THE PLUMBING SYSTEMS (SANITARY, WASTE, VENT, WATER DISTRIBUTION AND GAS) AND ALL ASSOCIATED EQUIPMENT WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE FULL REQUIREMENTS OF THE NEW YORK CITY 2014 PLUMBING CODE. COMPLIANCE WITH THE FULL PROVISIONS OF ALL NEW YORK CITY BUILDING AND PLUMBING CODE ACCESSIBILITY REQUIREMENTS AND PLUMBING FIXTURE FLOW REQUIREMENTS OF THE N.Y.C. 2014 PLUMBING CODE.

- 1. THE MATERIALS USED IN THE PLUMBING SYSTEMS WILL BE PROVIDED IN FULL ACCORDANCE WITH SECTIONS PC3O2 AND PC3O3.
- 2. EQUIPMENT HOOK-UP AND THE JOINING WILL BE FULL COMPLIANCE WITH SECTIONS PC605 AND PC705.
- 3. THE INSTALLATION OF GAS PIPING WILL BE IN FULL ACCORDANCE WITH
- 4. VERTICAL AND HORIZONTAL PIPING WILL BE HUNG AND SUPPORTED AS DIRECTED IN SPECIFICATIONS AND WITH THE FULL COMPLIANCE WITH
- 5. GAS PIPING AND EQUIPMENT WILL BE INSTALLED IN FULL COMPLIANCE WITH THE NEW YORK CITY FUEL GAS CODE.
- 6. ALL TRENCHING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION PC306.
- 7. RAT PROOFING SHALL BE IN ACCORDANCE WITH SECTION PC304.
- 8. TEMPORARY TOILET FACILITIES SHALL BE PROVIDED FOR WORKMAN AS PER SECTION PC311.

GENERAL PLUMBING NOTES:

- 1. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
- 2. EXISTING PIPING ARRANGEMENTS ARE APPROXIMATE AND ARE SHOWN FOR ESTIMATING PURPOSES ONLY. CONTRACTOR MUST VERIFY EXACT LOCATIONS AND ROUTING PRIOR TO INSTALLATION OF NEW WORK.
- 3. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES AND EXISTING CONDITIONS ON THE JOB SITE AND MAINTAIN REQUIRED CEILING HEIGHTS AND CONDITIONS.
- 4. PLUMBING CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT, SERVICES, LABOR AND TESTS NECESSARY FOR COMPLETE EXECUTION OF ALL PLUMBING WORK.
- 5. MATERIALS, EQUIPMENT AND SYSTEMS INSTALLED SHALL MEET ALL PERTINENT REQUIREMENTS OF NEW YORK CITY BUILDING CODES, NATIONAL FIRE PROTECTION ASSOCIATION, FEDERAL REGULATIONS, OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA) AND ANY NATIONALLY RECOGNIZED APPROVAL AGENCIES AS WELL AS APPLICABLE LOCAL CODES AND REGULATIONS.
- 6. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR AND REPLACE ANY EXISTING SUSPENDED CEILINGS AND/OR FINISHES DAMAGED BY INSTALLATION OF PIPING UNDER PLUMBING CONTRACT.
- 7. ALL WORK IN GROUND FLOOR HUNG CEILINGS SHALL BE PERFORMED AFTER HOURS OR ON PREMIUM TIME AS SCHEDULED BY GENERAL CONTRACTOR WITH HOSPITAL. THE CONTRACTOR SHALL COORDINATE THE EXACT WORK SCHEDULE WITH PRIOR TO STARTING WORK, IF NECESSARY THE WORK SHALL BE PHASED IN ORDER TO KEEP THE GROUND FLOOR CORRIDORS REMAIN ACTIVE AT ALL TIMES.

	PLUMBIN	G LEGEND
SYMBOL	ABBREV.	DESCRIPTION
$\leftarrow \rightarrow$	S,W	SOIL, WASTE PIPING BELOW FLOOR
├	V	VENT PIPING
├ ── -	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
$\leftarrow \rightarrow$	HWR	HOT WATER RETURN PIPING
:		EXISTING PIPING
\$[[]]. 4444,		EQUIPMENT/PIPING TO BE REMOVED
•	P.O.D.	POINT OF DISCONNECT
•	C.T.E.	CONNECT TO EXISTING
>		FLOW ARROW
⊸		DROP
Ī	BA	SHUT-OFF VALVE
ζ		BREAK
0		RISER
Ц	СО	CLEANOUT
•	CODP	CLEANOUT DECK PLATE
	FD	FLOOR DRAIN
0	SH-D	SHOWER DRAIN
	ZVB	ZONE VALVE BOX
	ETR	EXISTING TO REMAIN
	VIF	VERIFY IN FIELD
	AD	AREA DRAIN
	VB	VACUUM BREAKER
	SA	SHOCK ABSORBER
Ø	CV	CHECK VALVE
	TYP	TYPICAL

DRAWING LIST				
DRAWING NUMBER	DRAWING LIST			
P-001.00	PLUMBING LEGENDS, NOTES AND SCHEDULES			
P-101.00	PLUMBING SECOND FLOOR PLAN - DEMOLITION			
P-201.00	PLUMBING SECOND FLOOR PLAN - NEW WORK			
P-202.00	PLUMBING SECOND FLOOR PLAN - SANITARY PIPING - NEW WORK			
P-301.00	PLUMBING RISER DIAGRAMS			
P-401.00	PLUMBING DETAILS			
P-501.00	PLUMBING SPECIFICATIONS			

PLUMBING FIXTURE SCHEDULE								
DESIG.	FIXTURE	MODEL NUMBER	FLUSH VALVE/FAUCET	GPM/GPF	REMARKS			
<u>P-1</u>	WATER CLOSET	AMERICAN STANDARD MADERA FLOWISE ELONGATED BOWL MODEL No. 3461.576, FLOOR MOUNTED BOTTOM OUTLET, VITREOUS CHINA, ELONGATED BOWL, OLSONITE SEAT MODEL No. 95CT	AMERICAN STANDARD SELECTRONIC FLUSH VALVE MODEL No. 6065761.002, BATTERY POWERED, DUAL FLUSH.	1.1-1.28				
<u>P-2</u>	LAVATORY	AMERICAN STANDARD LUCERNE LAVATORY MODEL No. 0356.421, WALL HUNG WITH CONCEALED ARMS, VITREOUS CHINA, WITH SINGLE CENTER FAUCET HOLE, WHITE.	SLOAN OPTIMA SENSOR FAUCET MODEL No. EBF-85-BAT-BDM, BATTERY POWERED, CHROME PLATED, 4" TRIM PLATE, PROVIDE BELOW DECK THERMOSTATIC MIXING VALVE.	0.5	McGUIRE #201 TRAP, 155-WC OFFSET DRAIN, 2127 NIPPLE, H171LK SUPPLY. PROVIDE "TRAP WRAP" No. 500H TO COMPLY WITH ADA REQUIREMENTS. J.R. SMITH LAVATORY SUPPORT WITH CONCEALED ARMS FIGURE No. 0700, LAV GUARD 2 UNDERSINK PIPING COVERS			
<u>P-3</u>	EXAM RM-1, LAB SINK	CORIAN MODEL #804, INTEGRAL, UNDERMOUNT, SQUARE, ACRYLIC POLYESTER, 15 $\frac{1}{2}$ " x 15 $\frac{1}{2}$ " x 8 $\frac{1}{6}$ " DEEP	SLOAN SENSOR FAUCET MODEL No. SF-2250-BDM-ADA, GOOSE NECK, BATTERY POWERED. LAMINAR FLOW, PROVIDE BELOW DECK THERMOSTATIC MIXING VALVE.	0.35	PROVIDE P-TRAP, BRASS CRAFT GRADED FAUCET CONNECTOR - COMPRESSION INLET, BRASS CRAFT MULTI TURN ANGLE STOPS.			
<u>P-3A</u>	CLEAN ROOM, SOILED ROOM SINK	CORIAN MODEL #804, INTEGRAL, UNDERMOUNT, SQUARE, ACRYLIC POLYESTER, 15 3/4" x 15 3/4" x 8 1/8" DEEP	T & S BRASS FAUCET MODEL No. B-2867-04 CONCEALED WIDESPREAD MIXING FAUCET 8" ON CENTER, 4" WRIST BLADE HANDLES AND 5¾" SWIVEL GOOSENECK SPOUT.	2.2	PROVIDE P-TRAP, BRASS CRAFT GRADED FAUCET CONNECTOR - COMPRESSION INLET, BRASS CRAFT MULTI TURN ANGLE STOPS.			
<u>P-4</u>	STAFF LOUNGE SINK	CORIAN MODEL #804, INTEGRAL, UNDERMOUNT, SQUARE, ACRYLIC POLYESTER, 15 3/4" x 15 3/4" x 8 1/8" DEEP	T & S BRASS FAUCET MODEL No. B-2867-04 CONCEALED WIDESPREAD MIXING FAUCET 8" ON CENTER, 4" WRIST BLADE HANDLES AND 5¾" SWIVEL GOOSENECK SPOUT.	2.2	PROVIDE P-TRAP, BRASS CRAFT GRADED FAUCET CONNECTOR - COMPRESSION INLET, BRASS CRAFT MULTI TURN ANGLE STOPS.			
<u>P-5</u>	MOP SINK	FIAT MODEL No. MSB 2436	FIAT MODEL No. 830-AA CHROME PLATED WALL MOUNT UTILITY FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" THREADED HOSE SPOUT. BODY ON 8" CENTERS.	1.5	PROVIDE STAINLESS STEEL WALL GUARD MSG2424			
<u>P-6</u>	ELECTRIC WATER COOLER	OASIS MODEL # PFCP10EBF, ELECTRONIC FREE STANDING BOTTLE FILLER WITH VERSAFILTER III, STAINLESS STEEL	NONE	1.1	PROVIDE 2 ADDITIONAL FILTER CARTRIDGE VERSAFILTER III, INTERNALLY TRAPPED, FURNISH AND INSTALL 1-1/2" DRAIN PIPING AND 1/4" CW CONNECTION			
<u>P-7</u>	SOILED ROOM EYE/FACE SPRAY	BRADLEY MODEL No. S19-460EFW, DECK MOUNTED, HAND HELD EYE/FACE SPRAY, TMV MODEL No. S19-2000, CHROME PLATED, IN CABINETRY.		1.5 MINIMUM				
<u>FD</u>	FLOOR DRAIN	JAY R. SMITH MODEL No. DX-2010, ROUND TOP (A) ADJUSTABLE STRAINER WITH 4" WIDE FLANGE AND SECONDARY FLASHING FLANGE, THREADED OUTLET, BUILT UP WITH NICKEL BRONZE STRAINER HEAD	NONE					

