

## ABBREVIATIONS

3PL	THIRD PARTY LOGISTICS
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITIES HAVING JURISDICTION
APPROX	APPROXIMATE
BLDG	BUILDING
CBL	COLD BEVERAGE LINE
CLG	CEILING
CONST	CONSTRUCTION
CW	DOMESTIC COLD WATER
CXA	COMMISSIONING AGENT
DEG	DEGREES
DTL	DETAIL
DN	DOWN
DWG(S)	DRAWING(S)
EA	EACH
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRICAL
EM	EMERGENCY
(E) OR (EX)	EXISTING
EXT	EXTERIOR
FD	FLOOR DRAIN
FS	FLOOR SINK
F&I	FURNISH & INSTALL
FLR	FLOOR
FT	FOOT/FEET
FCO	FLOOR CLEANOUT
FW	FILTERED COLD WATER
GC	GENERAL CONTRACTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GW	GREASE WASTE
HR	HOUR
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HW	HOT WATER
HS	HANDSINK
HWR	HOT WATER RETURN
IW	INDIRECT WASTE
LL	LANDLORD
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MEP	MECHANICAL, ELECTRICAL, AND PLUMBING
MFG	MANUFACTURER
MIN	MINIMUM
MS	MOP SINK
NTS	NOT TO SCALE
PC	PLUMBING CONTRACTOR
PS	PREP SINK
POC	POINT OF CONNECTION
PM	PROJECT MANAGER
REF	REFERENCE
REQ(D)	REQUIRE(D)
REV	REVISION
SAN	SANITARY WASTE
SF	SQUARE FEET
SHT	SHEET
SPECS	SPECIFICATION(S)
SST	STAINLESS STEEL
TEL	TELEPHONE
TEMP	TEMPORARY
TYP	TYPICAL
TMV	TEMPERATURE MIXING VALVE
TW	TEMPERED HOT WATER
UNO	UNLESS NOTED OTHERWISE
V	VENT
WH	WATER HEATER
WP	WEATHER PROOF
WCO	WALL CLEANOUT

## PLUMBING SYMBOL LEGEND

— SAN —	SAN	SANITARY OR WASTE PIPING BELOW SLAB
--- VENT ---	V	VENT PIPING
— GW —	GW	GREASE WASTE
— CBL —	CBL	COLD BEVERAGE LINE
— CD —	CD	CONDENSATE DRAIN
— CW —	CW	COLD WATER PIPING
— HW —	HW	HOT WATER PIPING
— HWR —	HWR	HOT WATER RETURN PIPING
— FW —	FW	COLD WATER FILTERED
— CWN —	CWN	COLD WATER NANO FILTERED
— CWS —	CWS	COLD WATER SOFTENED
— TW —	TW	TEMPERED WATER
— RO —	RO	REVERSE OSMOSIS WATER
— GAS —	GAS	GAS PIPING
— RD —	RD	REFRIGERANT DISCHARGE PIPING
— RS —	RS	REFRIGERANT SUCTION PIPING
	BV	BALL VALVE
	GV	GATE VALVE
	CH.V	CHECK VALVE
	RV	RELIEF VALVE
	HB	HOSE BIBB
		SHOCK ABSORBER
		STRAINER
	WCO	WALL CLEANOUT
	FCO	FLOOR CLEANOUT
	FD	FLOOR DRAIN
	FS	FLOOR SINK
	BFP	BACKFLOW PREVENTER
	WM	WATER METER
	POC	CONNECT TO EXISTING

## PIPING

### SOIL, WASTE, AND VENT PIPING

**CAST IRON**  
NO-HUB CAST IRON PIPE AND FITTINGS MAY BE USED ABOVEGROUND FOR WASTE AND VENT PIPING. HUB AND SPOGOT CAST IRON PIPE MAY BE USED UNDERGROUND FOR WASTE AND VENT PIPING. NO-HUB CAST IRON WASTE, AND VENT PIPING AND FITTINGS 1-1/2" AND LARGER SHALL CONFORM TO ASTM A-888. HUB AND SPOGOT CAST IRON WASTE AND VENT PIPING AND FITTINGS 2" DIAMETER AND LARGER SHALL CONFORM TO ASTM A74 AND ASTM C684 GASKETED JOINTS.

**ABS**  
ABS PIPE AND FITTINGS MAY BE USED FOR ABOVEGROUND AND UNDERGROUND WASTE AND VENT PIPING. SOLID WALL ABS PIPING SHALL CONFORM TO NSF 14 AND ASTM D 2861, SCHEDULE 40. FITTINGS SHALL CONFORM TO NSF 14, ASTM D2861, AND ASTM D3311.

**PVC**  
PVC PIPE AND FITTINGS MAY BE USED FOR ABOVEGROUND AND UNDERGROUND WASTE AND VENT PIPING. SOLID WALL PVC PIPING SHALL CONFORM WITH NSF 14 AND ASTM D2685, SCHEDULE 40. FITTINGS SHALL CONFORM WITH NSF 14, ASTM D2865, AND ASTM D3311.

**COPPER**  
WASTE AND VENT PIPING SMALLER THAN 1-1/2" SHALL BE TYPE "M" COPPER AND CONFORM TO ASTM B306. SOLDER FILLER METALS: ASTM B32, LEAD FREE ALLOYS.

PIPING ALIGNMENT SHALL BE AS INDICATED ON THE DRAWINGS USING APPROVED WYE BRANCHES OR EIGHT-BENDS FOR DIRECTION CHANGES AND SHALL BE SURELY SUPPORTED OR SECURED TO MAINTAIN SUCH ALIGNMENT. INDIRECT WASTE PIPING FROM FIXTURES CAPABLE OF DISCHARGING WASTE 120°F AND GREATER SHALL BE TYPE M COPPER.

### DOMESTIC WATER PIPING

**DOMESTIC WATER PIPING ABOVE GROUND:**  
HARD COPPER TUBE, ASTM B88, TYPE L; WROUGHT-COPPER, SOLDER-JOINT FITTINGS; AND SOLDERED JOINTS. SOLDER FILLER METALS: ASTM B32, LEAD-FREE ALLOYS. FLUX: ASTM B813, WATER FLUSHABLE. CPVC SCHEDULE 80 NSF SE8459, ASTM D1784 IS APPROVED FOR INTERIOR WATER PIPING. TYPE "L"; COPPER PRESSURE-SEAL JOINT; AND PRESSURE-SEAL JOINT SYSTEMS.

**DOMESTIC WATER PIPING BELOW GROUND:**  
HARD COPPER TUBE, ASTM B88, TYPE K; WROUGHT-COPPER, SOLDER-JOINT FITTINGS; AND SOLDERED JOINTS. SOLDER FILLER METALS: ASTM B32, LEAD-FREE ALLOYS. FLUX: ASTM B813, WATER FLUSHABLE. PROVIDE INSULATION ON COPPER TUBING BELOW GRADE. REFERENCE SECTION 22 07 19, CPVC SCHEDULE 80 NSF SE8459, ASTM D1784 IS APPROVED FOR UNDERGROUND WATER PIPING.

**CATHODIC PROTECTION**  
PROVIDE DIELECTRIC INSULATION AT POINTS WHERE COPPER OR BRASS PIPE COMES IN CONTACT WITH FERROUS PIPING, REINFORCING STEEL OR OTHER DISSIMILAR METAL IN STRUCTURE.

### CONDENSATE DRAINAGE PIPING

**ABS**  
ABS PIPE AND FITTINGS MAY BE USED FOR ABOVEGROUND AND UNDERGROUND WASTE AND VENT PIPING. SOLID WALL ABS PIPING SHALL CONFORM TO NSF 14 AND ASTM D 2861, SCHEDULE 40. FITTINGS SHALL CONFORM TO NSF 14, ASTM D2861, AND ASTM D3311.

**PVC**  
PVC PIPE AND FITTINGS MAY BE USED FOR ABOVEGROUND AND UNDERGROUND WASTE AND VENT PIPING. SOLID WALL PVC PIPING SHALL CONFORM WITH NSF 14 AND ASTM D2685, SCHEDULE 40. FITTINGS SHALL CONFORM WITH NSF 14, ASTM D2865, AND ASTM D3311.

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WASTE AND VENT PIPING SMALLER THAN 1-1/2" SHALL BE TYPE "M" COPPER AND CONFORM TO ASTM B306. SOLDER FILLER METALS: ASTM B32, LEAD FREE ALLOYS.

PIPING ALIGNMENT SHALL BE AS INDICATED ON THE DRAWINGS USING APPROVED WYE BRANCHES OR EIGHT-BENDS FOR DIRECTION CHANGES AND SHALL BE SURELY SUPPORTED OR SECURED TO MAINTAIN SUCH ALIGNMENT. INDIRECT WASTE PIPING FROM FIXTURES CAPABLE OF DISCHARGING WASTE 120°F AND GREATER SHALL BE TYPE M COPPER.

### HANGERS AND SUPPORTS

THE PLUMBING CONTRACTOR SHALL PROVIDE ALL PIPE SUPPORTS REQUIRED FOR EQUIPMENT AND MATERIAL. ALL HORIZONTAL RUNS OF PIPING SHALL BE SUPPORTED BY PIPE HANGERS INSTALLED AS REQUIRED BY LOCAL CODES. ADDITIONAL SUPPORTS SHALL BE PROVIDED WHERE REQUIRED TO PREVENT SAGGING. HANGERS AND PIPE ATTACHMENTS TO BE FACTORY FABRICATED WITH GALVANIZED COATINGS; NON-METALLIC COATED FOR HANGERS IN DIRECT CONTACT WITH COPPER TUBING.

