

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-098-(1011)	2012	ADD. 3	64

- The scope of work for this project consists of cold planing, resurfacing, reconstructing weakened pavement areas, replacing existing damaged curb, gutter, and sidewalk, installing new concrete bus pads, installing loop detectors and traffic signal head back plates, adjusting utility manholes and pullboxes, pavement markings and striping, extension of left turn lanes, and landscaping.
- 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.
- The Contractor's attention is directed to the following Sections of the Special Provisions: Subsection 104.09 Maintenance of Traffic; Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; and Section 645 - Work Zone Traffic Control.
- 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.
- 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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State.
- The Contractor shall verify the presence of existing aerial and underground utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocation as necessary. All cost associated with the temporary relocations shall be borne by the Contractor.
- The exact locations and limits of areas to be reconstructed and cold planed shall be determined in the field by the Engineer.
- The Contractor shall notify in writing, the Oahu Transit Services Inc. Roads Supervision Office, 811 Middle Street, Honolulu, Hawaii 96819 (ph. no. 848-4571), seven (7) days prior to any paving operations, informing them of location, scope of work, and closure of Vineyard Boulevard and/or traffic lanes and dates of closure.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
- The Contractor shall obtain all necessary permits prior to start of work at his own cost.
- The Contractor shall submit maintenance plans and schedules, including traffic detours, road or lane closures, lane switches, and the placement of temporary traffic control devices, to the Engineer for acceptance prior to Construction.
- The Contractor shall schedule construction to begin at Olomea Street/Halona Street so as to avoid conflict with the construction of other planned projects within the vicinity. The Contractor shall coordinate with the Contractors of those projects as listed in Subsection 108.01 - Notice to Proceed.
- The Contractor shall remove and dispose of all existing raised pavement markers and traffic tapes prior to the overlaying of Asphalt Concrete. This work shall be considered incidental to HMA Pavement, Mix No. IV and will not be paid for separately.
- All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete, Mix No. IV prior to resurfacing. This work will be paid for under HMA Pavement, Mix No. IV.
- Smooth riding connections shall be constructed at all limits of project, including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer.
- Existing drainage system shall be kept 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 the various contract items and will not be paid for separately.
- The Contractor shall provide and maintain for access to and from all existing driveways, sidewalks and ADA access routes complying with ADAAG Section 403, and side streets and cross streets at all times. This work shall be considered incidental to the various contract items and will not be paid for separately.
- All saw cutting will not be measured or paid for separately, but shall be incidental to the various contract items.
- Contractor shall dispose or deliver any removed material at no cost to the State.
- Prior to his resurfacing operations, the Contractor shall be responsible for locating, preserving and marking all utility and highway facilities that will require adjustments to the new finished pavement grade. Additionally, the Contractor shall submit to the Engineer a list of all items, including water, drainage, sewer, electrical, telephone, and cable utilities to be adjusted to the new finished grade. This work shall be considered incidental to the various contract items.
- After completion of resurfacing, the Contractor and the Engineer will test for, and determine ponding areas (i.e. low spots within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas. Corrective measures shall be approved by the Engineer.
- No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designated in writing and approved by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the State Highways Right-of-Way Branch at telephone no. 692-7332.
- Tack coat shall be incidental to the various Asphalt Concrete Pavement items.
- The Contractor is to take special measures to reduce dust from cold planing operations including but not limited to use of water misters on cold planing equipment and vacuum sweepers. Use of power brooms to sweep road is not allowed if a dust nuisance is created.
- All work specified in the Contract but not listed separately in the proposal schedule shall be considered incidental to other various contract items and shall not be paid for separately.
- Existing concrete sidewalk shall be saw cut at scorelines prior to reconstructing the sidewalk. Actual location of the scoreline shall be determined in the field. Saw cutting shall be considered incidental to reconstructing the sidewalk. The exact locations and limits of concrete sidewalk to be reconstructed shall be determined in the field by the Engineer. Demolition and disposal of existing sidewalk shall be considered incidental to new sidewalk.
- Demolition and disposal of existing curb and gutter, driveways, and any debris shall be considered incidental to the various contract items.
- The Contractor might encounter Portland Cement Concrete Pavement when cold planing over left turn lanes. If P.C.C. pavement is encountered, the Contractor shall cold plane to the top of the P.C.C. pavement and put back the same A.C. thickness. Any additional costs shall be considered incidental to the various contract items.
- The Contractor shall replace damaged detectable warnings and install new detectable warnings at curb ramps as shown on the plans and/or as directed by the Engineer. This work will be paid for under Item No. 650.1000.
- Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.
- The Contractor shall be held liable for any damages incurred to the existing landscaping as a result of his operations.
- All utilities on sidewalk shall be adjusted to the new finished sidewalk grade. This work shall be considered incidental to new sidewalk.
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 33. The Contractor shall be responsible for all survey monuments (Highway, City and County and Survey Office Brass Disks) in the project site. Any survey monuments that will be disturbed or destroyed during construction shall notify Highways Surveyor immediately and provide a minimum of 30 days to have the survey monument referenced. If lane closure is needed, the Contractor shall provide the surveyor a safe zone to work on the road.
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 34. HECO's existing 138kV lines run from Liliha Street to Miller Street on the mauka side and from Miller Street onto Lusitana Street on the makai side. HECO's existing Transmission Splice Vaults (TSV) are located at approximately @ Sta. 105+75± and @ Sta. 109+25±. Approximate depth from top of existing pavement for TSV ranges from 2.68 feet to 3.47 feet.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	

