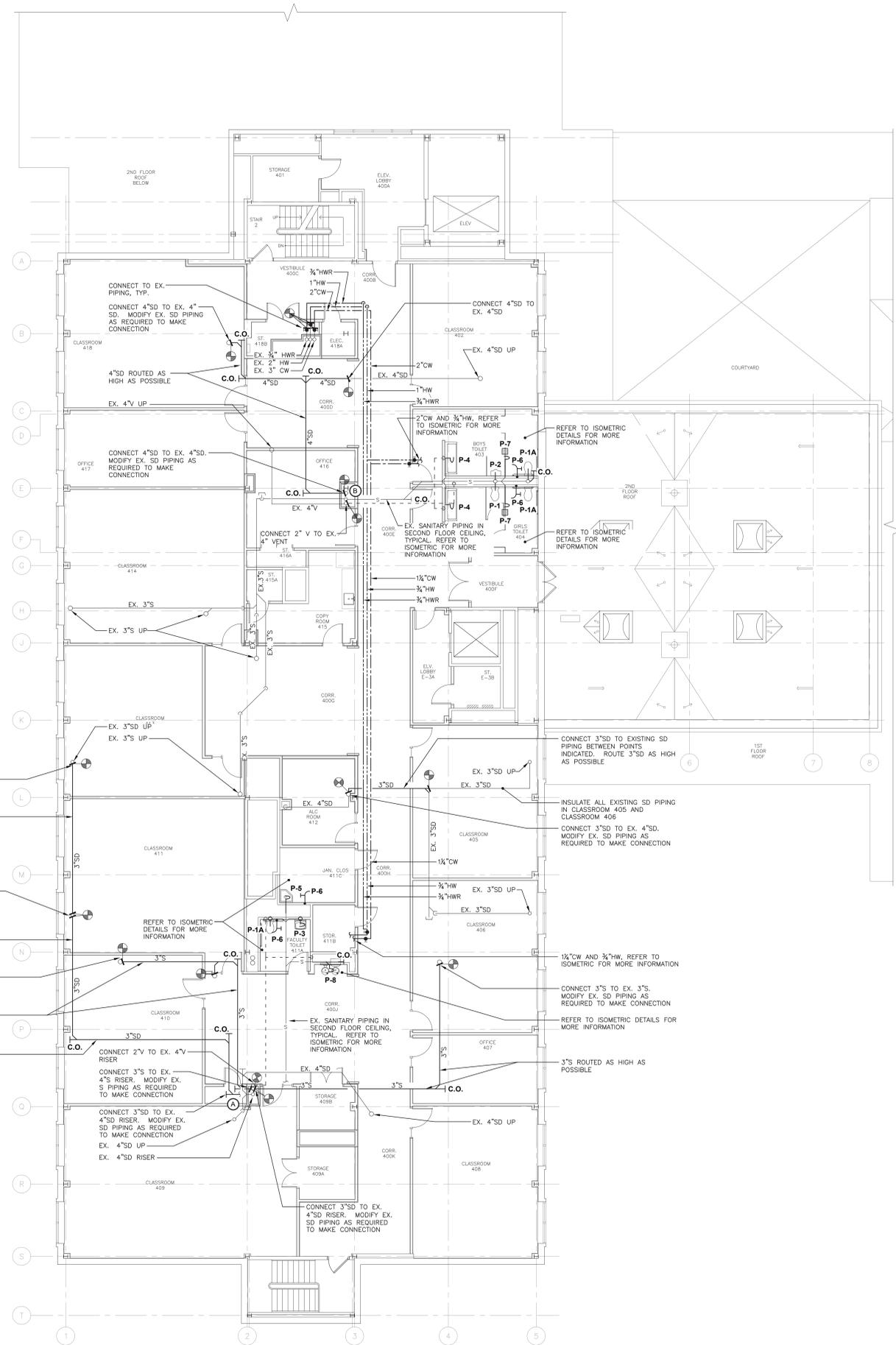
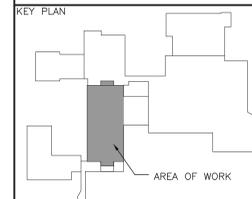


1 PLUMBING: THIRD FLOOR DEMOLITION PLAN  
1/8" = 1'-0"



2 PLUMBING: THIRD FLOOR PLAN  
1/8" = 1'-0"



NOTE: ALL DEMOLITION, MANAGEMENT AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF HARVEY GREENBERG & ASSOCIATES ARCHITECTS, P.C. AND WERE CREATED, EVALUATED AND DEVELOPED FOR USE ON AND IN CONNECTION WITH THE SPECIFIC PROJECT. NONE OF SUCH DESIGN, DESIGN ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF HARVEY GREENBERG & ASSOCIATES ARCHITECTS, P.C.  
NOTWITHSTANDING TO THIS DRAWING SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS OF THE JOB AND THE OFFICE MUST BE NOTIFIED OF ANY VARIATIONS FROM DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS. SHOP DETAILS MUST BE SUBMITTED TO THIS OFFICE FOR APPROVAL BEFORE PROCEEDING WITH FABRICATION.  
LEGAL NOTICE: ALTERATIONS BY ANY PERSON IN ANY WAY OF ANY ITEM CONTAINED ON THIS DOCUMENT, UNLESS ACTING UNDER THE DIRECTION OF THE LICENSED ARCHITECT, ENGINEER, PROFESSIONAL DESIGNER, SHALL BE HELD TO BE A VIOLATION OF TITLE 16, SECTION 1707 OF THE NEW YORK STATE LAW. UNAUTHORIZED ADDITION OR ALTERATION OF THIS PLAN IS A VIOLATION OF ARTICLE 16, SECTION 1707 OF THE NEW YORK STATE EDUCATION LAW.  
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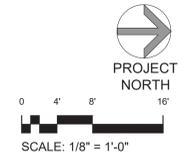
Professional Seal

No.	Date	Issue
2	09/22/23	ISSUED FOR BID
1	03/30/23	S.E.D. SUBMISSION

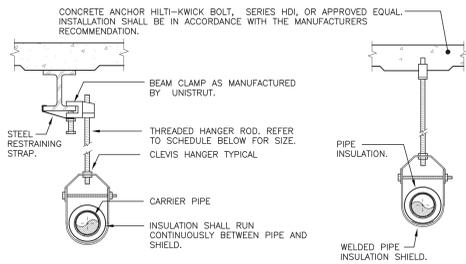
Sheet Title

**PLUMBING:  
THIRD FLOOR  
PLAN**

Job No.	Sheet No.
2023-1008	
Date	
03-30-23	
Scale	
AS NOTED	
Drawn/Checked	
KC/SZ	



