



Alabama State Port Authority
Requisition and Proposal

Project Name Maintenance of Way Breakroom Renovation

Project No. 11076 **Task No.** 3

To: Prospective Bidders

Date: October 2023

Please procure the following and deliver to the address below:

Delivery of Proposal Alabama State Port Authority (ASPA) Location identified below in Note #1	Delivery of Work Alabama State Port Authority 998 Dekle Street Mobile, AL
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DESCRIPTION OF WORK

This Requisition solicits proposals for the renovations of the Terminal Railroad Maintenance of Way Breakroom as specified in the attached documents and drawings. All work shall be in accordance with the requirements stated herein, Scope of Work Specifications, Reference documents and drawings, Insurance Requirements and applicable State of Alabama and Federal Laws.

The work consists principally of providing bonds, labor, materials, equipment, insurance, and supervision necessary to complete the work as specified in the attached documents and drawings. It is the Contractor’s responsibility to field verify all dimensions and site conditions essential for the successful completion of the work. The Contractor shall not be entitled to any additional compensation for any work or expense resulting from the neglect of verifying all existing site conditions. The project site is located on 998 Dekle Street in Mobile, Alabama.

All Contractors submitting bids are to carefully examine the site of the proposed work during the pre-bid meeting and thoroughly review the contract requirements prior to submission of a bid proposal. Each Bidder shall satisfy oneself as to the character, quality, and quantities of work to be performed, and as to the requirements of the proposed contract. The submission of a proposal shall be proof that the bidding Contractor has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the proposed Contract. All bidding Contractors must hold the proper license from the State Licensing Board for General Contractors, Montgomery, Alabama if the cost for the project is \$50,000 or more. **The license classification shall be BC-Building Construction or BCU4: Building Construction under Four Stories.**

A **MANDATORY** pre-bid meeting is scheduled for Thursday, November 2, 2023 at 9:00 a.m. The meeting location will be at the work location on 998 Dekle Street. If the parking lot out front is full, then enter through the gate and find a place to park that is out of the way and allows for vehicles and equipment to pass. Any prospective bidders needing directions should call the project manager a minimum of 24 hours in advance of the meeting.

The work performed under this contract shall not commence until the Contractor has submitted a Performance Bond, Labor & Material Bond, and Certificate of Insurance. Performance Bond shall be in an amount equal to 100% of the contract price; Labor & Material Bond equal to 100% of the contract price; and Certificate of Insurance shall be as per the attached requirements and countersigned by a licensed resident agent in the State of Alabama. The work performed under this contract shall not commence until the Contractor has submitted bonds and insurance in an acceptable form.

The Contractor will be required to complete the work under the Contract within 180 calendar days after receipt of a “Notice to Proceed”. The work will have to be scheduled and performed in a manner that will not interfere with the operations of the facility ongoing in the immediate and adjacent areas. ASPA intent is that work hours will be during normal day light hours. The contractor will be required to submit a



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schedule detailing the sequence of work and time frame for Contractor's activities within 10 calendar days of the "Notice to Proceed" and before work begins.

The Contractor shall comply with all Federal and State laws, local ordinances and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work.

The Contractor shall place a competent superintendent on the Project who shall have experience in the work being performed under the Contract. The assigned superintendent shall have the responsibility for the day-to-day operations of the work and shall remain on the Project site while the work under the Contract is being performed.

Time is an essential element in the contract. As the prosecution of the work will inconvenience the tenant and interfere with business, it is important that the work be pressed vigorously to completion. Also, the cost to the Alabama State Port Authority of the administration of the contract, supervision, inspection and engineering will be increased as the time occupied in the work is lengthened. Therefore, exclusive of Sundays and national holidays, for each day that the work remains incomplete after the time specified, an amount of \$300.00 shall be paid by the contractor to the Alabama State Port Authority as liquidated damages for the loss sustained by the State because of failure of the contractor to complete the work within the specified time.

Subsequent to the final acceptance of this project by the Engineer, the following requirements must be satisfied by the Contractor before final payment can be made.

- a) The Contractor must execute copies of CONTRACTOR'S AFFIDAVIT OF PAYMENT OF CLAIMS AND DEBTS on the form furnished by the Engineer.
- b) The Contractor must have his surety execute copies of CONSENT OF SURETY TO FINAL PAYMENT on the form furnished by the Engineer.
- c) The Contractor must furnish a letter on his letterhead acknowledging that acceptance of final payment by the Contractor constitutes a waiver of all claims, present or future, in connection with this project.
- d) The Contractor must furnish a written guarantee on his letterhead covering all defects in material and workmanship for a period of one (1) year commencing on the date of final acceptance.
- e) If any purchased items have been incorporated in the work, the Contractor must furnish a letter on his letterhead assigning those warranties to the OWNER. Copies of said warranties shall be bound in one binder and submitted along with the letter assignment.

IMPORTANT NOTICE TO BIDDERS REGARDING EMPLOYMENT PRACTICES:

Effective October 1, 2011, the Beason-Hammon Alabama Taxpayer and Citizen Protection Act ("the Act") requires that any business entity contracting with or providing any grant or incentives to the state, including the Alabama State Port Authority, certify compliance with the Act. All Bidders must certify such compliance by executing the enclosed "Certificate of Compliance" and returning it to the Alabama State Port Authority with your bid package. In addition, the bidding company shall submit with their bid evidence that the company is enrolled in the E-Verify system. The following E-Verify website link is provided for convenience: http://www.dhs.gov/files/programs/gc_1185221678150.shtm.

IMPORTANT NOTICE TO BIDDERS REGARDING ACCESS TO ASPA RESTRICTED FACILITIES:

The work on this project is not within an ASPA secured location and will not require access credential



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CONTRACTOR'S PROPOSAL					
The Contractor hereby agrees to perform the specified work for the prices outlined in the following schedule. All items listed shall be performed in accordance with this requisition and proposal and all referenced documents. This is a Lump Sum Bid for the work as shown on the drawings and as specified.					
<u>BID ALTERNATE #1</u>					
Item No.	Description	Unit	Quantity	Unit Price	Value
<u>General Construction Requirements</u>					
1.0					
1.1	Mobilization	Lump Sum	Lump Sum	Lump Sum	\$ _____
1.2	Demobilization	Lump Sum	Lump Sum	Lump Sum	\$ _____
1.3	Bonds and Insurance	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>Site Work</u>					
2.0					
2.1	GPR	Lump Sum	Lump Sum	Lump Sum	\$ _____
2.2	Excavation	Lump Sum	Lump Sum	Lump Sum	\$ _____
2.3	Concrete	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>Building Renovation</u>					
3.0					
3.1	Demolition	Lump Sum	Lump Sum	Lump Sum	\$ _____
3.2	Existing Office Renovation	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>Mechanical Components and Systems</u>					
4.0					
4.1	VRF Equipment and Ductwork and Mounting for Outside Unit (Wall Bracket or Concrete Pad)	Lump Sum	Lump Sum	Lump Sum	\$ _____
4.2	Exhaust Fan and Ductwork	Lump Sum	Lump Sum	Lump Sum	\$ _____
5.0	Electrical Components and Systems	Lump Sum	Lump Sum	Lump Sum	\$ _____
6.0	Plumbing	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>Miscellaneous</u>					
7.0	Miscellaneous (all items not specifically detailed in the schedule of prices but including in the contract documents.)	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>TOTAL BID – BID ALTERNATE #1</u>					\$ _____



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The Contractor hereby agrees to perform the specified work for the prices outlined in the following schedule. All items listed shall be performed in accordance with this requisition and proposal and all referenced documents. This is a Lump Sum Bid for the work as shown on the drawings and as specified.					
<u>BID ALTERNATE #2</u>					
Item No.	Description	Unit	Quantity	Unit Price	Value
1.0	<u>General Construction Requirements</u>				
1.1	Mobilization	Lump Sum	Lump Sum	Lump Sum	\$ _____
1.2	Demobilization	Lump Sum	Lump Sum	Lump Sum	\$ _____
1.3	Bonds and Insurance	Lump Sum	Lump Sum	Lump Sum	\$ _____
2.0	<u>Site Work</u>				
2.1	GPR	Lump Sum	Lump Sum	Lump Sum	\$ _____
2.2	Excavation	Lump Sum	Lump Sum	Lump Sum	\$ _____
2.3	Concrete	Lump Sum	Lump Sum	Lump Sum	\$ _____
3.0	<u>Building Renovation</u>				
3.1	Demolition	Lump Sum	Lump Sum	Lump Sum	\$ _____
3.2	Existing Office Renovation	Lump Sum	Lump Sum	Lump Sum	\$ _____
4.0	<u>Mechanical Components and Systems</u>				
4.1	Split System Heat Pump and Ductwork and Concrete Pad for Outside Unit	Lump Sum	Lump Sum	Lump Sum	\$ _____
4.2	Exhaust Fan and Ductwork	Lump Sum	Lump Sum	Lump Sum	\$ _____
5.0	Electrical Components and Systems	Lump Sum	Lump Sum	Lump Sum	\$ _____
6.0	Plumbing	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>Miscellaneous</u>					
7.0	Miscellaneous (all items not specifically detailed in the schedule of prices but including in the contract documents.)	Lump Sum	Lump Sum	Lump Sum	\$ _____
<u>TOTAL BID – BID ALTERNATE #2</u>					\$ _____



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NOTES:

1. Sealed bid proposals will be received via courier to the Alabama State Port Authority, 1400 Alabama State Docks Blvd, Suite 216, Administration Building, Mobile, AL 36602 by 1:00 P.M. on Thursday, November 16, 2023. Sealed bid proposals can also be hand delivered to the Killian Room starting at 15 minutes prior to the official bid opening at 2:00 PM on Thursday, November 16, 2023 at the Alabama State Port Authority in the International Trade Center building, 250 North Water Street, 1st floor—Killian Room, Mobile, AL. No bids will be accepted after 2:00 P.M. No faxed or electronic bids will be accepted. Conditional bids will not be accepted.
2. Bid proposals must be submitted in sealed envelopes with the words **“Bid Document Enclosed”** clearly marked on the outside of the envelope. Sealed bids shall have **the bidder’s name, contractor’s license number, project name, and time and date of bid opening shown on the outside of the envelope.**
3. A Bid Bond or Certified Check made payable to the Alabama State Port Authority and equal to five percent (5%) of the amount bid, not to exceed \$10,000, must accompany the Bid Proposal.
4. Authority reserves the right to refuse to issue a proposal form or a contract to a prospective bidder for any of the following reasons:
 - a) Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contract in force with the Authority.
 - b) Contractor default under previous Contract with the Authority.
 - c) Proposal withdrawal or Bid Bond forfeiture on previous project with the Authority.
 - d) Unsatisfactory work on previous contract with the Authority.
 - e) Lack of competency, past experience, adequate machinery or lack of personnel.
5. Authority may make such investigations as deemed necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish all such information and data for this purpose as the Authority may request. The Authority reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Authority that such bidder is properly qualified to carry out the obligations of the Contract.
6. The Owner may terminate the contract, or any portion thereof, for just cause by written notice to the Contractor. If the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed or started. No claims for loss of anticipated profits will be considered.
7. If the Contractor to whom this contract is awarded does not provide adequate service or workmanship, ASPA reserves the right to cancel the contract and re-bid this work excluding that Contractor from consideration.
8. Any questions regarding the procurement should be directed to Matthew Thomas, P.E., Project Manager via email at matthew.thomas@alports.com. Replies will be issued by Addenda emailed to all parties recorded as having received the bidding documents. All addenda so issued shall become part of the Contract Documents. Only questions answered by formal written Addenda will be binding. Deadline for submitting questions is 3:00pm on Thursday, November 9, 2023.
9. The right is reserved, as the interest of the Alabama State Port Authority may require, to reject any and all bids and to waive informalities in bids received.
10. The cost of all items ancillary to the project shall be absorbed into the cost of the bid items. No separate payment shall be made for these items.
11. ASPA may award the low bidder from either of the two bid alternates; bidders must submit a bid for both alternates.



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SIGNATURES

Receipt of following addendums is acknowledged:

Addendum No. _____

Addendum No. _____

Addendum No. _____

REFERENCED/ATTACHED DOCUMENTS

It is the sole responsibility of the prospective bidder to verify they have received all referenced/attached documents.

- Alabama State Port Authority –Insurance Requirements for Contract Work
- Certificate of Compliance with the Beason-Hammon Alabama Taxpayer & Citizen Protection Act
- Drawings: TERMINAL RAILROAD MAINTENANCE OF WAY

Contractor's Signature:		
Contractor Company _____		
_____	_____	_____
Name	Title	Date

Signature of Party Originating Requisition:

Matthew Thomas, P.E.	Date
Project Manager	

ALABAMA STATE PORT AUTHORITY **INSURANCE REQUIREMENTS FOR CONTRACT WORK**

INDEMNIFICATION

The Contractor shall assume all liability for and shall indemnify and save harmless the State of Alabama and the Alabama State Port Authority, and its officers and employees from all damages and liability for injury to any person or persons, and injury to or destruction of property, including the loss of use thereof, by reason of an accident or occurrence arising from operations under the contract, whether such operations are performed by himself or by any subcontractor or by anyone directly or indirectly employed by either of them occurring on or about the premises, or the ways and means adjacent during the term of the contract, or any extension thereof, and shall also assume the liability for injury and/or damages to adjacent or neighboring property by reason of work done under the contract.

INSURANCE REQUIREMENTS

The Contractor shall not commence work under the contract until he has obtained all insurance required under the following paragraphs and until such insurance has been approved by Alabama State Port Authority, nor shall the Contractor allow any subcontractor to commence work until all similar applicable insurance has been obtained by the subcontractor or the Contractor has provided coverage for the subcontractor. The Contractor shall provide, at his expense, insurance in accordance with the following:

General Requirements (applicable to all policies)

All policies of insurance must be written with companies acceptable to Alabama state port authority. The Contractor shall furnish to Alabama state port authority certificates of insurance, signed by the licensed agent, evidencing required coverages. Alabama state port authority reserves the right to require certified copies of any and all policies. Each policy of insurance shall provide, either in body of the policy or by endorsement, that such policy cannot be substantially altered or cancelled without thirty (30) days' written notice to Alabama state port authority and to the insured. **Except for Workers Compensation, said policies will identify Alabama State Port Authority, its officers, officials, agents, servants and employees as Primary and Non-contributory Additional Insureds in connection with work performed for, on behalf of, or on the property of Alabama state port authority.**

Commercial General Liability

The Contractor shall take out and maintain during the life of the contract Commercial General Liability insurance, including Blanket Contractual and Completed Operations coverages, in an amount not less than \$3,000,000 for any one occurrence for bodily injury, including death, and property damage liability.

Business Automobile Liability

The Contractor shall take out and maintain during the life of the contract Business Automobile Liability insurance covering any auto in an amount not less than \$1,000,000 for any one occurrence for bodily injury, including death, and property damage liability.

Workers Compensation

The Contractor shall take out and maintain during the life of the contract Workers Compensation and Employers Liability insurance providing coverage under the Alabama Workers Compensation Act in an amount not less than that required by Alabama law.

Where applicable, Contractor shall take out and maintain during the life of the contract insurance providing coverage as required by Federal statute, including but not limited to U.S. Longshoremen and Harborworkers' Compensation Act (USL&H), Jones Act, and Railroad Federal Employers Liability Act (FELA).

State of _____

County of _____

CERTIFICATE OF COMPLIANCE WITH THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535, as amended by Act 2012-491)

DATE: _____

RE Contract/Grant/Incentive (describe by number or subject):

_____ by and between

_____ (Contractor/Grantee) and
_____ (State Agency, Department or Public Entity)

The undersigned hereby certifies to the State of Alabama as follows:

1. The undersigned holds the position of _____ with the Contractor/Grantee named above, and is authorized to provide representations set out in this Certificate as the official and binding act of that entity, and has knowledge of the provisions of THE BEASON-HAMMON ALABAMA TAXPAYER AND CITIZEN PROTECTION ACT (ACT 2011-535 of the Alabama Legislature, as amended by Act 2012-491) which is described herein as "the Act".
2. Using the following definitions from Section 3 of the Act, select and initial either (a) or (b), below, to describe the Contractor/Grantee's business structure.

BUSINESS ENTITY. Any person or group of persons employing one or more persons performing or engaging in any activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood, whether for profit or not for profit. "Business entity" shall include, but not be limited to the following:

a. Self-employed individuals, business entities filing articles of incorporation, partnerships, limited partnerships, limited liability companies, foreign corporations, foreign limited partnerships, foreign limited liability companies authorized to transact business in this state, business trusts, and any business entity that registers with the Secretary of State.

b. Any business entity that possesses a business license, permit, certificate, approval, registration, charter, or similar form of authorization issued by the state, any business entity that is exempt by law from obtaining such a business license and any business entity that is operating unlawfully without a business license.

EMPLOYER. Any person, firm, corporation, partnership, joint stock association, agent, manager, representative, foreman, or other person having control or custody of any employment, place of employment, or of any employee, including any person or entity employing any person for hire within the State of Alabama, including a public employer. This term shall not include the occupant of a household contracting with another person to perform casual domestic labor within the household.

- _____ (a) The Contractor/Grantee is a business entity or employer as those terms are defined in Section 3 of the Act.
- _____ (b) The Contractor/Grantee is not a business entity or employer as those terms are defined in Section 3 of the Act.

