

MATERIALS

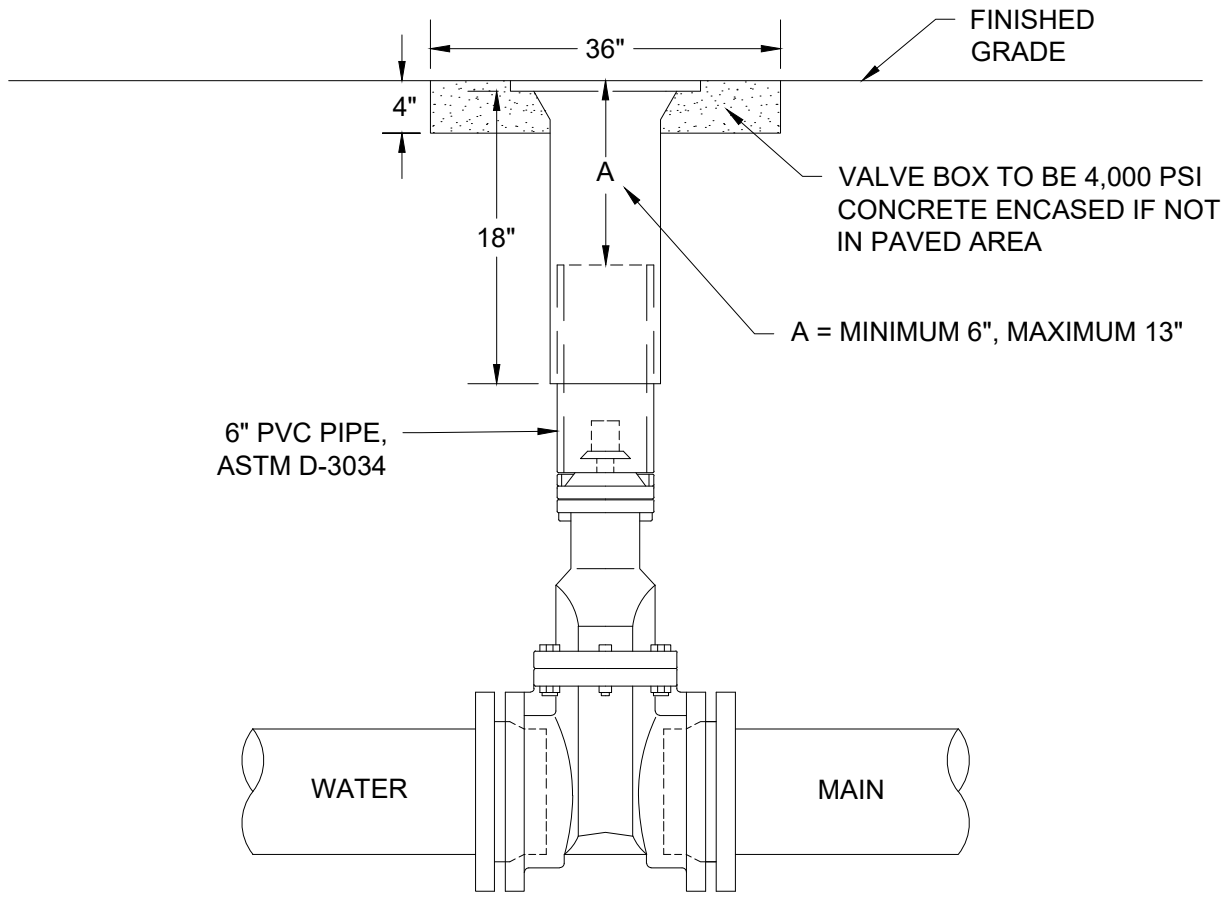
- ① DFW PLASTICS, INC. METER BOX (DFW486WBCNP4-12-BODY) AND COVER (SEE STANDARD DETAIL 515A) . NO PIPE HOLES.
- ② 1" CORP. STOP, MUELLER B-25008N, OR APPROVED EQUAL.
- ③ 1" SOFT TEMPER, TYPE "K" COPPER TUBING COMPLYING WITH ASTM B88.
- ④ 1", 300 BALL ANGLE METER VALVE, MUELLER, B-24258N COMPRESSION x SWIVEL. QUARTER TURN WITH LOCK AND WING STOP. NO REDUCED PORT. COUNTERCLOCKWISE OPENING ONLY. OR APPROVED EQUAL.