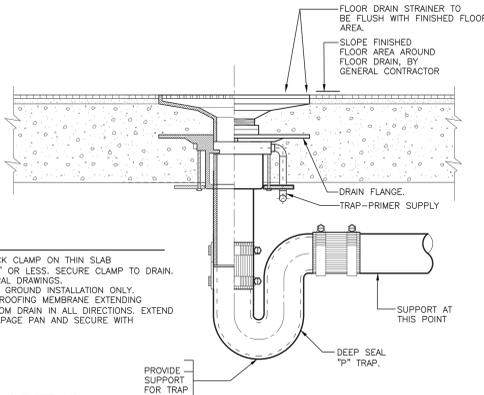
**P201**



PIPE HANGER SCHEDULE	
PIPE DIA.	3/4"-2" 2 1/2"-3" 4"-5" 6" 8"-12"
HANGER DIA.	3/8" 1/2" 5/8" 3/4" 7/8"

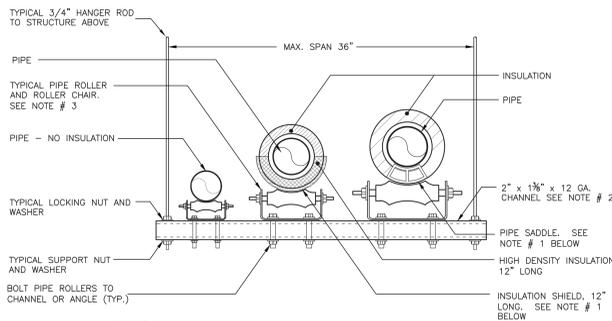
- NOTES:**
1. CLEVIS HANGERS WITH WELDED INSULATION SHIELDS SIMILAR TO RAUCH FIG. 100SH ON ALL PIPES LARGER THAN 1".
  2. FOR PIPES 1" OR SMALLER, A BAND HANGER WITH INSULATION SHIELD MAY BE USED SIMILAR TO RAUCH FIG. NO. 1ASH.
  3. FOR NON-INSULATED PIPE, INSULATION SHIELDS MAY BE OMITTED.
  4. ALL PIPE HANGERS SHALL BE GALVANIZED STEEL OR FACTORY PAINTED BLACK WITH ENAMEL.
  5. FOR NON FERROUS PIPING WITHOUT INSULATION, ALL HANGERS SHALL BE COPPER PLATED OR FURNISHED WITH A DI-ELECTRIC BETWEEN PIPE AND HANGERS.
  6. WHERE BUILDING STRUCTURAL COMPONENTS HAVE FIREPROOF MATERIAL, ANY AREA THAT IS DISTURBED OR DAMAGED AS A RESULT OF HANGER INSTALLATION SHALL BE PATCHED WITH UL AND FM APPROVED FIREPROOFING TO MATCH EXISTING CONDITIONS OR BETTER.

**1 PIPE HANGER DETAIL**  
NOT TO SCALE



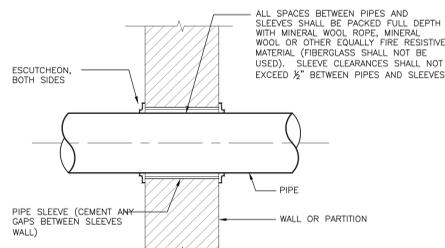
- NOTES:**
1. PROVIDE UNDER DECK CLAMP ON THIN SLAB INSTALLATIONS OF 5" OR LESS. SECURE CLAMP TO DRAIN. REFER TO STRUCTURAL DRAWINGS.
  2. NO HUB FOR ABOVE GROUND INSTALLATION ONLY.
  3. PROVIDE A WATER PROOFING MEMBRANE EXTENDING MINIMUM OF 12" FROM DRAIN IN ALL DIRECTIONS. EXTEND MEMBRANE INTO SEAPAGE PAN AND SECURE WITH CLAMPING COLLAR.

**2 FLOOR DRAIN DETAIL**  
NOT TO SCALE



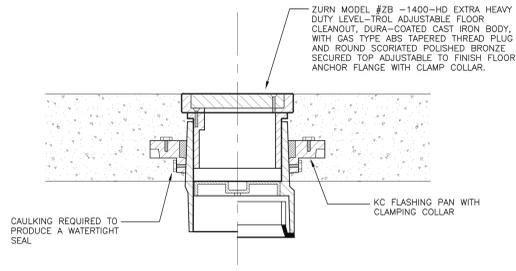
- NOTES:**
1. PROVIDE INSULATION SHIELD OR PIPE SADDLE BASED ON THE PIPING SYSTEM AND PIPE SIZE AS INDICATED IN THE SPECIFICATIONS.
  2. TRAPEZE TYPE HANGER SHALL BE USED FOR A MAXIMUM 1,000 LB UNIFORM LOAD.
  3. ELIMINATE PIPE ROLLERS AND ROLLER CHAIRS AT ANCHOR POINTS.

**3 TRAPEZE TYPE HANGER INSTALLATION DETAIL**  
NOT TO SCALE

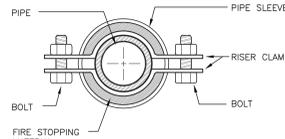


- NOTES:**
1. THIS DETAIL ALSO APPLICABLE TO INTERIOR NON-WATER PROOF FLOOR CONSTRUCTION. FOR WATER PROOF FLOOR CONSTRUCTION AND OTHER CONSTRUCTION - SEE SPECIFICATIONS.
  2. PROVIDE FIRE STOP SEALANT ON ALL NEW AND EXISTING PIPING PENETRATING EXISTING FIRE RATED WALLS AND NEW FIRE RATED WALLS CONSTRUCTED AS PART OF THE PROJECT.

