

LEGEND

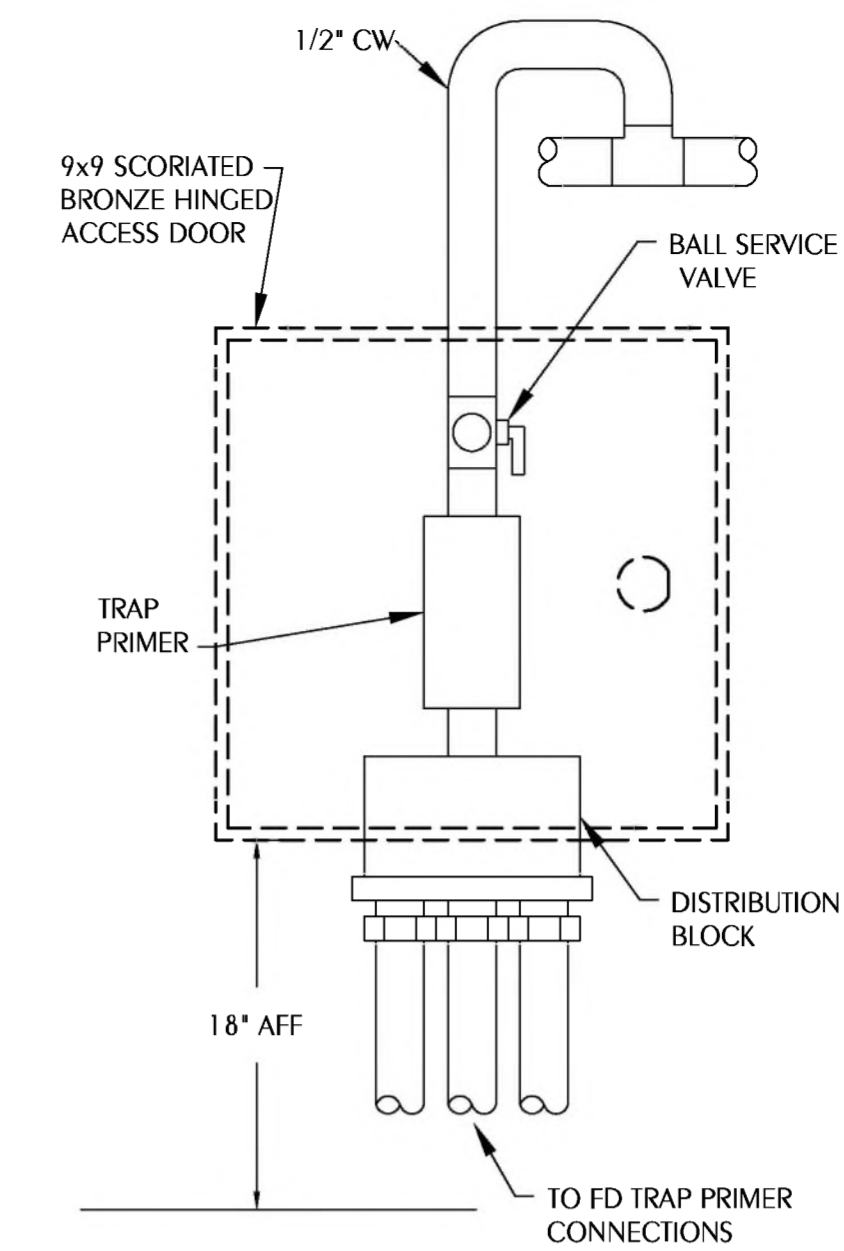
	S or W	SOIL OR WASTE PIPING
	V	VENT PIPING
	CW	COLD WATER SUPPLY PIPING
	HW	HOT WATER SUPPLY PIPING
	HWR	HOT WATER RETURN PIPING
	G	GAS PIPING
	GV	GATE VALVE
	CV	CHECK VALVE
	BV	BALL VALVE
	HB	HOSE BIBB
	WH	WALL HYDRANT
	CO	CLEANOUT TO FLOOR
	FD	FLOOR DRAIN
	COTS	CLEANOUT TO GRADE
	UNION	UNION
	VTR	VENT THRU ROOF
		SHEET NOTE
		SOLENOID VALVE
	MR	MOP RECEPTOR
	WC	WATER CLOSET
	TP	TRAP PRIMER
	EWH	ELECTRIC WATER HEATER
	WHA	WATER HAMMER ARRESTOR TYPE A
	WHB	WATER HAMMER ARRESTOR TYPE B
	WHC	WATER HAMMER ARRESTOR TYPE C
	L	LAVATORY
	UR	URINAL
	KW	KILOWATT
	TVC	TEMPERATURE CONTROL VALVE
	S	SWITCH
	WV	WET VENT
	CP	CIRCULATOR PUMP
	HD	2" HUB DRAIN WITH FLEXIBLE TRAP SEAL BY MIFAB OR EQUAL ABOVE CEILING UNLESS NOTED
	MV	MIXING VALVE
	EWC	ELECTRIC WATER COOLER
	UB	UTILITY BOX
	SK	SINK

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	FIXTURE CONNECTIONS		
		CW	HW	W
WC-1	WATER CLOSET (ADULT HANDICAP, MANUAL)	1	-	4
WC-2	WATER CLOSET (CHILD HANDICAP/ADULT STANDARD, MANUAL)	1	-	4
UR-1	URINAL (HANDICAP, MANUAL)	3/4	-	2
UR-2	URINAL (STANDARD, MANUAL)	3/4	-	2
L-1	LAVATORY (HANDICAP, 20X18)	1/2	-	2
L-2	LAVATORY (STANDARD, 20X18)	1/2	-	2
L-3	LAVATORY (HANDICAP, 20X18)	1/2	1/2	2
EWC-1	ELECTRIC WATER COOLER (DUAL LEVEL, BOTTLE FILL STATION)	1/2	-	2
MV-1	WATER MIXING VALVE	-	-	-
EWH-1	ELECTRIC WATER HEATER	1	1	-
IWH-1	INSTANTANEOUS WATER HEATER	1	1	-
CP-1	CIRCULATOR PUMP(INLINE)	-	1/2	-
TCV-1	TEMPERATURE CONTROL VALVE	-	1/2	-
FD	FLOOR DRAIN	-	-	3
TP-1	TRAP PRIMER	-	-	-
SP-1	SUMP PUMP	-	-	-

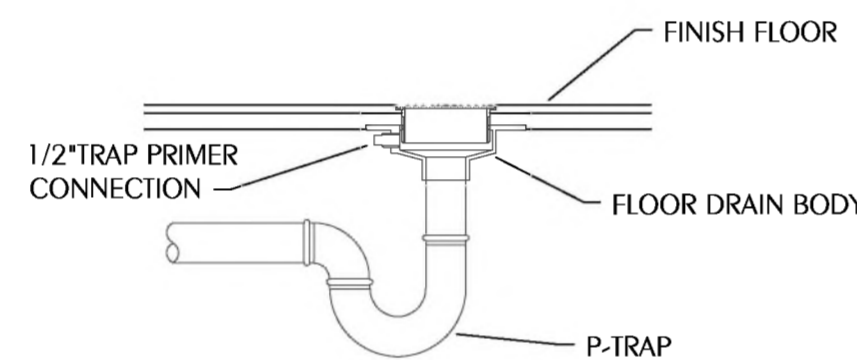
GENERAL NOTES

- COORDINATE ALL PIPING WITH DUCTWORK SHOP DRAWINGS AND EXISTING CONDITIONS. ROUTE PIPING AS REQUIRED TO AVOID CONFLICTS.
- PRIOR TO START OF ANY WORK, COORDINATE SANITARY SEWER AND POTABLE WATER PIPING WITH CIVIL DRAWINGS.
- FIELD VERIFY PIPE INVERTS PRIOR TO LAYING OUT SANITARY SEWER PIPING.
- ALL PIPING PASSING THROUGH ANY WALL SHALL HAVE A SLEEVE PER SPECIFICATIONS.
- ALL PIPING PASSING THROUGH FIRE-RATED WALLS SHALL HAVE A FIRE-RATED SLEEVE PER SPECIFICATIONS. ALL PIPING PENETRATIONS THROUGH WALLS OR FLOORS SHALL BE SEALED TO EQUAL THE RATING OF THE WALLS OR FLOORS.
- ALL PIPING INDICATED IS ABOVE THE CEILING EXCEPT THE OBVIOUS SANITARY SOIL, WASTE, VENT AND POTABLE WATER PIPING BELOW FLOOR OR GRADE.
- SEE TOILET ROOM ELEVATIONS ON ARCHITECTURAL DRAWINGS FOR PLUMBING FIXTURE MOUNTING HEIGHT.
- COORDINATE EXACT LOCATION OF ALL EXTERIOR WALL HYDRANTS WITH ARCHITECTURAL DRAWINGS.
- UNDER SLAB SOIL, WASTE AND VENT PIPING PASSING TO UNDERSIDE OR THROUGH FOUNDATION FOOTING, WALL OR GRADE BEAM SHALL BE PROVIDED WITH A RELIEVING ARCH OR PIPE SLEEVE 2 (TWO) PIPE SIZES GREATER THAN PIPE SIZE INDICATED ON PLANS. COORDINATE FINAL PIPE ROUTING AND LAYOUT WITH STRUCTURAL DRAWINGS.
- PRIOR TO SUBSTANTIAL COMPLETION OF NEW AND ALTERED WORK AREAS, CONTRACTOR SHALL HAVE SANITARY PLUMBING SYSTEM CLEARED OF DEBRIS OR ANY MATTER THAT WOULD INTERFERE OR PREVENT ADEQUATE CONVEYANCE OF MATERIALS FROM MOVING THROUGH AND TERMINATING INTO BUILDING OR PUBLIC DISPOSAL FACILITIES.
- ALL (VTR'S) VENT THRU ROOF PENETRATIONS INDICATED ON PLANS ARE PRELIMINARY. FINAL LOCATIONS SHALL BE COORDINATED WITH ALL TRADES. ALL VTR'S SHALL BE A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKE OPENINGS.
- ALL TRAP PRIMERS AND DOMESTIC WATER ISOLATION VALVES SHALL BE ACCESSIBLE. TRAP PRIMERS LOCATED IN THE VICINITY OF WATER CLOSETS SHALL BE ACTIVATED BY WATER CLOSET USAGE. ISOLATION VALVES SHALL BE OF THE QUARTER TURN BALL OR GATE TYPE.
- CONTRACTOR SHALL DEVELOP AND SUBMIT COORDINATION SHOP DRAWINGS WHICH IDENTIFY ROUTING OF PLUMBING PIPE AND LOCATION OF EQUIPMENT. SHOP DRAWINGS SHALL INDICATE COORDINATION WITH THE WORK OF OTHER TRADES.
- ALL WORK SHALL COMPLY WITH THE FLORIDA BUILDING CODE 7TH EDITION (2020) PLUMBING.

