

General Notes - Revised October, 2021

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED BOOK	DRAWN BY	X
	DESIGNED BY	
	CHECKED BY	
	IN CHARGE BY	
	NO.	Glugin

GENERAL NOTES

1.

The scope of work for this project consists of removing substandard guardrail end treatments to be replaced with hardware that meets current safety standards, curb and median construction, and removal of concrete barrier ramp downs.
2.

The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Non-compliance with this Subsection may be grounds for rejection of bid.
3.

The Contractor's attention is directed to the following Sections: Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; and Section 645 - Work Zone Traffic Control.
4.

At the end of each day's work, the Contractor shall remove all equipment and other obstructions to permit free and safe passage of public traffic. Contractor shall protect existing barrier ends after each working day and be considered incidental to various contract items.
5.

The existence and location of underground utilities, manholes, monuments and structures as shown on the plans are from the latest available data, but the accuracy is not guaranteed. The encountering of other obstacles during the course of work is possible. The Contractor shall tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.
6.

The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
7.

The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.
8.

Existing drainage system shall be functional at all times during construction. The Contractor shall furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to any culvert work or the various contract items and will not be paid for separately.
9.

Contractor to restore all landscaped areas damaged according to Section 641, Hydro-Mulch Seeding.
10.

The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to bulk of work or the various contract items and will not be paid for separately.
11.

Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their respective bid items
12.

All saw cutting work shall be considered incidental to the various contract items.
13.

The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
14.

When installing guardrail posts within 3' from the waterline, the post shall be hand placed and not driven. The holes shall be backfilled and compressible material, ASTM C33 Coarse Aggregate, Size no. 57. This work shall be considered incidental to Guardrail items and shall not be paid for seperately.

15.

The Contractor shall provide and maintain a temporary pedestrian safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved with at least an inch of Asphalt Concrete Pavement, Mix No V or steel and/or wood planks and shall be American With Disabilities Act (ADA) compliant [This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant.]. This work shall be incidental to curb ramps, or sidewalk, or the various contract items and will not be paid for separately.
16.

The Contractor shall preserve all existing striping by locating them with survey nails at the begin and end of each type of striping, including 50' intervals along curves and 100' intervals along tangents. The location of the installed survey nails shall be within 0.5 inch of where the existing striping was located. Striping includes but is not limited to the following: centerline, lane lines, stop bars, yield lines, crosswalks, medians, words, and arrows. This work shall be incidental to the various contract items.
17.

Drilling of holes shall be considered incidental to Various Guardrail Items and will not be paid for separately
18.

Any unfinished shoulder widening, metal railings, guardrails, and median drainage work shall not be left unshielded at the end of the work day. Refer to State Standard Plans for more information. The contractor shall develop a Traffic Control Plan to include all necessary Traffic Control Devices and shall be approved by the Engineer. All work mentioned above including furnishing, installing, and maintaining traffic controll devices shall be considered incidental to Contract Item No. 645.0100 - Traffic Control and shall not be paid for separately.
19.

The exact location and limits of guardrail improvements shall be determined in the field by the Engineer.
20.

The Contractor shall verify the exact locations of any underground utilities within the project limits prior to installing guardrail posts. The Contractor shall adjust new guardrail posts wihtin manufacturer's specifications to account for the actual locations of underground utilities. Probing foor utilities and adjusting new guardrail posts shall be considered incidental to various items of work. The Contractor shall be held liable for any damages incurred to existing facilities and/or improvements as a result oof his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at the Contractor's expense.
21.

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Asphalt concrete around guardrails shall be considered incidental to Guardrail Items and will not be paid for separately.
22.

Refer to State Standard Plans - Irrigation Details and Notes for information on the relocation of exisitng sprinklers.

NATIONAL HISTORIC PRESERVATION ACT SECTION 106 NOTES

1.

This project has been determined to have no potential to cause effects to historic properties. Therefore, the Contractor shall ensure the following:

a.

