

GENERAL

A. CODES AND PERMITS:

1. COMPLY WITH ALL APPLICABLE CODES, OBTAIN ALL NECESSARY APPROVALS AND PAY FOR ALL NECESSARY PERMITS PRIOR TO COMMENCEMENT OF WORK.
2. PLUMBING AND DRAINAGE SYSTEMS TO BE INSTALLED AS PER APPROVED DRAWINGS AND IN ACCORDANCE WITH THE ILLINOIS BUILDING CODE, (LATEST EDITIONS AND AMENDMENTS) AND LOCAL AUTHORITY'S REQUIREMENTS.
3. ALL MATERIALS AND EQUIPMENT SHALL HAVE PRIOR APPROVAL FOR THE APPLICATION BY THE AUTHORITIES HAVING JURISDICTION, E.G. UL AND AGA.

B. PIPING MATERIALS:

1. DOMESTIC SUPPLY PIPING:
ABOVE THE FINISH FLOOR SHALL BE TYPE "L" COPPER
BELOW THE SLAB-ON-GRADE LESS THAN 2" SHALL BE TYPE "K" COPPER LINES 2" AND LARGER SHALL BE DUCTILE IRON.
2. ABOVEGROUND: SANITARY AND STORM LINES SHALL BE CAST IRON PIPE COMPLYING WITH ASTM A74 AND NSF 14 WITH WELDED JOINTS. VENT LINES SHALL BE SCHEDULE 40 PVC PIPE COMPLYING WITH ASTM 2665-74 AND NSF 14 WITH WELDED JOINTS (IF CODE PERMITS).

CEILING: SANITARY AND VENT LINES SHALL BE SCHEDULE 40 CPVC PIPE COMPLYING WITH ASTM E1723 AND ICC-PMG 1278 LISTING FOR PLENUM USE.

UNDERGROUND: SANITARY AND VENT LINES TO BE CAST IRON.

D. NOTES:

1. CONTRACTOR SHALL BECOME FAMILIARIZED WITH SITE CONDITIONS PRIOR TO SUBMITTING BIDS. CLAIMS FOR EXTRAS DUE TO SITE CONDITIONS WILL NOT BE ACCEPTED.
2. EXCAVATE AND CONFIRM THE LOCATION AND INVERT OF EXISTING STORM AND SANITARY CONNECTIONS AT PROPERTY LINE PRIOR TO WORK COMMENCING. IF EXISTING CONNECTIONS AT PROPERTY LINE ARE FOUND TO BE UNSUITABLE (INSUFFICIENT SIZE OR UNACCEPTABLE INVERT) PLUMBING CONTRACTOR SHALL INFORM THE OWNER/ENGINEER.
3. COORDINATE WITH GENERAL CONTRACTOR LOCATIONS AND SIZES OF REQUIRED PLUMBING CHASES AND ANY ADDITIONAL BRACING BETWEEN STUDS FOR WALL HUNG FIXTURES.
4. COORDINATE WITH GENERAL CONTRACTOR ANY REQUIRED CUTTING OF STRUCTURE TO FACILITATE PASSAGE OF PIPES.
5. THESE DRAWINGS INDICATE DIAGRAMMATICALLY THE INTENT, GENERAL CHARACTER, REQUIREMENTS AND LOCATION OF THE WORK SHOWN AND INCLUDED. THE WORK INDICATED, BUT HAVING MINOR DETAILS OBVIOUSLY OMITTED, SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
6. CONTRACTOR IS RESPONSIBLE TO FURNISH AND INSTALL ALL LABOR AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM. WHERE THERE IS NO MENTION OF THE RESPONSIBLE PARTY FOR A SPECIFIC ITEM TO BE FURNISHED OR INSTALLED ON THE DRAWINGS, THE DRAWING'S TRADE CONTRACTOR SHALL BE COMPLETELY RESPONSIBLE FOR ALL RELATED PURCHASES AND LABOR FOR A COMPLETE OPERATING SYSTEM FOR THIS ITEM. THIS CONTRACTOR SHALL PAY ALL PERMIT FEES, PLAN REVIEW FEES, LICENSE FEES, INSPECTIONS, AND TAXES APPLICABLE TO THEIR DIVISION AND SHALL BE INCLUDED IN THE BASE BID AS PART OF THEIR CONTRACT.
7. CONTRACTOR SHALL BE LICENSED, BONDED, INSURED AND CAPABLE OF PERFORMING QUALITY WORKMANSHIP. THIS CONTRACTOR GUARANTEES ALL OF HIS WORK AND MATERIALS FOR A PERIOD OF ONE (1) FULL YEAR AFTER FINAL ACCEPTANCE BY THE OWNER AND ENGINEER.
8. CONTRACTOR SHALL ESTABLISH SAFE WORKING PROCEDURES FOR THE PROTECTION OF THE WORKMEN IN ALL PHASES OF WORK, COMPLYING WITH ALL APPLICABLE PROVISIONS OF CITY, STATE, AND FEDERAL SAFETY LAWS (OSHA) AND AS RECOMMENDED IN THE MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION AS ISSUED BY THE ASSOCIATION OF GENERAL CONTRACTORS OF AMERICA, INC., 20TH AND E. STREETS, N.W. WASHINGTON, D.C.
9. CONTRACTOR SHALL VERIFY ALL MOUNTING, ARRANGEMENTS, HEIGHTS AND LOCATIONS PRIOR TO ROUGH-IN. ANY MENTION OF A SPECIFIC MOUNTING ARRANGEMENT, HEIGHT OR LOCATION SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO VERIFY THE SPECIFIC REQUIREMENT FURNISHED OR THE TRADES WORKING IN THE SAME AREA. NO ADDITIONS TO THE CONTRACT SUM WILL BE PERMITTED FOR ITEMS INSTALLED IN WRONG LOCATIONS, IN CONFLICT WITH OTHER WORK, ETC.
10. ALL CUTTING AND PATCHING (TO ORIGINAL STATE) OF BUILDING MATERIALS AS REQUIRED FOR INSTALLATION OF A COMPLETE WORKABLE SYSTEM. CONTRACTOR SHALL FURNISH AND INSTALL ALL SLEEVES THRU WALLS AND CORING THRU FLOORS.
11. UPON COMPLETION OF THE WORK, CONTRACTOR SHALL REVIEW AND CHECK THE ENTIRE PORTION OF WORK, CLEAN EQUIPMENT AND DEVICES, REMOVE SURPLUS MATERIALS AND RUBBISH FROM THE PROPERTY AND LEAVE THE WORK IN NEAT AND CLEAN ORDER AND IN COMPLETE WORKING CONDITION. EACH RESPECTIVE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY CARTONS, DEBRIS, EQUIPMENT, ETC., INSTALLED BY THIS CONTRACTOR INCLUDING EQUIPMENT FURNISHED BY OTHERS AND UNCRATED OR REMOVED FROM CARTONS BY THIS CONTRACTOR.
12. BEFORE PLACING WATER SYSTEM IN OPERATION, CHLORINATE ENTIRE SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL AND STATE PLUMBING CODES. SUPPLY CERTIFICATE OF COMPLIANCE. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PUMPING AND DRAINING OF TRENCHES OR PITS NECESSARY FOR THE INSTALLATION OF HIS WORK.
13. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING THE PURCHASE, DELIVERY, RECEIVING, UNLOADING, STORING, SETTING IN PLACE, AND PROTECTING OF ALL NEW EQUIPMENT FURNISHED BY THIS CONTRACTOR AND EQUIPMENT FURNISHED BY OWNER AND INSTALLED BY THIS CONTRACTOR FROM DAMAGE BY VANDALISM AND WEATHER DURING CONSTRUCTION.
14. CONTRACTOR TO VERIFY IN FIELD AND PROVIDE EXTENSIONS REQUIRED TO ADJUST ALL FIXTURES TO GRADE LEVEL TO MAINTAIN INVERTS AS DETERMINED BY ALL FIXTURES RELATED (GREASE TRAPS, MAN HOLES, ETC.)

