## <u>GENERAL PLUMBING NOTES:</u>

- ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 VIRGINIA UNIFORM STATEWIDE 1. BUILDING CODE, ALL FEDERAL, STATE, AND CITY CODES, ORDINANCES, AND STANDARDS.
- 2. PROVIDE SHOP DRAWINGS FOR APPROVAL FOR ALL NEW EQUIPMENT.
- 3. PROVIDE OPERATION AND MAINTENANCE MANUALS FOR ALL NEW EQUIPMENT TO OWNER.
- 4. IT IS THE INTENT OF THESE DOCUMENTS THAT THE CONTRACTOR PROVIDE ALL LABOR, MATERIAL, EQUIPMENT AND TOOLS FOR THE COMPLETE INSTALLATION OF ALL WORK SHOWN ON THE PLANS AND/OR DESCRIBED HEREIN, INCLUDING ALL DEVISES AND CONTROLS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONING SYSTEM.
- ALL WORK PROVIDED UNDER THIS CONTRACT INCLUDING ALL MECHANICAL EQUIPMENT, 5. MATERIALS, AND LABOR SHALL BE PROVIDED WITH A 1 YEAR WARRANTY.
- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE. NOT ALL FITTINGS, OFFSETS, VENTS, OR 6. DRAINS ARE SHOWN. THE CONTRACTOR SHALL INCLUDE ALL OFFSETS, VENTS, AND DRAINS AS REQUIRED FOR A FULLY FUNCTIONING SYSTEM.
- 7. PROVIDE UL RATED FIRE STOPPING AROUND ALL PIPES THAT PENETRATE REATED WALL AND/OR FLOORS PROVIDE CAULKED SEAL AROUND ALL DUCT AND/OR PIPING PENETRATIONS THROUGH NON RATED FULL HEIGHT WALLS TO MINIMIZE SOUND TRANSFER.
- WHERE PIPE CONNECTIONS ARE SHOWN CONNECTING TO EXISTING, CONTRACTOR SHALL DETERMINE EXACT LOCATIONS AND CONNECTION SIZES BY FIELD VERIFICATION PRIOR TO INSTALLATION. SLOPES AND INVERT ELEVATIONS OF EXISTING SEWER SHALL BE ESTABLISHED AND VERIFIED BY CONTRACTOR BEFORE ANY PIPING IS INSTALLED IN ORDER THAT PROPER SLOPE WILL BE MAINTAINED AND NECESSARY INVERT ELEVATIONS OBTAINED.
- 9. ALL PIPING SHALL BE LABELED FOR ITS USAGE.
- 10. ALL PIPES SHALL BE COORDINATED WITH OTHER NEW AND EXISTING DUCTS, PIPES, LIGHTS, STRUCTURAL SYSTEM, CEILING SUPPORTS AND FRAMING BEFORE INSTALLATION. MINOR PIPE OFFSETS SHALL BE PROVIDED AS REQUIRED. MEASUREMENTS FOR VERTICAL CLEARANCES SHALL BE TAKEN AT THE JOB SITE BEFORE INSTALLATION OF ANY PIPING.
- 11. PIPING SHALL NOT BE INSTALLED ABOVE ELECTRICAL PANELS. COORDINATE INSTALLATION OF PIPES WITH ELECTRICAL PANELS WHEN SHOWN NEAR PANELS OR OVER ELECTRICAL ROOMS.
- 12. PROVIDE NEW WALL CARRIERS FOR ALL NEW WALL HUNG EQUIPMENT INCLUDING LAVATORIES AND URINALS.
- 13. CONTRACTOR SHALL COORDINATE WITH KITCHEN EQUIPMENT AND KITCHEN SINKS. PROVIDE ALL WATER, GAS, AND DRAINAGE SYSTEMS AS REQUIRED, COORIDNATE PURCHASE AND INSTALLATION WITH OWNER AND GENERAL CONTRACTOR.
- 14. REFER TO MECHANICAL CRAWL SPACE PLAN (M300) FOR SUMP PIT LOCATIONS AND PROVIDE CRAWL SPACE DRAIN AROUND BUILDING PERIMETER. FOUNDATION DRAINS SHALL BE ROUTED TO SUMP PIT/PUMP.

JOSAM CLEANOUT WALL CH FLOOR (UNFIN

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SYSTEM WITH A 4" THROAT. FABRICATED CHANNELS HA CHANNEL SEC INSTALLATION, GASKETS AVAILABLE. CHANNELS WEIGH LESS THAN 2.31 LBS. PER LINEAR FOOT, HAVE A SMOOTH, 1-1/2" RADIUSED SELF CLEANING BOTTOM. CHANNELS HAVE FEET FOR PATTY POUR OR LEVELING STUDS STANDARD TO SECURE TRENCH IN ITS FINAL LOCATION. CHANNELS ARE PROVIDED WITH STANDARD FS GRATES THAT LOCK DOWN TO FRAME. ZURN 6" WIDE REVEAL FABRICATED STAINLESS STEEL GRATE CONFORMING TO ASTM SPECIFICATION A-240, (TYPE 304), IS RATED CLASS A PER THE DIN EN1433 TOP LOAD CLASSIFICATION. SUPPLIED IN 40" [1016MM] NOMINAL LENGTHS WITH 5/16" WIDE SLOTS, AND 3/4" BEARING DEPTH. GRATE HAS AN OPEN AREA OF 12.00 SQ. IN PER FT.