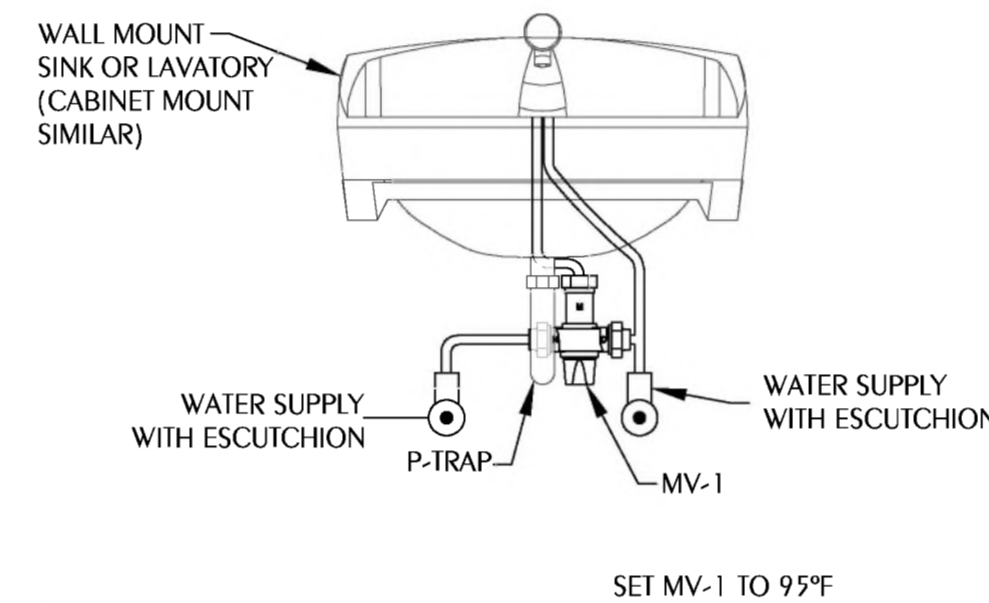


1 TRAP PRIMER DETAIL
PO.1 SCALE: NONE

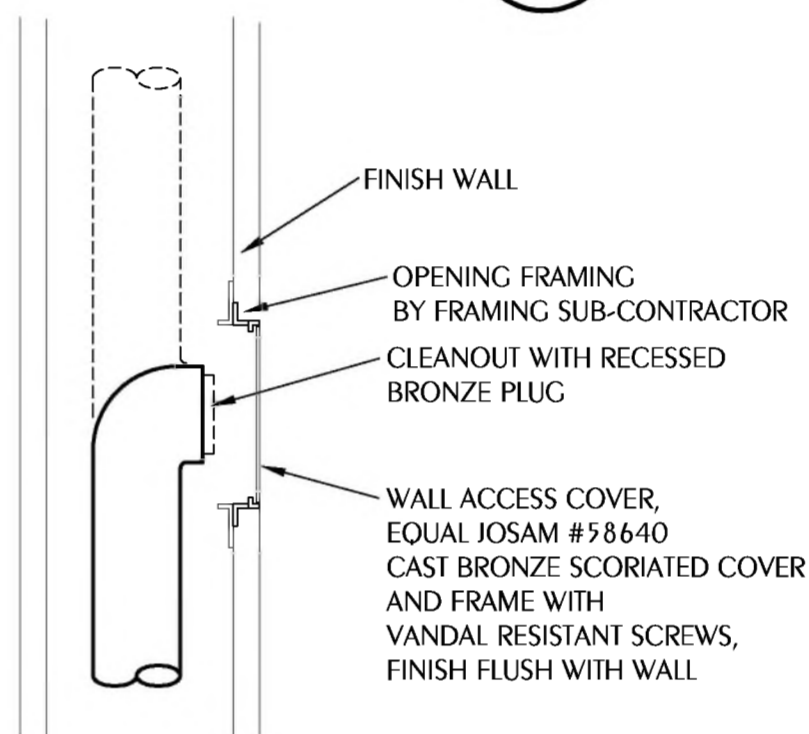
- WATER SUPPLY TAPPING TO EACH PLUMBING FIXTURE SHALL BE FULL SIZE (MINIMUM).
- SEE ELECTRICAL DWGS FOR FINAL POWER REQUIREMENTS.
- PROVIDE WATER HAMMER ARRESTERS ON HOT & COLD WATER SUPPLY BRANCHES SERVING SINGULAR, MULTIPLE OR GROUPS OF PLUMBING FIXTURES. ADHERENCE TO THE PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I.-WH201 (PER SPECIFICATIONS) SHALL BE EMPLOYED IN DETERMINING PROPER SIZE, SELECTION, PLACEMENT, LOCATION AND INSTALLATION OF ARRESTERS.



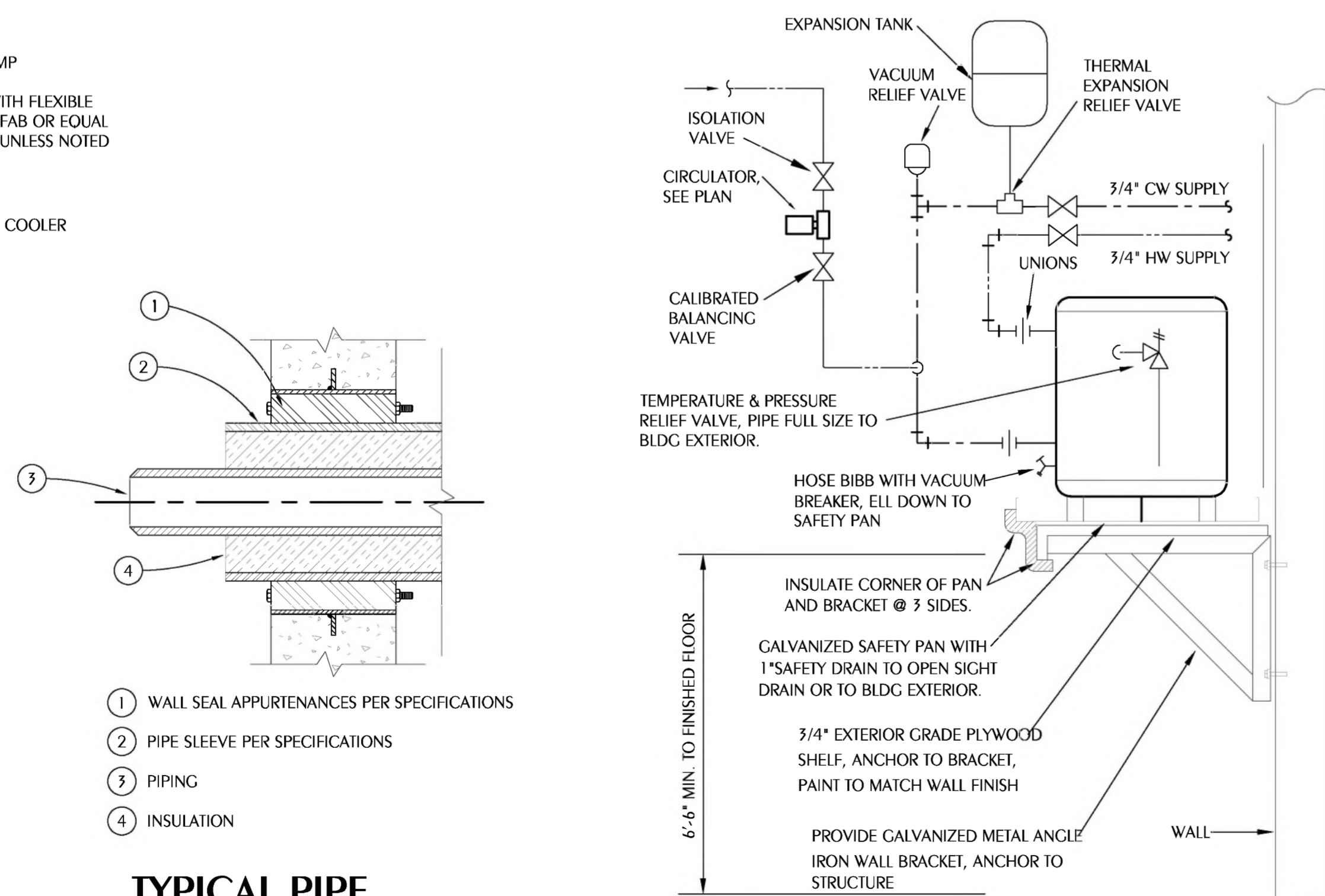
2 FLOOR DRAIN WITH TRAP PRIMER DETAIL
PO.1 SCALE: NONE



3 LAV/SINK MIXING VALVE DETAIL
PO.1 SCALE: NONE
NOTE: MIXING VALVE WILL BE TYPICAL FOR L-3



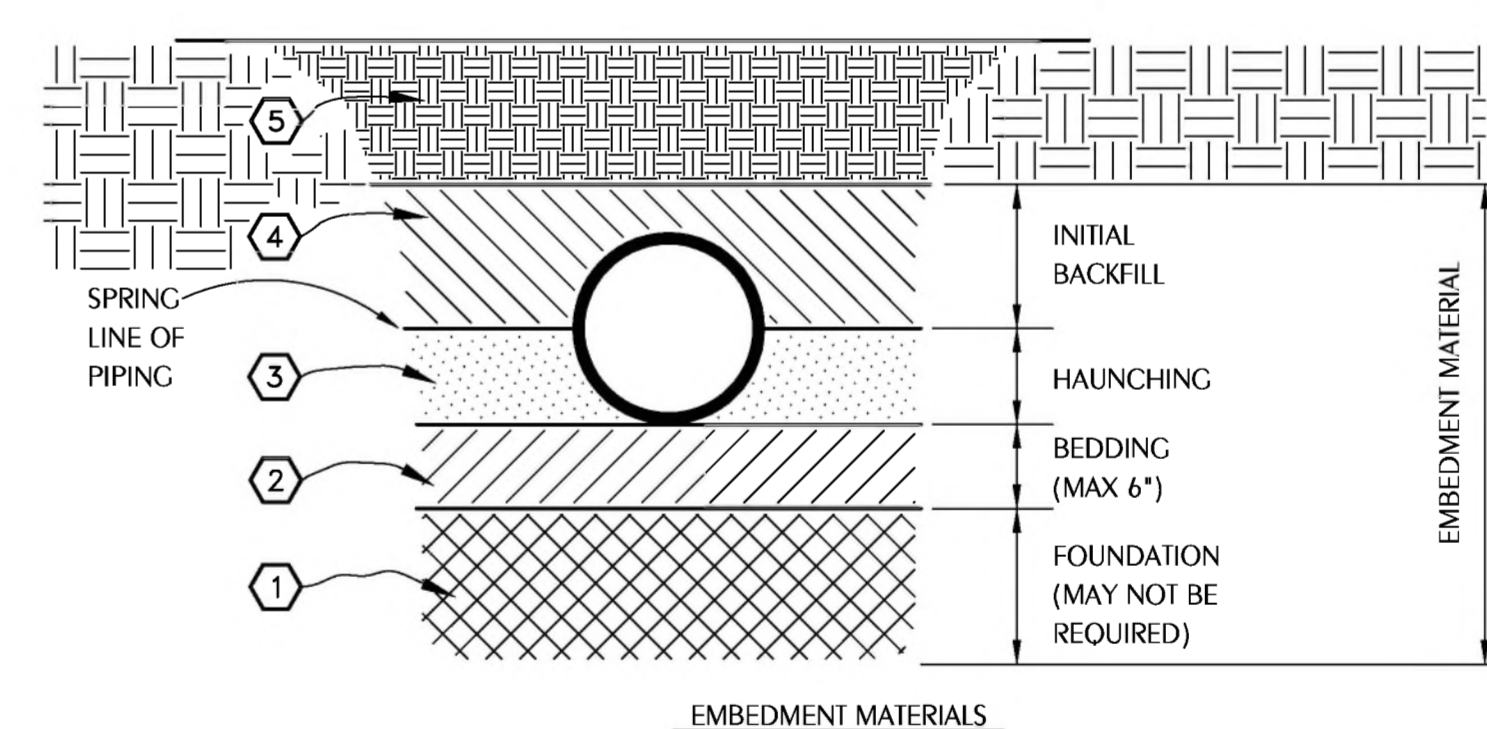
4 CLEANOUT TO WALL
PO.1 SCALE: NONE



5 TYPICAL PIPE PENETRATION OF WALL
PO.1 SCALE: 1/8" = 1'-0"

6 WALL MOUNT EWH
PO.1 SCALE: NONE

- A FOUNDATION MAY BE REQUIRED IN VERY POOR SOIL CONDITIONS.
 - BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE. IN DRY SOIL CONDITIONS, CLASS II OR III MATERIAL SHALL BE HAND PLACED IN 4'-6", LIGHTLY COMPACTED UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. IN WET CONDITIONS, CLASS I, II OR III MATERIAL SHALL BE HAND PLACED IN 4'-6", UNIFORM AND NOT FINER THAN THE FOUNDATION MATERIAL. WHEN UTILIZING CLASS I MATERIAL, SUFFICIENT AMOUNTS OF CLASS II OR III MATERIAL SHALL BE ADDED TO FILL ALL VOIDS CREATED BY THE USE OF CLASS I MATERIAL.
 - HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. CLASS II OR III MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.
 - INITIAL BACKFILL MATERIAL SHALL BE CLASS II OR III. IT SHALL BE PLACED WITHIN 24-30" ABOVE THE TOP OF THE PIPE AND TAMPED BY A PORTABLE VIBRATOR. FINAL BACKFILL MATERIAL MAY BE MACHINE PLACED. THE MATERIAL SHALL BE CLASS II OR III MATERIAL. CLASS IV MATERIAL MAY BE INSTALLED OUTSIDE OF ROADWAY.
 - FINAL BACKFILL UNDER ROADWAYS MAY REQUIRE SPECIAL COMPACTION AND DENSITY TESTS. A MINIMUM OF 30" OF COVER OVER THE TOP OF THE PIPE SHALL BE PROVIDED BEFORE THE TRENCH IS WHEEL-LOADED.
- NOTE:
ALL EMBEDMENT MATERIALS SHALL BE NO LESS THAN 95% OF MAXIMUM DENSITY. LABORATORY TESTING OF THE SOIL WILL BE REQUIRED. THIS PROCEDURE SHALL BE REQUIRED ON ALL INSTALLATIONS. ALL TRENCHING, EXCAVATION, AND BACKFILLING SHALL BE IN ACCORDANCE WITH 2020 FLORIDA BUILDING CODE SECTION 706.

