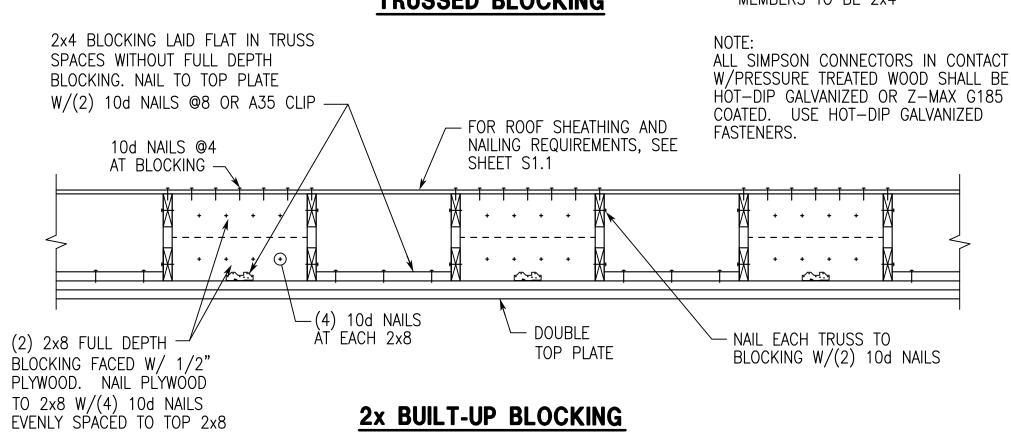
SHEET S1.1

A34 FRAMING ANCHOR —

EXTERIOR SHEATHING

AT EACH BRACE

AND BOTTOM 2x8



TRUSS BLOCKING AT EXTERIOR WALL

CONTRACTORS OPTION TO USE EITHER TRUSSED BLOCKING OR 2x BUILTUP BLOCKING AT AREAS WHERE TRUSS HEEL HEIGHT EXCEEDS THAT WHICH TYPICAL 2x SOLID DEPTH BLOCKING IS PRACTICAL.

COMPONENTS AND CLADDING WIND LOADS FOR ROOF (PSF)											
112 MPH VELOCITY	(3-SEC. GUST)			ROOF					OVERHANG		
H = 25'-10" 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	26.9	-60.5	-78.9	-85.0		-70.3	-88.7	-94.8	-113.1	
	20	23.2	-60.5	-71.1	-76.5		-70.3	-84.4	-89.8	-100.3	
	50	18.4	-46.6	-60.8	-65.3		-65.1	-78.8	-83.3	-83.4	
	100	16.0	-36.1	-53.0	-56.8		-61.1	-74.6	-78.3	-70.7	
	200	16.0	-36.1	-45.2	-48.3		-61.1	-70.3	-73.4	-58.1	
	500	16.0	-36.1	-45.2	-48.3		-61.1	-70.3	-73.4	-58.1	

WIDTH OF EDGE STRIP 'a' = 5'-5".

- RIDGE, VALLEY OR HIP

PROVIDE 2x BLOCKING FOR DECK SUPPORT AT

ALL RIDGE, VALLEYS &

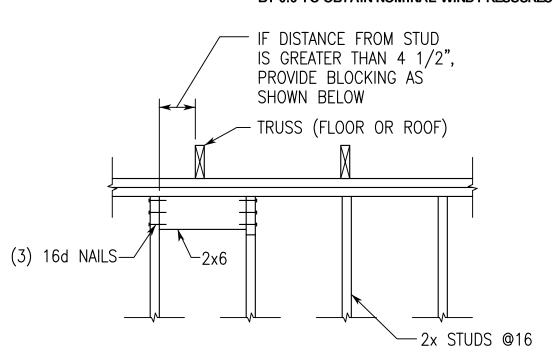
HIPS WHERE SHEATHING

IS UNSUPPORTED.

-TRUSSES @24

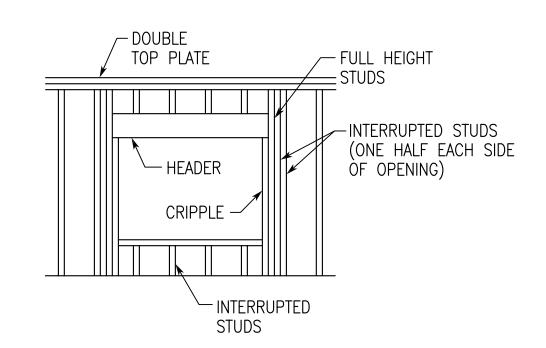
ROOF SHEATHING SUPPORT DETAIL

- 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.
- PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
- EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH.
- 5. HOLLOW CORE MANUFACTURER IS TO DESIGN SLAB PANELS FOR DEAD LOADS, LIVE LOADS, AND WIND LOADS (DOWNWARD AND UPLIFT) AS INDICATED IN GENERAL NOTES, TYPICAL DETAILS, PLAN NOTES, AND SECTION NOTES, IN ADDITION TO 20 PSF COLLATERAL LOAD AND SELF-WEIGHTS.
- 6. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

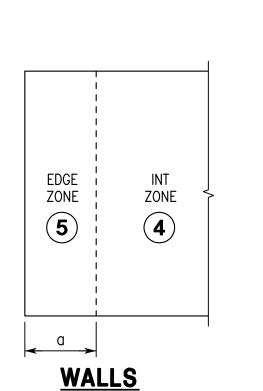


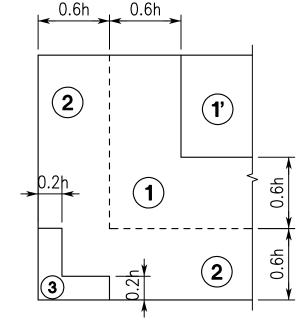
TRUSS BEARING DETAIL

TYPICAL

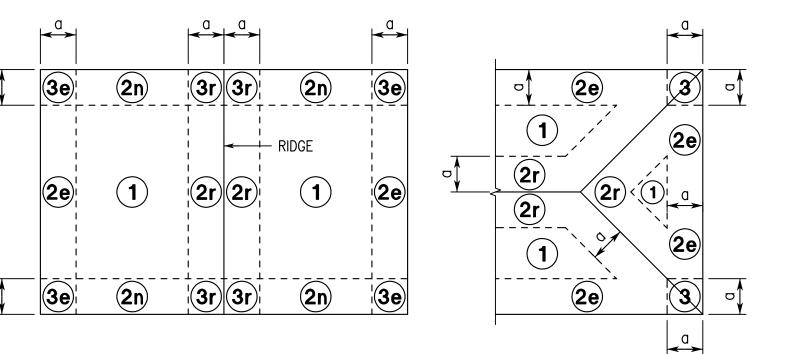


STUD PLACEMENT AT OPENINGS





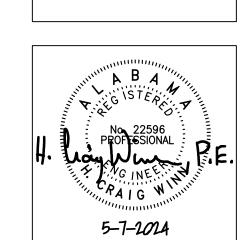
FLAT ROOFS



GABLE ROOFS

HIP ROOFS

WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS



LATHAN ARCHITECTS

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SHEET TITLE: TYPICAL DETAILS

PROJ. MGR.: DRAWN: ABS

DATE: 05/07/2024 REVISIONS

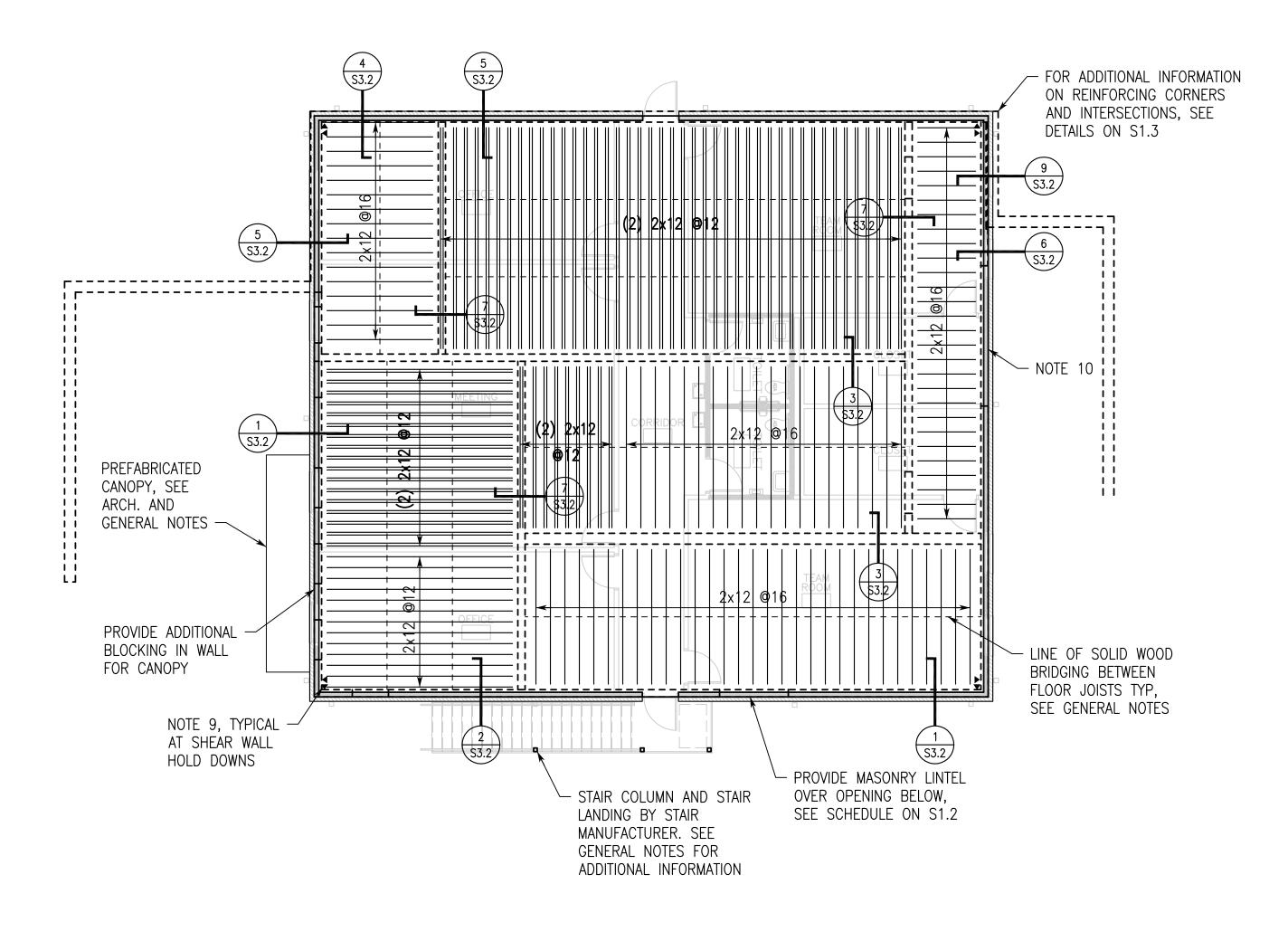
JOB NO. **24-24**

SHEET NO:

5 OF 9

IONS AND TOILET ROOM FAC

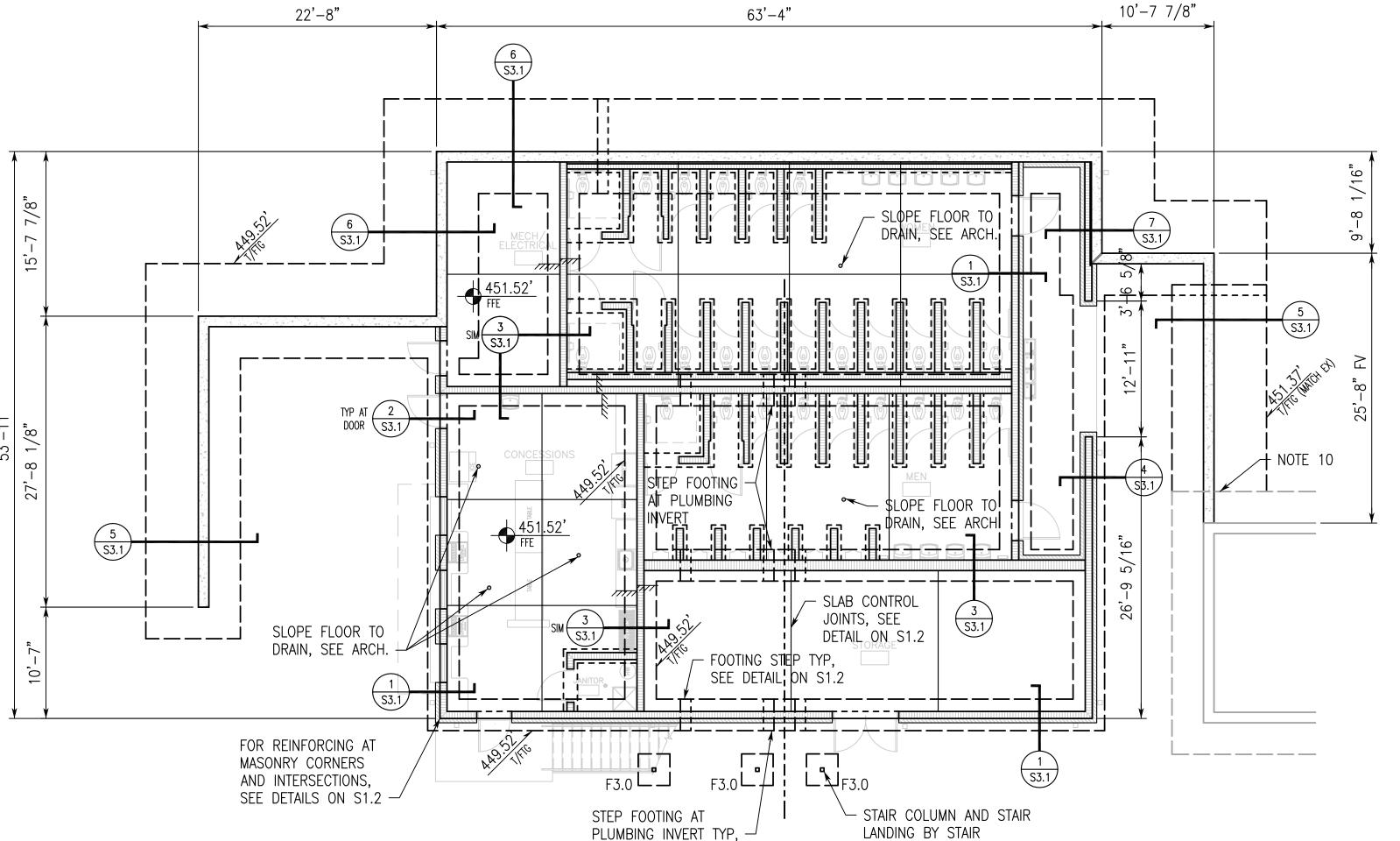
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SECOND FLOOR FRAMING PLAN

1/8"=1'-0"

- 1. FINISH FLOOR ELEVATION 462.52', UNLESS NOTED.
- TOP OF CMU ELEVATION 461.40' ABOVE FINISHED MAIN FLOOR, UNLESS NOTED.
- 2. FLOOR SYSTEM: 2x12 AT 16" ON CENTER, UNLESS NOTED. SEE GENERAL NOTES.
- FLOOR SHEATHING: 3/4" PLYWOOD, SEE GENERAL NOTES. GLUE AND NAIL TO FRAMING. FLOOR JOISTS BEAR ON ALL WALLS AND BEAMS AS SHOWN.
- FOR DIMENSIONS, SEE FOUNDATION AND ARCHITECTURAL DRAWINGS.
- DETAILS SHOWN ARE TYPICAL FOR THE ENTIRE BUILDING
- HANGER LOCATIONS FOR PIPING LARGER THAN 3" IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON \$1.3.
- 8. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALLS SHALL BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REINFORCING SHOP DRAWINGS.
- 9. ALL EXTERIOR WALLS ARE TO BE SHEAR WALLS. PROVIDE HDU2-SDS2.5 ANCHOR WITH 5/8"øx12" ROD AT EACH END OF SHEAR WALL. PROVIDE (2) 2x AT EDGE AND AT EACH OPENING. SEE S1.3 FOR ADDITIONAL INFORMATION.
- 10. PROVIDE SPECIAL 22" DEEP LINTEL OVER OPENING. EXTEND LINTEL 24" PAST OPENING ON BOTH SIDES. REINFORCE WITH 2#6 EACH COURSE.
- 11. AT MECHANICAL OPENINGS UNDER FLOOR SYSTEM, PROVIDE (2) RIM JOISTS IN THE PLANE OF THE FLOOR OVER THE MECHANICAL UNIT. MAXIMUM LENGTH OF OPENING IS 4'-0". FOR LARGER OPENINGS, CONTACT ENGINEER.



SEE DETAIL ON S1.2

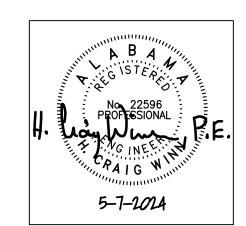
MANUFACTURER. SEE

GENERAL NOTES FOR ADDITIONAL INFORMATION

FOUNDATION PLAN

1/8"=1'-0"

- 1. FINISH FLOOR (TOP OF SLAB) ELEVATION 452.19', UNLESS NOTED. 2. TOP OF FOOTING ELEVATION 450.19', UNLESS NOTED.
- 3. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL
- 4. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATION WITH CONTROL JOINTS.
- 5. SEE DETAIL ON S1.2 FOR THICKENED SLAB UNDER MASONRY WALLS NOT SHOWN ON PLAN. COORDINATE LAYOUT WITH ARCHITECTURAL PLAN.
- 6. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL
- DRAWINGS AND CIVIL DRAWINGS.
- 7. FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS. 8. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL CMU
- WALLS. NOTE ALL EXTERIOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF CMU ABOVE WATERTABLE. REINFORCE ALL WALLS AND JAMBS PER SECTIONS AND LINTEL SCHEDULES ON S1.2.
- 9. F3.0 DENOTES 3'-0"x3'-0"x1'-0" DEEP FOOTING WITH 3#5 BOTTOM EACH WAY. COORDINATE EXACT LOCATION WITH STEEL STAIR PROVIDER AND ARCHITECTURAL DRAWINGS.
- 10. DOWEL AND EPOXY WALL REINFORCING 9" INTO EXISTING WALL FOUNDATION. DRILL AND EPOXY NEW HORIZONTAL WALL REINFORCING STEEL INTO EXISTING WALL 9". SEE SECTIONS FOR WALL REINFORCING.