3. As of the date of this Certificate, Contractor/Grantee does not knowingly employ an unauthorized alien within the State of Alabama and hereafter it will not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama;
4. Contractor/Grantee is enrolled in E-Verify unless it is not eligible to enroll because of the rules of that program or other factors beyond its control.

Certified this _____ day of _____ 20 _____

Name of Contractor/Grantee/Recipient

By: _____

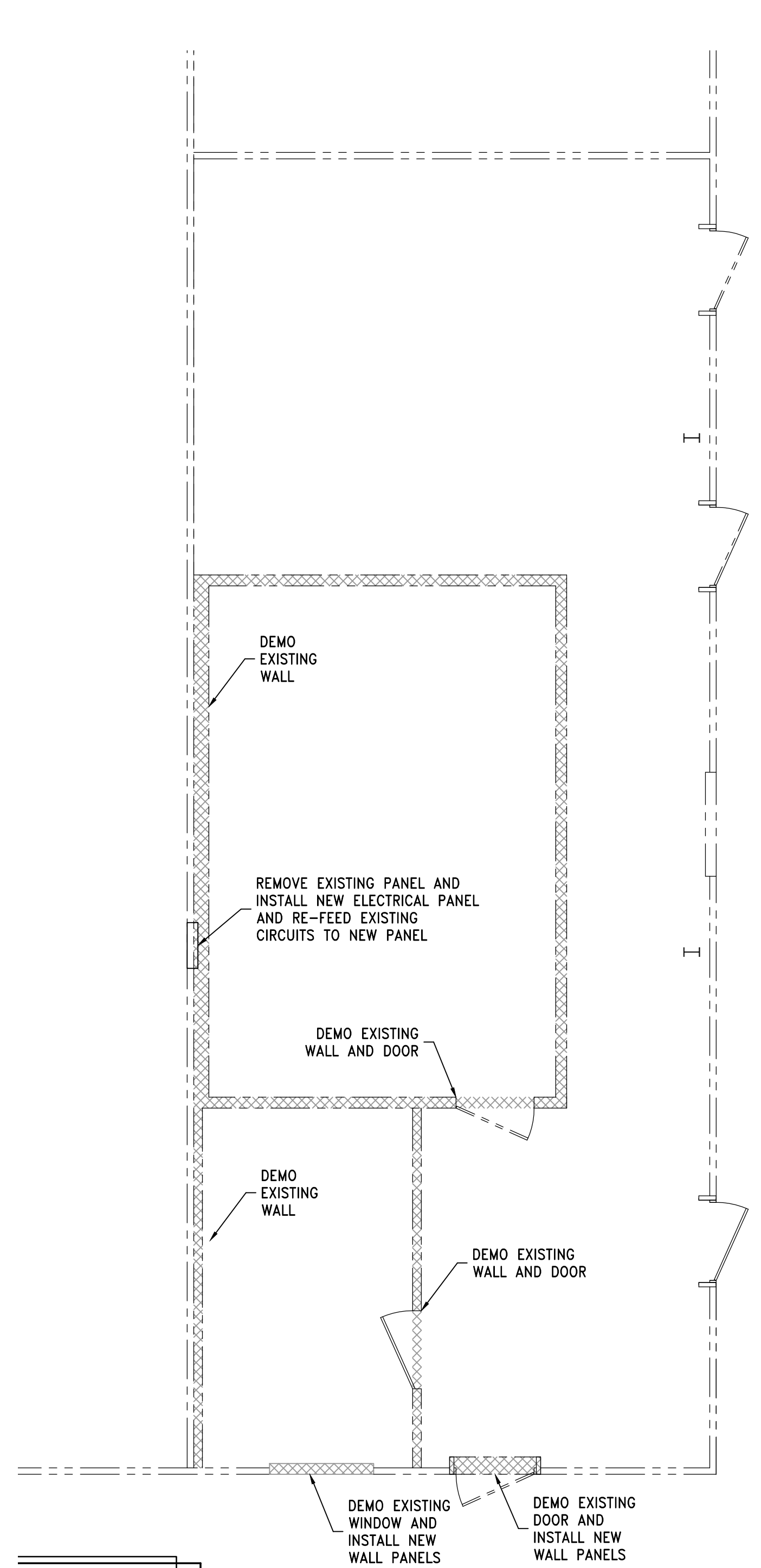
Its _____

The above Certification was signed in my presence by the person whose name appears above, on

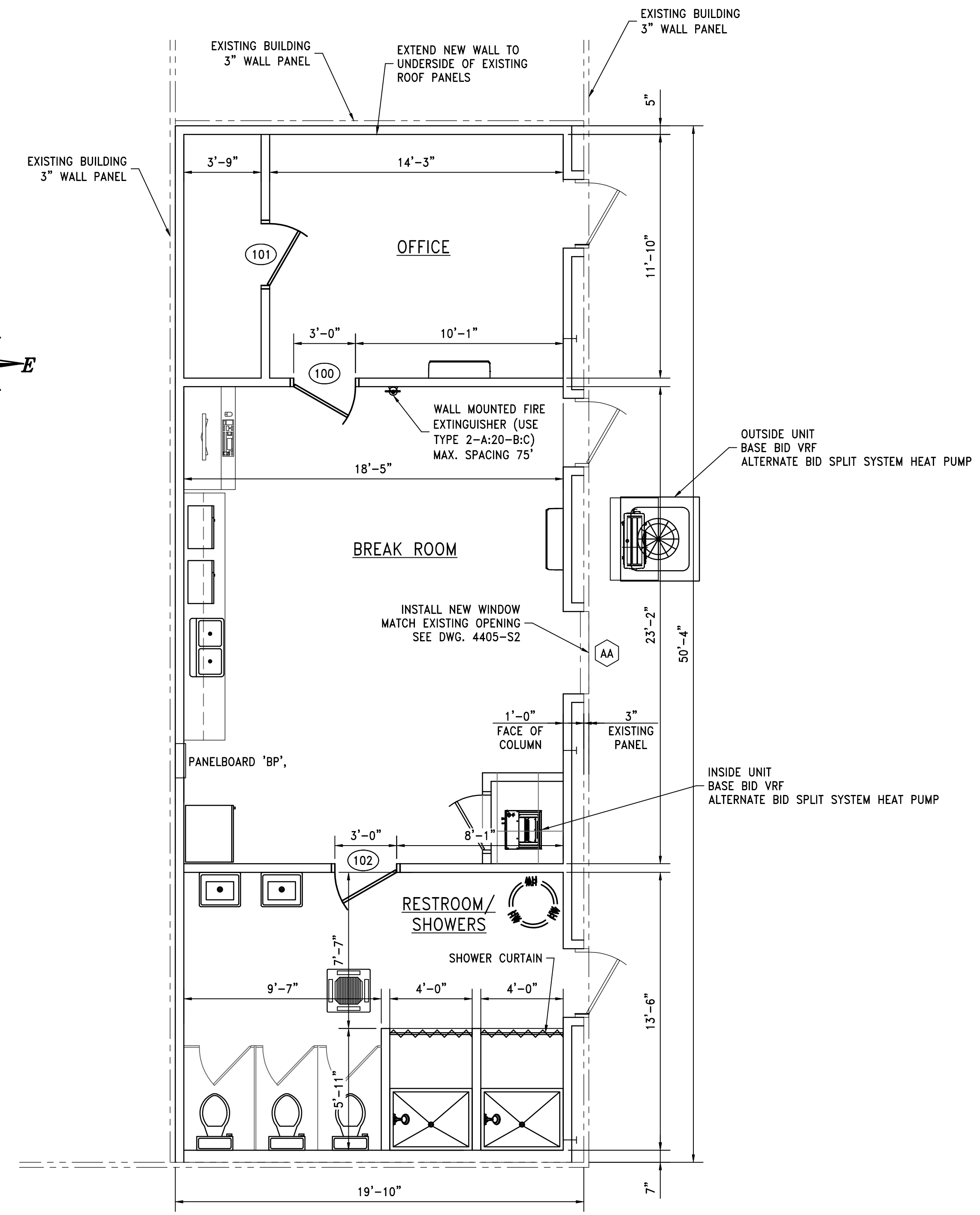
this _____ day of _____ 20 _____.

WITNESS: _____

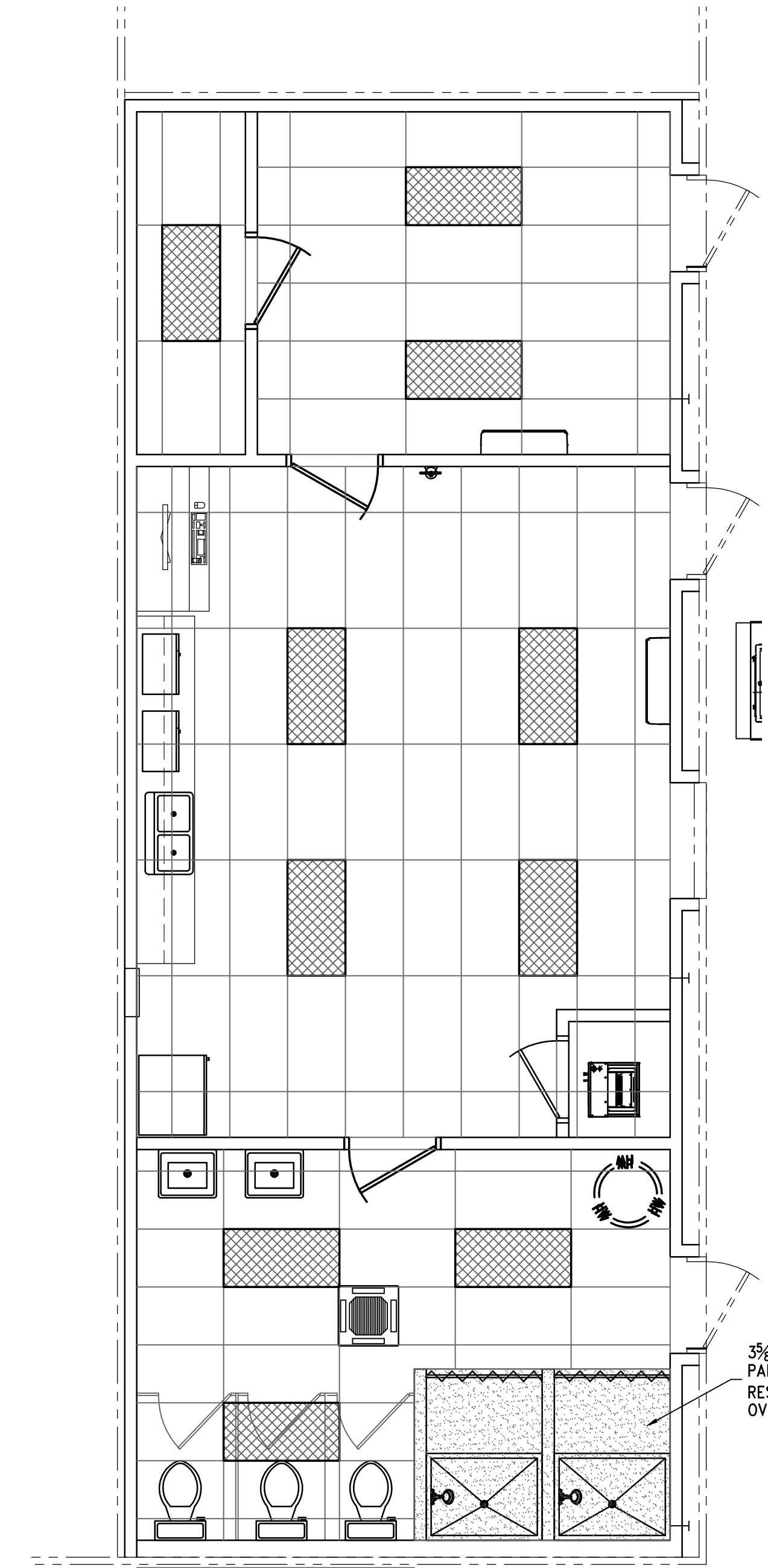
Printed Name of Witness



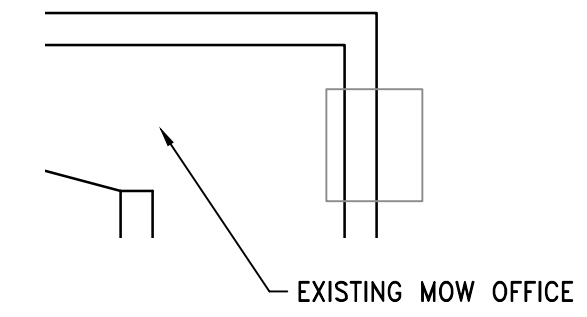
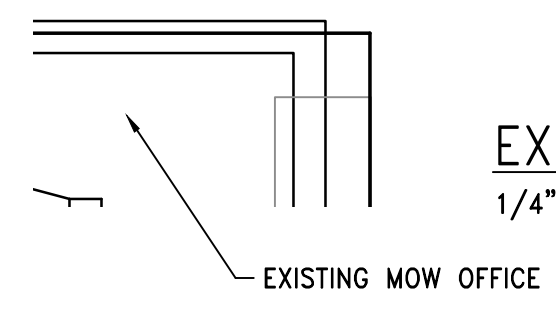
EXISTING FLOOR PLAN - DEMOLITION
1/4"=1'-0"



NEW FLOOR PLAN
1/4"=1'-0"



NEW REFLECTED CEILING PLAN
1/4"=1'-0"



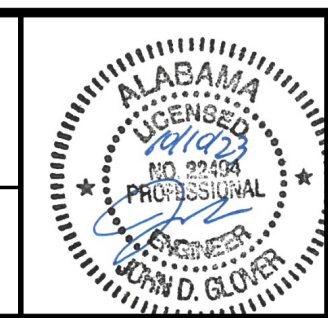
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CONFIDENTIAL, VALUABLE, AND PROPRIETARY INFORMATION

REV.	DESCRIPTION	DATE	BY	CHK'D
B	ISSUED FOR BID	10/10/23	CMG	JDG
A	ISSUED FOR REVIEW	09/15/23	CMG	JDG

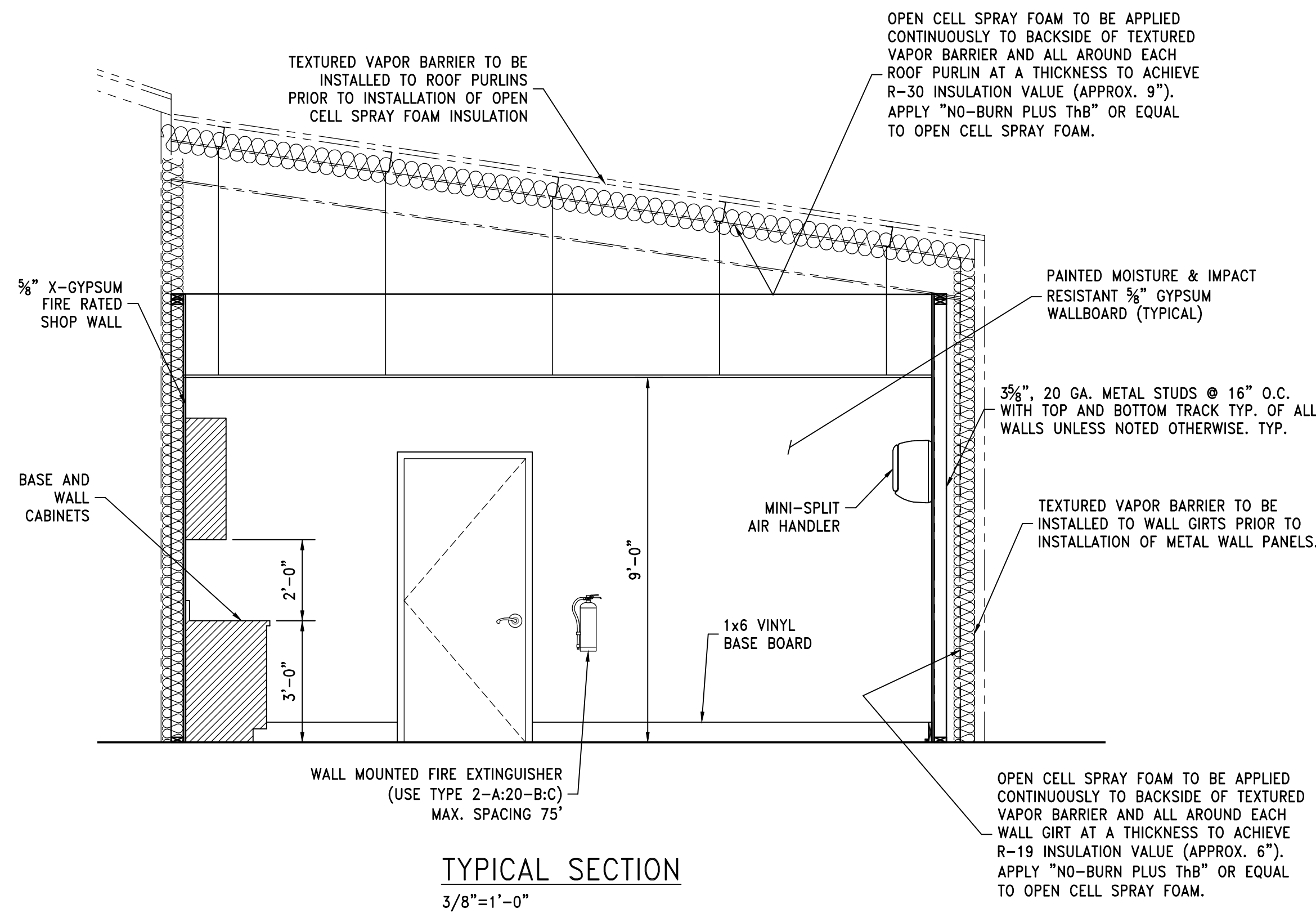
Cowles, Murphy, Glover & Associates
A Full Service Engineering Firm
PERFORMANCE • RELIABILITY • EXPERIENCE

