

CARTEE
APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019

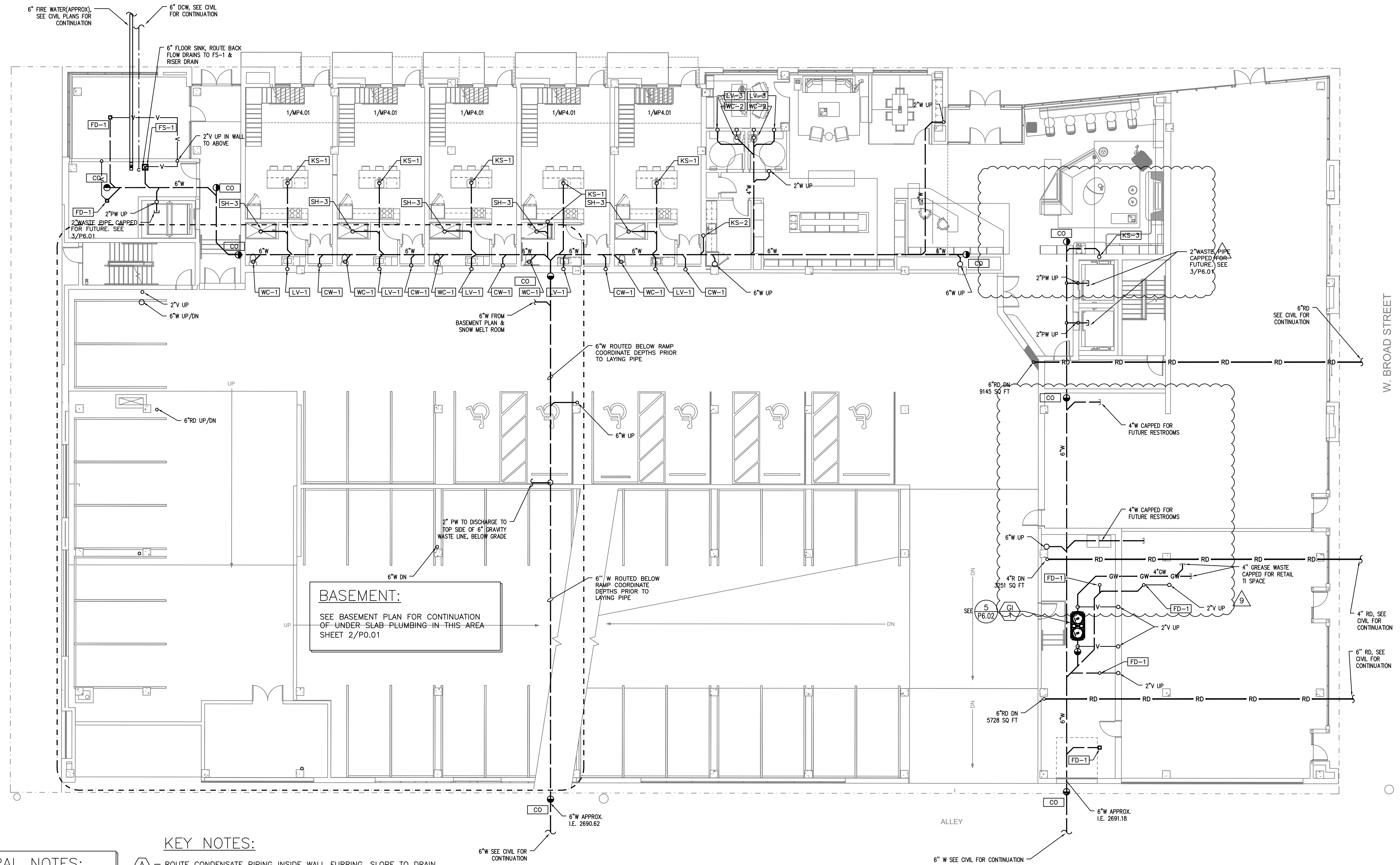


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INC. WWW.MPIA-ENG.COM
CONTACT: Mark Demeyer

S. 4TH STREET

W. MYRTLE STREET

W. BROAD STREET



BASEMENT:
SEE BASEMENT PLAN FOR CONTINUATION
OF UNDER-SLAB PLUMBING IN THIS AREA
SHEET 2/P0.01

GENERAL NOTES:
SEE SHEET P1.0B FOR GENERAL NOTES

- KEY NOTES:**
- (A) - ROUTE CONDENSATE PIPING INSIDE WALL FURRING. SLOPE TO DRAIN.
 - (B) - ROUTE CONDENSATE PIPING TO HUB DRAIN EXPOSED ON WALL OR COLUMN. ROUTE HUB DRAIN TO STORM OR SANITARY RISER.
 - (C) - OFFSET PIPING AS REQUIRED BETWEEN FLOORS.
 - (D) - MAKE CONNECTION TO RAIN DRAIN RISER.
 - (E) - PROVIDE HOSE BIBB AT APPROX 24" AFF.
 - (F) - PROVIDE SHUT OFF VALVE(S) WITH DRAIN FOR SEASONAL DRAIN DOWN. ROUTE WASTE TO NEAREST CLOTHES WASHER BOX DRAIN.
 - (G) - ROUTE PIPING EXPOSED ON WALL.
 - (H) - PROVIDE FREEZE PROTECTION.
 - (J) - ROUTE CONDENSATE DRAINS TO WASHER BOX IN ASSOCIATED UNIT.

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

RISER DETAILS:
SEE SHEET P300 FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

ADDENDUM 4 SET

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1 CITY RESPONSE	07.15.2019
2 CITY RESPONSE	07.15.2019
3 ADDENDUM 1	07.15.2019
4 CITY RESPONSE 3	07.16.2019
5 CITY REVISION 5	08.19.2019
6 ADDENDUM 3	08.19.2019
7 CITY REVISION 6	09.12.2019
9 ADDENDUM 4	10.25.2019
ASI 02	11.25.2019
ASI 05	01.28.2020

title:
**PLUMBING
PLAN LEVEL 1
UNDER SLAB**

sheet:

P0.01

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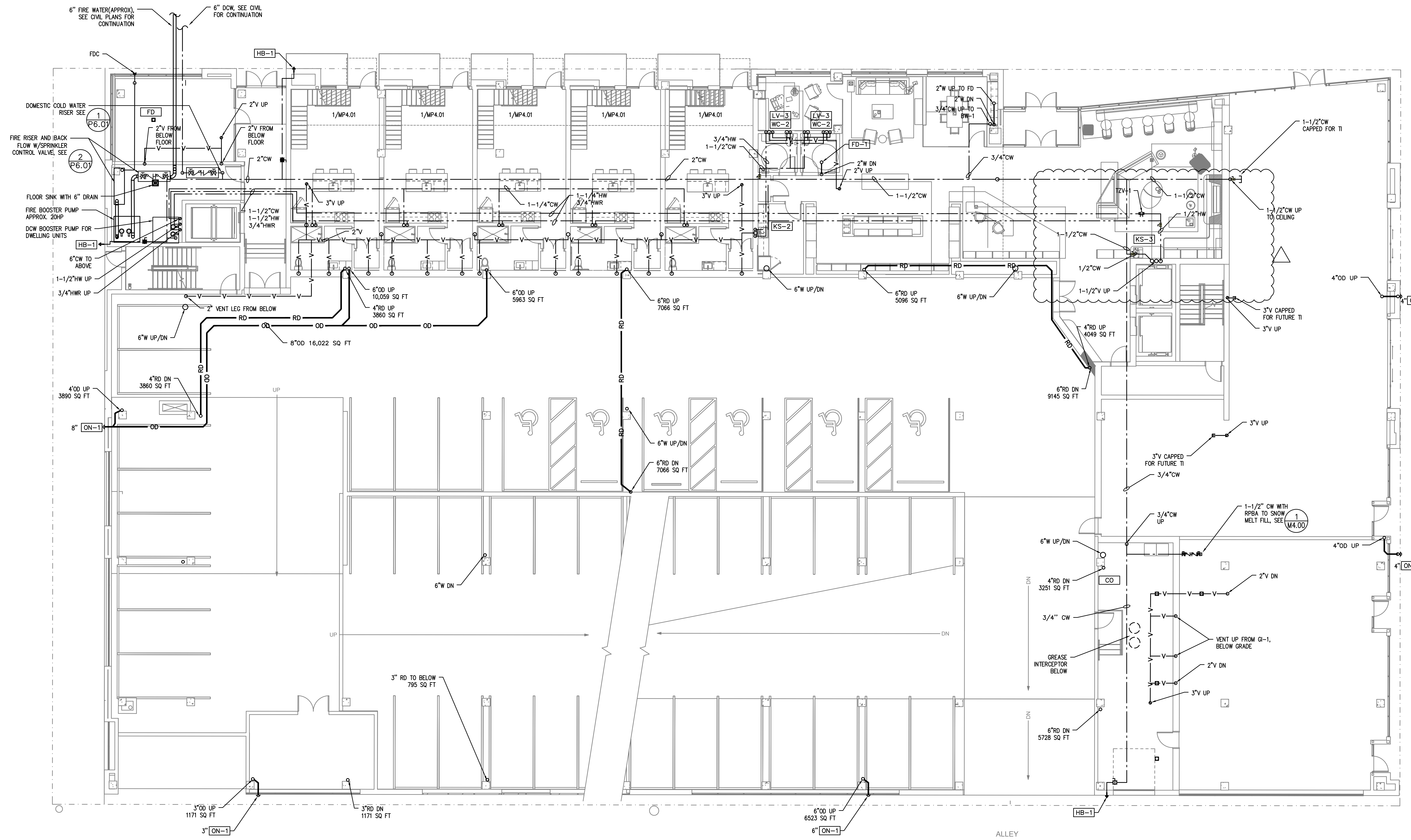


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CONTACT: Mike Denton

S. 4TH STREET

W. MYRTLE STREET

W. BROAD STREET



GENERAL NOTES:
SEE SHEET P1.0B FOR GENERAL NOTES

- KEY NOTES:**
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1
P1.01 LEVEL 1 FLOOR PLAN-PLUMBING
SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET **X**
P300 FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

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8	ADDENDUM 4 10.25.2019
9	ASI 02 11.25.2019
10	ASI 05 01.28.2020

title:
**PLUMBING
FLOOR PLAN
LEVEL 1**

sheet:
P1.01

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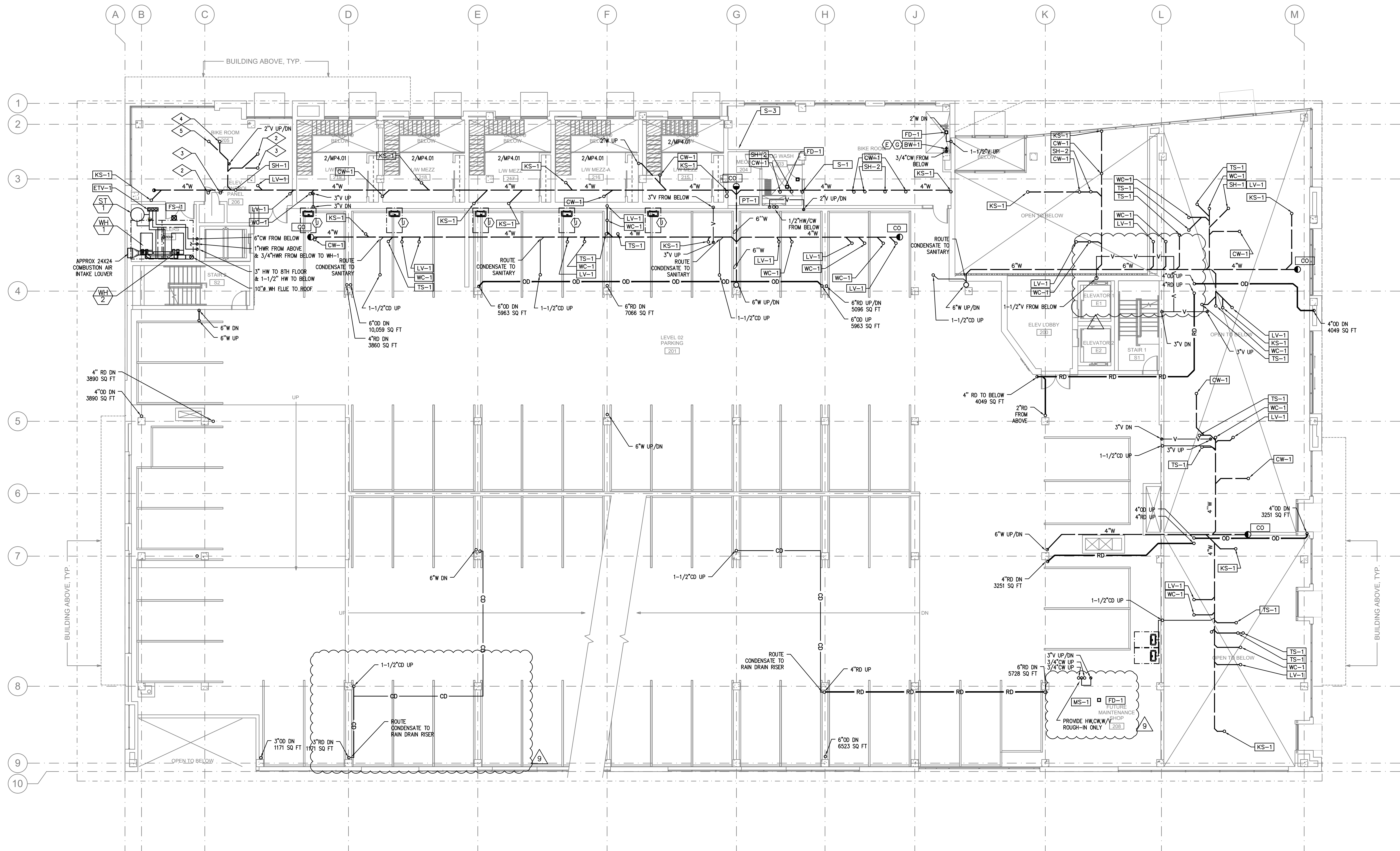
ADDENDUM 4 SET

10.25.2019

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1 LEVEL 2 FLOOR PLAN-PLUMBING
P1.02 SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET X P300 FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

title:
**PLUMBING
FLOOR PLAN
LEVEL 2**

sheet:
P1.02

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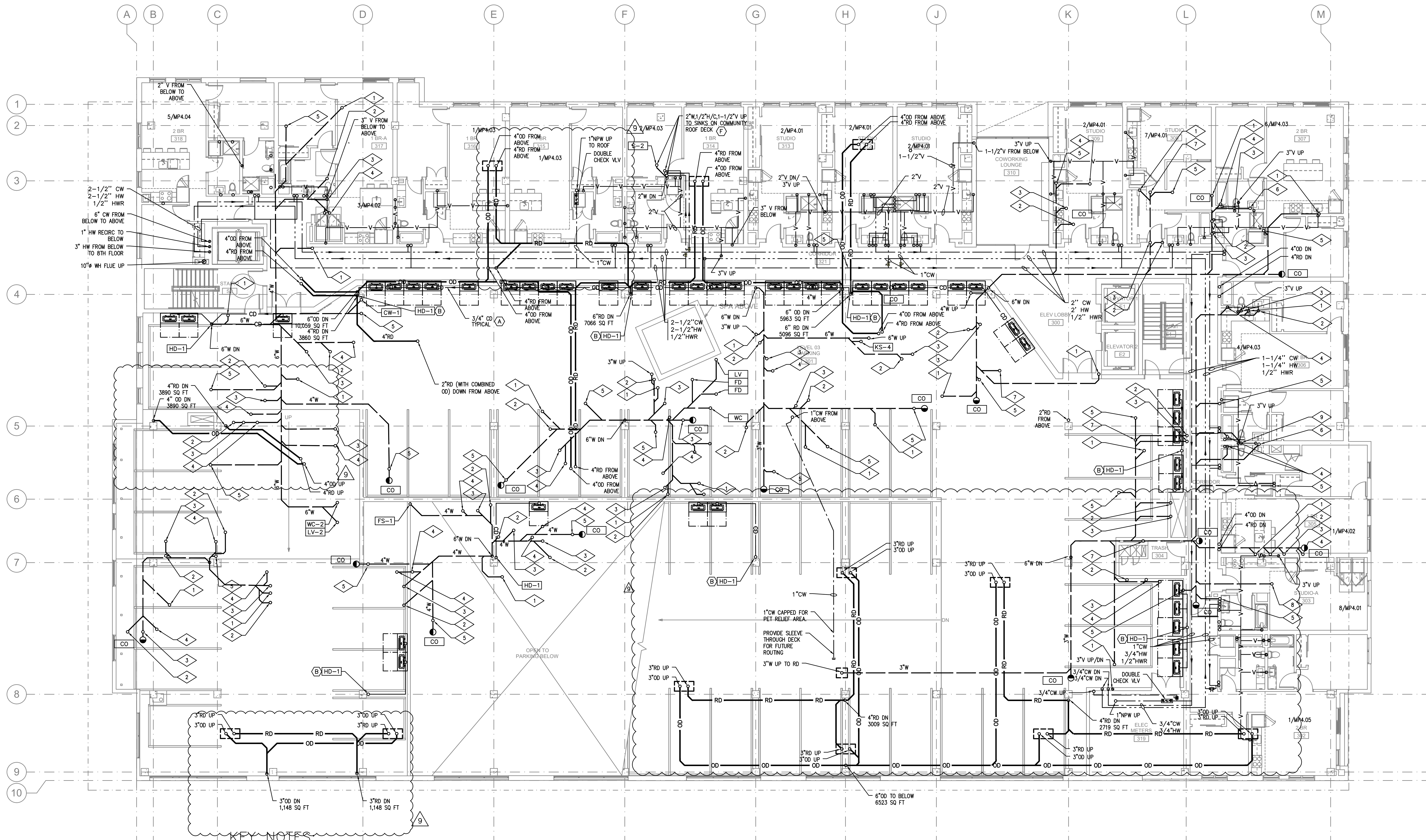
ADDENDUM 4 SET

