



- NOTES:** ⚠️ ⚠️
- METER DIMENSIONS MAY VARY. CONTRACTOR SHALL VERIFY METER DIMS & SUPPLY UTILITY BOX WITH SPECIFIED CLEARANCE, WALL THICKNESS PER MANUFACTURER SPECIFICATION.
 - CONCRETE VAULT BASE TO BE INCLUDED WITH VAULT.
 - SPACER ASSEMBLY ("JUMPER") SHALL NOT HAVE THE ABILITY TO CONVEY FLUIDS, SHALL BE AFIXED AND NON - ADJUSTABLE. NO SPOOLS ALLOWED. SPACER ASSEMBLY LENGTH PER METER MANUFACTURER'S SPECIFICATION.
 - DEPTH OF METER SHALL BE 5 FT. MAX. FROM VAULT LID TO TOP OF METER.
 - ALL MATERIALS PER EMWD APPROVED MATERIAL LIST.
 - METER TYPE SHALL BE APPROVED BY DEVELOPMENT SERVICES OR METER SERVICES.
 - PRESSURE TEST PER EMWD SPECIFICATIONS.
 - METER REGISTERS TO BE IN ACRE FEET.
 - SERVICE LATERAL HORIZ & VERT ALIGNMENT MUST MEET DDW SEPARATION REQUIREMENTS. ALL PIPING AND RELATED COMPONENTS SHALL BE IDENTIFIED FOR RECYCLED WATER USE PER DIVISION OF DRINKING WATER REQUIREMENTS AND EMWD SPECIFICATIONS. INSTALL IDENTIFICATION TAPE (CHRISTY'S PART NO. TA-DT-03-PRW) AND LOCATOR WIRE PER EMWD SPECIFICATIONS.
 - METER SHALL BE APPROVED PURPLE OR PAINTED PURPLE WHEN METER IS INSTALLED.
 - READ HOLES ARE TO BE INSTALLED PER B-976.
 - A FLANGED REDUCER SHALL BE INSTALLED AT EACH RSGV TO ACCOMODATE A 4" METER CONNECTION.
 - WHEN A SMALLER METER IS USED, REDUCED PIPE SIZING SHALL BE 3 TIMES THE PIPE DIAMETER IN LENGTH AT A MINIMUM FOR BOTH PRE AND POST METER PIPING.
 - VAULT LIDS TO HAVE 4" TALL BLACK LETTERING PAINTED WITH THE WORDS "EMWD RECYCLED WATER".
 - 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.
 - ALL SERVICE PIPE SHALL BE LAID ON A CONSTANT SLOPE UP FROM THE WATER MAIN TO THE METER. NO DIPS OR POCKETS IN THE LINE WILL BE PERMITTED. 36" COVER SHALL BE MAINTAINED AT GAS MAIN CROSSINGS.
 - TEST PORT (COUPLING & PLUG) SHALL BE 2" (IP).
 - IF VAULT IS PLACED IN DIRT/LANDSCAPE, PLACE TOP 4" ABOVE GRADE AND GRADE AWAY FROM VAULT TO PREVENT WATER FROM ENTERING.
 - PROVIDE A MINIMUM 4" CLEARANCE BETWEEN PIPE AND KNOCKOUT HOLE WITH A MINIMUM OF 6" CLEARANCE ABOVE THE VAULT FLOOR. METER SUPPORT AS REQUIRED. FILL THE ANNULUS SPACE FOR ALL KNOCKOUT OPENINGS IN THE VAULT WALL WITH NON-SHRINK GROUT PER EMWD STANDARD DETAIL PROVISION SECTION 03300.
 - VALVE CAN AND CAP SHALL BE INSTALLED PER B-668.
 - SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS. (SEE FLOW RATE TABLE)
 - 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 VAULT IS SET.
 - 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.
 - NO METER SHALL BE INSTALLED BEFORE FINAL INSPECTION AND CROSS CONNECTION SHUT DOWN TESTS HAVE BEEN PERFORMED AND APPROVED BY EMWD.
 - 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.
 - SERVICES THAT REQUIRE BACKFLOW PROTECTION SHALL BE PER B-968.

