CONNECT TO EXISTING

DISCONNECT FROM EXISTING

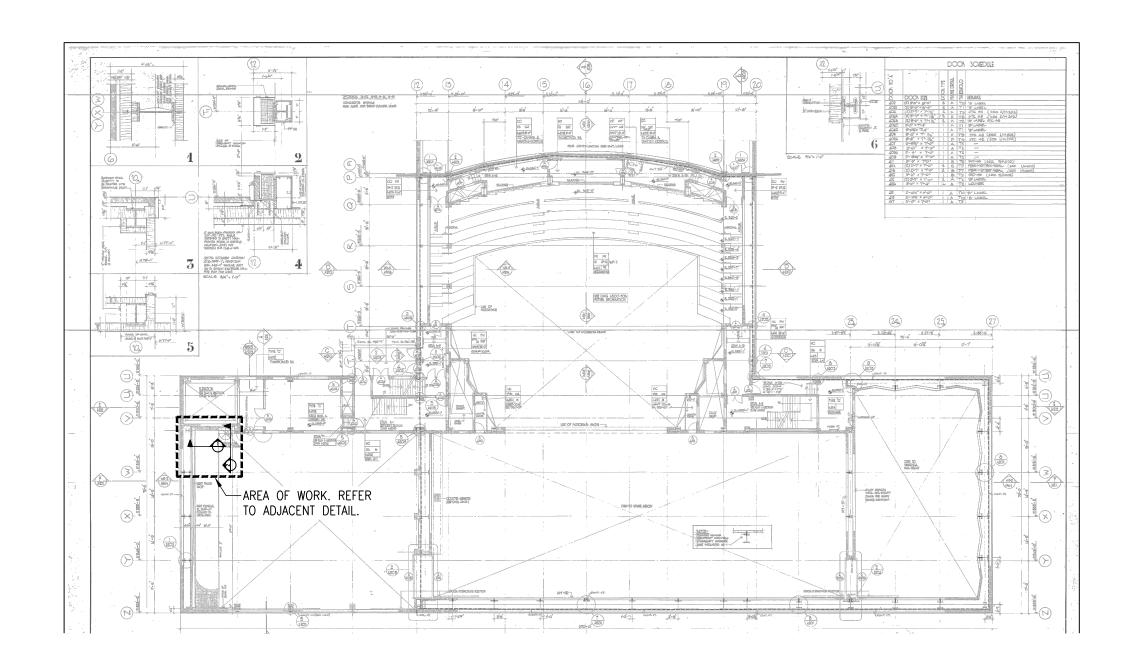
		// A TI O NI O	
	SYMBOLS & ABBRE'		
NOT ALL SYMBOLS & ABE	BREVIATIONS ARE NECESSARILY USED ON THIS PRO	JECT)	
	DOMESTIC COLD WATER PIPING DOMESTIC HOT WATER PIPING VENT PIPING (SANITARY) SOIL/WASTE/SANITARY PIPING	AFF BLDG. CLG. CODP	ABOVE FINISHED FLOOR BUILDING CEILING CLEAN OUT DECK PLATE
ST	STORM DRAIN CONTINUED PIPING	CONN CONT. CW	CONNECT CONTINUED/CONTINUATION COLD WATER
— ЯО о	PIPE DOWN/DROP PIPE UP/RISE BOTTOM PIPE CONNECTION	DIA DN	DIAMETER DOWN (PENETRATES FLOOR SLAB
— — — — — — — — — — — — — — — — — — —	TOP PIPE CONNECTION P-TRAP	DR DWG	DRAIN DRAWING
→	SLOPED CHANGE IN PIPE ELEVATION CLEAN OUT DECK PLATE (CODP)	FAI FD FLR	FRESH AIR INLET FLOOR DRAIN FLOOR
<u>_</u>	SLEEVE HOSE BIB	GC H.B.	GENERAL CONTRACTOR HOSE BIB
	DRAIN P-TRAP	HW LAV	HOT WATER LAVATORY
$\stackrel{\blacksquare}{\bowtie}$	BALL VALVE CHECK VALVE	PF NFWH	PRE-FILTER NON FREEZE WALL HYDRANT
⋈	MIXING VALVE	NTS OD	NOT TO SCALE OVERFLOW DRAIN
	RELIEF VALVE GLOBE VALVE	RD SAN ST/L	ROOF DRAIN SANITARY STORM DRAIN/LEADER
	GATE VALVE UNION	TYP UP	TYPICAL UP (PENETRATES FLOOR SLAB)
7	VACUUM BREAKER	V VTR	VENT VENT THROUGH ROOF
P	SHOCK ABSORBER	W	WASTE