NOTES:

1. SUBSTITUTES FOR ANY MATERIALS SHOWN MAY BE APPROVED BY THE CITY ENGINEER.
2. ALL PIPE AND STRUCTURE ZONES SHALL BE BACKFILLED USING 3/4" MINUS CRUSHED AGG. AND COMPACTED TO 95% DENSITY AS DETERMINED BY ASTM D1557.
3. WHEN AN ACTIVE CATHODIC PROTECTED SYSTEM IS ENCOUNTERED WITH COPPER SERVICES, PVC TAPE WRAP COPPER AND SCH. 40 PVC SHALL BE INSTALLED WITH NON-SHRINK GROUT AS SHOWN ABOVE.
4. METER BOX SHALL BE CENTERED OVER THE COMPLETED METER ASSEMBLY.
5. FOR VACANT RESIDENTIAL LOTS, LOCATE SERVICE 12" INSIDE SIDE LOT LINE. LOT LINE TO BE PROJECTED PERPENDICULAR TO CURB.
6. WATER METER BOXES SHALL NOT BE PLACED IN DRIVEWAY APPROACHES.
7. FOR INSTALLATION OF CORP STOP USE ONLY APPROVED CC THREADS AND TAPPING MACHINE.
8. SERVICE SHALL BE INSTALLED PERPENDICULAR TO METER BOX.
9. COPPER TO BE ONE CONTINUOUS PIECE (NO UNIONS OR DEFECTS) UNLESS OTHERWISE APPROVED.
10. ALL BRASS AND COPPER TO COMPLY WITH NSF STANDARD 61 "NO-LEAD" REQUIREMENT.
11. ALSO REFER TO PWS 501.03.04.
12. IN RAIN GARDEN AREAS, REFER TO DETAIL GS-109.

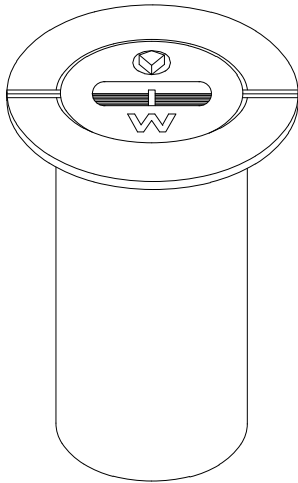
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REV. DATE	MARCH 2026
APPR.	
DETAIL NO.	502

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NOTES:

1. VALVE BOXES SHALL BE CENTERED DIRECTLY OVER THE VALVE NUT IN A VERTICAL POSITION.
2. VALVE BOX TOP SHALL BE ADJUSTED TO MEET FINISH GRADE.
3. PVC SHALL BE ONE CONTINUOUS PIECE - NO BELLS OR COUPLERS.
4. USE FOR ALL VALVES AND 2" BLOW-OFF STANDPIPES.
5. NO NOTCHES SHALL BE CUT INTO VALVE BOX UNLESS BY CITY STAFF.
6. NOTCH PVC AT YOLK BOLTS WHERE REQUIRED



18" TALL CAST IRON VALVE BOX,
"VANCOUVER" STYLE, MODEL NO 910 OR
APPROVED EQUAL - WITH "W" CAST ON THE
COVER.