* - GPM is based on a system pressure of 60 psi.

PLUMBING FIXTURE NOTES:

- 1. ALL PLUMBING FIXTURES ARE TO BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR.
- 2. PLUMBING CONTRACTOR SHALL PROVIDE ALL ROUGHING AND FINAL CONNECTIONS FOR ALL PLUMBING FIXTURES.
- 3. PROVIDE INDIVIDUAL STOP VALVES ON EACH WATER SUPPLY TO EACH FIXTURE.
- 4. INSTALL TRUBRO, INC. COVERING IN WHITE FITTING INSULATION KITS FOR ACCESSIBLE FIXTURES ACCORDING TO THE FOLLOWING; LAVATORIES AND SINK: COVER HOT
- AND COLD WATER SUPPLIES, STOPS AND HANDLES, DRAIN, AND TRAP, AND WASTE TO WALL. 5. ALL EXPOSED PLUMBING PIPING SHALL BE CHROME PLATED.

WORK DESCRIPTION:

DISCONNECTED AND REMOVED THE TOILET ROOM PLUMBING FIXTURES AND A DRINKING FOUNTAIN AND ASSOCIATED PIPING. 2. FURNISHED AND INSTALLED NEW ADA COMPLIANT TOILET ROOM PLUMBING FIXTURES, SINKS AND DRINKING FOUNTAIN AND ASSOCIATED PIPING.

SPECIAL INSPECTIONS NOTES:

PROVIDE SPECIAL INSPECTIONS FOR THE FOLLOWING:

 POST-INSTALLED ANCHORS 2. FIRE RESISTANCE RATED CONSTRUCTION

BC 1704.32 BC 1103.4.5



Stantec Consulting Services Inc. 135 Engineers Road, Suite 200 Hauppauge, N.Y. 11788-4008 Tel. 631.424.8600 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants



Mechanical & Electrical Engineering 200 Old Country Road, Suite 670

Mineola, NY 11501 Phone: (516) 484-1020 Fax: (516) 484-0926 www.leapc.com

AREA OF WORK 2,715 SQ FT

By Appd. YY.MM.DD OMH FILING 2022.10.04

By Appd. YY.MM.DD

Dwn. Chkd. Dsgn. YY.MM.DD

Permit-Seal

Issued

File Name: 7024.02-P-001.dwg



Client/Project

RICHMOND UNIVERSITY MEDICAL CENTER TRANSFORMATIONAL GRANT

669 CASTLETON AVENUE, STATEN ISLAND, NY SECOND FLOOR PROPOSED RENOVATION

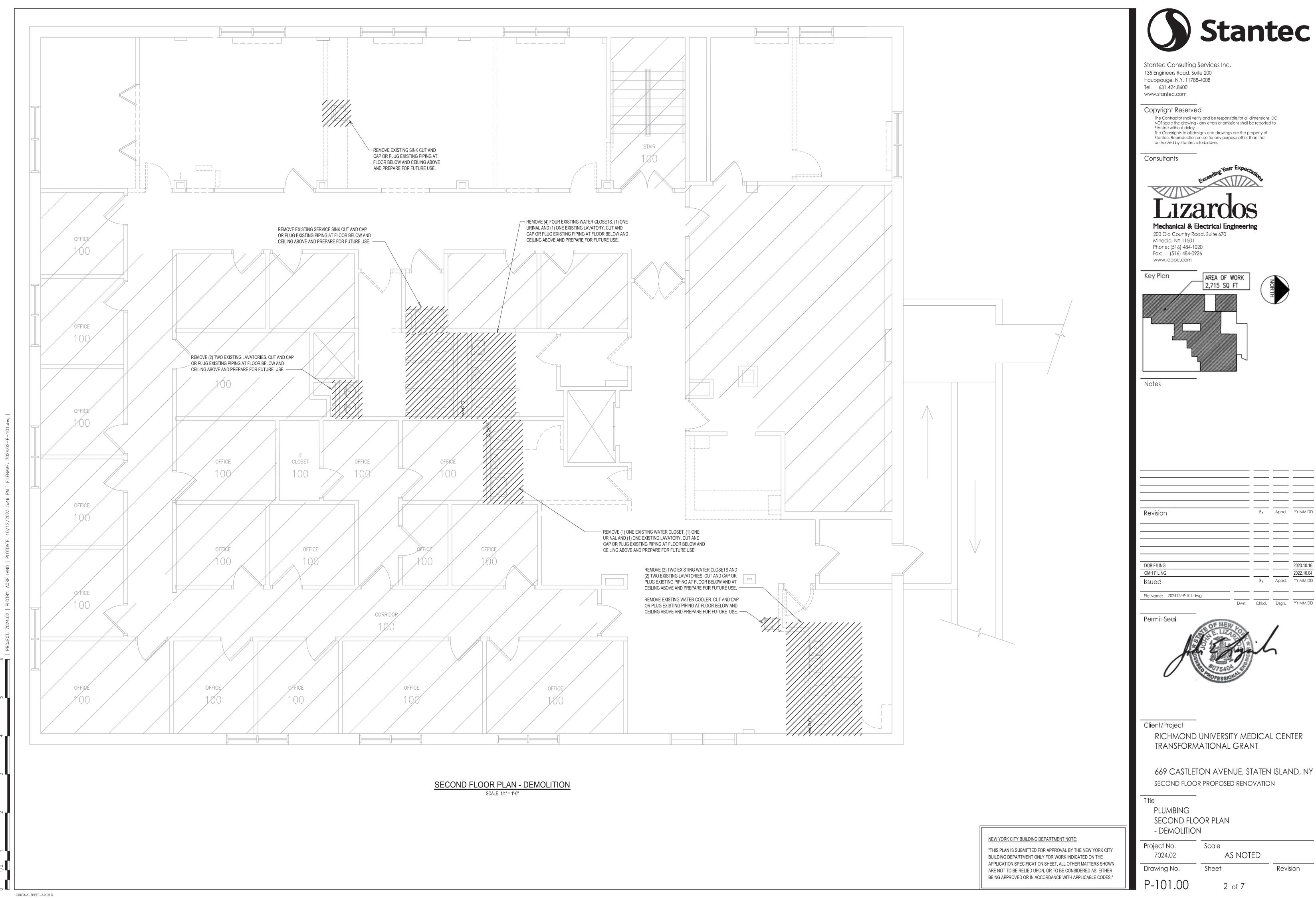
PLUMBING LEGENDS, NOTES AND **SCHEDULES**