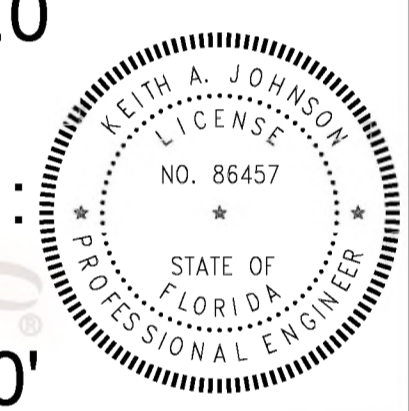


- EMBEDMENT MATERIALS**
- CLASS I: ANGULAR, 1/4"-1-1/2", GRADED STONE, INCLUDING A NUMBER OF FILL MATERIALS THAT HAVE REGIONAL SIGNIFICANCE SUCH AS CORAL, SLAC, CINDERS, CRUSHED STONE AND CRUSHED SHELLS.
 - CLASS II: COARSE SANDS AND GRAVELS WITH MAXIMUM PARTICLE SIZE OF 1-1/2" INCLUDING VARIOUS GRADED SANDS AND GRAVELS CONTAINING SMALL PERCENTAGES OF FINES, GENERALLY GRANULAR AND NON-COHESIVE, EITHER WET OR DRY. SOIL TYPES CW, CP, SW, AND SP ARE INCLUDED IN THIS CLASS.
 - CLASS III: FINE SAND AND CLAY GRAVELS, INCLUDING FINE SANDS, SAND-CLAY MIXTURES AND GRAVEL-CLAY MIXTURES. SOIL TYPES GM, GC, SM, AND SC ARE INCLUDED IN THIS CLASS.
 - CLASS IV: SILT, SILTY CLAYS, AND CLAYS, INCLUDING INORGANIC CLAYS AND SILT OF MEDIUM TO HIGH PLASTICITY AND LIQUID LIMITS. SOIL TYPES MH, ML, CH, AND CL ARE INCLUDED IN THIS CLASS. THESE MATERIALS ARE NOT TO BE USED FOR BEDDING, HAUNCHING, OR INITIAL BACKFILL.
 - CLASS V: THIS CLASS INCLUDES THE ORGANIC SOILS, AS WELL AS SOILS CONTAINING FROZEN EARTH, DEBRIS, ROCKS LARGER THAN 1-1/2" IN DIAMETER AND OTHER FOREIGN MATERIALS. THESE MATERIALS ARE NOT TO BE USED FOR BEDDING, HAUNCHING, OR INITIAL BACKFILL.

7 EXCAVATION AND BACKFILL DETAIL
PO.1 SCALE: NONE

2023.0
9.05
10:41:
08
-05'00'

Keith A. Johnson, State of Florida,
Professional Engineer, License No. 86457



REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/08/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
PANAMA CITY BEACH, FL
PHONE: (850) 236-9832
Commission Number: 22828

WATFORD ENGINEERING
4832 Clinton Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27825
850.336.3447 Project Number: 2023-007 Keith A. Johnson, PE Florida License 86457

PROJECT: **BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION**
PANAMA CITY, FLORIDA

SHEET TITLE: **PLUMBING LEGEND, SCHEDULE, NOTES, AND DETAILS**

SHEET NUMBER: **PO.1**

PLUMBING SPECIFICATIONS

SCHEDULE

WC-1 WATER CLOSET, FLOOR-MOUNT (ADULT HANDICAP, MANUAL VALVE):

VITREOUS CHINA, 1.28 GALLONS PER FLUSH, ELONGATED, HIGH EFFICIENCY SIPHON JET, WHITE, WATER SAVER BOWL WITH 1-1/2" TOP SPUD, 17" HIGH FOR HANDICAPPED. EXPOSED CHROME PLATE FLUSH VALVE, WITH SCREWDRIWER STOP, VACUUM BREAKER, QUIET FLUSH FEATURE, WITH SWEAT SOLDER KIT AND CAST WALL FLANGE. HEAVY MOLDED PLASTIC, WHITE, ELONGATED, OPEN FRONT SEAT LESS COVER, WITH STAINLESS STEEL, SELF-SUSTAINING CHECK HINGES. HOLD CENTERLINE FLUSH VALVE ASSEMBLY OFF FINISH WALL FOR GRAB BAR CLEARANCES, COORDINATE WITH ARCHITECTURAL DRAWINGS.

WATER CLOSET	ZURN Z5665BWL
VALVE	ZURN Z600PL-HET
SEAT	ZURN Z5955SS-EL-STS
CLOSET BOLT/WAX RING KIT	ZURN Z5972-COMB

WC-2 WATER CLOSET, FLOOR-MOUNT (ADULT STANDARD/CHILD ADA, MANUAL VALVE):

VITREOUS CHINA, 1.28 GALLONS PER FLUSH, ELONGATED, HIGH EFFICIENCY SIPHON JET, WHITE, WATER SAVER BOWL WITH 1-1/2" TOP SPUD, 15" HIGH FOR HANDICAPPED CHILDREN AGES 5 THROUGH 12. EXPOSED CHROME PLATE FLUSH VALVE, WITH SCREWDRIWER STOP, VACUUM BREAKER, QUIET FLUSH FEATURE, WITH SWEAT SOLDER KIT AND CAST WALL FLANGE. HEAVY MOLDED PLASTIC, WHITE, ELONGATED, OPEN FRONT SEAT LESS COVER, WITH STAINLESS STEEL, SELF-SUSTAINING CHECK HINGES.

WATER CLOSET	ZURN Z5654-BWL
VALVE	ZURN Z600PL-HET
SEAT	ZURN Z5955SS-ILV-STS
CLOSET BOLT/WAX RING KIT	ZURN Z5972-COMB

UR-1 URINAL, WALL-MOUNT (HANDICAP, MANUAL VALVE):

VITREOUS CHINA, 0.5 GALLONS PER FLUSH, SIPHON JET FLUSH, 3/4" TOP SPUD, AND 2" OUTLET URINAL. EXPOSED CHROME PLATED FLUSH VALVE WITH SCREWDRIWER STOP, VACUUM BREAKER AND QUIET FLUSH FEATURE. MOUNT TO SATISFY ADA REQUIREMENTS, COORDINATE WITH ARCHITECTURAL DRAWINGS (TOILET ROOM ELEVATIONS) FOR FINAL MOUNTING HEIGHT. FURNISH FLOOR MOUNTED SINGLE CARRIER WITH HANGER PLATE, BEARING PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325.

URINAL	ZURN Z5738-U
VALVE	ZURN Z6003AV
URINAL FLANGE KIT	ZURN Z5976-URINAL
CARRIER	ZURN Z-1222
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375

UR-2 URINAL, WALL-MOUNT (STANDARD, MANUAL VALVE):

VITREOUS CHINA, 0.5 GALLONS PER FLUSH, SIPHON JET FLUSH, 3/4" TOP SPUD, AND 2" OUTLET URINAL. EXPOSED CHROME PLATED FLUSH VALVE WITH SCREWDRIWER STOP, VACUUM BREAKER AND QUIET FLUSH FEATURE. SEE ARCHITECTURAL DRAWINGS (TOILET ROOM ELEVATIONS) FOR MOUNTING HEIGHT. FURNISH FLOOR MOUNTED SINGLE CARRIER WITH HANGER PLATE, BEARING PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325.

URINAL	ZURN Z5738-U
VALVE	ZURN Z6003AV-EWS
URINAL FLANGE KIT	ZURN Z5976-URINAL
CARRIER	ZURN Z-1222
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375

L-1 LAVATORY, WALL-MOUNT (HANDICAP):

VITREOUS CHINA 20" X 18", COLOR "WHITE", CENTER HOLE SETTING, FRONT OVERFLOW, FOR CONCEALED ARM SUPPORT. FURNISH FLOOR-MOUNTED SINGLE CARRIER WITH CONCEALED ARMS, LEVELING AND SECURING SCREWS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325. PROVIDE CHROME PLATED 1/2" IPS X 3/8" OD, LOOSE KEY OPERATED, ANGLE STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE COPPER RISERS, INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" OFFSET TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. POLISHED CHROME PLATED CAST BRASS SINGLE WATER METERING FAUCET WITH COVER PLATE, 0.5 GPM AERATOR OUTLET AND PUSH BUTTON. LAVATORY P-TRAP AND ANGLE VALVE ASSEMBLIES SHALL BE INSULATED WITH FULLY MOLDED INSULATION KIT, AND LIGHT GRAY COLOR WITH 3-PIECE INTERLOCKING TRAP ASSEMBLY AND 2-PIECE INTERLOCKING ANGLE VALVE ASSEMBLY. FASTENERS SHALL BE NYLON-TYPE SUPPLIED WITH KIT. LAVATORY SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 28" FROM FLOOR TO BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES SHALL BE AS FOLLOWS: 27" CLEAR HEIGHT SHALL BE PROVIDED FROM FINISHED FLOOR TO A POINT ON UNDERSIDE OF BOWL 8" IN FROM FRONT APRON. TOE CLEARANCE SHALL BE A MINIMUM HEIGHT OF 9" UNDER P-TRAP AND SUPPLIES OR STOPS. SEE ARCHITECTURAL DRAWINGS FOR FINAL MOUNTING HEIGHT.

LAVATORY	ZURN Z5111
FAUCET	ZURN Z-86300-3M
SUPPLY W/STOP	ZURN Z8802RLK-PC
P-TRAP	ZURN Z8700-PC
STRAINER/TAIPIECE	ZURN Z8746
INSULATION KIT	ZURN Z8946-3-NT
CARRIER	ZURN Z-1231
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375

L-2 LAVATORY, WALL-MOUNT:

VITREOUS CHINA 20" X 18", OVAL, COLOR "WHITE", CENTER HOLE SETTING, FRONT OVERFLOW. PROVIDE CHROME

PLATED 1/2" IPS X 3/8" OD, LOOSE KEY OPERATED, ANGLE STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE COPPER RISERS, INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. POLISHED CHROME PLATED CAST BRASS SINGLE WATER METERING FAUCET WITH COVER PLATE, 0.5 GPM AERATOR OUTLET AND PUSH BUTTON.

LAVATORY	ZURN Z5111
FAUCET	ZURN Z-86300-3M
SUPPLY W/STOP	ZURN Z8802RLK-PC
P-TRAP	ZURN Z8700-PC
STRAINER/TAIPIECE	ZURN Z8746
INSULATION KIT	ZURN Z8946-3-NT
CARRIER	ZURN Z-1231
BASE ANCHORAGE B-LINE ANCHORS	AWA-50-375

L-3 LAVATORY, WALL-MOUNT (HANDICAP):

VITREOUS CHINA 20" X 18", COLOR "WHITE", 8" ON CENTERS, FRONT OVERFLOW, FOR CONCEALED ARM SUPPORT. FURNISH FLOOR-MOUNTED SINGLE CARRIER WITH CONCEALED ARMS, LEVELING AND SECURING SCREWS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE BASE TO FLOOR FOR RIGID CONNECTION WITH 1/2" X 3-3/4" THREADED ZINC PLATED STEEL HEAVY DUTY WEDGE ANCHORS, COMPLETE WITH STAINLESS STEEL CLIP, WASHER AND THREADED NUT, CONFORMING TO FEDERAL SPEC. FF-S-325. PROVIDE CHROME PLATED ANGLE STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE SUPPLY AND LOOSE KEY OPERATOR. INTEGRAL PERFORATED CAST BRASS STRAINER WITH ELBOW AND 1-1/4" OFFSET TAILPIECE, CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT AND TUBE WASTE TO WALL. POLISHED CHROME PLATED CAST BRASS WATER FAUCET WITH WRIST BLADE HANDLES, WITH 0.5 GPM AERATOR. LAVATORY P-TRAP ANGLE VALVE ASSEMBLIES SHALL BE INSULATED WITH FULLY MOLDED INSULATION KIT, AND LIGHT GRAY COLOR WITH 3-PIECE INTERLOCKING TRAP ASSEMBLY AND 2-PIECE INTERLOCKING ANGLE VALVE ASSEMBLY. FASTENERS SHALL BE NYLON-TYPE SUPPLIED WITH KIT. LAVATORY SHALL BE MOUNTED WITH A CLEARANCE OF AT LEAST 28" FROM FLOOR TO BOTTOM OF THE APRON. KNEE AND TOE CLEARANCES SHALL BE AS FOLLOWS: 27" CLEAR HEIGHT SHALL BE PROVIDED FROM FINISHED FLOOR TO A POINT ON UNDERSIDE OF BOWL 8" IN FROM FRONT APRON. TOE CLEARANCE SHALL BE A MINIMUM HEIGHT OF 9" UNDER P-TRAP AND SUPPLIES OR STOPS. SEE ARCHITECTURAL DRAWINGS FOR FINAL MOUNTING HEIGHT. UNDER SINK MIXING VALVE WITH THREADED CONNECTION, BRONZE BODY, LIMITS HOT WATER BETWEEN 80°F & 120°F AND SET AT 95 DEGREE F. DOUBLE THROTTLING, INTEGRAL INLET FILTER WASHERS & CHECK VALVES, TAMPER RESISTANT LOCKING CAP. MEETS ASSE 1070 STANDARDS.

