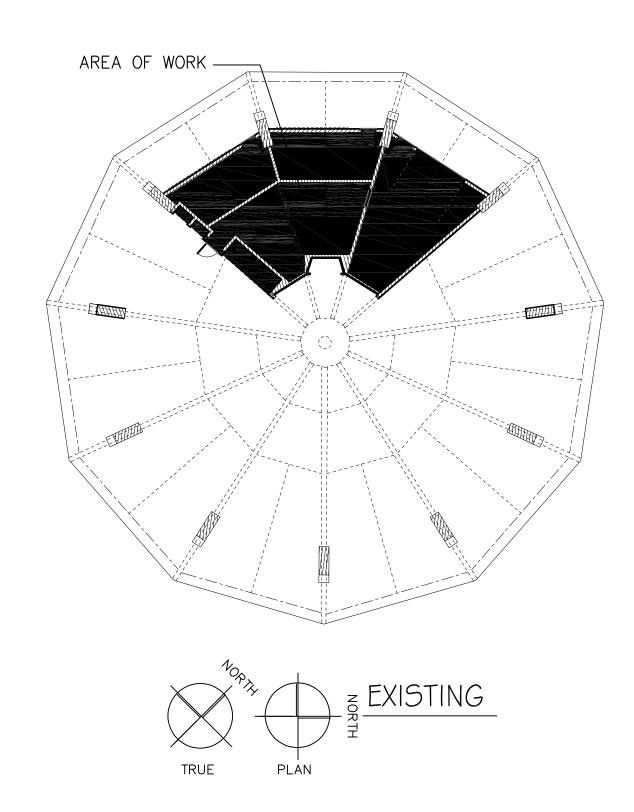
## RENNEBOHM PARK SHELTER RESTROOM RENOVATION

CONTRACT #9485

115 EAU CLAIRE AVE. MADISON, WI 53705

JANUARY 19, 2024



#### **GENERAL NOTES:**

- 1. UNLESS SPECIFICALLY NOTED IN THE PLANS AND SPECIFICATIONS AS WORK OR MATERIALS BY OTHERS, THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITIES OF WORK AND MATERIALS FOR THIS CONTRACT.
- 2. THE CONTRACTOR SHALL FURNISH ANY APPARATUS, APPLIANCE, MATERIAL, OR LABOR THAT MAY BE NECESSARY TO COMPLETE THE WORK, IN ACCORDANCE WITH THE INTENT OF THIS CONTRACT.
- 3. THE CONTRACTOR SHALL USE PROPERLY FUNCTIONING EQUIPMENT CAPABLE OF PERFORMING THE TASKS REQUIRED.
- 4. THE CONTRACTOR SHALL FURNISH WORKERS WHO PERFORM QUALITY WORK AND WHO ARE EXPERIENCED AND
- KNOWLEDGEABLE IN THE WORK PROPOSED.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND RESTORATION OF ALL NEW AND EXISTING WORK, INCLUDING EXISTING WALKWAYS FROM THE DESIGNATED BUILDING ENTRANCE TO THE CONSTRUCTION AREA, WHICH SHALL REMAIN FREE OF DIRT, MUD, SNOW, SPILLS, SPLATTERS AND PHYSICAL DAMAGE.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE IMMEDIATE AREA AROUND THE PROJECT LIMITS AND ENTRY DOORS CLEAN AND FREE OF CONSTRUCTION MATERIALS AND DEBRIS. THE CONTRACTOR SHALL INSTALL TEMPORARY TARPING AS NEEDED TO KEEP ALL CONSTRUCTION DEBRIS CONFINED TO THE IMMEDIATE PROJECT AREA.
- 7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CLEAN UP OF ALL AREAS AFFECTED BY THIS CONTRACT BEFORE FINAL CONTRACT CLOSEOUT
- 8. THE CONTRACTOR SHALL NOT TAKE ADVANTAGE OF ANY DISCREPANCY IN THE PLANS OR SPECIFICATIONS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO APPARENT ERRORS, OMISSIONS, AND INTERPRETATIONS INVOLVING CODES,
- REGULATIONS, AND STANDARDS. 9. ANY CONTRACTOR WHO IDENTIFIES SUCH A DISCREPANCY DURING THE BIDDING PROCESS SHALL NOTIFY THE CITY
- PROJECT MANAGER OF THE DISCREPANCY. 10. ANY CONTRACTOR WHO IDENTIFIES SUCH A DISCREPANCY AFTER THE BIDDING PROCESS AND/OR AFTER CONTRACT SIGNING SHALL IMMEDIATELY NOTIFY THE CITY PROJECT MANAGER IN WRITING AND REQUEST CLARIFICATION ON HOW TO
- 11. ALL DESIGN AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL LOCAL AND STATE OF WISCONSIN BUILDING CODES LATEST EDITION.
- 12. THE CITY OF MADISON BUILDING PERMIT WILL BE SECURED BY THE OWNER. THE CONTRACTOR SHALL BE REQUIRED TO APPLY FOR AND OBTAIN ALL PERMITS OR LICENSES THAT MAY BE REQUIRED BY THESE CONTRACT DOCUMENTS REGARDLESS OF ORDINANCE, STATUTE, OR OTHER REGULATORY REQUIREMENT.
- 13. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL INSPECTIONS RELATED TO ALL PERMITS AND LICENSES. RE-INSPECTION FEES ASSOCIATED WITH NON-COMPLAINT OR INCOMPLETE WORK SHALL BE THE RESPONSIBILITY OF THE
- 14. EXISTING INFORMATION SHOWN ON DRAWINGS IS BASED ON RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ACCURACY OF EXISTING INFORMATION AS REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.

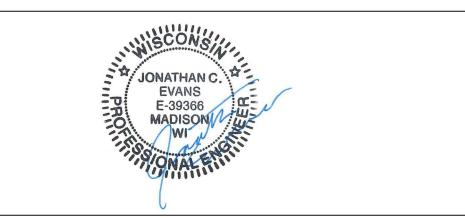


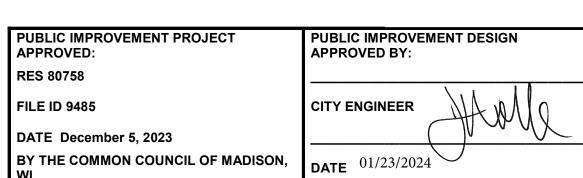


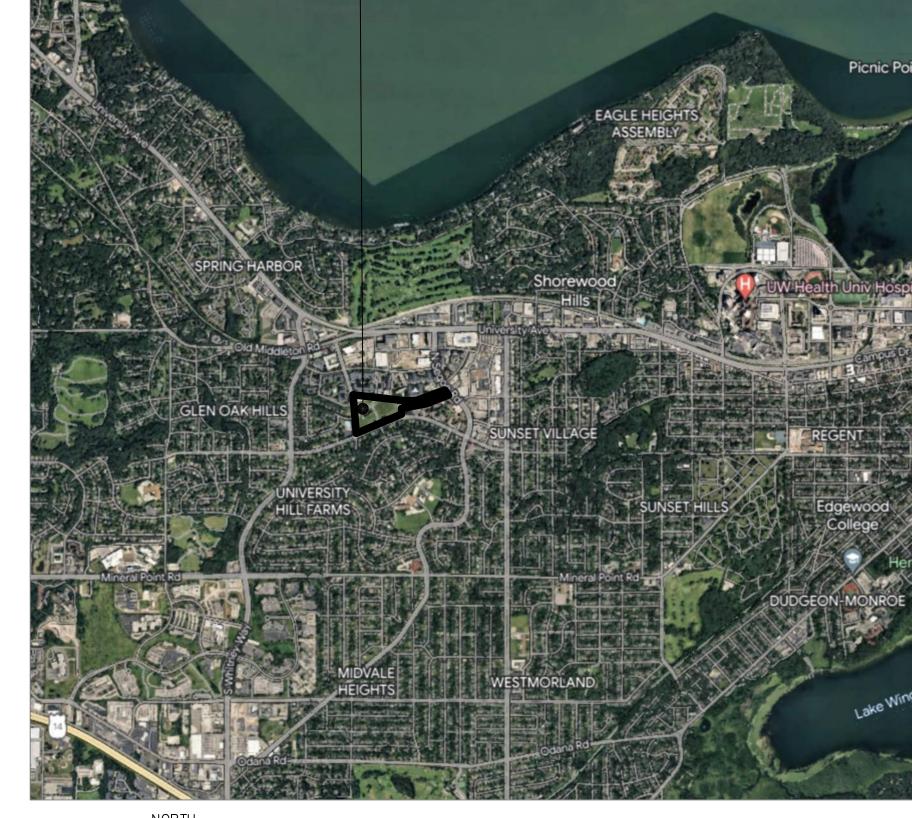


#### LANDS FOR WORK:

- NO TOBACCO PRODUCT USE IS ALLOWED ON THE PROPERTY.
- 2. WORK SHALL BE PERFORMED BETWEEN THE HOURS OF 7:00 A.M. TO 5:00 P.M.







-RENNEBOHM PARK



### SHEET INDEX:

- TS1 TITLE SHEET
- SITE PLAN
- EX1 EXISTING PLAN AND ELEVATION
- DEMOLITION PLAN
- GENERAL NOTES
- FOUNDATION PLAN
- **VOLUME 1:** RESTROOM FLOOR PLAN A2 ROOF PLAN **ARCHITECTURAL**

**ELECTRICAL** 

**PLUMBING** 

- BUILDING ELEVATIONS AND DETAILS
- PROPOSED SOUTHWEST ELEVATION
- WALL SECTION
- BUILDING SECTION & WINDOW DETAILS
- BUILDING SECTION & INTERIOR ELEVATIONS
- PD1 PLUMBING DEMOLITION PLAN
- WASTE AND VENT PLAN
- NON-POTABLE COLD WATER PLAN

- POTABLE WATER PLAN **VOLUME 2:** PLUMBING DETAILS **MECHANICAL** 
  - P5 SUPPLY RISER DIAGRAM
  - WASTE & VENT RISER DIAGRAM
  - PLUMBING SCHEDULE & NOTES
  - ELECTRICAL POWER PLAN, SCHEDULE & NOTES ELECTRICAL LIGHTING PLAN, SCHEDULE & NOTES
  - HVAC PLAN, SCHEDULE & NOTES



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CONTRACT #9485 MUNIS

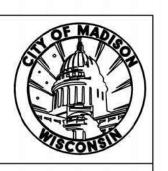
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# PLUMBING DEMOLITION PLAN SCALE: 1/4" = 1'-0"

### GENERAL NOTES:

- 1. PLUMBING CONTRACTOR SHALL REMOVE ALL EXISTING WASTE, VENT, SUPPLY PIPING, FIXTURES AND FIXTURE CARRIERS ABOVE FLOOR EXCEPT WHERE NOTED NOT TO DO SO
- 2. PLUMBING CONTRACTOR SHALL COORDINATE ALL FLOOR OPENINGS WITH THE GENERAL CONTRACTOR. GC IS RESPONSIBLE FOR ALL CONCRETE SAWCUTTING, CONCRETE REMOVAL, AND PROPER DISPOSAL, AND INSTALLATION OF NEW CONCRETE PER PLANS AND DETAILS.