457 St. Michael St., Mobile, AL 36602
11880 Cranston Dr. Ste 102, Arlington, TN 38002
Alabama (251) 433-1611 Tennessee (901) 290-5444

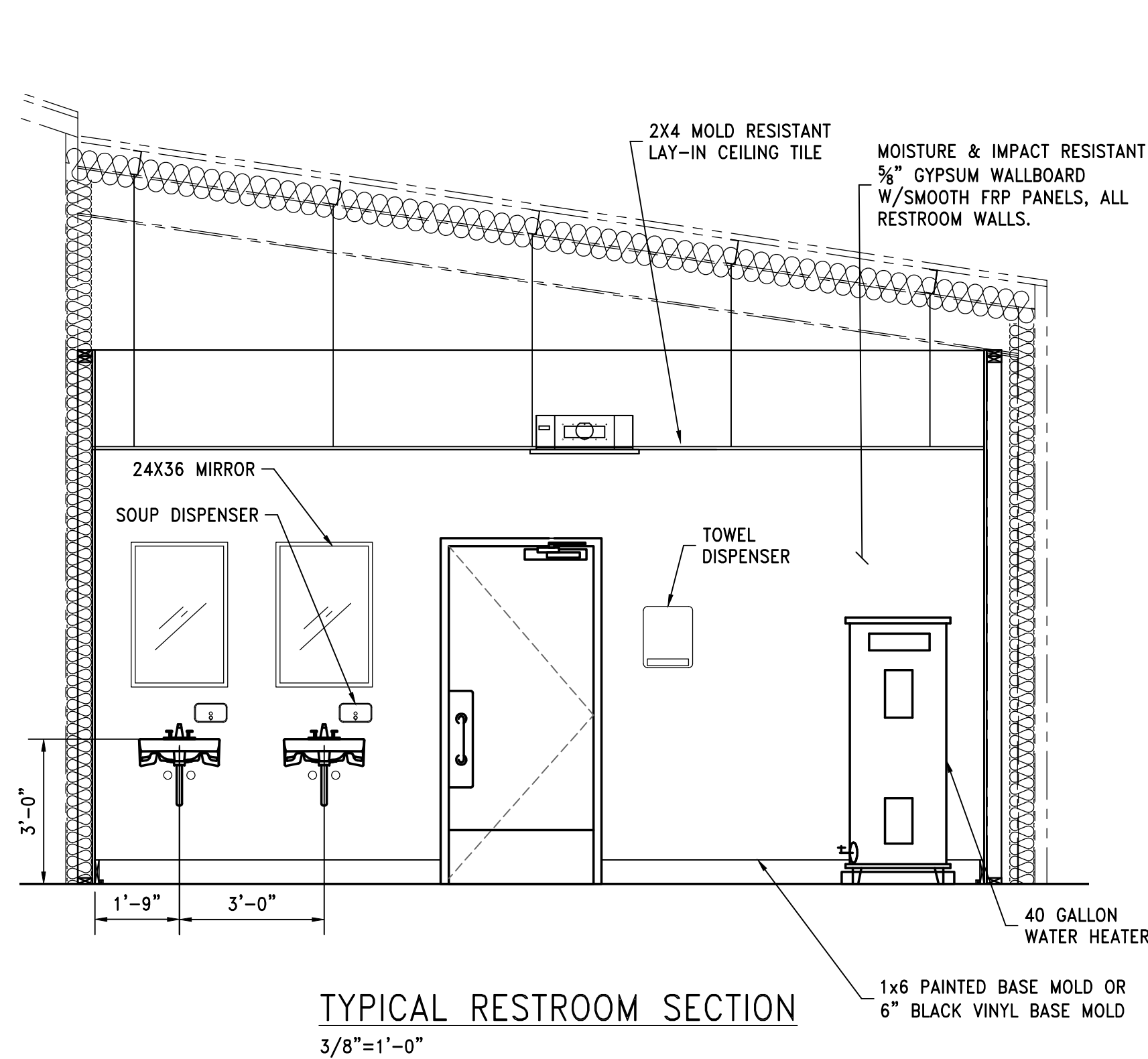
PROJECT
TERMINAL RAILROAD MAINTENANCE OF WAY
998 DEKLE STREET
MOBILE, ALABAMA 36602



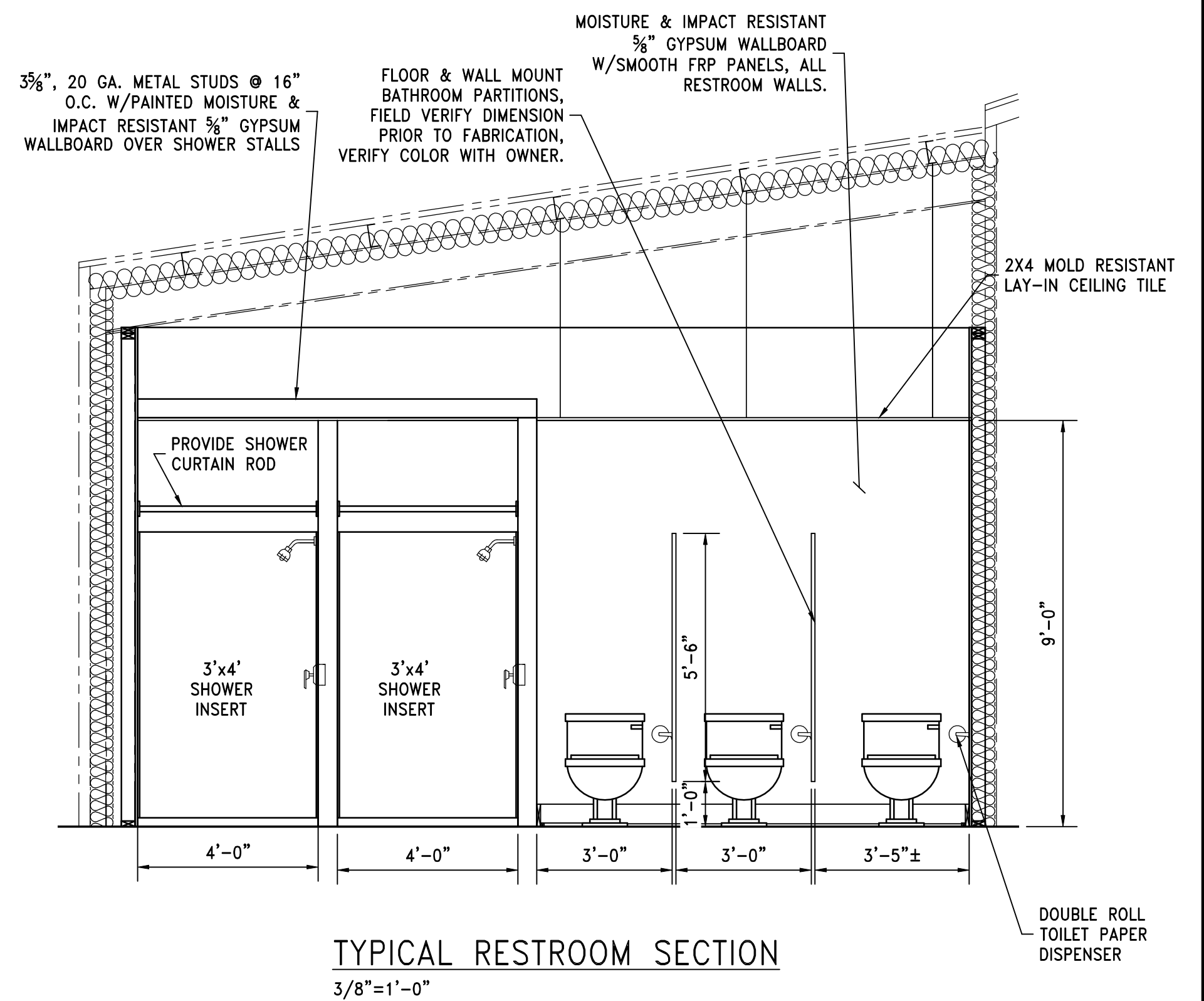
TITLE		OFFICE RENOVATION FLOOR PLAN	
SCALE	AS NOTED	DRAWN BY	RRC
		CHECKED BY	JDG
JOB NO.	4405-23	DATE	08/23/23
SHEET	22x34	DATE	08/23/23
DRAWING NUMBER	4405-S1	REV.	B



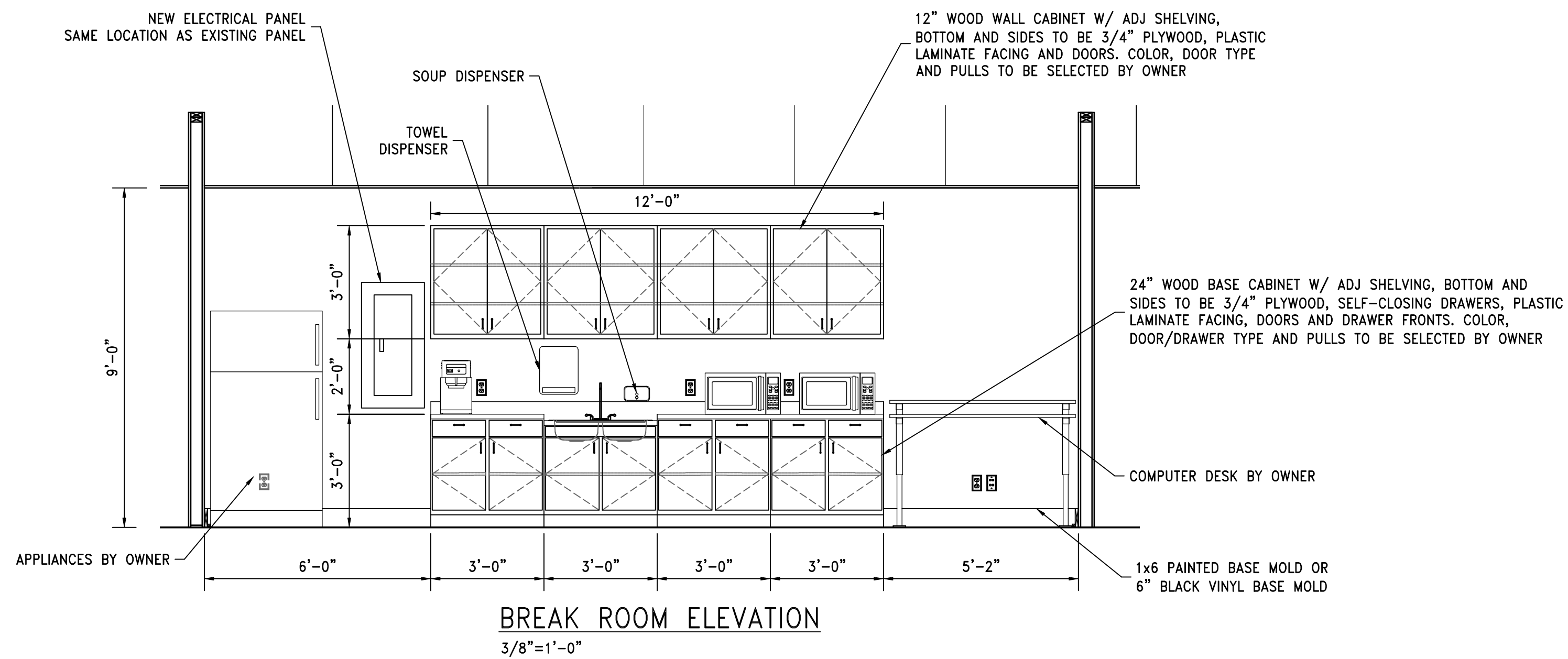
TYPICAL SECTION
3/8"=1'-0"



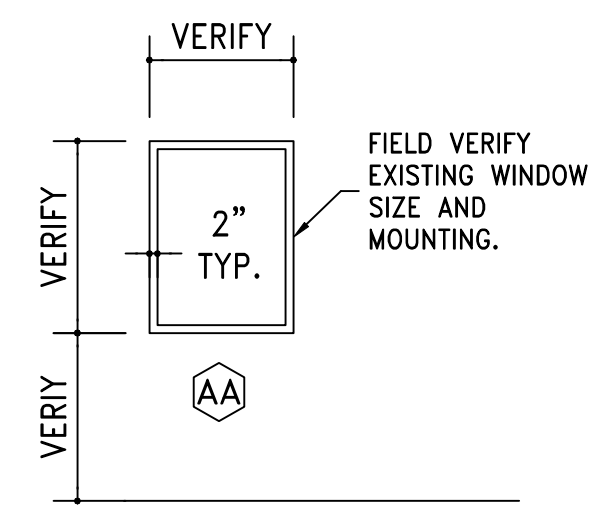
TYPICAL RESTROOM SECTION
3/8"=1'-0"



TYPICAL RESTROOM SECTION
3/8"=1'-0"



BREAK ROOM ELEVATION
3/8"=1'-0"



WINDOW DATA

STOREFRONT KAWNEER IR 501 CLEAR INSULATED - LOW-E #2 - HURRICANE RESISTANT GLAZING PROVIDE Z-GIRT FRAME AS-REQUIRED FOR WINDOW SUPPORT

ROOM	ROOM FINISH SCHEDULE							REMARKS	
	FLOOR	BASE	WALL			CEILING			
			N	S	E	W	MAT'L	HEIGHT	
100	OFFICE	SC	VB	1	1	1	LI	9'	
101	BREAK ROOM	SC	VB	1	1	1	LI	9'	
102	RESTROOM	SC	PVC	2	3	2	LI	9'	5/8" MOISTURE RESISTANT PAINTED GYPSUM OVER SHOWER STALLS

NOTES:
1. TOILET PARTITIONS TO BE FLOOR MOUNTED AND OVERHEAD BRACED, POWDER COATED STEEL VERIFY COLOR WITH OWNER.

ROOM FINISH SCHEDULE KEY NOTES:
WALLS:
1. 3/8" METAL STUD WALL FRAMING WITH 5/8" PAINTED GYPSUM WITH 3/2" SOUND BATT INSULATION (COLOR OWNER SPECIFIED)
2. 3/8" METAL STUD WALL FRAMING (16" O.C.) WITH 3/2" SOUND BATT INSULATION WITH 5/8" MOISTURE RESISTANT PAINTED GYPSUM AND SMOOTH FRP PANEL GYPSUM OVERLAY. (COLOR OWNER SPECIFIED)
3. 6" METAL STUD WALL FRAMING (16" O.C.) WITH 3/2" SOUND BATT INSULATION WITH 5/8" MOISTURE RESISTANT PAINTED GYPSUM AND SMOOTH FRP PANEL GYPSUM OVERLAY. (COLOR OWNER SPECIFIED)

FLOORING:
SC STAINED AND SEAL EXPOSED CONCRETE (COLOR OWNER SPECIFIED)

CEILING:
LI ARMSTRONG-TILE #1.733. FINE FISSURED 2'x4'x5/8" MINERAL BOARD - WITH WITH SQUARE EDGE DETAIL OWNER APPROVED EQUAL WITH 6/2" SOUND BATT INSULATION.