Project No. Drawing No. Scale **AS NOTED**

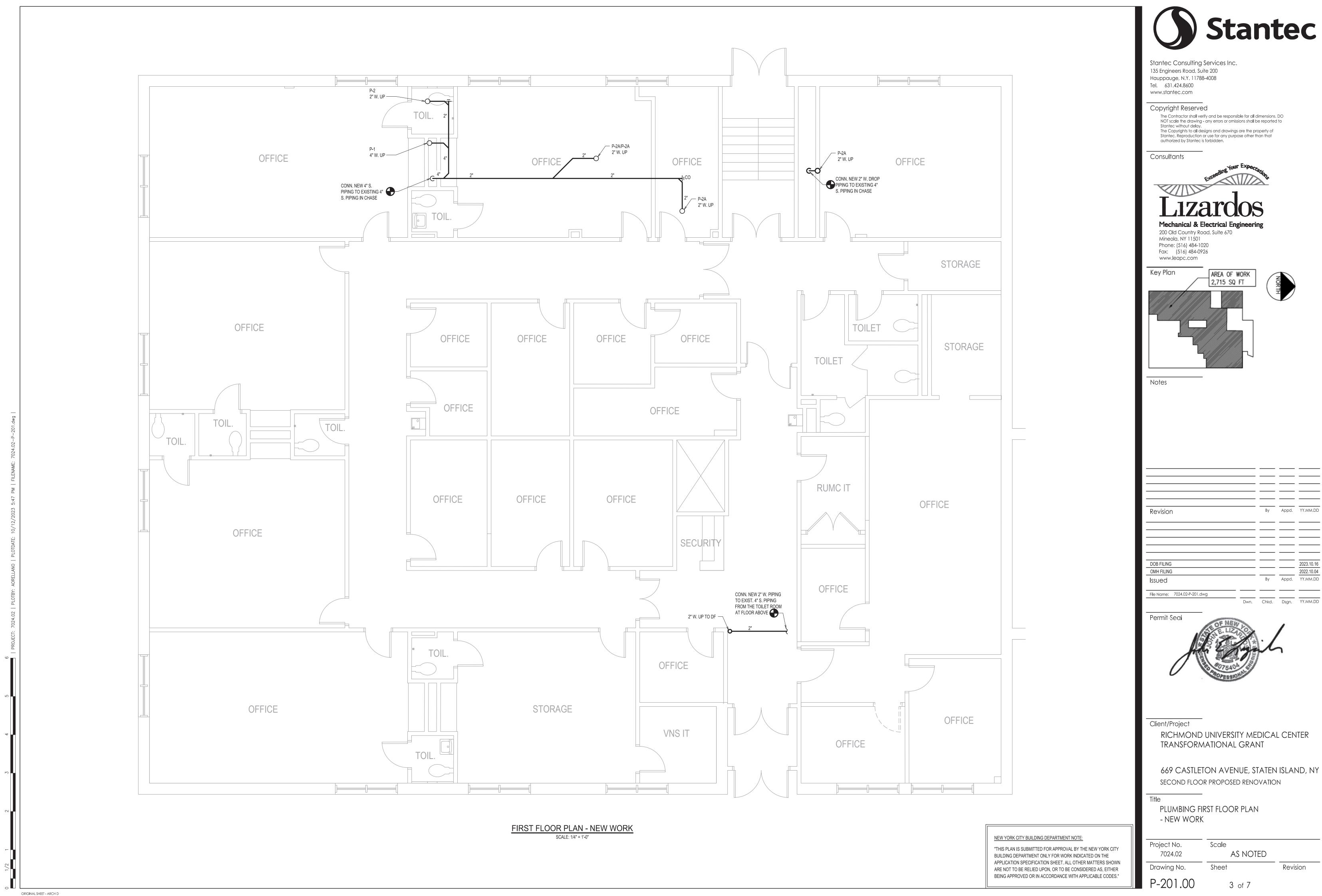
Revision

ORIGINAL SHEET - ARCH D

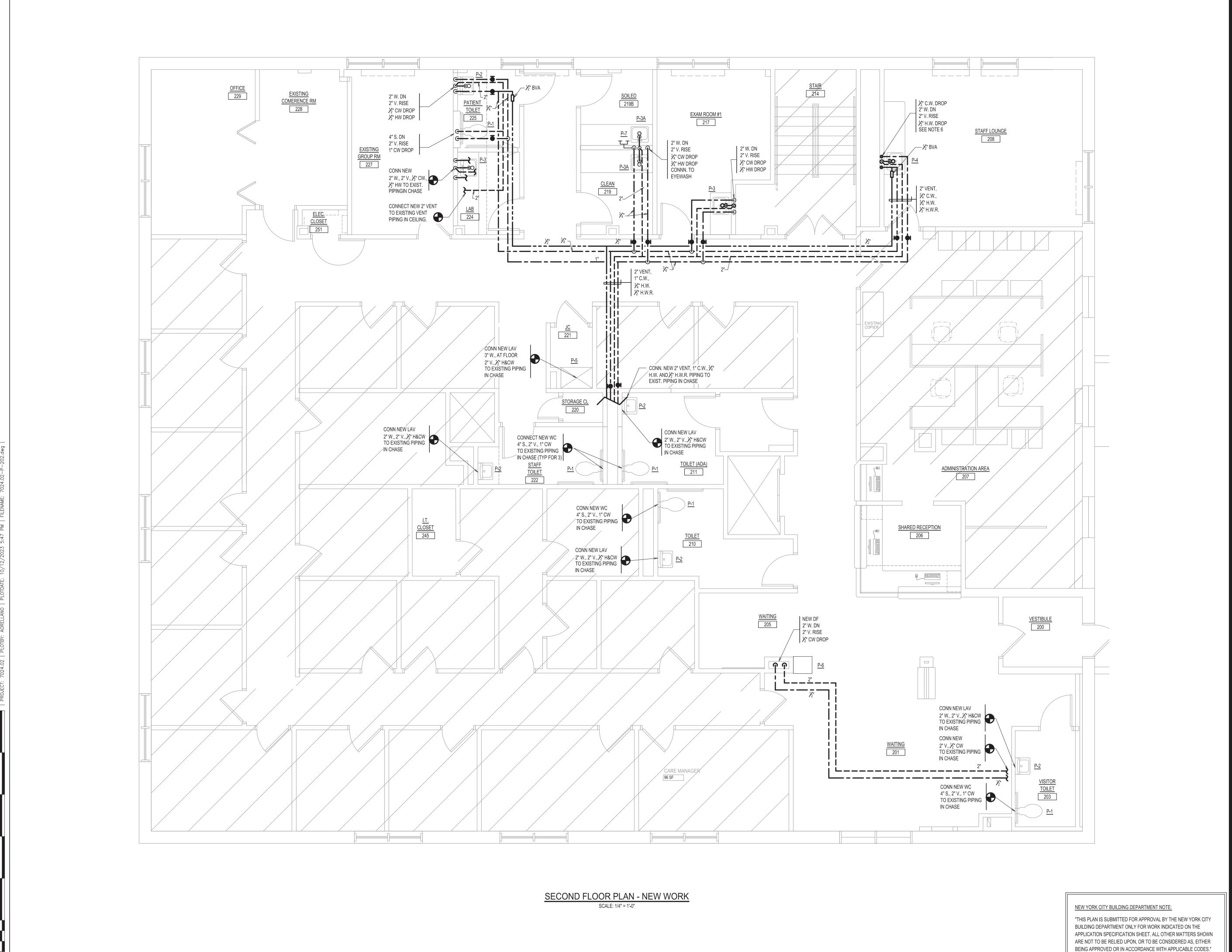
1 of 7



By Appd. YY.MM.DD Dwn. Chkd. Dsgn. YY.MM.DD



2022.10.04





Stantec Consulting Services Inc. 135 Engineers Road, Suite 200 Hauppauge, N.Y. 11788-4008 Tel. 631.424.8600 www.stantec.com