WATER CLOSET

WALL HYDRANT

PLUMBING DRAWING LIST							
DRAWING NO.	DRAWING TITLE						
P-001	PLUMBING PLAN, SYMBOLS, NOTES, DETAILS, SCHEDULES & DRAWING LIST						
P-100	PLUMBING SPECIFICATIONS						

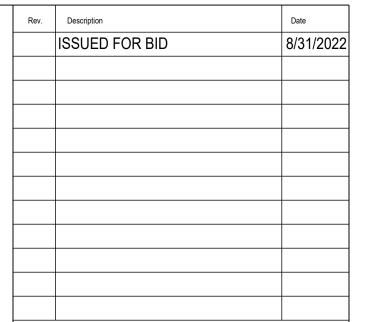
PLUMBING FIXTURE SCHEDULE									
DESIGNATION	FIXTURE	SERVICE CONNECTION							DEMADICS
		S	W	IW	٧	CW	HW	G	REMARKS
EW	EYE WASH	_	1½"	_	1½"	_	½"	_	GUARDIAN MODEL G1814. MOUNT AT RIM HEIGHT OF 33".
SS	SERVICE SINK	_	2"	_	1½"	½"	½"	_	COLUMBIA PRODUCTS MODEL 5A2F SINK WASH STATION (COMES WITH 2 FAUCETS). MOUNT AT RIM HEIGHT OF 35".
SI	SEDIMENT INTERCEPTOR	-	2"	ı	-	ı	ı	-	ZURN MODEL Z1180
MV	MIXING VALVE	-	_	_	_	½"	½"	_	GUARDIAN G3600LF THERMOSTATIC MIXING VALVE



4 KEY PLAN
SCALE: NTS

GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NEW YORK STATE BUILDING CODE, UTILITY COMPANY REQUIREMENTS, AND THE BEST TRADE PRACTICES.
- 2. BEFORE COMMENCING WORK, THE CONTRACTOR SHALL FILE ALL REQUIRED INSURANCE CERTIFICATES WITH THE DEPARTMENT OF BUILDINGS, OBTAIN ALL REQUIRED PERMITS, AND PAY ALL FEES REQUIRED BY THE GOVERNING NEW YORK STATE AGENCIES.
- 3. THE DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL PIPING AND EQUIPMENT AND INDICATE THE REQUIRED SIZE AND POINTS OF TERMINATION OF THE PIPING AND SUGGEST PROPER ROUTING OF SAME. HOWEVER, IT IS NOT THE INTENTION OF THE DRAWINGS TO SHOW ALL NECESSARY OFFSETS, OBSTRUCTIONS OR STRUCTURAL CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO INSTALL HIS WORK IN SUCH A MANNER THAT IT WILL CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR WITHOUT FURTHER CONSTRUCTION OR
- 4. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATING, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES OF MAGNITUDE WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- 5. THE CONTRACTOR SHALL COORDINATE ALL WORK PROCEDURES WITH THE STIPULATIONS OF LOCAL AUTHORITIES, BUILDING MANAGEMENT OR BOARD OF DIRECTORS.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL CONDITIONS AND MATERIALS WITHIN THE PROPOSED CONSTRUCTION AREA. THE CONTRACTOR SHALL DESIGN AND INSTALL ADEQUATE SHORING AND BRACING FOR ALL STRUCTURAL OR REMOVAL TASKS. THE CONTRACTOR SHALL HAVE SOLE RESPONSIBILITY FOR ANY DAMAGE OR INJURIES CAUSED BY OR DURING THE EXECUTION OF THE WORK.
- 7. THE CONTRACTOR SHALL LAY OUT HIS OWN WORK, AND SHALL PROVIDE ALL DIMENSIONS REQUIRED FOR OTHER TRADES.
- 8. ALL WORK SHALL BE PERFORMED BY PERSONS LICENSED IN THEIR TRADES, WHO SHALL ARRANGE FOR AND OBTAIN THROUGH THE DEPARTMENT OF BUILDINGS ALL REQUIRED PERMITS, INSPECTIONS AND REQUIRED SIGN OFFS.
- 9. THE CONTRACTOR SHALL DO ALL CUTTING, PATCHING, REPARING AS REQUIRED TO PERFORM ALL OF THE WORK INDICATED ON THE DRAWINGS, AND ALL OTHER WORK THAT MAY BE REQUIRED TO COMPLETE THE JOB.