BASE:
PVC 1x6 PAINTED PVC BASE
VB 6" VINYL BASE

DOOR SCHEDULE						
DOOR #	RATING	DOOR SIZE	DOOR MATERIAL	FRAME MATERIAL	HARDWARE	REMARKS
100	NONE	3'-0" x 7'-0"	SCWD	METAL	ENTRY LOCK SET, 1/2 PAIR S.S. BUTT HINGES, DOOR CLOSER	100 & 101 KEYED ALIKE
101	NONE	3'-0" x 7'-0"	SCWD	METAL	ENTRY LOCK SET, 1/2 PAIR S.S. BUTT HINGES	
102	NONE	3'-0" x 7'-0"	SCWD	METAL	STAINLESS PUSH PULL HANDLE SET, DOOR CLOSER, 1/2 PAIR S.S. BUTT HINGES, STAINLESS KICK PLATE	

DOOR SCHEDULE NOTES:

GENERAL: PROVIDE WALL BUMPERS FOR ALL DOORS.
1. SCWD = SOLID CORE WOOD DOOR, WOOD DOORS TO HAVE HOLLOW METAL FRAME
2. SS = STAINLESS STEEL

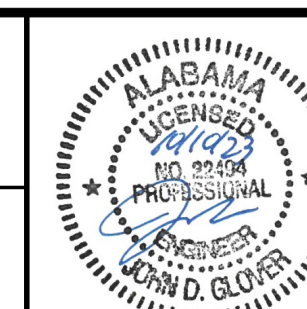
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REV.	DESCRIPTION	DATE	BY	CHK'D
B	ISSUED FOR BID	10/10/23	CMG	JDG
A	ISSUED FOR REVIEW	09/15/23	CMG	JDG

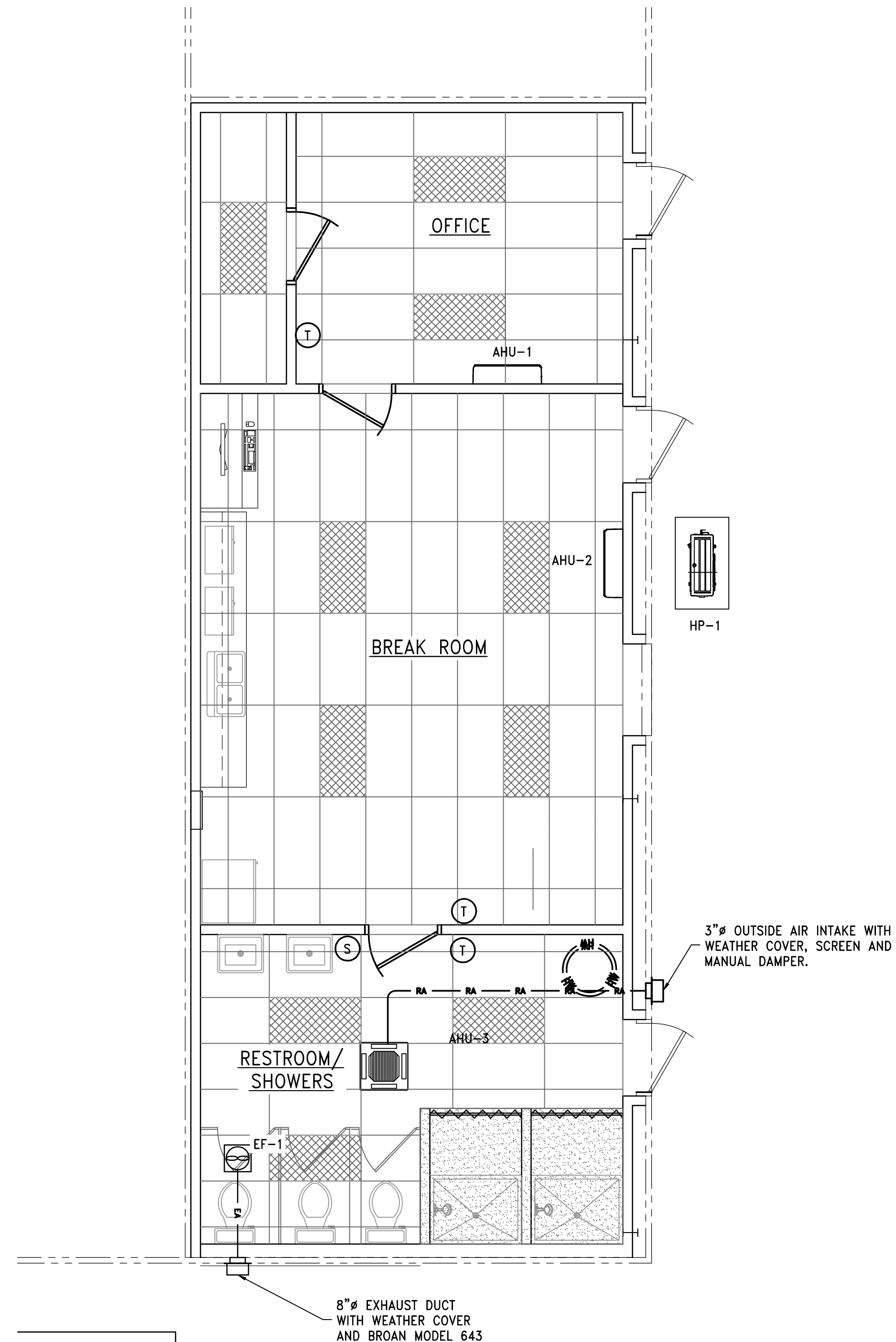
Cowles, Murphy, Glover & Associates
A Full Service Engineering Firm
PERFORMANCE • RELIABILITY • EXPERIENCE

457 St. Michael St., Mobile, AL 36602
11880 Cranston Dr. Ste 102, Arlington, TN 38002
Alabama (251) 433-1611 Tennessee (901) 290-5444

PROJECT
TERMINAL RAILROAD MAINTENANCE OF WAY
998 DEKLE STREET
MOBILE, ALABAMA 36602



TITLE			
OFFICE RENOVATION SECTIONS & ELEVATIONS			
SCALE	DRAWN BY	DATE	SHEET
AS NOTED	JWM	08/23/23	22x34 REV. B
JOB NO.	CHECKED BY	DATE	DRAWING NUMBER
4405-23	JDC	08/23/23	4405-S2



NEW HVAC PLAN
1/4"=1'-0"

- EXHAUST FAN
- EXHAUST FAN TIMER SWITCH
BROAN 61V 15 MIN. TIMER
- THERMOSTAT
- EXHAUST AIR DUCT

VRF AHU SYSTEM SCHEDULE																
MARK AHU #	AHU DATA			COOLING CAPACITY @ ARI STANDARD CONDITIONS				HEATING CAPACITY @ ARI STANDARD CONDITIONS				ELECTRICAL DATA			APPROX. PIPE LENGTH FT.	REMARKS
	TOTAL CFM	ESP	EDB °F	EWB °F	AMBIENT °F	TOTAL BTU/HR	SENSIBLE BTU/HR	TOTAL BTU/HR	EDB °F	EWB °F	VOLTS	Hz	PHASE	PIPE DIA. LIQUID/GAS		
1	237	0.6"	80	67	95	9,000	7,550	10,900	47	43	240	60	1	1/4" / 3/8"	65	MITSUBISHI MSZ-GLO9NA
2	522	0.6"	80	67	95	18,000	15,150	21,600	47	43	240	60	1	1/4" / 1/2"	100	MITSUBISHI MSZ-GL18NA
3	335	0.6"	80	67	95	12,000	10,800	13,000	47	43	240	60	1	1/4" / 3/8"	65	MITSUBISHI SLZ-KF12NA W/3" OUTSIDE AIR DUCT

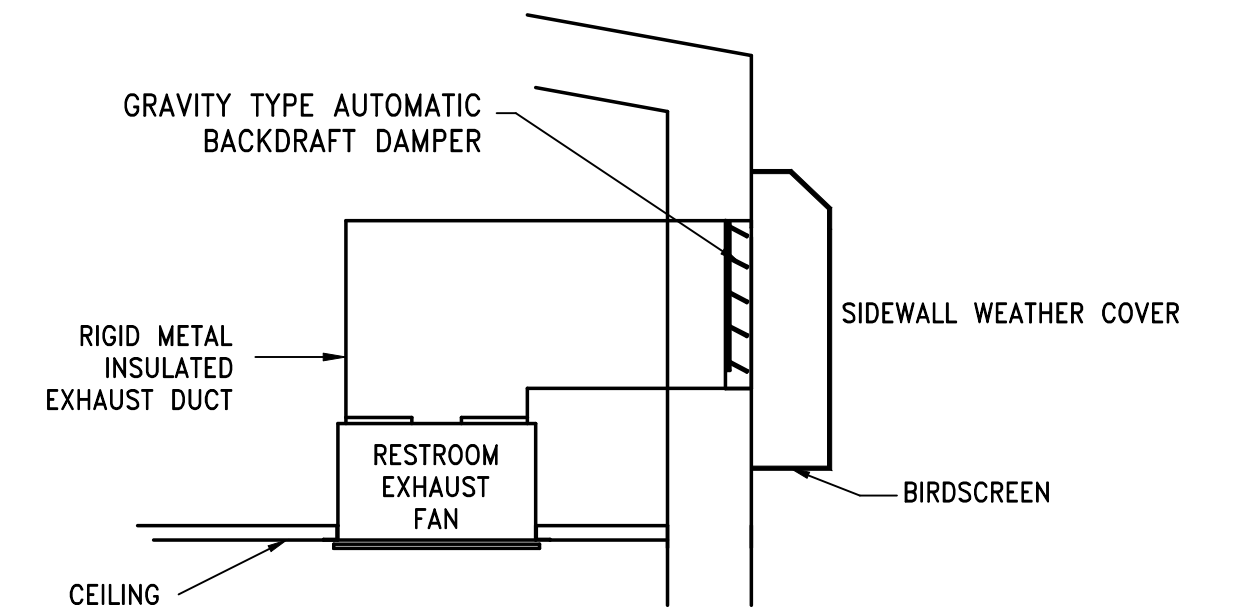
OUTDOOR VRF HEAT PUMP SYSTEM SCHEDULE														
MARK HP #	MIN. SEER/HSPF	COOLING CAPACITY @ AHRI STANDARD CONDITIONS				HEATING CAPACITY @ AHRI STANDARD CONDITIONS				HP MCA/CB	ELECTRICAL DATA			REMARKS
		EDB °F	EWB °F	AMBIENT °F	TOTAL BTU/HR	TOTAL BTU/HR	EDB °F	EWB °F	VOLTS		Hz	PHASE		
1	20.0/10.0	80	67	95	40,500	45,000	47	43	32/40	240	60	1	MITSUBISHI MXZ-5C42NA2	

NOTES:

- MCA SHOWN ARE ESTIMATED VALUES. CONTRACTOR SHALL VERIFY MINIMUM CIRCUIT REQUIREMENT WITH ACTUAL EQUIPMENT PURCHASED PRIOR TO INSTALLATION.
- PROVIDE GFI SERVICE OUTLET NEAR OUTSIDE UNITS.
- PROVIDE VRF AHU'S WITH 7-DAY PROGRAMMABLE THERMOSTAT.
- VRF SYSTEM SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
- PROVIDE AHU'S WITH DRAIN PAN LEVEL SENSORS. DRAIN PAN LEVEL SENSORS SHALL SHUT OFF UNIT TO PREVENT DRAIN PAN OVERFLOW.
- ALL UNITS SHALL BE PROVIDED WITH INTERNAL CONDENSATE PUMPS, DISCHARGE PIPING SHALL BE 1"

GENERAL NOTES:

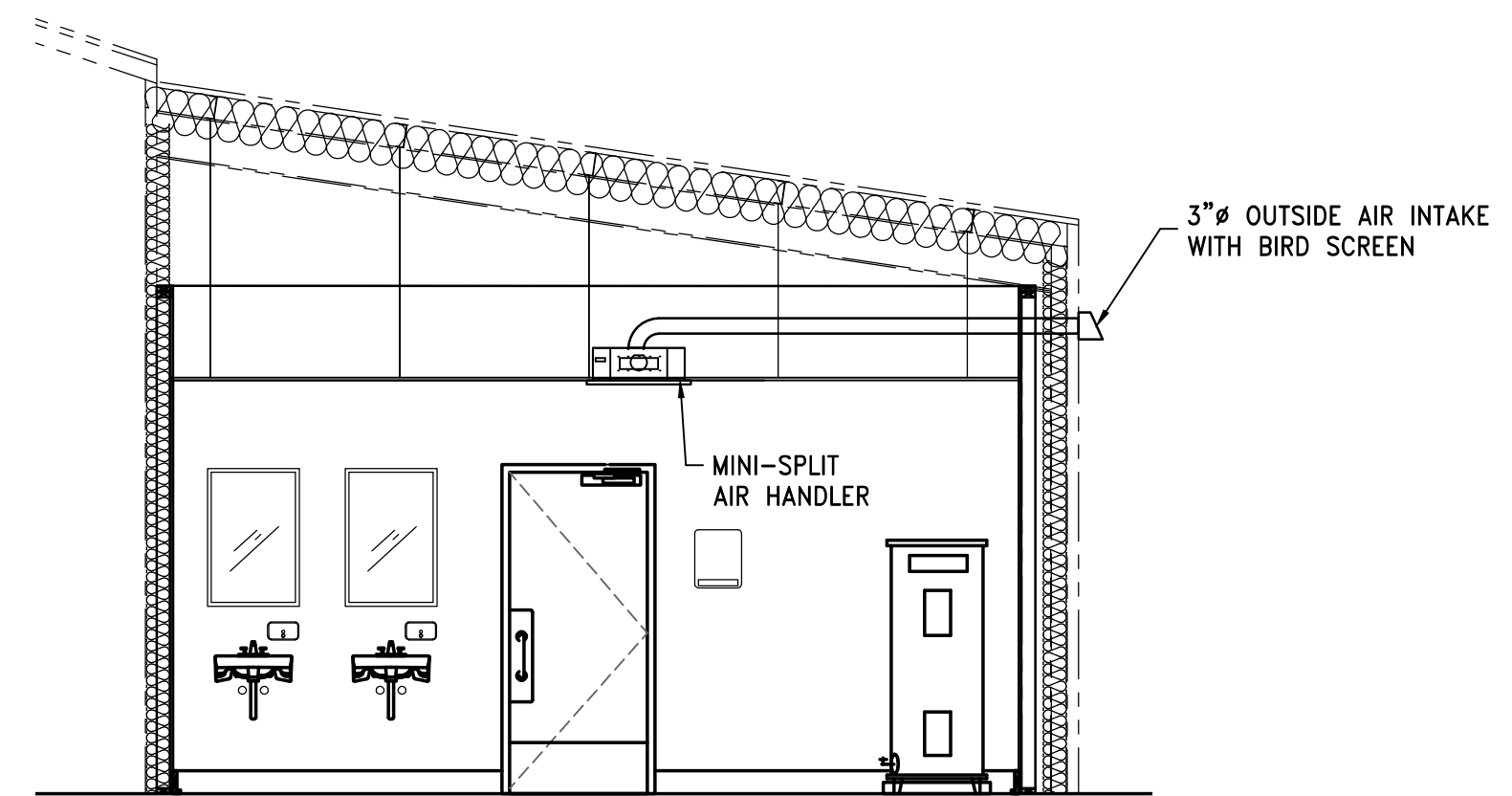
- ALL MECHANICAL WORK SHALL BE IN ACCORDANCE WITH INTERNATIONAL MECHANICAL CODES, 2018.
- ALL CONTROL WIRING AND INTERFACES WITH ANCILLARY EQUIPMENT BY CONTRACTOR. DUCTLESS AIR HANDLERS SHALL BE CONTROLLED USING A SEVEN DAY PROGRAMMABLE THERMOSTAT CONTROLLER.
- SEE TABLE FOR SYSTEM SCHEDULES. APPROVED MANUFACTURER ARE MITSUBISHI, DAIKIN, AND LG.
- CONTRACTOR SHALL ROUTE CONDENSATE DRAIN LINES INSIDE OF WALL AND DISCHARGE TO THE NEAREST LANDSCAPED AREA. CONDENSATE LINES SHALL BE COMPLETELY INSULATED, AND INSTALLED ACCORDING TO MANUFACTURES SPECIFICATIONS. DUCTLESS AIR HANDLER UNIT SHALL BE PROVIDED WITH DRAIN PAN LEVEL SENSORS. DRAIN PAN LEVEL SENSORS SHALL SHUT OFF UNIT TO PREVENT DRAIN PAN OVERFLOW.
- EXHAUST AIR DUCT WORK SHALL BE INSULATED.
- DUCTLESS AIR HANDLER INDOOR UNITS (AHU) SHALL BE MOUNTED TO THE WALL ACCORDING TO MANUFACTURES SPECIFICATIONS. INSTALL UNIT SUCH THAT TOP OF UNIT IS 12 INCHES BELOW CEILING.
- OUTDOOR UNIT (HP-1) SHALL BE MOUNTED ACCORDING TO MANUFACTURES SPECIFICATIONS ON A HURRICANE RATED WALL MOUNTING BRACKET. ALTERNATE MOUNTED, THE CONTRACTOR SHALL INSTALL 6" THICK CONCRETE PAD FOR OUTSIDE UNIT. SLAB SHALL BE 6" WIDER THAN OUTSIDE UNIT. ANCHOR UNIT TO CONCRETE PAD USING (8) EIGHT (2 PER SIDE) MIAMI TECH INC. CUTD 12" STEEL TIE-DOWN CLIPS, CONNECTION TYPE C4 PER MANUFACTURER INSTRUCTIONS. ANCHOR TIE-DOWN CLIP TO CONCRETE PAD USING (1)-1/4" STAINLESS STEEL 410 ELCO ULTRACON, 1 3/4" FULL EMBED TO CONCRETE, 2 1/2" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.



