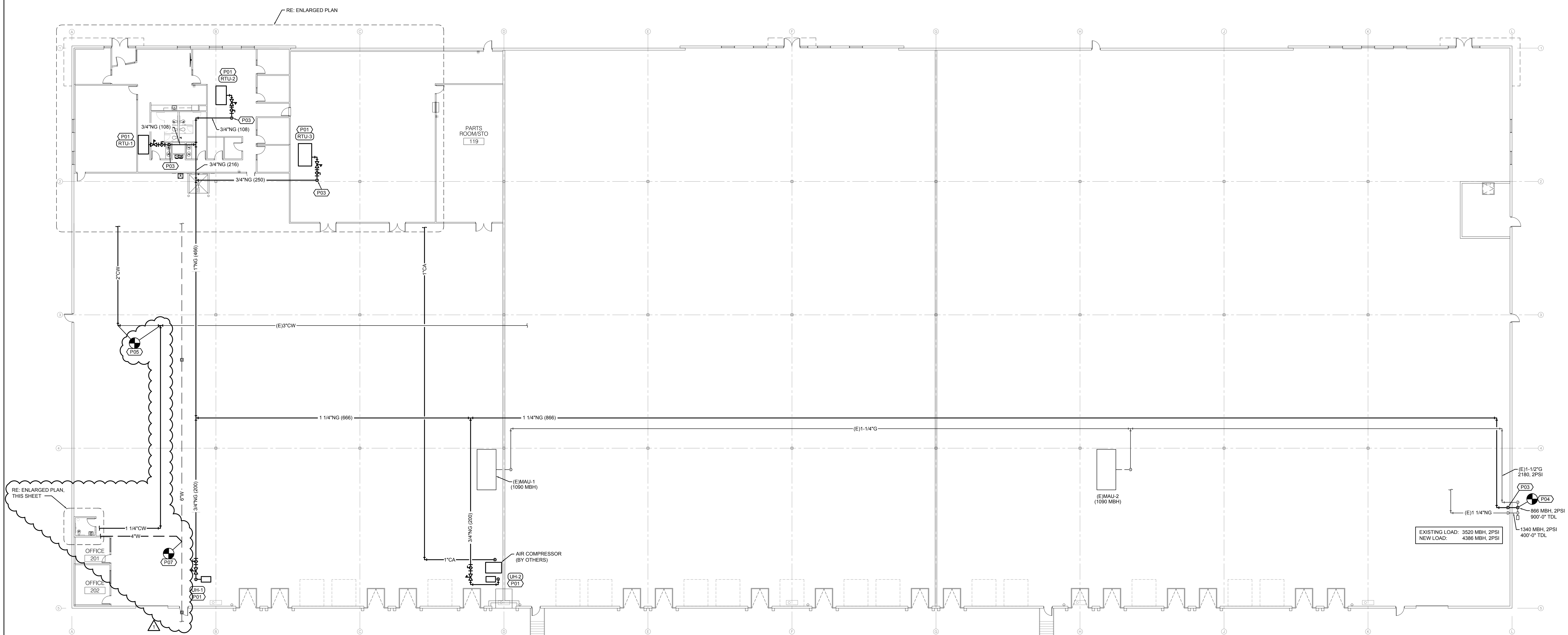
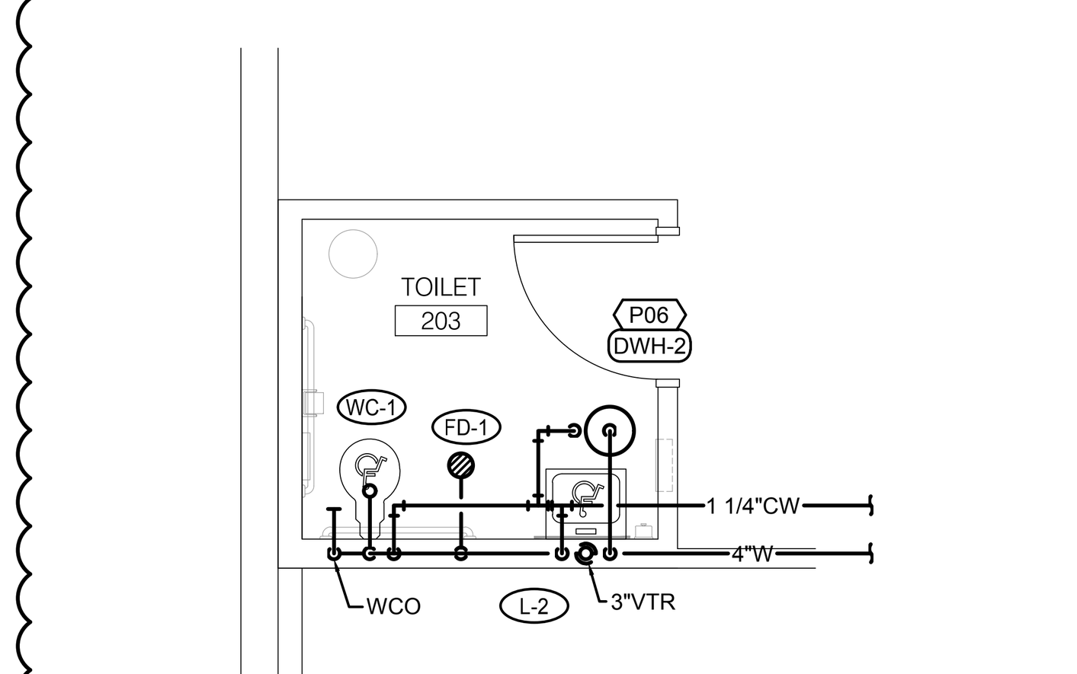