LAVATORY	ZURN Z5748
FAUCET	ZURN Z-81104-XL-3M
SUPPLY W/STOP	ZURN Z8800RLK-PC
P-TRAP	ZURN Z8700-PC
STRAINER/TAIPIECE	ZURN Z8746
INSULATION KIT	ZURN Z8946-3-NT
CARRIER	ZURN Z-1231
BASE ANCHORAGE	B-LINE ANCHORS AWA-50-375
MIXING VALVE	MV-1

EWC-1 ELECTRIC WATER COOLER (DUAL PURPOSE/TWO LEVELS/BOTTLE STATION):

WALL MOUNT, DUAL-PURPOSE UNIT, SELF-CONTAINED ELECTRIC WATER COOLER WITH SENSOR-ACTIVATED BOTTLE FILLING STATION. FURNISH FLOOR MOUNTED TWO LEVELS DOUBLE CARRIER WITH BEARING PLATE, HANGER PLATE, ADJUSTABLE SUPPORTING RODS, STRUCTURAL UPRIGHTS AND BLOCK BASES, SECURE TO FLOOR WITH 1/2" BOLTS AND ANCHORS. UNIT TO BE COMPLETE WITH HERMETIC AIR COOLED REFRIGERATION SYSTEM, COOLER PRE-COOLER, THERMOSTAT, SAFETY CONTROLS, CONDENSER FAN MOTOR, SILVER ION ANTIMICROBIAL PROTECTION ON KEY PLASTIC COMPONENTS, FLEXI-GUARD SAFETY BUBBLER, VERMIN PROOF INSULATION, HEAVY GAUGE STEEL CABINET, MOISTURE RESISTANT FINISH, QUIET OPERATION. TOP OF COOLER SHALL BE NO. 3 SATIN FINISH STAINLESS STEEL. COOLER CAPACITY SHALL BE 8.0 GPH. LAMINAR FLOW, VISUAL FILTER MONITOR, COOLING 80-DEGREE F WATER TO 50 DEGREE F. PROVIDE ONE-YEAR WARRANTY ON ENTIRE COOLER. PROVIDE CHROME PLATED STOP TO WALL WITH CHROME PLATED 3/8" FLEXIBLE SUPPLY. PROVIDE 1-1/2" CHROME PLATED 17 GAUGE CAST BRASS P-TRAP WITH CLEANOUT. CHROME PLATED LOOSE KEY ANGLE STOP TO WALL WITH 3/8" CHROME PLATED FLEXIBLE HOT AND COLD WATER SUPPLIES. 115V/60HZ, SINGLE PHASE, 5 FULL LOAD AMPS, 370 RATED WATTS, HERMETICALLY-SEALED REFRIGERATING COMPRESSOR. VERIFY FINAL LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL DRAWINGS. FINISH TO BE SELECTED BY ARCHITECT. CERTIFIED TO NSF/ANSI 42, 53, 61, & 372. UL 399 REQUIREMENTS.

EDF	ELKAY LZSTL8WSSP
TRAP	ZURN Z-8702-PC
SUPPLIES	ZURN Z-8800LK
CARRIER	Z1223-BL

MV-1 WATER MIXING VALVE (THERMOSTATIC MIXING):

UNDER SINK 3/8" COMPRESSION FITTING MIXING VALVE, BRASS BODY, LEAD FREE, LIMITS HOT WATER BETWEEN 80°F & 120°F, DUAL CHECK VALVES, 0.25CPM MIN. FLOW, 40 MESH STAINLESS STEEL STRAINER, TAMPER RESISTANT LOCKING CAP. MEETS ASSE 1070 STANDARDS.

EXPOSED MIXING VALVE	WATTS LFLUSC-B
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EWH-1 ELECTRIC WATER HEATER:

ASHRAE STANDARD 90, GLASS LINED TANK SUITABLE FOR 150 PSI WORKING PRESSURE, 300-PSI TEST. FINISH OF DURABLE HIGH GLOSS BAKED ENAMEL. BLANKET GLASS FIBER INSULATION OVER ENTIRE TANK. CONTROL CIRCUIT TRANSFORMER AND MANUAL RESET HIGH TEMPERATURE LIMIT CONTROL. ASME PRESSURE AND TEMPERATURE RELIEF VALVE. WATER HEATER SHALL BE ACCEPTABLE FOR COMMERCIAL APPLICATION BY MANUFACTURER. PROVIDE 3 YEAR WARRANTY, SNAP ACTION AUTOMATIC IMMERSION MOUNTED THERMOSTATS, IMMERSION TYPE HEATING ELEMENTS AND MAGNESIUM ANODE ROD. PROVIDE UNIT MOUNTED DISCONNECT SWITCH. PROVIDE INLET AND OUTLET SHUT-OFF VALVES, VACUUM RELIEF VALVE ON INLET WATER SUPPLY. PROVIDE GALVANIZED STEEL DRIP PAN. PROVIDE PRE-CHARGED EXPANSION TANK, OUTER STEEL SHELL (FLEXIBLE DIAPHRAGM TYPE), ON COLD WATER INLET SIDE OF WATER HEATER FOR THERMAL EXPANSION CONTROL. TANK VOLUME IN GALLONS SHALL BE OF SUFFICIENT SIZE TO ACCOMMODATE WATER HEATER SIZE IN GALLONS. 20 GAL 3KW PHASE.

WATER HEATER	A. O. SMITH DEL 20
VACUUM RELIEF	WATTS 36A
EXPANSION TANK	AMTROL "THERM-X-TROL"

IWH-1 INSTANTANEOUS WATER HEATER:

3.5 KW AT 120V/1 PHASE. COMMERCIAL ELECTRIC WATER HEATERS SHALL BE CONTROLLED BY AN INTEGRATED MICROPROCESSOR THAT EMPLOYS A PROPORTIONAL/INTEGRAL/DERIVATIVE (PID) CONTROL SCHEME USING THERMISTORS FOR SENSING TEMPERATURE AND FLOW. HEAT ELEMENTS SHALL SIMULTANEOUSLY VARY KW INPUT ACROSS ALL ELEMENTS FROM 1% TO MAXIMUM INPUT. STEPPING OF INDIVIDUAL ELEMENTS IS NOT ACCEPTABLE. HEATER SHALL INCLUDE DUAL WATER LEVEL SENSORS, HIGH LIMIT CONTROL VIA THE MICROPROCESSOR, AND DUAL HIGH LIMIT CUTOFF SWITCHES, ONE MANUAL AND ONE AUTOMATIC. HEATERS SHALL INCLUDE SELF-DIAGNOSTICS WITH AN LED AND SPEAKER AND MUST VISUALLY AND AUDIBLY SIGNAL THE STATUS OF ALL MONITORED FUNCTIONS. HEATERS SHALL INCLUDE A BUILT-IN LEAK DETECTOR. ALL WATER PASSAGES MUST BE CONSTRUCTED OF A HIGH TEMPERATURE RESISTANT DUPONTI RESIN. CLEAN-CUT ACCESS FOR REMOVING SEDIMENT MUST BE PROVIDED WITHOUT REMOVING PLUMBING CONNECTIONS OR EXPOSING ELECTRICAL COMPONENTS OF THE WATER HEATER. PROVIDE 5 YEAR LIMITED WARRANTY.

WATER HEATER	EEMAX EX3512T
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CP-1 CIRCULATOR PUMP (INLINE TYPE):

INFINITELY VARIABLE CIRCULATOR MADE OF COMPOSITE CASING, HOUSING, IMPELLER, CERAMIC SHAFT, AND CARBON BEARINGS. A 44 WATT ECM PERMANENT MAGNET MOTOR AND ELECTRICAL CHARACTERISTICS ARE 120V/1 PHASE, 60 HZ., WITH 1" CONNECTIONS, MAXIMUM OPERATING PRESSURE OF 150 PSI, UL STANDARD 778 AND NSF CERTIFIED. DIGITAL TIMER WITH CIRCULATOR PROGRAMMING. TEMPERATURE AQUASTAT, MAINTAINS WATER TEMPERATURE BETWEEN 95°F AND 115°F. CIRCUIT SETTER CALIBRATED BALANCE VALVE, LEAD-FREE BRASS, WITH 1/4" NPT TAPPED DRAIN PORT, MEMORY STOP FEATURE, SET AT 1 GPM. PROVIDE CIRCUIT SOLVER A SELF-ACTING THERMOSTATIC RECIRCULATION VALVE SET AT 110°F.

CIRCULATOR	TACO 006E3
TIMER	TACO 265-3
AQUASTAT	TACO 563-2
CIRCUIT SETTER	XYLEM CB-1/25 LF
RECIRCULATION VALVE (TVC)	CIRCUIT SOLVER CS-1/2-110

TCV TEMPERATURE CONTROL VALVE:

CIRCUIT SOLVER A SELF-ACTING THERMOSTATIC RECIRCULATION VALVE SET AT 110°F.

RECIRCULATION VALVE (TVC)	CIRCUIT SOLVER CS-1/2-110
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FD FLOOR DRAIN:

DURA-COATED CAST IRON BODY, BOTTOM OUTLET AND TRAP PRIMER CONNECTION. TYPE B POLISHED NICKEL BRONZE STRAINER, MEMBRANE CLAMP & ADJUSTABLE COLLAR WITH SLOTS.

FLOOR DRAIN	ZURN Z-415B-P
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HDFD FLOOR DRAIN:

DURA-COATED CAST IRON BODY, BOTTOM OUTLET AND TRAP PRIMER CONNECTION. INSIDE CAULK BOTTOM OUTLET OR TY-SEAL HUB OUTLET WITH ADAPTOR FOR CAST IRON TRAP INSTALLATION AND A 4" DEEP TRAP SEAL. PROVIDE CLAMPING RINGS FOR FLOORS WITH MEMBRANE.

FLOOR DRAIN	ZURN Z541-4-IC
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TP TRAP PRIMERS:

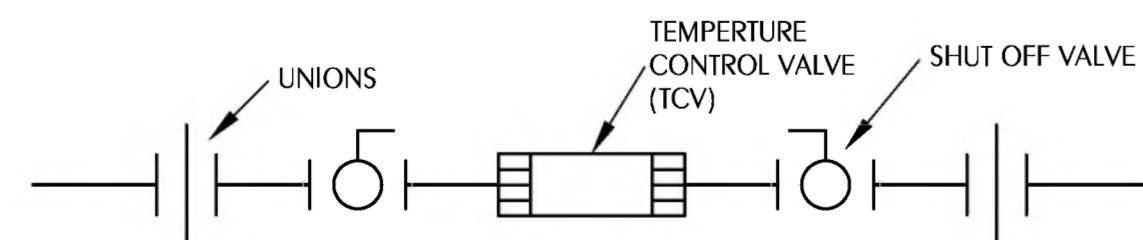
PROVIDE BRASS TRAP PRIMERS AND DISTRIBUTION UNITS TO SEAL FLOOR DRAINS INDICATED ON DRAWINGS. TRAP PRIMER VALVES SHALL BE AUTOMATIC, SELF CONTAINED TYPE WITH NO SPRINGS OR DIAPHRAGMS AND SHALL NOT REQUIRE ADJUSTMENT. INLET AND OUTLET SIZE IS 1/2". TRAP PRIMER VALVES SHALL BE THE TYPE THAT CAN BE INSTALLED ANYWHERE ON COLD WATER PIPING SIZE 1-1/2" OR LESS. DISTRIBUTION UNITS SHALL SUPPLY 1-4 FLOOR DRAINS. TRAP PRIMER VALVES SHALL COMPLY WITH ASSE 1018. PRECISION PLUMBING PRODUCTS (PPP)