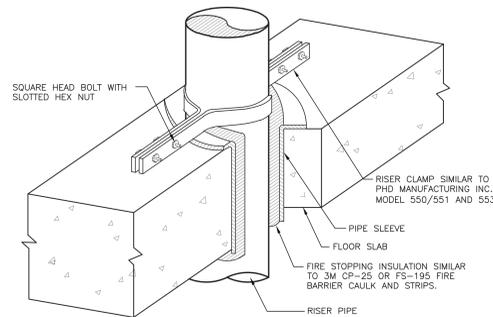
**4 FIRESTOP DETAIL**  
NOT TO SCALE



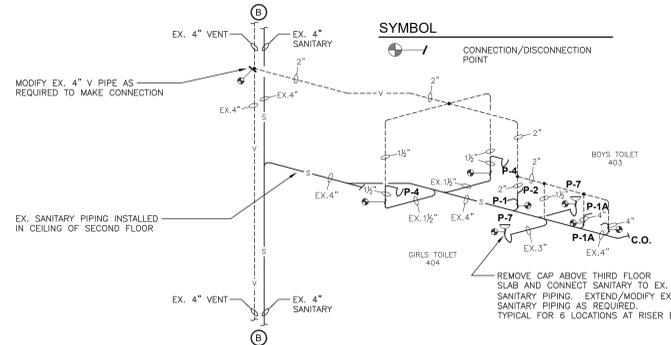
**5 FLOOR CLEAN OUT DETAIL**  
NOT TO SCALE



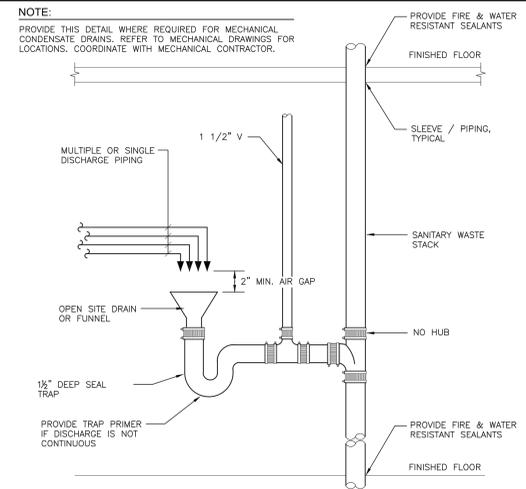
**6 SUPPORT/ANCHOR FOR PIPE RISERS**  
NOT TO SCALE



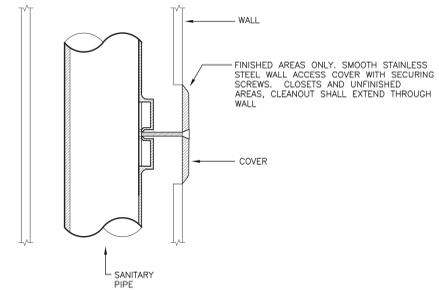
**7 PIPE PENETRATION THROUGH FLOOR DETAIL**  
NOT TO SCALE



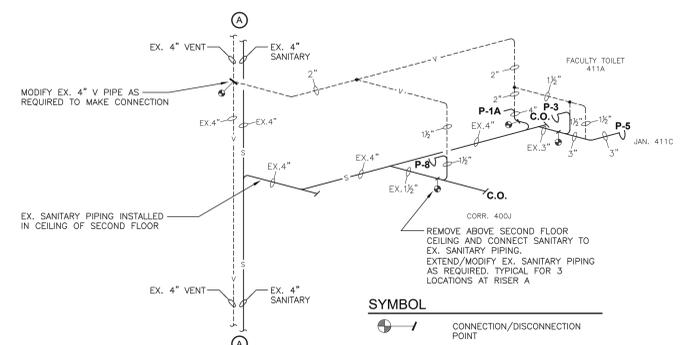
**8 SANITARY / VENT PIPING ISOMETRIC - RISER B**  
NOT TO SCALE



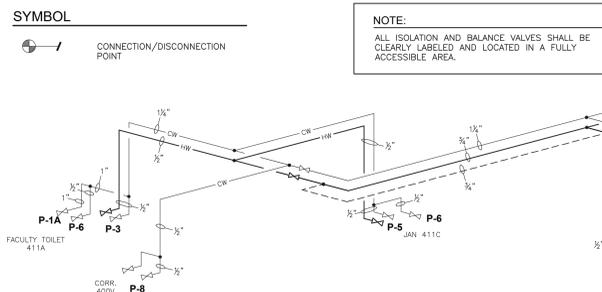
**10 INDIRECT WASTE (SANITARY) DETAIL**  
NOT TO SCALE



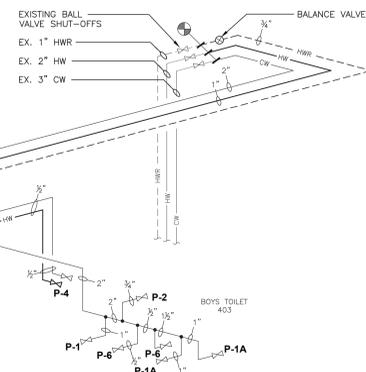
**11 WALL CLEAN OUT DETAIL**  
NOT TO SCALE



**12 SANITARY / VENT PIPING ISOMETRIC - RISER A**  
NOT TO SCALE



**9 DOMESTIC WATER PIPING ISOMETRIC**  
NOT TO SCALE



- NOTE:**
- ALL ISOLATION AND BALANCE VALVES SHALL BE CLEARLY LABELED AND LOCATED IN A FULLY ACCESSIBLE AREA.

NOTE: ALL IDEAS, DESIGN, MANAGEMENTS AND PLANS INDICATED OR REPRESENTED BY THIS DRAWING ARE OWNED BY AND ARE THE PROPERTY OF HARRIS COUNTY. A SCHEDULED CONTRACTOR SHALL VERIFY AND VERIFY AGAIN THE DIMENSIONS OF THE PROJECT. NONE OF SUCH IDEAS, DESIGN, MANAGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF HARRIS COUNTY. THE CONTRACTOR SHALL VERIFY AND VERIFY AGAIN THE DIMENSIONS OF THE PROJECT. NONE OF SUCH IDEAS, DESIGN, MANAGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF HARRIS COUNTY. THE CONTRACTOR SHALL VERIFY AND VERIFY AGAIN THE DIMENSIONS OF THE PROJECT. NONE OF SUCH IDEAS, DESIGN, MANAGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF HARRIS COUNTY. THE CONTRACTOR SHALL VERIFY AND VERIFY AGAIN THE DIMENSIONS OF THE PROJECT. NONE OF SUCH IDEAS, DESIGN, MANAGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PURPOSE WITHOUT THE WRITTEN PERMISSION OF HARRIS COUNTY.

