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PROJECT

WING SNOB
 3415 E. SAGINAW SUITE D
 LANSING, MI 48912

BUILDER/CLIENT
WING SNOB

PRELIMINARY ○
 CONSTRUCTION ●
 PERMIT ●
 SHEET TITLE:

PLUMBING SUPPLY PLAN

DATE: 01-17-2022
 02-28-2022
 03-03-2022

DRAWN BY: J.M.P.

CHECKED BY: J.M.P.

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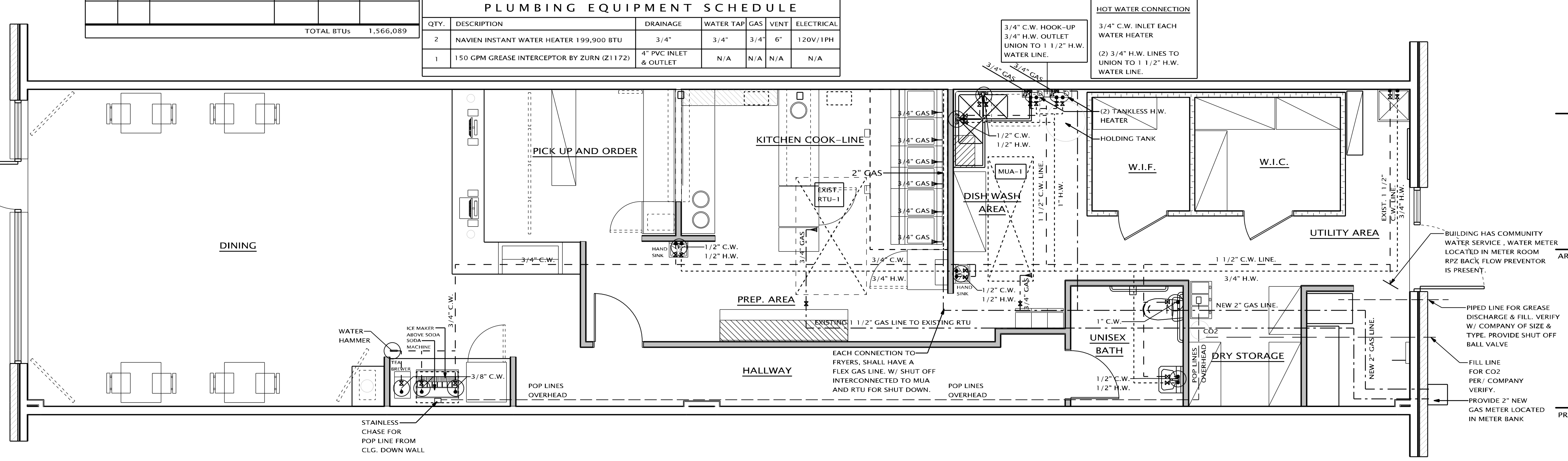
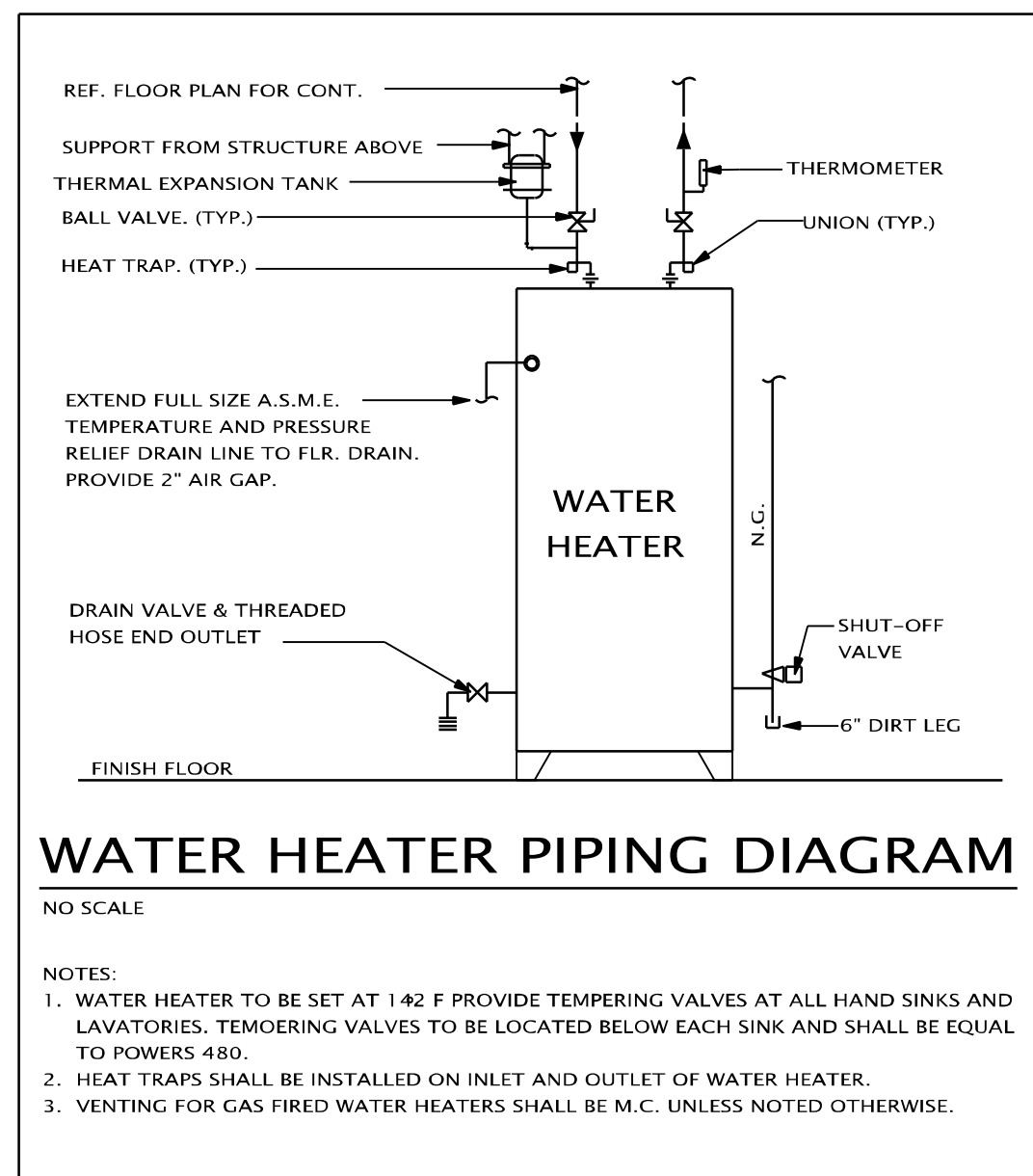
GAS SCHEDULE					
EQ. #	QTY.	DESCRIPTION	CONN.	BTU	TOTAL BTU
02	3	FRYER	3/4"	90,000	360,000
	3	FRYER	3/4"	150,000	450,000
41	2	WATER HEATER	3/4"	199,900	399,800
	1	RTU-1	3/4"	150,000	150,000
	1	MUA-1	3/4"	330,000	206,289
					TOTAL BTUs 1,566,089

