

PLUMBING LEGEND

AFF	..... ABOVE FINISHED FLOOR	--- (CW) COLD WATER
ARCH	..... ARCHITECTURAL	--- (HW) HOT WATER
B.F.	..... BELOW FINISHED FLOOR	--- (HWR) HOT WATER RECIRC
B.G.	..... BELOW GRADE	--- (W) BELOW GRADE WASTE
BTU	..... BRITISH THERMAL UNIT	--- (W) ABOVE GRADE WASTE
CAP.	..... CAPACITY	--- (V) VENT
C.I.	..... CAST IRON	--- (RD) RAIN DRAIN
COMP.	..... COMPARTMENT	--- (OD) OVERFLOW RAIN DRAIN
CONT.	..... CONTINUATION	--- (G) NATURAL GAS
CU.	..... CUBIC	--- (F) FIRE WATER
DIA.	..... DIAMETER	..... PRESSURE/TEMP RELIEF VALVE
ELEV.	..... ELEVATION	..... BUTTERFLY VALVE
FD	..... FLOOR DRAIN	..... GAS PRESS REGULATING VALVE
FDC	..... FIRE DEPARTMENT CONNECTION	..... PIPE UP, PIPE DOWN
F.F.	..... FINISH FLOOR	..... GATE VALVE
FLG.	..... FLANGE	..... BALL VALVE
FT	..... FOOT / FEET	..... BALANCING VALVE
G	..... GAS	..... CHECK VALVE
GA.	..... GAUGE	..... UNION
GALV.	..... GALVANIZED	..... DOUBLE CHECK ASSEMBLY
GPM	..... GALLONS PER MINUTE	..... CAP
G.V.	..... GATE VALVE	..... TEE
HP	..... HORSEPOWER	..... ELBOW
KW	..... KILOWATT	..... CLEANOUT
LAV	..... LAVATORY	
LBS	..... POUNDS	
MAX.	..... MAXIMUM	
MBH	..... THOUSANDS OF BTUs PER HOUR	
MIN.	..... MINIMUM	
M.J.	..... MECHANICAL JOINT	
N.I.M.	..... NOT IN MECHANICAL	
PROT.	..... PROTECTION	
PRV	..... PRESSURE REDUCING VALVE	
PSI, PSIG	..... POUNDS PER SQUARE INCH	
P/T	..... PRESSURE / TEMPERATURE	
REQ'D	..... REQUIRED	
TYP.	..... TYPICAL	
VTR	..... VENT THROUGH ROOF	
WC	..... WATER CLOSET	

	..... EQUIPMENT MARK NUMBER
	..... FIXTURE MARK
	..... NOTE
	..... POINT OF CONNECTION

PLUMBING SHEET INDEX:

- P0.01 PLUMBING LEGEND AND SCHEDULES
- P1.01 PLUMBING DEMO PLAN
- P2.00 PLUMBING UNDERSLAB PLAN
- P2.01 PLUMBING FLOOR PLAN
- P4.01 PLUMBING ENLARGED PLANS
- P5.01 GAS ISOMETRIC RISER DIAGRAM
- P6.01 PLUMBING DETAILS
- P6.02 PLUMBING CUT SHEETS

GENERAL NOTES

1. WORK SHALL COMPLY WITH CURRENT OREGON SPECIALTY CODE.
2. COORDINATE INSTALLATION WITH OTHER TRADES
3. ALL PIPING IN EXTERIOR WALLS TO BE INSTALLED ON WARM SIDE OF INSULATION.
4. UNIT HOT/COLD WATER PIPING TO FIXTURES IS 1/2" PEX UNLESS NOTED OTHERWISE.

PLUMBING CALCULATIONS

FIXTURE TYPE	NUMBER OF FIXTURES	WATER FIXTURE UNITS	DOMESTIC WATER SERVICE			SANITARY WASTE SERVICE	
			TOTAL WSFU	TOTAL C FIXTURE UNITS	TOTAL H FIXTURE UNITS	DRAINAGE FIXTURE UNITS	TOTAL DFU
CLOTHES WASHER	6	4	24	18	18	3	18
DISHWASHER (INDEPENDENT DRAIN)	1	1.5	1.5	1.125	1.125	2	2
DRINKING FOUNTAIN / WATER COOLER (GENERAL USE)	1	0.5	0.5	0.5	0	0.5	0.5
DRINKING FOUNTAIN / WATER COOLER (HEAVY USE)	1	0.75	0.75	0.75	0	0.5	0.5
KITCHEN SINK (ONE 1-1/2" TRAP)	2	1.5	3	2.25	2.25	2	4
KITCHEN SINK (FOOD GRINDER)	1	1.5	1.5	1.125	1.125	2	2
KITCHEN SINK (DISHWASHER)	1	3	3	2.25	2.25	2	2
KITCHEN SINK (GRINDER & DISHWASHER)	1	3	3	2.25	2.25	2	2
LAVATORY (SETS OF TWO OR THREE)	4	1	4	3	3	2	8
MOP BASIN	1	3	3	2.25	2.25	3	3
SHOWERS (STALL)	12	2	24	18	18	2	24
SERVICE SINK (FLUSHING RIM)	1	8	8	8	0	6	6
WATER CLOSET (3.5 GPF FLUSHOMETER VALVE-GENERAL)	14	8	112	112	0	6	84
HOSE BIBB (FIRST ONE)	1	2.5	2.5	2.5	0	---	---
HOSE BIBB (EACH ADDITIONAL)	3	1	3	3	0	---	---
TOTAL	50		193.75	177	50.25		156

GPM	64	62	29	WASTE SIZE	4"
Supply Size	2-1/2"	2-1/2"	2"		
Meter Size	2"	Per Oregon W-4			