No part of this project shall penetrate below the subbase course of the roadway or disturb any subgrade soils.

i.

In the event a pothole is found that is deeper than subgrade, repairs must be made without disturbing the soil. Use of geotextile fabric is encouraged. Make a note of the repairs and the GPS location so that recurring potholes may be addressed in a future project.

b.

No signposts in this project require new ground disturbance. Any signpost replacements shall be done in their existing locations.

c.

Guardrail repairs shall be done within the existing right-of-way, shall not disturb previously undisturbed soils, and shall not penetrate below the sub-base course of the roadway.

d.

Vegetation maintenance shall be limited to activities that do not penetrate the sub-base course of the roadway, or roadway shoulders.

e.

No part of this project, including staging, shall occur outside of the existing right-of-way, unless it is on a paved surface.

f.

Staging areas must be within existing asphalt paving or previously graded areas.

g.

Bridgework shall be limited to repaving activities.

h.

Site 50-10-12-30924, located near mile post 9.95, is a modified depression of unknown function constructed during the historic period that lies outside of the APE of this project. Contractor shall not stage near the site.

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In the event of any conflict between this section and any other sections, plans, and or specifications of the project, this section shall prevail.

ENDANGERED SPECIES ACT SECTION 7 NOTES

1. Hawaiian Seabirds

- To avoid or minimize effects to Hawaiian seabirds, the following conservation measures shall be incorporated into each project where applicable:
- a.

Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary.
- b.

Install automatic motion sensor switches and timer controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- c.

Avoid nighttime construction during the seabird fledging period, September 15 to December 15 on all islands. If nighttime work cannot be avoided during that time, this PIC cannot be used, and a separate consultation is needed.
- d.

Where fences extend above vegetation, integrate durable scare tape or bird deterrent into the fence to increase visibility and minimize fence strikes.
- e.

For power lines and other cables, minimize exposure above vegetation height and vertical profile.
- If the project includes a tower or antennae, then the following conservation measures shall be incorporated into each project:
- f.

The profile of the tower shall be as small as possible, minimizing the extent of the tower that protrudes above the surrounding vegetation layer, use of guy-wires shall be avoided.
- g.

If the top of the tower must be lit to comply with Federal Aviation Administration regulations, use a flashing red light versus a steady-beam red or white light.
- h.

If possible, co-locate with existing towers or facilities.

2. Hawaiian Hoary Bat

- To avoid or minimize effects to the Hawaiian Hoary Bat the following conservation measures shall be incorporated into each project where applicable:
- a.

No barbed wire shall be used for fencing.
- b.

No woody plants taller than 15 feet will be trimmed, removed, or disturbed during the Hawaiian hoary bat birthing and pup rearing season (June 1 to September 15).

3. Blackburn's Sphinx Moth

- To avoid or minimize effects to the Blackburn's Sphinx Moth the following conservation measures shall be incorporated into each project where applicable:
- a.

A biologist familiar with the species shall survey areas of proposed activities for Blackburn's sphinx moth and its larval host plants prior to project initiation.
- b.

Surveys shall be conducted during the wettest portion of the year (November 1 to April 30, or several weeks after a significant rain) and within 4 to 6 weeks prior to construction.
- c.

Surveys shall include searches for eggs, larvae, and signs of larval feeding (chewed stems, frass, or leaf damage).
- d.

If the Blackburn's sphinx moth or the native aiea or tree tobacco over 3 feet tall are found during the survey, a separate consultation is needed, and this PIC shall not be used.

<div>1</div>	1/10/24	Revised note.
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
GENERAL NOTES AND LEGEND		
GUARDRAIL AND SHOULDER IMPROVEMENTS		
At Various Locations, Phase 3, Oahu		
Federal-Aid Project No. STP-0300(187)		
Scale: NONE	Date: DECEMBER, 2023	
SHEET No. 1 OF 2 SHEETS		

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NOTED BOOK	DRAWN BY	• X
NO. 61429	DESIGNED BY	• • • • •
	CHECKED BY	

ENDANGERED SPECIES ACT SECTION 7 NOTES (Cont.)