FLOOR PLAN-PLUMBING

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

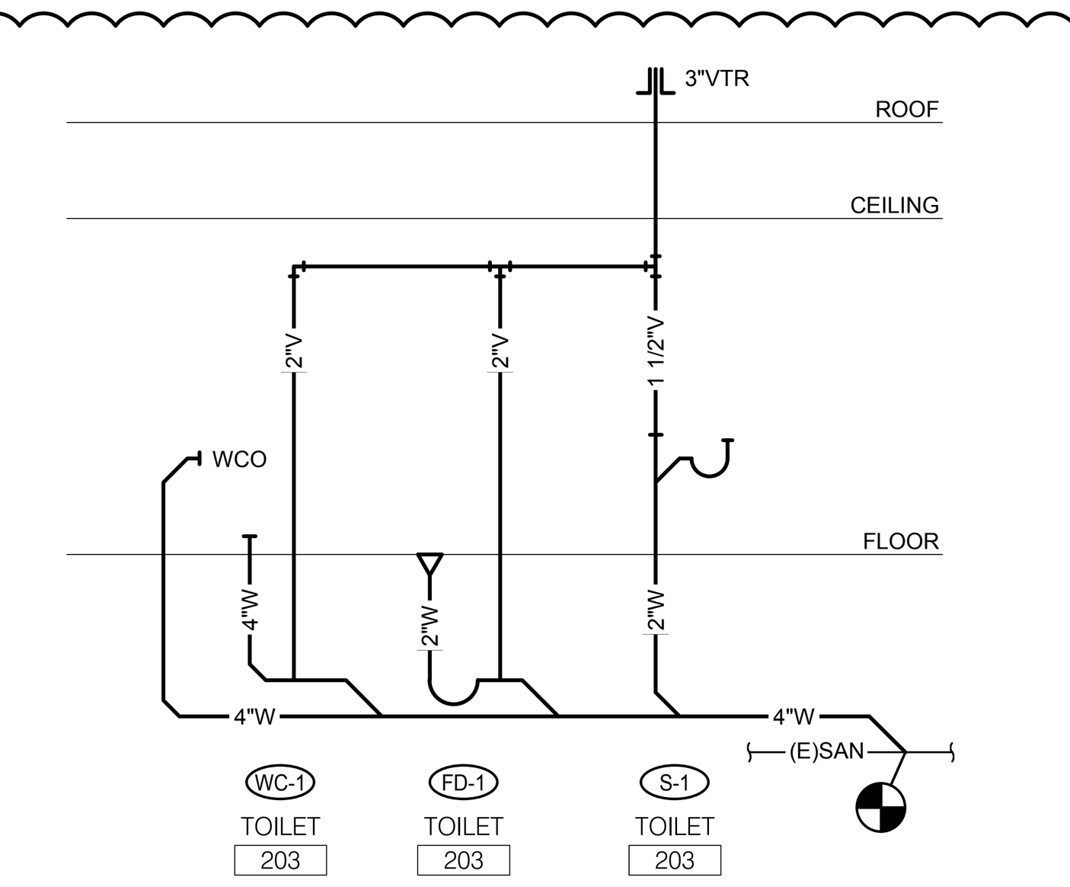
P## FLOOR PLAN NOTES

1. CONNECT TO MECHANICAL EQUIPMENT WITH GAS COCK, DIRT LEG, AND UNION. PROVIDE PRESSURE REGULATOR WITHIN 10'-0" OF UNIT CONNECTION. INLET: 2PSI, OUTLET: 7" WC.
2. ROUTE GAS PIPING UP TIGHT TO INTERIOR AND SUSPENDED ACROSS CEILING SPACE AS INDICATED.
3. ROUTE GAS PIPING UP THROUGH ROOF, RE: DETAIL.
4. CONNECT TO EXISTING GAS PIPING AS CLOSE TO METER AS POSSIBLE.
5. CONNECT TO EXISTING COLD WATER STUBOUT. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING.
6. NEW ELECTRIC WATER HEATER SUSPENDED FROM STRUCTURE. ROUTE WASTE FROM T&P AND DRAIN VALVE TO FLOOR DRAIN AND INDIRECT WASTE.
7. CONNECT TO EXISTING SANITARY PIPING BELOW SLAB. FIELD VERIFY EXACT SIZE, LOCATION, AND ELEVATION OF EXISTING PIPING.



ENLARGED RESTROOM PLAN

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



WASTE/VENT RISER DIAGRAM

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

studio North ARCHITECTURE™
3315 N Oak Trafficway | Kansas City, MO 64116
816 | 888 | 7380
NP Studio North, LLC
Missouri Certificate of Authorization No. A-2017040540

PLUMBING	DESIGN-BUILD BY GEN CONTRACTOR
MECHANICAL	DESIGN-BUILD BY GEN CONTRACTOR
ELECTRICAL	DESIGN-BUILD BY GEN CONTRACTOR
FIRE PROTECTION	DESIGN-BUILD BY GEN CONTRACTOR
CONTRACTOR	FORGE CONSTRUCTION

Lankford Fendler + associates
1730 Walnut Street Kansas City, Missouri 64108
1915 Frederick Avenue, St. Joseph, Missouri 64501
Phone: 816.221.1411 | Fax: 816.221.1429
LANKFORD | FENDLER + ASSOCIATES, CONSULTING ENGINEERS, INC.

COA No. 2006001168

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main St
Lee's Summit, MO 64086

Project No. 2024-032
Date: 04.26.24
Issued For: Permit Submittal
Drawn By: F. Crubaugh
Reviewed By:
Revisions:

No.	Date	Description
1	6/24/24	ASI 02 - Tenant Revisions

P1.0

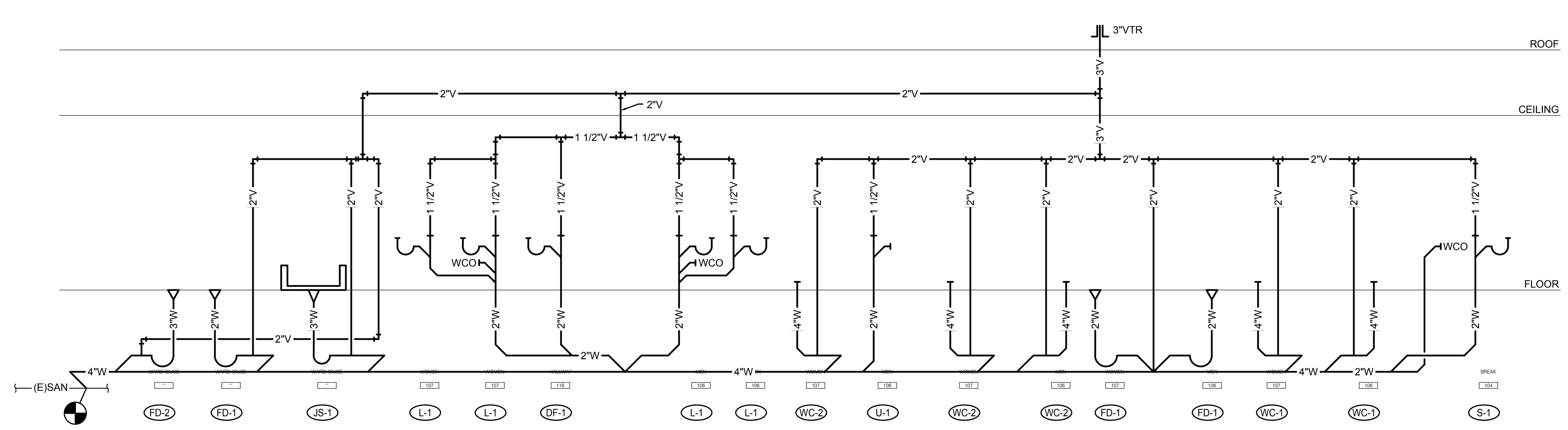
FLOOR PLAN- PLUMBING

ENLARGED FLOOR PLAN-PLUMBING

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

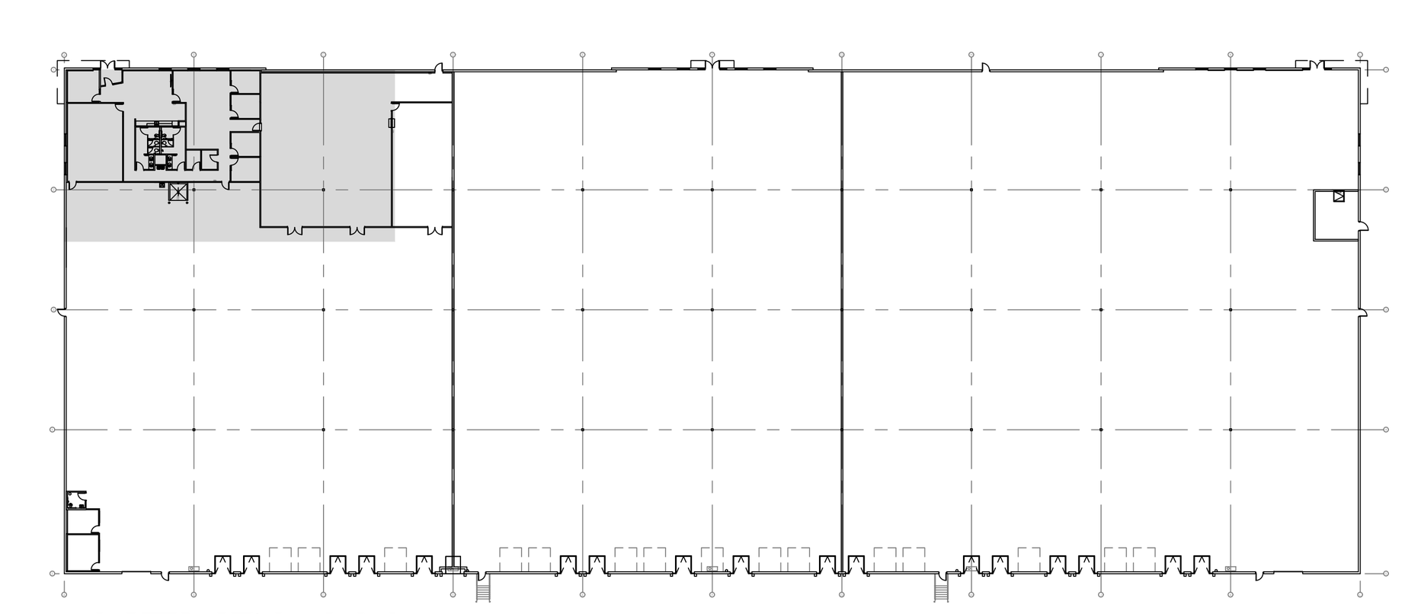
P## FLOOR PLAN NOTES

1. NEW ELECTRIC WATER HEATER INSTALLED ON FLOOR. ROUTE WASTE FROM T&P AND DRAIN VALVE TO FLOOR DRAIN AND INDIRECT WASTE.
2. CONNECT TO EXISTING WASTE PIPING BELOW SLAB. FIELD VERIFY EXACT SIZE, LOCATION AND ELEVATION OF EXISTING PIPING PRIOR TO CONNECTION.
3. CONNECT TO EXISTING COLD WATER STUBOUT, APPROX. 50'. FIELD VERIFY EXACT SIZE AND LOCATION OF STUBOUT PRIOR TO CONNECTION.
4. ROUTE 3/4" COLD WATER DOWN TO DOUBLE CHECK BFP IN ACCESSIBLE LOCATION NEAR MOP SINK. ROUTE PIPING FROM OUTLET UP TO ABOVE CEILING AND AS INDICATED.
5. PROVIDE 3/4" COLD WATER STUBOUT FOR FUTURE CONNECTION TO HUMIDIFIER.
6. 1/2" HOT AND COLD WATER DOWN TO SCRUBBER DUMP FAUCET.
7. 1/2" HOT AND COLD WATER DOWN TO MOP SINK.
8. 3/4" HOT AND COLD WATER DOWN AND IN WALL. ROUTE THRU WALL AND CONNECT 1/2" HOT AND COLD WATER TO EACH LAVATORY, AND 1/2" COLD WATER TO DRINKING FOUNTAIN.
9. 2" COLD WATER DOWN AND IN WALL. ROUTE FULL SIZE AND CONNECT 1" COLD WATER TO EACH WATER CLOSET AND 3/4" TO URINAL.
10. 3/4" COMPRESSED AIR PIPING DOWN TO WORK STATION WITH SHUTOFF VALVE IN ACCESSIBLE LOCATION.
11. 3/4" COMPRESSED AIR PIPING DOWN. PROVIDE 3/4" OUTLET AT EACH WORK STATION WITH DEDICATED SHUTOFF VALVES IN ACCESSIBLE LOCATION.



