110.01 Scope of Work. The work shall consist of furnishing all labor, necessary equipment, materials and traffic control, to repair pavement and apply surface treatments at various locations as requested. All work shall be performed in a professional manner in accordance

"SECTION 110 – INSTALLATION OF PAVEMENT PRESERVATION STRATEGIES

AND SURFACE TREATMENTS AT VARIOUS LOCATIONS

pavement structure. All work shall be performed in a professional manner in accordance with current practices and this document. All asphalt and asphalt concrete base debris shall be removed daily at all locations. See <u>Subsection 110.03</u> – Area of Coverage.

The Contractor shall work as directed by the Highways Division's Kauai District Engineer.

The Department agrees to provide at least two weeks of pavement repair work for each request.

The Contractor shall possess an "A" General Engineering Contractor's license, or "C-3" Asphalt Paving and Surfacing Contractor's license, or "C-3a" Asphalt Concrete Patching, Sealing, and Striping Contractor's license for the full term of the contract, and shall have possessed the license prior to the award of the contract. Failure to meet this requirement shall be cause for disqualification.

Pavement repair shall consist of one of the following:

- 1. 1-1/2" Asphalt Pavement Overlay. Resurface pavement with new 1-1/2 inches Hot Mix Asphalt (HMA) Pavement, Mix No. IV.
- 2. 1-1/2" Cold Planing and Resurfacing with Asphalt Pavement. Cold plane damaged or deteriorated pavement areas at a depth of one and one half (1-1/2) inches and resurface with new 1-1/2 inches HMA Pavement, Mix No. IV. The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

3. 2" Cold Planing and Resurfacing with Asphalt Pavement. Cold-plane damaged or deteriorated pavement areas at a depth of two (2) inches and resurface with new 2 inches HMA Pavement, Mix No. IV or Polymer Modified Asphalt (PMA). The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new

resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

4. 3" Cold Planing and Resurfacing with Asphalt Pavement. Cold-plane damaged or deteriorated pavement areas at a depth of three (3) inches and resurface with new 3 inches HMA Pavement, Mix No. IV. The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

5. 4" Cold Planing and Resurfacing with Asphalt Pavement. Cold-plane damaged or deteriorated pavement areas at a depth of four (4) inches and resurface with new 4 inches HMA Pavement, Mix No. IV. The minimum width of the cold planed area shall be nine (9) feet wide to include both vehicle wheel ruts in the reconstructed area. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Schedule the work so that the areas are resurfaced before the completion of the day's work.

6. Reconstruction of Weakened Pavement Areas. Excavate to the depth shown in the Typical Reconstruction Section (Figure 1), backfill the excavated weakened pavement areas with Hot Mix Asphalt Base Course. The new resurfaced finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.

Prior to placement of the asphalt base course, the exposed subbase or subgrade shall be recompacted to a dense and unyielding condition.

Schedule the work so that the excavated areas are backfilled before the completion of the day's work.

7. Scarify Existing Pavement. Scarify pavement as directed. The intention of this work is to enhance skid resistance on the highway. Scarifying shall be parallel to the direction of traffic flow, shall be accomplished with a cold planer, and at an amplitude not to exceed one-quarter inch (1/4") or as directed by the

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Engineer. The pavement shall be scarified as a width of 10 feet or as directed by the Engineer on the travel way only, and all existing pavement markings shall be preserved (in other words, scarify between the yellow and white stripes and markings only). A seal coat of emulsified asphalt, diluted with water at a ratio of 1:1, shall be applied to the scarified areas.

- Cut Cores in Existing Pavement. Cut four-inch (4") diameter sample 8. cores to the full depth of the existing pavement. The intention of this work is to determine the condition of the underlying pavement structure and base. The number of cores and the location of the sampling shall be as directed. The core holes shall be filled with hot mix AC of the type used in the paving of the section being repaired.
- Leveling of Existing Pavement. Install HMA Concrete Pavement to level dips, sags, and depressions as directed by the Engineer. The new leveled surface finish grade shall be the existing road grade. Pavement surface that varies more than 3/16 inch from testing edge of straightedge between two contacts exceeds surface tolerance.
- 10. Slurry Seal. See Section 404 – Slurry Seal.
- 11. Crack Seal. See Section 408 - Crack Seal.

If the existing pavement marking is required to be removed during pavement repair or other work done under this contract, the Contractor shall install temporary pavement markings until new pavement markings may be installed. This work shall be considered incidental to the appropriate pavement repairs.

Contract Period and Option to Extend. The period of the contract shall 110.02 be for 12 months commencing from the Start Work Date indicated from the Department. There is an option to extend for 2 additional 12 month periods, without re-bidding, upon mutual agreement in writing prior to the contract expiration date, provided the initial bid price remains the same. The maximum contract period is 36 months.

Failure by the Contractor to execute the amendment to extend the contract within the number of days specified under Section 103.07 - Failure to Execute Contract may be cause for cancellation of the written agreement to extend the contract and may be subject to disqualification from bidding future projects for a two-year period in accordance with Section 102.12 - Disqualification of Bidders.

