## 1.1 SUMMARY OF WORK

- ALL WORK SHALL BE PERFORMED IN A CLEAN AND WORKMANLIKE MANNER. CARE SHALL BE EXERCISED TO MINIMIZE ANY INCONVENIENCE OR DISTURBANCE TO OTHER AREAS OF THE BUILDING WHICH ARE TO REMAIN IN OPERATION. ISOLATE WORK AREAS BY MEANS OF TEMPORARY PARTITIONS AND/OR TARPS TO KEEP DUST AND DIRT WITHIN THE CONSTRUCTION
- 2. ALL ITEMS REMOVED SHALL BECOME PROPERTY OF THE OWNER AND SHALL BE DISPOSED OF AS PER THE OWNER'S INSTRUCTIONS, UNLESS INDICATED OTHERWISE. ALL ITEMS WHICH ARE NOT TO BE STORED ON SITE BY OWNER SHALL BE REMOVED FROM THE SITE IMMEDIATELY.
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY WORK. WHERE DISCREPANCIES OCCUR BETWEEN THESE DOCUMENTS AND EXISTING CONDITIONS, THE DISCREPANCY SHALL BE REPORTED BEFORE PERFORMING THE WORK.
- PRIOR TO BID, THE CONTRACTOR SHALL EXAMINE THE JOB SITE UNDER WHICH HE WILL BE OBLIGATED TO OPERATE SHOULD HE BE AWARDED THE WORK UNDER THIS CONTRACT. NO EXTRA CHARGES WILL BE ALLOWED FOR FAILURE OF ANY BIDDER TO EXAMINE THE SITE PRIOR TO BID.
- CONTRACTOR SHALL CLEAN THE JOB SITE DAILY AND REMOVE FROM THE PREMISES ANY DIRT AND DEBRIS CAUSED BY THE PERFORMANCE OF THE WORK INCLUDED IN THIS CONTRACT.
- 6. WHERE USED. THE TERM "PROVIDE" SHALL MEAN "FURNISH AND INSTALL."
- CONTRACTOR SHALL COORDINATE HIS WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION, PURCHASE AND/OR INSTALLATION OF ALL WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF REWORK CAUSED BY LACK OF COORDINATION.
- CONTRACTOR SHALL SCHEDULE ALL SHUTDOWNS THAT AFFECT UTILITIES AND PORTIONS OF THE BUILDING THAT MUST REMAIN IN OPERATION WITH THE OWNER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RIGGING, HANDLING, AND PROTECTION OF
- MATERIALS. MATERIALS SHALL BE PROTECTED FROM WEATHER AND CONSTRUCTION DEBRIS. 10. CONTRACTOR SHALL PROVIDE LABOR TO RECEIVE, UNLOAD, STORE, PROTECT AND TRANSFER TO
- POINT OF INSTALLATION, OWNER FURNISHED ITEMS.
- 11. THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK, MATERIALS, AND LABOR TO SATISFY A COMPLETE WORKING SYSTEM WHETHER SPECIFIED OR IMPLIED.
- 12. ALL MECHANICAL WORK IS TO BE PERFORMED IN ACCORDANCE WITH RECOGNIZED ACCEPTABLE PRACTICES (SMACNA. ASHRAE, NFPA) AND SHALL BE IN COMPLIANCE WITH ALL NATIONAL, STATE, AND LOCAL CODES HAVING GOVERNING AUTHORITY.
- 13. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED. NO SUBSTITUTIONS ARE PERMITTED WITHOUT APPROVAL BY THE ENGINEER. SUBSTITUTIONS FOR FINISHES AND OTHER AESTHETIC ITEMS SHALL BE APPROVED BY THE ARCHITECT AND/OR INTERIOR DESIGNER.
- 14. DO NOT SCALE THIS DRAWING FOR EXACT DIMENSIONS. VERIFY ALL FIGURES, CONDITIONS, AND DIMENSIONS AT THE JOB SITE AND REPORT ISSUES BEFORE BEGINNING WORK.
- 1.2 PERMITS 1. THE CONTRACTOR SHALL SECURE ALL PERMITS OR APPLICATIONS AND PAY ANY AND ALL FEES
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 2018 IPC & IFGC, INCLUDING ALL CURRENT STATE AND LOCAL AMENDMENTS.

#### 1.3 SHOP DRAWINGS, SUBMITTALS, & AS-BUILTS

PERTAINING TO THE CONTRACT.

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND ANNOTATED FOUIPMENT CUT SHEETS TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING ANY WORK, ALL SUBMITTALS SHALL BE PROVIDED ELECTRONICALLY IN PDF FORMAT. SUBMITTALS SHALL BE PROVIDED IN NO MORE THAN THREE (3) SEPARATE PACKAGES AS INDICATED BELOW. SMALL PACKAGES OF INDIVIDUAL SUBMITTALS BROKEN OUT BY SPECIFICATION SECTION WILL BE REJECTED WITHOUT REVIEW. PACKAGES SHALL BE AS FOLLOWS OR FEWER:
- A. EQUIPMENT: WATER HEATERS, PUMPS, ETC. B. PIPING, VALVES, & ACCESSORIES
- C. FIXTURES TYPICAL REVIEW TIME FOR SUBMITTALS IS FIVE (5) BUSINESS DAYS. SUBMITTALS LARGER THAN 100 PAGES MAY TAKE UP TO TEN (10) BUSINESS DAYS. SUBMITTALS POSTED WITH SHORTER
- REVIEW TIMES OR DUE DATES THAN THOSE LISTED HERE WILL BE REJECTED WITHOUT REVIEW. UPON COMPLETION OF CONSTRUCTION CONTRACTOR SHALL SUPPLY THE OWNER WITH (1) COMPLETE SET OF ELECTRONIC AS-BUILT DOCUMENTS AT CONTRACTOR'S EXPENSE AND (1)

COMPLETE SET OF OPERATIONS AND MAINTENANCE MANUALS.

#### 2.0 PIPING

2.1 DOMESTIC WATER SUPPLY PIPING

# COPPER PIPING:

- A. UNDERGROUND: PROVIDE TYPE "K" SOFT DRAWN COPPER TUBING WITH BRAZED CONNECTIONS.
- B. ABOVE GROUND: ALL PIPING SHALL BE COPPER TUBING ASTM B 88 TYPE L, HARD DRAWN.
- C. FITTINGS: ANSI/ASME B16.18, CAST BRASS, OR ANSI ASME B16.22, WROUGHT COPPER.
- D. JOINTS: ANSI/ASTM B32 SOLDER GRADE 95TA OR AWS A5.8 BCuP-2 BRAZING ALLOY.
- 2. CPVC PIPING:
  - A. PIPING: SHALL BE ASTM F 441/F 441M, SCHEDULE 40.
- B. CPVC SOCKET FITTINGS ASTM F 438 FOR SCHEDULE 40. C. CPVC THREADED FITTINGS ASTM F 437 FOR SCHEDULE 80.
- D. CPVC PIPING SYSTEM: ASTM D 2846/D 2846M, SDR 11, PIPE AND SOCKET FITTINGS.
- E. CPVC TUBING SYSTEM: ASTM D 2846/D 2846M, SDR 11, TUBE AND SOCKET FITTINGS. SHUTOFF VALVES, WITH UNIONS, SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE OR FOOD SERVICE EQUIPMENT ITEM TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT.