Copyright Reserved

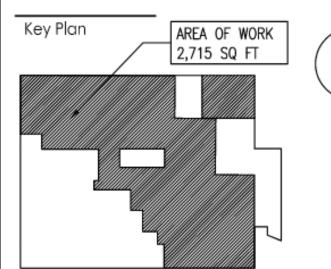
The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants



Mechanical & Electrical Engineering

200 Old Country Road, Suite 670 Mineola, NY 11501 Phone: (516) 484-1020 Fax: (516) 484-0926 www.leapc.com



Revision 2022.10.04 OMH FILING By Appd. YY.MM.DD Issued File Name: 7024.02-P-202.dwg Dwn. Chkd. Dsgn. YY.MM.DD

Permit-Seal



Client/Project

RICHMOND UNIVERSITY MEDICAL CENTER TRANSFORMATIONAL GRANT

669 CASTLETON AVENUE, STATEN ISLAND, NY SECOND FLOOR PROPOSED RENOVATION

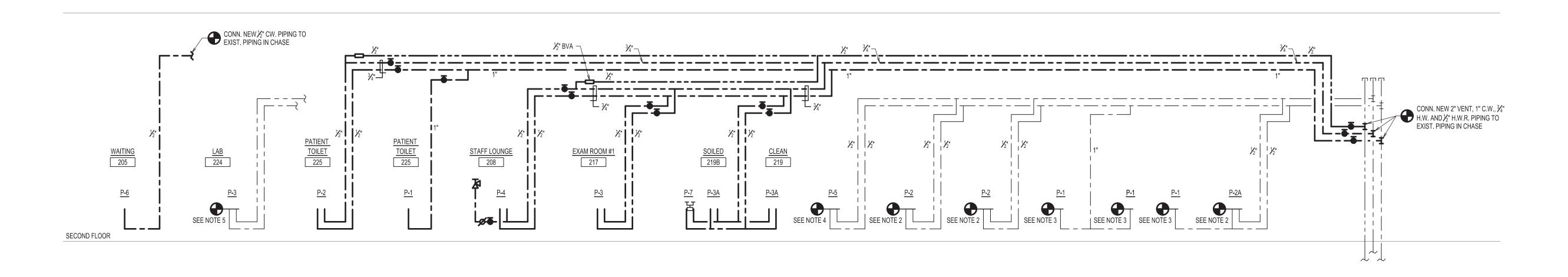
Revision

PLUMBING SECOND FLOOR PLAN - NEW WORK

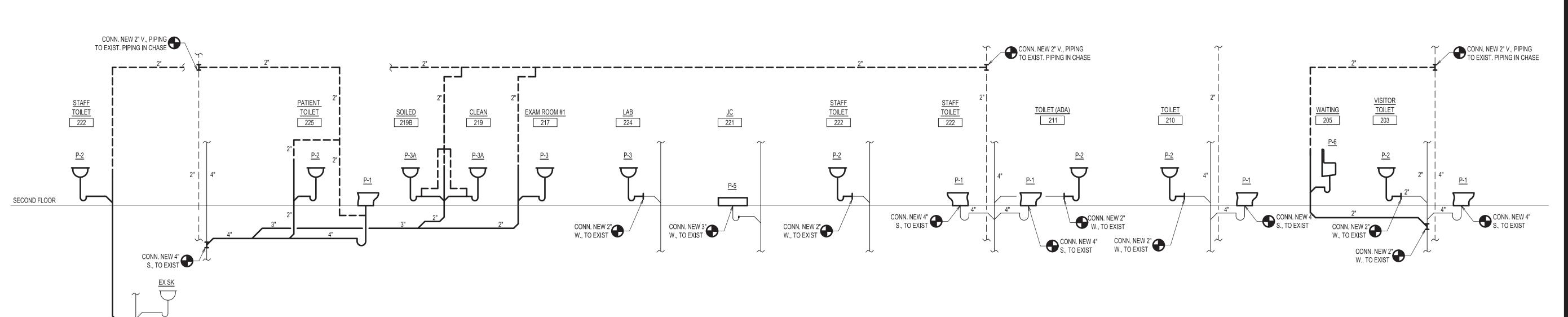
Project No. Scale **AS NOTED** 7024.02 Sheet Drawing No.

4 of 7

ORIGINAL SHEET - ARCH D



PARTIAL DOMESTIC WATER RISER DIAGRAM NOT TO SCALE:



PARTIAL SANITARY RISER DIAGRAM



Stantec Consulting Services Inc. 135 Engineers Road, Suite 200 Hauppauge, N.Y. 11788-4008 Tel. 631.424.8600 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

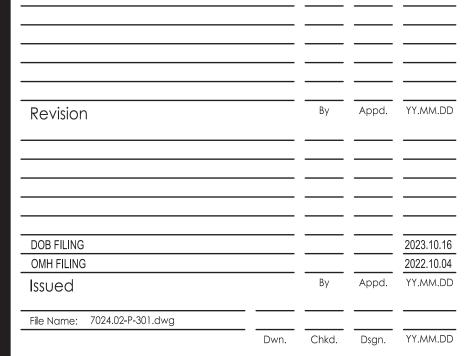
Consultants



Mechanical & Electrical Engineering

200 Old Country Road, Suite 670 Mineola, NY 11501 Phone: (516) 484-1020 Fax: (516) 484-0926 www.leapc.com

AREA OF WORK 2,715 SQ FT



Permit-Seal

Client/Project

RICHMOND UNIVERSITY MEDICAL CENTER TRANSFORMATIONAL GRANT

669 CASTLETON AVENUE, STATEN ISLAND, NY SECOND FLOOR PROPOSED RENOVATION

PLUMBING RISER DIAGRAMS

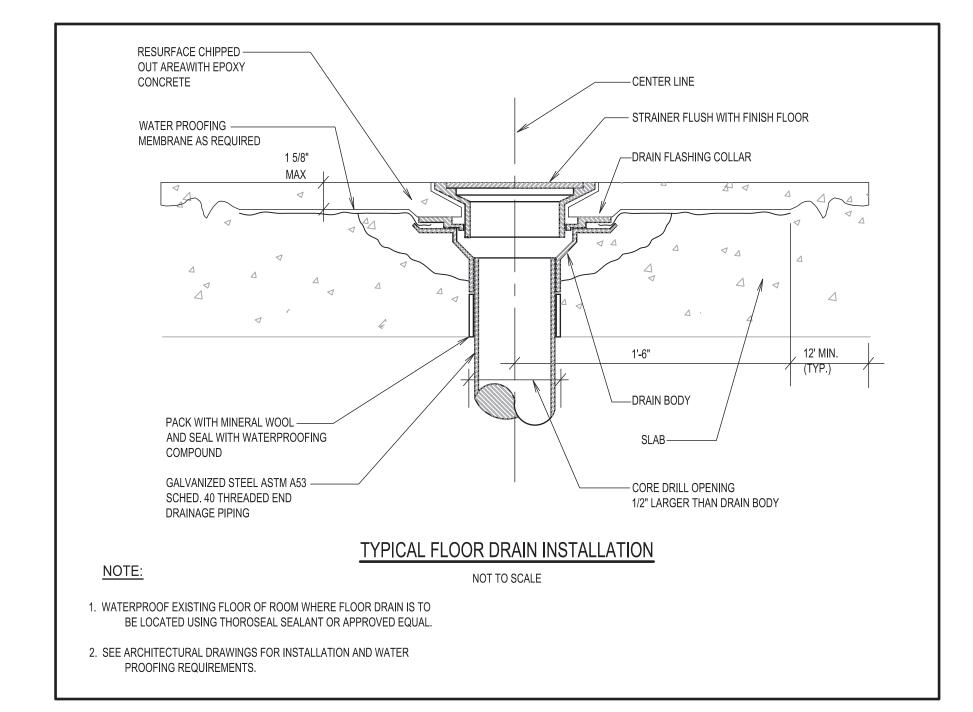
Project No.	Scale	
7024.02	AS NOTED	
Drawing No.	Sheet	Revision