### CONNECTIONS

INSTALL UNIONS ADJACENT TO EACH VALVE AND AT FINAL CONNECTION TO EACH PIECE OF EQUIPMENT. INSTALL DIELECTRIC COUPLINGS TO CONNECT PIPING MATERIALS OF DISSIMILAR METALS. SCREW JOINT STEEL PIPING UP TO AND INCLUDING 1-1/2" (38MM) FOR GAS PIPING. USE NON-LEAD, NON-ANTIMONY SOLDER FOR SOLDERING DOMESTIC WATER COPPER PIPE.

### CLEANOUTS

PROVIDE FLOOR AND WALL CLEANOUTS AS INDICATED ON THE DRAWINGS OR WHERE REQUIRED BY CODE IN ALL SOIL, WASTE, AND DRAIN LINES. IN AREAS WITH CERAMIC TILE OR CARPETED FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP. IN AREAS WITH RESILIENT (VINYL) FLOORING, PROVIDE CLEANOUTS WITH SQUARE, ADJUSTABLE, NICKEL BRONZE TOP WITH TILE RECESS. CLEANOUTS SHALL BE SAME SIZE AS PIPE EXCEPT THAT CLEANOUTS LARGER THAN 4" WILL NOT BE REQUIRED. WHERE CLEANOUTS OCCUR IN WALLS OF FINISHED AREAS, THEY SHALL BE CONCEALED BEHIND CHROME PLATED ACCESS COVERS.

## PIPING

### PIPING SYSTEMS REQUIRING INSULATION

INSULATE DOMESTIC COLD WATER PIPING, ASSOCIATED FITTINGS AND VALVES WITH FLEXIBLE ELASTOMERIC 1/2" WALL THICKNESS INSULATION. INSULATE DOMESTIC HOT WATER PIPING, ASSOCIATED FITTINGS AND VALVES WITH 1" THICK FLEXIBLE ELASTOMERIC, 1-1/2" THICK FIBERGLASS INSULATION OR PER LOCAL ENERGY CODE, WHICHEVER GREATER. INSULATE DOMESTIC HOT WATER RETURN PIPING, ASSOCIATED FITTINGS AND VALVES WITH 1" WALL THICKNESS INSULATION OR PER LOCAL ENERGY CODE, WHICHEVER GREATER. INSULATE DOMESTIC SUPPLY PIPING UNDERGROUND, BELOW SLAB, AND WITHIN AREAS SUBJECT TO FREEZING WITH MOISTURE RESISTANT CLOSED-CELL, SPONGE- OR EXPANDED-RUBBER MATERIALS. COMPLY WITH ASTM C 534, TYPE I FOR TUBULAR MATERIALS AND TYPE II FOR SHEET MATERIALS. ADHESIVES, SEALERS, AND PROTECTIVE FINISHES: AS RECOMMENDED BY INSULATION MANUFACTURER FOR APPLICATIONS INDICATED. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, AND ARE LIMITED TO, THE FOLLOWING: AEROFLEX USA, INC.; AEROCCEL, ARMACELL LLC; AP ARMAFLEX, K-FLEX USA; INSUL-LOCK, INSUL-TUBE, AND K-FLEX-L.

### FLEXIBLE ELASTOMERIC INSULATION

CLOSED-CELL, SPONGE- OR EXPANDED-RUBBER MATERIALS. COMPLY WITH ASTM C 534, TYPE I FOR TUBULAR MATERIALS AND TYPE II FOR SHEET MATERIALS. ADHESIVES, SEALERS, AND PROTECTIVE FINISHES: AS RECOMMENDED BY INSULATION MANUFACTURER FOR APPLICATIONS INDICATED. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, AND ARE LIMITED TO, THE FOLLOWING: AEROFLEX USA, INC.; AEROCCEL, ARMACELL LLC; AP ARMAFLEX, K-FLEX USA; INSUL-LOCK, INSUL-TUBE, AND K-FLEX-L.

### FIBERGLASS INSULATION

FIBERGLASS PIPING INSULATION: ASTM C 547, CLASS 1 ENCASE PIPE FITTINGS INSULATION WITH ONE-PIECE PRE-MOLDED PVC FITTING COVERS. VAPOR BARRIER MATERIAL: PAPER-BACKED ALUMINUM FOIL, EXCEPT AS OTHERWISE INDICATED. STRENGTH AND PERMEABILITY RATINGS EQUIVALENT TO ADJOINING PIPE INSULATION JACKETING. STAPLES, BANDS, WIRES, AND CEMENT: AS RECOMMENDED BY INSULATION MANUFACTURER FOR APPLICATIONS INDICATED. ADHESIVES, SEALERS, AND PROTECTIVE FINISHES: AS RECOMMENDED BY INSULATION MANUFACTURER FOR APPLICATIONS INDICATED. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, AND ARE LIMITED TO, THE FOLLOWING: ARMSTRONG WORLD INDUSTRIES, INC., OWENS-CORNING FIBERGLASS CORP., KEENE CORP., CERTAINTEED, JOHNS MANVILLE.

### ADHESIVES

MATERIALS SHALL BE COMPATIBLE WITH INSULATION MATERIALS, JACKETS, AND SUBSTRATES AND FOR BONDING INSULATION TO ITSELF AND TO SURFACES TO BE INSULATED, UNLESS OTHERWISE INDICATED. INSULATION FOR HANDICAP ACCESSIBLE FIXTURES ALL HANDICAP LAVATORY P-TRAP AND ANGLE STOP ASSEMBLIES SHALL BE INSULATED WITH TRAP WRAP PROTECTIVE KIT MANUFACTURED BY PROFLO MODEL PF202WH OR EQUIVALENT. ABRASION RESISTANT, ANTI-MICROBIAL VINYL EXTERIOR COVER SHALL BE SMOOTH. FOR TRAPS, THE INSULATION SHALL HAVE A CLEANOUT NUT CAP TO ALLOW SERVICE TO THE TRAP WITHOUT DISASSEMBLY. FOR STOPS, THE INSULATION SHALL HAVE A LOCK LID THAT PREVENTS TAMPERING BUT ALLOWS ACCESS WITHOUT REMOVAL OF THE INSULATION. FASTENERS SHALL REMAIN SUBSTANTIALLY OUT OF SIGHT. MANUFACTURERS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS: PROFLO, TRUEBRO, PLUMBEREX.

### GENERAL

INSULATION SHALL BE LISTED AND LABELED PER ASTM E 84 FOR PLENUM INSTALLATIONS EMPLOYING SLIP ON TECHNIQUES.

### TESTING

ALL PIPES SHALL BE TESTED BY AN APPROVED METHOD BEFORE THEY ARE BACKFILLED OR CONCEALED. AFTER TESTING IS COMPLETE, THE PLUMBING CONTRACTOR SHALL DISINFECT THE POTABLE WATER SYSTEM AS REQUIRED BY LOCAL AUTHORITY. TEST WATER PURITY ACCORDING TO LOCAL REQUIREMENTS AND SUBMIT CERTIFIED TEST RESULTS TO ENGINEER FOR REVIEW AND APPROVAL.

### IDENTIFICATION

PROVIDE PIPE IDENTIFICATION EVERY 10 FEET (EXCEPT WHERE PIPES ARE EXPOSED TO PUBLIC) IN ACCORDANCE WITH SPECIFICATIONS.

## GENERAL PLUMBING NOTES

- EXPOSED/SURFACE MOUNTED PIPING IS ONLY ALLOWED IN THE BAR AREA UNDER COUNTERTOPS, WHERE IT DOES NOT OBSTRUCT CABINETS/DEVICES, AND WHERE APPROVED BY STARBUCKS CONSTRUCTION MANAGER. IF ROUTED THROUGH CABINETS, IT SHALL BE ROUTED TO MAXIMIZE STORAGE SPACE AND BE PROTECTED FROM DAMAGE.
- CONTRACTOR TO VERIFY ALL DIMENSIONS, INCLUDING CLEARANCES REQUIRED BY OTHER TRADES, AND NOTIFY STARBUCKS CONSTRUCTION MANAGER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK. ALL DIMENSIONS ARE TO THE FACE OF THE FINISHED SURFACE UNLESS NOTED OTHERWISE. ALL DIMENSIONS TO BE TAKEN FROM ACTUAL BUILDING DIMENSIONS.
- THE PLUMBING CONTRACTOR SHALL COORDINATE PLUMBING WORK WITH OTHER TRADES. THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR FIXTURES IN CASEWORK AND PLUMBING DETAILS.

## GENERAL NOTES

### SITE EXAMINATION

THE CONTRACTOR SHALL THOROUGHLY EXAMINE ALL AREAS WHERE FIXTURES, EQUIPMENT, AND PIPING WILL BE INSTALLED AND WILL REPORT ANY CONDITION THAT, IN HIS OPINION, PREVENTS THE PROPER INSTALLATION OF THE PLUMBING WORK.

### STANDARDS

EQUIPMENT AND MATERIALS SHALL CONFORM WITH THE APPROPRIATE PROVISIONS OF CSA, UL, ASME, ASTM, UL, NEMA, ANSI, ASHRAE, NFPA, AS APPLICABLE TO EACH INDIVIDUAL UNIT OR ASSEMBLY.