HOT WATER CALCULATIONS			
QTY.	DESCRIPTION	FORMULA	TOTAL
3	HAND SINKS	$15 \times 70 \times 8.33$.80	10,933 BTUs
1	3-COMP SINK	$104.7 \times 100 \times 8.33$.80	109,018 BTUs
1	JANITOR'S SINK	$5 \times 100 \times 8.33$.80	5,206 BTUs
TOTAL			125,157 BTUs

PLUMBING FIXTURE REQUIREMENTS			FOR ENTIRE BUILDING OCCUPANT LOAD
PROVIDE AS SUCH PER TABLE 403.1 MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES. (A) ASSEMBLY (15 OCCUPANTS SIGNED AFFIDAVIT)			
LAVATORIES - MALE & FEMALE	1 PER 200 EACH SEX		1 LAVATORY REQ. FOR UNISEX
WATER CLOSETS - MALE & FEMALE	1 PER 75 EACH SEX		1 WATER CLOSETS REQ. UNISEX
SERVICE SINK REQUIRED			1 SERVICE SINK
DRINKING FOUNTAIN	NOT REQUIRED		NOT REQUIRED

SCHEDULE 40 NATURAL GAS PIPING SCHEMATIC
 2" PSI DELIVERY PRESSURE SIZING BASED ON
 2012 IFGC, TABLE 402.4(1) 0.3" WC PRESSURE
 DROP

PLUMBING EQUIPMENT SCHEDULE						
QTY.	DESCRIPTION	DRAINAGE	WATER TAP	GAS	VENT	ELECTRICAL
2	NAVIEN INSTANT WATER HEATER 199,900 BTU	3/4"	3/4"	3/4"	6"	120V/1PH
1	150 GPM GREASE INTERCEPTOR BY ZURN (Z1172)	4" PVC INLET & OUTLET	N/A	N/A	N/A	N/A



PLUMBING SUPPLY PLAN

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

PLUMBING NOTES

GENERAL REQUIREMENTS
 READ AND BE BOUND BY THE ARCHITECTURAL SPECIFICATIONS. THESE SPECIFICATIONS, ALL OTHER DOCUMENTS ATTACHED HERETO, AND ADDENDA ISSUED AND THE ACCOMPANYING PLANS ARE INTENDED TO PROVIDE FOR THE COMPLETE FURNISHING AND INSTALLING OF THE ENTIRE MECHANICAL SYSTEM.
 THE WORK SHALL BE DONE IN ACCORDANCE WITH BEST PRACTICE SO AS TO CONTRIBUTE TO EFFICIENCY OF OPERATION AND MINIMUM MAINTENANCE AND SHALL BE INSTALLED WITH PROPER ACCESSIBILITY. THE MATERIALS AND EQUIPMENT, INCLUDING ALL NECESSARY ACCESSORIES, SHALL BE PUT INTO PROPER ADJUSTMENTS SO THAT THE MECHANICAL PARTS FUNCTION TOGETHER AS A WORKABLE SYSTEM. THE MECHANICAL AND OPERATIONS AS INDICATED EITHER ON THE DRAWINGS OR CONTAINED HEREIN OR AS MAY BE REASONABLY IMPLIED BY EITHER TO ACCOMPLISH COMPLETE MECHANICAL SYSTEMS. MECHANICAL CONTRACTOR SHALL FURNISH LABOR AND MATERIAL PERFORMANCE BOND.
GOVERNING AGENCIES:
 THE CONTRACTOR SHALL BE HELD TO BE FULLY INFORMED OF ALL LAWS, ORDINANCES AND CODES, AND SHALL IN THE PERFORMANCE OF THE CONTRACT, COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL AFORESAID CODES REGULATIONS. ANY DEVIATION FROM THE PLANS OR CODE REQUIREMENTS SHALL BE MADE BY THE CONTRACTOR WITHOUT EXTRA COST TO THE OWNER.
DAMAGE TO OTHER WORK:
 REPAIR AND PAY FOR ALL DAMAGE DONE TO THE EXISTING AND NEW WORK BY MECHANICAL TRADES WORKMEN.
CUTTING AND PATCHING:
 ALL CUTTING AND PATCHING REQUIRED FOR INSTALLATION SHALL BE BY MECHANICAL TRADES AND INCLUDED IN EXPENSE TO AFOREMENTIONED WORK.
EXAMINATION OF SITE:
 CONTRACTOR SHALL EXAMINE EXISTING SITE AND BE THOROUGHLY AWARE OF EXISTING CONDITIONS TO BE WORKED UNDER AND WORK INVOLVED. ADVISE ENGINEER OF ANY CONTINGENCIES BEFORE SUBMITTING SIDS.
CLEANING:
 PREMISES SHALL BE CLEANED UPON COMPLETION OF MECHANICAL WORK.
COOPERATION WITH OTHER TRADES:
 COORDINATE WORK WITH OTHER TRADES TO AVOID INTERFERENCE AND PRESENT A NEAT APPEARANCE. INTERFERENCE WILL NOT BE CONSIDERED AS EXTRA WORK.