RESTROOM EXHAUST FAN DETAIL
NTS

EXHAUST FAN SCHEDULE			
MARK	CFM	V/A	REMARKS
EF-1	200	120/0.3	BROAN L200E

NOTE-EXHAUST FANS SHALL BE BROAN OR ENGINEER APPROVED EQUAL



RESTROOM HVAC SECTION
1/4"=1'-0"

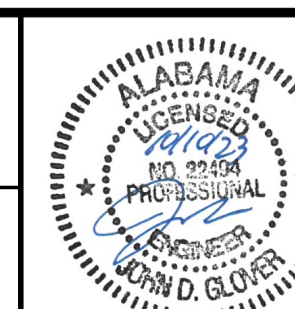
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REV.	DESCRIPTION	DATE	BY	CHK'D
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A	ISSUED FOR REVIEW	09/15/23	JWW	JDG

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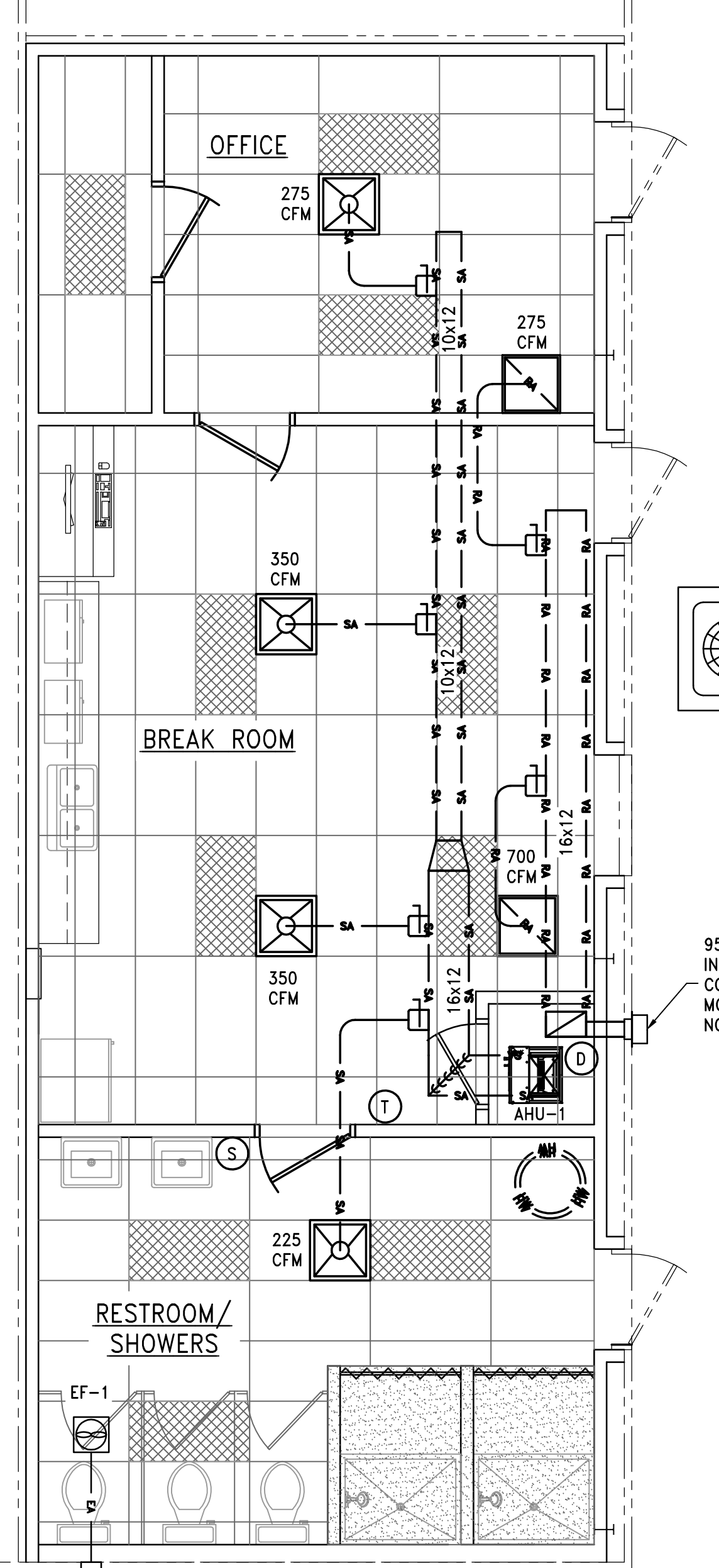
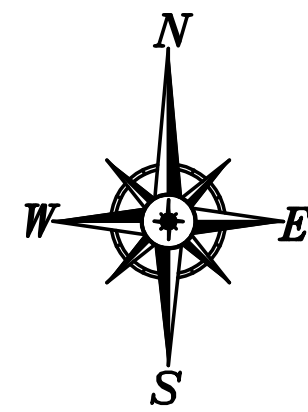
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11880 Cranston Dr. Ste 102, Arlington, TN 38002
Alabama (251) 433-1611 Tennessee (901) 290-5444

PROJECT
TERMINAL RAILROAD MAINTENANCE OF WAY
998 DEKLE STREET
MOBILE, ALABAMA 36602



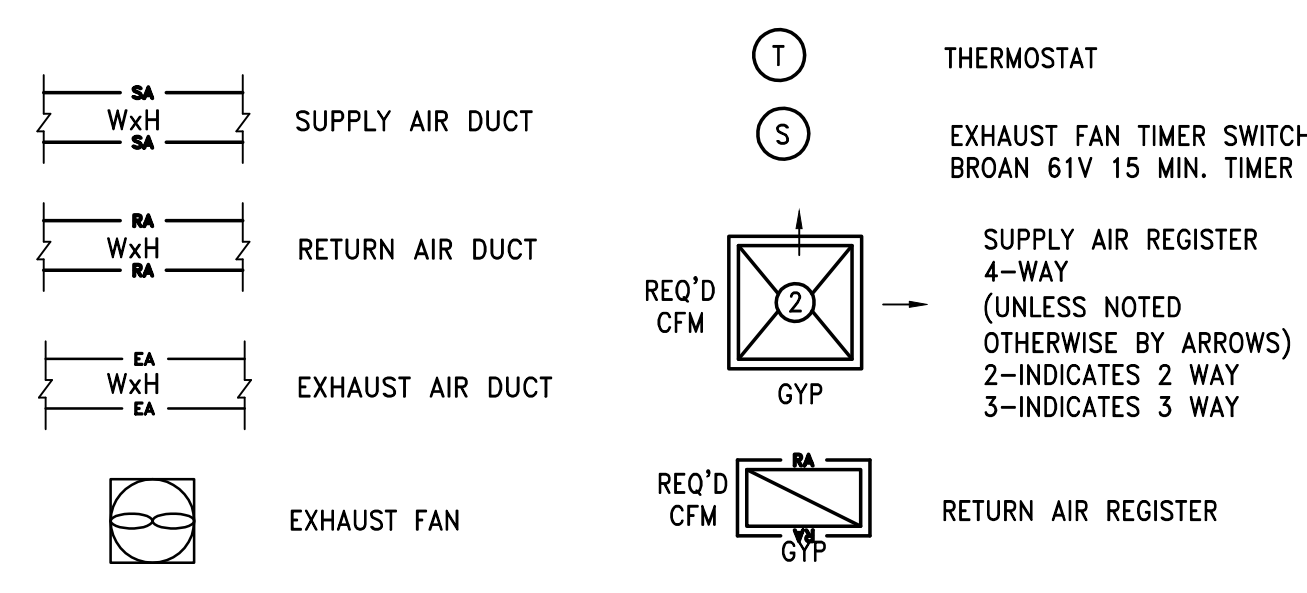
TITLE
OFFICE RENOVATION HVAC PLAN

SCALE AS NOTED	DRAWN BY JWW	DATE 08/23/23	SHEET 22x34	REV. B
JOB NO. 4405-23	CHECKED BY JDG	DATE 08/23/23	DRAWING NUMBER 4405-M1	



NEW HVAC PLAN
1/4"=1'-0"

LEGEND



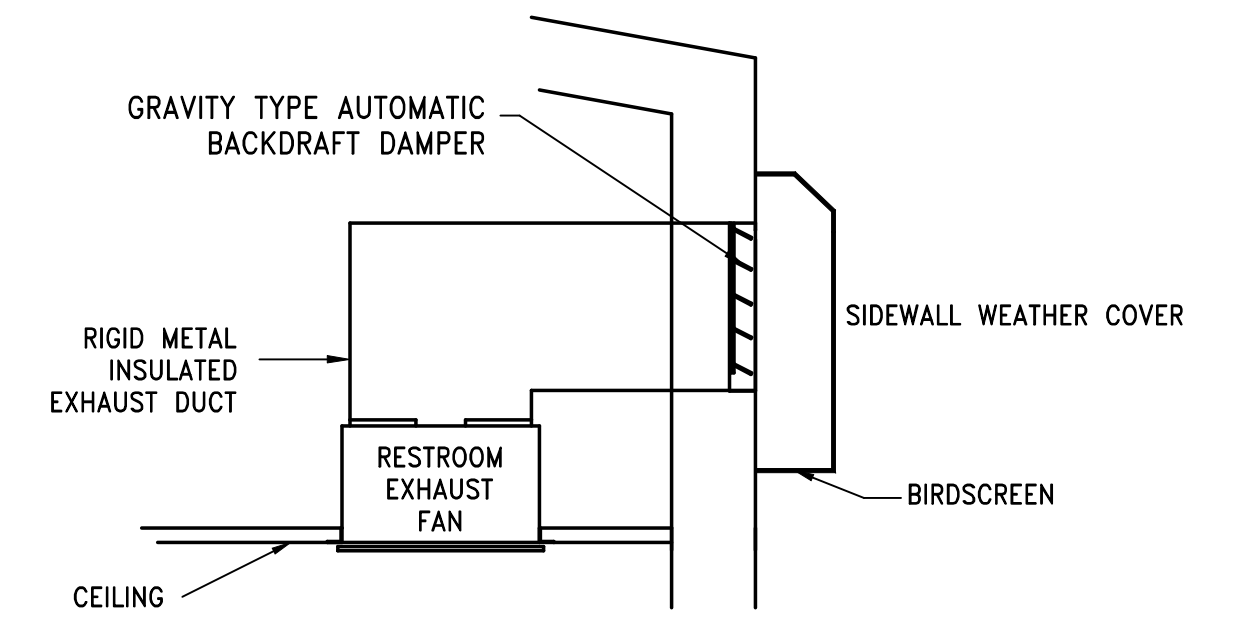
MARK AHU/ HP #	AHU DATA			COOLING CAPACITY @ ARI STANDARD CONDITIONS					MIN. SEER	HP MCA/CB	AHU MCA/CB	HEAT KW	ELECTRICAL DATA AHU/HP			REMARKS	
	TOTAL CFM	OA CFM	ESP	EDB °F	EWB °F	AMBIENT °F	TOTAL BTU/HR	SENSIBLE BTU/HR					VOLTS	Hz	PHASE		
	1	1200	95	0.5"	0.5	80	67	95					36,000	28,700	14		13/20

- NOTES:
 1. MCA SHOWN ARE ESTIMATED VALUES. CONTRACTOR SHALL VERIFY MINIMUM CIRCUIT REQUIREMENT WITH ACTUAL EQUIPMENT PURCHASED PRIOR TO INSTALLATION.
 2. PROVIDE GFI SERVICE OUTLET NEAR OUTSIDE UNIT. COORDINATE INSTALLATION WITH ELECTRICAL CONTRACTOR.
 3. PROVIDE AHU'S WITH 7-DAY PROGRAMMABLE THERMOSTATS.

CFM	AIR DEVICE SIZE	DUCT CONNECTION SIZE	REMARKS
75	6" X 6"	6"ø	SUPPLY
100	6" X 8"	6"ø	SUPPLY
125	6" X 8"	7"ø	SUPPLY
150	6" X 8"	7"ø	SUPPLY
175	8" X 8"	8"ø	SUPPLY
200	8" X 8"	8"ø	SUPPLY
225	8" X 8"	8"ø	SUPPLY
250	10" X 10"	10"ø or 8"x10"	SUPPLY
300	10" X 10"	10"ø or 8"x10"	SUPPLY
0-125	8" X 8"	10"ø	RETURN
126-450	12" X 12"	10"ø	RETURN
451-800	16" X 16"	12" X 12"	RETURN
801-1100	18" X 18"	12" X 16"	RETURN
1101-1500	20" X 20"	16" X 16"	RETURN

* - DUCT SIZE AS SHOWN IN SCHEDULE UNLESS NOTED ON PLAN.

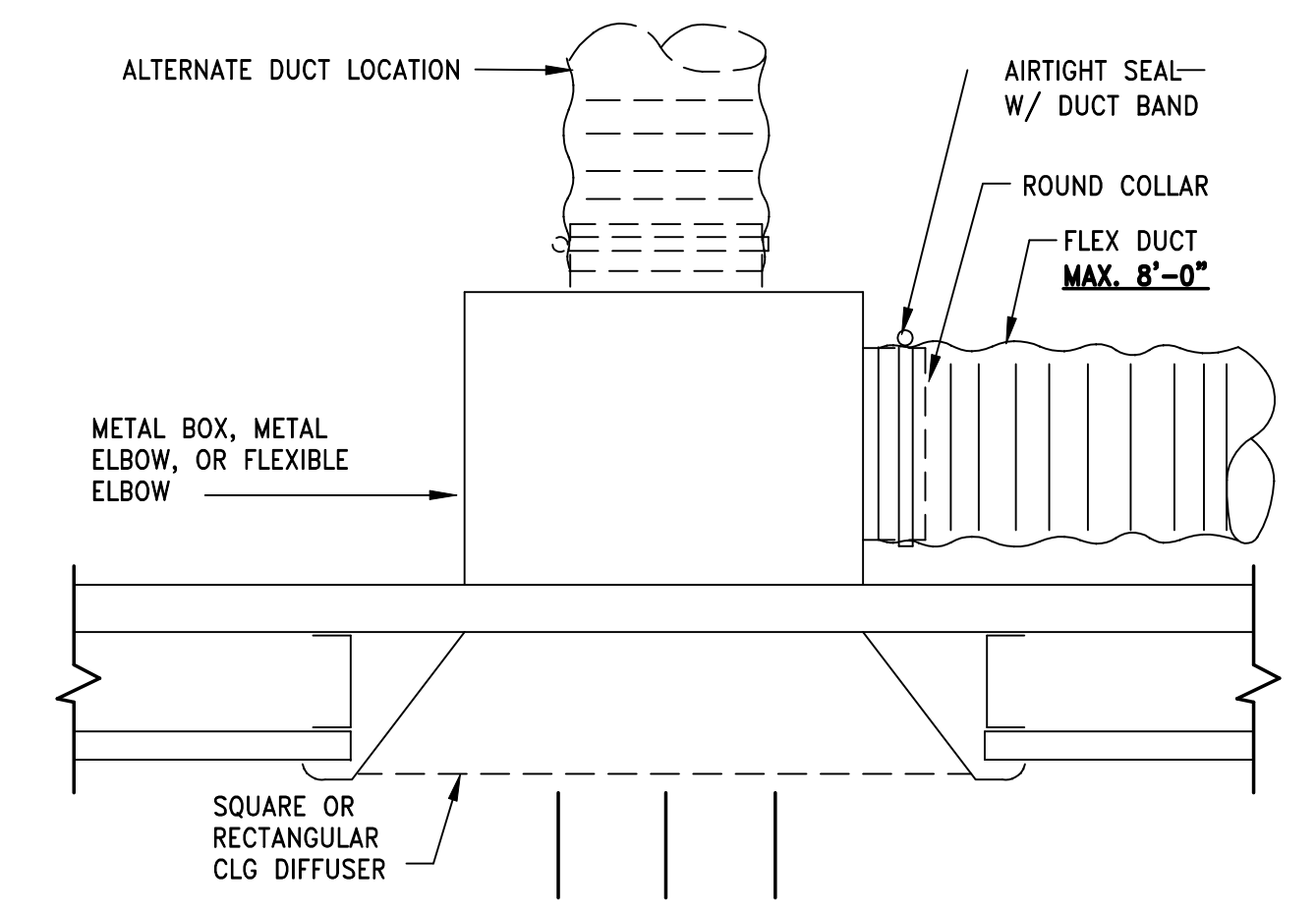
- NOTES: (SEE DWG. 4405-M2 FOR ADDITIONAL SPECIFICATIONS)
- ALL MECHANICAL WORK SHALL BE IN ACCORDANCE WITH INTERNATIONAL MECHANICAL CODES, 2012.
 - AIR FLOW (SUPPLY & RETURN) ARE 1000 FPM & 800 FPM. FLOW RATE BASED ON 8 AIR CHANGES PER HOUR.
 - ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED PER SMACNA STANDARDS. DUCTWORK SHALL INCLUDE BALANCING DAMPER AT EACH SUPPLY/RETURN AND TURNING VANES AS SHOWN AND @ ALL 90° TURNS BOTH VERTICAL AND HORIZONTAL.
 - OUTSIDE AIR INTAKE TO BE ADJUSTED AS SHOWN ON DWG. 4405-M1A. OUTSIDE AIR MOTORIZED DAMPERS SHALL BE CONTROLLED VIA AIR HANDLER ACTIVATION IN COOLING/HEATING MODE ONLY. OUTSIDE AIR INTAKE SHALL NOT BE LOCATED WITHIN TEN FEET OF EXHAUST FAN DISCHARGE OR PLUMBING VENT.
 - EXHAUST FANS SHALL BE BROAN OR ENGINEER APPROVED EQUAL AND SHALL BE VENTED TO THE OUTSIDE OF BUILDING. CONNECT FAN TO WALL TIMER SWITCH.
 - APPROVED MANUFACTURER'S ARE TRANE AND CARRIER. SUBMIT A VALUE ENGINEERED ANALYSIS FOR OTHERS MANUFACTURERS WITH BID FOR CONSIDERATION.
 - ALL CONTROL WIRING AND INTERFACES WITH ANCILLARY EQUIPMENT BY CONTRACTOR. AIR CONDITIONERS SHALL BE CONTROLLED USING A SEVEN DAY PROGRAMMABLE THERMOSTAT CONTROLLER WITH LOCKABLE CLEAR BOX COVER.
 - CONTRACTOR SHALL ROUTE AHU CONDENSATE DRAIN LINES TO NEAREST LANDSCAPED AREA.
 - THE CONTRACTOR SHALL INSTALL 6" THICK CONCRETE PAD FOR OUTSIDE UNIT. SLAB SHALL BE 6" WIDER THAN OUTSIDE UNIT. ANCHOR UNIT TO CONCRETE PAD USING (8) EIGHT (2 PER SIDE) MIAMI TECH INC. CUTD 12" STEEL TIE-DOWN CLIPS, CONNECTION TYPE C4 PER MANUFACTURER INSTRUCTIONS. ANCHOR TIE-DOWN CLIP TO CONCRETE PAD USING (1)-1/4"ø STAINLESS STEEL 410 ELCO ULTRACON, 1 3/4" FULL EMBED TO CONCRETE, 2 1/2" MIN. EDGE DISTANCE, 3" MIN. SPACING TO ANY ADJACENT ANCHOR.
 - CONTRACTOR SHALL FURNISH AND INSTALL ALL AC UNITS SHALL HAVE INTEGRAL CONTROLLERS WITH OVERLOAD PROTECTION AND DISCONNECT FUNCTIONS PER N.E.C. CONTRACTOR SHALL INSTALL GFI DUPLEX SERVICE RECEPTACLES NEAR UNIT. PROVIDE MOTOR STARTERS WITH OVERLOAD PROTECTION AND DISCONNECT FUNCTIONS FOR AIR HANDLERS.