CITY OF MADISON
DEPT OF PUBLIC WORKS
ENGINEERING DIVISION
CITY COUNTY BLDG RM 115
210 MARTIN LUTHER KING JR BLVD

RENNEBOHM PARK SHELTER RESTROOM RENOVATIO

#9485 MUNIS #14525

DRWN BY: JPE
DATE 01/19/2024
REV: XX/XX/XX

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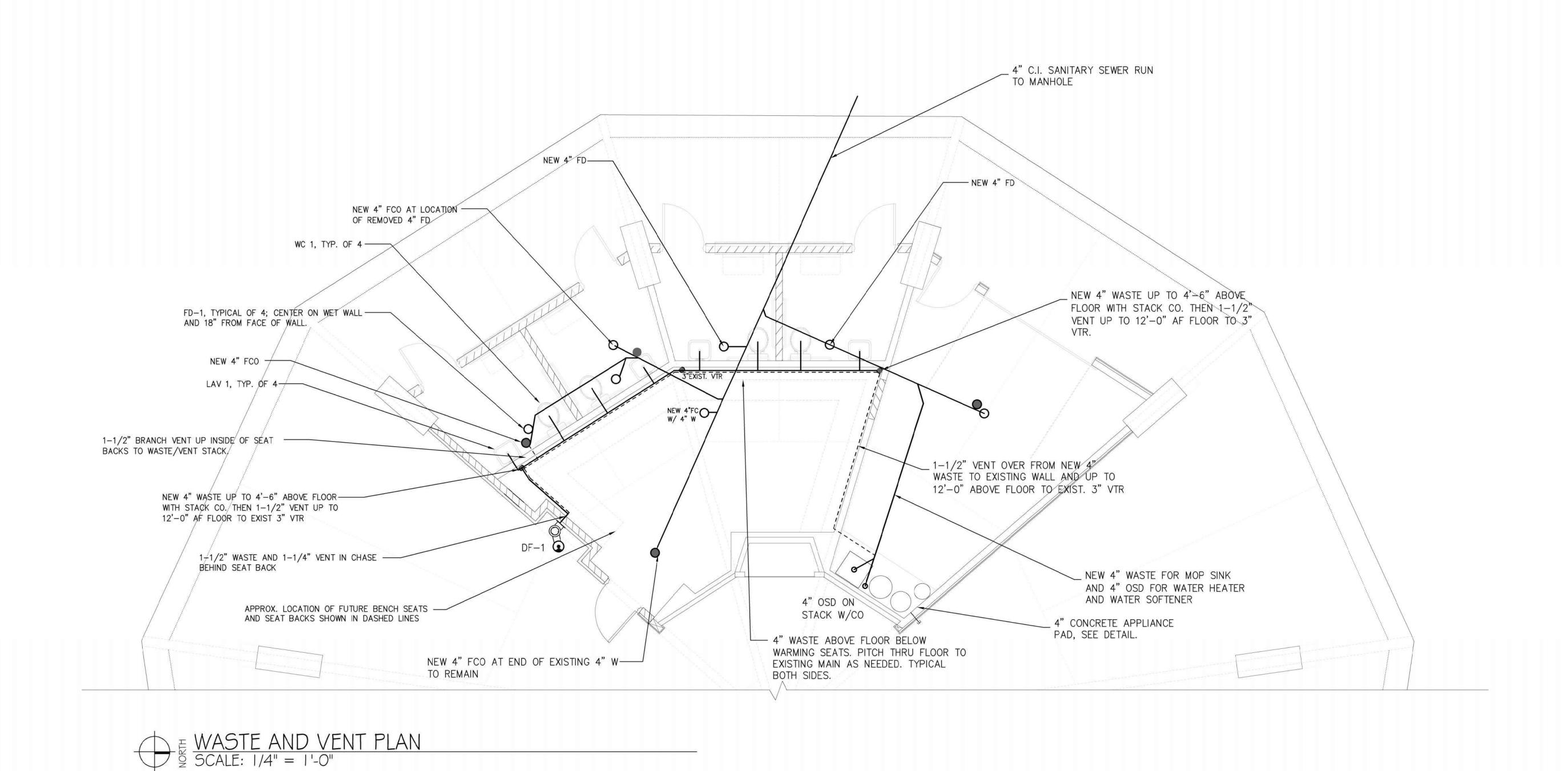
RENNEBOHM PARK SHELTER RESTROOM RENOVATION

CONTRACT #9485 MUNIS #14525

DRWN BY: JPE
DATE 01/19/2024
REV: XX/XX/XX

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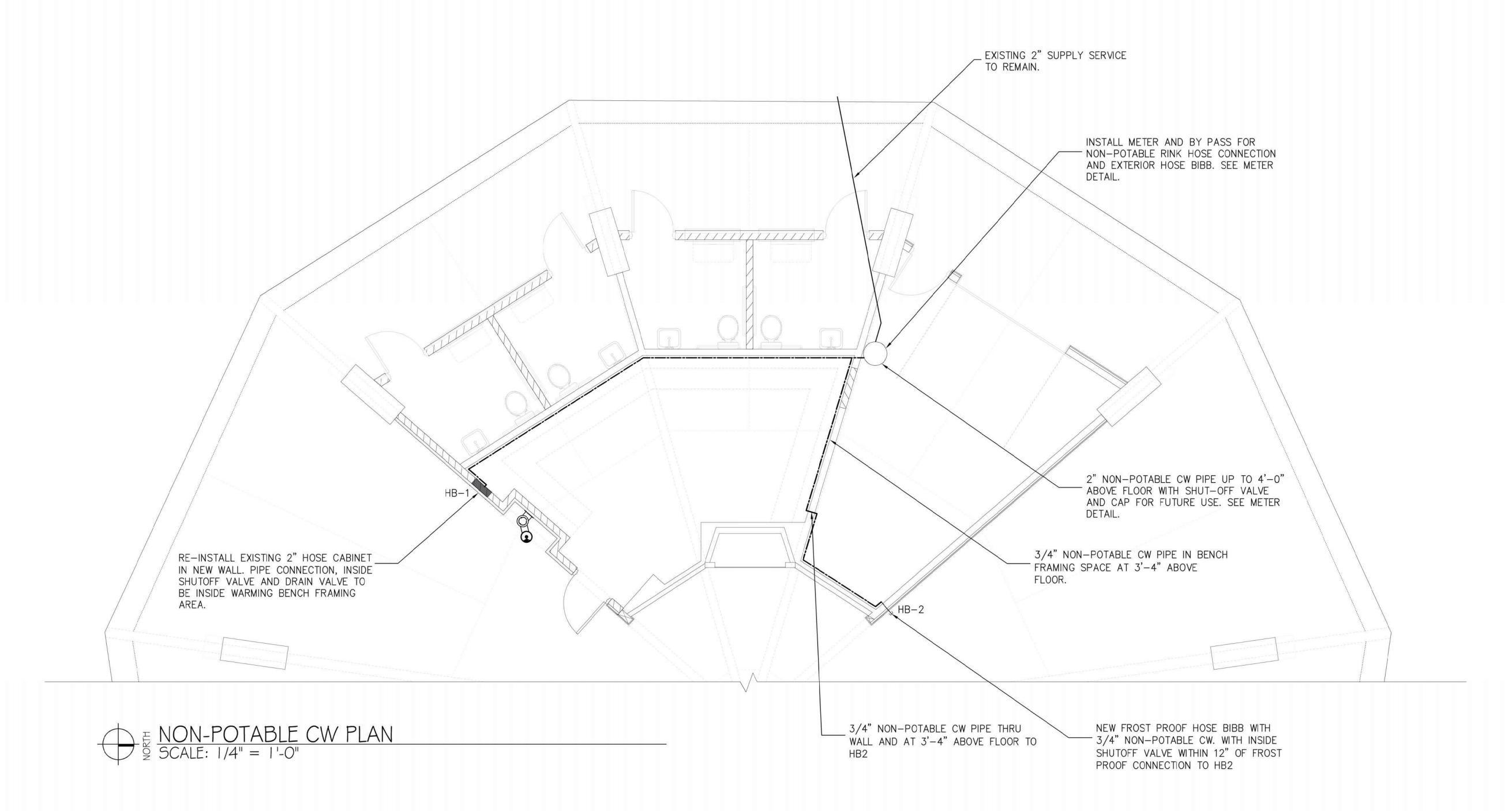


### GENERAL NOTES:

- 1. PLUMBING CONTRACTOR RESPONSIBLE FOR VERIFYING ALL BURIED PIPE PRIOR TO BEGINNING ANY WORK
- 2. HOLD PIPING TIGHT TO WALLS TO ACCOMMODATE FUTURE BUILD OUT OF WARMING ROOM BENCH SEATS AND SEAT BACKS

DRWN BY: JPE DATE 01/19/2024 REV: XX/XX/XX

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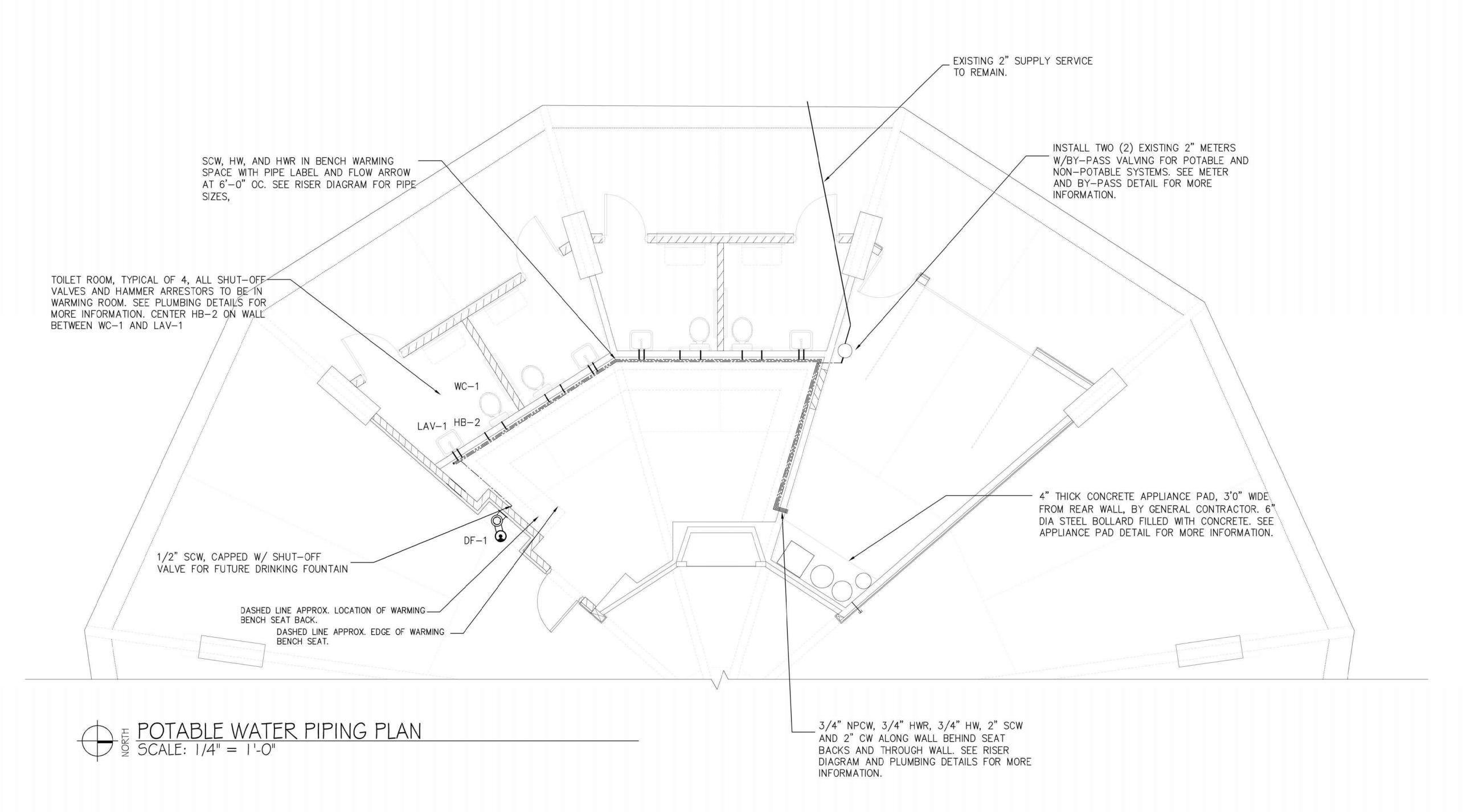
### GENERAL NOTES:

- 1. ALL PIPES AND FITTINGS SHALL HAVE A MINIMUM 1-1/2" INSULATION
- 2. SEE RISER DIAGRAM FOR VALVES AND BLOW OUT FIXTURES
- 3. ALL NON-POTABLE CW LINES TO RECEIVE LABEL AND FLOW DIRECTION ARROWS AT A MINIMUM OF 10 FEET OC AND BOTH SIDES OF WALL PENETRATION
- 4. HOLD PIPING TIGHT TO WALLS TO ACCOMMODATE FUTURE BUILD OUT OF WARMING ROOM BENCH SEATS AND SEAT BACKS

DRWN BY: JPE
DATE 01/19/2024
REV: XX/XX/XX

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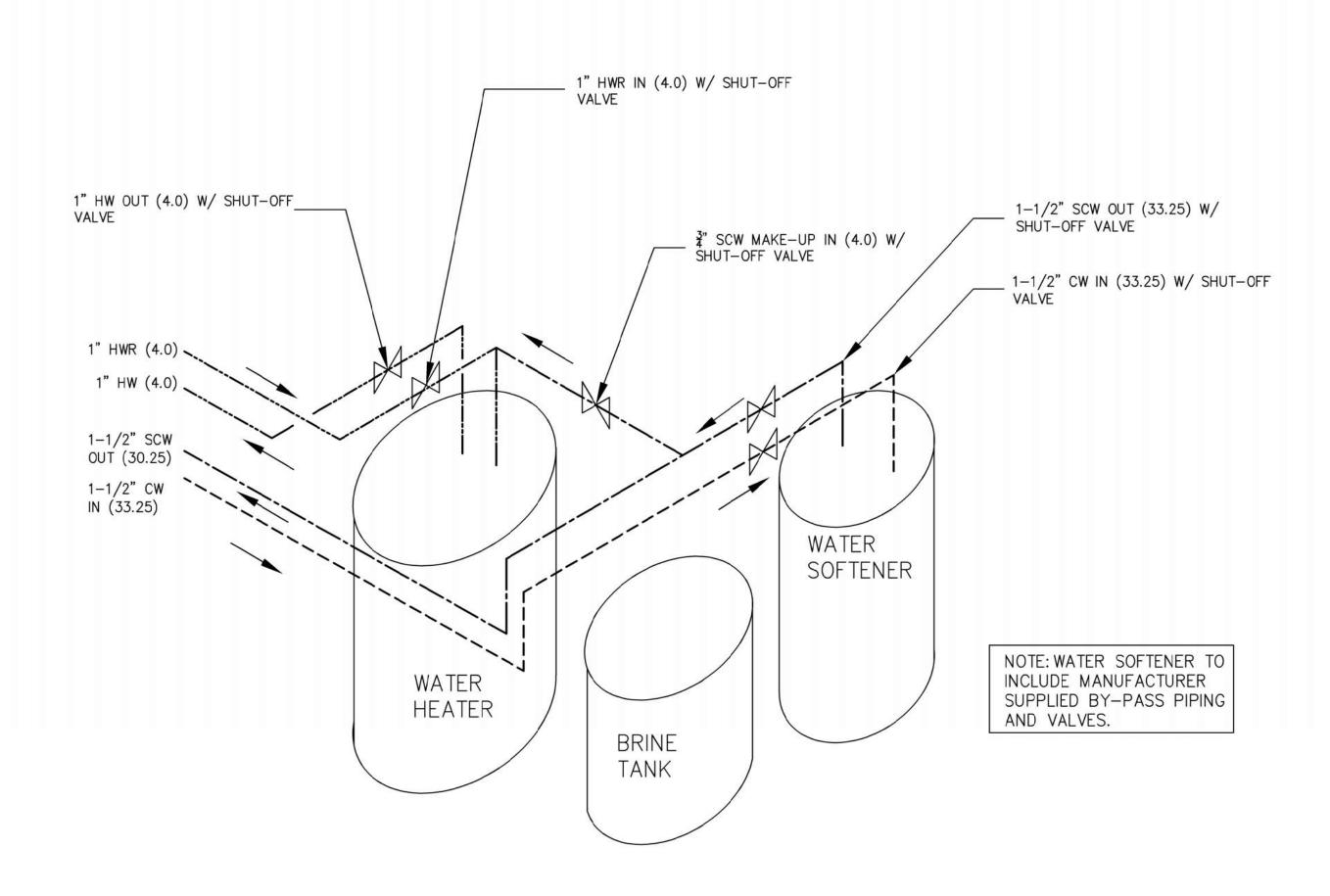
### GENERAL NOTES:

- 1. ALL PIPES AND FITTINGS SHALL HAVE A MINIMUM 1-1/2" INSULATION.
- 2. SEE RISER DIAGRAM FOR VALVES AND BLOW OUT FIXTURES.
- 3. ALL ELECTRIC TRANSFORMERS FOR WC FLUSH VALVES AND ELECTRIC FAUCET SHALL BE LOCATED IN THE WARMING ROOM. ELEC CONTRACTOR TO PROVIDE POWER AND PASS THROUGH WALL CONDUIT FOR WIRES.
- 4. LAV MIXING VALVES TO BE LOCATED IN THE WARMING ROOM.

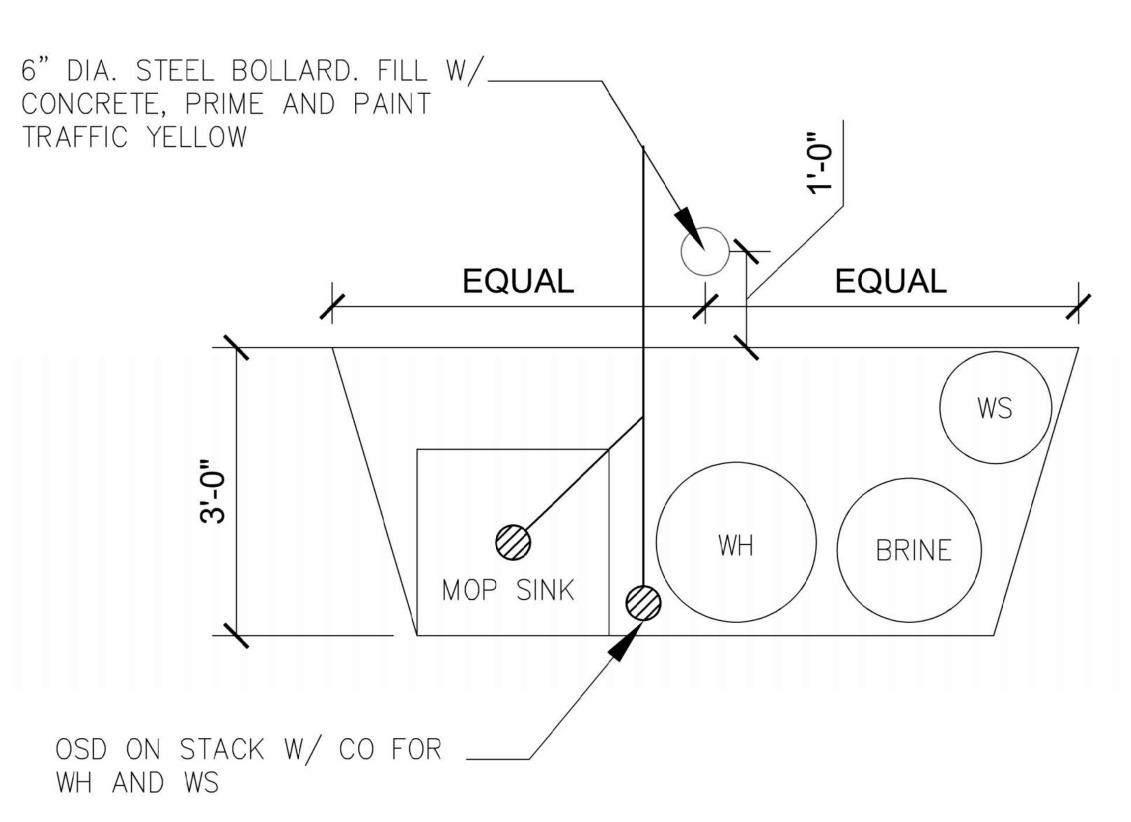
- 5. HOLD PIPING TIGHT TO WALLS TO ACCOMMODATE FUTURE BUILD OUT OF WARMING ROOM BENCH SEATS AND SEAT BACKS
- 6. INSULATE PIPING AND TRAP BELOW LAVATORY (TYP OF 4) FOR COMPLIANCE WITH ADA REQUIREMENTS