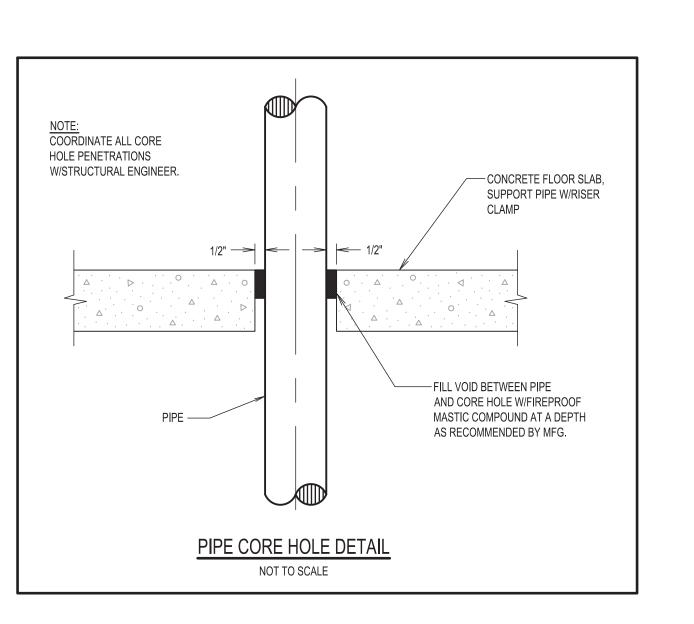
ORIGINAL SHEET - ARCH D

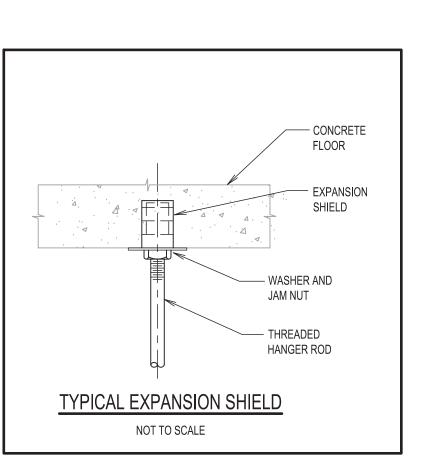
FIRST FLOOR

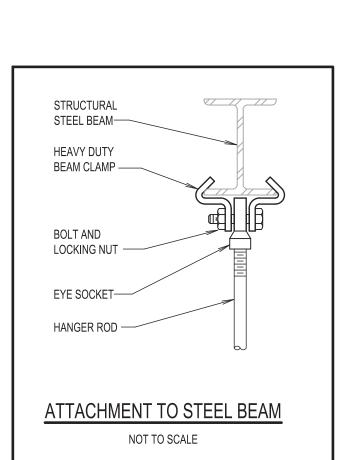
CONN. NEW 2"
W., TO EXIST

5 of 7









CONCEALED PIPING

ESCUTCHEONS WITH FASTENING SET SCREWS.

OPENING AND THE PIPE SHALL NOT EXCEED ONE-HALF INCH.

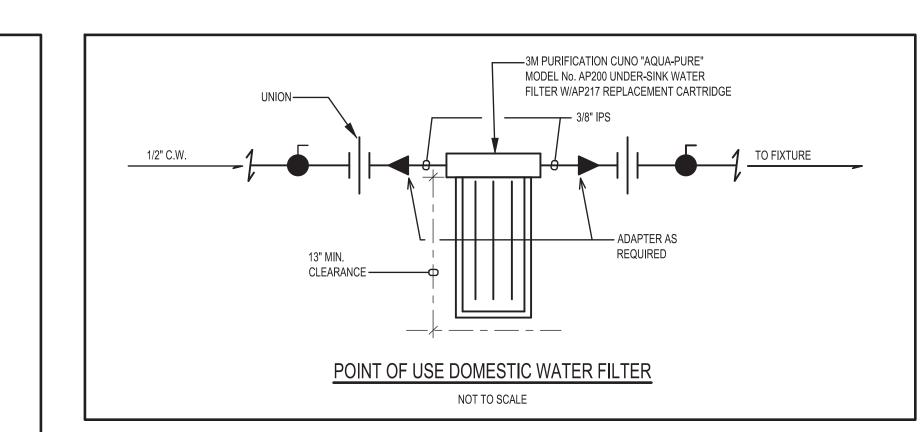
SIMMILAR OR EQUAL TO DUXSEAL AS MANUFACTURED BY THE J.M. CLIPPER CORP.

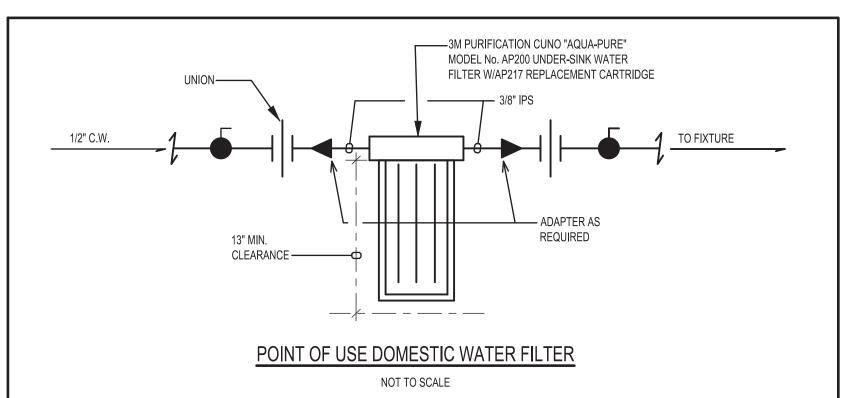
TYPICAL DETAIL OF PIPE INSTALLATION THRU RATED WALL

OF A SLEEVE SECURED THEREIN.

SLEEVES ANS ESCUTCHEONS:

CUTTING AND PATCHING:





-COLD WATER MAIN -AVOID DIRECT INSTALLATION TO PREVENT FOREIGN MATERIAL FROM ENTERING DIRECTLY INTO PRIMER -SERVICE VALVE -1/2" NPT INLET —TRAP PRIMER VALVE -V.B. PORTS -1/2" NPT OUTLET —DISTRIBUTOR UNIT DU-U DRAIN SUPPLY LINE MINIMUM 1/2" COPPER -FLOOR DRAIN 4 MAX. PER DEVICE SLAB — AUXILIARY INLET FITTING -TRAP PRIMER CONNECTING TO FLOOR DRAIN DETAIL

5. PRIMARY VALVE SHALL BE INSTALLED AT A MINIMUM OF 12" ABOVE FINISHED FLOOR 6. IF ALL FOUR OUTLETS ARE NOT USED PLUG REMAINING OUTLETS WITH THE SUPPLIED PIPE PLUGS

7. PREFERRED LOCATION OF TRAP PRIMER IN HUNG CEILING ABOVE

8. TRAP PRIMER SHALL CONNECT TO AN ACTIVE COLD WATER LINE WITH A MINIMUM OF 10 PSI

RESIDUAL PRESSURE.

NOTES: NOT TO SCALE 1. PROVIDE SERVICE VALVE WITH INSTALLATION OF TRAP PRIMER 2. TRAP PRIMER MUST BE INSTALLED LEVEL 3. PRIMER COMES AS A SINGLE FEED PROVIDE DISTRIBUTION UNIT MODEL No. DU-U FOR UP TO 4 FEEDS 4. COLD WATER SUPPLY SHALL BE NO LARGER THAN 1-1/2"

> BEAM CLAMP-__STRUCTURAL STEEL HANGER ROD-ATTACHMENT TO STEEL BEAM NOT TO SCALE

> > TRANSFORMATIONAL GRANT

Stantec Consulting Services Inc.

The Contractor shall verify and be responsible for all dimensions. DO

NOT scale the drawing - any errors or omissions shall be reported to

The Copyrights to all designs and drawings are the property of

Stantec. Reproduction or use for any purpose other than that

Mechanical & Electrical Engineering

AREA OF WORK

2,715 SQ FT

200 Old Country Road, Suite 670

Mineola, NY 11501

Key Plan

Revision

OMH FILING

Issued

Permit-Seal

File Name: 7024.02-P-401.dwg

Phone: (516) 484-1020

Fax: (516) 484-0926 www.leapc.com

135 Engineers Road, Suite 200

Hauppauge, N.Y. 11788-4008

Copyright Reserved

Stantec without delay.