### CODES

ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL APPLICABLE PROVINCIAL AND LOCAL CODES AND ORDINANCES. IN CASE OF CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS AND THE CODES AND ORDINANCES, THE HIGHEST STANDARD SHALL APPLY. CONTRACTOR SHALL SATISFY CODE REQUIREMENTS AS A MINIMUM STANDARD WITHOUT ANY EXTRA COST TO STARBUCKS.

### PERMITS AND FEES

THE CONTRACTOR SHALL PROCURE AND PAY FOR ALL PERMITS, FEES, AND INSPECTIONS NECESSARY TO COMPLETE THE PLUMBING WORK.

### WARRANTY

THE CONTRACTOR SHALL UNCONDITIONALLY WARRANT ALL WORK TO BE FREE OF DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE BY STARBUCKS AND WILL REPAIR OR REPLACE ANY DEFECTIVE WORK PROMPTLY AND WITHOUT CHARGE AND RESTORE ANY OTHER EXISTING WORK DAMAGED IN THE COURSE OF REPAIRING DEFECTIVE MATERIALS AND WORKMANSHIP.

### LEED

ALL WORK, MATERIALS AND EQUIPMENT SHALL MEET LEED REQUIREMENTS & CODE. IN CASE OF CONFLICT, THE HIGHER STANDARD SHALL APPLY.

### REVIEWED FOR CODE COMPLIANCE

Wayne Thome - PX3005 12-18-23  
 PERMIT ISSUED SHALL BE CONSTRUED TO BE A LICENSE TO PROCEED WITH THE WORK AND NOT AS AUTHORITY TO VIOLATE, CANCEL, ALTER OR SET ASIDE ANY OF THE PROVISIONS OF THE TECHNICAL CODES, NOR SHALL ISSUANCE OF A PERMIT PREVENT THE BUILDING OFFICIAL FROM THEREAFTER REQUIRING A CORRECTION OF ERRORS IN PLANS, CONSTRUCTION OR VIOLATIONS OF THIS CODE.



SITE COPY

BC23-000692

## PLUMBING FIXTURES

### WATER FILTRATION

STARBUCKS WATER FILTRATION VENDOR WILL FURNISH FILTRATION SYSTEM. GENERAL CONTRACTOR SHALL CONFIRM WITH STARBUCKS CONSTRUCTION MANAGER WHETHER VENDOR OR PLUMBING CONTRACTOR SHALL INSTALL FILTRATION SYSTEM.

### CONNECTIONS

THE PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT INCLUDING REQUIRED MATERIAL SUCH AS PIPING, VALVES, FILTERS, TRAPS, CHECKS VALVES, VACUUM BREAKERS, AND FLEXIBLE AND RIGID TUBING.

PROVIDE AND COORDINATE LINE VOLTAGE WIRING, LINE VOLTAGE CONTROL AND INTERLOCK WIRING FOR MECHANICAL SYSTEMS, AND LOW VOLTAGE CONTROL WIRING. FURNISH WIRING DIAGRAMS TO THE ELECTRICAL CONTRACTOR AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION. COORDINATE ACTUAL WIRE SIZING AMPS FOR PLUMBING EQUIPMENT (FROM THE EQUIPMENT NAMEPLATE) WITH THE ELECTRICAL CONTRACTOR TO ENSURE PROPER INSTALLATION.

## CARBONATION

STARBUCKS CARBONATION VENDOR WILL FURNISH EQUIPMENT, CO, TANKS, AND FITTINGS. STARBUCKS SHALL PROVIDE AND CONTRACTOR SHALL INSTALL CO<sub>2</sub> TANK MOUNTING BRACKET, PROTECTIVE SHELVING UNITS, AND CO<sub>2</sub> GAS TUBING AS SHOWN ON DRAWINGS AND PER MANUFACTURER'S INSTRUCTIONS. MAXIMUM TUBING LENGTH INCLUDING COILED ENDS IS 100 FEET AND MAXIMUM BEND IS 3 INCH RADIUS. ROUTE CO<sub>2</sub> TUBING PREFERABLY THROUGH WALL AND/OR CEILING CAVITIES, WITHOUT KINKS AND SO AS TO NOT TOUCH ANY HOT SURFACE (BALLAST, STEAM PIPE, ETC.) OR RUB AGAINST A SHARP EDGE THAT MAY ABRASE OR CUT TUBING. ALL HOLES MUST BE SEALED WITH A GROMMET OR ESCUTCHEON. TUBING IS TO BE SECURED TO APPROPRIATE PERMANENT SURFACES TO KEEP IT OFF THE FLOOR OR CABINET BOTTOMS AND AWAY FROM OTHER EQUIPMENT. LABEL BOTH ENDS OF TUBING AND AT 10 FOOT INTERVALS ALONG ROUTE AS "CO<sub>2</sub>".

## LANDLORD REQUIREMENTS

### PRIOR TO BID

THE CONTRACTOR SHALL COORDINATE WITH LANDLORD / BUILDING OWNER FOR ANY CONSTRUCTION REQUIREMENTS. IF LANDLORD / BUILDING OWNER DOES HAVE REQUIREMENTS, CONTRACTOR SHALL BECOME COMPLETELY FAMILIAR WITH REQUIREMENTS AND ADHERE TO THEM. WHERE LANDLORD / BUILDING OWNER REQUIREMENTS ARE MORE STRINGENT THAN SHOWN IN THESE PLANS (IN THE OPINION OF THE ENGINEER), LANDLORD / BUILDING OWNER REQUIREMENTS SHALL GOVERN.

## PLUMBING SCOPE OF WORK SUMMARY

THE FOLLOWING SCOPE OF WORK IS BASED ON THE LANDLORD'S WORKLETTER EXHIBIT C. THIS SCOPE OF WORK IS NOT INTENDED TO INDICATE THE FULL SCOPE, BUT ONLY A BROAD SUMMARY. THE GENERAL CONTRACTOR SHALL REFERENCE THE COMPLETE WORKLETTER FOR A MORE DETAILED DESCRIPTION OF WORK BY BOTH PARTIES. ANY QUESTIONS REGARDING SCOPE SHALL BE BROUGHT TO STARBUCKS ATTENTION FOR CLARIFICATION. RESPONSIBILITY INDICATED BELOW MEANS FURNISHED, PERMITTED AND INSTALLED BY THE PARTY INDICATED.

WORK DESCRIPTION	RESPONSIBILITY	
	LANDLORD	STARBUCKS
WATER SERVICE AND METER	X	
BOOSTER PUMP FOR WATER SERVICE		N/A
BELOW FLOOR / SLAB WASTE, VENT AND WATER PIPES	X	X
ABOVE FLOOR / SLAB WASTE, VENT AND WATER PIPES	X	X
PLUMBING VENT(S) THROUGH ROOF	X	
EXTERIOR HOSE BIBB(S)	X	
BASE COVERAGE SPRINKLER SYSTEM	N/A	
SPRINKLER SYSTEM MODIFICATIONS FOR TENANT BUILDOUT		N/A
INTERIOR GREASE INTERCEPTOR		N/A
EXTERIOR GREASE INTERCEPTOR	X	



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Timothy D. Raebolding, PE  
 Professional Engineer

12/12/2023



PROJECT NAME:  
**US 17-92 & LAKE MARY BLVD**

PROJECT ADDRESS:  
**3764 ORLANDO DRIVE  
 SANFORD, FL 23773**

STORE #:	81065
PROJECT #:	98504-001
ISSUE DATE:	08-03-2023
DESIGN MANAGER:	PAULINA LOPEZ
PRODUCTION DESIGNER:	ANDY M.CLOUD
CHECKED BY:	DONALD RETHMAN

Revision Schedule		
Rev	Date	Description

SHEET TITLE:  
**PLUMBING NOTES**

SCALE: AS INDICATED

SHEET NUMBER:  
**P-001**

FOR CONSTRUCTION

REVIEWED FOR CODE COMPLIANCE  
 Wayne Thorne - PX3005 12-18-23  
 A PERMIT ISSUED SHALL BE CONSTRUED TO BE A  
 LICENSE TO PROCEED WITH THE WORK AND NOT AS  
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12/12/2023



FOR CONSTRUCTION

PROJECT NAME:  
**US 17-92 & LAKE MARY BLVD**

PROJECT ADDRESS:  
**3764 ORLANDO DRIVE  
 SANFORD, FL 23773**

STORE #: 81065  
 PROJECT #: 98504-001  
 ISSUE DATE: 08-03-2023  
 DESIGN MANAGER: PAULINA LOPEZ  
 PRODUCTION DESIGNER: ANDY M'CLOUD  
 CHECKED BY: DONALD RETHMAN

