PRCTI20221916

City of Puyallup
Development
Engineering
APPROVED
See permit
conditions.
ycharitou
02/22/2023
9:01:00 AM

Approval of submitted plans is not an approval of omissions or oversights by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable codes and regulations of the local government.

THE APPROVED CONSTRUCTION PLANS, DOCUMENTS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITEE ON SITE FOR INSPECTION

PLUMBING GENERAL NOTES

1. DO NOT SCALE DRAWINGS. VERIFY DIMENSIONS IN FIELD PRIOR TO COMMENCEMENT OF WORK.
2. EXISTING PIPING AND EQUIPMENT TO REMAIN IS SHOWN LIGHT. NEW PIPING AND EQUIPMENT IS SHOWN HEAVY. EXISTING PIPING AND EQUIPMENT TO BE REMOVED IS SHOWN CROSSHATCHED.
3. ARCHITECTURAL DRAWINGS SHALL BE REVIEWED FOR PROJECT SCOPE AND AREA OF WORK. WORK SHALL INCLUDE DEMOLITION AND REMOVAL OF EXISTING PLUMBING FIXTURES AS REQUIRED. PLUMBING IN EXISTING WALLS AND UNDER GROUND SHALL BE REMOVED AND CAPPED AS REQUIRED. RECONNECT EXISTING PIPING TO FIXTURES AND EQUIPMENT NOT IN DEMOLITION AREA AS REQUIRED TO MAINTAIN A COMPLETE AND OPERABLE SYSTEM.
4. THE OWNER RESERVES FIRST CHOICE TO KEEP EXISTING EQUIPMENT AND MATERIALS. COORDINATE WITH OWNER AND DELIVER DESIGNATED EQUIPMENT AND MATERIALS REMOVED UNDER THIS CONTRACT TO OWNERS DESIGNATED STORAGE AREA. REMAINING EQUIPMENT AND MATERIAL REMOVED SHALL BECOME PROPERTY OF THE CONTRACTOR.
5. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT PLUMBING FIXTURE LOCATIONS, MOUNTING HEIGHTS, AND PLUMBING ROUGH-IN LOCATIONS. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, ALL HANDICAPPED FIXTURES. OBTAIN EXACT FLOOR DRAIN AND FLOOR SINK LOCATIONS FROM FOOD SERVICE DRAWINGS. ROUGH-IN LOCATIONS FOR KITCHENS, BARS, ETC TO BE TAKEN FROM APPROVED FOOD SERVICE SHOP DRAWINGS.
6. ITEM DESIGNATIONS INDICATED ARE FOR PURPOSES OF THESE DOCUMENTS ONLY. CONTRACTOR SHALL VERIFY WITH OWNER ACTUAL DESIGNATION INFORMATION TO BE PROVIDED FOR EACH ITEM OF PLUMBING EQUIPMENT PRIOR TO NAMEPLATE ORDER RELEASE.
7. THE PLUMBING DETAILS SHALL BE INCORPORATED INTO THE ASSOCIATED WORK AND PROVIDE GENERAL GUIDANCE AS TO THE INSTALLATION INTENT WHETHER REFERENCED TO OR NOT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE INSTALLATION AND ENSURE THAT ALL INSTALLATIONS ARE IN ACCORDANCE WITH THE EQUIPMENT'S LISTING AND MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTION.
8. REFER TO APPROVED FOOD SERVICE DRAWINGS AND SCHEDULES FOR KITCHEN AND BAR LAYOUTS, PLUMBING REQUIREMENTS AND DETAILS. PROVIDE PIPING, VALVES, FIXTURES, INDIRECT WASTE, PRESSURE REDUCING VALVES, ETC (NOT PROVIDED BY KITCHEN EQUIPMENT CONTRACTOR) AS REQUIRED TO MAKE A COMPLETE AND OPERABLE SYSTEM (INCLUDING HOOD DRAIN PIPING, VENTILATOR CONTROL PANEL PIPING, REFRIGERANT PIPING, BEER AND SYRUP LINE RACEWAYS, DRAIN PIPING FROM REFRIGERATION FAN COILS, ETC). EXPOSED PIPING ABOVE COUNTER HEIGHT SHALL BE CHROME PLATED. PROVIDE REDUCED PRESSURE TYPE BACKFLOW PREVENTER AT CARBONATORS, VACUUM BREAKER AND PRESSURE REDUCING VALVES FOR HOOD HOT AND COLD WATER ARE FURNISHED BY KITCHEN EQUIPMENT CONTRACTOR AND INSTALLED BY DIVISION 22 (PLUMBING). COORDINATE WITH KITCHEN EQUIPMENT CONTRACTOR ACCORDINGLY. PROVIDE SHUT-OFF VALVES AND CHECK VALVES ON EACH BRANCH LINE TO HOSE REELS, SOAP DISPENSERS AND EACH HOT AND COLD WATER FAUCET THAT HAS A HOSE CONNECTION. PIPE 3/4" COLD WATER TO FILTER (BY KITCHEN EQUIPMENT CONTRACTOR) WITH SHUT-OFF VALVE PIPING FROM FILTER TO EQUIPMENT ROUTED IN WALL.
9. PROVIDE STAINLESS STEEL WASTE PIPE AND P-TRAP AT ALL BARS, SODA STATIONS, WAITRESS STATIONS, AND BEVERAGE STATIONS ABOVE GRADE (SCHEDULE 40 PVC FOR BELOW GRADE). RUN-OUTS SHALL BE MINIMUM 20'-0" OF STAINLESS STEEL DRAIN PIPE, OR TO THE MAIN DRAIN OF AREA SERVED.
10. PROVIDE SHEET METAL DRAIN PAN UNDER GRAVITY OR PUMPED DRAIN PIPING WHERE PIPING OCCURS ABOVE KITCHENS, FOOD SERVICE PREP, FUTURE TENANT KITCHENS, OR FOOD SERVICE CORRIDORS. PIPE 3/4" DRAIN FROM DRAIN PAN TO OVER NEAREST FLOOR SINK.
11. PROVIDE SHEET METAL DRAIN PAN UNDER PIPING WHERE PIPING OCCURS ABOVE ANY ELECTRICAL ROOMS, IT CENTER, OR ELECTRICAL SWITCH GEAR. PIPE 3/4" DRAIN FROM DRAIN PAN TO OVER NEAREST FLOOR SINK.
12. REFER TO APPROVED FOOD SERVICE DRAWINGS FOR HOT AND COLD WATER HOSE BIBB LOCATIONS UNDER HAND SINKS IN KITCHEN AREAS.
13. REFER TO FOOD SERVICE DRAWINGS FOR SPECIFICATION OF MOP/SERVICE SINK IN KITCHEN AND PANTRY AREAS. WHERE FOOD SERVICE DRAWINGS DO NOT SPECIFY FIXTURE, USE PLUMBING FIXTURE SPECIFICATION FOR SERVICE SINK.
14. SEISMIC RESTRAINTS SHALL BE PROVIDED PER THE LATEST ADOPTED STANDARD BUILDING CODE AND THE SMACNA SEISMIC RESTRAINT MANUAL GUIDELINES FOR MECHANICAL SYSTEMS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED RESTRAINTS, STRUCTURAL ATTACHMENT METHODS, AND RESTRAINT LOCATIONS TO THE ARCHITECT FOR REVIEW. THE SUBMITTED DOCUMENTS SHALL BE PREPARED AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE PROJECT STATE.
15. COORDINATE SPRINKLER/STANDPIPE DRAIN REQUIREMENTS AND LOCATIONS WITH FIRE PROTECTION DIVISION OF WORK.
16. REFER TO CIVIL DRAWINGS FOR INVERT AT SITE UTILITY POINTS OF CONNECTION. PROVIDE OFFSET AND INCREASER FOR STORM DRAIN OR SEWER AS REQUIRED FOR CONNECTION TO CIVIL.
17. GREASE TRAP INSTALLATION SHALL CONFORM WITH APPLICABLE COUNTY REQUIREMENTS. MANHOLE SPACING SHALL NOT EXCEED 10'-0" ON CENTER. PROVIDE QUANTITY AS REQUIRED TO COMPLY WITH MAXIMUM SPACING. COORDINATE WITH CIVIL DIVISION OF WORK.