Professional Seal

2	09/22/23	ISSUED FOR BID
1	03/30/23	S.E.D. SUBMISSION
No.	Date	Issue

Sheet Title  
**PLUMBING:  
DETAILS**

Job No.	2023-1008	Sheet No.
Date	03-30-23	<b>P501</b>
Scale	AS NOTED	
Drawn/Checked	KC/SZ	



S.E.D. Control No.  
44-90-00-00-8-035-008

CONSTRUCTION  
DOCUMENTS



223 MAIN STREET, GOSHEN NY 10924  
TEL. (845) 291-1272  
www.gerardassociates.com

GA2010

PLUMBING NOTES:

- PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH 2022 VERSION OF NYS EDUCATION DEPARTMENT MANUAL OF PLANNING STANDARDS FOR SCHOOL BUILDINGS, THE 2020 VERSION OF THE PLUMBING CODE, FIRE CODE, BUILDING CODE AND ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE, ALL LOCAL CODES AND GENERALLY ACCEPTED STANDARDS.
- CONTRACTOR SHALL PROVIDE ALL FIXTURES, PIPING, VALVES, ACCESS DOORS, HANGERS, FITTINGS AND MISCELLANEOUS COMPONENTS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE PLUMBING SYSTEMS COMPLETE, OPERABLE, AND IN ACCORDANCE WITH APPLICABLE CODES AND GENERALLY ACCEPTED INDUSTRY STANDARDS.
- CONTRACTOR SHALL COORDINATE LOCATIONS OF ALL PIPING AND EQUIPMENT WITH OTHER TRADES TO AVOID CONFLICTS. ROUGH-IN DIMENSIONS OF FIXTURES MUST BE COORDINATED WITH GENERAL CONTRACTOR. SEE ARCHITECT'S DRAWINGS FOR EXACT LOCATIONS AND ELEVATIONS OF PLUMBING FIXTURES.
- ALL PIPE OPENINGS THROUGH PARTITIONS, FLOORS AND CEILINGS SHALL HAVE PIPE SLEEVES. FOR PIPE PENETRATING FIRE RATED PARTITIONS, CEILINGS AND FLOORS THE CONTRACTOR SHALL SEAL AROUND ALL PIPE PENETRATIONS WITH HILT INTUMESCENT FIRE STOP MATERIAL BETWEEN THE PIPE AND SLEEVE TO MAINTAIN FIRE AND SMOKE RATINGS. PROVIDE FIRE STOP SEALANT ON ALL EXISTING PIPING PENETRATING NEW FIRE RATED WALLS CONSTRUCTED AS PART OF THE PROJECT.
- CONTRACTOR SHALL PITCH ALL SANITARY AND STORM PIPING UNDER 3" A MINIMUM OF 1/4" PER FOOT. SANITARY AND STORM PIPING 3" AND ABOVE MAY BE PITCHED A MINIMUM OF 3/8" PER FOOT.
- CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIAL INSTALLED UNDER THIS CONTRACT FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION AND ACCEPTANCE BY THE OWNER AND AGREE TO REPLACE DEFECTIVE WORK (INCLUDING ALL REQUIRED LABOR AND MATERIAL) AT NO ADDITIONAL COST TO OWNER DURING THE GUARANTEE PERIOD.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL EQUIPMENT, PIPING, INSULATION, VALVES AND PLUMBING FIXTURES TO OWNER AND ARCHITECT FOR APPROVAL. DEMONSTRATE NEW PLUMBING SYSTEMS TO OWNERS AND REVIEW MAINTENANCE PROCEDURES.
- PROVIDE CHROME PLATED ESCUTCHEON PLATES WHERE PIPES PASS THROUGH WALLS, FLOORS AND CEILINGS IN FINISHED AREAS.
- CONTRACTOR SHALL COORDINATE FINAL LOCATIONS OF ALL PIPING IN FINISHED AREAS WITH GENERAL CONTRACTOR TO ENSURE CONCEALMENT OF ALL PIPING IN WALLS, FLOORS, CEILINGS AND UNDER WATER.
- CONTRACTOR SHALL LOCATE ALL PIPING ON THE WARM SIDE OF BUILDING INSULATION ENVELOPE.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL CONTROL WIRING (24V) AND (120V) FOR SYSTEMS SHOWN ON PLUMBING DRAWINGS AND TRANSFORMERS, CONDUIT, BOXES, CONDUCTORS, THERMOSTATS, APPURTENANCES AND ALL NECESSARY EQUIPMENT TO MAKE SYSTEMS COMPLETE AND OPERABLE.
- CONTRACTOR SHALL PAY FOR ALL PERMITS AND INSPECTIONS FEES REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
- CONTRACTOR SHALL PROVIDE ACCESS DOORS FOR ALL VALVES CONCEALED IN WALLS/CEILINGS. ACCESS DOORS SHALL HAVE APPROPRIATE FIRE RATING TO MAINTAIN INTEGRITY OF WALL/CEILING. ACCESS DOORS TO BE INSTALLED BY GENERAL CONTRACTOR.
- CONTRACTOR SHALL NOT DRILL OR CUT ANY STRUCTURAL MEMBERS WITHOUT PERMISSION OF ARCHITECT, OR STRUCTURAL ENGINEER.
- CONTRACTOR IS RESPONSIBLE FOR INSULATING ALL DOMESTIC HOT AND COLD WATER PIPING AND HOT WATER RECIRCULATION. SEE PLUMBING INSULATION SCHEDULE ON THIS DRAWING.
- ALL DOMESTIC WATER PIPING CONNECTIONS TO PLUMBING EQUIPMENT SHALL BE COPPER TYPE "L".
- ALL NEW PIPES ARE TO BE SUPPORTED FROM STRUCTURE, NOT FROM EXISTING PIPING OR DUCTWORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DRAINING (AND PROPER DISPOSAL OF ALL DRAINAGE WATER) AND REFILLING EXISTING SYSTEMS AS REQUIRED FOR COMPLETION OF WORK.
- CONNECTIONS TO EXISTING UTILITIES AND SERVICES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, INVERT ELEVATIONS, AND SIZES OF EXISTING PLUMBING SERVICES IN FIELD, AND SHALL CONNECT NEW PLUMBING SERVICES AS INDICATED ON DRAWINGS.
- PROVIDE DIELECTRIC FITTINGS OR COUPLINGS WHEREVER DISSIMILAR METALS ARE JOINED.
- PROVIDE SHUTOFF VALVES AT ALL FIXTURES AND EQUIPMENT ON COLD WATER AND HOT WATER SUPPLY PIPES.
- ALL WORK SHALL BE PROPERLY TESTED, BALANCED, AND CLEANED AND DISINFECTED.
- A CLEANOUT SHALL BE LOCATED AT ALL CHANGES IN DIRECTION AND AT THE BASE OF EACH STACK AND LEADER.