PLUMBING CONNECTION SCHEDULE

MARK	FIXTURE	KITCHEN EQUIP # (KES #)	W	V	CW	HW105	HW140	G	GAS INPUT	KES *	UDS *	REMARKS
WC-1	WATER CLOSET		3"	2"	1"							FLUSH VALVE, 1.28 GPF, FLOOR MOUNT
WC-2	WATER CLOSET		3"	2"	1"							FLUSH VALVE, 1.28 GPF, FLOOR MOUNT, ADA
LV-1	LAVATORY		1-1/2"	1-1/2"	1/2"	1/2"						0.5 GPM, COUNTER MOUNT
LV-2	LAVATORY		1-1/2"	1-1/2"	1/2"	1/2"						0.5 GPM, WALL MOUNT
S-1	SINK, BREAK RM		GW 2"	1-1/2"	1/2"		1/2"			*		1.8 GPM, 1-COMP, S/S, COUNTER MOUNT
SH-1	SHOWER, SINGLE		3"	2"	1/2"	1/2"						2.0 GPM, SHOWER PAN & DRAIN
SH-2	SHOWER, SINGLE, ADA		3"	2"	1/2"	1/2"						2.0 GPM, SHOWER PAN & DRAIN
TD-1	TRENCH DRAIN		2"	VL								SIoux CHIEF 823 SERIES.
TD-2	TROUGH DRAIN		3"	VL								SOux CHIEF 823 SERIES.
RC-1	REFRIGERATOR CONNECTION				1/2"							RECESSED W/ SHUT OFF VALVE
OW-1	CLOTHES WASHER FITTING		2"	2"	1/2"	1/2"						COORDINATE WITH OWNER PROVIDE EQUIPMENT
FD-1	FLOOR DRAIN		3"	V.L.								J.R. SMITH 2005A (ROUND)
FS-1	FLOOR SINK		3"	V.L.								J.R. SMITH 3002 STAINLESS STEEL, NO GRATE
MS-1	MOP SINK		GW 3"	V.L.	1/2"		1/2"					VACUUM PROTECTED
PW-1	PET WASH		3"	1-1/2"	1/2"	1/2"						STAINLESS STEEL, VACUUM PROTECTED
HB-1	HOSE BIBB, EXTERIOR				3/4"							VACUUM/FREEZE PROTECTED
HB-2	HOSE BIBB, INTERIOR				3/4"							VACUUM PROTECTED
(EDF)	DRINKING FOUNTAIN		1-1/2"	1-1/2"	1/2"							PROVIDE NEW CW SUPPLY
HS-1	HAND SINK	5	GW 2"	1-1/2"	1/2"		1/2"			*		1-COMP W/POINT OF USE MIXING VALVE SET @105d
SK-1	STEAM KETTLE SINK	12	IDW	1-1/2"	1/2"		1/2"			*		FLOOR SINK
KS-1	SINK	12	IDW	1-1/2"	1/2"		1/2"			*		FLOOR SINK
KS-2	PREP SINK	6	IDW	1-1/2"	1/2"		1/2"			*		2-COMP, ROUTE WASTE TO FS
KS-3	SCULLERY SINK	25	GW 2"	1-1/2"	1/2"		1/2"			*		3-COMP WITH PRE-SPRAYER
BF-1	BOTTLE FILLING STATION	35	1-1/2"	1-1/2"	1/2"					*		PROVIDE NEW CW SUPPLY
DW-1	DISH WASHER	24	IDW	V.L.	1/2"		1/2"			*		ROUTE WASTE TO FS

PROVIDE CLEAN-OUTS BELOW ALL SINKS AND LAVS.
 PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS AND FLOOR SINKS

GW - GREASE WASTE
 V.L. - VENTED LINE
 IDW - INDIRECT WASTE
 KES-* - EQUIPMENT SUPPLIED BY KITCHEN EQUIPMENT SUPPLIER (KES) OR OWNER. ALL ROUGH IN WORK AND FINAL CONNECTIONS BY DIVISION 15. DIVISION 15 CONTRACTOR TO PROVIDE ALL TRAPS, STOPS AND OTHER REQUIRED ACCESSORIES.

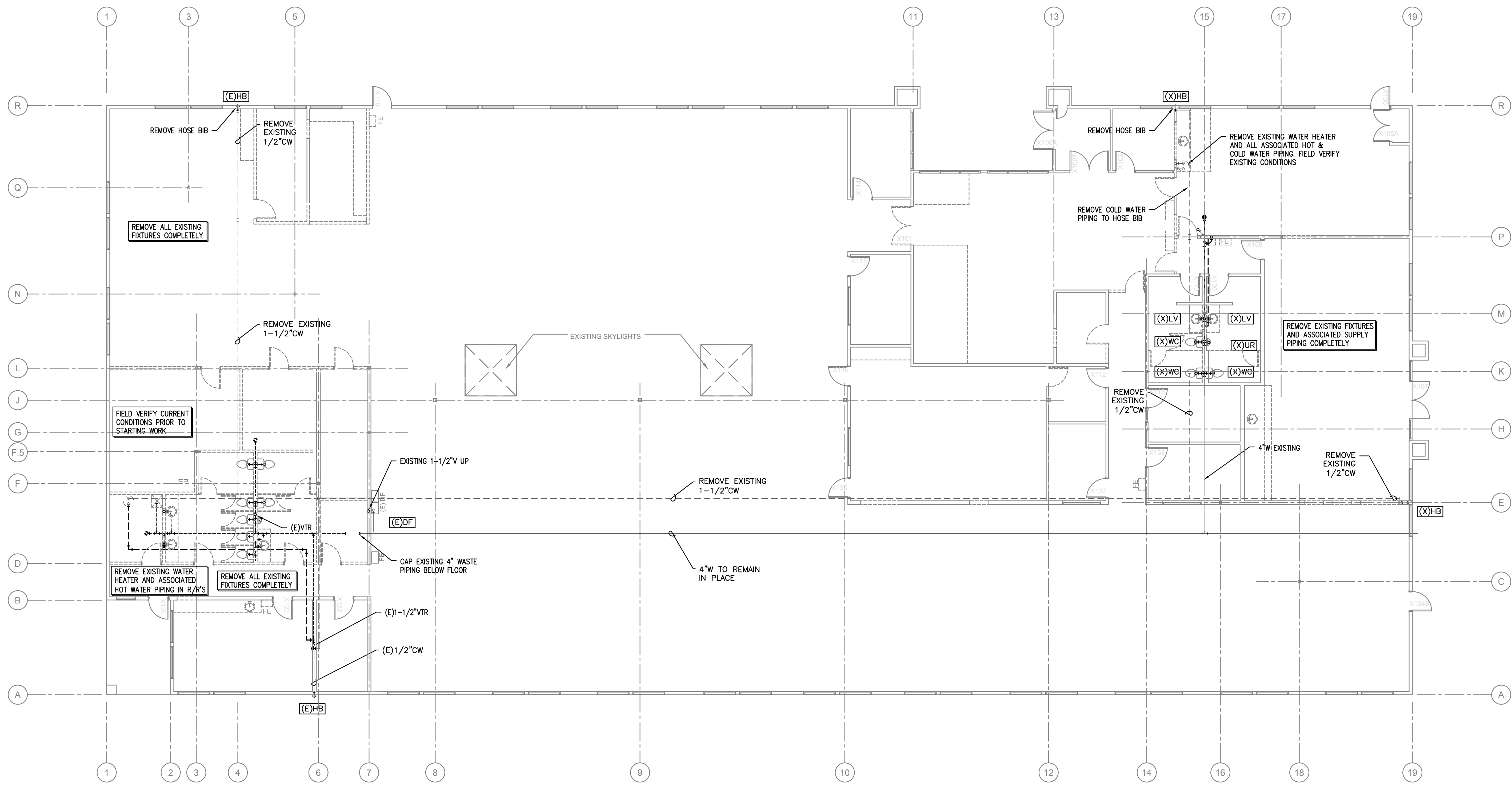
UDS-* - UTILITY DISTRIBUTION SYSTEM (UDS) - EQUIPMENT SERVED BY THE UDS WILL HAVE WATER AND GAS SUPPLIED THROUGH THE UDS, WITH THE UDS BEING SERVED BY A SINGLE POINT CONNECTION AS SHOWN ON THE PLANS. DIVISION 15 IS RESPONSIBLE FOR FINAL CONNECTIONS OF ALL HOSES FROM UDS TO THE INDIVIDUAL PIECES OF EQUIPMENT.