VALVES SHALL BE EQUAL TO JENKINS #902-T BALL VALVE, CHROME-FINISHED BRONZE, TEFLON

5. PROVIDE A FULL-OPEN VALVE BEFORE EVERY DOWN-FEED PIPE.

SEATS AND PACKING, 400LB. W.O.G., SOLDER END.

- 6. PROVIDE WATER HAMMER ARRESTORS AT EACH FIXTURE OR GROUP OF FIXTURES AS REQUIRED.
- PROVIDE THERMOSTATIC MIXING VALVES SET AT 110 DEGREES FAHRENHEIT AT EACH LAVATORY, HAND WASH SINK, AND SINK ACCESSIBLE TO THE PUBLIC.

## 2.2 SANITARY/STORM DRAINAGE AND VENT PIPING

# CAST IRON PIPING

- A. ABOVE GRADE PIPING SHALL BE CAST IRON ASTM A74 WEIGHT WITH CAST IRON FITTINGS, JOINTS HUB-AND-SPIGOT, CISPI HSN COMPRESSION TYPE WITH ASTM C 564 NEOPRENE
  - B. BELOW GRADE PIPING SHALL BE CAST IRON ASTM A74 SERVICE WEIGHT WITH CAST IRON FITTINGS, JOINTS ASTM C 564 WITH NEOPRENE GASKETS

## PVC PIPING

- A. ABOVE GRADE PIPING SHALL BE PVC ASTM D2665 SCHEDULE 40 WITH PVC FITTINGS, JOINTS HUB-AND-SPIGOT WITH SOLVENT WELDS.
- B. BELOW GRADE PIPING SHALL BE PVC ASTM D2665 SCHEDULE 40 DWV WITH PVC FITTINGS, JOINTS HUB-AND-SPIGOT WITH SOLVENT WELDS.
- C. PVC PIPING SHALL NOT BE USED IN AIR PLENUMS, ABOVE CEILING OR OTHERWISE.
- D. PVC PIPING SHALL NOT BE USED WHERE WATER IN EXCESS OF 140°F WILL BE DISCHARGED INTO THE DRAIN SYSTEM.
- DRAINAGE PIPING SHALL BE RUN AS STRAIGHT AS POSSIBLE AND SHALL HAVE LONG RADIUS
- CONTRACTOR SHALL PROVIDE ALL CLEANOUTS IN DRAINAGE PIPING AS REQUIRED TO MEET CODE
- INCLUDING THE LOCATIONS LISTED BELOW. WHERE REQUIRED, THE CONTRACTOR SHALL PROVIDE ACCESS DOORS IN WALLS OR CEILINGS SO THAT CLEANOUTS ARE ACCESSIBLE.
- A. ALL CHANGES IN DIRECTION GREATER THAN 45 DEGREES. B. AT THE BASE OF EACH STACK. C. WHERE LINE EXITS THE BUILDING AT 5'-0" OUTSIDE THE EXTERIOR WALL.

D. AT EVERY 100' OF PIPE RUN.

- DRAINAGE PIPING 3" SIZE AND SMALLER SHALL RUN AT A UNIFORM GRADE OF AT LEAST 1/4" PER FOOT, AND PIPING LARGER THAN 3" SHALL BE RUN AT A GRADE OF NO LESS THAN 1/8"
- 6. ALL VENT PIPING SHALL BE SLOPED TO DRAIN BACK TO FIXTURES. 7. ALL VENTS SHALL BE INSTALLED A MINIMUM OF TEN FEET FROM EQUIPMENT OUTSIDE AIR INTAKES AND OPERABLE OPENINGS INTO BUILDINGS.

#### 2.3 NATURAL GAS PIPING

- 1. ALL ABOVE GRADE GAS PIPING SHALL BE ASTM A53, SCHEDULE 40 BLACK STEEL WITH ASME
- B16.3, MALLEABLE IRON FITTINGS.
- 3. CONTRACTOR SHALL COORDINATE ALL ROOF WORK WITH THE ROOFER. A. PIPES 2" DIAMETER AND SMALLER AND PRESSURE UNDER 1.0 PSI: THREADED JOINTS
- B. PIPES LARGER THAN 2" DIAMETER OR PRESSURE OVER 1.0 PSI: WELDED JOINTS (AWS D1.1) WHERE GAS PIPE CONNECTS TO EQUIPMENT, IT SHALL BE PROVIDED WITH A DRIP LEG THE FULL SIZE OF THE RUNOUT, A 100% SHUT-OFF VALVE, A SEMI-RIGID OR FLEXIBLE

#### 3.0 OTHER PRODUCTS

CONNECTOR, AND A UNION.

#### 3.1 PIPE INSULATION

- INSULATE ALL LISTED SERVICE PIPING AS FOLLOWS. ALL INSULATION SHALL BE: ARMAFLEX OR FIBERGLASS, ASJ/SS-11, FLAME 25, SMOKE DEVELOPED 50, ASTM C-547.
- A. DOMESTIC COLD WATER PIPING WHERE PIPING IS SUSCEPTIBLE TO CONDENSATION OR FREEZING: 1" THICK
- B. HOT WATER PIPING 1-1/2" DIAMETER AND LESS: 1" THICK C. HOT WATER PIPING 2" AND GREATER: 2" THICK D. HORIZONTAL STORM WATER PIPING: PROVIDE 1/2" THICK
- F. EXPOSED CONDENSATE OR WASTE PIPING WITH FLUID TEMPERATURE BELOW 60°F: PROVIDE 1/2" THICK

#### 2. ALL EXPOSED DRAIN AND WATER PIPING BELOW HANDICAPPED ACCESSIBLE LAVATORIES AND SINKS SHALL BE PROTECTED PER ADA GUIDELINES WITH 1/2" THICK ARMAFLEX OR FIBERGLASS INSULATION.

- 3.2 ACCESSORIES PRESSURE REDUCING VALVES:
- A. WATTS U5B, 223 OR EQUAL B. SET AT 70 PSIG UNLESS NOTED OTHERWISE.