SHEET TITLE: FDN & SECOND FLR

FRAMING PLAN

PROJ. MGR.: DRAWN:

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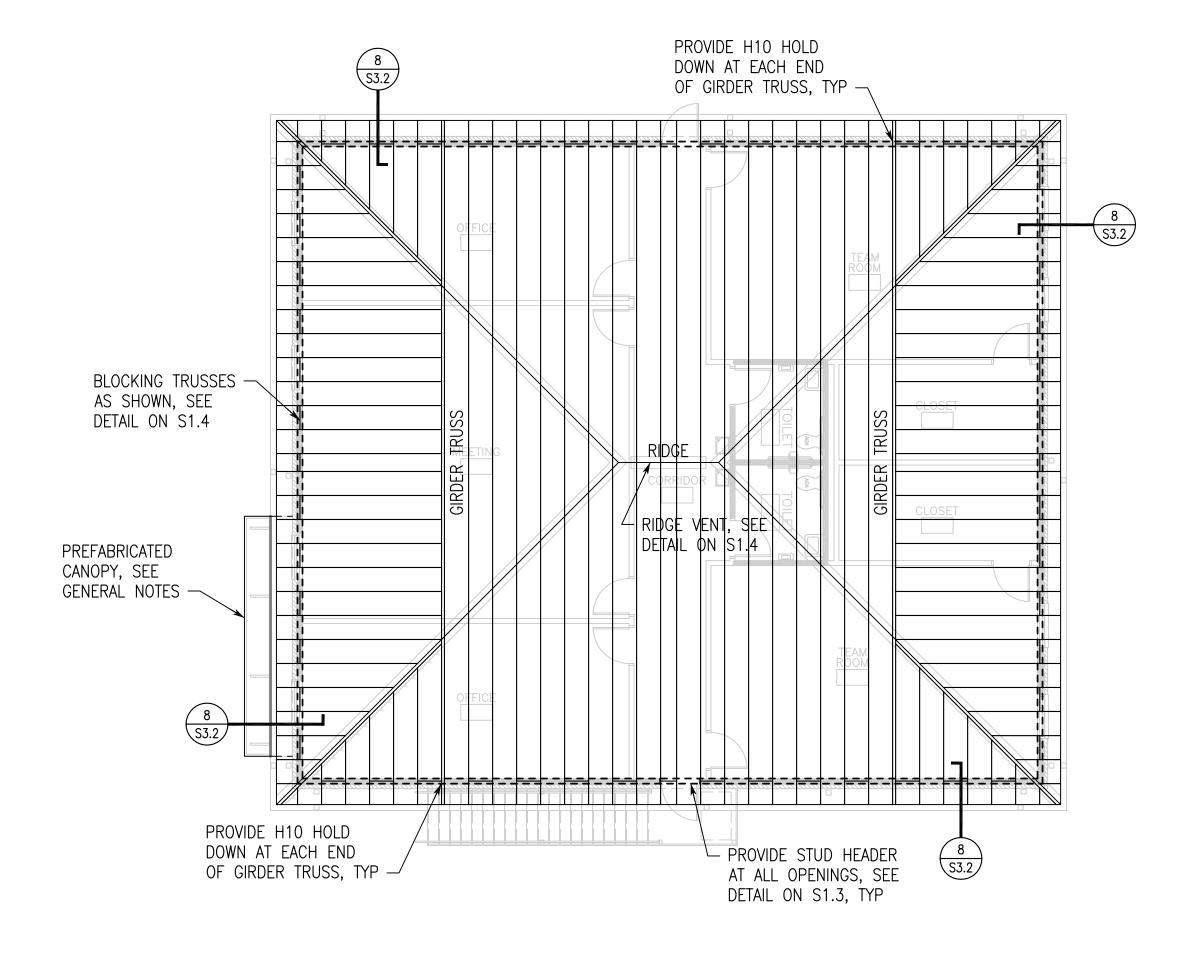
JOB NO. **24-24**

SHEET NO:

STRUCTURAL DESIGN GROUP

300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 24-097





ROOF FRAMING PLAN

1/8"=1'-0"

1. ROOF SYSTEM: PREFABRICATED WOOD ROOF TRUSSES AT 24". SEE GENERAL NOTES.

2. ROOF SHEATHING: 3/4" PLYWOOD, SEE GENERAL NOTES.

3. TRUSS BEARING ELEVATION 472.40' (9'-10 1/2") ABOVE FINISHED FLOOR, UNLESS NOTED.

4. TRUSSES BEAR ON ALL WALLS AND BEAMS AS SHOWN. 5. POSITION TRUSSES TO AVOID HVAC UNITS AND DUCTS.

6. FOR DIMENSIONS, SEE FOUNDATION AND ARCHITECTURAL DRAWINGS.

7. DETAILS SHOWN ARE TYPICAL FOR THE ENTIRE BUILDING.

8. TRUSS MANUFACTURER TO PROVIDE ALL VENT CLOSURE PLATES SUCH AS RIDGE AND VALLEY PLATES.

9. HANGER LOCATIONS FOR PIPING LARGER THAN 3" IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE TRUSS MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAIL ON \$1.3.

10. BLOCKING TRUSSES/PLATES, BRIDGING, PERMANENT BRACING, MISC STEEL CLOSURE PLATE, ETC. SHALL BE DESIGNED AND INDICATED ON THE TRUSS LAYOUT SHOP DRAWINGS. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES.

11. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALLS SHALL BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REINFORCING SHOP DRAWINGS.



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SHEET TITLE:
ROOF FRAMING
PLAN

PROJ. MGR.: HCW
DRAWN: ABS

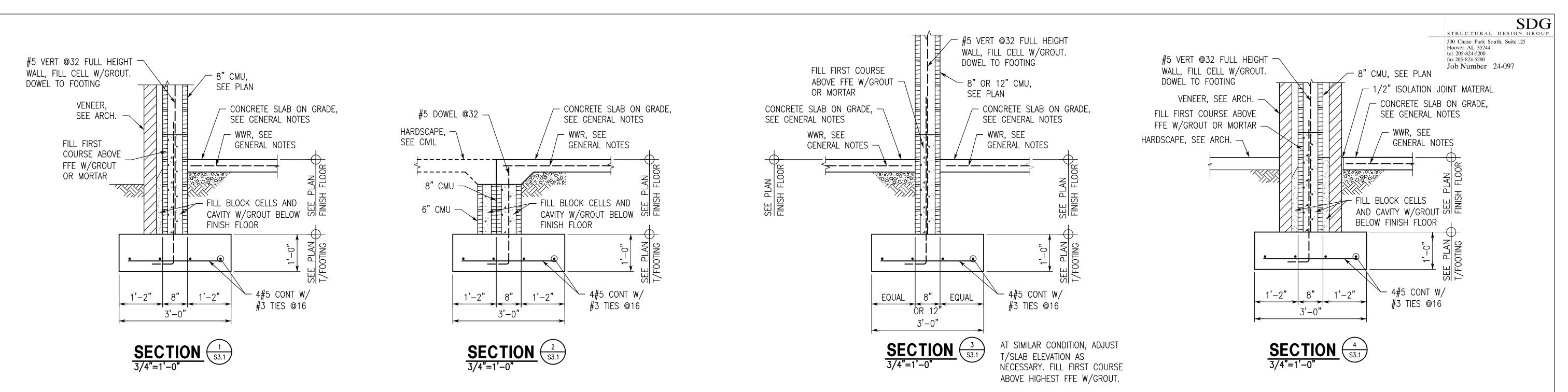
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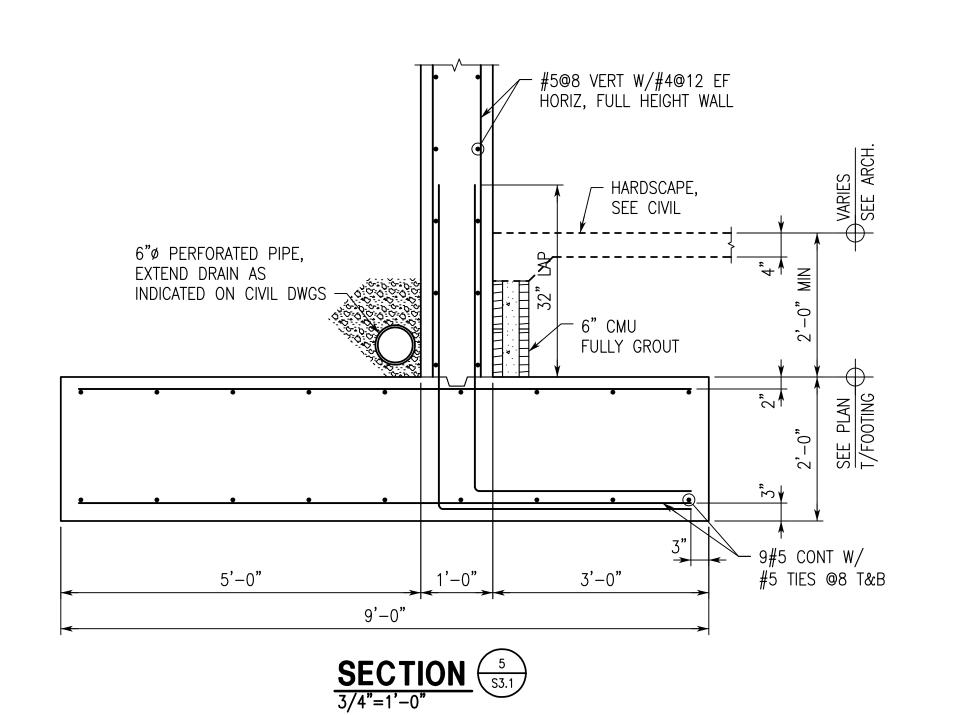
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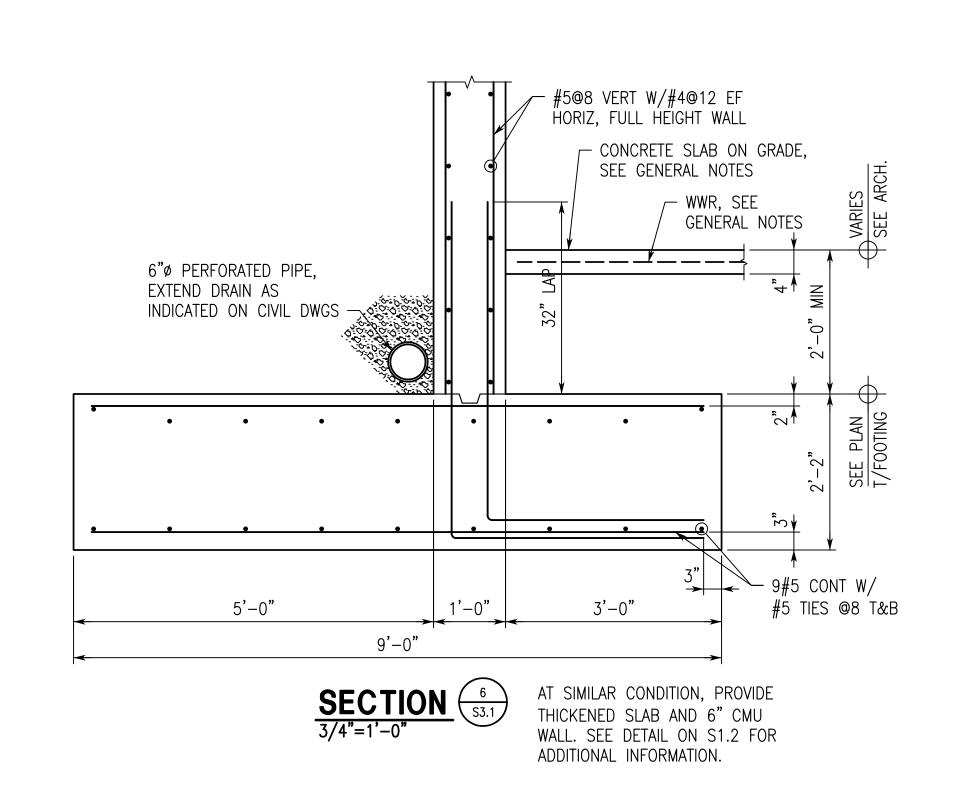
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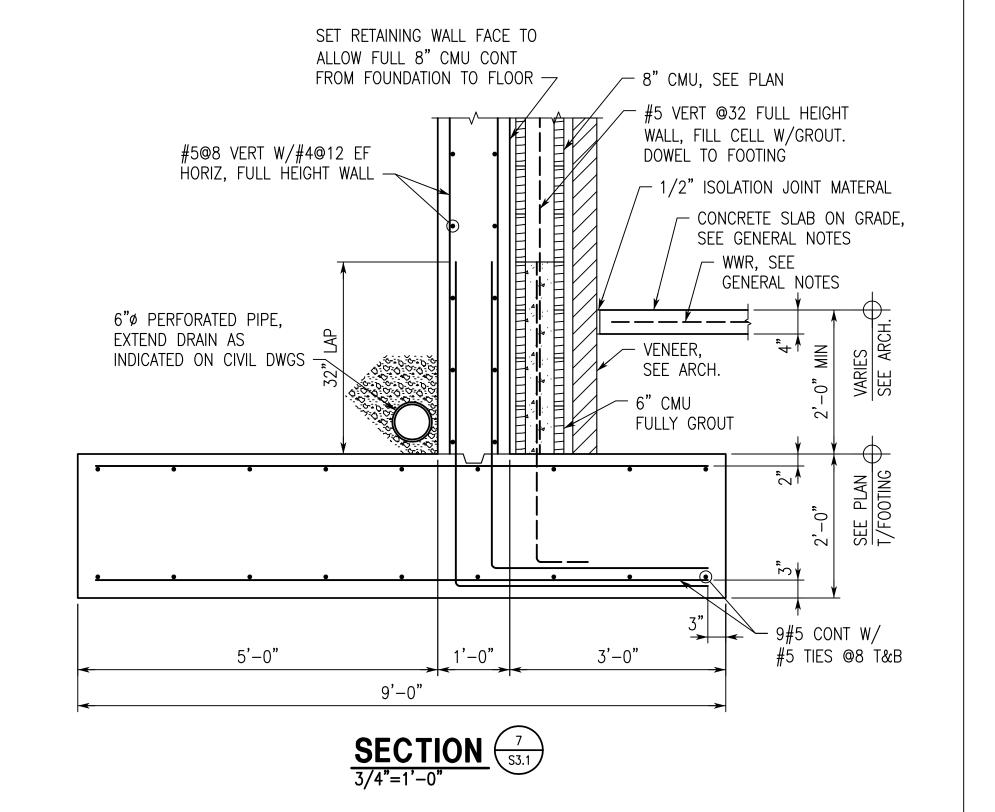
S2.2

0 1" 2"











CONCESSIONS AND TOILET ROOM FACILITY FOR TI

CITY OF HAMILTON, AL

CITY OF HAMILTON



SHEET TITLE:
SECTIONS
AND DETAILS

PROJ. MGR.: HCW
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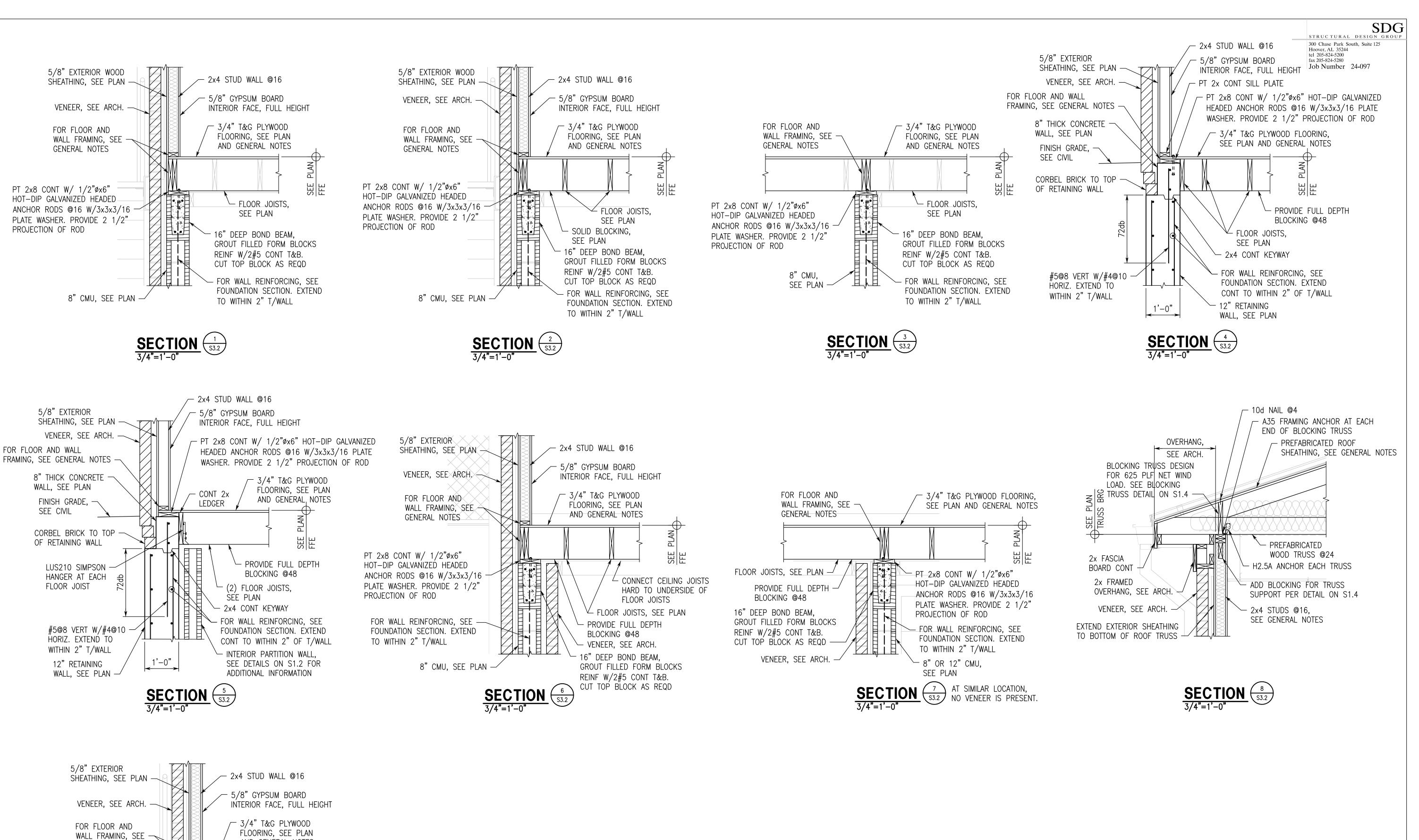
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SHEET NO:

S3.1

0 1" 2



AND GENERAL NOTES

- FLOOR JOISTS,

GROUT FILLED FORM BLOCKS

FOR WALL REINFORCING, SEE

FOUNDATION SECTION. EXTEND

SEE PLAN

16" DEEP BOND BEAM,

REINF W/2#5 CONT T&B.