If no Blackburn's sphinx moth, aiea, or tree tobacco are found during pre-construction surveys, it is imperative that measures be taken to avoid attraction of Blackburn's sphinx moth to the project location and prohibit tree tobacco from entering the site. Tree tobacco can grow greater than 3 feet tall in approximately 6 weeks. If it grows over 3 feet, the plants may become a host plant for Blackburn's sphinx moth. We therefore recommend that you:

- e. Remove any tree tobacco less than 3 feet tall.
- f. Monitor the site every 4-6 weeks for new tree tobacco growth before, during and after the proposed ground-disturbing activity.
- g. Monitoring for tree tobacco can be completed by any staff, information on different life stages of tree tobacco shall be provided to monitor.

4. Hawaiian Stilt

To avoid or minimize potential effects to the Hawaiian stilt, the following conservation measures shall be incorporated into each project where applicable (within or adjacent to aquatic environments):

- a. In areas where waterbirds are known to be present, post and implement reduced speed limits, and inform project personnel and contractors about the presence of endangered species on-site or nearby.
- b. If water resources are located within or adjacent to the project site, incorporate the applicable best management practices (BMPs) regarding work in aquatic environments into the project design (see below).

If a nest or active brood is found:

- d. Contact the Service within 24 hours for further guidance.
- e. Establish and maintain a 100-foot buffer around all active nests or broods until the chicks have fledged. Do not conduct potentially disruptive activities or habitat alteration within this buffer.

5. National Marine Fisheries Service, Essential Fish Habitat BMPs

To avoid or minimize impacts to fish and wildlife resources, the following conservation measures shall be incorporated into each project where work may affect aquatic environments:

- a. Concrete wastes, solid wastes, and any sanitary/septic wastes shall be located away from the site and managed to ensure no contamination will reach critical habitats.
- b. All vehicles and equipment cleaning, maintenance, and refueling shall be located away from the site and managed to ensure no contamination will reach critical habitats.
- c. The chosen contractor shall be required to obtain a National Pollution Discharge Elimination System permit for storm water discharge from the construction site, and shall be required to follow BMPs to control stormwater discharge.
- d. Hawaii Department of Transportation Standard Specifications for Road and Bridge Construction Section 209 Temporary Water Pollution, Dust, and Erosion Control shall be followed.
- e. The use of barriers and regular watering shall be used to minimize runoff and air quality impacts
- f. Constant vigilance shall be kept for the presence of ESA-listed marine species (sea turtles and Hawaiian monk seals) during all aspects of the action.
- g. A responsible party (i.e., permittee/site manager/project supervisor) shall designate a competent observer to search/monitor work sites and the areas adjacent to the authorized work area for ESA-listed marine species.
- h. Work shall be postponed or halted when ESA-listed marine species are within 50 yards.
- i. A pollution and erosion control plan for the project site and adjacent areas must be prepared and carried out. As a minimum, this plan shall include:
 - i. Proper installation and maintenance of silt fences/curtains, sausages, equipment diapers, or drip pans.
 - ii. A contingency plan to control and clean spilled petroleum products and other toxic materials.

- iii. Appropriate materials to contain and clean potential spills shall be stored at the work site, and be readily available.
- iv. All project-related materials and equipment placed in the water shall be free of pollutants.
- v. Daily pre-work inspections of heavy equipment for cleanliness and leaks, with all heavy equipment operations postponed or halted until leaks are repaired and equipment is cleaned.
- vi. Fueling of project-related vehicles and equipment shall take place at least 50 feet away from the water and within a containment area, preferably over an impervious surface.
- j. BMPs shall be implemented in accordance with An Intergrated Storm Water Management Approach and a Summary of Clear Water Diversion adn Isolation Best Management Practices for Use in the State of Hawaii, by the Federal Highway Administration and Hawaii Department of Transportation Practitioners Guide (2016) or the Construction Best Management Practices Field Manual by the State of Hawaii Department of Transportation (2008).