TRAP PRIMER	PPP PR-500
DISTRIBUTION UNIT	PPP DU-U

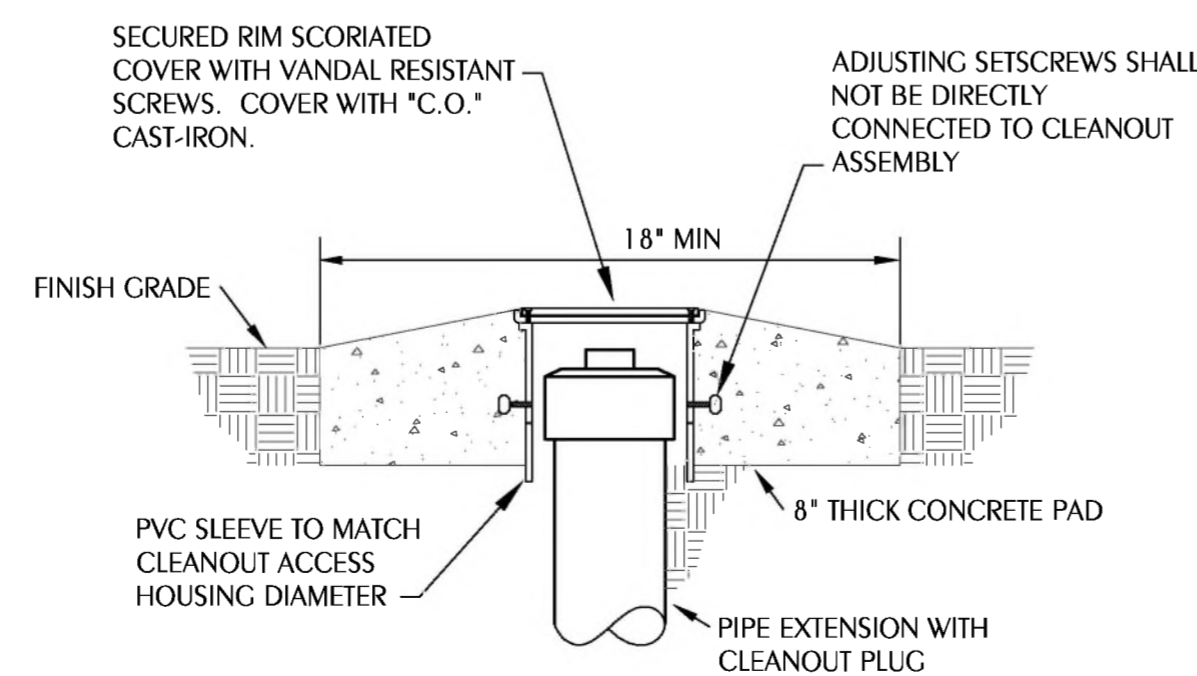
SP-1 SUMP PUMP:

SUBMERSIBLE SUMP PUMP, BRONZE WITH I.P.S. CONNECTION, CAPACITY OF 50 GPM @ 14 FT. DISCHARGE HEAD, PROVIDE WITH MAGNETIC STARTERS, 3450 RPM, INTEGRAL SUBMERSIBLE SWITCH WITH ROD AND FLOAT FOR AUTOMATIC CONTROL. FURNISH WITH METAL FRAME AND STEEL COVER, SIZE TO BE FOR 24"X24"X30" DEEP CONCRETE PIT, COORDINATE WITH STRUCTURAL AND ARCHITECTURAL ELEVATOR WALL FOOTING DETAILS.

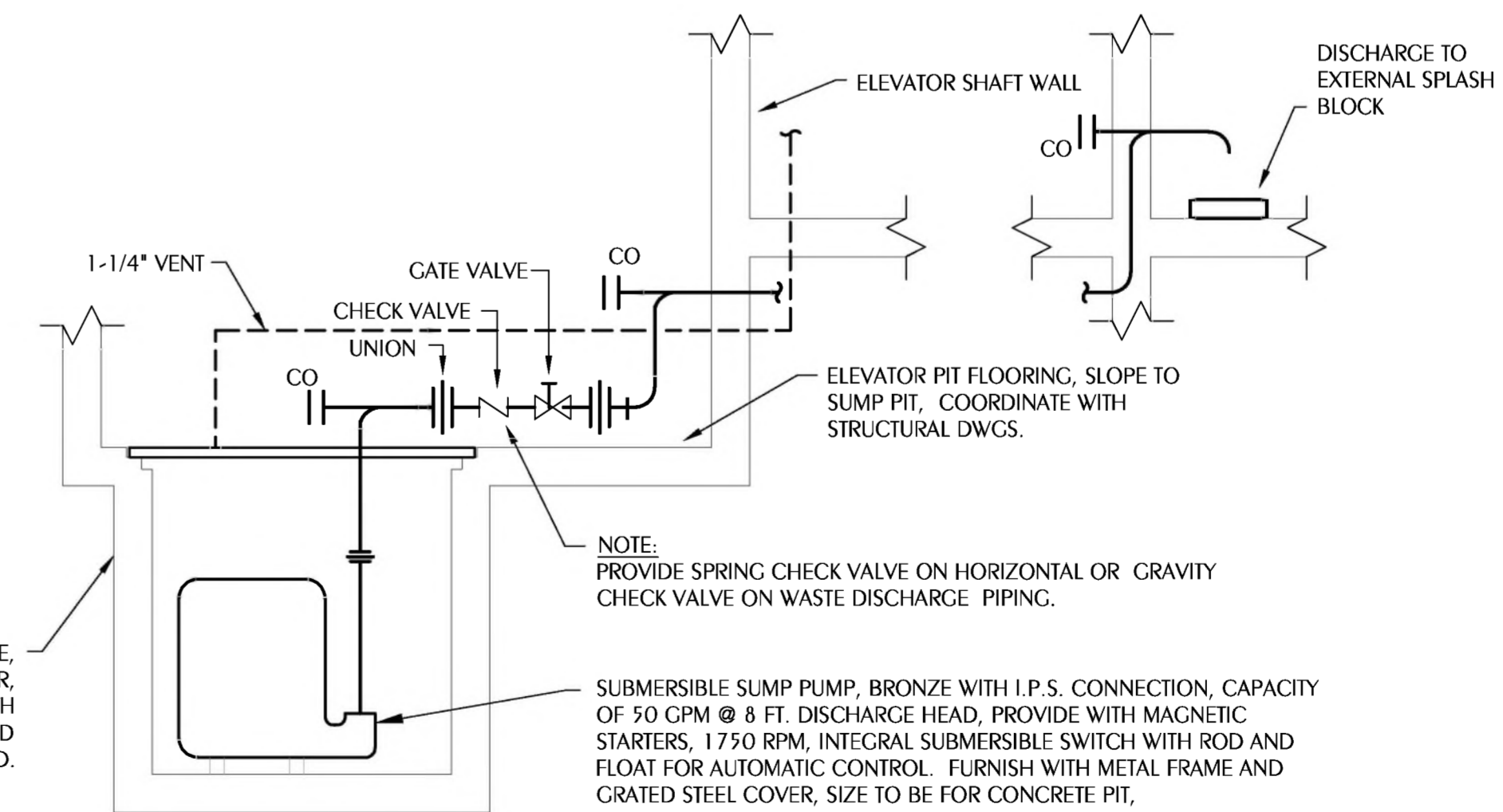
SUMP PUMP	LIBERTY ELV280
REMOTE ALARM	LIBERTY OTC-115



1 THERMOSTATIC TEMPERATURE CONTROL VALVE DETAIL
SCALE: NONE



2 CLEANOUT TO GRADE
SCALE: NONE



3 ELEVATOR SUMP DETAIL
SCALE: NONE

REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE

	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/03/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
PANAMA CITY BEACH, FL
PHONE: (850) 236-9832
Commission Number: 22828

WATFORD ENGINEERING
4832 Citrus Street, Marianna, Florida 32448 Florida Certificate of Authorization: 27625
850-336-3447 Project Number: 2023-007 Keith A. Johnson, PE Florida License #64947

PROJECT:

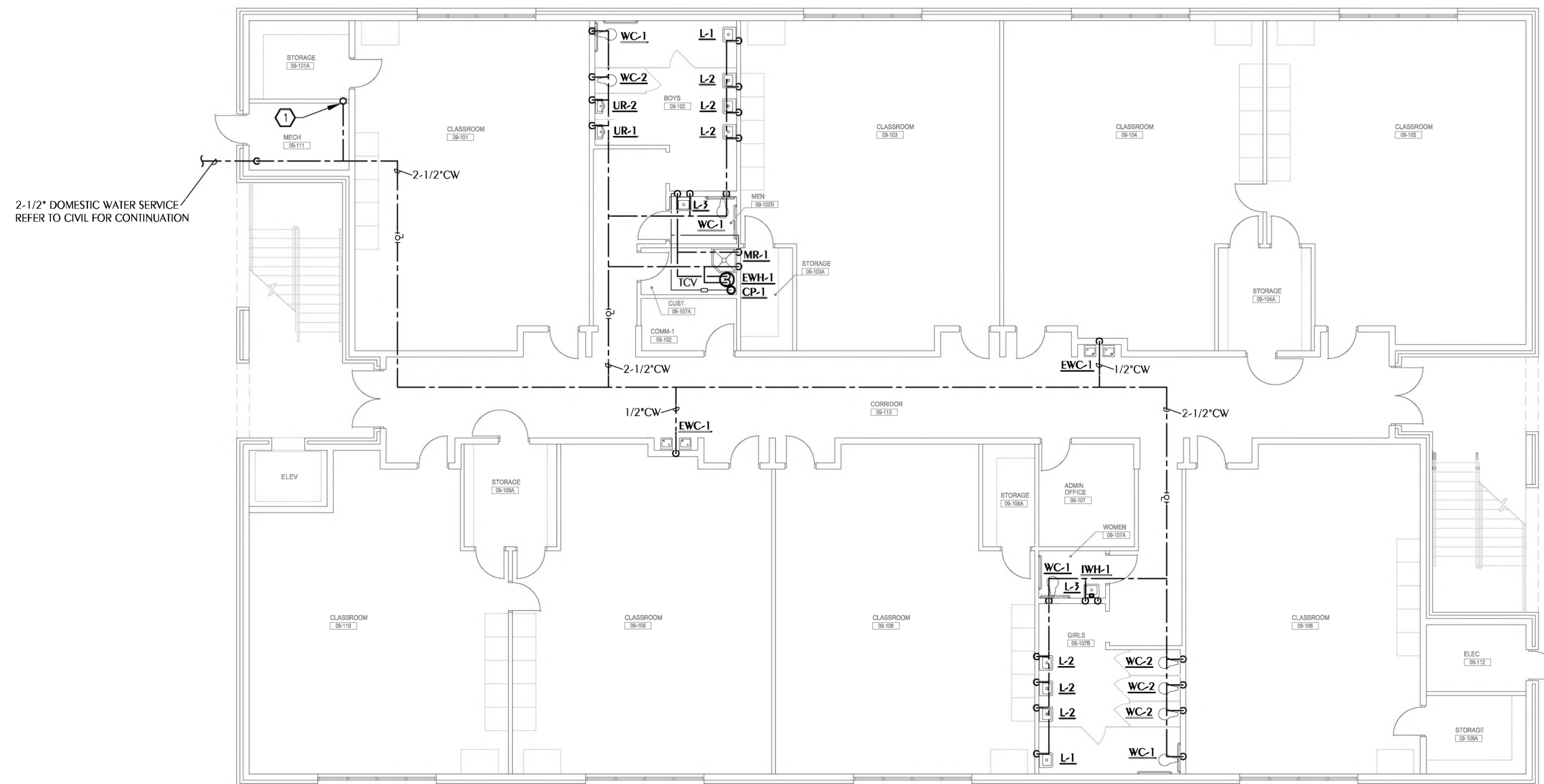
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
PANAMA CITY, FLORIDA

SHEET TITLE:
PLUMBING SPECIFICATIONS AND DETAILS

SHEET NUMBER:
P0.2

SHEET NOTES

① 2-1/2" CW UP TO SECOND FLOOR.