CUT TOP BLOCK AS REQD

TO WITHIN 2" T/WALL

SEE PLAN

SECTION (9) (S3.2)

GENERAL NOTES

12" RETAINING

WALL, SEE PLAN —

PT 2x8 CONT W/ 1/2"øx6" HOT-DIP GALVANIZED HEADED

PROJECTION OF ROD

FOR WALL REINFORCING, SEE

FOUNDATION SECTION. EXTEND

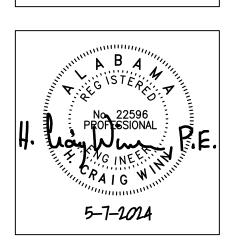
CONT TO WITHIN 2" OF T/WALL -

ANCHOR RODS @16 W/3x3x3/16 -

PLATE WASHER. PROVIDE 2 1/2"



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SHEET TITLE: SECTIONS AND DETAILS

PROJ. MGR.: DRAWN:

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JOB NO. **24-24**

SHEET NO:

9 OF 9

GENERAL NOTES

- LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
- CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
- ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN
- WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.

18"X18"X16" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)

- ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
- ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
- ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
- NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANICAL AND GENERAL CONTRACTORS.
- 10. DOMESTIC WATER PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
- 11. CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
- 12. PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
- 13. INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING
- 14. ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
- 15. INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
- 16. NO JOINTS IN WATER PIPING BELOW SLAB.
- 17. 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.
- 18. WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
- 19. 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.
- 20. 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.
- 21. COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
- 22. NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED
- 23. 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.
- 24. SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING
- 25. FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
- 26. OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
- 27. 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).
- 28. ALL WALL HYDRANTS AND HOSE BIBBS SHAL BE MOUNTED 24" ABOVE FINISH FLOOR UNLESS OTHERWISE NOTED.
- 29. ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.

	PLUMBING L	EGENI	D
	DOMESTIC COLD WATER	BFP	BACKFLOW PREVENTER
	DOMESTIC HOT WATER SUPPLY	BFF	BELOW FINISHED FLOOR
	DOMESTIC HOT WATER RETURN	CW	COLD WATER
	SOIL, WASTE, OR SANITARY SEWER	DN	DOWN
	VENT	GPH	GALLONS PER HOUR
<u></u>	PIPE TURNING DOWN	PRV	PRESSURE RELIEF VALVE
	PIPE TURNING UP	RPZ BFP	REDUCED PRESSURE ZONE BFP
	TEE DOWN	EX	EXISTING
	TEE UP	GPM	GALLONS PER MINUTE
	UNION	<u>CO</u>	CLEANOUT - PLUG TYPE
	BALANCE VALVE	ABV	ABOVE
	BALL VALVE	AFF	ABOVE FINISHED FLOOR
	CHECK VALVE	HW	HOT WATER
VS	VENT STACK	HWR	HOT WATER RETURN
VSTR	VENT THROUGH ROOF	TYP	TYPICAL
WS	WASTE STACK		

					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	3"	-	-	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.
MFD	MECHANICAL FLOOR DRAIN	3"	-	-	J.R. SMITH #2242 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, K-9183 STAINLESS STEEL STRAINER, 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, K-9183 STAINLESS STEEL STRAINER, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET.
P-5	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-6	LAVATORY	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET.
P-7	MOP SINK	3"	1/2"	1/2"	STERN WILLIAMS #SBC-1700 (24" X 24") COMPLETE, T-35 HOSE WITH WALL HOOK, STAINLESS STEEL BACKSPLASH AND CHICAGO FAUCET #897 FAUCET.
P-8	THREE-POT SINK	FS-2	1/2"	1/2"	ADVANCE TABCO T9-3-54, K-105, K-5 DRAIN, MCGUIRE #165 STOPS AND SUPPLIES. VERIFY LENGTH OF SINK MATCHES ARCH. PIPE WASTE FROM EACH COMPARTMENT INDIVIDUALLY TO FLOOR SINK BELOW USING COPPER AND SECURLEY ANCHORED IN THE HORIZONTAL.
P-9	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY #VRCTL8WSK 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-10	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY LVRC8WSK, WITH BOTTLE FILLER, STAINLESS STEEL CABINET, WITH WATERWAYS MANUFACTURED OF 100% LEAD FREE MATERIAL, J.R. SMITH #830 FIXTURE SUPPORT, BALL VALVE STOP WITH SUPPLY, SAFETY-GUARD BUBBLER. MCGUIRE #8872 P-TRAP. FULLY INSULATE P-TRAP. MOUNT WITH SPOUT OUTLET 36" ABOVE FINISH FLOOR. PROVIDE COLOR CHART FOR ARCHITECT COLOR SELECTION.
P-11	WATER COOLER	1 1/2"	1/2"	-	ELKAY LVRC8S, STAINLESS STEEL CABINET, WITH WATERWAYS MANUFACTURED OF 100% LEAD FREE MATERIAL, J.R. SMITH #830 FIXTURE SUPPORT, BALL VALVE STOP WITH SUPPLY, SAFETY-GUARD BUBBLER. MCGUIRE #8872 P-TRAP. FULLY INSULATE P-TRAP. PROVIDE COLOR CHART FOR ARCHITECT COLOR SELECTION.
P-12	ICE MACHINE	FS-1	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.
P-13	HOSE BIBB #1	-	3/4"	-	EVERFLOW 46124-NL BRASS BODY WITH T-HANDLE AND PLAIN END, HOSE BIBB SHALL NOT HAVE HOSE THREADS.
P-14	HOSE BIBB #2	-	3/4"	-	Z1350-VB ZURN NARROW WALL HYDRANT WITH MOUNTING BRACKETS.
P-15	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.

WATER HEATER SCHEDULE

AMTROL THERM - X-TROL #ST-12 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.

208V; 3 PHASE; 15 KW LOCHINVAR LHS-80 T15, 80 GALLON STORAGE, 61 GALLON RECOVERY AT 100°F RISE. NEW P&T RELIEF VALVE. SET OUTLET TEMPERATURE AT 130°F. INSTALL AS DETAILED ON

ARMSTRONG COMPASS H. PROVIDE WITH AQUASTAT (EQUAL TO HONEYWELL L6006A) AND TIMER.

METAL CLAMP INSULATION COUPLING (KLO-SHURE 7 SERIES OR EQUAL)	
UNISTRUT (OR EQUAL)	
INSULATION	

- 1. APPLICATION: FOR STRUT MOUNTED, 4 INCH AND SMALLER, COFFEE PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
- 2. ALLOWED FOR HORIZONTAL OR VERTICAL
- 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

THERMOMETER —		
VACUUM BREAKER7 130	130	
EXPANSION TANK (ET-1) DIELECTRIC UNION THERMOMETER		
T&P RELIEF VALVE PIPE TO MOP SINK WATER HEATER	3/4"	BUILDING CIRC. PUMP (CP-1) 3/4"
DETAIL OF WATER HEATER		

DRAWINGS. VERIFY VOLTAGE WITH ELECTRICAL SECTION.

FIXTURE

ELECTRIC WATER HEATER

NO SCALE

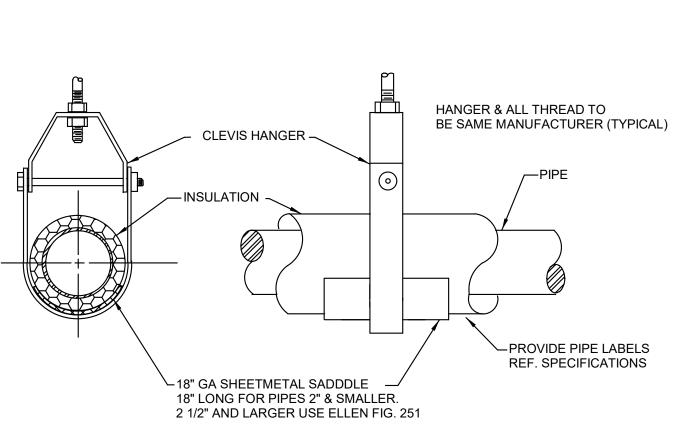
CP-1 CIRCULATION PUMP

EXPANSION TANK

ET-1

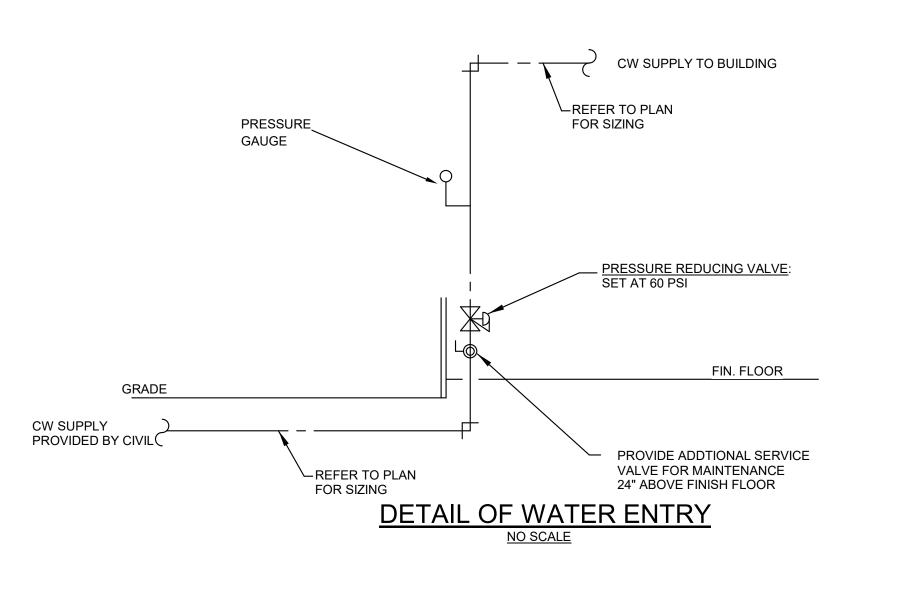
ELEC INFO.

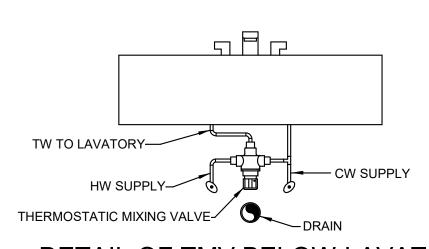
115V/1/60



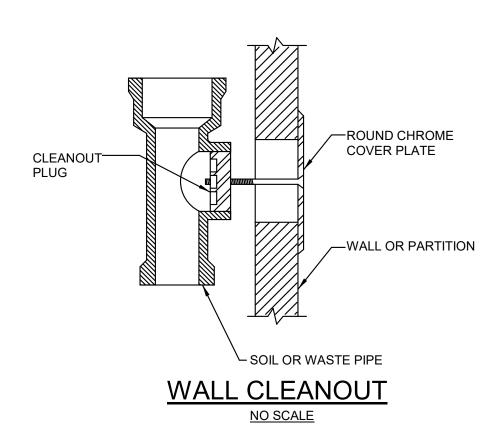
SUSPENDED PIPE SUPPORT

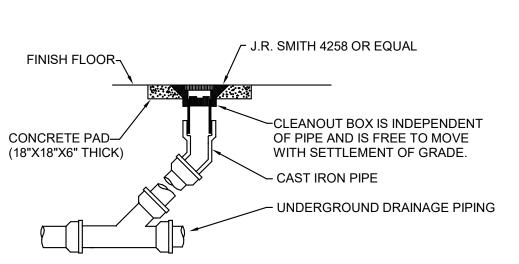
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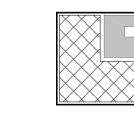