- ALL MOTOR STARTERS AND DISCONNECT SWITCHES FOR PLUMBING EQUIPMENT SHALL BE FURNISHED BY THE PLUMBING CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR, UNLESS OTHERWISE NOTED. DISCONNECT SWITCHES FURNISHED BY THE PLUMBING CONTRACTOR FOR PLUMBING EQUIPMENT SHALL BE HEAVY DUTY TYPE.
- FIXTURE (GENERAL):
  - FIXTURE SHALL BE COMPLETE WITH REQUIRED TRIM, INCLUDING BUT NOT LIMITED TO: SUPPORTS, FAUCETS, SUPPLIES, STOP VALVES, 17 GAUGE WASTE TAP/PIECES, TRAPS, SEATS, FLOWMETER, VACUUM BREAKER, BOYS, GASKETS CHROME PLATED KUTCHROEN, CAST BRASS FLOOR FLANGE AND BOLT CAPS. ALL SCREWS SHALL BE VALDELPROOF.
  - EXPOSED METAL TRIM AND ROUGHING SHALL BE CHROME PLATED NICKEL BRASS. CHROME PLATED CAST BRASS "P" TRAPS WITH SCREW PLUG CLEANOUT, SLIP-JOINT INLET AND FEMALE CAST SWIVEL THREADED ELBOW OUTLET. CHROME PLATED BRASS NIPPLE AT WALL WITH CHROME PLATED ESCUTCHEON. SWING SPOUTS SHALL HAVE 140" SWING LIMIT STOPS.
  - SUPPORT WALL FIXTURES SECURELY ON APPROVED COMMERCIAL GRADE CARRIERS AS MANUFACTURED BY JAY R. SMITH, JOSAM, OR ZURN.
- PIPE TESTING:
  - UPON COMPLETION OF THE ENTIRE SANITARY DRAIN AND VENT SYSTEM AND STORM WATER SYSTEM, THE CONTRACTOR SHALL PERFORM AN AIR TEST WITNESSED BY AUTHORITY HAVING JURISDICTION. AIR SHALL BE FORCED INTO THE SYSTEM UNTIL THERE IS A UNIFORM GAUGE PRESSURE OF 5 PSI OR SUFFICIENT TO BALANCE A 10 INCH COLUMN OF MERCURY. THIS TEST SHALL BE HELD FOR A PERIOD OF AT LEAST 15 MINUTES.
  - WATER SUPPLY SYSTEM TEST SHALL BE DONE ON COMPLETION OF A SECTION OF OR THE ENTIRE WATER SUPPLY SYSTEM, THE SYSTEM OR THE PORTION COMPLETE SHALL BE TESTED UNDER A WATER PRESSURE NOT LESS THAN THE WORKING PRESSURE OF THE SYSTEM; OR, BY AN AIR TEST OF NOT LESS THAN 50 PSI. TEST PRESSURE SHALL BE HELD FOR A MINIMUM OF 15 MINUTES. THE WATER UTILIZED FOR TESTS SHALL BE OBTAINED FROM A POTABLE SOURCE OF SUPPLY.
  - REFER TO SPECIFICATIONS FOR ADDITIONAL TESTING REQUIREMENTS.
- DOMESTIC WATER PIPING DISINFECTING:
  - ON OPEN ENDS OF PIPING, VALVES AND EQUIPMENT SHALL BE PLUGGED EXCEPT WHEN ACTUAL WORK IS BEING PERFORMED, TO MINIMIZE ACCUMULATION OF DIRT AND DEBRIS.
  - THE CONTRACTOR SHALL DISINFECT WATER PIPING BEFORE IT IS PLACED IN SERVICE.
  - CONTRACTOR SHALL FURNISH ALL EQUIPMENT AND MATERIALS NECESSARY TO DO THE WORK OF DISINFECTING, AND SHALL PERFORM THE WORK IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN THE AWWA C651 OR AWWA C652 OR AS DESCRIBED BELOW.
  - SYSTEM OR PART THEREOF SHALL BE FILLED WITH A WATER/CHLORINE SOLUTION CONTAINING AT LEAST 50 PARTS PER MILLION OF CHLORINE AND THE SYSTEM OR PART THEREOF SHALL BE ALLOWED TO STAND FOR 24 HOURS.
  - DURING THE DISINFECTING PERIOD, CARE SHALL BE EXERCISED TO PREVENT CONTAMINATION OF WATER IN THE STREET MAIN OR THE ACTIVE WATER PIPING WITHIN THE BUILDING.
  - FOLLOWING REQUIRED STANDING TIME, THE SYSTEM SHALL BE FLUSHED WITH CLEAN POTABLE WATER UNTIL THE CHLORINE IS PURGED FROM THE SYSTEM.
- PIPING AND EQUIPMENT IDENTIFICATION:
  - CONTRACTOR TO PROVIDE OPTI-CODE LABELS FOR ALL NEW PIPING. LABELS SHALL INDICATE SERVICE AND FLOW DIRECTION, LETTERS AND ARROWS INDICATING FLOW SHALL BE 2 1/2" HIGH, PLACED EVERY 10' AND SHALL BE WHITE ON A GREEN BACKGROUND AND SHALL CONFORM TO ANSI AND OSHA STANDARDS. LABELS SHALL BE APPLIED OVER INSULATION ONLY.
  - VALVE SERVICE IDENTIFICATION TAGS: NUMBER 19 B&S GAGE BRASS, WITH 1/4" HIGH VALVE SERVICE ABBREVIATED LETTERING ON ONE LINE OVER 1/2" HIGH VALVE SERVICE CHART NUMBER, BOTH DEEP STAMPED AND BLACK FILLED; AND WITH 3/16" TOP HOLE FOR BRASS "S" HOOK OR BRASS JACK CHAIN FASTENER.
  - EQUIPMENT VALVE SERVICE IDENTIFICATION CHART MOUNTED IN LOCATION COORDINATED WITH OWNER'S REPRESENTATIVE. FRAME SHALL BE SATIN FINISHED EXTRUDED ALUMINUM WITH RIGID CLEAR PLASTIC GLAZING, SIZE TO FIT 8-1/2" x 11" VALVE CHART.
  - CONTRACTOR SHALL HAVE 3" HIGH BLACK LAMACOID NAME PLATES WITH WHITE ENGRAVED LETTERS PERMANENTLY FASTENED TO ALL NEW EQUIPMENT.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING START-UP OF ALL NEW EQUIPMENT, CONTROLS, AND ETC. TO ENSURE CORRECT OPERATION OF INSTALLED DEVICES.
  - CONTRACTOR SHALL PROVIDE OWNER WITH CATALOG DATA, OPERATING INSTRUCTIONS, MAINTENANCE INSTRUCTIONS, AND RECORD (AS-BUILT) DRAWINGS OF ALL COMPLETED WORK.
  - CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL CUTTING, PATCHING, AND PAINTING ASSOCIATED WITH PLUMBING WORK WITH THE GENERAL CONTRACTOR, WHO SHALL PERFORM THE WORK. ALL FLOORS AND WALLS WHERE AN EXISTING PIPE HAS BEEN REMOVED AND NOT REPLACED SHALL BE PATCHED BY THE GENERAL CONTRACTOR, THIS CONTRACTOR SHALL COORDINATE.
  - ALL NEW HOLES IN WALLS AND FLOORS SHALL BE CORE DRILLED BY THIS CONTRACTOR. PRIOR TO CORE DRILLING FLOORS, PARAPET FLOOR SLABS. USE CAUTION WHEN CORE DRILLING TO AVOID DAMAGE TO EXISTING EQUIPMENT, SYSTEMS, STRUCTURE AND ETC. ANY ITEMS DAMAGED AS A RESULT OF CORE DRILLING SHALL BE REPAIRED BY THIS CONTRACTOR AT NO ADDITIONAL COST TO SCHOOL DISTRICT.