E. CONDENSATE PIPING: PROVIDE 1/2" THICK

- THERMOSTATIC MIXING VALVES:
- A. MASTER MIXING VALVE: BRADLEY HL SERIES OR EQUAL. SHALL CONFORM TO ASSE 1017. B. POINT OF USE - LAVATORY: BRADLEY NAVIGATOR SERIES OR EQUAL. SHALL CONFORM TO ASSE 1070. C. POINT OF USE - SHOWER: BRADLEY NAVIGATOR SERIES OR EQUAL. SHALL CONFORM TO ASSE 1016.
- THERMAL EXPANSION TANKS: AMTROL THERM-X-TROL ST SERIES. FACTORY PRECHARGE PER MANUFACTURER'S RECOMMENDATIONS FOR HEATER SERVED.
- 4. AIR GAP FITTINGS: JR SMITH FIGURE 3955 OR EQUAL BY WADE, ZURN OR JOSAM.

D. ALL: SET DISCHARGE TO 110°F UNLESS NOTED OTHERWISE.

- VACUUM BREAKERS: MOP SINKS OR OTHER KITCHEN SUPPLY FIXTURES NOT PROTECTED BY AN AIR GAP SHALL BE SUPPLIED WITH AN INTEGRAL VACUUM BREAKER OR REDUCED PRESSURE BACKFLOW PREVENTER AT EACH OUTLET.
- BALANCING VALVES: GRISWOLD 3R ISOLATOR SERIES WITH INTEGRAL TEST PORT CONNECTIONS AND ISOLATION VALVE.
- WATER HEATERS: SHALL BE AS SCHEDULED. HEATERS TO INCLUDE BRASS WATER CONNECTIONS AND DIP TUBE, DRAIN VALVE, MAGNESIUM ANODE, AND ASME RATE TEMPERATURE AND
- 8. AIR ADMITTANCE VALVES: STUDOR MINI-VENT OR EQUAL.

PIPING, ANSI B31.1 WITH ADDENDA 31.1 OA-69.

HEAT TRACED AND INSULATED. CHROMALOX SRL OR EQUAL.

9. HEAT TRACE TAPE: ALL WATER PIPING PIPING AND P-TRAPS EXPOSED TO FREEZING SHALL BE

#### 3.3 PIPE SUPPORTS

- 1. SUPPORT ALL DUCT, PIPING, AND EQUIPMENT FROM STRUCTURE. DO NOT SUPPORT FROM OTHER DUCT, PIPING, CONDUIT, ETC.
- 2. ALL DUCT, PIPING, AND EQUIPMENT SHALL BE SUPPORTED WITH HANGERS DESIGNED FOR THAT PURPOSE. THE USE OF WIRE, METAL STRAP, OR OTHER IMPROVISED ITEMS IS NOT PERMITTED.
- 3. "C" CLAMPS SHALL NOT BE USED UNLESS TACK WELDED OR STRAPPED TO STRUCTURAL STEEL
- 4. USE MATERIALS WHICH AVOID ELECTROLYTIC ACTION AND CONFORM TO ANSI/ASME B31, NFPA,
- SUPPORT ALL PIPING WITH HANGERS, SUPPORTS, ANCHORS PER ANSI CODE FOR PRESSURE
- 6. HORIZONTAL PIPE: HANGERS SHALL BE SPACED SO AS TO PREVENT SAG AND PERMIT PROPER DRAINAGE AND SHALL NOT BE SPACED MORE THAN EIGHT FEET APART (FOUR FEET FOR PLASTIC PIPE). A HANGER SHALL BE PLACED WITHIN (1) FOOT OF EACH HORIZONTAL ELBOW.
- 7. VERTICAL PIPE: SUPPORTS SHALL NOT BE SPACED MORE THAN EIGHT FEET APART (FOUR FEET

FOR PLASTIC PIPE). PROVIDE A RISER CLAMP AT EVERY FLOOR PENETRATION.

- 3. BELOW GRADE: EARTH SHALL BE EXCAVATED TO A MINIMUM DEPTH WITH EVEN SURFACE TO INSURE SOLID BEARING OF PIPE FOR ENTIRE LENGTH.
- A. INTERIOR: THE PIPE SHALL BE INSTALLED (UNLESS OTHERWISE SPECIFIED) A MINIMUM OF 4 INCHES BELOW THE BOTTOM OF THE SLAB AND SHALL NOT BE IN ANY DIRECT CONTACT WITH THE CONCRETE AT ANY POINT.
- B. EXTERIOR: THE WATER PIPE SHALL HAVE A MINIMUM OF 42" OF COVER AND THE SANITARY WASTE PIPE SHALL HAVE A MINIMUM OF 24" OF COVER.

## 3.4 EQUIPMENT

- THESE PLANS ARE DIAGRAMMATIC AND ARE BASED ON ONE MANUFACTURER'S EQUIPMENT. THE PLANS ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION, THE EXACT DIMENSIONS, CONNECTION POINTS, OR ALL THE DETAILS OF THE EQUIPMENT. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, CLEARANCES, AND CONNECTION POINTS FOR THE ACTUAL EQUIPMENT INTENDED TO BE INSTALLED.
- WHERE APPLICABLE, THE CONTRACTOR IS RESPONSIBLE FOR FINAL CONNECTION OF ALL OWNER SUPPLIED APPLIANCES TO THE BUILDING UTILITIES.
- 3. ALL EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S WRITTEN INSTALLATION
- 4. PROVIDE ALL HANGERS AND SUPPORTS AS REQUIRED FOR A COMPLETE INSTALLATION.

# 4.0 EXECUTION

INSTRUCTIONS.

# 4.1 MECHANICAL EQUIPMENT AND PIPING IDENTIFICATION

- . PROVIDE IDENTIFICATION OF ALL PIPES, VALVES, AND EQUIPMENT. INCLUDE THE FOLLOWING: A. PLASTIC PIPE MARKERS
- B. VALVE TAGS AND EQUIPMENT TAGS C. VALVE SCHEDULE

OF THE PENETRATED WALL OR FLOOR.

## 4.2 ELECTRICAL

- CONTRACTOR SHALL COORDINATE WITH ELECTRICAL CONTRACTOR BEFORE ORDERING EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL EQUIPMENT AT THE PROPER VOLTAGE AND PHASE.
- WHERE HEAT TRACE TAPE IS REQUIRED, CONTRACTOR SHALL COORDINATE CONNECTION REQUIREMENTS WITH ELECTRICAL BEFORE ORDERING EQUIPMENT.

