



# CITY OF ROCKY MOUNT

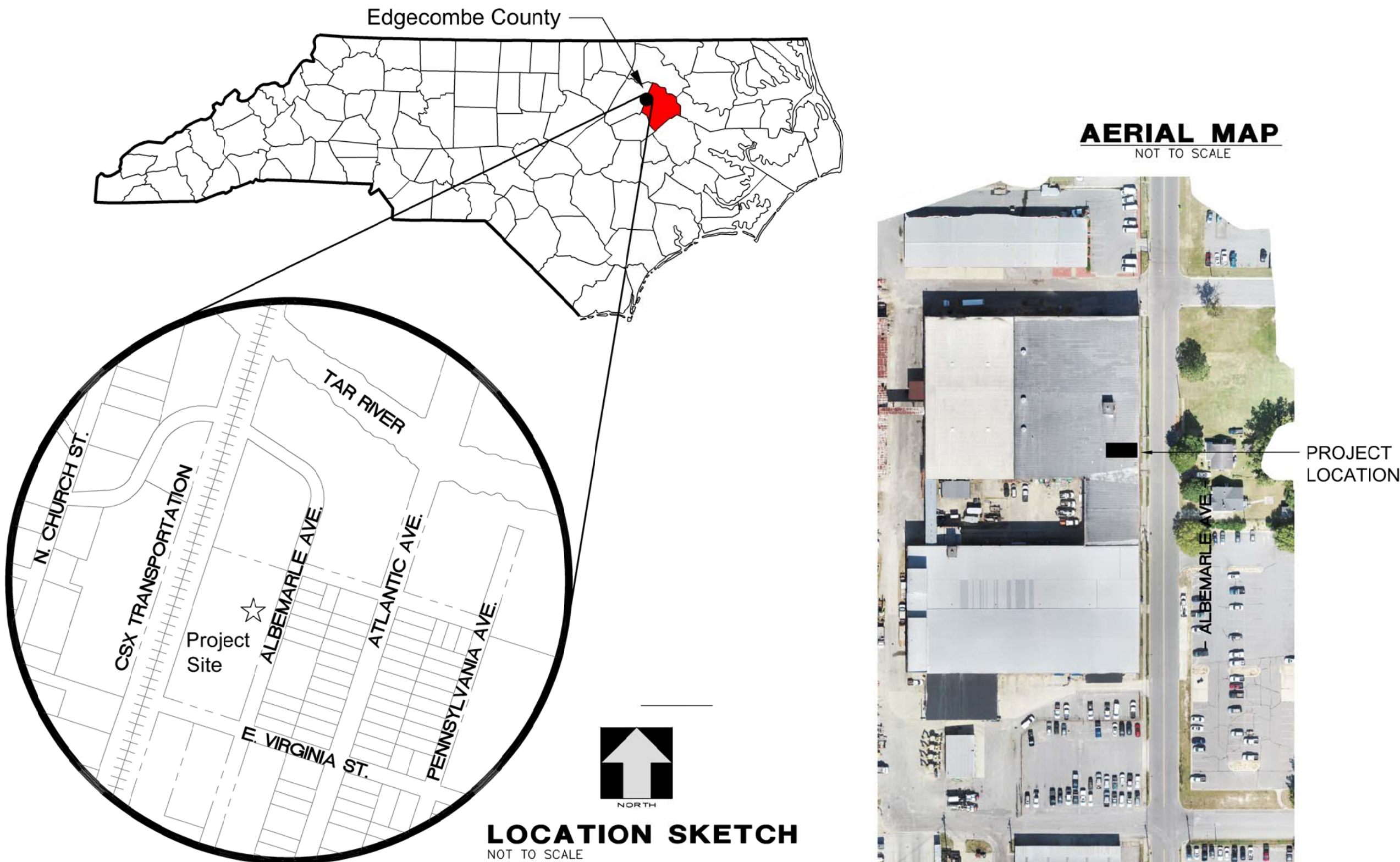
## ALBEMARLE WAREHOUSE - BREAK ROOM RENOVATION

724 Albemarle Ave. Rocky Mount, NC

### GENERAL NOTES

Last Revised 3/1/22

- The purpose of this project is to renovate the existing breakroom and restrooms in the Albemarle Warehouse Building.
- All existing information has been obtained from actual field measurements and City records provided to Appian. CONTRACTOR TO VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING BUILDING FEATURES SHOWN PRIOR TO CONSTRUCTION.
- Property is located a Flood Hazard zone per FEMA Map 3720.3850.00K, dated 6/18/13.
- All materials, construction, workmanship shall meet requirements of the NC State Building Codes and City of Rocky Mount.
- Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of America Inc. and the Safety and Health Regulations for Construction issued by the US Department of Labor.
- The contractor shall be responsible for reviewing and verifying all existing conditions. Any adverse existing conditions affecting work shown shall be brought to the attention of the Engineer for possible clarification or reconciliation.
- Contractor to comply with all current ADA Accessibility Guidelines. Refer to "Department of Justice ADA Standards for Accessible Design," latest edition, ICC/ANSI A117.1 Standard and Commentary and NC State Building Code Volume 1-C, "Making Buildings and Facilities Accessible to and Useable by the Physically Handicapped," latest addition.
- City will provide exterior staging area within fenced area. Contractor to coordinate with Michael Baughn regarding location. The City does not provide security and is not liable for any theft or damage to construction materials stored on-site.
- Contractor to provide adjustments to existing fire suppressions/sprinkler system in the project area to comply with NC Fire Codes.



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### PROJECT CONTACTS

NAME/ TITLE	ENTITY	PHONE	MAIL/EMAIL
Michael Baughn Property & Risk Division Manager	City of Rocky Mount	252.972.1202	michael.baughn@rockymountnc.gov
William Hale Fire Marshal	City of Rocky Mount	252.972.1377	William.Hale@rockymountnc.gov
Bobby L. Joyner, PE President	Appian Consulting Engineers	252.972.7703	bjoyner@appianengineers.com
David C. Revor, PE Project Engineer	Appian Consulting Engineers	252.972.7703	drevor@appianengineers.com
Michael Gallina Project Designer	Appian Consulting Engineers	252.972.7703	mgallina@appianengineers.com
Josh Thompson PM&E Designer	James Miller & Associates	252.813.8645	joshvge@gmail.com

### SITE INFORMATION

OWNER INFORMATION	
Owner:	City of Rocky Mount
Owner Representative:	Michael Baughn Property & Risk Division Manager
Contact info:	252.972.1202
LOCATION INFORMATION	
Address:	724 Albemarle Ave
City:	Rocky Mount
County:	Edgecombe
State:	NC
Zone:	I-2
Edgecombe County PIN:	3850-83-0877
Deed Book/ Page:	DB 902/ PG 0553
Latitude/ Longitude:	35.953084, -77.789408

Final Drawings  
Review Purposes ONLY

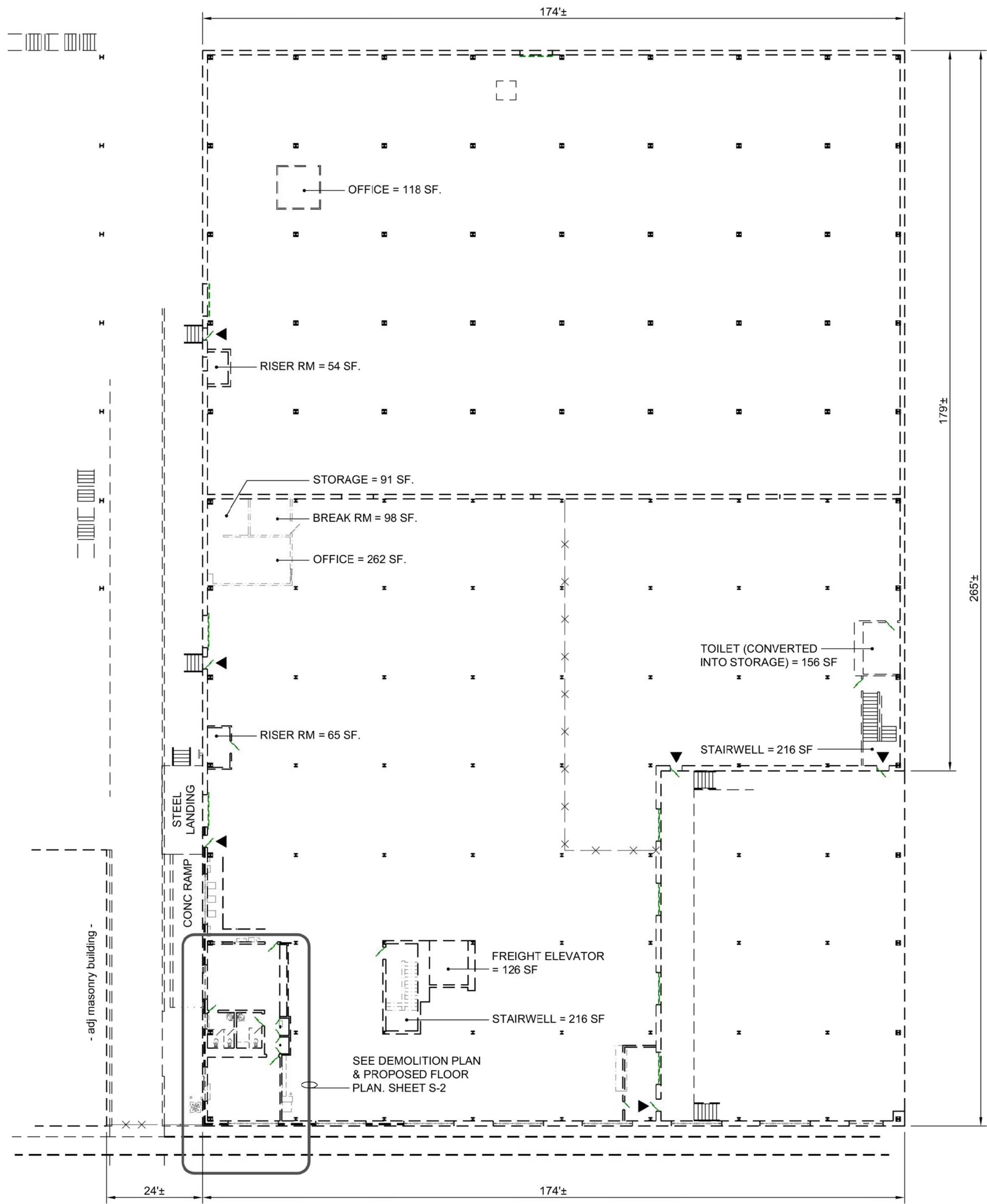


REVISIONS					
NO.	DATE	DESCRIPTION	BY	CAD	
1	4/13/22	REV. PER CITY COMMENTS	D.C.R.	M.G.J.	









EXISTING WAREHOUSE 1st FLOOR PLAN

SCALE: 1" = 20'

RENOVATION AREA = 985 SF.  
1st FLOOR AREA = 41,560 SF.  
2nd FLOOR AREA = 59,223 SF.  
TOTAL WAREHOUSE AREA = 100,783.21 SF.

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Approved for Construction:

Date:

**RECORD DRAWINGS:**

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By:

Date:

**CONSTRUCTION SAFETY**

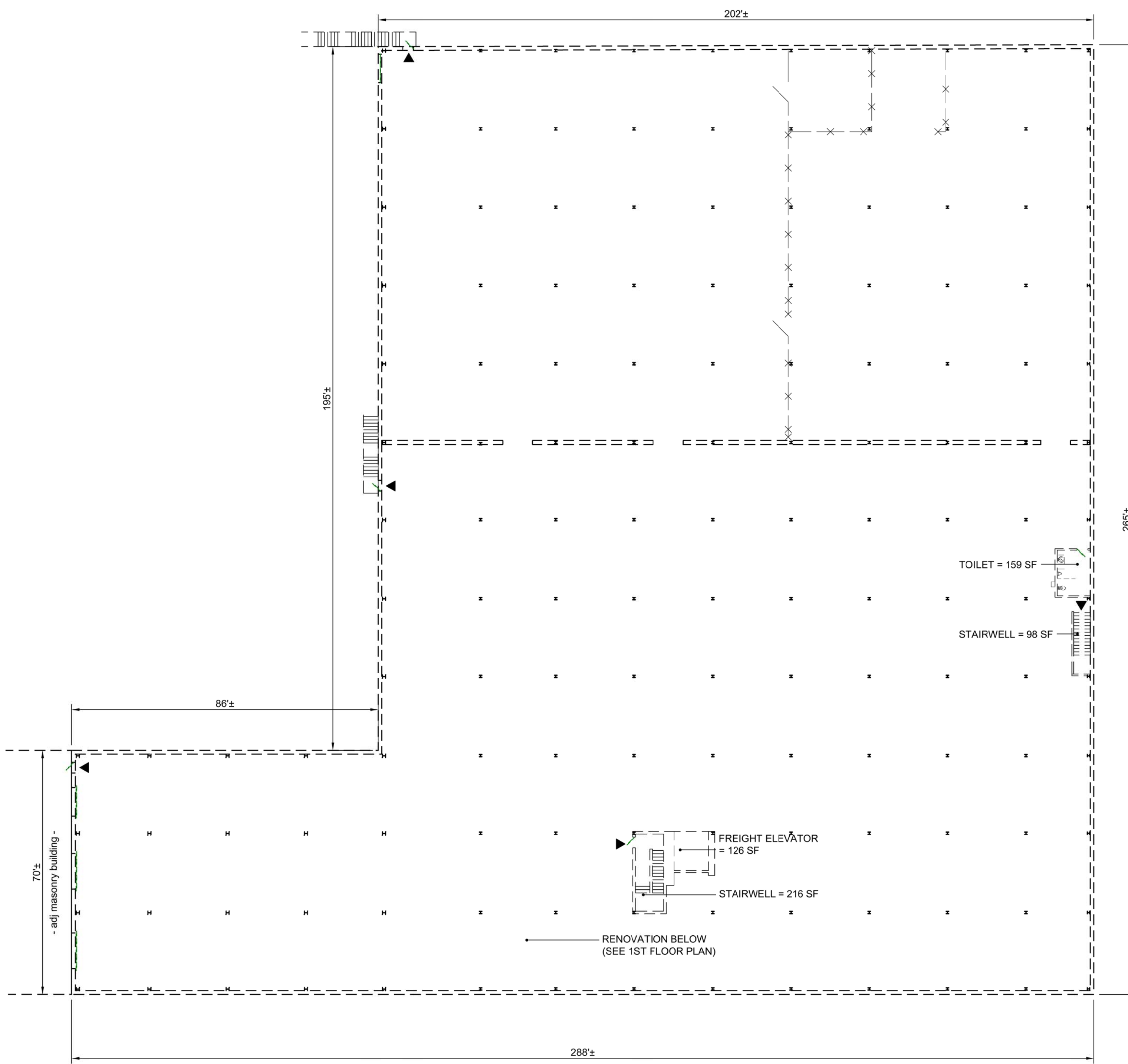
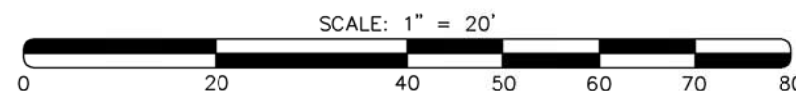
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**ADA AND LEGAL DISCLAIMER**

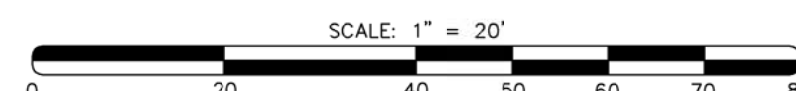
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EXISTING WAREHOUSE 2nd FLOOR PLAN

SCALE: 1" = 20'

RENOVATION AREA = 985 SF.  
1st FLOOR AREA = 41,560 SF.  
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TOTAL WAREHOUSE AREA = 100,783.21 SF.



DATE:	December 2021	DESIGN:	M. Gallina Jr.
LAST EDIT:	N/A	DATE:	4/13/22
NO.:	1	BY:	D.C.R.
DATE:	4/13/22	DESCRIPTION:	REVISIONS
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Phone: (252) 972-7703

www.appianengineers.com  
admin@appianengineers.com

Final Drawings  
Review Purposes ONLY



EXISTING FLOOR PLANS for  
Break Room Renovation  
City of Rocky Mount Warehouse  
724 Albemarle Ave.

21-098

D-0000

S-1





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By: \_\_\_\_\_ Date: \_\_\_\_\_



Project: **CRM Warehouse Break Room Renovation**

Last Revised: 3/16/22 11:00 AM

DOOR SCHEDULE																
DOORS					FRAMES			HARDWARE								
MARK	ROOM #	LOCATION	SIZE	THICKNESS	LABEL / RATING	MATERIAL	HEAD	1	2	3	4	5	6	7	8	9
2a, 2b	100	BREAK ROOM	3'-0" x 7'-0"	1.75"	20 MIN	WOOD	H.M.	2"	D6							
3b	101	WOMEN'S TOILET	3'-0" x 7'-0"	1.75"	20 MIN.	WOOD	H.M.	2"	D6							
3a	102	MEN'S TOILET	3'-0" x 7'-0"	1.75"	20 MIN.	WOOD	H.M.	2"	D6							
1	EX.	WAREHOUSE	3'-0" x 7'-0"	1.75"	-	-	H.M. ALUM	-	D6							

HARDWARE SCHEDULE		
MARK	ITEM	DESCRIPTION
D1	LOCKSET:	"YALE" 4607LN AU, 626 FINISH, GRADE 2 LOCKSET, SATIN CHROME FINISH, 3-HOUR RATED OR EQUAL
D2	PUSH PLATE:	"ROCKWOOD", 70C, US 260/626 FINISH OR EQUAL
D3	PULL PLATE:	"ROCKWOOD", 106 X 70C PULL PLATE, US260/626 SATIN CHROME FINISH OR EQUAL
D4	PASSAGE SET	"YALE" AL4601LN-626 CYLINDRICAL PASSAGE SET, LEVER LOCK, SATIN CHROME FINISH
D5	KICK PLATE:	"ROCKWOOD" K1050, 10" WIDE, 2" LESS THAN DOOR WIDTH (PUSH SIDE) 1 1/2" LESS THAN DOOR WIDTH (PULL SIDE), US260 SATIN CHROME FINISH OR EQUAL
D6	CLOSERS:	"YALE", 5801 ADJUSTABLE SIZE ANSI GRADE 1 (2 MILLION CYCLES) FIRE RATED SURFACE DOOR CLOSER, GRADE 3 (10.5 MILLION CYCLES) FOR CLOSERS, SET SIZE ON ADJUSTABLE TO "4" (5 LBS OPENING FORCE) FOR EXTERIOR DOORS AND "3" FOR INTERIOR DOORS (5 LBS OPENING FORCE)
D7	EXTERIOR & INTERIOR DOOR HINGES:	"YALE" BALL BEARING HINGES WITH 32D FINISH OR EQUAL
D8	DOOR STOPS:	"ROCKWOOD" WALL MOUNT STOPS NO. 406 US32D WITH STAINLESS STEEL FINISH OR EQUAL
D9	PANIC EXIT DEVICE:	"YALE" 2150 SATIN STAINLESS STEEL FINISH, SQUAREBOLT 36" RIM LATCH W/ OUTSIDE KEYS CYLINDER (LOCKS OR UNLOCKS OUTSIDE LEVER); OR APPROVED EQUAL
D10	KICK-DOWN DOOR STOP:	"ROCKWOOD", #461L SATIN CHROME FINISH
D11	CONCEALED VERTICAL ROD PANIC HARDWARE EXIT DEVI	"YALE" 7120, 630 - SATIN STAINLESS STEEL FINISH FOR DOUBLE METAL FRAME EGRESS DOORS W/ OUTSIDE KEYS CYLINDER (LOCKS OR UNLOCKS OUTSIDE LEVER); OR APPROVED EQUAL
D12	PRIVACY LEVER LOCK SET, PUSH BUTTON LOCKING	"YALE" 4702LN 626 STAIN CHROME FINISH, 3-HOUR RATED, OR APPROVED EQUAL
D13	COAT HOOK	"ROCKWOOD" COAT HOOK POLISHED CHROME - RM802-US26
NOTES:	1. ALL DOOR HARDWARE TO BE LEVER OR PUSH-PULL IN NATURE IN ACCORDANCE WITH ADA STANDARDS. 2. HARDWARE SHALL HAVE THE SAME FIRE RATING DURATION AS DOOR AND FRAME ON WHICH THEY WILL BE MOUNTED. 3. ALL INTERIOR AND EXTERIOR DOOR HINGES TO BE BALL BEARING HINGES...SEE HARDWARE SCHEDULE ITEM D7 4. EXTERIOR DOORS TO BE WINDSTORM RESISTANT. 5. HARDWARE FINISH, U.N.O., TO BE SATIN CHROME.	

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Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

RECORD DRAWINGS:

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By: \_\_\_\_\_ Date: \_\_\_\_\_

CONSTRUCTION SAFETY

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GENERAL DOOR NOTES

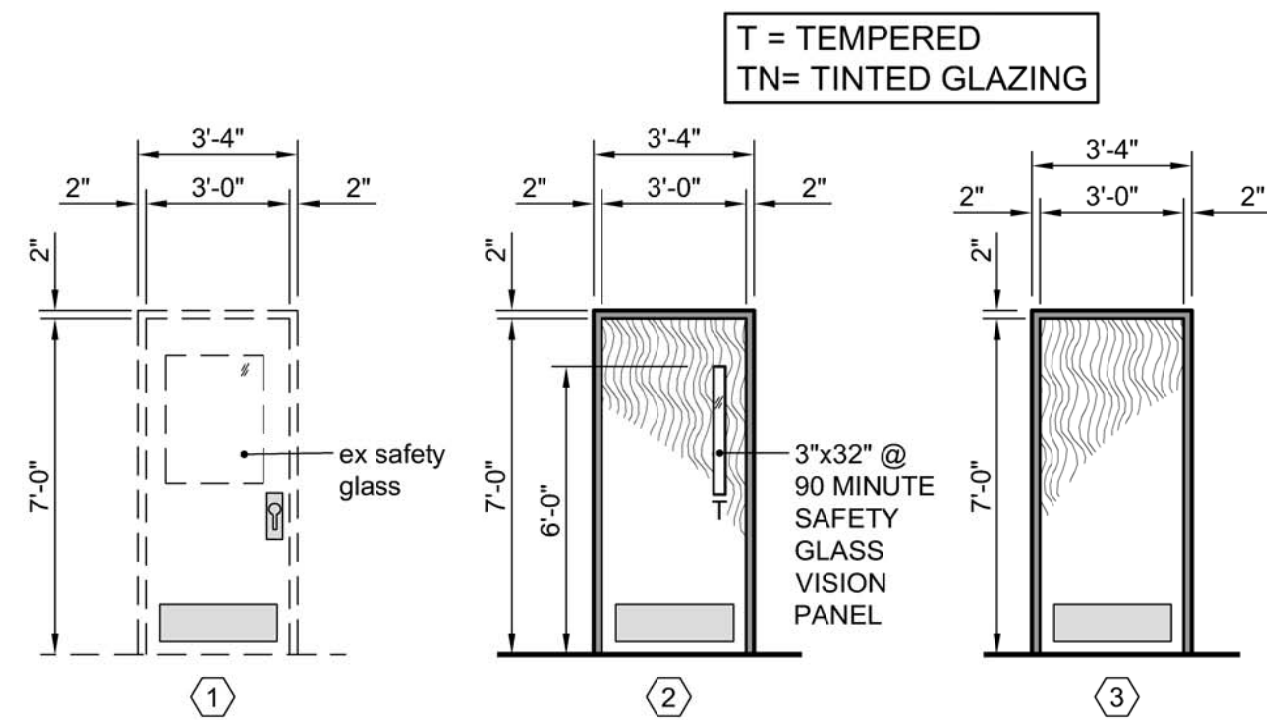
- All hardware shall meet all applicable provisions of ANSI/ICC A117.1 and related and referenced accessibility codes.
- Tempered glazing shall be used as required by code.
- Furnish and install door closer as scheduled; in compliance with all applicable codes
- All hollow metal door frames shall be fully welded type, factory primed, and field painted. Install per manufacturer's requirements for proper installation and operation for specific applications
- Door thresholds shall be 3/4" maximum height and meet the applicable provision ANSI/ICC A117.1 for accessibility.
- Tactile braille signs: Provide tactile braille signs at: Women's Toilet, Men's Toilet, & at both Conference room doors.
- Hinge-mounted door stops not permitted (i.e., door stops mounted on door hinges).
- 8" Birch doors to be stained/metal door frames to be painted. Solid core wood doors - stain grade (not paint grade).
- Provide a 1/2" undercut on all interior doors.
- Interior signage to be furnished and installed by the General Contractor as per ADA requirements (ANSI/ICC A117.1 and related and referenced accessibility codes).
- New lockset hardware on existing door shall use existing keying to fit new hardware - verify keying w/ owner

GENERAL WINDOW NOTES

- All windows are existing. Horizontal pivot single glazed sheet windows.
- Repair any missing mortar or broken panes. Re-seal any damaged or missing seals. See General Structural Notes.

HOLLOW METAL FRAME WIDTHS WITH VARIOUS WALL TYPES

- 6" perimeter Walls: 7 5/8" wide for typical 6" wall comprised of 6" wood studs and 5/8" gypsum wallboard on each inside & 1/2" T-11 plywood on warehouse side
- 6" interior Walls: 7 3/4" wide for typical 6" wall comprised of 6" wood studs and 5/8" gypsum wallboard on each side.



TYPICAL DOOR & FRAME ELEVATIONS

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

PROJECT: CRM Warehouse Break Room Renovation

Last Revised: 4/13/2022 9:35 AM

TOILET ACCESSORIES SCHEDULE

Note: Unless otherwise noted below, all accessories are to be Bradley Corp Products (or approved equal).

Number	Description of Toilet Accessories	Model No.	Mounting Height
T1	SS Surface Mtd Paper Towel Dispenser, Satin Finish	250-15	40" Max See Elevation
T2	18" x 1 1/2" Vertical Grab Bar - Peened (non-slip)	812-18 (001)	See Elevation
T3	36" x 1 1/2" Grab Bar - Peened (non-slip)	812-36 (001)	33" - 36" AFF
T4	42" x 1 1/2" Grab Bar - Peened (non-slip)	812-42 (001)	33" - 36" AFF
T5	SS Framed 1/4" x 60" W x 36" H Mirror	781 (60x36)	40" Max See Elevation
T6	Omitted		
T7	Double Roll Toilet Paper Dispenser	5224	1'-7" Min to C/L
T8	Omitted		
T8A	Foam, Soap, sanitizer Dispenser, surface mounted stainless steel, satin finish (automatic) (4 aa batteries)	Bradley Corp 6A01-11	40" Max See Elevation
T9	Omitted		
T10	Omitted		
T11	Accessible Braille Sign (Room Designation)	1 Men/1 Women	60" AFF to bottom of text
T11a	Accessible Braille Sign (Exit)	Fire Exit	60" AFF to bottom of text
T12	Omitted		
T13	Omitted		
T14	Omitted		
T15	Omitted		
T16	Omitted		
T17	SS Adjustable Speed Hand Dryer, ADA Compliant, 10-15 Sec drying time	2902-287400	40" min to 48" Max
T18	Omitted		
T19	Solid Color Reinforced Composite Toilet Partitions & Urinal Screens, Floor Anchored Overhead Braced	Bobrick Series 1092, or equal	-
T20	Georgia-Pacific Touchless Towel Dispenser (battery powered), high capacity, color splash blue. 14.8"x9.75"x16.75" (WxDxH)	enMotion 59460 or equal	48" Max to bottom of paper dispenser
T21	Omitted		
T22	Sanitary Napkin Disposal: 1.5 gallon, surface mount 22 ga. stainless steel cabinet with tumbler gauge. 22 gauge, satin finish with removable waste receptacle with 1.5 gallon capacity.	Bradley 4722-150C000	-
T23	Uline Domed Trash Can: 24 ga. Steel, mirror Chrome. 100 lbs capacity. 15" dia. X 36" high. https://uline.com	K	-
T24	Omitted		
T25	Mop Service Sink: Mustee, floor mounted, fiberglass, 24"X24". With faucet and and mop holder.	Mustee #63CM, or approved equal	Contractor to Provide blocking in wall behind bucket brace, above faucet. Brace faucet in wall.
T26	toilet compartment cloths hook with bumper, solid aluminum casting, matte finish. Rubber bumper to protect wall or partition surface	Bobrick B-212, or approved equal	-

OTHER FIXTURES/FURNISHINGS

Number	Description of Fixture	Model No.	Mounting Height
F-3	Elkay ezH2O Filtered bottle filling station & Versastile Bi-Level ADA Cooler & Drinking Fountain	Elkay Model LZSTL8WSLK, or approved equal https://www.elkay.com	wall mounted. See Manufacturer's Shop Drawgs and High Low water Cooler Detail these plans

TOILET ACCESSORY NOTES:

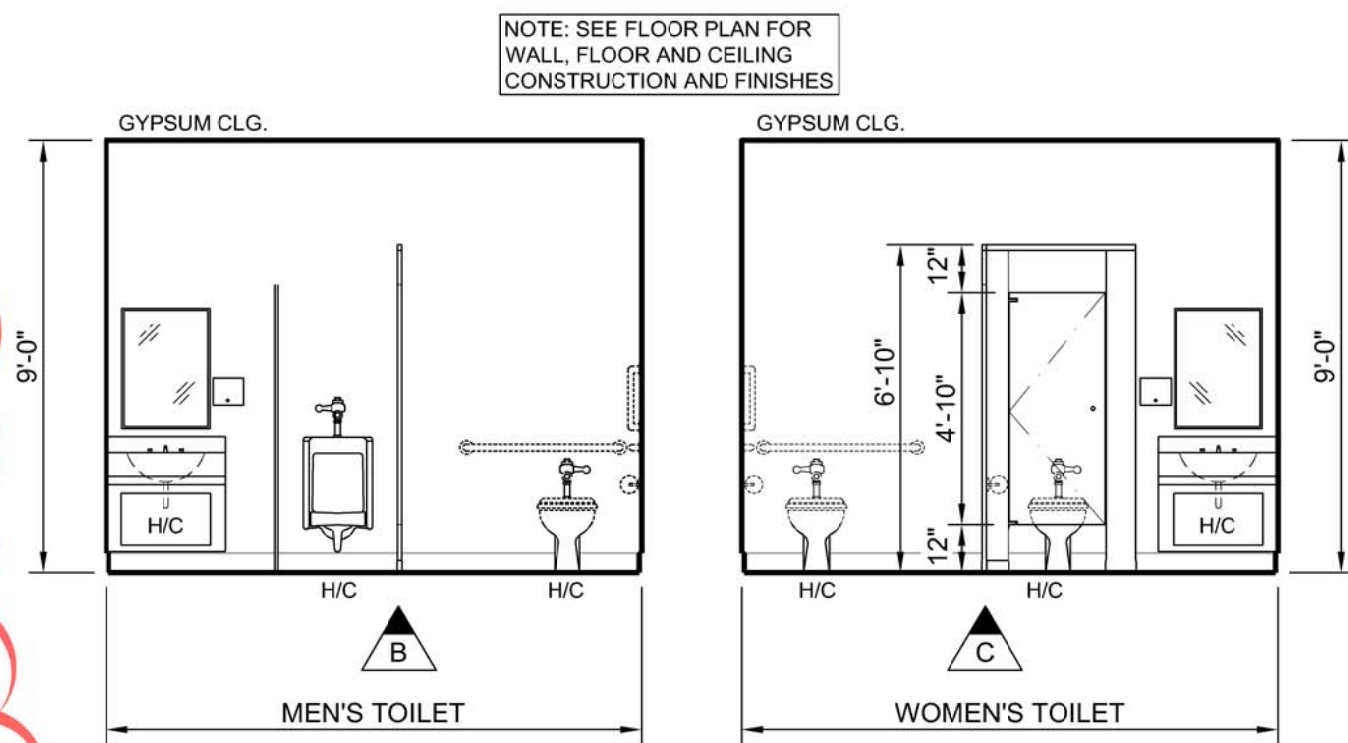
- All of Bradley's cut sheets are available at the following website: www.bradleycorp.com/accessories. Manufacturer and model numbers indicated represent basis of design. Approved equals will be accepted.
- Toilet & Urinal partition cut sheet is available at the following website: http://www.bobrick.com. Manufacturer and model numbers indicated represent basis of design. Approved equals will be accepted.
- All toilet accessories shall be installed per manufacturer's recommendations for specific application in compliance with all applicable codes.
- Where indicated and as required, toilet accessory installation shall comply with NC Accessibility Code (Chapter 11 - Accessibility of the 2018 NC Building Code [2015 IBC w/ NC Amendments]) and ANSI A117.1/ICC, latest revision.
- Contractor shall furnish and install all necessary framing and blocking as required for proper installation and operation of all accessories.
- Omitted

TOILET NOTES

- Dimensions are typical for handicap accessory installations. Equipment and fixture orientation may vary. Refer to plan for toilet layout.
- Refer to plumbing schedule and details for all fixtures and mounting heights.
- Refer to floor plan and finish schedule for wall finishes. Contractor shall coordinate installation of all items with specific wall types and finishes.
- Contractor shall furnish and install all necessary framing and blocking as required for proper installation and operation of all toilet fixtures and related equipment.
- Omitted