15. DISINFECTION OF POTABLE WATER SYSTEM SHALL BE AS FOLLOWS: GENERAL: NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE PURGED OF DELETERIOUS MATTER AND DISINFECTED PRIOR TO UTILIZATION. THE METHOD TO BE FOLLOWED SHALL BE THAT PRESCRIBED BY THE HEALTH AUTHORITY HAVING JURISDICTION OR, IN THE ABSENCE OF A PRESCRIBED METHOD, THE PROCEDURE DESCRIBED IN EITHER AWWA C651 OR AWWA C652 LISTED IN CHAPTER 19, OR AS DESCRIBED IN THIS SECTION. THIS REQUIREMENT SHALL APPLY TO "ON-SITE" OR "IN-PLANT" FABRICATION OF A SYSTEM OR TO A MODULAR PORTION OF A SYSTEM.

A. THE PIPE SYSTEM SHALL BE FLUSHED WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT THE POINTS OF OUTLET.

B. THE SYSTEM OR PART THEREOF SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION AT LEAST 50 PARTS PER MILLION (50 MG/L) OF CHLORINE, AND THE SYSTEM OR PART THEREOF SHALL BE VALVED OFF AND ALLOWED TO STAND FOR 24 HOURS; OR THE SYSTEM OR PART THEREOF SHALL BE FILLED WITH A WATER CHLORINE SOLUTION AT LEAST 200 PARTS PER MILLION (200 MG/L) OF CHLORINE AND ALLOWED TO STAND FOR 3 HOURS.

C. FOLLOWING THE REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM.

D. THE PROCEDURE SHALL BE REPEATED WHERE SHOWN BY A BACTERIOLOGICAL EXAMINATION THAT CONTAMINATION REMAINS PRESENT IN THE SYSTEM.

E. INSPECTIONS AND APPROVALS:

1. ALL WORK AND MATERIALS WILL BE SUBJECT TO INSPECTION FROM TIME TO TIME BY THE ENGINEER AND THE AUTHORITY HAVING JURISDICTION. INFORM THE ENGINEER 48 HOURS IN ADVANCE OF ANY TESTS OR COVERING BURYING OR CONCEALMENT OF SERVICES TO ALLOW FOR INSPECTION. DO NOT COVER, BURY OR CONCEAL SERVICES WITHOUT THE ENGINEER'S APPROVAL.
2. DO NOT CHANGE ANY MATERIAL, EQUIPMENT OR CONSTRUCTION METHOD FROM WHAT IS SHOWN ON THE DRAWINGS AND SPECIFICATION WITHOUT THE APPROVAL OF THE ENGINEER. ANY CHANGES MADE WITHOUT THE ENGINEER'S AUTHORIZATION MAY RESULT IN THE WORK NOT BEING ACCEPTED AND/OR DELAY IN ISSUANCE OF THE FINAL LETTER OF ASSURANCE.
3. THE DOCUMENTS INDICATE THE MINIMUM STANDARDS TO BE APPLIED TO THE WORK. ANY APPROVAL, OF, OR AGREEMENT TO, A LOWER STANDARD, BY ANY PERSON OR AUTHORITY WILL NOT NECESSARILY BE APPROVED BY THE ENGINEER AND MAY RESULT IN THE WORK NOT BEING ACCEPTED AND/OR DELAY IN ISSUANCE OF THE FINAL LETTER OF ASSURANCE.

F. COOPERATION WITH OTHER TRADES:

1. GIVE FULL COOPERATION TO OTHER SUB TRADES AND FURNISH ANY INFORMATION NECESSARY TO PERMIT THE WORK OF ALL SUB TRADES TO BE INSTALLED SATISFACTORILY AND WITH THE LEAST POSSIBLE INTERFERENCE OR DELAY.

2. INSTALL ALL EQUIPMENT AND PIPING TO OBTAIN CEILING HEIGHTS SPECIFIED. IN CASE OF CONFLICT, NOTIFY THE ENGINEER BEFORE INSTALLING ANY ITEM REFERRED TO ABOVE. CARRY OUT ANY REQUIRED ADJUSTMENT.

G. MATERIALS AND WORKMANSHIP: FINE

1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND APPARATUS REQUIRED FOR WORK SHALL BE NEW, OF GOOD QUALITY AND SHALL BE FURNISHED, DELIVERED, ERECTED, CONNECTED AND FINISHED IN EVERY DETAIL, AND SHALL BE SELECTED AND ARRANGED SO AS TO FIT PROPERLY INTO THE BUILDING SPACES. WHERE NO SPECIFIC KIND OR QUALITY OF MATERIAL IS GIVEN, A GOOD STANDARD ITEM, AS APPROVED BY THE ENGINEER, SHALL BE FURNISHED.
2. USE SKILLED AND QUALIFIED, FITTERS, PLUMBERS, METAL WORKERS, WELDERS, HELPERS, AND LABOR REQUIRED TO UNLOAD, TRANSFER, ERECT, CONNECT UP, ADJUST, START, OPERATE AND TEST SUCH SYSTEMS. HELPERS AND UNQUALIFIED WORKERS WILL BE DIRECTLY SUPERVISED AT ALL TIMES WHILE WORKING ON THE SITE BY QUALIFIED TRADES PERSONS.
3. UPON REQUEST BY THE ENGINEER, PRODUCE COPIES OF TRADE QUALIFICATIONS OF ANY SELECTED WORKERS.
4. THE ENGINEER SHALL HAVE THE RIGHT TO REJECT ANY ITEM THAT, IN HIS/HER OPINION, DOES NOT CONFORM TO AN ACCEPTABLE STANDARD OF QUALITY, QUIETNESS OF OPERATION, FINISH, APPEARANCE AND PERFORMANCE. UNACCEPTABLE MATERIAL AND/OR WORKMANSHIP MUST BE RECTIFIED TO THE APPROVAL OF THE ENGINEER.
5. UNLESS NOTED OTHERWISE, ALL FIXTURES SHALL BE PROVIDED WITH APPLICABLE ACCESSORIES (SUCH AS SUPPLY STOPS, WASTE TRAPS, FIXTURE MOUNTING SUPPORTS, BOLT CAPS, WATER CLOSET SEATS, ETC., AS REQ'D.)
6. ALL EQUIPMENT AND DEVICES SHALL BEAR AGA, CSA OR UL APPROVED LABELS AND CERTIFICATIONS SHALL VERIFY IF LOCAL CODE REQUIRED.

H. SUBMITTALS:

1. PRIOR TO COMMENCEMENT OF WORK, SUBMIT COMPLETE SHOP DRAWINGS ELECTRONICALLY (PDF FILES) ON ALL SPECIFIED OR APPROVED EQUAL MATERIALS TO BE USED. ALLOW 5 WORKING DAYS FOR THE ENGINEER TO REVIEW.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DELAYS CAUSED BY ANY REQUIRED RESUBMISSION OF SHOP DRAWINGS.
3. THE ENGINEER'S REVIEW IS FOR GENERAL COMPLIANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS AND WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR CORRECTNESS OF PERFORMANCE, FUNCTION, DETAILS AND DIMENSIONS.
4. WHERE ALTERNATE EQUIPMENT HAS BEEN SUBMITTED THE CONTRACTOR BEARS RESPONSIBILITY FOR ANY REDESIGN AND CONSTRUCTION REQUIRED TO ACCOMMODATE THE EQUIPMENT.

I. DRAWINGS AND SPECIFICATIONS:

1. CONTRACT DRAWINGS FOR PLUMBING WORK ARE IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK AND INDICATE GENERAL ARRANGEMENT OF EQUIPMENT AND PIPING. THIS CONTRACTOR SHALL LAY OUT THE WORK AT THE SITE AND PROVIDE ANY NECESSARY OFFSETS AND ADJUSTMENTS TO SUIT SITE CONDITIONS AND AVOID CONFLICT WITH OTHER TRADES.
2. CARE SHALL BE TAKEN TO ENSURE THAT THE INSTALLATION IS IN ACCORDANCE WITH DETAILED DRAWINGS, WHERE GIVEN, AND THAT THE INSTALLATION MEETS THE DESIGN REQUIREMENTS.
3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY. ANYTHING CALLED FOR IN THESE SPECIFICATIONS OR SHOWN ON THE DRAWINGS SHALL BE CONSIDERED AS APPEARING IN BOTH.
4. ANY DISCREPANCIES FOUND BETWEEN DRAWINGS AND SPECIFICATIONS, LEAVING IN DOUBT THE TRUE INTENT OR MEANING SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE WORK BEING PERFORMED.