## PLUMBING EQUIPMENT SCHEDULE:

PLUMBING FIXTURE SCHEDULE:
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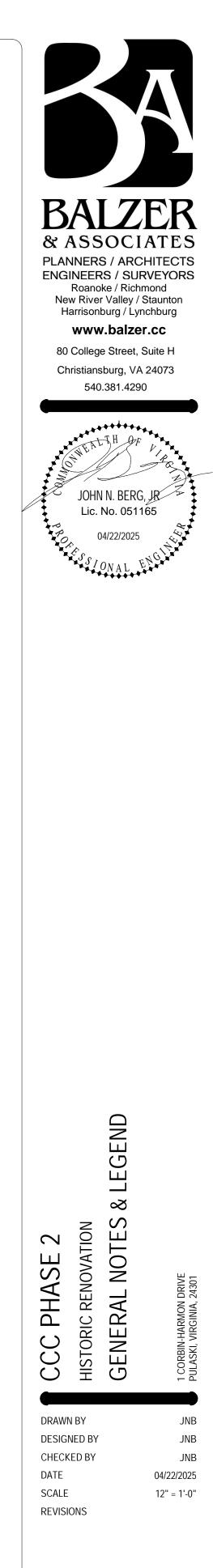
JOSAM CLEANOUT			
	USH WALL PLATE, RECESSED PLUG.	PF-1	8" POT FILLER MIXING FAUCET, QUARTER-TURN ETERNA CARTRIDGES W/ SPRING CHECKS, LEVER HANDLES, 18" DOUBLE JOINT SWING NOZZLE, HEAT RESISTANT HANDLE & 1/2" NPT MALE INLETS
FLOOR (UNFINISHED) -	SATIN NIKALOY BRONZE TOP, RECESSED PLUG.	HR-1	HOSE REEL: REGENCY MODEL# 600HRSS50NS, DURABLE STAINLESS STEEL REEL HOUSES 50' HOSE, ADJUSTABLE GUIDE ARM FOR PRECISE CONTROL, LOCKING
FLOOR (FINISHED) -	RECESSED SATIN BRONZE TOP TO RECEIVE FLOOR FINISH MATERIAL (CARPET/TILE), RECESSED PLUG.		MECHANISM FOR LOCKING AT PREFERRED LENGTH, 6 3/4" WIDE L-SHAPED BASE WITH GROOVE REINFORCEMENT TO ENSURE STABILITY, SPRING REDUCER
	(	WH-1	WALL HYDRANT: ANTI-SIPHON, FREEZELESS TYPE, WOODFORD MODEL B65, CONCEALED BOX TYPE WITH ANTI-SIPHON VACCUM BREAKER, 3/4" INLET AND OUTLET. EXTERIOR SHALL BE ROUGH BRASS WITH KEY. COORDINATE LOCATIONS WITH WALL THICKNESS.
TRENCH DRAIN, ZURN M	10DEL ZS890, 7" WIDE REVEAL TRENCH DRAIN		
A 4" THROAT. MODULAR FABRICATED STAINLES CHANNELS HAVE 10GA.	OM. CHANNELS ARE 80" LONG, 7" WIDE AND HAVE CHANNEL SECTIONS ARE MADE OF 16 GA. S STEEL CONFORMING TO ASTM A-240 (TYPE 304). BOLTED, FLANGED CONNECTION BETWEEN AT WILL NOT SEPARATE DURING THE	S-1	KITCHEN HAND SINK: ADVANCE TABCO 7-PS-49 HAND SINK WITH SPLASH MOUNT FAUCET - 19" X 19 3/4". 4" O.C. SPLASH MOUNTED FAUCET AND 2 STAINLESS STEEL SUPPORT BRACKETS. (HARDWARE INCLUDED).

# PLUMBING LEGEND

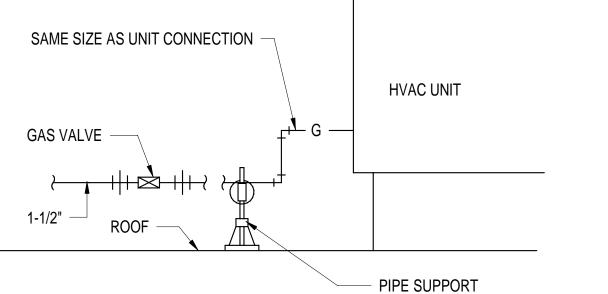
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GAS LINE SANITARY SEWER (W) VENT (V) COLD WATER (CW) HOT WATER (HW) HOT WATER RECIRCULATION STORM DRAIN (SD) DRAIN LINE ACID RESISTANT PIPE COMPRESSED AIR DIRECTION OF FLOW AIR CUSHION-PDI UNIT RATING
PIPE ANCHOR GATE VALVE GLOBE VALVE CHECK VALVE BALANCING COCK HOSE BIB WALL HYDRANT CIRCUIT SETTER BALANCING VALVE UNION STRAINER
BACKFLOW PREVENTER PRESSURE REDUCING VALVE AIR PRESSURE REGULATING VALVE PRESSURE RELIEF VALVE CAP FLEXIBLE CONNECTION ELBOW,90 DEGREES
ELBOW,90 DEGREES -TURNED UP ELBOW,90 DEGREES -TURNED DOWN ELBOW,45 DEGREES
TOP OF MAIN BRANCH CONNECTION
BOTTOM OF MAIN BRANCH CONNECTION
SIDE OF BRANCH CONNECTION FLOOR DRAIN CLEAN OUT IN FLOOR CLEAN OUT PLUG
PRESSURE GAGE
POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK (EXISTING PIPING, OR EQUIPMENT) (NEW PIPING, OR EQUIPMENT)
POINT OF DISCONNECTION OF EXISTING PIPING, OR EQUIPMENT (PIPING, OR EQUIPMENT TO REMAIN)

— (PIPING, OR EQUIPMENT TO BE REMOVED)







## DETAIL - ROOFTOP GAS PIPING CONNECTION

NOT TO SCALE

TOTAL GAS LOAD FOR BUILDING IS 1420 MBH GAS PIPING IS SIZED BASED ON 14.0" W.C. AND 175 FEET TOTAL LENGTH OF PIPING.

GAS LOAD SUMMARY

120 MBH

287 MBH 135 MBH

40 MBH

120 MBH

307 MBH

90 MBH

320 MBH

1419 MBH

CURRENT LOAD:

MUA-1: STEAM KETTLE

48" CHARBROLIER

RTU-1:

FRYER

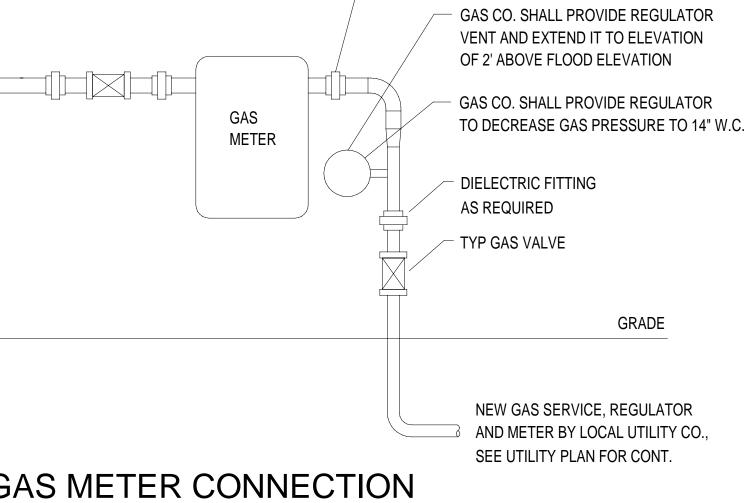
RTU-2:

60" RANGE

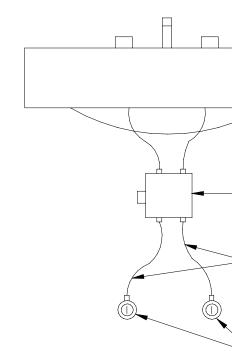
CONV. OVEN

FUTURE LOAD:

TOTAL LOAD:



DETAIL -	GAS	ME <sup>-</sup>	ΓER	C
NOT TO SCALE				



### DETAIL - TEMPERING VALVE FOR SINKS AND LAVS NOT TO SCALE

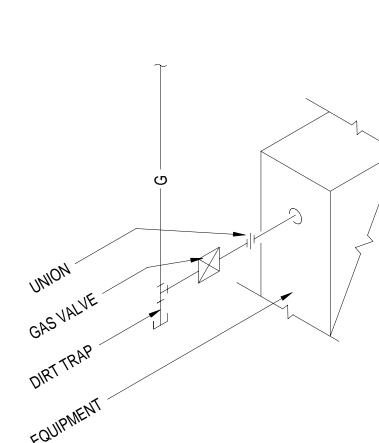
- ¾" FLEXIBLE RISERS (TYP) - HOT & COLD WATER STOPS

ASSE 1070 TEMPERING VALVE,

INSTALL PER MANUF INSTRUCTIONS

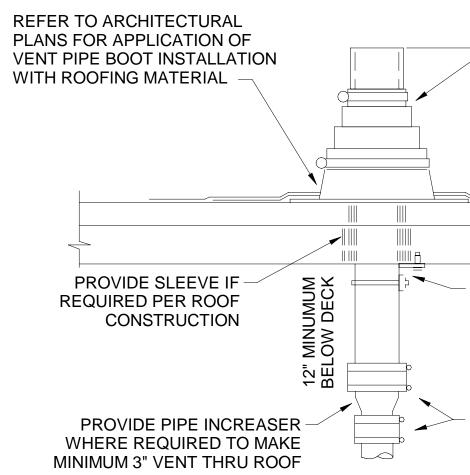
- SINK/LAV

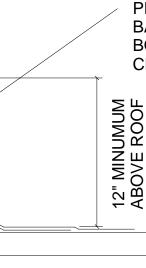
## DETAIL - EQUIPMENT GAS CONNECTION NOT TO SCALE



NOT TO SCALE

- UNION (TYP)





PROVIDE ONE PIECE SPUN ALUMINUM BASE WITH GRADUATED STEPPED PVC BOOT AND ADJUSTABLE STAINLESS STEEL CLAMPS. SET BASE IN BED OF MASTIC

> ROOF DECK AND INSULATION, REFER TO ARCHITECTURAL PLANS

ANCHOR PIPE TO ROOF DECK OR JOISTS WITH U-BOLT AROUND PIPE AND ANGLE IRON WELDED OR SCREWED TO DECK OR JOIST

HUBLESS PIPE CONNECTORS ON CAST IRON PIPE

REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR A MINIMUM OF 20 FEET HORIZONTAL (UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION) OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND COUNTERFLASHING WITH ROOFING CONTRACTOR.







DESIGNED BY

CHECKED BY

DATE

SCALE

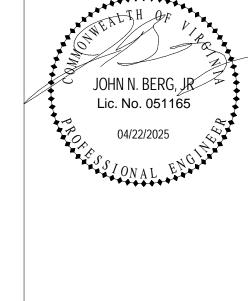
REVISIONS

JNB

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04/22/2025

As indicated







### PLUMBING SPECIFICATIONS

- 1. GENERAL PROVISIONS
  - 1.A. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2021 VIRGINIA UNIFORM STATEWIDE BUILDING CODE, ALL FEDERAL, STATE, AND CITY CODES, ORDINANCES, AND STANDARDS,
  - 1.B. THE PLANS ARE DIAGRAMMATIC IN NATURE AND BASED ON ONE MANUFACTURER'S EQUIPMENT. THEY ARE NOT INTENDED TO SHOW EVERY ITEM IN ITS EXACT LOCATION. THE EXACT DIMENSIONS. OR ALL THE DETAILS OF THE EQUIPMENT. VERIFY THE ACTUAL DIMENSIONS OF THE EQUIPMENT PROPOSED TO BE USED. INSTALLATION SHALL BE WITHIN THE LIMITATIONS IMPOSED BY THE ARCHITECTURAL, STRUCTURAL, HVAC, ELECTRICAL, AND PLUMBING REQUIREMENTS WITH ADEQUATE SPACE FOR MAINTENANCE.
  - 1.C. GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1 YEAR FROM DATE OF ACCEPTANCE AND CONTRACTOR SHALL MAKE GOOD. WITHOUT ADDITIONAL COST TO THE OWNER. ANY DEFECTS WHICH MAY APPEAR WITHIN THAT PERIOD. MANUFACTURER'S WARRANTIES EXTENDING BEYOND ONE YEAR SHALL BE PROCESSED AND TURNED OVER TO THE OWNER.
  - 1.D. MAJOR ITEMS ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INCIDENTAL ITEMS REQUIRED TO PROVIDE A COMPLETE AND FUNCTIONAL SYSTEM.
  - 1.E. A TRADE NAMES AND CATALOG NUMBERS SHALL BE INTERPRETED AS ESTABLISHING A GENERAL DESIGN AND STANDARD OF QUALITY AND SHALL NOT BE CONSTRUED AS LIMITING COMPETITION. UNLESS STATED OTHERWISE, THE CONTRACTOR MAY USE ANY ARTICLE WHICH, IN HIS JUDGEMENT, AND WITH WRITTEN COMMENT FROM THE ARCHITECT/ENGINEER INDICATING NO OBJECTION, IS EQUAL OR SUPERIOR TO THAT SPECIFIED. DRAWINGS SHOWING CHANGES OR REVISIONS REQUIRED BY THE SUBSTITUTION FOR SPECIFIED ITEMS SHALL BE SUBMITTED WITH THE SHOP DRAWING DATA, AND THE COSTS OF ALL SUCH CHANGES SHALL BE BORNE BY THE CONTRACTOR.
  - 1.F. SIMILAR ITEMS SHALL BE PROVIDED BY A SINGLE MANUFACTURER.
  - 1.G. ALL REQUIRED WALL OR FLOOR OPENINGS SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR AND/OR OTHER RELEVANT TRADES.
  - 1.H. ALL PIPING SHALL BE INSTALLED ABOVE THE CEILING UNLESS INDICATED OTHERWISE. ALL WATER PIPING AND P-TRAPS SHALL BE INSTALLED WITHIN THE BUILDINGS INSULATION ENVELOPE OR BE PROVIDED WITH A FREEZE PROTECTION SYSTEM.
  - 1.I. PROVIDE SUPPORTS TO RIGIDLY ATTACH ALL EQUIPMENT. APPURTENANCES AND PIPE AS REQUIRED FOR SUPPORT. PRIOR TO INSTALLATION OF HANGERS AND INSERTS, THE CONTRACTOR SHALL COORDINATE LOCATIONS AND REQUIREMENTS TO MINIMIZE CONFLICTS WITH OTHER BUILDING SYSTEMS, INSTALLATION OF PIPE HANGERS AND SUPPORTS SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURERS STANDARDIZATION SOCIETY (MSS) STANDARDS SP-58, 69 AND 89.
  - 1.J. THE CONTRACTOR SHALL MAKE FINAL CONNECTIONS TO ALL EQUIPMENT INDICATED TO BE FURNISHED BY OTHERS.
- SUBMITTAL AND SHOP DRAWINGS:
  - 2.A. SUBMIT MANUFACTURER'S CERTIFIED DATA RELATIVE TO ALL EQUIPMENT, PIPING, CONTROLS, ETC, REQUIRED FOR THE INSTALLATION OF THE PLUMBING AND FIRE PROTECTION SYSTEMS. SUBMIT FOR REVIEW ALL NECESSARY ENGINEERING, PRODUCT AND INSTALLATION DATA, SHOP DRAWINGS, SAMPLES ETC, FOR ALL EQUIPMENT, MATERIAL, AND SYSTEMS TO ASCERTAIN COMPLIANCE WITH THE TECHNICAL REQUIREMENTS OF THE CONTRACT DOCUMENTS.
  - 2.B. SUBMIT A DIGITAL PDF OF ALL NECESSARY DATA, CUTS, MANUFACTURER'S SELECTIONS, CATALOGS, BULLETINS, INSTALLATION INSTRUCTIONS, DRAWINGS, DIAGRAMS, CURVES, ETC. CLEARLY INDICATE ON THE SUBMITTED DATA, THE MANUFACTURER'S NAME, PRODUCT NUMBER(S), OPTIONS, EQUIPMENT CAPACITY, DIMENSIONAL DATA, WEIGHTS, AND OTHER APPLICABLE TECHNICAL DATA FOR THE PROJECT.
  - 2.C. TRADE NAMES, MANUFACTURERS, AND CATALOGUE NUMBERS ARE MENTIONED HEREIN AND ON THE DRAWINGS SOLELY IN ORDER TO ESTABLISH A STANDARD FOR THE TYPE, GENERAL DESIGN, AND QUALITY OF PRODUCT REQUIRED. OTHER PRODUCTS SIMILAR IN DESIGN OF EQUIVALENT QUALITY CAPABLE OF FITTING WITHIN THE SPACES ALLOCATED AND COMPLYING WITH THE DRAWINGS AND SPECIFICATIONS WILL BE CONSIDERED AFTER THE CONTRACT IS LET UNLESS "PRIOR APPROVAL" REQUIREMENTS ARE SET FORTH IN THESE DOCUMENTS.