WASTE/VENT RISER DIAGRAM

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



KEYPLAN

NO SCALE

studio North ARCHITECTURE ™

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Missouri Certificate of Authorization No. A-2017040540

PLUMBING	DESIGN-BUILD BY GEN CONTRACTOR
MECHANICAL	DESIGN-BUILD BY GEN CONTRACTOR
ELECTRICAL	DESIGN-BUILD BY GEN CONTRACTOR
FIRE PROTECTION	DESIGN-BUILD BY GEN CONTRACTOR
CONTRACTOR	FORGE CONSTRUCTION

06.24.2024

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TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main St
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1	6/24/24	ASI 02 - Tenant Revisions

P1.1

ENLARGED FLOOR PLAN-PLUMBING

220 100

PLUMBING SPECIFICATIONS

1.0 SCOPE:

A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation and to provide complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, storm drainage, fixtures, equipment and other items described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer.

B. Extend piping systems as indicated on contract documents or to point of connection as follows:

1. Points of connection within the existing building.

2.0 PIPING, FITTINGS AND VALVES:

A. Provide hot and cold water supply to each and every fixture, piece of equipment and to systems where makeup water is required.

B. Provide service valves for each item of equipment, at branch piping, fixture groups, individual fixtures and elsewhere as indicated or required. Provide balance valves, strainers, check valves and other valves as indicated or required by the application.

C. Provide a union or flanged connection between each item of equipment and its service valve. Copper to ferrous pipe connections shall have isolation coupling, flange or union.

D. Domestic water, interior, above ground -

1. Pipe, copper tube: 2-1/2” and Smaller - Type "L" hard temper copper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvabrite or “CB” solder joints, or roll grooved mechanical joints or pressure seal joint fittings with EPDM O-ring seals.

2. Provide valves where indicated on the drawings, where required by code, or required for service.

a. 1/4 turn Service -

1) 1/2” thru 2” - Nibco 585-66-LF bronze lead free, 600 PSIG, full port, stainless steel ball and stem.

2) Provide isolation valves where indicated on drawing, including at branches, terminations, each piece of equipment and elsewhere as required by code.

b. Check, Strainers and Miscellaneous -

1) Check - 1/2” thru 2” - Nibco 413-Y-LF bronze lead free, 200 PSIG, PTFE seats, Y-pattern check valve.

2) Check - 1/2” thru 2” - Nibco 480-Y-LF lead free, 200 PSIG, PTFE seats, spring loaded, resilient disc, spring loaded inline non-slam check valve, in pump discharge.

3. Securely anchor and support piping, valves and fittings, with adequate provisions for expansion and contraction. Grade lines, free of traps, to low point at cut-off and drain valve.

4. Hot and cold supply lines to have manufactured pre-charged piston type water hammer arresters sized and installed in accordance with PDI-WH 201. Install at each solenoid actuated quick closing valve location including but not limited to dishwashers, clothes washers, ice makers, electronic faucets and similar items. Sioux Chief, JR Smith or equal. Provide access panel where required.

E. Natural Gas --

1. Pipe above ground:

a. 2” and smaller - Schedule 40 black steel piping with threaded fittings.

b. 4” and smaller - Schedule 40 black steel pipe with pressure seal steel fittings. Viega Megapress XL, Apollo PowerPress or equal.

2. Valves & Connectors:

a. Shutoff Service -

1) 1/2" thru 1” - Nibco GB-1A, brass body, chrome plated brass ball, PTFE seats, screwed ends, 5 PSIG per CGA, lever handle.

2) 1/2” thru 2” - Nordstrom 142, iron lubricated tapered plug valve, 200 PSIG, threaded ends.

b. Regulator, 3/4” thru 1-1/2” - Fisher type S, spring loaded diaphragm, 1.5” WC to 2.5 PSIG discharged pressure, threaded, vented to atmosphere.

c. Flex Connectors, Metraflex GASCT 300 series stainless steel braided hose with carbon steel threaded ends.

3. Natural gas piping in return air plenum, where permitted shall be either installed in vented fabricated enclosure; sleeved and vented; or welded or one piece.

4. Paint exterior natural gas piping with corrosion inhibiting paint, color to be selected.

F. Sanitary sewer, vent, interior --

1. Pipe - Standard weight cast iron hubless with no-hub shielded mechanical joints; solid wall schedule 40 PVC, ABS with solvent cement joints; vents may be galvanized malleable iron.

2. Plastic piping shall not be allowed in return air plenums.

3. Floor or equipment drains shall be provided at all locations where equipment is indirect wasted. Floor drains shall be provided outside all ADA showers for roll-in applications or where there is no threshold.

4. All gravity drainage shall be graded per code but not less than 1/8” per foot unless noted otherwise, except that piping sizes up thru 2-1/2” shall be sloped at 1/4" per foot. Piping sizes up thru 4” to be sloped at 1/4" per foot where possible and where required by local codes.

5. Vents shall be sloped upward in direction of flow.

G. Sanitary sewer, vent, below grade --

1. Pipe - Standard weight cast iron hubless with no-hub heavy duty mechanical joint fittings; solid wall schedule 40 PVC, ABS with solvent cement joints.

2. All gravity drainage shall be graded per code but not less than 1/8” per foot unless noted otherwise, except that piping sizes up thru 2-1/2” shall be sloped at 1/4" per foot. Piping sizes up thru 4” to be sloped at 1/4" per foot where possible and where required by local codes.

3. Vents below grade shall be 2” minimum size and shall be sloped up in direction of flow.

H. Compressed Air -

1. Pipe - Copper tube -Type "L" hard temper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvabrite or “CB” solder.

2. Valves, service - 1/2” - 2” Nibco S-585-70, 1/4 turn, 600 PSIG, full port, stainless steel ball and stem.

3. Outlets - Terminate with male pipe with air valve rated for compressed air, chrome angle stop, compression fitting, equipment connection in accordance with equipment vendor requirements.

4. All pipe material, joints and outlets to be in accordance with dental vendor drawings and details.

3.0 CLEANOUTS, TEST TEES, TRAPS AND TRAP SEALS:

A. Provide cleanout at the base of each stack or riser, at ends of runs greater than 100', each 135° aggregate change of direction in horizontal piping, where indicated on the drawings or as required by code. Cleanouts shall be the same size as pipe up to 4" diameter, 4" cleanouts for larger pipe unless otherwise noted.

A. All traps shall be deep seal type with liquid seal not less than specified by code.

B. Where trap primers are not specified provide all floor and hub drains with trap seal with EPDM or silicone diaphragm, conforming to requirements of ASSE 1072 or 1017.2. Provent Proset Series SG22 or TG22, Sioux Chief series 835, Rectorseal SS series or acceptable equal.