# 4.3 FIRE PROTECTION

WHERE CONDUIT, CABLES, DUCT OR PIPING PASSES THROUGH FIRE RATED FLOORS OR WALLS, THE SLEEVES SHALL BE COMPLETELY SEALED WITH A FIRE STOP MATERIAL THAT IS UL LISTED AND ACCEPTED BY THE BUILDING DEPARTMENT AND FIRE DEPARTMENT AS BEING SUITABLE FOR THIS SERVICE SUCH AS DOW CORNING CORP., SILICONE ELASTOMER, DOW CORNING 3-6548 SILICONE RTV FOAM, OR APPROVED EQUAL. THIS MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER TO MAINTAIN THE FIRE RATING

#### 4.4 PENETRATIONS

- 1. ALL PIPING PENETRATIONS OF BUILDING FOUNDATIONS OR FOOTINGS SHALL BE SLEEVED.
- 2. ALL EXTERIOR PENETRATIONS TO BE FLASHED, CAULKED, AND SEALED TO PREVENT INFILTRATION
- 4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BEAM OR FOOTING PENETRATIONS AS IT RELATES TO HIS WORK. CONTRACTOR SHALL SUBMIT SIZE AND LOCATION TO THE STRUCTURAL ENGINEER FOR REVIEW AND DETAIL, PRIOR TO COMMENCING WORK AND ORDERING MATERIALS AND FQUIPMENT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CORING AND STRUCTURAL PENETRATIONS AS IT RELATES TO HIS WORK. CONTRACTOR SHALL COORDINATE ALL SUCH PENETRATIONS WITH THE STRUCTURAL ENGINEER PRIOR TO COMMENCING WORK OR ORDERING MATERIALS AND EQUIPMENT.

#### 4.5 KITCHEN NOTES

- ALL SANITARY PIPING FROM KITCHEN EQUIPMENT SHALL HAVE AN AIR GAP FIXTURE INSTALLED BEFORE THE TRAP.
- 2. ALL KITCHEN SUPPLY FIXTURES TO HAVE VACUUM BREAKERS OR REDUCED PRESSURE BACKFLOW PREVENTERS AT EACH OUTLET NOT PROTECTED BY "AIR GAP" AT EACH DOMESTIC WATER SUPPLY.

### 4.6 TESTING

- PLUMBING SYSTEMS SHALL BE FLOW AND PRESSURE TESTED IN ACCORDANCE WITH STANDARD
- TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE. FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE AS

PRACTICE AND THE INTERNATIONAL PLUMBING CODE.

REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

### 4.7 GUARANTEE

- MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.
- FOR THE SAME PERIOD, THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISE CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED BY HIM.

GAS WATER HEATER SCHEDULE							
_							
	RECOVERY (90°F RISE)	GAS INPUT (BTU/HR)	TEMP. SETPOINT	MANUFACTURER	MODEL	REMARKS	
7	261 GPH	199,000	140°F	AO SMITH	RTH-199	1. 2. 3	

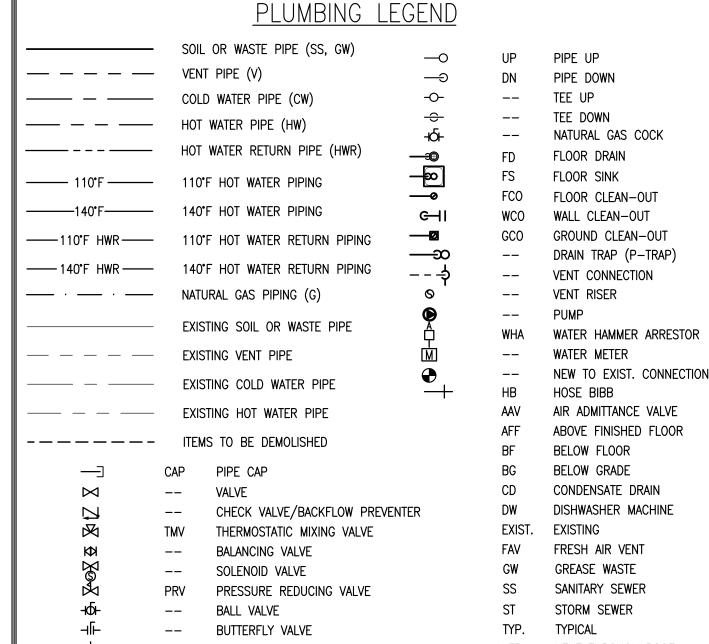
WH-1 | 100 | 261 GPH | 199,000 | 140°F | A.O. SMIIH | BIH-199 | 1, 2, 3 WATER HEATER TO BE HIGH EFFICIENCY, CONDENSING, CLOSED COMBUSTION, DIRECT VENT TYPE HEATER. PROVIDE AUXILIARY DRAIN PAN. CONTRACTOR TO PROVIDE MINIMUM 3" PVC INTAKE AND EXHAUST VENTS. CONTRACTOR TO FOLLOW ALL MANUFACTURER'S PUBLISHED VENTING REQUIREMENTS.

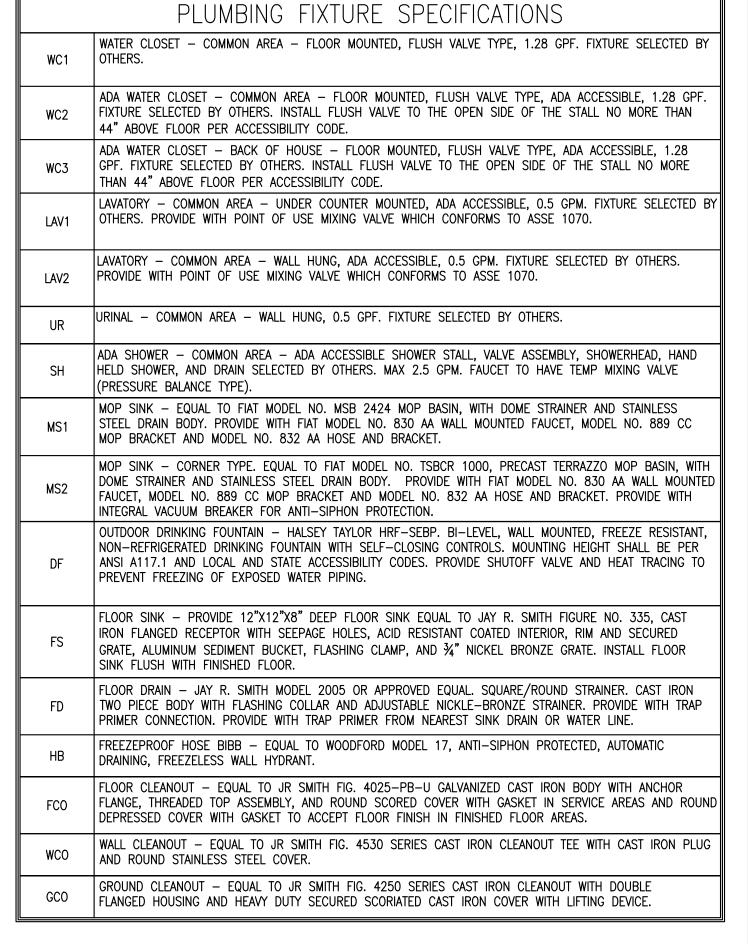
(GAL)

. PROVIDE WITH AQUASTAT TO MAINTAIN 140°F WATER.