DETAIL OF CLEANOUT TO GRADE

NO SCALE



LATHAN | BRYANT | CALMA

Dewberry

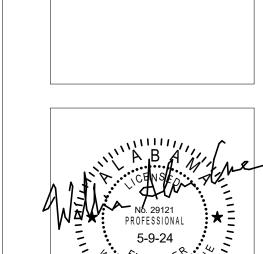
2 Riverchase Office Plaza Suite 205

Hoover, AL 35244

(205) 988-2069 www.dewberry.com

Project Number 50181199

> AMIL



SHEET TITLE: PLUMBING SCHEDULES AND

PROJ. MGR.: SMC DRAWN: ADH DATE: 5/07/2024 REVISIONS

JOB NO. 24-24 SHEET NO: P0.1

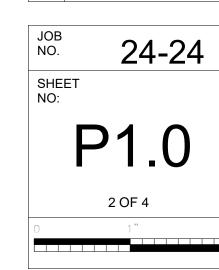


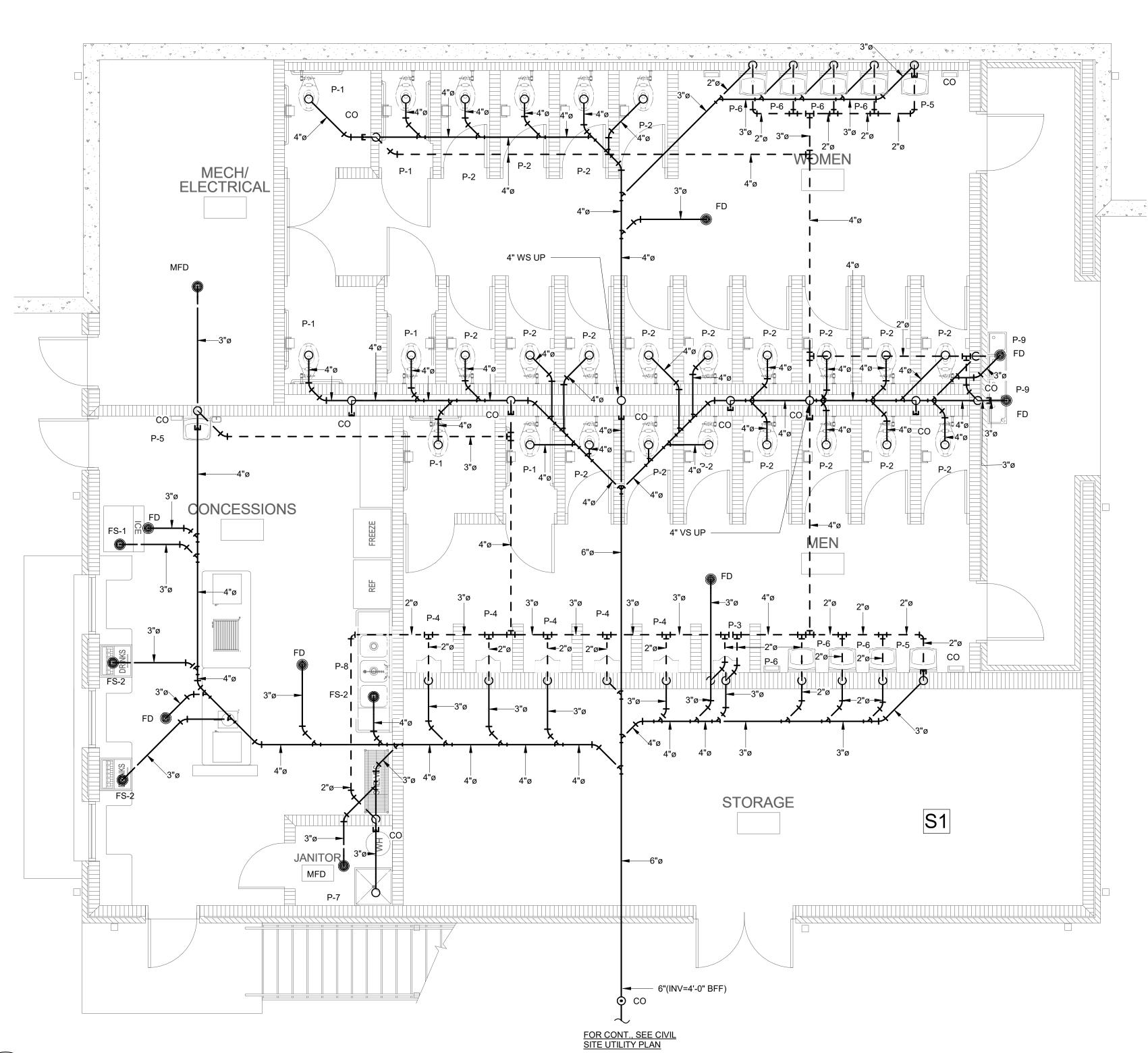


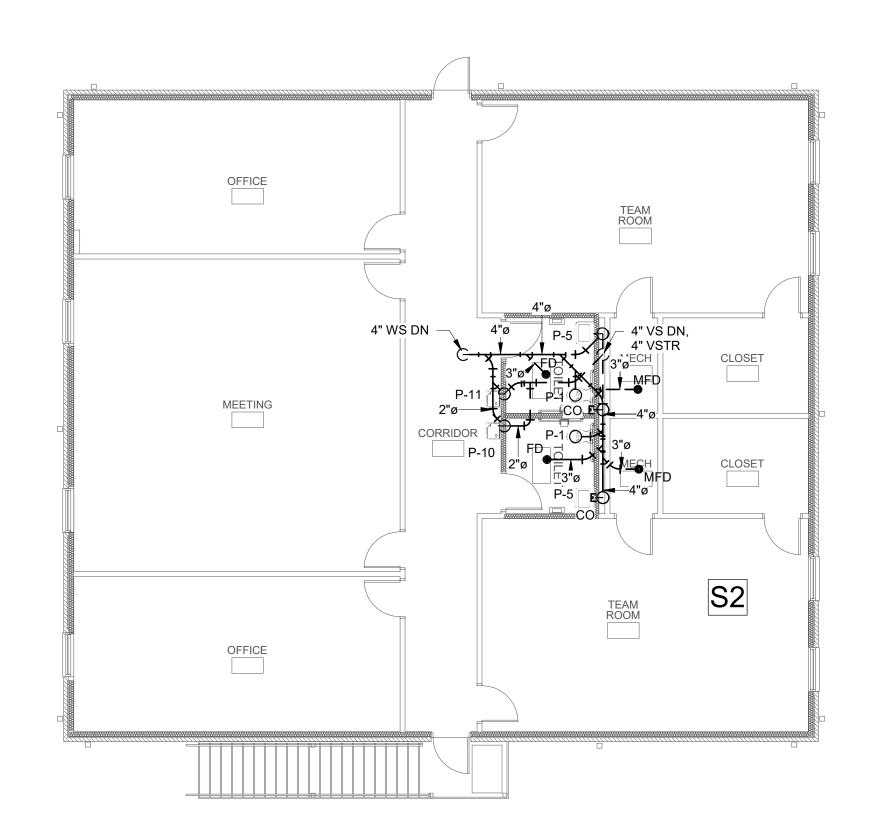


SHEET TITLE:
PLUMBING - NON-PRESSURE
FLOOR PLANS

PRO	J. MGR.:	SMC
DRA	NN:	ADH
DATE	<u>:</u>	5/07/2024
REVI	SIONS	





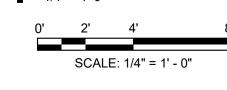


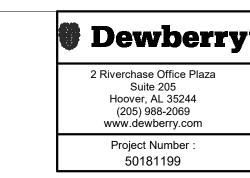
2 NON-PRESSURE PIPING - SECOND FLOOR PLAN

1/8" = 1'-0"

NON-PRESSURE PIPING - FIRST FLOOR PLAN

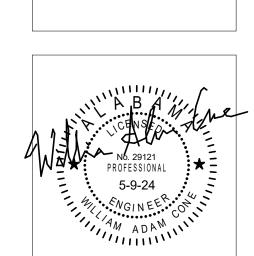
1/4" = 1'-0"

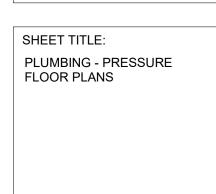




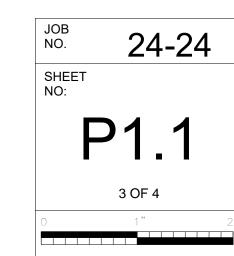


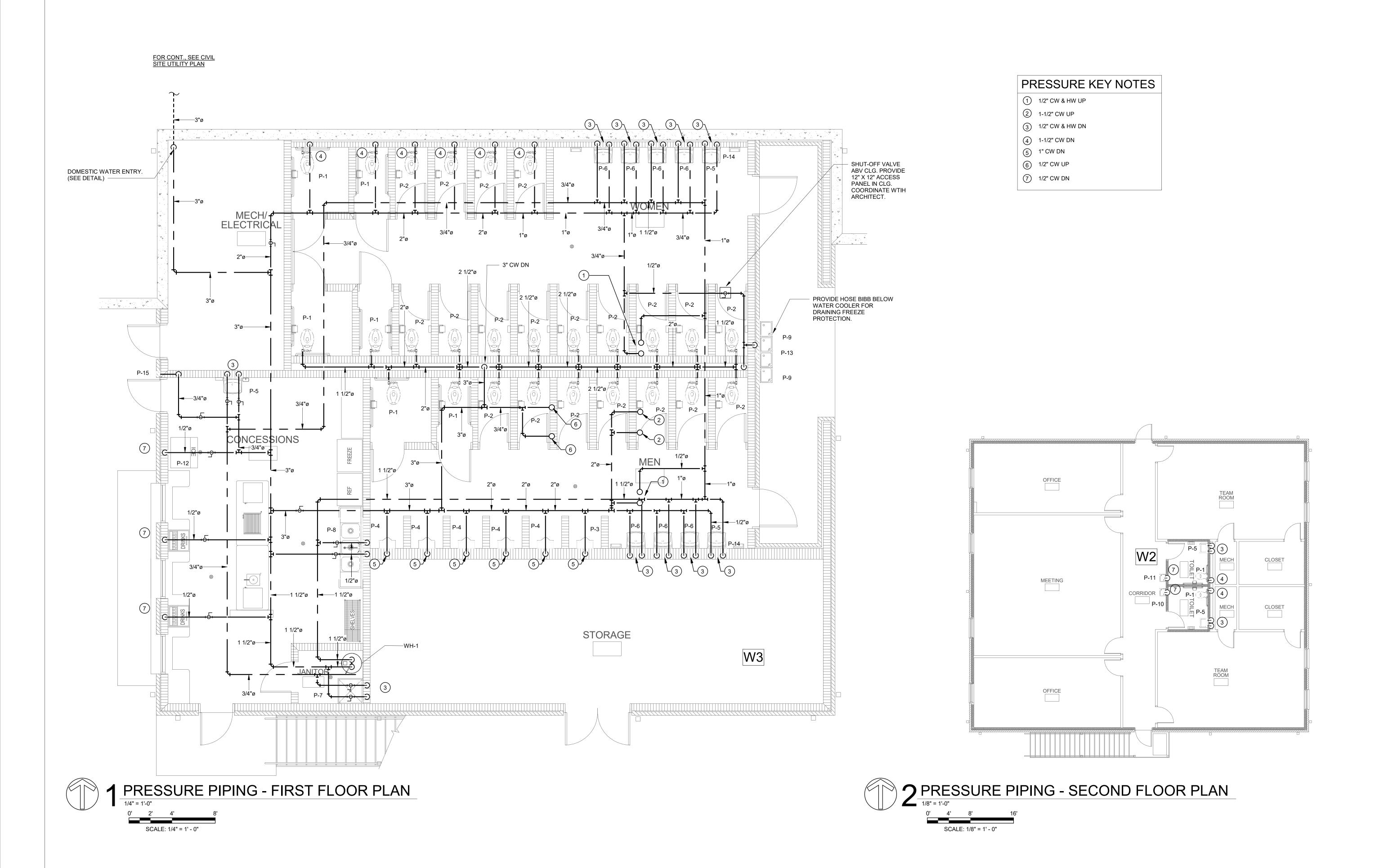


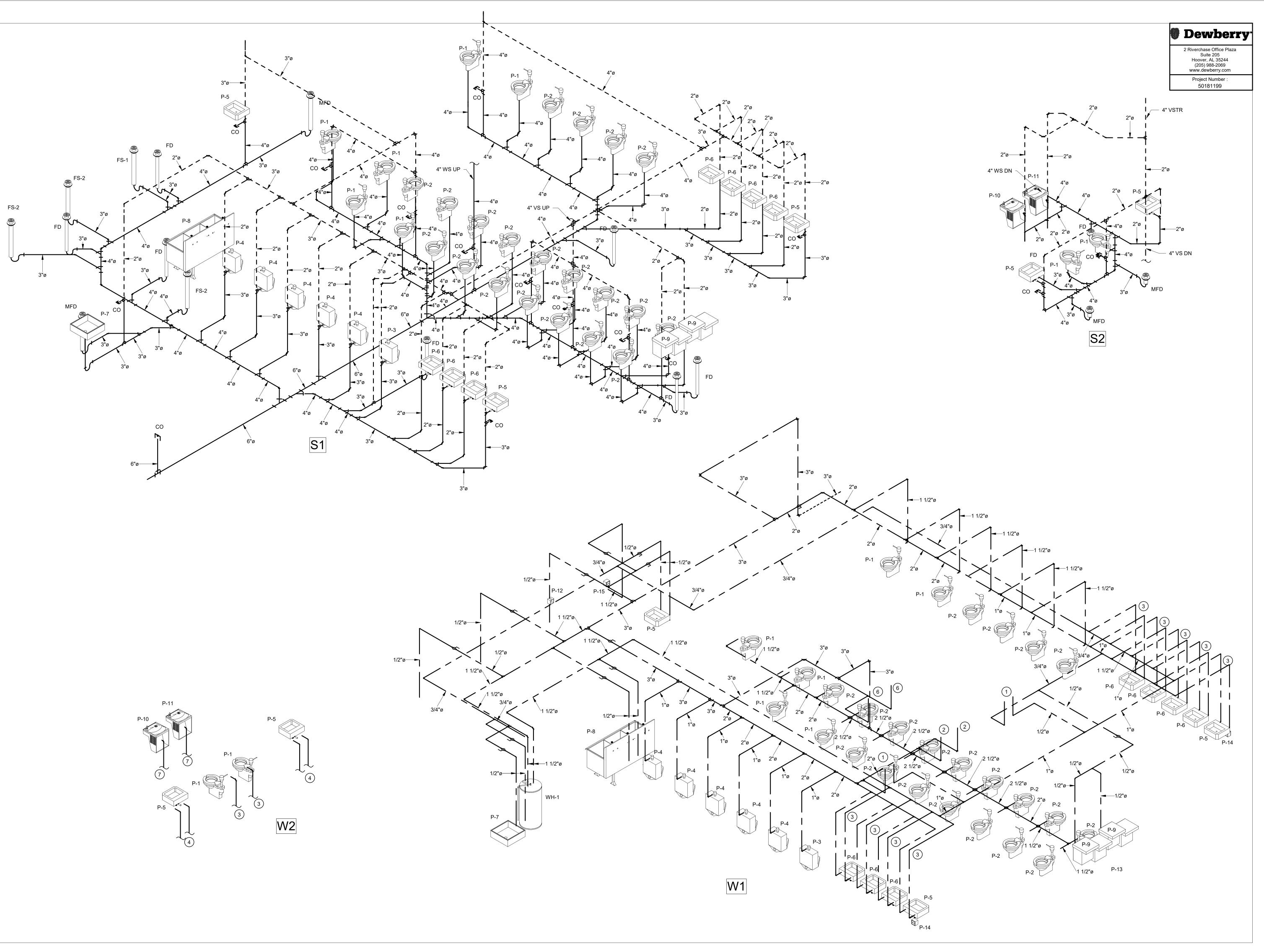


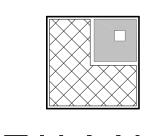


PROJ. MGR.:	SMC
DRAWN:	ADH
DATE:	5/07/2024
REVISIONS	



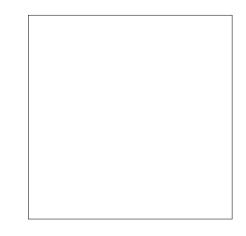


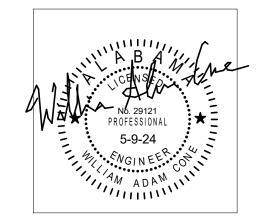




LATHAN ARCHITECTS

TOILET ROOM FACILITY FOR THE

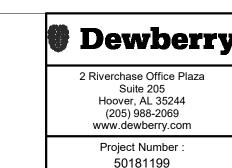




SHEET TITLE:
PLUMBING RISER DIAGRAMS

PROJ. MGR.:	SMC
DRAWN:	ADH
DATE:	5/07/2024
REVISIONS	

JOB
NO. 24-24
SHEET
NO:
P2.0
4 OF 4





LATHAN ARCHITECTS

LATHAN | BRYANT | CALMA

T0 AMIL

SHEET TITLE: MECHANICAL LEGENDS

PRO	J. MGR.:	WAC	
DRAV	VN:	LMR	_
DATE	i:	5/07/2024	_
REVI	SIONS		

JOB NO. 24-24 SHEET

NO:

HVAC ABBREVIATIONS HVAC CONTROLS LEGEND DUCTWORK LEGEND SUPPLY DIFFUSER TEMPERATURE SENSOR ABOVE FINISH FLOOR RETURN GRILLE (H)AHU AIR HANDLING UNIT **HUMIDITY SENSOR EXHAUST GRILLE** AMB. AMBIENT ARCH. ARCHITCTURAL (c) TRANSFER AIR GRILLE CO2 MONITOR BRAKE HORSEPOWER

BOD **BOTTOM OF DUCT** SIDEWALL REGISTER BTUH BRITISH THERMAL UNIT PER HOUR (M)----FAN/PUMP MOTOR **ROUND DUCT SYMBOL** CFM CUBIC FEET PER MINUTE RECTANGULAR DUCT (WIDTH X HEIGHT) DB DRY BULB DOWN VARIABLE FREQUENCY DRIVE DEGREES FAHERNHEIT CHANGE IN PRESSURE RECTANGULAR SUPPLY DUCT TURNING UP CHANGE IN TEMPERATURE CURRENT TRANSDUCER DIAMETER DIA. EXHAUST AIR

HORSEPOWER

1000 WATTS

INSIDE DIAMETER

LOCKED ROTOR AMPS

LEAVING AIR TEMPERATURE

MIXED AIR TEMPERATURE

MINIMUM CIRCUIT AMPACITY

NON-STAND PART LOAD VALUE

POUNDS PER SQUARE INCH

RETURN AIR TEMPERATURE

REVOLUTIONS PER MINUTE

SUPPLY AIR TEMPERATURE

UNLESS NOTED OTHERWISE

TOTAL STATIC PRESSURE

MAXIMUM OVER CURRENT PROTECTION

LEAVING WATER TEMPERATURE

INCHES

LENGTH

POUNDS

LEAVING

MAXIMUM

1000 BTUH

MINIMUM

NORMALLY OPEN

OUTSIDE AIR

PSI GAUGE RETURN AIR

SUPPLY AIR

VOLUME

WIDTH

WET BULB

WATER GAGE

NORMALLY CLOSED

OUTSIDE DIAMETER

PSI ATMOSPHERIC

RELATIVE HUMIDITY

RATED LOAD AMPS

TRANSFER DUCT TOP OF DUCT

VOLTS/PHASE/HERTZ

RECTANGULAR SUPPLY AIR DUCT TURNING DOWN ENT. **ENTERING** ENTERING AIR TEMPERATURE EAT EXPANDED METAL GRILLE **EMG** EXTERNAL WATER TEMPERATURE EWT RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP EXTERNAL STATIC PRESSURE **EXISTING EXTERNAL**

MAT

MBH

MCA

MIN.

NC

NPLV

OSA

O.D.

PSI

PSIA

PSIG

RAT

RLA

SAT

T.S.P.

U.N.O.

V/Ø/Hz

W.G.