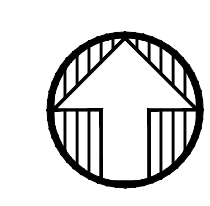
GAS WATER HEATERS

MARK NUMBER	WH 1	WH 2	WH 3
CAPACITY (GAL)	100	100	100
INPUT RATE (MBH)	250	250	250
OUTPUT RATE (MBH)	242	242	242
EFFICIENCY (%)	97%	97%	97%
FUEL	NAT GAS	NAT GAS	NAT GAS
RECOVERY CAP. (GPH) @ 100' F RISE	291	291	291
GAS VENT DIA. (INCHES)	3" PVC	3" PVC	3" PVC
COMBUSTION AIR INTAKE	3" PVC	3" PVC	3" PVC
DESIGN WEIGHT (LBS)	1735	1735	1735
BASIS OF DESIGN: BRADFORD WHITE	EF-100T-250	EF-100T-250	EF-100T-250

PUMPS

MARK NUMBER	CP 1
SERVICE	DHW RECIRC
TYPE	CIRC
CONTROLLED BY	AQUASTAT
ARRANGEMENT	IN-LINE
FLOW RATE (GPM)	4.0
HEAD (FT)	20
MOTOR HP	40 WATTS
RPM	---
DESIGN WEIGHT (LBS)	20



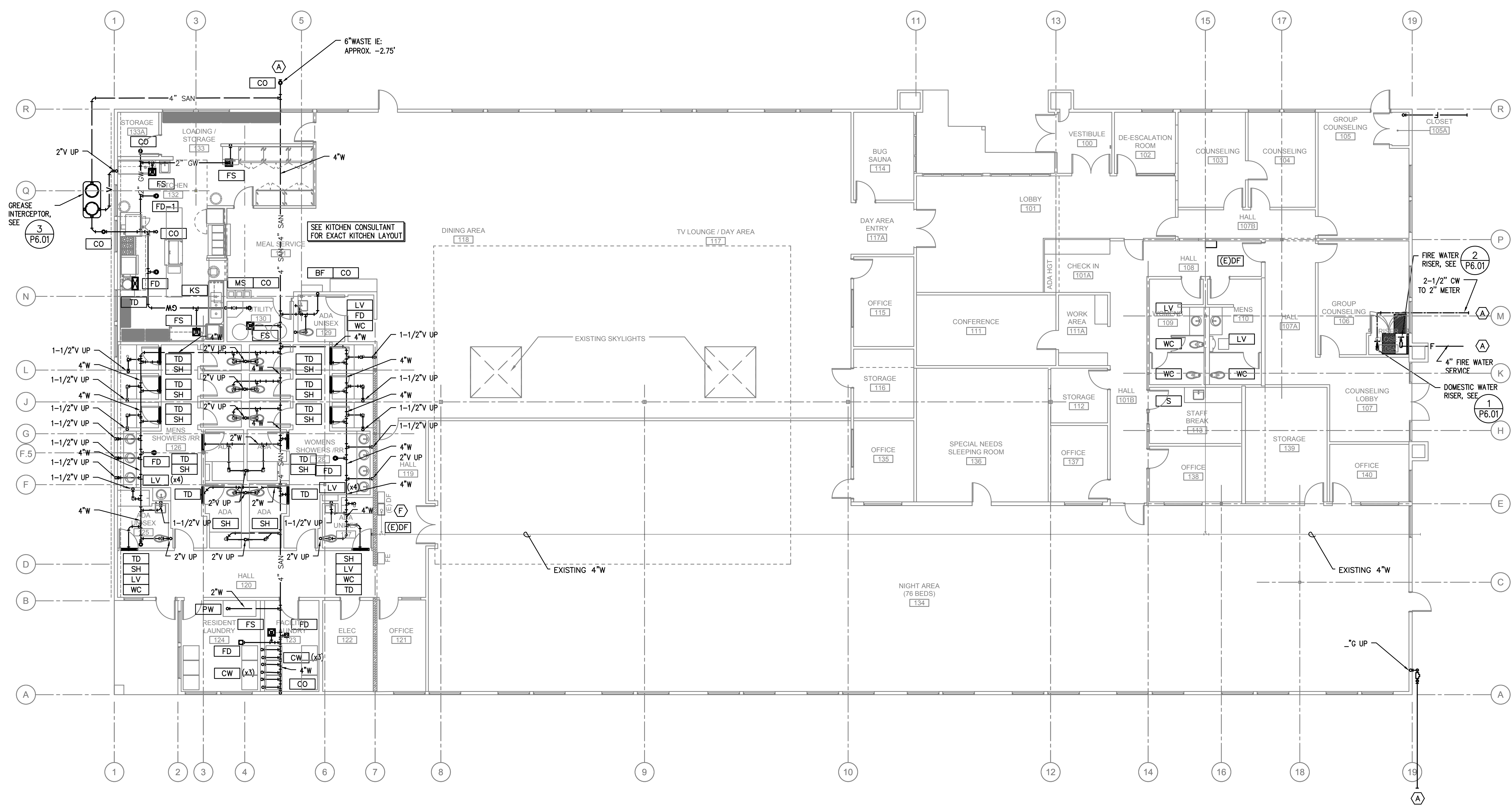
 1 PLUMBING DEMO PLAN
 SCALE: 1/8" = 1'-0"