HOT WATER CIRCULATOR PUMP SCHEDULE							
TAG	TYPE	GPM	TOTAL HEAD FEET	HP	MANUFACTURER	MODEL NO.	REMARKS
CP-1	IN-LINE	3	7	1/40*	TACO	006-B4	1, 2, 3, 5
CP-2	IN-LINE	3	7	1/40*	TACO	006-B4	1, 2, 4, 5
1. SHALL BE ALL BRONZE CONSTRUCTION. 2. REFER TO ELECTRICAL DRAWINGS FOR ELECTRICAL CHARACTERISTICS, INCLUDING VOLTAGE & PHASE. 3. PROVIDE WITH AQUASTAT TO MAINTAIN 110°F WATER.							

5. PUMP TO BE CONTROLLED BY 7 DAY 24 HOUR PROGRAMMABLE TIMER. PUMP TO RUN WHILE BUILDING IS OCCUPIED.





	PLUMBING FIXTURE	AND	CONN	1ECT	ION	SCHEDULE
MADIC	DECORIDATION	PLUMBING CONNECTIONS				DELLABOR
MARK	DESCRIPTION	WASTE	VENT	CW	HW	REMARKS
WC	WATER CLOSET (FLUSH VALVE)	3"	2"	1"		REFER TO SPECIFICATIONS
LAV	LAVATORY	1-1/4"	1-1/2"	1/2"	1/2"	REFER TO SPECIFICATIONS
UR	URINAL	2"	2"	3/4"		REFER TO SPECIFICATIONS
SH	SHOWER	2"	2"	1/2"	1/2"	REFER TO SPECIFICATIONS
MS	MOP SINK	3"	2"	1/2"	1/2"	REFER TO SPECIFICATIONS
DF	DRINKING FOUNTAIN	2"	1-1/2"	1/2"		REFER TO SPECIFICATIONS
FS	FLOOR SINK	3"	2"			REFER TO SPECIFICATIONS
FD	FLOOR DRAIN	3"	2"			REFER TO SPECIFICATIONS
НВ	HOSE BIBB			3/4"		REFER TO SPECIFICATIONS

PLUMBING LEGEND NEW TO EXIST. CONNECTION VTR VENT THROUGH ROOF UNION

WC1	OTHERS.
WC2	ADA WATER CLOSET — COMMON AREA — FLOOR MOUNTED, FLUSH VALVE TYPE, ADA ACCESSIBLE, 1.28 GPF. FIXTURE SELECTED BY OTHERS. INSTALL FLUSH VALVE TO THE OPEN SIDE OF THE STALL NO MORE THAN 44" ABOVE FLOOR PER ACCESSIBILITY CODE.
WC3	ADA WATER CLOSET — BACK OF HOUSE — FLOOR MOUNTED, FLUSH VALVE TYPE, ADA ACCESSIBLE, 1.28 GPF. FIXTURE SELECTED BY OTHERS. INSTALL FLUSH VALVE TO THE OPEN SIDE OF THE STALL NO MORE THAN 44" ABOVE FLOOR PER ACCESSIBILITY CODE.
LAV1	LAVATORY — COMMON AREA — UNDER COUNTER MOUNTED, ADA ACCESSIBLE, 0.5 GPM. FIXTURE SELECTED BY OTHERS. PROVIDE WITH POINT OF USE MIXING VALVE WHICH CONFORMS TO ASSE 1070.
LAV2	LAVATORY — COMMON AREA — WALL HUNG, ADA ACCESSIBLE, 0.5 GPM. FIXTURE SELECTED BY OTHERS. PROVIDE WITH POINT OF USE MIXING VALVE WHICH CONFORMS TO ASSE 1070.
UR	URINAL - COMMON AREA - WALL HUNG, 0.5 GPF. FIXTURE SELECTED BY OTHERS.
SH	ADA SHOWER — COMMON AREA — ADA ACCESSIBLE SHOWER STALL, VALVE ASSEMBLY, SHOWERHEAD, HAND HELD SHOWER, AND DRAIN SELECTED BY OTHERS. MAX 2.5 GPM. FAUCET TO HAVE TEMP MIXING VALVE (PRESSURE BALANCE TYPE).
MS1	MOP SINK — EQUAL TO FIAT MODEL NO. MSB 2424 MOP BASIN, WITH DOME STRAINER AND STAINLESS STEEL DRAIN BODY. PROVIDE WITH FIAT MODEL NO. 830 AA WALL MOUNTED FAUCET, MODEL NO. 889 CC MOP BRACKET AND MODEL NO. 832 AA HOSE AND BRACKET.
MS2	MOP SINK - CORNER TYPE. EQUAL TO FIAT MODEL NO. TSBCR 1000, PRECAST TERRAZZO MOP BASIN, WITH DOME STRAINER AND STAINLESS STEEL DRAIN BODY. PROVIDE WITH FIAT MODEL NO. 830 AA WALL MOUNTED FAUCET, MODEL NO. 889 CC MOP BRACKET AND MODEL NO. 832 AA HOSE AND BRACKET. PROVIDE WITH INTEGRAL VACUUM BREAKER FOR ANTI-SIPHON PROTECTION.
DF	OUTDOOR DRINKING FOUNTAIN — HALSEY TAYLOR HRF—SEBP. BI—LEVEL, WALL MOUNTED, FREEZE RESISTANT, NON—REFRIGERATED DRINKING FOUNTAIN WITH SELF—CLOSING CONTROLS. MOUNTING HEIGHT SHALL BE PER ANSI A117.1 AND LOCAL AND STATE ACCESSIBILITY CODES. PROVIDE SHUTOFF VALVE AND HEAT TRACING TO PREVENT FREEZING OF EXPOSED WATER PIPING.
FS	FLOOR SINK - PROVIDE 12"X12"X8" DEEP FLOOR SINK EQUAL TO JAY R. SMITH FIGURE NO. 335, CAST IRON FLANGED RECEPTOR WITH SEEPAGE HOLES, ACID RESISTANT COATED INTERIOR, RIM AND SECURED GRATE, ALUMINUM SEDIMENT BUCKET, FLASHING CLAMP, AND ¾" NICKEL BRONZE GRATE. INSTALL FLOOR SINK FLUSH WITH FINISHED FLOOR.
FD	FLOOR DRAIN — JAY R. SMITH MODEL 2005 OR APPROVED EQUAL. SQUARE/ROUND STRAINER. CAST IRON TWO PIECE BODY WITH FLASHING COLLAR AND ADJUSTABLE NICKLE—BRONZE STRAINER. PROVIDE WITH TRAP PRIMER FROM NEAREST SINK DRAIN OR WATER LINE.
НВ	FREEZEPROOF HOSE BIBB — EQUAL TO WOODFORD MODEL 17, ANTI—SIPHON PROTECTED, AUTOMATIC DRAINING, FREEZELESS WALL HYDRANT.
FC0	FLOOR CLEANOUT — EQUAL TO JR SMITH FIG. 4025—PB—U GALVANIZED CAST IRON BODY WITH ANCHOR FLANGE, THREADED TOP ASSEMBLY, AND ROUND SCORED COVER WITH GASKET IN SERVICE AREAS AND ROUND DEPRESSED COVER WITH GASKET TO ACCEPT FLOOR FINISH IN FINISHED FLOOR AREAS.
WCO	WALL CLEANOUT — EQUAL TO JR SMITH FIG. 4530 SERIES CAST IRON CLEANOUT TEE WITH CAST IRON PLUG AND ROUND STAINLESS STEEL COVER.
GCO	GROUND CLEANOUT — EQUAL TO JR SMITH FIG. 4250 SERIES CAST IRON CLEANOUT WITH DOUBLE FLANGED HOUSING AND HEAVY DUTY SECURED SCORIATED CAST IRON COVER WITH LIFTING DEVICE.