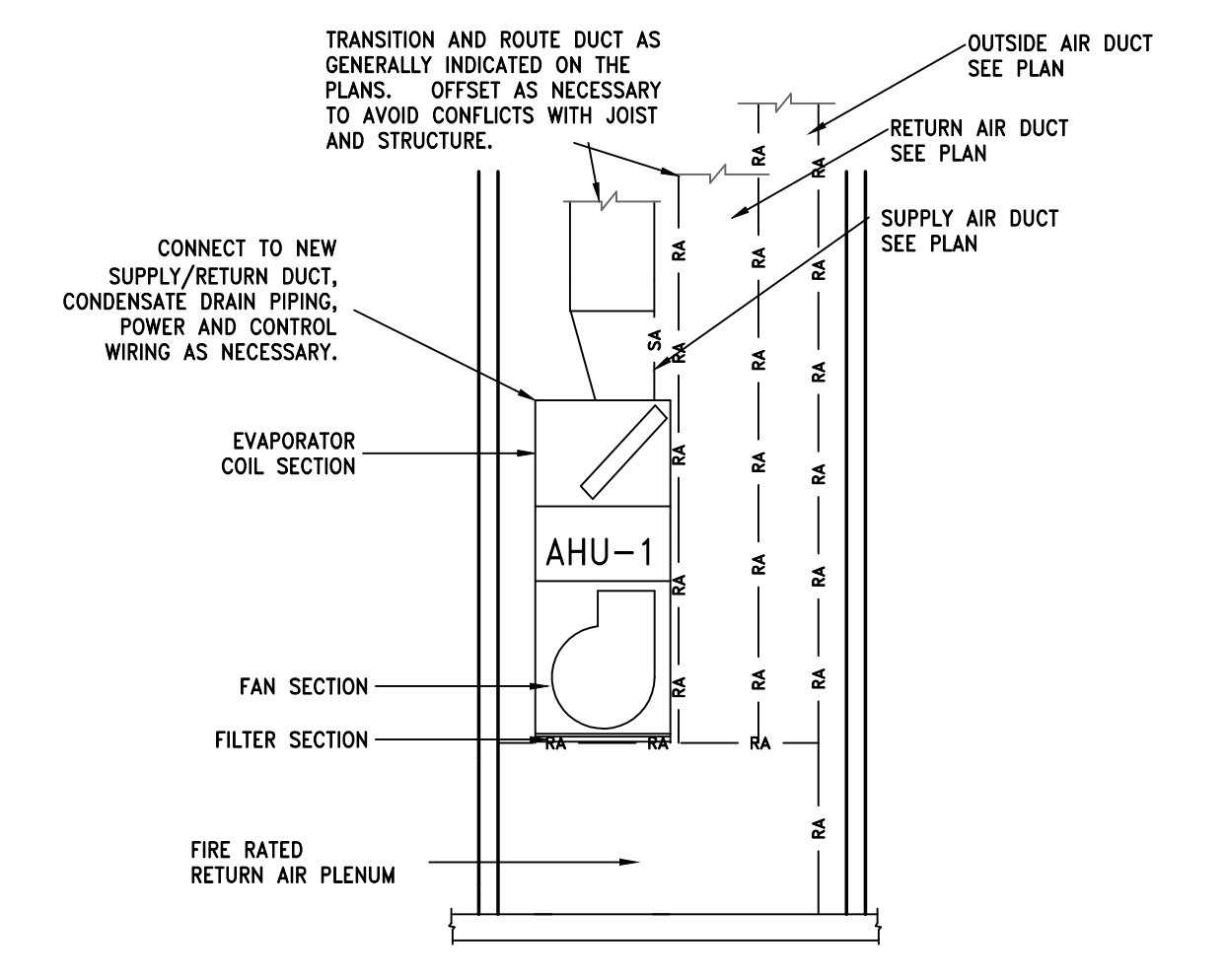
RESTROOM EXHAUST FAN DETAIL
N.T.S.

MARK	CFM	V/A	REMARKS
EF-1	200	120/0.3	BROAN L200E

NOTE-EXHAUST FANS SHALL BE BROAN OR ENGINEER APPROVED EQUAL



FLEXIBLE DUCT TO CEILING DIFFUSER
N.T.S.



TYPICAL AHU DETAIL
N.T.S.

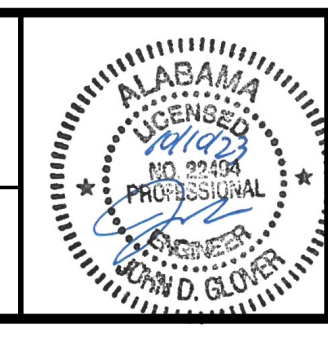
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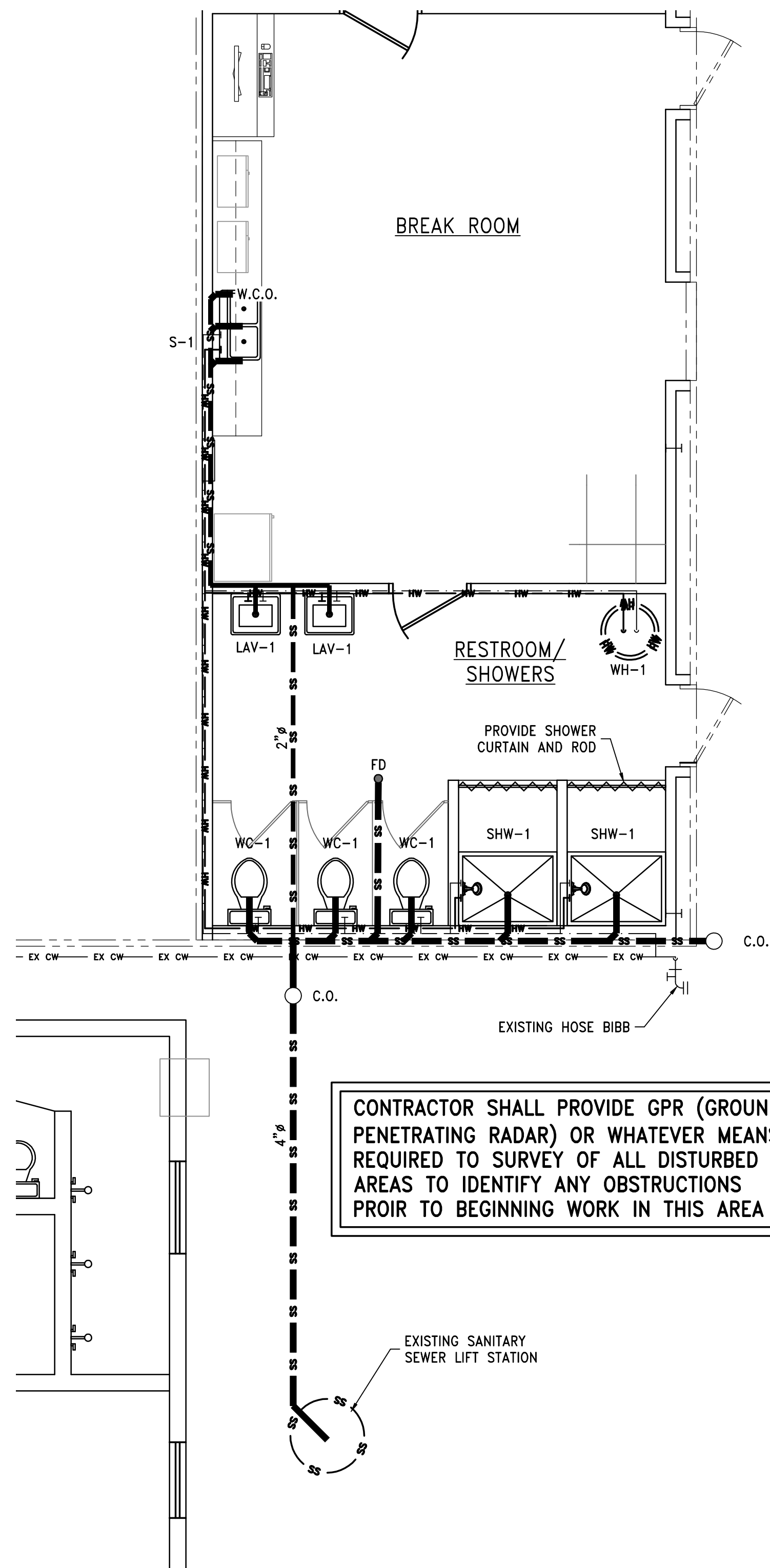
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PROJECT
**TERMINAL RAILROAD
MAINTENANCE OF WAY**
998 DEKLE STREET
MOBILE, ALABAMA 36602



TITLE		OFFICE RENOVATION HVAC PLAN -- ALTERNATE	
SCALE	AS NOTED	DRAWN BY	JWW
DATE	08/23/23	CHECKED BY	JDC
SHEET	22x34	DATE	08/23/23
JOB NO.	4405-23	DRAWING NUMBER	4405-M1A



CONTRACTOR SHALL PROVIDE GPR (GROUND PENETRATING RADAR) OR WHATEVER MEANS REQUIRED TO SURVEY OF ALL DISTURBED AREAS PROIR TO BEGINNING WORK IN THIS AREA

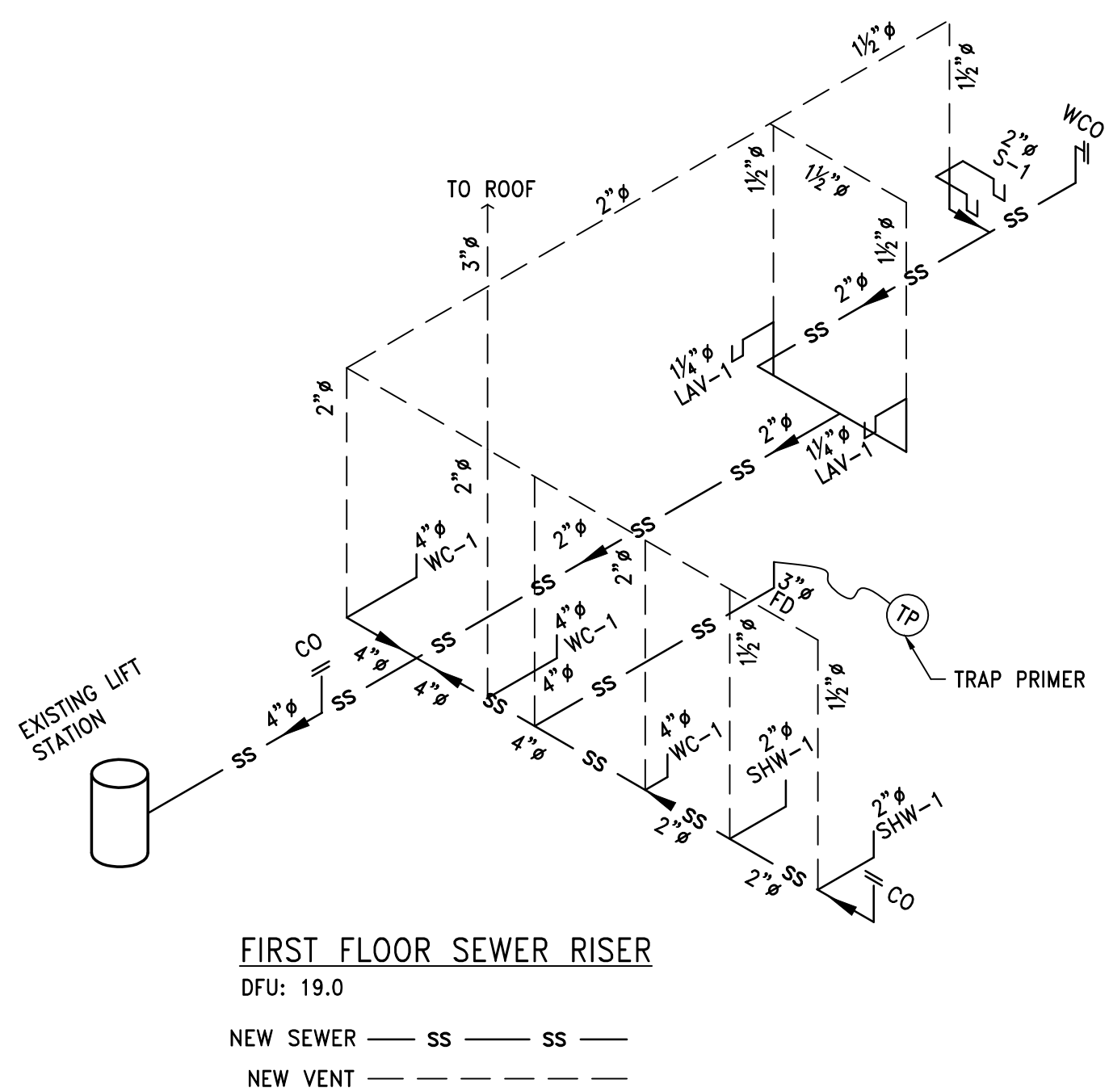
NEW FLOOR PLAN
1/4"=1'-0"

PLUMBING FIXTURE SCHEDULE					
MARK	FIXTURE	CONNECTIONS			REMARKS
		WASTE	CW	HW	
WC-1	WATER CLOSET	4"	1/2"	---	FLOOR MOUNTED, RIM HEIGHT 15", BOTTOM OUTLET, ELONGATED FRONT, 1.6 GPF PRESSURE-ASSISTED TOILET WITH OPEN FRONT SEAT, AND FLEXIBLE SUPPLY WITH STOP, VERIFY RH/LH FLUSH, MOUNT PER ADA SPECIFICATIONS. AMERICAN STANDARD CADET SERIES OR EQUAL.
LAV-1	LAVATORY	1 1/4"	1/2"	1/2"	VITREOUS CHINA WALL MOUNTED LAVATORY (24"x20") WITH SINGLE LEVER FAUCET W/WATTS MMV TEMPER VALVE. PROVIDE OFFSET GRID DRAIN, 1 1/4", 17 GA. P-TRAP, FLEXIBLE SUPPLIES AND STOPS. INSTALL PER ADA SPECIFICATIONS W/ZURN Z8946-1 GUARDS.
S-1	SINK	2"	1/2"	1/2"	TOP MOUNTED DOUBLE BOWL STAINLESS STEEL 33"x22"x7" DOUBLE LEVER FAUCET W/ WATTS MMV TEMPER VALVE. FLEXIBLE SUPPLIES AND STOPS. ELKAY CELEBRITY MODEL CR3322 OR EQUAL.
SHW-1	SHOWER	1 1/2"	1/2"	1/2"	DREAMLINE SHOWER MODEL DL-6193C-01 SLIMLINE, 3' X 4' SHOWER, SLIP RESISTANT TEXTURED FLOOR. DELTA WALL MOUNTED CHROME PLATED SHOWER UNIT MODEL 132900 WITH THERMOSTATIC/PRESSURE BALANCING MIXING VALVE OR APPROVED EQUAL.

