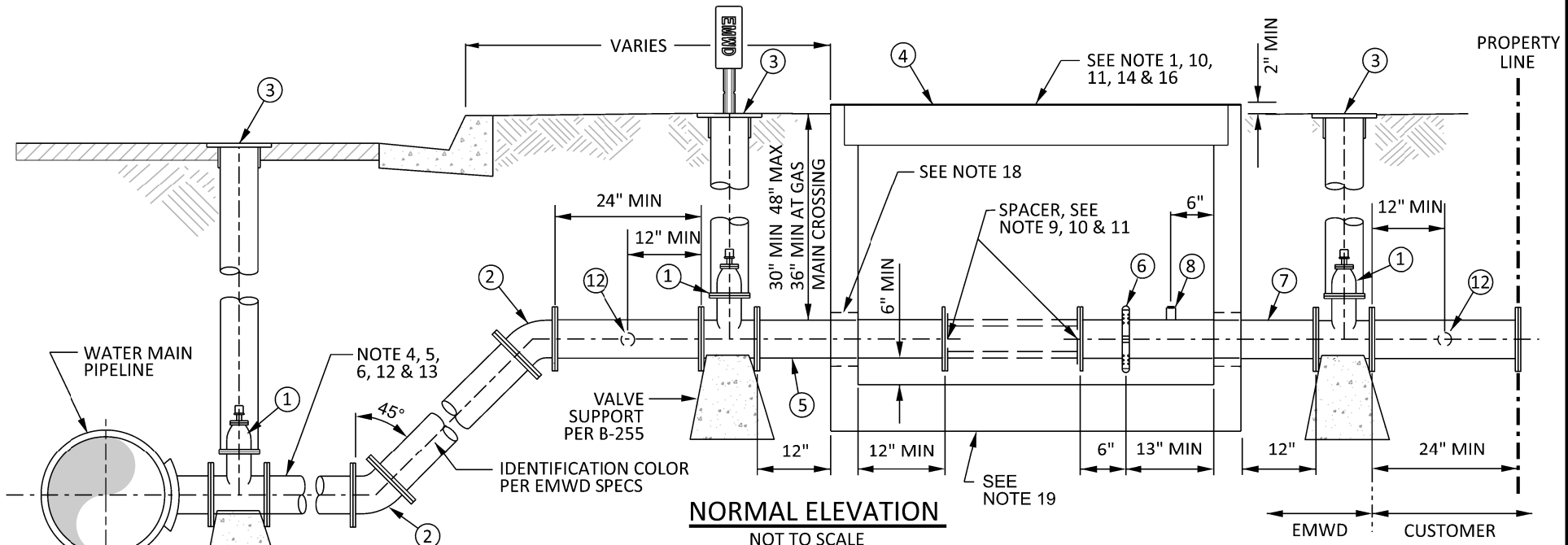


NOTES ⚠

- RISER CAP, METER BOX/VAULT, AND STEEL LIDS TO BE PAINTED PER EMWD SPECIFICATIONS.
- ALL 2" PIPE AND FITTINGS SHALL:
 - BE MADE OF BRASS OR BRONZE;
 - BE OF THE BANDED PATTERN;
 - BE DESIGNED FOR A MIN OF 175 PSI (COLD) WATER WORKING PRESSURE.
- PRESSURE TEST PER EMWD SPECIFICATIONS.
- ALL BARE IRON AND STEEL SHALL BE COATED WITH CEMENT MORTAR AS PER THE FIELD ENGINEER. VALVES AND OTHER APPURTENANCES AND FITTINGS AT THE PIPELINE SHALL BE PRIMED, AND WRAPPED WITH PROTECTO-WRAP NO. 200 OR 300 TAR RESIN TAPE. BOLTS AND NUTS SHALL BE PROTECTED USING ZINC CAPS ANODES IN ACCORDANCE WITH SECTION \ 15089.
- SERVICE LATERAL SHALL BE INSTALLED WITH IDENTIFICATION TAPE AND LOCATOR \ WIRE PER EMWD SPECIFICATIONS.
- ALL SERVICE PIPE AND TUBING SHALL BE LAID ON A POSITIVE SLOPE UP FROM THE WATER MAIN TO THE METER. NO DIPS OR POCKETS IN THE LINE WILL BE PERMITTED.
- THREAD NOTATION THUS:
 - IP = IRON PIPE THREAD;
 - CS = CORPORATION STOP (MUELLER) THREAD;
 - PJ = PACK JOINT
 - CTS = COPPER TUBE SIZE
 - CTS A.S. = COPPER TUBE SIZE ANGLE STOP
- VALVE BOX SHALL BE EMWD APPROVED 12" DIA x 10" DEEP, COMPLETE WITH COVER AND ONE (1) - 6" EXTENSION.
- JUMPER ASSEMBLY USED FOR THE CONSTRUCTION OF THE METER SERVICE SHALL BE MADE OF SCHEDULE 80 PVC AND HAVE ALL PVC FITTINGS SOLVENT WELDED MEET METER MANUFACTURERS SPECIFICATIONS FOR METER INSTALLATION JUMPER TO BE PAINTED BLUE (POTABLE JUMPERS ARE NOT TO BE USED FOR RECYCLED WATER)
- WHEN METER IS FURNISHED BY OTHERS, ANGLE METER STOP SHALL BE LOCKED CLOSED WITH LEAD SEAL AND THREE-STRAND SEALING WIRE. METER DIMENSIONS MAY VARY, METER INSTALLATION SHALL BE PER METER MANUFACTURER SPECIFICATIONS AND EMWD STANDARDS AND SPECIFICATIONS.
