

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	
No.		

WATERLINE IMPROVEMENTS (Non-BWS Project Waterlines and/or FH Installations/Relocations)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-01-12	2016	9	29

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the HAWAII STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 2005, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS", DATED 2002, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, and all subsequent amendments and additions.

2. The existence and location of underground utilities and structures as shown on the plans are from the latest available data, but are not guaranteed as to their accuracy or the encountering of other obstacles during the course of work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.

3. The Contractor shall be responsible for the protection of all waterlines during construction. The contractor shall especially be careful when excavating behind waterlines, tees, and bends wherever there is a possibility of waterline movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the waterlines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.

4. The Contractor shall notify BWS Capital Projects Division, Construction Section in writing, and submit six (6) sets of approved construction drawings, one week prior to commencing construction activities.

5. Re-approval shall be required if this project is not under construction within a period of two (2) years.

6. Prior to any excavating, the Contractor shall verify in the field, the location of existing waterlines and appurtenances.

7. Any adjustments to the existing water system required during construction, to meet the requirements to the BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.

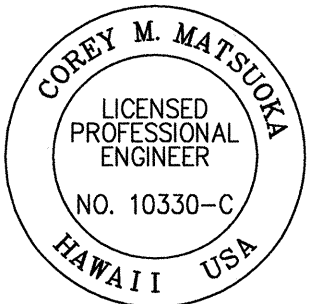
8. All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.

9. Contractor shall cut and plug all existing unused laterals at the main whether or not shown on the plans. The damaged area shall be repaired to an equal or better condition than the immediate area. All work shall be done at the expense of the Contractor.

10. Pipe cushion shall be of high resistivity material. The contractor shall submit a soil certification that high resistant cushion material has a resistivity greater than 5,000 Ohm-cm. Remainder of the backfill material shall be as specified in the Water System Standards. Pipe cushion and backfill material shall contain no hazardous substances above regulatory action levels including but not limited to lead, asbestos, mercury, chromium, cadmium, zinc, strontium, and polychlorinated biphenyls (PCB).

11. Ball corp and ball stop shall be used in lieu of a corporation stop and stopcock, respectively.
12. Install 4 mil thick, non-metallic, blue colored, 6 inches wide warning tape over centerline of the pipe and below the base course along the entire length of trench. Tape should be marked with "Caution Water Line Buried Below".

13. All waterline relocation work shall be done under the inspection of BWS personnel.



THIS WORK WAS PREPARED BY ME  
OR UNDER MY SUPERVISION

*Corey Matsuka*  
SIGNATURE

4/30/16  
EXPIRATION  
DATE OF THE  
LICENSE

APPROVED:	11-9-2015
<i>[Signature]</i>	DATE
MANAGER AND CHIEF ENGINEER, BWS	
(For Work Affecting BWS Facilities in City/State R/W & BWS Easements only)	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
<b>WATER NOTES</b>
<b>FARRINGTON HIGHWAY DRAINAGE IMPROVEMENTS</b>
<b>Vicinity of Princess Kahanu Avenue</b>
<b>Project No. 93A-01-12</b>
Date: Oct. 2015
SHEET No. 1 OF 1 SHEETS