**CITY OF
GRESHAM**

"VANCOUVER" STYLE VALVE BOX

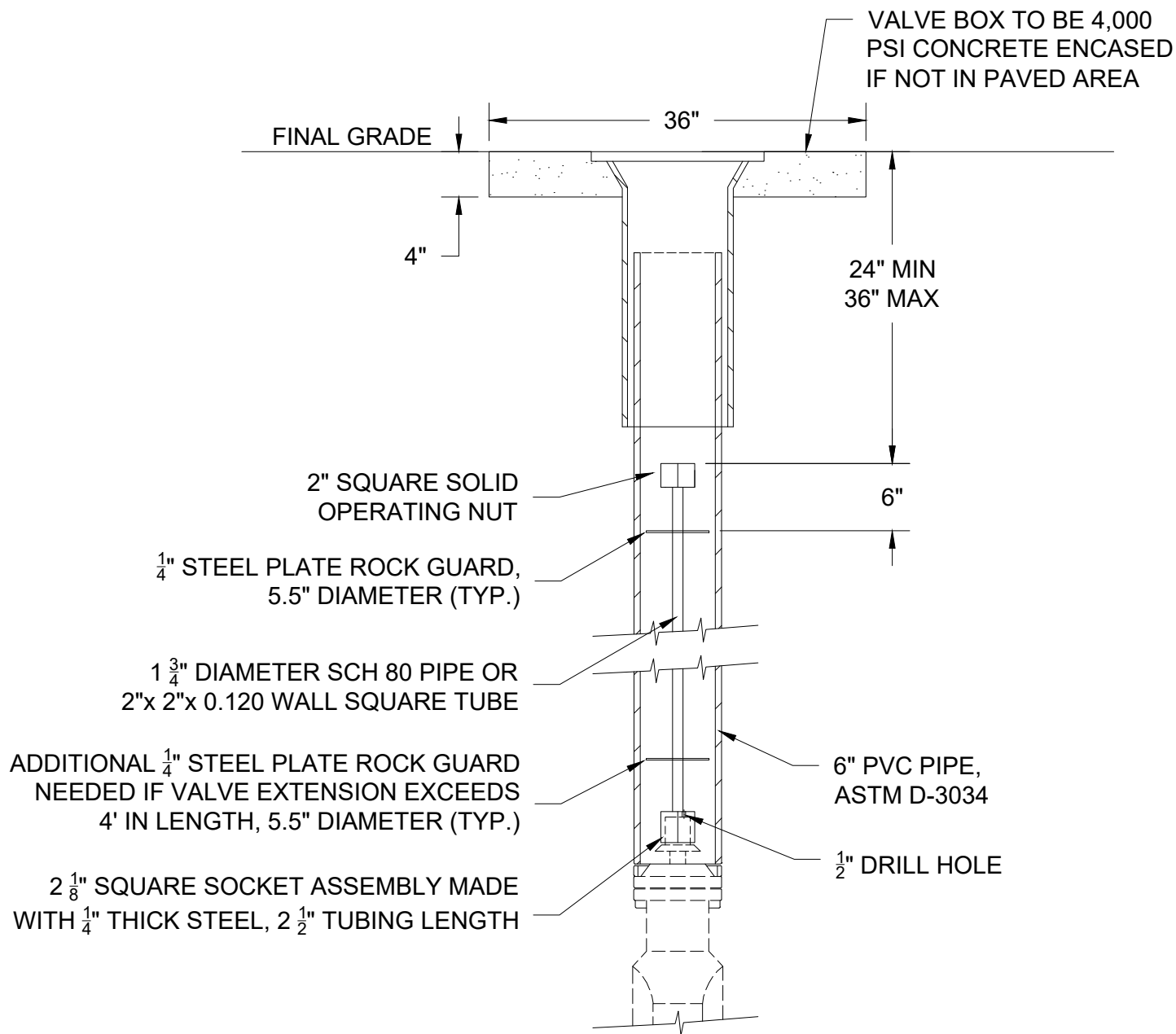
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REV. DATE OCT 2025

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DETAIL NO. 511A



NOTES:

1. OPERATOR EXTENSION REQUIRED WHEN VALVE NUT IS DEEPER THAN 4' FROM FINISHED GRADE
2. VALVE OPERATOR SHALL BE MADE WITH A36 STEEL CENTER AND SQUARE ALONG CENTER AXIS, HOT DIP GALVANIZED AFTER FABRICATION