18. PROVIDE TRAP PRIMERS FOR AREAS OF INFREQUENT USE, INCLUDING FLOOR DRAINS IN RESTROOMS AND MECHANICAL ROOMS, EQUAL TO PRECISION PRODUCTS CO. "PRIME-RITE," WITH DISTRIBUTION UNITS FOR MULTIPLE FLOOR DRAINS AND FLOOR SINKS. TRAP PRIMER SHALL BE ACCESSIBLE AND INSTALLED PER MANUFACTURER'S REQUIREMENTS. PROVIDE LINE SIZE SHUT-OFF VALVE AHEAD OF EACH TRAP PRIMER AND PRIMER LINE SHALL BE INSTALLED ON A COLD WATER LINE LESS THAN 2" DIAMETER. ALL ELECTRONIC TYPE TRAP PRIMERS SHALL BE PPP "PRIME-TIME ELECTRONIC TRAP PRIMING MANIFOLD" WITH FOUR (4) TO 30 OUTLETS, VACUUM BREAKER, 24 HOUR CLOCK, MANUAL OVERRIDE, SOLENOID VALVE, CALIBRATED MANIFOLD WITH 1/2" OUTLET COMPRESSION FITTINGS. PROVIDE 3/4" SHUT-OFF VALVE ON INLET. (ELECTRONIC TRAP PRIMERS TO BE LOCATED IN MECHANICAL ROOMS AND WHERE NOTED. PROVIDE RECESSED MOUNT IN STUD WALLS AND SURFACE MOUNT ON CONCRETE AND BLOCK WALLS.)
19. REFER TO FLOW CONTROL VALVE DETAIL FOR NOMINAL GPM AT EACH HOT WATER RETURN BRANCH LINE CONNECTION.
20. HOT WATER RETURN PIPING BRANCH LINES TO DROP DOWN IN WALL AND CONNECT TO HOT WATER SUPPLY AT STOPS, OR AT TEMPERING STATIONS. REFER TO DETAIL SHEET FOR DIAGRAMS SHOWING CONNECTIONS.
21. ARRANGE WATER HEATERS AND PIPING TO PROVIDE EASE OF DISASSEMBLY AND MAINTENANCE.
22. PLUMBING RISERS, DRAIN STACKS, AND BRANCH PIPING OFF MAINS SHALL BE COORDINATED WITH MECHANICAL DUCTWORK, MECHANICAL PIPING, AND FIRE PROTECTION PIPING SYSTEMS.
23. INSTALL PIPING HIGH AS POSSIBLE. AS IN THE CASE OF WAREHOUSE AREAS, IN ORDER TO ALLOW FOR SHELVING AND RACKING SYSTEMS OR OTHER SPECIAL CONDITIONS THAT MAY ARISE.
24. WHERE REMOTE CHILLER IS TO BE PROVIDED WITH AN ELECTRIC WATER COOLER, PIPE 1/2" COLD WATER WITH SHUT-OFF VALVE TO REMOTE CHILLER AND INTERCONNECT WITH FOUNTAIN.
25. INDUSTRIAL COLD WATER PIPING SERVING LANDSCAPE PLANTERS AND TREES SHALL BE SUPPLIED THROUGH BACKFLOW PREVENTER BY LANDSCAPE SECTION. REFER TO LANDSCAPE DRAWINGS FOR FINAL STUB-UP AND TERMINATION SERVING ALL PLANTERS AND STATIONS.
26. FUTURE TENANT ROUGH-IN FOR GREASE, WASTE, GAS, WATER AND VENT PIPING SHALL BE MINIMUM ±2'-0" BELOW STRUCTURE. (ROUGH-IN HEIGHT SHALL BE COORDINATED WITH ARCHITECT AND WITH OTHER DIVISIONS OF WORK.)
27. GREASE WASTE PIPING SHALL PITCH AT 2% PER FOOT WHERE INVERT ALLOWS.
28. GREASE WASTE PIPING BELOW GRADE SHALL BE URECON PRE-INSULATED SCHEDULE 40 PVC PIPE WITH SOLVENT WELD JOINTS, MANUFACTURED FROM VIRGIN TYPE 1, GRADE 1 PVC CONFORMING TO ASTM RESIN SPECIFICATION D 1784 AND SHALL BE FULLY COMPATIBLE AND INTERCHANGEABLE WITH COMMERCIAL PVC. PIPES SHALL BE INSULATED BY URECON "UIP" VOID FREE INSULATION PROCESS WITH AN INTEGRAL CONDUIT AND SHALL INCLUDE FOR THERMOCABLE HEAT TRACE SYSTEM AT 105', CONSTANT WATT, 208V/1~, (2", 3" AND 4" PIPE = 1 RUN OF C13-240 CABLE, 6" PIPE = 2 RUNS OF C10-240 CABLE) INSULATION THICKNESS SHALL BE 2". INSULATION SHALL BE WRAPPED WITH A 50 mm POLYETHYLENE BLACK TAPE. INSTALLATION SHALL BE PER MANUFACTURER'S GUIDE LINES. URECON SHALL PROVIDE INSULATION KIT FOR ALL FITTINGS. (URECON PRE-INSULATED PIPE 780-985-3636). CONTRACTOR SHALL VERIFY THE NUMBER OF CONTROL BOXES AND COMPONENTS WITH URECON MANUFACTURER REPORT FOR COMPLETE AND OPERABLE SYSTEM. GREASE WASTE PIPE ABOVE GRADE SHALL BE NO-HUB CAST IRON, INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. PROVIDE A SELF-REGULATING TEMPERATURE MAINTENANCE SYSTEM EQUAL TO RAYCHEM 5XL2-CR FOR 105°F DESIGN TEMPERATURE, STRAIGHT TRACED AND INSTALLED UNDER 1" PREFORMED) FIBERGLASS PIPE INSULATION WITH VAPOR BARRIER. PROVIDE POWER CONNECTION KIT, TEE CONNECTION KITS AND END SEAL KIT AND SPLICE KITS AS REQUIRED INSTALLATION AND TESTING SHALL COMPLY IN ALL RESPECTS WITH MANUFACTURER'S INSTALLATION AND TESTING PROCEDURES. SUBMIT TEST REPORT TO ARCHITECT FOR REVIEW. SYSTEM SHALL BE 208V/1~ SERVICE. PROVIDE GLASS TAPE TO TAPE HEATING CABLE TO THE PIPE, ALSO PROVIDE "ELECTRIC TRACED" LABEL AND LOCATE PER MANUFACTURER'S RECOMMENDATIONS.
29. PROVIDE A 6mm POLYETHYLENE SLEEVE EQUAL TO IPS WATER-TITE FOR COPPER DOMESTIC WATER PIPE BELOW SLAB.
30. HOT AND COLD WATER SHUT-OFF VALVES AND HOT WATER RETURN THROTTLING VALVES SHALL BE LOCATED TO BE EASILY ACCESSED.
31. PROVIDE STAINLESS STEEL BASKET AT KITCHEN AND BAR FLOOR SINKS. DRAIN SPECIALTIES MODEL NUMBER DS-200.
32. PROVIDE WALL CLEANOUTS AT SINKS AND URINALS IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE ADOPTED STANDARD PLUMBING CODE.
33. REFER TO MIXING VALVE DETAIL FOR LAVATORY/SINK TEMPERED WATER DETAIL. PROVIDE THERMOSTATIC TYPE MIXING VALVE AS INDICATED.
34. MINIMUM DISTANCE FOR CONNECTIONS AT THE BASE OF SOVENT STACKS ARE 5'-0" FOR 6" STACK, 4'-2" FOR 5" STACK, 3'-4" FOR 4" STACK AND 2'-6" FOR 3" STACK. THIS DISTANCE SHALL APPLY TO ALL CONNECTIONS, INCLUDING FIXTURE BRANCHES.
35. THE CAST IRON SOVENT SYSTEM SHALL BE MANUFACTURED AND DISTRIBUTED BY CONNIE MANUFACTURING COMPANY OR APPROVED EQUAL. THE INSTALLATION SHALL BE IN ACCORDANCE WITH APPROVED DRAWINGS AND SPECIFICATIONS, AND IN COMPLIANCE WITH THE CAST IRON SOVENT DESIGN MANUAL. SOVENT AERATOR AND DEAERATOR FITTINGS SHALL BE IN COMPLIANCE WITH STANDARD ASME/ANSI B16.4519897, SPONSORED AND PUBLISHED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS. SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION.
36. VENTS THROUGH ROOF SHALL BE MINIMUM 10'-0" FROM ANY OUTSIDE AIR INTAKES AND BUILDING OPENINGS.
37. EQUIPMENT AND PIPING LOCATIONS SHOWN FROM BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY SIZE AND LOCATIONS PRIOR TO START OF WORK. IF SYSTEMS ARE NOT AS SHOWN IN DRAWINGS, REPORT DEVIATIONS TO ARCHITECT/ENGINEER WITHIN 48 HOURS OF DISCOVERY.
38. WHERE PIPING IS TO BE REMOVED TO A POINT, IT SHALL BE CAPPED OFF AND PROTECTED (WHERE APPLICABLE) FOR CONNECTION TO NEW WORK. INSULATION ON EXISTING PIPING SHALL BE REPAIRED OR REPLACED EQUAL TO NEW CONDITION.
39. PIPING CONNECTING TO REMOVED EQUIPMENT SHALL BE REMOVED TO A POINT SO AS NOT TO INTERFERE WITH NEW CONSTRUCTION.
40. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND PATCHING OF DAMAGED ARCHITECTURAL COMPONENTS TO REMAIN DURING THE REMOVAL OF DESIGNATED SYSTEMS. COORDINATE REPAIR REQUIREMENTS WITH ARCHITECT.