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10	ASI 02	11.25.2019
11	ASI 05	01.28.2020



GENERAL NOTES:
SEE SHEET P1.0B FOR GENERAL NOTES

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1 LEVEL 3 FLOOR PLAN-PLUMBING
SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET P300 FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

title:
PLUMBING FLOOR PLAN LEVEL 3

sheet:
P1.03

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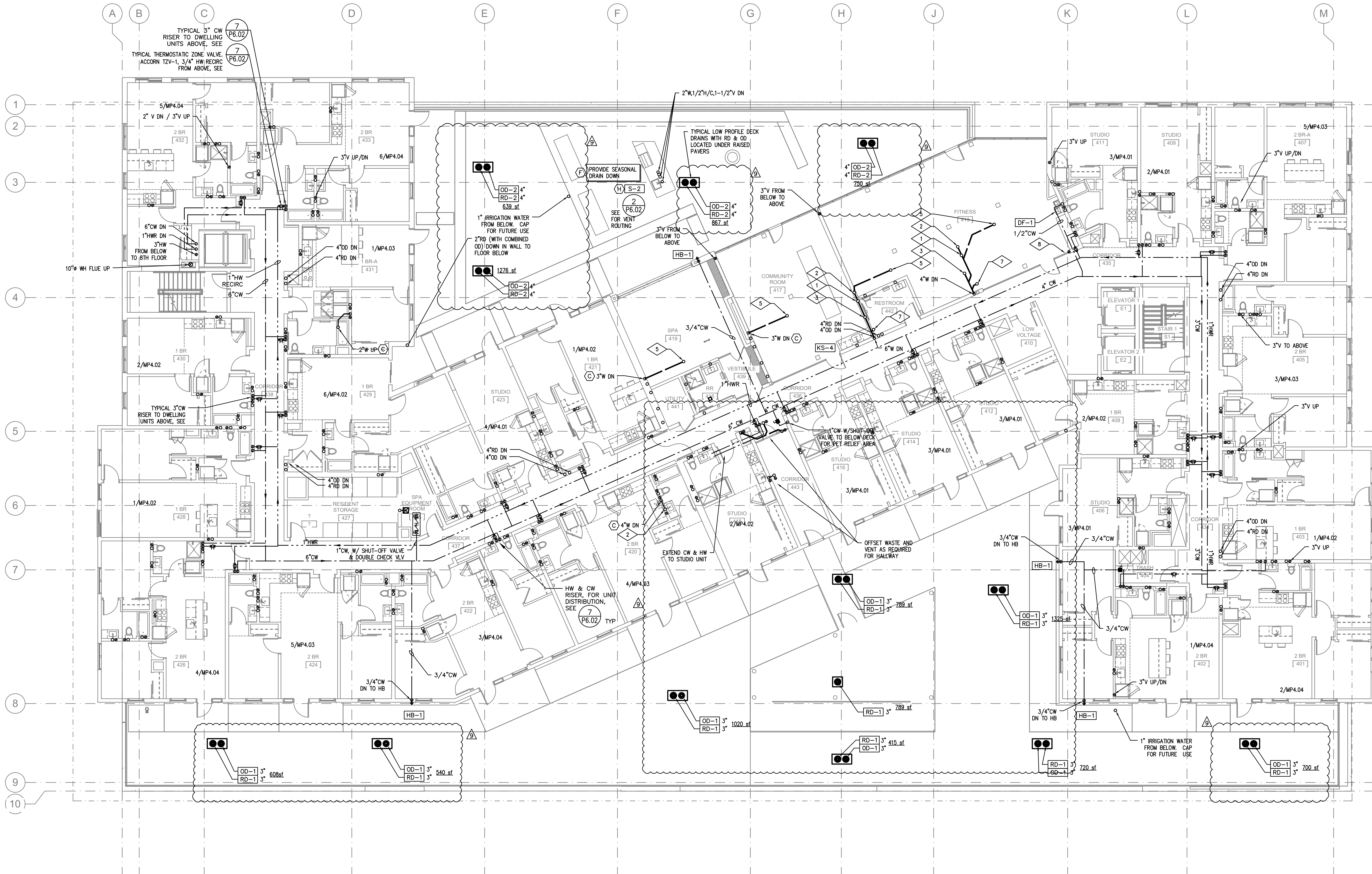
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ADDENDUM 4 SET

10.25.2019

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GENERAL NOTES:
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1 LEVEL 4 FLOOR PLAN-PLUMBING
SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET **X P300** FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

title:
**PLUMBING
FLOOR PLAN
LEVEL 4**

sheet:
P1.04

**CARTEE
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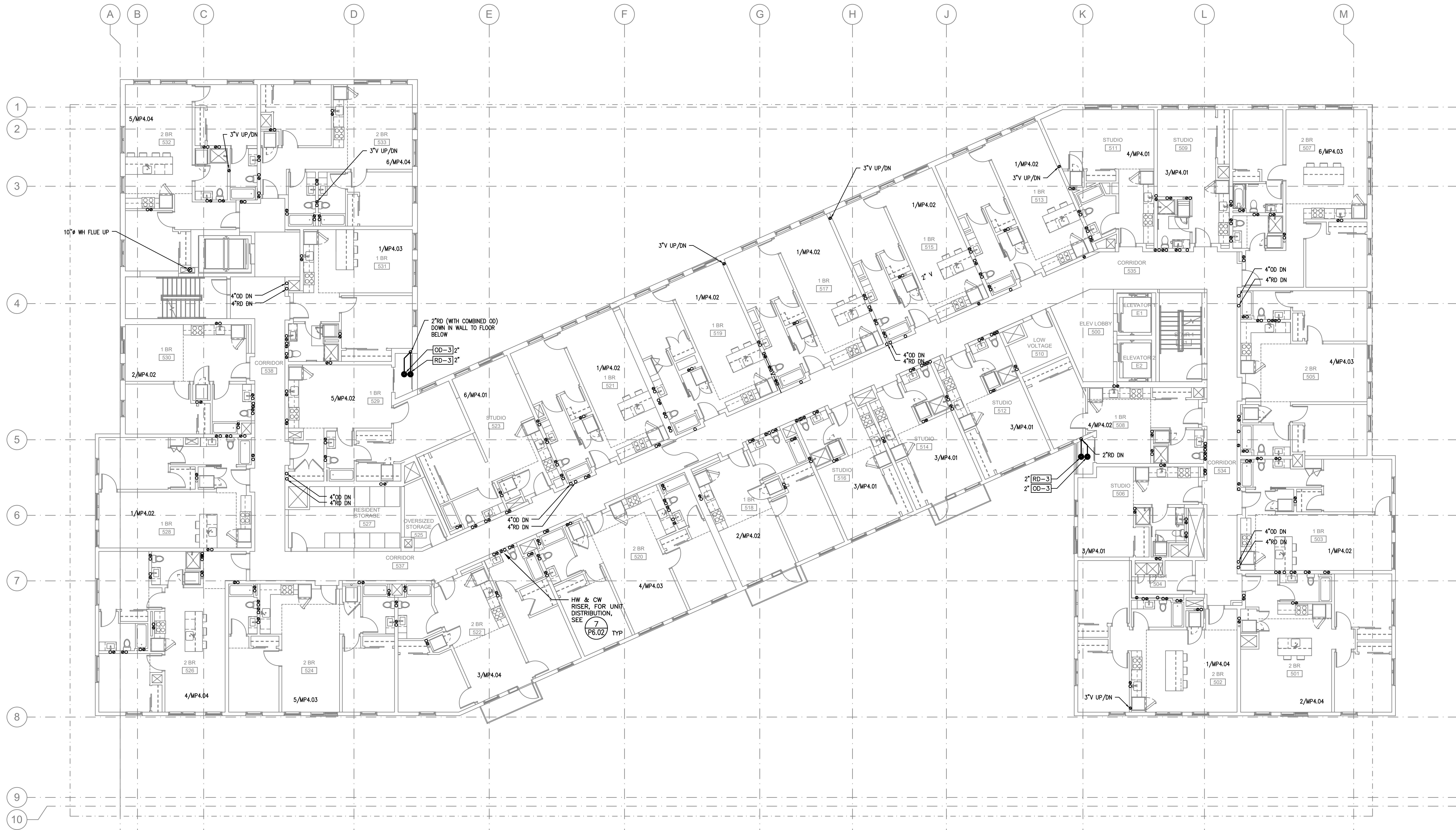
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KEY NOTES:

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GENERAL NOTES:
SEE SHEET P1.0B FOR GENERAL NOTES

1 LEVEL 5 FLOOR PLAN—PLUMBING
SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET **X P300** FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
SEE SHEETS MP4.01 — MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

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9 ADDENDUM 4	10.25.2019
△ ASI 02	11.25.2019
△ ASI 05	01.28.2020

title:
**PLUMBING
FLOOR PLAN
LEVEL 5**

sheet:

P1.05

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GENERAL NOTES:
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KEY NOTES:

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1 LEVEL 6 FLOOR PLAN-PLUMBING
P1.06 SCALE: 1/8"=1'-0"

RISER DETAILS:
SEE SHEET P300 FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:
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title:
PLUMBING FLOOR PLAN LEVEL 6

sheet:

P1.06

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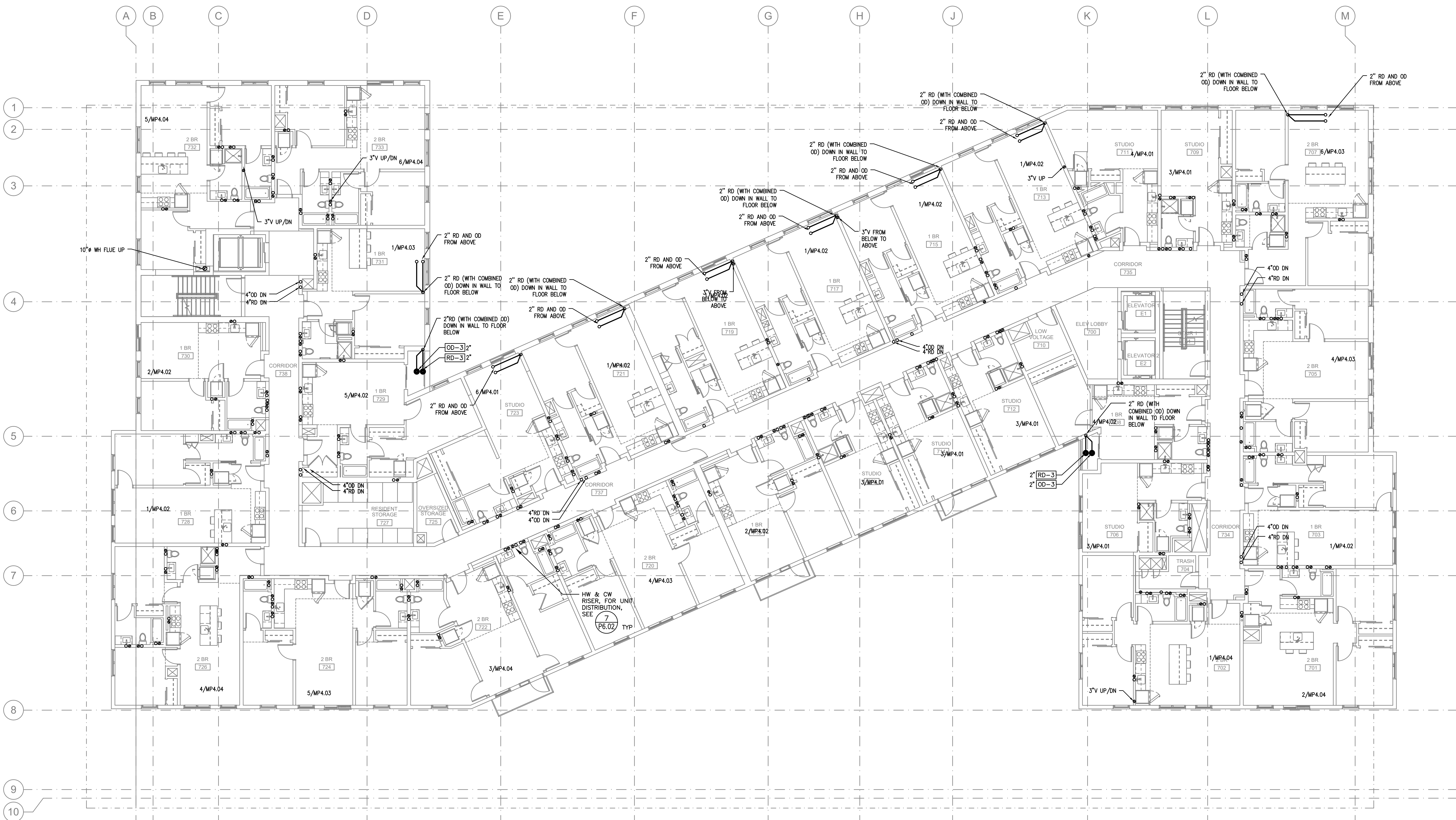
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GENERAL NOTES:
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1 LEVEL 7 FLOOR PLAN—PLUMBING
P1.07 SCALE: 1/8"=1'-0"

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title:
**PLUMBING
FLOOR PLAN
LEVEL 7**

sheet:

P1.07

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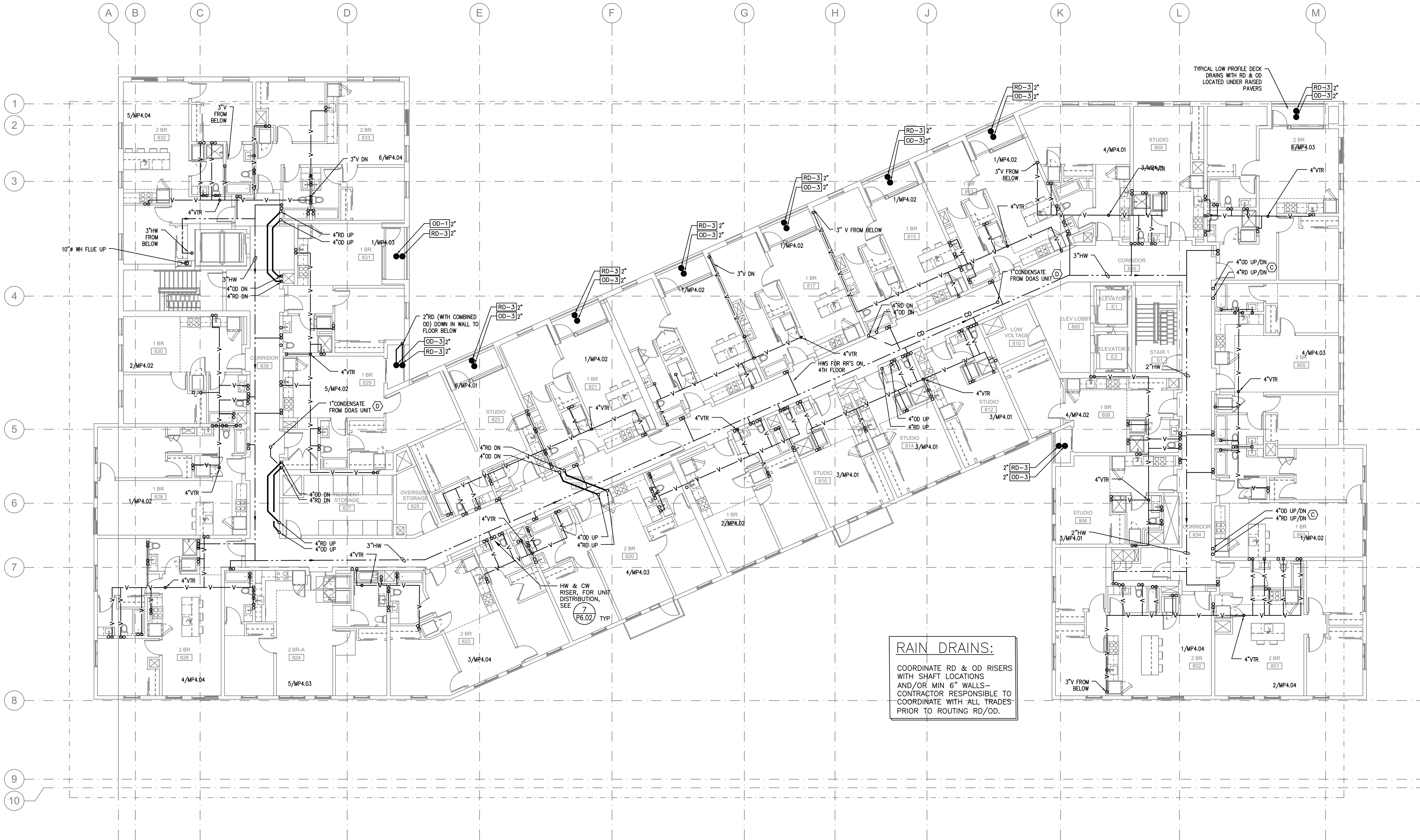
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RAIN DRAINS:
 COORDINATE RD & OD RISERS
 WITH SHAFT LOCATIONS
 AND/OR MIN 6" WALLS—
 CONTRACTOR RESPONSIBLE TO
 COORDINATE WITH ALL TRADES
 PRIOR TO ROUTING RD/OD.

GENERAL NOTES:
 SEE SHEET P1.0B FOR GENERAL NOTES

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 - (F) — PROVIDE SHUT OFF VALVE(S) WITH DRAIN FOR SEASONAL DRAIN DOWN. ROUTE WASTE TO NEAREST CLOTHES WASHER BOX DRAIN.
 - (G) — ROUTE PIPING EXPOSED ON WALL.
 - (H) — PROVIDE FREEZE PROTECTION.
 - (J) — ROUTE CONDENSATE DRAINS TO WASHER BOX IN ASSOCIATED UNIT.