RPM

MOCP

RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN FEET PER MINUTE FEET FACE VELOCITY GALLONS GPM FLAT OVAL TURNING UP. GALLONS PER MINUTE HEIGHT

FLAT OVAL TURNING DOWN. LBS. LRA ROUND DUCT TURNING DOWN LVG. LWT MAX. 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

CONICAL SPIN-IN WITH MANUAL DAMPER

□¹ MD MANUAL DAMPER FIRE DAMPER (PROVIDE ACCESS DOOR)

WITH MANUAL DAMPER

AUTOMATIC DAMPER

(CFM) S

(CFM) R

(CFM) E

(CFM) T

(CFM) SR

WXH

COMBINATION SMOKE/FIRE DAMPER (PROVIDE ACCESS DOOR)

TEMPERATURE SENSOR **HUMIDITY SENSOR** CO2 MONITOR

OSA CALCULATIONS - NAT VENTILATION									
ROOM SQFT REQUIRED AREA (SF X 0.04) OPENABLE AREA SF									
CONCESSION 510 20.4 46.5									

XHAUST AI	R CALCULAT	IONS					
		EXHAUST RATE	EXHAUST RATE	EXHAUST RATE	REQUIRED EXHAUST	PROVIDED EXHAUST	
# OF FIXTURES	# OF SHOWERS	CFM/FT ²	CFM / FIXTURE	CFM/ SHOWER	CFM	CFM	
0	0	N/A	N/A	N/A	0	0	
0	0	N/A	N/A	N/A	0	0	
0	0	N/A	N/A	N/A	0	0	
0	0	N/A	N/A	N/A	0	0	
0	0	N/A	N/A	N/A	0	0	
1	0	N/A	70	N/A	70	100	
1	0	N/A	70	N/A	70	100	

EXHAUST AI	R CALCULAT	IONS				
		EXHAUST RATE	EXHAUST RATE	EXHAUST RATE	REQUIRED EXHAUST	PROVIDED EXHAUST
# OF FIXTURES	# OF SHOWERS	CFM/FT ²	CFM / FIXTURE	CFM/ SHOWER	CFM	CFM
17	0	50	N/A	N/A	850	850
15	0	50	N/A	N/A	750	750

		IAQP	OSA CALCULAT	ION - STORAC	SE ROOM					
				Zone	Table 6.1				Table 6.2	Outdoor Air to
			Zone Floor Area (square ft)	Max Occupancy	OA per Occupant	Table 6.1 cfm/ft2	Pz * Rp	Az * Ra	Ventilation Effectiveness	Zone (CFM) with Ez correction
Zone Tag	Facility Type	Zone Use	Az	Pz	Rp	Ra	Pz * Rp	Az * Ra	Ez	(Vbz/Ez)
IHP-2	Educational Facilities	Storage Rooms	560.0	0.0	0.0	0.12	0	67	0.8	84
ne Height (feet)	10.0	•								OA required per VR
esired Outside Air (Vo) IAQP	0	(1-R)V _r			Carbon di	oxide**		***OSHA, NIOSH	& WHO most cons	servative values used
ıpply Air (Vs)	560			6000 —					gov/niosh/npg/npgs	syn-a.html
eturn Air (Vr)	560	Er_A		5000	5000			1 = ASHRAE & N		
ecirc. Flow Factor (R)	1.00	RV.		/ r				2 = C02 Level at \		
entilation Effectiveness (Ez)	8.0	Vo,Co E	· · · · · · · · · · · · · · · · · · ·	4000				3 = C02 Level at I		
vel of Physical Activity	Sedentary	L E.C. J.		3000				**Carbon dioxide h		
Iter Location	В	Fr (V	r + V _o)	2000				for gathering dema		
VAC Flow Type utdoor Air Flow Type	Constant Constant	7		1000		■ Carbon	dioxide**	setpoints. The Nat commissioned by		
utdoor Air Flow Type	Constant		Occupied Zone		0	0		not a contaminant		
			e, N, C,	0 +	1 2	3		purification to cont		
					1 2			of concern, as fou	nd on submarines.	
Indoor Contaminants		Steady State	Steady State	Is Steady State Level	Contaminant			1		
Generated By People	Maximum Threshold Value	Using the VRP*	Using the IAQ Method	Acceptable at Reduced	Generation	Filtration	Cognizant			
9 Evens Outdoore										
& From Outdoors	(PPM)	(Prescribed OA)	(Reduced OA)	OA Levels?	Rate	Effectiveness	Authority***			
		Plasma Off	Plasma On		(PPM)					
etaldehyde	100.0	Plasma Off 0.01109	Plasma On 0.00000	Yes	(PPM) 0.00032	50%	OSHA			
eetaldehyde eetone	100.0	Plasma Off 0.01109 0.00126	Plasma On 0.00000 0.00000	Yes Yes	(PPM) 0.00032 0.00433	50% 50%	OSHA NIOSH			
cetaldehyde cetone nmonia	100.0 250.0 25.00	Plasma Off 0.01109 0.00126 0.00173	Plasma On 0.00000 0.00000 0.00000	Yes Yes Yes	(PPM) 0.00032 0.00433 0.14210	50% 50% 50%	OSHA NIOSH NIOSH			
cetaldehyde Setone mmonia enzene	100.0	Plasma Off 0.01109 0.00126	Plasma On 0.00000 0.00000	Yes Yes	(PPM) 0.00032 0.00433	50% 50%	OSHA NIOSH			
cetaldehyde betone mmonia anzene Butanone (MEK) arbon dioxide**	100.0 250.0 25.00 1.0000 200.0 5000	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000	Yes Yes Yes Yes Yes Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292	50% 50% 50% 50% 50% 0%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH			
cetaldehyde cetone mmonia enzene Butanone (MEK) arabon dioxide**	100.0 250.0 25.00 1.0000 200.0 5000 2.0000	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes Yes Yes Yes Yes Yes Yes Yes Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003	50% 50% 50% 50% 50% 0% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH			
cetaldehyde cetone mmonia enzene Butanone (MEK) arbon dioxide** hloroform	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000	50% 50% 50% 50% 50% 0% 50% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH OSHA			
cetaldehyde cetone mmonia enzene Butanone (MEK) arbon dioxide** hiloroform ioxane ydrogen Sulfide	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00010 0.00000 0.00000	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000	50% 50% 50% 50% 50% 0% 50% 50% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH OSHA NIOSH			
cetaldehyde cetone mmonia enzene Butanone (MEK) arabon dioxide** nloroform oxane dydrogen Sulfide	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 1.68094	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.000000 0.000000	50% 50% 50% 50% 50% 6 50% 50% 50% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH			
cetaldehyde betone mmonia nzene Butanone (MEK) arbon dioxide** loroform oxane drogen Sulfide ethane ethane	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA 200.0 25.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 0.00000 1.68094 0.00000 0.00009	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 0% 50% 50% 50% 50% 5	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH OSHA			
cetaldehyde setone mmonia enzene Butanone (MEK) arbon dioxide** loloroform oxane drogen Sulfide ethane ethanol ethalole ethylene Chloride opane	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA 200.0 25.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 0.00000 1.68094 0.00000 0.00000 0.00000 0.00000 0.00000	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 50% 50% 50% 50% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH			
cetaldehyde betone mmonia nzene Butanone (MEK) arbon dioxide** loroform oxane ydrogen Sulfide ethane ethene ethene ethene Chloride opane etrachloroethane	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 100.0 NA 200.0 25.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 0.00000 1.68094 0.00000 0.00069 0.00098 0.00000	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 50% 0% 50% 50% 60% 0% 50% 0% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH OSHA			
cetaldehyde cetone mmonia enzene Butanone (MEK) erbon dioxide** nloroform oxane ydrogen Sulfide ethane ethanol ethylene Chloride opane etrachloroethylene	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA 200.0 25.0 1000.0 5000 100.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 1.68094 0.00000 0.00069 0.00998 0.000007	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 0% 50% 50% 50% 50% 0% 50% 5	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH NA NIOSH OSHA OSHA OSHA			
cetaldehyde zetone mmonia eneme Butanone (MEK) arbon dioxide** hloroform oxane ydrogen Sulfide ethane ethanol ethylene Chloride opane ptrachloroethylene bluene	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA 200.0 25.0 1000.0 100.0 100.0 100.0 100.0 100.0 100.000	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00000 0.00000 1.68094 0.00000 0.000069 0.00098 0.00000 0.00000 0.00000	Plasma On	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 50% 50% 50% 50% 50%	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH			
cetaldehyde cetone mmonia enzene Butanone (MEK) erbon dioxide** nloroform oxane ydrogen Sulfide ethane ethanol ethylene Chloride opane etrachloroethylene	100.0 250.0 25.00 1.0000 200.0 5000 2.0000 100.0 10.0 NA 200.0 25.0 1000.0 5000 100.0	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 1.68094 0.00000 0.00069 0.00998 0.000007	Plasma On 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 0% 50% 50% 50% 50% 0% 50% 5	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH NA NIOSH OSHA OSHA OSHA			
cetaldehyde zetone mmonia enzene Butanone (MEK) arbon dioxide** loloroform oxane ydrogen Sulfide ethane ethane ethanol ethylene Chloride opane etrachloroethylene bluene 1,1 - Trichloroethane	100.0 250.0 25.00 1.0000 200.0 5000 200.0 5000 100.0 10.0 NA 200.0 25.0 1000.0 5.0000 100.0000 100.0000 100.0000 100.0000	Plasma Off 0.01109 0.00126 0.00173 0.00250 0.00010 0.00010 0.00000 0.00000 1.68094 0.00000 0.00069 0.00998 0.00000 0.00037 0.00031	Plasma On	Yes	(PPM) 0.00032 0.00433 0.14210 0.00015 0.00088 292 0.00003 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000 0.00000	50% 50% 50% 50% 50% 50% 0% 50% 5	OSHA NIOSH NIOSH OSHA NIOSH NIOSH NIOSH NIOSH NIOSH OSHA NIOSH NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH OSHA NIOSH			

OSA CALCULATI	IONS								
		Rp	Pz	Ra	Az	Vbz	Ez	REQUIRED OSA (Voz)	PROVIDED OSA (IAQP)
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
STORAGE	Storage Rooms	0	0	0.12	560	67	0.80	84	0
				То	tal Require	ed by <u>IHP-</u>	<u>2:</u>	84	
				Total Pro	ovided by I	HP-2 using	g IAQP:		

		Rp	Pz	Ra	Az	Vbz	Ez	Voz
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm
CORRIDOR	Corridors	0	0	0.06	174	10	0.80	13
MEETING	Conference/meeting	5	8	0.06	708	82	0.80	103
OFFICE	Office Space	5	2	0.06	348	31	0.80	39
OFFICE	Office Space	5	2	0.06	351	31	0.80	39

		Rp	Pz	Ra	Az	Vbz	Ez	Voz
Room	Room Type	cfm / P	People	cfm/ft²	ft²	cfm		cfm
CORRIDOR	Corridors	0	0	0.06	174	10	0.80	13
TEAM ROOM	Conference/meeting	5	10	0.06	482	79	0.80	99
TEAM ROOM	Conference/meeting	5	10	0.06	482	79	0.80	99
CLOSET	Storage Rooms	0	0	0.12	96	12	0.80	14
CLOSET	Storage Rooms	0	0	0.12	96	12	0.80	14
TOILET	Restroom				58			0
TOILET	Restoom				58			0
	•	•				quired by		23
					i otal Pr	ovided by	<u> 1HP-4:</u>	25

		Rp	Pz	Ra	Az	Vbz	Ez	Voz
Room	Room Ty	pe cfm / P	People	cfm/ft²	ft²	cfm		cfm
WOMEN	Restroom				820			0
MEN	Restroom				550			0

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

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 CONTRATOR 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.

MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN
"S "	200S CFM	PLAQUE FACE CEILING DIFFUSER WITH ROUND NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE ROUND NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: CFM NECK SIZE RUN-OUT SIZE 0 - 100 6" 6" 101 - 220 8" 8" 221 - 320 10" 10" 321 - 500 12" 12" 501 - 750 15" 15" 751 - 1000 18" 18"	TITUS OMNI
"R", "E", "T"	200R CFM- R24 SQUARE NECK SIZE	CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGCRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: <u>CFM</u> <u>NECK SIZE</u> 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	WALL RETURN GRILLE /	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 350FL

AIR DEVICE LEGEND

200 🖋

CFM-W x H

DIRECTION OF FLOW

PIPING LEGEND

C+----

DRAIN PIPING

BALL VALVE

BUTTERFLY VALVE.

BUTTERFLY VALVE.

PIPE TURNING UP.

PIPE TURNING DOWN.

BRANCH OFF TOP OF MAIN.

BRANCH OFF SIDE OF MAIN.

ECCENTRIC REDUCER

BRANCH OFF BOTTOM OF MAIN.

SLOPE DOWN IN DIRECTION OF ARROW.

SEE SPECIFICATIONS FOR FINISH AND CONSTRUCTION MATERIAL FOR EACH AIR DEVICE. COORDINATE WITH ARCHITECT'S CEILING PLAN FOR LAY-IN OR SURFACE MOUNTING OF CEILING MOUNTED

WALL TRANSFER GRILLE.

- COORDINATE LOCATIONS OF CEILING MOUNTED AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER CEILING MOUNTED DEVICES. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS.

ATHAN ARCHITECTS

AMIL

LATHAN | BRYANT | CALMA

SHEET TITLE:

MECHANICAL SCHEDULES

PROJ. MGR.: WAC DRAWN: LMR DATE: REVISIONS

5/07/2024

24-24 NO. SHEET

NO:

INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

DIMENSIONS

(IN.) (WxLxH)

33"X33"X12"

33"X33"X12"

208

208

1,2,3,4,5

TYPE:

1. INDOOR, WALL MOUNT

2. INDOOR, CEILING CASSETE 3. INDOOR, HORIZONTAL CONCEALED, MEDIUM-STATIC

MARK

IHP-2

1. AIRFLOW RATED AT HIGH FAN SPEED.

560

ACCESSORIES:

3. MERV 13 FILTER.

4. AUXILIARY DRAIN PAN.

2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT

TONS

2.5

1. WALL MOUNTED HUMIDITY SENSOR.

2. SPRING VIBRATION ISOLATORS.

CAPACITY

18

CAPACITY

(MBH)

19

3. COOLING CAPACITY RATED AT 95°F. 4. HEATING CAPACITY RATED AT 47°F.

1. 3-POLE DISCONNECT SWITCH. 2. HARD WIRED UNIT CONTROLLER.

3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED

CONNECTIONS.

ELECTRICAL

4. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD.

WEIGHT

(LBS.)

100

100

ACCESSORIES

1,2,3,4

1,2,3,4

1. OUTDOOR HEAT PUMP NOTES:

TYPE:

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.

		COOLING	HEATING			ELECTRIC	CAL		EFFIC	IENCY	BASIS OF
MARK	TYPE	CAPACITY (MBH)	CAPACITY (MBH)	V	PH	HZ	MCA (A)	MOCP (A)	SEER	HSPF	DESIGN
OHP-1	1	30	32	208	1	60	19 A	26 A	23.4	9.5	MITSUBISHI
OHP-2	1	18	19	208	1	60	11 A	28 A	25	9.2	MITSUBISHI

ACCESSORIES:

3. ELECTRIC HEAT.

1. SINGLE POINT POWER CONNECTION

5. PROGRAMMABLE THERMOSTAT - 24/7.

2. FILTER RACK WITH 1" THICK FILTERS - MERV 8.

4. DISCONNECT SWITCH PROVIDED AND INSTALLED BY ELECTRICAL.

2. MICROPROCESSOR CONTROLS.

5. ANTI SHORT CYCLE TIMER.

6. HAIL / VANDAL GUARDS.

4. LIQUID LINE REFRIGERANT FILTER DRIER.

3. ISOLATION VALVES.

OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

DEHUMIDIFIER SCHEDULE

UNIT TYPE:

1. HORIZONTAL DEHUMIDIFIER.

ELECTRICAL TO PROVIDE DEDICATED 15 AMP CIRCUIT.

FAN TYPE:

CEF-1

CEF-2

CEF-3

TYPE

100

0.50

803

57 W

RECOVERY CORE. AND MATCHED CONDENSING UNIT.

		WATER		EL		ELECTRICAL			UNIT		
MARK	TYPE	REMOVAL	AIRFLOW (CFM)	V	РН	HZ	MOCP	ACCESSORIES	WEIGHT (LBS)	BASIS OF DESIGN	
DH-1	1	70 PINTS/DAY	140	120	1	60	15 A	1,2,3,4	80	SANTA FE ULTRA	
DH-2	1	70 PINTS/DAY	140	120	1	60	15 A	1,2,3,4	80	SANTA FE ULTRA	

AIR HANDLER UNIT TYPE:

MCA (A)

1 A

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

BASIS OF

DESIGN

MITSUBISHI

MITSUBISHI

1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT

2. HEATING CAPACITY IS NET CAPACITY @ 47°F AMBIENT 3. UL LISTED. AHRI CERTIFIED.

. SEE PLANS FOR AIRFLOW CONFIGURATION.

Loren Cook Company

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		S	UPPLY FAN	١			DX COOLING	COIL CAPACIT	Υ	DX HEATING	CAPACITY	ELE	CHEAT		ELI	ECTRIC	CAL			BASIS OF
MARK	TYPE	AIRFLOW	E.S.P.		OSA (CFM)	NOMINAL	TOTAL (MBH)	SENSIBLE	EAT	TOTAL	EAT	KW	STAGES	V	РН	HZ	MCA		ACCESSORIES	DESIGN
		(CFM)	(INW.G.)	(HP)		TONS	TOTAL (MDIT)	(MBH)	(DB°F/WB°F)	(MBH)	(DB°F)	1244	OIAGEG	•		112	(A)	(A)		
IHP-3	1	1700	0.75"	3/4	200 CFM	4	45.5	37.6	76/63	41.5	70	10.8	1	208 V	3	60	44	45	1,2,3,4,5	TRANE
IHP-4	1	1460	0.75"	3/4	250 CFM	4	44.4	34.5	78/64	41.5	70	10.8	1	208 V	3	60	44	45	1,2,3,4,5	TRANE

INDOOR HEAT PUMP UNIT SCHEDULE

FAN SCHEDULE FAN ACCESSORIES: 1. CEILING MOUNTED EXHAUST FAN 1. BACKDRAFT DAMPER. 2. DISCONNECT SWITCH. 3. ALUMINUM CEILING GRILLE. 4. 5A-120V FAN SPEED CONTROLLER. 5. INTERLOCK WITH LIGHT SWITCH. **BASIS OF DESIGN** AIRFLOW E.S.P. WHEEL **MOTOR ELECTRICAL RPM** ACCESSORIES SIZE (CFM) (in-wg) (HP / W) HZ MANUFACTURER MODEL V PH 0.50 50 841 32 W 120 V 60 1,2,3,4,5 Loren Cook Company GC 1,2,3,4,5 GC 100 0.50 803 57 W 120 V 60 Loren Cook Company

60

OUTDOOR HEAT PUMP SCHEDULE ACCESSORIES 1. PHASE PROTECTION. 1. OUTDOOR HEAT PUMP

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. THERMAL EXPANSION VALVE.