Revision Schedule		
Rev	Date	Description

SHEET TITLE:  
**PLUMBING SUPPLY PLAN**

SCALE: AS INDICATED

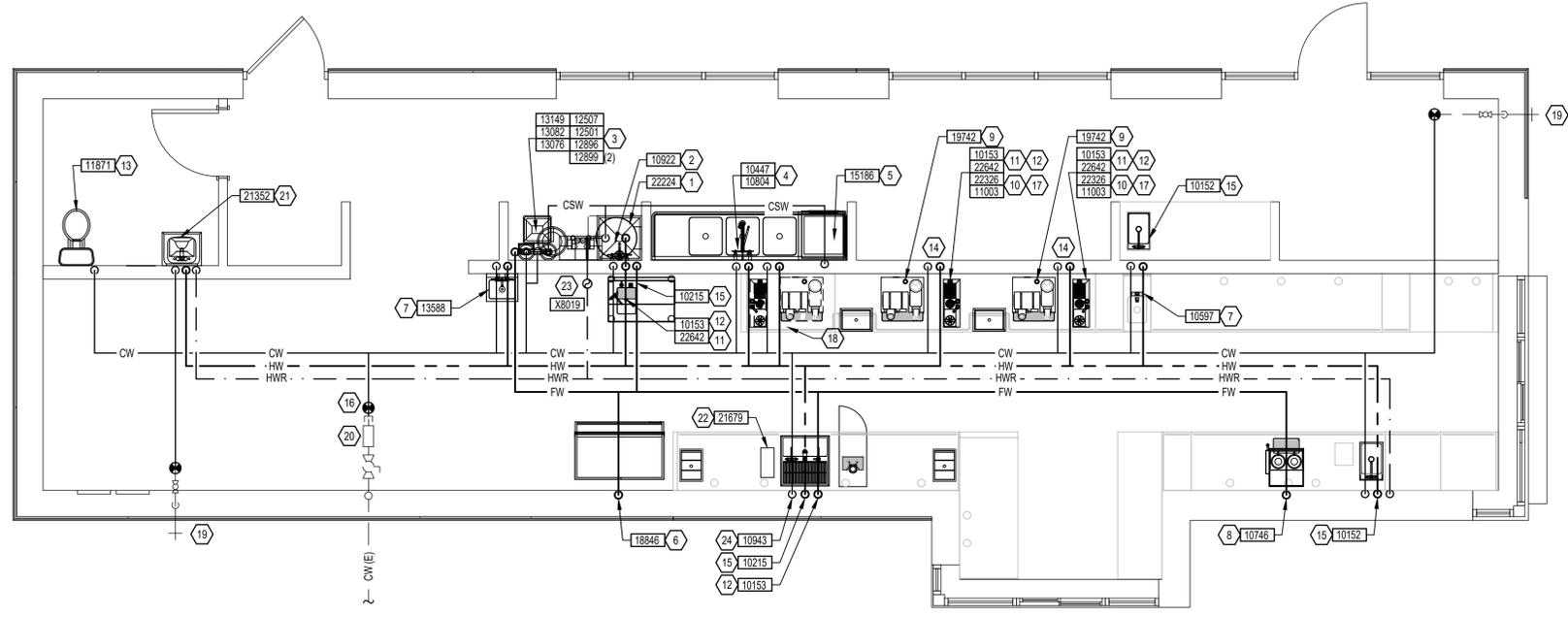
SHEET NUMBER:  
**P-111**

**GENERAL NOTES:**

- FURNISH AND INSTALL A COMPLETE AND OPERATING SYSTEM. ALL ITEMS ARE NOT NECESSARILY SHOWN.
- PLUMBING CONTRACTOR RESPONSIBLE FOR SITE INVESTIGATION PRIOR TO START OF WORK TO REVEAL FULL SCOPE OF WORK.
- COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTION TO ALL PLUMBING EQUIPMENT.
- SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- REFER TO DETAIL SHEETS FOR PLUMBING FITTINGS LOCATED IN CASEWORK.
- COLD WATER SUPPLY LINES INSIDE CASEWORK AND BAR AREA TO BE COVERED WITH 1/2" THICK SELF SEALING, SECTIONAL CLOSED-CELL FOAM INSULATION. REFER TO SHEET P002 FOR HOT WATER SUPPLY LINE INSULATION REQUIREMENTS.
- CONTRACTOR SHALL CONTACT WATER FILTER SUPPLIER 10 DAYS (MINIMUM) BEFORE THE TIME THAT THE FILTER SYSTEM IS TO BE STARTED UP.

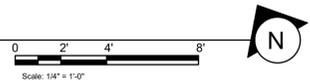
**KEYED NOTES:**

- PIPE 3/4" COLD SOFTENED WATER TO WATER HEATER. PIPE 2" HOT WATER FROM WATER HEATER. WATER HEATER AS SPECIFIED ON SHEET P601. REFER TO WATER HEATER DETAIL ON SHEET P501.
- 1/2" HOT WATER AND 1/2" COLD WATER TO FAUCET WITH INTEGRAL ASSE 1001 ATMOSPHERIC VACUUM BREAKER AT MOP SINK. CAULK AND SEAL BACK OF SINK TO WALL.
- (3) 3/4" CITY COLD WATER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT TO FILTRATION EQUIPMENT WITH 3/4" FILTERED WATER AND 3/4" COLD SOFTENED WATER OUT. PLUMBING CONTRACTOR TO FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ACTIVATION PROCEDURES FOR BOTH SYSTEMS. REFER TO FILTER CONNECTION DETAIL ON SHEET P501.
- 1/2" HOT WATER AND 1/2" COLD WATER TO FAUCET AND SPRAY AT THREE COMPARTMENT SINK. CAULK AND SEAL BACK OF SINK TO WALL.
- 1/2" COLD SOFTENED WATER WITH INTEGRAL ASSE 1001 ATMOSPHERIC VACUUM BREAKER TO DISHWASHER. INSTALL SHUT-OFF WITH 3/4" MALE HOSE-END FITTING @ 18" AFF UNDER COMPARTMENT SINK. SHUT-OFF TO INCLUDE PRESSURE REDUCING VALVE, PRESSURE GAUGE (SET @ 20 PSIG, \* OR - 5 PSIG), LINE STRAINER, AND SHOCK ARRESTOR IN WALL. CONNECT SANITIZER TO CSW SUPPLY WITH 72" LONG BRAIDED STAINLESS STEEL HOSE.
- 1/2" FILTERED WATER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT TO ICE MACHINE. REDUCE TO 3/8" AT MACHINE.
- 1/2" HOT WATER AND 1/2" COLD WATER TO ASSE 1070 THERMOSTATIC MIXING VALVE. 3/8" TEMPERED WATER FROM THERMOSTATIC MIXING VALVE TO FAUCET AT HAND SINK. SET THERMOSTATIC MIXING VALVE TO DELIVER 100°F TEMPERED WATER.
- 1/2" FILTERED WATER TO COFFEE/TEA BREWER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT. INSTALL SHUT-OFF IN CABINET @ 24" AFF REDUCE TO 3/8" AT UNIT.
- 1/2" FILTERED WATER TO ESPRESSO MACHINE PUMP. CONNECT 3/8" COMPRESSION BRAIDED STAINLESS STEEL HOSE FROM SHUT-OFF TO ESPRESSO MACHINE WATER INLET. SEE DETAIL PROVIDED ON SHEET P501.
- 1/2" COLD WATER TO DIPPERWELL FAUCET. REDUCE TO 1/4" AT UNIT.
- 1/2" FILTERED WATER TO INSTAHOT TAP. REDUCE TO 1/4" AT UNIT.
- 1/2" FILTERED WATER TO WATER TOWER FAUCET LOCATED IN WATER STATION.
- 1/2" COLD WATER TO TOILET. PROVIDE WATER HAMMER ARRESTOR IN SUPPLY LINE. SEE DETAILS ON SHEET P501.
- 3/4" FILTERED WATER AND 3/4" COLD WATER DOWN IN WALL TO BELOW COUNTER TOP LEVEL. REFER TO NOTES 9, 10, 11, 12, AND 17. VERIFY ROUTING IN FIELD WITH GC PRIOR TO INSTALLATION.
- 1/2" HOT WATER WITH ASSE 1012 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT AND 1/2" COLD WATER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT TO SINK.
- CONNECT TO EXISTING 1-1/2" DOMESTIC WATER SERVICE TO LEASE SPACE. VERIFY EXACT SIZE, LOCATION, PRESSURE AND REQUIREMENTS ON SITE.
- 1/2" COLD WATER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT TO PITCHER RINSER.
- COLD AND FILTER WATER TO BE STUBBED AND BELOW COUNTER TOP LEVEL FOR FUTURE CONNECTION OF PLUMBING EQUIPMENT. REFER TO NOTES 9, 10, 11, 12, 14, AND 17.
- 3/4" COLD WATER TO EXISTING HOSE BIB TO REMAIN.
- EXISTING BOOSTER PUMP BY LANDLORD IF REQUIRED. FIELD VERIFY LOCATION AND ALL REQUIREMENTS IF REQUIRED AND INSTALLED.
- 1/2" HOT WATER AND 1/2" COLD WATER TO ASSE 1070 THERMOSTATIC MIXING VALVE. REDUCE HOT WATER AND COLD WATER LINES TO 3/8" AT THERMOSTATIC MIXING VALVE. 3/8" TEMPERED WATER FROM THERMOSTATIC MIXING VALVE TO METERED FAUCET AT LAVATORY. SET THERMOSTATIC MIXING VALVE TO DELIVER 100°F TEMPERED WATER.
- 1/2" NITROGEN GAS LINE FROM NITROGEN GENERATOR TO NITRO WORKSTATION. FINAL CONNECTION BY STARBUCKS VENDOR.
- 3/4" HOT WATER RETURN TO HOT WATER RECIRC PUMP. SEE DETAIL SHEET P501.
- 1/2" COLD WATER WITH ASSE 1022 DOUBLE CHECK VALVE WITH ATMOSPHERIC VENT TO FAUCET AT SINK.



**DOMESTIC WATER PLAN**

SCALE: 1/4" = 1'-0"



REVIEWED FOR CODE COMPLIANCE  
 Wayne Thorne - PX3005 12-18-23  
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 ASIDE ANY OF THE PROVISIONS OF THE TECHNICAL  
 CODES, NOR SHALL ISSUANCE OF A PERMIT PREVENT  
 THE BUILDING OFFICIAL FROM THEREAFTER  
 REQUIRING A CORRECTION OF ERRORS IN PLANS,  
 CONSTRUCTION OR VIOLATIONS OF THIS CODE.