EXECUTION

TESTING:

1. SANITARY PIPING: TEST UNDER 10 FEET STANDING HEAD.
2. WATER PIPING: PRESSURE TEST AT 1-1/2 TIMES THE SYSTEM PRESSURE BUT AT LEAST 100. PSI BY AIR OR WATER, FOR 1 HOURS, WITH NO SIGNIFICANT PRESSURE DROP.
3. ALTERNATE TESTS WILL GOVERN AS CALLED FOR BY PLUMBING INSPECTOR. TESTING SHALL BE WITNESSED AND SIGNED BY OWNER.

A. INSTALLATION:

1. PROVIDE CHROME PLATED ESCUTCHEON PLATES WHEREVER PLUMBING LINES PENETRATE A FINISHED WALL.
2. PROVIDE SHUT OFF VALVES AND ACCESSORIES IN ACCESSIBLE LOCATIONS TO EACH APPLIANCE, PIECE OF EQUIPMENT, FIXTURE GROUP OR BRANCHES. PROVIDE VALVES IN ACCORDANCE WITH CODES AND WHERE SHOWN ON THE DRAWINGS.
3. INSTALL BALANCING VALVES WHERE SHOWN ON THE DRAWINGS OR AS REQUIRED AND ADJUST THE VALVES FOR BALANCED FLOW ON THE RECIRCULATION SYSTEM.
4. IDENTIFY EACH PIPING SYSTEM WITH STICK ON DECALS TO INDICATE SERVICE AND DIRECTION OF FLOW. DO NOT RUN WATER PIPES IN OUTSIDE WALLS WITHOUT PROTECTION FROM FREEZING TO THE ENGINEER'S APPROVAL.
5. THREADED FITTINGS ON GALVANIZED STEEL PIPING SHALL BE 150# CLASS GALVANIZED MALLEABLE IRON FILLING CONFORMING TO ASTM A-197 SPECIFICATION.
6. FURNISH AND INSTALL UNIONS WHERE INDICATED OR NECESSARY FOR REPAIR OR SERVICE. UNIONS 2" AND SMALLER SHALL BE STANDARD GROUND JOINT BRASS TO IRON SEAT, MALLEABLE IRON, SCREWED. UNIONS 2-1/2" AND LARGER SHALL BE STANDARD CAST IRON FLANGED UNIONS 125# CLASS.
7. HORIZONTAL SOIL OR WASTE LINES SHALL BE AT A SLOPE OF NOT LESS THAN 1/8" PER FOOT AND SHALL BE HELD CLOSE TO THE CONSTRUCTION TO MAINTAIN A MAXIMUM OF HEAD ROOM. ALL CHANGES OF DIRECTION AND JUNCTIONS SHALL BE MADE WITH "Y" FITTINGS AND 1/8" BENDS.
8. HOT AND COLD WATER PIPING SHALL BE PROPERLY PITCHED TO LOW POINTS IN THE SYSTEM WHERE DRAINS SHALL BE INSTALLED.
9. VALVES SHALL BE MANUFACTURED BY CRANE, STOCKHAM, VALVE NUMBERS INDICATED HERE ARE CRANE, GATE VALVE, 2" AND SMALLER #428, GLOBE VALVE, 2" AND SMALLER #7 CHECK VALVE, 2" AND SMALLER, #36. VALVES ARE SUITABLE FOR IRON OR STEEL PIPE ONLY. IF COPPER PIPING IS USED, MODIFY VALVE NUMBERS AS REQUIRED AND SUBMIT PROPER VALVES FOR APPROVAL.
10. ALL SUPPLY PIPING TO BE RUN OVERHEAD, UNLESS NOTED OTHERWISE.
11. ALL SUPPLY PIPING TO BE A MINIMUM OF 3/4" DIA., UNLESS NOTED OTHERWISE.
12. EACH FIXTURE WILL HAVE A 3/4" X 12" AIR CHAMBER.
13. DO NOT USE PVC IN PLENUM RETURN CEILING.
14. ALL FIXTURES WILL BE FURNISHED WITH INTEGRAL STOPS.
15. ALL FLOOR DRAINS AND FIXTURES TO BE BOLTED IN ACCORDANCE WITH LOCAL CODES.
16. ALL HORIZONTAL BENT PIPING SHALL BE RUN ABOVE FINISHED CEILING AND SLOPED UP TOWARD MAIN SANITARY.
17. THE PLUMBING CONTRACTOR WILL NOT INSTALL COMBUSTIBLE PIPING MATERIAL IN OR THRU FIRE RATED ASSEMBLIES.
18. HORIZONTAL DRAINAGE PIPING SHALL BE PITCHED NOT LESS THAN 1/4" PER FOOT FOR PIPING 3" DIA. AND UNDER, WHILE HORIZONTAL DRAINAGE PIPING SHALL BE PITCHED NOT LESS THAN 1/8" PER FOOT FOR PIPING 4" DIA. AND OVER.
19. ALL CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH DIELECTRIC UNIONS OR COUPLINGS.
20. PIPES WHICH PASSING THROUGH THE FOUNDATION OR RATED WALL SHALL BE SLEEVED WITH WATER STOP OR FIRE RESIST "DEPEND TO THE APPLICATION" TO PROVIDE NOT LESS THAN 1" CLEARANCE AROUND THE PIPE. THE OPENING BETWEEN THE PIPE AND THE PIPE SLEEVE SHOULD BE TIGHTLY PACKED WITH OAKUM AND CAULKED WITH LEAD.