4.0 SLEEVES AND SEALS, FLASHINGS, ROOF PIPE SUPPORTS AND UV PROTECTION:

A. Flash all pipes and vents extending through roof. Flashing details shall be in accordance with roof manufacturer's requirements.

B. Continuous roof piping penetrations shall be made weather tight, conform to roof manufacturer warranty.

C. Roof pipe supports shall be prefabricated with UV resistant rubber base, unistrut channel and pipe clamp, length and height for consistent pipe elevation to suit application. Mi-Fab C6 series or acceptable equal.

D. Plastic piping without UV inhibiters which is exposed to UV radiation from sunlight shall be protected by coating with a UV resistant paint.

5.0 CROSS- CONNECTIONS AND INTERCONNECTIONS:

A. No plumbing device or piping shall be installed which will provide cross-connection or interconnection between a distributing supply or waste so as to make possible the backflow or back-siphonage of polluted water into the potable water supply system. Where the possibility of back-siphonage exists, water supply to the fixture shall be introduced through a suitable backflow preventer device suitable for the hazard protected. Installed backflow preventers must be approved through the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.

1. They may be an air gap, anti-syphon valve, atmospheric vacuum breaker, pressure vacuum breaker, double check, reduced pressure backflow preventer or as otherwise required by the authority having jurisdiction.

6.0 PLUMBING EQUIPMENT:

A. Water heaters, pumps, expansion tanks and other equipment shall be as scheduled or by acceptable equal by one of the following:

Water Heaters and Accessories:
Water Heaters: A.O. Smith, State, Rheem, Bradford White
Expansion Tanks: Watts, Amtrol, Armstrong, Elbi, Taco, Wessels.

B. Water Heater Installation

1. Pipe water heater drains and/or pan drains to indirect waste per code and as noted or detailed. Water heater P&T relief valves shall be piped independently, indirectly wasted 6” above receptor per code and as noted or detailed.

2. Install vacuum relief valve on each bottom fed storage water heater, installed above the top of the water heater on cold water inlet piping.

3. Mount water heaters on concrete floor pads, suspended from structure on steel rods, on steel floor stands or wall bracket steel frames as indicated on drawings.

4. Suspended heaters up to 50 gallons may be mounted utilizing prefabricated steel support platform, HoldRite SWHP series or acceptable equal.

5. Where water heaters are mounted overhead, on wood floor or other location requiring containment, mount water heaters in drain pan with 1” minimum drain, HoldRite QP series, acceptable equal or field fabricated equivalent.

6. Water piping connections to water heaters shall be metallic, no plastic piping is permitted within 18” of a water heater connection. Stainless steel flexible connectors with union ends may be used, HoldRite or acceptable equal. Provide 18” minimum flexible corrugated copper or braided stainless steel connector hoses with compression ends for water heaters with 3/4" water connections.

7.0 INSULATION:

A. Pipe insulation shall conform to the International Energy Conservation Code.

B. Insulate all cold water, hot water piping, Owens Corning or acceptable equal.

1. Cold water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket.

2. Hot Water piping insulation: 1" (pipe sizes up thru 1-1/4”) 1-1/2” (pipe sizes 1-1/2” and above) fiber glass sectional pipe covering with universal all service jacket.

C. At Contractor's option, Armacell AP Armaflex unicellular insulation or acceptable equal with 25/50 flame and smoke rating with equal thermal performance may be substituted for fiberglass products.

D. Seal all joints on cold water insulation to maintain vapor barrier.

E. Insulation shall run continuously thru hangers and supports without interruption.

F. Refer to plumbing fixture schedule for protective insulation of fixture drains and water piping for compliance with ADA requirements for People with Disabilities.

1. Pipe coverings may be omitted where protection from injury (such as shrouds or casework) is provided by other trades.

2. Provide comparable protection for accessory items such as disposers where items are exposed to contact beneath ADA designated fixtures.

8.0 PIPE SUPPORTS AND ROUTING:

A. Hangers and Supports

1. Piping shall be supported in accordance with industry standards including support methods, sizes and spacing. All supports and installation shall conform to MSS SP58 and 69 and Fed Spec WW-H-171E and A-A-1192A.

2. Pipe Slopes: Install hangers and supports to provide indicated or required pipe slopes to provide for drainage and venting

3. Each piping system shall be independently supported with no piping bearing on another and installed such that no weight of piping is borne by the equipment.

4. Space hangers and supports within maximum piping span length indicated in MSS SP-58. Install building attachments at required locations for proper piping support.

5. Hangers shall be designed to allow for expansion and contraction of pipe lines and shall be of adequate size to permit covering when required. Provide protective saddles and blocking where supporting insulated piping to prevent crushing insulation.

B. Routing

1. Piping shall be routed as shown on drawings, parallel to building lines unless otherwise shown, coordinated with building structure and other trades. Adjust pipe routing and drop locations with necessary pipe offsets or changes in elevation to accommodate beams and other obstructions.

9.0 EQUIPMENT AND PIPE LABELS:

A. Equipment labels shall be provided for all plumbing equipment and shall be self-adhesive engraved plastic, blue with white lettering, sized, minimum 1-1/2” high, and located for viewing from ground or floor level. Label shall indicate drawing designation or unique equipment number.

B. Pipe labels for domestic water, waste, and vent piping shall be preprinted, color-coded, with 1-1/2” lettering indicating service, and showing flow direction, locate pipe labels where piping is exposed or above accessible ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums; and locations as follows:

1. Near each valve and control device.

2. Near each branch connection, excluding short takeoffs for fixtures and terminal units. Where flow pattern is not obvious, mark each pipe at branch.

3. Near major equipment items and other points of origination and termination.

4. Spaced at maximum intervals of 50 feet along each run. Reduced intervals to 25 feet in areas of congested piping and equipment.

5. On piping above removable acoustical ceilings, omit intermediately spaced labels.

10.0 MISCELLANEOUS

A. Indirect wastes shall discharge full size thru an air gap to a floor, equipment drain, sanitary floor sink or hub drain. The floor or equipment drain grate shall be fitted with a funnel, the sanitary floor sink shall have a partial grate or the grate shall be omitted. Drains shall be located so they are accessible and not a tripping hazard.

B. Provide escutcheons at all penetrations of exposed walls and ceilings. Escutcheons shall be chrome plated brass in occupied areas, prime paint finish for unoccupied areas unless otherwise noted. Escutcheons for exterior or moist areas shall be brass.