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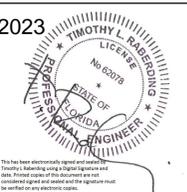
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12/12/2023



FOR CONSTRUCTION

PROJECT NAME:  
**US 17-92 & LAKE MARY BLVD**

PROJECT ADDRESS:  
**3764 ORLANDO DRIVE  
 SANFORD, FL 23773**

STORE #: 81065  
 PROJECT #: 98504-001  
 ISSUE DATE: 08-03-2023  
 DESIGN MANAGER: PAULINA LOPEZ  
 PRODUCTION DESIGNER: ANDY MCLOUD  
 CHECKED BY: DONALD RETHMAN

Revision Schedule		
Rev	Date	Description
1	9/15/2023	Revision 1
2	11/3/2023	Revision 2

SHEET TITLE:  
**PLUMBING WASTE PLAN**

SCALE: AS INDICATED

SHEET NUMBER:  
**P-112**

**GENERAL NOTES:**

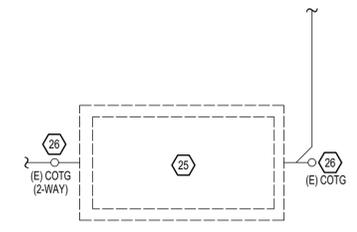
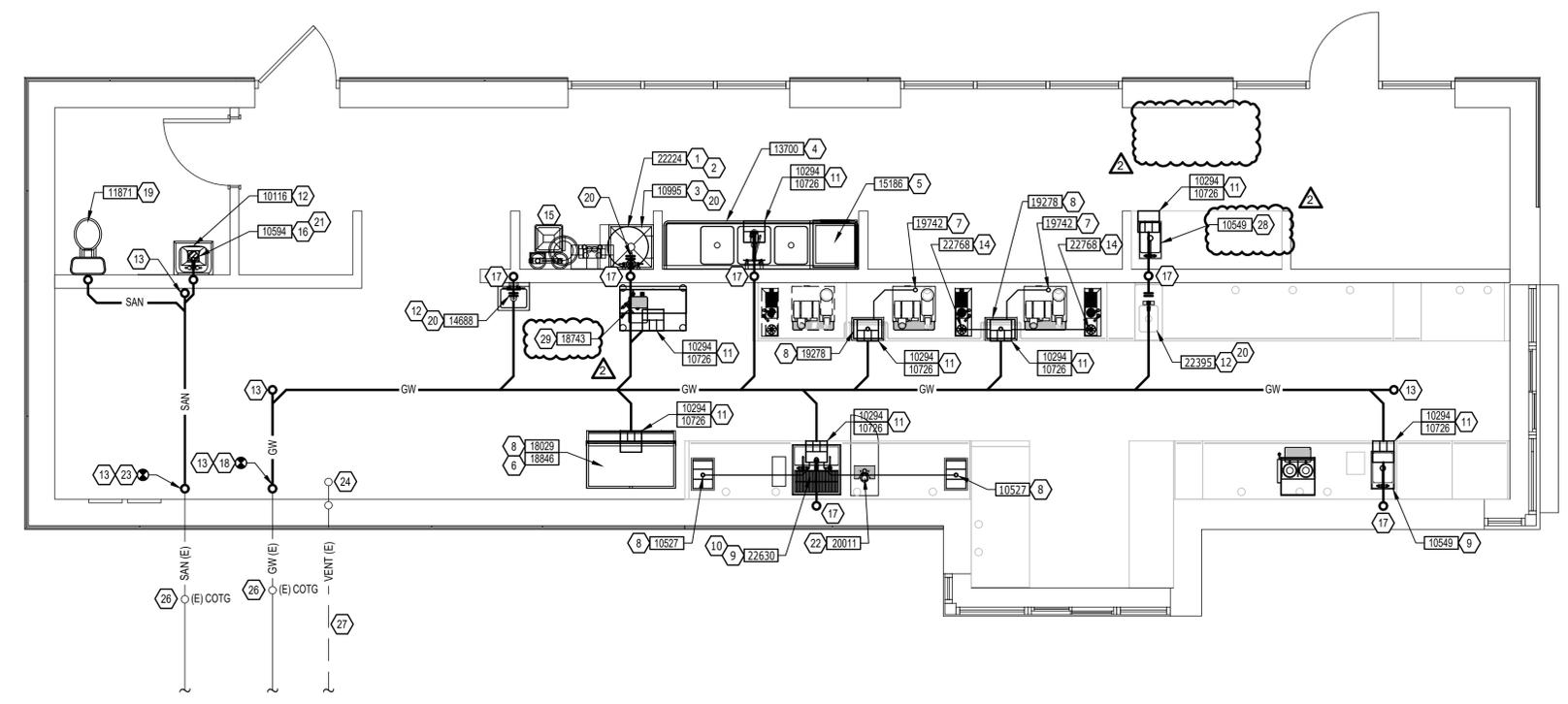
- A. FURNISH AND INSTALL A COMPLETE AND OPERATING SYSTEM. ALL ITEMS ARE NOT NECESSARILY SHOWN.
- B. FOR FULL SCHEDULES AND COMPLETE LISTING SEE ARCHITECTURAL SCHEDULES. CONFIRM ALL QUANTITIES WITH PLAN.
- C. PLUMBING CONTRACTOR RESPONSIBLE FOR SITE INVESTIGATION PRIOR TO START OF WORK TO REVEAL FULL SCOPE OF WORK.
- D. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTOR FOR POWER CONNECTION TO ALL PLUMBING EQUIPMENT.
- E. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
- F. ALL INDIRECT DRAIN LINES SHALL BE ROUTED WITHOUT DIPS OR SAGS TO TERMINATE WITH AN AIR GAP INTO AN APPROVED INDIRECT WASTE RECEPTOR.
- G. REFER TO DETAILS FOR FURTHER REQUIREMENTS.
- H. LOCATIONS OF EXISTING PIPING AND FIXTURES ARE APPROXIMATE. VERIFY LOCATION IN FIELD.

**KEY NOTES:**

1. 3/4" PRESSURE RELIEF FROM WATER HEATER TO MOP SINK.
2. 1" INDIRECT DRAIN FROM WATER HEATER DRIP PAN TO MOP SINK.
3. 3" WASTE FROM MOP SINK.
4. 2" INDIRECT DRAIN FROM EACH THREE COMPARTMENT SINK BASIN TO FLOOR SINK. PROVIDE RHINO WET WASTE INTERCEPTOR OR EQUIVALENT, IF REQUIRED.
5. 1-1/4" INDIRECT DRAIN FROM DISHWASHER TO FUNNEL OVER FLOOR SINK IF PERMITTED.
6. 3/4" I.D. F.P.T. FROM DRAIN ON ICE MACHINE TO INDIRECT DRAIN AT FLOOR SINK.
7. 5/8" DRAIN HOSE TO INDIRECT DRAIN RISER. SEE DETAIL ON SHEET P501.
8. 1" INDIRECT INSULATED DRAIN LINE FROM ICE BIN DROP TO FLOOR SINK.
9. 1-1/2" INDIRECT DRAIN FROM SINK TO FLOOR SINK. PROVIDE RHINO WET WASTE INTERCEPTOR OR EQUIVALENT ON INDIRECT WASTE PIPE.
10. 3/4" INDIRECT DRAIN FROM WATER STATION DRAIN BOARD TO FLOOR SINK.
11. 3" WASTE FROM FLOOR SINK.
12. 2" WASTE FROM SINK.
13. FLOOR CLEAN OUT MATCH TO DRAIN LINE SIZE.
14. 1-1/2" INDIRECT DRAIN FROM PITCHER RINSER TO FLOOR SINK. PROVIDE RHINO WET WASTE INTERCEPTOR OR EQUIVALENT ON INDIRECT WASTE PIPE.
15. 3/4" INDIRECT DRAIN FROM WATER EQUIPMENT TO MOP SINK.
16. 3" WASTE FROM FLOOR DRAIN.
17. 2" VENT PIPE.
18. CONNECT TO EXISTING GREASE WASTE BUILDING DRAIN.
19. 3" WASTE FROM WATER CLOSET.
20. WALL CLEAN OUT TO MATCH DRAIN SIZE.
21. PROVIDE ASSE 1072 TRAP GUARD IN FLOOR DRAIN P-TRAP.
22. 1/2" INDIRECT DRAIN FROM NITRO STATION TO FLOOR SINK.
23. CONNECT TO EXISTING SANITARY BUILDING DRAIN
24. EXISTING 4" VENT THROUGH ROOF.
25. EXISTING 1250 GALLON GREASE INTERCEPTOR BY LANDLORD UNDER A SEPARATE PERMIT.
26. EXISTING CLEAN OUT AT GRADE TO REMAIN WITHOUT MODIFICATION.
27. EXISTING 2" VENT FROM GREASE INTERCEPTOR BY LANDLORD UNDER A SEPARATE PERMIT. FIELD VERIFY ROUTING AND ALL REQUIREMENTS.
28. 1-1/2" INDIRECT DRAIN FROM SINK TO FLOOR SINK. SINK IS LOCATED WITHIN EMPLOYEE BREAK ROOM AND NOT USED FOR BEVERAGE PRODUCTION.
29. 1-1/2" INDIRECT DRAIN FROM SINK TO FLOOR SINK.