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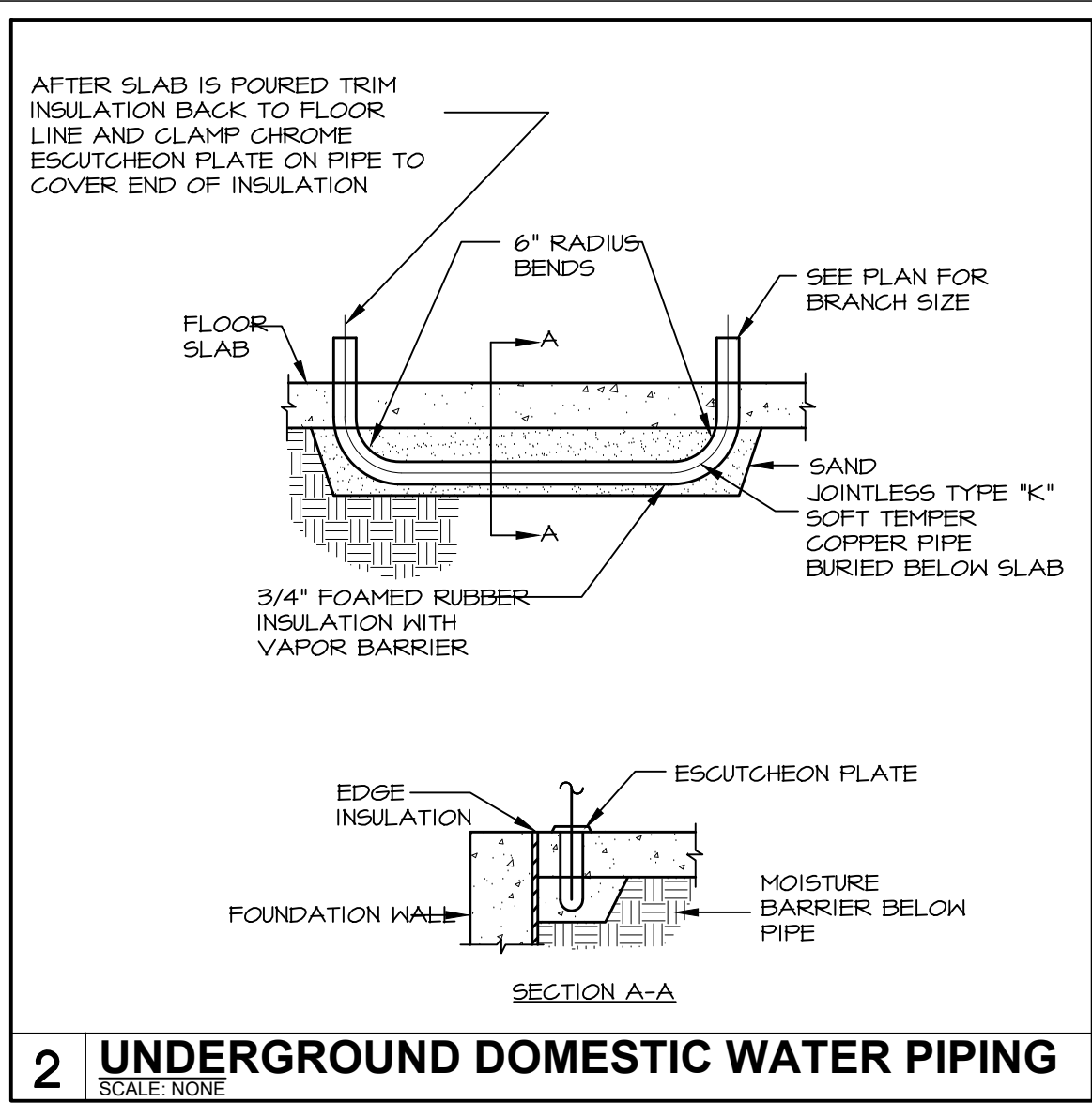
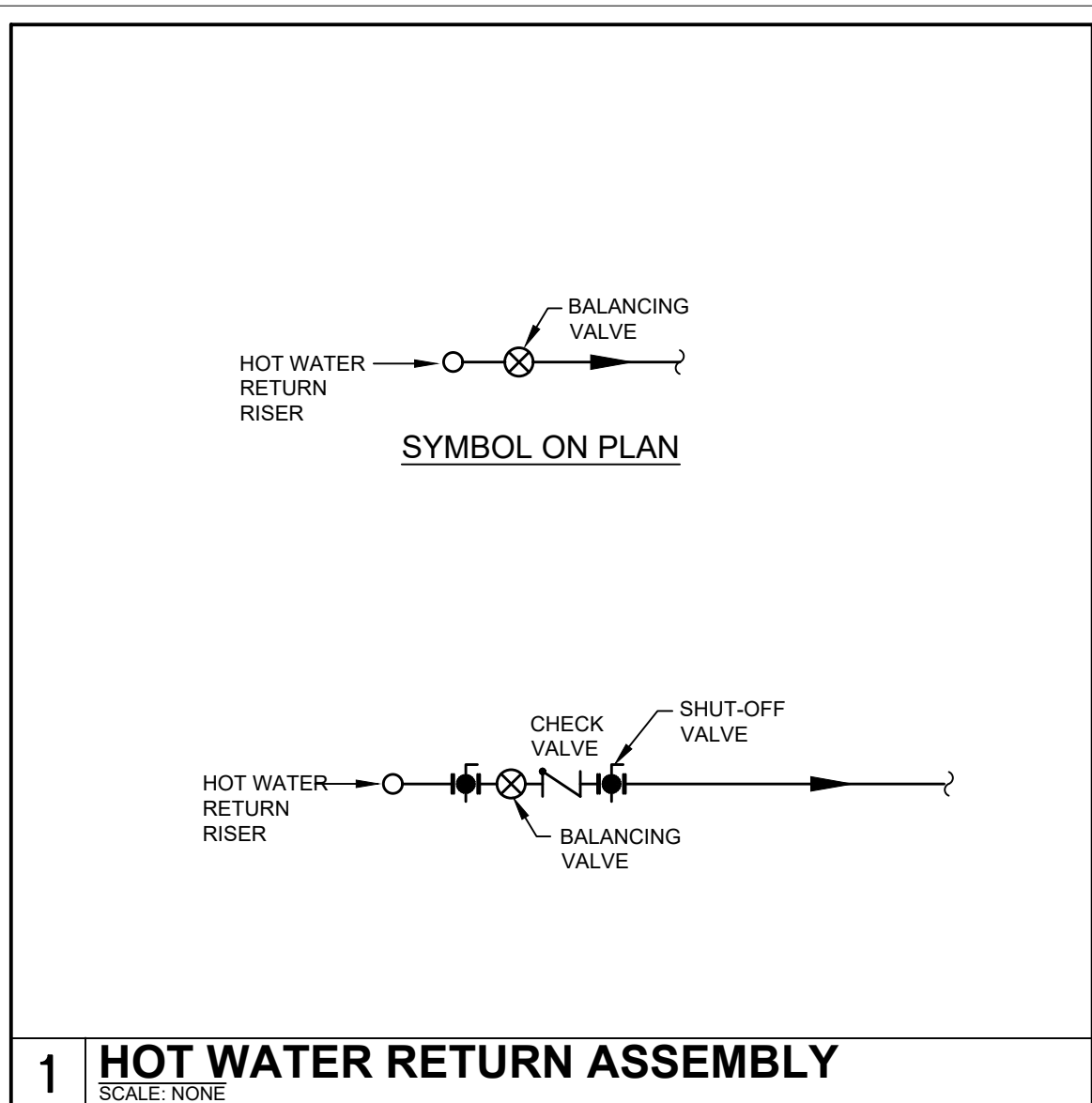
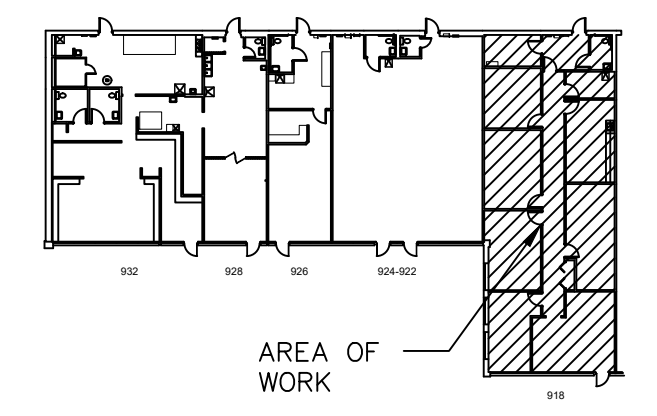
J. FIRE STOPPING:

1. ALL FIRE STOPPING SHALL BE DONE IN ACCORDANCE WITH THE LOCAL BUILDING CODE TO MAINTAIN FIRE RATINGS OF THE STRUCTURE AND FINISHES. MATERIAL USED FOR FIRE STOPPING SHALL BE TESTED AND APPROVED FOR THE PARTICULAR APPLICATION. PROVIDE COPIES OF THE TEST RESULTS TO THE ENGINEER ON REQUEST.
2. PIPES PASSING THROUGH WALLS AND FLOORS SHALL NOT BE IN DIRECT CONTACT WITH THE STRUCTURE. PENETRATIONS SHALL BE SIZED TO ALLOW 1/2" CLEARANCE BETWEEN THE PIPE AND THE STRUCTURE.
3. PIPES PENETRATING OR PARTLY PENETRATING FIRE SEPARATIONS, FIREWALLS AND FIRE RATED STRUCTURES SHALL HAVE THE 1/2" SPACE BETWEEN THE PIPE AND THE STRUCTURE CALKED WITH UL APPROVED HIGH TEMPERATURE INSULATION CEMENT TO AVOID FIRE, SMOKE AND SOUND TRANSMISSION.
4. PIPES PASSING THROUGH WALLS AND FLOOR THAT ARE NOT ARE RATED SHALL HAVE THE 1/2" SPACE BETWEEN THE PIPE AND THE STRUCTURE CALKED WITH INSULATION AND/OR INSULATION CEMENT TO AVOID SOUND, SMOKE AND DUST TRANSMISSION.
5. THIS WORK TO BE UNDERTAKEN BY QUALIFIED TRADES PEOPLE ONLY.