Consultants

authorized by Stantec is forbidden.

Tel. 631.424.8600 www.stantec.com

> 669 CASTLETON AVENUE, STATEN ISLAND, NY SECOND FLOOR PROPOSED RENOVATION

PLUMBING DETAILS

Project No. Scale AS NOTED 7024.02 Sheet Revision Drawing No.

- CONCRETE FLOOR SLAB EXISTING STEEL MEMBER— "C" CLAMP-RETAINING STRAP ROD (SIZE AS -REQUIRED) -HANGER ROD SPRINKLER PIPE-CLEVIS HANGER-TYPICAL HANGER DETAIL TYPE 'A' ATTACHMENT TO SLAB NOT TO SCALE NOT TO SCALE

STANDARD WEIGHT STEEL PIPE

SLEEVE TO PASS PIPE

-TERMINATE SLEEVE FLUSH

SEAL OR CAULK SLEEVES THRU FIRE WALLS IN A SMOKE

- FINISHED ESCUTCHEON PLATE

FLUSH AGAINST WALL AND OF

SIZE TO COMPLETELY COVER

- FINISHED WALL SURFACE

PIPING EXPOSED TO VIEW

A. SLEEVES FOR PIPING THROUGH MASONRY WALLS SHALL BE SCHEDULE 40, STANDARD GALVANIZED STEEL PIPE; IN FRAMED

B. EXPOSED PIPING PASSING THROUGH WALLS, FLOORS OR CEILING SHALL BE FITTED WITH CHROMIUM-PLATED CAST BRASS

A. PIPING PASSING THROUGH WALLS SHALL HAVE A TRIM OPENING CUT NO GREATER THAN NECESSARY FOR THE INSTALLATION

B. PIPING PASSING THROUGH CONCRETE FLOORS SHALL HAVE AN OPENING CORE DRILLED SO THAT THE SPACE BETWEEN THE

C. ANNULAR SPACES BETWEEN PIPING AND SLEEVES OR CORE DRILLED FLOOR OPENINGS SHALL BE PACKED WITH MINERAL

WOOL AND SEALED, TO RETAIN THE FIRE INTEGRITY OF THE WALLS AND FLOORS, WITH A NON-HARDENING COMPOUND

PARTITIONS SHALL BE 20 GAUGE SHEET METAL. THE SPACE BETWEEN THE PIPE AND ITS SLEEVE SHALL NOT EXCEED ONE-HALF INCH. THE SLEEVE SHALL HAVE A SUFFICIENT LENGTH TO BE FLUSH WITH THE FINISHED WALL SURFACE.

OPENING (TYP. FOR EACH SIDE)

——1/2" CLEAR MAXIMUM

WITH FINISHED WALL SURFACES

TIGHT MANNER. REFER TO SPECIFICATIONS

CONCRETE ANCHOR HILTI-KWICK BOLT, SERIES HDI, OR APPROVED EQUAL. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION. - WASHER & NUT

> "THIS PLAN IS SUBMITTED FOR APPROVAL BY THE NEW YORK CITY BUILDING DEPARTMENT ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS, EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES."

NEW YORK CITY BUILDING DEPARTMENT NOTE:

ORIGINAL SHEET - ARCH D

2022.10.04

Appd. YY.MM.DD

Chkd. Dsgn. YY.MM.DD

Client/Project RICHMOND UNIVERSITY MEDICAL CENTER

6 of 7

A. WORK INCLUDED

- A.1. WORK UNDER THIS CONTRACT SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT, PLANT SERVICES AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE THE PLUMBING WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN. INCLUDING:
- A.1.1. ALTERATIONS AND ADDITION TO THE EXISTING SANITARY DRAINAGE AND VENT SYSTEM, HOT AND COLD WATER SUPPLY SYSTEM.
- A.1.2. PIPING. VALVES AND ACCESSORIES.
- A.1.3. PLUMBING FIXTURES.
- HANGERS AND SUPPORTS.
- A.1.5. REMOVALS AS NOTED.
- B. GENERAL REQUIREMENTS
- B.1. GENERAL
- B.1.1. AFTER CAREFULLY STUDYING THE DRAWINGS AND SPECIFICATIONS, AND BEFORE SUBMITTING THEIR PROPOSAL, EACH BIDDER SHALL VISIT THE SITE TO ASCERTAIN CONDITIONS OF THE SITE, AND THE NATURE AND EXACT QUANTITY OF WORK TO BE PERFORMED. NO EXTRA WILL BE ALLOWED IF THE CONTRACTOR FAILS TO EXAMINE THE SITE, OR HAVING EXAMINED THE SITE, THE CONTRACTOR FAILS TO NOTIFY THE OWNER IN WRITING OF ANY DISCREPANCIES THAT HE MAY HAVE NOTED BETWEEN THE EXISTING CONDITIONS, AND DRAWINGS AND SPECIFICATIONS.
- 3.1.2. THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS OF HIS OWN OR OTHERS AT THE SITE, AND SHALL BE RESPONSIBLE FOR CORRECTNESS OF SAME AS RELATED TO HIS WORK.
- B.1.3. CONTRACTOR SHALL COOPERATE WITH ALL OTHER CONTRACTORS WHO FURNISH AND INSTALL WORK IN CONNECTION WITH THE WORK OF THIS PROJECT. GIVE THEM COMPLETE DATA AS TO HIS REQUIREMENTS, AND NOTIFY OWNER OF ANY CONDITION THAT WILL INTERFERE WITH PROPER COMPLETION OF THIS WORK. COOPERATE IN THE SCHEDULING OF THIS WORK WITH THE WORK OF OTHER CONTRACTS SO AS NOT TO DELAY JOB PROGRESS.
- B.1.4. THE WORK SHALL BE CAREFULLY LAID OUT IN ADVANCE TO AVOID UNNECESSARY CUTTING, CHANNELING, CHASING OR DRILLING OF FLOORS, WALLS, PARTITIONS, CEILINGS OR OTHER SURFACES. WHERE SUCH WORK IS NECESSARY, HOWEVER, THE WORK SHALL BE CAREFULLY DONE. ANY DAMAGE TO THE BUILDING OR EQUIPMENT SHALL BE PATCHED AND/OR REPAIRED IN AN APPROVED MANNER BY SKILLED MECHANICS AT NO ADDITIONAL COST TO THE OWNER.
- B.2. CODES, REGULATIONS AND STANDARDS
- B.2.1. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE NEW YORK CITY BUILDING CODE NFPA, ALL APPLICABLE FEDERAL, AND LOCAL CODES AND ANY OTHER AGENCIES HAVING JURISDICTION.
- B.2.2. THE CONTRACTOR SHALL INCLUDE IN HIS BID THE COST OF ALL REQUIRED PERMITS, FEES, INSPECTIONS, TESTS AND CERTIFICATES OF APPROVAL.
- B.3. SECURITY
- B.3.1. OBEY ALL SECURITY REGULATIONS ESTABLISHED BY THE OWNER, AND ABIDE BY ALL BUILDING RULES AND REGULATIONS. OWNER'S APPROVAL SHALL BE OBTAINED BEFORE ENTERING SECURED AREAS OF THE BUILDINGS OF THE BUILDING.
- B.4. CLEANING
- B.4.1. MAINTAIN ALL AREAS, UNDER CONTRACTOR'S CONTROL, FREE OF EXTRANEOUS DEBRIS.
- B.4.2. SCHEDULE REGULAR COLLECTION AND DISPOSAL OF DEBRIS DAILY AND MORE FREQUENTLY IF NECESSARY.
- B.5. SPECIAL REQUIREMENTS
- B.5.1. CUTTING AND PATCHING
- 3.5.1.1. ALL CUTTING, DRILLING, AND ROUGH PATCHING REQUIRED FOR THE WORK SHALL BE PROVIDED BY THE CONTRACTOR.
- B.5.1.2. ALL CUTTING, DRILLING OR OTHER CONSTRUCTION OPERATIONS WHICH CREATE EXCESSIVE NOISE OR VIBRATION SHALL BE SCHEDULED WITH THE OWNER. CONTRACTOR SHALL PAY FOR ANY OVERTIME WORK REQUIRED.
- B.5.1.3. CUTTING OF WALLS SHALL BE DONE AS APPROVED BY THE OWNER IN A CAREFUL MANNER SO AS NOT TO SERIOUSLY IMPAIR THE APPEARANCE OR STRENGTH OF THE STRUCTURE.
- B.5.1.4. PROVIDE ALL DRILLING AND PATCHING FOR EXPANSION BOLTS, HANGERS AND OTHER SUPPORTS FOR PROPER AND SAFE INSTALLATION OF THE WORK.
- B.5.2. TESTING
- B.5.2.1. TEST PIPING AND SYSTEMS FOLLOWING THE PROCEDURES SPECIFIED HEREIN, REQUIRED BY CODE OR AS DIRECTED BY THE
- B.6. MAINTENANCE OF EXISTING FACILITIES AND CONDUCT OF THE WORK
 - B.6.1. THE BUILDING WILL BE OCCUPIED AND IN OPERATION DURING THE PROGRESS OF THE WORK. WHEN NECESSARY TO TEMPORARILY HALT BUILDING EGRESS OR FLOW OF PERSONNEL TRAFFIC, CONFER WITH THE OWNER'S REPRESENTATIVE AND ARRANGE THE PERIOD OF INTERRUPTION FOR A TIME MUTUALLY AGREED UPON. IT IS REQUIRED THAT THE WORK INDICATED AND/OR SPECIFIED SHALL ESTABLISHED ROUTINE OF THE BUILDING.