2-1/2" DOMESTIC WATER SERVICE
REFER TO CIVIL FOR CONTINUATION

REVISIONS				
NO.	DESCRIPTION	DRAWN	CHECKED	DATE
PHASE				
		DRAWN	CHECKED	DATE
SCHEMATIC DESIGN				12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ		02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ		03/21/23
BID DOCUMENTS	JDD	KAJ		03/05/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
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Commission Number: 22828

WATFORD ENGINEERING
4822 Citrus Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
850.336.3447 Project Number: 2023-007 Keith A. Johnson, P.E. Florida License #6467

PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
PANAMA CITY, FLORIDA

SHEET TITLE:
PLUMBING DOMESTIC WATER PLAN - FIRST FLOOR

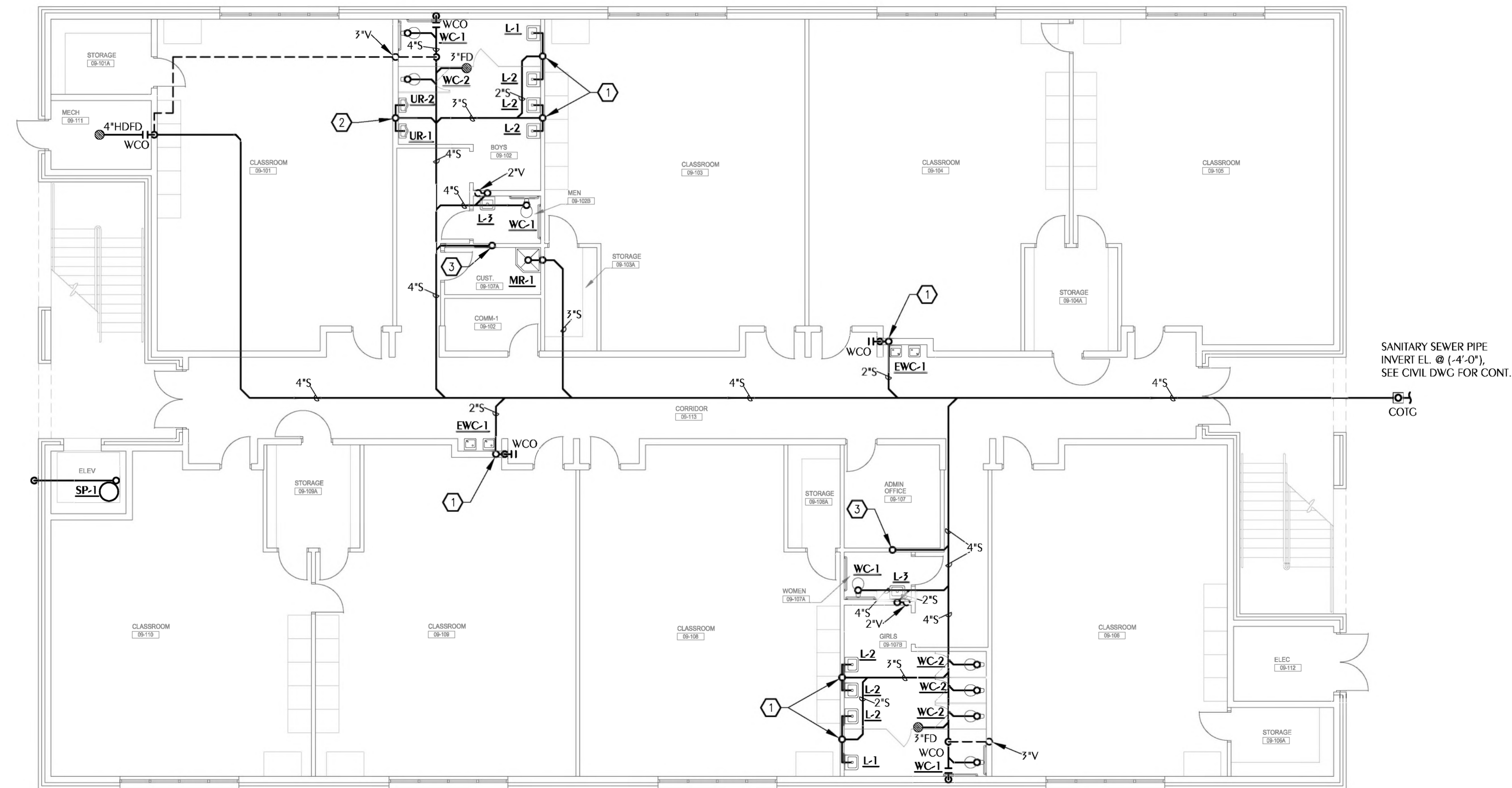
SHEET NUMBER:
P1.0

PLUMBING DOMESTIC WATER PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

REFERENCE:
FINISHED FLOOR ELEVATION = 0'-0"

SHEET NOTES

- ① 2" SANITARY DOWN FROM SECOND FLOOR
- ② 3" SANITARY DOWN FROM SECOND FLOOR
- ③ 4" SANITARY DOWN FROM SECOND FLOOR



REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE

PHASE	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/09/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
PANAMA CITY BEACH, FL
PHONE: (850) 236-9832
Commission Number: 22828

WATFORD ENGINEERING
4652 Citrus Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
850-336-3447 Project Number: 2023-017 Keith A. Johnson, P.E. Florida License #6467

PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
PANAMA CITY, FLORIDA

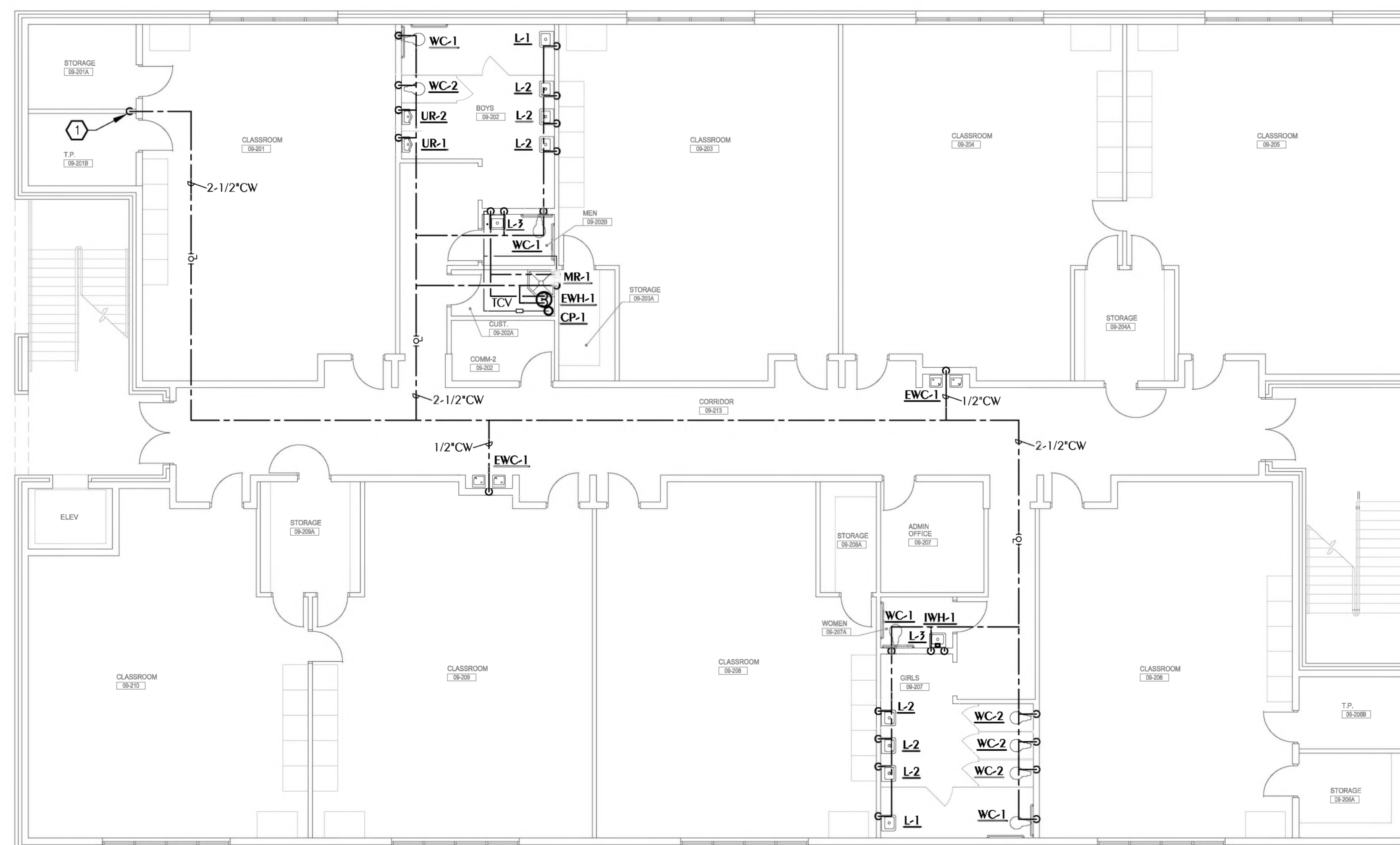
SHEET TITLE:
PLUMBING SANITARY PLAN - FIRST FLOOR

SHEET NUMBER:
P1.1

PLUMBING SANITARY PLAN - FIRST FLOOR
SCALE: 1/8" = 1'-0"

SHEET NOTES

① 2-1/2" CW UP FROM FIRST FLOOR.



REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/05/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
 PANAMA CITY BEACH, FL
 PHONE: (850) 236-9832
 Commission Number: 22828



4832 Clifton Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
 650-336-3447, Project Number: 2023-027 Keith A. Johnson, PE Florida License #6467

PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
 PANAMA CITY, FLORIDA

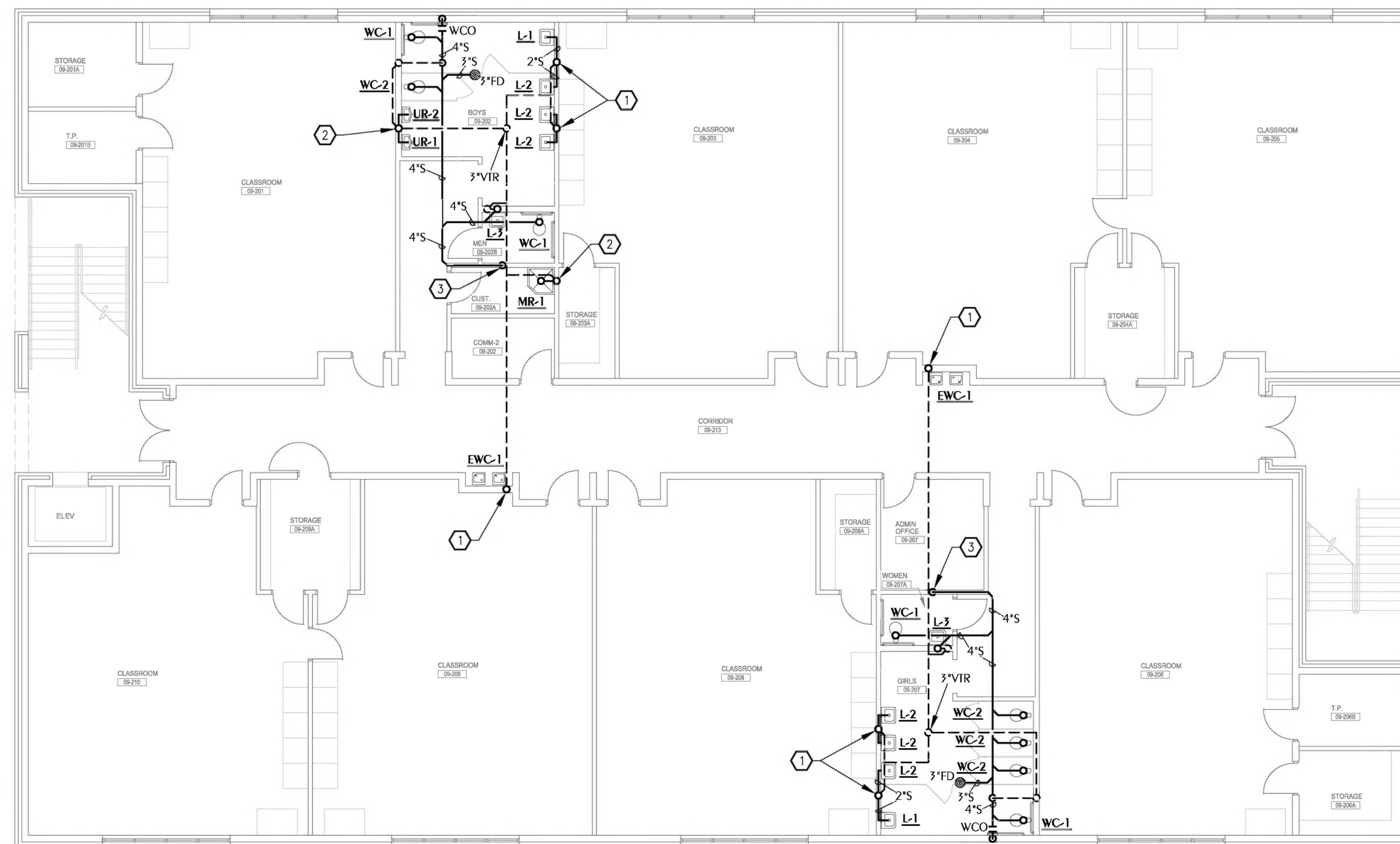
SHEET TITLE:
PLUMBING DOMESTIC WATER PLAN - SECOND FLOOR