1 LEVEL 8 FLOOR PLAN—PLUMBING
 P1.08 SCALE: 1/8"=1'-0"

RISER DETAILS:
 SEE SHEET P300 FOR RISER DIAGRAMS
 # = RISER NUMBER

SHEET NOTES:
 SEE SHEETS MP4.01 — MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
 SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

title:
**PLUMBING
 FLOOR PLAN
 LEVEL 8**

sheet:

P1.08

**CARTEE
APARTMENTS**

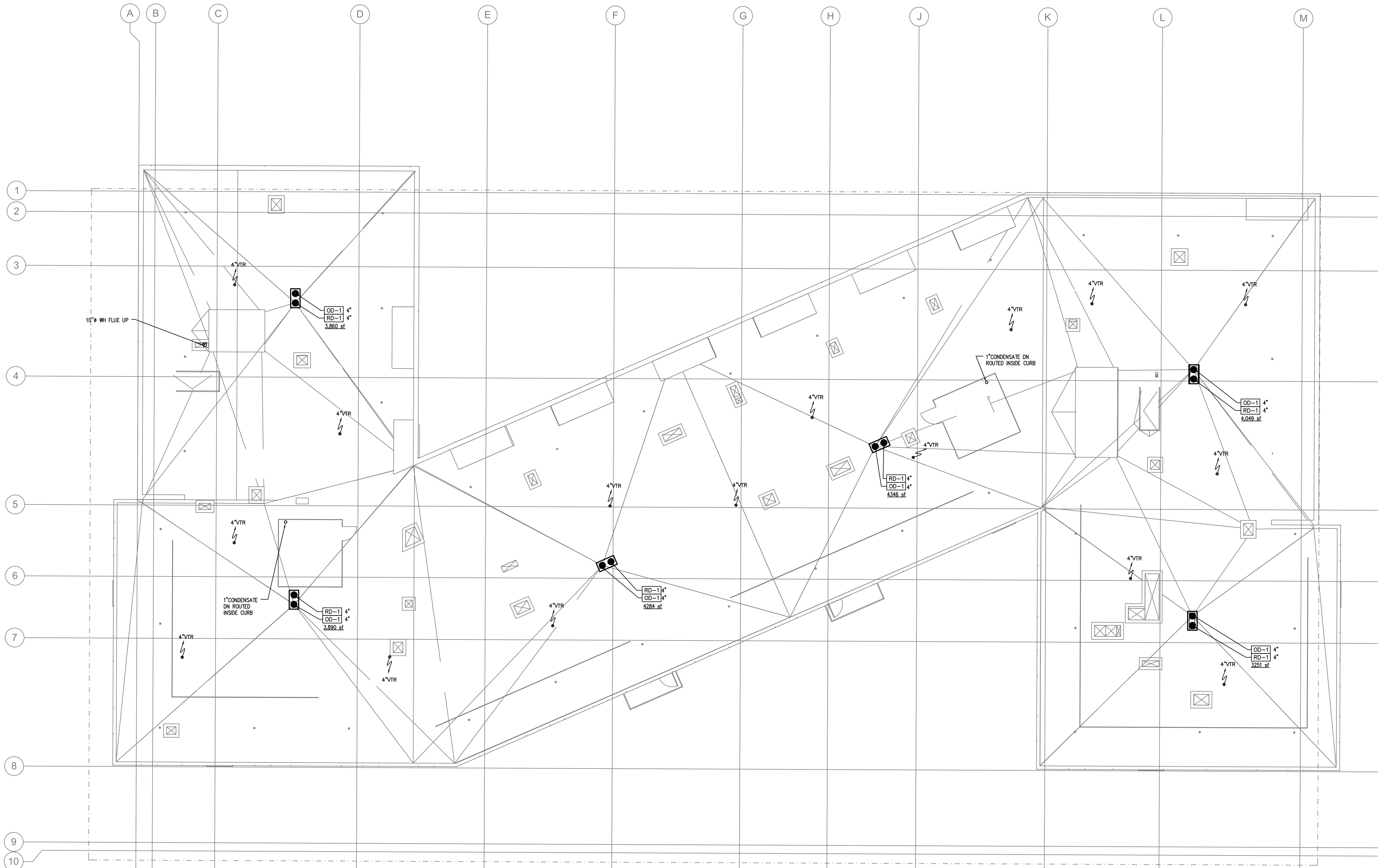
406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



M F I A Consulting Engineers
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Portland, OR 97214
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CONTACT: Mark Demeyer



GENERAL NOTES:
SEE SHEET P1.0B FOR GENERAL NOTES

KEY NOTES:

- (A) — ROUTE CONDENSATE PIPING INSIDE WALL FURRING. SLOPE TO DRAIN.
- (B) — ROUTE CONDENSATE PIPING TO HUB DRAIN EXPOSED ON WALL OR COLUMN. ROUTE HUB DRAIN TO STORM OR SANITARY RISER.
- (C) — OFFSET PIPING AS REQUIRED BETWEEN FLOORS.
- (D) — MAKE CONNECTION TO RAIN DRAIN RISER.
- (E) — PROVIDE HOSE BIBB AT APPROX 24" AFF.
- (F) — PROVIDE SHUT OFF VALVE(S) WITH DRAIN FOR SEASONAL DRAIN DOWN. ROUTE WASTE TO NEAREST CLOTHES WASHER BOX DRAIN.
- (G) — ROUTE PIPING EXPOSED ON WALL.
- (H) — PROVIDE FREEZE PROTECTION.
- (J) — ROUTE CONDENSATE DRAINS TO WASHER BOX IN ASSOCIATED UNIT.

RISER DETAILS:

SEE SHEET **P300** FOR RISER DIAGRAMS
= RISER NUMBER

SHEET NOTES:

SEE SHEETS MP4.01 — MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS
SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

1 ROOF PLAN—PLUMBING
P1.09 SCALE: 1/8"=1'-0"

ADDENDUM 4 SET

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1 CITY RESPONSE	07.15.2019
2 CITY RESPONSE	07.15.2019
3 ADDENDUM 1	07.15.2019
4 CITY RESPONSE 3	07.16.2019
5 CITY REVISION 5	08.19.2019
6 ADDENDUM 3	08.19.2019
7 CITY REVISION 6	09.12.2019
8 ADDENDUM 4	10.25.2019
9 ASI 02	11.25.2019
10 ASI 05	01.28.2020

title:
**PLUMBING
ROOF PLAN**

sheet:
P1.09

CARTEE APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



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GENERAL NOTES:

DRAINAGE CONNECTIONS SHALL NOT BE MADE INTO A DRAINAGE PIPING SYSTEM WITHIN 8 FT OF ANY VERTICAL TO HORIZONTAL CHANGE OF DIRECTION OF A STACK CONTAINING A SUDS-PRODUCING FIXTURE. EXCEPTION: STACKS RECEIVING THE DISCHARGE FROM LESS THAN 3 STORIES OF PLUMBING FIXTURES

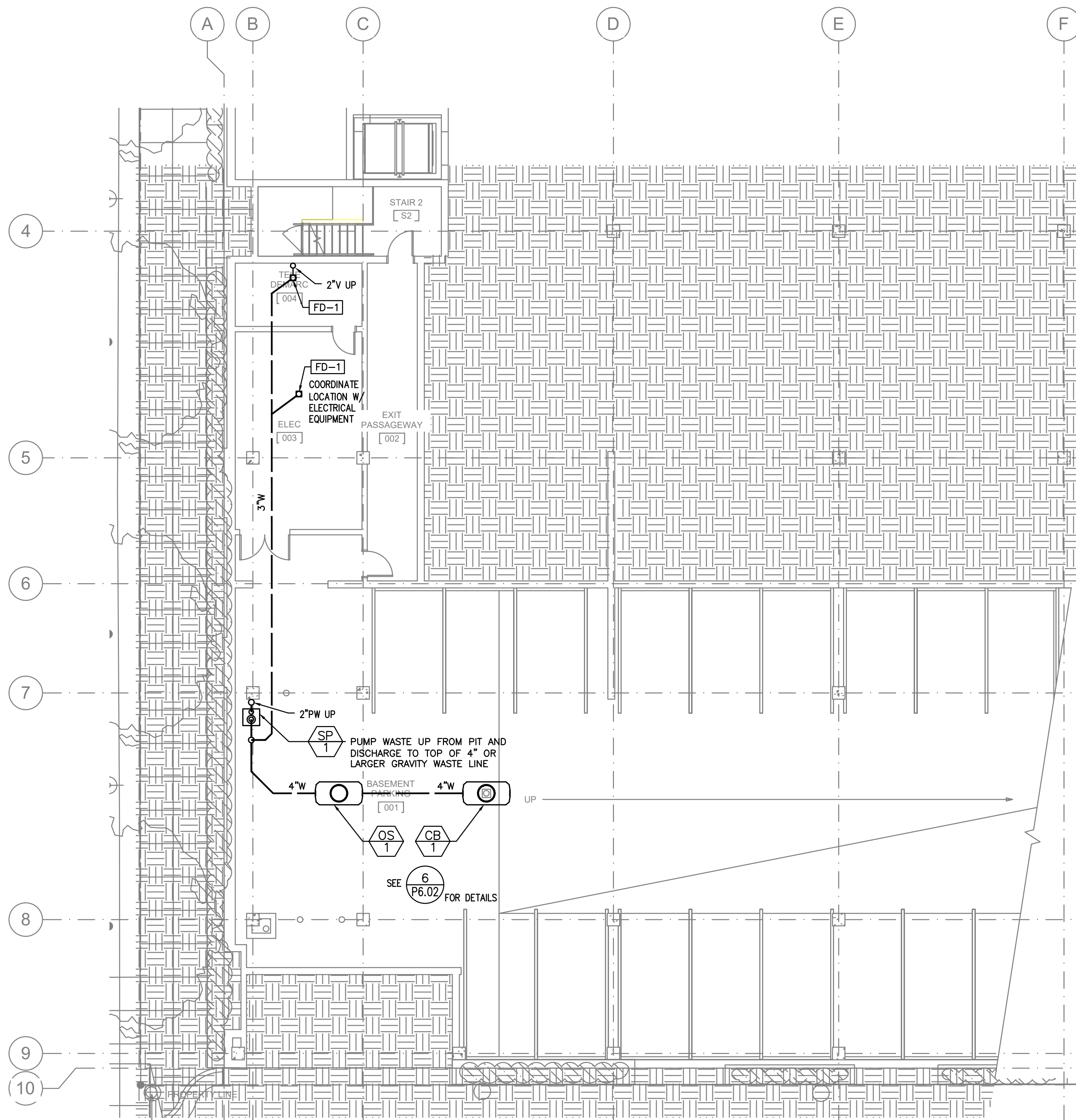
HEAT TRACE (FREEZE PROTECTION) ALL PIPING SUBJECTED TO FREEZING CONDITIONS. ALL HEAT TRACED PIPE TO BE INSULATED.

HEAT TRACE WASTE TRAPS, INSULATE WASTE PIPING EXPOSED TO FREEZING CONDITIONS

ROUTE ALL HVAC UNIT CONDENSATE DRAINS TO AN APPROVED LOCATION (OPTIONS LISTED BELOW)

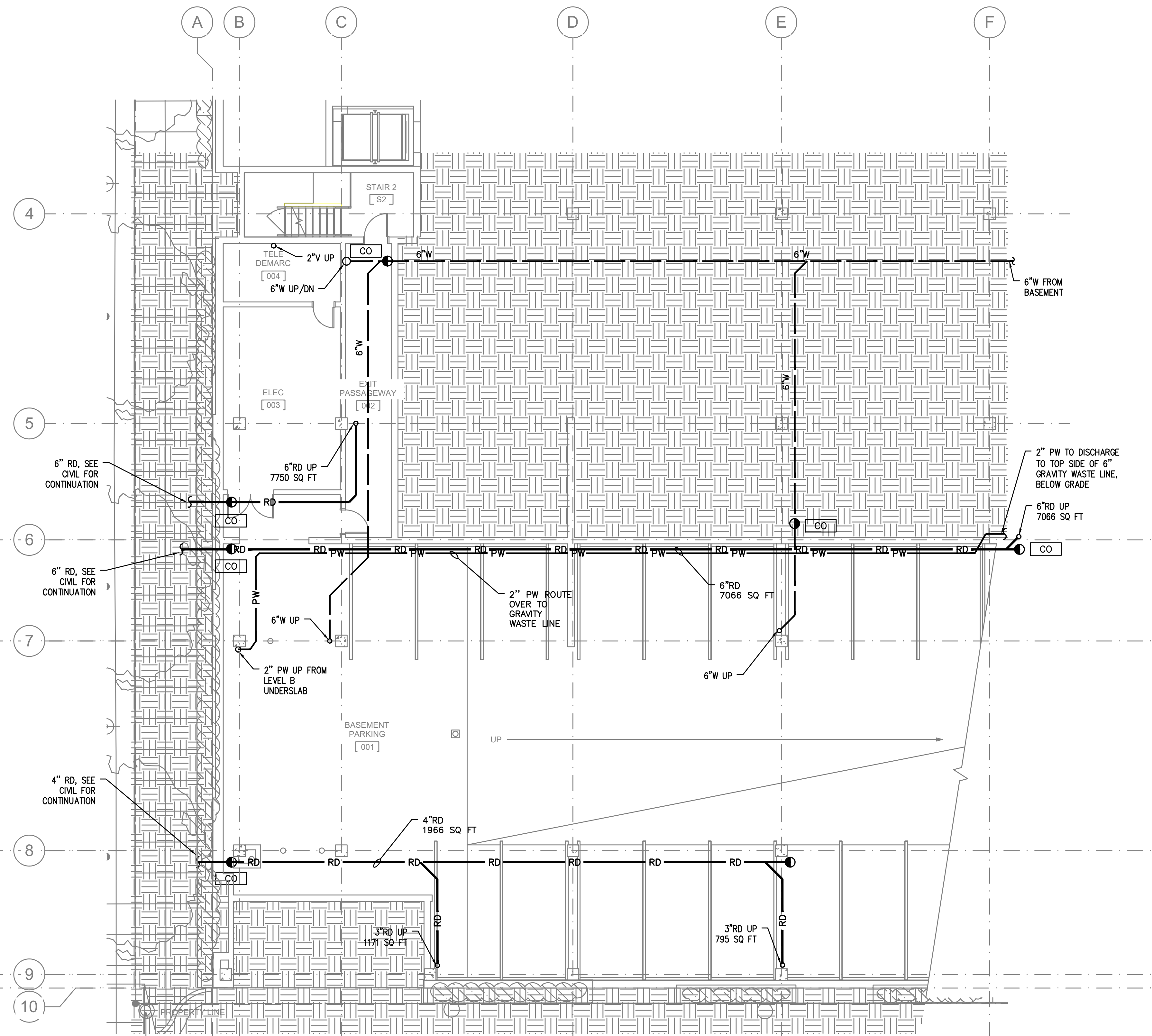
- ROUTE TO CLOTHES WASHER BOX VIA TOP DISCHARGE - IPS WATER TITE MODEL W8900 OR EQUAL.
- ROUTE ALL CONDENSATES DOWN IN WALLS IN COMMON DRAIN SYSTEM AND ROUTE TO HUB DRAINS - CONTRACTOR TO SIZE DRAIN SYSTEM BASED ON NUMBER OF CONNECTED UNITS.
- PROVIDE CONDENSATE PUMPS ON ALL UNITS THAT ARE NOT GRAVITY DRAINED.

ROUTE VENTS FROM FLOOR DRAINS/SINKS BELOW SLAB AND UP ON/IN A WALL TO VENT STACKS ABOVE. (ROUTE INDIVIDUAL VENTS UNTIL ABOVE FLOOD LINE OF FIXTURE).



KEY NOTES: 1 LEVEL B UNDERSLAB PLAN-PLUMBING
P1.0B SCALE: 1/8"=1'-0"

- (A) - ROUTE CONDENSATE PIPING INSIDE WALL FURRING. SLOPE TO DRAIN.
- (B) - ROUTE CONDENSATE PIPING TO HUB DRAIN EXPOSED ON WALL OR COLUMN. ROUTE HUB DRAIN TO STORM OR SANITARY RISER.
- (C) - OFFSET PIPING AS REQUIRED BETWEEN FLOORS.
- (D) - MAKE CONNECTION TO RAIN DRAIN RISER.
- (E) - PROVIDE HOSE BIBB AT APPROX 24" AFF.
- (F) - PROVIDE SHUT OFF VALVE(S) WITH DRAIN FOR SEASONAL DRAIN DOWN. ROUTE WASTE TO NEAREST CLOTHES WASHER BOX DRAIN.
- (G) - ROUTE PIPING EXPOSED ON WALL.
- (H) - PROVIDE FREEZE PROTECTION.
- (J) - ROUTE CONDENSATE DRAINS TO WASHER BOX IN ASSOCIATED UNIT.