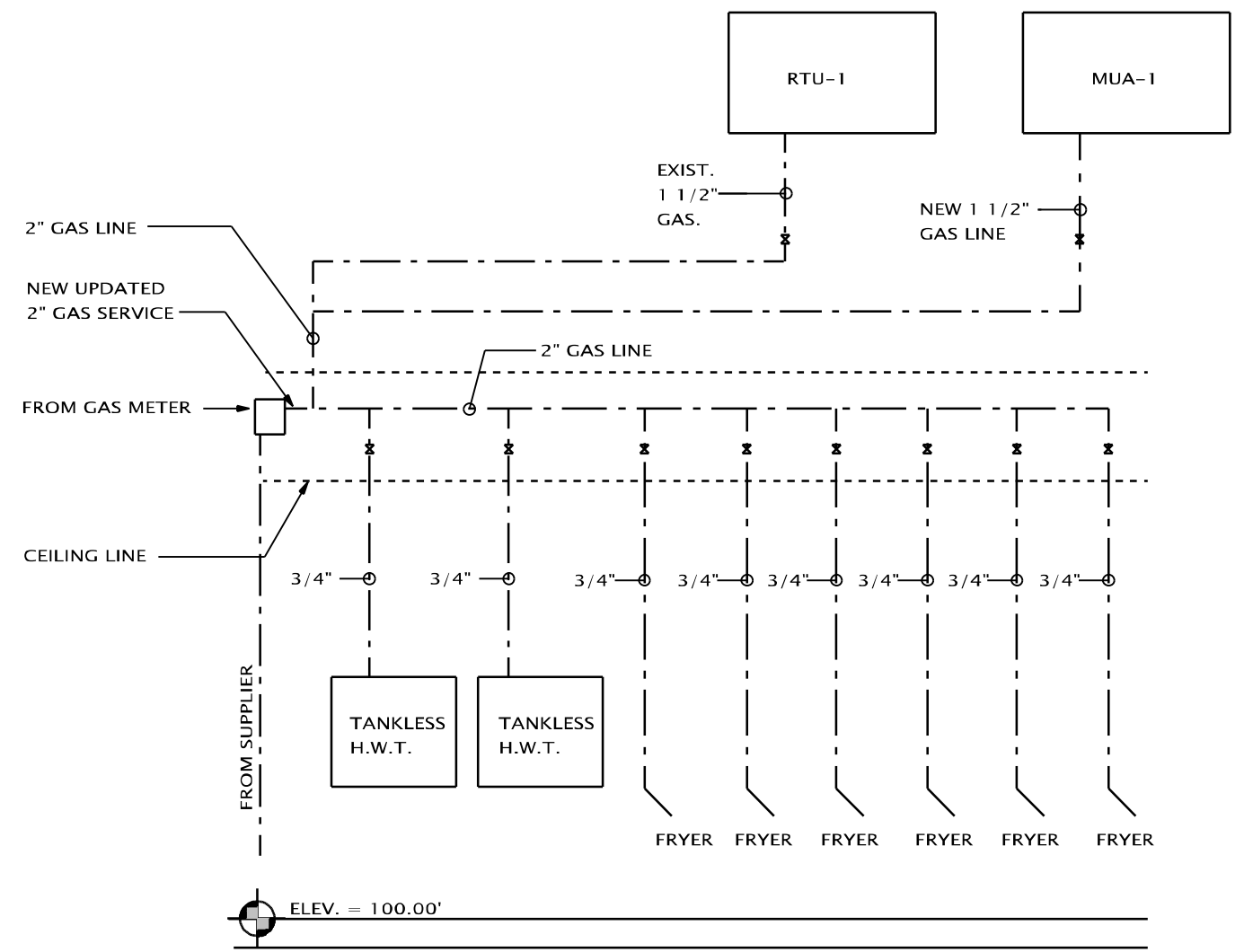
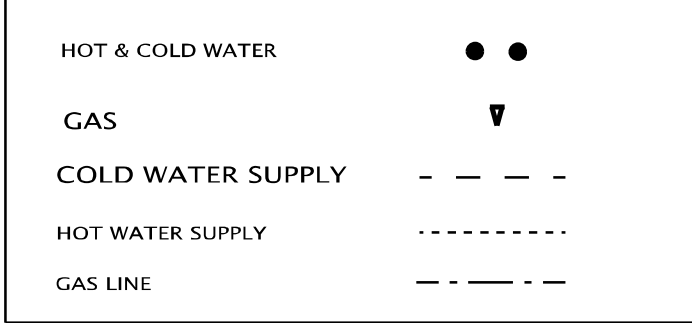
INTERFERENCE:
 ALL MINOR DEVIATIONS REQUIRED DUE TO INTERFERENCE WITH THE WORK OF OTHERS SHALL BE MADE BY MECHANICAL CONTRACTOR AT NO ADDITIONAL COST. VERIFY LOCATIONS OF EXISTING PIPING, DUCTS AND BUILDING STRUCTURAL BEAMS IN THE PROJECT AREA FOR CONNECTIONS TO THE SAME AND TO AVOID POSSIBLE INTERFERENCE.
SHOP DRAWINGS:
 SUBMIT FOUR (4) REPRODUCIBLE TRANSPARENCIES AND FOUR (4) COPIES OF ALL SHOP DRAWING OR ALL EQUIPMENT FOR APPROVAL.
DRAWING:
 THE DESIGN DRAWING SHOW THE GENERAL ARRANGEMENT AND EXTENT OF THE WORK. THE DRAWING ARE DIAGRAMMATIC AND MAY NOT BE DRAWN TO SCALE IN CERTAIN AREAS FOR PURPOSES OF CLARITY AND LEGIBILITY. IT IS INTENDED THAT ALL APPARATUS BE LOCATED SYMMETRICAL WITH ARCHITECTURAL ELEMENTS AND BE INSTALLED TO AVOID OBSTRUCTIONS AND PRESERVE HEADROOM. THE CONTRACTOR SHALL REVIEW THE PLANS OF OTHER TRADES WITH HIS OWN WORK TO AVOID CONFLICTS AND INTERFERENCES. HE SHALL MAKE USE OF ALL SOURCES OF DATA, INCLUDING SHOP DRAWING AND DRAWINGS OF EQUIPMENT FURNISHED BY OTHERS.
ACCESS TO EQUIPMENT:
 ALL CONTROL DEVICES, EQUIPMENT, DAMPERS, ETC. SHALL BE SO LOCATED SO AS TO PROVIDE FOR EACH ACCESS OF OPERATION, REPAIRS AND MAINTENANCE. IF CONCEALED, ACCESS PANELS OR EXTENDED OPERATORS SHALL BE PROVIDED.
SUPPORTS:
 PROVIDE ALL SUPPORTS, FRAMING, ETC. FOR THE PROPER INSTALLATION OF PIPE, EQUIPMENT, ETC. FABRICATED FROM STRUCTURAL STEEL SHAPES AND TO PREVENT SAGGING, VIBRATION AND STRAIN, AND TO PROVIDE FOR EXPANSION AND CONTRACTION.
SYSTEM BALANCING:
 THE HEATING VENTILATING AND AIR CONDITIONING SHALL BE TESTED AND BALANCED TO DEMONSTRATE THAT SPECIFIED CAPACITIES OF THE VARIOUS PARTS OF ALL SYSTEMS AS INDICATED IN THE CONTRACT DOCUMENTS CAN BE MET AND ALL CONTROLS ARE FUNCTIONING PROPERLY.
GUARANTEE:
 NO ADDITIONAL COST TO THE OWNER.
 ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE, AND THE CONTRACTOR SHALL MAKE GOOD ANY DEFECTS WITHIN THAT PERIOD AT PROVIDE AND CONNECT ALL FIXTURES SHOWN ON DRAWINGS OR HEREIN CALLED FOR. ALL FIXTURES SHALL BE EQUAL IN ALL RESPECT TO THE FIGURE NUMBERS HEREINAFTER LISTED. FIGURE NUMBERS ARE USED FOR ESTABLISHING A STANDARD. ALL FIXTURE TRIM SHALL BE BY ONE MANUFACTURER ONLY. NO MIXING OF TRIM OR FIXTURES WILL BE PERMITTED, UNLESS OTHERWISE SPECIFIED.