- USE APPLICABLE EMWD METER STANDARD DRAWING FOR METER AND METER BOX/VAULT INSTALLATION.
- ALL MATERIALS SHALL BE PER EMWD APPROVED MATERIALS LIST.
- RESTRAIN OR WELD ALL JOINTS PER EMWD SPECIFICATIONS.
- METER BOX/VAULT TO BE INSTALLED DURING CONSTRUCTION OF WATER SERVICE/MAINLINE CONSTRUCTION. CONTRACTOR SHALL RETURN AFTER ROAD SHOULDER OR PARKWAY IS COMPLETE TO INSTALL METER VAULT, AND SHALL BE RESPONSIBLE FOR COORDINATING WORK OF OTHER CONTRACTORS FOR SAFEGUARDING SERVICES UNTIL METER BOX/VAULT IS SET.
- TEST PORT (COUPLING & PLUG) SHALL BE 2" (IP) FOR 6" & SMALLER METERS, 4" (IP) FOR 8" & LARGER METERS.
- DEPTH OF METER SHALL BE 5 FT. MAX. FROM VAULT LID TO TOP OF METER.
- UPON EMWD APPROVAL, VAULT DEPTHS GREATER THAN 5 FT SHALL INSTALL LADDER PER B-519 OR B-520. ("DANGER" PERMITTED CONFINED SPACE DO NOT ENTER) SHALL BE PAINTED ON THE VAULT LID PER EMWD SPECIFICATIONS.
- PROVIDE A MINIMUM 4" CLEARANCE BETWEEN PIPE AND KNOCKOUT HOLE WITH A MINIMUM OF 6" CLEARANCE ABOVE THE VAULT FLOOR. FILL THE ANNULUS SPACE FOR ALL KNOCKOUT OPENINGS IN THE VAULT WALL WITH NON-SHRINK GROUT PER EMWD STANDARD DETAIL PROVISION SECTION 03300.
- BASE IS INCLUDED WITH VAULT.
- READ HOLES ARE TO BE POSITIONED OVER METER REGISTER PER B-976.
- SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS.
- POTABLE SERVICE LATERAL HORIZ & VERT ALIGNMENT MUST MEET DDW SEPARATION REQUIREMENTS WHEN RECYCLED WATER IS EXISTING OR PROPOSED.
- SERVICES THAT REQUIRE BACKFLOW PROTECTION PER EMWD'S ADMIN CODE, SHALL BE PER B-597.
- WHEN VAULT IS PLACED IN HIGH LOAD OR TRAFFIC PRONE AREAS, VAULT AND LID SHALL BE ABLE TO WITHSTAND H-20 VEHICULAR LOADS.
- VAULT LIDS SHALL HAVE SPRING ASSIST FOR BOTH LIDS.