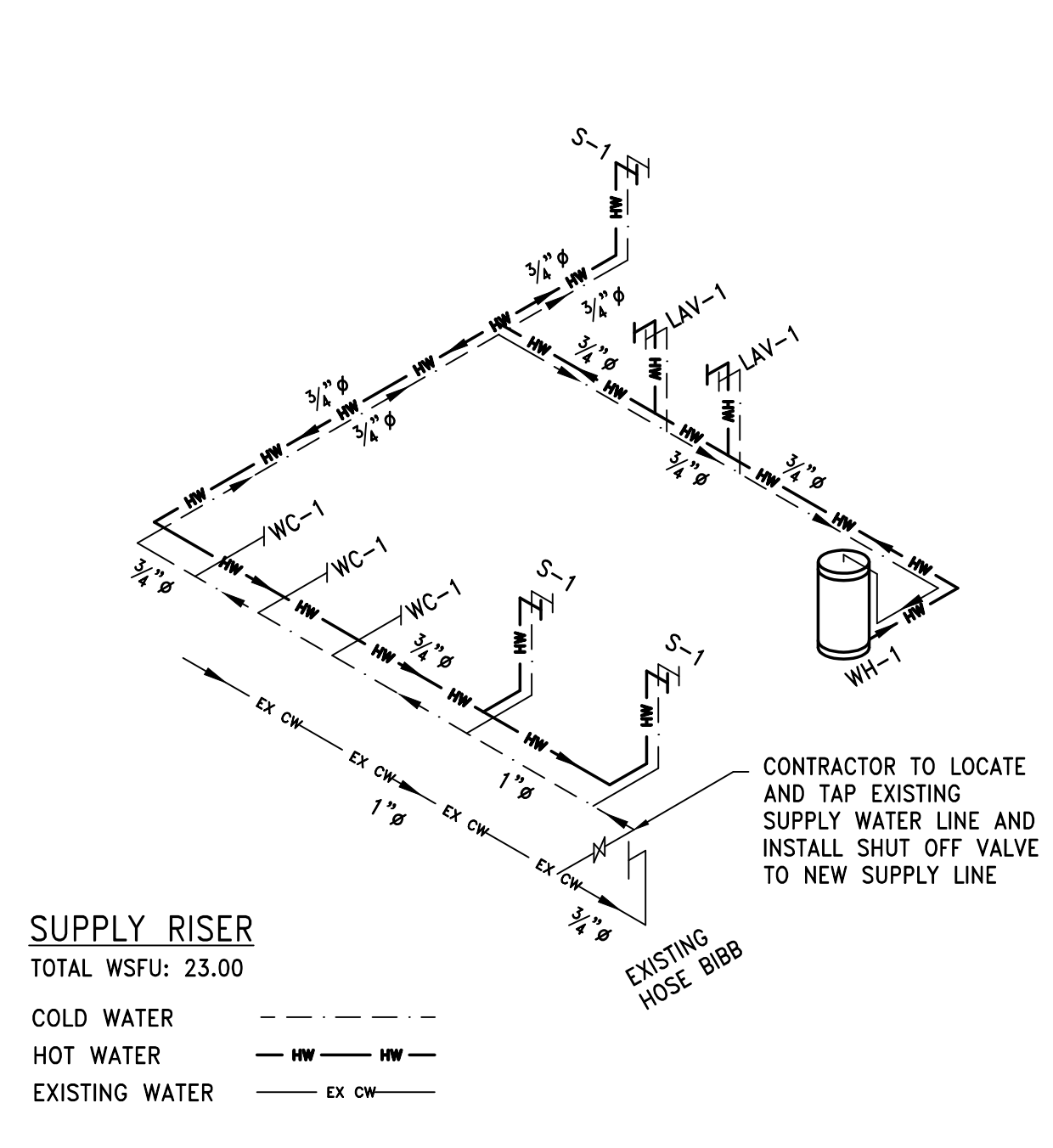
NOTES:

1. ALL PLUMBING FIXTURES SHALL BE WHITE, UNLESS INDICATED OTHERWISE.
2. INSTALL ZURN INSUL GUARD Z-8946-3 TRAP AND SUPPLY PROTECTORS ON ALL ADA MOUNTED LAVATORIES OR ENGINEER APPROVED EQUAL.
3. INSTALL WATTS MMV TEMPER VALVE CONFORMING TO ASSE 1070 ON ALL LAVATORIES AND SINKS. SET TO 109F MAX.

WATER HEATER SCHEDULE						
MARK	WH #	CAPACITY (GALLONS)	ELECTRICAL DATA			REMARKS
			VOLTS	Hz	PHASE	
WH-1	40	240	60	1	4.5	A.O. SMITH PROLINE STANDARD ENT-40, BLUE DIAMOND GLASS COATING, HEAT TRAP AND AUXILIARY DRAIN PAN. SHALL MEET ASHRAE 90.1



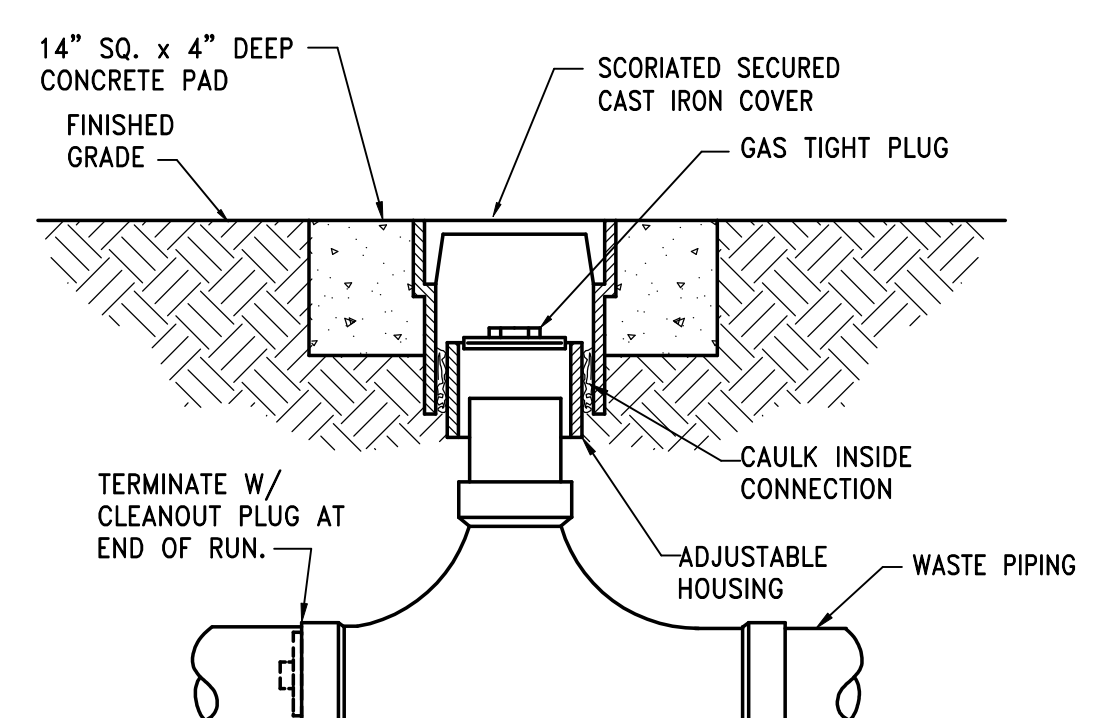
FIRST FLOOR SEWER RISER
DFU: 19.0
NEW SEWER — SS — SS —
NEW VENT — - - - -



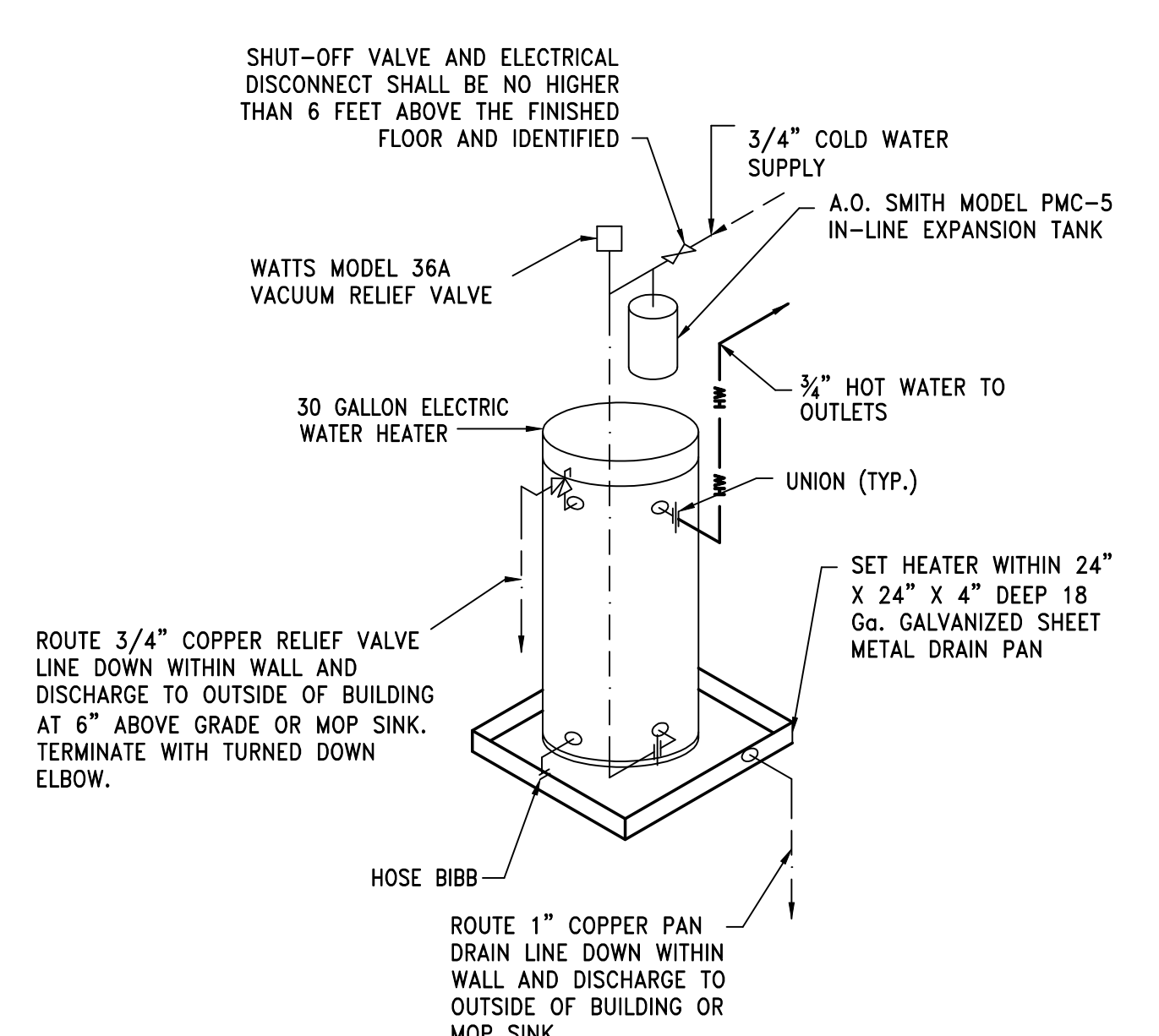
SUPPLY RISER
TOTAL WSFU: 23.00
COLD WATER — - - - -
HOT WATER — HW — HW —
EXISTING WATER — EX CW —

GENERAL NOTES:

1. ALL PLUMBING TO BE DONE IN ACCORDANCE WITH INTERNATIONAL PLUMBING CODE 2018.
2. WASTE PIPING TO BE 4" PVC DWV SCH.40. ALL DRAIN LINES SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FT.
3. COLD AND HOT WATER SUPPLY CONNECTION TO BE 1/2" UNLESS NOTED OTHERWISE IN SCHEDULE.
4. ALL COPPER EMBEDDED SHALL BE SLEEVED AND WRAPPED TO PREVENT CORROSION. NO SEAMS/JOINTS ARE PERMITTED BELOW THE SLAB.
5. CONTRACTOR WILL BE RESPONSIBLE FOR CONNECTING ALL WATER SUPPLY AND SEWER DRAIN LINES TO NEW UTILITIES.
6. CONTRACTOR SHALL FIELD VERIFY GRAVITY FLOW TO THE NEW SEPTIC TANK PRIOR TO CONNECTION.
7. SIZES SHOWN ON RISER ARE FOR MAIN LINE AND BRANCH LINES.
8. SUPPLY PIPING MAY BE ROUTED OVERHEAD. INSULATED ALL PIPING ROUTED OVER HEAD TO PREVENT FREEZING.
9. ALL HOSE BIBBS LOCATED ON THE EXTERIOR OF BUILDING SHALL BE FREEZE PROTECTED W/ KEYED SHUTOFF. ZURN Z-1315 OR EQUAL.



TWO-WAY CLEANOUT ON GRADE
NTS



WATER HEATER (WH) DETAIL
NTS

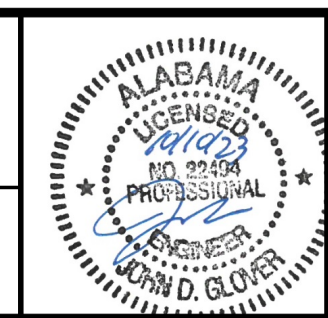
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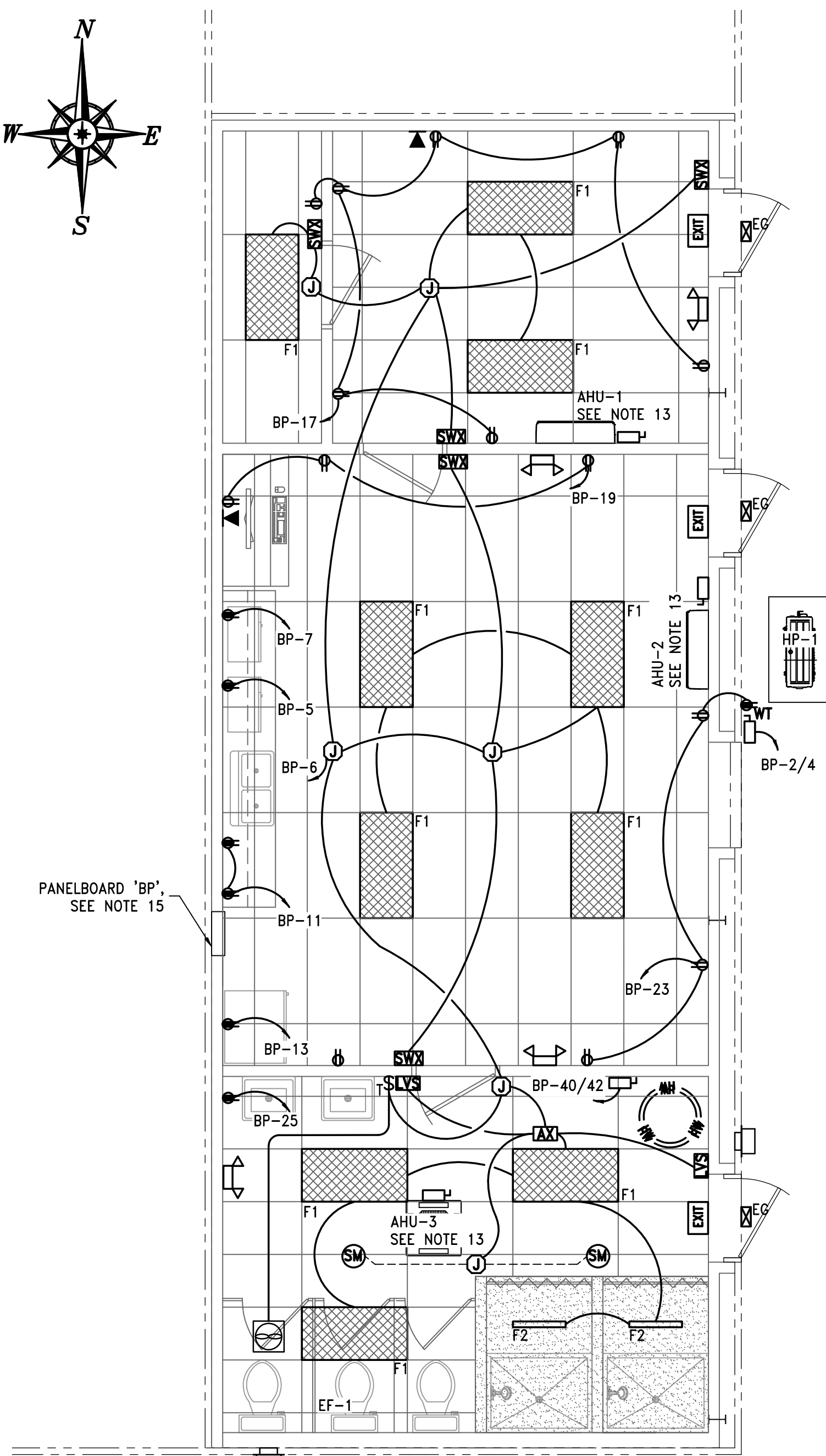
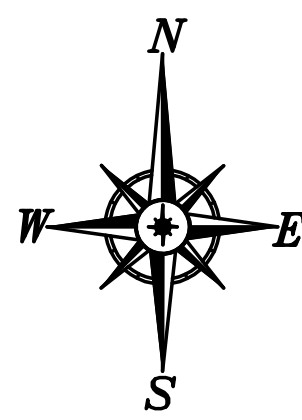
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PROJECT
TERMINAL RAILROAD MAINTENANCE OF WAY
998 DEKLE STREET
MOBILE, ALABAMA 36602



TITLE		OFFICE RENOVATION PLUMBING PLAN	
SCALE	AS NOTED	DRAWN BY	JWW
JOB NO.	4405-23	CHECKED BY	JDC
DATE	08/23/23	DATE	08/23/23
SHEET	— OF —	DRAWING NUMBER	4405-P1
22x34	REV.	B	



NEW ELECTRICAL PLAN

1/4"=1'-0"