CAPS. ANY ACCESS DEVICE REQUIRED SHALL BE LEFT ON SITE WITH THE OWNER AT PROJECT CLOSE OUT

		NOMINAL	COOLING	HEATING		ELECTRICAL EFFICIENCY						BASIS OF		
MARK TYP	TYPE	TONS	CAPACITY (MBH)	HEATING CAPACITY (MBH)	STAGES	V	РН	HZ	MCA (A)	MOCP (A)	COOLING (SEER,EER/IEER)	HEATING (HSPF,COP)	DESIGN	
OHP-3	1	4	45.5	37.5	1	208 V	3	60	18	30	14.5	8.2	TRANE	
OHP-4	1	4	44.4	34.5	1	208 V	3	60	18	30	14.5	8.2	TRANE	

COMPONENTS

SPLIT ENERGY RECOVERY UNIT

INDOOR, CONSTANT VOLUME, HORIZONTAL DRAW-THRU, WITH DX

120 V

3. PROVIDE ELECTRICAL CIRCUITS AS SCHEDULED.

GC

NOTES: 1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT. 1. 2" THICK THROWAWAY FILTERS, MERV 13. COOLING COIL, ELEC HEAT, HOT GAS RE-HEAT COIL, FIXED PLATE ENERGY 2. UNIT SHALL BE ASHRAE 90.1 - 2013 COMPLIANT.

ACCESSORIES:

2. INVERTER DUTY RATED MOTORS 3. UNIT MOUNTED VARIABLE FREQUENCY DRIVE FOR

SUPPLY & EXHAUST FAN. 4. HINGED ACCESS DOORS.

5. STAINLESS STEEL DRAIN PAN AND COIL CASINGS. 6. HOT GAS REHEAT COIL

7. FACTORY MOUNTED STAND ALONE DIGITAL CONTROLLER AS REQUIRED TO PROVIDE SEQUENCE ON SHEET M0.3

1. INTAKE SECTION WITH OUTSIDE AIR CONNECTION WITH AUTO DAMPER. 2. EXHAUST SECTION WITH EXHAUST AIR CONNECTION WITH AUTO DAMPER.

3. OSA FILTER SECTION WITH ANGLED FILTERS. 4. ENERGY RECOVERY CORE SECTION.

5. ELEC HEAT SECTION.

6. DX COOLING COIL. 7. ACCESS SECTION.

8. DIRECT DRIVE PLENUM FAN IN SUPPLY FAN SECTION WITH HORIZONTAL DISCHARGE. DIRECT DRIVE PLENUM FAN IN EXHAUST FAN SECTION WITH HORIZONTAL DISCHARGE.

	SUI	PPLY F	AN	EXH	HAUST F	AN		SUMMER			WINTER			E	LECTR	RICAL		ELEC	HEAT		DX COOL	ING COIL				BASIS OF DE	ESIGN
MARK		"W.G			"W.G.		OUTSIE	DE AIR	EXHAUST	OUTSID	E AIR	EXHAUST								LAT	TOTAL	SENSIBLE	NOM.	WEIGHT	ACCESSORIES		
WAIN	CFM	E.S.P	· HP	CFM	E.S.P.	HP	EAT (DB/WB)	LAT (DB/WB)	ENTERING (DB/WB)	EAT (DB/WB)	LAT (DB/WB)	ENTERING (DB/WB)	V	PH	Hz	MCA	MOCP	KW	STAGES	(DB/WB)	(MBH)	(MBH)	TONS	(LBS)	ACCECCINEC	MANUFACTURER	MODEL
ERU-1	1500	0.75	1.5	1600	0.75	1.5	95/78	80.1/74.1	75/63	15/17	56.3/38.4	70/58	480	3	60	7.65 25.32	15 30	16	2	54/53.9	102	43	10	2500	1,2,3,4,5,6,7	TRANE	CSA

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

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

PROVIDE FOR UNITS LISTED: IHP-2

WALL HEATER SCHEDULE **ACCESSORIES:**

HEATER TYPE: I. ELECTRIC WALL HEATER.

1. SURFACE MOUNTING. 2. UNIT MOUNTED THERMOSTAT. 3. CONCEALED ON/OFF SWITCH.

4. HIGH LIMIT CONTROLS. 5. BUILT-IN CIRCUIT BREAKER.

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

CONDENSING UNIT SCHEDULE

460 V 3 60

ELECTRICAL

1. AIR COOLED CONDENSING UNIT

. CAPACITY TO BALANCE RESPECTIVE INDOOR AC UNIT.

COOLING CAPACITY RATED AT 95°F.

3. UL LISTED, AHRI CERTIFIED.

1. 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.

NOMINAL

TONS

COOLING

CAPACITY (MBH)

8. THERMAL EXPANSION VALVE. 9. DUAL COOLING STAGES, DUAL CIRCUITS.

10. APR VALVE ON THE LEAD CIRCUIT. **EFFICIENCY**

1. PHASE PROTECTION.

3. ISOLATION VALVES.

2. MICROPROCESSOR CONTROLS.

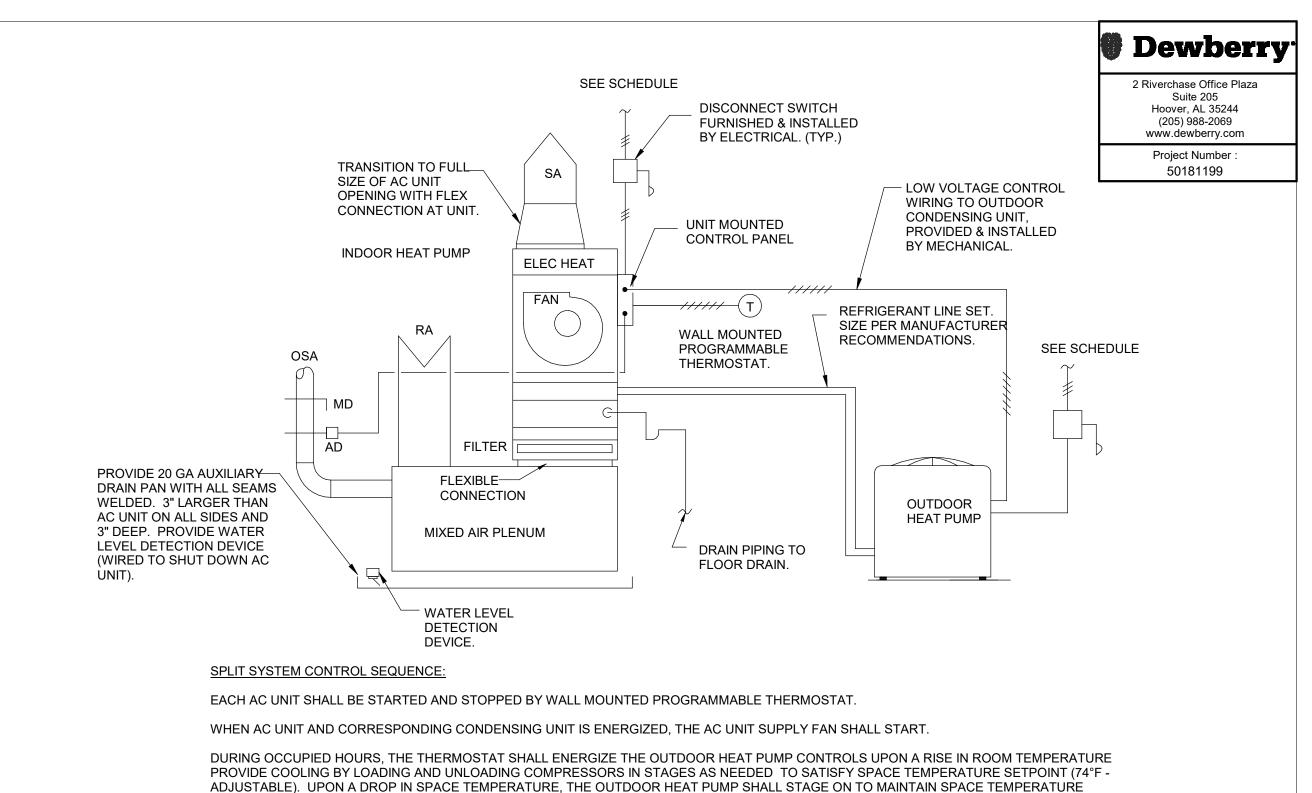
5. ANTI SHORT CYCLE TIMER.

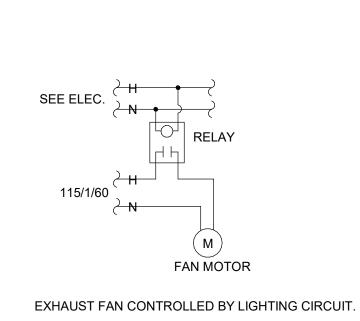
7. HAIL / VANDAL GUARDS.

BASIS OF DESIGN PH | HZ | MCA (A) | MOCP (A) COOLING (EER/IEER) 12.7/12.9 TRANE

4. LIQUID LINE REFRIGERANT FILTER DRIER.

6. LOW AMBIENT CONTROL DOWN TO 0°F.

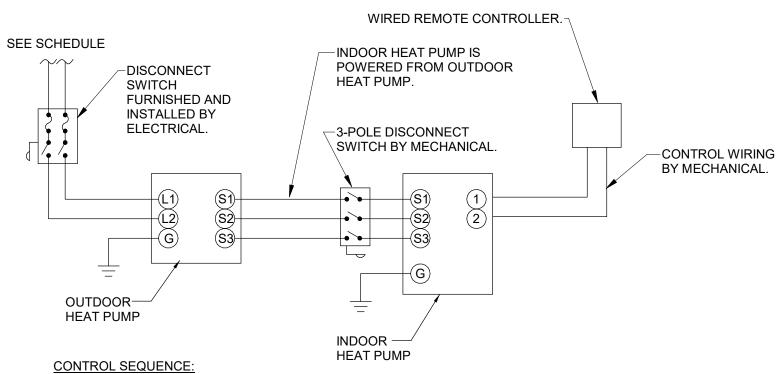






UNIT

COMPRESSORS



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

DUCTLESS SPLIT SYSTEM CONTROLS

NO SCALE

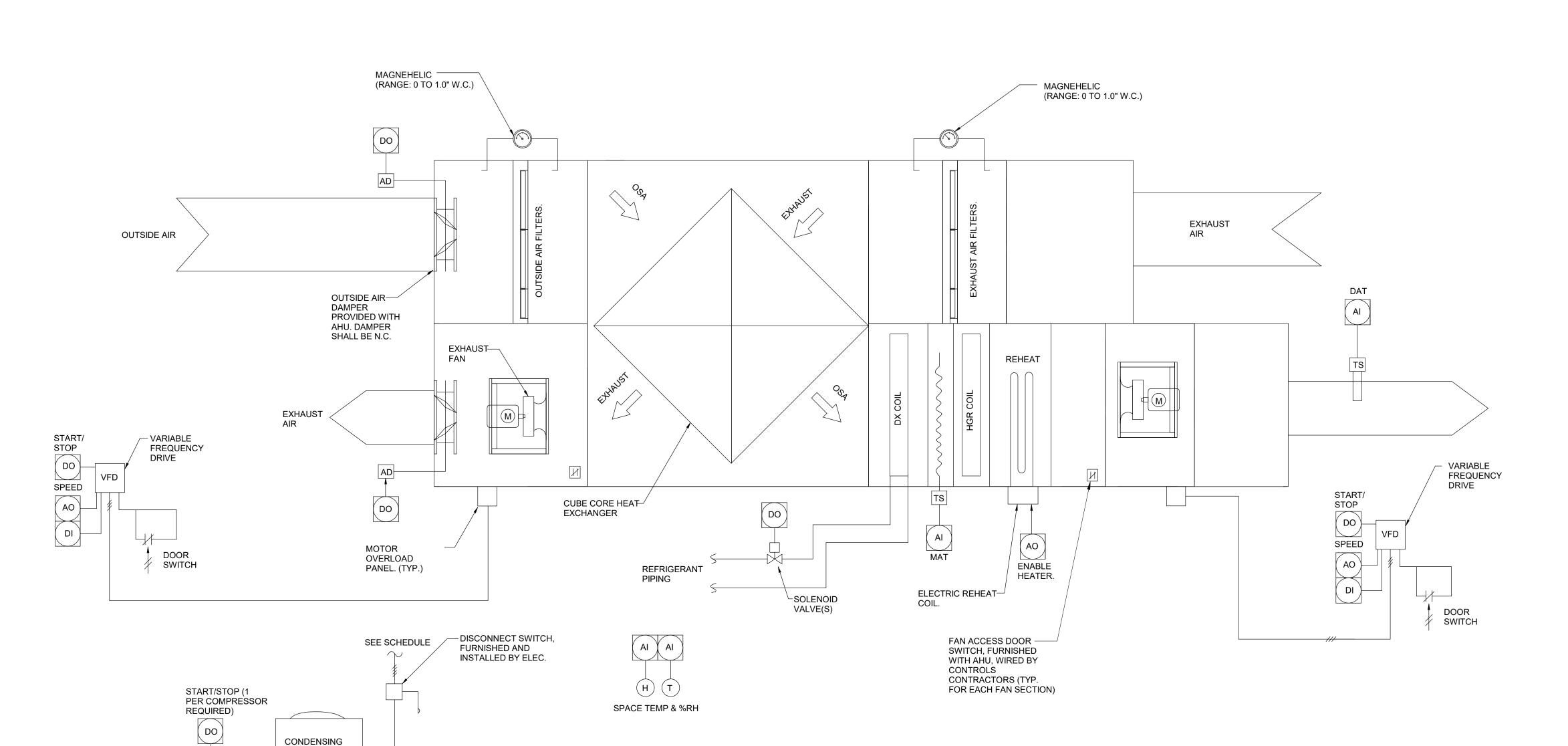


SETPOINT (70°F - ADJUSTABLE). IF THE HEAT PUMP CANNOT SATISFY SPACE TEMP, THE ELECTRIC HEAT SHALL STAGE ON. OCCUPIED HOURS

TO BE DETERMINED BY THE OWNER.

WHEN THE SUPPLY FAN RUNS, THE OSA DAMPER SHALL OPEN.

NO SCALE



ENERGY RECOVERY UNIT CONTROL SEQUENCE

THE CONTROLS FOR THE ENERGY RECOVERY UNIT ARE INTENDED TO BE STAND ALONE. ANY DIGITAL DEVICES SHOWN ARE INTENDED TO BE MONITORED OR CONTROLED THROUGH THE FACTORY UNIT MOUNTED

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 ALL INTERNAL UNIT SAFETIES. OCCUPIED AND UNOCCUPIED HOURS SHALL BE DETERMINED BY THE OWNER AND SHALL BE FULLY ADJUSTABLE AT THE UNIT MOUNTED COLNTROLLER 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.

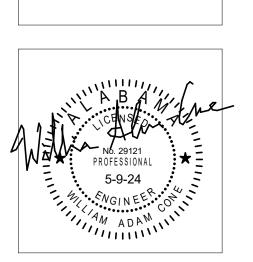
DURING OCCUPIED HOURS, THE EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL OPEN. ONCE THE DAMPERS ARE PROVEN TO BE OPEN, THE SUPPLY FAN AND EXHAUST FAN SHALL BE STARTED BY THE UNIT MOUNTED CONTROLLER AND SHALL RUN CONTINUOUSLY. TEST AND BALANCE SHALL ADJUST THE FAN SPEED AT THE VARIABLE FREQUENCY DRIVE FOR EACH FAN TO PROVIDE THE SCHEDULED OUTSIDE AIR AND EXHAUST AIR CFM. THIS FAN SPEED SHALL BE SET AND SHALL BE DISPLAYED AT THE THE UNIT MOUNTED COLNTROLLER. 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 SPACE TEMPERATURE COOLING SETPOINT 75degF AND HEATING SETPOINT THE ELEC HEATER SHALL STAGE TO MAINTAIN SPACE TEMPERATURE OF 70°F (ADJUSTABLE)

IF THE SPACE MOUNTED RELATIVE HUMIDITY SENSOR RISES ABOVE 60% RH 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 DX COOLING SHALL PROVIDE A DISCHARGE AIR TEMPERATURE OF 54degF (ADJ) AT THE LAT SENSOR, AND THE HOT GAS REHEAT SHALL MODULATE TO MAINTAIN A DISCHARGE TEMPERATURE OF 72degF AT THE DAT SENSOR. ONCE THE HUMIDITY RETURNS TO BELOW 55%RH, THE ERU SHALL RETURN TO NORMAL OCCUPIED OR UNOCCUPIED MODE.



AMIL

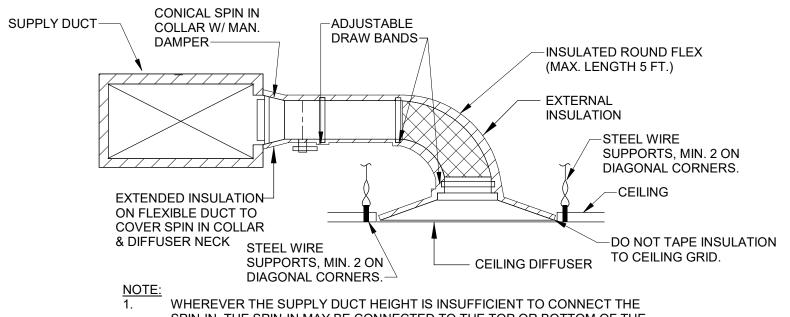


SHEET TITLE: MECHANICAL CONTROLS

PRO	J. MGR.:	WAC
DRAV	VN:	LMR
DATE	:	5/07/2024
REVI	SIONS	

JOB NO. 24-24 SHEET NO:

OUTSIDE AIR UNIT CONTROLS - FIXED PLATE HX, DX WITH ELECTRIC HEAT NO SCALE

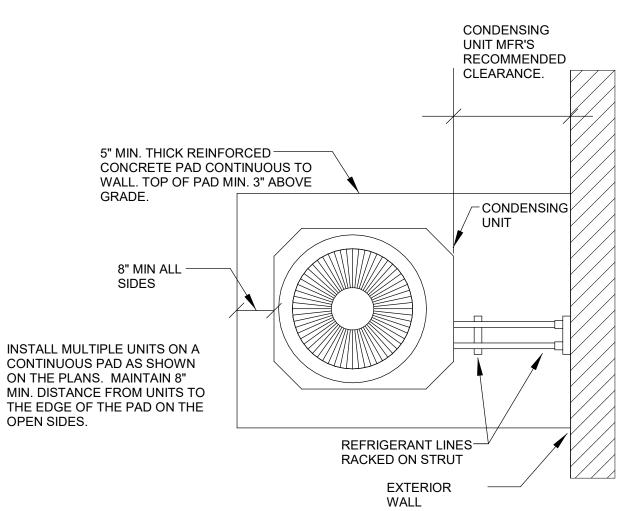


TE:

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.