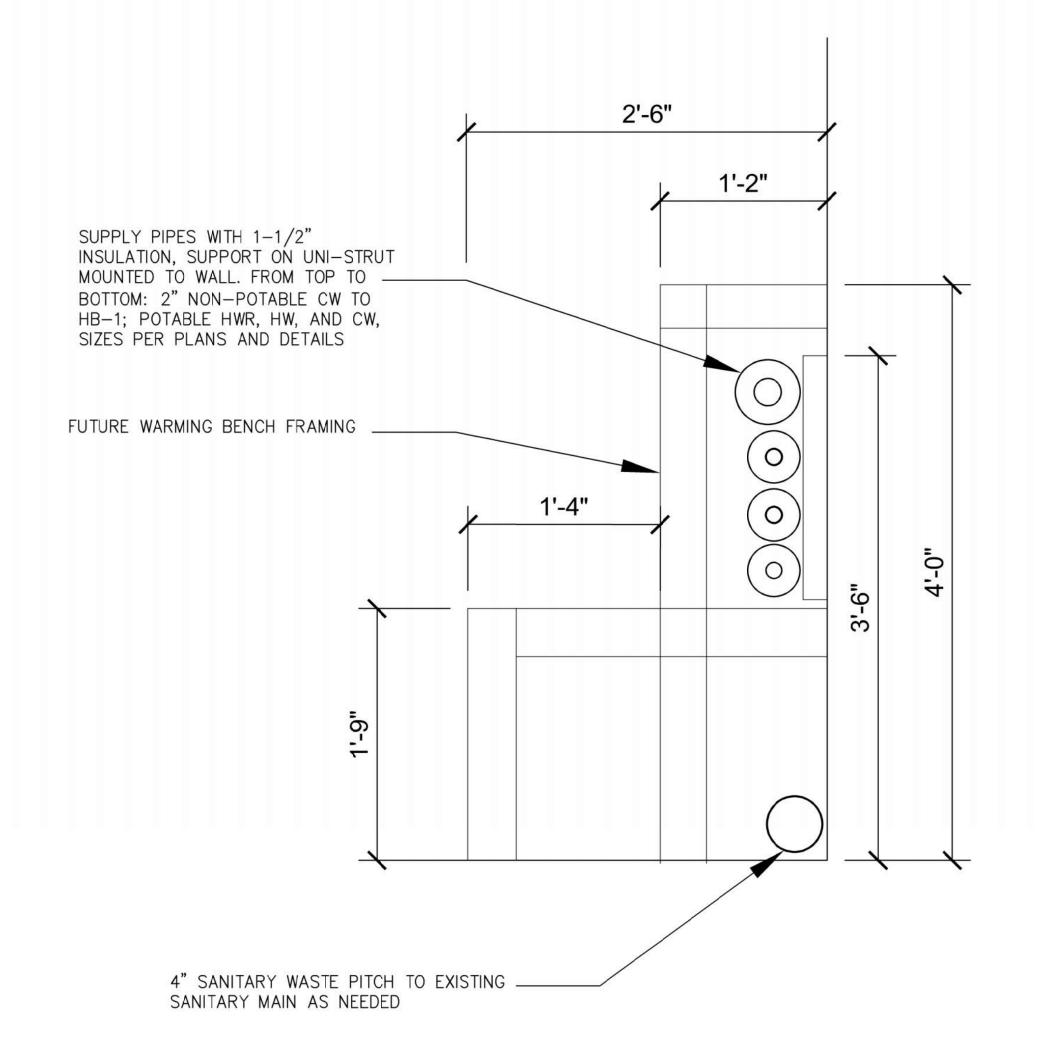
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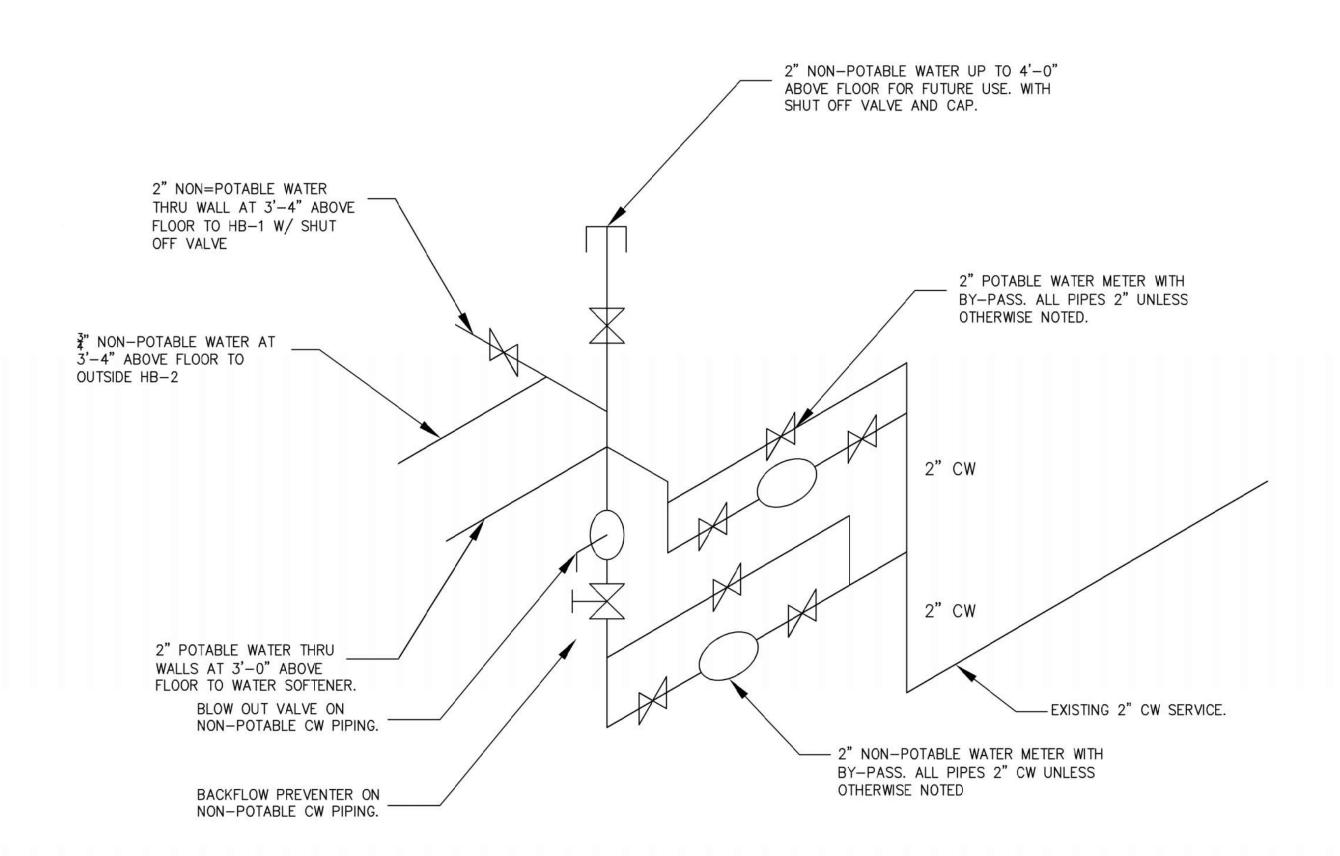


### HEATER AND SOFTENER DETAIL





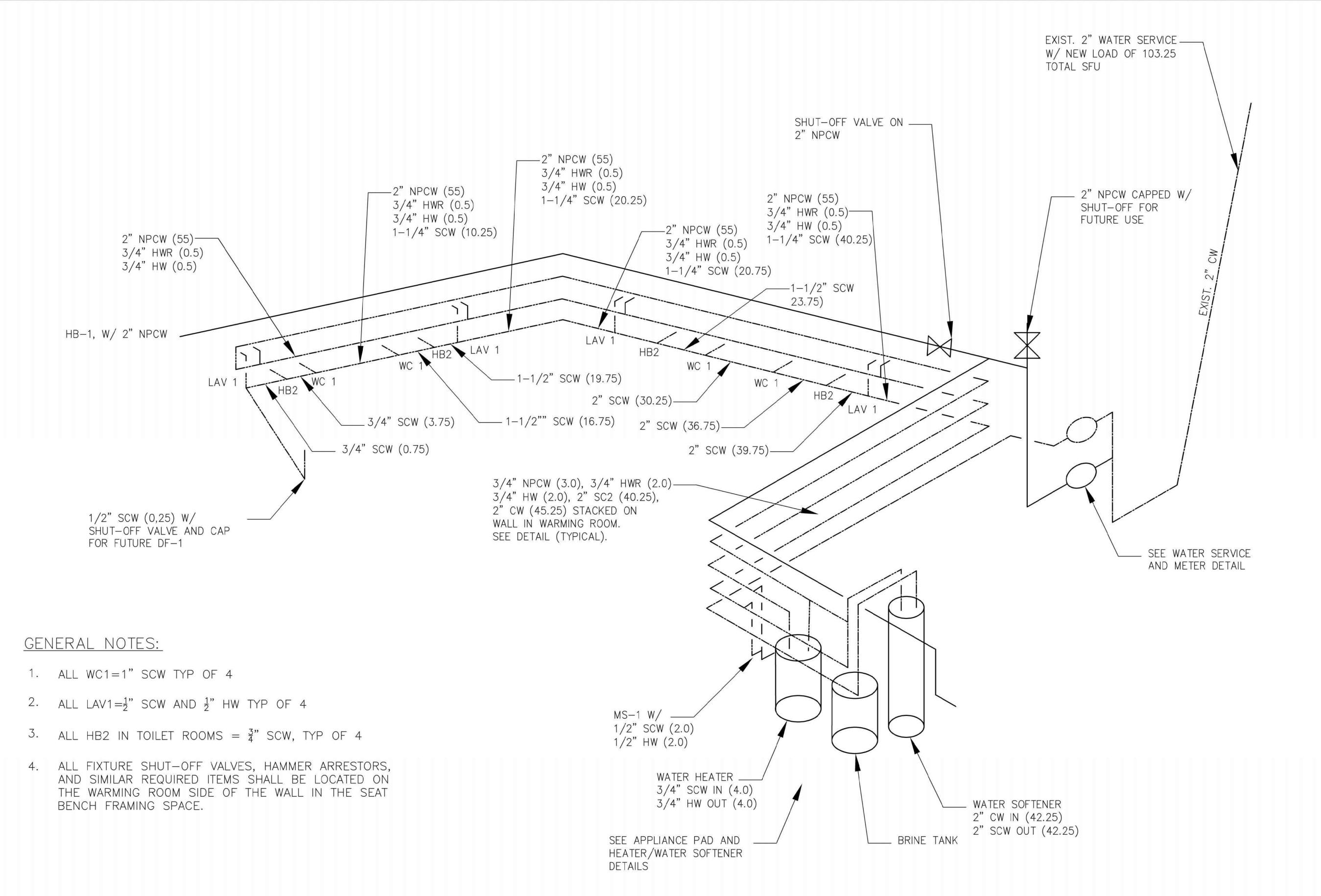
### PIPING STACK DETAIL



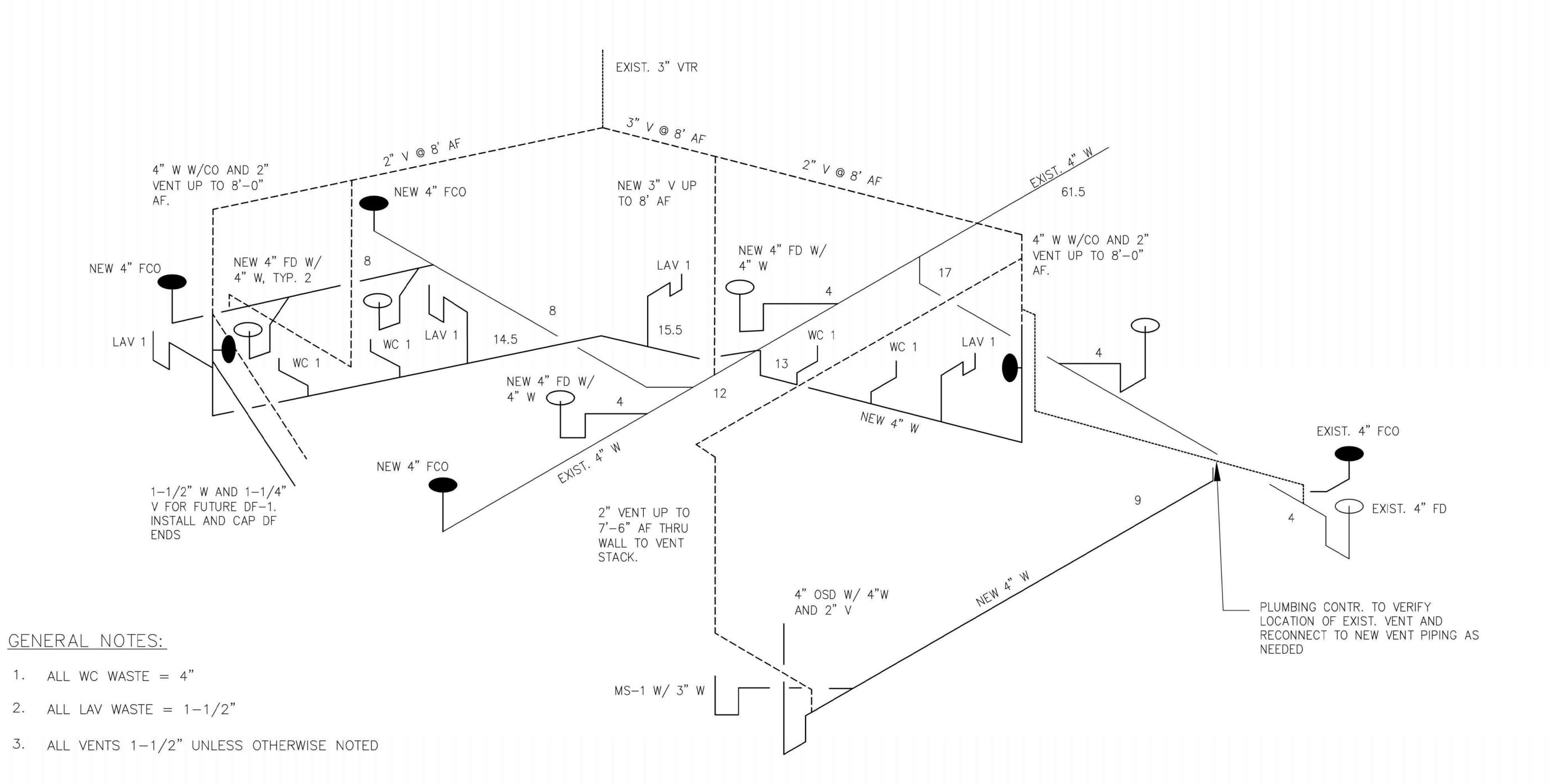
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PLUMBING GENERAL NOTES:

 PLUMBING CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS.