PLUMBING - PLUMBING FIXTURES:
 FIXTURE CONNECTIONS SHALL BE CHROME PLATED FLEXIBLE BRASS PIPE. ALL WATER SUPPLY CONNECTIONS SHALL BE PROVIDED WITH WHEEL HANDLE STOPS OR VALVES, WITH ESCUTCHEONS. PROVIDE ALL TRAPS, VALVES, STOPS, SHUTOFF VALVES, TAILPIECES, FITTINGS AND PIPING.
 SANITARY AND STORM PIPING:
 ALL 2" AND LARGER WASTE AND STORM PIPING ABOVE GROUND SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE WITH NO-HUB FITTINGS. ALL 1 1/2" AND SMALLER WASTE AND STORM PIPING ABOVE GROUND SHALL BE GALVANIZED STEEL WITH THREADED BLACK CAST IRON DRAINAGE FITTINGS.
 ROOF WASTE AND STORM PIPING BELOW GRADE SHALL BE SERVICE WEIGHT CAST IRON SOIL PIPE WITH COMPRESSION TYPE FITTINGS.
 CLEANOUTS AND ACCESS COVERS (CO):
 PROVIDE CLEANOUTS AT THE FOOT OR BASE OF EACH VERTICAL WASTE OR STORM STACK, IN DRAINAGE LINES AT ALL CHANGES IN DIRECTION AND AT 50'-0" INTERVALS IN LINES 4" AND UNDER HAVING NO CHANGES IN DIRECTION AND 100'-0" IN LINES OVER 4".
GAS PIPING:
 STANDARD WEIGHT SCHEDULE 40, ASTM 1-20 BLACK STEEL PIPE WITH CLASS 150 SCREWED MALLEABLE IRON FITTINGS.
GAS VALVE:
 GAS VALVE SHALL BE NON-LUBRICATED PLUG VALVES. ACF OR DEZURIK PROVIDE PLUG VALVES AT ALL CONNECTIONS TO EQUIPMENT.
DOMESTIC WATER PIPING:
 ABOVE GROUND, TYPE L, HAD TEMPER COPPER TUBE WITH WROUGHT COPPER FITTINGS AND NON-LEAD SOLDER JOINTS.
DOMESTIC WATER VALVES:
 A. GATE VALVE: JENKINS 901-A BRONZE BALL VALVE, SCREWED ENDS, OR APPROVAL EQUAL.
 B. BALANCE VALVE: DEZURIK 4275 BRONZE OR APPROVED EQUAL.
FLUSHING AND STERILIZATION:
 UPON COMPLETION OF WATER DISTRIBUTION PIPING SYSTEM AND PRIOR TO BEING PLACED INTO SERVICE, THE SYSTEM, INCLUDING FITTINGS AND PUMPS, SHALL BE FLUSHED AND DISINFECTED AS FOLLOWS:
 A. SYSTEM SHALL BE FLUSHED WITH WATER AT MAXIMUM SYSTEM PRESSURE.