CITY OF
GRESHAM

VALVE OPERATOR EXTENSION

PWS VERSION:

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DETAIL NO. 511B

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SPECIFICATIONS

METER	3" METER	4" METER	6" METER	8" METER
INCOMING LINE SIZE	4"	4"	6"	8"
BY-PASS LINE SIZE	4"			
OLD CASTLE NO.	577-SLD (OR APPROVED EQUAL)			
LID NO. (OR APPROVED EQUAL)	57 TOP W/ USF-TPD-3660 ALUMINUM DOOR			

FITTINGS & VALVES BY CONTRACTOR

METERS	3"	4"	6"	8"
Ⓐ	4" FLG TEE	4" FLG TEE	6"x4" FLG TEE	8"x4" FLG TEE
Ⓑ	4" MEGA-LUG	4" MEGA-LUG	6" MEGA-LUG	8" MEGA-LUG
Ⓒ	4" MJ 90° BEND			
Ⓓ	4" VALVE FLG x MJ			
Ⓔ	4" VALVE FLG x MJ	4" VALVE FLG x MJ	6" VALVE FLG x MJ	8" VALVE FLG x MJ
Ⓕ	4" DIP CL 52			
Ⓖ	4" MJxFLG ADAPTER	4" MJxFLG ADAPTER	6" MJxFLG ADAPTER	8" MJxFLG ADAPTER
Ⓗ	4" FLG x MJ TEE	4" FLG x MJ TEE	6" x 4" FLG x MJ TEE	8" x 4" FLG x MJ TEE
Ⓘ	4" DIP CL 52	4" DIP CL 52	6" DIP CL 52	8" DIP CL 52

FITTINGS & METER BY CITY

METER	3"	4"	6"	8"
1	(2) 4" MJ x 3" FLG REDUCERS	(2) 4" MJ x FLG ADAPTERS	(2) 6" MJ x FLG ADAPTERS	(2) 8" MJ x FLG ADAPTERS
2	3" SENSUS METER (OR APPROVED EQUAL)	4" SENSUS METER (OR APPROVED EQUAL)	6" SENSUS METER (OR APPROVED EQUAL)	8" SENSUS METER (OR APPROVED EQUAL)



