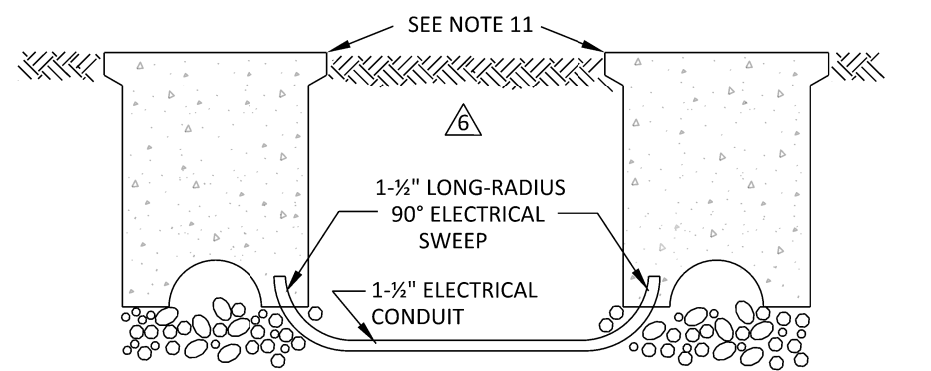


5 FLOW RATE TABLE

METER SIZE	FLOWRATE (GPM)	VELOCITY (ft/s)
3/4" MULTI-JET	20	3.72
1" MULTI-JET	30	5.60
1 1/2" MULTI-JET	75	SEE NOTE 14



GENERAL NOTES

1. ALL PIPE AND FITTINGS BETWEEN AND INCLUDING CORPORATION STOP AND BALL VALVE SHALL:
 - A. BE MADE OF BRASS OR BRONZE;
 - B. BE OF THE BANDED PATTERN;
 - C. BE DESIGNED FOR A MIN OF 175 PSI (COLD) WATER WORKING PRESSURE.
2. PRESSURE TEST PER EMWD SPECIFICATIONS.
3. ALL BARE IRON AND STEEL SHALL BE COATED WITH CEMENT MORTAR PER EMWD SPECIFICATIONS.
4. ALL LISTED MATERIALS TO BE PER EMWD APPROVED MATERIALS LIST.
5. CORPORATION STOP, FITTINGS, AND SERVICE LINE WITHIN 3 FEET OF SADDLE SHALL BE PRIMED & WRAPPED WITH APPROVED COAL-TAR RESIN TAPE.
6. 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 LINE WILL BE PERMITTED. 36" COVER AT GAS MAIN CROSSINGS.
7. THREAD NOTATION SHOWN THUS:
 - IP = IRON PIPE THREAD.
 - CS = CORPORATION STOP (MUELLER).
 - CT = COPPER SERVICE THREAD.
 - PJ = PACKING JOINT.
8. METER BOX SHALL BE EMWD APPROVED COMPLETE WITH TWO-PEICE COVER AND LID PER METER STANDARD DRAWING.
9. VALVE BOX, IF REQUIRED, SHALL BE PER METER STANDARD DRAWING.
10. CONTRACTOR SHALL RETURN AFTER ROAD SHOULDER OR PARKWAY IS COMPLETE TO INSTALL METER BOX, AND SHALL BE RESPONSIBLE FOR COORDINATING WORK OF OTHER CONTRACTORS FOR SAFEGUARDING SERVICES UNTIL METER BOXES ARE SET.
11. INSTALL 1-1/2" PVC SCH. 40 ELECTRICAL CONDUIT BETWEEN ALL METER BOXES THAT ARE LOCATED NEAR PROPERTY LINE WITHIN 10' OF EA. OTHER. TAPE END OF SWEEPS PREVENTING DEBRIS FROM ENTERING CONDUIT. PLACE SWEEPS INSIDE AND AGAINST SIDE OF METER BOX.
12. SYSTEMS WITH ONSITE PUMPS SHALL NOT EXCEED 5 FPS VELOCITY WITHIN THE SERVICE LATERAL. SYSTEMS WITHOUT PUMPS, SHALL NOT EXCEED 10 FPS.
13. FOR A 1 INCH METER INSTALLATION AN 1-1/2" METER FLANGE X FNPT WITH 1" METER TAIL PIECE WILL BE REQUIRED. FOR A 3/4" METER INSTALL A 1" X 3/4" METER BUSHING WILL BE REQUIRED. SEE MANUFACTURER'S SPECIFICATIONS FOR METER INSTALLATION.
14. FOR SINGLE FAMILY RESIDENTIAL UNITS, ENGINEER TO VERIFY THE ADEQUACY OF THE SERVICE LATERAL SIZE TO ALLOW FOR OPERATION OF RESIDENTIAL FIRE SPRINKLER SYSTEM. FOR COMMERCIAL AND INDUSTRIAL APPLICATIONS, SERVICE LATERAL SIZES WILL BE BASED ON VELOCITIES BEING UNDER 10 FT/S.
15. 1-1/2" COPPER SERVICE LATERAL TO BE REDUCED TO 1" COPPER AFTER THE 90° TRANSITION. A 1" METER ANGLE STOP TO BE INSTALL WITH METER REDUCER BUSHING.

PLACEMENT OF METER BOX

- A. PLACE FRONT EDGE OF METER BOX 6" BEHIND EXISTING OR PROPOSED 6' OR 8' SIDEWALKS.
- B. WHEN PROPOSED OR EXISTING SIDEWALK IS 12' WIDE, PLACE FRONT EDGE OF BOX 1.5' BEHIND CURB USING APPROPRIATE BOX.
- C. WHEN NO SIDEWALK IS PROPOSED, PLACE FRONT EDGE OF METER BOX 7.5' BEHIND CURB.
- D. UPON COMPLETION OF WATER SYSTEM, WHEN NO CURBS ARE EXISTING NOR WILL BE INSTALLED, PLACE BACK EDGE OF METER BOX ON PROPERTY LINE.
- E. A MINIMUM 5' SEPARATION IS TO BE BETWEEN SEWER LATERAL AND WATER SERVICE.
- F. WHEN INSTALLED IN CONCRETE (SIDEWALK), SEE METER STANDARD DRAWING FOR METER BOX INSTALLATION SPECIFICATIONS.

REVISIONS				APPROVALS		
NO.	DATE	INITIAL	DESCRIPTION	APP'D	DATE	DATE
1	12/21/16	GS	UPDATED LOGO AND NOTE 1, 6, AND 11	AGA	12/30/16	
6	9/2/14	GS	ADDED ELECTRIC CONDUIT DETAIL, REMOVED CONCRETE INSTALLATION DETAIL, AND REVISED NOTES	AGA	10/30/14	
5	4/1/14	GS	REVISE TITLE SHEET, TITLE, ADDED METER FLOW RATE TABLE AND NOTES F, 8, 9, 11, 12, 13, 14, & 15	AGA	4/9/14	

APPROVALS		
DESIGN	CONSTRUCTION	OPERATIONS



**EASTERN MUNICIPAL WATER DISTRICT
STANDARD DRAWING**

1-1/2" COPPER SERVICE CONNECTION

REFERENCES: ORIGINAL DRAWN 8/68
FILE I.D.: \kauai\eng\std dwgs\B-342A.dgn

SCALE: NONE
DRAWN BY: KER

RECOMMENDED *Joseph D. Van Sickle* 10/20/95
DIRECTOR OF ENGINEERING DATE

APPROVED *G. Novite Ruyge* 10/20/95
CHIEF ENGINEER DATE

B-342A