PLUMBING SYMBOL LIST

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
A.F.F.	ABOVE FINISHED FLOOR	---	COLD WATER LINE
AG	AIR GAP	---	HOT WATER LINE
C.I.	CAST IRON	---	HOT WATER RECIRCULATION
CO	CLEANOUT	S	SUSPENDED SANITARY
CW	COLD WATER SUPPLY	US	UNDERGROUND SANITARY
FD	FLOOR DRAIN	-----	SUSPENDED VENT
HWT	HOT WATER TANK	⊖	DOWN (ELBOW)
LAV	LAVATORY	⊖	RISER UP (ELBOW)
OSD	OPEN SITE DRAIN	⊕	BALL VALVE
P	PUMP	⊕	GATE VALVE
PC	PLUMBING CONTRACTOR	⊕	CHECK VALVE
RD	ROOF DRAIN	⊕	UNION
SAN	SANITARY	▶	DIRECTION OF FLOW
SK	SINK		
ST	STORM		
UR	URINAL		
UG	UNDER GROUND		
V	VENT		
V.I.F.	VERIFY IN FIELD		
VTR	VENT THRU ROOF		
WC	WATER CLOSET		
WH	WATER HEATER		
E.T.R.	EXISTING TO REMAIN		

DISREGARD ANY SYMBOL OR ABBREVIATION THAT IS NOT APPLICABLE TO THIS PROJECT



Rev. No.	Date	Description
1	02/06/23	ISSUED FOR CLIENT REVIEW

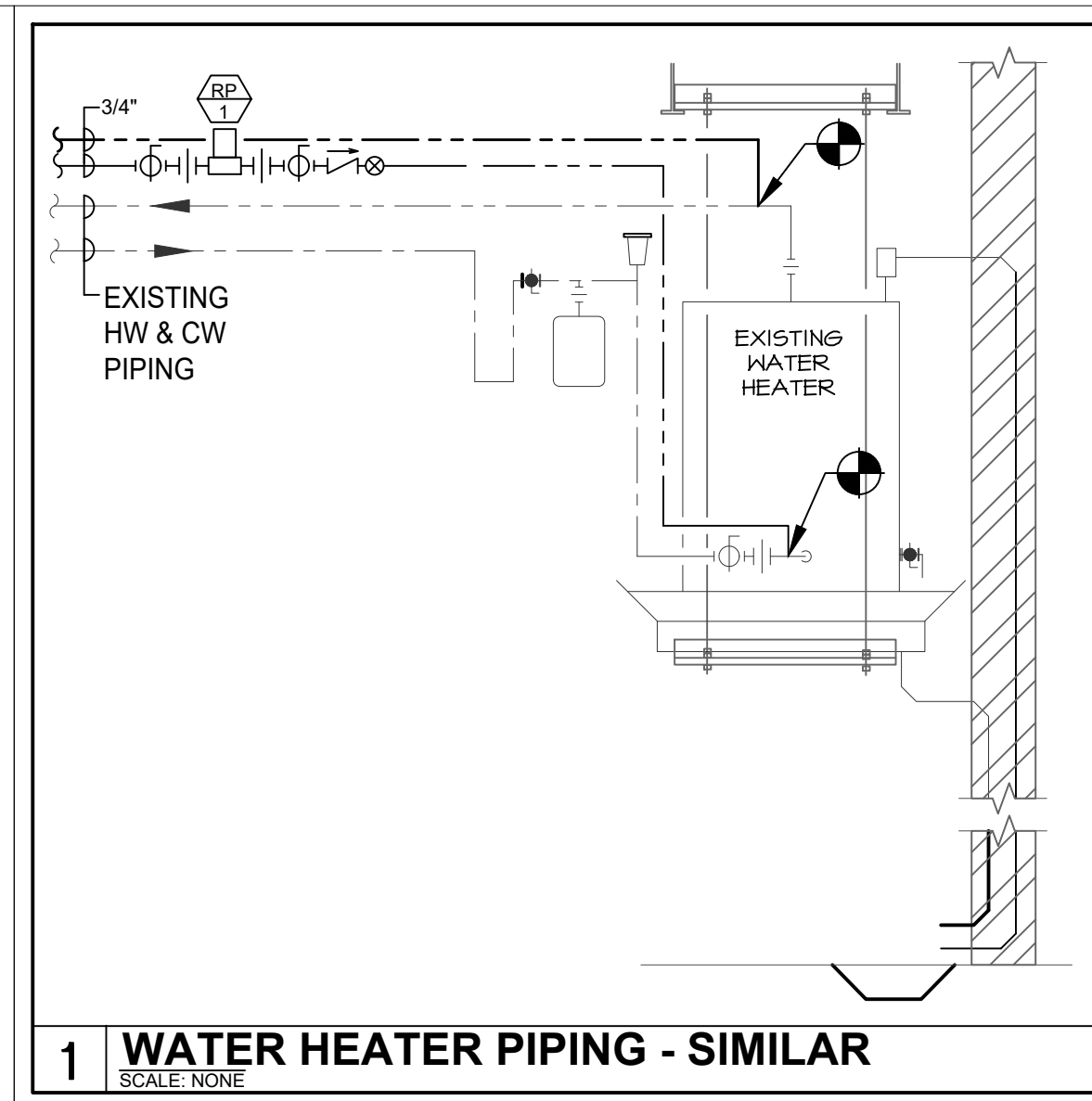
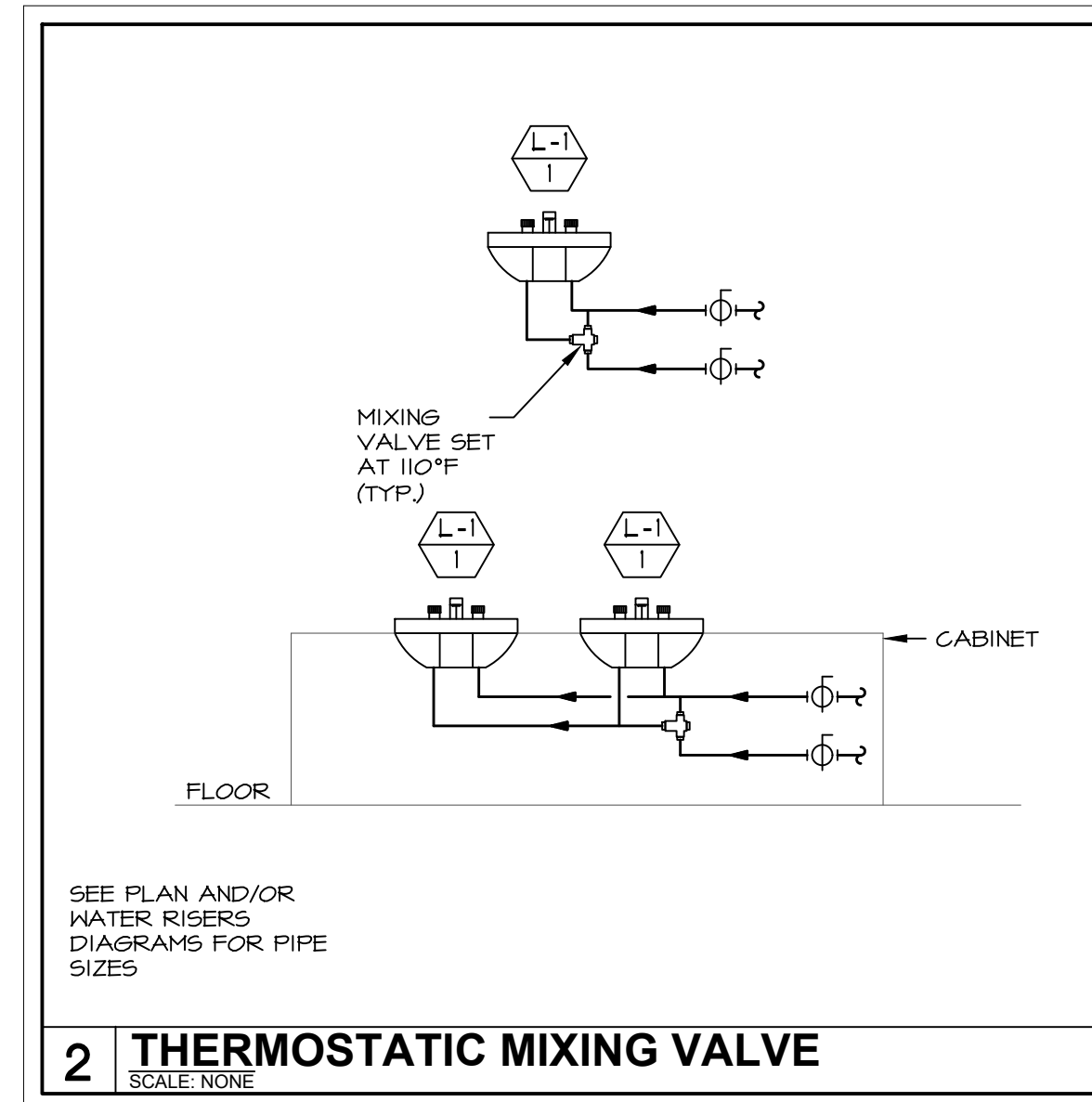
ISSUES & REVISIONS