PLUMBING FIXTURE SCHEDULE

ITEM	FIXTURE	MFR	MODEL NO.	ROUGH-IN SIZE					ELECTRICAL	NOTES
				TW	HW	CW	VENT	WASTE		
A	3 STAGE PARTS WASHER	–	–	–	–	1"	–	–	–	1

1. INSTALL SERVICE, SHUT OFF AND CHECK VALVES, COCKS, STOPS, AIR CUSHIONS, VACUUM BREAKERS, AND SAFETY DEVICES.

ITEMS TO BE DEFERRED:
MECHANICAL PLANS THAT INCLUDE INSTALLATION OF EXHAUST SYSTEM FOR PAINT BOOTH. INCLUDE CFM PER MANUFACTURER'S SPECIFICATIONS, TERMINATION DETAILS, SUPPORT AND STRUCTURAL ROOF PENETRATION DETAILS, INCLUDE CLEARANCE STRUCTURAL SUPPORT

PLUMBING FIXTURE COUNT SUMMARY

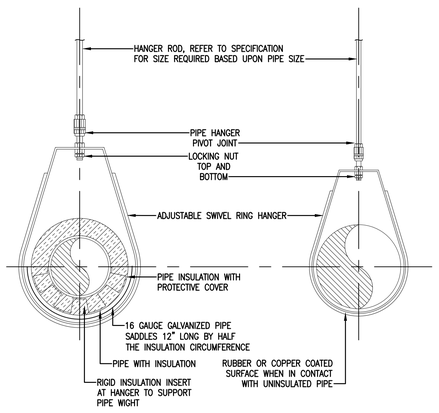
~~PER UPC 2018 TABLE 702.1~~ PER UPC 2018 TABLES 610.4 and 702.2

FIXTURE	EXISTING	REMOVED	ADDED	TOTAL FIXTURES	WSFU	DFU	TOTAL WSFU	TOTAL DFU
3 STAGE PARTS WASHER	0	0	1	1	16	2	16	2
						TOTAL:	16	2

NOTE:
FIXTURE VALUE NOTED IS ESTIMATE BASED ON FLOW RATE BEING ESTIMATED. IT IS NOT A STANDARD FIXTURE AS LISTED BY PLUMBING CODE.

The 3 Stage Parts Washer is only permitted to connect to City water under permit PRCTI20221916. The 16 water fixture units totaled in the Plumbing Fixture Count Summary were used to calculate and assess water system development fees for PRCTI20221916. The 3 Stage Parts Washer shall not connect to City sanitary sewer at this time. Discharged water shall be pumped and hauled off site for treatment. The sanitary sewer connection for the 3 Stage Parts Washer shall be reviewed under the future manufacturing TI application. The standard CoP Plumbing Fixture Worksheet is not required for this permit since the 3 Stage Parts Washer is not a standard fixture.