- WORK WITH WORK OF OTHER TRADES.
- AND CONSTRUCTION IS BEGUN.
- FROM PLANS AND SPECIFICATIONS.
- AS-BUILT DRAWINGS:
  - DRAWINGS TO THE ARCHITECT/ENGINEER.
- OPERATION AND MAINTENANCE MANUALS:
- 5. PIPING SPECIALTIES:
  - IF NECESSARY.
  - SHEET BRASS ESCUTCHEONS, SOLID OR SPLIT HINGED.
  - DETAILED ON DRAWINGS, OR AS REVIEWED BY ENTERING SLEEVES.
  - RECOMMENDED BY THE MANUFACTURER.

2.D. REVIEW OF SUBMITTALS AND SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR FITTING THE EQUIPMENT IN THE SPACE ALLOTTED WITH SPACE FOR ALL CONNECTIONS AND SERVICING AND FOR THE COORDINATION OF THE

2.E. THE CONTRACTOR SHALL REVIEW ALL SUBMITTALS AND SHOP DRAWINGS AND INDICATE BY STAMP OR LETTER THAT HE HAS REVIEWED THEM. BEFORE FORWARDING THEM TO THE ARCHITECT AND/OR ENGINEER. SUBMITTALS AND DRAWINGS WILL BE RETURNED AFTER REVIEW INDICATING WHETHER EXCEPTIONS ARE TAKEN, THE SUBMITTAL RETURNED WITH CORRECTIONS, OR IS COMPLETELY REJECTED. RESUBMISSION OF REVISED SUBMITTALS AND SHOP DRAWINGS, IF REQUIRED, SHALL BE DONE BEFORE INSTALLATION

2.F. CORRECTIONS OR COMMENTS MADE ON THE SUBMITTALS AND DRAWINGS DURING THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THIS REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS FABRICATION PROCESSES, TECHNIQUES OF CONSTRUCTION, COORDINATING THE WORK WITH THAT OF ALL OTHER TRADES, AND PERFORMING WORK IN A SAFE AND SATISFACTORY MANNER REVIEW OF THE SUBMITTALS SHALL NOT PERMIT ANY DEVIATION

3.A. MAINTAIN DAILY UPDATED DRAWINGS SHOWING DEVIATIONS FROM CONSTRUCTION DOCUMENTS. AT THE END OF THE PROJECT. PROFESSIONALLY PREPARE AS-BUILT DRAWINGS AND SUBMIT

4.A. UPON COMPLETION OF THE PROJECT, SUBMIT ALL OPERATION AND MAINTENANCE MANUALS, WARRANTIES, SPARE PARTS LIST, AS-BUILT DRAWINGS, TEST AND BALANCE REPORTS, AND LETTER OF GUARANTEE ALL BOUND IN THREE RING BINDERS, CLEARLY SHOWING WHICH EQUIPMENT WAS SUPPLIED TO THE JOB.

5.A. ACCESS DOORS: ACCESS DOORS SHALL BE PROVIDED FOR ALL CONCEALED VALVES, CONTROLS, AND ANY OTHER EQUIPMENT OR MATERIALS REQUIRING INSPECTION OR MAINTENANCE. ACCESS DOORS SHALL BE FURNISHED FOR FLOORS, WALLS AND CEILINGS, OF ADEQUATE SIZE SO THAT CONCEALED ITEMS WILL BE READILY ACCESSIBLE FOR SERVICING OR FOR REMOVAL AND REPLACEMENT

5.B. PIPE ESCUTCHEONS: INSTALL PIPE ESCUTCHEONS ON EACH PIPE PENETRATION THRU FLOORS, WALLS PARTITIONS, AND CEILINGS WHERE PENETRATION IS EXPOSED TO VIEW AND ON EXTERIOR OF BUILDING. SECURE ESCUTCHEON TO PIPE OR INSULATION SO ESCUTCHEON COVERS PENETRATION HOLE, AND IS FLUSH WITH ADJOINING SURFACE. PROVIDE SHEET STEEL ESCUTCHEONS, SOLID OR SPLIT HINGED. FOR AREAS WHERE WATER AND CONDENSATION CAN BE EXPECTED TO ACCUMULATE, PROVIDE CAST BRASS OR

5.C. PIPE SLEEVES: INSTALL PIPE SLEEVES WHERE PIPING PASSES THROUGH WALLS, FLOORS, CEILINGS, AND ROOFS. DO NOT INSTALL SLEEVES THROUGH STRUCTURAL MEMBERS OF WORK, EXCEPT AS