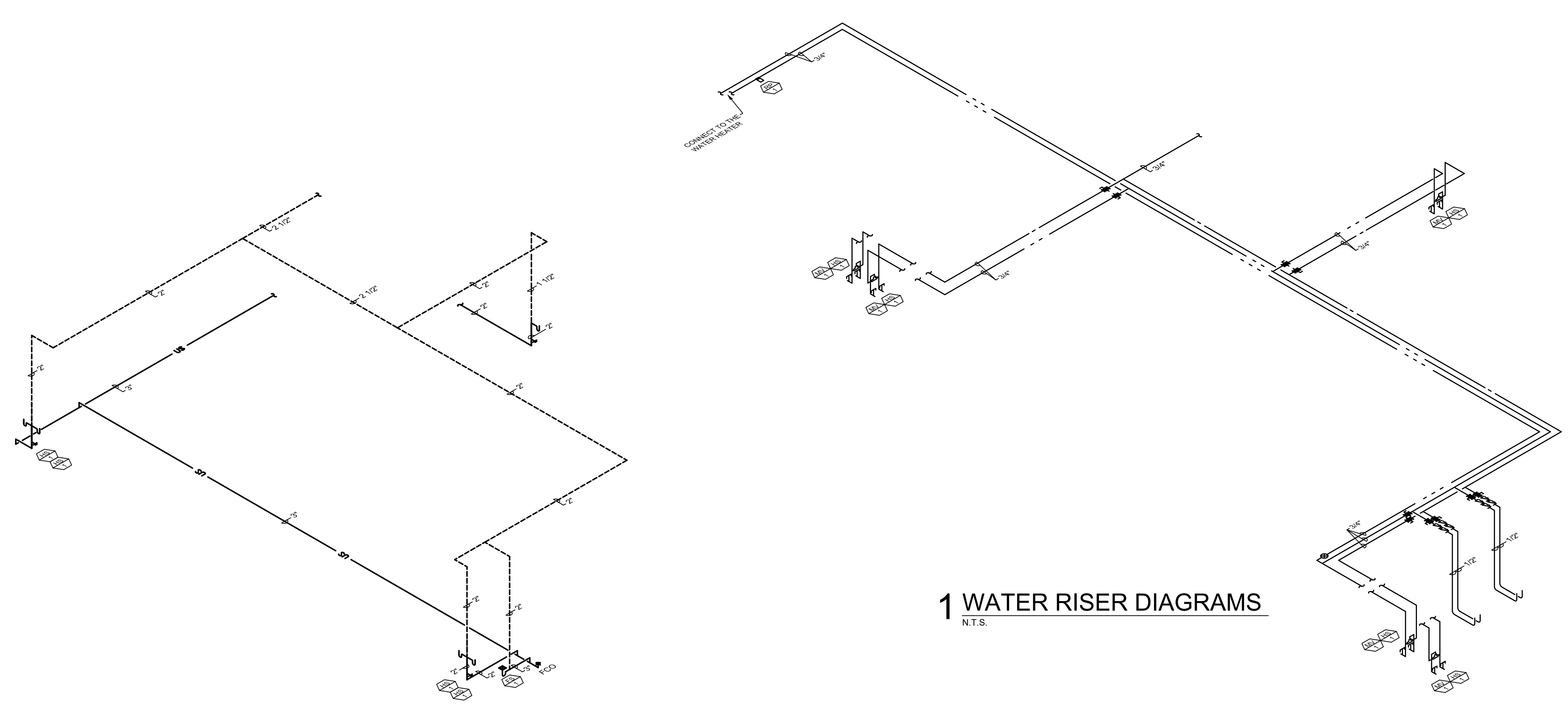
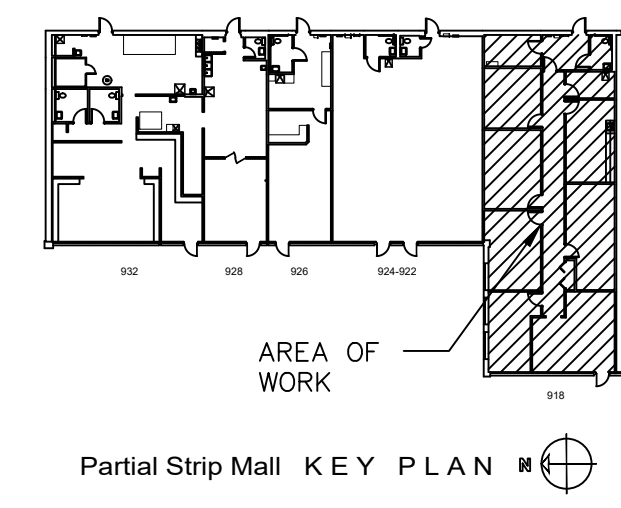
Project:
New Hand Sinks for Rooms 1 through 5
 918 W. Algonquin Road
 Arlington Heights, IL 60005

Sheet Title:
GENERAL NOTES & SYMBOL LIST

Date:	02/06/23	Proj. No.:	2308
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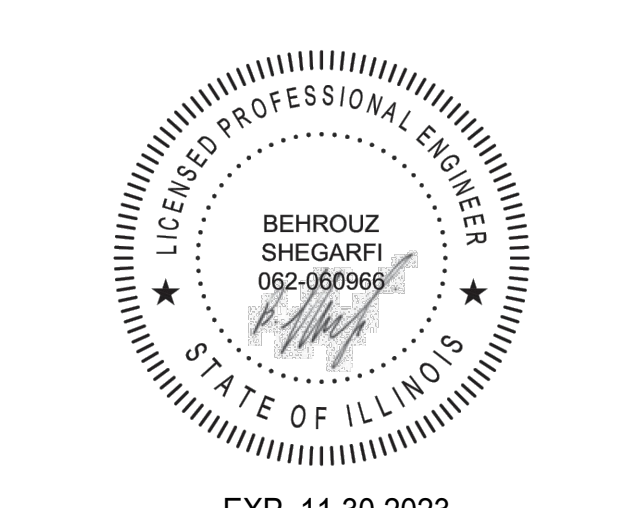