City of Puyallup
Building
APPROVED
See permit
for additional
requirements.
JMontgomery
02/22/2023
3:12:07 PM



1 PIPE (4" AND LOWER) HANGER DIAGRAM
NO SCALE

FIRE PROTECTION NOTICE

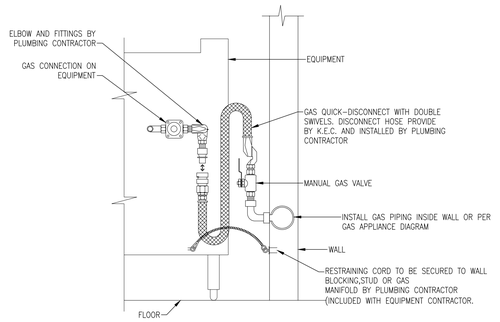
1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE FIRE SPRINKLER SYSTEM DESIGN, LAYOUT, HYDRAULIC CALCULATIONS, PREPARATION OF SHOP DRAWINGS, FIELD INSTALLATION, COORDINATION AND COMPLETION IN ACCORDANCE WITH PROJECT REQUIREMENT AND APPLICABLE CODES AND STANDARDS.
2. PENETRATION OF RATED ASSEMBLIES SHALL BE FIRE-STOPPED, FIRE STOPPING SHALL BE U.L. APPROVED MATERIAL.
3. INSTALLATION OF THE SPRINKLER SYSTEM SHALL NOT BE STARTED UNTIL COMPLETE PLAN AND SPECIFICATIONS, INCLUDING WATER SUPPLY INFORMATION HAVE BEEN APPROVED BY LOCAL FIRE DEPT.
4. THE WORK OF THE SECTION SHALL BE INSTALLED UNDER SUPERVSION AND CONTROL OF A LICENSED FIRE SPRINKLER ENGINEER/CONTACTOR.
5. APPLY AND PAY FOR ALL PERMITS, FEES, INSPECTIONS SHALL COMPLY WITH WITH THE REQUIREMENTS OF NFPA-13, NFPA-72 (FIRE ALARM/MONITORING) INSURANCE CARRIER, LOCAL FIRE DEPT. AND ALL LOCAL ORDINANCES

PIPING MATERIAL SCHEDULE

SERVICE	MATERIALS COMPLY WITH LATEST UPC MATERIAL REQUIREMENTS. (NOTE: ALL PIPING ABOVE GRADE SHALL BE LABELED ACCORDINGLY)
DOMESTIC WATER (ABOVE GRADE)	TYPE 'L' HARD COPPER ASTM B88, FITTINGS: WROUGHT COPPER, CAST BRASS, CAST BRONZE, JOINTS: 95/5 LEAD FREE SOLDER, INSULATION: FIBERGLASS.
NATURAL GAS (INDOOR ABOVE GRADE)	BLACK STEEL SCHEDULE 40, FITTINGS AND JOINTS: THREADED UP TO 2-1/2", WELDED ABOVE 2-1/2"
NATURAL GAS (OUTDOOR BELOW GRADE)	POLYETHYLENE D2513 MIN 14 AWG TRACER OR MAGNETIC TAPE PER AWWA STANDARD, FITTINGS AND JOINTS: CTS, IPS, NPS OR SDR SHALL MATCH.
NATURAL GAS (OUTDOOR ABOVE GRADE)	BLACK STEEL SCHEDULE 40, FITTINGS AND JOINTS: THREADED UP TO 2-1/2", WELDED ABOVE 2-1/2"

SYSTEM DISINFECTION NOTICE

DOMESTIC WATER PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION STANDARDS AWWA C651 FOR PIPING MAINS. ALL PIPING SHALL BE FLUSHED AND DISINFECTED UPON COMPLETION.



2 QUICK DISCONNECT DIAGRAM
NO SCALE

SHEET INDEX

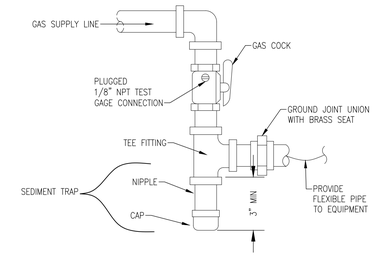
ISSUE	SHEET NUMBER	SHEET DESCRIPTION
2023-02-17 ISSUE FOR PERMIT	P0.0	PLUMBING INDEX, NOTES, DIAGRAMS
	P3.0	PLUMBING SITE PLAN – NON POTABLE WATER & GAS
	P3.1	PLUMBING ENLARGED PLAN – NON POTABLE WATER & GAS
	P3.2	PLUMBING ENLARGED PLAN – NON POTABLE WATER & GAS

PLUMBING ABBREVIATION LIST

AD	ACCESS DOOR / AREA DRAIN		
AFF	ABOVE FINISH FLOOR	MCA	MINIMUM CIRCUIT AMPS
AP	ACCESS PANEL	MCC	MOTOR CONTROL CENTER
AUTO	AUTOMATIC	MH	MANHOLE
		MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MOCP	MAXIMUM OVER CURRENT PROTECTION
BMS	BUILDING MANAGEMENT SYSTEM		
BOH	BACK OF HOUSE		
BOS	BOTTOM OF STEEL	NA	NOT APPLICABLE
BTU	BRITISH THERMAL UNIT	NEC	NATIONAL ELECTRICAL CODE
		NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
°C	DEGREES CELSIUS		
CFH	CUBIC FEET PER HOUR	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NPSHA	NET POSITIVE SUCTION HEAD AVAILABLE
CP	CHROME PLATED		
		NPSHR	NET POSITIVE SUCTION HEAD REQUIRED
DC	DIRECT CURRENT		
DDC	DIRECT DIGITAL CONTROL	NPT	NATIONAL PIPE THREAD
DDCFP	DIRECT DIGITAL CONTROL FIELD PANEL	NPW	NON POTABLE WATER
DF	DRINKING FOUNTAIN	OFCI	OWNER FURNISHED/CONTRACTOR INSTALLED
DIA (~)	DIAMETER		
DN	DOWN		
		P	PUMP
E	EXISTING	PA	PRESSURE AVAILABLE
EFF	EFFICIENCY	PD	PRESSURE DROP
EMCS	ENERGY MANAGEMENT CONTROL SYSTEM	PDI	PLUMBING DRAINAGE INSTITUTE
		PH	PHASE
ET	EXPANSION TANK	POC	POINT OF CONNECTION
EWC	ELECTRIC WATER COOLER	POD	POINT OF DISCONNECT
		POS	PROVIDE BY OTHER SECTION
°F	DEGREES FAHRENHEIT	PRV	PRESSURE REDUCING VALVE
FCO	FLOOR CLEAN OUT	PSI	POUND PER SQUARE INCH
FH	FIRE HYDRANT	PSIA	POUND PER SQUARE INCH ABSOLUTE
FLA	FULL LOAD AMPS	PSIG	POUND PER SQUARE INCH GAUGE
FPM	FEET PER MINUTE		
FPS	FEET PER SECOND	RPM	REVOLUTIONS PER MINUTE
FT	FEET / FLUSH TANK		
FU	FIXTURE UNITS	S	SINK, SOIL
FV	FLUSH VALVE	SEER	SEASONAL ENERGY EFFICIENCY RATIO
		SH	SHOWER / STATIC HEAD
GAL	GALLONS	SOV	SHUT-OFF VALVE
GPH	GALLONS PER HOUR	SP	STATIC PRESSURE
GPM	GALLONS PER MINUTE	SQ FT (?)	SQUARE FEET
		SS	SERVICE SINK / STAINLESS STEEL
H	HEIGHT		
HD	HEAD	T	TEMPERATURE
HOA	HAND OFF AUTO	TAB	TESTING AND BALANCING
HP	HORSEPOWER	TDH	TOTAL DEVELOPED HEAD
HR	HOUR	TEL	TOTAL EQUIVALENT LENGTH
HS	HAND SINK	TOS	TOP OF STEEL
HZ	HERTZ	TP	TRAP PRIMER
		TS	TEMPERING STATION
IBC	INTERNATIONAL BUILDING CODE	TW	TEMPERED WATER
IE	ICERT ELEVATION	TYP	TYPICAL
IFC	INTERNATIONAL FIRE CODE		
IFGC	INTERNATIONAL FUEL GAS CODE	U	URINAL
IMC	INTERNATIONAL MECHANICAL CODE	UMC	UNIFORM MECHANICAL CODE
IN	INCH	UNO	UNLESS NOTED OTHERWISE
IPC	INTERNATIONAL PLUMBING CODE	UPC	UNIFORM PLUMBING CODE
KW	KILOWATT	V	VENT, VOLTS
L	LENGTH, LAVATORY	W	WIDTH, WASTE, WATT
LAV	LAVATORY	WC	WATER CLOSET
LBS	POUNDS	WFU	WATER FIXTURE UNITS
		WG	WATER GAUGE
MAX	MAXIMUM	WH	WATER HEATER
MBH	1000 BRITISH THERMAL UNITS PER HOUR	WP	WATER PRESSURE
		WPD	WATER PRESSURE DROP
MPG	MEDIUM PRESSURE GAS		

