

FED. ROAD DIST. NO.

STATE

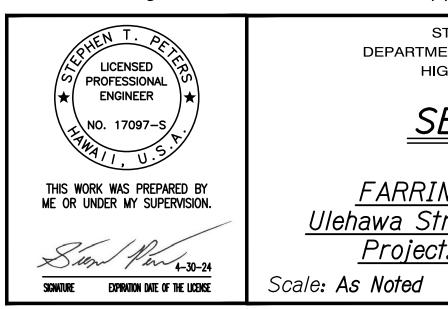
PROJ. NO.

STRUCTURAL GENERAL NOTES

- Elastomeric bearing pads shall have a shore A durometer hardness of 60±5 in accordance with ASTM D2240 and a minimum tensile strength of 2,500 psi in accordance with ASTM D412.
- Defective concrete repair mortar shall be a pre-blended, pre-bagged, shrinkage compensated, polymer-modified material capable of developing 4,500 psi in 24-hrs and 9,000 psi in 28-days such as FasTrac V/O Mortar by Western Material ♥ Design or approved equal.
- An amine carboxylate water-based migrating corrosion inhibitor, such as Cortec MCI Mini-Grenades or approved equal, shall be added to the repair mortar mix. The dosage requirements shall be one mini-grenade per bag of repair mortar.
- Corrosion inhibitor/bonding agent used to join fresh repair mortar to existing concrete girders shall be a three-component, pre-proportioned, anti-corrosion, water-based, epoxy-modified portland cement bonding agent such as Sika Armatec-110 EpoCem.
- Coat any exposed reinforcing steel in existing concrete diaphragm with a rust primer such as Cortec CorrVerter MCI or approved equal.

- 6. Structural Steel Shapes and Plates shall conform to ASTM A36 and shall be hot-dip zinc galvanized in accordance with ASTM A123 after fabrication.
- 7. Welding shall be performed by certified welders in accordance with either AWS D1.1 or AWS D1.5.
- 8. All welds shall be made in the shop and shall be in accordance with ASTM A233, E-70 series electrodes for matching filler metal to base metal strength.
- 9. Threaded Rods shall be in accordance with ASTM F1554 Grade 55. Nuts shall be ASTM A563 DH heavy-hex. Hardened washers shall be in accordance with ASTM F436. All hardware shall be hot-dip zinc galvanized in accordance with ASTM A153
- 10. During application and curing of repair mortar, live vehicular traffic shall not be allowed directly above the girder being repaired. Allow repair mortar to cure for a minimum of 3 hours prior to allowing traffic to resume. See Civil Plans for traffic control plan.

- 11. Prior to drilling any holes, the surface of the girder shall be scanned using an appropriate ground penetrating radar (GPR) rebar scanner to check the locations of all stirrups and prestressing strands. Adjust location of threaded rods as needed within 3" tolerance to avoid damaging existing reinforcing steel.
- 12. All holes for threaded rods shall be drilled 1" OD. Core Drilling will only be allowed if written procedures for GPR scanning and coring operation are submitted to the Engineer for review and approval.



HIGHWAYS DIVISION

SECTIONS

FARRINGTON HIGHWAY Ulehawa Stream Bridge Repairs Project. No. 93A-01-23M Date: Mar. 2023

SHEET No. S3.2 OF 2 SHEETS

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