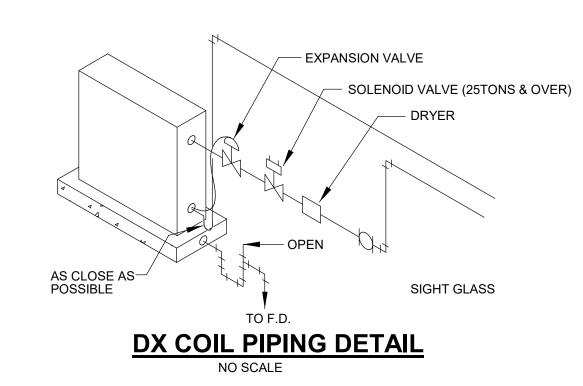
- 2. PROVIDE EXTERNAL INSULATION ON ALL ROUND BRANCH DUCTWORK. SEE SPECS FOR THICKNESS AND EXTENT.
- 3. PROVIDE EXTERNAL INSULATION ON BACK SIDE OF CEILING DIFFUSERS. THICKNESS TO MATCH BRANCH DUCT INSULATION THICKNESS.

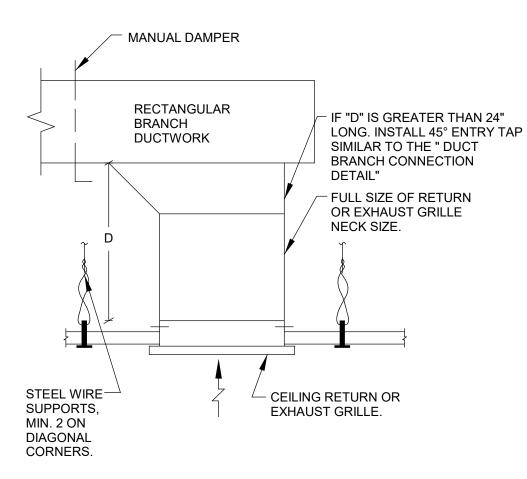
CEILING DIFFUSER INSTALLATION DETAIL NO SCALE



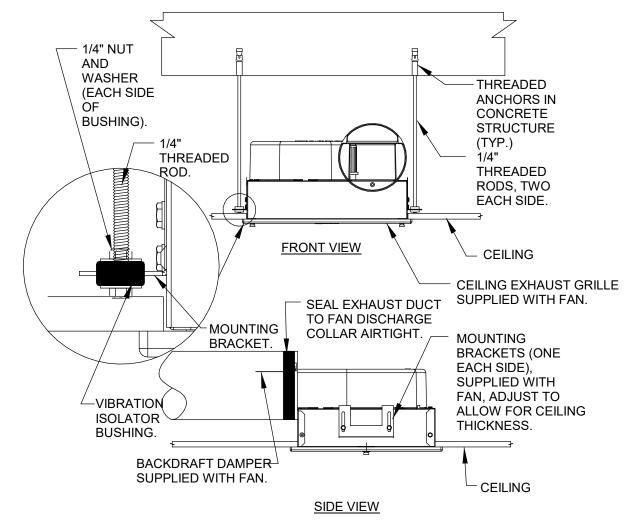
CONDENSING UNIT INSTALLATION

NO SCALE

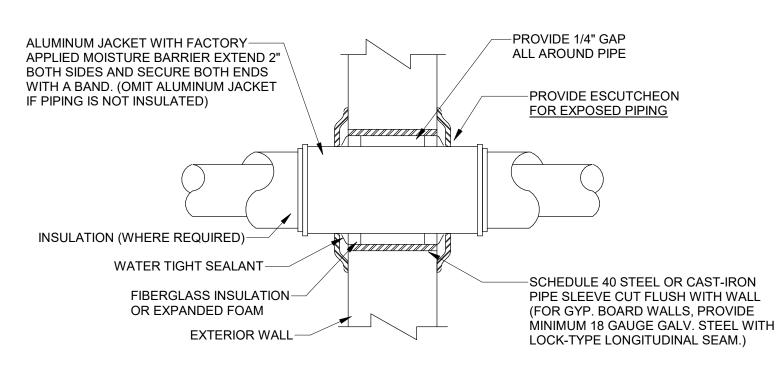




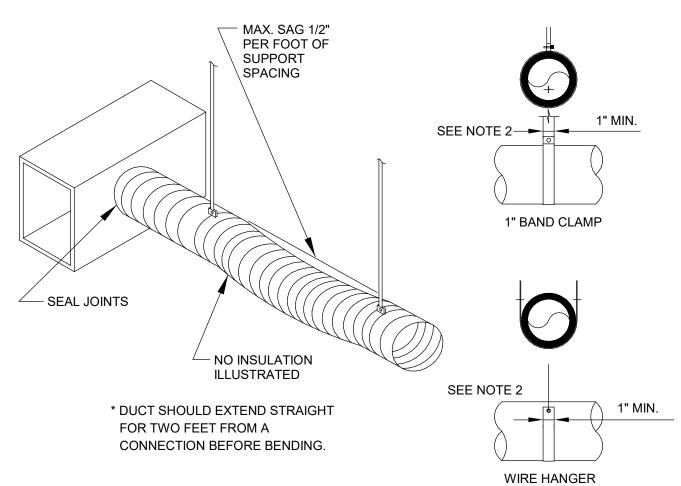
CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL



CEILING EXHAUST FAN DETAIL



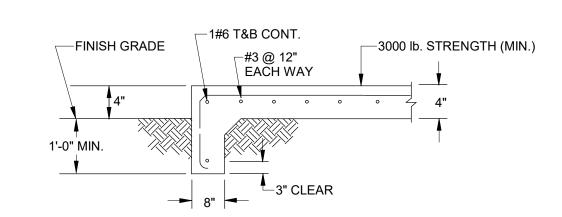
PIPE PENETRATION DETAIL NO SCALE



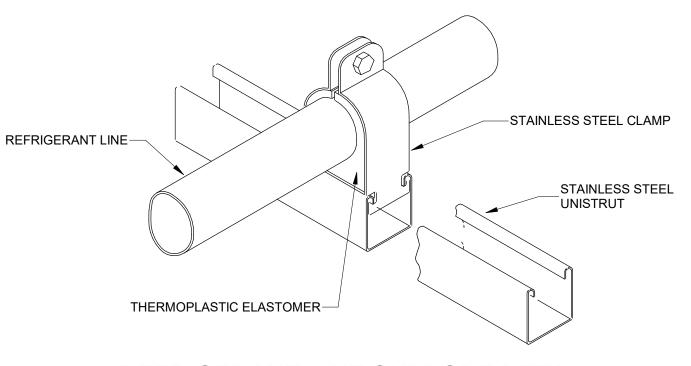
NOTES:

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

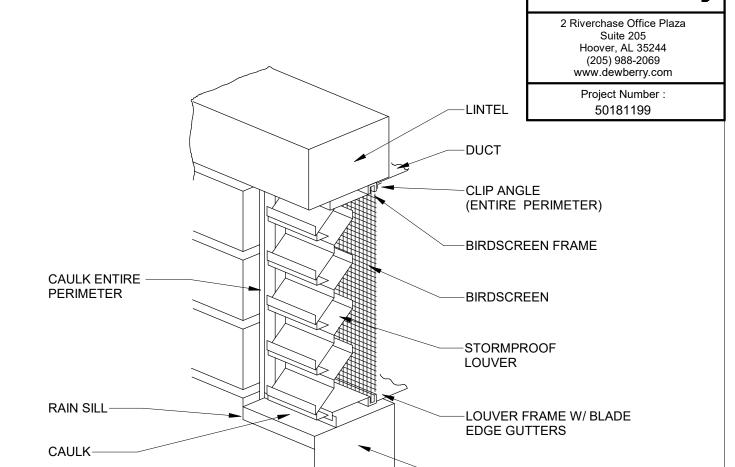
NO SCALE



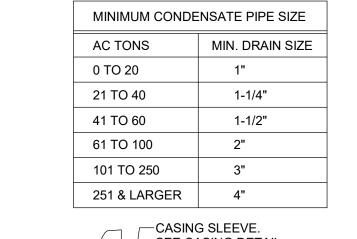
CONCRETE PAD DETAIL NO SCALE

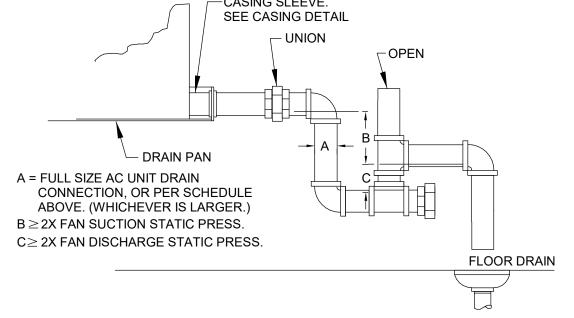


REFRIGERANT LINE SUPPORT DETAIL NO SCALE

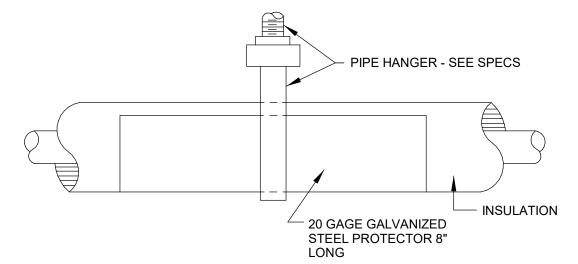


HVAC WALL LOUVER

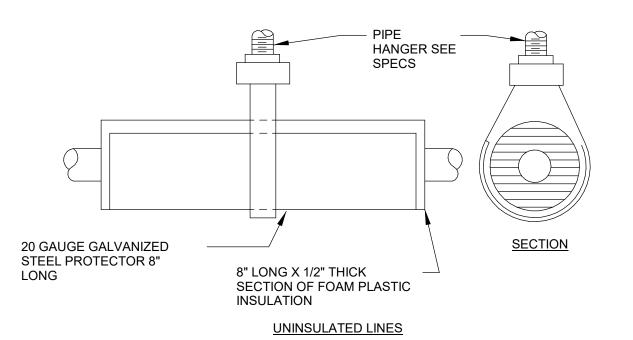




AC UNIT DRAIN TRAP DETAIL NO SCALE



INSULATED LINES



REFRIGERANT PIPING HANGER DETAIL

<u> IAIL</u>

MO.4

1"

4 OF 5

24-24



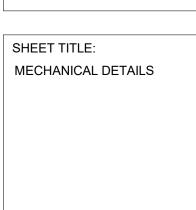
LATHAN | BRYANT | CALMA

Dewberry

CONCESSIONS AND TOILET ROOM FACILITY FOR THE

CITY OF HAMILTON, AL





WAC

LMR

5/07/2024

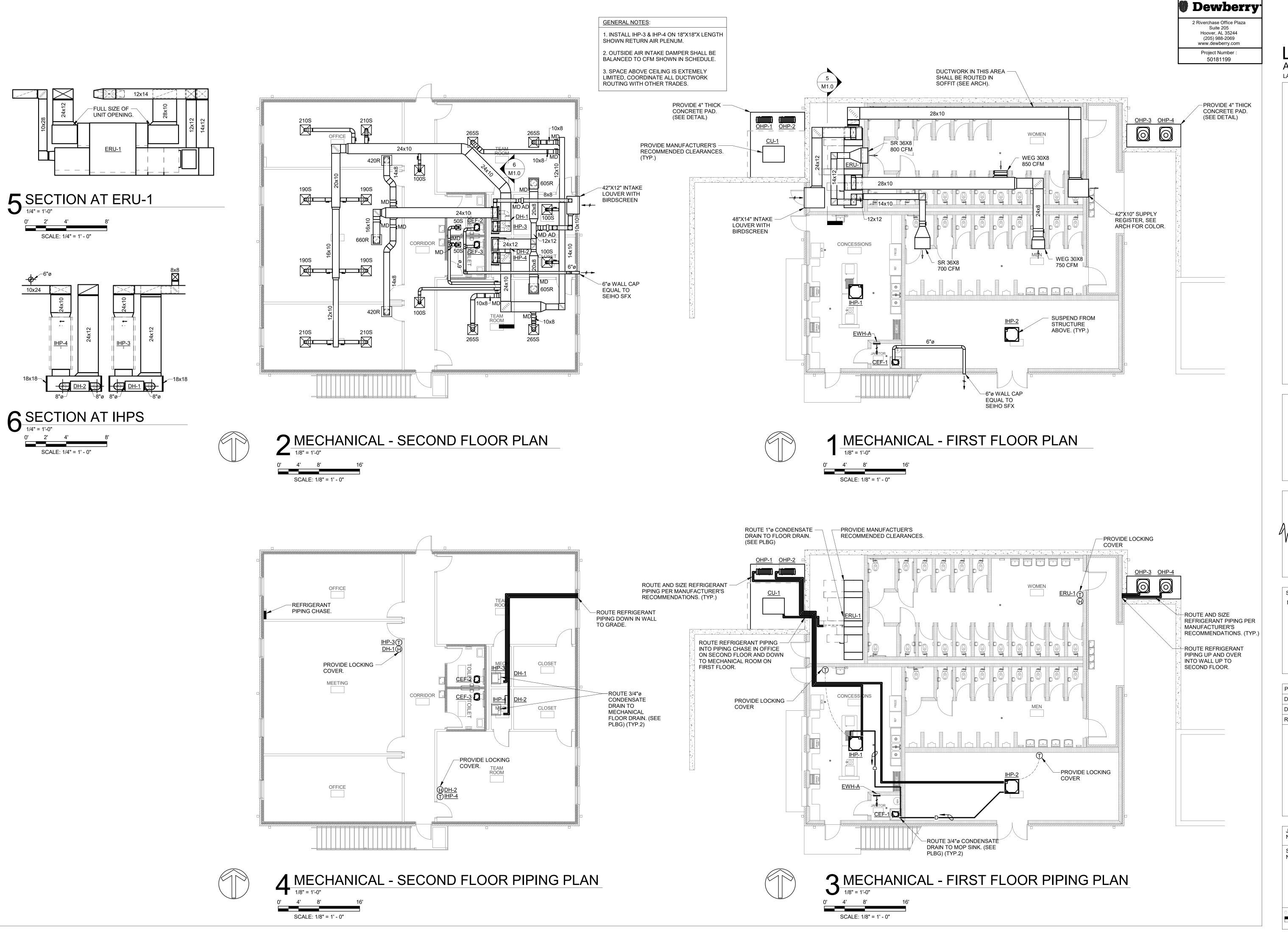
PROJ. MGR.:

REVISIONS

DRAWN:

DATE:

JOB NO.



LATHAN ARCHITECTS LATHAN | BRYANT | CALMA

AND TOILET ROOM FACI

SHEET TITLE: MECHANICAL FLOOR PLAN

PRO	J. MGR.:		WAC
DRAV	VN:		LMR
DATE	:	5	5/07/2024
REVI	SIONS		

JOB NO. 24-24 SHEET NO: M1.05 OF 5

LIGHTING FIXTURE SCHEDULE

		21711 22112		LAMPS		MOUNTING	TYPE	RECESS	DE1/10/20
MARK	MANUFACTURER	CATALOG NO.	NO.	WATTS	TYPE	HEIGHT	MOUNTING	DEPTH	REMARKS
А	METALUX	24FP6440C-UNV	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	3-1/4"	
A (EM)	METALUX	24FP6440C-UNV EBPLED14W	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	3-1/4"	SEE NOTE 1
В	METALUX	22FP4740C-UNV	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	3-1/4"	
B (EM)	METALUX	22FP4740C-UNV EBPLED14W	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	3-1/4"	SEE NOTE 1
С	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA- 6VLEDMD-SCLPF	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	6"	
D	METALUX	4SNLED-LD4-4600SL- LW-UNV-L840-CD1	FURNIS	HED WITH F	FIXTURE	CEILING	SURFACE		
D (EM)	METALUX	4SNLED-LD4-4600SL- LW-UNV-EL14-L835-CD1	FURNISH	HED WITH F	FIXTURE	CEILING	SURFACE		SEE NOTE 1
F	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA- 6VLEDFOL-SCLPF	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	6"	
F (EM)	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA- 6VLEDFOL-SCLPF-EM	FURNISH	HED WITH F	FIXTURE	CEILING	RECESSED	6"	SEE NOTE 1
G	MCGRAW-EDISON	ISW-E02-LED-E1- BL4-BZ-TR-OSB	FURNISH	HED WITH F	FIXTURE	+9'	BRACKET		
G (EM)	MCGRAW-EDISON	ISW-E02-LED-E1- BL4-BZ-TR-BBB	FURNISH	HED WITH F	FIXTURE	+9'	BRACKET		SEE NOTE 1
Н	LUMIERE	303-W1-LED81-3000- 120-T2-XX	FURNISH	HED WITH F	FIXTURE	VERIFY WITH ARCHITECT	BRACKET		
Х	SURE-LITES	APX-7-R-WH	FURNISH	HED WITH F	FIXTURE	© ABOVE DOOR	BRACKET		

1. FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS.

- UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING. 2. VERIFY ALL FIXTURE COLORS WITH ARCHITECT PRIOR TO SUBMITTALS.
- 3. EQUAL FIXTURES BY LITHONIA, DAYBRITE, PARKER, AND COLUMBIA WILL BE CONSIDERED APPROVED EQUALS.