**3" THROUGH 8" METER VAULT AND PIPING
SPECS**

PWS VERSION: JAN 2026

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DETAIL NO.	513B

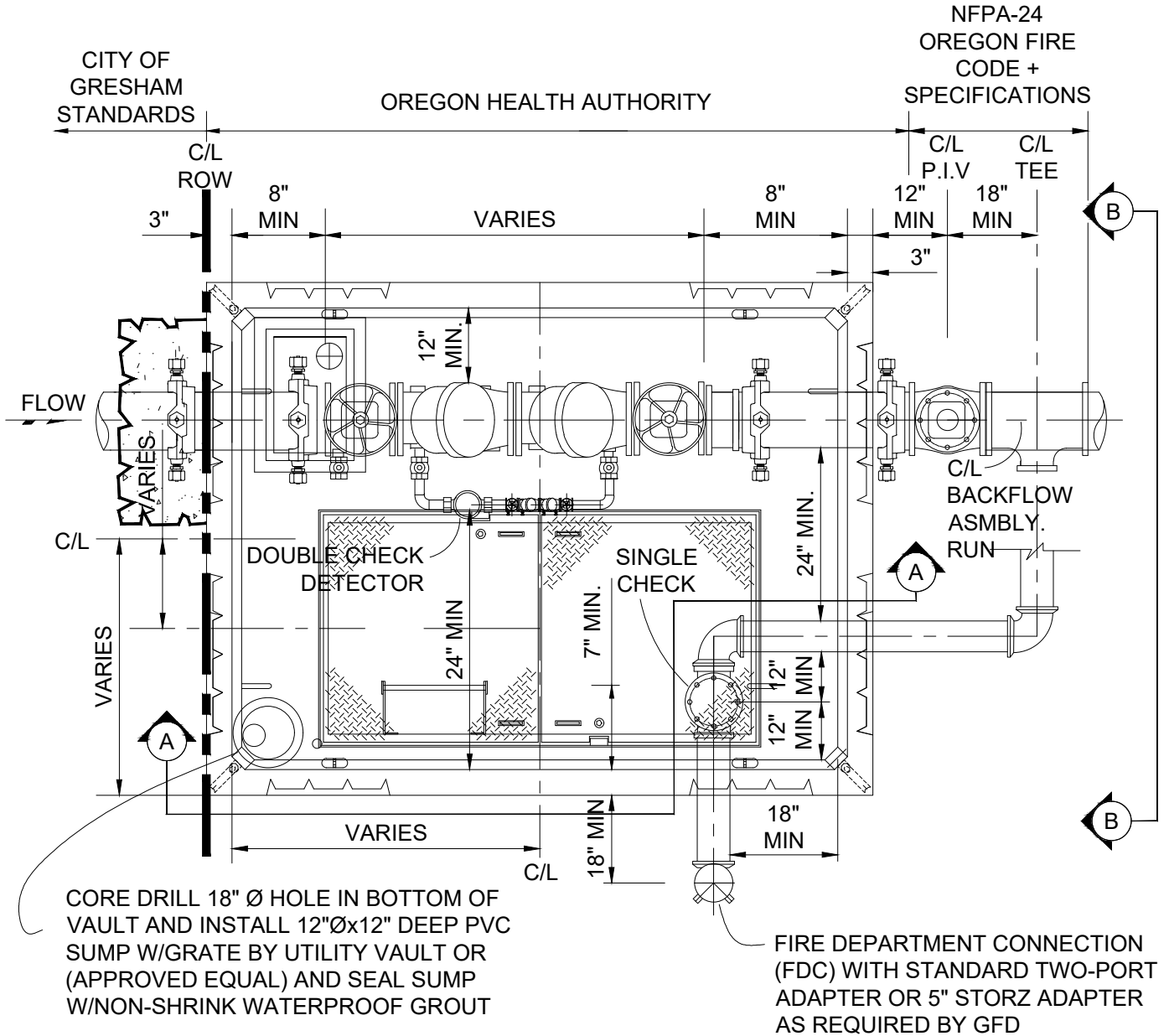
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BACK FLOW VAULT		
SIZE	VAULT WITH FDC*	VAULT W/O FDC*
3	676-WA	TBD
4	676-WA	TBD
6	676-WA	676-WA
8	687-WA	687-WA
10	5106-1-WA	5106-1-WA

* OR APPROVED EQUAL BY WATER ENG.

NOTES:

1. CONTRACTOR TO SEAL ALL OPENINGS IN VAULT WITH NON-SHRINK GROUT.
2. CONTRACTOR TO INSTALL CONCRETE BALLAST 3 CU YDS MIN. AROUND BASE OF VAULT WHERE FLOODING OR HIGH GROUND WATER EXIST.
3. STRADDLE BLOCK TO BE INSTALLED PER STANDARD DETAIL 509.
4. DETECTOR METER TO READ IN CUBIC FEET
5. FOR SPECIFICATIONS ON DOUBLE CHECK VALVE BACKFLOW ASSEMBLY SEE PWS 502.03.05
6. COAT ALL OUTSIDE CONC SURFACES OF VAULT W/ COMASEAL (OR APPROVED EQUAL)
7. WHEN A FIRE HYDRANT OR MULTIPLE BUILDINGS ARE ON SITE FDC AND PIV FACILITIES LOCATION WILL BE DETERMINED ON A CASE BY CASE BASIS.
8. SEE DETAIL 514B FOR SECTION A-A AND DETAIL 514C FOR SECTION B-B.



PLAN

CITY OF GRESHAM

DOUBLE CHECK VALVE OR DOUBLE CHECK VALVE DETECTOR ASSEMBLY PLAN VIEW

PWS VERSION: JAN 2026

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