MOLNAR JORDAN & ASSOCIATES, INC. Consulting Engineers ORIDA COA #: 26750 1 VICKERY STREET 24169 Phone (770) 992-5077

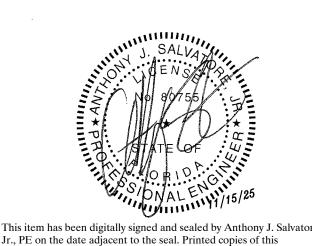


730 PEACHTREE STREET, NE STUDIO 325 ATLANTA, GEORGIA 30308 678.244.6270

www.KDCarchitects.com

ARCHITECT:

CONSULTANT:



REVISIONS DATE: DESCRIPTION: 10/18/24 | SCHEMATIC DESIGN 7/24/25 | DESIGN DEVELOPMENT 10/23/25 | 50% CONSTRUCTION DOCS 11/14/25 | PERMIT SET

ocument are not considered signed and sealed and the signature

must be verified on any electronic copies.

PROJECT:

SERENITY SEASIDE

**BUILDING #3** 

RESORT

186 SOUTH BAY SHORE DRIVE, EASTPOINT, FL 32328

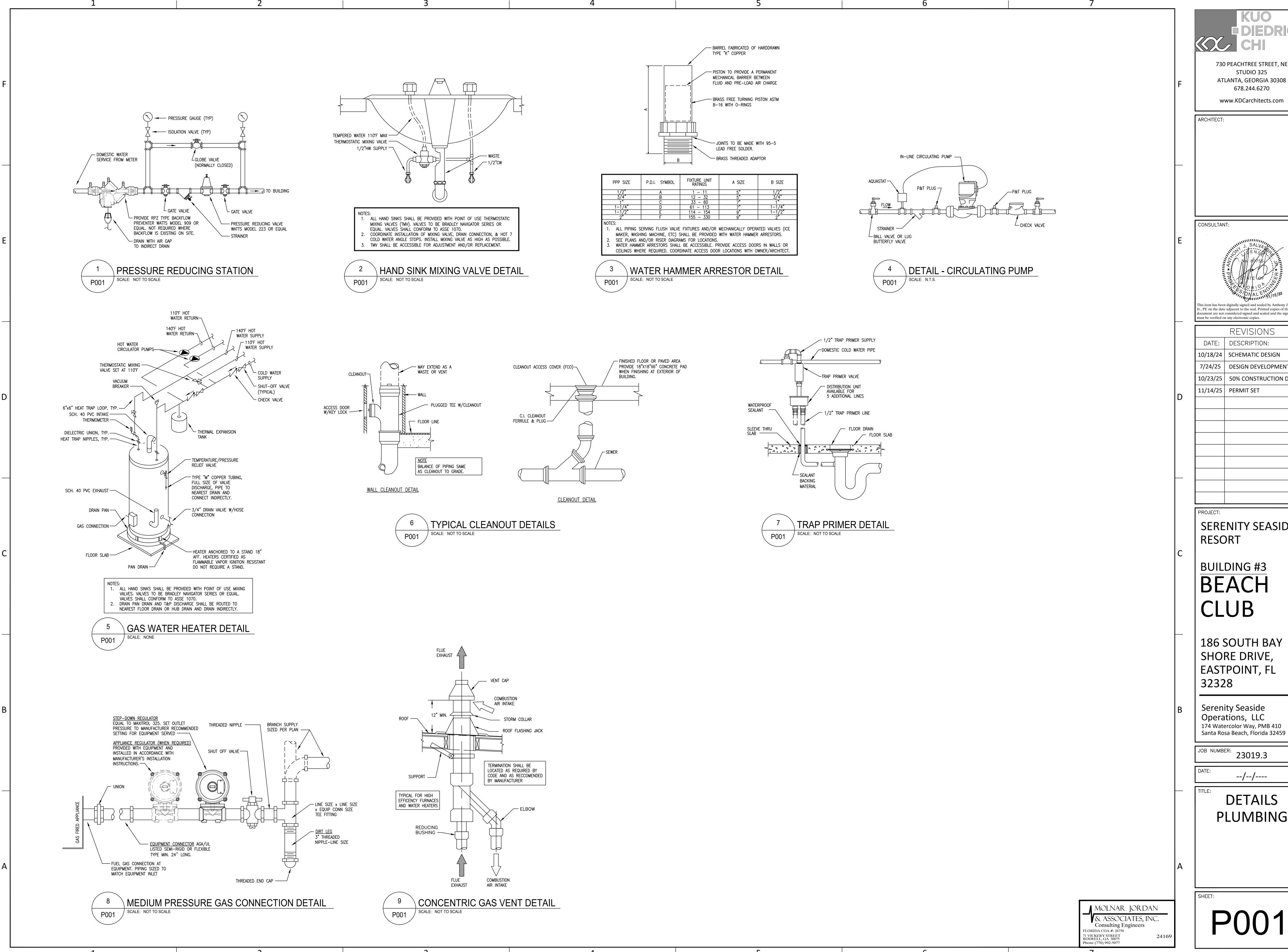
Serenity Seaside Operations, LLC 174 Watercolor Way, PMB 410 Santa Rosa Beach, Florida 32459

JOB NUMBER: 23019.3

NOTES &

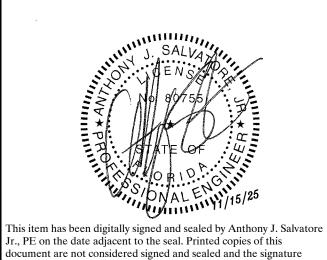
--/--/---

**SCHEDULES PLUMBING** 



730 PEACHTREE STREET, NE STUDIO 325

> 678.244.6270 www.KDCarchitects.com



REVISIONS DATE: DESCRIPTION: 10/18/24 | SCHEMATIC DESIGN 7/24/25 | DESIGN DEVELOPMENT 10/23/25 | 50% CONSTRUCTION DOCS

SERENITY SEASIDE **RESORT** 

BUILDING #3 **BEACH** CLUB

186 SOUTH BAY SHORE DRIVE, EASTPOINT, FL

Serenity Seaside Operations, LLC 174 Watercolor Way, PMB 410 Santa Rosa Beach, Florida 32459