ARCHITECT/ENGINEER. SIZE SLEEVES SO THAT PIPING AND INSULATION (IF ANY) WILL HAVE FREE MOVEMENT IN SLEEVE, INCLUDING ALLOWANCE FOR THERMAL EXPANSION; BUT NOT LESS THAN 2 PIPE SIZES LARGER THAN PIPING RUN. INSTALL LENGTH OF SLEEVE EQUAL TO THICKNESS OF CONSTRUCTION PENETRATED, AND FINISH FLUSH TO SURFACE; EXCEPT FLOOR SLEEVES. EXTEND FLOOR SLEEVES 1/4 INCH ABOVE LEVEL FLOOR FINISH, AND 3/4 INCH ABOVE FLOOR FINISH SLOPED TO DRAIN. PROVIDE TEMPORARY SUPPORT OF SLEEVES DURING PLACEMENT OF CONCRETE AND OTHER WORK AROUND SLEEVES, AND PROVIDE TEMPORARY CLOSURE TO PREVENT CONCRETE AND OTHER MATERIALS FROM

5.D. WATER HAMMER ARRESTORS (WHA): PROVIDE AT ALL FAST OPENING WATER VALVES INCLUDING WATER CLOSETS, URNIALS, AND CLOTHES WASHERS. SHALL BE ZURN MODEL 1260XL OR EQUIVALENT AND SHALL BE SIZED AND PLACED WITHIN THE SYSTEM AS

- 6. INSULATION:
  - 6.A. FLAME/SMOKE RATINGS: PROVIDE COMPOSITE PLUMBING INSULATION (INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES) WITH FLAME-SPREAD RATING OF 25 OR LESS, AND SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 METHOD. INSULATION SHALL BE LABELED BY THE MANUFACTURER. THE LABEL SHALL INDICATE THE INSULATING VALUE, FLAME SPREAD AND SMOKE-DEVELOPED RATING.
  - 6.B. INSTALLATION: INSULATION SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS USING ONLY ADHESIVES, MASTICS AND PLUMBING FASTENERS APPROVED BY THE INSULATION MANUFACTURER. INSULATION SHALL NOT BE APPLIED UNTIL AFTER THE EQUIPMENT HAS BEEN TESTED WITH RESULTS ACCEPTABLE TO THE ARCHITECT/ENGINEER. INSULATION WITH A VAPOR BARRIER JACKET SHALL BE APPLIED WITH A CONTINUOUS, UNBROKEN VAPOR SEAL AND ALL JOINTS SHALL BE SEALED WITH A VAPOR BARRIER ADHESIVE UNLESS OTHERWISE INDICATED. STAPLES, STICK CLIPS AND HANGERS SHALL BE VAPOR SEALED WHERE THEY PUNCTURE VAPOR BARRIER JACKETS.

6.C. MATERIALS:

6.C.A. GLASS FIBER PIPE INSULATION: HEAVY DENSITY PREFORMED PIPE INSULATION WITH OPERATING TEMPERATURE RANGE OF -60 DEGREES F TO 350 DEGREES F, THERMAL CONDUCTIVITY "K"=0.24 BTU-IN/HOUR-SF-DEG F AT 100 DEGREES F. FACTORY APPLIED JACKET (ASJ) SHALL CONSIST OF WHITE KRAFT PAPER BONDED TO ALUMINUM FOIL AND REINFORCED WITH GLASS FIBER YARN. EQUAL TO OWENS-CORNING ASJ.

6.C.B.CELLULAR FOAM PIPE INSULATION: TUBULAR, FLEXIBLE, FIRE **RESISTANT INSULATION WITH OPERATING TEMPERATURE RANGE OF -40** DEGREES F TO 220 DEGREES F, THERMAL CONDUCTIVITY "K"=0.27 BTU-IN/HOUR-SF-DEG F AT 75 DEGREES F. NO JACKET REQUIRED. EQUAL TO ARMSTRONG ARMAFLEX AP.

6.C.C.A POLYETHYLENE PIPE INSULATION: INSULATION MATERIALS CORPORATION OF AMERICA (IMCOA), FLEXIBLE CLOSED CELL POLYETHYLENE TUBING, ASTM C534, "K"=0.24 AT 75 DEGREES F, SERVICE TEMPERATURE -110F TO 210F. NO JACKET REQUIRED.

- 6.D. OMIT INSULATION ON EXPOSED PLUMBING FIXTURE RUNOUTS FROM FACES OF WALL OR FLOOR TO FIXTURE; ON UNIONS, FLANGES, STRAINERS, FLEXIBLE CONNECTIONS, AND EXPANSION JOINTS.
- 6.E. COVER VALVES, FITTINGS AND SIMILAR ITEMS IN EACH PIPING SYSTEM WITH EQUIVALENT THICKNESS AND COMPOSITION OF INSULATION AS APPLIED TO ADJOINING PIPE RUN.
- 6.F. ALL DOMESTIC WATER PIPING ABOVE GROUND INCLUDING COLD, HOT, AND HOT WATER RE-CIRCULATING PIPING SHALL BE INSULATED WITH A MINIMUM 1/2" THICK INSULATION.
- 7. PLUMBING PIPING:
  - 7.A. DOMESTIC WATER PIPING SHALL BE COPPER TUBE AND FITTINGS IN ACCORDANCE WITH ASTM B88, TYPE L HARD DRAWN COPPER. JOINTS SHALL BE MADE WITH LEAD FREE SOLDER.
  - 7.B. STORM, SOIL, WASTE, AND VENT PIPING BELOW GRADE SHALL BE SCHEDULE 40 PVC PIPE AND FITTINGS. PVC SCHEDULE 40 PIPE SHALL BE IRON PIPE SIZE (IPS) CONFORMING TO ASTM D 1785. INJECTION MOLDED PVC SCHEDULE 40 FITTINGS SHALL CONFORM TO ASTM D 2466. PIPE AND FITTINGS SHALL BE MANUFACTURED AS A SYSTEM AND BE THE PRODUCT OF ONE MANUFACTURER. PIPE AND FITTINGS SHALL CONFORM TO NSF INTERNATIONAL STANDARD 61 AND THE HEALTH-EFFECTS PORTION OF NSF STANDARD 14.
  - 7.C. STORM. SOIL. WASTE, AND VENT PIPING ABOVE GRADE SHALL BE HUBLESS CAST IRON TYPE DESIGNED FOR SAID APPLICATION. HUBLESS CAST IRON PIPE AND FITTINGS SHALL BE MANUFACTURED FROM GRAY CAST IRON AND SHALL CONFORM TO ASTM A 888 AND CISPI STANDARD 301. ALL PIPE AND FITTINGS SHALL BE MARKED WITH THE COLLECTIVE TRADEMARK OF THE CAST IRON SOIL PIPE INSTITUTE® AND LISTED BY NSF® INTERNATIONAL. HUBLESS COUPLINGS SHALL CONFORM TO CISPI STANDARD 310, SHALL BE MANUFACTURED IN THE UNITED STATES, AND BE CERTIFIED BY NSF® INTERNATIONAL.
  - 7.D. CONDENSATE DRAINS SHALL BE TYPE L HARD DRAWN COPPER. JOINTS SHALL BE MADE WITH LEAD FREE SOLDER.