PLUMBING SYMBOL LIST

ABBREVIATION	SYMBOL	DESCRIPTION
		SHEET NOTE
		REVISION NUMBER
NPW		NON POTABLE WATER
SOV		SHUT-OFF VALVE
PRV		PRESSURE REDUCING VALVE
GC		GAS COCK
		PIPE DOWN
		PIPE UP
		PIPE TEE UP
		PIPE TEE DOWN
		PIPE CAP



3 GAS CONNECTION DIAGRAM
NO SCALE

REDLINE MECHANICAL
LIC. NO.:REDLIM*835MM
24230 ROBERTS DR.
BLACK DIAMOND, WA 98010
360.886.5072

DANIELLE F. GALVEZ
STATE OF WASHINGTON
48405
REGISTERED
PROFESSIONAL ENGINEER
DATE: 02-17-2023

RED DOT SHOP TI

PUYALLUP CORPORATE PARK
2504 EAST MAIN AVENUE
PUYALLUP, WA 98372

City of Puyallup
Development & Permitting Services
ISSUED PERMIT
Building | Planning
Engineering | Public Works
Fire | Traffic

PLUMBING INDEX, NOTES, DIAGRAMS

ISSUANCE

No.	Description	Date
1	PERMIT SET	02/17/2023
2		
3		

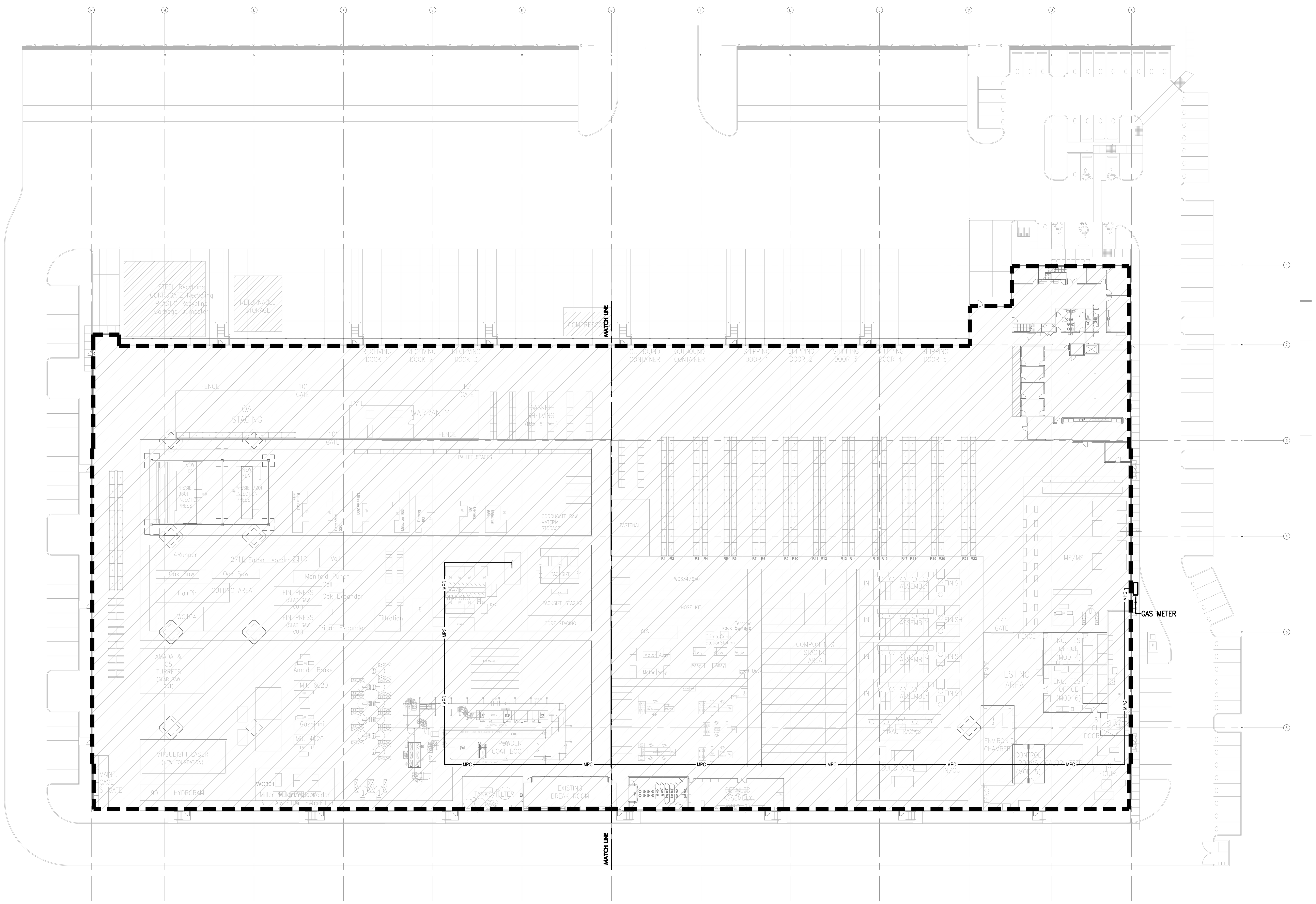
PROJECT INFORMATION
PROJECT NUMBER:
PROJECT LEAD: 2213
DRAWN/ CHECKED BY: 2213

SHEET NO
P0.0

PRCTI20221916

NOTICE

1. CONTRACTOR TO COORDINATE ALL UTILITY CONNECTIONS WITH CIVIL PLANS AND LOCAL UTILITIES.
2. PLAN SHOWN FOR REFERENCE ONLY. REFER TO CIVIL AND ARCHITECTURAL PLANS.
3 REFER TO OWNER AND LANDSCAPE DESIGN FOR ANY LANDSCAPE REQUIREMENTS.
4. FIELD VERIFY AVAILABLE SITE PRESSURE PRIOR TO START OF WORK.