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

PLACEMENT OF METER VAULT ⚠️

- PLACE FRONT EDGE OF VAULT 6" BEHIND EXISTING OR PROPOSED 6' OR 8' SIDEWALKS.
- WHEN PROPOSED OR EXISTING SIDEWALK IS 12' WIDE, PLACE FRONT EDGE OF VAULT 1.5' BEHIND CURB USING APPROPRIATE BOX.
- WHEN NO SIDEWALK IS PROPOSED, PLACE FRONT EDGE OF VAULT 6.5' BEHIND CURB.
- WHEN NO CURBS ARE EXISTING OR TO BE INSTALLED UPON COMPLETION OF THE WATER SYSTEM, PLACE BACK EDGE OF VAULT ON PROPERTY LINE.
- WHEN INSTALLED IN CONCRETE (SIDEWALK), USE COVER ASSEMBLY THAT AVOIDS TRIPPING HAZARDS, AND WHICH INCLUDES READING LID.
- A MINIMUM 5' SEPARATION IS TO BE MAINTAINED BETWEEN THE SEWER LATERAL, WATER SERVICE, AND RECYCLED WATER SERVICE.

FLOW RATE TABLE ⚠️ ⚠️

FUTURE METER SIZE	FLOW RATE (GPM)	EMWD STD DWG	LATERAL SIZE	VELOCITY (FT/S)	METER LENGTH
4" OMNI T2	1000	PB-1	6"	10.2	23"
4" OCTAVE	1000	PB-1	6"	10.2	14"
4" OMNI T2	1000	PB-1	8"	5.9	23"
4" OCTAVE	1000	PB-1	8"	5.9	14"

MATERIALS LIST ⚠️ ⚠️

ITEM	QTY	DESCRIPTION
①	1	4" METER WITH AMR COMMUNICATION ENCODER*
②	2	6" OR 8" RESILIENT SEAT GATE VALVE FxF
③	1	4" VICTAULIC COUPLING
④	1	FLGD X VICTAULIC NIPPLE
⑤	1	FLG x VICTAULIC NIPPLE (MIN. LENGTH EQUALS (3) THREE X PIPE DIAM.)
⑥	2	FLGD SPOOL (MIN. LENGTH EQUALS (3) THREE X PIPE DIAM.)
⑦	1	6"x 24" OR 8"x 24" FLANGED SPOOL
⑧	1	BLIND FLANGE (IF REQUIRED)
⑨	LF	6" OR 8" PIPE
⑩	1	UTILITY BOX/VAULT ** SEE NOTE 1 & 26 TORSION SPRING ASSIST. 2-PC LID :
⑪	1	PARKWAY OR TRAFFIC COVER (ALUMINUM). ROADWAY APPLIC. TO MEET AASHTO H-20 DIRECT TRAFFIC RATING.
⑫	2	FLANGED REDUCER (SEE METER SPEC. FOR METER FLANGE SIZE)
⑬	1	(IP) COUPLING AND PLUG (SEE NOTE 17)
⑭	1	LADDER SEE NOTE 23

REVISIONS			APPROVALS		
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE
⚠️	6/3/22	GS	REVISED TITLE BLOCK, FONT, LOGO, METER FLOW RATE, NOTES	AGA	6/3/22
			TABLE, MATERIAL LIST, ADDED REDUCER, PLACEMENT NOTES		
			MATERIAL LIST, REDUCER, REMOVED STRAINER & BYPASS		
⚠️	12/13/16	GS	ADDED FLOW RATE TABLE, 2" BYPASS, UPDATED MATERIAL LIST,	AGA	12/14/16
			NOTES, & REFERENCES		

DESIGN	INITIAL	DATE
DESIGN	CM	5/13/05
CONSTRUCTION		
INSPECTION	CD	5/16/05
OPERATIONS	KG	5/13/05
SUBMITTED	VJB	5/16/05



**EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING**

4" RECYCLED METER INSTALLATION

APPROVED *Charlie Bachmann* 5/16/05
CHIEF ENGINEER DATE

PB-14

REFERENCES:
FILE I.D.:

SCALE: NONE
DRAWN BY: GS