

MATERIALS LIST – (ALL SIZES ARE SAME AS METER UNLESS OTHERWISE LISTED)

MATERIALS LIST

- ① 1-MECH. CPLG. TO FIT, EQUAL TO ROMAC 501 OR MJ SLEEVE
- ② 1-4"x3" REDUCER, P.E.xM.J. (FOR 3" SERVICE ONLY)
- ③ 1-TEE, M.J. x FL.
- ④ 1-GATE VALVE, F.L.x M.J. (W/VALVE BOX & COVER)
- ⑤ 3-D.I. PIPE, P.E., LENGTH AS REQUIRED
- ⑥ 2-90° BEND, M.J.
- ⑦ 2-D.I. PIPE, P.E.xFL., LENGTH AS REQUIRED.
- ⑧ 1-EPOXY OR NYLON COATED SERVICE SADDLE, FORD FC202 (TAP POINTED UP AT 12-O'CLOCK) OR APPROVED EQUAL,
1-CORPORATION STOP, AWWA TAPER(CC) x M.I.P.T., FORD FB400-7, WITH 2" F.I.P.T. x 2 1/2" M.N.S.T. ADAPTOR AND CAP (2 1/2" F.N.S.T.), OR APPROVED EQUAL.
- ⑨ 3-GATE VALVE, FL.
- ⑩ SENSUS OMNI C2 METER W/ INTERNAL STRAINER, W/ELECTRONIC RESOLUTION (100'S OF CUBIC FEET) REGISTER.
- ⑪ 1-D.I. ADAPTER FL. x P.E., LENGTH TO FIT.
- ⑫ 2-FL.xCPLG. ADAPTER, SMITH-BLAIR 912, RESTRAINED FCA, OR APPROVED EQUAL.
- ⑬ 2-WELDED FL. RESTRAINT OR MEGA-LUG MID-SPAN RESTRAINT AND THRUST BLOCK ADJACENT TO VAULT SEE STANDARD DETAIL W-56.
- ⑭ PRECAST CONC. VAULT W/ TWO DIAMOND PLATE DOORS RATED FOR H-30 LOADING.
VAULT COVER SHALL INCLUDE 2 LOCKING ALUMINUM LW HATCH DOORS (PART NO. HHD-36"x72" OR APPROVED EQUAL) DOORS SHALL HAVE SLIP RESISTANT TREATMENT PER SECTION W4-17 OF THE ENGINEERING STANDARDS. DOORS SHALL BE CAST IN COVER WITH 8" SPECIAL OFFSET FROM VAULT WALL, AS SHOWN. COVER TO READ "WATER".
- ⑮ 1-2" BRASS NIPPLE, M.I.P.T.xM.I.P.T., 6" LONG, CONNECT TO TEST PORT OF COMPOUND METER. BALL VALVE FORD FB1000 FIPTxFIPT SIZED TO FIT OMNI C2 FLUSHPORT, OR APPROVED EQUAL.
- ⑯ 2" M.I.P.T. X 2 1/2" MNST ADAPTOR AND CAP (2 1/2" FNST).
- ⑰ TR/PL SENSOR (TO MOUNT IN VAULT ACCESS DOOR).
- ⑱ 2-ADJUSTABLE STANCHION BOLTED TO FLOOR.
- ⑲ 1-GALVANIZED STEEL LADDER TO BE ATTACHED TO VAULT. THE FIRST STEP SHALL BE MAX. 8" BELOW TOP OF COVER.
- ⑳ 1-BILCO LADDER UP, LU-2 MODEL, OR APPROVED EQUAL, AT TOP OF THE LADDER. SEE DETAIL W-19.
- ㉑ 1- TEE, FL.

NOTES:

- 1. ALL MATERIALS, INCLUDING METER SHALL BE FURNISHED BY CONTRACTOR.
- 2. ALL PIPE & FITTINGS 3" & LARGER SHALL BE CEMENT LINED DUCTILE IRON, CLASS 52 MINIMUM.
- 3. TEE WITH (3) GATE VALVES REQUIRED AT DISTRIBUTION MAIN.
- 4. VAULTS SHALL NOT BE INSTALLED IN AREAS W/VEHICULAR TRAFFIC.
- 5. PROVIDE 24" CLEARANCE BETWEEN VAULT FLOOR & BOTTOM OF COMPOUND METER. WHERE ELEVATION OF VAULT FLOOR IS TOO LOW TO DRAIN TO DAYLIGHT OR STORM SYSTEM, THIS CLEARANCE CAN BE REDUCED TO A MINIMUM OF 12".
- 6. PROVIDE 2 1/4" DIAM. OPENING IN ALUMINUM DOOR FOR TR/PL SENSOR.
- 7. LADDER TO BE BOLTED TO VAULT FLOOR AND TO VAULT WALL AT THREE LOCATIONS. RUNGS SHALL BE SPACED AT 12" ON CENTER.
- 8. ALL FITTINGS OUTSIDE VAULT SHALL INCLUDE THRUST BLOCKING AND JOINT RESTRAINT DEVICES.

VAULT REQUIREMENTS

- 1. MINIMUM DESIGN STRUCTURAL LOADING SHALL BE H-20 LOADING COMPLY WITH ASTM C-857 AND ASTM C-890.
- 2. ALL PRECAST CONCRETE PRODUCTS SHALL BE MANUFACTURED BY AN NPCA-CERTIFIED PLANT.
- 3. VAULT ASSEMBLIES (WALLS, BASES AND COVERS) SHALL BE CONSTRUCTED IN ACCORDANCE WITH ASTM C-858 AND ASTM C-913.
- 4. REINFORCING STEEL BARS SHALL CONFORM TO ASTM A-615.
- 5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A-1064.
- 6. GASKET MATERIAL SHALL CONFORM TO ASTM C-443.
- 7. END WALLS FOR WATER PIPE PENETRATIONS SHALL BE CAST WITHOUT KNOCK-OUTS.
- 8. ALL WALL, FLOOR AND LID PENETRATIONS SHALL BE CORE DRILLED OR INTEGRALLY CAST.
- 9. VAULT ASSEMBLIES SHALL CONSIST OF 1). A COVER AND INTEGRALLY CAST BASE AND WALL UNIT; OR 2). INDIVIDUALLY CAST BASE, WALL AND COVER SECTIONS.
- 10. ALL VAULTS SHALL BE WATERTIGHT AND BE FREE OF ANY VISIBLE LEAKS.
- 11. THE REPAIR OF ANY LEAKS SHALL BE IN ACCORDANCE WITH THE VAULT MANUFACTURER'S WRITTEN RECOMMENDATIONS..
- 12. A MANUFACTURER'S CERTIFICATION OF COMPLIANCE WITH THESE REQUIREMENTS SHALL BE PROVIDED FOR EACH TYPE OF PRODUCT FURNISHED FOR INSTALLATION.

4-INCH METER VAULT INTERIOR CLEAR DIMENSIONS:

	MIN.	MAX.
LENGTH	6'-10"	7'-2"
WIDTH	5'-4"	5'-8"
HEIGHT	6'-0"	7'-0"



City of Bellevue

WATER UTILITY

TITLE

4" DOMESTIC METER
MATERIALS LIST AND VAULT REQUIREMENTS