- LARGER.

- 10FT.
- 9.
- 10. PLUMBING VALVES
  - PLUMBING FIXTURES.
- 11. CLEANING AND TESTING
  - C601
  - ACCEPTABLE.

## END OF PLUMBING SPECIFICATIONS

7.E. SLOPE ALL DRAIN LINES AT 1/4 INCH PER FOOT FOR SIZES LESS THAN 4 INCHES. SLOPE AT 1/8 INCH PER FOOT FOR SIZES 4 INCH AND

7.F. SOIL, WASTE, AND VENT PIPING BELOW GRADE SHALL BE A MINIMUM OF 2 INCH AND SHALL BE PROVIDED WITH METALLIC TRACING/DETECTION WIRE.

7.G. VENTS SHALL EXTEND A MINIMUM OF 12 INCHES ABOVE THE ROOF. ROOF FLASHING SHALL BE PROVIDED AND COORDINATED WITH THE GENERAL AND ROOFING CONTRACTORS.

7.H. TRENCHING AS REQUIRED FOR UNDERGROUND PIPING SHALL BE GRADED TO UNIFORM PITCH AND SHALL BE NO WIDER THAN NECESSARY FOR PIPING INSTALLATION. CLEAN BACKFILL SHALL BE USED AND THOROUGHLY TAMPED IN LAYERS NOT EXCEEDING 6 INCHES TO A MINIMUM DEPTH OF 1 FOOT ABOVE PIPE. COMPACTED BACKFILL SHALL BE USED FOR THE ENTIRE DEPTH OF EXCAVATION UNDER SLAB ON GRADE CONSTRUCTION

7.I. NATURAL GAS SYSTEMS: PIPING SHALL BE SCHEDULE 40 BLACK STEEL PIPE, ASTM A120/A53-CW OR ASTM/A53 GRADE B (WELDED OR SEAMLESS); WROUGHT STEEL BUTTWELDING FITTINGS. GAS COCKS 2 INCHES AND SMALLER SHALL BE RATED FOR 150 PSI, NON SHOCK WOG, BRONZE STRAIGHTWAY COCK, FLAT OR SQUARE HEAD, WITH THREADED ENDS. ALL GAS PIPING CONNECTIONS SHALL BE PROVIDED WITH A 6 INCH DIRT TRAP, UNION, AND GAS COCK SHUT OFF VALVE. ALL JOINTS SHALL BE SEALED WITH CHEMICALLY RESISTANT SEALER APPLIED TO MALE THREADS OF PIPE CONNECTION. GAS PIPING SHALL BE INSTALLED WITH A 1/64 INCH PER FOOT DOWNWARD SLOPE IN THE DIRECTION OF FLOW. A ROLLER BEARING TYPE PIPE SUPPORT SHALL BE USED TO SUPPORT ALL GAS PIPING LOCATED ON THE ROOF. SUPPORTS SHALL HAVE A POLYCARBONATE BASE, WITH PIPE RESTING ON A SELF LUBRICATING POLYCARBONATE RESIN AXLE AND ROLLER AND BE SIZED FOR THE PIPE BEING SUPPORTED. MAXIMUM SPACING SHALL NOT EXCEED

PLUMBING FIXTURES, PUMPS, AND WATER HEATERS SHALL BE PROVIDED AND INSTALLED AS PER THE PLUMBING FIXTURE SCHEDULE. ALL EXPOSED FIXTURE SUPPLIES AND WASTE LINES SHALL BE CHROME PLATED. NO EXPOSED COPPER, PVC, AND/OR CAST IRON IS ALLOWED.

CLEANOUTS SHALL BE THE SAME SIZE AS LINE SERVED, BUT NOT LARGER THAN 4 INCHES, AND SHALL BE PROVIDED AT THE BASE OF EACH SOIL AND WASTE STACK, AT ALL POINTS WHERE DIRECTION CHANGE IS MORE THAN 45 DEGREES, AT MINIMUM INTERVALS OF 50 FEET FOR 4 INCH AND SMALLER PIPING, AT MINIMUM INTERVALS OF 100 FEET FOR PIPING LARGER THAN 4 INCHES, AS REQUIRED BY CODE AND AS INDICATED ON THE DRAWINGS. COVERS SHALL BE SET FLUSH WITH FLOOR OR WALL.

10.A. PROVIDE SHUT-OFF VALVE AND UNION OR EQUIVALENT AT EACH HOT AND COLD WATER EQUIPMENT CONNECTION. PROVIDE SHUTOFF VALVE ON EACH BRANCH OR RISER THAT SERVES TWO OR MORE

10.B. GATE VALVES 2-1/2 INCHES AND SMALLER: ALL BRONZE, RISING STEM, SOLID WEDGE DISC. STOCKHAM B-100 OR B-108.

10.C. GLOBE VALVES: ALL BRONZE, RENEWABLE COMPOSITION DISC. STOCKHAM B-16 OR B-14-T.

10.D. CHECK VALVES IN HORIZONTAL PIPES: 2 INCHES AND SMALLER: ALL BRONZE, REGRINDING BRONZE DISC, HORIZONTAL SWING, Y-PATTERN, STOCKHAM B-319OR B-309,

10.E. CHECK VALVES IN VERTICAL PIPES AND PUMP DISCHARGE: SILENT CHECK VALVE WITH SEMI-STEEL BODY, BRONZE TRIM AND STAINLESS STEEL SPRING. METRAFLEX 700 SERIES.

10.F. BALL VALVES MAY BE USED IN LIEU OF GATE VALVES 2 INCHES AND SMALLER. BALL VALVES SHALL HAVE BRONZE BODY, BRONZE BALL AND TFE SEATS AND SEALS. STOCKHAM S-216BRRT OR S-216BRRS.

11.A. ALL WATER PIPING, VALVES, ETC. SHALL BE THOROUGHLY FLUSHED OF FOREIGN MATTER AND TESTED FOR LEAKS IN ACCORDANCE WITH THE PLUMBING AND BUILDING CODE, LATEST EDITION. ANY LEAKAGE SHALL BE REPAIRED. DISINFECT DOMESTIC WATER PIPING INCLUDING WATER SERVICE PIPING IN ACCORDANCE WITH AWWA

11.B. ALL DRAIN, WASTE AND VENT PIPING SHALL BE TESTED FOR LEAKS IN ACCORDANCE WITH THE PLUMBING AND BUILDING CODE CODE. LATEST EDITION. NO VISIBLE DROP IN WATER LEVEL WILL BE

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\*\*\*\*\*\*\*\* NWEALTH GA JOHN N. BERG, JR Lic. No. 051165 POR ESSIONAL