**GREASE INTERCEPTOR CALCULATION:**

1. CALCULATION BASED UPON FAC 64E-6013 (7) (d) 1.
2. (MEALS) X (GALLONS OF WASTE PER MEAL) X (LOADING FACTOR) = EFFECTIVE CAPACITY OF GREASE INTERCEPTOR.
3. MEALS = 240.
4. GALLONS OF WASTE PER MEAL = 5.
5. LOADING FACTOR = 1.00 (FOR DISHWASHING).
6. (240) X (5) X (1.00) = 1200 GALLONS.



**PLUMBING WASTE PLAN**

SCALE = 1/4" = 1' - 0"



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 Wayne Thorne - PX3005 12-18-23  
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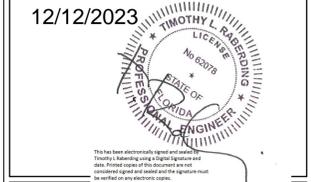


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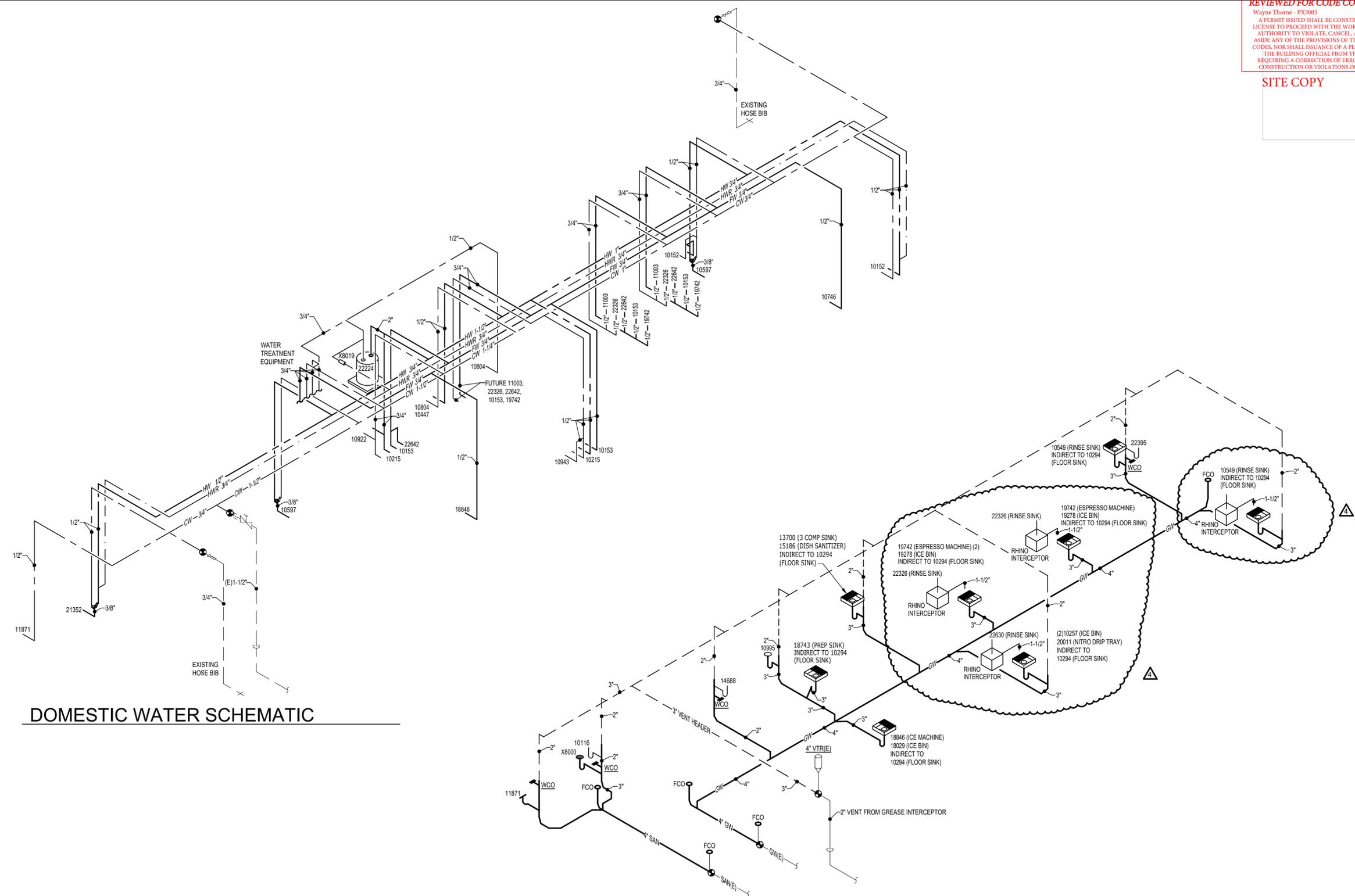
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4	12/11/2023	Revision 4

SHEET TITLE:  
**PLUMBING ISOMETRICS**

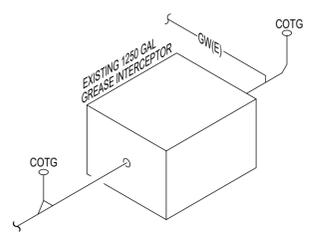
SCALE: AS INDICATED

SHEET NUMBER:  
**P-113**



**DOMESTIC WATER SCHEMATIC**

**WASTE SCHEMATIC**



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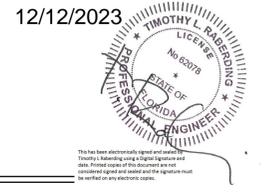


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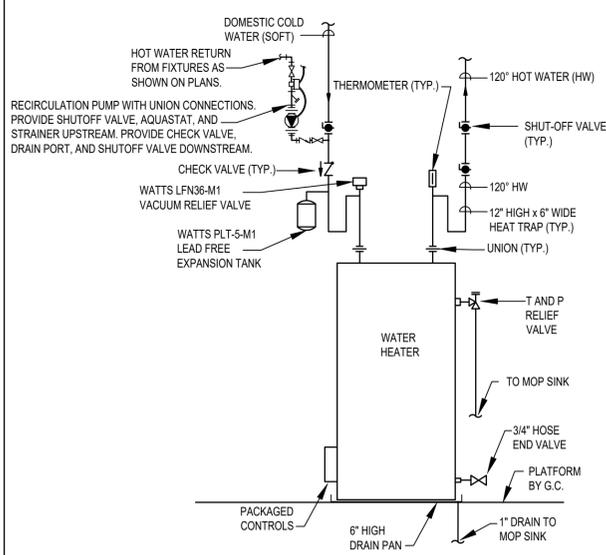
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Revision Schedule		
Rev	Date	Description

SHEET TITLE:  
**PLUMBING DETAILS**

SCALE: AS INDICATED

SHEET NUMBER:  
**P-501**

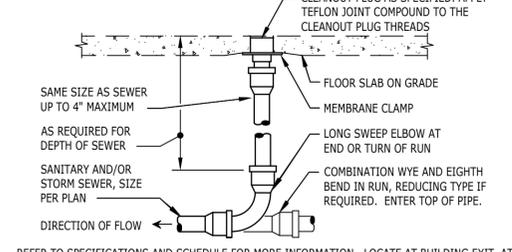


**1 ELECTRIC WATER HEATER**  
 N.T.S.

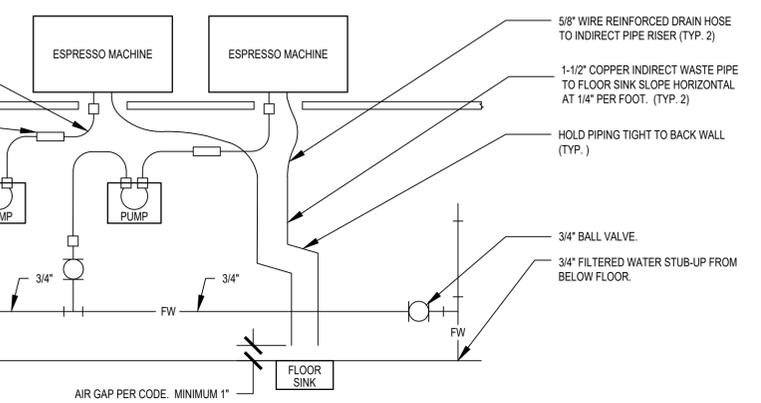
**HOT WATER RECIRCULATION NOTES:**

- RECIRCULATION PUMP:** BELL & GOSSETT #NBF-35 WET ROTOR TYPE IN-LINE 3-SPEED PUMP WITH 3300RPM MOTOR, LEAD FREE BRONZE BODY WITH FULL UNION CONNECTIONS, CAPACITY OF 15 GPM AT 15 FEET OF HEAD. PROVIDE WITH BELL & GOSSETT AQS-3/4 SURFACE MOUNTED AQUASTAT WITH SINGLE POLE DOUBLE THROW SWITCH FOR RECIRCULATION CONTROL. SET AQUASTAT TO SHUT "OFF" (OPEN) RECIRCULATION PUMP AT WATER HEATER SET POINT AND "ON" (CLOSED) AT 10°F BELOW SET POINT. ELECTRICAL REQUIREMENTS: 120 VOLT, 2.25 FULL LOAD AMPS.
- TIME SWITCH:** BELL & GOSSETT TC-1, 7 DAY, ONE CIRCUIT, SINGLE POLE SINGLE THROW, ELECTRONIC TIME SWITCH OR EQUAL. TIME SWITCH SHALL BE MOTOR RATED (1 HP @ 120 VOLT, SINGLE PHASE), MINIMUM OF 20 SET POINTS (14 ON/OFF CYCLES) AND BATTERY BACK-UP. COORDINATE WITH GC FOR INSTALLATION AND INTERLOCK OF TIME SWITCH IN SERIES WITH AQUASTAT AND RECIRCULATION PUMP. SET TIME SWITCH "ON" TO ONE HOUR BEFORE STORE OPENING AND "OFF" TO ONE HOUR AFTER STORE CLOSING. VERIFY STORE OPERATING HOURS WITH STARBUCKS CM.