EXHAUST FAN

NEW PANELBOARD SCHEDULE (120/240V 3Ø)																			
CKT #	LOAD DESCRIPTION	BREAKER P	TRIP TRIP	FEEDER FEED	CONDUIT GRD	SIZE SIZE	PHASE (VA)			FEEDER/CONDUIT			BREAKER P	TRIP TRIP	LOAD DESCRIPTION	CKT #			
							A	B	C	A	B	C					FEED	GRD	SIZE
1	NEW WATER HEATER	2	30	8	10	3/4	2,250			3,840		8	10	3/4	2	40	NEW HP-1	2	
3							2,250			3,840									4
5	MICROWAVE RECEPT	1	20	12	12	1/2						12	12	1/2	1	20	NEW LIGHTING	6	
7	MICROWAVE RECEPT	1	20	12	12	1/2	1,100					10	12	1/2	1	20	EMERGENCY CIRCUIT (NOTE 14)	8	
9	NOT USED (STINGER LEG)																NOT USED (STINGER LEG)	10	
11	COUNTER RECEPT	1	20	12	12	1/2											SPACE	12	
13	REFRIG RECEPT	1	20	12	12	1/2	1,100										SPACE	14	
15	NOT USED (STINGER LEG)																NOT USED (STINGER LEG)	16	
17	OFFICE RECEPT	1	20	12	12	1/2											SPACE	18	
19	BREAKROOM RECEPT	1	20	12	12	1/2	540										SPACE	20	
21	NOT USED (STINGER LEG)																NOT USED (STINGER LEG)	22	
23	BREAKROOM RECEPT	1	20	12	12	1/2											SPACE	24	
25	RESTROOM RECEPT	1	20	12	12	1/2	180										SPACE	26	
27	NOT USED (STINGER LEG)																NOT USED (STINGER LEG)	28	
29	SPACE	1										1,200	12	12	1/2	1	20	WELD SHOP LTG (NOTE 4)	30
31	SPACE	1										1,200	12	12	1/2	1	20	WELD SHOP LTG (NOTE 4)	32
33	NOT USED (STINGER LEG)																NOT USED (STINGER LEG)	34	
35	SPACE	1										720	12	12	1/2	1	20	WELD SHOP RECEPT (NOTE 4)	36
37	SPACE	1										720	12	12	1/2	1	20	WELD SHOP RECEPT (NOTE 4)	38
39	NOT USED (STINGER LEG)											2,250							40
41	SPACE	1										2,250	8	10	3/4	2	30	NEW WATER HEATER	42
							5,170	2,250	3,440	5,760	6,090	4,730							
TOTAL (kVA) #A							10.93	#B	8.34	#C	8.17	HIGH PHASE (AMPS)		91.1					
TOTAL CONNECTED LOAD (kVA)							27.44			TOTAL LOAD (AMPS)		66.1							

PANELBOARD COORDINATION SCHEDULE														
MARK	TYPE	MOUNTING	VOLTAGE	Ø	WIRE	MAIN	SERVICE RATED	kAIC RATING	BUS RATING	NEUTRAL RATING	C/B TYPE	FEEDER		
												CONDUCTORS	GROUND	CONDUIT
BP	NEMA-1	FLUSH	120/240	3	4	225MB	NO	18	225	225	BOLT-ON	EX	EX	EX

- PANEL NOTES:
- ALL BUSSING COPPER, INCLUDING NEUTRAL AND GROUND.
 - ALL LUGS 100 AMPS AND GREATER SHALL BE COPPER.
 - ALL LUGS ON CIRCUIT BREAKERS GREATER THAN 400 AMPS SHALL BE COPPER.
 - CONTRACTOR SHALL VERIFY AND RE-CONNECT EXISTING ELECTRICAL CONDUCTORS, AS DIRECTED BY OWNER, THAT WILL BE REUSED.
 - CONTRACTOR SHALL CONNECT THE STINGER-LEG PHASE TO PHASE B IN NEW PANELBOARD AND MARK WITH ORANGE TAPE. NO 120V, 1-PHASE LOADS SHALL BE CONNECTED TO B-PHASE (STINGER LEG).
 - ALL 240V, 1Ø CIRCUIT BREAKERS SHALL BE RATED 240V ONLY AND NOT 120/240V.

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	LED TROFFER METALUX #24GR-LD5-64-F1-UNV-L840-CD1-U, LED RECESSED LAY-IN, 120V, 6,565 LUMENS (50W) OR EQUAL.
	SURFACE MOUNT WET-LOCATION FIXTURE, METALUX #2VT2-LD5-4-DR-UNV-L840-CD1-WL-SSL-U, STAINLESS STEEL LATCHES, 120V, 4,000 LUMENS (30W) OR EQUAL.
	SENSORWORX #SWX-221-1, CEILING MOUNT OCCUPANCY SENSOR, LOW VOLTAGE, PASSIVE DUAL TECHNOLOGY (PIR/ACOUSTIC), SMALL MOTION 360°.
	SENSORWORX #SWX-801-WH, DECORATOR LOW VOLTAGE WALL SWITCH, MOMENTARY OPERATION, WHITE.
	SENSORWORX #SWX-900-AX-SWX-999, POWER PACK CONTROLLER, LINE VOLTAGE, 120/277V, SINGLE RELAY +150mA SUPPLY WITH SNAP-ON LOW VOLTAGE WIRING CHAMBER
	SENSORWORX #SWX-121-WH, OCCUPANCY SENSOR, LINE VOLTAGE, WALL SWITCH, PASSIVE DUAL TECHNOLOGY (PIR/ACOUSTIC), 1-POLE:AUTO ON (OCCUPANCY), WHITE, FLUSH WALL MOUNTED 48" A.F.F.
	SINGLE POLE 120V, 20A, 15-MINUTE TIMER CONTROL - FLUSH WALL MOUNTED 48" A.F.F. UNLESS NOTED OTHERWISE. BROAN #61W OR EQUAL
	NON-FUSED DISCONNECT SWITCH, NEMA-3R, SIZED AS REQUIRED
	NEMA-1 DISTRIBUTION PANEL, SEE SCHEDULE
	DATA/TELEPHONE JACK DUPLEX J-BOX WITH CONDUIT TO OVERHEAD CEILING. PHONE CABLE BY OTHERS. INSTALL BLANK COVER PLATES.
	110 VOLT GROUNDING TYPE, DUPLEX RECEPTACLE. FLUSH WALL MTD. 18" A.F.F. UNLESS NOTED OTHERWISE.
	GROUND FAULT DUPLEX RECEPTACLE. FLUSH WALL MTD. 42" A.F.F. UNLESS NOTED OTHERWISE. WT - WEATHER-PROOF ENCLOSURE
	EMERGENCY LIGHTING FIXTURE UNIT WITH BATTERY PACK. MOUNTED 12" BELOW CEILING UNLESS NOTED OTHERWISE. COPPER SURELITE #SEL25SD. SEE NOTE 14
	EXIT SIGN WITH BATTERY BACKUP. MOUNT OVER DOOR. COOPER SURELITE #APX7R. SEE NOTE 14.
	EGRESS EXTERIOR FIXTURE. LUMARK #XTOR88RL-PC1-CBP. 120V, PHOTO-CELL CONTROL WITH BATTERY BACK-UP. 85W OR EQUAL. SEE NOTE 14

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 - ALL EMERGENCY, EXIT AND EGRESS LIGHTING FIXTURES SHALL BE CONNECTED TO CIRCUIT BP-8 AND BE LABELED AS 'EMERGENCY - DO NOT TURN OFF'. ROUTE 1/2" CONDUIT W/(2)#12AWG & (1)#12AWG GRD.
 - CONTRACTOR SHALL REMOVE THE EXISTING PANELBOARD AND REPLACE WITH NEW, 120/240V, 3-PHASE W/STINGER PHASE, 42 POLE, 225A MAIN CIRCUIT BREAKER, NEMA-1 FLUSH MOUNT. CONTRACTOR SHALL VERIFY ALL EXISTING CIRCUITS AND CONDUCTORS AND VERIFY WITH OWNER THE EXISTING CIRCUITS/CONDUCTORS TO BE REUSED/RECONNECTED. SEE PANELBOARD SCHEDULE FOR PRELIMINARY CIRCUIT REQUIREMENTS.

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B	ISSUED FOR BID	10/10/23	CMG	JDG
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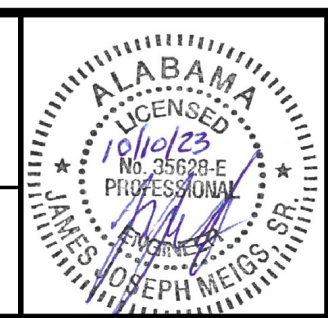
Cowles, Murphy, Glover & Associates
A Full Service Engineering Firm
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457 St. Michael St., Mobile, AL 36602
1880 Cranston Dr. Ste 102, Arlington, TN 38002
Alabama (251) 433-1611 Tennessee (901) 290-5444

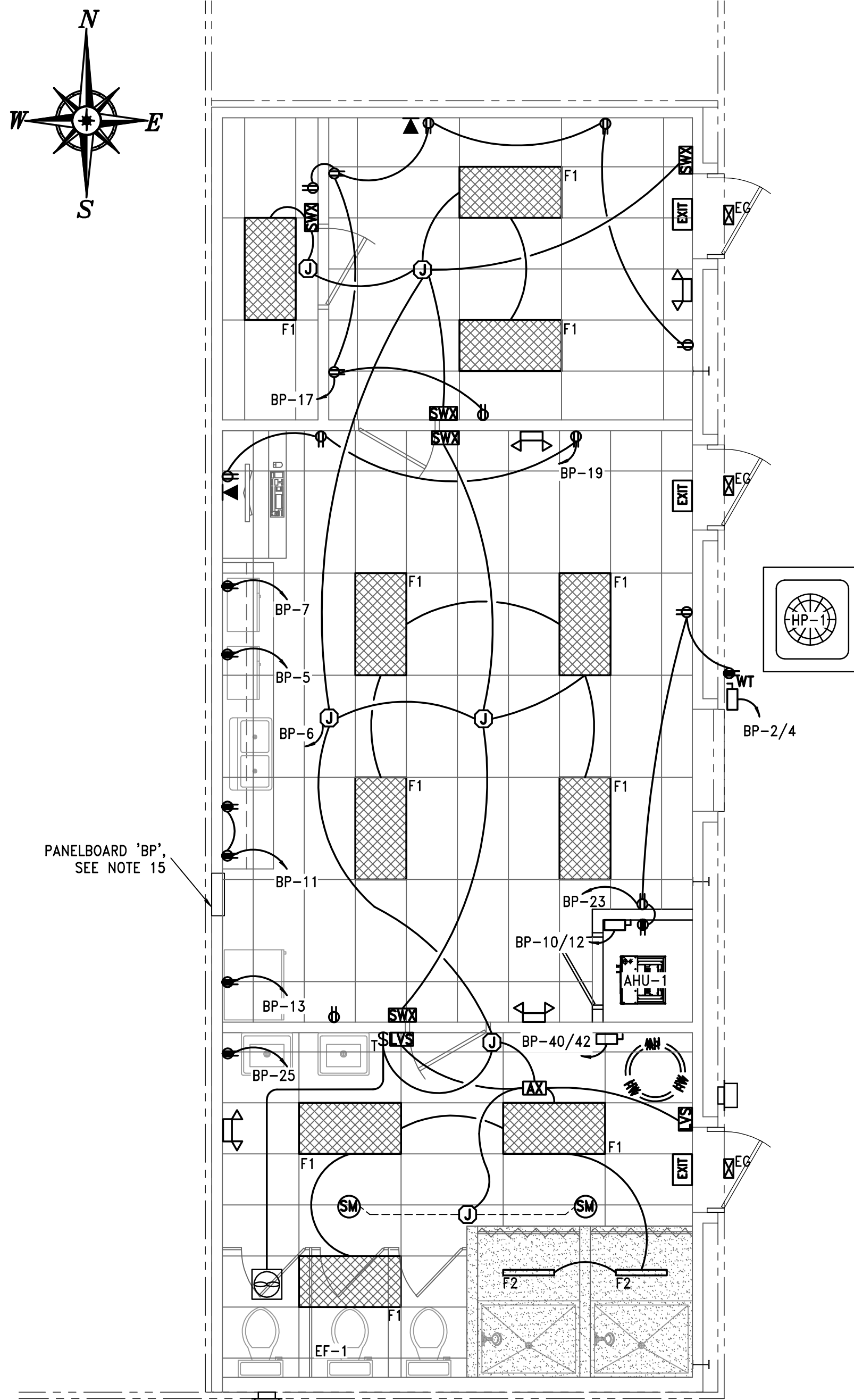
PROJECT

TERMINAL RAILROAD MAINTENANCE OF WAY

998 DEKLE STREET
MOBILE, ALABAMA 36602

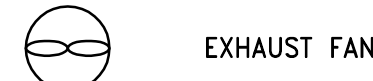


TITLE				
OFFICE RENOVATION ELECTRICAL PLAN				
SCALE	DRAWN BY	DATE	SHEET	REV.
AS NOTED	RCC	08/23/23	22x34	B
JOB NO.	CHECKED BY	DATE	DRAWING NUMBER	
4405-23	JJM	08/23/23	4405-E1	



NEW ELECTRICAL PLAN

1/4"=1'-0"



EXHAUST FAN

NEW PANELBOARD SCHEDULE (120/240V 3Ø)																					
MARK: "BP"																					
CKT #	LOAD DESCRIPTION	BREAKER P	TRIP	FEEDER	CONDUIT	PHASE (VA)			FEEDER	CONDUIT	BREAKER P	TRIP	LOAD DESCRIPTION	CKT #							
						A	B	C													
1	NEW WATER HEATER	2	30	8	10	3/4	2,250			1,560		10	12	1/2	2	20	NEW HP-1	2			
3							2,250			1,560									4		
5	MICROWAVE RECEPT	1	20	12	12	1/2						560	12	12	1/2	1	20	NEW LIGHTING	6		
7	MICROWAVE RECEPT	1	20	12	12	1/2	1,100						10	12	1/2	1	20	EMERGENCY CIRCUIT (NOTE 14)	8		
9	NOT USED (STINGER LEG)																		10		
11	COUNTER RECEPT	1	20	12	12	1/2				360								NEW AHU-1	12		
13	REFRIG RECEPT	1	20	12	12	1/2	1,100						2,400	10	12	1/2	2	30	SPACE	14	
15	NOT USED (STINGER LEG)																		NOT USED (STINGER LEG)	16	
17	OFFICE RECEPT	1	20	12	12	1/2				1,260									SPACE	18	
19	BREAKROOM RECEPT	1	20	12	12	1/2	540												SPACE	20	
21	NOT USED (STINGER LEG)																		NOT USED (STINGER LEG)	22	
23	BREAKROOM RECEPT	1	20	12	12	1/2				720									SPACE	24	
25	RESTROOM RECEPT	1	20	12	12	1/2	180												SPACE	26	
27	NOT USED (STINGER LEG)																		NOT USED (STINGER LEG)	28	
29	SPACE	1	-	-	-	-							1,200	12	12	1/2	1	20	WELD SHOP LTG (NOTE 4)	30	
31	SPACE	1	-	-	-	-				1,200				12	12	1/2	1	20	WELD SHOP LTG (NOTE 4)	32	
33	NOT USED (STINGER LEG)																		NOT USED (STINGER LEG)	34	
35	SPACE	1	-	-	-	-							720	12	12	1/2	1	20	WELD SHOP RECEPT (NOTE 4)	36	
37	SPACE	1	-	-	-	-				720				12	12	1/2	1	20	WELD SHOP RECEPT (NOTE 4)	38	
39	NOT USED (STINGER LEG)												2,250							40	
41	SPACE	1	-	-	-	-								8	10	3/4	2	30	NEW WATER HEATER	42	
							5,170	2,250	3,440	3,480	6,210	7,130									
TOTAL (kVA) #A							8.85	#B	8.46	#C	10.57	HIGH PHASE (AMPS)		88.1							
TOTAL CONNECTED LOAD (kVA)							27.88				TOTAL LOAD (AMPS)		67.0								

PANELBOARD COORDINATION SCHEDULE														
MARK	TYPE	MOUNTING	VOLTAGE	Ø	WIRE	MAIN	SERVICE RATED	kAIC RATING	BUS RATING	NEUTRAL RATING	C/B TYPE	FEEDER		
												CONDUCTORS	GROUND	CONDUIT
BP	NEMA-1	FLUSH	120/240	3	4	225MB	NO	18	225	225	BOLT-ON	EX	EX	EX

- PANEL NOTES:
- ALL BUSSING COPPER, INCLUDING NEUTRAL AND GROUND.
 - ALL LUGS 100 AMPS AND GREATER SHALL BE COPPER.
 - ALL LUGS ON CIRCUIT BREAKERS GREATER THAN 400 AMPS SHALL BE COPPER.
 - CONTRACTOR SHALL VERIFY AND RE-CONNECT EXISTING ELECTRICAL CONDUCTORS, AS DIRECTED BY OWNER, THAT WILL BE REUSED.
 - CONTRACTOR SHALL CONNECT THE STINGER-LEG PHASE TO PHASE B IN NEW PANELBOARD AND MARK WITH ORANGE TAPE. NO 120V, 1-PHASE LOADS SHALL BE CONNECTED TO B-PHASE (STINGER LEG).
 - ALL 240V, 1Ø CIRCUIT BREAKERS SHALL BE RATED 240V ONLY AND NOT 120/240V.

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	LED TROFFER METALUX #24GR-LD5-64-F1-UNV-L840-CD1-U, LED RECESSED LAY-IN, 120V, 6,565 LUMENS (50W) OR EQUAL.
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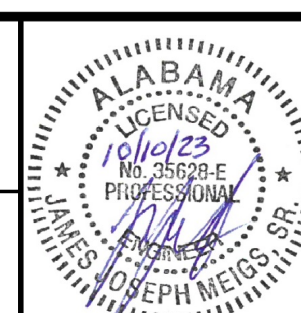
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PROJECT
TERMINAL RAILROAD MAINTENANCE OF WAY
998 DEKLE STREET
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TITLE		PROJECT		SHEET	
OFFICE RENOVATION ELECTRICAL PLAN - ALTERNATE		4405-23		22x34 REV. B	
SCALE	AS NOTED	DRAWN BY	RCC	DATE	08/23/23
JOB NO.	4405-23	CHECKED BY	JJM	DATE	08/23/23
DRAWING NUMBER				4405-E1A	