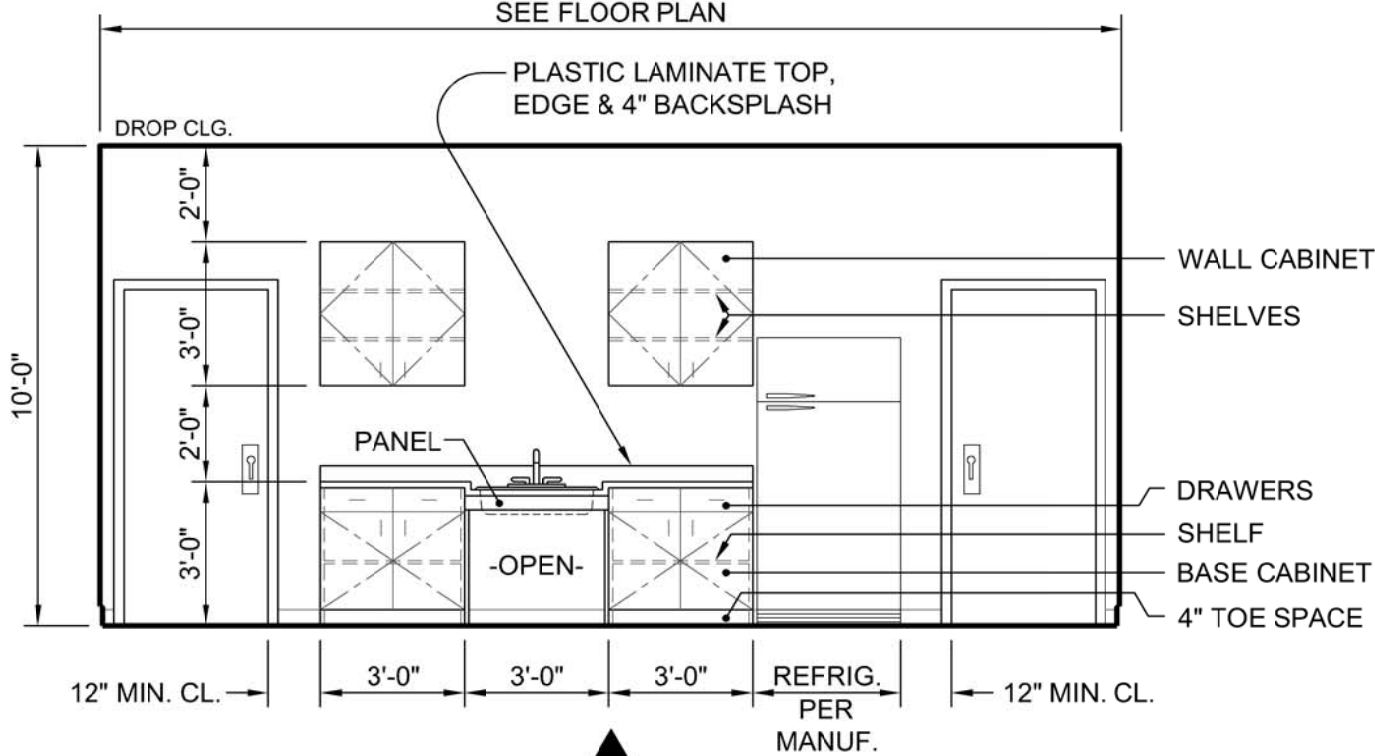
CABINET, TRIM, DOOR FINISHES

See Finish Schedule



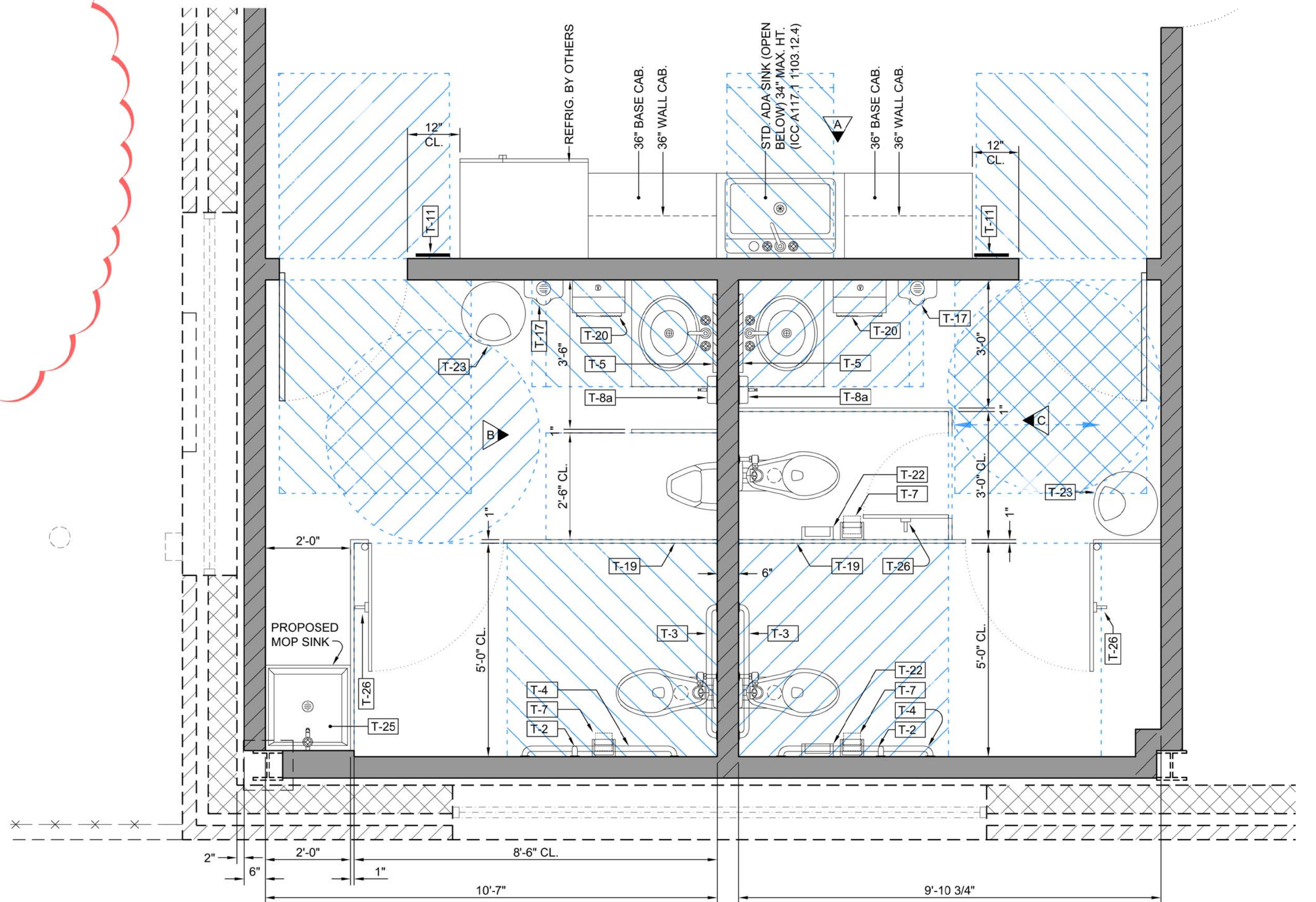
TOILET ELEVATIONS

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



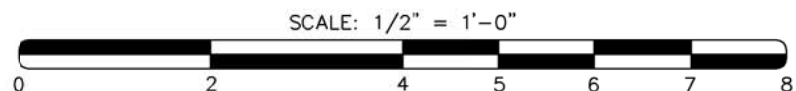
KITCHENETTE ELEVATION

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



ENLARGED TOILET PLANS

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



DESIGN: M. Gollino Jr.	DATE: December 2021	REVISIONS
DATE: 4/13/22	BY: CAD: M.G.J.R.	DESCRIPTION: REV. PER CITY COMMENTS



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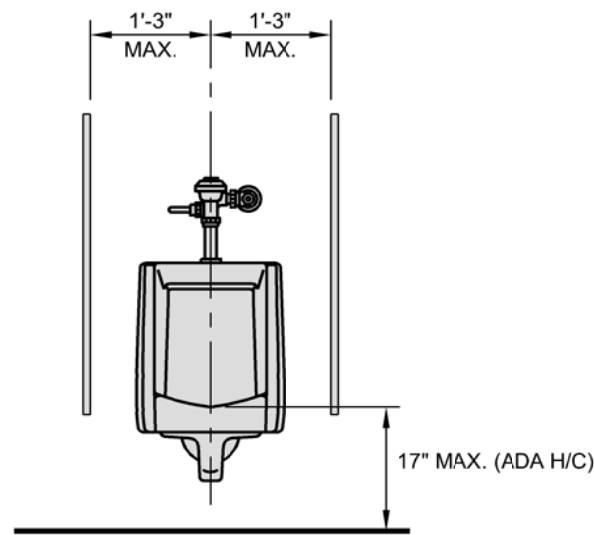
TOILET PLAN, DETAILS, & SCHEDULES  
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City of Rocky Mount Warehouse  
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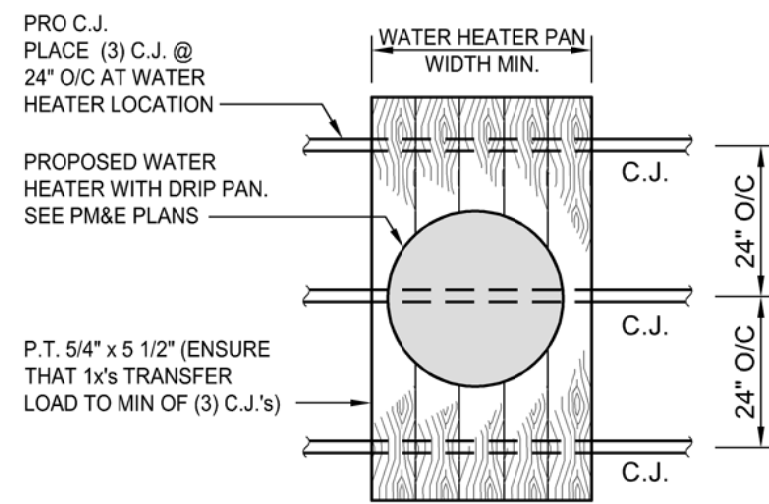
S-3



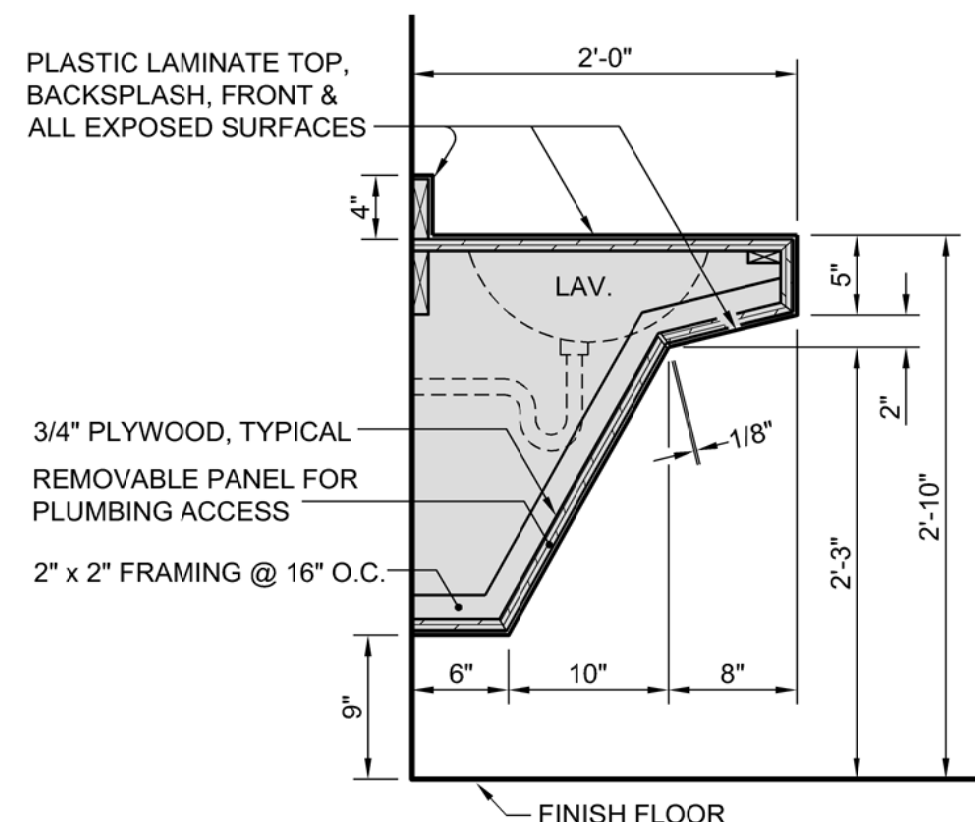


FRONT ELEVATION  
**TYPICAL WALL HUNG URINAL**  
ACCESSIBILITY REQUIREMENTS  
NOT TO SCALE

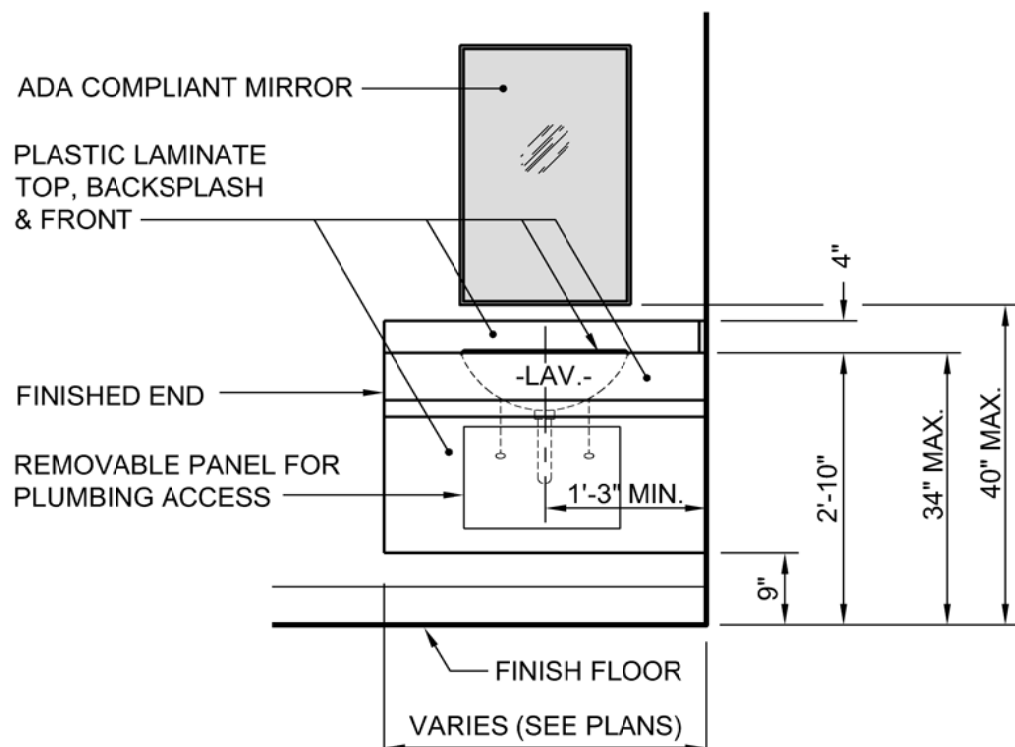
NOTE: THIS DRAWING IS FOR THE PURPOSE OF SHOWING URINAL MOUNTING HEIGHTS REQUIRED BY THE ACCESSIBILITY CODE ONLY.



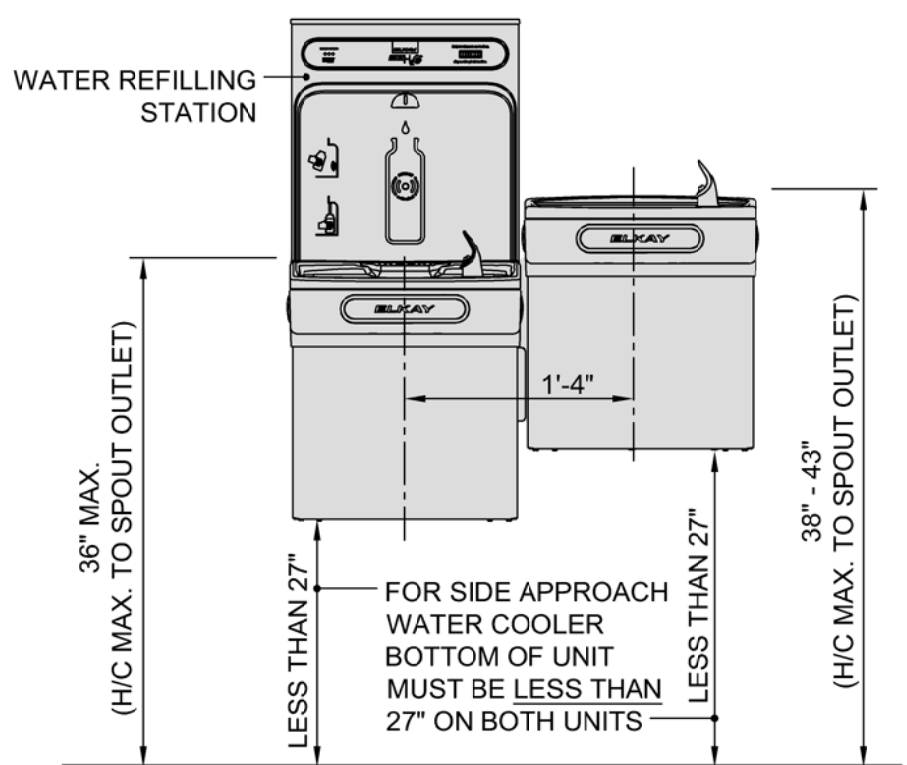
**WATER HEATER ABOVE**  
CEILING JOISTS DETAIL  
NOT TO SCALE



**TYPICAL VANITY SECTION**  
NOT TO SCALE



**TYPICAL SINGLE**  
VANITY ELEVATION  
NOT TO SCALE



**HIGH/ LOW WATER COOLER**  
NOT TO SCALE (SIDE APPROACH)

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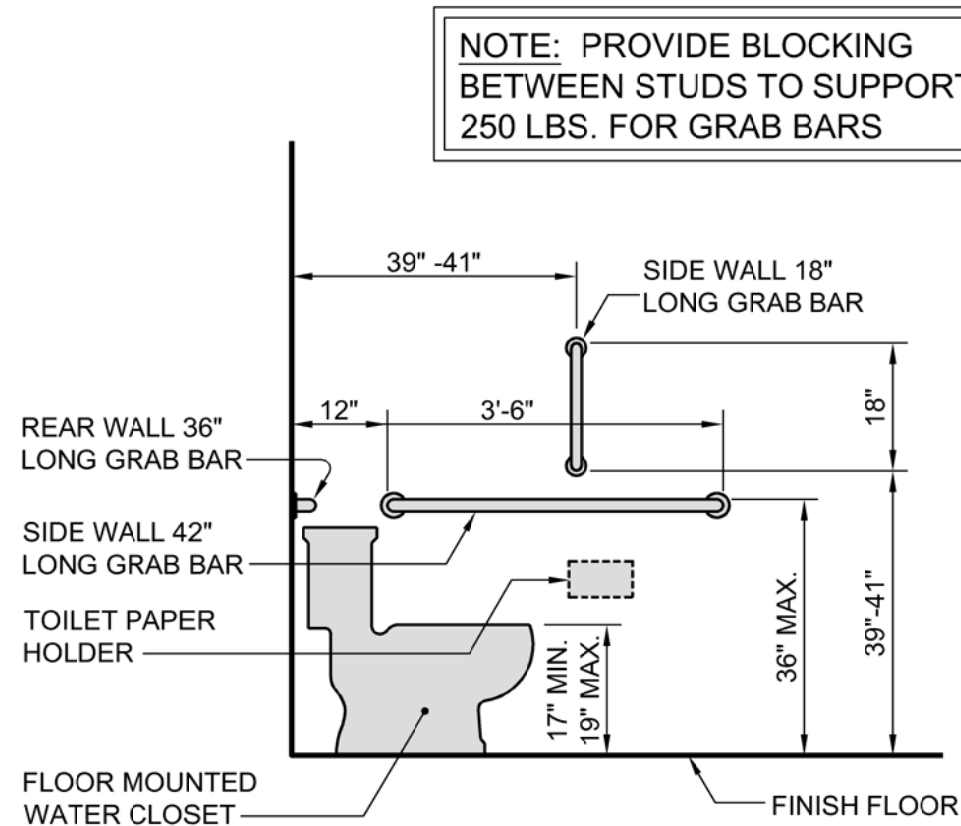
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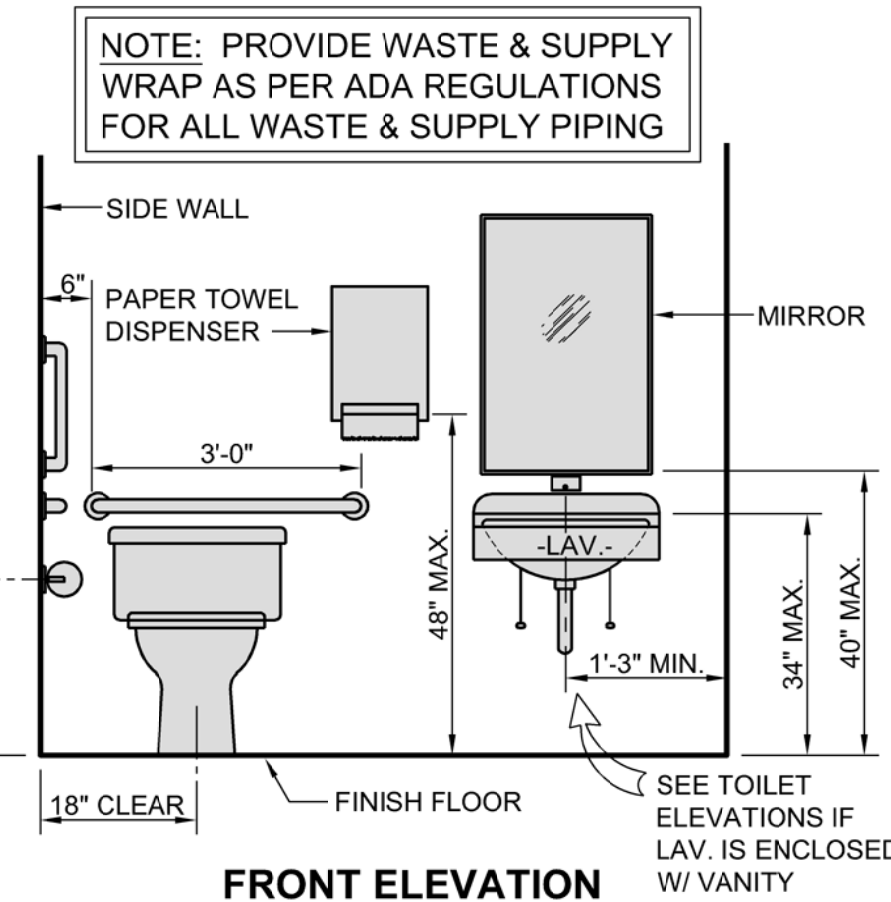
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**SIDE ELEVATION**

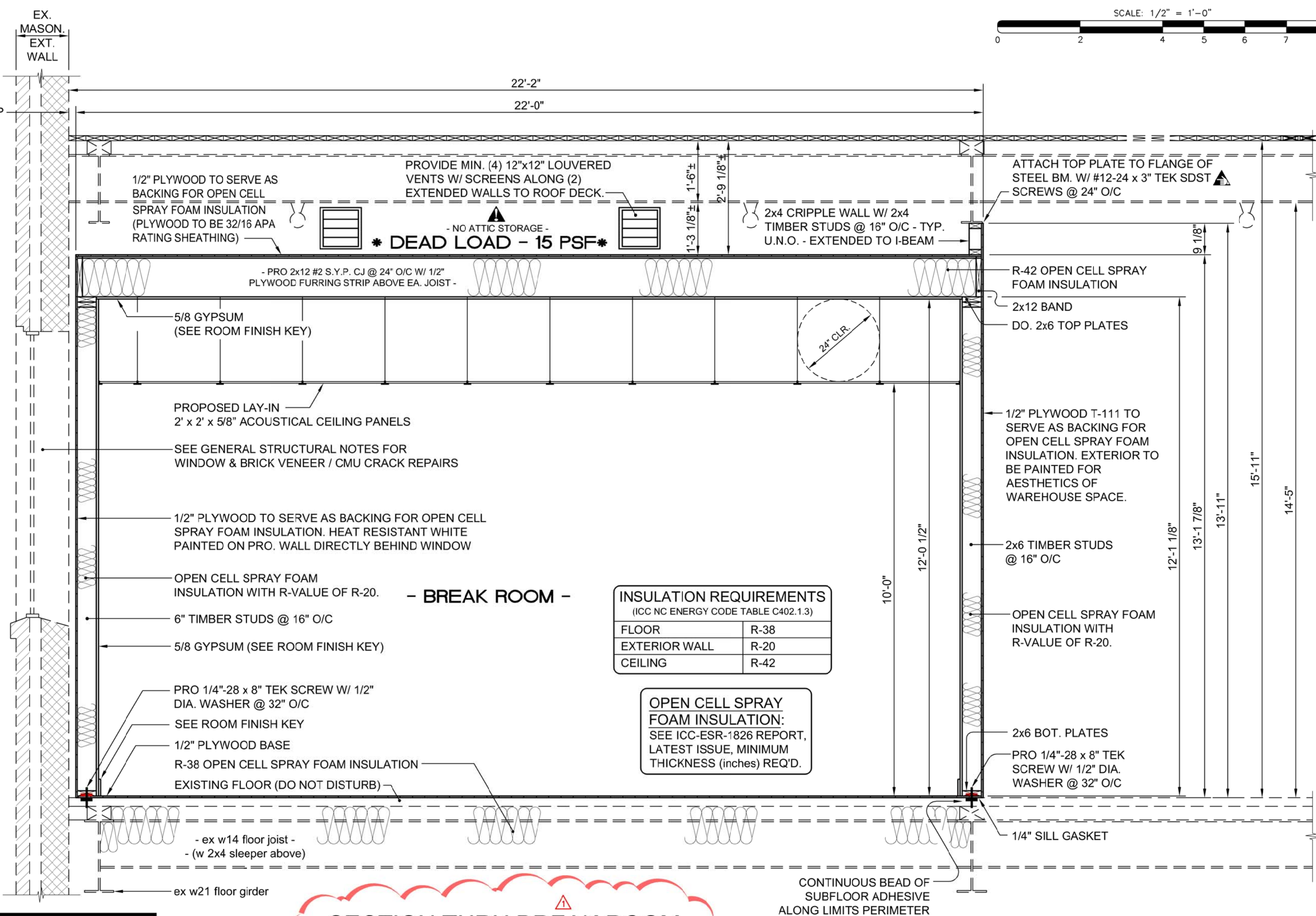
**TYPICAL TOILET ACCESSIBILITY REQUIREMENTS**

NOT TO SCALE



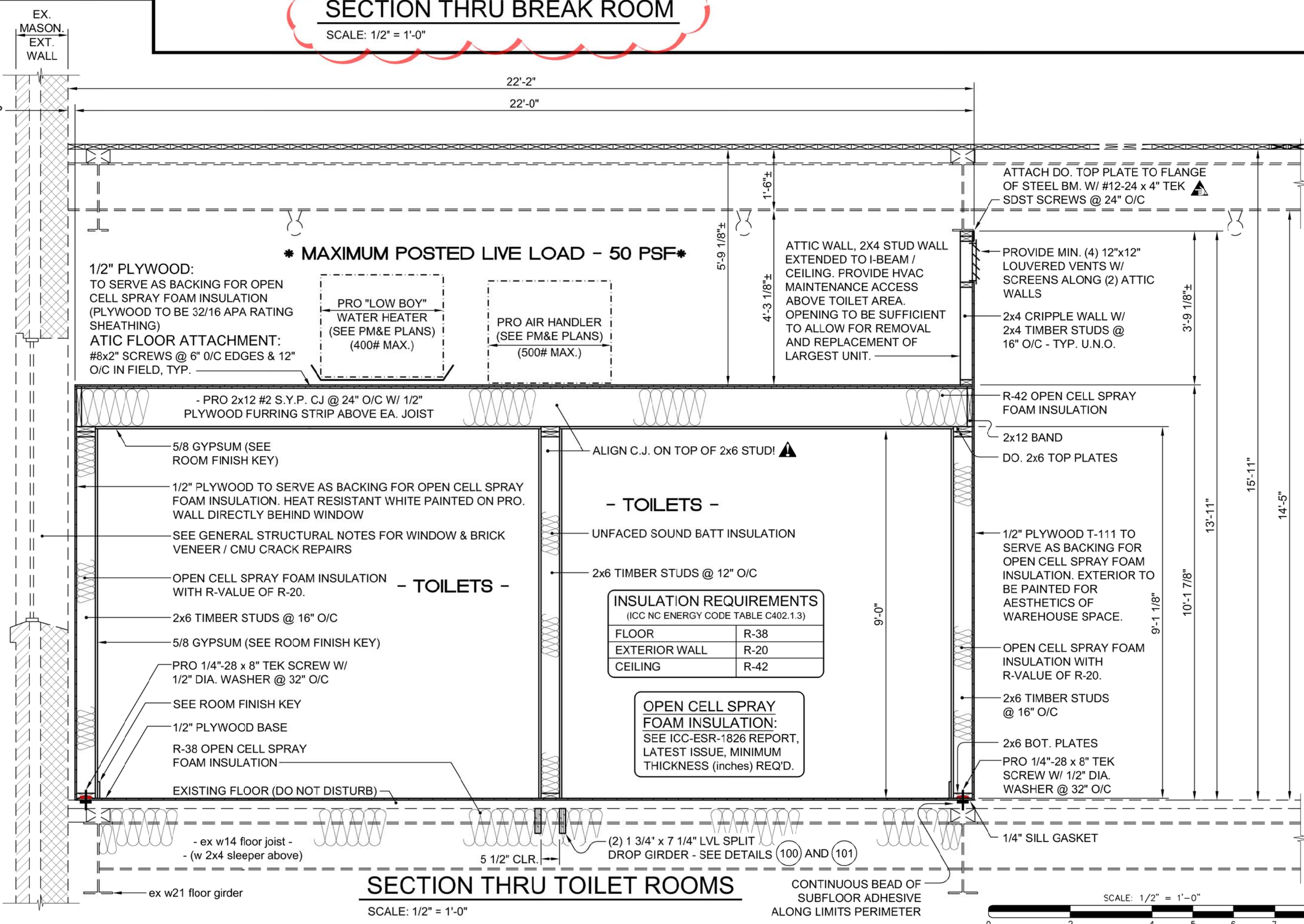
**FRONT ELEVATION**

NOTE: THIS DRAWING IS FOR THE PURPOSE OF SHOWING TOILET MOUNTING HEIGHTS REQUIRED BY THE ACCESSIBILITY CODE ONLY.



**SECTION THRU BREAK ROOM**

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



**SECTION THRU TOILET ROOMS**

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

DATE:	December 2021	BY:	Mike Gollino	REVISIONS	
DATE:	4/13/22	BY:	Mike Gollino	REVISIONS	
DATE:		BY:		REVISIONS	
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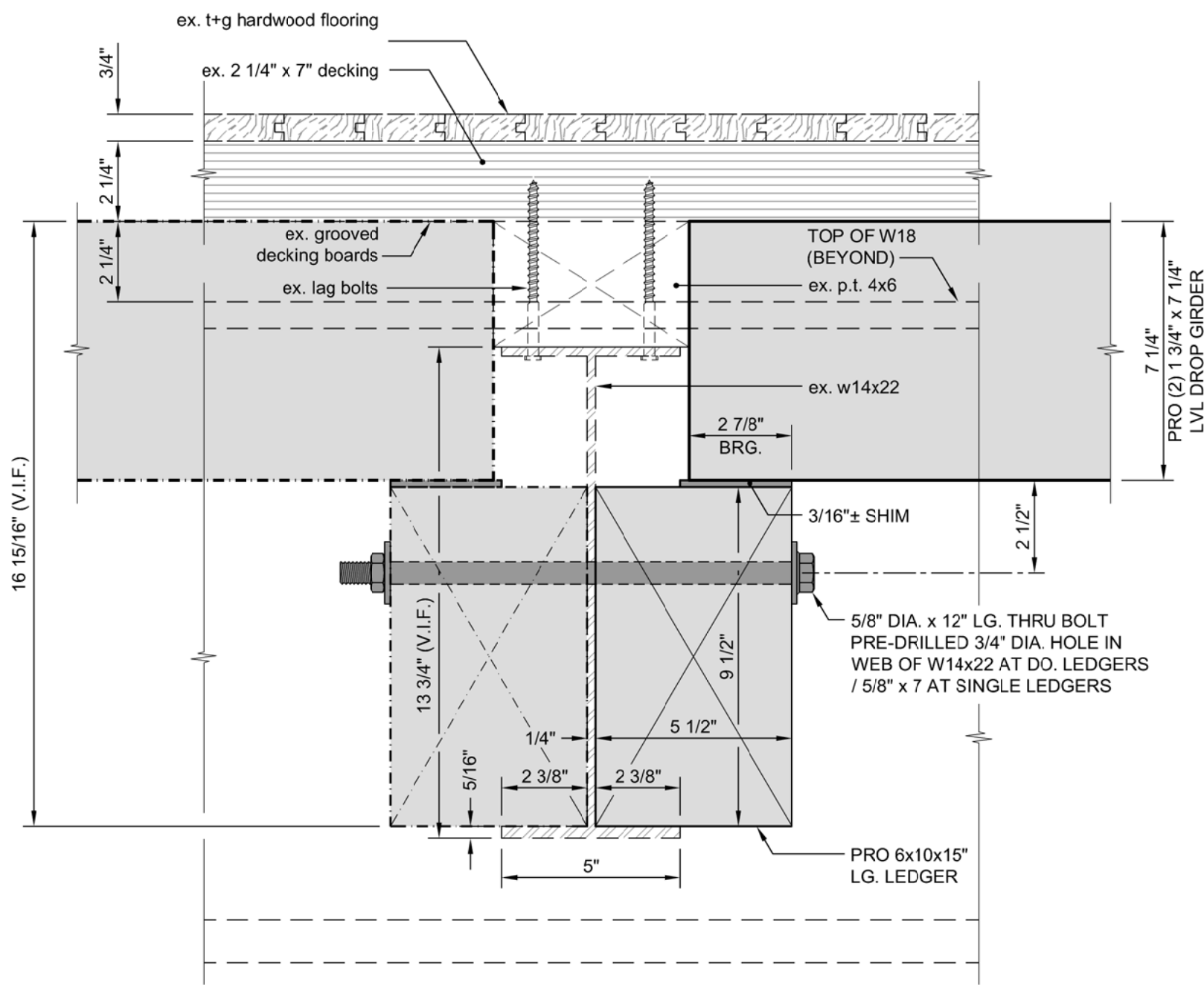
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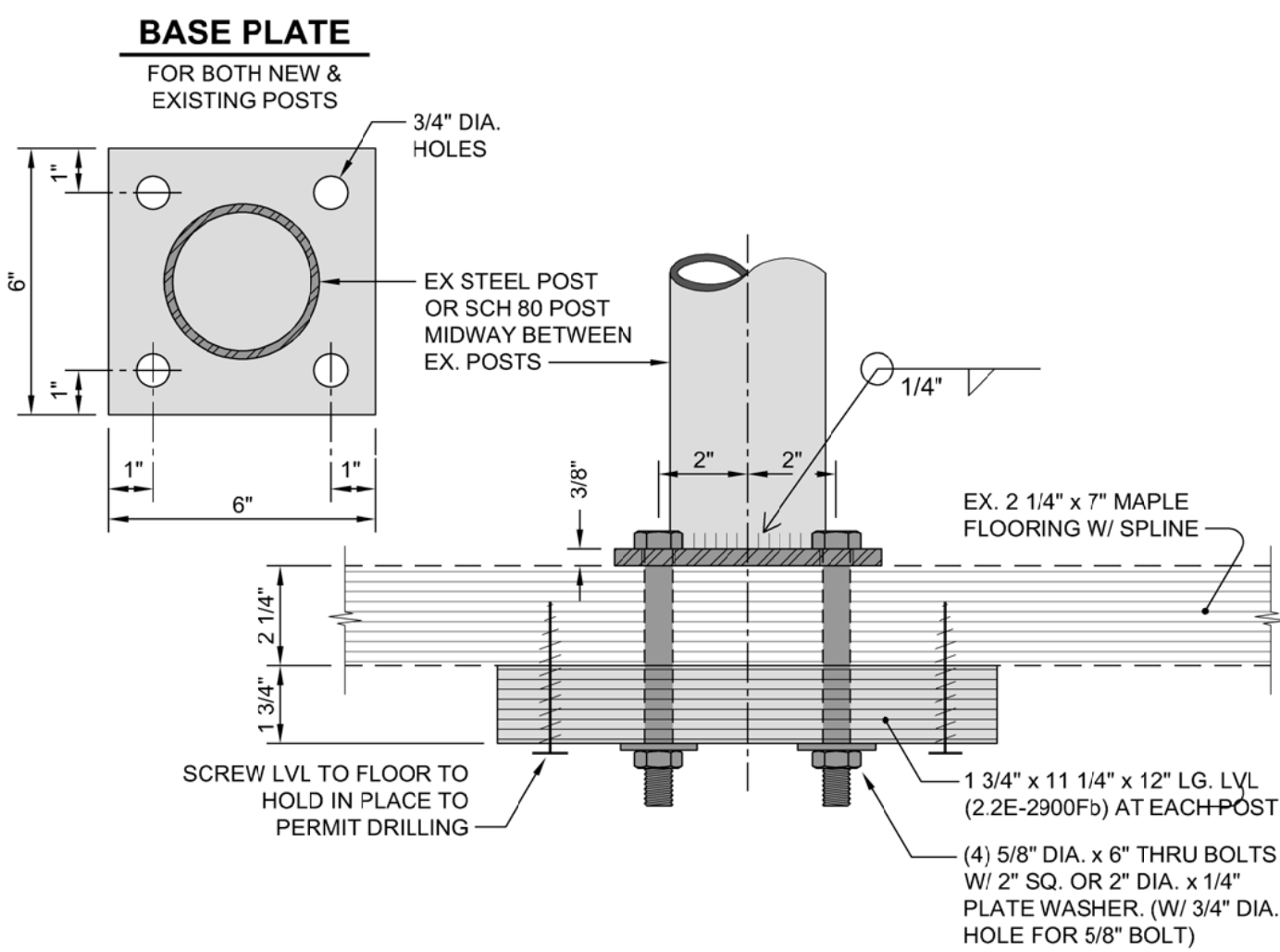
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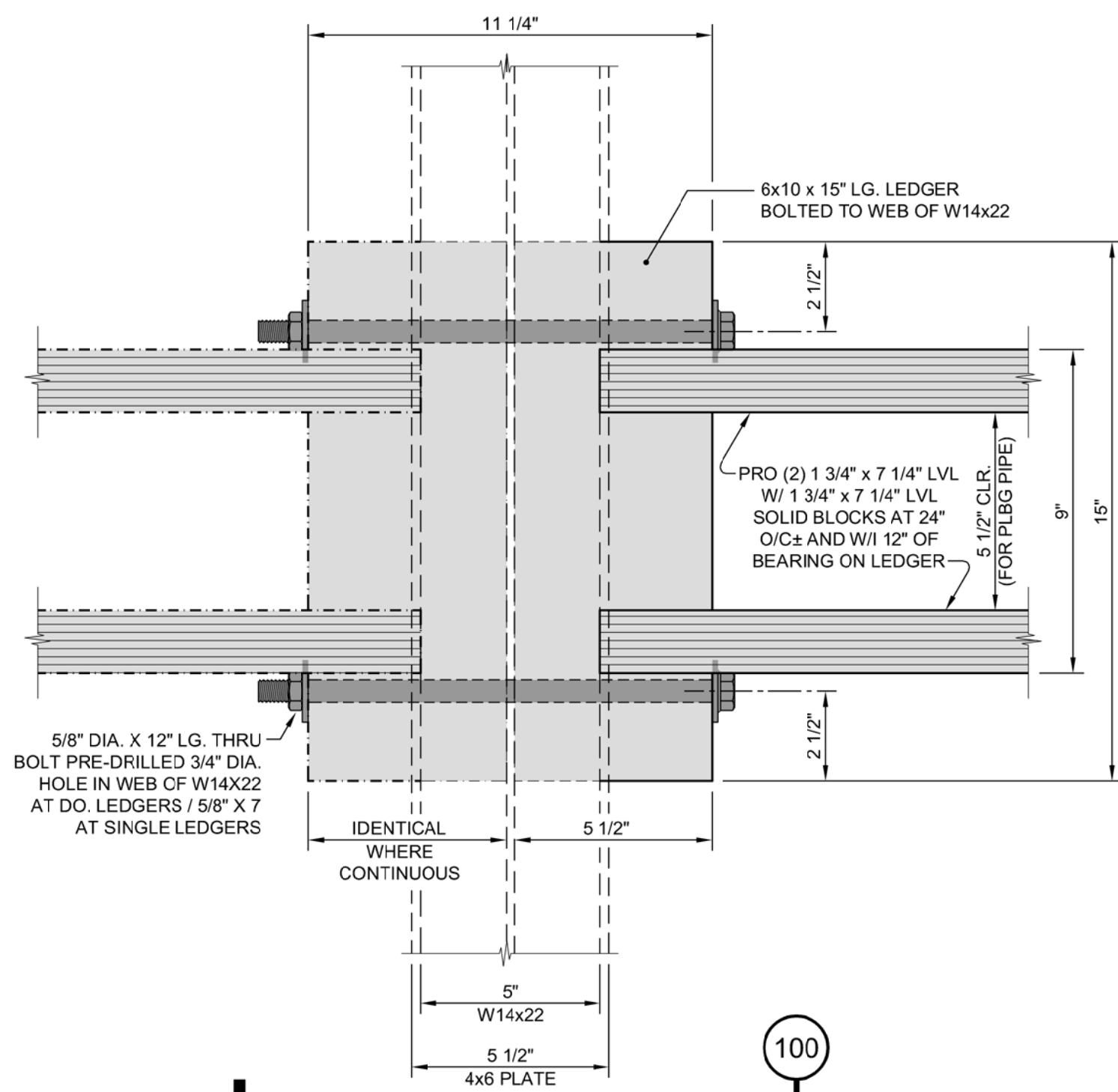