11.0 PROTECTION OF WORK

A. Protection

1. Protect and cover piping and fixture waste and water openings to prevent entry of dirt and debris.

2. Cover and protect fixtures and plumbing equipment to prevent damage.

12.0 TEST, ADJUSTMENTS AND CLEANING:

A. Soil, waste and vent piping testing:

1. Initial Piping Water Test: Fill with water to the top of the highest point of the system extending through roof. Systems may be tested in whole or part. The system shall remain leak free under test for a minimum period of Fifteen (15) minutes.

a. Gravity Drain Test: Either 10' water column or at a pressure not less than 10% above that the piping will be subjected to during nominal operation

b. Where applicable, isolate new portions of the system(s) piping with test tee and Oatey Clean Seal inflatable plug prior to testing.

2. Final Piping Test: The completed system(s) shall be visually inspected to determine compliance with all codes and standards. Where required by the building official, the completed system shall be smoke tested with all traps water filled and system pressured to 1” WC for a minimum period of fifteen (15) minutes.

B. Water, gas, and compressed air line testing:

1. Water piping shall be purged and tested with compressed air or water at 50 PSIG above the operating pressure but not to exceed the pressure rating of piping system materials for a period of 2 hours with no measurable pressure drop.

2. Natural gas lines shall be inspected and blown out with dry compressed air or nitrogen to purge of debris and tested at 1-1/2 times the operating pressure or a minimum of 25 PSIG pressure with no measurable pressure drop. All test procedures including duration of test shall be in accordance with NFPA 54 and the International Fuel Gas Code.

3. Compressed air lines shall be blown out with dry compressed air or nitrogen to purge of debris and tested at 1-1/2 times the operating pressure or a minimum of 150 PSIG air pressure for a period of 2 hours with no measurable pressure drop.

4. Where applicable, isolate new portions of pressure piping from existing piping with valves prior to testing.

C. After successful testing, sterilize water system with an approved solution in accordance with local health officials.

Contractor to submit all test data and other documentation for record.

13.0 FIXTURE BRANCH PIPING:

A. Fixture branch and connection sizes shall be as shown in the plumbing fixture schedule on the drawings and not less than required by code.

B. Minimum waste or vent size below slab on grade shall be 2”.

14.0 PLUMBING FIXTURES:

A. Refer to plumbing fixture schedule for plumbing fixtures and accessories. Include all fittings and accessories as required for a complete working system.

B. Where required for ADA compliance, provide lavatory and sink offset drain and tailpiece assembly.

C. At contractor option, flexible stainless steel braided hose, 125 PSIG rated, with non-toxic liner and compression fittings may be used in lieu of chrome plated brass riser tube. Where ADA complinace is required, provide flexible insulation wrap on braided water supplies in lieu of specified molded vinyl wrap.