SYMBOLS AND ABBREVIATIONS		
SYMBOL	ABBREVIATION	DESCRIPTION
—	DN.	DOWN
—	GPH	GALLONS PER HOUR
—	GPM	GALLONS PER MINUTE
—	TYP.	TYPICAL
—	V	VOLTS
—	VTR	VENT THROUGH ROOF
—	CW	DOMESTIC COLD WATER
—	HW	DOMESTIC HOT WATER
—	HWR	DOMESTIC HOT WATER RETURN
—	S	SANITARY
—	V	VENT
●	—	BALL VALVE
⊕	—	MANUAL AIR VENT
⊖	—	THERMOMETER
⊕	—	PRESSURE GAUGE
⊖	—	UNION
⊕	—	CDDP
—	EX.	EXISTING TO REMAIN
-----	DEM.	EXISTING TO BE REMOVED
—	NEW	NEW WORK
⊕	—	ELBOW UP
⊖	—	ELBOW DOWN
⊕	—	TEE UP
⊖	—	TEE DN
⊕	—	TRAP
⊕	—	FLOOR DRAIN
⊕	—	POINT OF DISCONNECT/CONNECT
—	MC	MECHANICAL CONTRACTOR
—	VTR	VENT THROUGH ROOF
—	RTU	ROOFTOP UNIT
⊕	RD	ROOF DRAIN
⊕	PRV	PRESSURE REDUCING VALVE
—	'F	DEGREES FAHRENHEIT
—	IN	INCHES
—	PSIG	POUNDS PER SQUARE INCH
—	H	HEIGHT
—	W	WIDTH
—	L	LENGTH
∅	DIA	DIAMETER
—	—	PIPE CAP
—	MIN	MINIMUM
—	MAX	MAXIMUM
—	FT <sup>2</sup>	SQUARE FEET
—	CO	CLEAN OUT
—	WCO	WALL CLEAN OUT
—	SD	STORM DRAIN
—	—	HOSE-BIBB
—	—	WALL HYDRANT
—	PC	PLUMBING CONTRACTOR