**100 SECTION at SPLIT GIRDER**  
SCALE: 3\"/>



**102 GUARDRAIL ATTACHMENT**  
SCALE: 3\"/>



**101 SPLIT DROP GIRDER at LBW at TOILETS**  
SCALE: 3\"/>

**CONSTRUCTION SAFETY**  
These drawings do not contain the requirements for job safety. All provisions for safety shall be the sole responsibility of the contractor.

**EXISTING CONDITIONS:**  
The contractor shall be responsible for reviewing all existing job conditions. Any adverse existing conditions affecting work shown on these drawings shall be brought to the attention of the engineer for possible clarification or reconciliation.

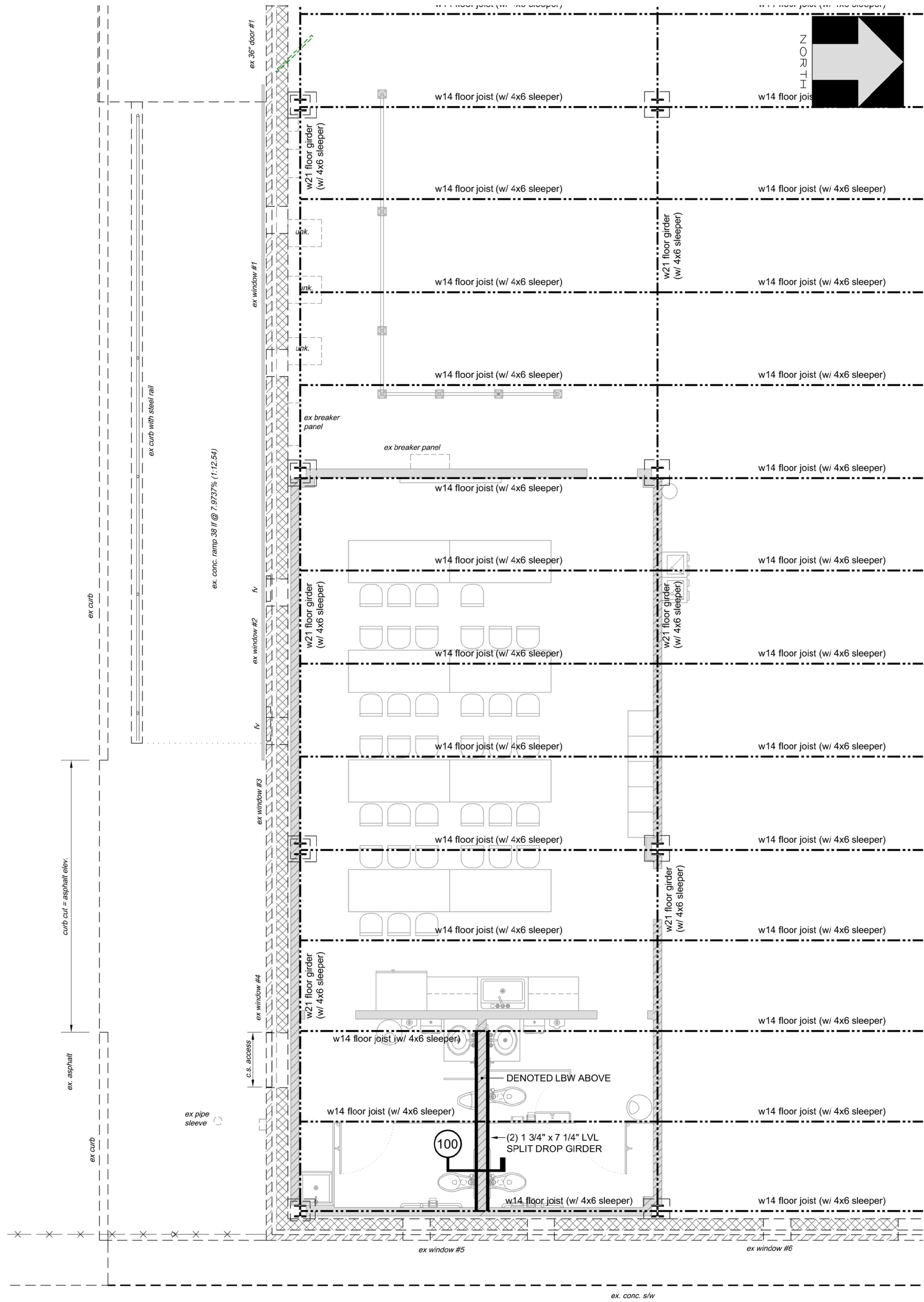
**ADA AND LEGAL DISCLAIMER**  
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Approved for Construction: \_\_\_\_\_ Date: \_\_\_\_\_

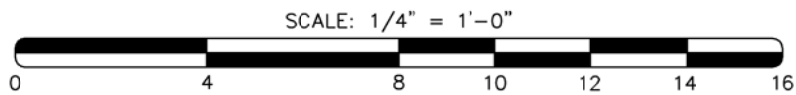
**RECORD DRAWINGS:**  
These drawings are believed to be a correct representation of actual field conditions but are not warranted as such.

By: \_\_\_\_\_ Date: \_\_\_\_\_



**EXISTING CRAWL SPACE UNDERLAY**  
SCALE: 1/4\"/>

- ALBEMARLE AVE. -



DATE:	December 2021	DESIGN:	M. Gollino Jr.	REVISIONS	
LAST EDIT:	N/A	APP: M. Gollino	REVISOR:	David Revor	
NO.		DATE:	4/13/22	DESCRIPTION:	
BY:		REV. PER	QTY	COMMENTS	
D.C.R.					

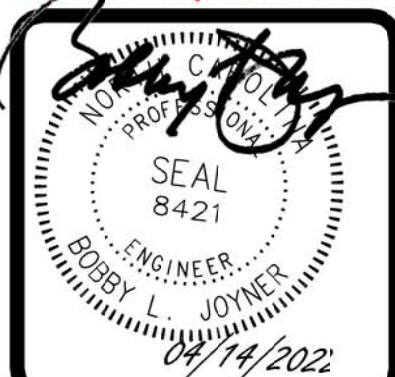


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Final Drawings  
Review Purposes ONLY



**EXISTING CRAWL SPACE UNDERLAY**  
Break Room Renovation  
City of Rocky Mount Warehouse  
724 Albemarle Ave.

21-098  
D-0000  
S-5



### ALBEMARLE WAREHOUSE BUILDING

Construction Type:	III-A
Sprinklers:	Yes, NFPA 13 Risk Category (Table 1604.5): II
Floor Area:	100,783 sf± Total 40,403 sf± First Floor Warehouse 59,223 sf± Second Floor Warehouse 985 sf± Proposed Break Room/Restrooms
Date of Construction:	1946±, renovated 1983±
Building Height:	50'±
Walls:	
Exterior:	CMU/Metal
Interior:	CMU Firewalls
Roof:	Wood, Stone/Tar
Max. Exit Distance:	250 ft
Occupancy:	S-1, Moderate Hazard Storage
Description:	Bathroom/Breakroom will be Non-Separated Mixed Use

### LIFE SAFETY LEGEND:

- DIRECTION OF EGRESS
- EXIT SIGN (existing)
- EXIT SIGN (PROPOSED)
- FIRE EXTINGUISHER (existing)
- BATTERY OPERATED EMERGENCY LIGHT (RECOMMENDED)
- EYE WASH STATION (existing)  
SEE NOTES
- EYE WASH STATION (PROPOSED)  
SEE NOTES
- "LED" UNSWITCHED LIGHT FIXTURE WITH BATTERY STANDBY (SECURITY/EMERGENCY LT.)  
(SEE SHEET E-1 FOR EXACT LOCATION)

NOTE: MAX. EXIT TRAVEL DISTANCE **W/** SPRINKLERS = 250', FOR **S-1** OCCUPANCY.  
(2018 FIRE PREVENTION CODE TABLE 1017.2)

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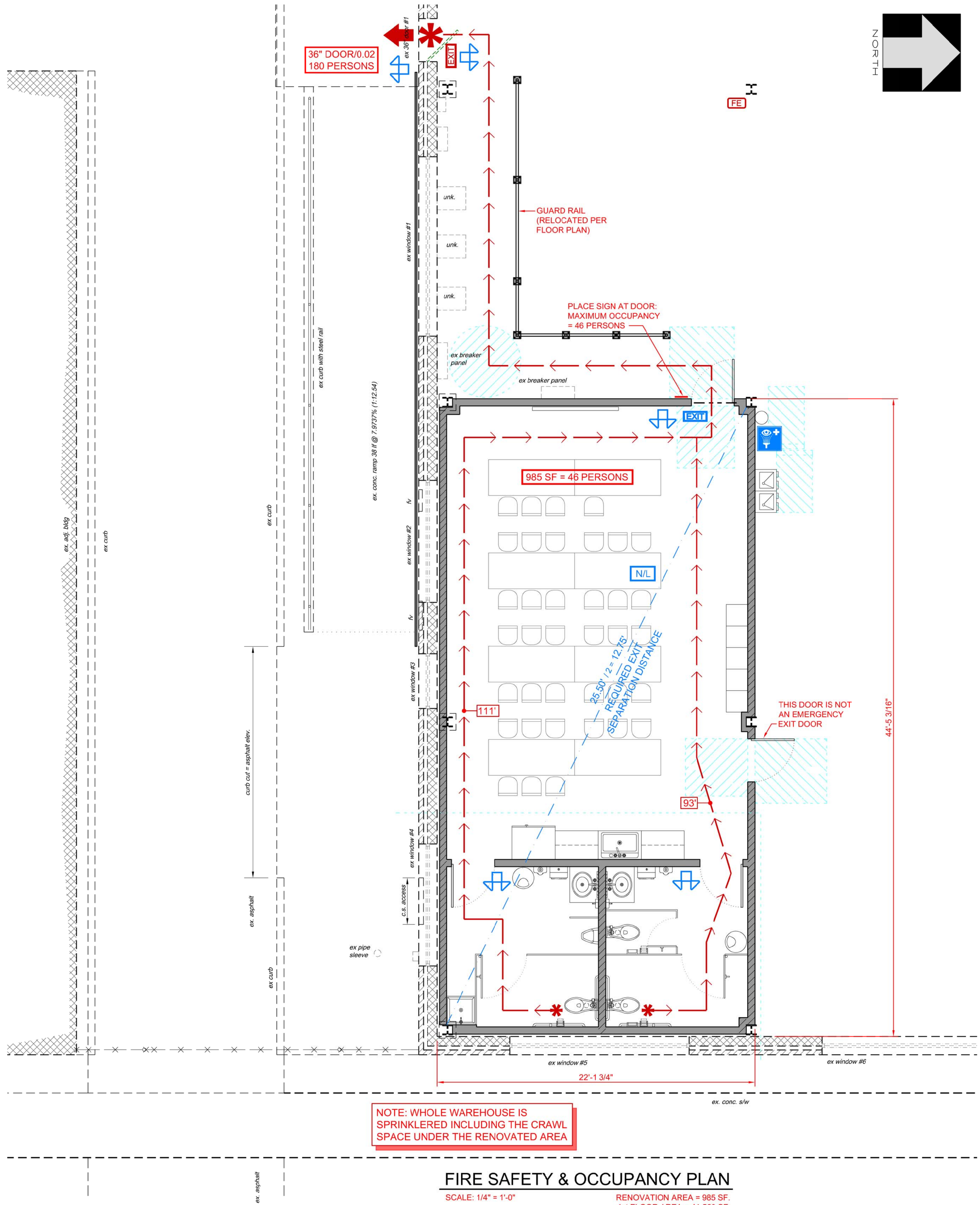
Approved for Construction: \_\_\_\_\_  
Date: \_\_\_\_\_

**RECORD DRAWINGS:**  
These drawings are believed to be a correct representation of actual field conditions but are not warranted as such.

By: \_\_\_\_\_ Date: \_\_\_\_\_  
**CONSTRUCTION SAFETY**  
These drawings do not contain the requirements for job safety. All provisions for safety shall be the sole responsibility of the contractor.

**EXISTING CONDITIONS:**  
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### FIRE SAFETY & OCCUPANCY PLAN

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

RENOVATION AREA = 985 SF.  
1st FLOOR AREA = 41,560 SF.  
2nd FLOOR AREA = 59,223 SF.  
TOTAL WAREHOUSE AREA = 100,783.21 SF.

- ALBEMARLE AVE. -

SCALE: 1/4" = 1'-0"  
0 4 8 10 12 14 16

**FIRE SAFETY & OCCUPANCY PLAN**  
**Break Room Renovation**  
**City of Rocky Mount Warehouse**  
**724 Albemarle Ave.**

21-098  
D-0000  
**S-6**

Final Drawings  
Review Purposes ONLY



04/14/2022

DATE:	December 2021	DESIGN:	Mike Gallina	REVISIONS	
LAST EDIT:	N/A	BY:	David Revolin	DESCRIPTION:	
NO.	1	DATE:	4/13/22	REV. PER CITY COMMENTS	
NO.	2	DATE:		REV. PER CITY COMMENTS	
NO.	3	DATE:		REV. PER CITY COMMENTS	
NO.	4	DATE:		REV. PER CITY COMMENTS	
NO.	5	DATE:		REV. PER CITY COMMENTS	
NO.	6	DATE:		REV. PER CITY COMMENTS	
NO.	7	DATE:		REV. PER CITY COMMENTS	
NO.	8	DATE:		REV. PER CITY COMMENTS	
NO.	9	DATE:		REV. PER CITY COMMENTS	
NO.	10	DATE:		REV. PER CITY COMMENTS	



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Last revised 3/22/22; 2:54 PM for CRM Warehouse Conf Rm & Toilets

## GENERAL STRUCTURAL NOTES

### GENERAL

- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 NORTH CAROLINA STATE BUILDING CODE (2015 IRC WITH NC AMENDMENTS).
- SPECIAL INSPECTIONS: NOT REQUIRED.
- WHERE A SECTION OR DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY TO ALL LIKE AND SIMILAR CONDITIONS.
- UNDER NO CIRCUMSTANCES SHALL THE CONTRACT DRAWINGS BE REPRODUCED AND USED AS SHOP DRAWINGS.
- THE REFERENCE DATUM (ELEVATION = 0'-0") FOR ELEVATIONS SHOWN ON THESE DRAWINGS SHALL BE FINISHED FLOOR ELEVATION.
- NO LOADS IN EXCESS OF DESIGN LIVE LOADS LISTED SHALL BE IMPOSED UPON ANY AREA DURING CONSTRUCTION UNLESS ADEQUATE SHORING OR OTHER MEANS IS PROVIDED TO SUPPORT THE EXCESSIVE LOADS.
- IF ANY CHANGES ARE MADE IN WEIGHT AND/OR LOCATION OF POINTS OF SUPPORT OF EQUIPMENT, THE CONTRACTOR SHALL FURNISH DETAIL OF CHANGES TO THE ENGINEER FOR REVIEW AND NECESSARY MODIFICATIONS.
- TEMPORARY BRACING, GUY WIRES, SHORING, ETC. SHALL BE USED AS NECESSARY TO RESIST ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING EQUIPMENT AND OPERATION.
- DRAWINGS DO NOT SHOW ALL OPENING. COORDINATE WITH MECHANICAL DRAWINGS. VERIFY SIZES AND LOCATIONS OF ALL OPENINGS WITH MECHANICAL.
- ALL SECTIONS AND DETAILS, WHETHER EXPLICITLY CUT ON PLAN OR NOT, SHALL BE CONSIDERED TYPICAL AND SHALL APPLY AT SIMILAR CONDITIONS.
- SHOP DRAWINGS: THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL REQUIREMENTS WITH THE STRUCTURAL DRAWINGS INCLUDING THE LOCATION OF MISCELLANEOUS ITEMS AFFECTING THE STRUCTURAL WORK SUCH AS OPENINGS, BENT PLATS, INSERTS, ETC. PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR OMISSIONS.
- THE CONTRACTOR SHALL VERIFY ALL FLOOR AND CEILING MOUNTED MECHANICAL EQUIPMENT DIMENSIONS AND WEIGHTS AND VERIFY ALL CEILING OPENING SIZES AND LOCATIONS WITH THE BUILDING PLANS AND MECHANICAL DRAWINGS AND SHOP DRAWINGS.
- THE SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR AND SUBCONTRACTOR PRIOR TO BEING SUBMITTED TO THE ENGINEER FOR APPROVAL.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING A WATER TIGHT, LEAK-PROOF STRUCTURE. THE WALLS ARE TO BE REPAIRED TO RESTRICT WIND DRIVEN RAIN BY PROPER CONSTRUCTION DETAILING, CAULKING, RE-GLAZING, CRACK SEALING, FLASHING, ETC.

### BRICK MASONRY REPAIR

- ANY NEW CLAY MASONRY UNITS SHALL (USED AS REPLACEMENT) TO BE ASTM C62 SOLID CLAY UNITS GRADE SW WITH A COMPRESSIVE STRENGTH OF 8,000 PSI. FACING BRICK (SOLID MASONRY UNITS) SHALL BE ASTM C216, GRADE SW, TYPE FBS. COLOR TO MATCH EXISTING BRICK AS CLOSE AS REASONABLY POSSIBLE. USE BRICK FROM SURPLUS BRICK CANNIBALIZED FROM THIS STRUCTURE MA BE PERMITTED.
- MORTAR FOR NON-REINFORCED BRICK MASONRY SHALL BE ASTM C270, TYPES M OR S THROUGHOUT. MORTAR FOR REINFORCED BRICK MASONRY AND GROUT SHALL BE ASTM C476. AIR ENTRAINING ADMIXTURES SHALL NOT BE USED IN MORTAR.

MORTAR JOINTS ARE TO BE 3/8-INCH THICKNESS FOR BOTH HORIZONTAL AND VERTICAL HEAD JOINTS. MORTAR JOINTS SHOULD BE COMPLETELY FILLED AND SHOVED INTO CONTACT WITH THE PREVIOUSLY LAID UNITS.

PROVIDE FULL BEDMENT OF MORTAR FOR ALL BRICK. MORTAR SHOULD NOT BE LAID FAR IN ADVANCE OF THE UNIT BEDMENT. UNITS ONCE BEDDED SHOULD NOT BE MOVED. IF NECESSARY, THE UNIT AND MORTAR SURROUNDING THE UNIT SHOULD BE REMOVED, THE MORTAR THEN REMOVED FROM THE UNIT AND WALL AND THE UNIT THEN RELAID USING FRESH MORTAR.

- BRICK ROWLOCKS TO BE SLOPED DOWN TO DRAIN AT A MINIMUM OF 15°. ROWLOCKS OVERHANG RECOMMENDED TO BE A MINIMUM OF 1 1/2"; HOWEVER, MATCH EXISTING ROWLOCK OVERHANG.
- CRACK SEALING OF MINOR CRACKS IN BRICK VENEER AND CMU BACKUP WALLS (INTERIOR):

CAUSE: THERE ARE NO VERTICAL EXPANSION JOINTS IN THE EXPOSED BRICK VENEER SPANDREL PANELS. AS SUCH, NO STRESS RELIEF ELEMENTS WERE PROVIDED IN THE ORIGINAL CONSTRUCTION TO CONTROL THERMAL RELATED LATERAL MOVEMENT OF BRICK VENEER (AND THE ASSOCIATED CRACKING THAT OCCURS WITHOUT THEM).

- RAKE OUT THE BED JOINTS. SCRAPE OUT THE HORIZONTAL JOINTS TO A DEPTH OF AT LEAST 3/4 INCH (JOINTS WIDER THAN 3/4 INCH HAVE TO BE DEEPER: 2 1/2 TIMES THE JOINTS WIDTH). A CARBIDE-TIPPED GROUT SAW WORKS WELL ON THESE 3/4-INCH-WIDE "BUTTER JOINTS" (ON WIDER JOINTS, USE A COLD CHISEL AND AN ENGINEER'S HAMMER). AVOID ELECTRIC ANGLE GRINDERS UNLESS TRAINED TO USE THEM AS THEY ARE ALMOST GUARANTEED TO CUT INTO AND DISFIGURE THE BRICK.
- CLEAN OUT THE HEAD JOINTS.
- WASH DOWN THE WALL.
- MIX THE MORTAR (TYPE S OR M) AND FILL IN THE JOINTS; MATCHING THE JOINT CONTOUR. SCOOP A DOLLOP OF MORTAR ONTO A BRICK TROWEL OR HAWK, HOLD IT UP EVEN WITH A BED JOINT, AND PUSH THE MORTAR AGAINST THE BACK OF THE JOINT WITH THE TUCK-POINTING TROWEL. ELIMINATE VOIDS WITH A FEW SLICING PASSES OF THE TROWEL'S EDGE, THEN ADD MORE MORTAR UNTIL THE JOINT IS FILLED. ONCE FINISHED THREE OR FOUR COURSES OF BED JOINTS, GO BACK AND FILL THE HEAD JOINTS. FINALLY, SMOOTH AND COMPACT ALL THE MORTAR WITH THE TROWEL'S FLAT FACE AND SCRAPE THE EXCESS MORTAR OFF THE BRICK.

- CONTRACTOR TO TINT THE MORTAR TO MATCH AS CLOSE AS REASONABLY POSSIBLE THE EXISTING MORTAR.
- BRUSH THE WALL. WHEN THE MORTAR IS FIRM TO THE TOUCH, BRUSH DIAGONALLY ACROSS IT TO REMOVE ANY DRY MORTAR CRUMBS. (BRUSHING IN LINE WITH THE JOINTS CAN PULL OUT THE FRESH MORTAR.) THEN CAREFULLY SPONGE MORTAR RESIDUE OFF THE BRICK FACES. FOR THE NEXT THREE DAYS, USE A TARP TO PROTECT THE SOFT JOINTS FROM THE SUN, WIND, OR HARD RAIN, AND GIVE THE WALL A DAILY WASH WITH THE BRICK AND MORTAR MOIST.
- FOR EACH HORIZONTAL STRETCHER COURSE, ADD A MORTAR WASH TO DIRECT RAIN RUNOFF TO THE OUTSIDE EDGE OF THE EACH HEADER COURSE. THE WASH WILL BE FOR THREE TWO EASTERN BRICK SEGMENT EXPOSURES ONLY.

- SEALING OF MAJOR CRACKS IN BRICK VENEER AND CMU BACKUP WALLS (INTERIOR) DUE TO SUBSIDENCE OR LATERAL MOVEMENT (FROM EXPANSION/CONTRACTION):
  - EXISTING CONDITIONS: THE BRICK PANEL BETWEEN THE ALLEY NORTH OF THE RENOVATION AND THE TRIPLE HORIZONTAL PIVOT WINDOWS HAVE A VERTICAL CRACK THAT APPEARS TO BE THE THERMAL EXPANSION FORCES IN THE BRICK PANEL. THE NARROW BRICK IT APPEARS, A STEEL LINTEL THAT HORIZONTAL FORCES TO THE TWO PANEL HAVE INADEQUATE RESISTANCE TO THE SLIDING FORCES IMPOSED ON THEM. 3/8" TO 1/2" WIDE VERTICAL CRACK. PROBLEM IS THE LATERAL RELIEF INCORPORATES A HEADER COURSE STRETCHER COURSE. THE HEADER APPROXIMATELY 1/2-INCH TO 1-INCH BEYOND THE FACE OF THE MASONRY VENEER STRETCHER COURSE. SEE PHOTO AT RIGHT. SUCH A CONDITION EASILY COLLECTS RAIN RUNNING DOWN THE FACE OF THE BRICK AND PROVIDES A PATH FOR ENTRY OF WATER INTO THE INTERIOR MULTI-WYTHE EXTERIOR WALL.
  - BASE BID: REPAIR THE WALL AS OUTLINED ABOVE IN [ITEM 4, CRACK SEALING OF MINOR CRACKS IN BRICK VENEER AND CMU BACKUP WALL](#).



- CRACK SEALING WOULD REQUIRE CARE. PLACING MORTAR IN CRACK BRICK JOINTS WILL CONTRAST WITH THE NORMAL HEAD JOINT MORTAR PATTERN; HOWEVER, THE APPEARANCE OF THE WALL LEFT WILL BE LESS OF AN AESTHETIC CONCERN THAN THAT CURRENTLY EXISTS WITH OPEN CRACKS. THE CITY CAN, IF THE RESULT IS THAT UNACCEPTABLE, SECURE A PRICE POST-BID FOR STAINING AND TINTING MORTAR/BRICK.
- SEE [ITEM 4](#), ABOVE REGARDING MORTAR TINTING.
- WITHOUT CUTTING IN NEW EXPANSION JOINTS IN THE SPANDREL PANEL AND/OR REMOVING AND RELAYING THE TWO BRICK PANELS ON EITHER SIDE OF THE TRIPLE WINDOW, VERTICAL CRACKING IS LIKELY TO CONTINUE AS THE PANELS TO SHRINK AND EXPAND FROM SEASONAL CHANGES IN TEMPERATURE.

### STRUCTURAL CONCRETE MASONRY REPAIR

- LOAD-BEARING MASONRY WALLS, WALLS DESIGNATED ON THE DRAWINGS AS SHEAR WALLS, AND OTHER MASONRY SO DESIGNATED ON DRAWINGS ARE CONSIDERED HERE TO BE STRUCTURAL MASONRY.
- ALL CONCRETE MASONRY UNITS (CMU) SHALL BE IN ACCORDANCE WITH ASTM C-90 "SPECIFICATIONS FOR HOLLOW LOAD-BEARING UNITS" AND SHALL HAVE A 28-DAY MINIMUM COMPRESSIVE STRENGTH OF f<sub>m</sub>=1500 PSI. PROVIDE INTEGRAL WATER REPELLANT IN CMU.
- REPAIR OF CMU WALL CRACKS: FOLLOW THE SAME PROCEDURES AS OUTLINED IN [BRICK MASONRY REPAIR; ITEM 4, ABOVE](#).
- MORTAR FOR NON-REINFORCED MASONRY AND FOR USE IN ENGINEERED MASONRY BEARING WALLS SHALL BE ASTM C270, TYPES M OR S THROUGHOUT. AIR ENTRAINING ADMIXTURES SHALL NOT BE USED IN MORTAR.
- ALL BED AND HEAD JOINTS SHALL BE FULLY MORTARED, AS APPLICABLE.

### STRUCTURAL STEEL

- STEEL SHAPES SHALL CONFORM TO "STRUCTURAL STEEL" – DUAL CERTIFIED TO ASTM A36 AND ASTM A572.
  - STEEL PLATES, BARS, AND RODS – ASTM A36.
  - PIPE COLUMNS – ASTM A53.
  - BOLTS – ASTM A325.
  - WELDS – AWS CLASS E 70 LOW HYDROGEN ELECTRODES.
- ALL STEEL WORK SHALL CONFORM TO "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS – ALLOWABLE STRESS DESIGN" AND THE AISI/CAN STEEL STANDARD PRACTICE.
- ALL STRUCTURAL STEEL EXPOSED TO WEATHER SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS OTHERWISE NOTED.
- BOLTED CONNECTIONS SHALL BE TIGHTENED TO A SNUG TIGHT CONDITION UNLESS NOTED OTHERWISE ON PLANS. REFER TO DRAWINGS FOR CONNECTIONS. IF CONNECTIONS ARE NOT SHOWN, FABRICATOR SHALL DESIGN CONNECTIONS FOR BEAM UNIFORMLY LOADED TO CAPACITY.
- TYPICAL FIELD WELD REQUIREMENTS ERECTOR NOTE (UNLESS NOTED OTHERWISE ON DRAWINGS):
  - ALL FIELD WELDING MUST BE PERFORMED BY AWS/CWB CERTIFIED WELDERS WHO ARE QUALIFIED FOR THE WELDING PROCESSES AND POSITIONS INDICATED.
  - ALL WORK MUST BE COMPLETED AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE AWS/CWB SPECIFICATIONS.
  - WELD ELECTRODES USED FOR THE SMAW (OR STICK) WELD PROCESS MUST BE 70 KSI/483 MPa MATERIAL AND LOW HYDROGEN CONTENT.
- RETURN ALL WELDS AT CORNERS A MINIMUM OF TWICE THE NORMAL SIZE OF THE WELD.
- PROVIDE HOLES FOR BLOCKING AND NAILER BOLTS AS REQUIRED BY ARCHITECTURAL DRAWINGS.
- STRUCTURAL STEEL SHALL RECEIVE ONE COAT OF RED OXIDE PAINT OF 2 MIL DFT. SURFACE PREPARATION SHALL BE POWER TOOL CLEANING CONFORMING TO SSPC-SP3.
- PROVIDE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.
- WHERE PLATES ARE FILLET WELDED TO MEMBERS AND NO WELD SIZE IS SPECIFIED PROVIDE FULL LENGTH FILLET WELDS BOTH SIDES OF PLATE. WELD SIZES SHALL BE AS FOLLOWS:

PLATE THICKNESS (IN)	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8
WELD SIZE (IN)	3/16	3/16	3/16	1/4	1/4	5/16	3/8	7/16

### POST INSTALLED ANCHOR WORK:

- POST INSTALLED ANCHOR WORK IN CONCRETE OR CMU ARE TO BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INCLUDING BUT NOT LIMITED TO DRILL BIT SIZE, PROPER CLEANING OF HOLES, INSTALLATION TORQUE AND TEMPERATURE CONSTRAINTS.
- WHEN A SPECIFIC PRODUCT IS REFERENCED IN THE CONTRACT DOCUMENTS, THAT SPECIFIC PRODUCT SHALL BE USED UNLESS THE CONTRACT SUBMITS A REQUEST FOR A PRODUCT SUBSTITUTION OF AN ANCHOR WITH EQUIVALENT RESISTANCE VALUES IN THE APPROPRIATE BASE MATERIAL. ALL REQUESTS FOR SUBSTITUTION SHALL INCLUDE PRODUCT SPECIFICATIONS AND DESIGN DATA FOR REVIEW BY THE STRUCTURAL ENGINEER OF RECORD. CONTRACTOR SHALL SUBMIT CALCULATIONS DEMONSTRATING PROPOSED SUBSTITUTION IS EQUAL TO APPROVED PRODUCTS.
- FASTENERS GENERICALLY REFERRED TO AS "CONCRETE/MASONRY ANCHORS" SHALL BE ONE OF THE FOLLOWING:
  - TAPCON BY ITW RAMSET/REDHEAD
  - Kwik-Con II + BY HILTI
  - TITEN BY SIMPSON STRONG-TIE ANCHOR SYSTEMS
- FASTENERS GENERICALLY REFERRED TO AS "TEK SCREWS" TEK SCREWS ARE SELF-TAPPING AND SELF-DRILLING, WHICH MEANS THERE IS NO NEED FOR PRE-DRILLING. THEY ARE COMMONLY USED AS HVAC DUCTWORK, SOLAR PANELS, ELECTRICAL, FOR METAL ROOFING SCREWS FOR METAL-TO-METAL, AND TIMBER TO METAL APPLICATIONS. TIP SIZE IS DESIGNATED WITH A VALUE OF 1 THROUGH 5, WHICH INDICATES THE THICKNESS OF THE SHEET METAL THAT THE SCREW CAN PENETRATE; 1 REPRESENTS THE THINNEST METAL AND 5 THE THICKEST. THE MOST COMMON TEK SCREW TIP IS TEK 3. TEK 4 AND TEK 5 SCREWS ARE VERY POPULAR FOR ANY PROJECTS USING THICKER METALS. TEK SCREWS SHALL BE AS DESIGNATED ON THE DRAWINGS. APPROVED ALTERNATES MUST BE APPROVED PRIOR TO USE. SUBMIT A CUT SHEET FOR REVIEW BY ENGINEER ON ANY ALTERNATE SDST SCREW MANUFACTURER.