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WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

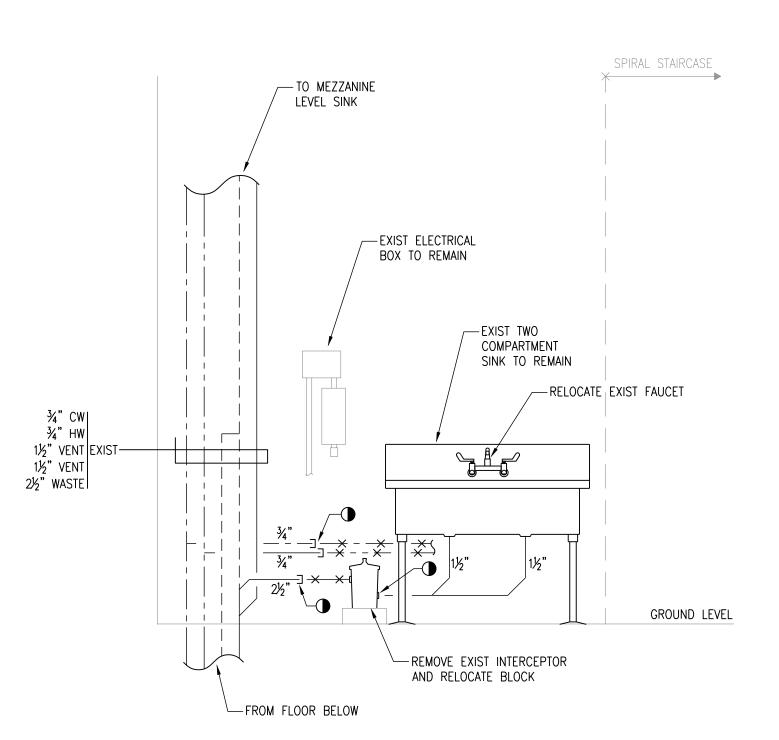
SUNY PURCHASE COLLEGE

New York, NY

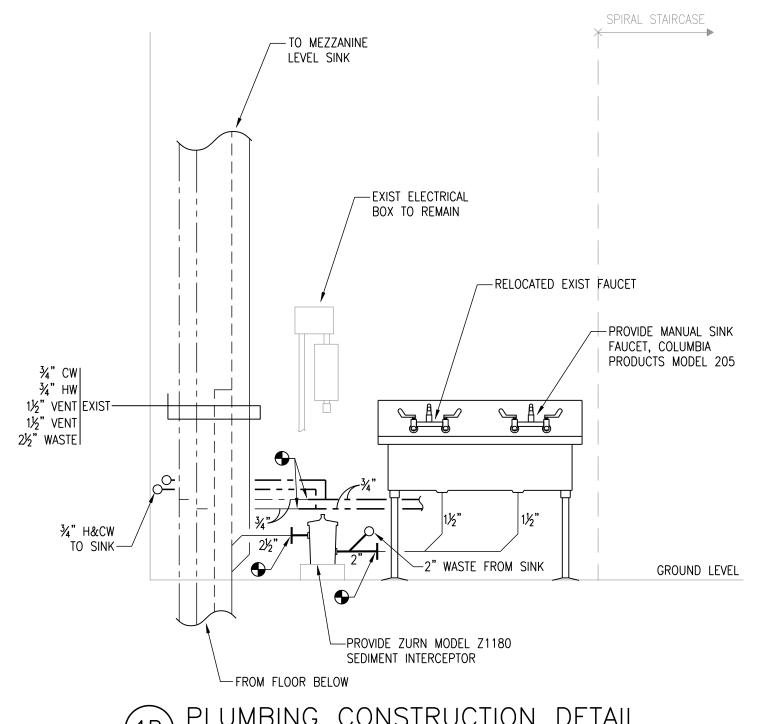
PAINT DECK ADA SINK

PLUMBING PLAN, SYMBOLS, NOTES, DETAILS, SCHEDULES & DRAWINGS LIST