PLUMBING EQUIPMENT SCHEDULE					
TAG	EQUIPMENT	QTY	MANUFACTURER & MODEL	TYPE	REMARKS
CO	CLEANOUT "FINISHED"	-	ZURN, ZN-1400-BP-NL JR SMITH, 4021	FLOOR	ADJUSTABLE, C.I. BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG. FURNISH WITH SECURING SCREW. (EQUAL MANUFACTURERS: JOSAM, SIOUX CHIEF)
	CLEANOUT	-	ZURN, 1441-2 JR SMITH, 4422	WALL	C.I. BODY, GAS AND WATERTIGHT ABS TAPERED THREAD PLUG. FURNISH WITH CHROME ACCESS COVER AND SECURING SCREW. (EQUAL MANUFACTURERS: JOSAM, SIOUX CHIEF)
	CLEANOUT "CARPET FLOOR"	-	ZURN, Z-1441-BP JR SMITH, 4021-Y	FLOOR	C.I. BODY, ADJUSTABLE, POLISHED BRASS TOP WITH CARPER MARKER. (EQUAL MANUFACTURERS: JOSAM, SIOUX CHIEF)
FS-1	FLOOR SINK	1	JR SMITH 3110-12	-	FLOOR SINK WITH BOTTOM STRAINER. 12"X12" SQUARE NICKEL BRONZE TOP, 1/2" GRATE. CAST IRON FLANGED RECEPTOR WITH SEEPAGE HOLES, ACID RESISTANT COATED INTERIOR, NICKEL BRONZE RIM AND SECURED GRATE. ALUMINUM DOME BOTTOM STRAINER. (EQUAL MANUFACTURERS: ZURN, SIOUX CHIEF)
MV-1	MIXING VALVE	5	WATTS, LFUSG-B-M2	SINGLE SINK	ROUGH BRONZE FINISH. MIXING VALVE SET AT 110°F DISCHARGE TEMP. ASSE 1070, PRESSURE RATING OF 125 PSIG. FLOW RATE 4 GPM AT 45 PSIG. (EQUAL MANUFACTURERS: WATTS, BRADLEY, ZURN)
HS-1	HAND SINK	5	ELKAY, CHS1716-C CHICAGO FAUCET 631 Mc GUIRE LFH2165CCLK STOPS	WALL	12"x9 1/4"x6" TYPE 304 STAINLESS STEEL. LK-8 CHROME PLATED STAMPED BRASS PERFORATED STRAINER. 7" HIGH BACK SPLASH, WALL HANGER, INTEGRAL S.S. SUPPORT BRACKETS. P-TRAP: 1 1/2" CAST BRASS WITH CLEANOUT AND WALL FLANGE. STOPS: HEAVY DUTY CHROME PLATED 3/8" ODX12" LONG AND BRASS STEAM. (EQUAL MANUFACTURERS: JUST, EAGLE GROUP)
RP-1	REC. PUMP	1	BELL & GOSSETT, PL-30	INLINE	1/12 HP, 115/1/60, 1750 RPM, 5 GPM @ 20' HD, 3/4" SUCTION & DISCHARGE SIZE. DRIP PROVE TYPE MOTOR, CAST IRON MOTOR HOUSING AND CASING. TC-1 AUTOMATIC TIMER KIT AND AQS AQUASTAT.



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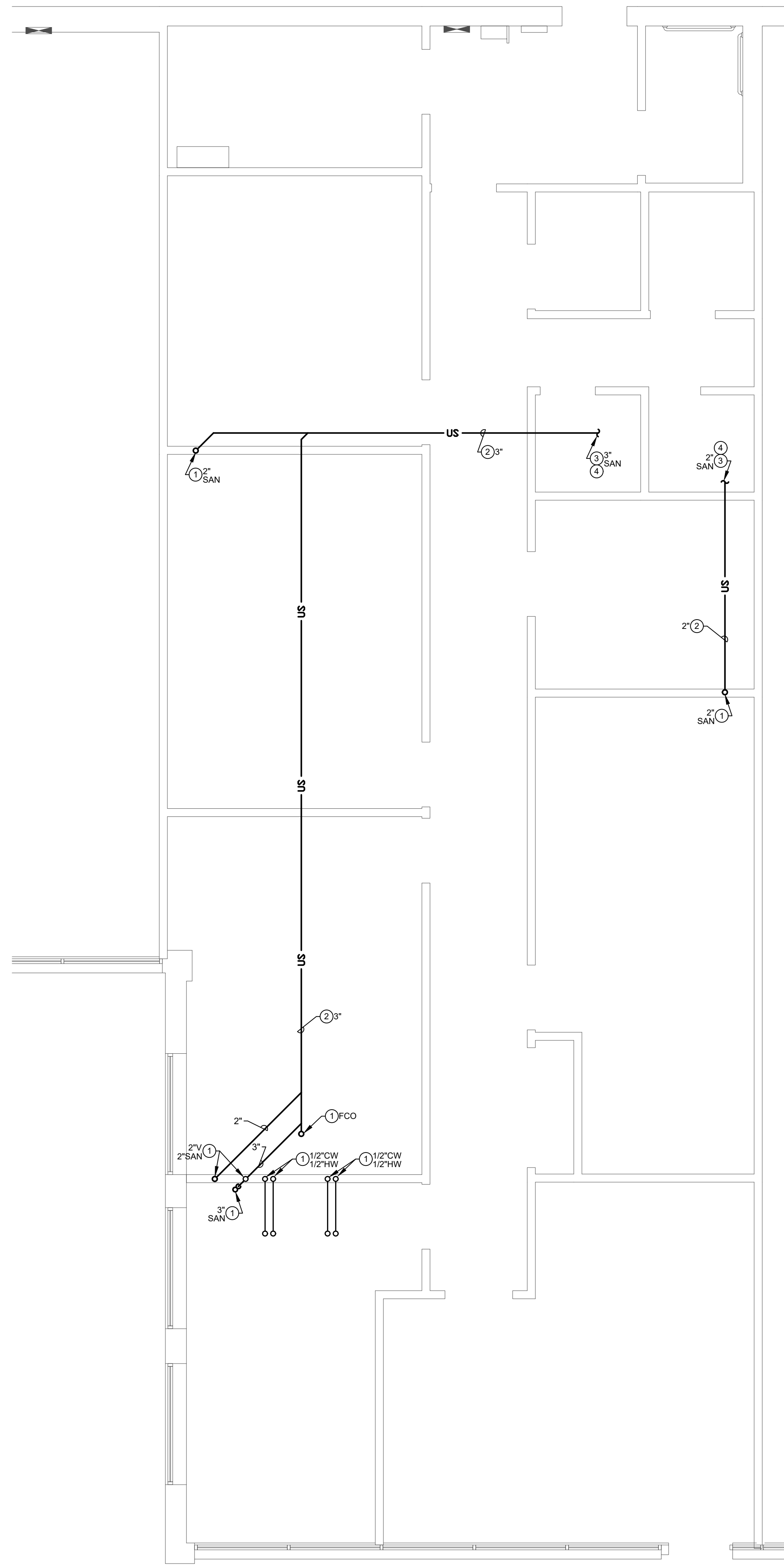
ISSUES & REVISIONS