2 LEVEL B PLAN-PLUMBING
P1.0B SCALE: 1/8"=1'-0"

RISER DETAILS:

SEE SHEET X FOR RISER DIAGRAMS
P300

= RISER NUMBER

SHEET NOTES:

SEE SHEETS MP4.01 - MP4.05 FOR ENLARGED UNIT PLANS, ENLARGED UNIT PLANS SHOW ALL PIPING WITHIN DWELLING UNITS

SEE SHEETS P3.00 FOR TYPICAL RISER DIAGRAMS

ADDENDUM 4 SET

10.25.2019

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AS1 02	11.25.2019
AS1 05	01.28.2020

title:
PLUMBING PLANS LEVEL B

sheet:

P1.0B

CARTEE APARTMENTS

406 S 4TH ST.
BOISE, ID 83702

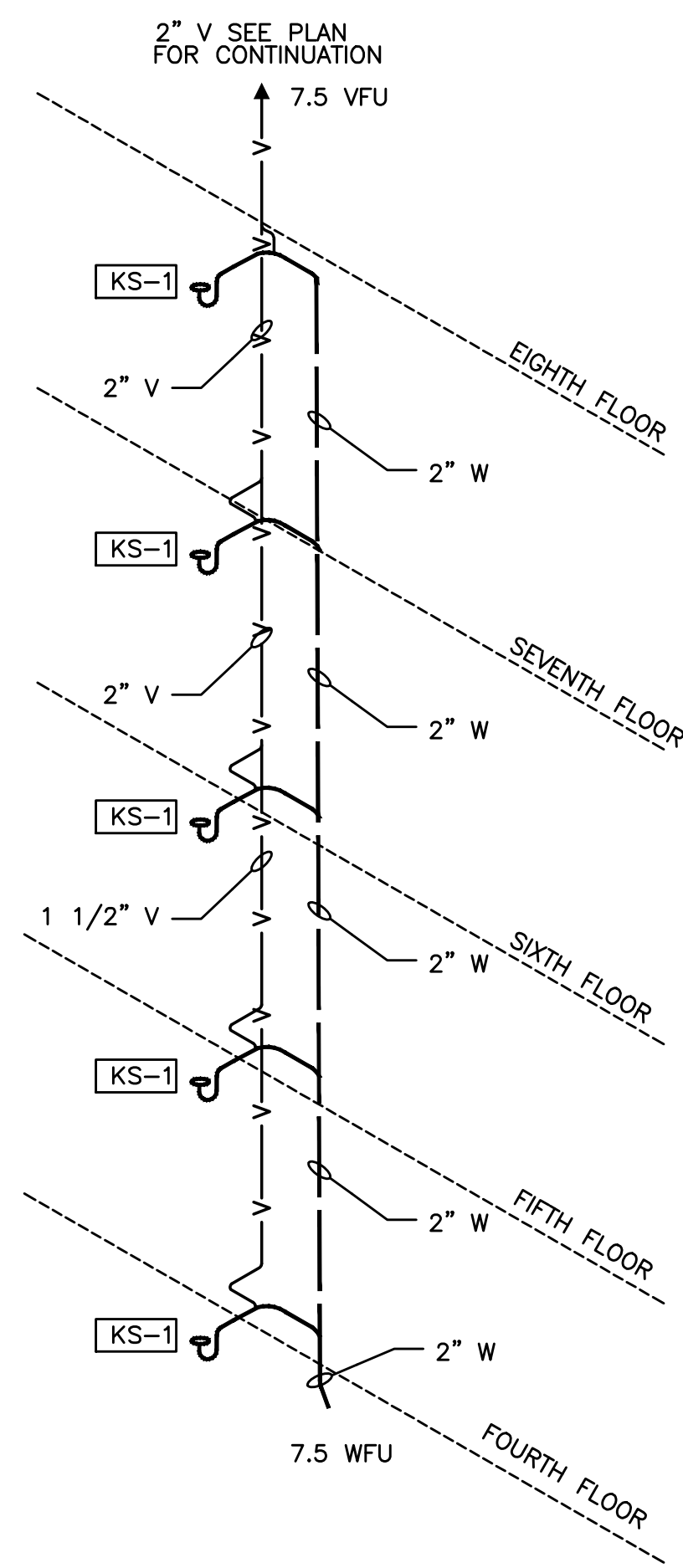
JOB NO. 18-001.00

6-18-2019

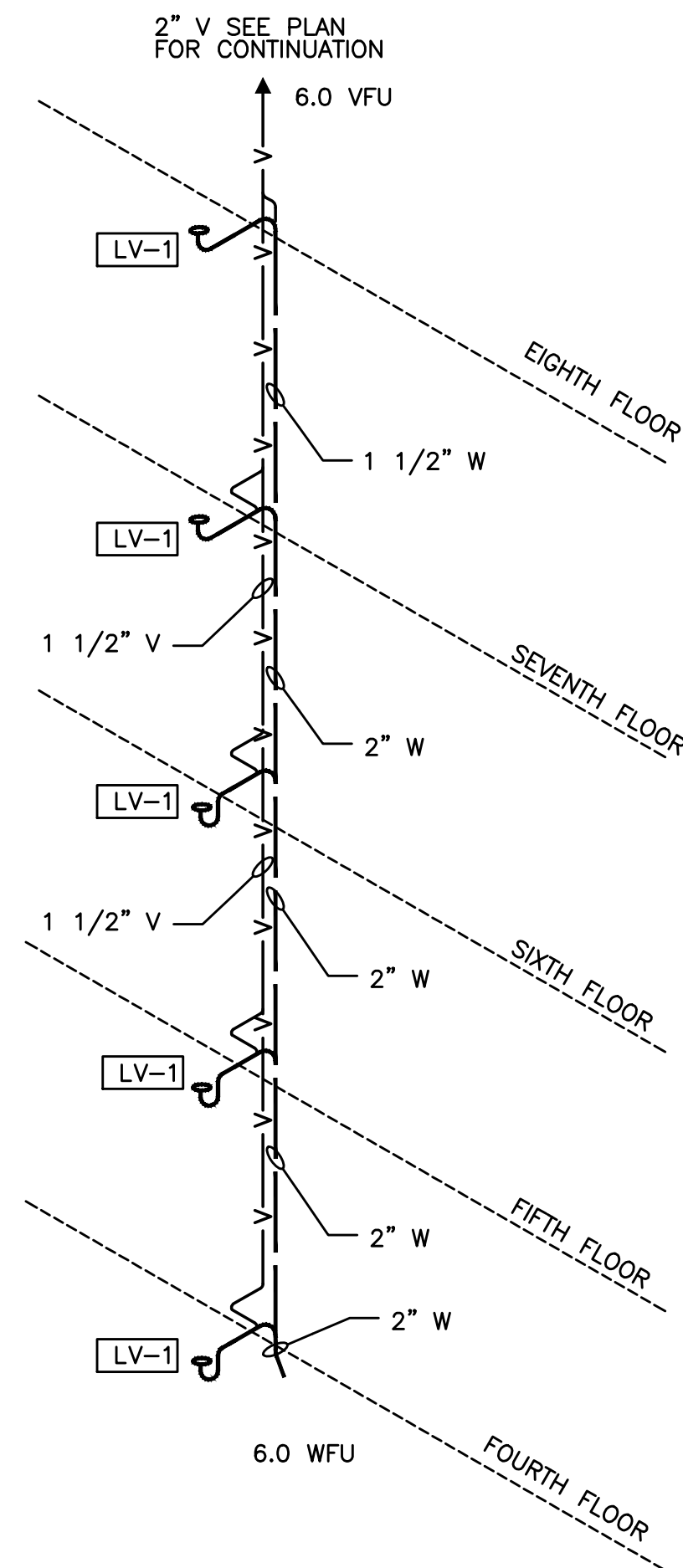


Expires May 31, 2021

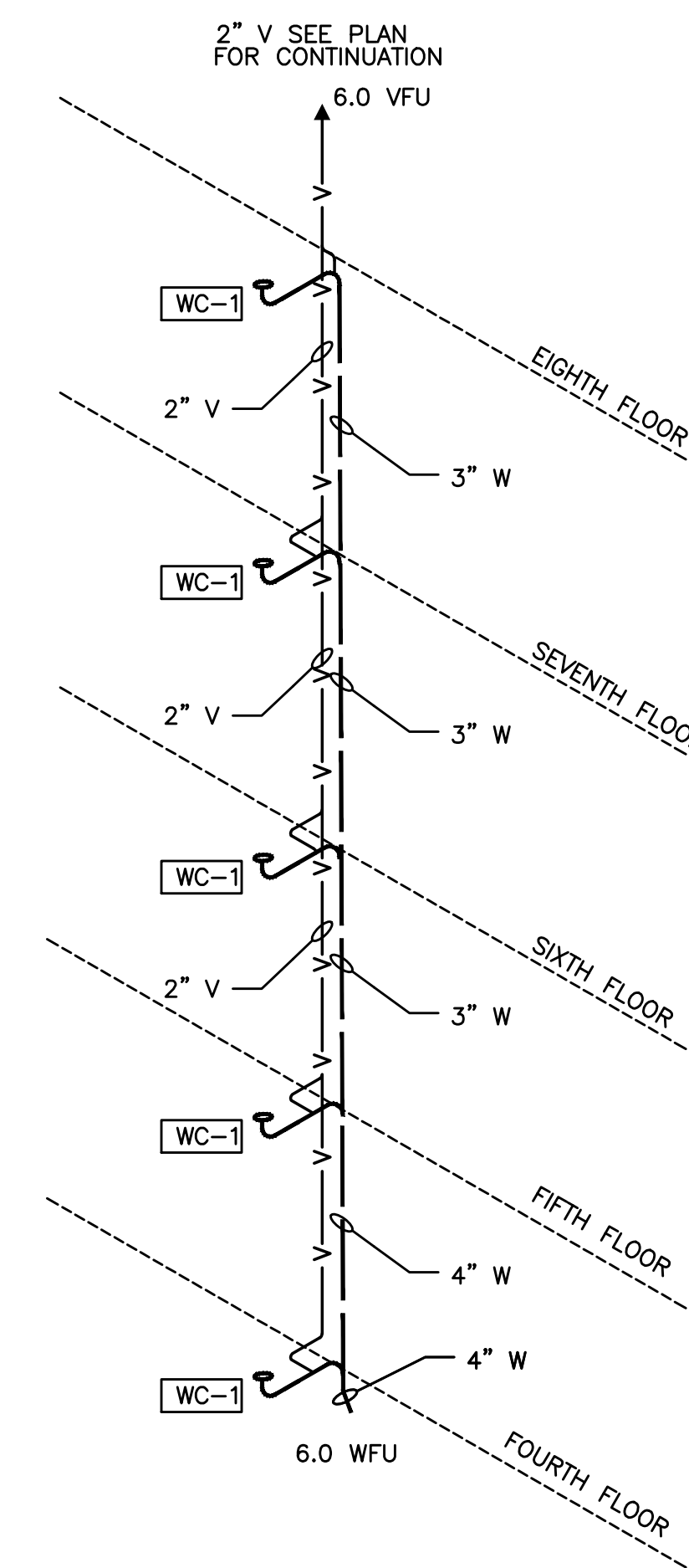
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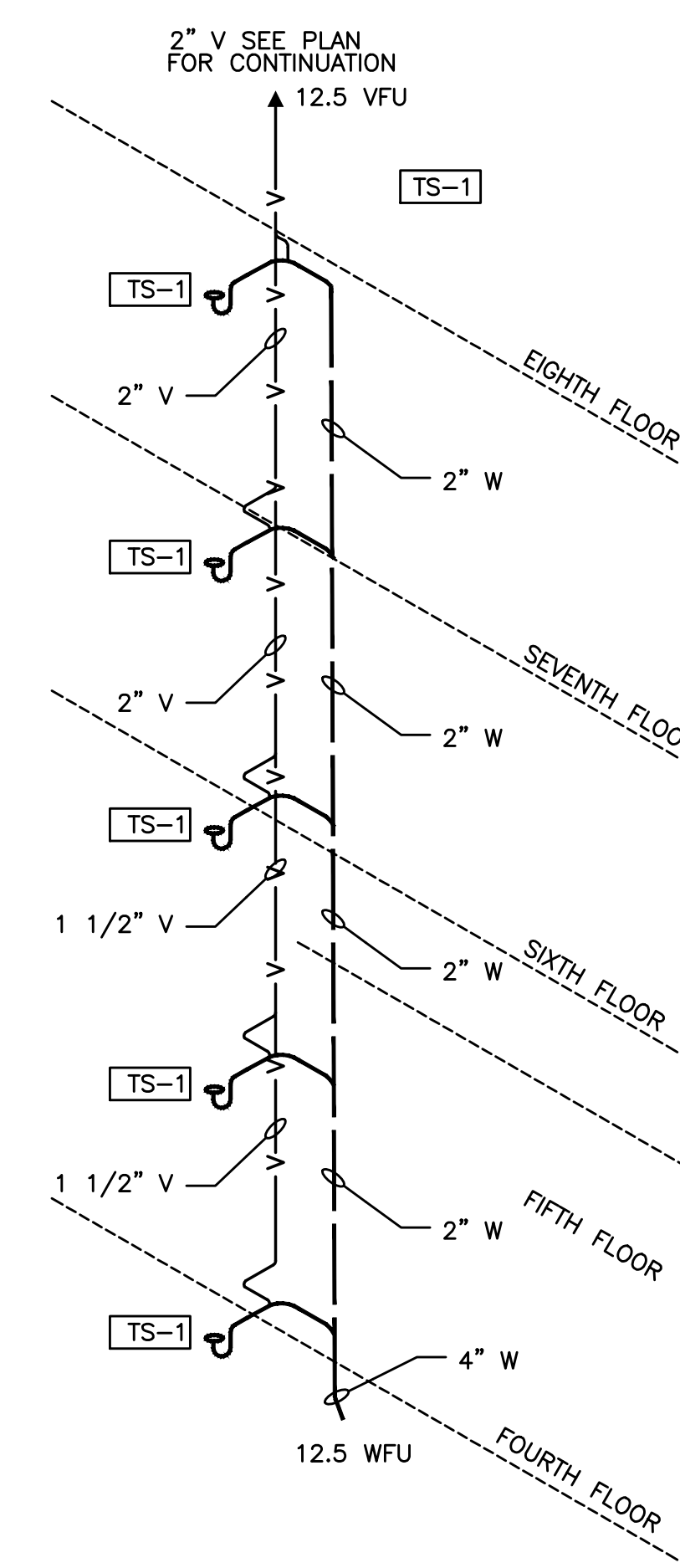
1 RISER "1" TYPICAL
P300 DIAGRAMATIC



2 RISER "2" TYPICAL
P300 DIAGRAMATIC



3 RISER "3" TYPICAL
P300 DIAGRAMATIC



4 RISER "4" TYPICAL
P300 DIAGRAMATIC

GENERAL NOTES:

DRAINAGE CONNECTIONS SHALL NOT BE MADE INTO A DRAINAGE PIPING SYSTEM WITHIN 8 FT OF ANY VERTICAL TO HORIZONTAL CHANGE OF DIRECTION OF A STACK CONTAINING A SUDS-PRODUCING FIXTURE.
EXCEPTION: STACKS RECEIVING THE DISCHARGE FROM LESS THAN 3 STORIES OF PLUMBING FIXTURES

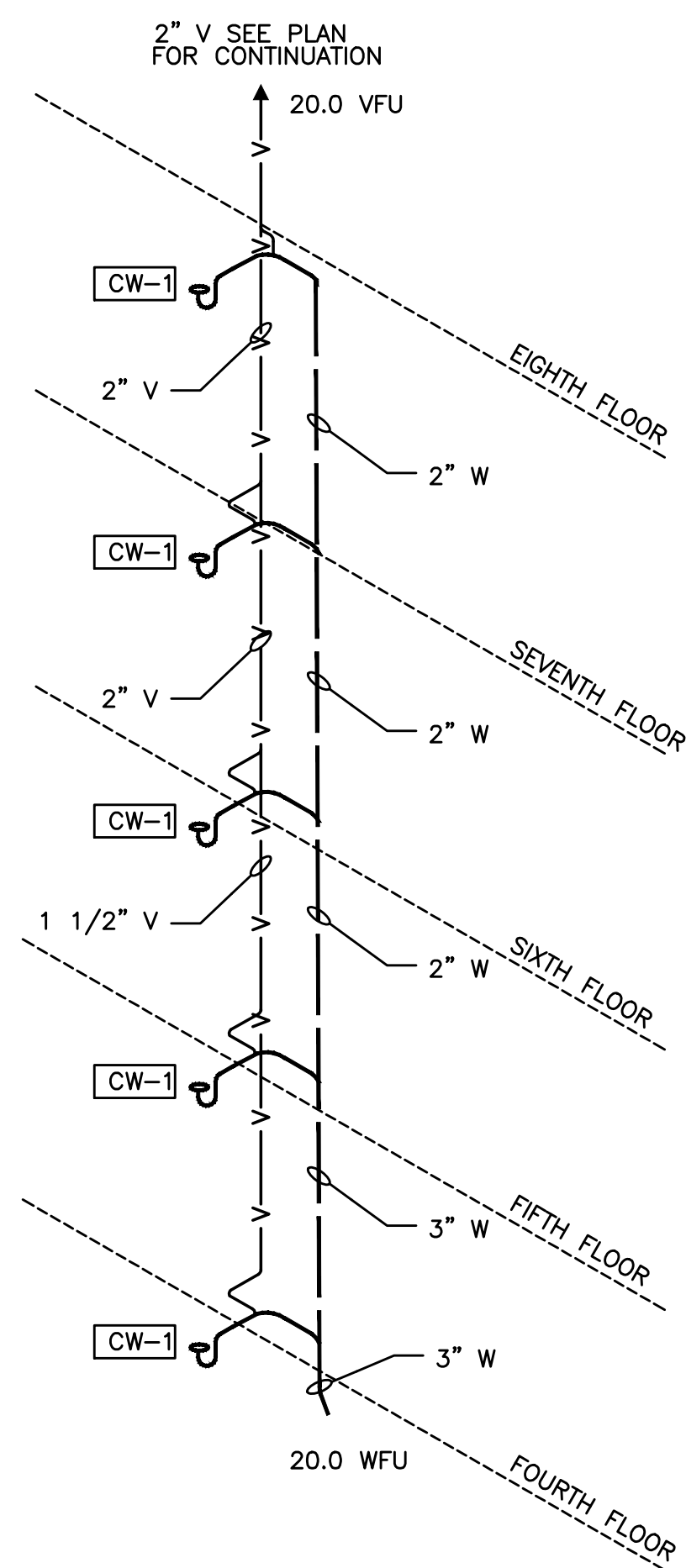
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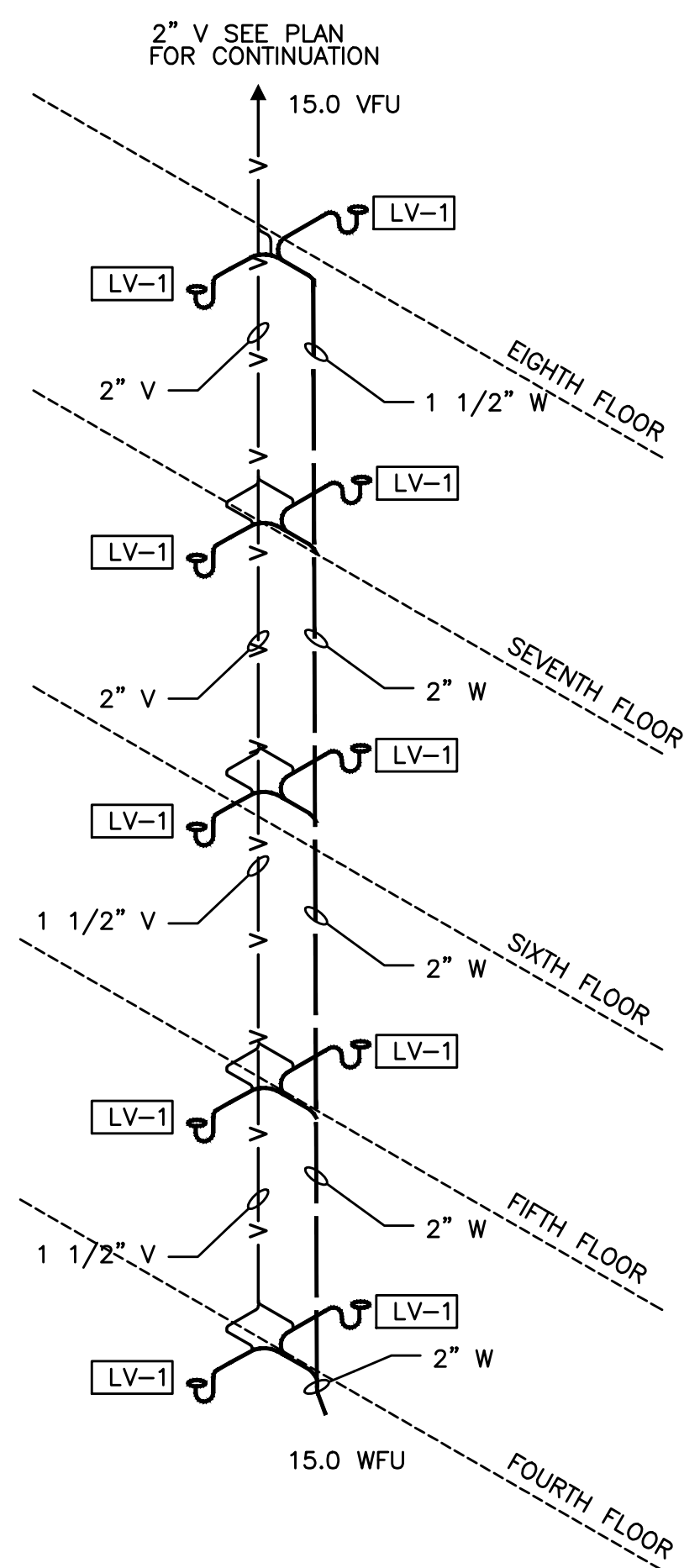
ROUTE ALL HVAC UNIT CONDENSATE DRAINS TO AN APPROVED LOCATION (OPTIONS LISTED BELOW)