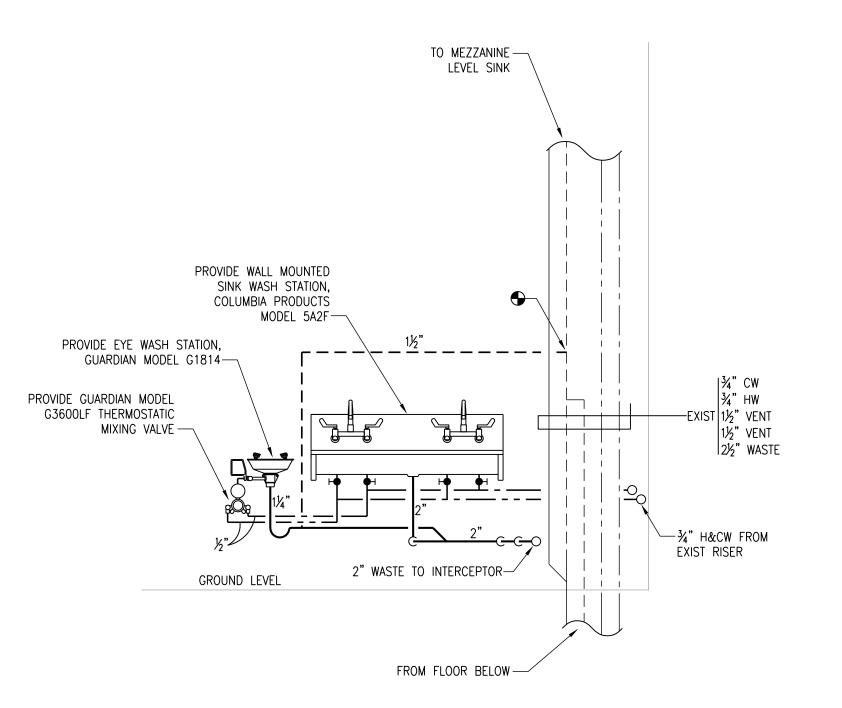
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Drawn PA	C.E. Job No. 24045
Checked MQ	Copyright©2016 by Collado Engineering, P.C.







PLUMBING CONSTRUCTION DETAIL SCALE: 1/2" = 1'-0"



PLUMBING CONSTRUCTION DETAIL

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

PLUMBING SPECIFICATIONS

GENERAL:

- A. THE "GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION," AIA DOCUMENT A201, LATEST EDITION AND THESE SPECIFICATIONS AS APPLICABLE ARE PART OF THIS CONTRACT.
- B. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIAL WHICH VIOLATES ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE
- C. INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. ASCERTAIN FROM BUILDING OWNER AND TENANT AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED THROUGH ALL AREAS.
- D. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. PIPE ROUTING IS SHOWN DIAGRAMMATICALLY AND DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF PIPE TO AVOID OBSTRUCTIONS. COORDINATION WITH THE EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES IS REQUIRED. MAINTAIN HEADROOM AND SPACE CONDITIONS.
- E. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.
- F. REMOVAL AND RELOCATION OF CERTAIN EXISTING WORK WILL BE NECESSARY FOR THE PERFORMANCE OF THE GENERAL WORK. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. THE CONTRACTOR SHALL SURVEY THE SITE AND INCLUDE ALL CHANGES IN MAKING UP THE WORK PROPOSAL.
- G. CONNECTIONS TO EXISTING WORK: INSTALL NEW WORK AND CONNECT TO EXISTING WORK WITH MINIMUM INTERFERENCE TO EXISTING FACILITIES. TEMPORARY SHUTDOWNS OF EXISTING SERVICES SHALL BE PERFORMED AT NO ADDITIONAL CHARGES, AT TIMES NOT TO INTERFERE WITH NORMAL OPERATION OF EXISTING FACILITIES AND ONLY WITH WRITTEN CONSENT OF OWNER. MAINTAIN CONTINUOUS OPERATION OF EXISTING FACILITIES AS REQUIRED WITH NECESSARY TEMPORARY CONNECTIONS BETWEEN NEW AND EXISTING WORK. CONNECT NEW WORK TO EXISTING WORK IN NEAT AND ACCEPTABLE MANNER. RESTORE EXISTING DISTURBED WORK TO ORIGINAL CONDITION.
- H. DISCONNECT, REMOVE AND/OR RELOCATE EXISTING MATERIAL, EQUIPMENT AND OTHER WORK AS NOTED OR REQUIRED FOR PROPER INSTALLATION OF NEW
- I. THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS. SIDEWALKS AND PAVEMENTS. FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.
- J. THE LOCATIONS OF THE EXISTING SERVICES ARE BELIEVED TO BE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION OF THESE SERVICES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING ANY WORK.
- K. SEAL OPENINGS THROUGH WALLS AND FLOORS WITH A U.L.-LISTED FIRESTOPPING ASSEMBLY.
- L. ALL PRESENT MATERIAL, EQUIPMENT AND CONSTRUCTION DEBRIS TO BE REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION OF SPECIFIC EQUIPMENT AND APPARATUS REQUESTED BY THE BUILDING REPRESENTATIVE, ARCHITECT OR AS NOTED TO BE RELOCATED ON THE DRAWINGS. REMOVED EQUIPMENT SHALL BE PROPERLY DISPOSED OF BY THIS CONTRACTOR.
- M. THE WORK IN THE BUILDING SHALL BE DONE WHEN AND AS DIRECTED, AND IN A MANNER SATISFACTORY TO THE OWNER. THE WORK SHALL BE PERFORMED SO AS TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND DISTURBANCE TO THE PRESENT OCCUPANTS.
- N. THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK IN OVERTIME AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.
- O. UNLESS OTHERWISE SPECIFICALLY SPECIFIED, INCLUDE ALL CUTTING AND ROUGH PATCHING OF EXISTING FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING.
- P. ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH ARCHITECTURAL SPECIFICATIONS.
- Q. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE EXISTING BUILDING, EQUIPMENT, ETC., WHICH AFFECT THIS WORK, AND THE ACCESS TO SUCH SPACES, HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK.
- R. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR ARCHITECT AND ENGINEER.
- S. THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS

ADJUSTED HIS EQUIPMENT, TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

2. SCOPE OF WORK:

- A. SCOPE OF WORK SHALL CONSIST OF PROVIDING LABOR, MATERIALS, EQUIPMENT, SERVICES & FEES NECESSARY FOR COMPLETE AND SAFE INSTALLATION IN CONFORMITY WITH THE NYC PLUMBING CODE AND ALL OTHER APPLICABLE INDUSTRY, NATIONAL AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.
- B. THE ARCHITECTURAL DRAWINGS, PLANS, DETAILS, SPECIFICATIONS AND SPECIFICATION ADDENDA ARE MADE PART OF THIS CONTRACT AND SHALL APPLY TO ALL WORK UNDER THE CONTRACT UNLESS OTHERWISE AMENDED, MODIFIED, SUPPLEMENTED OR SPECIFIED HEREIN.
- C. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OR ACTUAL USE OF EQUIPMENT OR BENEFICIAL OCCUPANCY OF SPACES BY OWNER INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING AND REPLACING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.
- D. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH THE DEPARTMENT HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

SHOP DRAWINGS:

- A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT PROVIDE COMPLETE SET OF COORDINATED SHOP DRAWINGS OF ALL NEW AND EXISTING EQUIPMENT, INDICATING CAPACITY DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT AND
- B. INDICATE ON EACH SHOP DRAWING SUBMITTED:
- a. PROJECT NAME AND LOCATION
- b. NAME OF ARCHITECT AND ENGINEER
- c. ITEM IDENTIFICATION
- d. APPROVAL STAMP OF PRIME CONTRACTOR