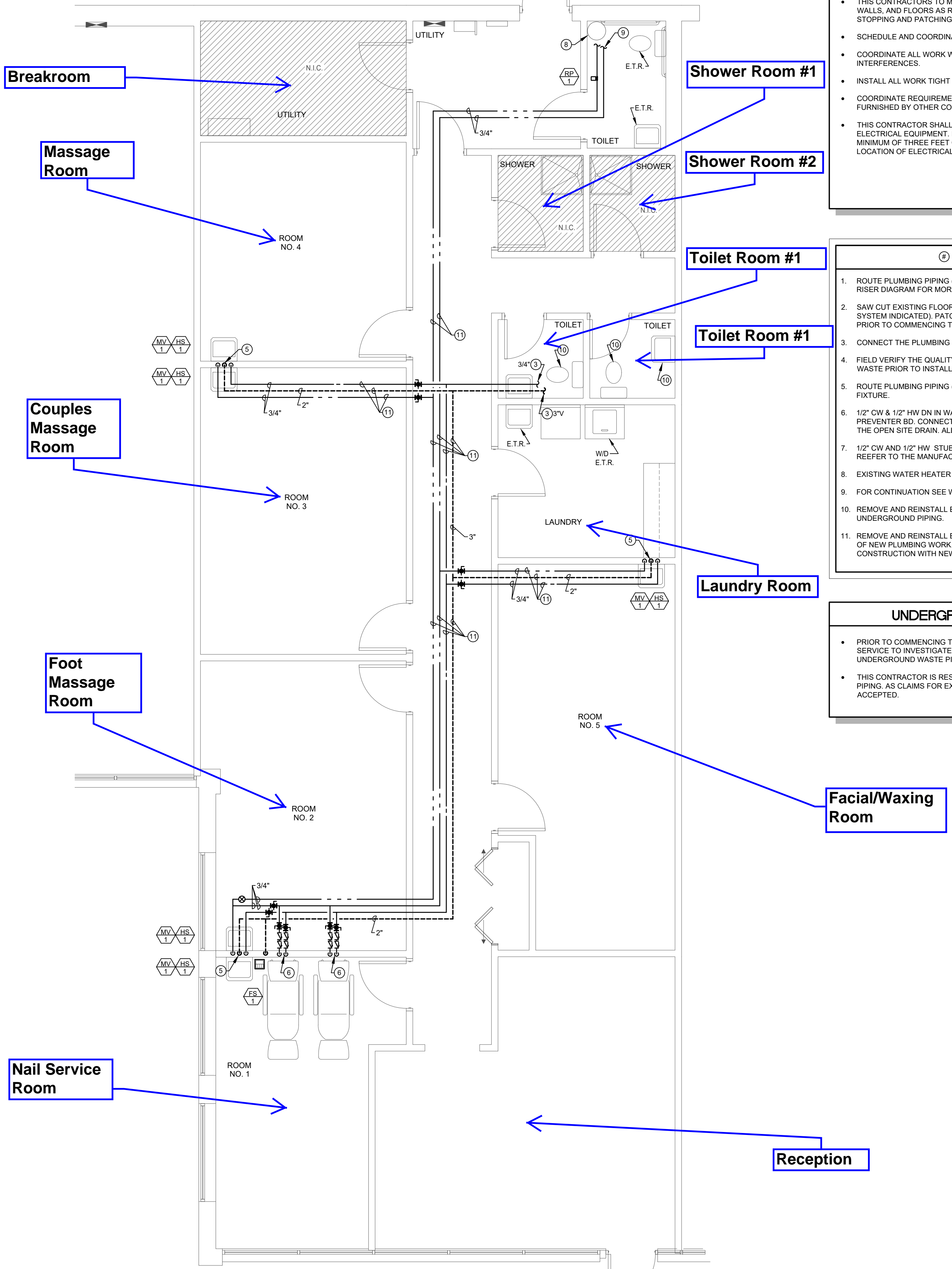
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Sheet Title:
SCHEDULES DETAILS & RISERS DIAGRAMS

Date: 02/06/23	Proj. No: 2308
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Checked: BS	P0.2
Approved: BS	



1 UNDERGROUND PLAN - PLUMBING
P1.1 SCALE: 1/4" = 1'-0"



2 FLOOR PLAN - PLUMBING
P1.1 SCALE: 1/4" = 1'-0"

GENERAL NOTES

- THIS CONTRACTOR TO MAKE ALL REQUIRED PIPE OPENINGS THROUGH ROOF, WALLS, AND FLOORS AS REQUIRED FOR WORK INDICATED INCLUDING FIRE STOPPING AND PATCHING AS REQUIRED.
- SCHEDULE AND COORDINATE ALL WORK TO MEET THE PROJECT PHASING.
- COORDINATE ALL WORK WITH THAT OF ALL OTHER TRADES IN ORDER TO AVOID INTERFERENCES.
- INSTALL ALL WORK TIGHT TO BOTTOM OF EXISTING STRUCTURE.
- COORDINATE REQUIREMENTS AND MAKE FINAL CONNECTIONS TO EQUIPMENT FURNISHED BY OTHER CONTRACTORS AND THE OWNER.
- THIS CONTRACTOR SHALL NOT INSTALL PIPING IN ANY ROOM DEDICATED FOR ELECTRICAL EQUIPMENT. FOR THE ROOMS WITH ELECTRICAL EQUIPMENT, PROVIDE MINIMUM OF THREE FEET CLEARANCE FROM THE EQUIPMENT. COORDINATE LOCATION OF ELECTRICAL EQUIPMENT WITH ELECTRICAL CONTRACTOR.

PLAN NOTES

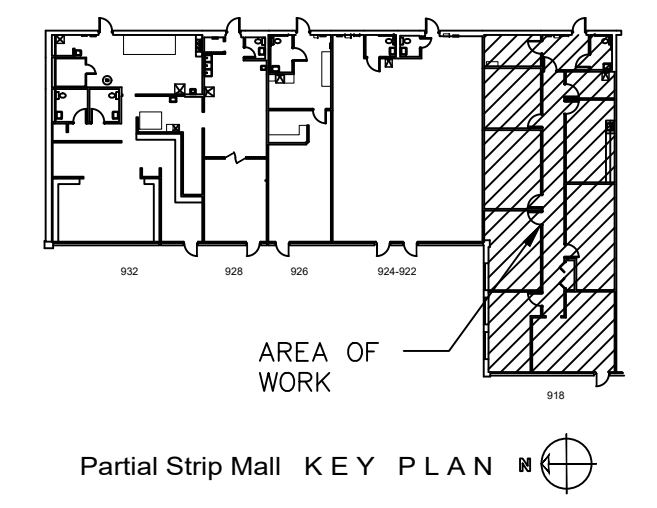
- ROUTE PLUMBING PIPING (OF SIZE, SYSTEM/FIXTURE INDICATED) UP. REFER TO THE RISER DIAGRAM FOR MORE INFORMATION.
- SAW CUT EXISTING FLOOR AS REQUIRED TO INSTALL NEW PIPING (OF SIZE AND SYSTEM INDICATED). PATCH FLOOR TO MATCH THE EXISTING. VERIFY THE ROUTING PRIOR TO COMMENCING THE WORK.
- CONNECT THE PLUMBING PIPING (OF SIZE AND SYSTEM INDICATED) TO THE EXISTING.
- FIELD VERIFY THE QUALITY, LOCATION AND HEIGHT OF THE EXISTING SANITARY WASTE PRIOR TO INSTALLATION.
- ROUTE PLUMBING PIPING (OF SIZE AND SYSTEM INDICATED) DN. TO THE PLUMBING FIXTURE.
- 1/2" CW & 1/2" HW DN IN WALL TO PEDICURE CHAIR WITH ASSE 1022 BACKFLOW PREVENTER BD. CONNECT A DRAIN LINE AT THE VENT OUTLET SIZE AND ROUTE TO THE OPEN SITE DRAIN. ALLOW 1" AIR GAP.
- 1/2" CW AND 1/2" HW STUB UP TO THE PEDICURE CHAIR. PRIOR TO INSTALLATION REFER TO THE MANUFACTURE INSTALLATION FOR PLUMBING REQUIREMENT.
- EXISTING WATER HEATER TO REMAIN.
- FOR CONTINUATION SEE WATER HEATER PIPING DETAIL 1/P0.1.
- REMOVE AND REINSTALL EXISTING PLUMBING FIXTURE AS REQUIRE TO INSTALL NEW UNDERGROUND PIPING.
- REMOVE AND REINSTALL EXISTING CEILING TILES AS REQUIRED FOR INSTALLATION OF NEW PLUMBING WORK. REPLACE ANY DAMAGED CEILING TILES DURING CONSTRUCTION WITH NEW ONES TO MATCH THE EXISTING.

UNDERGROUND GENERAL NOTES

- PRIOR TO COMMENCING THE WORK, CONTRACTOR SHALL PROVIDE A CAMERA SERVICE TO INVESTIGATE CONDITION, LOCATION AND INVERT ELEVATIONS OF UNDERGROUND WASTE PIPING.
- THIS CONTRACTOR IS RESPONSIBLE FOR ANY REPAIR TO UNDERGROUND WASTE PIPING. AS CLAIMS FOR EXTRAS DUE TO UNCOVERED SITE CONDITIONS WILL NOT BE ACCEPTED.



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1	02/06/23	ISSUED FOR CLIENT REVIEW

ISSUES & REVISIONS



Project:
New Hand Sinks for Rooms 1 through 5
 918 W. Algonquin Road
 Arlington Heights, IL 60005

Sheet Title:
PLUMBING FLOOR PLANS

Date: 02/06/23 Proj. No: 2308

Drawn: BS Sheet No:
 Checked: BS **P1.1**
 Approved: BS