- ROUTE TO CLOTHES WASHER STAND PIPE, OF UNIT BELOW
- ROUTE ALL CONDENSATES DOWN IN EXTERIOR WALL IN COMMON DRAIN SYSTEM AND ROUTE THROUGH 1ST FLOOR TO FLOOR SINK IN UTILITY ROOM - CONTRACTOR TO SIZE DRAIN SYSTEM BASED ON NUMBER OF CONNECTED UNITS.
- PROVIDE CONDENSATE PUMPS ON ALL UNITS THAT ARE NOT GRAVITY DRAINED.

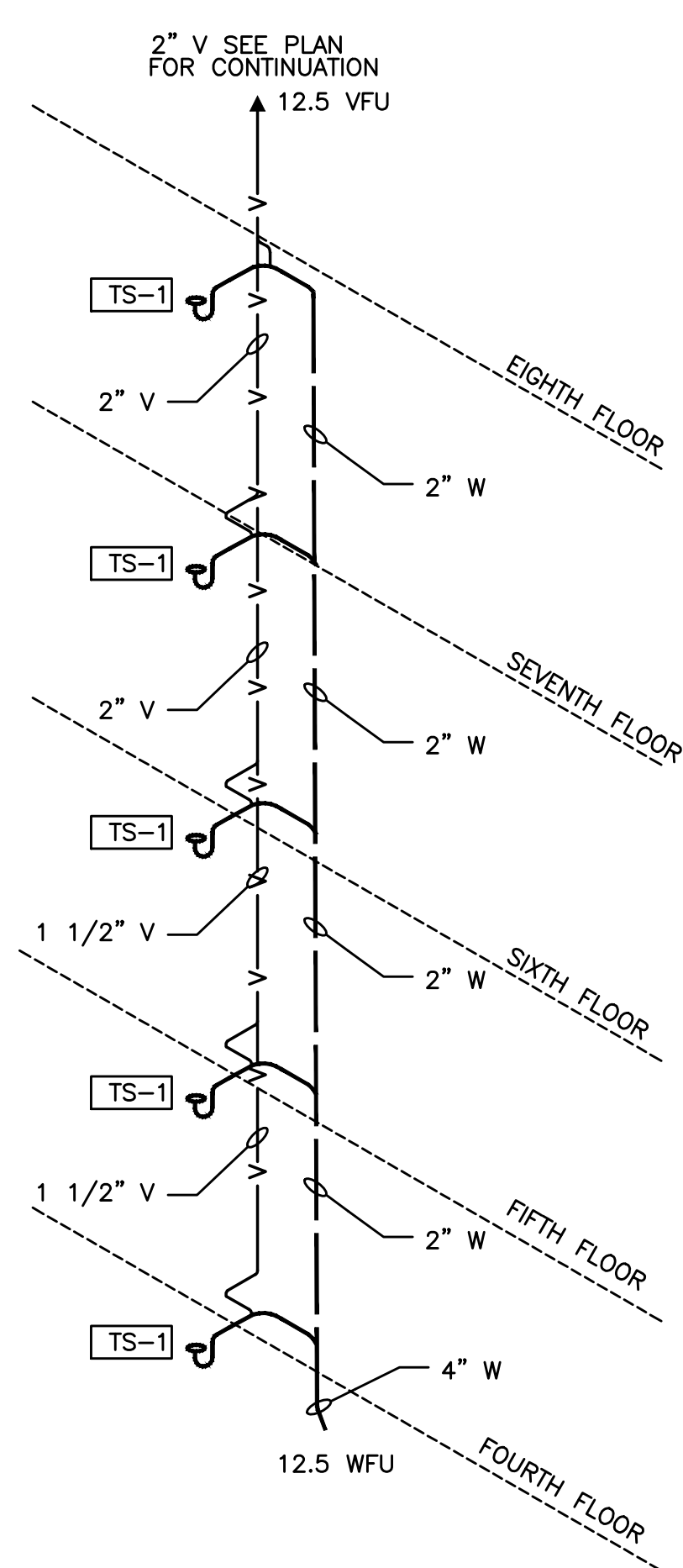
ROUTE VENTS FROM FLOOR DRAINS/SINKS BELOW SLAB AND UP ON/IN A WALL TO VENT STACKS ABOVE. (ROUTE INDIVIDUAL VENTS UNTIL ABOVE FLOOD LINE OF FIXTURE).



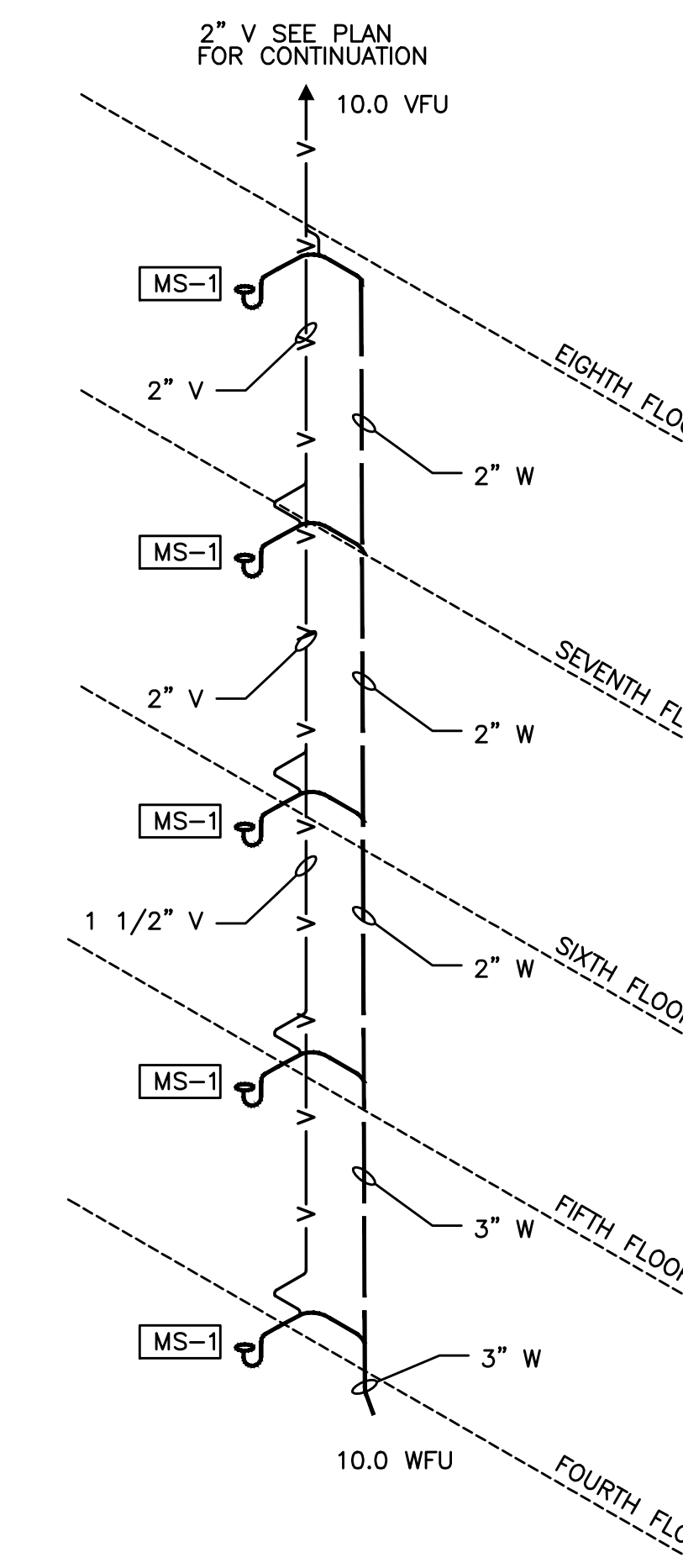
5 RISER "5" TYPICAL
P300 DIAGRAMATIC



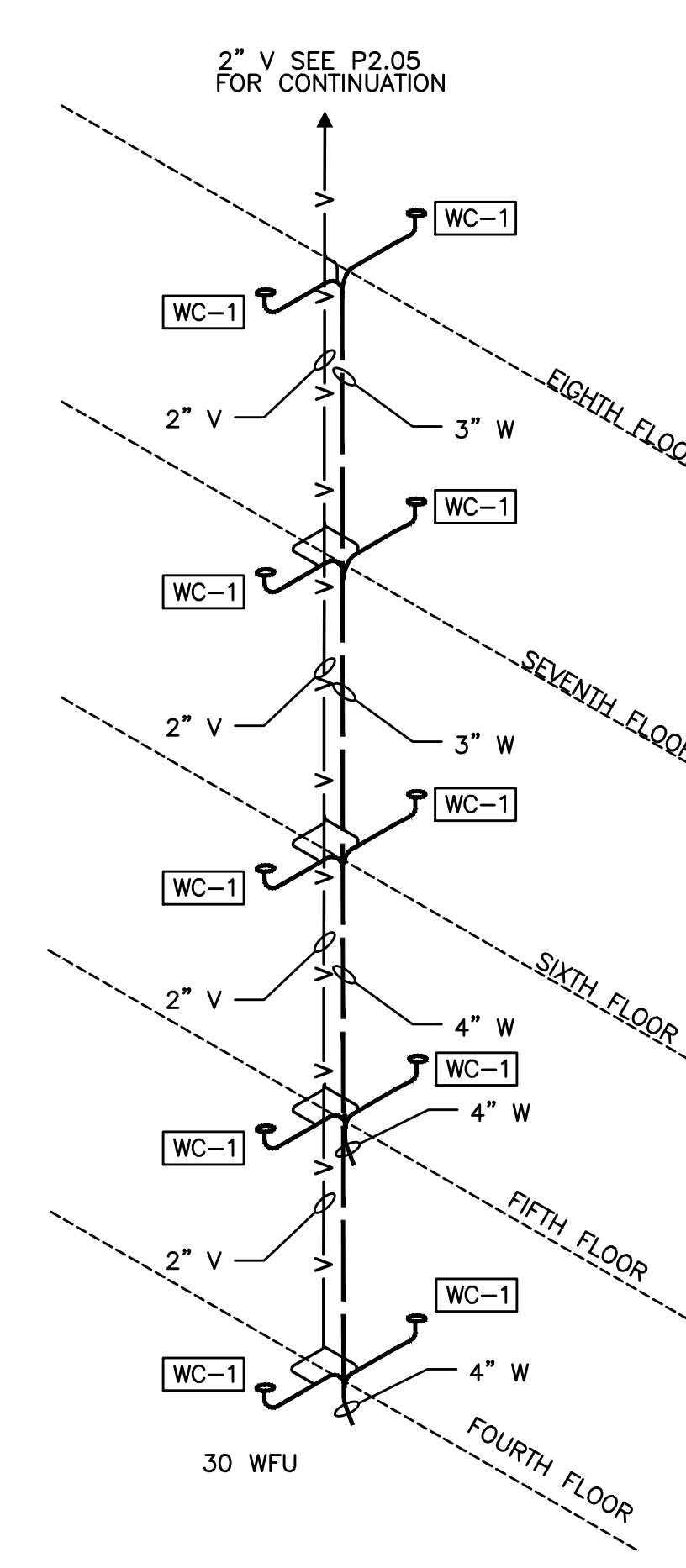
6 RISER "6" TYPICAL
P300 DIAGRAMATIC



7 RISER "7" TYPICAL
P300 DIAGRAMATIC



8 RISER "8" TYPICAL
P300 DIAGRAMATIC



9 RISER "9" TYPICAL
P300 DIAGRAMATIC

ADDENDUM 4 SET

10.25.2019

Issue:	date:
50% SD	07.20.2018
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△	ASI 02 11.25.2019
△	ASI 05 01.28.2020

title:

PLUMBING-RISER DIAGRAMS

sheet:

P3.00

PLUMBING LEGEND

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

PRV	..... PRESSURE REDUCING VALVE
PSI	..... POUNDS PER SQUARE INCH
P/T	..... PRESSURE / TEMPERATURE REQUIRED
REQ'D	..... REQUIRED
TYP.	..... TYPICAL
VTR	..... VENT THROUGH ROOF
WC	..... WATER CLOSET

XX	..... EQUIPMENT MARK NUMBER
XXX	..... FIXTURE MARK
#	..... NOTE
X	..... RISER DIAGRAM

PLUMBING CONNECTION SCHEDULE

MARK	FIXTURE	W	V	CW	HW	REMARKS
WC-1	WATER CLOSET	3"	2"	1/2"		FLOOR MOUNT, TANK TYPE, ADA 1.28 GPF
WC-2	WATER CLOSET, PUBLIC	4"	2"	1-1/2"		FLOOR MOUNT, FLUSHOMETER, ADA 1.6 GPF
LV-1	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	UNDERCOUNTER ADA - 1.5 GPM - *
LV-2	LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	WALL HUNG, ADA - 1.5 GPM - *
LV-3	LAVATORY, PUBLIC	1-1/2"	1-1/2"	1/2"	1/2"	WALL HUNG, ADA - 1.5 GPM - *
TS-1	TUB/SHOWER	1-1/2"	1-1/2"	1/2"	1/2"	1.5 GPM SHOWER HEAD - **
KS-1	KITCHEN SINK, TYPE B	2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT W/ DISPOSAL 1.5 GPM ****
KS-2	KITCHEN SINK, TYPE A	2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT W/ DISPOSAL 1.5 GPM ****
KS-3	SINK, ROOF DECK	2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT W/ DISPOSAL 1.5 GPM ****
KS-4	SINK, COMMUNITY ROOM	2"	1-1/2"	1/2"	1/2"	SINGLE COMPARTMENT W/ DISPOSAL 1.5 GPM ****
TS-1	TUB/SHOWER	1-1/2"	1-1/2"	1/2"	1/2"	1.5 GPM SHOWER HEAD - **
CW-1	CLOTHES WASHER FITTING	2"	2"	1/2"	1/2"	VALVE & WASTE BOX WITH BALL VALVES - ***
RC-1	REFRIGERATOR CONNECTION			1/2"		VALVE BOX WITH 1/2" BALL VALVE
DF-1	DRINKING FOUNTAIN	1-1/2"	1-1/4"	1/2"		DUAL HEIGHT W/ BOTTLE FILLER
PT-1	DOG WASH	2"	1-1/2"	1/2"	1/2"	PROVIDE W/ HAIR TRAP
BW-1	BIKE WASH			3/4"		HOSE BIB AT 24" A.F.F.
MS-1	MOP SINK	2"	1-1/2"	1/2"	1/2"	VACUUM PROTECTED
HB-1	HOSE BIB			3/4"		VACUUM/FREEZE PROTECTED; CONFIRM LOCATIONS W/ ARCH
HB-2	HOSE BIB			3/4"		VACUUM PROTECTED
HD-1	HUB DRAIN	2"				PRIME, *****
RD-1	RAIN DRAIN					JR SMITH 1010-1020
OD-1	OVERFLOW RAIN DRAIN					JR SMITH 1070
RD-2	RAIN DRAIN					JR SMITH 1010-1020
OD-2	OVERFLOW RAIN DRAIN					JR SMITH 1070
ON-1	OVERFLOW NOZZLE					JR SMITH 1770
RD-3	RAIN DRAIN					JR SMITH 1470-1480
OD-3	OVERFLOW RAIN DRAIN					JR SMITH 1470-1480
FD-1	FLOOR DRAIN	3"	VL			SIoux CHIEF
FS-1	FLOOR SINK	4"	VL			J.R. SMITH 3150 ENAMELED CAST IRON

V.L. - VENTED LINE
 * PROVIDE WITH ASSE 1070 APPROVED POINT OF USE MIXING VALVE OR LAV FAUCET WITH APPROVED TEMPERATURE LIMIT STOP.
 ** PROVIDE WITH ASSE 1016 APPROVED TEMPERATURE AND PRESSURE SHOWER MIXING VALVE.
 *** PROVIDE ACCESSIBLE VALVE BOX (SINGLE THROW DUAL BALL VALVE) WITH STAND PIPE FITTING LOCATED TO THE SIDE OF THE WASHER.
 **** PROVIDE ALL PIPES, FITTINGS AND ACCESSORIES FOR A COMPLETE DISHWASHER INSTALLATION.
 ***** PROVIDE RECESSED BOX.