NORMAL ELEVATION
NOT TO SCALE

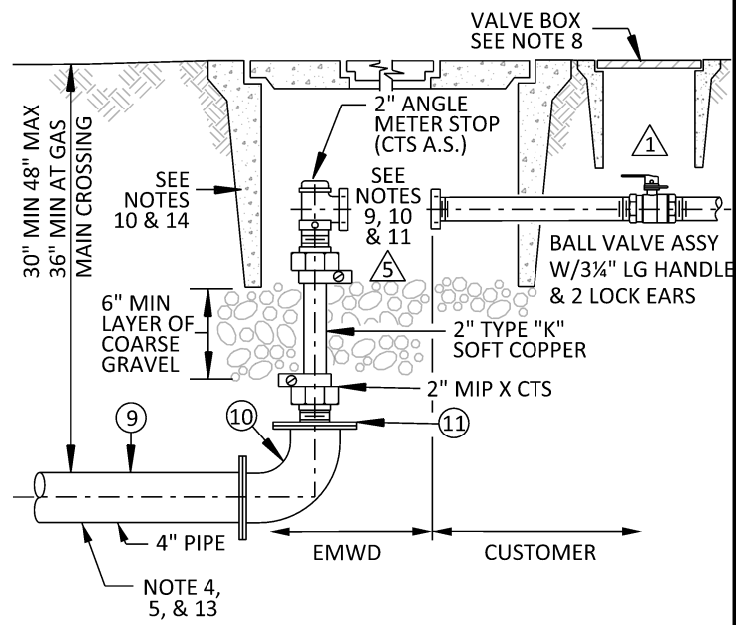
⚠ NOTE: ALL MATERIALS SHALL MATCH THE SERVICE LATERAL PIPELINE SIZE EXCLUDING BYPASS LINE.

FLOW RATE TABLE

FUTURE METER SIZE	FLOW RATE (GPM)	EMWD STD DWG	LATERAL SIZE	VELOCITY (FT/S)	METER LENGTH
1½" OMNI R2	150	B-342	4"	3.18	13"
2" MASTER	120	B-344	4"	2.5	17"
2" OMNI C2	160	B-344	4"	3.3	15¼"
2" OMNI T2	200	B-344	4"	4.2	17"
2" OCTAVE	250	B-344	4"	5.3	17"
3" OMNI C2	400	B-633	4"	8.4	17"
3" OMNI T2	500	B-633	4"	10.6	19"
3" OCTAVE	500	B-633	4"	10.6	12"
3" OMNI C2	400	B-633	6"	4.1	17"
3" OMNI T2	500	B-633	6"	5.1	19"
3" OCTAVE	500	B-633	6"	5.1	12"
4" OMNI C2	800	B-634	6"	8.2	20"
4" OMNI T2	1000	B-634	6"	10.2	23"
4" OCTAVE	1000	B-634	6"	10.2	14"
4" OMNI C2	800	B-634	8"	4.7	20"
4" OMNI T2	1000	B-634	8"	5.9	23"
4" OCTAVE	1000	B-635	8"	5.9	14"
6" OMNI C2	1600	B-635	12"	4.4	24"
6" OCTAVE	1600	B-635	12"	4.4	18"
6" OMNI T2	2000	B-635	12"	5.6	27"
8" OMNI C2	2700	B-636	12"	7.5	30½"
8" OCTAVE	2800	B-636	12"	7.8	20"
8" OMNI T2	3500	B-636	12"	9.8	30½"
8" OMNI C2	2700	B-636	18"	3.4	30½"
8" OCTAVE	2800	B-636	18"	3.6	20"
8" OMNI T2	3500	B-636	18"	4.5	30½"

MATERIALS LIST ⚠

ITEM	DESCRIPTION
①	RESILIENT SEAT GATE VALVE PER APPLICABLE METER BOX DETAIL
②	45° DEG. ELBOW (IF REQUIRED)
③	RISER AND CAP DETAIL PER EMWD B-668
④	METER VAULT PER METER STANDARD DRAWING & EMWD APPROVED MATERIAL LIST
⑤	24" FLANGED SPOOL, SIZE PER APPLICABLE METER DETAIL
⑥	VICTAULIC COUPLING
⑦	FLANGED SPOOL WITH VICTAULIC COUPLING & TEST PORT, SIZE PER APPLICABLE METER DETAIL
⑧	(IP) COUPLING & PLUG (SEE NOTE 16)
⑨	PIPE (SEE NOTE 13)
⑩	90° ELBOW
⑪	4" X 2" COMPANION FLANGE
⑫	METER BYPASS CONNECTION (REFER TO THE APPROPRIATE METER STANDARD DRAWING FOR METER INSTALLATION SPECIFICATIONS)



4" WATER SERVICE CONNECTION 2" METER
NOT TO SCALE

REVISIONS				APPROVALS		
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE	
①	4/6/22	GS	REVISED NOTES, VALVE, MATERIAL AND FLOW RATE TABLE	AGA	4/6/22	

DESIGN	GS	5/15/15
CONSTRUCTION		
INSPECTION	BAM	5/21/15
OPERATIONS	KG	5/21/15
SUBMITTED	AGA	5/15/15

**EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING**

4" & LARGER SERVICE CONNECTION

REFERENCES:	SCALE: NONE
FILE I.D.:	DRAWN BY: GS

RECOMMENDED Joe Monawad 5/18/15
DIRECTOR OF ENGINEERING DATE

APPROVED Charlie Bachmann 5/27/15
ASSISTANT GENERAL MANAGER DATE

B-993