END OF SECTION

PLUMBING FIXTURE SCHEDULE

MARK NO.	FIXTURE TYPE	MANUFACTURER	MODEL NO.	DESCRIPTION	MINIMUM CONNECTION SIZE			
					CW	HW	WASTE	VENT
WC-1	WATER CLOSET (ADA)	AMERICAN-STANDARD	3043.001 "MADERA"	FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD, 16-1/2" RIM HEIGHT. SLOAN “G2 OPTIMA PLUS” 8111-1.6-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: BEMIS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS. NOTE: MOUNT FLUSH VALVE TO WIDE SIDE OF FIXTURE.	1"	-	4"	2"
WC-2	WATER CLOSET	AMERICAN-STANDARD	2234.001 "MADERA"	FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD. 15" RIM HEIGHT. SLOAN “G2 OPTIMA PLUS” 8111-1.6-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: BEMIS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS.	1"	-	4"	2"
U-1	URINAL (ADA)	AMERICAN-STANDARD	6590.001 "WASHBROOK”	WHITE VITREOUS CHINA, WALL-HUNG, HIGH EFFICIENCY WASHOUT FLUSH ACTION, INTEGRAL FLUSHING RIM, 3/4" TOP SPUD, 2" OUTLET. SLOAN “OPTIMA PLUS” G2 8186-1.0 (1.0 GPF) BATTERY OPERATED ELECTRONIC FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: J. R. SMITH URINAL SUPPORT. NOTE: MOUNT FIXTURE RIM 17" ABOVE FINISHED FLOOR.	3/4"	-	2"	1-1/2"
L-1	LAVATORY (ADA)	D'VONTZ	DV1813RTUWH	UNDERMOUNT 18"x13" RECTANGULAR VITREOUS CHINA WITH FRONT OVERFLOW. ZURN Z6915-XL BATTERY POWERED, DECK MOUNTED, FAUCET WITH 4" CENTERS, SENSOR OPERATION, AND 0.5 GPM OUTLET. ACCESSORIES: PROVIDE WATTS LFG480 THERMOSTATIC MIXING VALVE, GRID DRAIN WITH TAILPIECE, SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS AND CONCEALED ARM LAVATORY SUPPORT. PROVIDE WITH FULLY MOLDED FLEXIBLE VINYL INSULATION KIT COVER TRAP, SUPPLIES AND STOPS, TRUEBRO E-Z LAV GUARD.	1/2"	1/2"	1-1/2"	1-1/2"
L-2	LAVATORY (ADA)	AMERICAN STANDARD	0355.012 "LUCERNE"	WALL HUNG, 18"x13" VITREOUS CHINA, WITH FRONT OVERFLOW AND 4" CENTERS. ZURN Z6915-XL BATTERY POWERED, DECK MOUNTED, FAUCET WITH 4" CENTERS, SENSOR OPERATION, AND 0.5 GPM OUTLET. ACCESSORIES: PROVIDE WATTS LFG480 THERMOSTATIC MIXING VALVE, GRID DRAIN WITH TAILPIECE, SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS AND CONCEALED ARM LAVATORY SUPPORT. PROVIDE WITH FULLY MOLDED FLEXIBLE VINYL INSULATION KIT COVER TRAP, SUPPLIES AND STOPS, TRUEBRO E-Z LAV GUARD. NOTE: MOUNT FIXTURE RIM 31” ABOVE FLOOR.	1/2"	1/2"	1-1/2"	1-1/2"
S-1	SINK (ADA)	DAYTON	DCFU2816	SINGLE COMPARTMENT UNDERMOUNT SINK, 18 GA, TYPE 304 STAINLESS STEEL, 6-1/2” DEEP BOWL. AMERICAN STANDARD 7077300 "COLONY PRO" SINGLE HOLE, DECK MOUNTED FAUCET WITH CERAMIC OPERATING CARTRIDGE, SINGLE LEVER HANDLE, AND PULL DOWN SPRAY. ACCESSORIES: STRAINER WITH 1-1/2" TAILPIECE, 1-1/2" 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS. GARBAGE DISPOSAL: MOEN GXP33C PRO SERIES 1/3 HP WITH POWER CORD.	1/2"	1/2"	2"	1-1/2"
JS-1	JANITOR SINK	ZURN	Z1996-24	SIZE 24" X 24" X 10", COMPOSITE SERVICE SINK WITH COMPOSITE DRAIN, STAINLESS STEEL STRAINER, 3" DRAIN CONNECTION. ZURN Z843M1 WITH QUARTER TURN CERAMIC OPERATING CARTRIDGES, VACUUM BREAKER SPOUT WITH PAIL HOOK AND WALL BRACE, 3/4" MALE HOSE THREAD OUTLET, 369 LEVER HANDLES, FLANGED ADJUSTABLE SUPPLY ARM AND INTEGRAL SUPPLY STOPS AND CHECK VALVES. ACCESSORIES: EXTRUDED VINYL BUMPER GUARDS ON EXPOSED SIDES, RUBBER HOSE WITH STAINLESS STEEL WALL BRACKET.	1/2"	1/2"	3"	2"
SD-1	SCRUBBER DUMP	ZURN	Z843M1	WALL MOUNTED FAUCET WITH QUARTER TURN CERAMIC OPERATING CARTRIDGES, VACUUM BREAKER SPOUT, PAIL HOOK AND WALL BRACE, 3/4" MALE HOSE THREAD OUTLET, 369 LEVER HANDLES, FLANGED ADJUSTABLE SUPPLY ARM AND INTEGRAL SUPPLY STOPS AND CHECK VALVES.	1/2"	1/2"	-	-
DF-1	DRINKING FOUNTAIN (ADA)	ELKAY	EZSTL8LC	ADA BARRIER-FREE BI-LEVEL COOLER, 8.0 G.P.H. (50° F WATER WITH 90° F AIR TEMPERATURE), PUSH BAR ACTIVATION, STAINLESS STEEL COOLER TOP, HEAVY GAUGE VINYL CLAD STEEL CABINET WITH GREY FINISH. 120V/1PH/60HZ. ACCESSORIES: 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED SUPPLY AND STOP, J.R. SMITH FLOOR MOUNTED TYPE SUPPORT WITH "PRO-SET" UPRIGHTS. NOTES: MOUNT WITH SPOUT 35” ABOVE FINISH FLOOR.	1/2"	-	1-1/2"	1-1/2"
IM-1	ICE MAKER WALL BOX	SIOUX CHIEF	696-G1000 SERIES	RECESSED ICE MAKER WALL BOX WITH QUARTER TURN VALVE AND 1/2” INLET, ABS COVER.	1/2"	-	-	-
FD-1	FLOOR DRAIN	ZURN	FD-2210	GENERAL PURPOSE, PVC BODY WITH ADJUSTABLE STRAINER HEAD, ROUND NICKEL BRONZE STRAINER, AND SEEPAGE OPENINGS. OUTLET SIZE PER PLANS. NOTE: PROVIDE WITH RECTORSEAL TRAP SEAL IN OUTLET OF FLOOR DRAIN. MATCH OUTLET SIZE.	-	-	2"	1-1/2"
FD-2	EQUIPMENT DRAIN	WATTS	FD-344-Y	EPOXY COATED CAST IRON BODY WITH ANCHOR FLANGE, WEEPHOLES, AND ROUND DUCTILE IRON STRAINER. NOTE: PROVIDE WITH RECTORSEAL TRAP SEAL IN OUTLET OF FLOOR DRAIN. MATCH OUTLET SIZE.	-	-	3"	1-1/2"

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WATER HEATER SCHEDULE (ELECTRIC)

MARK NO.	MANUFACTURER	MODEL NO.	TANK LINING	TANK CAPACITY (GAL)	INPUT (KW)	THERMAL EXPANSION TANK MODEL NO.	ELECTRICAL			NOTES
							VOLT	ø	HZ	
~~DWH-1~~	~~RHEEM~~	~~ELD40~~	~~GLASS~~	~~40~~	~~6~~	~~PLT-5~~	~~208~~	~~1~~	~~60~~	~~1,2,3~~
DWH-2	RHEEM	PROE6 1 RUI POU	GLASS	6	2	PLT-5	120	1	60	1,2,3

NOTES:
1. PROVIDE WITH TEMPERATURE AND PRESSURE RELIEF VALVE AND DRAIN.
2. PROVIDE WITH CONTROL THERMAL EXPANSION TANK, WATTS MODEL SCHEDULED WITH WATTS SCV SERVICE CHECK VALVE.
3. COORDINATE FINAL ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PURCHASE.

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GENERAL NOTES (TYPICAL ALL SHEETS)

A. PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.

B. ALL EXISTING PIPING SHOWN ON DRAWINGS IS SCHEMATIC AND IS BASED ON EXISTING RECORD DRAWINGS PROVIDED BY THE OWNER AND DO NOT REFLECT EXACT EXISTING CONDITIONS. CONTRACTOR TO FIELD VERIFY EXACT DEPTH AND/OR LOCATIONS ON JOB SITE. CONTRACTOR SHALL REROUTE NEW WORK TO ACCOMMODATE EXACT LOCATIONS OF EXISTING UTILITIES, STUBOUTS AND/OR CONNECTIONS.

C. CUTTING AND PATCHING OF FLOORS, WALLS, CEILING, ETC., REQUIRED IN STRICT ACCORDANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECT'S AND/OR BUILDING OWNER REQUIREMENTS.

D. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS.

E. ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED FROM PROJECT SITE AND DISPOSED OF BY CONTRACTOR.

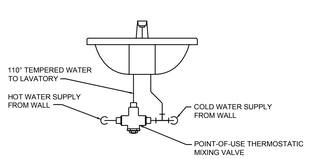
F. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL PIPES. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

G. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT BY OTHERS. VERIFY CONNECTIONS SIZES AND REQUIREMENTS.