PLUMBING EQUIPMENT SCHEDULE										
TAG	SYMBOLS		PLUMBING CONNECTIONS				MANUFACTURER	CATALOG #	DESCRIPTION	
	PLAN	ELEVATION	SAN/STORM	VENT	COLD	HOT				GAS
P-1 P-1A			4"	2"	1"	—	—	KOHLER	K-4325	WALL-MOUNTED, VITREOUS CHINA, ELONGATED BOWL, FLUSHMETER TOILET WITH CONCEALED TRAPWAY, DIRECT-FED SIPHON JET ACTION, AND 1-1/2" TOP SPUD. FIXTURE COLOR SHALL BE WHITE. PROVIDE COMMERCIAL HEAVY DUTY PLASTIC TOILET SEAT, BEMIS MODEL 1955CT AND COMMERCIAL GRADE FLOOR MOUNTED VERTICAL ADJUSTABLE CLOSET CARRIERS. P-1A IS ADA ACCESSIBLE. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
			—	—	—	—	—	ZURN	ZER6000AV-TM -W51-DP	EXPOSED, BATTERY POWERED, GEAR DRIVEN, ELECTRONIC SENSOR OPERATED WATER CLOSET FLUSHMETER WITH: MANUAL OVERRIDE BUTTON, CONTROL STOP WITH VANDAL-RESISTANT CAP AND VACUUM BREAKER, DUAL FLUSH, LOW CONSUMPTION, 1.6/1.1 GALLONS PER FLUSH. ADA COMPLIANT.
P-2			2"	1 1/2"	3/4"	—	—	KOHLER	K-4991-ET	WALL-MOUNTED, VITREOUS CHINA, LOW CONSUMPTION, WASHOUT FLUSHING ACTION URINAL WITH FLUSHING RIM, EXTENDED SIDES FOR PRIVACY AND 3/4" TOP SPUD INLET. FIXTURE COLOR SHALL BE WHITE. PROVIDE COMMERCIAL GRADE FLOOR MOUNTED URINAL CARRIER WITH BEARING PLATE. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
			—	—	—	—	—	ZURN	ZER6003AV-CPM -EWS	EXPOSED, BATTERY POWERED, SENSOR OPERATED URINAL FLUSHMETER WITH MANUAL OVERRIDE BUTTON, CONTROL STOP WITH VANDAL-RESISTANT CAP AND VACUUM BREAKER. LOW CONSUMPTION, 0.5 GALLONS PER FLUSH. ADA COMPLIANT.
P-3			1 1/2"	1 1/2"	1/2"	1/2"	—	KOHLER	K-1728	19K"(L)x17 1/2"(W) WALL-HUNG, VITREOUS CHINA, D-SHAPED BOWL LAVATORY WITH FRONT OVERFLOW, CONCEALED ARM SUPPORTS, FAUCET LEDGE, AND SELF-DRAINING DECK AREA. FIXTURE COLOR SHALL BE WHITE. PROVIDE COMMERCIAL GRADE FLOOR MOUNTED CONCEALED ARM SUPPORTS, OFFSET LAVATORY GRID STRAINER (ACQUIRE MANUFACTURING PART NUMBER 155C); AND TRUEBRO MODEL 103 E-Z LAV GUARD. P-3 IS ADA ACCESSIBLE. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS. LAVATORY SHALL BE ADA COMPLIANT.
			—	—	—	—	—	ZURN	Z6915-XL-TM1-N	ADA COMPLIANT, LOW-LEAD COMPLIANT, BATTERY POWERED, CHROME PLATED CAST BRASS BODY, SENSOR FAUCET WITH: INFRARED PROXIMITY SENSOR, THIRTY SECOND TIME OUT FEATURE, IN LINE FILTER, (4) "AA" BATTERIES, 0.5 GPM VANDAL-RESISTANT LAMINAR FLOW, AND THERMOSTATIC MIXING VALVE.
P-4			1 1/2"	1 1/2"	1/2"	1/2"	—	BRADLEY	LVGD2	VERGE LAVATORY SYSTEM, TWO-STATION WITH STANDARD LAVATORY SPACING POSITIONED ON 30" CENTERS. EVERO GEO SERIES BOWL CONSTRUCTED OF A NATURAL QUARTZ SURFACE MADE OF A BLEND OF BIO-BIASED RESIN, NATURAL QUARTZ AND GRANITE; 300 SERIES STAINLESS STEEL ACCESS PANEL; HEAVY GAUGE STAINLESS STEEL, WALL MOUNTED SUPPORT FRAME. WATER SUPPLIES, VALVES, WASTE ASSEMBLY SHALL BE CONCEALED WITHIN UNIT TO PROVIDE VANDAL-RESISTANCE. LAVATORY SYSTEM SHALL BE LEAD FREE, NSF 372 COMPLIANT AND ADA COMPLIANT. SYSTEM SHALL HAVE 4" CENTER SET DRILLING FOR FAUCETS. PROVIDE TMA NAVIGATION THERMOSTATIC MIXING VALVE ASSEMBLY WITH STOPS AND SUPPLY HOSES. COLOR SHALL BE SELECTED BY ARCHITECT. PROVIDE SINGLE CHROME-PLATED P-TRAP, STAINLESS STEEL GRID STRAINER DRUM ASSEMBLY AND COMMERCIAL GRADE FLOOR MOUNTED CONCEALED ARM SUPPORT. P-4 IS ADA ACCESSIBLE. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS.
			—	—	—	—	—	ZURN	Z6915-XL-TM1-N	ADA COMPLIANT, LOW-LEAD COMPLIANT, BATTERY POWERED, CHROME PLATED CAST BRASS BODY, SENSOR FAUCET WITH: VANDAL-RESISTANT LAMINAR FLOW, AND THERMOSTATIC MIXING VALVE.
P-5			3"	1 1/2"	1/2"	1/2"	—	ACORN	TNC-24	PRECAST MOP SINK, ONE PIECE TERRAZZO COMPOSED OF MARBEL CHIPS IN PORTLAND CEMENT. MOP SINK SHALL BE 24"X 24" NEO-CORNER STYLE WITH 12" STANDARD HEIGHT FRONT SHOULDER. INTEGRAL DRAIN WITH A REMOVABLE STAINLESS STEEL GRID STRAINER FOR INSIDE CAULK CONNECTION TO 3" PIPE. PROVIDE STAINLESS STEEL CAPS ON ALL SHOULDERS, 3/8" HOSE WITH WALL HANGER, AND MOP HANGER.
			—	—	—	—	—	SPEAKMAN	SEF-9000-TW	FAUCET WITH EYEWASH/BRENCH HOSE. UNIT SHALL BE COMPLETE WITH SPEAKMAN SC-5811-RCP SERVICE SINK FAUCET CONNECTED TO EYEWASH. EYEWASH SHALL BE ACTIVATED BY SQUEEZE VALVE AND INCLUDE (2) YELLOW PLASTIC SPRAY HEADS WITH FLIP TOP DUST CAPS, INTEGRAL VACUUM BREAKER AND CHECK VALVE. PROVIDE SE-370 THERMOSTATIC MIXING VALVE. SERVICE SINK FAUCET SHALL HAVE VANDAL RESISTANT FOUR-ARM HANDLES, CAST BRASS NOZZLE WITH 3/4" HOSE THREAD, PAUL HOOK AND TOP BRACE OUTLET, AND INTEGRAL VACUUM BREAKER.
P-6			—	—	3/4"	—	—	WOODFORD	24	CHROME, ANTI-SIPHON, VACUUM BREAKER PROTECTED WALL FAUCET WITH 3/4" MALE HOSE THREAD, POLYCARBONATE WHEEL HANDLE AND LOOSE TEE KEY, AND 3/4" INLET.
P-7			3"	1 1/2"	—	—	—	WATTS	FD-100-M	VANDAL-PROOF, EPOXY COATED CAST IRON FLOOR DRAIN WITH ANCHOR FLANGE, REVERSIBLE CLAMPING COLLAR WITH PRIMARY & SECONDARY WEPHOLES, ADJUSTABLE SQUARE HEE-PROOF NICKEL BRONZE STRAINER, AND 3" NO HUB OUTLET. FLOOR DRAIN SHALL BE COMPLETE WITH 6"x6" STRAINER, AND TRAP PRIMER TAPPING. PROVIDE SURESEAL MODEL SS3009V WATERLESS INLINE 3" DRAIN TRAP SEAL.
P-8			1 1/2"	1 1/2"	1/2"	—	—	ELKAY	LZSLBWSVRLK	BOTTLE FILLING STATION AND BI-LEVEL ADA VANDAL-RESISTANT COOLER, FILTERED, REFRIGERATED, AND LIGHT GRAY. FIXTURE FEATURES: ANTIMICROBIAL, FILTERED, GREEN TICKER, HANDS FREE, LAMINAR FLOW, REAL DRAIN, VISUAL FILTER MONITOR, VANDAL RESISTANT BUBBLER, ELECTRONIC BOTTLE FILLER SENSOR WITH ELECTRONIC FRONT AND SIDE BUBBLER PUSH-BAR ACTIVATION. WALL MOUNTED. CHILLING CAPACITY OF 8 GALLONS PER HOUR OF 50°F DRINKING WATER AT 80°F AMBIENT ELECTRICAL: 115V/60Hz, 6.0 FULL LOAD AMPS, 370 WATTS. ADA COMPLIANT, NSF 61 CERTIFIED. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS AND COOLER CONFIGURATION. PROVIDE COMMERCIAL GRADE, IN-WALL, FLOOR MOUNTED FIXTURE SUPPORT AND (2) SPARE FILTERS.