- B.6.2. AT NO TIME SHALL EXISTING SERVICES BE CUT OFF OR STOPPED WITHOUT THE OWNER'S WRITTEN PERMISSION. PRIOR TO STOPPING SERVICES CONTRACTOR SHALL INVESTIGATE AREAS TO BE AFFECTED AND NOTIFY THE OWNER AS TO THE TIME REQUIRED TO PERFORM HIS WORK AND ACTIVATE SERVICES. CONTRACTOR SHALL PERFORM ALL PREPARATORY WORK PRIOR TO SHUT DOWN IN ORDER TO MINIMIZE INCONVENIENCES. IF THE OWNER REQUIRES, SHUT DOWNS SHALL BE PERFORMED ON AN OVERTIME BASIS AT NO ADDITIONAL COST TO THE OWNER.
- B.6.3. NO WORK SHALL BE LEFT INCOMPLETE NOR ANY HAZARDOUS
 SITUATIONS CREATED WHICH WILL AFFECT THE LIFE OR SAFETY OF THE
 PUBLIC AND/OR BUILDING OCCUPANTS. AT NO TIME SHALL THE WORK
 INTERFERE WITH OR CUT OFF ANY OF THE EXISTING SERVICES WITHOUT THE
 OWNER'S WRITTEN PERMISSION.
- B.6.4. NO WORK SHALL BE LEFT IN SUCH A MANNER AS TO CREATE LEAKAGE, WATER DAMAGE OR OTHER DETRIMENTAL SITUATIONS.
- B.7. SCAFFOLDING, RIGGING AND HOISTING
- B.7.1. PROVIDE, ERECT, MAINTAIN AND BE RESPONSIBLE FOR THE SAFE AND LEGAL USE OF ALL SCAFFOLDING, HOISTING AND RIGGING. ALSO, PROVIDE ADDITIONAL BRACING AND SERVICES REQUIRED FOR THE DELIVERY OR ERECTION OF THE EQUIPMENT AND CONSTRUCTION MATERIALS PROVIDED OR INSTALLED UNDER THIS CONTRACT.
- C. SUBMITTALS
- C.1. SHOP DRAWINGS
- C.1.1. SUBMIT ONE SEPIA AND THREE PRINTS OF SYSTEM FABRICATION DRAWINGS.
- C.1.2. SUBMIT SIX COPIES OF MANUFACTURER'S SUBMITTAL SHEETS OR CATALOG CUTS FOR FIXTURES AND VALVING.
- C.2. AS-BUILT DRAWINGS
- C.2.1. PROVIDE OWNER WITH A COMPLETE SET OF AS-BUILT DRAWINGS COVERING EVERY ASPECT OF THE WORK. THE COMPLETE SET SHALL INCLUDE A SET OF MYLARS OR QUALITY SEPIAS CAPABLE OF PRODUCING QUALITY PRINTS AND TWO FULL SETS OF ALL AS-BUILT DRAWINGS.
- D. PIPING SYSTEMS, ACCESSORIES, SUPPORTS, SLEEVES, TESTING
- D.1. INSTALL ALL EQUIPMENT AND PIPING SYSTEMS USING THE BEST STANDARD PRACTICES OF THE TRADE AND LEAVE SYSTEM COMPONENTS COMPLETE AND READY FOR OPERATION. UNLESS OTHERWISE NOTED, SPECIFIED OR INDICATED, ALL PIPING AND EQUIPMENT SHALL BE CONNECTED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDED DETAILS AND AS APPROVED BY THE OWNER.
- D.2. PROMPTLY INSTALL PIPING REQUIRED TO BE CONCEALED IN FLOOR, WALL OR CEILING CONSTRUCTION TO NOT CAUSE DELAY TO OTHER WORK, AND TO ALLOW AMPLE TIME FOR NECESSARY TASKS AND APPROVALS.
- D.3. MODIFY PIPING ARRANGEMENTS AS NECESSARY TO SUIT CONDITIONS IN THE BUILDING, AND TO PERMIT ACCESS TO EQUIPMENT AND ACCESSORIES.
- D.4. UPON COMPLETION OF ALL PIPING SYSTEMS, NOTIFY THE OWNER, IN WRITING, FIVE

DAYS IN ADVANCE OF THE TIME LEAK TESTS ARE TO BE MADE.

- D.4.1. CONDUCT TESTS IN ACCORDANCE WITH THE SPECIFICATIONS OR AS DIRECTED BY OWNER.
- D.4.2. PIPING TESTS ARE TO BE CONDUCTED PRIOR TO PAINTING, INSULATING, OR CONCEALING WITHIN THE BUILDING.
- D.4.3. ALL MATERIALS, EQUIPMENT AND COSTS INVOLVED IN TESTING THE PIPING SYSTEMS SHALL BE INCLUDED IN THE WORK.
- D.4.4. SANITARY PIPING SHALL BE TESTED WITH WATER FOR TWO HOURS AT A PRESSURE OF FIVE PSIG OR TEN FOOT WATER COLUMN, UNLESS OTHERWISE DIRECTED.
- D.4.5. TEST WATER PIPING AT 1-1/2" TIMES THE STATIC WATER PRESSURE FOR 2
- D.4.6. TESTING OF MEDICAL GAS SYSTEMS SHALL COMPLY WITH NFPA 99.
- E. MATERIALS
- E.1. CAST IRON SOIL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE (CISPI) AND BE LISTED BY NSF INTERNATIONAL.
- E.1.1 ABOVE GROUND SANITARY AND VENT PIPING AND FITTINGS SHALL BE TYLER PIPE CO. NO-HUB SERVICE WEIGHT CAST IRON PIPING CONFORMING TO CISPI 301 WITH NEOPRENE GASKETS CONFORMING TO ASTM C564 AND STAINLESS STEEL MID RANGE (4 BAND) CLAMPS CONFORMING TO ASTM C 1540 AS MANUFACTURED BY HUSKY NO. 2000, MISSION TYPE "HW", (2) BAND CLAMPS ARE NOT PERMITTED. PROVIDE SWAY BRACING ON CAST IRON DRAINAGE PIPING 4" AND LARGER AT EVERY FOURTH HANGER, WHERE HANGERS ARE MORE THAN 18" IN LENGTH FROM UNDERSIDE OF THE SLAB AS PER SECTION 308.6 OF BOTH THE NEW YORK STATE AND NEW YORK CITY PLUMBING CODE. PROVIDE ANCHORAGE TO RESTRAIN DRAINAGE PIPING FROM AXIAL MOVEMENT ON PIPING 5" OR GREATER. THIS SHALL BE COMPRISED OF BRACES, RODDING AND/OR OTHER SUITABLE METHODS BY THE COUPLING MANUFACTURE AND C.I.S.P.I AND DIRECTED BY SECTION 308.7 OF BOTH THE NEW YORK STATE AND NEW YORK CITY PLUMBING CODE.
- E.2. HOT, AND COLD WATER PIPING TO BE TYPE L COPPER WITH BRAZED FITTINGS. PROVIDE TYPE K COPPER FOR PIPING IN THE GROUND.
- E.3. INSULATION ON HOT AND COLD WATER PIPING 1" INCH FIBERGLASS INSULATION WITH KRAFT PAPER BACKING, VAPOR BARRIER ON COLD WATER, FIRE AND SMOKE RESISTANT. PROVIDE 1" INSULATION ON HORIZONTAL STORM LINES WITHIN THE BUILDING HUNG CEILING. PROVIDE 2" OF INSULATION ON COLD WATER, SANITARY AND STORM PIPING WITHIN THE CRAWL SPACE.