110.03 Area of Coverage. The project requires the Contractor to repair pavement at various locations on the Island of Kauai. Work shall be on the routes as shown on the attached map of the island of Kauai (Figure 2). Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets. Pavement repairs may extend into these areas.

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140	The areas are:
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142	(A) Area 1 (Hanalei Bridge to End of Route 560)
143	ROUTE 560, Kuhio Highway
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145	(B) Area 2 (Hanalei Bridge to Kapaa Stream Bridge)
146	ROUTE 56, Kuhio Highway
147	ROUTE 560, Kuhio Highway
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149	(C) Area 3 (Kapaa Stream Bridge to Huleia Stream Bridge)
150	ROUTE 50, Kaumualii Highway
151	ROUTE 51, Kapule Highway
152	ROUTE 56, Kuhio Highway
153	ROUTE 58, Nawiliwili Road
154	ROUTE 570, Ahukini Road
155	ROUTE 580, Kuamoo Road
156	ROUTE 583, Maalo Road
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158	(D) Area 4 (Huliea Stream Bridge to End of Route 50)
159	ROUTE 50, Kaumualii Highway
160	ROUTE 540, Halewili Road
161	ROUTE 541, Waialo Road
162	ROUTE 550, Waimea Canyon Drive
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164	The Control of the state of the
165	110.04 Safety and Convenience. The Contractor shall at all time
166	work to assure the least possible obstruction to public traffic.

110.04 Safety and Convenience. The Contractor shall at all times conduct his work to assure the least possible obstruction to public traffic. The Safety and convenience of the general public and the protection of persons and property is of utmost importance, and the Contractor shall provide appropriate traffic control and safety measures. The Contractor and his employees shall treat members of the public in a fair and polite manner. Workers shall present a professional appearance and conduct themselves in a professional manner at all times.

All Traffic Control and safety measures shall be done in Conformance with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways" adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition. Costs for traffic control shall include set-up and removal of all signs, cones, delineators, barricades, flag persons, police officers, arrow boards, etc., and shall be included in the contract price of the various contract items in Section 401 – Hot Mix Asphalt Pavement. See Section 645 – Work Zone Traffic Control.

Do not close traffic lanes or slow down traffic during the following peak hours (unless otherwise approved by the Engineer):

6:00 A.M. to 8:30 A.M. 3:00 P.M. to 6:00 P.M.

Above peak hours are daily except Saturdays, Sundays and holidays.

Night work shall be done from 9:00 P.M. to 5:00 A.M. of the following day. No night work is permitted from September 15 to December 15.

 The Contractor must notify all private property owners in the vicinity where pavement repair is performed in the event that the work may hinder access to their property. The Contractor must also secure permission prior to entering private property to do pavement repair, if any.

The Contractor shall remove debris daily and shall leave the work site in a condition equal to or cleaner than prior to commencing work. The Contractor shall be responsible for all hauling and lawful disposal of debris. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.05 Hours of Operation. The Contractor shall be available to provide the specified services during normal working hours and complete the services within the period specified in the work order or as directed by the Engineer. Normal working days and hours for the project are defined as Monday through Friday, 8:30 A.M. to 3:00 P.M., except for State holidays. Refer to Section 645 – Work Zone Traffic Control. Authorized Highways personnel will contact the Contractor to schedule work, as needed. All services requested after normal work hours may be charged in accordance with Subsection 107.04 – Overtime and Night Work.

110.06 Disposal of Debris. The Contractor shall be responsible for all hauling and dump fees and shall include the cost of these items in his bid. Any unauthorized or illegal disposal is grounds for termination of the contract.

110.07 Work Orders. The Engineer or his representative will prepare a work order (Figure 3) for each pavement work. The work order shall be like the attached form. Within 48 hours of receiving a work order, the Contractor shall submit a proposed work schedule that demonstrates that work will begin within 2 weeks and be completed by the date indicated on the work order. The work order shall also include a construction time schedule. At certain work sites, erosion control plans or BMP plans will be requested by the Engineer. Submit the signed work order, proposed schedule and BMP plans for approval to the Highways Division District Office, District Engineer, 1720 Haleukana Street, Lihue, Hawaii 96766. Work shall not be performed unless the Contractor receives an approval from the Engineer. The Engineer or his representative shall authorize any increases in total price.

110.08 Basis of Payment. Pavement repairs will be made through purchase orders placed with the Contractor during the contract period for which payment will be based on the quantities placed and the unit bid prices in the proposal schedule which

232 233	prices shall include payment for all materials, equipment, tools, labor, and incidentals necessary to complete the pavement repairs.
234 235 236	The Contractor shall submit monthly invoices to the Kauai District Office, District Engineer, 1720 Haleukana Street, Lihue, Hawaii 96766, if services are rendered. (See
237 238	Subsection 109.08 - Progress Payments).
239 240	The contract unit prices shall be full compensation for furnishing all labor, materials (as listed in <u>Section 104 SCOPE</u> <u>OF WORK</u>), tools, equipment, trucks, traffic
241 242	control, applicable taxes and incidentals to complete the work."
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245	END OF SECTION 110