GAS WATER HEATERS

MARK NUMBER	WH1	WH2
CAPACITY (GAL)	---	---
INPUT RATE (MBH)	1001	1001
OUTPUT RATE (MBH)	941	941
EFFICIENCY (%)	94%	94%
FUEL	NAT GAS	NAT GAS
RECOVERY CAP. (GPH) @ 100' RISE	1248	1248
GAS VENT DIA. (INCHES)	6" PVC	6" PVC
COMBUSTION AIR INTAKE	6" PVC	6" PVC
TURNDOWN	33:1	33:1
VENT MATERIAL	AL29C	AL29C
ELECT 120V/1Ø*	20AMPS/32W	20 AMPS/32W
HEADERS	2"	2"
WATER VOLUME	4 GAL	4 GAL
SIZE (HxWxD)	68"x30"x44"	68"x30"x44"
MAX FLOW	45 GPM	45 GPM
DESIGN WEIGHT (LBS)	800	800
BASIS OF DESIGN: INTELLIHOT	IQ1001	IQ1001

*ELECT FOR REFERENCE ONLY, SEE OUT SHEETS.

BOOSTER PUMP

MARK NUMBER	BP1
SERVICE	DOMESTIC BOOSTER PUMP
STARTER TYPE	VFD
ARRANGEMENT	DUPLEX END SUCTION
FLOW RATE (GPM)	340 GPM
HEAD (PSI)	35
MIN SUCTION PRESSURE (PSI)	50
DISCHARGE PRESSURE (PSI)	85
MOTOR HP (2)	7.5
RPM	3600
CONTROLLED BY	PUMP CONT.
DESIGN WT	1200 LBS
SUCTION PIPE SIZE	4"
DISCHARGE PIPE SIZE	4"
BASIS OF DESIGN (FLOWTHERM)	FMV2-9

ELECTRONIC TEMPERING VALVE

MARK NUMBER	ETV1
SERVICE	DHW
VALVE SIZE	1-1/2"
CV	4
VALVE CONNECTION - HOT	1-1/2"
VALVE CONNECTION - COLD	1-1/2"
VALVE CONNECTION - MIXED	1-1/2"
FLOW RATE (GPM)	58
PRESSURE DROP (PSI)	4
HEAT TIMER	CTV 1-1/2"
ELECT 120V/1Ø*	48VA
INTERNET CONNECTION	YES

*ELECT FOR REFERENCE ONLY, SEE ELECT DRAWINGS.

EXPANSION TANK

MARK NUMBER	ET1
SERVICE	DHW
TANK VOLUME (GAL)	45
ACCEPTABLE VOLUME (GAL)	30
MAX PRESSURE	150 PSI
MAX TEMPERATURE	240 F
SYSTEM CONNECTION	1"
DESIGN WEIGHT (LBS)	148
BASIS OF DESIGN:	

PUMPS

MARK NUMBER	P1
SERVICE	DHW RECIRC
TYPE	CIRC
CONTROLLED BY	CONTINUOUS
ARRANGEMENT	IN-LINE
FLOW RATE (GPM)	10
HEAD (FT)	25
MOTOR HP	1/6
RPM	---
DESIGN WEIGHT (LBS)	22

STORAGE TANK

MARK NUMBER	ST1
SERVICE	DHW
CAPACITY (GAL)	200
MAX WATER TEMP	210 F
MAX PRESSURE	150 PSI
FLOW RATE (GPM)	10
HEAD (FT)	25
MOTOR HP	1/6
RPM	---
DESIGN WEIGHT (LBS)	634
BASIS OF DESIGN:	

OIL SEPARATOR

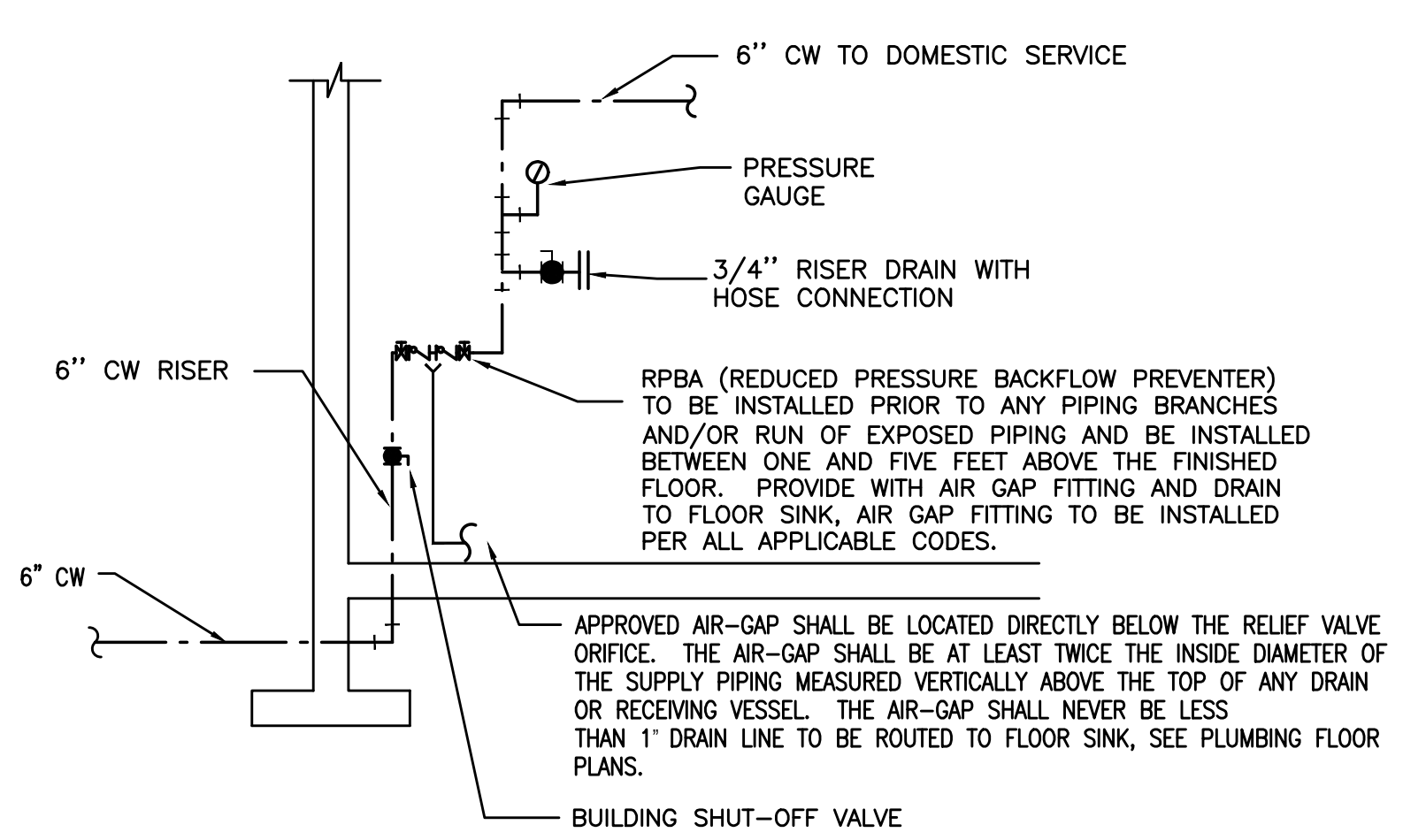
MARK NUMBER	OS1
SERVICE	PARKING GARAGE
CAPACITY (GPM)	50 GPM
GREASE (LB)	150 LBS
INLET/OUTLET PIPE SIZE	4"
DESIGN WEIGHT-WET (LBS)	130 LBS
BASIS OF DESIGN	STREIM OS-50
QTY	1

NOTES:
 1. PROVIDE WITH HIGHWAY RATED BOLTED COVER C24-HP
 2. PROVIDE WITH TELEGLIDE RISER SR-24 IF REQUIRED.
 3. PROVIDE WITH BUILT IN FLOW CONTROL.

GREASE INTERCEPTOR

MARK NUMBER	GI1
SERVICE	KITCHEN
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. 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.



1 DOMESTIC RISER
 SCALE: DETAIL

PLUMBING CALCULATIONS - 1-Bedroom(1 bath)

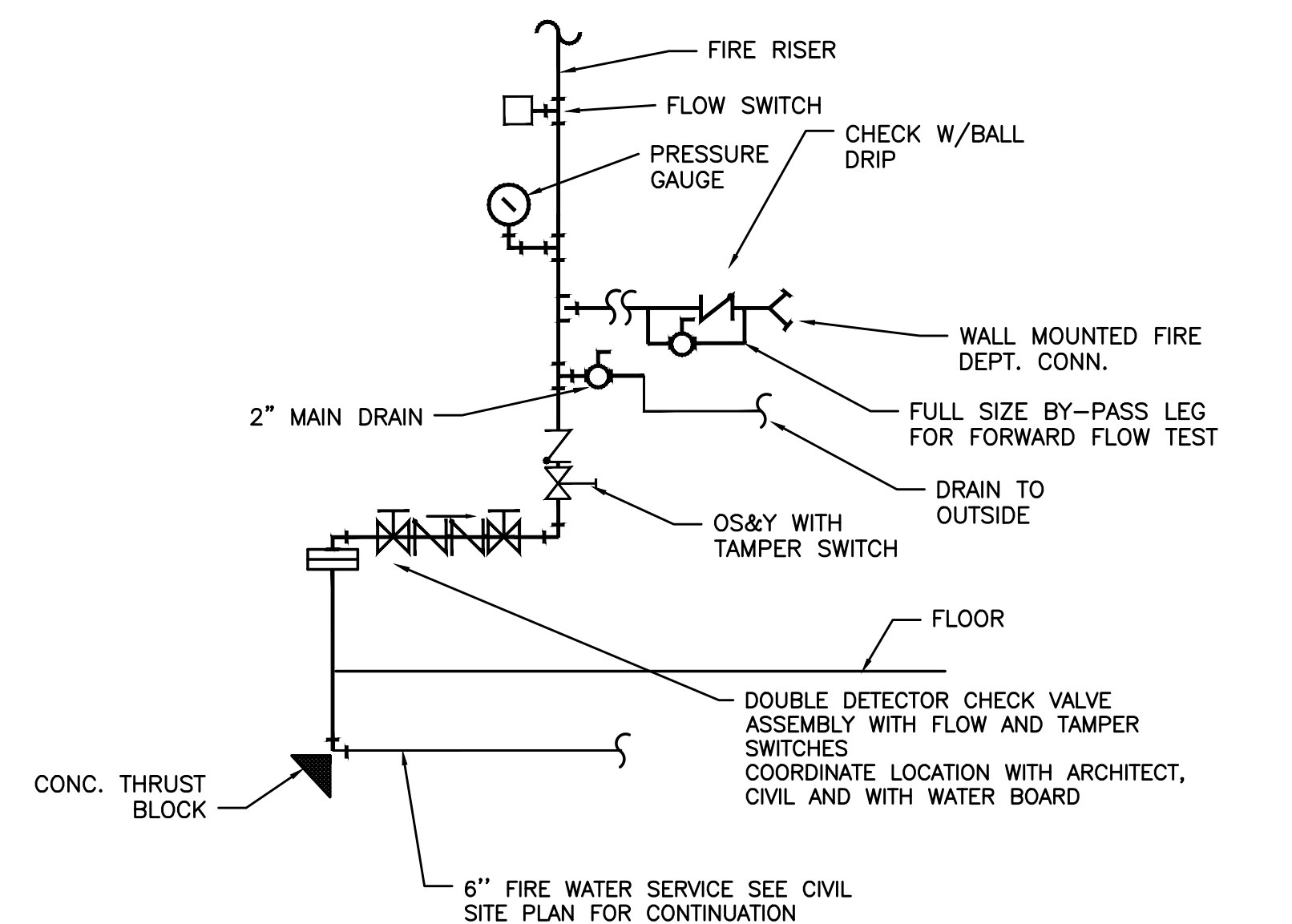
FIXTURE TYPE	NUMBER OF FIXTURES	DOMESTIC WATER SERVICE			SANITARY WASTE SERVICE		
		WATER FIXTURE UNITS	TOTAL WSFU	TOTAL CW FIXTURE UNITS	TOTAL HW FIXTURE UNITS	DRAINAGE FIXTURE UNITS	TOTAL DFU
BATHTUB or COMBO BATH/SHOWER	1	4	4	3	3	2	2
CLOTHES WASHER	1	4	4	3	3	3	3
KITCHEN SINK (GRINDER)	1	1.5	1.5	1.125	1.125	2	2
LAVATORY (SINGLE)	1	1	1	0.75	0.75	1	1
WATER CLOSET (1.6 GPF TANK-PRIVATE)	1	2.5	2.5	0	0	3	3
TOTAL	5	13	10.375	8	7.875	11	11
GPM SIZE				1"	3/4"		
WASTE SIZE						8"	

PLUMBING CALCULATIONS - 2-Bedroom (2-bath)

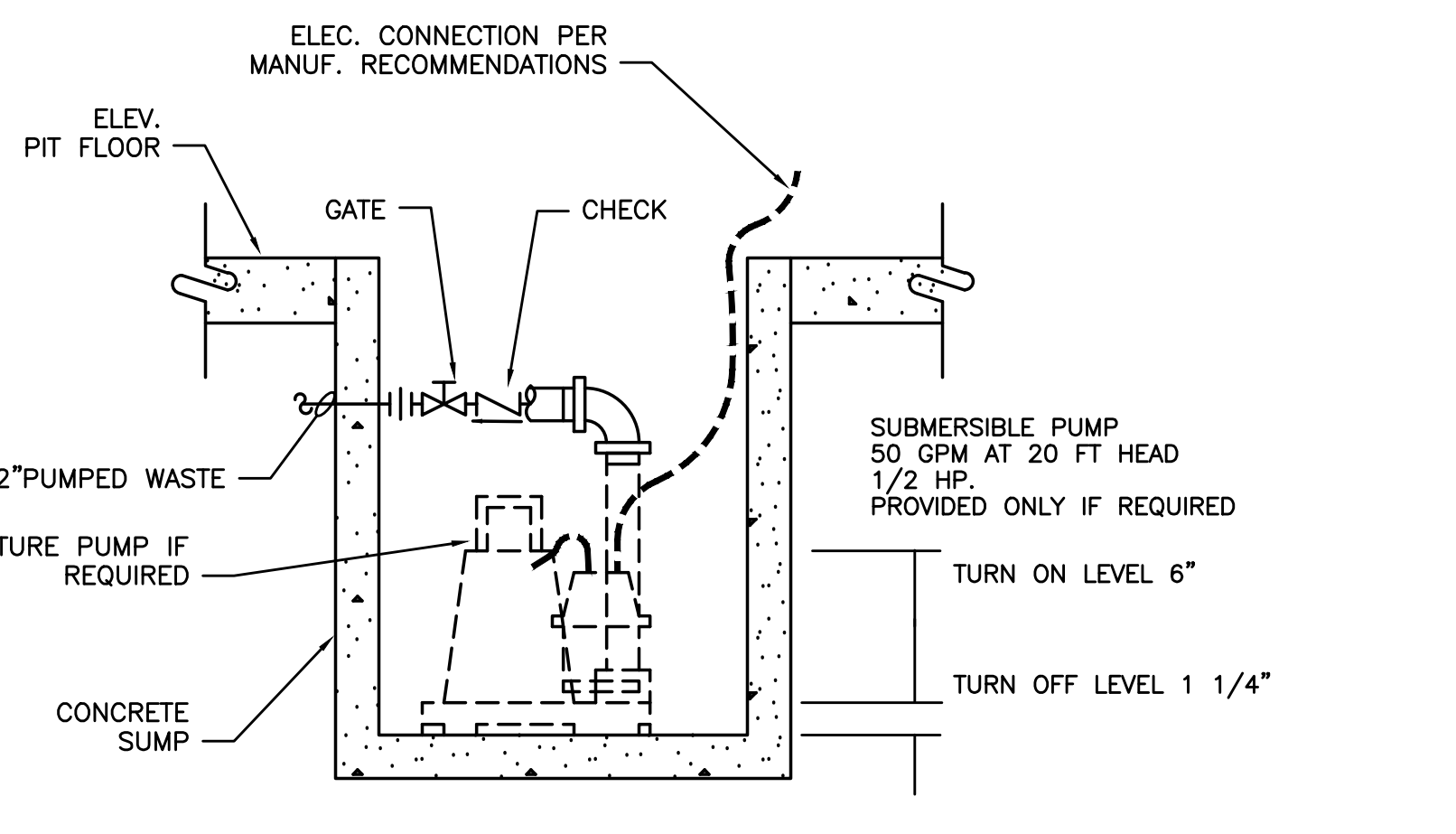
FIXTURE TYPE	NUMBER OF FIXTURES	DOMESTIC WATER SERVICE			SANITARY WASTE SERVICE		
		WATER FIXTURE UNITS	TOTAL WSFU	TOTAL CW FIXTURE UNITS	TOTAL HW FIXTURE UNITS	DRAINAGE FIXTURE UNITS	TOTAL DFU
BATHTUB or COMBO BATH/SHOWER	2	4	8	6	6	2	4
CLOTHES WASHER	1	4	4	3	3	3	3
KITCHEN SINK (GRINDER)	1	1.5	1.5	1.125	1.125	2	2
LAVATORY (SINGLE)	2	2	2	1.5	1.5	1	2
WATER CLOSET (1.6 GPF TANK-PRIVATE)	2	2.5	5	0	0	3	6
TOTAL	8	20.5	16.625	12	11.625	17	17
GPM SIZE				1"	3/4"		
WASTE SIZE						8"	

PLUMBING CALCULATIONS - Average Full Size Restaurant

FIXTURE TYPE	NUMBER OF FIXTURES	DOMESTIC WATER SERVICE			SANITARY WASTE SERVICE		
		WATER FIXTURE UNITS	TOTAL WSFU	TOTAL CW FIXTURE UNITS	TOTAL HW FIXTURE UNITS	DRAINAGE FIXTURE UNITS	TOTAL DFU
BAR SINK (GENERAL USE)	1	2	2	1.5	1.5	2	2
LAVATORY (SINGLE)	2	1	2	1.5	1.5	1	2
MOP BASIN	1	3	3	2.25	2.25	3	3
SINK GENERAL (1-1/2" TRAP)	2	1.5	3	2.25	2.25	3	6
SINK GENERAL (2" TRAP)	2	3	6	4.5	4.5	4	8
WATER CLOSET (1.6 GPF TANK-GENERAL)	2	2.5	5	0	0	4	8
TOTAL	10	21	21	17	12	29	29
GPM							
WASTE SIZE							



2 FIRE RISER DIAGRAM
 SCALE: DETAIL



3 ELEVATOR SUMP PUMP
 NO SCALE

SUMP PUMP

MARK NUMBER	SP1
SERVICE	KITCHEN
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. 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.