PIPE HANGER SCHEDULE							
PIPE SIZE (INCHES)	MAXIMUM HORIZONTAL SPACING (FEET)		SINGLE STEEL ROD HANGER SIZE (INCHES)		HANGER TYPE STEEL	MAXIMUM VERTICAL SPACING (FEET)	
	COPPER TUBE	CAST IRON	TUBING	PIPING		COPPER TUBE	CAST IRON
1/2"	6	5	1/4"	3/8"	BAND	10	15
3/4"	6	5	1/4"	3/8"	BAND	10	15
1"	6	5	1/4"	3/8"	BAND	10	15
1 1/2"	6	5	1/2"	3/4"	CLEVIS	10	15
1 1/2"	6	5	1/2"	3/4"	CLEVIS	10	15
2"	10	5	1/2"	3/4"	CLEVIS	10	15
2 1/2"	10	5	3/4"	1/2"	CLEVIS	10	15
3"	10	5	3/4"	1/2"	CLEVIS	10	15
4"	10	5	1"	3/4"	CLEVIS	10	15
5"	10	5	1"	3/4"	CLEVIS	10	15
6"	10	5	1"	3/4"	CLEVIS	10	15
8"	10	5	5/8"	3/4"	CLEVIS	10	15
10"	10	5	5/8"	3/4"	CLEVIS	10	15
12"	10	5	5/8"	3/4"	CLEVIS	10	15

NOTES:  
1. MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS SHALL BE INCREASED TO 10 FEET WHERE 10 FOOT LENGTHS OF PIPE ARE INSTALLED.  
2. INSTALL HANGER OR SUPPORT CLOSE TO THE POINT OF CHANGE OF DIRECTION IN ALL PIPE RUNS.  
3. INSTALL ADDITIONAL HANGERS ON SUPPORTS AT CONCENTRATED LOADS.  
4. SUPPORT ALL BRANCH PIPING OVER 6'-0" IN LENGTH.  
5. SUPPORT VERTICAL PIPING AT EVERY FLOOR.

WATTS WATER HAMMER ARRESTORS		
NO. 15 SIZE	FIXTURE UNITS	CROSS REF. PDI STANDARD
1/2" M1	1-11	A
3/4" M1	12-32	B
1" M1	33-60	C
1-1/4" M1	61-113	D
1-1/2" M1	114-154	E
2" M1	155-330	F

PLUMBING PIPING FITTING SCHEDULE				
SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE (ABOVE GROUND)	ALL	COPPER	LEAD-FREE SOLDER ASTM B828	ASTM B 16.22
SANITARY, VENT, AND STORM (ABOVE GROUND)	ALL	SERVICE WEIGHT CAST IRON	C1277 ASTM C564	ASTM A 74

PLUMBING PIPING MATERIAL SCHEDULE				
SERVICE	SIZE (IN)	MATERIAL	TYPE/WEIGHT	STANDARD
WATER PIPE (ABOVE GROUND)	ALL	COPPER	TYPE L TUBE	ASTM B 88
SANITARY, VENT, AND STORM (ABOVE GROUND)	ALL	CAST IRON	SERVICE WEIGHT	ASTM A 74

PLUMBING PIPE INSULATION SCHEDULE		
SERVICE	INSULATION THICKNESS (INCHES)	
	PIPE SIZE (INCHES)	
	BELOW 1 1/2"	1 1/2" AND OVER
COLD WATER	1/2"	1"
HOT WATER	1"	1 1/2"
HOT WATER RECIRCULATION	1"	1 1/2"
HORIZONTAL STORM PIPING	1"	1"

NOTES:  
1. PIPE COVERING SHALL BE FIBERGLASS PIPE INSULATION WITH: FIRE RETARDANT VAPOR BARRIER JACKETS, 0.25 K-FACTOR AT 75°F MEAN TEMPERATURE, FLAME SPREAD = 25, SMOKE DEVELOPED = 50.  
2. FITTINGS AND VALVES SHALL BE PROVIDED WITH PREMOULDED FITTING COVERS WITH PVC JACKETING EQUAL IN THICKNESS AND MATERIAL TO ADJOINING PIPE INSULATION.  
3. ALL EXISTING UNINSULATED STORM DRAIN PIPING ON THIRD FLOOR SHALL BE INSULATED AS PART OF THIS PROJECT. PLUMBING CONTRACTOR TO COORDINATE IN FIELD.

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Professional Seal

No.	Date	Issue
2	09/22/23	ISSUED FOR BID
1	03/30/23	S.E.D. SUBMISSION

PLUMBING:  
EQUIPMENT  
SCHEDULES AND  
NOTES

Job No. 2023-1008	Sheet No.
Date 03-30-23	P701
Scale AS NOTED	
Drawn/Checked KC/SZ	