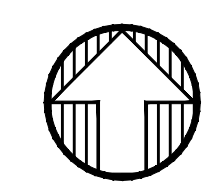
- KEYED NOTES:**
- (A) - SEE CIVIL FOR CONTINUATION.
 - (B) - SEE COOKING LINE GAS PIPING DETAIL 2/P5.01 VENT THROUGH ROOF. PROVIDE OFFSET AT ROOF AS REQUIRED.
 - (C) - PROVIDE 3/4" FILTERED WATER TO CONVECTION OVEN.
 - (D) - PROVIDE 1/2" FILTERED CW TO STEAM JACKETED KETTLE.
 - (E) - SEE GAS ISOMETRIC RISER DIAGRAM 1/P5.01.
 - (F) - (E) FIXTURES TO REMAIN, PROVIDE NEW WATER CONNECTIONS, INCLUDING STOPS & SUPPLIES.
 - (G) - ROUTE VENT UP, CONNECT TO EXISTING 2" OR LARGER VENT. VENT THROUGH ROOF AS NEEDED. USE EXISTING PENETRATIONS WHERE AVAILABLE.
 - (H) - MOUNT HB AT 18" AFF.

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 **1** PLUMBING UNDERSLAB PLAN
 P2.00 SCALE: 1/8" = 1'-0"

KEYED NOTES:

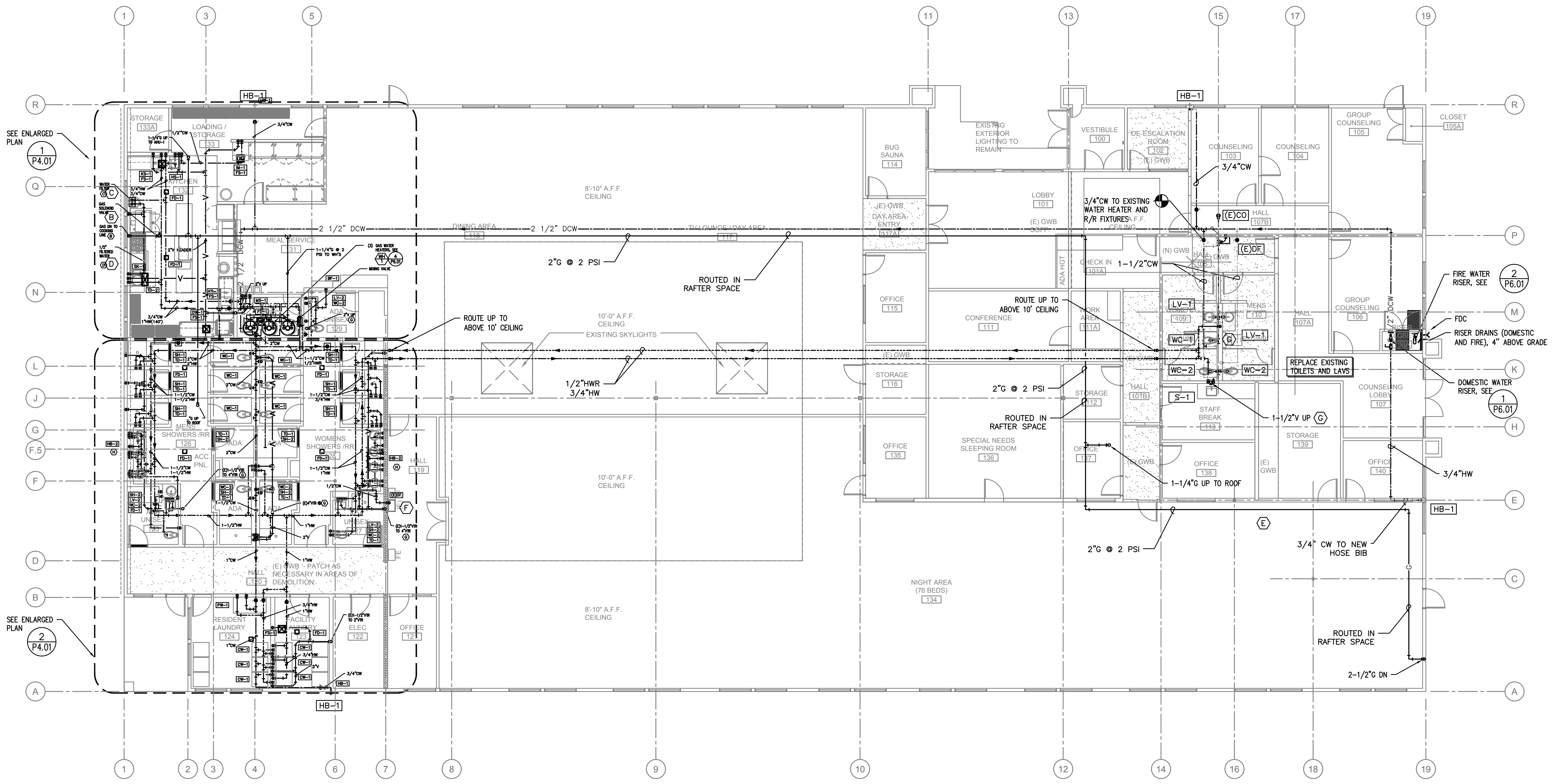
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SHEET
PLUMBING UNDERSLAB PLAN
P2.00
 PERMIT SET
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1 PLUMBING FLOOR PLAN
 P2.02 SCALE: 1/8" = 1'-0"