PROVIDE CLEANOUT WITH ADJUSTABLE CLEANOUT TOP WITH VARIATIONS SUITABLE FOR FLOOR COVERING (CARPET MARKER, RECESSED FOR TILE, SCORiated FOR UNFINISHED FLOORS). CLEAN THE TOP OF EXPOSED FCO AFTER INSTALLATION.

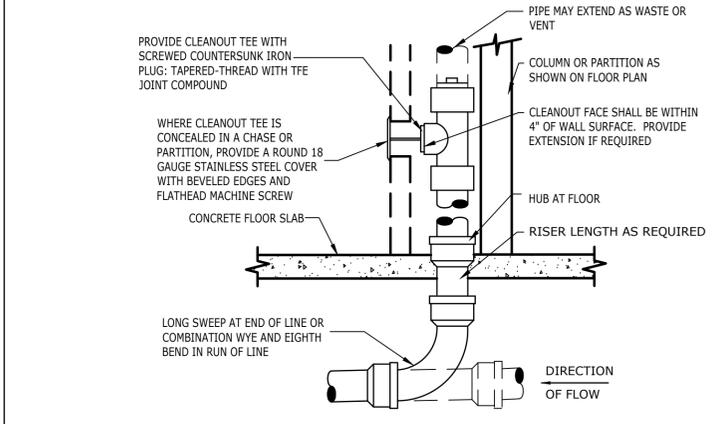


**2 FLOOR CLEANOUT**  
 N.T.S.



**5 ESPRESSO MACHINE GENERAL PIPING CONNECTION SCHEMATIC**  
 N.T.S.

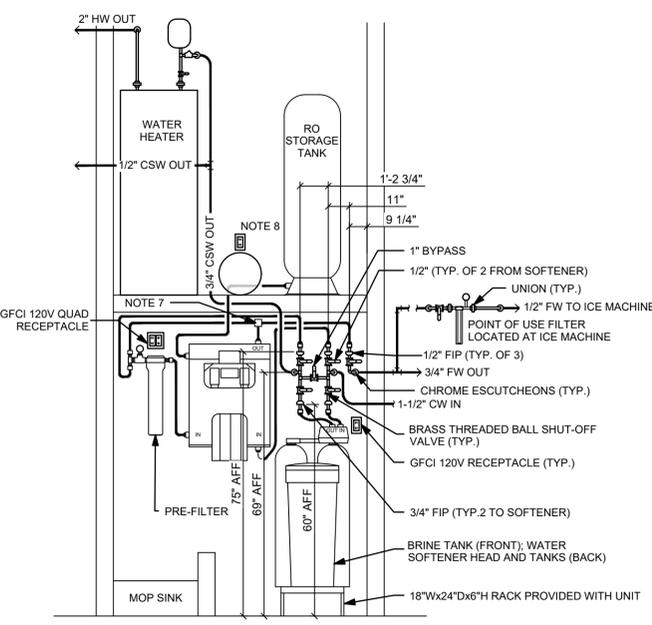
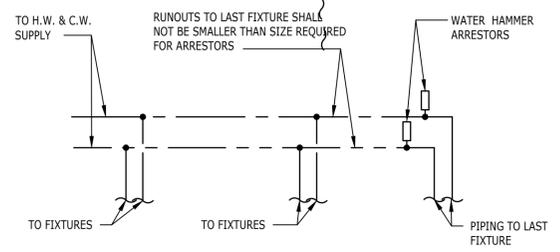
- ESPRESSO MACHINE DETAIL NOTES:**
- THIS DETAIL IS SCHEMATIC ONLY. FOR THE LOCATION OF THE COMPONENTS SHOWN, AND EXTENT OF THE WORK REQUIRED, SEE THE PLAN DRAWINGS.
  - ALL WATER HOSE SHALL BE THE MINIMUM LENGTH NEEDED AND SUPPORTED AS REQUIRED TO AVOID STRESSING CONNECTIONS AND COILING EXCESSIVE HOSE. ROUTE TO AVOID KINKING AND ALLOW SPACE FOR UNDER COUNTER REFRIGERATOR AND ACCESS TO EQUIPMENT AND VALVES.
  - ALL PIPING SHALL BE HELD TIGHT TO WALLS SLOPED WHERE REQUIRED AND ROUTED TO ALLOW ACCESS TO EQUIPMENT AND VALVES.
  - ROUTE HORIZONTAL PIPING A MINIMUM OF 6" ABOVE FLOOR.
  - INSTALL PUMP AS SHOWN ON PLANS. COORDINATE LOCATION AND ELEVATION WITH OTHER TRADES. ORIENT PUMP AS REQUIRED TO ALLOW MAINTENANCE.



**4 WALL CLEANOUT**  
 N.T.S.

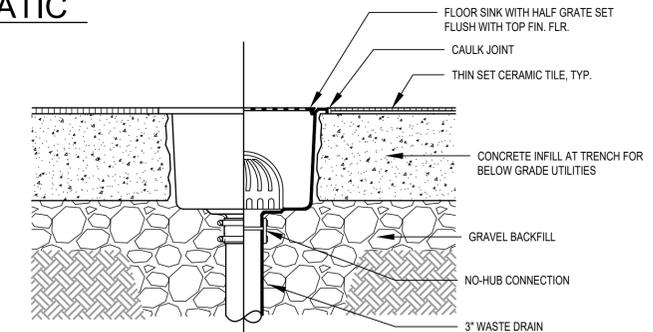
WATER HAMMER ARRESTOR SIZING CHART		
FIXTURE UNIT RATING	PDI SIZE	CONNECTION TO SUPPLY LINE
1-11	A	3/4"
12-32	B	1"
33-60	C	1"
61-113	D	1 1/4"
114-154	E	1 1/2"
155-330	F	2"

REFERENCE PDI-WH-201.



**7 TYPE 3 WATER TREATMENT SYSTEM**  
 N.T.S.

- WATER FILTRATION NOTES:**
- CLEARANCES:** COMPONENTS ARE TO BE POSITIONED TO MAXIMIZE ACCESS FOR REGULAR SERVICING. PRE-FILTER, BYPASS VALVES, AND SOFTENER TANKS MUST BE INSTALLED 72" AFF OR LOWER. WATER INLET AND OUTLET INSTALLED AT 72" AFF. 2-1/2" CLEARANCE REQUIRED FOR FILTER REMOVAL.
  - PIPING:** ALL CONCEALED PIPING SHALL BE COPPER. PEX PIPING IS ACCEPTABLE BETWEEN FILTER SYSTEM COMPONENTS WHERE ALLOWED BY CODE.
  - WASTE LINES:** PROVIDE INDIRECT PIPE FROM RO SYSTEM DRAIN CONNECTION TO MOP SINK. PROVIDE FLEXIBLE INDIRECT WASTE LINE FROM FLUSH VALVE TO MOP SINK.
  - COORDINATION:** ALL COMPONENTS DRAWN IN BOLD ARE GC RESPONSIBILITY. GC TO COORDINATE INSTALLATION OF ALL OTHER COMPONENTS SHOWN WITH FILTER VENDOR. COORDINATE WITH ELECTRICAL CONTRACTOR FOR RECEPTABLES.
  - 3/4" BY-PASS LINE WITH 3/4" BY-PASS VALVE (NORMALLY CLOSED).
  - IN MUNICIPALITIES WITH BRINE RESTRICTIONS, REFER TO THE WATER SYSTEM CONFIGURATIONS APPENDIX UNDER ITEM SPECIFICATIONS FOR WATER SOFTENER EXCHANGE TANK SCHEMATIC.
  - EMERGENCY BYPASS.
  - BOOSTER PUMP, IF REQUIRED.