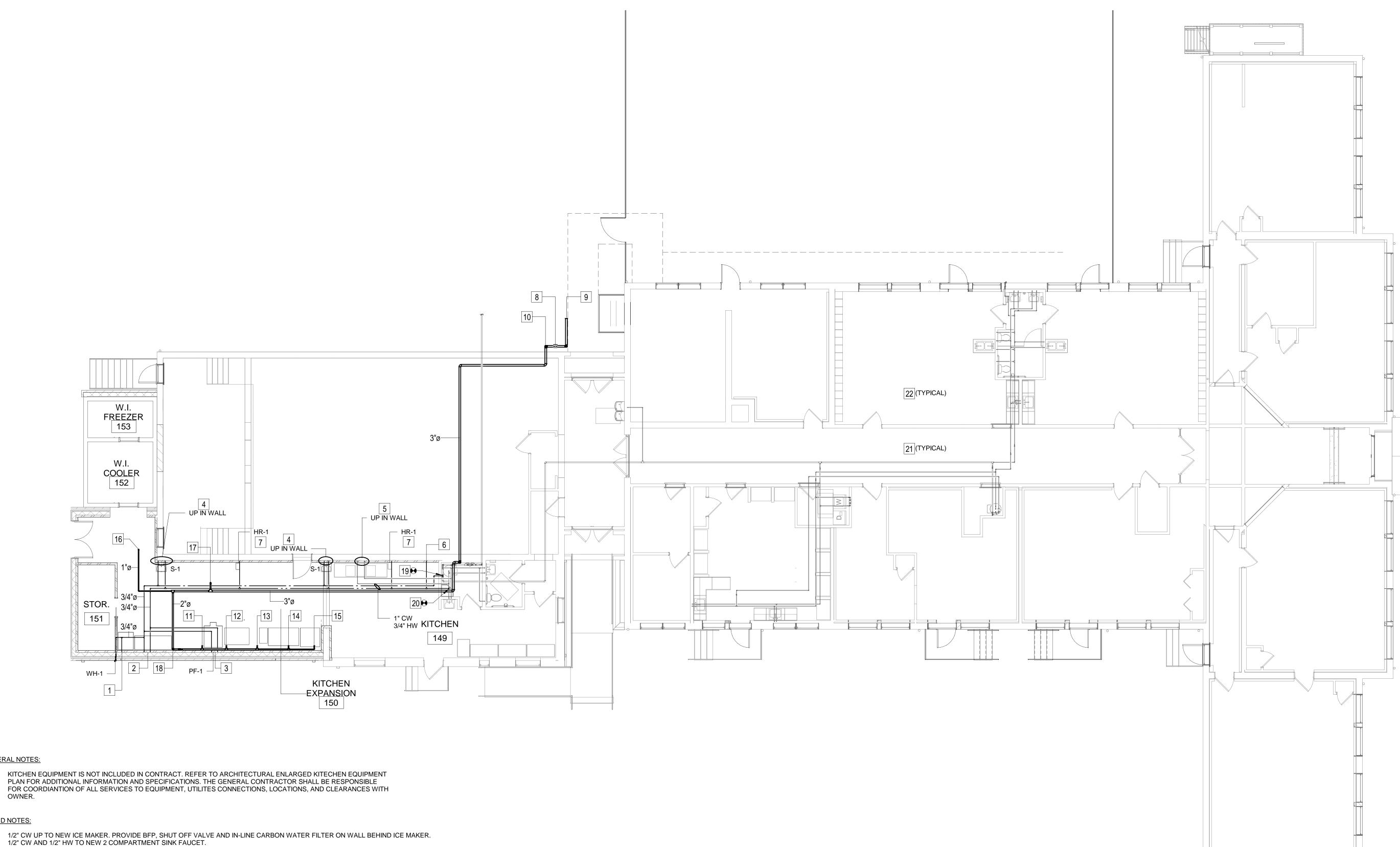


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### JNB JNB JNB 04/22/2025

REVISIONS





### GENERAL NOTES:

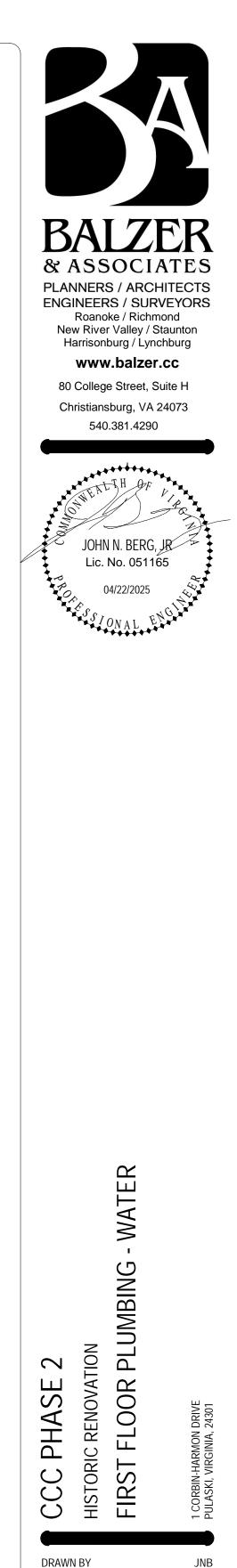
KITCHEN EQUIPMENT IS NOT INCLUDED IN CONTRACT. REFER TO ARCHITECTURAL ENLARGED KITECHEN EQUIPMENT 1. PLAN FOR ADDITIONAL INFORMATION AND SPECIFICATIONS. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDIANTION OF ALL SERVICES TO EQUIPMENT, UTILITES CONNECTIONS, LOCATIONS, AND CLEARANCES WITH OWNER.

KEYED NOTES:

22.

- 1/2" CW AND 1/2" HW TO NEW WALL MOUNTED POT FILLER (PF-1). SHALL BE MOUNTED AT 42" ABOVE FINISHED FLOOR.
- 1/2" CW AND 1/2" HW TO NEW KITCHEN HAND SINK.
- 1/2" CW AND HW TO EXISTING 3 COMPARTMENT SINK FAUCET. 1/2" HW TO NEW DISHWASHER.
- 1/2" HW TO NEW HOSE REEL (HR-1). INSTALL HOSE REEL AT 60" ABOVE FINISHED FLOOR. NEW GAS METER AND REGULATOR. REGULATOR DOWNSTREAM OF METER SHALL REDUCE THE GAS PRESSURE FROM 2PSI DOWN TO 12" W.C. RELOCATE / PROVIDE NEW NATURAL GAS SERVIDE TO THE BUILDING.
- 10. 3" GAS LINE DOWN TO CRAWL SPACE.
- NEW STEAM KETTLE (135 MBH INPUT) 11. NEW 48" CHARBROILER (40 MBH INPUT) 12.
- NEW FRYER (120 MBH INPUT) 13.
- NEW 60" RANGE (307 MBH INPUT) 14.
- NEW CONVECTION OVEN (90 MBH INPUT) 15. 1" GAS LINE UP TO RTU-1 ON THE ROOF. 16.
- 1-1/2" GAS LINE UP TO MUA-1 ON ROOF. 17.
- 2" GAS DOWN TO NEW KITCHEN EQUIPMENT. PROVIDE SHUT OFF VALVE AND AUTOMATIC SOLENOID SHUT OFF VALVE LINKED TO HOOD FIRE 18. SUPPRESSION SYSTEM. DETECTION OF FIRE SHALL CLOSE OF VALVE.
- CONNECT TO EXISTING CW MAIN. CONTRACTOR TO FIELD VERIFY EXACT TIE-IN LOCATION. 19. CONNECT TO EXISTING HW MAIN. CONTRACTOR TO FIELD VERIFY EXACT TIE-IN LOCATION.
- 20. ALL PHASE 1 DOMESTIC CW & HW IS EXISTING TO REMAIN AND SHOWN FOR REFERENCE ONLY (TYPICAL). FOR ROOM NAMES NOT SHOWN, REFER TO ARCHITECTURAL DRAWINGS (TYPICAL). 21.