### REPAIR OF EXISTING HORIZONTAL PIVOT WINDOWS

- REPAIR OF EXISTING HORIZONTAL PIVOT WINDOWS (AN EARLY TYPE OF INDUSTRIAL WINDOW).
  - REPAIRING IN PLACE:
    - REMOVE LIGHT RUST, FLAKING AND EXCESSIVE PAINT.
    - PRIME EXPOSED METAL WITH A RUST-INHIBITING PRIMER.
    - IF FOUND, REMOVE AND REPLACE CRACKED OR BROKEN GLASS.
  - EXISTING WINDOW PUTTY.
    - WINDOW PUTTY BASE BID: ASSUME FOR BASE BID PURPOSES REPLACING MISSING PUTTY, REMOVAL AND REPLACEMENT OF CRACKED/LOOSE PUTTY, AND REPAINTING SOWN PUTTY IN PLACE (TO BE PERFORMED AT SAME TIME AS PAINTING OF WINDOWS/WINDOW FRAMES).
    - WINDOW PUTTY ALTERNATE BID 1: IF WINDOW PUTTY IS FOUND TO BE IN A POOR CONDITION NECESSITATING COMPLETE REMOVAL AND REPLACEMENT, PROVIDE A BID ALTERNATE FOR COMPLETE WINDOW PUTTY REMOVAL AND REPLACEMENT; COST TO COVER COMPLETE REMOVAL, DISPOSAL, REPLACEMENT WITH NEW PUTTY.
    - WINDOW PUTTY ALTERNATE BID 2: IF WINDOW PUTTY IS FOUND TO BE ASBESTOS CONTAINING MATERIAL (ACM), COORDINATE REMOVAL (ABATEMENT) WITH AN ASBESTOS REMEDIATION COMPANY. ALTERNATIVELY, THE CITY MAY CONSIDER ENCAPSULATING THE WINDOW PUTTY IN PLACE AS AN ACCEPTABLE ALTERNATE. IF SO, SUCH ENCAPSULATION COST (PAINTING) TO BE CONSIDERED AS PART OF BASE BID.
    - REPLACE MISSING SCREWS OR FASTENERS.
    - CLEAN HINGES. SINCE WINDOWS WILL REMAIN INOPERABLE, LUBRICATING HINGES WILL NOT BE NECESSARY.
    - REPAINT OF ALL STEEL SECTIONS WITH TWO COATS OF FINISH PAINT COMPATIBLE WITH THE PRIMER.
    - CAULKING THE MASONRY SURROUNDS WITH A HIGH-QUALITY ELASTOMERIC CAULK OR POLYSULFIDE CAULK; THE LATTER BEING THE PREFERENCE.
  - WEATHERSTRIPPING EXISTING STEEL INDUSTRIAL WINDOWS:
    - METAL WINDOWS ARE GENERALLY NOT EFFICIENT. THEREFORE, TO REDUCE INFILTRATION, ADD A COMPRESSIBLE WEATHERSTRIPPING. COMPRESSIBLE FOAM TAPE WEATHERSTRIPPING IS OFFEN BEST FOR LARGE WINDOWS WHERE THERE IS A SLIGHT BENDING OR DISTORTION OF THE SASH. IF THE GAP IS NOT MORE THAN 1/4", FOAM WEATHERSTRIPPING CAN NORMALLY FILL THE SPACE. IF THE GAP EXCEEDS THIS, THE WINDOW MAY NEED TO BE REALIGNED TO CLOSE MORE TIGHTLY OR AN ALTERNATE WEATHERSTRIPPING CAN BE CONSIDERED. THE FOAM WEATHERSTRIPPING COMES EITHER WITH AN ADHESIVE OR PLAIN BACK. THE LATTER VARIETY REQUIRES APPLICATION WITH GLUE. COMPRESSIBLE FOAM REQUIRES MORE FREQUENT REPLACEMENT THAN EITHER SPRING-METAL OR VINYL WEATHERSTRIPPING HOWEVER, THE INTENT IS THAT THESE WINDOWS WILL NO LONGER BE OPERABLE AFTER THEY ARE REPAIRED IN PLACE.
    - AFTER PLACEMENT OF WEATHERSTRIPPING, ENSURE THAT ALL WINDOWS ARE IN A "LOCKED" POSITION BEFORE THE INTERIOR TIMBER WALL IS ERECTED!

### TIMBER FRAMING

- ALL LUMBER SHALL BE SOUTHERN YELLOW PINE (MINIMUM SPECIFIC GRAVITY OF 0.55) #2 OR BETTER FRAMING UNLESS NOTED OR SPECIFIED OTHERWISE. REFER TO PLANS FOR SIZE.
- PRESSURE TREATED TIMBER TO BE TREATED TO AWPA UC4C (ABOVE GROUND OR GROUND CONTACT), MINIMUM (OR UC5B WHERE APPLICABLE). MINIMUM NET RETENTION OF PRESERVATIVES SHALL BE IN ACCORDANCE WITH AWPA USE CATEGORY U1.
  - CUT SURFACES OF TREATED TIMBER MUST BE FIELD TREATED. 2% COPPER NAPHTHENATE IS RECOMMENDED.
- PROVIDE PROPER SIZE AND NUMBER OF NAILS IN ALL DESIGNATED HOLES OF THE SIMPSON CONNECTORS TO ACHIEVE FULL RATED LOAD OF CONNECTOR.
- WALL SHEATHING SHALL BE NAILED AT ALL EDGES WITH 8d NAILS SPACED AT 6" MAXIMUM CENTERS AND IN FIELD OF SHEET WITH 8d NAILS SPACED AT 12" OC. PROVIDE 2 X 4 BLOCKING AT JOINTS AS NOTED ON THE DRAWINGS.
- ALL SUBFLOORING SHALL BE AS SHOWN ON THE DRAWINGS (SEE WALL SECTIONS).
- ALL SUBFLOORING SHALL BE SCHEDULE 40 STEEL GRABBER COARSE THREAD SCREWS SPACED AT A MAXIMUM OF 6" O.C. ALONG EDGES AND 12 INCHES O.C. AT INTERMEDIATE SUPPORTS. PROVIDE A DOUBLE BEAD OF LIQUID NAIL TYPE ADHESIVE BETWEEN SUBFLOORING AND WOOD SUPPORTS IN ADDITION TO SCREWING.
- ALL DOOR AND WINDOW HEADERS IN 4- AND 6-INCH WALLS SHALL BE 2 – 2 X 10'S WITH PLYWOOD SPACERS AND 3 – 2 X 10'S WITH PLYWOOD SPACERS, RESPECTIVELY. OPENING HEADERS OVER 6' LONG SHALL HAVE DOUBLE CRIPPLES EACH END.
- PROVIDE UNIFORM 1/8" GAP ALL AROUND ALL SUBFLOOR PLYWOOD SHEETS FOR EXPANSION.
- PROVIDE PROPER SIZE AND NUMBER OF NAILS IN ALL DESIGNATED HOLES OF THE SIMPSON CONNECTORS TO ACHIEVE FULL RATED LOAD OF CONNECTOR.
- ALL FRAMING LUMBER IN CONTACT WITH CONCRETE, MASONRY, OR WITHIN 8" OF FINISH GRADE SHALL BE PRESSURE TREATED.
- ALL LVL BEAMS SHALL BE TRUS-JOIST MCMILLAN OR EQUAL WITH F<sub>b</sub> = 2900 PSI; 2.2E MINIMUM. REFER TO PLANS FOR SIZE.
  - FASTEN MULTIPLE MEMBERS OF LVL'S WITH 2 ROWS OF GALVANIZED 16D NAILS (OR #8, [OR #10] X 3 1/2" SCREWS) AT 12 INCHES ON CENTERS FOR BEAMS LESS THAN OR EQUAL TO 14 INCHES IN DEPTH AND 3 ROWS OF 16D NAILS (OR #8, [OR #10] X 3 1/2" SCREWS) AT 12 INCHES ON CENTERS FOR LVL'S 16 INCHES AND GREATER IN DEPTH.
- U.N.O, ALL WALL STUDS SHALL BE 2 X 6 SPF STUD GRADE SPACED AT 16" O.C. SHORT CRIPPLE WALLS ON TOP OF ATTICS TO BE 2X4 SYP STUD GRADE SPACED AT 16" O/C.

U.N.O, ALL INTERIOR LOAD BEARING, NON-LOAD BEARING, AND SHEAR WALLS SHALL BE STUD GRADE 2 X 6 SPF SPACED AT 16" O.C.

- DOOR AND WINDOW HEADERS/JACK STUDS: ALL DOOR AND WINDOW JAMBS IN INTERIOR WALLS SHALL BE DOUBLE KING STUDS PLUS A DOUBLE CRIPPLE STUD UNDER THE HEADER.
- ALL TIMBER SHALL BE STORED ABOVE GRADE AND THE TOP DRAPED WITH PLASTIC AND SECURED TO PREVENT ENTRY OF RAIN. DO NOT FULLY ENCLOSE STACKS OF TIMBER IN ORDER TO PREVENT CREATING A TENT THAT WILL TRAP GROUND MOISTURE UNDER THE PLASTIC COVER.

### FASTENERS AND CONNECTORS

(APPLICABLE TO COASTAL ENVIRONMENTS AND WHEN SUCH ITEMS ARE USED WITH ACQ OR CA TREATED TIMBER)

- CORROSION PROTECTION (GENERAL):
  - CCA TREATMENT FORMULATION WAS COMMON FOR GROUND CONTACT TIMBER PRIOR TO 2003. HOWEVER, THE CURRENT ACQ OR CA TREATMENT FORMULATION IS 2 TO 3 TIMES AS CORROSIVE AS THE FORMER CCA TREATMENT FORMULATION. AS SUCH, WHEN THERE IS AN OPTION, STAINLESS STEEL FASTENERS AND PLATE CONNECTORS SHOULD BE STRONGLY CONSIDERED IN LIEU OF HDG TO REDUCE THE RATE OF FASTENER AND PLATE CORROSION.
- WHERE TO USE STAINLESS STEEL PLATES, STRAPS, RODDED CROSS-BRACING AND FASTENERS:
  - INLAND AND IN AQUATIC ENVIRONMENTS:
    - USE TYPE 316/305/304 STAINLESS STEEL WHEN IN CONTACT WITH ACQ OR CA TREATED TIMBER IN EITHER DRY OR WET EXTERIOR ENVIRONMENTS. ACQ IS 2 TO 2.5 TIMES AS CORROSIVE AS THE OLDER CCA TREATMENT (CCA TREATMENT METHOD WAS USED PRIOR TO 2004 AND VOLUNTARILY WITHDRAWN EXCEPT FOR SPECIAL APPLICATIONS).
    - EXCEPTION: WHERE THE ITEM SPECIFIED ON THE PLANS IS NOT COMMERCIALY AVAILABLE (OR CANNOT BE SHOP FABRICATED), ON A CASE-BY-CASE BASIS, THE ENGINEER WILL APPROVE THE USE OF ASTM A653, TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, CONNECTORS IN CONTACT WITH PRESERVATIVE TREATED WOOD.
  - PREFORMED CONNECTORS, STEEL PLATES AND STRAPS:
    - IN CONTACT WITH ACQ TREATED TIMBER: UNLESS OTHERWISE INDICATED ON THE PLANS, HARDWARE SUCH AS PREFORMED CONNECTORS, STEEL PLATES OR STRAPS HAVING A BASE METAL THICKNESS EQUAL TO LESS THAN 1/8" SHALL BE TYPE 316 STAINLESS STEEL (SEE EXCEPTION 1 UNDER PARAGRAPH 2.A IMMEDIATELY ABOVE).
    - WHEN GALVANIZED MATERIALS ARE SPECIFIED OR SHOWN ON THE PLANS, STRUCTURAL SHAPES HAVING A BASE METAL THICKNESS GREATER THAN 1/8", ANCHORS, BOLTS, NUTS, WASHERS, ETC. SHALL BE HOT DIP GALVANIZED AFTER FABRICATION PER ASTM A653, A123 TO G185 COATING THICKNESS STANDARD (1.85 OUNCE/SF [1.56 MILS])
  - G90 COATING IS NOT PERMITTED AS A FASTENER COATING WHEN SUCH FASTENER IS PROPOSED TO BE USED WITH ACQ PRESSURE TREATED TIMBER.
- ALUMINUM OR ELECTROPLATED GALVANIZED FASTENERS ARE NOT PERMITTED FOR ANY EXTERIOR APPLICATIONS WHEN USED WITH EITHER CONNECTOR PLATES OR STRAPS.
- NAILS, SCREWS, BOLTS, AND RODDED CROSS-BRACING (AND THEIR APPLICABLE HARDWARE):
  - WHEN PREFORMED PLATE CONNECTORS, PLATES OR STRAPS ARE SPECIFIED BY A PARTICULARLY MANUFACTURER (I.E. SIMPSON, USP, ETC.), IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR USE THE FASTENERS THAT ARE TYPICALLY SUPPLIED BY THE MANUFACTURER TO ENSURE THE REQUIRED GRADE, LENGTH, AND DIAMETER OF FASTENER MATCHES THE REFERENCED PLATE OR STRAP. FOR EXAMPLE, 10D NAILS ARE AVAILABLE IN BOTH 1 1/2" AND 3" LENGTHS FROM THE PLATE MANUFACTURER DEPENDING ON THE STRAP LOAD REQUIREMENTS. REQUEST THAT THE MANUFACTURER SEND THE FASTENER THAT CORRESPONDS TO THE PLATE OR STRAP SPECIFIED OR BEING REQUESTED. VERIFY WHEN ORDERING THAT THE FASTENERS ARE INCLUDED!
  - EXCEPTION: LOCAL COMMERCIALY AVAILABLE FASTENERS MEETING THE PLATE OR STRAP MANUFACTURER'S SAME PRODUCT SPECIFICATIONS (I.E. DIAMETER, LENGTH, GRADE, ETC.) MAY BE USED WHEN APPROVED BY THE ENGINEER AND/OR VERIFIED TO BE THE SAME BY THE PROJECT INSPECTOR.
  - IF NAIL GUNS ARE BEING USED ON THE PLATE OR STRAP CONNECTORS, ADVISE MANUFACTURER AND REQUEST ACCORDINGLY.
- JOINING DISSIMILAR METALS: VERIFY THAT THE CONNECTOR PLATE AND THE FASTENER ARE THE SAME TYPE OF METAL. AVOID JOINING DISSIMILAR METALS, ESPECIALLY THOSE WITH HIGH GALVANIC POTENTIAL (E.G., COPPER AND STEEL) BECAUSE THEY ARE MORE PRONE TO CORROSION. DO NOT MIX STAINLESS MATERIAL STEEL AND GALVANIZED STEEL MATERIAL. IF THEY MUST BE JOINED, AN INSULATING MATERIALS SUCH AS A NYLON WASHER, OR OTHER PLASTIC OR RUBBER WASHER, SHALL BE USED TO SEPARATE THE DISSIMILAR MATERIALS.
- CONNECTIONS TO WOOD FRAMING, SPECIFIED ON THESE PLAN, ARE BASED ON LUMBER HAVING A MINIMUM SPECIFIC GRAVITY OF 0.55 (SOUTHERN YELLOW PINE).

### JOINT SEALANTS:

- NON-SAG GROUT VERTICAL AND HORIZONTAL APPLICATIONS, SEALANT FOR EIFS, & SUBMERGED ENVIRONMENTS): USE A NON-SAG FLEXIBLE EXTERIOR GRADE POLYURETHANE SEALANT SUCH AS SIKAFLEX 2C NS MEETING ASTM C-920, TYPE M, GRADE NS, CLASS 25, OR APPROVED EQUAL.
- FOR SEALING JOINTS IN FACILITIES REQUIRING A DURABLE ELASTOMERIC, WEATHER-TIGHT, CHEMICAL RESISTANT SEAL: USED IN OVERHEAD, HORIZONTAL OR VERTICAL APPLICATIONS: USE A TWO-PART NON-SAG POLYSULFIDE CAULK SUCH AS SYNTHACALK GC2+ BY PECORA CORPORATION OR AN APPROVED EQUAL MEETING ASTM C920, TYPE M, GRADE NS, CLASS 25, USE NT, M, AND I AND FEDERAL SPECIFICATION A-A-1556A, TYPE M, GRADE NS, CLASS 25, USE NT, M, AND I. COLOR TO MATCH MATERIAL APPLIED TO. PRIMER REQUIRED ON SUBSTRATES. CLOSED-CELL POLYETHYLENE JOINT BACKER RODS ARE REQUIRED TO CONTROL DEPTH OF SEALANT. JOINTS SHOULD HAVE A 2:1 WIDTH TO DEPTH RATIO TO CREATE AN HOURGLASS SHAPE.

### GROUT

- PROVIDE NON-SHRINK, NON-METALLIC PRE-MIXED GROUT UNDER ALL COLUMN BASE PLATES AND BEAM BEARING PLATES. GROUT SHALL HAVE A COMPRESSIVE STRENGTH OF 7,000 PSI 7 DAYS. NON-SHRINK GROUT SHALL BE IN ACCORDANCE WITH CRD-C621 SPECIFICATIONS, AND SHALL BE NON-CORROSIVE, NON-STAINING AND NON-METALLIC, PREMIXED PRODUCT.

### DESIGN CRITERIA AND GOVERNING NOTES (ASCE7-16):

- THE 2018 NORTH CAROLINA STATE BUILDING CODE (2015 IRC WITH NC AMENDMENTS).
- 2016 EDITION OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE 7-16), "MINIMUM LOADS FOR BUILDINGS AND OTHER STRUCTURES."
- FIFTEENTH EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), "MANUAL OF STEEL CONSTRUCTION", ALLOWABLE STRESS DESIGN AND "ALLOWABLE STRESS DESIGN SPECIFICATION FOR STRUCTURAL STEEL."
- 2019 EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI 318), "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".
- LATEST EDITION OF THE AMERICAN STANDARDS OF TESTING OF MATERIALS (ASTM), "STANDARDS IN BUILDING CODES", VOLUME I AND II.
- LATEST EDITION OF THE AMERICAN WELDING SOCIETY (AWS), "STRUCTURAL WELDING CODE".
- LATEST EDITION OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) STANDARDS.

### DESIGN LIVE LOADS (ASCE7-16)

- CEILING LIVE LOAD – SHOWN ON PLANS.
- COLLATERAL LOAD – N/A
- GROUND SNOW – N/A PSF
- ASSUMED SOIL BEARING PRESSURE – N/A
- WALL LATERAL FORCE DESIGN GOVERNED IN ACCORDANCE WITH ASCE7 – 16: **5 PSF ON INTERIOR WALLS**
- SEISMIC – N/A, INTERIOR TO BUILDING MWFRS AND SEISMIC RESISTING ELEMENTS

### DIMENSIONS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DIMENSIONS IN THE DRAWINGS AND ADVISING THE ENGINEER OF ANY DIFFERENCES IN THE DIMENSIONS ON THE DRAWINGS PRIOR TO COMMENCING CONSTRUCTION.

### EXISTING CONDITIONS

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING JOB CONDITIONS. ANY ADVERSE EXISTING CONDITIONS AFFECTING WORK SHOWN ON THESE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR POSSIBLE CLARIFICATION OF RECONCILIATION.

### CONSTRUCTION SAFETY

- THESE DRAWINGS DO NOT CONTAIN THE REQUIREMENTS FOR JOB SAFETY. ALL PROVISIONS FOR SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.



### ABBREVIATIONS

ABBREVIATION	WORD OR PHRASE
ASD	ALLOWABLE STRESS DESIGN
A/C	AIR CONDITIONING
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
	AT
CIP	CAST-IN-PLACE
C/L	CENTERLINE
CLM	CLEAR
CMU	CONCRETE MASONRY UNIT
CJ or CONST. JT.	CONSTRUCTION JOINT
COND	CONDENSING UNIT
CONT	CONTINUOUS
DIA or Ø	DIAMETER
DMG	DIMENSION
DWG	DRAWING
E	EAST
EA	EXISTING
EF	EACH FACE
ELEV	ELEVATION
ENG	ENGINEER
EW	EACH WAY
EJ or EXP JT	EXPANSION JOINT
FT OR '	FEET
FF or FFE	FINISHED FLOOR or FINISHED FLOOR ELEVATION
FD	FLOOR DRAIN
FND	FOUNDATION
GA	GAUGE
GALV	GALVANIZED
GEN	GENERAL
GR	GRADE
HDG	HOT DIPPED GALVANIZED
IN or "	INCH
JT	JOINT
K	KIPS
KSF	KIPS PER SQUARE FOOT
MFR	MANUFACTURER
MATL or MAT'L	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
N	NORTH
NTS	NOT TO SCALE
NO. OR #	NUMBER
O/C	ON CENTER
PE	PROFESSIONAL ENGINEER
PL	PLATE
PM&E	PLUMBING MECHANICAL AND ELECTRICAL ENGINEER
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSI	PROFESSIONAL LAND SURVEYOR
REF	REFERENCE
REINF or REINF'T	REINFORCE OR REINFORCEMENT
S	SOUTH
SECT	SECTION
SHT	SHEET
SIM	SIMILAR
SOG	SLAB-ON-GRADE
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STIFF	STIFFENER
STR	STRUCTURAL
SYM	SYMMETRICAL
T	TOP
T&B	TOP AND BOTTOM
TOC	TOP OF CONCRETE
TOP	TOP OF FOOTING
TOS	TOP OF SLAB
TYP	TOP OF WALL
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
VERT	VERTICAL
VIF	VERIFY IN FIELD
W	WEST
WWF	WELDED WIRE FABRIC
W/	WITH

### CONSTRUCTION SAFETY

These drawings do not contain the requirements for job safety. All provisions for safety shall be the sole responsibility of the contractor.

### EXISTING CONDITIONS:

The contractor shall be responsible for reviewing all existing job conditions. Any adverse existing conditions affecting work shown on these drawings shall be brought to the attention of the engineer for possible clarification or reconciliation.

### ADA AND LEGAL DISCLAIMER

This document is not represented to comply with all requirements contained in the ADA or other laws. Engineers are not licensed to interpret laws or give advice concerning laws, the owner should have this document reviewed by his attorney to determine legal compliance.

These plans are for bidding purposes only and are not to be used as Construction Drawings unless initiated and dated as approved for Construction below by the Engineer.

Approved for Construction: \_\_\_\_\_

Date: \_\_\_\_\_

### RECORD DRAWINGS:

These drawings are believed to be a correct representation of actual field conditions but are not warranted as such.

By: \_\_\_\_\_ Date: \_\_\_\_\_

DESIGN: M. Gollino Jr.	DATE: December 2021	REVISIONS	BY: CAD: M.G.J.P.
DATE: N/A	LAST EDIT: Mike Gollino	DESCRIPTION: REV. PER CITY COMMENTS	DATE: 4/13/22
NO. Δ	Δ		

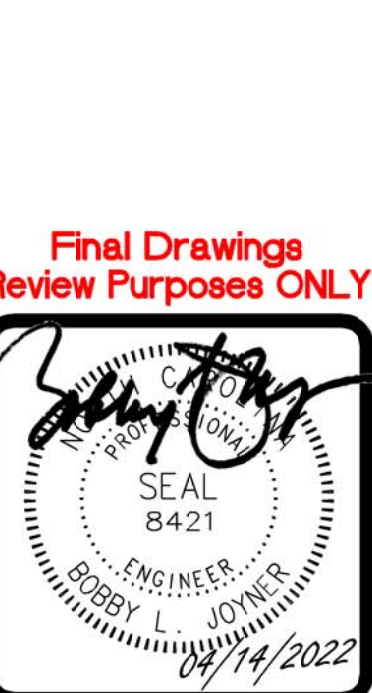


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Final Drawings  
Review Purposes ONLY



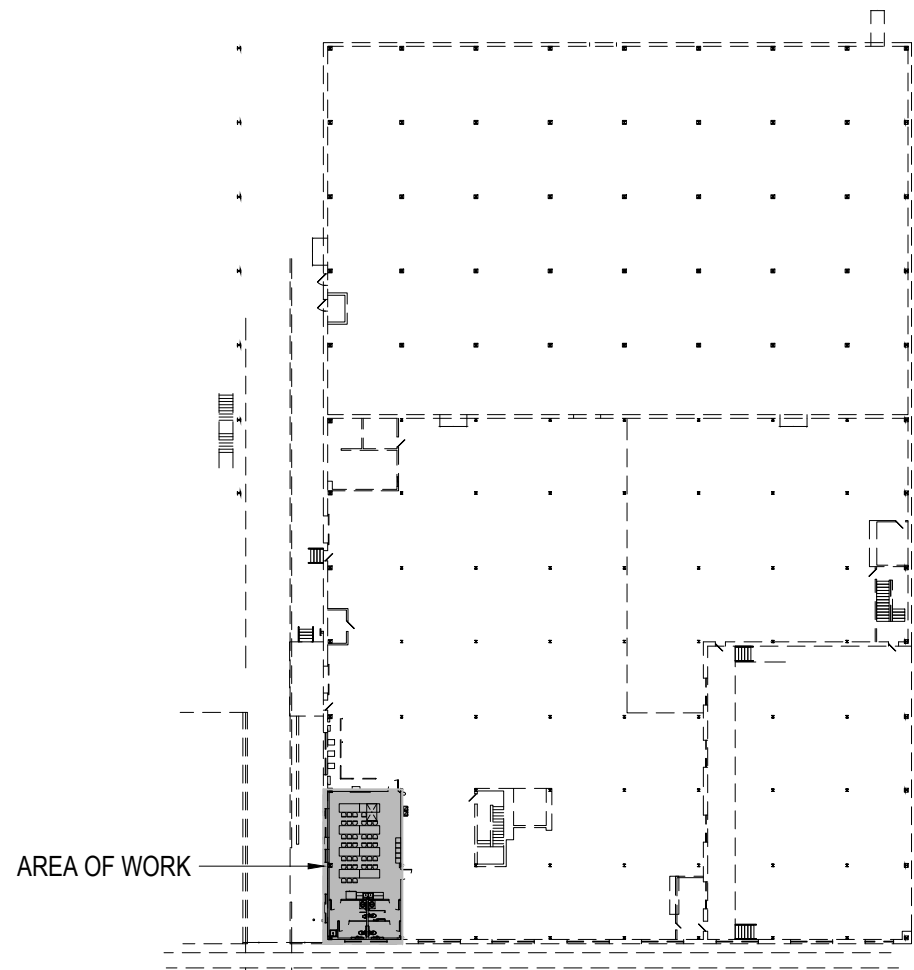


PLUMBING FIXTURE SCHEDULE		
MARK	MAKE	DESCRIPTION
P-1	AMERICAN STANDARD OR EQUAL	1.6 GAL. ELONGATED, FLOOR MTD. FLUSH TANK WATER CLOSET WITH OPEN FRONT SEAT.
P-2	AMERICAN STANDARD OR EQUAL	1.6 GAL. ELONGATED, FLOOR MTD. 17" H HANDICAPPED FLUSH TANK WATER CLOSET WITH OPEN FRONT SEAT. ADA COMPLIANT
P-3	AMERICAN STANDARD OR EQUAL	3/4" HC ACCESSIBLE FLUSH VALVE WALL HUNG URINAL WITH TOUCHLESS, BATTERY POWERED FLUSH VALVE. RIM 17" AFF. ADA COMPLIANT
P-4	AMERICAN STANDARD OR EQUAL	SELF-RIMMING HC ACCESSIBLE LAVATORY WITH "SELECTRONIC" TOUCHLESS, BATTERY POWERED FAUCET & DRAIN. ADA COMPLIANT TEMP. @ FAUCET SET @ 115°F MAX.
P-5	DAYTON OR EQUAL	HC ACCESSIBLE SINGLE COMPARTMENT STAINLESS STEEL SINK WITH GOOSENECK FAUCET, WINGED LEVER HANDLES & DRAIN. ADA COMPLIANT
P-6	FIAT OR EQUAL	24" X 24" X 10" DEEP MOP SERVICE BASIN WITH INTEGRAL DRAIN, FAUCET, HOSE AND BRACKET AND MOP HANGER BRACKET
P-7	ELKAY OR EQUAL	"EZH2O" BI-LEVEL ELECTRIC WATER COOLER WITH BOTTLE FILLING STATION. ADA COMPLIANT. 120V, 6 AMPS
P-8	STATE OR EQUAL	30 GAL. ELECTRIC WATER HEATER. 208V, 10, 4.5 KW. PROVIDE WITH HEAT TRAPS & ISOLATION VALVES AS REQUIRED

NOTES: 1. FLUSHER'S FOR WATER CLOSETS SHALL BE ON APPROACH SIDE OF FIXTURE.  
2. COORDINATE ALL FIXTURES AND FAUCETS WITH OWNER PRIOR TO INSTALLATION.