C. SUBMISSIONS:

- a. CONTRACTOR SHALL SUBMIT A PDF OR TIFF FILE TO ARCHITECT THROUGH PREVIOUSLY DISCUSSED AND APPROVED METHOD (EMAIL, SUBMITTAL EXCHANGE PROGRAM, ETC). SUBMITTAL WILL THEN BE FORWARDED TO RELEVANT PARTIES FOR RÉVIEW.
- b. UNLESS OTHERWISE APPROVED, PROVIDE ALL PLUMBING EQUIPMENT SUBMITTALS AND SHOP DRAWINGS AT ONE TIME.
- c. PROVIDE A SEPARATE TRANSMITTAL FOR EACH SUBMITTAL ITFM. TRANSMITTALS SHALL INDICATE PRODUCT BY SPECIFICATION SECTION NAME AND NUMBER. SEPARATE ALL SUBMITTALS INTO APPROPRIATE SPECIFICATION SECTION NUMBER. DO NOT COMBINE SPECIFICATION SECTIONS
- d. SUBMIT ONLY PAGES WHICH ARE PERTINENT TO THE PROJECT. ALL OPTIONS WHICH ARE INDICATED ON THE PRODUCT DATA SHALL BECOME PART OF THE CONTRACT AND SHALL BE REQUIRED WHETHER SPECIFIED OR NOT.
- e. MARK EACH COPY OF STANDARD PRINTED DATA TO IDENTIFY PERTINENT PRODUCTS, REFERENCED TO SPECIFICATION SECTION AND ARTICLE
- f. SHOW REFERENCE STANDARDS, PERFORMANCE CHARACTERISTICS AND CAPACITIES; WIRING AND PIPING DIAGRAMS AND CONTROLS; COMPONENT PARTS; FINISHES; DIMENSIONS AND REQUIRED CLEARANCES.
- q. MODIFY MANUFACTURER'S STANDARD SCHEMATIC DRAWINGS AND DIAGRAMS TO SUPPLEMENT STANDARD INFORMATION AND TO PROVIDE INFORMATION SPECIFICALLY APPLICABLE TO THE WORK. DELETE INFORMATION NOT
- h. THE ENGINEER WILL REVIEW THE ORIGINAL SUBMITTAL AND ONE RESUBMITTAL FOR THE SAME PRODUCT. ADDITIONAL RESUBMITTALS WILL BE REVIEW ON A HOURLY RATE, PAYABLE BY THE CONTRACTOR.
- i. PARTIAL SUBMITTALS OR SUBMITTALS NOT PROPERLY FORMATTED AS INDICATED ABOVE, ARE SUBJECT TO RETURN WITHOUT REVIEW FOR THE CONTRACTOR TO CORRECT.

4. GENERAL PROVISIONS FOR PLUMBING WORK:

APPLICABLE.

A. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE

SENTENCES. WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL", "SHALL BE", "FURNISH", "PROVIDE", "A", "THE", AND "ALL" HAVE BEEN OMITTED FOR BREVITY.

B. QUALITY ASSURANCE:

- a. QUALITY AND GAUGE OF MATERIALS:
- NEW, BEST OF THEIR RESPECTIVE KINDS, AND FREE FROM DEFECTS. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION SHALL BE OF SAME MANUFACTURER, EXCEPT AS NOTED.
- b. GUARANTEE:
 - ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF WORK.
- C. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE. PAINTED EXPOSED WORK THAT IS SOILED OR DAMAGED. CLEAN AND REPAIR TO MATCH ADJOINING WORK BEFORE FINAL ACCEPTANCE. REMOVE DEBRIS FROM INSIDE AND OUTSIDE OF MATERIAL AND EQUIPMENT.
- D. FINAL LOCATIONS AND MOUNTING ORIENTATIONS OF ALL PLUMBING FIXTURES SHALL BE VERIFIED BY ARCHITECT.