CATCH BASIN

MARK NUMBER	CB1
SERVICE	PARKING GARAGE
MAX FLOW RATE (GPM)	50 GPM
LIQUID CAPACITY	104 GAL
MAX OIL CAPACITY	34.1 GAL
INLET/OUTLET PIPE SIZE	4"
DESIGN WEIGHT-WET (LBS)	130 LBS
BASIS OF DESIGN	STREIM CB-50-G
QTY	1

NOTES:
 1. PROVIDE WITH TRAFFIC RATED PICKABLE GRATE
 2. PROVIDE WITH RISER IF REQUIRED.
 3. PROVIDE WITH SEDIMENT BASKET BCB-7.

HOLST

110 SE 8TH AVE.
 PORTLAND, OR 97214
 HOLSTARC.COM

CARTEE APARTMENTS

406 S 4TH ST.
 BOISE, ID 83702

JOB NO. 18-001.00

6-18-2019



Consulting Engineers
 2007 S.E. Ash St.
 Portland, OR 97214
 PHN: (503) 234-0548
 FAX: (503) 234-0677
 WWW.MFIA-ENG.COM
 CONTACT: Mark Demyer

ADDENDUM 4 SET

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10

CARTEE APARTMENTS

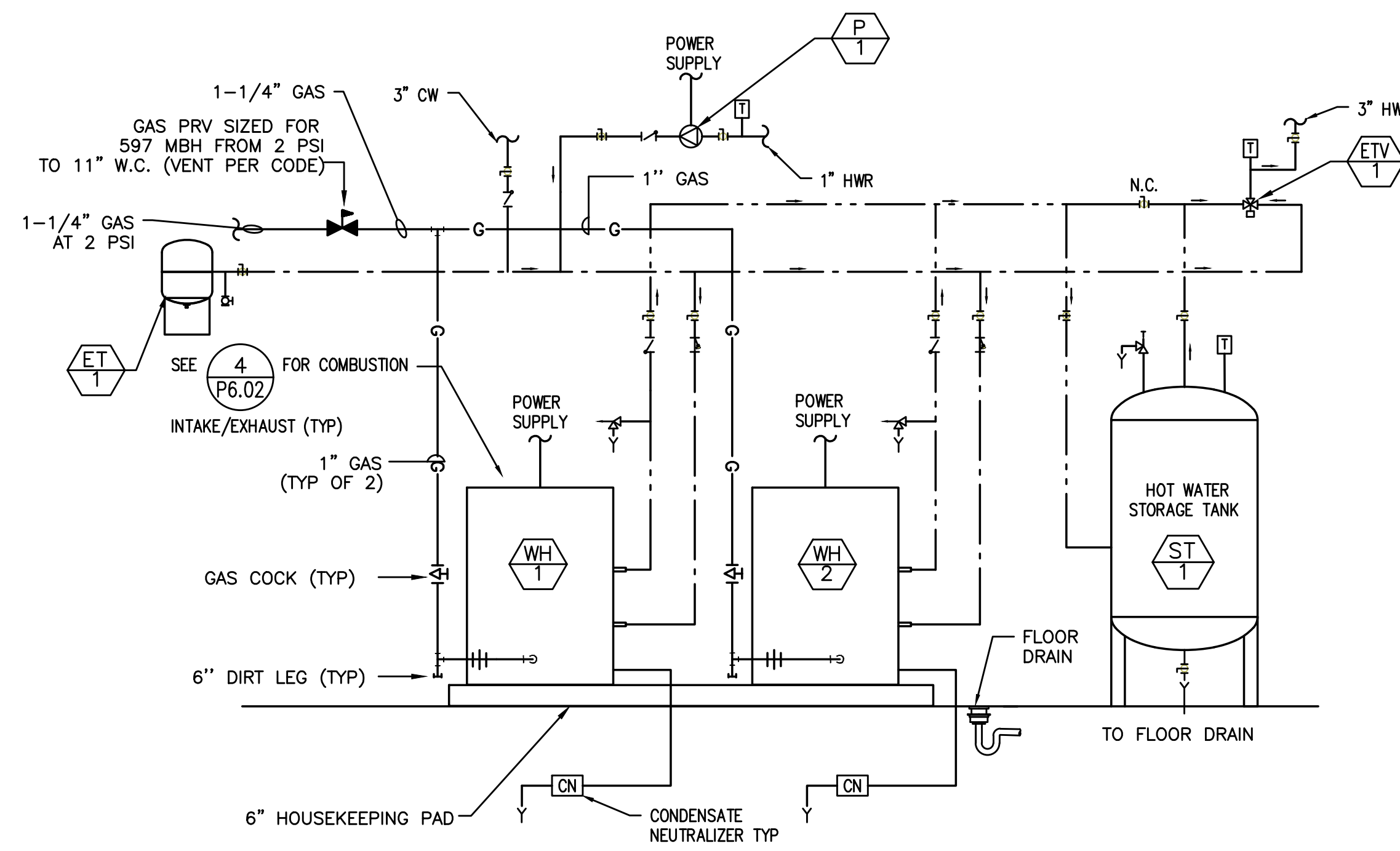
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BOISE, ID 83702

JOB NO. 18-001.00

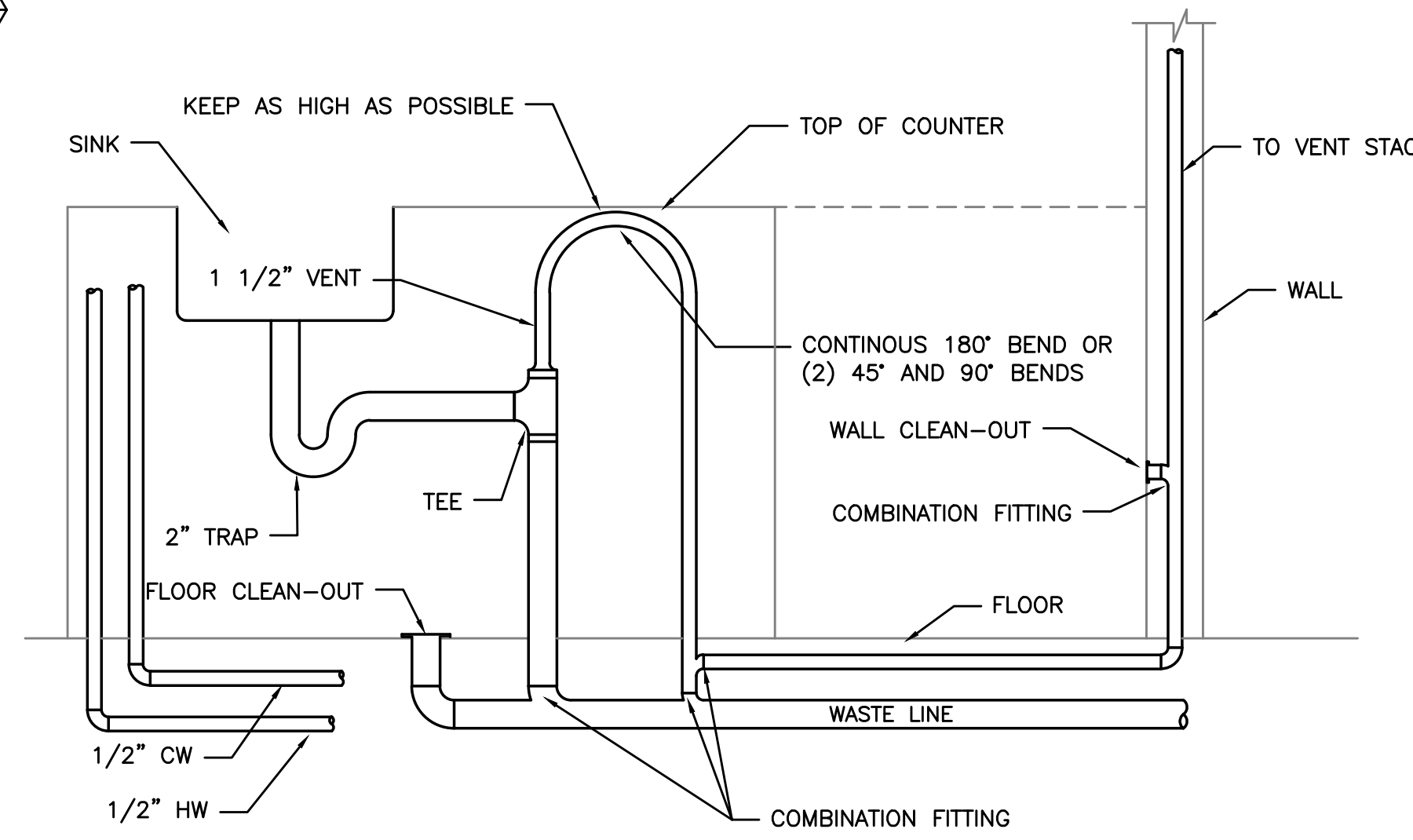
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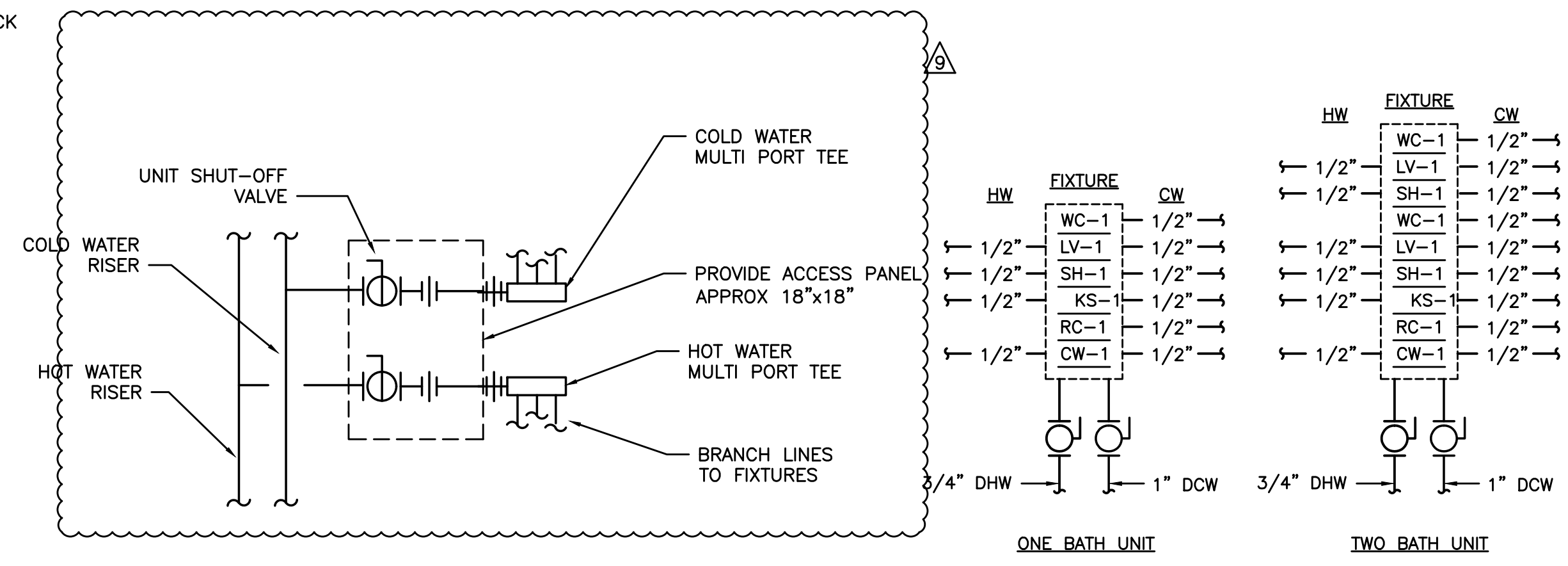
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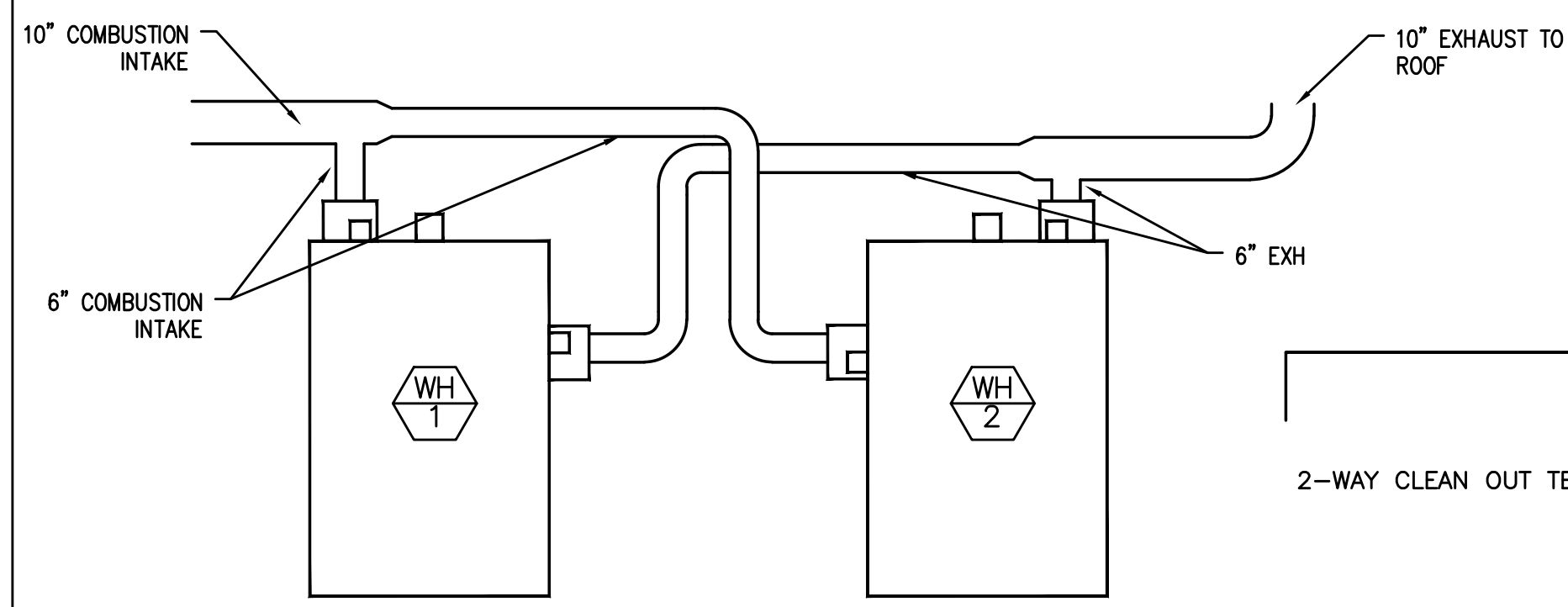
1 WATER HEATER PIPING
P6.02 SCALE: DETAIL