GENERAL NOTES

- 1. SERVICE TO BUILDING IS 277/480 VOLTS, 3 PHASE, 4 WIRE.
- VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
- 3. VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
- CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF COUNTERTOPS AND BACKSPLASHES ON ARCHITECTURAL DETAILS AND/OR CASEWORK SHOP DRAWINGS AND ADJUST SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED TO AVOID CONFLICTS.
- CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
- FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
- SUPPORT OF ALL LIGHTING FIXTURES TO BE THE RESPONSIBILITY OF THIS CONTRACTOR. FIXTURES TO BE SUPPORTED INDEPENDENT OF CEILING FROM STRUCTURAL MEMBERS OF THE BUILDING.
- ELECTRICAL CONTRACTOR MUST CHECK THE CORRESPONDING MECHANICAL SHEETS AND BE RESPONSIBLE FOR INCLUDING PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL ITEMS SHOWN THEREON REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
- 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.)

COLOR CODE FOR JUNCTION BOXES

PAINT ALL JUNCTION BOXES AND COVERS WITH COLORS AS SHOWN BELOW. PAINTING COVERS ONLY IS NOT ACCEPTABLE.

> FUNCTION: COLOR: LIGHTING BLUE POWER GREEN

ELECTRICAL SYMBOLS

CEILING OUTLET - FIXTURE "A", CIRCUIT 1, SWITCH a. CEILING OUTLET - FLUORESCENT FIXTURE. CEILING OUTLET - FLUORESCENT INDUSTRIAL OR STRIP TYPE. WALL OUTLET - INCANDESCENT BRACKET TYPE. WALL OUTLET - FLUORESCENT BRACKET TYPE. WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR 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. 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) 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. WALL OUTLET - DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR. INSTALL #WIUC10-CAGV WEATHERPROOF COVER. DEVICE SHALL BE LABELED AS "EXTRA DUTY". FLOOR OUTLET - CONDUIT STUB UP. CEILING OUTLET - JUNCTION BOX. WALL OUTLET - JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT. SWITCH OUTLET - AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 - GREY.("N" DENOTES NARROW) SWITCH OUTLET - FLUORESCENT DIMMER - LUTRON NOVA-T SERIES #NTF-103P. SWITCH OUTLET - AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 - GREY. SWITCH OUTLET - AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 - GREY. SWITCH OUTLET - AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 - GREY. SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION. SWITCH OUTLET - AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #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. EMPTY CONDUIT -3/4". BRANCH CIRCUIT EXPOSED. CONDUIT RUN DOWN WALLS, CONCEALED CONDUIT RUN UP WALLS, CONCEALED MOTOR SHOWN 5hp (TYPICAL) OR 40 AMPS (TYPICAL). EXHAUST FAN MOTOR - FRACTIONAL HORSEPOWER. MAGNETIC MOTOR STARTER. NON-FUSED DISCONNECT SWITCH. (RT - RAINTIGHT). FUSED DISCONNECT SWITCH. A.F.F. ABOVE FINISHED FLOOR. VERIFY LOCATION. NATIONAL ELECTRICAL CODE. GROUND FAULT CIRCUIT INTERRUPTER WEATHER PROOF ISOLATED GROUND WALL SWITCH WITH BUILT IN MOTION SENSOR - COOPER #OSW-P-0451-W WITH WALL PLATE CEILING MOUNTED MOTION DETECTOR - COOPER #OMC-P-1200-R MOTION SENSOR SWITCHPACK - COOPER #SP20-MV (INSTALLED ABOVE LAY-IN CEILING)

COLOR CODE FOR ELECTRICAL WIRING

MOTION SENSOR WIRING - LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)

277/480 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM PHASE A-BROWN B-ORANGE C-YELLOW N-GRAY

120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM PHASE A-BLACK B-RED C-BLUE

GROUND-GREEN

N-WHITE

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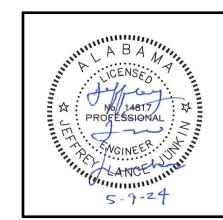
STEWART ENGINEERING ELECTRICAL CONSULTANTS

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

Engineer:

Project Number: J. Lance Junkin, P.E. Alabama Reg. 14817

LATHAN ARCHITECTS

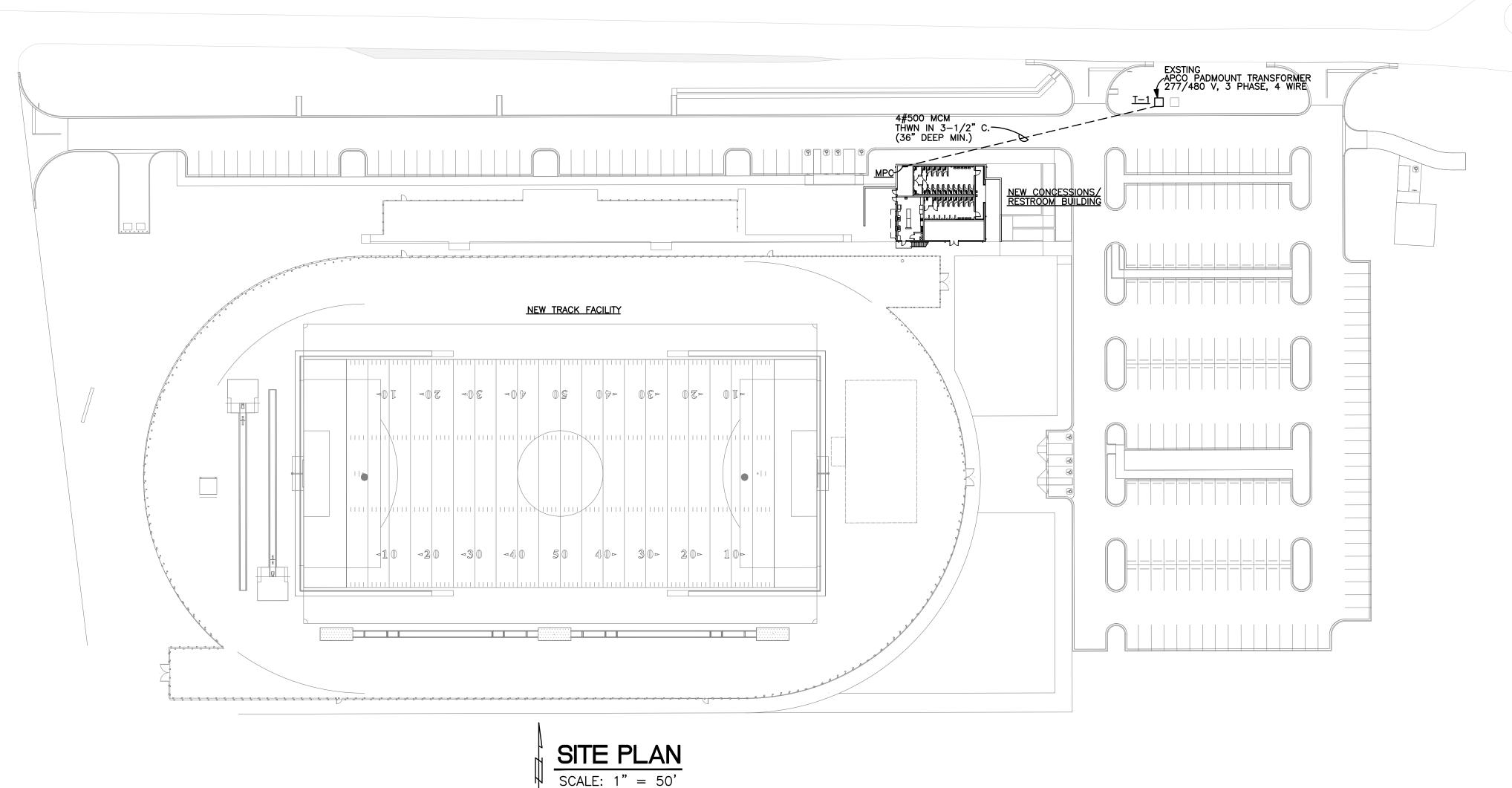


SHEET TITLE: SCHEDULES, SYMBOLS, AND NOTES

PROJ. MGR.: LANCE JUNKIN MAY 7, 2024 REVISIONS

JOB NO. **24-24** SHEET NO:

1 OF 3



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.

PANELBOARD SCHEDULE

MARK	TYPE	MAINS		BRANCHES					LUG		AREA PANEL	AVAILABLE FAULT	REMARKS	
MARK	TIPE	TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES	LOCATION	MOUNTING	LOCATED	CURRENT	NEMARKS
<u>MPC</u>	I-LINE	м/в	400	277/480V 3ø, 4W			1-100 1-200		5-3PS	воттом	SURFACE	ELEC 101	20,000	SEE NOTES 1, 2, 3, & 4
LPC	NF	LUGS	100	277/480V 3ø, 4W	5-20		1-20 2-30	6-20/1	10-1PS	воттом	SURFACE	ELEC 101	18,000	SEE NOTES 1, 2, & 3
DPC	I-LINE	M/B	400	120/208V 3ø, 4W			2-225		5-3PS	воттом	SURFACE	ELEC 101	10,000	SEE NOTES 1, 2, & 3
RPC	NQOD	LUGS	225	120/208V 3ø, 4W	29-20			6-20/1	7-1PS	воттом	SURFACE	ELEC 101	10,000	SEE NOTES 1, 2, & 3
PPC	NQOD	LUGS	225	120/208V 3ø, 4W	4-20	1-20 2-30	2-30 2-45 1-60	6-20/1	11-1PS	воттом	SURFACE	ELEC 101	10,000	SEE NOTES 1, 2, & 3

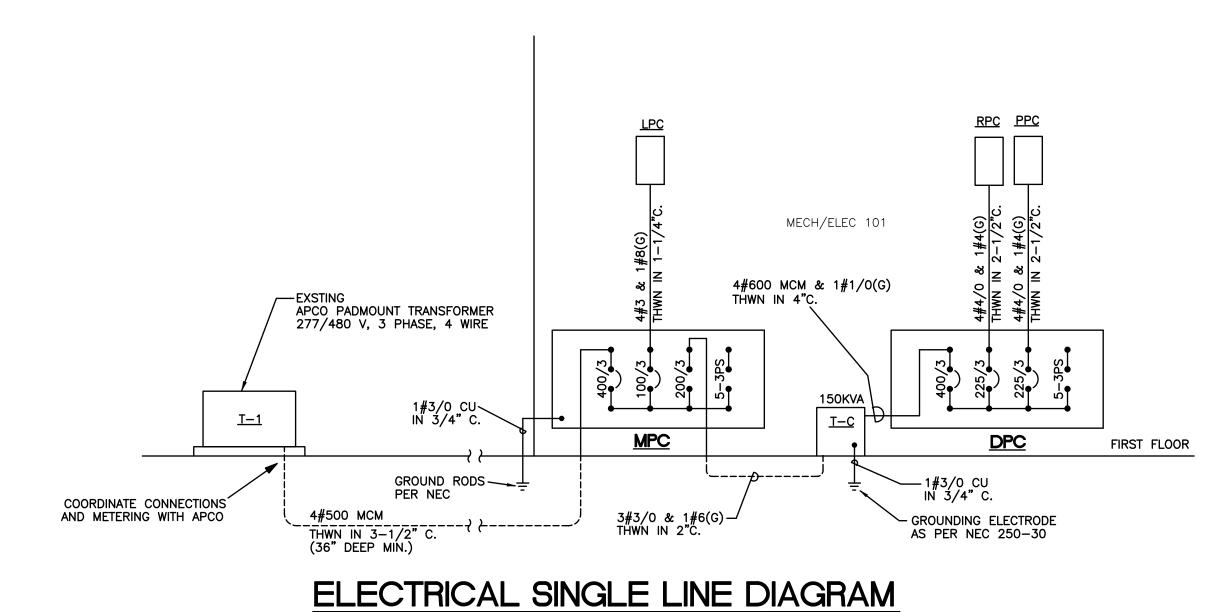
- NOTES:

 1. ALL PANELBOARDS SHALL BE CAPABLE OF WITHSTANDING AND INTERRUPTING THE AVAILABLE FAULT CURRENTS AS LISTED ABOVE.

 2. ALL PANELBOARDS SHALL HAVE MICARTA LABELS SHOWING PANELBOARD DESIGNATION, AND OPERATING VOLTAGE. I—LINE PANELBOARDS
- 3. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.
- 4. SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.

- PANELBOARD NOTES:

 1. MANUFACTURER OF SWITCHBOARDS AND/OR PANELBOARDS SHALL PERFORM FAULT CURRENT CALCULATIONS, COORDINATION STUDY, AND ARC FLASH HAZARD ANALYSIS, AND LABEL ALL SWITCHBOARDS AND/OR PANELBOARDS, IN ACCORDANCE WITH NFPA 70E-2009
- 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).



TRANSFORMER SCHEDULE

MARK	SIZE	PRIMARY	SECONDARY	MANUFACTURER	CATALOG NUMBER	REMARKS
T-C	150 KVA	480V 3ø DELTA	120/208V 3ø, 4W, WYE	SQUARE D	150T3H	SEE NOTE 1

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.

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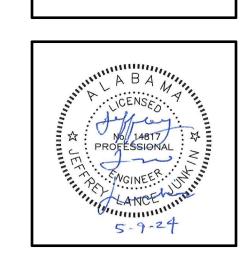
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JOB NO. **24-24** SHEET NO:

2 OF 3





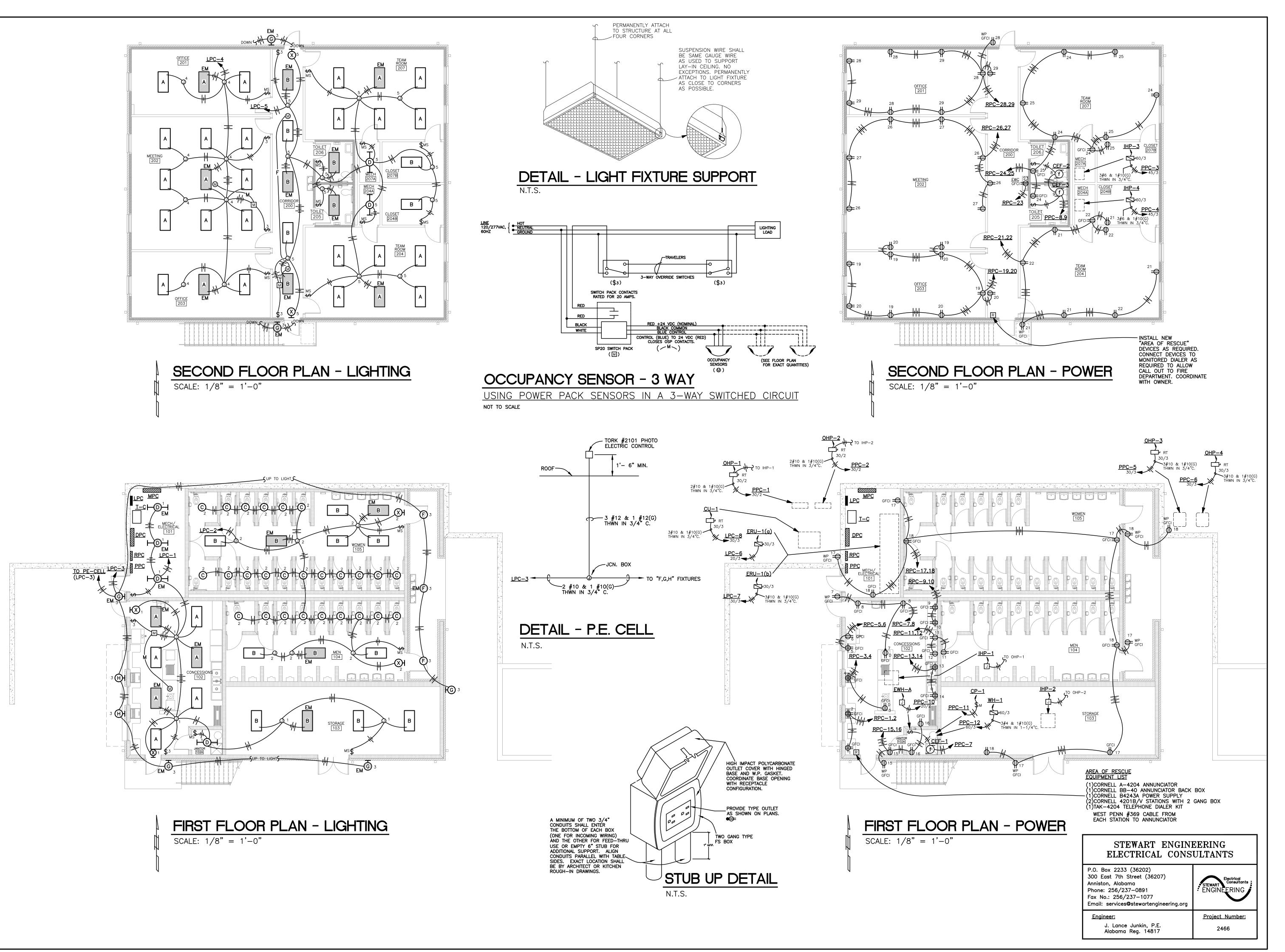
SHEET TITLE:

REVISIONS

SITE PLAN AND SINGLE LINE DIAGRAM

PROJ. MGR.: LANCE JUNKIN

MAY 7, 2024

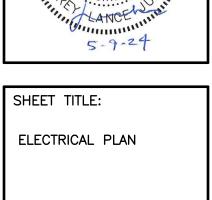




S AND TOILET ROOM FACILITY FOR THE

F HAMILTON

A B A Maria



PROJ. MGR.: LANCE JUNKIN
DRAWN: SEC
DATE: MAY 7, 2024
REVISIONS

JOB NO. **24–24**SHEET NO: **E3.1**3 OF 3