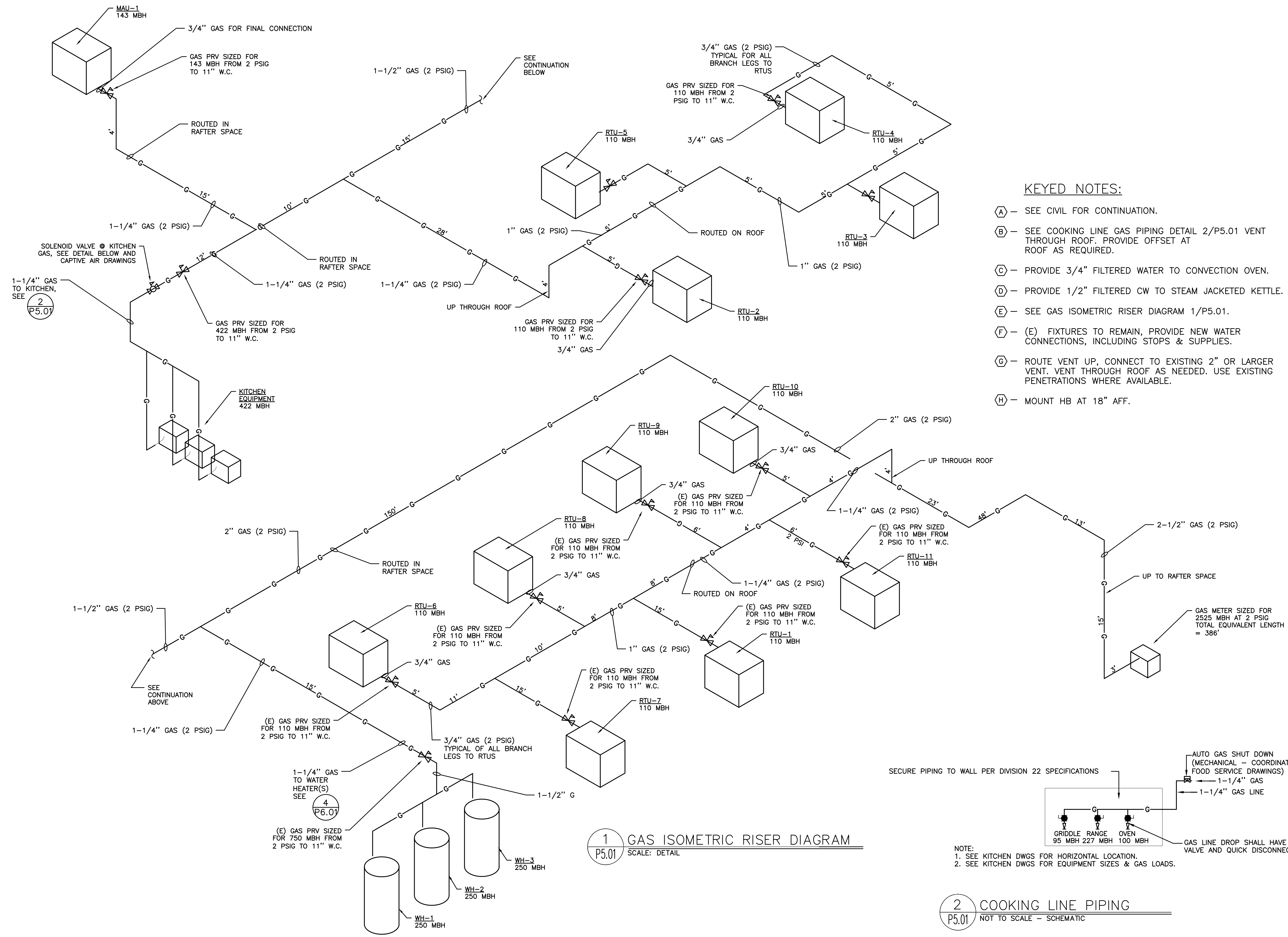
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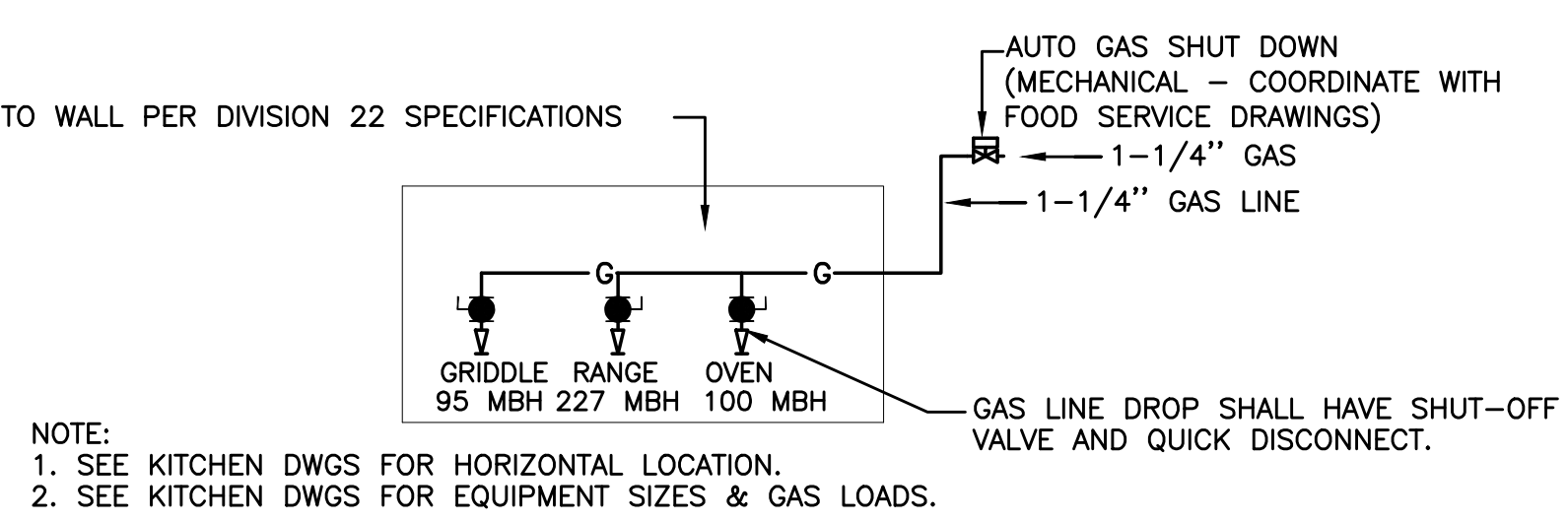
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1 GAS ISOMETRIC RISER DIAGRAM
 SCALE: DETAIL