COORDINATE PHASING OF WORK WITH GENERAL CONTRACTOR. OF MADISON STREET

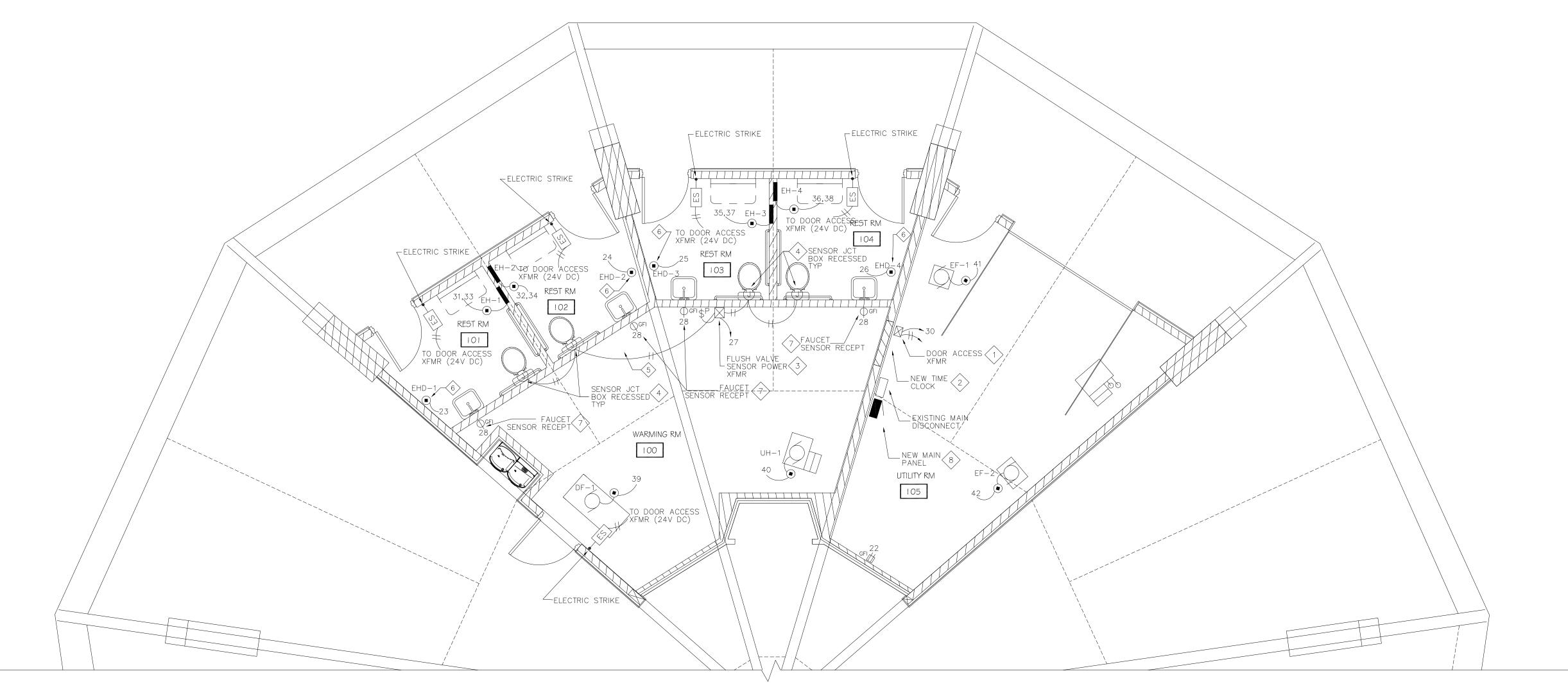
CITY OF MADISON
DEPT OF PUBLIC WORKS
ENGINEERING DIVISION
CITY COUNTY BLDG RM 115
210 MARTIN LUTHER KING JR BLVD

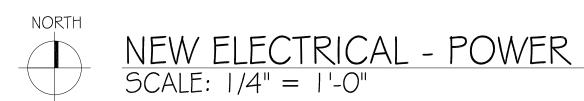
CONTRACT #9485 MUNIS #14525 DRWN BY: JPE

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DATE 01/19/2024
REV: XX/XX/XX

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									<b>Indiv SFU</b>			<b>Total SFU</b>		<u></u>	DFU
Mark	Manufacturer/Model	Qty.	CW Size	HW Size	Waste Size	Vent Size	Remarks	CW	HW	<u>Total</u>	cw	HW	Total	DFU	Total DFU
DF-1	Elkay. LK44008BF;Outdoor ezH2O Bottle Filling Station and Single Fountain.	1	1/2"	N/A	N/A	N/A	Informational only, DRINKING FOUNTAIN NOT IN CONTRACT. Install waste and vent, cap waste, install valved water line. For future installation by owner.	0.25	N/A	0.25	0.25	N/A	0.25	0.50	0.50
HB-1	N/A	1	2"	N/A	N/A	N/A	Re-use/relocate existing 2" hose cabinet.	55.00	N/A	55.00	55.00	N/A	55.00	N/A	N/A
HB-2	Woodford, Model 67	5	3/4"	N/A	N/A	N/A	Pipe mounted anti-freeze, in wall hose bibb, with automatic draining anti-siphon vacuum breaker. Finish = brass	3.00	0.00	3.00	15.00	0.00	15.00	N/A	N/A
LAV-1	Kohler Kingston, K-1729, white vitreous china, wall mounted, 3 hole-4" centers.	4	1/2"	1/2"	1-1/4"	1-1/4"	Kohler 8998 ADA compliant P-trap with cleanout. Zurn Z-1231 concealed arm carrier . See note 1 below for faucet and insulation requirments.	0.50	0.50	1.00	2.00	2.00	4.00	1.00	4.00
WC-1	Kohler Kingston, K-4323, white vitreous china, wall mounted, elongated bowl.	4	1"	N/A	4"	1-1/2"	Rear spud, mount rim 16" above floor, Zurn Z1201-N3 wall carrier. See note 2 below for flush valve and seat requirements	6.50	N/A	6.50	26.00	N/A	26.00	6.00	24.00
FD-1	JR Smith 2005Y-A-U-PB, round, no-hub, vandal proof, bronze.	5	N/A	N/A	4"	1-1/2"	With proset trap guard and 2010C-A-PB caulked outlet.	N/A	N/A	N/A	N/A	N/A	N/A	4.00	20.00
OSD-1	JR Smith 3650, 8-1/2" with 3"x8" oval cup, no-hub, vandal proof, bronze.	1	N/A	N/A	4"	2"		N/A	N/A	N/A	N/A	N/A	N/A	6.00	6.00
FCO	JR Smith 4021S-U-PB, round, no-hub, vandal proof, bronze.	4	N/A	N/A	4"	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MS-1	Mustee, 24"x24"x10" one piece Durastone mop sink.	1	1/2"	1/2"	3"	1-1/2"	With high impact vinyl bumper guards. T&S Brass B-0662 servce sink faucet, polished chrome, w/ wall plate and hose threaded vaccum breaker.		2.00	3.00	2.00	2.00	3.00	3.00	3.00
WH-1	AO Smith DEN-30, 30 gal capacity, 23 GPH @ 80F Temp rise, 4500W, 240V single phase	1	3/4"	3/4"	N/A	N/A	Floor mounted on appliance pad. 18.8 FLA, T&P relief valve	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WS-1	Hellenbrand Model H151-90-BD, Capacity=96,000 grain, 3.0 CF resin, 35GPM @ 15 PSI max WPD	N/A	1-1/2"	N/A	N/A	N/A	Softener size 14" dia x 65" tall. Brine Tank 18" dia x 40" tall (300 lb salt cap.), 1-1/2" valve manifold and MFR by-pass, metered demand-controlled regeneration. Provide bootom drain for winterizing.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
xisting to	Remain														
FD	N/A	1						N/A	N/A	N/A	N/A	N/A	N/A	4.00	4.00
10		-						14/7	N/A	14//	14//	14/71	14/71	4.00	4.00
							Totals	67.25	2.50	68.75	100.25	4.00	103.25	24.50	61.50
NOTES															
	Sloan ETF-600-P-BDM electric faucet with mecha insulation guards.	nichal m	nixing valve	e. Sloan I	ETF-233 (1	120V) tra	nsformer to be located in the Warming Room. Prowrap 2000								
	Sloan Optima 152-1.6 ES-S sensor operated flush open front seat.	valve (1	.5GPF). Sl	oan EL-15	54 (120V) t	transforr	ner to be located in the Warming Room. Bemis 1995-SSCT 000 (white)								
	All LAV and WC installations shall meet ADA mou	inting red	auirement												+





ELECTRICAL	SYMBOL SCHEDULE
SYMBOL	DESCRIPTION
	SWITCHES
\$ <sub>P</sub>	SINGLEPOLE — PILOT ILLUMINATED
	<u>SECURITY</u>
ES	ELECTRIC DOOR STRIKE
	RECEPTACLES
	125V. 2P, 2W SINGLE RECEPTACLE
GFI	DUPLEX: SURFACE MTD W/GROUND FAULT INTERRUPTION PROTECTION
	EQUIPMENT AND WIRING
	DIRECT EQUIPMENT CONNECTION
	MOTOR CONNECTION
	JUNCTION BOX—CONCEALED IN FINISHED AREAS, SURFACE IN UNFINISHED AREAS
	TRANSFORMER
	ELECTRICAL POWER PANEL
	<u>EQUIPMENT</u>
	DF = DUCT FURNACE EF = EXHAUST FAN EH = ELECT. HEATER EHD = ELECT. HAND DRYER UH = UNIT HEATER

			PANEL	MAIN'	_			
		AMPS 200 AIC 22K	VOLTS 120/2 PHASE 1		MOUNTING LOCATIONSURFACE UTILITY ROOM			
BRI	ΚR	DESCRIPTION	CIRCUIT	CIRCUIT	DESCRIPTION	BRI	KR	
Α	Р		NO.	NO.		Α	Р	
20	1	EXISTING LOAD (CIRCUIT 1)	,	2	EXISTING LOAD (CIRCUIT 3)	20	1	
20	1	EXISTING LOAD (CIRCUIT 4)	3	4	EXISTING LOAD (CIRCUIT 5)	20	1	
20	1	EXISTING LOAD (CIRCUIT 6)	5	6	EXISTING LOAD (CIRCUIT 7)	20	1	
20	1	EXISTING LOAD (CIRCUIT 8)	7	8	EXISTING LOAD (CIRCUIT 9)	20	1	
20	1	EXISTING LOAD (CIRCUIT 10)	S	10	EXISTING LOAD (CIRCUIT 11)	20	1	
20	1	EXISTING LOAD (CIRCUIT 12)	1 ′	12	EXISTING LOAD (CIRCUIT 14)	20	1	
20	1	EXISTING LOAD (CIRCUIT 15)	13	14	EXISTING LOAD (CIRCUIT 16)	20	1	
15	1	EXISTING LOAD (CIRCUIT 17)	15	16	EXISTING LOAD (CIRCUIT 18)	15	1	
20	1	EXISTING LOAD (CIRCUIT 19)	17	18	EXISTING LOAD (CIRCUIT 26)	60	2	
60	2	EXISTING LOAD (CIRCUIT 25)	19	20	EXISTING LOAD (CIRCUIT 26)	_		
	_	EXISTING LOAD (CIRCUIT 25)	21	22	RECEPTACLE UTILITY ROOM 105(WH & WS)	20	1	
20	1	EHD-1 RESTROOM 101		24	EHD-2 RESTROOM 102	20	1	
20	1	EHD-3 RESTROOM 103	25	26	EHD-4 RESTROOM 104	20	1	
15	1	TOILET FLUSH SENSORS		28	FAUCET SENSOR RECEPTACLES	15	1	
15	1	TIME CLOCK		30	DOOR ACCESS TRANSFORMER	15	1	
20	2	EH-1 RESTROOM 101		32	EH-3 RESTROOM 103	20	2	
	_	EH-1 RESTROOM 101		34	EH-3 RESTROOM 103	_		
20	2	EH-3 RESTROOM 103		36	EH-4 RESTROOM 104	20	2	
		EH-3 RESTROOM 103		38	EH-4 RESTROOM 104	_		
15	1	DF-1 WARMING ROOM 100		40	UH-1 WARMING ROOM 100	15	1	
15	1	EF-1 UTILITY ROOM 105		42	EF-2 UTILITY ROOM 105	15	1	
				44			ļ'	
				46			ļ'	
				48			ļ'	
				50			ļ'	
				52			<u> </u>	
			53	54				

#### ELECTRICAL GENERAL NOTES:

- 1. COORDINATE ELECTRICAL RACEWAYS ROUTING WITH GENERAL CONTRACTOR AND OTHER TRADES FOR PROPER EQUIPMENT ACCESS.
- 2. ALL RACEWAYS ARE TO BE CONCEALED IN FINISHED AREAS.
  MECHANICAL & UTILITY AREAS MAY USE SURFACE CONDUIT SYSTEMS.
- 3. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL CONSTRUCTION CONDITIONS.
- 4 COORDINATE AND SCHEDULE ALL WORK WITH THE GENERAL CONTRACTOR AND LOW-VOLTAGE CABLING PRIOR TO STARTING.