6. General Conservation Measures

To avoid or minimize potential effects to listed species, the following conservation measures shall be incorporated into each project where applicable:

- a. Avoid placing equipment and machinery, staging materials waiting for installation, or waste material waiting for disposal in streambeds.
- b. Develop a plan for managing equipment, materials, and job site conditions in the event of approaching foul weather (e.g., tropical storms and hurricanes) Equipments and materials may need to be removed from the project site or adequately secured. Stormwater runoff and erosion may require heightened management during storm events.

HAWAII ONE CALL CENTER

- 1. Before conducting any excavation in the public right of way or on private property, call the Hawaii One Call Center at least five (5) working days before planning to dig. Be sure to give them the address and location of the newarest cross street(s) where digging is planned.

Call 811 toll-free 24 hours a day.
For more information, go to www.callbeforeyoudig.org

- 2. The Hawaii One Call Center will contact all utility companies to tone, mark or identify the location of their underground utilities for free. Mark the area where the Contractor plans to excavate in white and lable all of the other utilities as listed below.

- RED Electric power lines, cables, or conduits, and lighting cables.
- YELLOW Gas, oil, steam, petroleum or other hazardous liquid or gaseous materials.
- ORANGE Communications, cable TV, alarm or signal lines, cables, or conduits.
- BLUE Water, irrigation, and slurry lines.
- GREEN Sewers, storm sewer facilities or other drain lines.
- WHITE Proposed excavation.
- PINK Temporary survey markings.
- PURPLE Reclaimed water, irrigation and slurry lines.

- 3. In accordance with Hawaii State Law Section 269E-7, the Hawaii One Call Center (HOCC) shall provide an inquiry identification number and utility marks shall remain valid for not more than twenty-eight (28) calendar days from the date of issuance and after that date shall require the Contractor to submit a new request for HOCC revalidation. The Contractor shall provide all inquiry identification numbers for each location request to the Engineer.

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LEGEND

- Portland Cement Concrete Pavement and Curb
- Removal of Existing
- Hydro-Seeding
- Existing Electrical Line
- New Electrical Line
- Existing Power Pole
- Existing Electric Manhole
- Adjusted Elec. MH Frame/Cover
- Existing Electric Pullbox
- Existing Telephone Manhole
- Adjusted Tele. MH Frame/Cover
- Existing Telephone Pullbox
- Existing 12" Water Line
- Existing Water Manhole
- Adjusted Water MH Frame/Cover
- New Water Manhole
- Existing Water Air Valve
- Adjusted Water Air Valve
- Existing Water Valve Box
- Adjusted Water Valve Box
- Existing Water Meter
- Adjusted Water Meter
- New Type "X" Water Meter Box
- Existing Traffic Sign
- New Traffic Sign
- Existing Fire Hydrant
- Existing Metal Guardrail
- New Metal Guardrail
- Adjusted and/or Relocated Metal Guardrail
- Existing Sewer Line
- New 12" Sewer Line
- Existing Sewer Manhole
- Adjusted Sewer MH Frame/Cover
- New Sewer Manhole
- Existing Monument
- Adjusted Monument
- New Monument
- Existing 24" Drain Line
- Existing Storm Drain Manhole
- Adjusted Storm Drain MH Frame/Cover
- Existing Grated Drop Inlet
- New Grated Drop Inlet
- Adjusted/Reconstructed Drain Inlet or Replaced Steel Grate

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

GUARDRAIL AND SHOULDER IMPROVEMENTS

At Various Locations, Phase 3, Oahu
Federal-Aid Project No. STP-0300(187)

Scale: NONE Date: DECEMBER, 2023

SHEET No. 2 OF 2 SHEETS