

WATER NOTES

1. *Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 1994, 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. *All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply.*
3. *The Contractor shall notify BWS Capital Projects Division, Construction Section in writing one week prior to commencing work on the water system.*
4. *The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the 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.*
5. *Re-approval shall be required if this project is not under construction within a period of two (2) years.*
6. *The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method.*
7. *Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.*

MANAGER AND CHIEF ENGINEER, BWS

DATE _____

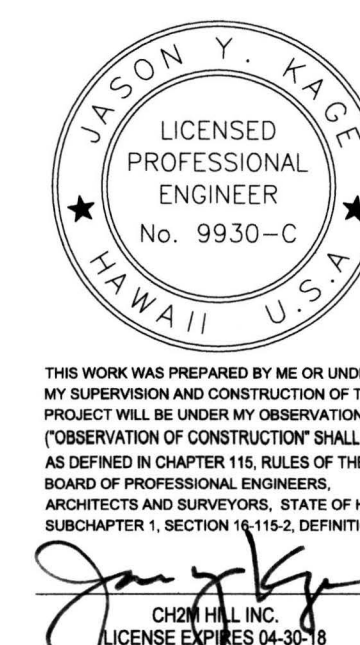
HECO NOTES

1. *The Contractor shall call the Hawaii One Call Center at 866-423-7287 for field verification of HECO's underground lines a minimum of 5 working days prior to excavation.*
2. *The Contractor is responsible for properly supporting and protecting the 138kV cable pipes and FTB ductbank at all times.*
3. *A HECO stand-by inspector must be on-site anytime the excavation is within 10 feet of the outside face of the FTB enclosure surrounding the 138kV cable pipes. The cost of such inspection will be charged to the Contractor and upfront payment will be required prior to scheduling. To coordinate this stand-by inspector, please contact HECO's Underground Supervisor at 543-5837, at least two (2) months prior to excavation.*
4. *A HECO stand-by inspector for excavation near 46kV ductlines with FTB is not required but can be requested. The cost of such inspection will be charged to the Contractor and upfront payment will be required prior to scheduling. To coordinate this stand-by inspector, please contact HECO's Underground Supervisor at 543-5837, at least two (2) months prior to excavation.*
5. *Once the Contractor reaches the FTB surrounding the 138kV cable pipes, the Contractor shall use only hand tools to further excavate and remove the FTB.*
6. *The Contractor shall take great care when excavating the FTB nearing the 138kV cable pipes to prevent damage to the protective coating on the cable pipes. Only HECO personnel are to handle these cable pipes and erect temporary gaurds to protect these cable pipes from damage. The cost of HECO's assistance in providing proper support and protection of its underground lines will be charged to the Contractor. The Contractor shall exercise due care and precautions to avoid disturbing any energized cables and temporary guards and shall work cautiously at all times to avoid accidents.*
7. *The Contractor shall be responsible for any damages to HECO's facilities and all costs associated with the damage and repair as a result of his operations. Repair work shall be done by HECO or by the Contractor under HECO's supervision.*
8. *If the coating on the 138kV pipes is damaged in any way, it is imperative that the HECO stand-by inspector on-site be notified as soon as possible such that the coating may be repaired before backfilling. Even a nick or pinhole puncture in the protective coating can jeopardize the integrity and reliable operation of the underground cable system.*
9. *The 138kV and/or 46kV lines will remain energized at all times. However, in the event that the lines are damaged, depending on the extent of the damage, the line may be instantaneously de-energized as a result of sophisticated relay protection equipment operating, or it may need to be manually de-energized by following a system operational protocol.*

- MANAGER AND CHIEF ENGINEER, HECO

DATE

ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTE BOOK	DRAWN BY _____
	DESIGNED BY _____
	QUANTITIES BY _____
	CHECKED BY _____
N. _____	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

BWS AND HECO NOTES

VINEYARD BOULEVARD

TRAFFIC SIGNALS AT RIVER STREET

PROJECT NO. 98A-01-15

Scale: N/A Date: June, 2017

SHEET No. 22 OF 34 SHEETS