PLUMBING CONNECTION SCHEDULE				
FIXTURE	CW	HW	WASTE	VENT
FLUSH TANK WATER CLOSET	1/2"	-	3"	2"
LAVATORY	1/2"	1/2"	2"	1 1/2"
URINAL	3/4"	-	2"	1 1/2"
EWC	1/2"	-	2"	1 1/2"
KITCHEN SINK	1/2"	1/2"	2"	1 1/2"
MOP SINK	1/2"	1/2"	3"	1 1/2"

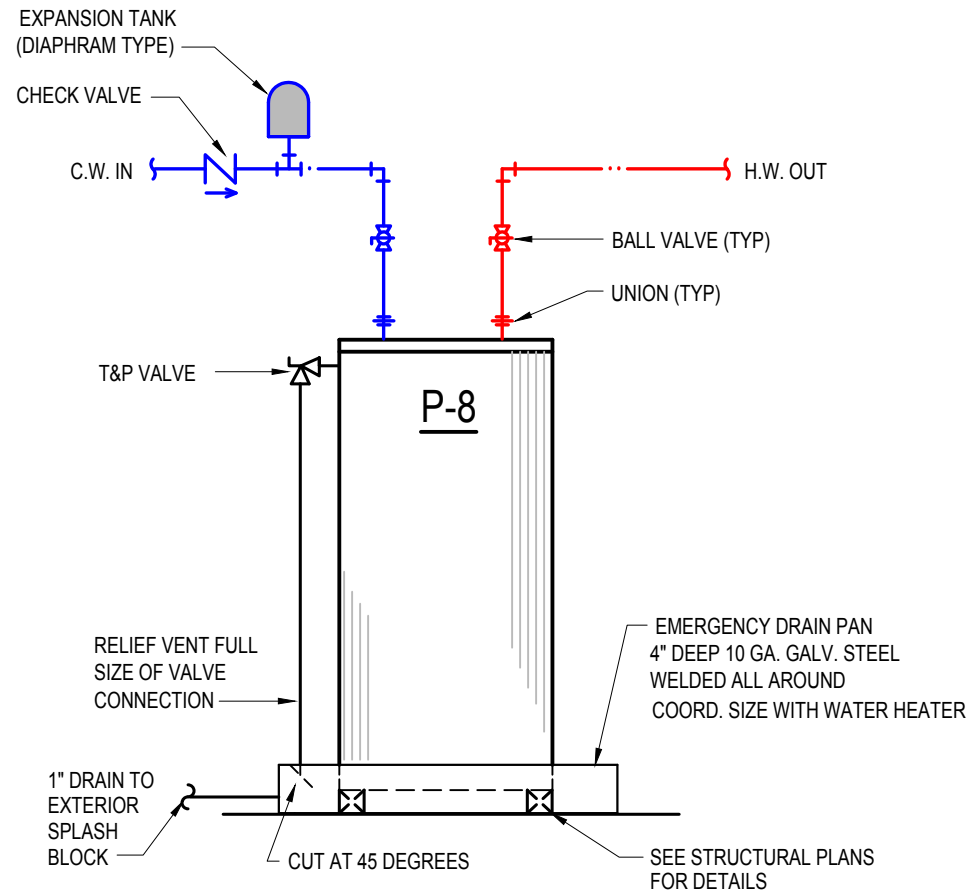
PLUMBING CALCULATIONS					
ITEM	# OF	SUPPLY FIXTURE UNITS			WASTE FIXTURE UNITS
		COLD	HOT	TOTAL	
FLUSH TANK WATER CLOSET	3	5.0	-	5.0	6
LAVATORY	2	1.5	1.5	2.0	1
URINAL	1	5.0	-	5.0	2
EWC	2	0.25	-	0.25	0.5
KITCHEN SINK	1	1.0	1.0	1.4	2
MOP SINK	1	2.25	2.25	3.0	2
GPM - 23.3		<b>COLD TOTAL</b>	<b>HOT TOTAL</b>	<b>TOTAL</b>	<b>WASTE TOTAL</b>
		26.75	6.25	28.9	27



## KEY PLAN NTS

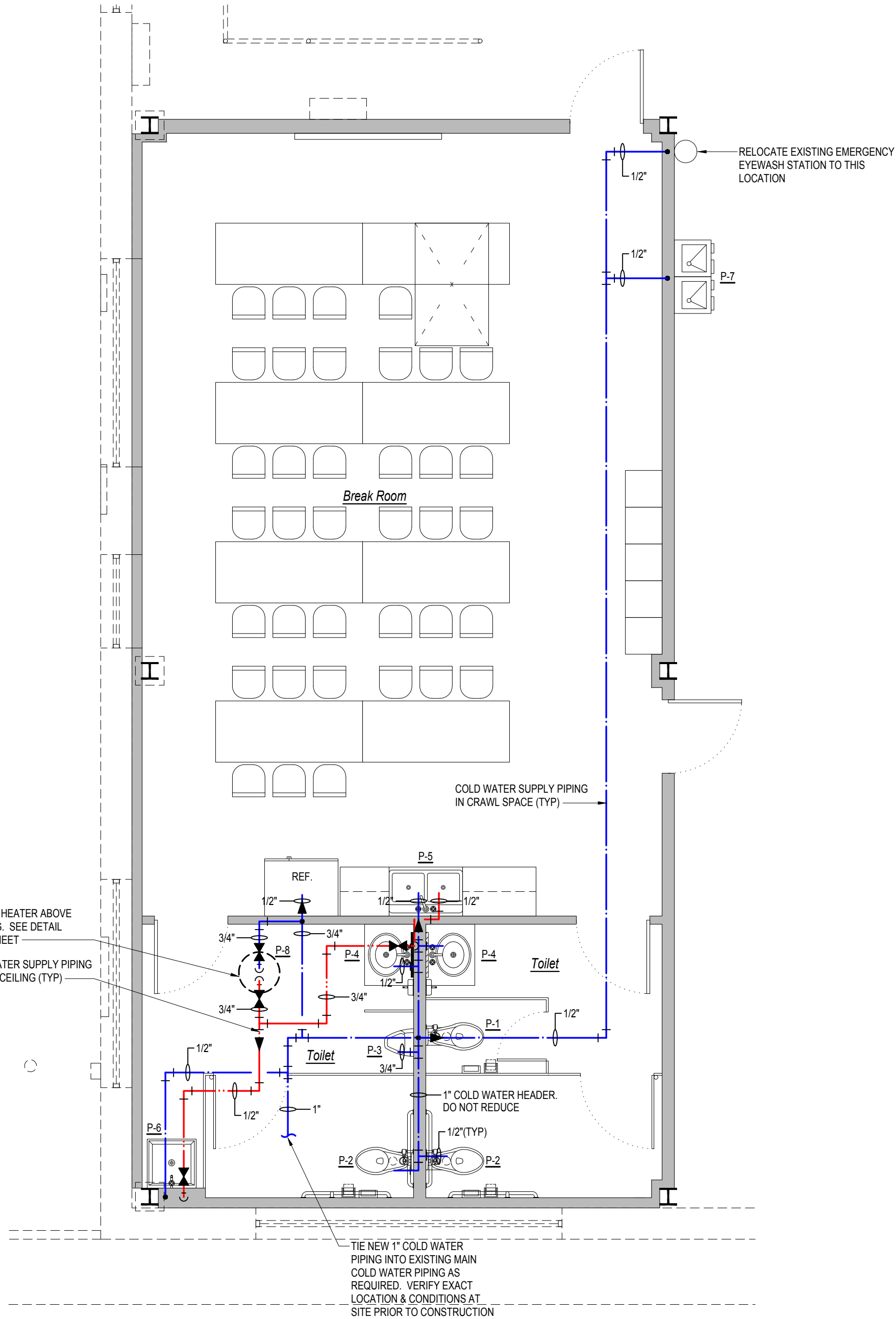
## GENERAL PLUMBING NOTES

- ALL WORK SHALL BE IN COMPLIANCE WITH LOCAL, STATE, AND NATIONAL CODES.
- CONTRACTOR SHALL COORDINATE PIPING WITH ALL OTHER TRADES.
- CONTRACTOR SHALL REFER TO "S" SHEETS FOR DIMENSIONS.
- CONTRACTOR SHALL FURNISH AND INSTALL DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
- CONTRACTOR SHALL FURNISH AND INSTALL ESCUTCHEONS AND COVER PLATES AT ALL FINISHED WALLS, CEILINGS AND FLOOR OPENINGS.
- PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH STATE AND LOCAL CODE.
- ALL PIPING SHALL BE TESTED FOR LEAKS. IF ANY LEAKS ARE DETECTED THE PIPING SHALL BE REPAIRED OR REPLACED AND RETESTED.
- INSULATE ALL NEW HOT & COLD WATER PIPING.
- NEW SUPPLY PIPING SHALL BE PEX
- NEW WASTE AND VENT PIPING SHALL BE SCH. 40 PVC. & SCH. 80 UNDER TRAFFIC AREAS.
- SET HOT WATER TEMPERATURE FROM LAVATORY & HAND SINK FAUCETS TO 115 DEGREE F. MAX.
- PROVIDE SHUT-OFF VALVES IN ALL SUPPLY PIPING LINES ABOVE CEILING FOR ALL DROPS AND AT PLUMBING FIXTURES. PROVIDE ACCESS TO ALL VALVES AS REQUIRED IN HARD CEILINGS.



## DETAIL - WATER HEATER NOT TO SCALE

NOTE: PROVIDE WITH FACTORY INSTALLED T&P VALVE AND HEAT TRAPS AS REQUIRED



## BREAK ROOM PLUMBING - SUPPLY PIPING PLAN

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

### GENERAL DEMO NOTE:

REMOVE ALL UNUSED PLUMBING LINES, FIXTURES, ETC. AS REQUIRED. CAP PIPING BELOW FLOOR, IN WALL ABOVE CEILING AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

### BACKFLOW PREVENTER NOTE:

VERIFY LOCATION OF EXISTING BACK FLOW PREVENTER & WORKING CONDITION FOR PROPOSED USE PRIOR TO CONSTRUCTION. PROVIDE & INSTALL NEW BACK FLOW PREVENTER IN COLD WATER MAIN AS REQUIRED FOR PROPOSED USE.

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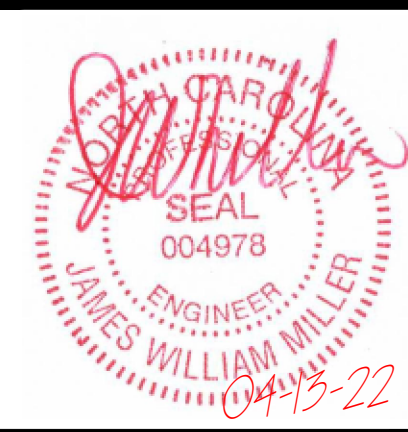
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Rev:      Date:      Description:

Title Sheet: BREAK ROOM PLUMBING - SUPPLY PIPING PLAN

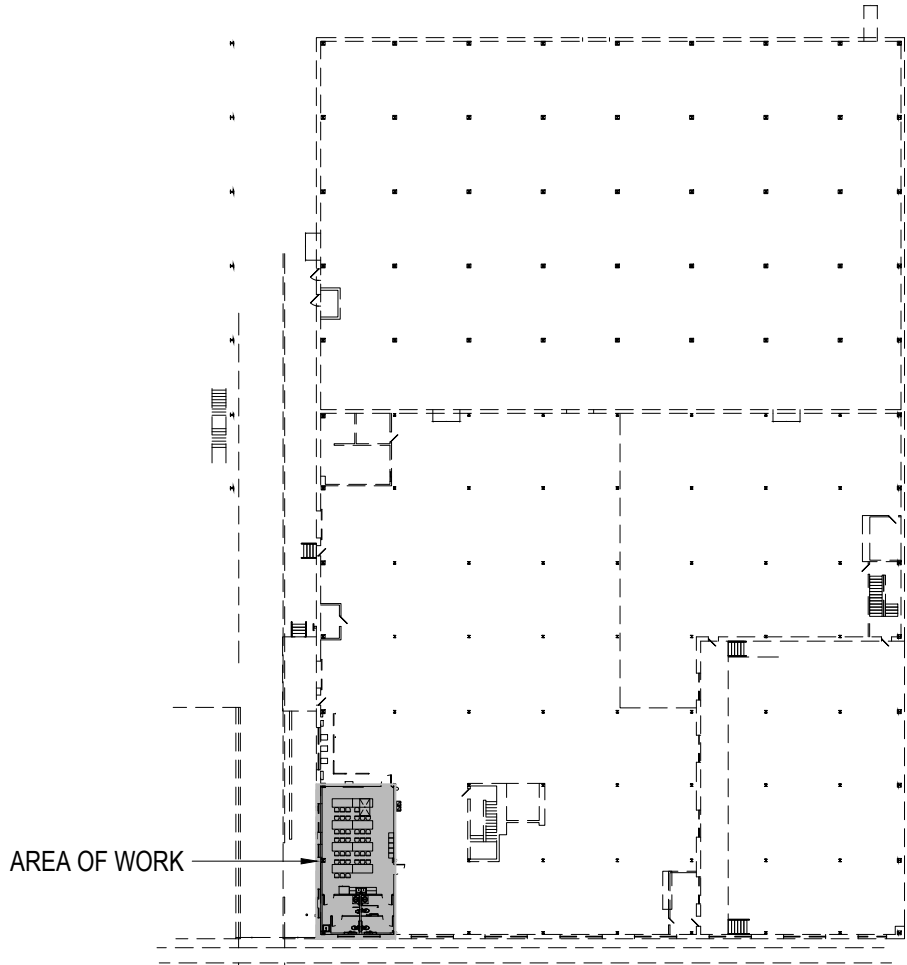
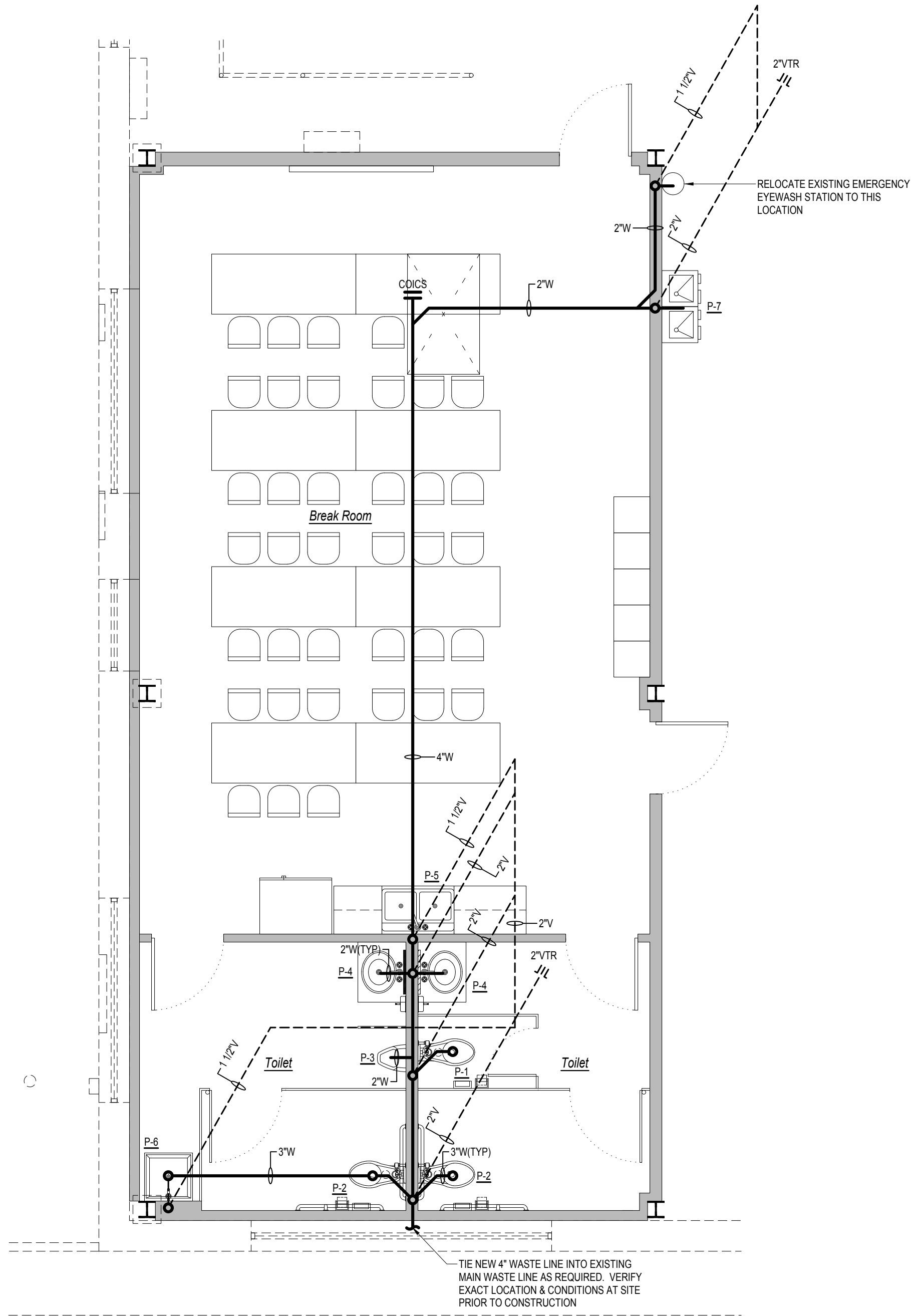
Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR City of Rocky Mount Warehouse 724 Albemarle Ave.

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
Sheet:

P-1



PLUMBING LEGEND		
DESCRIPTION	SYMBOL	
COLD WATER	— CW	
HOT WATER	— HW	
VENT PIPING	- V	
WASTE PIPING	- W	
CLEAN OUT IN CRAWL SPACE		COICS
CHECK VALVE	—	
SHUT-OFF VALVE	—	
FIXTURE DESIGNATION	P-	
MOUNTING HEIGHT	MH	
VENT THRU ROOF	— VTR	



KEY PLAN  
NTS

BREAK ROOM PLUMBING -  
WASTE & VENT PIPING PLAN  
SCALE: 1/4" = 1'-0"

GENERAL DEMO NOTE:

REMOVE ALL UNUSED PLUMBING  
LINES, FIXTURES, ETC. AS REQUIRED.  
CAP PIPING BELOW FLOOR, IN WALL  
ABOVE CEILING AS REQUIRED. DISPOSE  
OF ALL MATERIALS PROPERLY.

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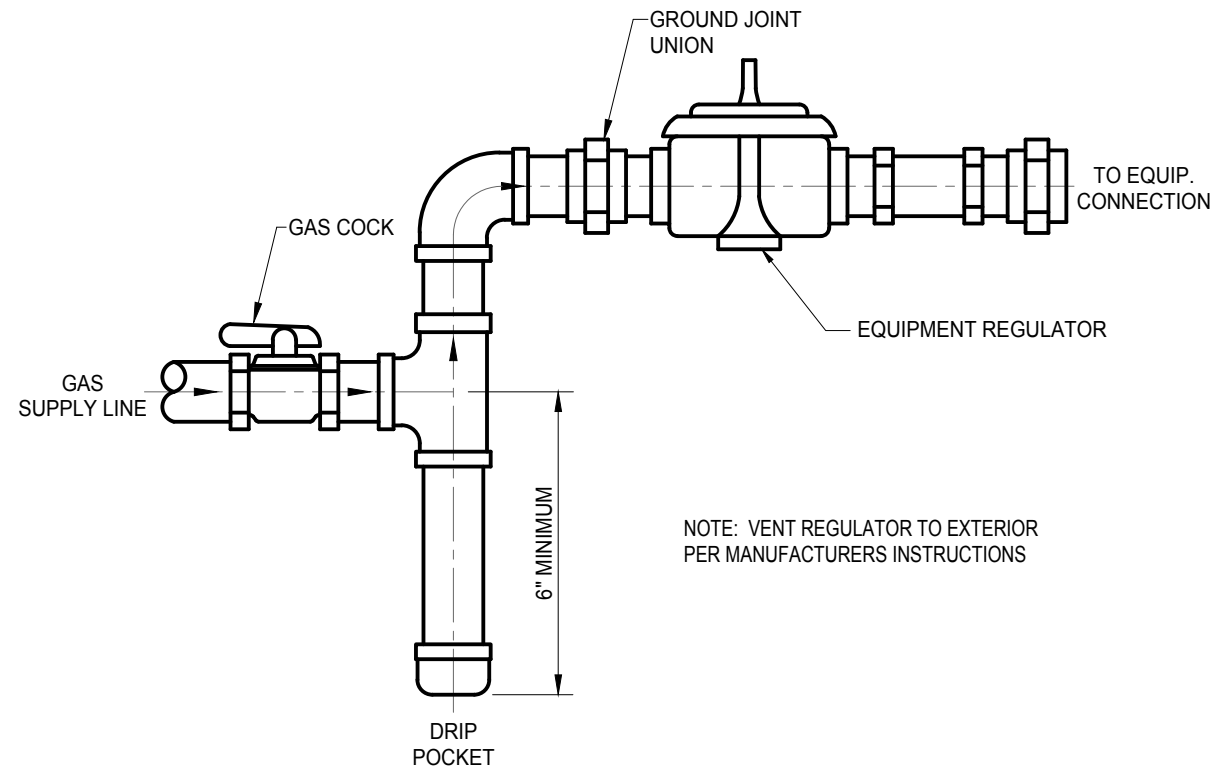
Rev.	Date:	Description:

Title Sheet:  
BREAK ROOM PLUMBING - WASTE & VENT PIPING PLAN

Project:  
**TOILET / BREAK ROOM REMODEL  
& BACKUP GENERATOR**  
City of Rocky Mount Warehouse  
724 Albemarle Ave.

Drawn by: JLT  
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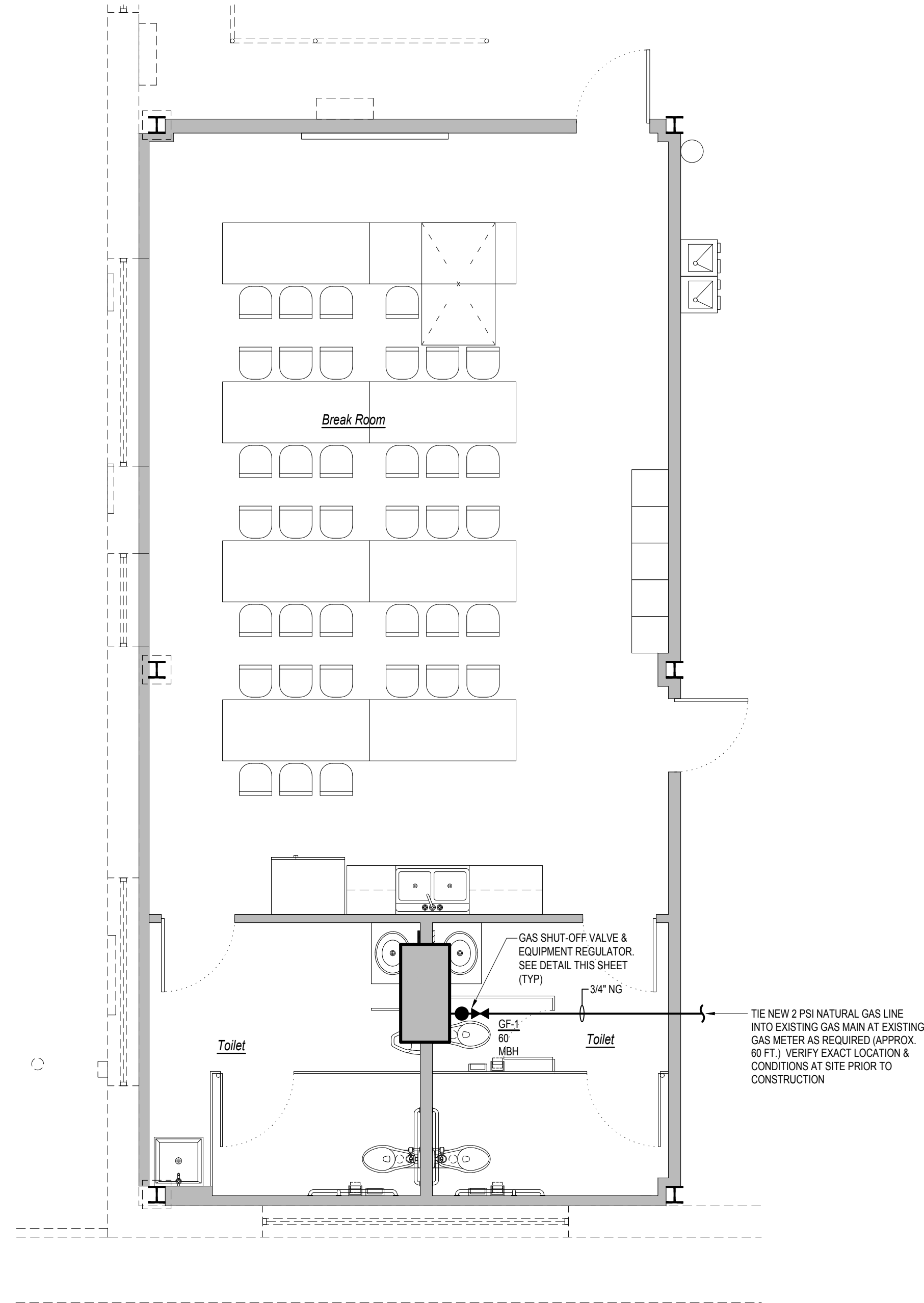




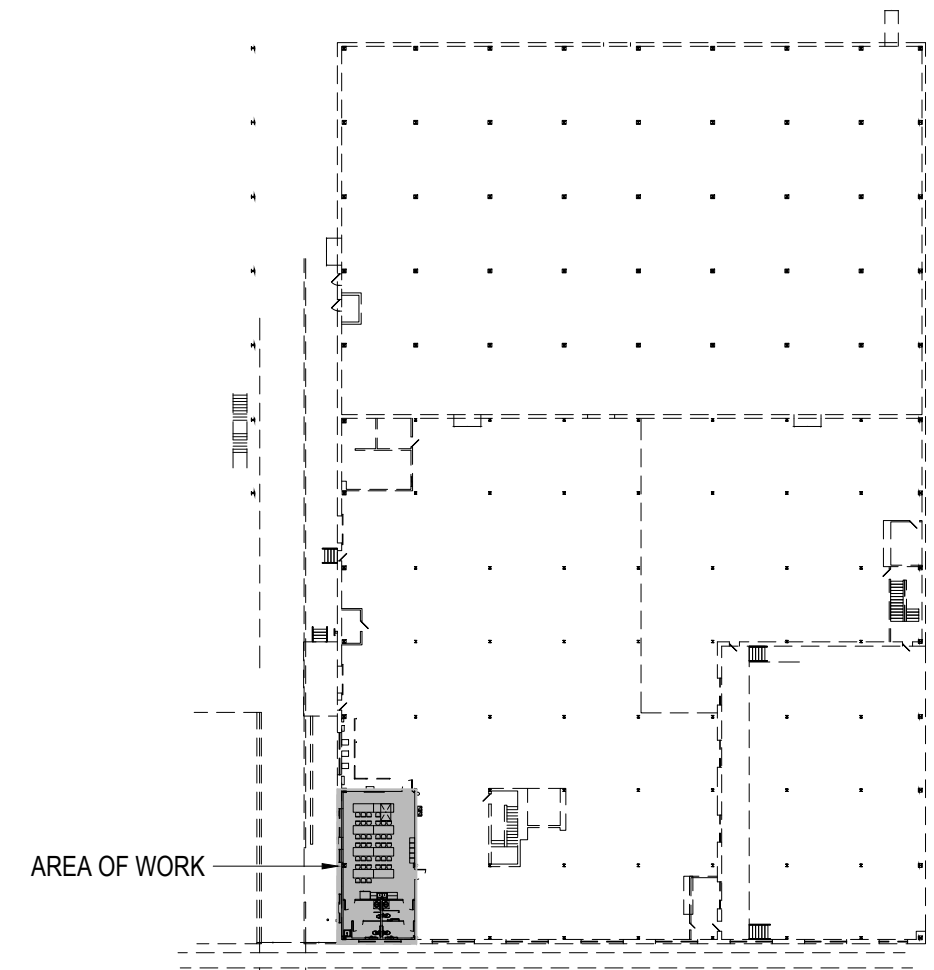
DETAIL - GAS CONNECTION  
NOT TO SCALE

**GAS PIPING NOTES:**

1. GAS PIPING TO BE INSTALLED IN COMPLIANCE WITH THE 2018 NC FUEL GAS CODE.
2. GAS LINE TO BE BONDED TO BUILDING STEEL IN ACCORDANCE WITH THE 2018 NC FUEL GAS CODE, SECTION 310 ELECTRICAL BONDING.
3. GAS PIPING TO BE SCHEDULE 40 BLACK IRON THREADED.
4. MARK GAS PIPING WITH GAS & PSI IN BLACK LETTERS ON YELLOW BACKGROUND PER CODE.
5. TAG TOTAL BTU'S & ADDRESS AT BUILDING REGULATOR AS REQUIRED.
6. MP REGULATORS SHALL COMPLY WITH SECTION 410.2 MP REGULATORS 2018 NC FUEL GAS CODE



BREAK ROOM GAS PIPING PLAN  
SCALE: 1/4" = 1'-0"



KEY PLAN  
NTS

GENERAL GAS PIPING DEMO NOTE:  
REMOVE ALL EXISTING UNUSED GAS PIPING, VALVES, REGULATORS, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

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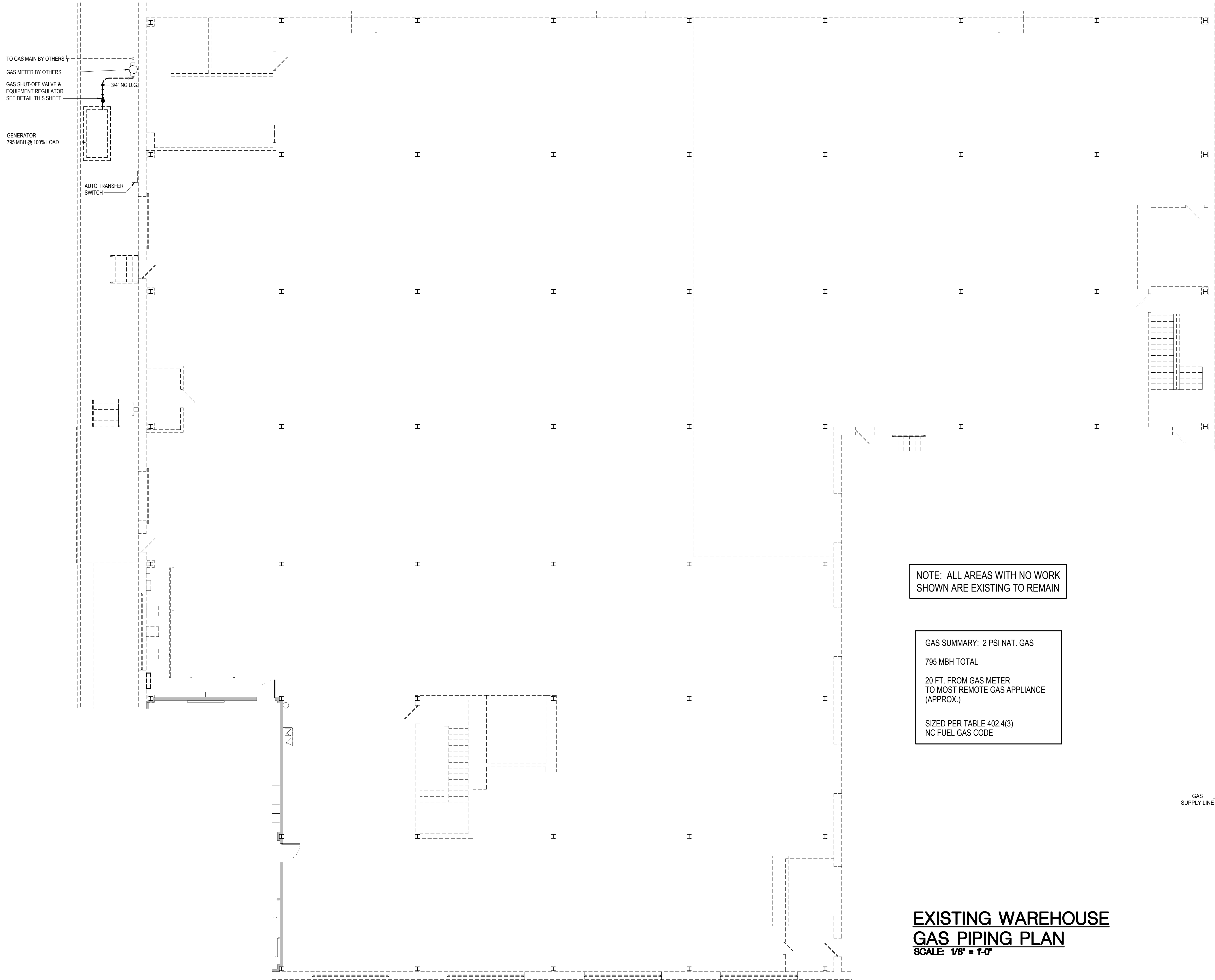
Rev.	Date:	Description:

Title Sheet: BREAK ROOM GAS PIPING PLAN

Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR  
City of Rocky Mount Warehouse  
724 Albemarle Ave.

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
Sheet: P-3

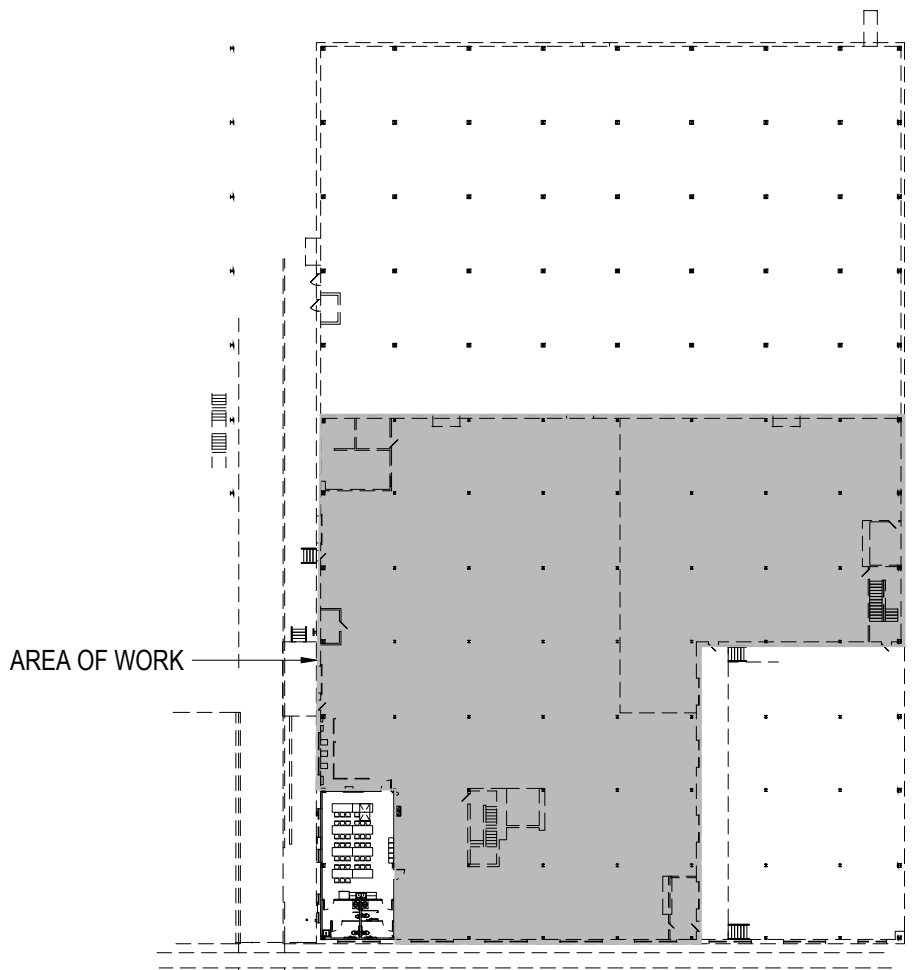




NOTE: ALL AREAS WITH NO WORK SHOWN ARE EXISTING TO REMAIN

GAS SUMMARY: 2 PSI NAT. GAS  
795 MBH TOTAL  
20 FT. FROM GAS METER TO MOST REMOTE GAS APPLIANCE (APPROX.)  
SIZED PER TABLE 402.4(3)  
NC FUEL GAS CODE

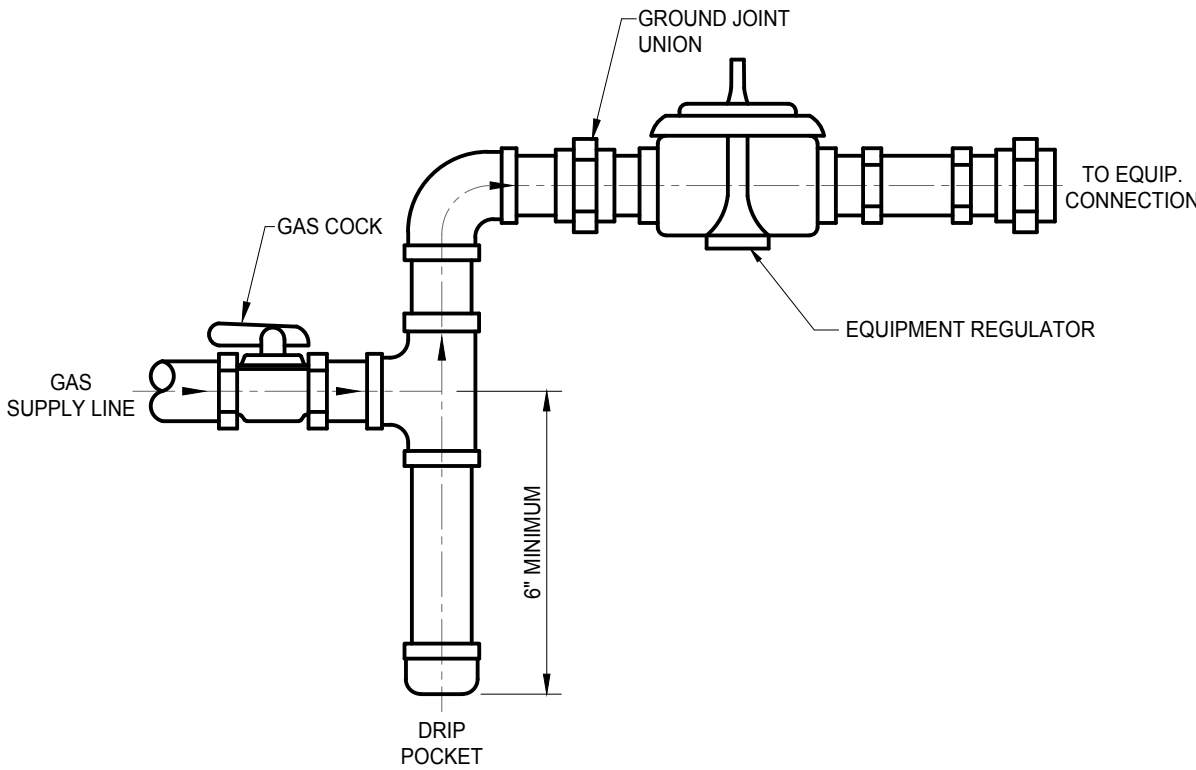
**EXISTING WAREHOUSE  
GAS PIPING PLAN**  
SCALE: 1/8" = 1'-0"