2 COOKING LINE PIPING
 NOT TO SCALE - SCHEMATIC

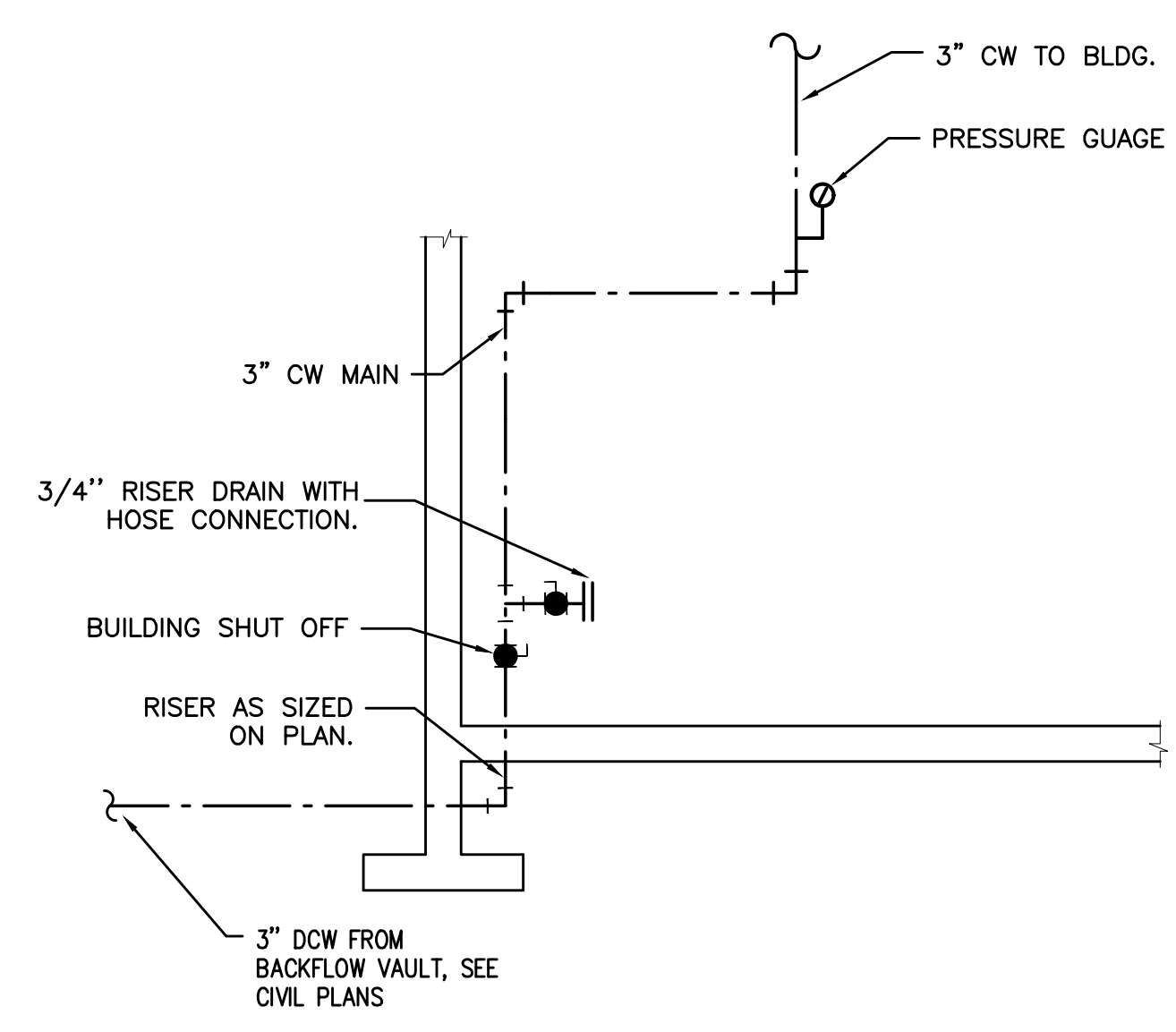


NOTE:
 1. SEE KITCHEN DWGS FOR HORIZONTAL LOCATION.
 2. SEE KITCHEN DWGS FOR EQUIPMENT SIZES & GAS LOADS.

