Make this Section a part of the Standard Specifications: **PM shall review and modify as required**

**“SECTION 110 – INSTALLATION OF ENHANCED PAVEMENT MARKING AND NEW MILLED RUMBLE STRIP AT VARIOUS LOCATIONS**

**110.01 Scope of Work.** The work shall consist of furnishing all labor, necessary equipment, materials and traffic control to install pavement markings and milled rumble strips on the Island of Oahu as requested. Pavement marking installation involves removing existing pavement marking, laying out and installing new pavement striping, crosswalk markings, pavement arrows, pavement words, delineators, and pavement markers. Milled rumble strip installation involves the installation of milled rumble strip along the centerline of the road. All work shall be performed within the existing pavement structure. All work shall be performed in a professional manner in accordance with current practices and this document. All pavement markings and rumble strip debris shall be removed daily at all locations. See Subsection 110.03 - Area of Coverage.

The Contractor shall work as directed by the Highways Division’s Oahu District Engineer. The Contractor, as per Subsection 110.04 - Safety and Convenience, shall provide traffic control and its cost shall be inclusive of pavement marking and milled rumble strip work cost.

The Contractor shall install pavement marking and milled rumble strip as requested by the Department during the term of the contract. The Department agrees to provide at least two weeks of pavement marking and/or milled rumble strip 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. Failure to meet this requirement shall be cause of disqualification.

**110.02 Contract Period and Option to Extend.** The period of the contract shall be for 12 months commencing from the Start Work Date from the Department. There is an option to extend for 4 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 60 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 2-year period in accordance with Section 102.12 - Disqualification of Bidders.

To compensate for escalation during the maximum contract period the Department will adjust the Unit Prices of all items on the Proposal Schedule by 2% on the start date of an extension period. The price adjustment shall not be applied to contract change orders issued within the current contract year or work orders that have already been issued to the contractor.

**110.03 Area of Coverage.** The project requires the Contractor to install pavement markings and milled rumble strip at various locations on the Island of Oahu. Work shall be along the corresponding routes as shown on the attached map of the Island of Oahu (Figure 1). Note: There are numerous side streets with or without route numbers along State highways where State Jurisdiction extends various distances into side streets. The four areas are:

1. **Area 1:**

Route 64, Sand Island Access Road/ Sand Island Parkway

Nimitz Highway (92) to Coast Guard Station Gate

Route 7310, Puuloa Road

Nimitz Highway (92) to Salt Lake Blvd

\*Route H-1, Waiawa Interchange to Kahauiki Interchange

Pearl City/ Waipahu to Middle Street

Route H201, Moanalua Freeway

Moanalua Freeway Overpass (Structure over H-1) to Kahauiki Interchange

1. **Area 2:**

Route 93, Farrington Highway

Palailai Interchange to Kaena Point State Park

Route 750, Kunia Road

Interstate Route H-1 to Lyman Road

1. **Area 3:**

Route 80, Kamehameha Highway

Wilikina Drive (99) to Kamananui Road (99)

Route 83, Joseph P. Leong Highway

Kamehameha Highway (99) to Haukoi Place

1. **Area 4:**

Route 63, Likelike Highway

Valley View Drive to Intersection of Kahekili Hwy (83) & Likelike Hwy (83)

Route 72, Kalanianaole Highway

Waimanalo Junction to Hanauma Bay

\*Route H-1, Middle Street (7415) to Ainakoa Avenue

\*Note: Night work is required. Refer to Section 110.04 – Safety and Convenience

**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 pavement marking proposal price. 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):

Morning Peak Hours 6:00 A.M. to 8:30 A.M.

Afternoon Peak Hours 3:00 P.M. to 6:00 P.M.

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

Morning Peak Hours from 6:00 A.M. to 9:00 A.M. shall be observed for Likelike Highway.

Night work is required for Interstate Route H-1, Palailai Interchange to Ainakoa Avenue. The night work hours are from 10:00 P.M. to 4:30 A.M.

The Contractor must notify all private property owners in the vicinity where pavement marking or milled rumble strip installation are 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 marking or milled rumble strip work, 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 2) for each pavement marking or milled rumble strip installation. 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. 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, 727 Kakoi Street, Honolulu, Hawaii 96819. 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 marking and milled rumble strip installation 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 prices shall include payment for all materials, equipment, tools, labor, and incidentals necessary to complete the pavement marking and milled rumble strip work.

The Contractor shall submit monthly invoices to the Oahu District Office, 727 Kakoi Street, Honolulu, Hawaii 96819, if services are rendered. (See Subsection 109.08 - Progress Payments).

The contract unit prices shall be full compensation for furnishing all labor, materials (as listed in Section 104 SCOPE OF WORK), tools, equipment, trucks, traffic control, applicable taxes and incidentals to complete the work.”

**END OF SECTION 110**