**KEY PLAN**  
NTS

**GAS PIPING NOTES:**

1. GAS PIPING TO BE INSTALLED IN COMPLIANCE WITH THE 2018 NC FUEL GAS CODE.
2. GAS LINE TO BE BONDED TO BUILDING STEEL IN ACCORDANCE WITH THE 2018 NC FUEL GAS CODE, SECTION 310 ELECTRICAL BONDING.
3. GAS PIPING TO BE SCHEDULE 40 BLACK IRON THREADED.
4. MARK GAS PIPING WITH GAS & PSI IN BLACK LETTERS ON YELLOW BACKGROUND PER CODE.
5. PROVIDE A TRACER WIRE FOR UNDERGROUND GAS PIPING PER 2018 NC FUEL GAS CODE SECTION 404.15.3 TRACER.
6. TAG TOTAL BTU'S & ADDRESS AT GAS METER AS REQUIRED.
7. MP REGULATORS SHALL COMPLY WITH SECTION 410.2 MP REGULATORS 2018 NC FUEL GAS CODE



**DETAIL - GAS CONNECTION**  
NOT TO SCALE

Prepared for:

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Title Sheet: EXISTING WAREHOUSE GAS PIPING PLAN

Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR  
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**P-4**

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MECHANICAL SYMBOL LEGEND		
SINGLE LINE	DOUBLE LINE	DESCRIPTION
		TAKE OFF TO SUPPLY AIR REGISTER
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT
		END CAP
		DUCT INSULATED WITH 2" EXTERNAL INSULATION. SEE GENERAL MECHANICAL NOTES
		VOLUME CONTROL DAMPER (TYP) SUPPLY AIR CEILING DIFFUSER. THROW TO MATCH CEILING HEIGHT. FLEXIBLE DUCTWORK (10' MAX.)
		RETURN AIR GRILLE
		SUPPLY AIR DIFFUSER. THROW TO MATCH CEILING HEIGHT
		(1) CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2) CUSHION HEAD IS EQUAL TO 1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT
		MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE
		EXHAUST FAN
		O.A. DUCT WITH MANUAL DAMPER FROM RETURN AIR TRUNK DUCT
		GF-XX MULTI-POSITION CONDENSING GAS FURNACE WITH FLEXIBLE CONNECTION AT SUPPLY & RETURN DUCT. PROVIDE WITH DRAIN PAN & VIBRATION ISOLATORS AS REQUIRED.
		CU-XX OUTDOOR UNIT ON CONC. PAD. PAD TO EXTEND 6" EACH SIDE OF UNIT
		7-DAY "WIFI" PROGRAMMABLE THERMOSTAT WITH AUTO-CHANGEOVER

DIFFUSER / GRILLE SCHEDULE						
CFM	NECK SIZE	MAKE *	MODEL	MATERIAL	TYPE	DUCT SIZE
125-225	9x9	METAL-AIRE	SERIES 5000	EXTRUDED ALUMINUM	SUPPLY	8" RND
250	12x12	METAL-AIRE	SERIES 5000	EXTRUDED ALUMINUM	SUPPLY	10" RND
700	16x16	METAL-AIRE	SERIES CC5F	ALUMINUM	RETURN	14" RND

- NOTES:
- ALL BRANCH DUCTS AND RUN OUTS SHALL HAVE MANUAL LOCKING QUADRANT BALANCING DAMPERS.
  - ALL DIFFUSERS, REGISTERS AND GRILLES SHALL BE FACTORY INSULATED.
  - PANEL / FACE SHALL BE SUITABLE FOR CEILING TYPE.
  - SUPPLY AIR DIFFUSER'S THROW SHALL MATCH CEILING HEIGHT IN SPACE IT SERVES.
  - MAX NC LEVEL - 20
  - \* - EQUAL BY ANEMOSTAT OR TITUS

#### GENERAL MECHANICAL NOTES:

- ALL WORK SHALL BE IN COMPLIANCE WITH LOCAL, STATE, AND NATIONAL CODES.
- DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT NOT SHOWN SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE IN CONSTRUCTION IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK.
- ALL HARD ROUND DUCTWORK SHALL BE GALVANIZED STEEL AS OR APPROVED EQUAL. LOCK FORMING SHALL MEET ASTM A-527 STANDARDS. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUN OUTS SHALL NOT EXCEED 10'-0" AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
- SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-8 AND AN ATTACHED VAPOR BARRIER. DIFFUSERS SHALL BE INSULATED WITH FIBERGLASS INSULATION WITH VAPOR BARRIER. ALL JOINTS SHALL BE TAPED TO PROVIDE A CONTINUOUS VAPOR BARRIER.
- DUCT SIZES SHOWN ARE NET DIMENSIONS. DUCT SIZES SHOULD BE INCREASED TO ALLOW FOR LINING WHEN USED. DUCT LINER SHALL BE INSTALLED FROM THE A.H.U. RETURN TO THE FIRST 90 DEG. ELBOW OR IF NO ELBOW, FROM UNIT RETURN TO 10'-0" DOWNSTREAM. ACOUSTICAL LINER SHALL BE 1" THICK X 1/2LB. DENSITY. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
- EXHAUST FANS AND DUCTWORK BY MECHANICAL CONTRACTOR. WIRING FOR EXHAUST FANS BY ELECTRICAL CONTRACTOR.
- MECHANICAL CONTRACTOR TO PROVIDE AN AIR BALANCE REPORT UPON COMPLETION OF WORK TO OWNER AND LOCAL BUILDING INSPECTOR.
- CONDENSING GAS FURNACE SHALL BE PER MANUFACTURER'S INSTRUCTION VENTED TO EXTERIOR FOR SEPARATION OF COMBUSTION AIR & FLUE GASES.

#### MECHANICAL SUMMARY

MECHANICAL SYSTEMS SERVICE SYSTEMS AND EQUIPMENT:

Thermal Zone	IV
Winter dry bulb	16 deg. F
Summer dry bulb	92 deg. F
Interior Design Conditions	
Winter dry bulb	68 deg. F
Summer dry bulb	75 deg. F
Relative humidity	50 %
Building Heating Load	90 MBH TOTAL
Building Cooling Load	3.5 TONS
Mechanical Spacing Conditioning System	
Unitary	
Description of unit	(2) CONDENSING GAS FURNACES
Heating efficiency	92.1%
Cooling efficiency	14 SEER MIN.
Size category of unit	>65,000 BTU/HR.
Boiler	
Size category. If oversized, state reason.	N/A
Chiller	
Size category. If oversized, state reason.	N/A
List Equipment Efficiencies	
Equipment Schedules with Motors (mechanical systems)	
Motor horsepower	N/A
Number of phases	
Minimum efficiency	
Motor type	
# of poles	

#### EQUIPMENT SCHEDULE

##### CONDENSING GAS FURNACE SCHEDULE

GF-1
1,400 CFM TOTAL
350 CFM O.A.
42,000 BTU/HR. COOLING
60,000 BTU/HR. HEAT IN
58,300 BTU/HR. HEAT OUT
120V 10
MCA 11.8
MOCP 15
CU-1
NOM. 3.5 TONS
208V 10
MCA 22
MOCP 35
14 SEER MIN.

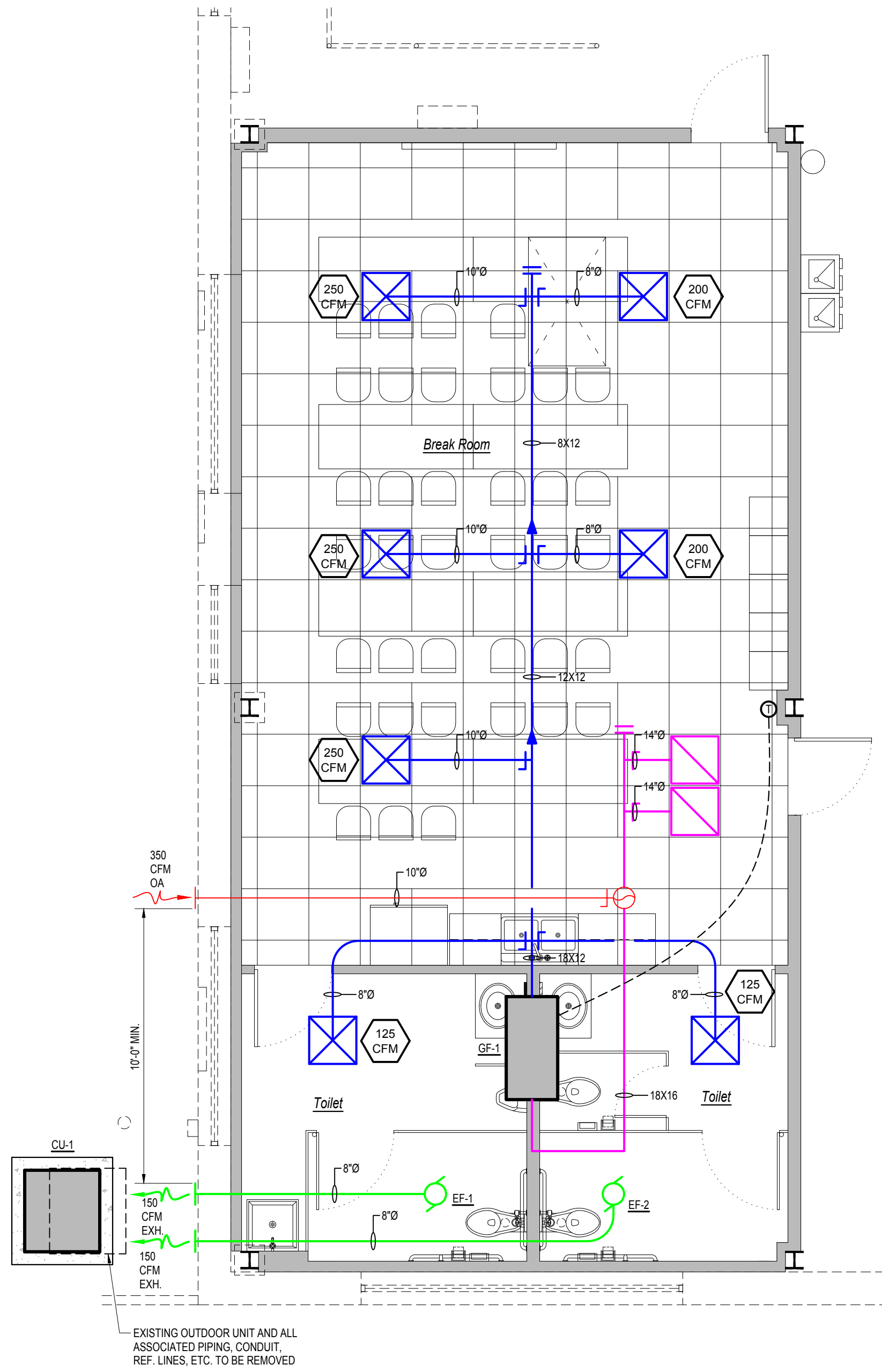
- NOTES:
- PROVIDE COOLING COIL FOR RATED CAPACITY. MAX 0.5 EXT. SP. DROP, AND SCHEDULED AIR FLOW. COIL SHALL HAVE ASHRAE FULLY DRAINABLE CONDENSATE PAN AND AUTO SHUT-OFF TO PREVENT CONDENSATE OVERFLOW.
  - PROVIDE WITH HUMIDITY CONTROL THERMOSTAT.
  - EQUIPMENT TO BE TRANE OR EQUAL.

#### CABINET EXHAUST FAN SCHEDULE

MARK	MAKE	MODEL	TYPE	CFM	EX. SP.	WATTS	ELECTRICAL		
							VOLT	PH.	HZ.
EF-1 & 2	GREENHECK OR EQUAL	SP-A190	CABINET EXHAUST	150	0.25	113	120	1	60

##### NOTES:

- INTERLOCK EXHAUST FANS WITH LIGHTS
- PROVIDE EXHAUST FANS WITH DISC, BDD, BIRD SCREEN & WALL CAP

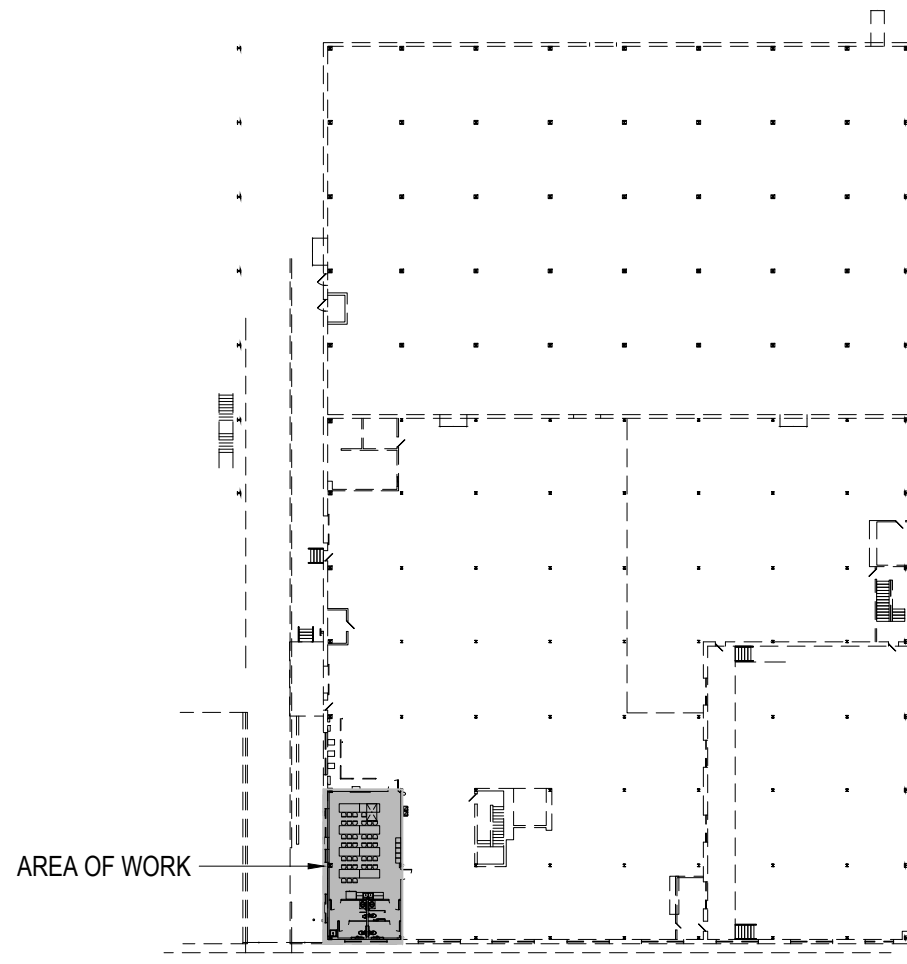


#### BREAK ROOM MECHANICAL PLAN

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

##### GENERAL HVAC DEMO NOTE:

REMOVE ALL EXISTING UNUSED HVAC EQUIPMENT, DUCTWORK, GRILLES, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.



#### KEY PLAN

NTS

#### OUTSIDE AIR / EXHAUST SUMMARY

Per Table 403.3 NC Mechanical Code

##### OUTSIDE AIR REQUIRED:

Break Room	
46 PEOPLE X 5 CFM / PERSON =	230 CFM
680 SQ. FT. X 0.06 CFM / SQ. FT. =	41 CFM

TOTAL OUTSIDE AIR REQUIRED=	271 CFM
TOTAL OUTSIDE AIR PROVIDED=	350 CFM

##### EXHAUST AIR REQUIRED:

Toilets	
4 FLUSHING FIXTURES @ 70 CFM / FLUSHING FIXTURE	280 CFM

TOTAL EXHAUST REQUIRED=	280 CFM
TOTAL EXHAUST PROVIDED=	300 CFM

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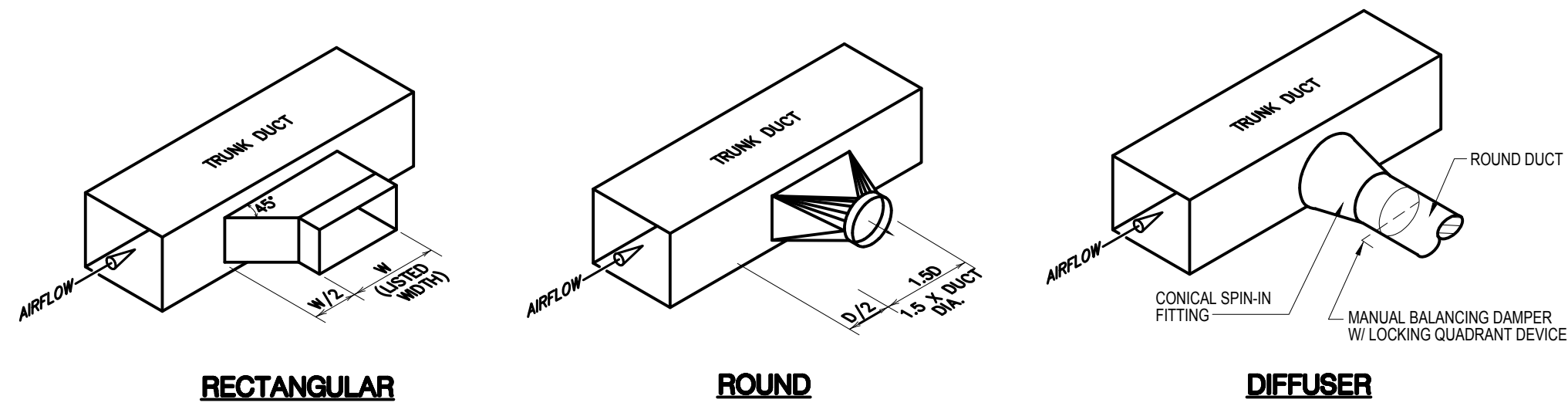
Title Sheet: BREAK ROOM MECHANICAL PLAN

Project: TOILET / BREAK ROOM REMODEL  
& BACKUP GENERATOR  
City of Rocky Mount Warehouse  
724 Albemarle Ave.

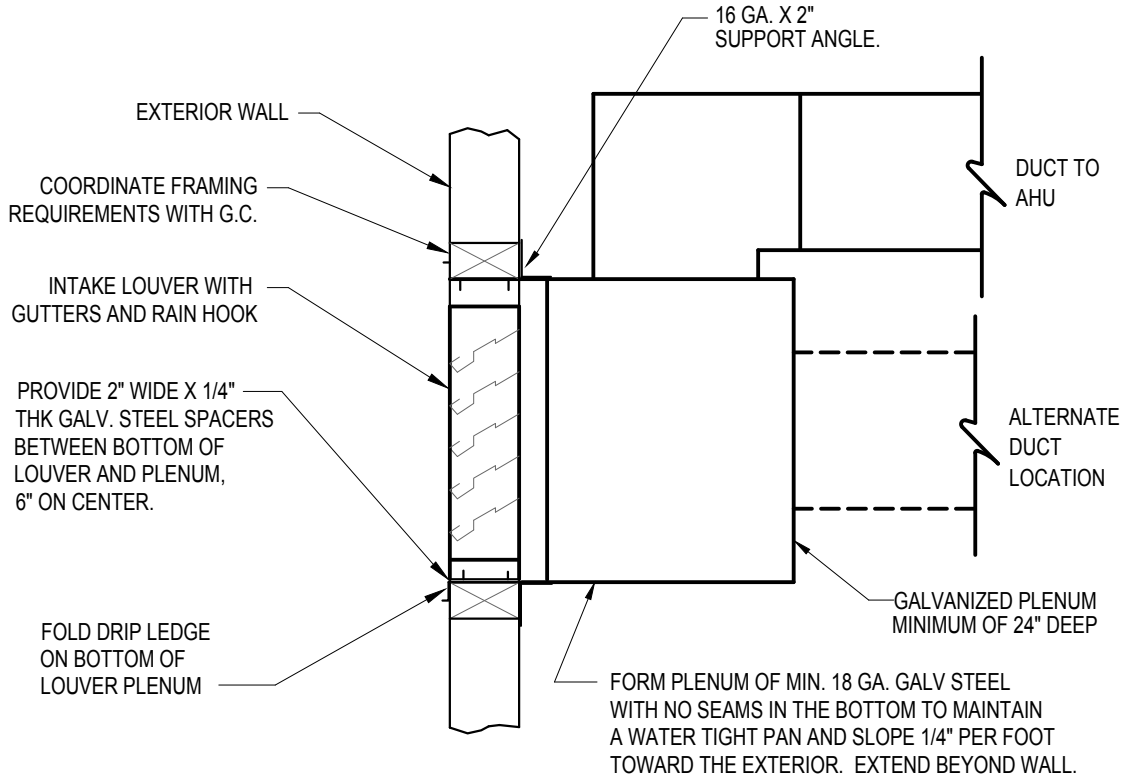
Drawn by: JLT  
Issue Date: 04-13-22  
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Sheet:

M-1

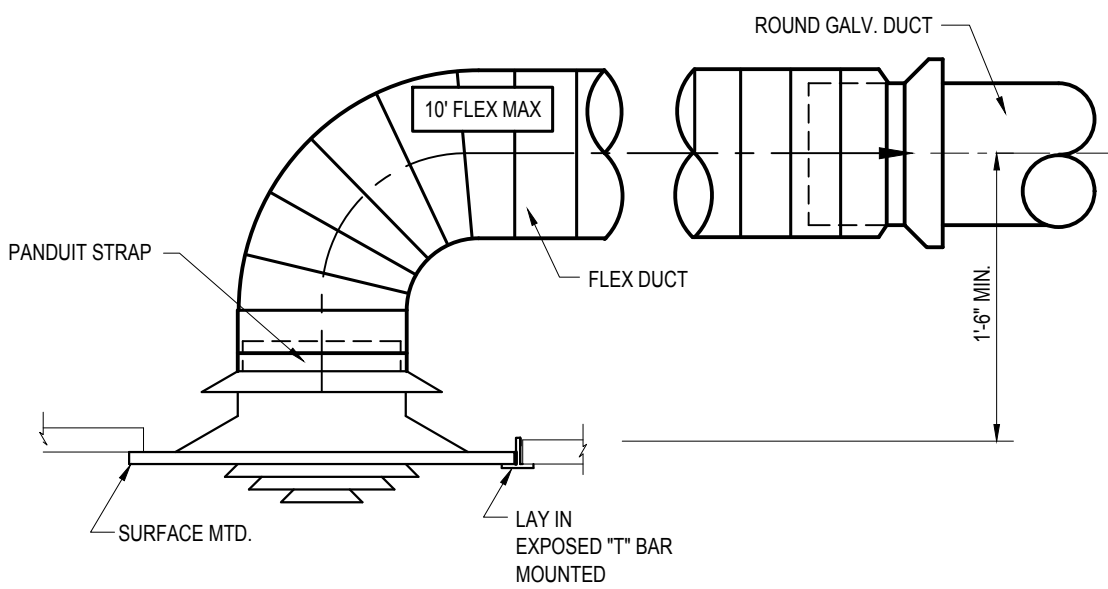




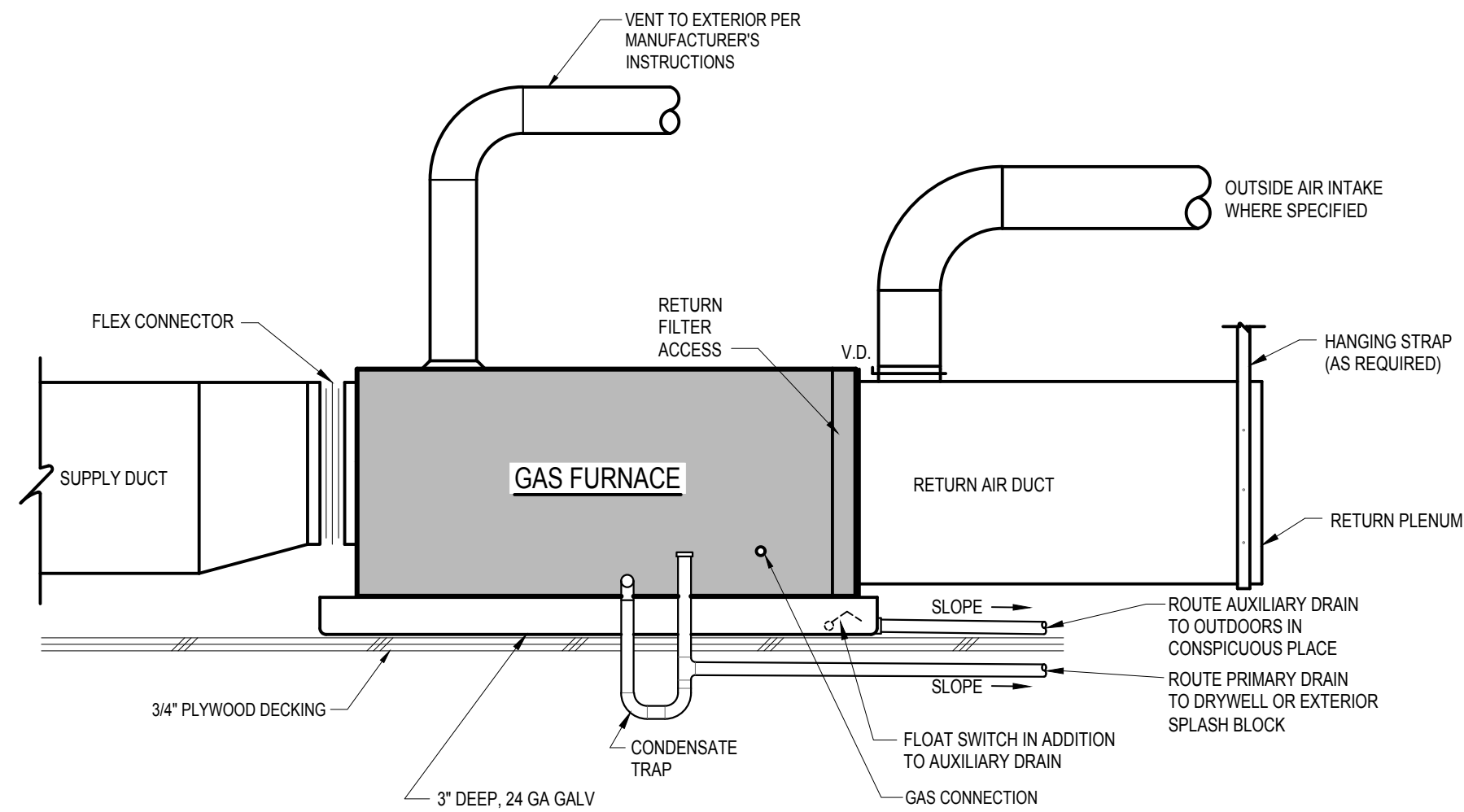
DETAIL-LATERAL TO REGISTER OR BRANCH DUCT  
NOT TO SCALE



DETAIL-MAKE-UP AIR LOUVER  
NOT TO SCALE

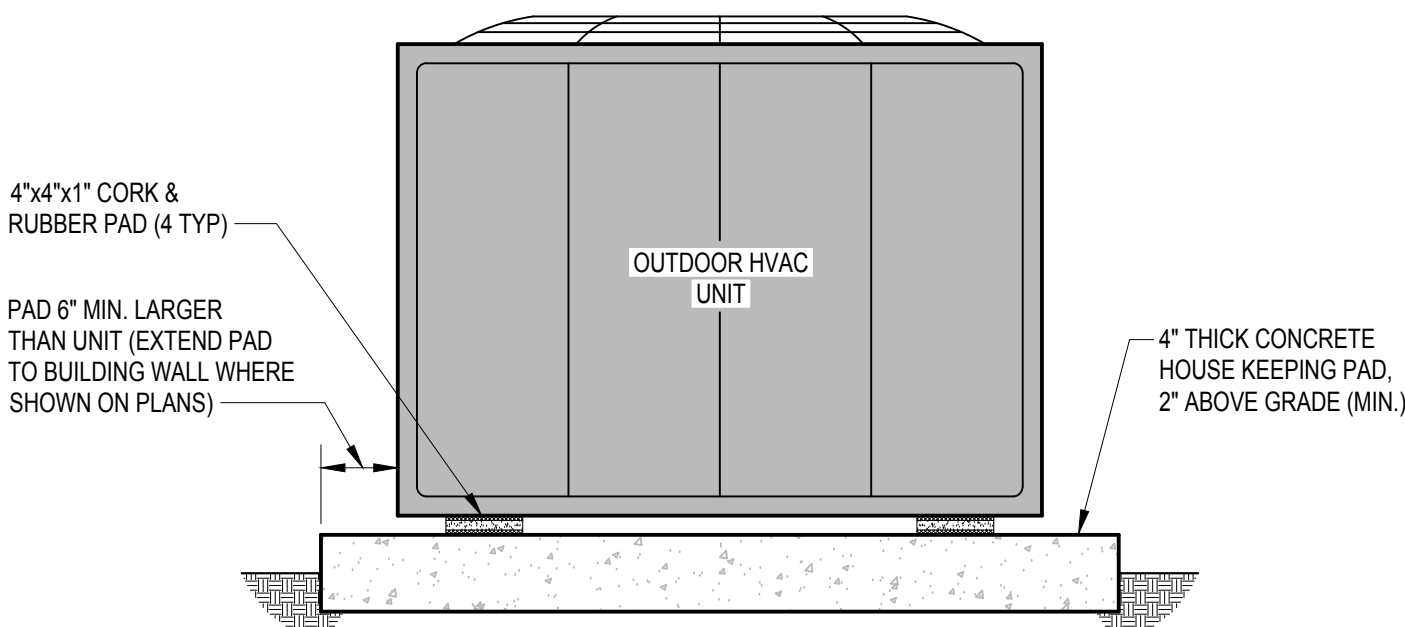


DETAIL-CEILING DIFFUSER CONNECTION  
NOT TO SCALE



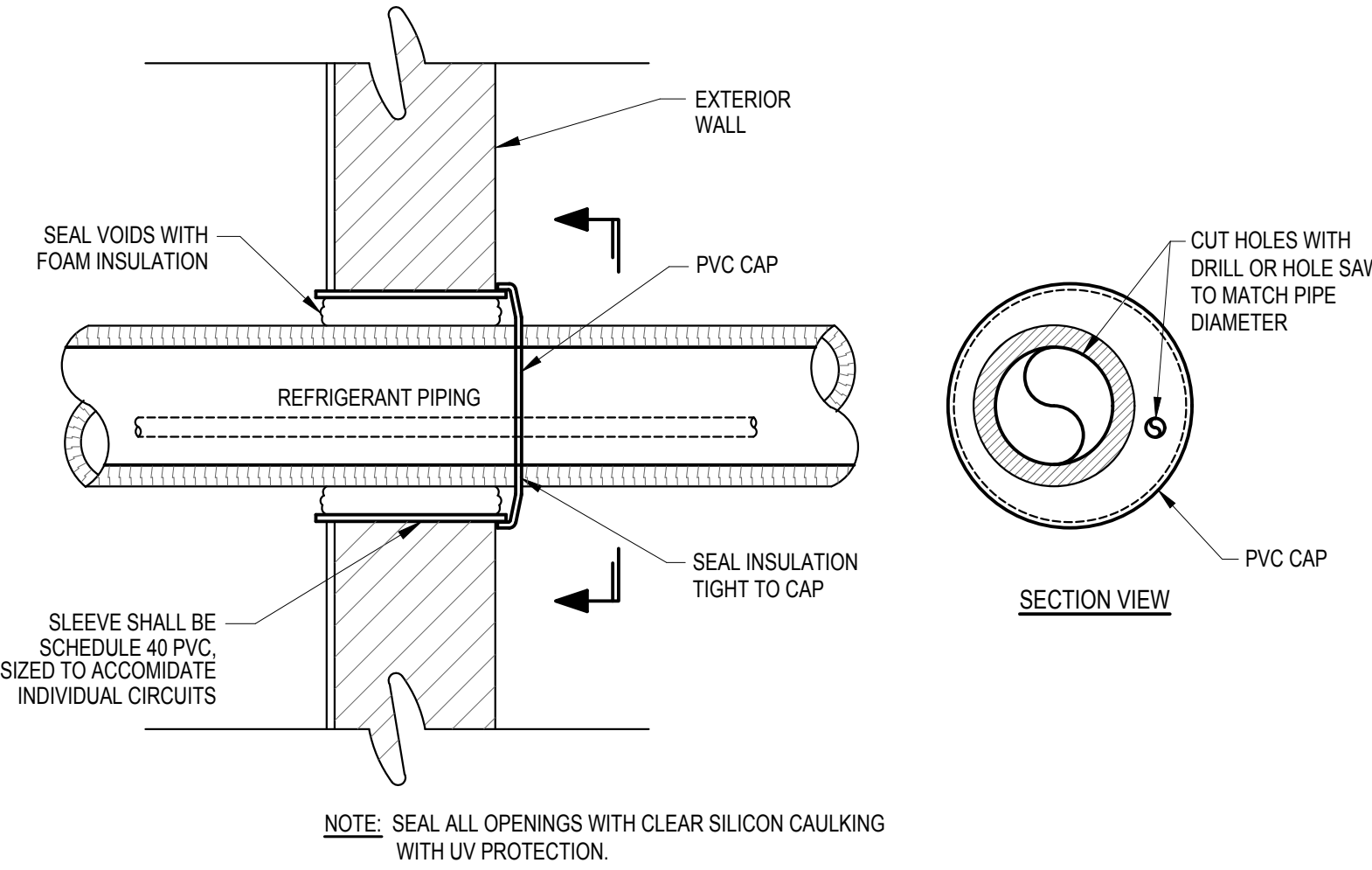
- NOTES:
1. TRAP, DRAIN & VENT PIPING SHALL BE 1" SCHEDULE 40 PVC UNLESS NOTED OTHERWISE ON PLANS.
  2. TRAP & PRIMARY DRAIN PIPING SHALL BE INSULATED WITH 1/2" UNICELLULAR INSULATION.

DETAIL-GAS FURNACE  
NOT TO SCALE



NOTE: MAINTAIN EQUIPMENT MFG'S. RECOMMENDED CLEARANCES AND A MINIMUM OF 6" BEYOND SPLASH LINE OF ROOF OVERHANG.