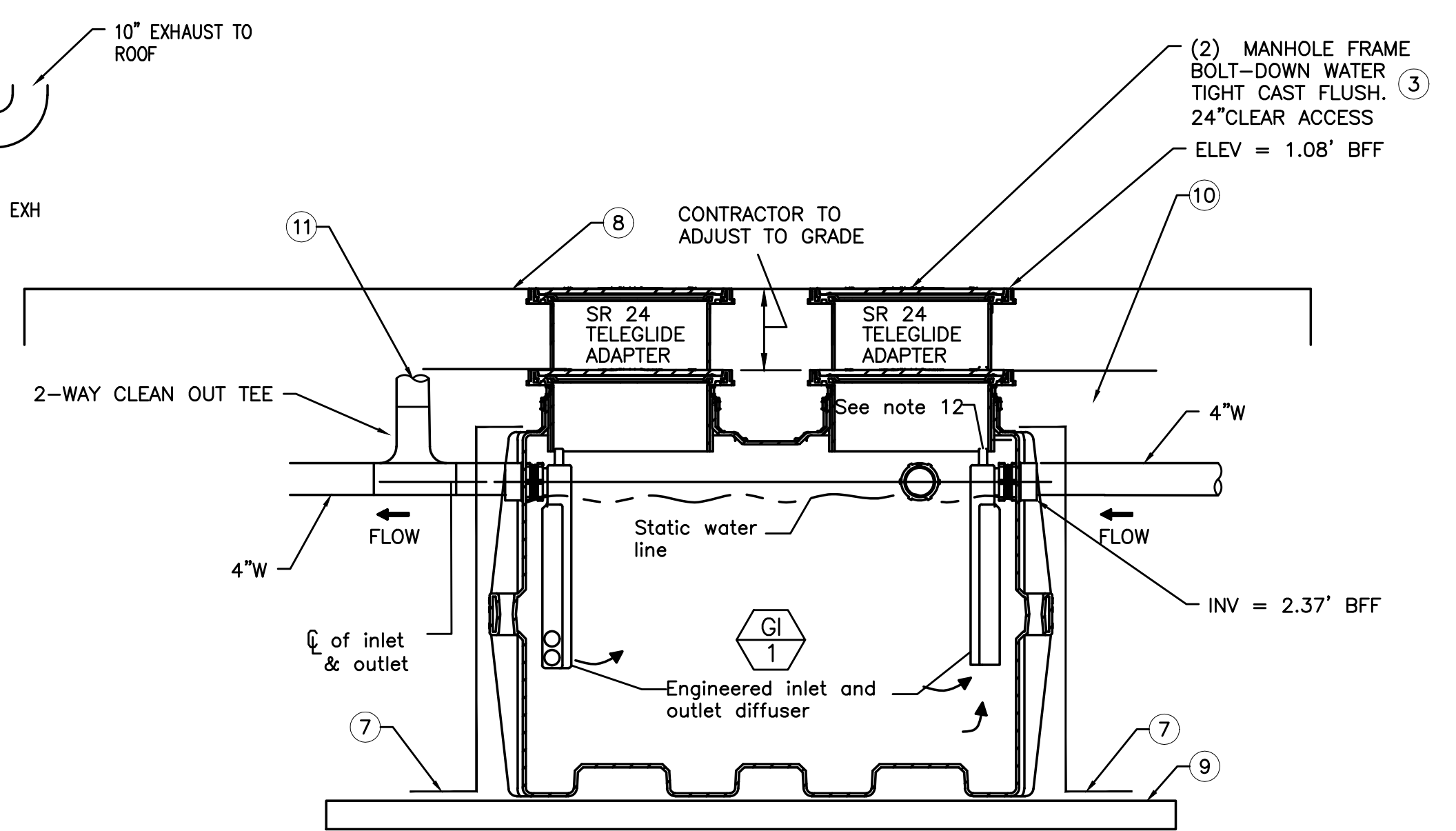
2 ISLAND/PENINSULA FIXTURE
P6.02 NO SCALE



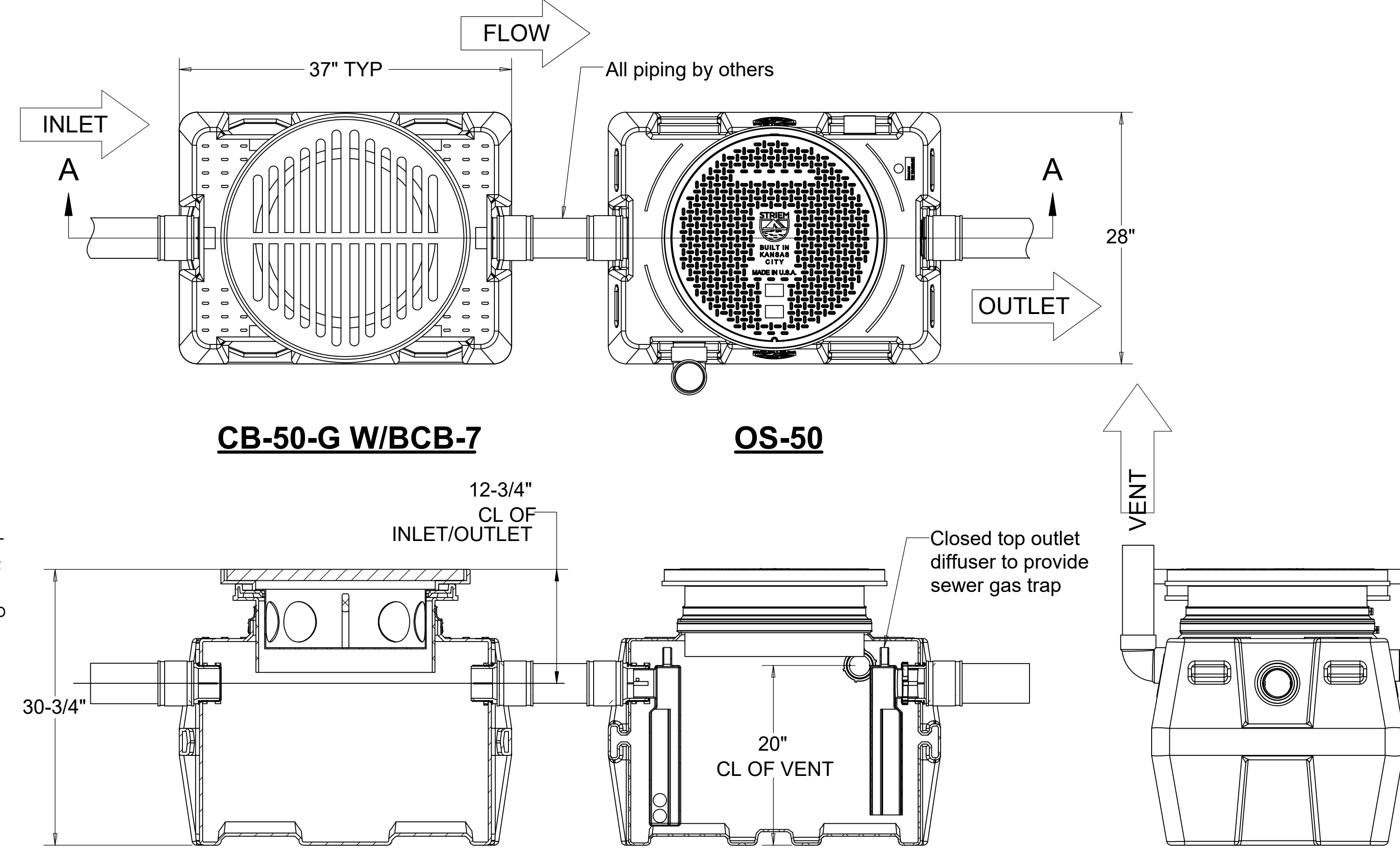
3 UNIT DISTRIBUTION MANIFOLD
P6.02 SCALE: DETAIL



4 WATER HEATER VENTING
P6.02 NOT TO SCALE



5 GREASE INTERCEPTOR DETAIL
P6.02 SCALE: DETAIL



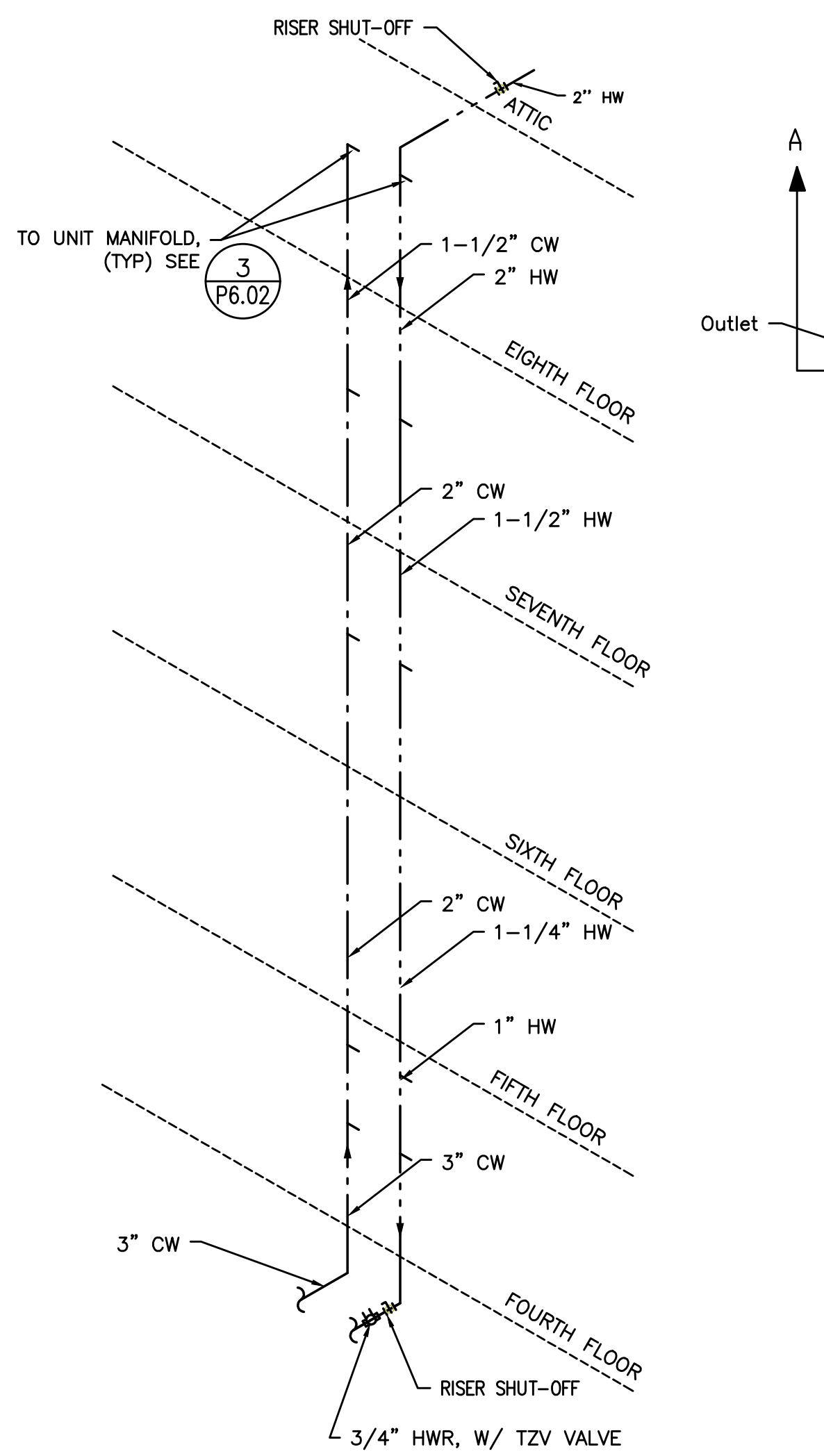
6 OIL SEPARATOR DETAIL
P6.02 SCALE: DETAIL

- 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 16,000 LBS LOAD CAPACITY.
 7. HOLD DOWN KIT.
 8. PROVIDE 6" THICK CONCRETE PAD OVER UNIT W/ #4 REBAR @ 12" O.C. SEE INSTALLATION GUIDE FOR BAR PLACEMENT AROUND ACCESS. PAD TO EXTEND BEYOND BASIN FOOT PRINT 18" ON EACH SIDE.
 9. 6" DEEP COMPACTED AGGREGATE PAD 12" BEYOND BASIN TANK @ ALL SIDES.
 10. BACKFILL W/ PEA GRAVEL.
 11. 3" VENT ROUTED BACK TO BUILDING. VENT THROUGH ROOF.

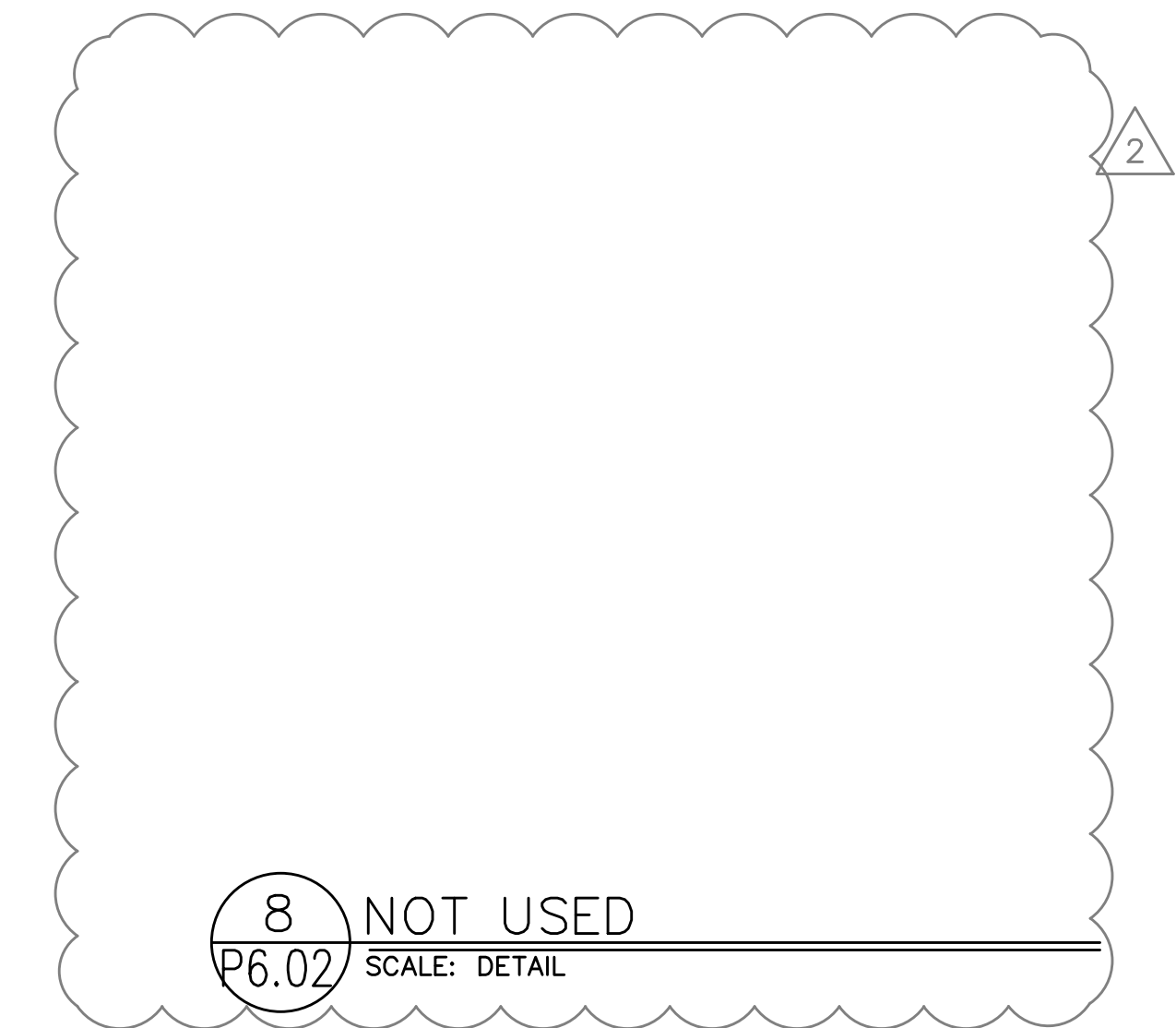
- SYSTEM SPECIFICATIONS**
1. Max flow rate: 50 GPM
 2. Liquid capacity: 104 Gallons (13.9 cu ft)
 3. Max oil capacity: 34.1 gallons
 4. Unit weight w/std. covers: 178 lbs.
 5. Sand/Solids capacity : 64.5 gallons
 6. H2O rated, cast iron grate/cover.
 7. Maximum operating temperature 140 F continuous.

- OPTIONS:**
- Teleglide field adjustable risers for extending covers to grade
 - Male pipe thread connections
 - High water anchor kit (set of 2 per tank)
 - Highway rated bolted or pickable cast iron cover
 - SLICK STICK™ Oil Level Monitoring System

- NOTES**
1. Factory installed Built-in Flow control within OS-50.
 2. For gravity drainage applications only. Do not use for pressure applications.
 3. 3/8" thick seamless high density polyethylene walls.
 4. Unit supplied with built-in adapter(s) for up to 6" of adjustability. Additional riser(s) available for deeper burial depth.
 5. Cover placement allows full access to tank for proper maintenance.
 6. Narrow footprint allows clearance through doorways and down stairwells.
 7. Engineered inlet and outlet diffusers are removable to inspect/clean piping.
 8. For on-the-floor or buried applications.



7 TYPICAL DOMESTIC WATER RISER
P6.02 SCALE: DETAIL



8 NOT USED
P6.02 SCALE: DETAIL

ADDENDUM 4 SET

10.25.2019

Issue:	date:
50% SD	07.20.2018
100% SD	09.28.2018
50% DD	11.02.2018
100% DD	12.21.2018
60% CD	02.12.2019
PERMIT SET	04.30.2019
GMP SET	06.26.2019
CONSTRUCTION SET	10.25.2019

revision:	date:
1 CITY RESPONSE	07.15.2019
2 CITY RESPONSE	07.15.2019
3 ADDENDUM 1	07.15.2019
4 CITY RESPONSE 3	07.16.2019
5 CITY RESPONSE 5	08.19.2019
6 CITY RESPONSE 3	08.19.2019
7 CITY RESPONSE 6	09.12.2019
8 CITY RESPONSE 6	09.12.2019
9 ADDENDUM 4	10.25.2019
AS1 02	11.25.2019
AS1 05	01.28.2020

title:

PLUMBING DETAILS

sheet:

P6.02