SHEET NUMBER:
P1.2

PLUMBING DOMESTIC WATER PLAN - SECOND FLOOR
 SCALE: 1/8" = 1'-0"

SHEET NOTES

- ① 2" SANITARY DOWN TO FIRST FLOOR
- ② 3" SANITARY DOWN TO FIRST FLOOR
- ③ 4" SANITARY DOWN TO FIRST FLOOR



PLUMBING SANITARY PLAN - SECOND FLOOR
 SCALE: 1/8" = 1'-0"

REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE

PHASE	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/05/23

JRA ARCHITECTS
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 PHONE: (850) 236-9832
 Commission Number: 22828

WATFORD ENGINEERING
4825 Citrus Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
 850-336-3447 Project Number: 2023-007 Keith A. Johnson, P.E. Florida License #6467

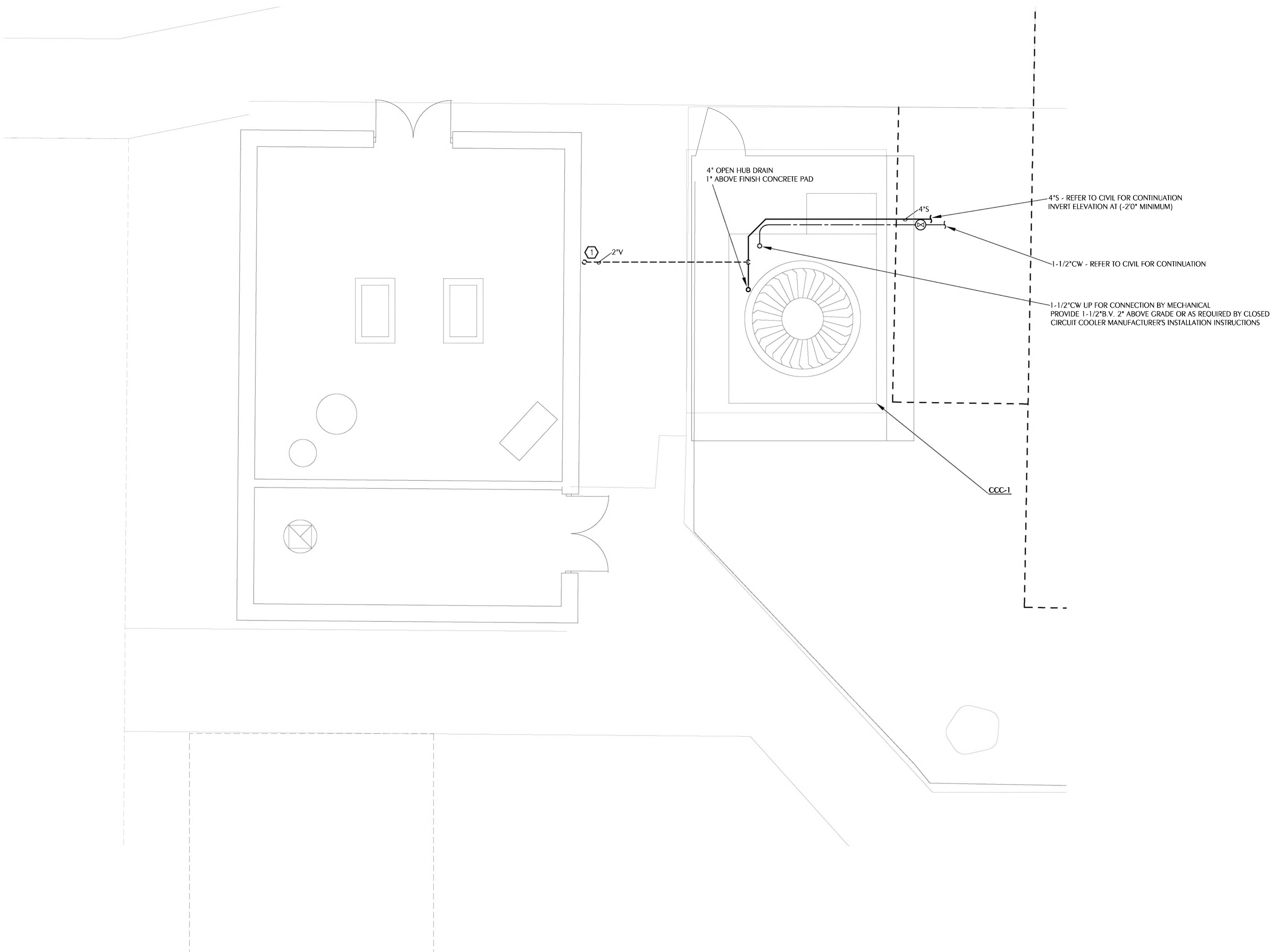
PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
 PANAMA CITY, FLORIDA

SHEET TITLE:
PLUMBING SANITARY PLAN - SECOND FLOOR

SHEET NUMBER:
P1.3

SHEET NOTES

① PROVIDE 2" VENT TERMINAL. VENT TERMINAL SHALL BE MINIMUM 10'0" HORIZONTAL FROM ANY OPENABLE WINDOW, AIR INTAKE, OR DOOR. SHALL NOT TERMINATE BELOW A VENTED SOFFIT UNLESS THE VENT TERMINATION IS A MINIMUM OF 3'0" ABOVE SUCH OPENING OR SOFFIT. SECURE VENT PIPING TO EXTERIOR WALL. PAINT TO MATCH EXISTING BUILDING COLOR OR AS DIRECTED BY OWNER.



REVISIONS

NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE

PHASE	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/15/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/05/23

JRA ARCHITECTS 2211 THOMAS DR., STE 100
 PANAMA CITY BEACH, FL
 PHONE: (850) 236-9832
 Commission Number: 22828



WATFORD ENGINEERING

4825 Citrus Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
 850.336.3447 Project Number: 2023-007 Keith A. Johnson, PE Florida License #6467

PROJECT:

**BAY HAVEN CHARTER ACADEMY
 CLASSROOM ADDITION
 PANAMA CITY, FLORIDA**

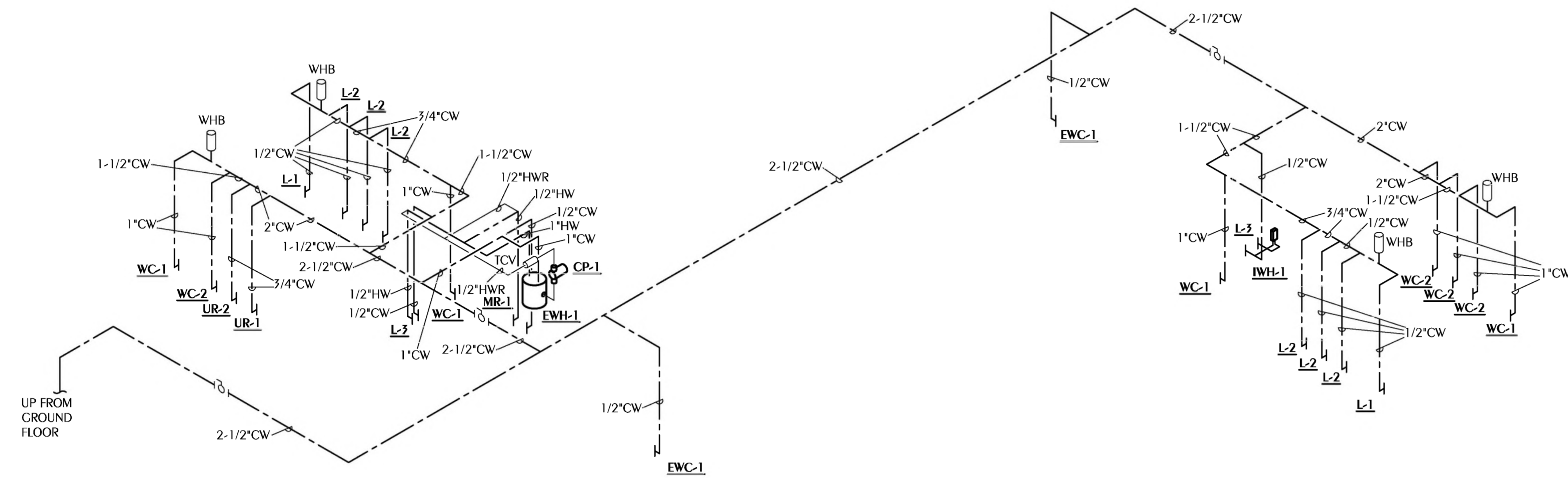
SHEET TITLE:

**PLUMBING PARTIAL
 SITE PLAN**

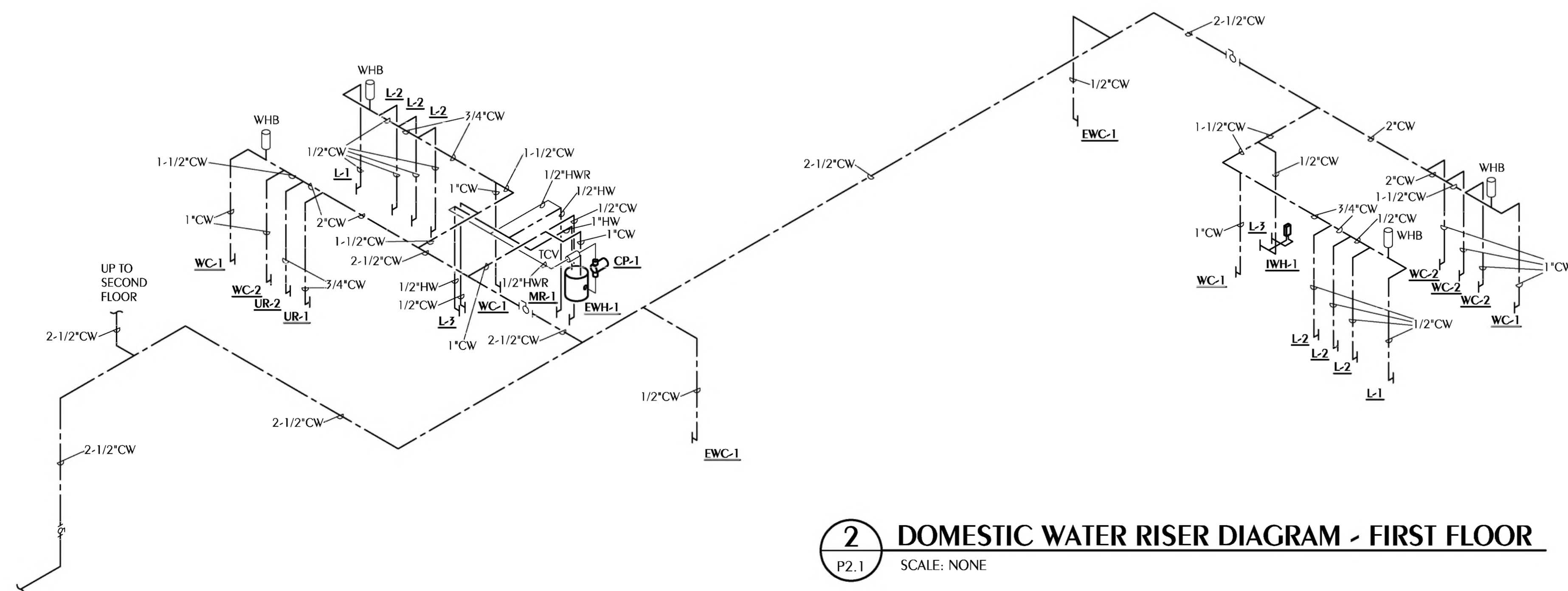
SHEET NUMBER:

P1.4

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



1 DOMESTIC WATER RISER DIAGRAM - SECOND FLOOR
 P2.1 SCALE: NONE



2 DOMESTIC WATER RISER DIAGRAM - FIRST FLOOR
 P2.1 SCALE: NONE

REVISIONS				
NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE			
	DRAWN	CHECKED	DATE
SCHEMATIC DESIGN			12/5/22
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23
BID DOCUMENTS	JDD	KAJ	03/05/23