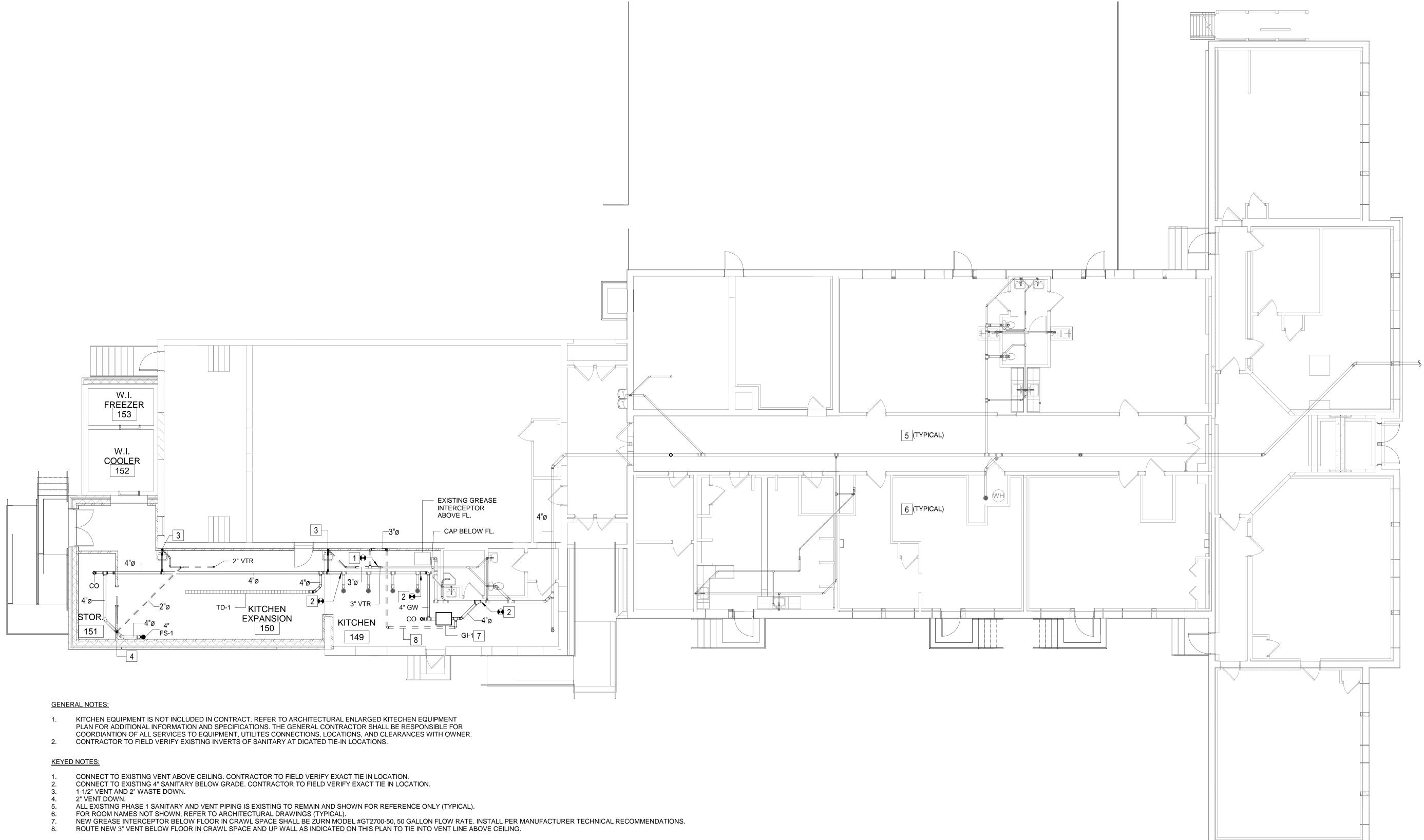


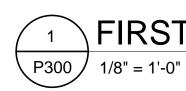
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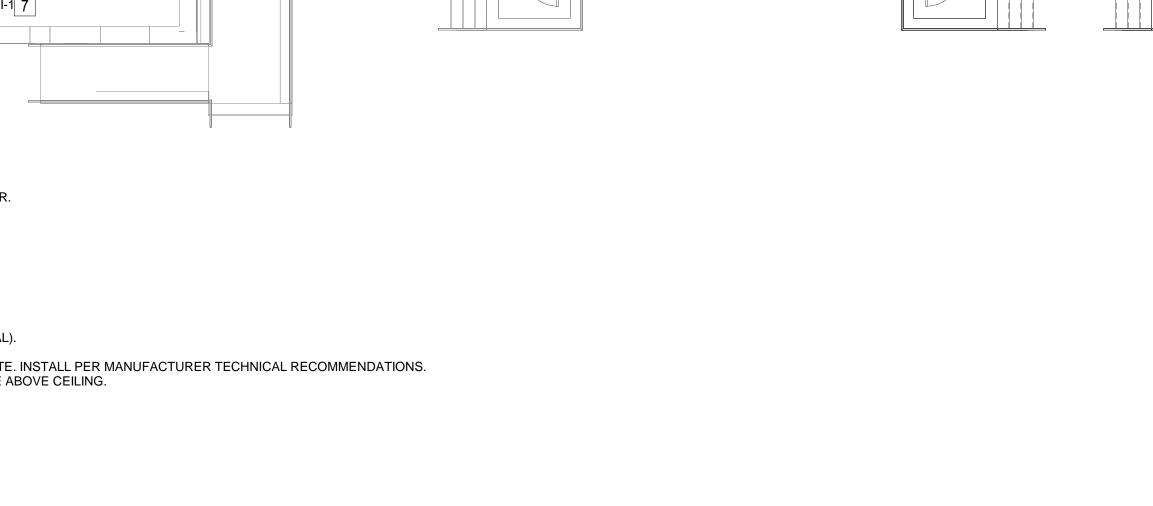
JNB 04/22/2025 1/8" = 1'-0"

JNB









FIRST FLOOR PLAN - PLUMBING - WASTE & VENT



P300 PROJECT NO 23220008.00