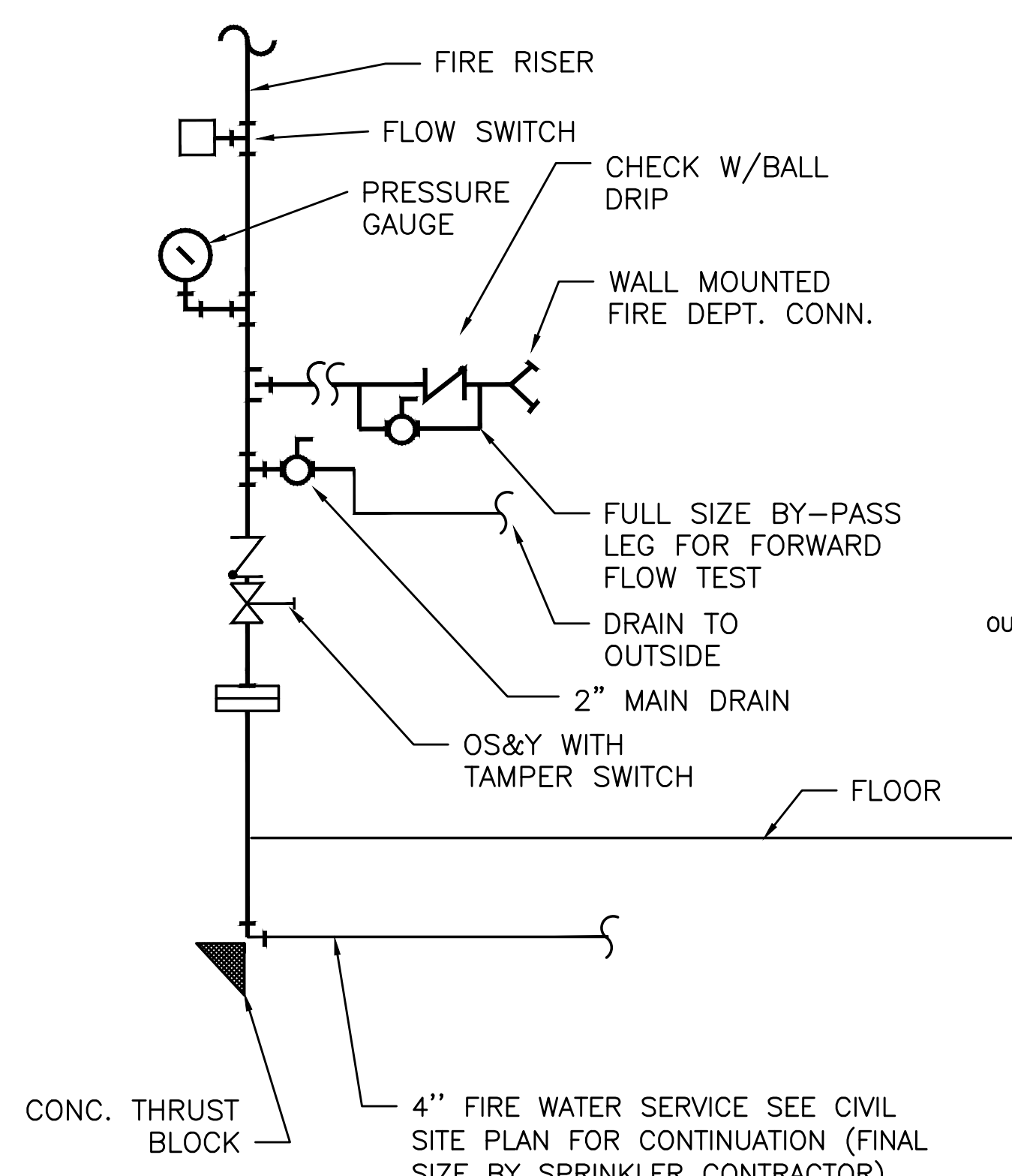
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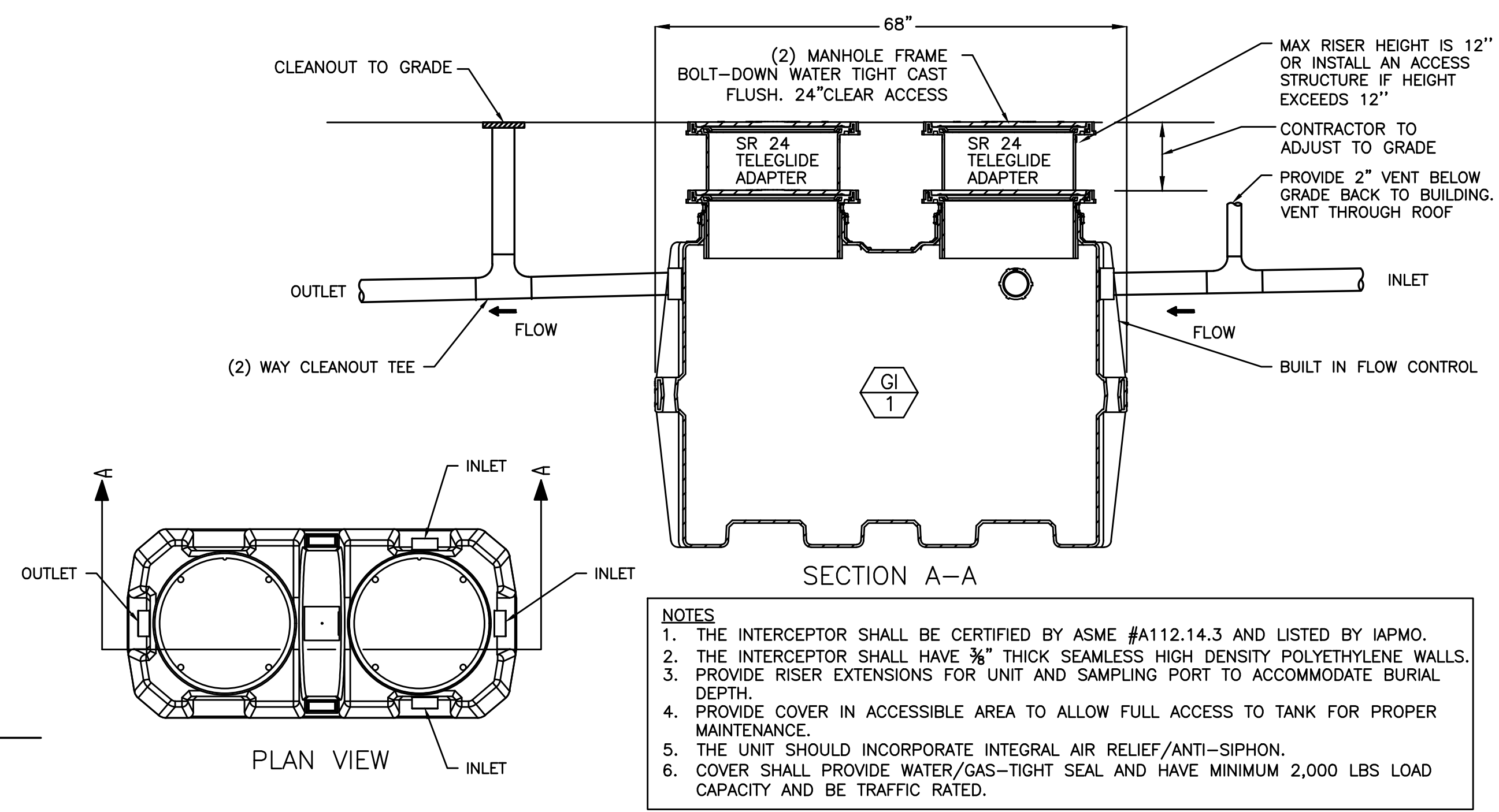
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1 DOMESTIC WATER RISER
P6.01 SCALE: DETAIL