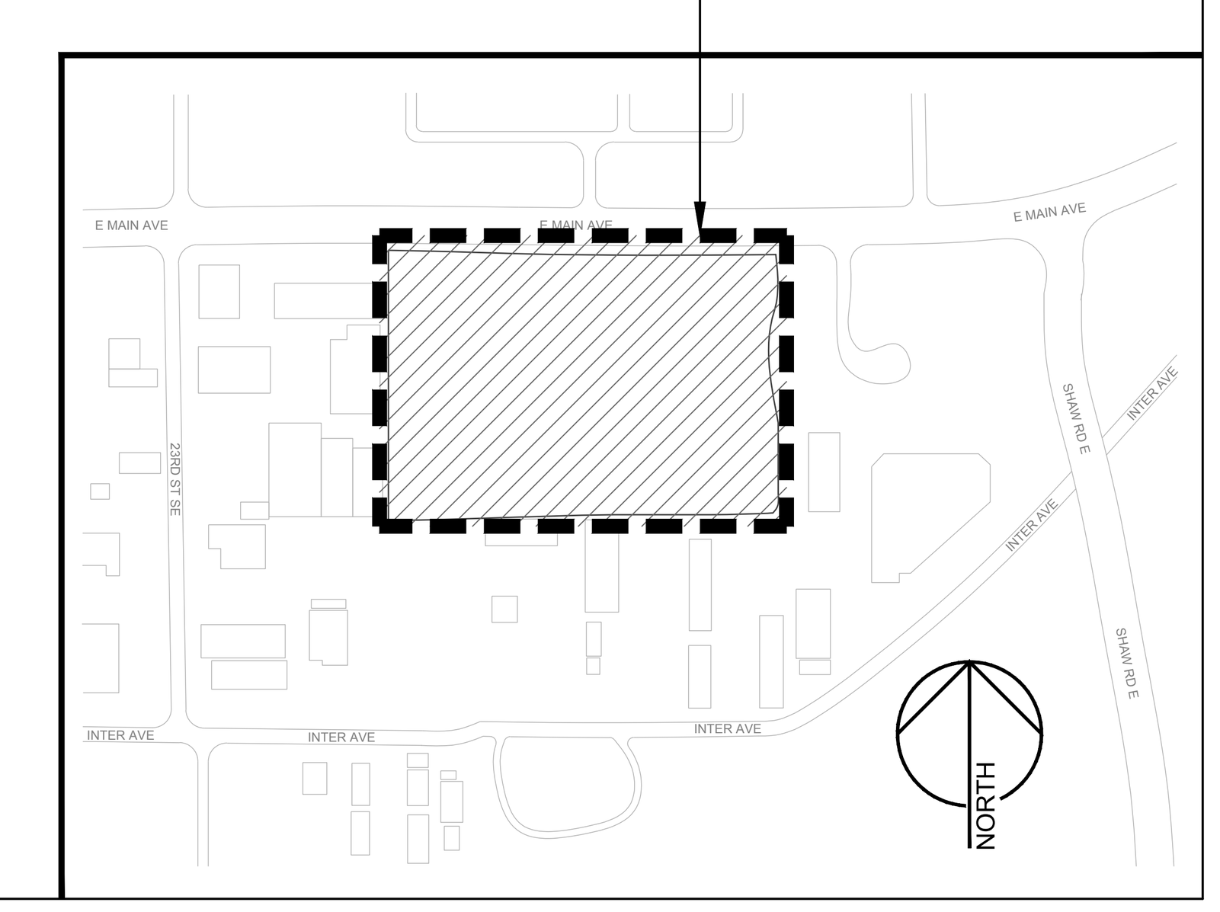


PLUMBING SITE PLAN - NON POTABLE WATER & GAS

SCALE: 1/32" = 1'-0"

NORTH

THIS AREA SCOPE OF WORK



REDLINE MECHANICAL
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BLACK DIAMOND, WA 98010
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MANUEL F. GALVEZ
STATE OF WASHINGTON
48405
REGISTERED PROFESSIONAL ENGINEER
DATE: 02-17-2023

RED DOT SHOP TI

PUYALLUP CORPORATE PARK
2504 EAST MAIN AVENUE
PUYALLUP, WA 98372

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PLUMBING SITE PLAN - NON POTABLE WATER & GAS

ISSUANCE

No.	Description	Date
1	PERMIT SET	02/17/2023
2		
3		

PROJECT INFORMATION
PROJECT NUMBER:
PROJECT LEAD: 2213
DRAWN/ CHECKED BY: 2213

SHEET NO

P3.0

PRCTI20221916

MEDIUM PRESSURE NATURAL GAS - AT 730' TDL	
BASED ON 2018 UPC TABLE 1215.2 (6)	
INLET PRESSURE	5.0 psi
PRESSURE (SCHEDULE 40 METALLIC PIPE)	
ACTUAL LOAD (CFH)	399.0
TABLE PIPE DEVELOP (FEET)	750
LARGEST PIPE SIZE (INCHES)	2"
TABLE MAXIMUM LOAD (CFH)	7190

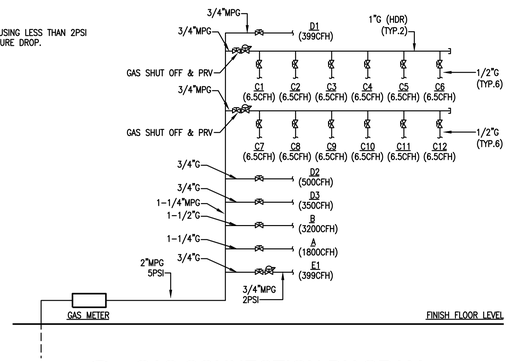
PIPE SIZE	PIPE ID	MAXIMUM CFH
1/2"	0.622	308
3/4"	0.824	644
1"	1.049	1210
1-1/4"	1.380	2490
1-1/2"	1.610	3730
2"	2.067	7190
GAS EQUIPMENT CAPACITIES		CFH
POWDER COAT BOOTH G-1 WASHER [A]		1800
POWDER COAT BOOTH G-2 COMBINATION OVEN [B]		3200
OVEN #1 [D1]		399
OVEN #2 [D2]		500
OVEN #3 [D3]		399
BRAZING STATION [C1]		6.5
BRAZING STATION [C2]		6.5
BRAZING STATION [C3]		6.5
BRAZING STATION [C4]		6.5
BRAZING STATION [C5]		6.5
BRAZING STATION [C6]		6.5
BRAZING STATION [C7]		6.5
BRAZING STATION [C8]		6.5
BRAZING STATION [C9]		6.5
BRAZING STATION [C10]		6.5
BRAZING STATION [C11]		6.5
BRAZING STATION [C12]		6.5
GAS BOILER [E1]		399.0
TOTAL		6775.0