#### ELECTRICAL POWER/LV PLAN NOTES:

- DOOR ACCESS TRANSFORMER (120 VAC/24 VDC) AND ELECTRIC STRIKE PROVIDED BY GENERAL CONTRACTOR AND WIRED BY ELECTRICAL TRADE. CONTROL XFMR POWER BY TIME CLOCK. ALL CABLING IN EMT RACEWAY SYSTEM.
- TIME CLOCK SHALL BE INTERMATIC MODEL ET1725C; EXHAUST FAN AND OCC SENSORS SHALL BE OCCUPIED MODE SCHEDULE; ELECTRIC STRIKE AUTO LOCK SHALL BE UNOCCUPIED MODE SCHEDULE; SET PER OWNER'S REQUESTED OCCUPIED/UNOCCUPIED SCHEDULES.
- COORDINATE POWER TO LOW-VOLTAGE TRANSFORMER FOR FLUSH VALVES BY PLUMBING TRADE. PROVIDE MASTER PILOT LIGHT SWITCH FOR POWER TO FLUSH VALVES AND LABEL. ROUTE ALL LV CABLING IN RACEWAY.
- PROVIDE 4"x4"x21" RECESSED BOX WITH PLASTER RING FOR SENSOR MOUNTING HEIGHT TO CENTER OF BOX. COORDINATE INSTALLATION WITH PLUMBING TRADE. COORDINATE FINAL MOUNTING HEIGHT LOCATION WITH GENERAL CONTRACTOR.
- 5 EXTEND LOW-VOLTAGE CABLING FROM TRANSFORMER (BY P.C.) TO FLUSH VALVE SENSORS. ROUTE CABLING IN CONDUIT OR RACEWAYS.
- PROVIDE 4"x4"x2\frace{1}" RECESSED BOX WITH PLASTER RING FOR ELECTRIC HAND DRYER CONNECTION. PROVIDE POWER CONNECTION TO HAND DRYERS. COORDINATE FINAL MOUNTING HEIGHT LOCATION WITH GENERAL CONTRACTOR.
- COORDINATE FINAL RECEPTACLE LOCATION WITH PLUMBING TRADE FOR FAUCET SENSOR POWER.
- 8 NEW 200A 54 SPACE MAIN PANEL REPLACING EXISTING 200A 30 SPACE PANEL IN SAME LOCATION.



CITY OF MADISON
DEPT OF PUBLIC WORKS
ENGINEERING DIVISION
SITY COUNTY BLDG RM 115
Z10 MARTIN LUTHER KING JR BLVD

ZENNEBOHM PARK SHE 115 EAU CLAIRE AVE.

CONTRACT #9485 MUNIS #14525

#14525 DRWN BY: WHM DATE 01/19/2024 REV:

SHT

Arowed Actual Lighting Load Load 214 VA 175 VA 85 VA 48 VA 65 VA 48 VA 67 VA 48 VA 291 VA 153 VA 153 VA 154 VA 155 VA 155

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MUNIS #14525 DRWN BY: KS

DATE 01/19/2023 REV: XX/XX/XX

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Lighting Fixture Schedule (26 50 00 - Lighting) 
 URL
 Power
 Flux
 e
 Efficacy
 Lumen Maintenance

 www.e-conolight.com
 55 VA
 5400 lm
 5000 K
 98 lm/W
 LM 88 @ 75K hours
 E-CRB05A-W50Z e-conoligh Lithonia LQM-S-W-3-G-120/27 Select # of faces as required for location www.acuitybrandslighting.com Damp Location Lithonia FEM-L48-4000LM-LPACL-MD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 24 VA 2251 lm 4000 K 95 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar lithonia FEM-L48-6000LM-LPACL-WD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 38 VA 2251 lm 4000 K 60 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar lithonia FEM-L48-6000LM-LPACL-WD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 38 VA 2251 lm 4000 K 60 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar lithonia FEM-L98-9000LM-LPACL-WD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 53 VA 2251 lm 4000 K 42 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar lithonia FEM-L98-9000LM-LPACL-WD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 53 VA 2251 lm 4000 K 42 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar lithonia FEM-L98-9000LM-LPACL-WD-MVOLT-GZ10-40K-80CRI www.acuitybrands.com 53 VA 2251 lm 4000 K 42 lm/W L80 @ 100K hours lP66, NEMA 4X, NSF Splash Zone 2 Use STSL stainless latch and wet location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like washbays and similar location fittings in wet environment like SVT-4-4.0K-M Strip Light, Vapor-Tight, Medium Distribution SVT-4-4.0K-W Strip Light, Vapor-Tight, Wide Distribution SVT-4-8.0K-W Strip Light, Vapor-Tight, Wide Distribution SVT-8-9.0K-W Strip Light, Vapor-Tight, Wide Distribution

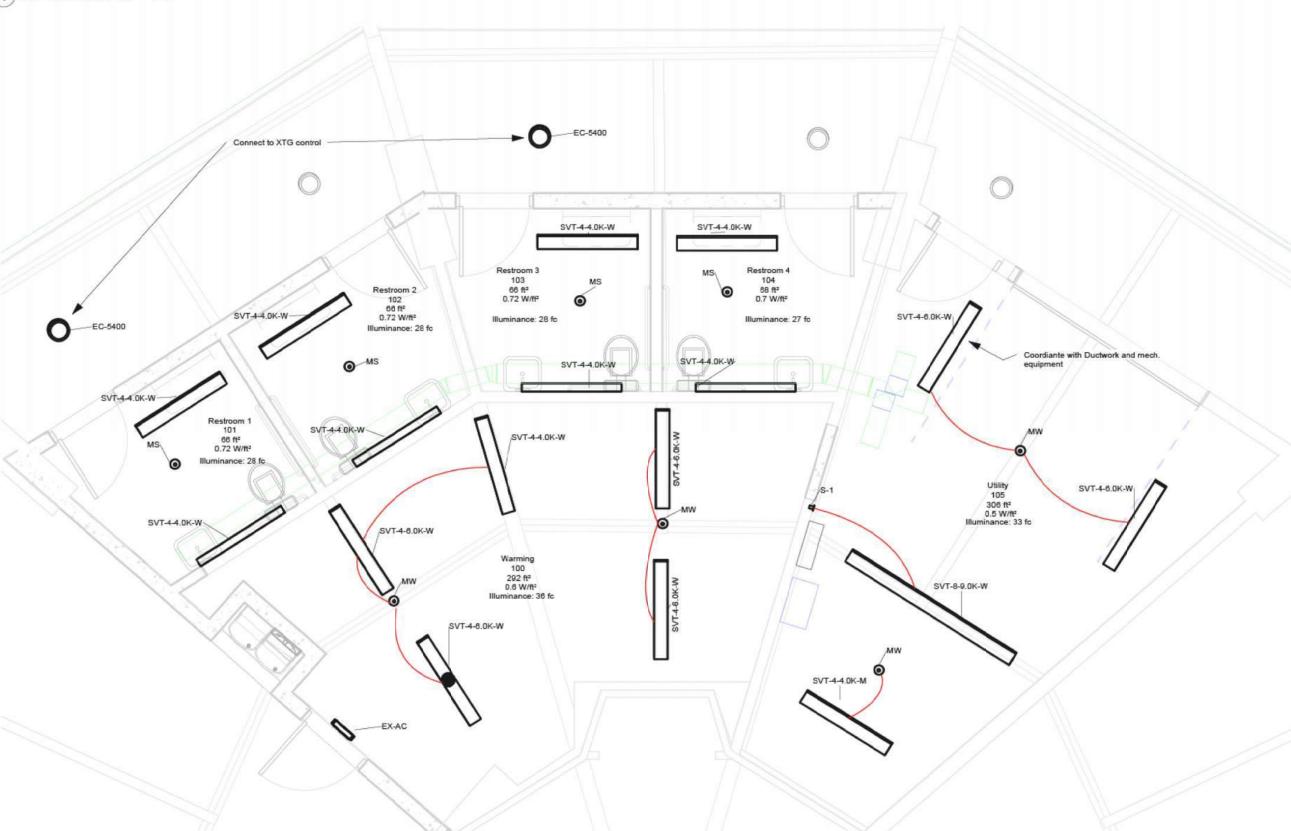
Lighting Device Schedule (26 09 23 - Lighting Control Devices) Sensorswitch CMR-9-PDT-ADC-VLP Motion Sensor short Range www.acuitybrands.com Sensorswitch CMR-10-PDT-ADC-VLP Motion Sensor wide Range

Exterior Light matching XTG

Exit Sign, no Battery

1 ED - Demolition 1/8" = 1'-0"

lighting fixtures and



(2) EL - New Lighting 1/4" = 1'-0"

Demolish all existing lighting fixtures and controls. This includes all items not needed for new installation to function. This includes, but is not limited to, emergency, exit, track, architectural and spot lights, switches, sensors, inverters, batteries and control panels. Demolition drawings may not show all existing items. Remove all unused raceways, boxes, conduit and wiring

IECC 2015 Lighting Levels

Goal 181% 142% 142% 142% 137%

36.2 fc 28.4 fc 28.4 fc 28.4 fc 27.5 fc

0.73 W/ft² 0.98 W/ft²

0.98 W/ft²

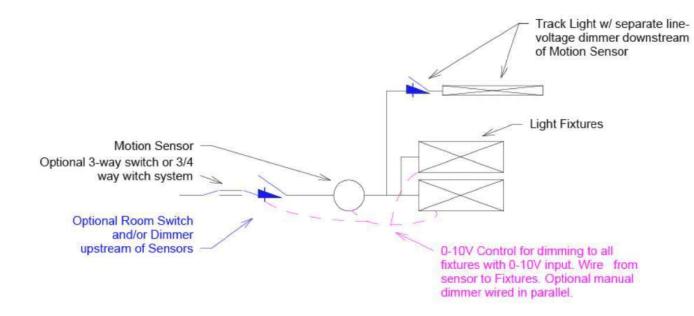
0.98 W/ft² 0.98 W/ft² 0.95 W/ft²

0.72 W/ft²

- Patch wall, ceiling and other surfaces damaged by removal of XTG elements. Use adjacent surface matching cover for electrical boxes that remain.
- Install new raceways, boxes, conduit and wiring as required for new lighting fixtures and controls.