H. PLUMBING CONTRACTOR SHALL PROVIDE PRO-SET SYSTEMS 'TRAP GUARD' IN ALL FLOOR DRAIN TRAPS WITHIN PROJECT SCOPE OF WORK.

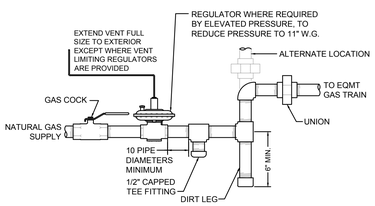
PLUMBING SYMBOLS

────	EXISTING TO REMAIN
━━━━	NEW PIPING
───►───	FLOW ARROW
───CW───	COLD WATER
───HW───	HOT WATER
───NG───	NATURAL GAS
───CA───	COMPRESSED AIR
───V───	SANITARY VENT ABOVE GROUND/FLOOR
───W───	SANITARY WASTE BELOW GROUND/FLOOR
─⋈─	GAS SHUT-OFF COCK
─⋈─	CHECK VALVE
─⋈─	SHUT OFF VALVE
▨ OR ◍	FLOOR DRAIN OR EQMT FLOOR DRAIN
─◦ ─○	PIPE DROP/PIPE RISE
─◦─	BOTTOM OUTLET TEE
─○─	TOP OUTLET TEE
WCO⊢	WALL CLEAN OUT
▣ FFCO	FINISHED FLOOR CLEANOUT
◎ VTR	SANITARY VENT THROUGH ROOF
(DWH-1)	EQUIPMENT TYPE AND DESIGNATION
○	PLUMBING FIXTURE DESIGNATION
ETR	EXISTING TO REMAIN
◕	CONNECT TO EXISTING



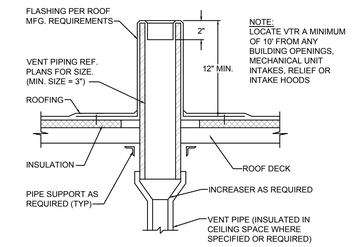
POINT-OF-USE MIXING VALVE

NO SCALE



GAS EQUIPMENT CONNECTION DETAIL

NO SCALE

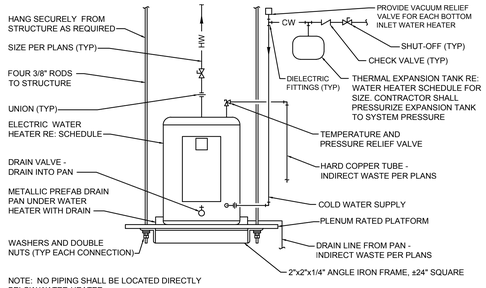


NOTE:
LOCATE VTR A MINIMUM OF 10' FROM ANY BUILDING OPENINGS, MECHANICAL UNIT INTAKES, RELIEF OR INTAKE HOODS

VENT THRU ROOF DETAIL

NO SCALE

NOTES:
1. CONTRACTOR TO INSTALL WHERE INDICATED ON PLANS IN ACCESSIBLE LOCATION.
2. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
3. WATER HEATERS THAT ARE NOT RECIRCULATED SHALL BE EQUIPPED WITH AN INLET AND OUTLET HEAT TRAP, WHETHER INTEGRAL OR EXTERNAL, IN ACCORDANCE WITH THE IECC ENERGY CODE.
4. FOR DOMESTIC WATER SYSTEMS UTILIZING PVC, CPVC OR PEX, PROVIDE 18" MINIMUM COPPER OR BREADED STAINLESS STEEL HOSE CONNECTIONS.



NOTE: NO PIPING SHALL BE LOCATED DIRECTLY BELOW WATER HEATER.

ELECTRIC WATER HEATER DETAIL

NO SCALE

SIZE UP TO 10 GALLONS

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NOTES:
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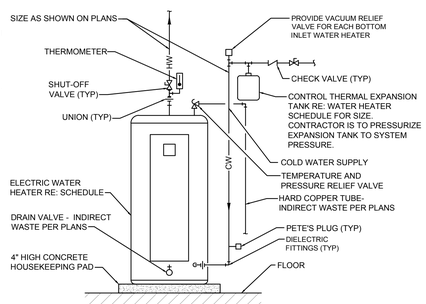
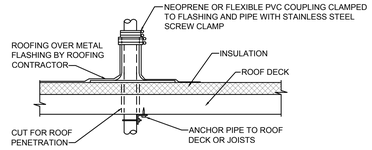


ELECTRIC WATER HEATER DETAIL

NO SCALE



NOTES:
1. REFER TO PLANS FOR PIPE SIZE(S) AND LOCATION(S). LOCATE PENETRATION MINIMUM 18" FROM ADJACENT WALLS OR ANY EQUIPMENT CURBS, PARAPETS, EXPANSION JOINTS, ETC
2. VERIFY FLASHING AND COUNTERFLASHING WITH ROOF MFG. COMPLY WITH ROOF WARRANTY REQUIREMENTS.
3. FLASHING AND COUNTER FLASHING IS BY ROOFING CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE INSTALLATION.

SINGLE PIPE
ROOF PENETRATION DETAIL

NO SCALE

studio North
ARCHITECTURE ™
3315 N Oak Trafficway | Kansas City, MO 64116
816 | 888 | 7380
NP Studio North, LLC
Missouri Certificate of Authorization No. A-2017040540

PLUMBING	DESIGN-BUILD BY GEN CONTRACTOR
MECHANICAL	DESIGN-BUILD BY GEN CONTRACTOR
ELECTRICAL	DESIGN-BUILD BY GEN CONTRACTOR
FIRE PROTECTION	DESIGN-BUILD BY GEN CONTRACTOR
CONTRACTOR	FORGE CONSTRUCTION

NUMBER PE-2009005130
06.24.2024

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LANKFORD | FENDLER + ASSOCIATES, CONSULTING ENGINEERS, INC.

Project No. 24.7428.08
COA No. 2006001168

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main St
Lee's Summit, MO 64086

Project No. 2024-032
Date: 04.26.24
Issued For: Permit Submittal
Drawn By: F. Crubaugh
Reviewed By:
Revisions:

No.	Date	Description
1	6/24/24	ASI 02 - Tenant Revisions

P2.0

PLUMBING NOTES, SYMBOLS, DETAILS, & SCHEDULES