 B. OPEN ALL DRAINS AND FIXTURE VALVES IN THE BUILDING, STARTING WITH THE VALVE NEAREST THE WATER SERVICE LINE AND PERMIT THE WATER TO RUN CLEAR FOR TEN (10) MINUTES.
 C. DISINFECTING SHALL BE ACCOMPLISHED BY INTRODUCING LIQUID CHLORINE INTO THE SYSTEM.
 D. THE CHLORINATION AGENT SHALL BE APPLIED AT THE BEGINNING OF THE WATER MAIN TO BE DISINFECTED.
PIPE INSULATION:
 INSULATION SHALL BE LOW PRESSURE MOLDED SECTION FIBROUS GLASS PIPE INSULATED WITH FACTORY-APPLIED ALL SERVICE JACKET. FITTINGS AND VALVE BODIES SHALL BE INSULATED WITH FIBROUS GLASS BLANKET BUILT-UP TO THE THICKNESS OF THE ADJACENT INSULATION AND SECURED WITH INSULATING TAPE AND JACKETED TO MATCH INSULATION, OR WITH MOLDED FIBROUS GLASS FITTINGS INSTALLED WITH BOTH LONGITUDINAL AND CIRCUMFERENTIAL JOINTS FULLY BUTTER WITH PROPER ADHESIVE. LAPS SHALL BE FASTENED WITH OUTWARD CLINCHING STAPLES, HANGERS, ETC. SHALL NOT PENETRATE VAPOR BARRIER.
 IN LIEU OF BUILT-UP INSULATION ON FITTING, ZESTON FITTING COVERS MAY BE USED.
 ALL INSULATION SHALL BE CLASS A OM ACCORDANCE WITH ASTM STANDARD NO. 8-84 NFPA NO. 255, AND UL STANDARD NO. 723 AS FOLLOWS:
 ALL MATERIAL SHALL BE MANUFACTURED BY ONE OF THE LISTED APPROVED MANUFACTURERS INSTRUCTIONS, EXCEPT WHERE THESE INSTRUCTIONS CONFLICT WITH THE SPECIFICATION HEREINAFTER STATED, IN WHICH CASE THE SPECIFICATIONS SHALL GOVERN ALL ADHESIVES, BINDS AND OTHER FASTENING MATERIALS AND DEVICES SHALL BE SUPPLIED AS REQUIRED TO PROPERLY INSTALL THE INSULATION MATERIALS BEING FURNISHED.
 APPROVED MANUFACTURERS: ARMSTRONG CO. CERTAIN-TEED, JOHNSMANVILLE CO. OWENS-CORNING FIBERGLASS.
PIPE INSULATION SCHEDULE:
 PIPE INSULATION THICKNESS SHALL COMPLY WITH THE MINIMUM REQUIREMENTS OF ASHRAE 90-75 AND THE FOLLOWING:
 PIPE DIAMETER 1" AND LESS 1-1/4", 2" 2-1/2", 4" 6"