<div>△</div>	2/25/13	Added General Note No. 34.
<div>△</div>	1/10/13	Added General Note No. 33.
DATE	REVISION	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES AND LEGEND	
VINEYARD BOULEVARD RESURFACING	
Vicinity of Palama St. to End of H-1 On-and-off Ramp	
Federal Aid Project No. STP-098-(1011)	
Date: November, 2012	
SHEET No. 1 OF 2 SHEETS	

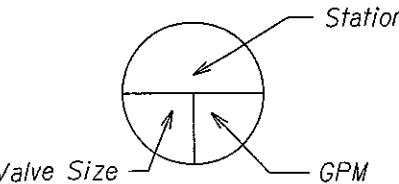
IRRIGATION NOTES:

1. Contractor shall install controllers, lines, wires, valves and heads per specifications. Existing gate valves, point of connection, etc. are derived from the best available information and on-site inspection. The Contractor shall verify those points of connection noted and report any discrepancies to the Engineer.
2. This plan is diagrammatic. Irrigation system is subject to field adjustments due to unanticipated site conditions. Locate all mainlines, laterals, valves and sprinkler heads within planting areas, unless otherwise noted. Place mainline in planting areas where no sleeves are shown. Avoid any conflict between underground utilities, structures and plantings. The Contractor shall be responsible for locating and protecting all existing utilities.
3. This irrigation system was designed with a minimum static water pressure of 75 psi at the point of connection. Notify the Project Engineer if water pressure is less than 50 psi or greater than 100 psi.
4. Contractor shall secure all necessary permits and observe all local codes and regulations. The Contractor shall confirm all site's dimensions and conditions, and report any discrepancies to the Engineer.
5. Contractor shall coordinate the installation of all sleeves, conduits, mainlines and laterals under pavement and through walls. Contractor shall assure that these items are laid prior to placement of pavement or wall structures.
6. Locate and install all sprinkler heads 6" from sidewalks, curbs, driveways, building and wall unless otherwise noted. Adjust all sprinkler heads and flow control for maximum coverage and minimum overthrow and misting. Operate only one valve at a time per controller.
7. Within 30 days after award of the contract, submit for the Engineer's acceptance six (6) copies of detailed scaled drawings and wiring diagrams for permanent. No proposed deviations from the contract. Include samples of materials, if required by contract.
8. Perform hydrostatic test by applying continuous static pressure of 60 psi for one (1) hour. Notify the Engineer at least three (3) days in advance of test. Repair leaks that develop and repeat test. Do not backfill until there is no further sign of leakage.
9. Perform operability test by opening remote control valve and test circuits for leaks around barbed and threaded PVC fittings. Repair leaks and repeat tests. Notify the Engineer at least three (3) days in advance of test. Do not backfill until there is no further sign of leakage.
10. Perform coverage test. Before planting period, run automatic controller through all its cycles. Check watering for coverage and uniformity in company of the Engineer. Run system until there are puddles or there is sheet flow to determine initial irrigation time and number of cycles per week needed to water requirements of plants.
11. If plans do not specify depth of excavation, provide minimum cover to finish grade as follows:
- a. 18 inches for irrigation main.
 - b. 10 inches for irrigation lateral.
 - c. for controller wires and conduits in unpaved areas, depth equal to that of pressure irrigation pipe.
12. All valve boxes shall be plastic rectangular valve boxes with plastic cover.
13. Contractor at final acceptance to program all controllers with 3 programs for maximum water conservation - Dry Season Program, Wet Season Program, and Transition Season Program.
14. The new trees should be watered with water bag system.

IRRIGATION SCHEDULE:

SYMBOL	QUANTITY	DESCRIPTION	P.S.I.	RADIUS	G.P.M.
	152	Rainbird 6" Pop-Up 1806-SAM-PRS-UI0H	30	10'	0.82
	14	Rainbird 6" Pop-Up 1812-SAM-PRS-5H-B	50	5'	1.0
	143	Rainbird 6" Pop-Up 1806-SAM-PRS-UI2H	30	12'	1.30
	54	Rainbird 12" Pop-Up 1812SAM-PRS-U8H	30	8'	0.52
	3	Rainbird 100-GB-PRS-D w/actuator and plastic adapter (1")			
	3	Rainbird 125-GB-PRS-D w/actuator and plastic adapter (1 1/4")			
	1	Rainbird 150-GB-PRS-D w/actuator and plastic adapter (1 1/2")			
	3	Rainbird 200-GB-PRS-D w/actuator and plastic adapter (2")			
	3	Rainbird 44-RC 1" quick coupler valve w/Leemco Stabilizer LS-120. Provide a minimum of one per median island			
	3	2" Reduced pressure principle backflow preventer Wilkins model 975XL-2 with Wilkins model 600 pressure reducing valve on downpipe in security enclosure Strongbox SBBC-45SS			
	3	2" U.S. Bronze Nibco T-113-2" Gate Valve			
	3	DIG LEIT 4 Station Solar Controller Model 4004 in Stainless Steel Security Enclosure ENC 4000 with Rain Sensor Hunter Model Miniclik in Stainless Steel Security Enclosure with Sensor Kit Skit8821. Controller on Mounting Column MCOL4000.			
		Main Line PVC Irrigation Type			
		Lateral Line PVC Irrigation Pipe			

LEGEND:



<div>3</div>	2/25/13	Revised Irrigation Note No. 12.
<div>2</div>	1/29/13	Revised Irrigation Note No. 12.
DATE	REVISION	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION		
<u>IRRIGATION DETAILS & NOTES</u>		
<u>VINEYARD BOULEVARD RESURFACING</u> <u>Vicinity of Palama Street to End of H-1 On-and-off Ramp</u> <u>Federal-Aid Project No. STP-098-K(011)</u>		
Not to Scale		Date: November, 2012
SHEET No. 1 OF 8 SHEETS		