Restroom 2

- Locations shown are approximate only. Install as required to coordinate with tile patterns, architectural features, sprinklers, mechanical equipment and other obstacles. Center Fixtures and provide even grid wherever possible. Review deviations from plan with designer prior installation.
- Install fixtures at indicated height. Provide required suspension. A noted height typically applies to all fixtures in a space, even if only a single fixture has an indicated height shown. If no height is given, ceiling surface mounting or mounting at bottom of fixture can be assumed. Installation in between trusses or beams also is an option. Consult with engineer before determining mounting height.
- Surface wiring raceway in finished areas is only allowed where the structure does not allow installation inside ceiling or wall. Raceway shall be neatly routed and hidden in corners to the greatest extend possible. In finished spaces use surface wire molding instead of conduit. Wiremold shall be factory painted to match wall surface. Where matching factory paint is not available, use field-painting.
- Support all lighting fixtures adequately and provide all extra support.
- All conduit except at fixture entrance shall be 3/4" or larger. Turns between access boxes should not be more than 270°.
  - use flexible metal conduit from a J-box in enough length to allow lifting and 2' lateral move of fixture Move flexible head sprinklers where required for even layout pattern.
- Suspended Strip Light Fixtures: use rigid type hangers every 4' or less. Mount multiple fixtures in a row on a uni-strut structure.
- Cord & Plug Fixtures: Mount on hook for easy replacement and install safety wire. Provide plug within reach of fixture In rooms with obstruction (e.g. equipment, pipes, and ducts in mechanical and electrical rooms) mount the fixtures below obstruction and as high as practical to allow good light distribution
- without limiting access to obstructing equipment. Consult with designer before installation.
  - Maintain all fire ratings while penetrating plenums, walls or ceilings. Install all wiring inside ceiling and wall. If wiring cannot be fished through, provide surface mounted conduit or wire molding in finished spaces. Modify Grid Ceiling to accommodate new fixtures. Fill in openings with new tiles of existing type. Contractor shall provide tiles and grid elements. Review Special site conditions for information
- on type of tile. Where sprinkler, diffuser or other permanent obstruction prevents even layout, relocate after consultation with engineer.
- Relocate wired devices (WiFi access points, speakers, signs) as required to allow new fixture layout. Relocate Fire Alarm devices up to 3'. Consult with designer before re-location. Prevent dirt and dust polluting occupied areas and take special care while working in occupied areas and cover equipment and furniture as needed.
- Canopy: Provide retrofit version of fixtures and/or all retrofit accessories for installing over existing fixture locations. Ensure existing opening is fully covered. Build cover matching surrounding
- Locate sensors to enable good detection within controlled zone and in between partitions. In enclosed rooms minimize detection of motion in adjacent rooms. Lighting zones are indicated by wire annotations and/or switchleg (SL) numbering. Wire annotations are schematic only to indicate control relationships and don't necessarily equal actually required physical wire runs. Lighting zones can be shown by proximity of sensor and light fixture without wire or switchleg annotation (for example, garage lighting where each fixture has one sensor). In a room with only one sensor (and dimmer/switch), it is assumed all fixtures are controlled by that sensor (and dimmer/switch) even if no wires or switchlegs are indicated. Unless
  - noted otherwise assume the standard lighting control zone setup. Spaces with electrical panels shall have at least one light be controlled by a manual switch only (no automatic control) per code-requirement.
  - Fixture-mounted sensors shall be installed to allow 360° detection and bottom of sensor lens shall be at or below bottom of fixture. Size analog 0-10V wiring to limit voltage drop. At 100% position the light fixture shall be 100% bright.
- Emergency Lighting: Light fixtures with a black dot indicate emergency lights.
- Control fixtures from central inverter or generator. Provide all wiring to emergency power source.
- Re-wire fixture internals if fixture has integrated sensor or other lighting control. Install UL 924 relay in accessible location near controlled fixture. Verify location with engineer.
- Drywall Ceiling: if no easily accessible location is available, install relay above grid ceiling in adjacent area
- Outdoor fixtures: Install relay inside above a grid ceiling or other accessible location
- Retrofit of XTG fixtures: Re-arrange wiring and existing control to allow emergency fixture operation like for new fixtures. Note that schedules that show number of relays required only account



- Lighting zones with lighting-devices and light-fixtures are indicated by wire lines and/or switch leg (SL) numbers. Where devices allow, dimming shall be accomplished by 0-10V wiring of all devices.
- Where shown on plans, a zone may have 3-way and 4-way switches. Enable 3-way function on dimmer switch and wire appropriately to enable control from all switch locations. Fixtures and devices in the same above zone are denoted by the same switchleg (SL) number.
- Motion sensor with local switch will be de-energized when switch is off (sensor downstream of switch): Light will be on upon activation of local switch regardless of actual motion detection (sensor is ON upon power-up)
- Sensors will not click when local switch is off (nuisance avoidance in quiet rooms) If the order of switching is different at a specific location, plans will indicate so. Examples include, but are not limited to sensors
- controlling line-voltage dimmers or other track lighting control. Line-voltage dimmers (i.e. track lighting) shall be downstream of local motion sensor.
- Notes on plans or switchleg naming will indicate exceptions. For example: Disable Switchleg: A dimmer will only dim the lighting level to the allowable minimum. The line voltage switch in the dimmer will
- not be used. This prevents lights turning off entirely. Hallways are an example. One light fixture shall be controlled by switch only: Switchleg parameters indicate that some lights are controlled by switch and sensor, and some lights by switch only. This prevents the latter lights from turning off upon loss of motion detection. Electrical
- or mechanical rooms are examples. G. Sensor Programming Instructions: The below is based on Sensorswitch Instructions at the time of design. Amend if different sensors are used or if manufacturer
- changes procedure. Confirm any deviation with engineer. Sensorswitch support#. 1-800-535-2465 If sensors are equipped with VLC programming option, a smartphone app shall be used. Note that sensors needs to be initialized and set with a PIN within 45 minutes of powering up. Program is sent to sensor via flashlight. Lights will blink to
- acknowledge successful programming. Verify settings with engineer prior programming. Certain settings may be different in certain zones.
- Sensors shall be programmed depending on availability of daylight . Save presets to avoid deviations. No daylight available:
- Enable "Time Delay" Set to 15 minutes Disable Trim
- Enable "Dim to Off Delay" set to 5 minutes Disable Photocell
- Daylight available (inc. spaces with overhead doors, skylights, windows within 20' of sensor)
- Enable "Photocell" and set to "On/Off and Auto Dimming" Enable "Auto Set Point"
- After programming, all functions shall be tested to verify desired function. Adjust as required for intended function. Discuss problems with engineer.

(3) EL Lighting Control Zone - Not to Scale

0 5 10 15 20 5 0 5 10 15 20 25 30 5 0 5 10 15 20 25 30 35 40 45 2 0 2 4 6 8 10 12 14 5 FEET 1/4" = 1'-0" 3/16" = 1'-0" FEET 3/32" = 1'-0" 1" = 20'-0" FEET 1/8" = 1'-0" 1/16" = 1'-0"

ENNEBOHM PARK 15 EAU CLAIRE AVE. ADISON, WI 53705

 $\cong$ 

CONTRACT #9485

MUNIS #14525 DRWN BY: JCE DATE 01/19/2024

SHT

AND ASSOCIATED DUTWORK AND WIRING DEMØLISH OLISH DOWNSTREAM
GÁS PIPING -DEMOLISH KEEP ("STERLING HEATER") ELÈCTRICAL STORAGE ROOM HEATER AND ASSOCIATED PANEL`& WIRING AND GAS PIPING. KEEP SWITCHES ` ASSOCIATED COMBUSTION VENT PIPING DEMOLISH ("REZNOR HEATER") STORAGE ROOM HEATER W/ EXHAUST THROUGH ROOF AND ASSOCIATED WIRING

EXISTING FACILITIES HEATING PLAN - DEMOLITION

DEMOLISH

WARMING ROOM HEATER

AND ASSOCIATED WIRING

ROOF PENETRATION TO BE

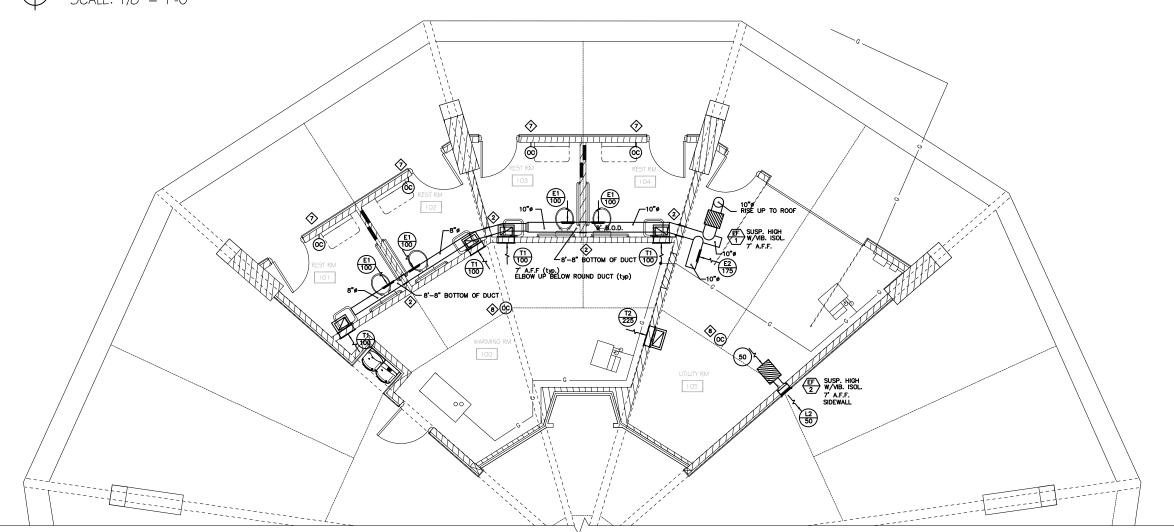
AND EXHAUST

REPURPOSED

BATHROOM FAN

AND ASSOCIATED

DUCTWORK AND WIRING



rDEMOLISH €

TDEMOLISH :

BATHROOM FAN

BATHROOM HEATERS N

ÄND-ASSOCIATED-

EF-1

GREENHECK

SQ-95-VG

575

1/2"

1637

SPRING VIB. HANGERS

DIRECT

8.8/8.4

15"x16"x15"

0.12

3.8

115/1

SEE 1/H1 INLINE EF

123456

NOTE: ALL EF LINE VOLTAGE CONTROLS WIRED BY E.C.

(3) SPRING/NEOPRENE VIBRATION ISOLATION HANGERS

5 DIRECT-COUPLED EXTERNAL ACTUATOR (BELIMO) 6 NEMA 1 DISCONNECT SWITCH, UNIT MOUNTED

4 MOTORIZED(115V) OPPOSED BLADE, LOW LEAK DAMPER

1 INTERLOCK EF-1 WITH DF-1

2 ECM MOTOR WITH UNIT-MOUNTED

POTENTIOMETER FOR BALANCING.

TOILETS/GARAGE

MANUFACTURER

MODEL NO.

ESP \*WG

MOUNTING

ELECTRICAL:

FAN F.L.A.