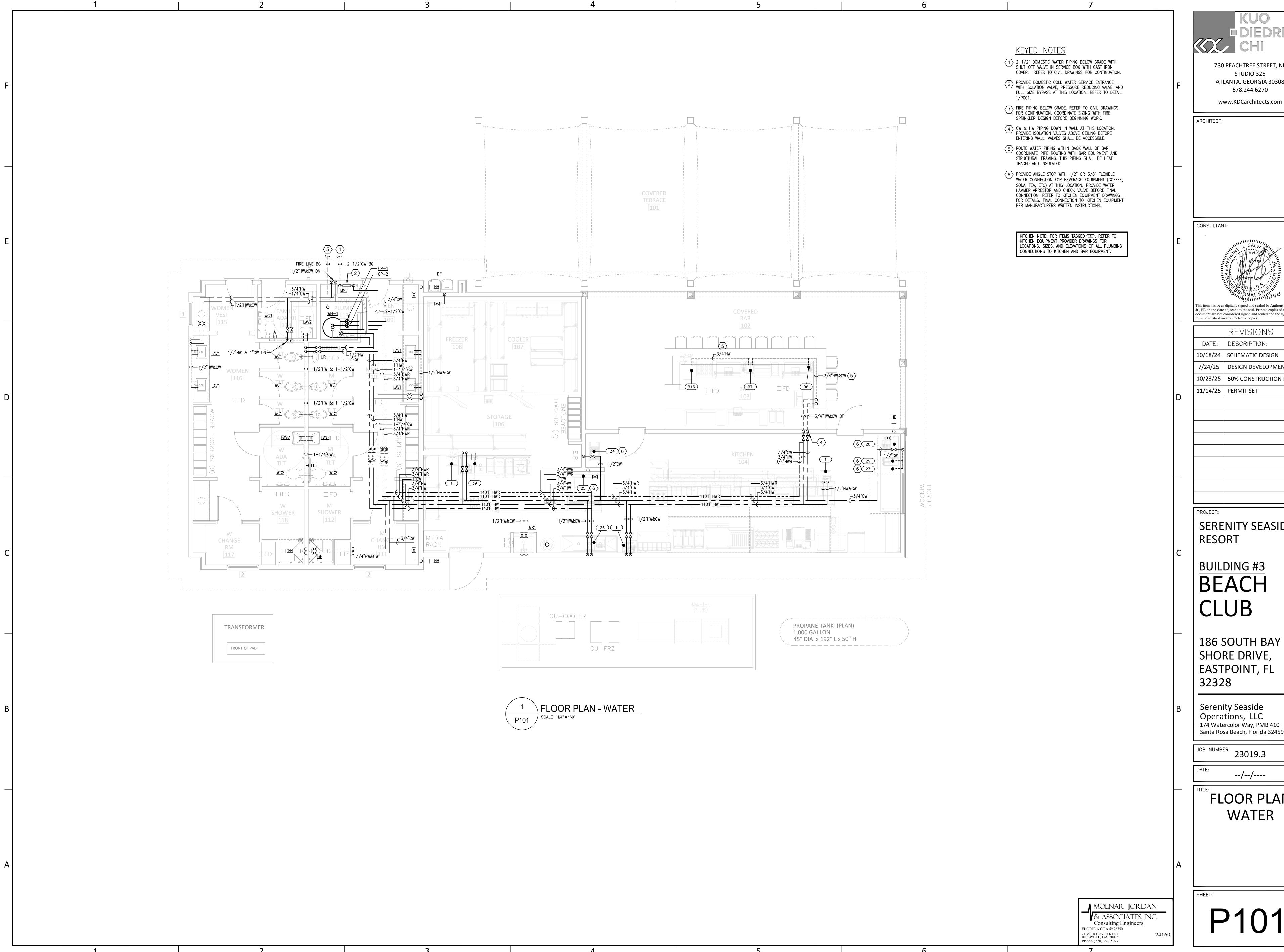
JOB NUMBER: 23019.3

--/--/----

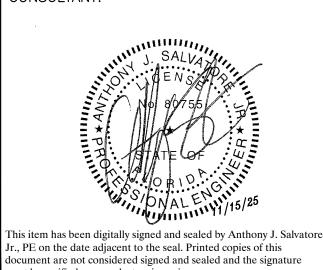
**DETAILS** 

**PLUMBING** 

P001



730 PEACHTREE STREET, NE ATLANTA, GEORGIA 30308



10/18/24 | SCHEMATIC DESIGN 7/24/25 DESIGN DEVELOPMENT 10/23/25 50% CONSTRUCTION DOCS

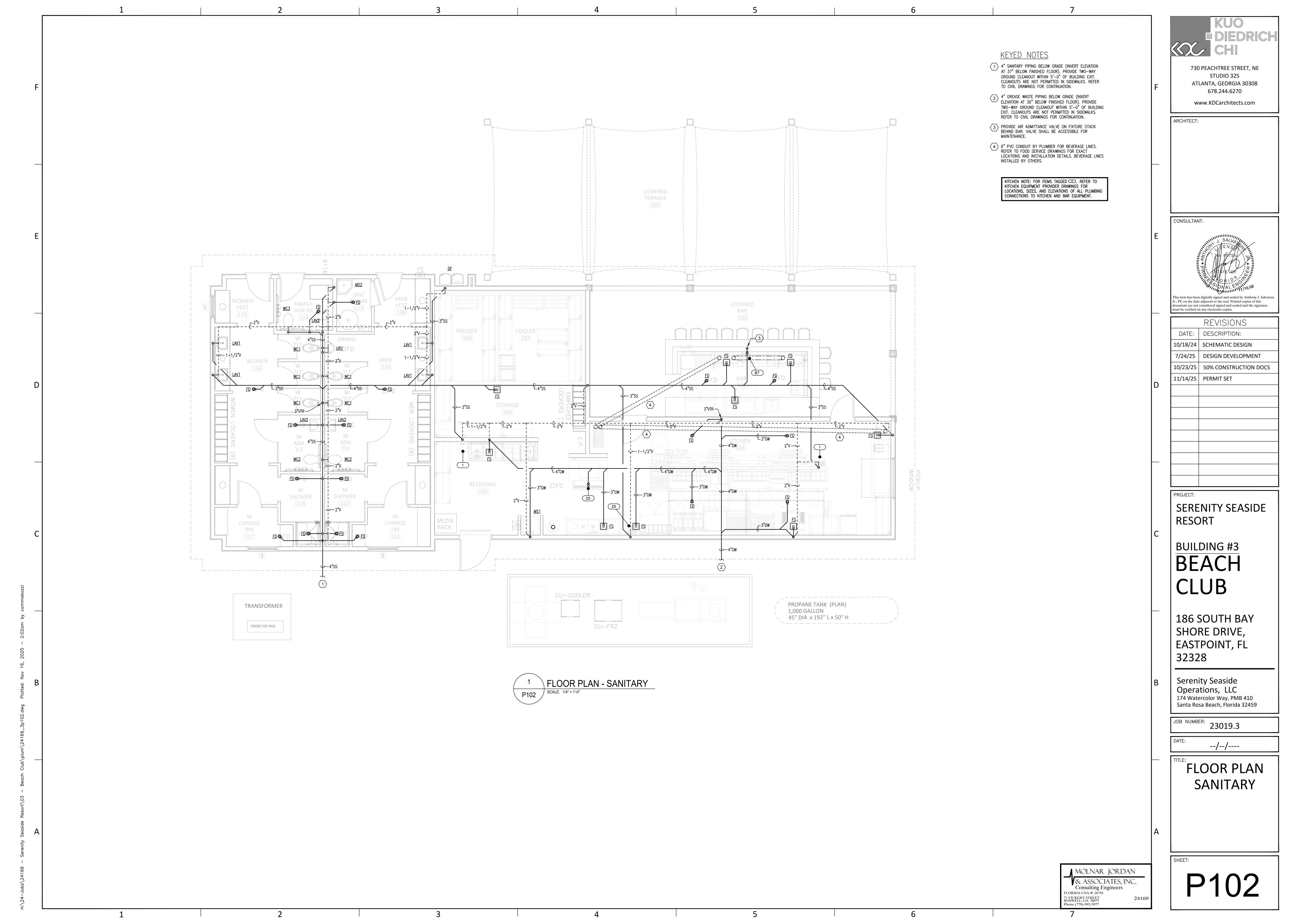
SERENITY SEASIDE

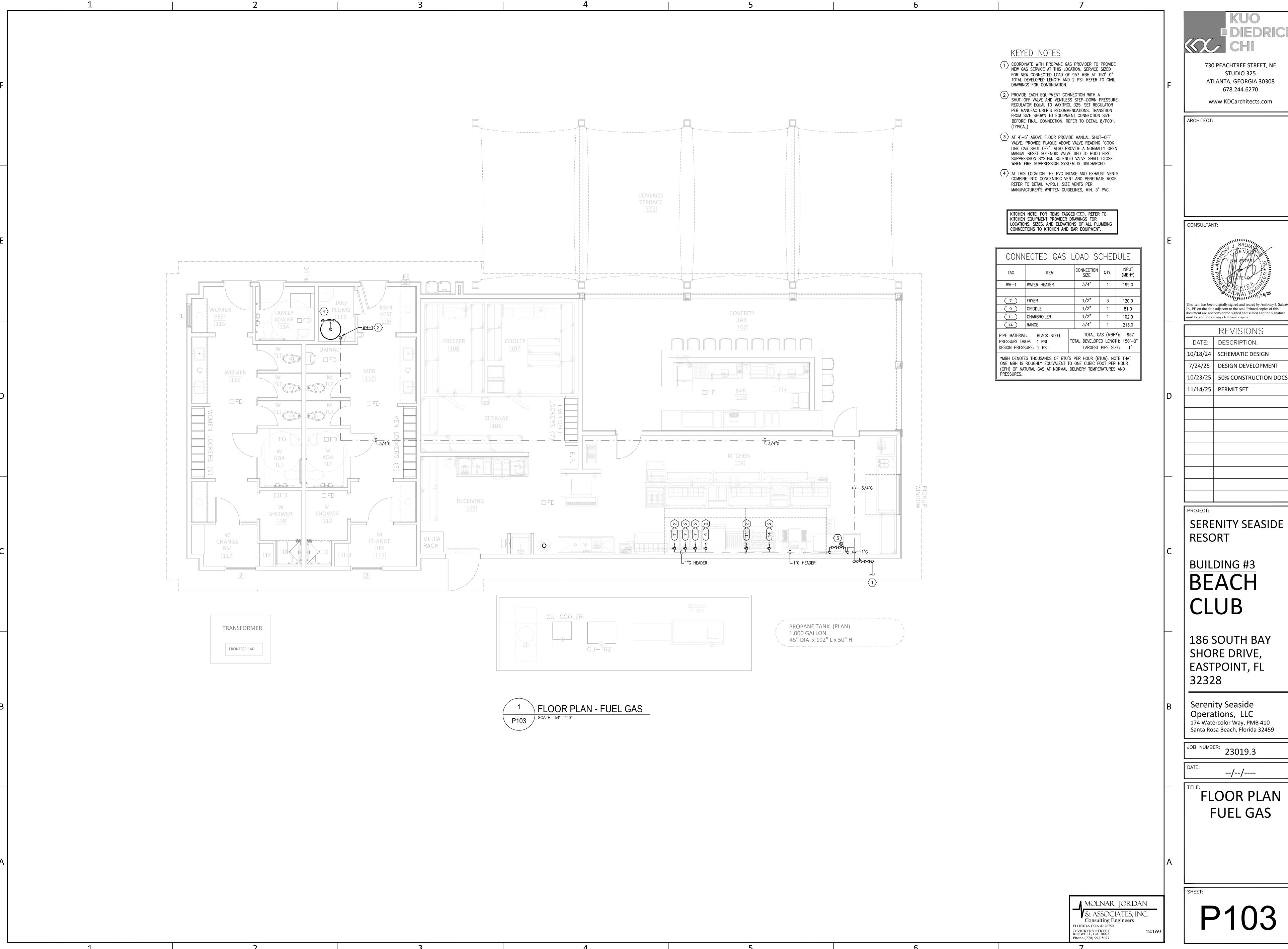
186 SOUTH BAY

174 Watercolor Way, PMB 410

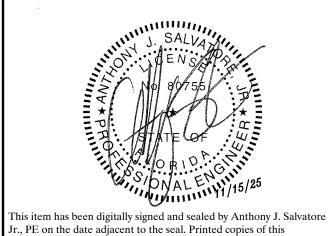
FLOOR PLAN

P101





730 PEACHTREE STREET, NE STUDIO 325 ATLANTA, GEORGIA 30308 678.244.6270 www.KDCarchitects.com



dist be verified on any electronic copies.					
	REVISIONS				
DATE:	DESCRIPTION:				
10/18/24	SCHEMATIC DESIGN				
7/24/25	DESIGN DEVELOPMENT				
10/23/25	50% CONSTRUCTION DOCS				
11/14/25	PERMIT SET				

SERENITY SEASIDE RESORT

BUILDING #3 BEACH CLUB

186 SOUTH BAY SHORE DRIVE, EASTPOINT, FL 32328

Serenity Seaside Operations, LLC 174 Watercolor Way, PMB 410 Santa Rosa Beach, Florida 32459

--/--/----

FLOOR PLAN **FUEL GAS** 

P103