NOTICE

1. LENGTH FROM METER TO FURTHEST REGULATOR IS 730 FEET. DISTANCES FROM REGULATORS TO MOST REMOTE APPLIANCES ARE LABELED ON THE RISER DIAGRAM. GAS PIPING IS SIZED PER 2015 SFGC, TABLE 402.4(2) AND 402.4(5). [408.1]
2. PROVIDE CONNECTION TO EACH PIECE OF EQUIPMENT WITH UNION, GAS COCK(TYP) AND SEDIMENT TRAP INSTALLED AS CLOSE AS POSSIBLE TO THE APPLIANCE INLET WITH THE PLUMBING DESIGN. EXCEPTIONS: APPLIANCES WITH AN INTERNAL SEDIMENT TRAP, (OR) RANGES AND GAS FIREPLACES.
3. PROVIDE VENTS TO OUTDOORS FOR REGULATORS PER LOCAL JURISDICTION AND NFPA-54. ROUTING OF VENTS IS NOT SHOWN ON THE PLANS.
4. PROVIDE GAS SOLENOID VALVE FOR AUTOMATIC GAS SHUT-OFF. INTERLOCK VALVE SHALL BE CLOSED (DE-ENERGIZED) UPON ALARM CONDITION. LOCATE VALVE IN ACCESSIBLE LOCATION.
5. CONTRACTOR SHALL OBTAIN VERIFICATION FROM LOCAL UTILITY PRIOR TO CONSTRUCTION THAT 5.0 PSI GAS SERVICE IS AVAILABLE. NOTIFY ENGINEER IMMEDIATELY IF 5.0 PSI GAS SERVICE IS NOT AVAILABLE.
6. GAS PIPING 1-1/2" AND SMALLER SHALL BE JOINED BY THREADING. GAS PIPING 2" AND LARGER SHALL BE JOINED BY WELDING.

PIPING AFTER THE PRV IS SIZED USING LESS THAN 2PSI INLET PRESSURE, 0.5" W.C PRESSURE DROP.

PIPE SIZE:	10' MAX CFH/MBH
1/2"	172
3/4"	360
1"	678
1-1/4"	1390
1-1/2"	2090
2"	4020



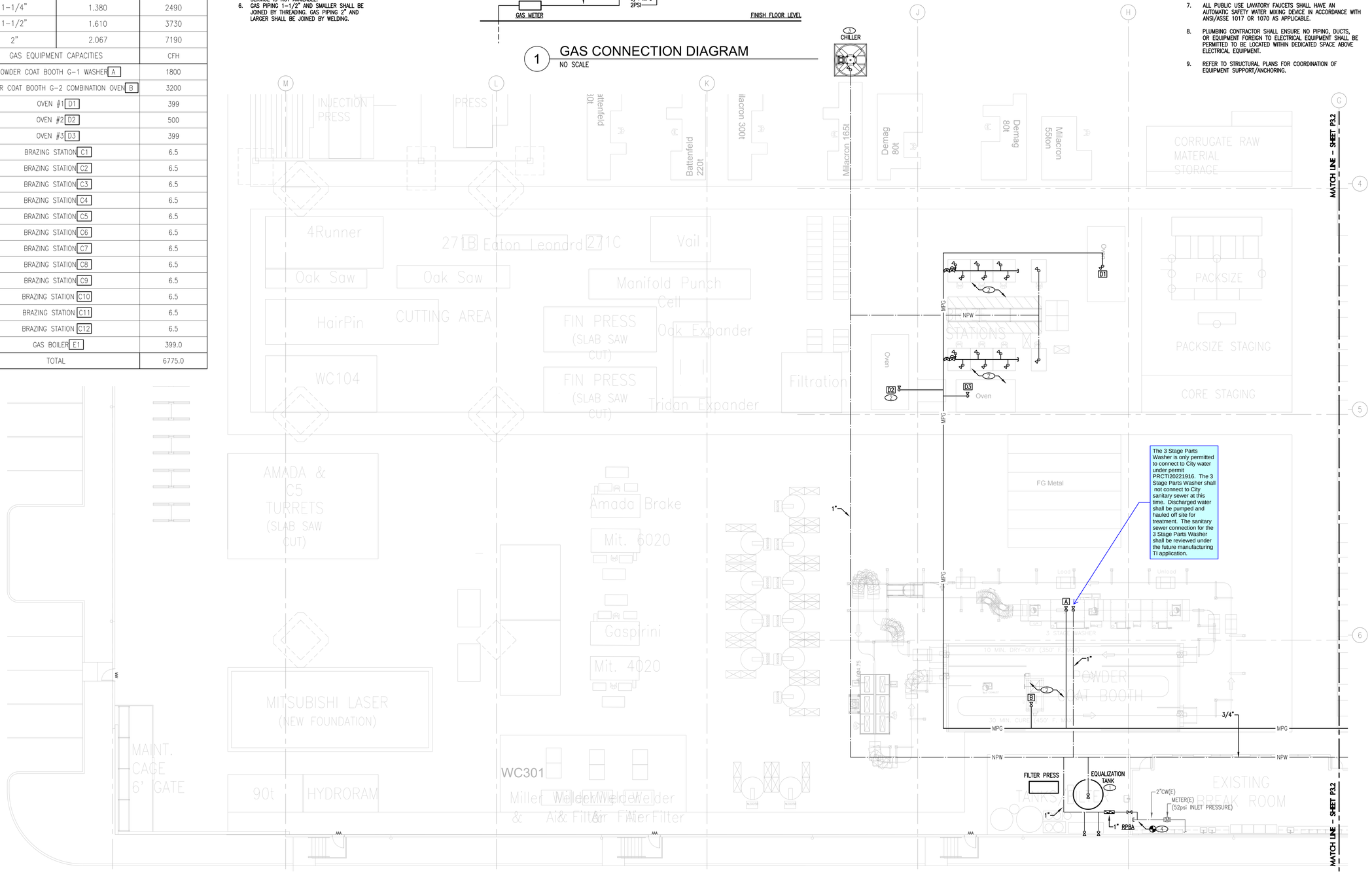
1 GAS CONNECTION DIAGRAM
NO SCALE

NOTES

1. PROPOSED LOCATION OF EQUALIZATION TANK (BY OWNER)
2. SEE SHEET P0.0 FOR GAS PIPING SIZES AND INFO.
3. PROPOSED LOCATION OF CHILLER (BY OWNER)
4. APPROXIMATE POINT OF CONNECTION TO EXISTING WATER PIPING. FIELD VERIFY EXACT SIZE AND LOCATION.