5. PIPE AND FITTINGS:

- A. SANITARY DRAINAGE AND VENT:
- a. HUBLESS CAST IRON SOIL PIPE AND FITTINGS WITH EXTRA WIDE HEAVY DUTY GASKETED HUBLESS COUPLINGS HUSKIE SERIES 4000

B. DOMESTIC WATER:

- a. TYPE L HARD COPPER TUBING WITH CAST BRONZE OR WROUGHT COPPER FITTINGS AND 95/5 TIN ANTIMONY SOLDER JOINTS.
- b. STANDARD WEIGHT RED BRASS PIPE WITH STANDARD WEIGHT CAST BRONZE THREADED FITTINGS.

C. DIELECTRIC FITTINGS

- a. ASSEMBLY OF COPPER ALLOY AND FERROUS MATERIALS OR FERROUS MATERIAL BODY WITH SEPARATING NONCONDUCTIVE INSULATING MATERIAL SUITABLE FOR SYSTEM FLUID, PRESSURE, AND TEMPERATURE.
- b. PROVIDE DIELECTRIC FITTING AT ALL CONNECTIONS OF DISSIMILAR PIPING MATERIALS. FITTINGS SHOULD CONSISTS OF DIELECTRIC UNIONS, FLANGES OR COUPLINGS, AS APPROPRIATE FOR SIZE AND SERVICE.

6. VALVES:

- A. BALL VALVES:
 - a. TWO-PIECE, BRONZE, END ENTRY, 600 PSI WWP; SIMILAR TO STOCKHAM #S-216BR-R-T, #2-216 BR-R-S.

7. INSULATION:

- A. ALL INSULATION (INCLUDING JACKET, FACING AND ADHESIVE) SHALL HAVE COMPOSITE FIRE AND SMOKE HAZARD RATINGS AS TESTED BY PROCEDURES LISTED IN ASTM E-84, NFPA 255 AND UL 273; NOT EXCEEDING A FLAME SPREAD OF 25 AND A SMOKE DEVELOPED OF 50.
- B. ON VALVES AND FITTINGS PROVIDE PREMOLDED FIBERGLASS FITTINGS. VAPOR SEAL INSULATION ON "CW".

C. "CW" PIPING:

c. PROVIDE 1/2" THICK FIBERGLASS SECTION PIPE COVERING WITH VAPOR BARRIER JACKET.

D. "HW" PIPING:

a. PROVIDE 1" THICK FIBERGLASS SECTIONAL PIPE COVERING.

8. PLUMBING FIXTURES:

- A. PROVIDE ALL FIXTURES WITH STOP VALVES AND SUPPLIES AND FIXTURE TRAPS AS REQUIRED.
- B. ALL FIXTURES SHALL BE AS INDICATED ON ARCHITECTURAL DRAWING.

9. PIPING SUPPORTS:

- A. SUPPORT ALL PIPING FROM BUILDING CONSTRUCTION BY PROVIDING BEAM CLAMPS & STEEL FISHPLATES (IN CONCRETE FILL ONLY), AND ACCEPTABLE BRACKETS. SUBMIT ALL METHODS FOR REVIEW.
- B. PROVIDE TRAPEZE HANGERS OF BOLTED ANGLES OR CHANNELS FOR GROUPED LINES AND SERVICES.
- C. PROVIDE ADDITIONAL FRAMING WHERE BUILDING CONSTRUCTION IS INADEQUATE. SUBMIT FOR REVIEW.
- D. SUSPENDED HORIZONTAL PIPING:
- a. SUPPORT ALL PIPING INDEPENDENTLY FROM STRUCTURE USING HEAVY IRON-HINGED TYPE HANGERS, SIMILAR TO GRINNEL CLEVIS NO. 260.
- b. PROVIDE ELECTROPLATED SOLID-BAND HANGERS SIMILAR TO AUTO-GRIP, FOR 2" AND SMALLER PIPE.
- c. PROVIDE WALL BRACKETS FOR WALL SUPPORTED PIPING AND PROVIDE PIPE SADDLES FOR FLOOR MOUNTED PIPING.