DETAIL-OUTDOOR UNIT  
NOT TO SCALE



DETAIL-REFRIGERANT PIPE PENETRATION EXTERIOR WALL  
NOT TO SCALE

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ENGINEER

04-13-22

Title Sheet:

MECHANICAL DETAILS

Project:

TOILET / BREAK ROOM REMODEL  
& BACKUP GENERATOR

City of Rocky Mount Warehouse

724 Albemarle Ave.

Drawn by:

JLT

Issue Date:

04-13-22



Project Number:

22-556

Sheet:

M-2



LIGHT FIXTURE SCHEDULE						
SYMBOL	MANUFACTURER	DESCRIPTION	LAMPS			MOUNTING
			NO.	WATTS	TYPE	
	EELP OR EQUAL	VersaLED 2X4 LED LIGHTING PANEL WITH ACRYLIC LENS. 120V 4,852 LUMENS, 4,000K COLOR TEMP.	-	50	LED'S	LAY-IN
	EELP OR EQUAL	VersaLED 2X4 LED LIGHTING PANEL WITH ACRYLIC LENS. 120V 4,852 LUMENS, 4,000K COLOR TEMP.	-	50	LED'S	SURFACE
	LITHONIA OR EQUAL	ARCHITECTURAL "LED" VANITY LIGHT. 4,000K COLOR TEMP. 120V	3	11	LED'S	WALL
	LITHONIA OR EQUAL	LED EXIT/EMERGENCY COMBO LIGHT WITH BATTERY BACKUP. 120V DUAL REMOTE READY AT EXTERIOR DOOR	-	-	LED'S	WALL
	LITHONIA OR EQUAL	LED EMERGENCY LIGHT WITH BATTERY BACKUP. 120V	-	-	LED'S	WALL
	LITHONIA OR EQUAL	REMOTE DUAL HEAD POWERED FROM EMERGENCY LIGHT BATTERY PACK WET/DAMP LOCATION. 120V	-	-	LED'S	WALL
NOTES:  NOTE (1) - FIXTURES SHALL HAVE DISCONNECTING MEANS MEETING THE REQUIREMENTS OF NEC ARTICLE 410.130(G).  NOTE (2) - COORDINATE ALL FIXTURE REQUIREMENTS, COLOR TEMP, CRI (COLOR RENDERING INDEX) ETC. WITH OWNER PRIOR TO INSTALLATION.  NOTE (3) - SHIFT LOCATIONS OF FIXTURES IN MECHANICAL AREAS IF/AS REQUIRED TO BEST LIGHT SPACES & AVOID CONFLICTS WITH DUCTS, PIPING, ETC.  NOTE (4) - PROVIDE CHANNEL SUPPORTS WITH HANGER RODS, ETC. WHERE NECESSARY TO SUSPEND FIXTURES BENEATH DUCTWORK, PIPING, ETC.						

LIGHTING DATA FOR N.C. ENERGY CODE (UPFIT AREA ONLY)					
AREA USE	SQ. FT.	WATTS PER SQ.FT. ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
BREAK ROOM	975	0.89	867.75	566	301.75

GENERAL ELECTRICAL NOTES:

- WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE (NEC), STATE BUILDING CODE, AND ALL REQUIREMENTS OF THE LOCAL INSPECTOR. ALL WORK SHALL BE BY LICENSED ELECTRICAL CONTRACTOR.
- ALL BRANCH CIRCUITS SHALL BE E.M.T., RIGID CONDUIT OR MC CABLE AS PERMITTED OR REQUIRED. RIGID CONDUIT SHALL BE USED FOR CIRCUITS UNDER SLAB ON GRADE, OR WHERE APPROVED SCHEDULE 80 PVC MAY BE USED.
- ALL CONDUCTORS SHALL BE COPPER.
- ALL EQUIPMENT LOADS SHALL BE VERIFIED BEFORE EQUIPMENT AND/OR CIRCUIT INSTALLATION. VERIFY LOCATION OF ALL RECEPTACLES & DATA / TELE. BOXES WITH OWNER PRIOR TO INSTALLATION.
- PROVIDE GREEN GROUNDING CONDUCTOR CONTINUOUS FROM DEVICE TO PANEL GROUND BAR. PROVIDE DRIVEN GROUND ROD AND COLD WATER GROUND FOR MAIN SERVICE AND ALL POINTS PER N.E.C. REQUIREMENTS.
- EMT FITTINGS SHALL BE HEXAGONAL ALL STEEL, COMPRESSION TYPE.
- RECEPTACLES AND SWITCHES SHALL BE COMMERCIAL GRADE BRYANT, SIERRA, LEVITON BRAND EXCEPT AS SPECIFIED.
- ALL WALL OUTLET BOXES SHALL BE STEEL CITY OR RACO WITH PLATES.
- ALL CIRCUITS SHALL BE TESTED WITH 500 VOLT TESTER PRIOR TO ENERGIZING.
- ELECTRICAL CONTRACTOR SHALL CONNECT TO TERMINALS OF MECHANICAL EQUIPMENT AND EQUIPMENT SUPPLIED BY OWNER.
- EXHAUST FANS & DUCTWORK BY MECHANICAL CONTRACTOR. WIRING FOR EXHAUST FANS BY ELECTRICAL CONTRACTOR.
- MOUNTING HEIGHTS FOR ALL SWITCHES & RECEPTACLES TO BE ADA COMPLIANT PER ANSI A117.1.

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT:

Method of Compliance :

- ☒ Prescriptive (Energy Code) ☐ Prescriptive (ASHRAE 90.1)  
☐ Performance (Energy Code) ☐ Performance (ASHRAE 90.1)

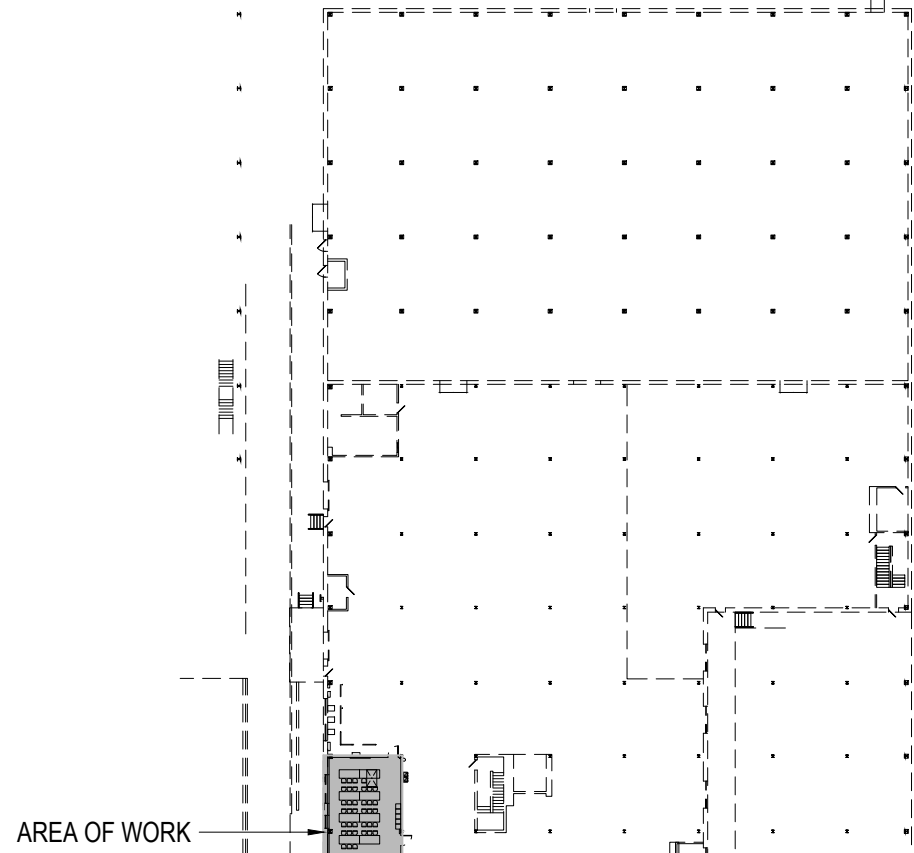
Lighting Schedule

Lamp type required in fixture \_\_\_\_\_ THIS SHEET  
Number of lamps in fixture \_\_\_\_\_  
Ballast type used in fixture \_\_\_\_\_  
Number of ballasts in fixture \_\_\_\_\_  
Total wattage per fixture \_\_\_\_\_  
Total interior wattage specified -vs- allowed \_\_\_\_\_  
Total exterior wattage specified -vs- allowed \_\_\_\_\_

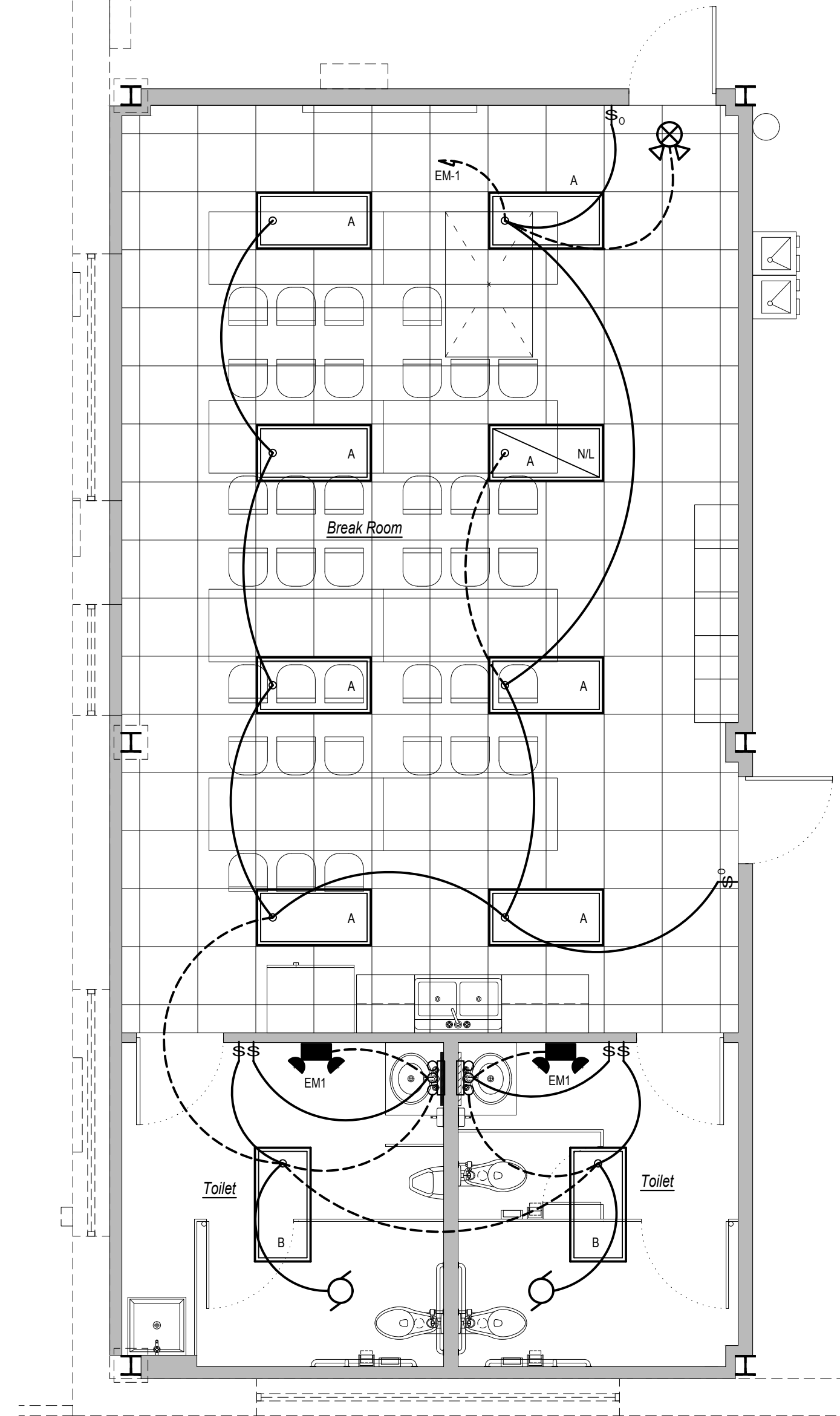
Additional Prescriptive Compliance

- ☐ 306.2.1 More Efficient Mechanical Equipment  
☐ 306.2.2 Reduced Lighting Power Density  
☐ 306.2.3 Energy Recovery Ventilation Systems  
☐ 306.2.4 Higher Efficiency Service Water Heating  
☐ 306.2.5 On-Site Supply of Renewable Energy  
☐ 306.2.6 Automatic Daylighting Control Systems

TIE NEW EXIT / EMERGENCY LIGHT INTO EXISTING LOCAL LIGHTING CIRCUIT AS REQUIRED. VERIFY EXACT LOCATION & CONDITIONS AT SITE PRIOR TO CONSTRUCTION



KEY PLAN  
NTS



NOTE:  
ALL LIGHTING FOR UPFIT AREA IS POWERED FROM NEW EMERGENCY PANEL "EM" & BACKUP GENERATOR

BREAK ROOM ELECTRICAL -  
LIGHTING PLAN  
SCALE: 1/4" = 1'-0"

GENERAL DEMO NOTE:

REMOVE ALL EXISTING UNUSED ELECTRICAL DEVICES, FIXTURES, BOXES, SWITCHES, WIRING, DISCONNECTS, CONDUIT, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

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City of Rocky Mount Warehouse  
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E-1

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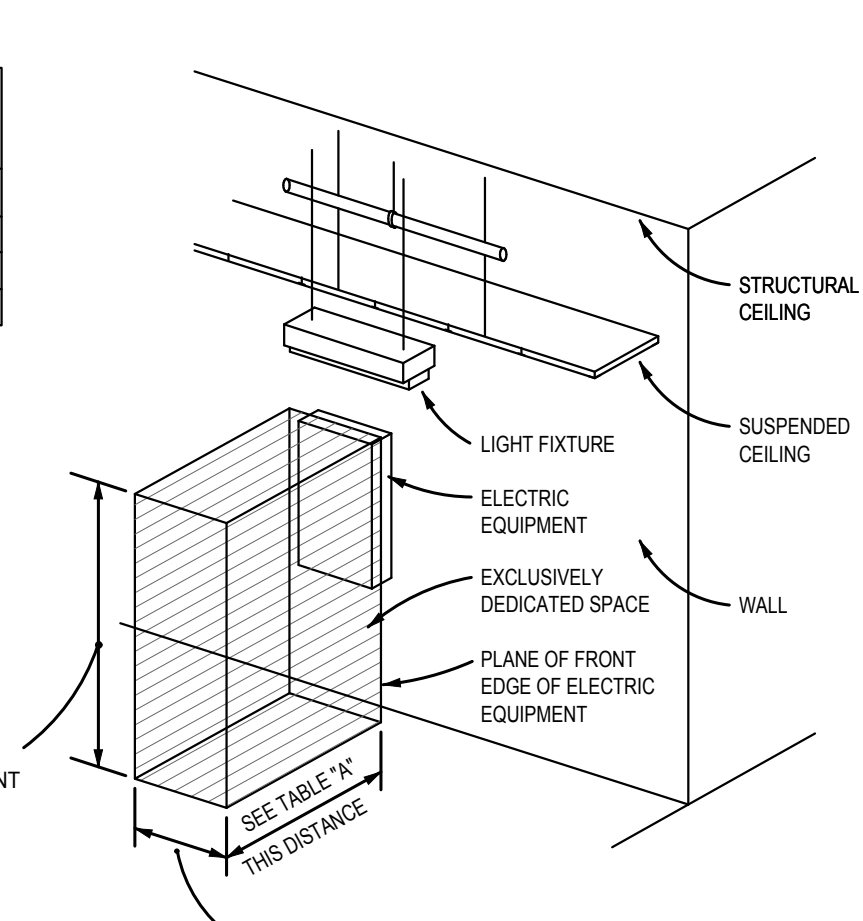
ELECTRICAL LEGEND			
MARK	DESCRIPTION	MARK	DESCRIPTION
	"LED" LIGHT FIXTURE (WALL/CEIL.)		"GFCI" DUPLEX RECEPTACLE
	"LED" LIGHT FIXTURE		"GFCI" DUPLEX RECEPTACLE IN WEATHER-PROOF COVER
	"LED" UNSWITCHED LIGHT FIXT. WITH BATTERY STANDBY (SECURITY/ EMERGENCY LT.)		FUSED DISCONNECT SWITCH
	SINGLE-POLE SWITCH		EXHAUST FAN
	"LED" COMBO EXIT/EM. LIGHT		SWITCHED BRANCH CIRCUIT
	"LED" BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)		UNSWITCHED BRANCH CIRCUIT
	3-WAY SWITCH (4-WAY)		HOMERUN
	PASSIVE DUAL TECHNOLOGY OCCUPANCY WALL SENSOR SWITCH		VOICE/DATA 1" CONDUIT TO ABV. CEILING
	DUPLEX RECEPTACLE		JUNCTION BOX
	DUPLEX RECEPTACLE ABOVE COUNTER		

TABLE "A" WORKING CLEARANCES			
VOLTAGE TO GROUND (NOMINAL)	CONDITION: 1	2	3
	(MINIMUM CLEAR DISTANCE)		
0-150	3'	3'	3'
151-600	3'	3 1/2'	4'

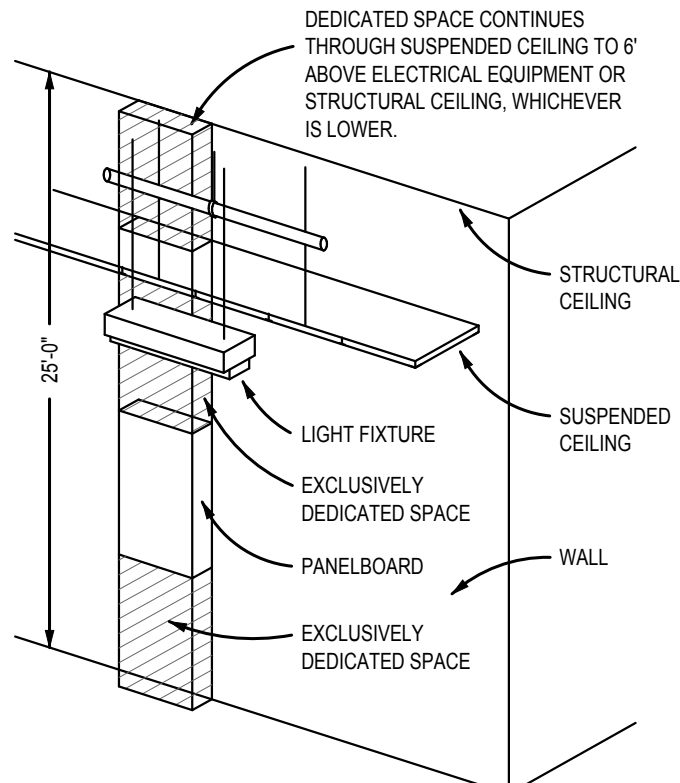
- WHERE THE "CONDITIONS" ARE AS FOLLOWS:
1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR GROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300 VOLTS SHALL NOT BE CONSIDERED LIVE PARTS.
  2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
  3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

NOTES:

1. THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF ELECTRICAL EQUIPMENT REQUIRED BY NEC SECTION 110-26.
2. THIS INCLUDES BUT IS NOT LIMITED TO PANELBOARDS, SAFETY SWITCHES, MOTOR STARTERS, JUNCTION BOXES AND OTHER ELECTRICAL EQUIPMENT.



ALL ELECTRIC EQUIPMENT



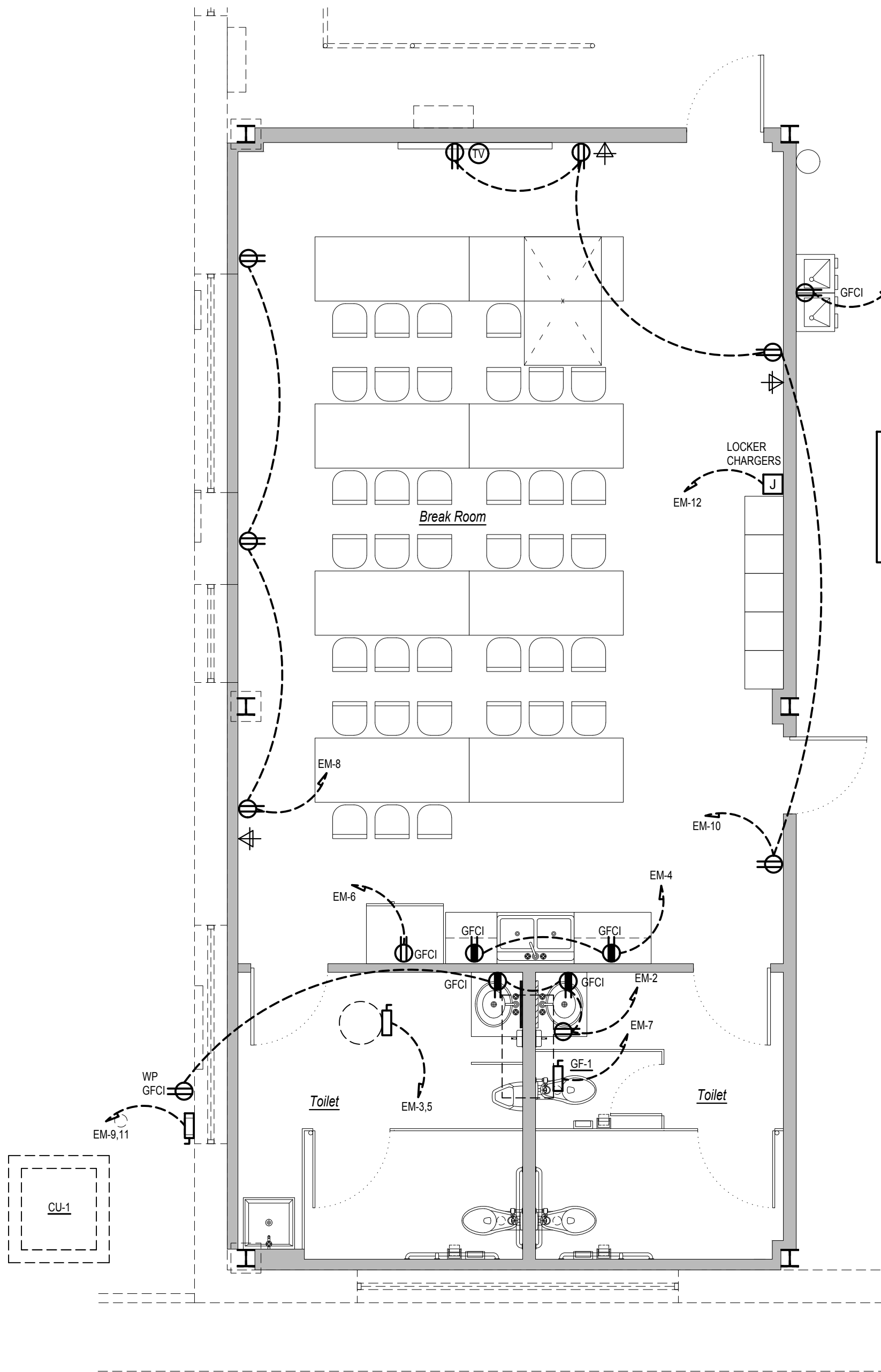
NOTES:

1. THIS FIGURE ILLUSTRATES THE ADDITIONAL EXCLUSIVELY DEDICATED SPACE REQUIRED OVER AND UNDER PANELBOARDS FOR CABLES, RACEWAYS, ETC. TO AND FROM PANELBOARDS REQUIRED BY NEC SECTION 110-26.
2. NO PIPING, DUCTWORK OR EQUIPMENT FOREIGN TO THE ELECTRICAL EQUIPMENT OR ARCHITECTURAL APPURTENANCES SHALL BE PERMITTED TO BE INSTALLED IN, ENTER OR PASS THROUGH THE DEDICATED SPACES SHOWN. FOR EXCEPTIONS SEE NEC SECTION 110-26F.

PANELBOARDS

## DEDICATED WORKING SPACE REQUIREMENTS

NO SCALE

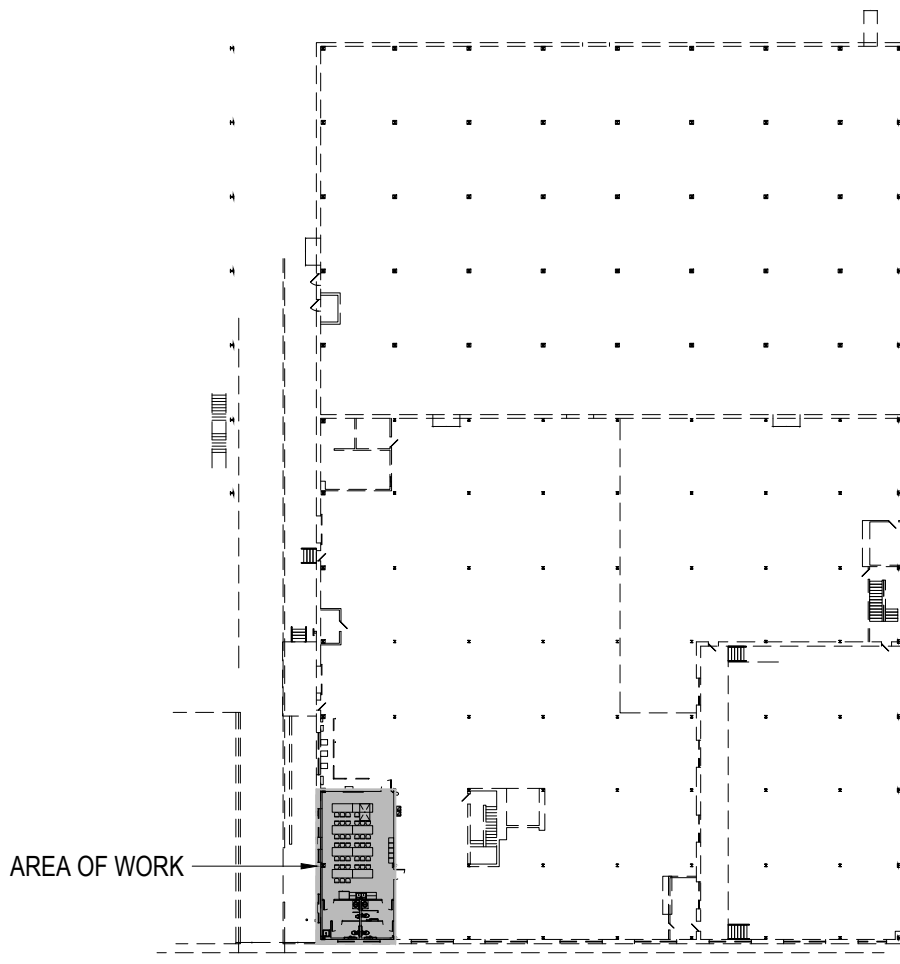


## BREAK ROOM ELECTRICAL - POWER PLAN

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

GENERAL DEMO NOTE:

REMOVE ALL EXISTING UNUSED ELECTRICAL DEVICES, FIXTURES, BOXES, SWITCHES, WIRING, DISCONNECTS, CONDUIT, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.



## KEY PLAN

NTS

Prepared for:

James Miller & Assoc. PA

NC LICENSE NO. C-1926

209 Price Street

Roanoke Rapids, NC 27870

Tel: 252.203.1607

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Rev: Description

Date:

Rev:

Title Sheet: BREAK ROOM ELECTRICAL - POWER PLAN

Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR

City of Rocky Mount Warehouse

724 Albemarle Ave.

Drawn by:

JLT

Issue Date:

04-13-22

Project Number:

22-556

Sheet:

E-2

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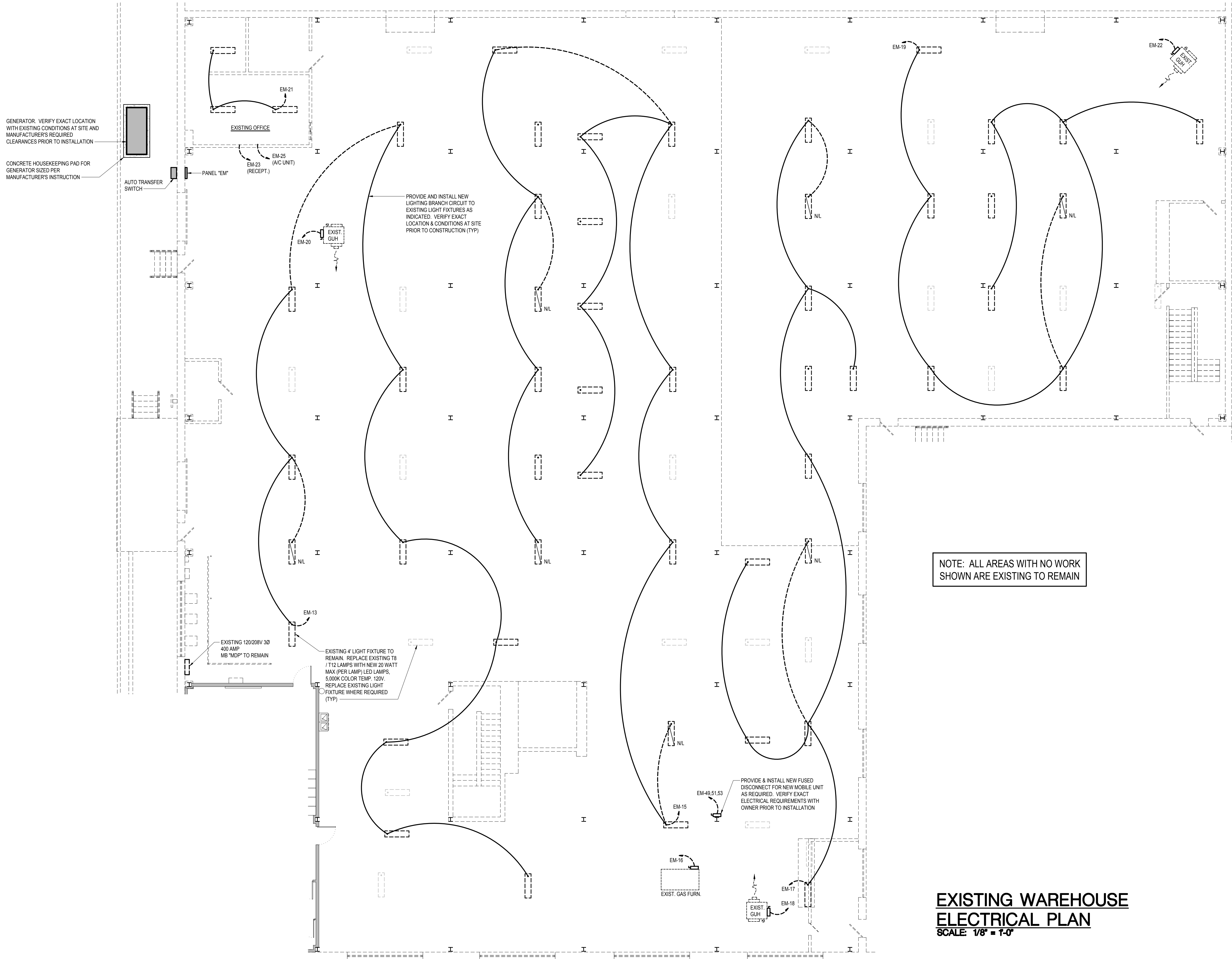
CONSULTING ENGINEERS, P.A.