NOTICE

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE GOVERNMENTAL AND LOCAL CODE REQUIREMENTS.
2. PROVIDE ACCESS PANELS AS REQUIRED TO ALLOW ACCESS TO VALVES, EQUIPMENT, ETC. LOCATED ABOVE INACCESSIBLE CEILINGS AND WALL CAVITIES.
3. COORDINATE ALL SLAB PENETRATIONS WITH GENERAL CONTRACTOR PRIOR TO CONSTRUCTION. MAINTAIN A MINIMUM OF 2" CLEARANCE FROM THE EDGE OF THE SLAB OPENING TO ANY STRUCTURAL MEMBERS AND PIPES.
4. PIPE SIZES INDICATED ON THE PLANS ARE MINIMUM. THE CONTRACTOR SHALL PROVIDE PIPE SIZES EQUAL TO OR GREATER THAN THE SPECIFIED SIZES. THE CONTRACTOR MAY INCREASE PIPE SIZES AS REQUIRED AT NO ADDITIONAL EXPENSE TO THE PROJECT.
5. REFER TO THE PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL PLUMBING FIXTURE CONNECTION SIZE REQUIREMENTS.
6. ALL HANDICAPPED ACCESSIBLE WATER CLOSETS SHALL HAVE THE FLUSHING HANDLE ON THE WIDE SIDE OF THE HANDICAPPED ACCESSIBLE STALL AS REQUIRED BY ADA REQUIREMENTS.
7. ALL PUBLIC USE LAVATORY FAUCETS SHALL HAVE AN AUTOMATIC SAFETY WATER MIXING DEVICE IN ACCORDANCE WITH ANSI/ASSE 1017 OR 1070 AS APPLICABLE.
8. PLUMBING CONTRACTOR SHALL ENSURE NO PIPING, DUCTS, OR EQUIPMENT FOREIGN TO ELECTRICAL EQUIPMENT SHALL BE PERMITTED TO BE LOCATED WITHIN DEDICATED SPACE ABOVE ELECTRICAL EQUIPMENT.
9. REFER TO STRUCTURAL PLANS FOR COORDINATION OF EQUIPMENT SUPPORT/ANCHORING.



The 3 Stage Parts Washer is only permitted to connect to City water under permit PRCTI20221916. The 3 Stage Parts Washer shall not connect to City sanitary sewer at this time. Discharged water shall be pumped and hauled off site for treatment. The sanitary sewer connection for the 3 Stage Parts Washer shall be reviewed under the future manufacturing TI application.

PLUMBING ENLARGED PLAN - NON POTABLE WATER & GAS

SCALE: 3/32" = 1'-0"

NORTH

REDLINE MECHANICAL
LIC. NO.:REDLIM*835MM
24230 ROBERTS DR.
BLACK DIAMOND, WA 98010
360.886.5072

NATHAN F. GALVEZ
STATE OF WASHINGTON
48405
REGISTERED
PROFESSIONAL ENGINEER
DATE: 02-17-2023

RED DOT SHOP TI

PUYALLUP CORPORATE PARK
2504 EAST MAIN AVENUE
PUYALLUP, WA 98372

City of Puyallup
Development & Permitting Services
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

PLUMBING ENLARGED PLAN - NON POTABLE WATER & GAS

ISSUANCE

No.	Description	Date
1	PERMIT SET	02/17/2023
2		
3		

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PRCTI20221916

PROVIDE IDENTIFICATION OF POTABLE AND NONPOTABLE WATER SYSTEM PER 601.3 OF THE 2018 UPC. EACH SYSTEM SHALL BE CLEARLY IDENTIFIED IN ACCORDANCE WITH SECTION 601.3.1 THROUGH 601.3.5.

NOTES

1 PROPOSED LOCATION OF GAS METER (BY LOCAL GAS COMPANY).

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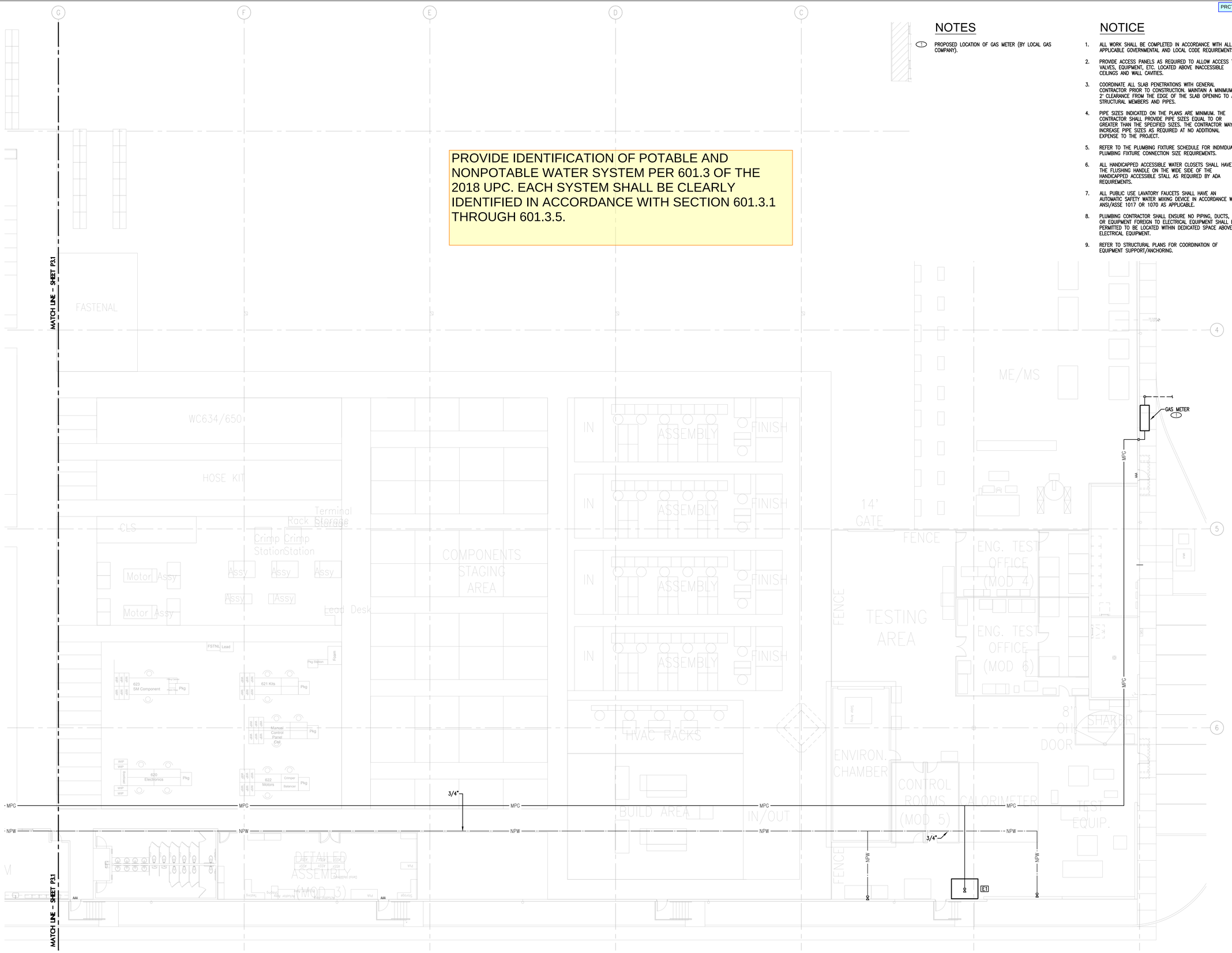

PLUMBING ENLARGED PLAN - NON POTABLE WATER & GAS

SCALE: 3/32" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER

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2504 EAST MAIN AVENUE
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ISSUED PERMIT

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PLUMBING ENLARGED PLAN - NON POTABLE WATER & GAS

ISSUANCE

No.	Description	Date
1	PERMIT SET	02/17/2023
2		
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