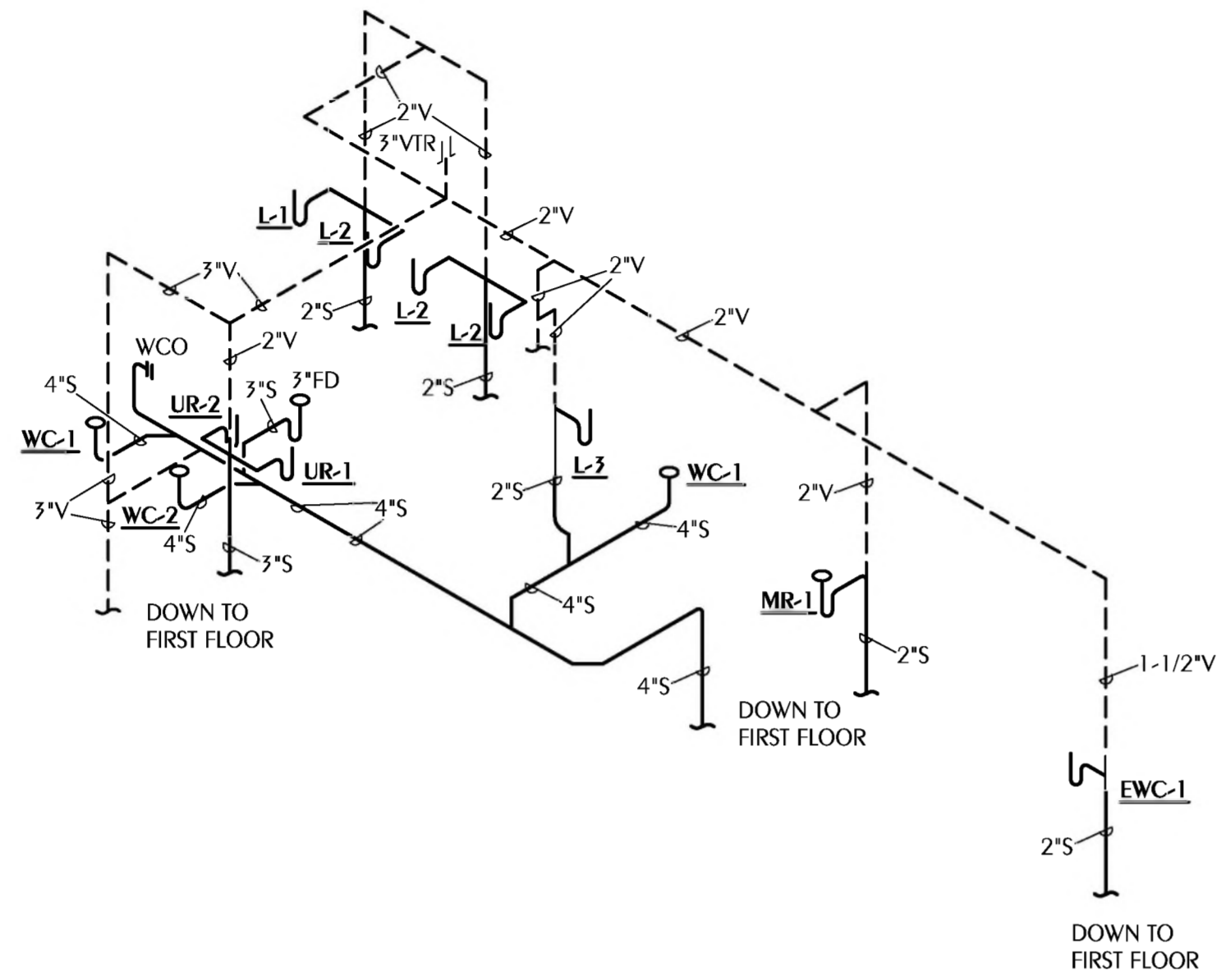
JRA ARCHITECTS 2211 THOMAS DR., STE 100
 PANAMA CITY BEACH, FL
 PHONE: (850) 236-9832
 Commission Number: 22828

WATFORD ENGINEERING
 4825 Collins Street, Marianna, Florida 32446 Florida Certificate of Authorization: 27625
 850.336.3447 Project Number: 2023-027 Keith A. Johnson, PE Florida License #6467

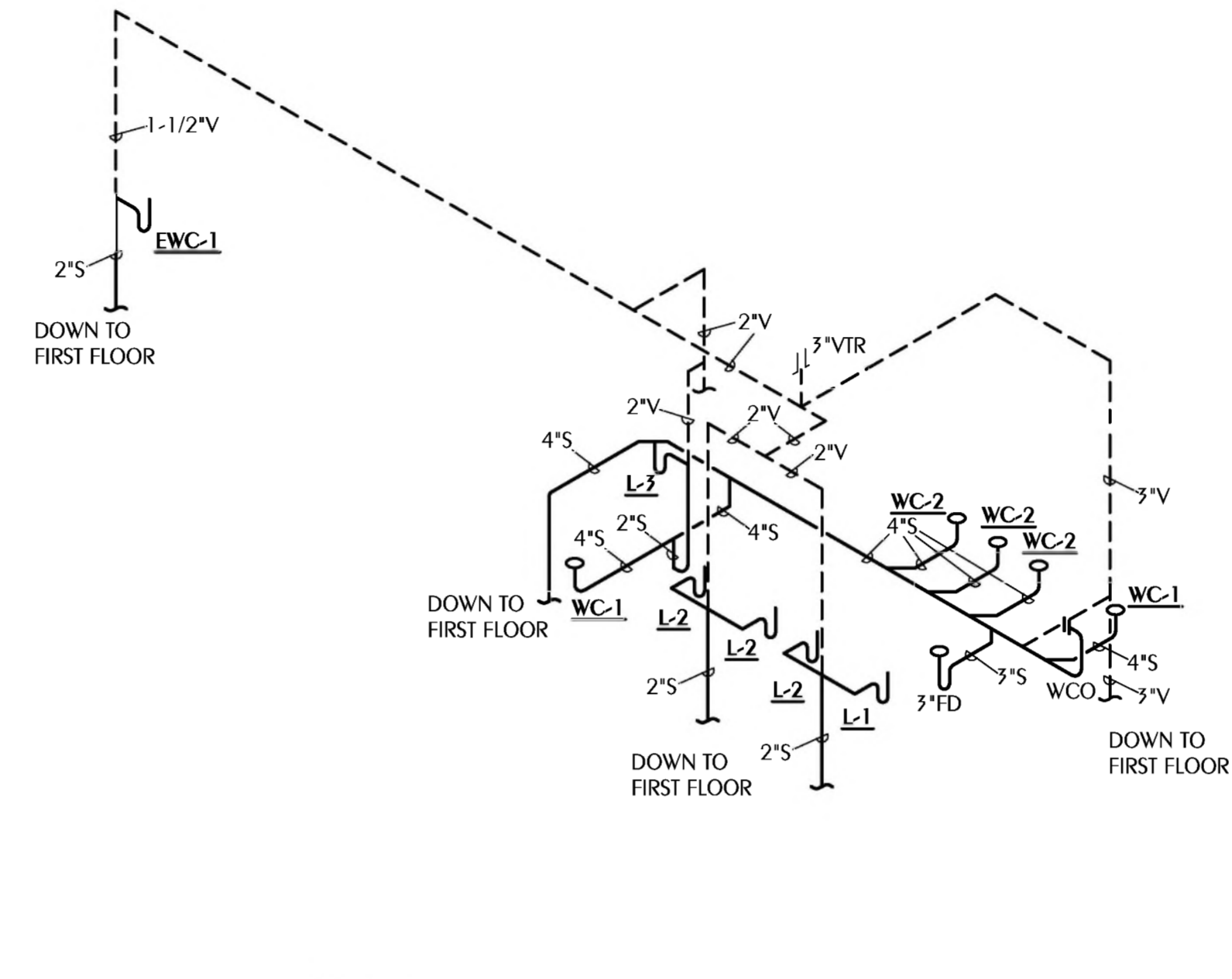
PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
 PANAMA CITY, FLORIDA

SHEET TITLE:
DOMESTIC WATER RISER DIAGRAMS

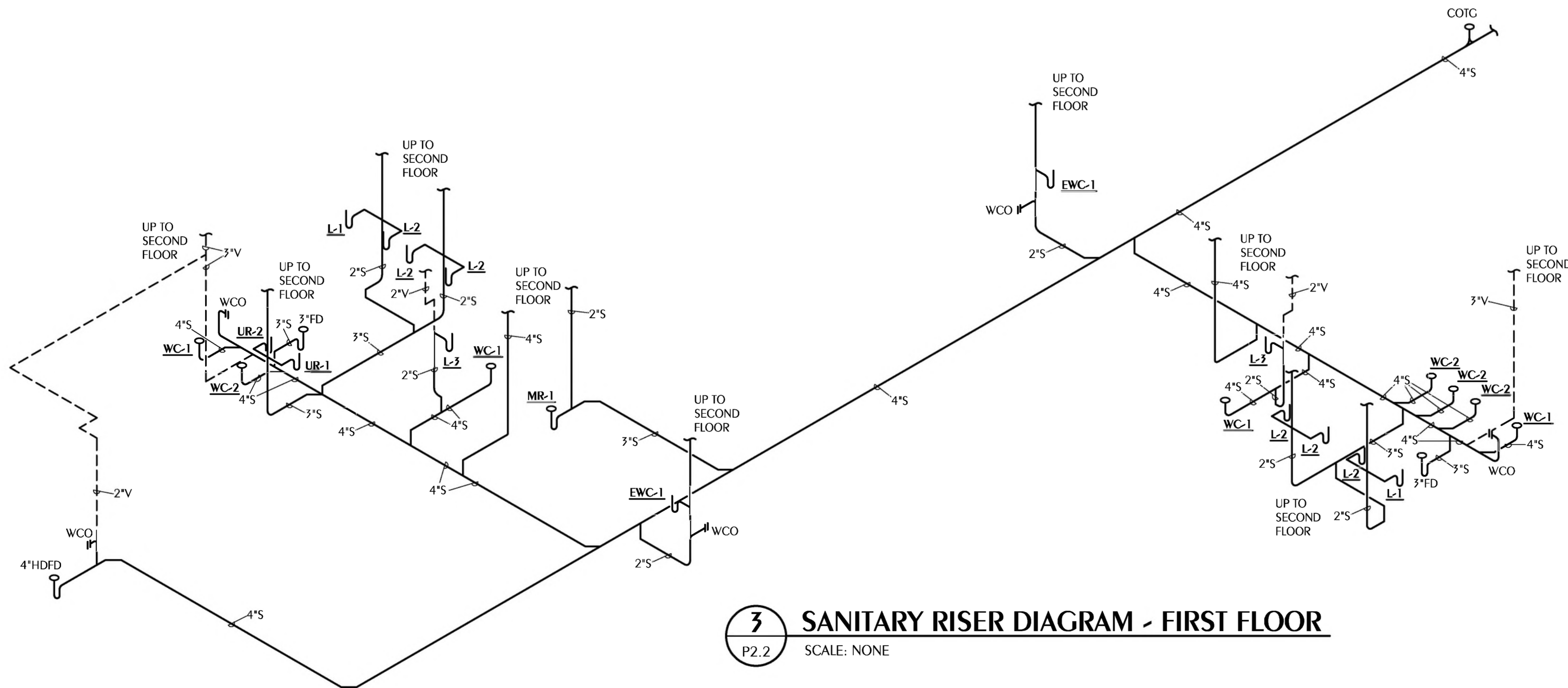
SHEET NUMBER:
P2.1



1 SANITARY RISER DIAGRAM - SECOND FLOOR
P2.2 SCALE: NONE



2 SANITARY RISER DIAGRAM - SECOND FLOOR
P2.2 SCALE: NONE



3 SANITARY RISER DIAGRAM - FIRST FLOOR
P2.2 SCALE: NONE

REVISIONS				
NO.	DESCRIPTION	DRAWN	CHECKED	DATE

PHASE				
	DRAWN	CHECKED	DATE	
SCHEMATIC DESIGN			12/15/22	
50% PROGRESS DOCUMENTS	JDD	KAJ	02/07/23	
CONSTRUCTION DOCUMENTS	JDD	KAJ	03/21/23	
BID DOCUMENTS	JDD	KAJ	03/05/23	

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850.336.3447 Project Number: 2023-007 Keith A. Johnson, PE Florida License 86467

PROJECT:
BAY HAVEN CHARTER ACADEMY CLASSROOM ADDITION
PANAMA CITY, FLORIDA

SHEET TITLE:
SANITARY RISER DIAGRAMS

SHEET NUMBER:
P2.2