STRUCTURAL ENGINEERS

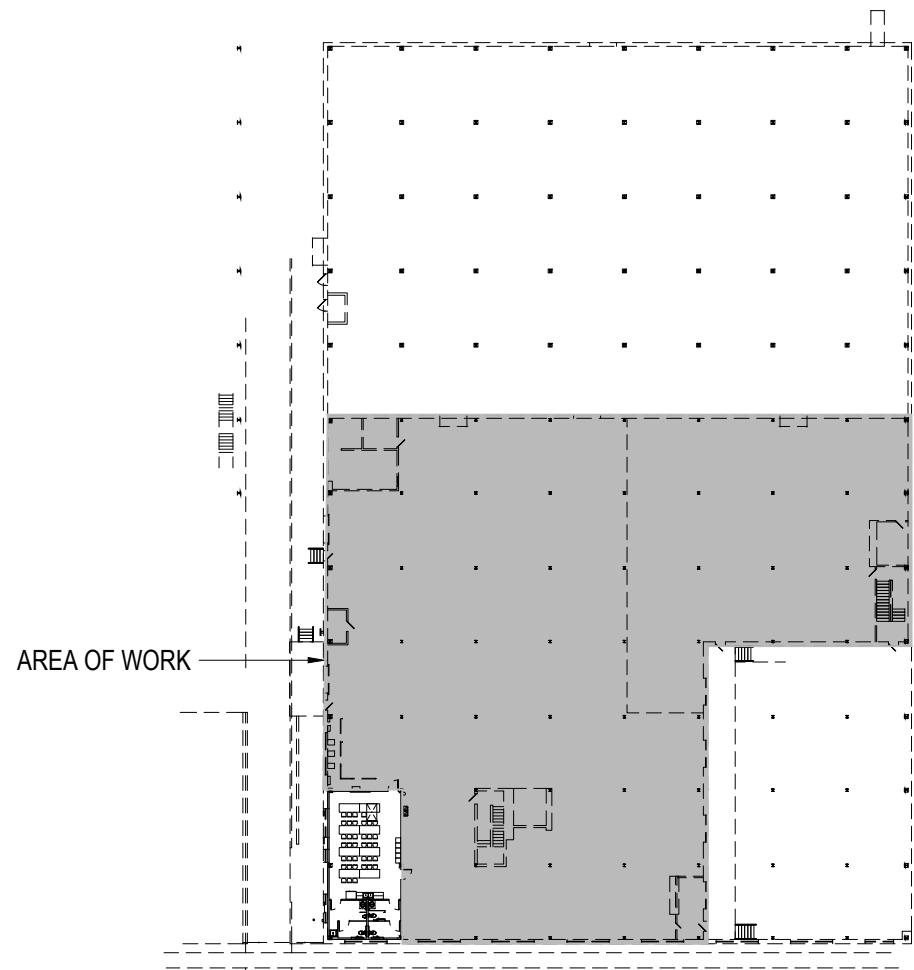
COMPREHENSIVE

ENVIRONMENTAL SERVICES





**EXISTING WAREHOUSE ELECTRICAL PLAN**  
SCALE: 1/8" = 1'-0"



**KEY PLAN**  
NTS

**GENERAL DEMO NOTE:**

REMOVE ALL EXISTING UNUSED ELECTRICAL DEVICES, FIXTURES, BOXES, SWITCHES, WIRING, DISCONNECTS, CONDUIT, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

Prepared for:

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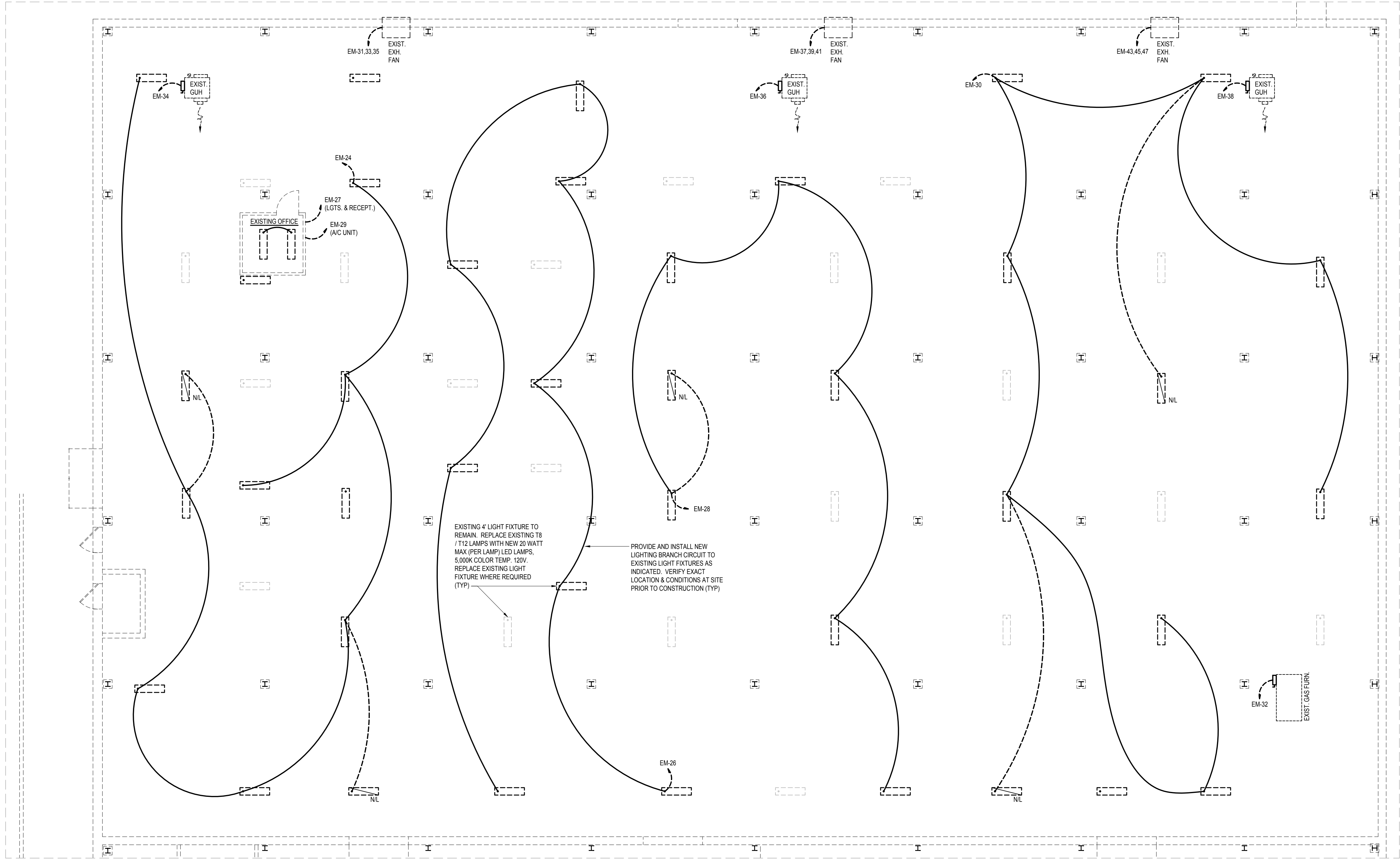
Rev.	Date:	Description:

Title Sheet: **EXISTING WAREHOUSE ELECTRICAL PLAN**

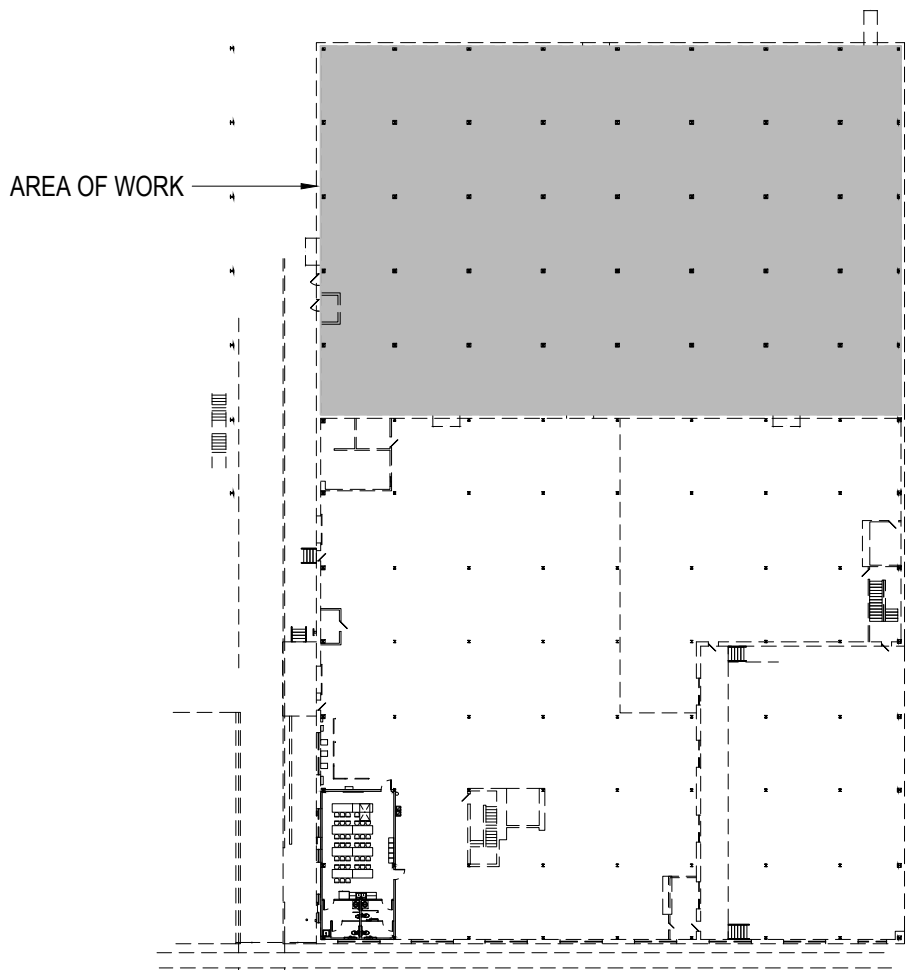
Project: **TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR**  
**City of Rocky Mount Warehouse**  
**724 Albemarle Ave.**

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
Sheet: **E-3**





**EXISTING WAREHOUSE  
ELECTRICAL PLAN**  
SCALE: 1/8" = 1'-0"



**KEY PLAN**  
NTS

NOTE: ALL AREAS WITH NO WORK  
SHOWN ARE EXISTING TO REMAIN

**GENERAL DEMO NOTE:**

REMOVE ALL EXISTING UNUSED  
ELECTRICAL DEVICES, FIXTURES,  
BOXES, SWITCHES, WIRING,  
DISCONNECTS, CONDUIT,  
ETC. AS REQUIRED. DISPOSE OF ALL  
MATERIALS PROPERLY.

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Rev.	Date:	Description:

Title Sheet: **EXISTING WAREHOUSE ELECTRICAL PLAN**

Project: **TOILET / BREAK ROOM REMODEL  
& BACKUP GENERATOR  
City of Rocky Mount Warehouse  
724 Albemarle Ave.**

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
Sheet:



SG060 | 4.5L | 60 kW  
INDUSTRIAL SPARK-IGNITED GENERATOR SET  
EPA Certified Stationary



DEMAND RESPONSE READY

Standby Power Rating  
60 kW, 75 kVA, 60 Hz

Demand Response Rating  
60 kW, 75 kVA, 60 Hz

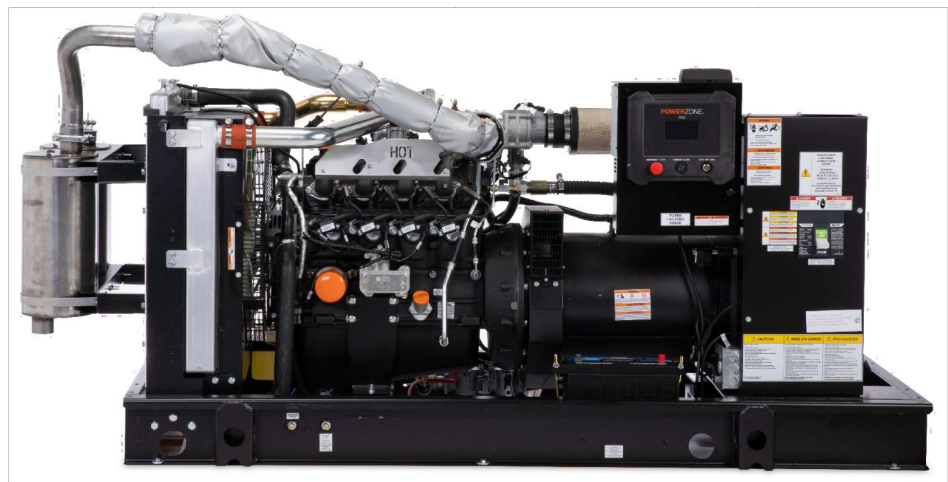


Image used for illustration purposes only

Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.

	UL2200, UL6200, UL1236, UL489
	CSA C22.2
	BS5514 and DIN 6271
	SAE J1349
	NFPA 37, 70, 99, 110
	NEC700, 701, 702, 708
	ISO 3046, 7637, 8528, 9001
	NEMA ICS10, MG1, 250, ICS6, AB1
	ANSI C62.41
	IBC 2009, CBC 2010, IBC 2012, ASCE 7-05, ASCE 7-10, ICC-ES AC-156 (2012)

Powering Ahead

Generac ensures superior quality by designing and manufacturing most of its generator components, such as alternators, enclosures, control systems and communications software. Generac also makes its own spark-ignited engines, and you'll find them on every Generac gaseous-fueled generator. We engineer and manufacture them from the block up — all at our facilities throughout Wisconsin. Applying natural gas and LP-fueled engines to generators requires advanced engineering expertise to ensure reliability, durability and necessary performance. By designing specifically for these dry, hotter-burning fuels, the engines last longer and require less maintenance. Building our own engines also means we control every step of the supply chain and delivery process, so you benefit from single-source responsibility.

Plus, Generac Industrial Power's distribution network provides all parts and service so you don't have to deal with third-party suppliers. It all leads to a positive owner experience and higher confidence level. Generac spark-ignited engines give you more options in commercial and industrial generator applications as well as extended run time from utility-supplied natural gas.

SG060 | 4.5L | 60 kW  
INDUSTRIAL SPARK-IGNITED GENERATOR SET  
EPA Certified Stationary



APPLICATION AND ENGINEERING DATA

DEMAND RESPONSE READY

ENGINE SPECIFICATIONS

General	Lubrication System
Make	Generac
Cylinder #	4
Type	In-Line
Displacement - in <sup>3</sup> (L)	275.0 (4.5)
Bore - in (mm)	4.5 (114.3)
Stroke - in (mm)	4.25 (107.95)
Compression Ratio	9.1:1
Intake Air Method	Turbocharged
Number of Main Bearings	5
Connecting Rods	Forged Steel, Fractured Split, Bushingless
Cylinder Head	Cast Iron
Cylinder Liners	Cast Iron
Ignition	Coil Near Plug Solid State Inductive
Piston Type	Cast Aluminum Flat Top
Crankshaft Type	Forged Steel
Lifter Type	Hydraulic
Intake Valve Material	Stainless Steel
Exhaust Valve Material	Stainless Steel
Hardened Valve Seats	High Steel Iron Alloy
Engine Governing	Engine Electrical System
Governor	Electronic
Frequency Regulation (Steady State)	±0.25%
Oil Pump Type	Gear Driven
Oil Filter Type	Full-Flow Spin-On Cartridge
Crankcase Capacity - qt (L)	21 (20)
Cooling System	
Cooling System Type	Pressurized Closed
Fan Type	Pusher
Fan Speed - RPM	2,100
Fan Diameter - in (mm)	22 (533)
Fuel System	
Fuel Type	Natural Gas, Propane
Fuel Injection	Electronic
Fuel Shut Off	Generac
Operating Fuel Pressure (NG)	5 - 14 (1.2 - 3.5)
- in H <sub>2</sub> O (kPa)	
Operating Fuel Pressure (LP)	7 - 14 (1.7 - 3.5)
- in H <sub>2</sub> O (kPa)	
System Voltage	12 VDC
Battery Charger Alternator	Standard
Battery Size	See Battery Index 0161970S8Y
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0060124Y21	Standard Excitation	Synchronous Brushless
Poles	4	Bearings	Sealed Ball
Field Type	Revolving	Coupling	Direct via Flexible Disc
Insulation Class - Rotor	H	Prototype Short Circuit Test	Yes
Insulation Class - Stator	H	Voltage Regulator Type	Full Digital
Total Harmonic Distortion	<5% (3-Phase Only)	Number of Sensed Phases	All
Telephone Interference Factor (TIF)	<50	Regulation Accuracy (Steady State)	±0.25%

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STANDARD FEATURES

DEMAND RESPONSE READY

ENGINE SYSTEM

- Oil Drain Extension
- Air Cleaner
- Level 1 Fan and Belt Guards (Open Set Only)
- Stainless Steel Flexible Exhaust Connection
- Factory Filled Oil and Coolant
- Critical Silencer
- Oil Temperature Sender with Alarm
- Air Filter Restriction Indicator

FUEL SYSTEM

- NPT Fuel Connection on Frame
- Primary and Secondary Fuel Shutoff

COOLING SYSTEM

- Closed Coolant Recovery System
- UV/Ozone Resistant Hoses
- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

ELECTRICAL SYSTEM

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Boot Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- Class H Insulation Material
- 2/3 Pitch
- Sleeved Stator
- Brushless Excitation
- Sealed Bearing
- Full Load Capacity Alternator

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- Wrapped Exhaust Piping
- Standard Factory Testing
- 2 Year Limited Warranty (Standby and Demand Response Rated Units)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

CONTROL SYSTEM



Power Zone® Pro Controller

- NFPA 110 Level 1 Compliant
- Engine Protective Functions
- Alternator Protective Functions
- Digital Engine Governor Control
- Digital Voltage Regulator
- Multiple Programmable Inputs and Outputs
- Remote Display Capability
- Remote Communication via Modbus® RTU, Modbus TCP/IP, and Ethernet 10/100
- Alarm and Event Logging with Real Time Stamping

- Expandable Analog and Digital Inputs and Outputs
- Remote Wireless Software Update Capable
- Wi-Fi®, Bluetooth®, BMS, and Remote Telemetry
- Built-In Programmable Logic Eliminates the Need for External Controllers Under Most Conditions
- Programmable I/O Channel Properties
- Built-In Diagnostics

Alarms and Warnings

- High/Low Oil Pressure
- High/Low Coolant Level
- High/Low Coolant Temperature
- Sender/Sensor Failure
- High/Low Oil Temperature
- Over Total kW
- Over/Under Speed
- Over/Under Voltage
- Over/Under Frequency
- Over Current
- High/Low Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (IFT Algorithm)

4.3 Inch Color Touch Screen Display

- Resistive Color Touch Screen
- Easily Identifiable Icons
- Multi-Lingual
- On Screen Editable Parameters
- Key Function Monitoring
- Three Phase Voltage, Amperage, kW, kVA, and kVAR
- Selectable Line to Line or Line to Neutral Measurements
- Frequency
- Engine Speed
- Engine Coolant Temperature
- Engine Oil Pressure
- Engine Oil Temperature
- Battery Voltage
- Hourmeter
- Warning and Alarm Indication
- Diagnostics
- Maintenance Events/Information

SG060 | 4.5L | 60 kW  
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EPA Certified Stationary



OPERATING DATA

DEMAND RESPONSE READY

POWER RATINGS

Standby					
Single-Phase 120/240 VAC @1.0pf	60 kW/80 kVA	Amps: 250			
Three-Phase 120/208 VAC @0.8pf	60 kW/75 kVA	Amps: 208			
Three-Phase 120/240 VAC @0.8pf	60 kW/75 kVA	Amps: 181			
Three-Phase 277/480 VAC @0.8pf	60 kW/75 kVA	Amps: 90			
Three-Phase 346/600 VAC @0.8pf	60 kW/75 kVA	Amps: 72			

MOTOR STARTING CAPABILITIES (skVA)

skVA vs. Voltage Dip					
120/240 VAC 10	30%	277/480 VAC 30	30%	208/240 VAC 30	30%
A0060044N21	40	K0060124Y21	124	K0060124Y21	95
A0100044N21	67	K0100124Y21	227	K0100124Y21	171

FUEL CONSUMPTION RATES\*

Natural Gas – scfh (m³/hr)		Propane Vapor – scfh (m³/hr)		Propane Liquid – gph (Lph)	
Percent Load	Standby	Percent Load	Standby	Percent Load	Standby
25%	231 (6.5)	25%	64 (1.8)	25%	2.2 (8.3)
50%	413 (11.7)	50%	152 (4.3)	50%	4.4 (16.6)
75%	601 (17.0)	75%	232 (6.6)	75%	6.6 (24.9)
100%	795 (22.5)	100%	306 (8.7)	100%	8.8 (33.2)

\* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COMBUSTION AIR REQUIREMENTS

Standby	
Air Flow (Fan Air Flow Across Radiator) - Open Set	cfm (m³/min)
Coolant Flow	gpm (Lpm)
Coolant System Capacity	gal (L)
Maximum Operating Ambient Temperature	°F (°C)
Maximum Operating Ambient Temperature (Before Derate)	See Bulletin No. 0169270SSD
Maximum Additional Radiator Backpressure	in H <sub>2</sub> O (kPa)

COMBUSTION AIR REQUIREMENTS

Standby	
Flow at Rated Power - cfm (m³/min)	136 (3.9)

ENGINE

EXHAUST

Standby		Standby	
Rated Engine Speed	RPM	Exhaust Flow (Rated Output)	cfm (m³/min)
1,800		331 (9.0)	
Horsepower at Rated kW**	hp	Maximum Additional Exhaust Backpressure (Post Silencer)	inHg (kPa)
98		0.75 (2.54)	
Piston Speed	f/min (m/min)	Exhaust Temperature (Rated Output)	°F (°C)
1,275 (389)		1,338 (726)	
BMEP	psi (kPa)		
162 (1,119)			

\*\* Refer to "Emissions Data Sheet" for maximum BHP for EPA and SCAQMD permitting purposes.

Deration - Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please contact a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528, and DIN6271 standards. Standby - See Bulletin 0187500SSB Demand Response - See Bulletin 10000018250

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CONFIGURABLE OPTIONS

DEMAND RESPONSE READY

ENGINE SYSTEM

- Heater with Shutoff Valves
- Engine Coolant Heater
- Oil Heater
- Level 1 Fan and Belt Guards (Enclosed Units Only)
- Wrapped Exhaust Piping
- Radiator Duct Adapter (Open Set Only)
- Heavy Duty Air Cleaner
- Two-Stage Heavy Duty Air Cleaner

FUEL SYSTEM

- NPT Flexible Fuel Line

ELECTRICAL SYSTEM

- 10A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical Coating

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- 3rd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Extended Factory Testing (3-Phase Only)
- 8 Position Load Center

ENCLOSURE

- Level 0 Sound Attenuated
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC/DC Enclosure Lighting Kit
- Enclosure Heaters (with Motorized Dampers Only)
- Door Open Alarm Horn

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- Ground Fault Annunciator
- 120V GFCI and 240V Outlets
- 100 dB Alarm Horn
- Damper Alarm Contacts (with Motorized Dampers Only)
- Wi-Fi Extension Kit

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

ENGINEERED OPTIONS

CONTROL SYSTEM

- Spares Inputs (x4) / Outputs (x4)
- Battery Disconnect Switch

GENERATOR SET

- Special Testing
- Battery Box

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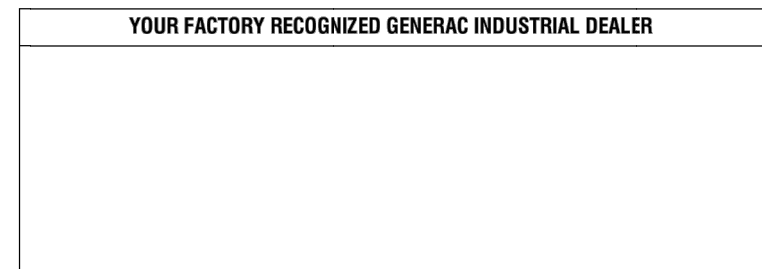


DIMENSIONS AND WEIGHTS\*

DEMAND RESPONSE READY

	<b>OPEN SET</b> L x W x H - in (mm) 92.9 (2,380) x 39.9 (1,014) x 46.0 (1,170) Weight - lbs (kg) 1,923 - 2,094 (872 - 950)
	<b>LEVEL 0 SOUND ATTENUATED ENCLOSURE</b> L x W x H - in (mm) 120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754) Weight - lbs (kg) Steel: 2,662 - 2,834 (1,207 - 1,286) Aluminum: 2,310 - 2,483 (1,048 - 1,126)
	<b>LEVEL 1 SOUND ATTENUATED ENCLOSURE</b> L x W x H - in (mm) 120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754) Weight - lbs (kg) Steel: 2,753 - 2,925 (1,249 - 1,327) Aluminum: 2,401 - 2,573 (1,089 - 1,167)
	<b>LEVEL 2 SOUND ATTENUATED ENCLOSURE</b> L x W x H - in (mm) 120.8 (3,068) x 40.5 (1,028) x 69.0 (1,754) Weight - lbs (kg) Steel: 2,831 - 3,003 (1,284 - 1,362) Aluminum: 2,458 - 2,630 (1,115 - 1,193)

\* All measurements are approximate and for estimation purposes only.



Specification characteristics may change without notice. Please contact a Generac Power Systems Industrial Dealer for detailed installation drawings.

GENERATOR & TRANSFER SWITCH SUMMARY

Quantity 1 - Generac Industrial gaseous engine-driven generator, 4.5L in-line 4 cylinder engine, or Equal, consisting of the following features and accessories:

- Stationary Emergency-Standby rated
- 60 kW rating, wired for 120/208 VAC three phase, 60 Hz
- MLCB, 80% rated thermal-magnetic
  - 200 Amp
- Natural Gas fuel system
- Standard Weather Protective Enclosure, Steel
- EPA Certified
- CETLus
- Power Zone Pro Digital Control Panel for Single Generators
- 110 AH, 925 CCA Group 31 Battery, with rack, installed
- Block Heater, 1500 watt
- Std Heavy Duty Air Cleaner
- 120V GFCI and 240V Outlet
- Flex Fuel Hose, shipped loose
- Critical Grade Silencer
- Standard 2-Year Limited Warranty

Quantity 1 - TRANSFER SWITCH - TX SERIES

- 200 Amp, 3 pole, 120/208 VAC three phase, 60 Hz, with 2-Wire Start Circuit
- UL Listed 1008
- NEMA 1 Enclosure
- 42KA Contactor Withstand and Closing Rating
- Open Transition, In Phase
- Non Service Entrance Rated

Quantity 1 - Factory Authorized Start Up

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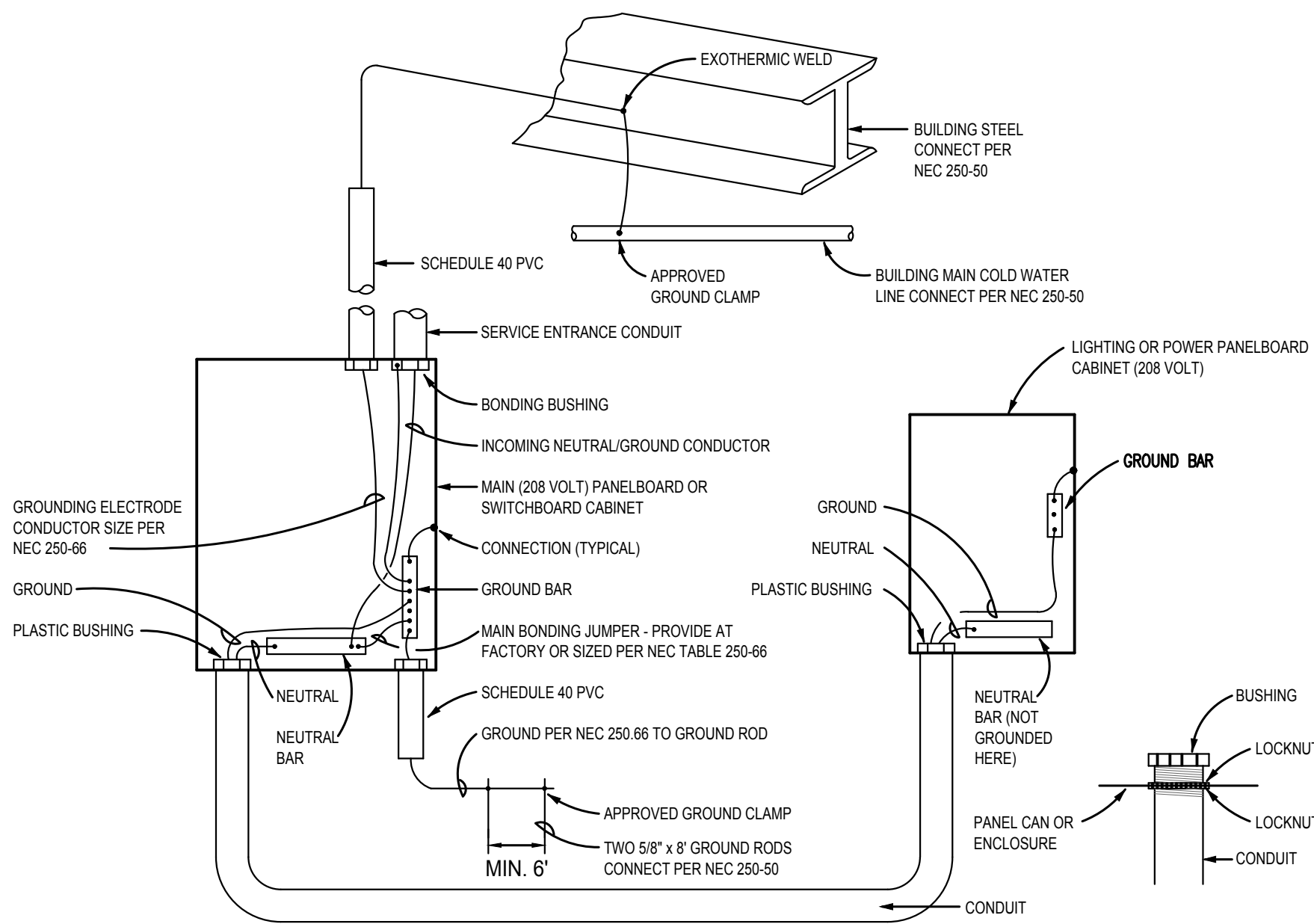
Title Sheet: GENERATOR SPECIFICATIONS

Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR City of Rocky Mount Warehouse 724 Albemarle Ave.

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
Sheet:

E-5





- NOTES:
- GROUNDING ELECTRODE CONDUCTOR SHALL BE RUN CONTINUOUSLY (UNBROKEN) FROM COLD WATER LINE AND/OR BUILDING STEEL AND GROUND ROD TO GROUND BAR BEFORE BONDING TO ANY CONDUIT BUSHING.
  - ALL THE FOLLOWING GROUNDING ELECTRODES THAT ARE PRESENT SHALL BE BONDED TOGETHER TO FORM THE GROUNDING ELECTRODE SYSTEM PER NEC 250.52:
    - METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH EARTH FOR 10 FT OR MORE
    - METAL FRAME OF THE BUILDING
    - ANY ELECTRODE ENCASED BY AT LEAST 2 IN. OF CONCRETE, CONSISTING OF 20 FT OR MORE BARE OR ZINC GALVANIZED OR OTHER ELECTRICALLY CONDUCTIVE COATED STEEL REINFORCING BARS OR RODS NOT LESS THAN 1/2" IN DIAMETER
  - GROUND RING ENCIRCLING THE BUILDING
  - ROD AND PIPE ELECTRODES NOT LESS THAN 8 FT.
  - PLATE ELECTRODES

TYPICAL BONDING & GROUNDING DIAGRAM  
NO SCALE

ELECTRICAL LOAD SUMMARY

EXISTING  
LIGHTS 1131 KW X 125 14.14 KW  
RECEPTACLES 10 KW + (50% of 4.40 KW) 1220 KW  
HVAC (INCLUDES VENT. FANS) 17.52 KW  
MISC. 5.00 KW

TOTAL 48.86 KW

PROPOSED

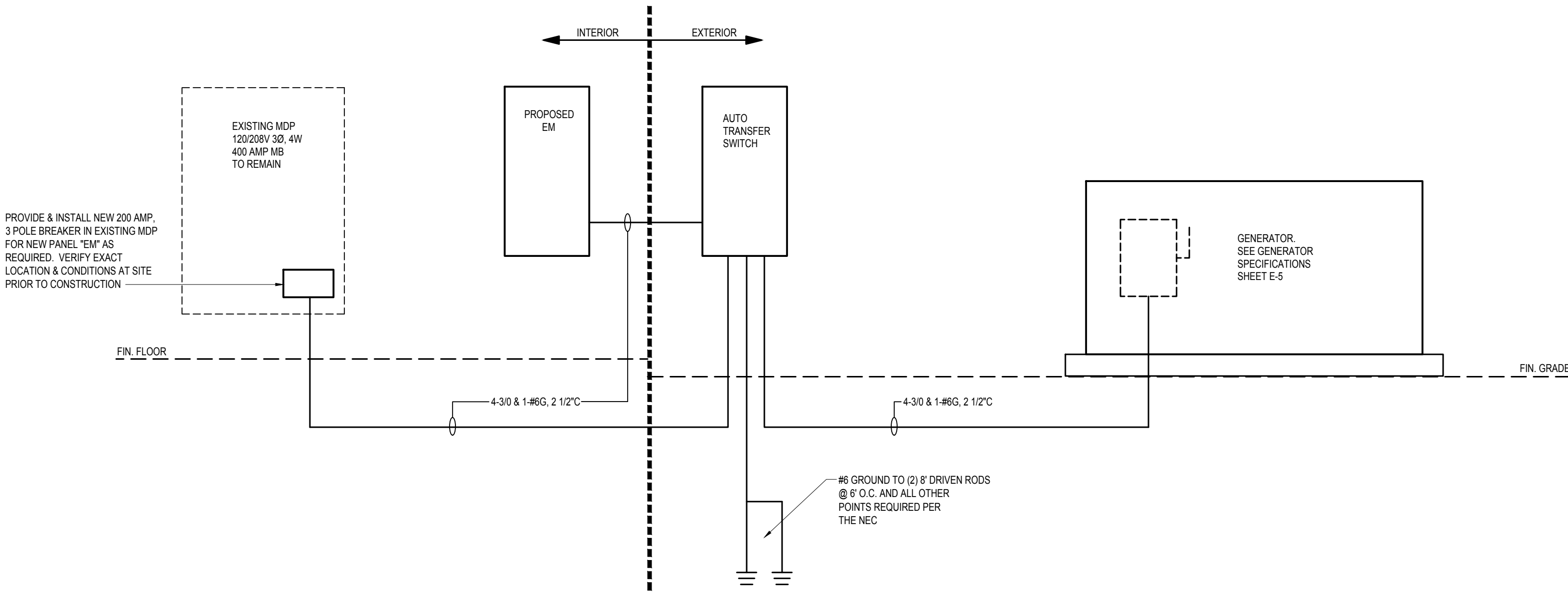
LIGHTS 0.67 KW X 125 0.84 KW  
RECEPTACLES 4.68 KW  
HVAC 6.00 KW  
WATER HEATER 4.50 KW  
MOBILE UNIT (LGTS, RECEPT. & AC) 720 KW

TOTAL 2322 KW

48.86 KW (Existing) + 2322 KW (Proposed) = 7208 KW  
• 208V 3• = 200.3 AMPS  
200.3 AMPS X 125 = 2504 AMPS  
EXISTING 400 AMP ELECTRICAL SERVICE TO REMAIN

PANEL: EM MTD: SURFACE TYPE: "SQ-D"  
VOLTS: 120/208 PHASE: 3 WIRE: 4  
225 AMP MLO

L1	L2	L3	CIRCUIT	POLES	TRIP	ASSIGNMENT	PHASE	L1	L2	L3	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2	L3
5.6			1	1	20	BREAK ROOM LIGHTS	○				RECEPT.	20	1	2	4.5		
	21.7		3	2	30	WATER HEATER	○				RECEPT.	20	1	4		3	
		21.7	5								REF.	20	1	6			10
11.8			7	1	15	GF-1	○				RECEPT.	20	1	8	4.5		
	22		9	2	35	CU-1	○				RECEPT.	20	1	10		6	
		22	11								LOCKER CHARGERS	20	1	12			5
7.4			13	1	20	EXISTING WAREHOUSE LIGHTS	○				EW	20	1	14	6		
	8.7		15	1	20	EXISTING WAREHOUSE LIGHTS	○				EXIST. GAS FURNACE	20	1	16		10	
		6.7	17	1	20	EXISTING WAREHOUSE LIGHTS	○				EXIST. GAS UNIT HEATER	20	1	18			5
6			19	1	20	EXISTING WAREHOUSE LIGHTS	○				EXIST. GAS UNIT HEATER	20	1	20	5		
	2		21	1	20	EXISTING OFFICE LIGHTS	○				EXIST. GAS UNIT HEATER	20	1	22		5	
		12	23	1	20	EXISTING OFFICE RECEPT.	○				EXISTING WAREHOUSE LIGHTS	20	1	24			7.7
12			25	1	20	EXISTING OFFICE A/C UNIT	○				EXISTING WAREHOUSE LIGHTS	20	1	26	6		
	7		27	1	20	EXISTING OFFICE LGTS. & RECEPT.	○				EXISTING WAREHOUSE LIGHTS	20	1	28		4.7	
		12	29	1	20	EXISTING OFFICE A/C UNIT	○				EXISTING WAREHOUSE LIGHTS	20	1	30			6.7
8			31	1	15	EXISTING VENTILATION FAN	○				EXIST. GAS FURNACE	20	1	32	10		
	8		33				○				EXIST. GAS UNIT HEATER	20	1	34		5	
		8	35				○				EXIST. GAS UNIT HEATER	20	1	36			5
8			37	3	15	EXISTING VENTILATION FAN	○				EXIST. GAS UNIT HEATER	20	1	38	5		
	8		39				○				SPARE	20	1	40		X	
		8	41				○				SPARE	20	1	42			X
8			43	3	15	EXISTING VENTILATION FAN	○				SPACE			44	X		
	8		45				○				SPACE			46		X	
		8	47				○				SPACE			48			X
20			49	3	30	PROPOSED MOBILE UNIT	○				SPACE			50	X		
	20		51				○				SPACE			52		X	
		20	53				○				SPACE			54			X
86.8	105.4	118.4						L1-127.8 L2-139.1 L3-157.8			141.6 AMPS				41.0	33.7	39.4



ELECTRICAL RISER DIAGRAM  
NOT TO SCALE

- NOTES:
- A/C RATINGS SHALL BE VERIFIED AND PROPER PLAQUES APPLIED PRIOR TO ENERGIZING.
  - ELECTRICAL CONTRACTOR SHALL LABEL UTILITY AVAILABLE FAULT CURRENT AND DATE PER NEC.
  - PANELS, BREAKERS & FUSES SHALL BE RATED 22K A/C MIN. UNLESS AVAILABLE FAULT CURRENT IS HIGHER, THEN RATING SHALL BE INCREASED TO EXCEED AVAILABLE FAULT CURRENT.

GENERAL DEMO NOTE:

REMOVE ALL EXISTING UNUSED ELECTRICAL DEVICES, FIXTURES, BOXES, SWITCHES, WIRING, DISCONNECTS, CONDUIT, ETC. AS REQUIRED. DISPOSE OF ALL MATERIALS PROPERLY.

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SEAL  
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JAMES WILLIAM MILLER  
04-13-22

Rev.	Date:	Description:

Title Sheet: ELECTRICAL PANEL SCHEDULE & RISER DIAGRAM  
Project: TOILET / BREAK ROOM REMODEL & BACKUP GENERATOR City of Rocky Mount Warehouse 724 Albemarle Ave.

Drawn by: JLT  
Issue Date: 04-13-22  
Project Number: 22-556  
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