**3 FLOOR SINK DETAIL**  
 N.T.S.

**WASTE & WATER SERVICE CALCULATIONS:**

EQUIPMENT	WASTE			COLD			HOT		
	QTY	F.U.	TOT.	F.U.	TOT.	F.U.	TOT.	F.U.	TOT.
THREE COMPARTMENT SINK	1	-	-	2.25	2.25	2.25	2.25	-	-
MOP SINK	1	2	2	2.25	2.25	2.25	2.25	-	-
HAND SINK	2	1	2	0.5	1	0.5	1	-	-
EMERGENCY FLOOR DRAIN	1	-	-	-	-	-	-	-	-
FLOOR DRAIN	-	2	-	-	-	-	-	-	-
FLOOR SINK	8	5	40	-	-	-	-	-	-
ICE MACHINE	1	-	-	0.5	0.5	-	-	-	-
KITCHEN SINK	3	-	-	3	3	3	3	-	-
WATER CLOSET	1	4	4	5	5	-	-	-	-
URINAL	-	4	-	5	-	-	-	-	-
LAVATORY	1	1	1	1.5	1.5	1.5	1.5	-	-
ESPRESSO MACHINE	3	-	-	1	3	-	-	-	-
COFFEE BREWER	1	-	-	1	1	-	-	-	-
WAREWASHER	1	-	-	6	6	-	-	-	-
BEVERAGE STATION	-	-	-	1	-	-	-	-	-
PITCHER RINSER	3	-	-	3	9	-	-	-	-
TOTAL			49		40.5		16		

**ELECTRIC WATER HEATER**

TAG	22224
GALLON CAPACITY	50
VOLTAGE/PHASE	208/3
UPPER/LOWER WATTAGE	4500/4500/4500
NO. OF ELEMENTS	3 (SIMULTANEOUS)
GPH RECOVERY @ 100°	56
MANUFACTURER	BRADFORD WHITE
MODEL	E32-50S-3

**NEW EQUIPMENT & PLUMBING FIXTURE SCHEDULE**

DESIGN ID	COUNT	DESCRIPTION	RESP.	SERVES	W	IW	V	CW	CSW	FW	HW	TW	COMMENTS
<b>DRAIN</b>													
10294	8	DRAIN - FLOOR SINK SQUARE - 12IN 305MM	SB-GC	-	3"	-	2"	-	-	-	-	-	
10726	8	DRAIN - GRATE HALF SQUARE - 12IN 305MM	SB-GC	-	-	-	-	-	-	-	-	-	
10594	1	FLOOR DRAIN - 6" ROUND	GC-GC	RESTROOMS	3"	-	2"	-	-	-	-	-	JAY R SMITH 2005-K06CP
<b>FAUCET</b>													
10152	1	FAUCET - DOUBLE LABORATORY WITH BENT RISER SPOUT	SB-GC	10549	-	-	-	1/2"	-	-	1/2"	-	2.2GPM
10153	5	FAUCET - WATER TOWER - 12IN 305MM	SB-GC	18743, 22326, 22630	-	-	-	-	-	1/2"	-	-	
10215	2	FAUCET - DOUBLE LABORATORY WITH SWING SPOUT	SB-GC	22630, 18743	-	-	-	1/2"	-	-	1/2"	-	2.2GPM
10447	1	FAUCET - PRE RINSE SPRAYER WALL MOUNTED	SB-GC	13700	-	-	-	-	-	-	1/2"	-	1.2GPM
10597	1	FAUCET - SINGLE HANDLE	SB-GC	22395	-	-	-	1/2"	-	-	-	1/2"	0.5GPM AERATOR
21352	1	FAUCET - SINGLE HANDLE - METERED MOTION SENSOR	SB-GC	10116	-	-	-	1/2"	-	-	-	1/2"	0.5GPM METERED
10804	1	FAUCET - PRE RINSE SWING SPOUT	SB-GC	13700	-	-	-	1/2"	-	-	1/2"	-	1.2GPM
22642	4	FAUCET - HOT WATER DISPENSER WITH POINT-OF-USE WATER HEATER	SB-GC	22326, 18743	-	-	-	-	-	1/2"	-	-	1.5KW INPUT, 6.1GPH @ 90°F RISE
10922	1	FAUCET - MOP SINK WALL MOUNTED	SB-GC	10995	-	-	-	1/2"	-	-	1/2"	-	
11003	3	FAUCET - DIPPERWELL	SB-GC	22326	-	-	-	1/2"	-	-	-	-	0.5GPM METERED
13588	1	FAUCET - HAND SINK WALL MOUNTED	SB-GC	14688	-	-	-	1/2"	-	-	-	1/2"	0.5GPM AERATOR
10943	1	FAUCET - SINGLE LABORATORY WITH SWING SPOUT	SB-GC	22630	-	-	-	1/2"	-	-	-	-	2.2GPM
<b>SINK</b>													
10116	1	SINK - RESTROOM WALL MOUNTED	SB-GC	21352	2"	-	1 1/2"	-	-	-	-	-	
10549	1	SINK - RINSE DROP IN SST - 12X20IN 305X510MM	SB-GC	10152	-	1 1/2"	-	-	-	-	-	-	
10995	1	SINK - MOP - 24X24IN 610X610MM	SB-GC	10922	3"	-	2"	-	-	-	-	-	
13700	1	SINK - 3 COMP WORK SST - 105IN 2667MM	SB-GC	10447, 10804	-	2"	-	-	-	-	-	-	ELKAY
14688	1	SINK - HAND WALL MOUNTED WITH SIDE SPLASH SST	SB-GC	13588	2"	-	1 1/2"	-	-	-	-	-	
18743	1	PREP STATION SINK	SB-GC	22642, 10153, 10215	-	1-1/2"	1-1/2"	-	-	-	-	-	
22326	3	SINK - RINSE 29X7IN WITH INTEGRAL PITCHER RINSER	SB-GC	10153, 11003, 22642	-	1-1/2"	-	1/2"	-	-	-	-	
22630	1	SINK - RINSE DROP IN - 27X26IN 685X670MM	SB-GC	10943, 10215, 10153	-	1 1/2"	-	-	-	-	-	-	
<b>TOILET</b>													
11871	1	TOILET - TANK EFFICIENT SINGLE FLUSH	GC-GC	-	3"	-	2"	1/2"	-	-	-	-	PROFLO PF1601PAWH 1.0GPF PRESSURE ASSIST
<b>FILTER</b>													
12501	1	FILTER - RO SYSTEM 600GPD	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
12507	1	FILTER - RO SYSTEM 40GAL STORAGE TANK	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
12896	1	FILTER - BRINE TANK	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
12899	2	FILTER - POLY GLASS VESSEL	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
13076	1	FILTER - PREFILTRATION SYSTEM	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
13082	1	FILTER - WATER SOFTENER TWIN	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
13149	1	FILTER - PRESSURE GAUGE	SB-GC	-	-	-	-	-	-	-	-	-	PENTAIR
<b>WATER HEATER</b>													
22224	1	WATER HEATER 50GAL ELECTRIC	GC-GC	-	-	3/4"	-	-	3/4"	-	1-1/2"	-	BRADFORD WHITE E32-50S-3 13.5KW
<b>EQUIPMENT</b>													
10746	1	BREWER DUAL SOFT HEAT	SB-GC	-	-	-	-	-	-	1/2"	-	-	
15186	1	DISHWASHER SANITIZER	SB-GC	-	-	3/4"	-	-	1/2"	-	-	-	
19742	3	ESPRESSO MACHINE MASTRENA	SB-GC	-	-	5/8"	-	-	-	1/2"	-	-	
X8019	1	HOT WATER RECIRCULATION PUMP	GC-GC	-	-	-	-	1/2"	-	-	-	-	BELL & GOSSETT MODEL NBF-36 PUMP WITH BELL & GOSSETT AQS-3/4 AQUASTAT, AND BELL & GOSSETT TC-1 AUTOMATIC TIMER
<b>NITRO SYSTEM</b>													
20011	1	NITRO STATION	SB-GC	-	-	1/2"	-	-	-	-	-	-	
21679	1	NITROGEN GENERATOR COMPACT	SB-GC	-	-	-	-	-	-	-	-	-	
<b>ICE</b>													
10527	2	ICE - BIN DROP IN 45LB 20KG	SB-GC	-	-	1"	-	-	-	-	-	-	
19278	2	ICE - BIN DROP IN 45LB 20KG	SB-GC	-	-	1"	-	-	-	-	-	-	
18846	1	ICE - 48" MACHINE 1520LB REMOTE AIR COOLED	SB-GC	-	-	3/4"	-	-	-	1/2"	-	-	
18029	1	ICE - 48" BIN 854LB	SB-GC	-	-	1"	-	-	-	-	-	-	
<b>CASEWORK</b>													
22395	1	CABINET WITH HAND SINK	SB-GC	10597	2"	-	1 1/2"	-	-	-	-	-	

**REVIEWED FOR CODE COMPLIANCE**  
 Wayne Thorne - PX3005 12-18-23  
 A PERMIT ISSUED SHALL BE CONSTRUED TO BE A LICENSE TO PROCEED WITH THE WORK AND NOT AS AUTHORITY TO VIOLATE, CANCEL, ALTER OR SET ASIDE ANY OF THE PROVISIONS OF THE TECHNICAL CODES, NOR SHALL ISSUANCE OF A PERMIT PREVENT THE BUILDING OFFICIAL FROM THEREAFTER REQUIRING A CORRECTION OF ERRORS IN PLANS, CONSTRUCTION OR VIOLATIONS OF THIS CODE.



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12/12/2023



The seal shall not be used for any other project or purpose. The seal shall be used only for the project and purpose for which it was issued. The seal shall be used only for the project and purpose for which it was issued. The seal shall be used only for the project and purpose for which it was issued.

**FOR CONSTRUCTION**

PROJECT NAME:  
**US 17-92 & LAKE MARY BLVD**

PROJECT ADDRESS:  
**3764 ORLANDO DRIVE  
 SANFORD, FL 23773**

STORE #: 81065  
 PROJECT #: 98504-001  
 ISSUE DATE: 08-03-2023  
 DESIGN MANAGER: PAULINA LOPEZ  
 PRODUCTION DESIGNER: ANDY M'CLOUD  
 CHECKED BY: DONALD RETHMAN

Revision Schedule		
Rev	Date	Description

SHEET TITLE:  
**PLUMBING SCHEDULES**

SCALE: AS INDICATED

SHEET NUMBER:  
**P-601**