CONTROL

REMARKS:

SONES (INLET/RADIATED)

DIMENSIONS (LxWxH)

MOTOR HP (BHP)

VOLTAGE/PHASE

CFM

RPM

DRIVE

AREA SERVED

EF-2

GREENHECK

GARAGE

50

1/2"

808

SPRING VIB. HANGERS

DIRECT

2.0/2.0

13"x11"x9"

0.05

0.29

115/1

24/7

INLINE EF

3 6

SP-A50-90-VG

## EXHAUST FAN SCHEDULE

<u>TAG</u>	MFGR	MODEL	SIZ	<u>SIZE</u> <u>MC</u>		SERVICE	<u>CFM</u>	REMARKS
			FACE (WxH)	DEPTH (L)				
E1	PRICE	SDGER	10"x6"		SIDEWALL	EXHAUST	100	①
E2	PRICE	SDGER	12 <b>"</b> x8"		SIDEWALL	EXHAUST	175	①
T1	PRICE	ATG1	16"x8"	_	SIDEWALL	TRANSFER	100	12
T2	PRICE	ATG1	20"x12"	_	SIDEWALL	TRANSFER	225	①②
		•	•					

PROVIDE TRANSFER DUCTWORK, ELBOW UP, 1/2 INCH LINER AND WIRE MESH OVER OPENING

			LOL	JVER	SCHE	DULE			
<u>TAG</u>	MFGR	MODEL	SIZ FACE (WxH)	<u>ZE</u> DEPTH (L)	FREE AREA	<u>SERVICE</u>	<u>CFM</u>	<u>FPM</u>	REMARKS
L1	RUSKIN	ELF6375XH	18"x24"	6"	0.29	OUTSIDE AIR	625	504	12
L2	RUSKIN	ELF6375XH	12"x12"	6"	1.24	EXHAUST	50	172	①②

1 ALUMINUM, CLEAR ANODIZED

2 BIRD SCREEN

<u>TAG</u>	<u>MFGR</u>	<u>MODEL</u>	<u>TYPE</u>	<u>SIZE</u>	WATTS CAP.		<u>ELECTRI</u>	<u>REMARKS</u>				
		NO.		<u>HTxWxDEPTH</u>		BTU/HR	<u>VOLTS/PHASE</u>	<u>AMPS</u>				
EH-1	Q-MARK	AWH-4407F	RECESSED WALL HTR	18.25H"x14.38W"x3D"	3000	10,236	240/1	12.5	123			

(1) INTEGRAL TAMPER PROOF THERMOSTAT.

(3) LFKSFCNW: 14 GA SECURITY FRONT COVER.

DIFFUSERS, REGISTERS AND GRILLES SCHEDULE

_		$\circ$ $\sim$ $\cdot$	1 1 0 1 0		7 (1 ( )	0111		3 O 1 1 L D O L L			
<u>TAG</u>	<u>MFGR</u>	MODEL	SIZ	ZE_	MOUNTING	SERVICE	<u>CFM</u>	REMARKS			
	_		FACE (WxH)	DEPTH (L)							
E1	PRICE	SDGER	10"x6"	_	SIDEWALL	EXHAUST	100	①			
E2	PRICE	SDGER	12"x8"		SIDEWALL	EXHAUST	175	①			
T1	PRICE	ATG1	16"x8"	_	SIDEWALL	TRANSFER	100	①2			
T2	PRICE	ATG1	20"x12"	_	SIDEWALL	TRANSFER	225	①②			
DEMA	DEMARKS.										

1 ALUMINUM, CLEAR ANODIZED. INCLUDE AIR SCOOP (AS) OPTION FOR BALANCING

	LOUVER SCHEDULE												
TAG	MFGR	MODEL	SIZ FACE (WxH)	<u>ZE</u> DEPTH (L)	FREE AREA Sq. Ft.	<u>SERVICE</u>	<u>CFM</u>	<u>FPM</u>	<u>REMARKS</u>				
L1	RUSKIN	ELF6375XH	18"x24"	6"	0.29	OUTSIDE AIR	625	504	1)2				
L2	RUSKIN	ELF6375XH	12"x12"	6"	1.24	EXHAUST	50	172	①2				

### FLECTRIC HEATER SCHEDULE

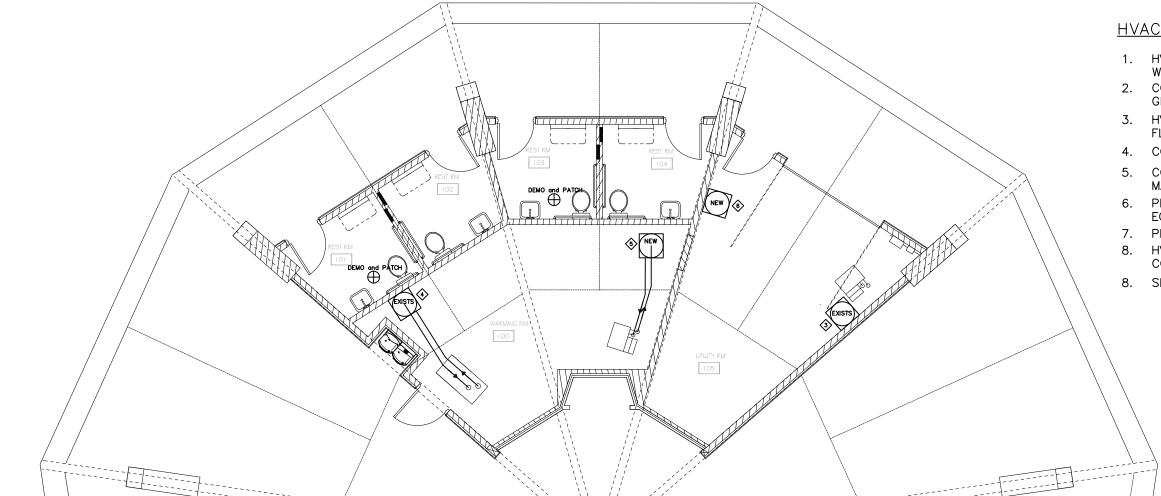
<u>10</u>	<u>IWII GIX</u>	NO.	<u> </u>	HTxWxDEPTH	WAIIS	BTU/HR	VOLTS/PHASE	AMPS	ILLIMAKKS
H-1	Q-MARK	AWH-4407F	RECESSED WALL HTR	18.25H"x14.38W"x3D"	3000	10,236	240/1	12.5	123
	<b>-</b>					•		•	

② BUILT-IN DISCONNECT SWITCH.

### HVAC GENERAL NOTES:

----- EXISTING GAS (EG)

----- NEW GAS (NG)



1. HVAC CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF HVAC WORK

**HVAC PLAN NOTES:** 

PROPERLY VENT NEW DUCT FURNACE (DF-1).

OPENING WITH GENERAL CONTRACTOR.

INTO DRAIN LINE FOR WATER FOUNTAINS.

BALANCING. ONE FOR OWNER ATTIC STOCK.

LONG OFF DELAY (30 MIN).

LONG OFF DELAY (30 MIN).

NEW CONCENTRIC ROOF VENT BY MECHANICAL CONTRACTOR. COORDINATE OPENING WITH GENERAL CONTRACTOR.

6 NEW EXHAUST OUTLET BY MECHANICAL CONTRACTOR. COORDINATE

⟨7⟩ WALL MOUNTED IR OCCUPANCY SENSOR. WIRED IN SERIES WITH EF-1.

(8) CEILING MOUNTED IR OCCUPANCY SENSOR. WIRED IN SERIES WITH EF-1.

(9) 1/2 INCH COPPER CONDENSATE LINE TO HUB DRAIN WITH AIR GAP. TEE

(10) FIELD BUILT FILTER RACK HOUSING AND FILTER RACK FOR 4"x16"x20" MERV8

FILTER. BASIS OF DESIGN FILTER RACK IS AAF MODEL # 321-000-500.

PROVIDE ADEQUATE CLEARANCE FOR FILTER CHANGES WITHOUT INTERFERENCE.
PROVIDE 2 SETS OF CLEAN FILTERS — ONE INSTALLED JUST PRIOR TO

WITH OTHER TRADES.

2. COORDINATE PROVISIONS FOR OPENINGS IN NEW CONSTRUCTION WITH THE GENERAL CONTRACTOR FOR APPROVAL PRIOR TO STARTING WORK.

3. HVAC CONTRACTOR IS RESPONSIBLE FOR CUTTING AND PATCHING WALLS, FLOORS & CEILINGS FOR NEW HVAC WORK, IF REQUIRED. 4. COORDINATE FINAL REGISTER AND GRILLE LOCATIONS WITH OTHER TRADES.

5. COORDINATE PIPING AND DUCTWORK ROUTING WITH OTHER TRADES TO

MAINTAIN SCHEDULED CEILING HEIGHTS. 6. PROVIDE PROPER SERVICE CLEARANCES AND ACCESS SPACE FOR ALL NEW

EQUIPMENT. 7. PROVIDE ACCESS PANELS TO SERVICE EQUIPMENT, WHERE REQUIRED.

8. HVAC CONTRACTOR PROVIDES DISCONNECTS AS NOTED ON PLAN. COORDINATE LINE VOLTAGE WIRING BY ELECTRICAL CONTRACTOR.

8. SEE SPECIFICATION 23 05 00 FOR FURTHER DETAILS.

NEW HEATING AND VENTILATION SYSTEM PLAN

	ELECTRICAL A	AIRFLOW REMARKS
HTxWxLENGTH BTU/HR BTU/HR VOLTS	TS/PHASE AMPS CFM	
DF-1 RENEWAIRE GH-INSI050NSSHTSD11F-SE GAS SEPERATED 21.96H"x15.75W"x47.22L" 50,000 40,000 11	115/1 2.4 625	5 268 (1)2)3)4(5)6)7

1 STAINLESS STEEL HEAT EXCHANGER

2 PROVIDE OPTIONAL DISCONNECT SWITCH.

3 PROVIDE OPTIONAL 5:1 CONTINUOUS ELECTRONIC MODULATION AND DUCT THERMOSTAT FOR MODULATION CONTROL

(4) PROVIDE CUSTOM FABRICATED VERTICAL CONCENTRIC VENT TO ACCOMODATE 5" VENTS, RENEWAIRE DOESN"T HAVE THIS FOR THIS UNIT AT THIS TIME

(5) 1/2 inch GAS SUPPLY CONNECTION. UNIT INCLUDES STANDARD COMBINATION GAS VALVE WITH SHUTOFF

6 3/8" CONDENSATE DRAIN CONNECTION. PROVIDE 1/2" COPPER CONDENSATE DRAIN PIPING AS NOTED ON PLANS - GENERALLY OVER TO NEW DRINKING FOUNTAIN DRAIN

(7) PROVIDE FIELD BUILT FILTER RACK AND FILTER RACK HOUSING TO ACCOMMODATE 4"x16"x20" MERV8 FILTER. BOD FOR RACK IS AAF 321-000-500.

	UNIT HEATER SCHEDULE														
	<u>TAG</u>	MFGR	MODEL NUMBER	TYPE	<u>SIZE</u> <u>HTxWxLENGTH</u>	INPUT BTU /HR	OUTPUT BTU/HR	ELECTRIC VOLTS/PHASE	CAL AMPS		<u>MOTOR</u> <u>RPM</u>	TYPE	AIR CFM	FLOW FPM	REMARKS
-					IIIXWXLLINGIII	<u> </u>	DIO/III	VOLIS/I HASE	AIVII 3	<u> </u>	1 <u>111 IVI</u>	_ <u></u>	CIW	<u> </u>	
	UH-1	MODINE	HDS-60-SS-01-11-F	GAS SEPERATED	18.0H"x26.8W"x25.0L"	60,000	49,200	115/1	3.3	1/12	1625	PSC	990	653	12345

(1) STAINLESS STEEL HEAT EXCHANGER

② BUILT-IN ON/OFF SWITCH. (3) FINGER PROOF FAN GUARD

(4) PROVIDE OPTIONAL 4-inch VERTICAL CONCENTRIC VENT

(5) 1/2 inch GAS SUPPLY CONNECTION