PLUMBING NOTES

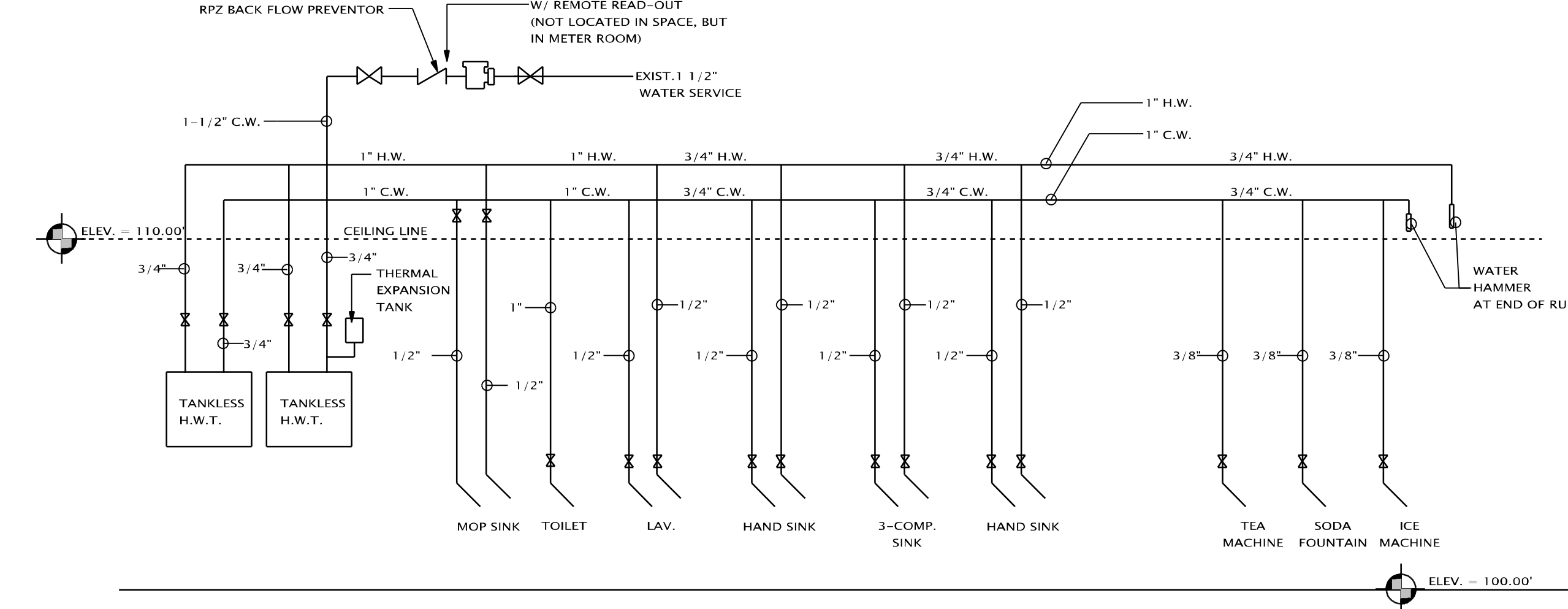
- PLUMBER IS RESPONSIBLE FOR PADDING ON PIPING UNDERNEATH WALL MOUNTED SINK.
- EACH FLOOR DRAIN IS REQUIRED TO HAVE A TRAP PRIMER.
- PROVIDE INDIVIDUAL TEMPERING VALVES CONFORMING TO A.S.S.E. 1070 REQUIRED FOR EACH BARRIER FREE LAV.
- USE COPPER WATER LINES TO SERVICE SINKS, ALL EQUIPMENT, AND H.W. HEATER FOR COLD AND HOT. OPTIONAL USE OF APPROVED PEX PIPING.
- ALL ROOF CUTTING / PATCHING BY LANDLORDS ROOF CONTRACTOR AT TENANTS EXPENSE.
- FIRE SUPPRESSION (ANSAL) SYSTEM SHALL BE INSTALLED UNDER HOOD BY A CERTIFIED INSTALLER. THIS SYSTEM SHALL BE TESTED BY APPROPRIATE FIRE MARSHALL.
- PROVIDE TEST RESULTS FOR ALL BACKFLOW DEVICES AT FINAL INSPECTION.

PLUMBING SYMBOLS



GAS DISTRIBUTION RISER DIAGRAM

SCALE: N.T.S.



WATER DISTRIBUTION RISER DIAGRAM

SCALE: N.T.S.