- E.4. VALVES SHALL BE CAST BRONZE BALL TYPE, APOLLO OR EQUAL.
- E.5. PRESSURE REDUCING VALVE CONSTRUCTION RENEWABLE STAINLESS STEEL SEAT. HIGH TEMPERATURE RESISTING DIAPHRAGM, SPRING CAGE CONSTRUCTION AND STRAINER. WATTS NO. 223S OR APPROVED EQUAL. SET AT 30 PSI OUTLET.
- E.6. SHOCK ARRESTORS SHALL BE JONESPEC MODEL #55000 SERIES.E.7. DRAINS
- E.7.1. FUNNEL DRAINS SHALL BE JAY R. SMITH FIG. NO. 3811C SHALL BE JAY R SMITH FIG.3811C DUCO CAST IRON WITH ACID RESISTANT COATED INTERIOR AND EXTERIOR WITH OPTIONAL DOME BOTTOM STRAINER OF THE SAME FINISH. THIS DRAIN SHALL BE INSTALLED TO THE TAILPIECE OF THE SINK PRIOR TO THE SINK
- E.7.2. FLOOR DRAINS SHALL BE JAY R. SMITH.
- F. DISINFECTING AND BACTERIOLOGICAL TESTING
- F.1. FLUSHING
- F.1.1. FLUSH ALL NEW AND/OR REPAIRED POTABLE WATER PIPING SYSTEMS WITH CLEAN, POTABLE WATER UNTIL NO DIRTY WATER FLOWS FROM THE OUTLETS.
- F.2. DISINFECTING
- F.2.0.1. DISINFECT THE WATER PIPING SYSTEMS WITH A SOLUTION CONTAINING NOT LESS THAN 50 PARTS PER MILLION OF AVAILABLE CHLORINE.
- F.2.0.1.1. THE CHLORINATING MATERIAL SHALL BE LIQUID CHLORINE GAS-WATER MIXTURE, CALCIUM HYPOCHLORITE, SODIUM HYPO CHLORITE, OR CHLORINATED LIME AND WATER MIXTURE CONFORMING TO THE STANDARDS OF THE AWWA AND SHALL BE INTRODUCED INTO THE SYSTEM IN AN APPROVED MANNER.
- F.2.0.2. ALLOW THE DISINFECTING SOLUTION TO REMAIN IN THE SYSTEM FOR A MINIMUM PERIOD OF 24 HOURS. FOLLOWING THE DISINFECTING PERIOD, FLUSH ALL PIPING, VALVES AND OUTLETS WITH CLEAN WATER UNTIL RESIDUAL CHLORINE CONTENT IS NOT GREATER THAN 0.2 PARTS PER MILLION, UNLESS OTHERWISE DIRECTED.
- F.3. TESTING
- F.3.1. TAKE SAMPLES OF WATER FOR BACTERIOLOGICAL TESTING AS PRESCRIBED BY THE DEPARTMENT OF HEALTH.
- F.3.2. SHOULD THE SAMPLES FAIL TO MEET THE MINIMUM STANDARDS AS SET FORTH BY THE DEPARTMENT OF HEALTH, REPEAT THE DISINFECTING PROCEDURE AND SUBMIT NEW SAMPLES FOR TESTING.
- G. PIPE HANGERS AND SUPPORTS
- G.1. FABRICATE AND INSTALL HANGERS AND SUPPORTS IN COMPLIANCE WITH THE LATEST EDITION OF THE FOLLOWING:
- G.1.1. MSS MANUAL SP-89, PIPE HANGERS AND SUPPORTS, FABRICATION AND INSTALLATION PRACTICES.
- G.1.2. HANGING MATERIALS SHALL HAVE A SAFETY FACTOR OF 5 BUILT-IN AND BE DESIGNED AND ARRANGED TO MINIMIZE VIBRATION.
- G.1.3. SUPPORT PIPING TO MAINTAIN REQUIRED GRADING AND PITCHING OF LINES.

 USE HANGERS WHICH ARE VERTICALLY ADJUSTABLE 1½ INCHES MINIMUM

 AFTER PIPING IS ERECTED. AFTER ADJUSTING HANGERS IN PLACE, TRIM, CUT

 OR FILE HANGER RODS SO THAT THE ENDS DO NOT EXTEND MORE THAN 1/2
- G.1.4. DESIGN AND INSTALL PIPE SUPPORTS TO AVOID INTERFERENCE WITH OTHER PIPING, DUCTS, CONDUIT AND SUPPORTS.
- G.1.5. PROVIDE SEPARATE SUPPORTS FOR ALL BRANCHES. NO BRANCH TWO FEET IN LENGTH OR OVER SHALL BE INSTALLED WITHOUT AN APPROVED HANGER. PROVIDE HANGERS AT ALL JOINT CONNECTIONS.
- G.1.6. PROVIDE SWAY BRACING AT EVERY FOURTH HANGER.

INCH BELOW THE HANGER BOLTS.

- 9.1.7. PROVIDE ALL AUXILIARY STRUCTURAL STEEL MEMBERS NECESSARY TO SUPPORT ALL PIPING AND EQUIPMENT.
- G.1.8. HANGERS FOR BARE COPPER PIPE SHALL BE COPPER PLATED.
- H. GUARANTEES
- H.1. ALL INSTALLATIONS, MATERIAL, EQUIPMENT AND WORK FURNISHED AND PERFORMED UNDER THESE SPECIFICATIONS SHALL BE GUARANTEED FOR ONE YEAR FROM THE DATE OF THE FINAL ACCEPTANCE.
- 2. ALL SYSTEMS FOUND DEFECTIVE AT SUCH TESTING OR DURING THE GUARANTEE PERIOD SHALL BE REPLACED OR REPAIRED BY THIS CONTRACTOR WITHOUT ANY ADDITIONAL CHARGE. ANY LABOR, MATERIAL, EQUIPMENT OR INSTRUMENT NECESSARY FOR SUCH REPAIR OR REPLACEMENT SHALL BE INCLUDED AND FREE OF CHARGE.



Stantec Consulting Services Inc. 135 Engineers Road, Suite 200 Hauppauge, N.Y. 11788-4008 Tel. 631.424.8600 www.stantec.com

Copyright Reserved

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.

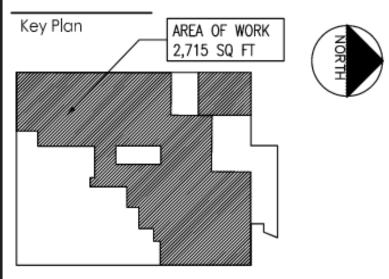
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Consultants

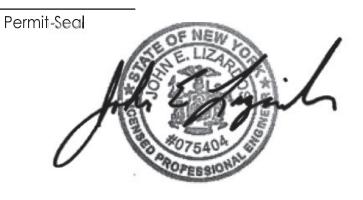


Mechanical & Electrical Engineerin
200 Old Country Road, Suite 670

Mineola, NY 11501
Phone: (516) 484-1020
Fax: (516) 484-0926
www.leapc.com



Notes



Client/Project

RICHMOND UNIVERSITY MEDICAL CENTER TRANSFORMATIONAL GRANT

669 CASTLETON AVENUE, STATEN ISLAND, NY SECOND FLOOR PROPOSED RENOVATION

PLUMBING SPECIFICATIONS

Project No. 7024.02 Drawing No. Scale
AS NOTED

Revision

7 of 7

Sheet

01.00

ORIGINAL SHEET - ARCH D