- d. PROVIDE SUPPORTS WITH COPPER LINING FOR UNINSULATED COPPER
- e. SUSPEND PIPING FROM BEAM CLAMPS WITH RETAIN CLAMP OR LOCKNUT, STEEL FISHPLATES, CANTILEVER BRACKETS OR OTHER ACCEPTED MEANS. BEAM CLAMPS SHALL BE SIMILAR TO GRINNEL FIGURES 61, 87, 131 OR 225.
- f. SUSPEND PIPING BY RODS WITH DOUBLE NUTS.
- g. PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND ACCEPTED WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING HANGER RODS IN REQUIRED LOCATIONS.
- h. SUPPORT BRANCH FIXTURE WATER PIPING IN CHASES WITH COPPER-PLATED METAL BRACKETS, SECURED TO STUDS, SIMILAR TO HOLDRITE NOS. 102-18, 107-18, 102-26 OR 101-26.
- E. PROVIDE 180° ARC GALVANIZED METAL COVERING SHIELDS ON HANGERS FOR INSULATED PIPING WITHOUT INCOMPRESSIBLE INSULATING BLOCK IN INSULATION
- F. MAXIMUM HANGER SPACING AS INDICATED:
- a. PIPE $\frac{3}{8}$ " $-\frac{3}{4}$ " SHALL BE EVERY 6'.
- b. PIPE 1" SHALL BE EVERY 10'.
- c. PIPE 1¼" AND LARGER SHALL BE EVERY 10'.
- d. COPPER TUBING 1¼" AND SMALLER SHALL BE EVERY 6'.
- e. COPPER TUBING 1½" AND LARGER SHALL BE EVERY 10'.
- f. CAST IRON: EVERY 5' AND AT EVERY FITTING OR JOINT.

G. EXPANSION ANCHORS:

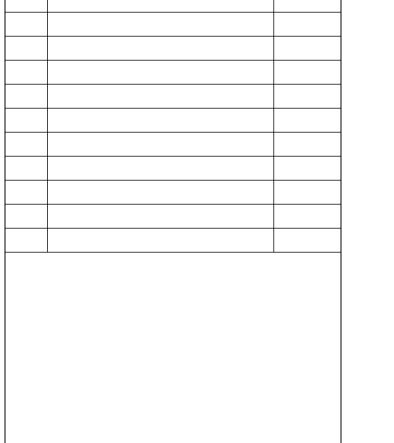
- a. PROVIDE SMOOTH WALL, NON-SELF-DRILLING INTERNAL PLUG EXPANSION TYPE ANCHORS CONSTRUCTED OF AISC 12L14 STEEL AND ZINC PLATED IN ACCORDANCE WITH FED. SPEC. QQ-A-325 TYPE 1, CLASS 3.
- b. DO NOT EXCEED 1/4" OF AVERAGE VALVES FOR A SPECIFIC ANCHOR SIZE USING 2000 PSIG (13,800 KPA) CONCRETE ONLY, FOR MAXIMUM WORKING LOADS.
- c. PROVIDE SPACING AND INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- d. EXPANSION ANCHORS SHALL BE QUALIFIED PER ASCE 93 AND HAVE AN ESR REPORT, QUALIFIED FOR CRACKED CONCRETE.

10. TESTS:

- A. DOMESTIC WATER PIPING:
- a. TEST PIPING HYDROSTATICALLY AT A PRESSURE OF 125 PSI.
- b. DURATION OF TEST SHALL BE 2 HOURS WITHOUT A LOSS IN PRESSURE
- B. DRAINAGE AND VENT PIPING:
- a. CAP ALL OUTLETS AND FILL PIPING SYSTEM TO OVERFLOWING FROM A POINT AT LEAST 10' ABOVE THE FLOOR.
- DURATION OF 2 HOURS. C. ARRANGE AND COORDINATE TESTS WITH OWNER 48 HOURS IN ADVANCE.

NOTIFY ENGINEER AND ARCHITECT OF TEST AND DATE TIME.

b. THE WATER LEVEL SHALL REMAIN CONSTANT THROUGHOUT THE TEST



8/31/2022

Rev. Description

ISSUED FOR BID



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Client or Agent

SUNY PURCHASE COLLEGE

New York, NY

Project Title PAINT DECK ADA SINK

Drawing Title PLUMBING SPECIFICATIONS

Scale NONE Date 5/18/22 Drawn PA C.E. Job No. 24045

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Drawing No.