





WATER CONSTRUCTION NOTES CONT'D:

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-23(001)	2021	8	109

20. All water valves that will be abandoned in place shall be placed in the "Closed" position. Remove top section of valve box and concrete settlement slab. Fill remainder of valve box with concrete. Place backfill and repair pavement section to applicable State or County standards. Backfill to finish grade in road shoulder area.

21. The Contractor shall obtain all applicable Department of Health permits prior to the start of construction. Permits include, but are not limited to, National Pollution Discharge Elimination System (NPDES) permits for storm water, hydrostatic test, dewatering, and for construction activities, including clearing, grading, and excavation, that result in the disturbance of equal to or greater than one (1) acre of total land area.

The Contractor shall be responsible for the proper disposal of storm water discharges and effluent associated with construction activities including hydrotesting and disinfection operations, to safeguard public health and safety in accordance with applicable Department of Health requirements. All permits and licenses for storm water and construction water disposal, including all application, charges, fees, and taxes, are the responsibility of the Contractor.

22. The Contractor is responsible for dewatering trench as necessary where groundwater is encountered. All associated costs for dewatering shall be borne by the Contractor.

23. The use of known sewer pump trucks is prohibited for DOW projects for any use, including but not limited to dewatering and testing of new facilities.

24. The Contractor shall verify outside diameter of all existing asbestos-cement (AC) waterlines to be connected. Contractor shall verify use of proper gaskets prior to connection. AC pipe and gasket information shall be submitted to Engineer for approval.

25. All removal, disposal and connection work that involves asbestos pipe/material shall be done in the presence of or by a licensed Asbestos Contractor.

The licensed Asbestos Contractor shall submit their plan for all associated removal, disposal and connection work for the project to DOW for review and approval prior to conducting the work.

26. All connections to existing AC pipe shall be at the nearest ac pipe joint. AC pipe shall be removed by entire length(s) to facilitate the connection. Cutting of AC pipe is prohibited.

27. The Contractor shall follow all applicable OSHA, HIOSH and Federal regulations in handling and disposal of asbestos-cement pipe. Disposal of the pipe shall be at an approved asbestos material disposal site.

28. All waterworks brass fittings shall be in compliance with the Amended Section 1417 of Safe Drinking Water Act (SDWA) which takes effect on January 4, 2014. the Amendment includes a change to the definition of "Lead-Free" by reducing lead content from 8% to a weighted average of not more than 0.25% in the wetted surface material. All waterworks brass fittings installed for potable water service on January 4, 2014 and beyond shall conform to the amended definition of "Lead-Free".

As indicated in Section 211 of Water System Standards - Brass Products, all brass fittings shall conform to NSF Standard 61 and Section 1417 of the Safe Drinking Water Act (SDWA), in addition, all brass fittings shall conform to NSF Standard 372.

29. Contractor shall install water facilities only after reaching final subgrade or higher. The Department of Water will not allow installation of any water facilities until the final subgrade layer at minimum has been achieved.

30. Prior to installation of new water lines and /or facilities, the Contractor shall have all facilities surveyed and staked out by a licensed Surveyor and the Contractor shall expose, verify, and backfill all existing underground utilities and structures in close proximity to crossings and connections prior to excavation of pipeline trench. Ccontractor shall provide the licensed Surveyor cut sheet and the probing information to the DOW Construction Engineer for review and approval before moving forward with installation via the submittal review process.

31. The Department shall be provided twenty (20) working days for all submittal reviews from the time of submission by the Contractor.

32. Unless otherwise specified, all ductile iron pipes, valves, and fittings, shall be encased in one layer of 8 mil minimum thickness polyethylene material in accordance with ANSI A-21.5 and AWWA C105. The Polyethylene Encasement Film shall be manufactured from Virgin Polyethylene and shall consist of three layers of co-extruded linear low density polyethylene (LLDPE), fused into a single thickness of not less than 8 mils. The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of an antimicrobial to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion. Polyethylene material shall have permanent markings per AWWA C105.

Copper service laterals shall be encased with polyethylene wrap from the connection to the water main to the angle ball valve located in the water meter box.

33. All Design Consultant and Construction Contractor staffing will be required to utilize the Department of Water's construction management software/platform, if any, during construction management of the project.

34. Any existing water manholes and valve boxes wihin project limits shall be adjusted to match new finish grade, whether shown on these drawings or not.

Existing cast iron frame and cover shall be carefully removed, cleaned, and painted with approved asphaltum paint prior to installation. The Contractor shall replace any frame and cover damaged during removal. Frames and covers and valve boxes to be adjusted shall match new finish grade.

35. Contractor shall install hydrant markers for all existing hydrants where road will be resurfaced.


36. Thermoplastic roadway striping shall be cut around water manhole and water valve covers to allow easy use for access.

SPECIAL NOTES TO DEVELOPER:

Certification of completion for these water systems facilities will not be issued until:

- All water improvements are complete and dedicated to the Department of Water.
- As-built tracings are submitted to the Department of Water.
- Final cost breakdown for the water improvements are submitted and approved by the Department of Water. The Developer shall certify costs.
- Roadway and pipeline easements are conveyed to the Department of Water, if applicable.
- Payment of all applicable fees for the development have been received by the Department of Water.
- Other required conditions are completed, if applicable.

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