2 FIRE WATER RISER
P6.01 SCALE: DETAIL

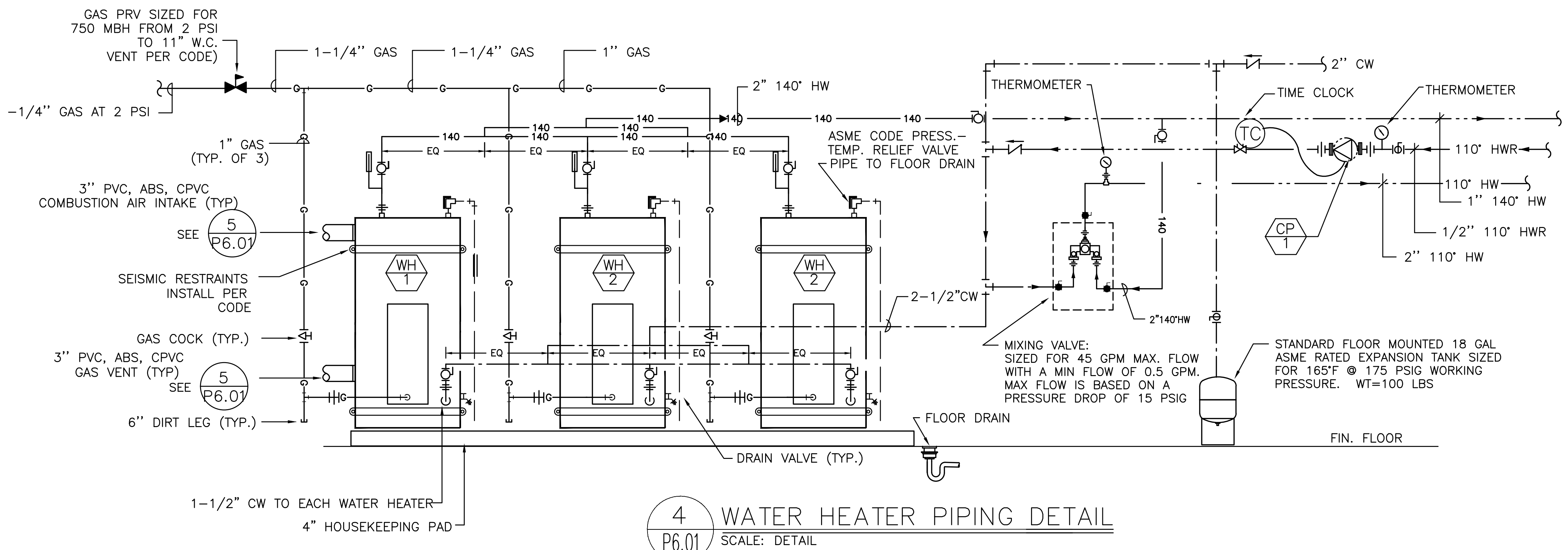


GREASE INTERCEPTOR	
MARK NUMBER	GI 1
SERVICE	OUTDOOR CONCESSION
CAPACITY (GPM)	100 GPM
GREASE (LB)	1,751 LBS
INLET/OUTLET PIPE SIZE	4"
DESIGN WEIGHT-WET (LBS)	230 LBS
BASIS OF DESIGN	SCHIER GB-250
QTY	1

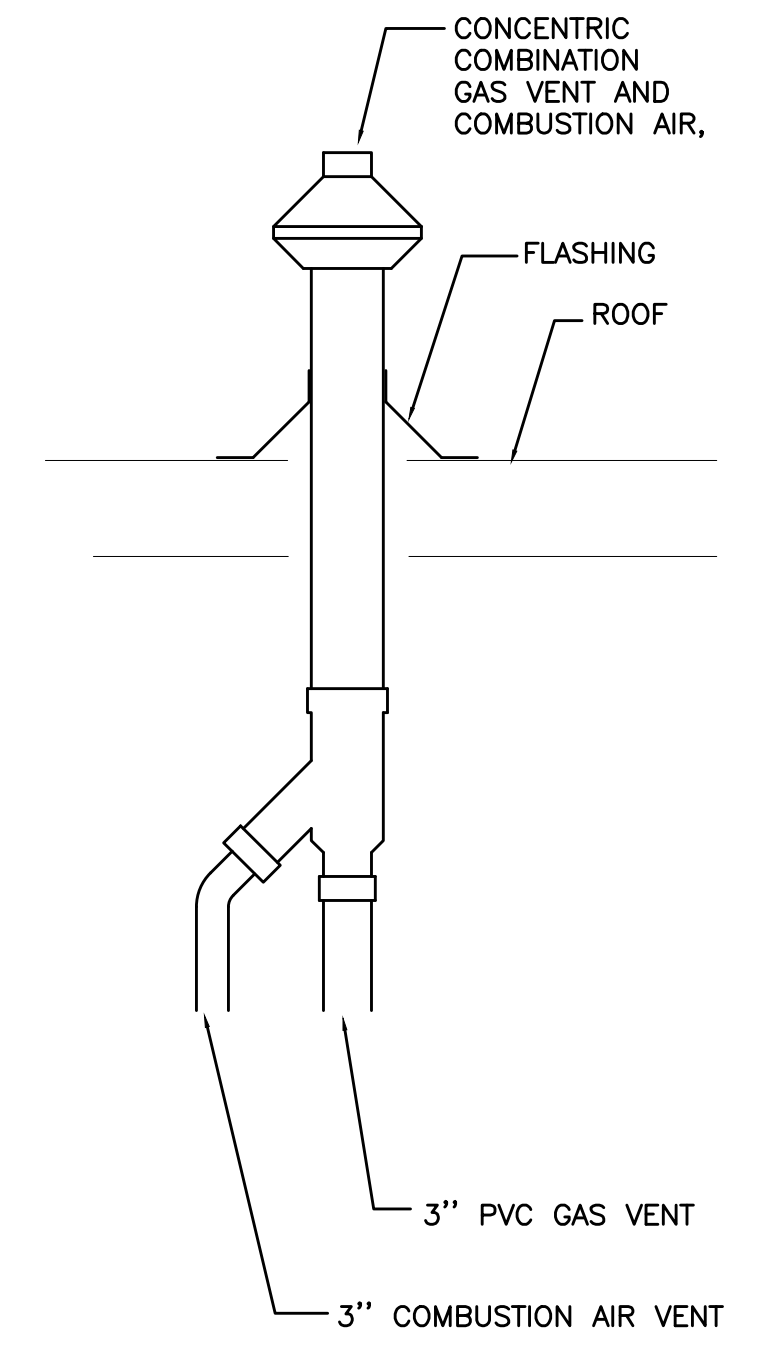
- NOTES
1. THE INTERCEPTOR SHALL BE CERTIFIED BY ASME #A112.14.3 AND LISTED BY IAPMO.
 2. THE INTERCEPTOR SHALL HAVE 3/8" THICK SEAMLESS HIGH DENSITY POLYETHYLENE WALLS.
 3. PROVIDE RISER EXTENSIONS FOR UNIT AND SAMPLING PORT TO ACCOMMODATE BURIAL DEPTH.
 4. PROVIDE COVER IN ACCESSIBLE AREA TO ALLOW FULL ACCESS TO TANK FOR PROPER MAINTENANCE.
 5. THE UNIT SHOULD INCORPORATE INTEGRAL AIR RELIEF/ANTI-SIPHON.
 6. COVER SHALL PROVIDE WATER/GAS-TIGHT SEAL AND HAVE MINIMUM 2,000 LBS LOAD CAPACITY AND BE TRAFFIC RATED.

3 GREASE INTERCEPTOR
P6.01 SCALE: DETAIL

- NOTES:
1. PROVIDE WITH SR24 TELEGLIDE RISER ADAPTER AND SV-24 SAMPLING PORT, IF REQUIRED BY CITY
 2. PROVIDE WITH BUILT IN FLOW CONTROL & BUILT IN TEST CAP



4 WATER HEATER PIPING DETAIL
P6.01 SCALE: DETAIL



5 CONCENTRIC GAS VENT
P6.01 SCALE: DETAIL

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SHEET
PLUMBING DETAILS

P6.01

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