

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-099-1(24)	2007	3	74

- The scope of work for this project consists of pavement reconstruction, resurfacing, cold planing, reconstruction of existing curb, gutter and sidewalk, upgrading guardrails, end post connection, end treatments and bridge railings, drainage improvements, removing and installing signs, loop detectors, and pavement markings and striping.
- The Contractor is reminded of the requirements of Subsection 108.01 - Subcontracting, which requires him to perform work amounting 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 bids.
- The Contractor's attention is directed to the following Sections: Subsection 104.04 - Maintenance of Traffic, Subsection 107.13 - Public Convenience and Safety, Subsection 107.21 - Contractor's Responsibilities for Utility Property and Services, and Section 645 - 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.
- When excavating in close proximity to walls, fences and other improvements, the Contractor shall protect, support, secure and take all precautions to prevent damaging these facilities and improvements.
- The location and existence of underground utilities, manholes, monuments, and other structures as shown on the plans are from the latest available data but the accuracy is not guarantee. The encountering of other obstacles during the course of work is possible. The Contractor shall make an independent check on the ground by probing and/or checking with the various utility companies and government agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating and cold planing in the area. Whenever connections of new utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavating for new lines. 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 the Contractor's expense.
- 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 costs associated with the temporary relocation shall be borne by the Contractor.
- The Contractor shall notify in writing, the Oahu Transit Services, Inc. Roads Supervision Office, 811 Middle St., Hon., HI 96819 (ph. #848-4571) seven (7) days prior to any paving operations.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- 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 Asphalt Concrete 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 Pavement, Mix No. IV prior to resurfacing. This work shall be considered incidental to Asphalt Concrete Pavement, Mix No. IV and will not be paid for separately.
- Smooth riding connections shall be constructed at all limits of resurfacing and reconstruction, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or as directed by the Engineer.

- Dressing of shoulder and sidewalk shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved adjacent areas with suitable material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to the various contract items.
- Existing drainage system shall be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. This work shall be considered incidental to various contract items.
- Earth swale shall be graded to drain. This work shall be considered incidental to the various contract items.
- The contractor shall provide for access to and from all existing side streets and driveways at all times.
- All saw cutting work shall be considered incidental to Asphalt Concrete Pavement Mix No. IV.
- 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.
- 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 dust nuisance is created.
- 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 exact location and limits of guardrail improvements shall be determined in the field by the Engineer.
- Removal and disposal of any debris shall be considered incidental to the respective bid items. The Contractor shall clean and remove any accumulation of aggregate along roadside within 10 feet of the edge of pavement. This work shall be considered incidental to the various contract items and will not be paid for separately.
- Cut grass in project area once at the beginning of the project and once at the end of the project. This work shall be considered incidental to the various contract items and will not be paid for separately. Any additional grass cutting shall be done on a force account basis under the respective contract items.
- Contractor shall verify all dimensions and details shown in the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer.

- After construction is completed, Contractor shall restore ground disturbed as a result of the project to a condition of equal or better than existing before such damage or injury was done.
- 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.

PUBLIC HEALTH, SAFETY, AND CONVENIENCE:

- The Contractor shall observe and comply with all federal, state and local laws required for the protection of public health and safety and environmental quality.
- The Contractor at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in conformance with the Air Pollution Standards and Regulations of the State Department of Health. The City shall require supplementary measures as necessary.
- Contractor shall provide, install and maintain all necessary signs, lights, flares barricades, markers, cones, and other protective facilities and shall take all necessary precautions for the protection, convenience, and safety of the public.

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
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QUANTITIES BY	
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ORIGINAL PLAN	
NOTE BOOK	
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GENERAL NOTES AND LEGEND
KAMEHAMEHA HIGHWAY REHABILITATION
Waihau Street to H-2 Interchange
Federal Aid Project No. NH-099-1(24)
Date: June, 2006
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-099-1(24)	2007	4	74

PAVING AROUND MANHOLES:




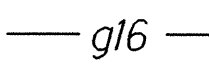
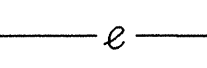
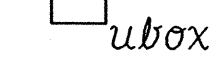
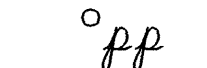
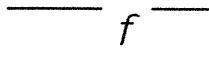
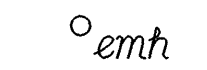
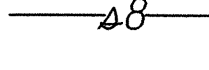

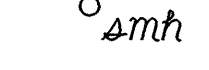
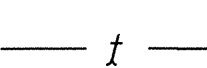
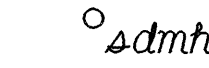
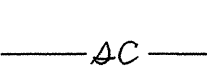
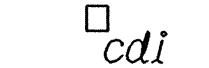
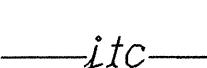



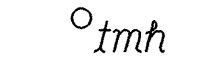

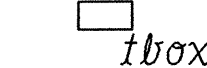
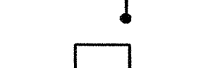
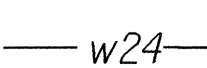

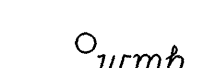
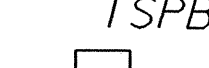

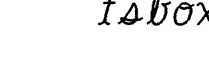
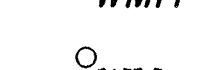
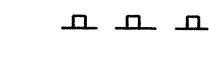
1. The Contractor shall first lower manholes more than 2½" prior to cold planing. The work shall be considered incidental to the various paving contract items. Upon final paving, the manhole shall be raised and paid under various contract items pertaining to manhole adjustments.
2. The Contractor shall place hot asphalt concrete around manholes and compact properly with a vibrating plate compactor.
3. If a plate compactor is not used, the Contractor shall use a pneumatic roller to roll the area around the manhole which is not rolled by the steel roller.
4. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

SIGNAL CORPS LINE NOTES:

1. Remove and demolish existing Signal Corps Line from I.B. # Sta. 27+50±, Rt. to I.B. # Sta. 33+50±, Rt. and replace with New 2 Way 4-Inch PVC Schedule 40 Conduits. Removal and demolishing of existing Signal Corps Line shall be considered incidental to new conduits.
2. Provide 3' minimum coverage for New Signal Corps Conduit.
3. The Backfill for the Conduits shall be free of any rocks, and asphalt. The Contractor shall compact the backfill after 6 inches of fill and again after the next 6 inches of fill and then again at 12 inches increments.
4. Conduit shall enter at the lowest opening of the Signal Corps Manhole. The Contractor shall terminate the conduit in the Signal Corps Manhole with bell shape and shall be flushed with the wall. The Contractor shall grout any gaps to prevent leakage.
5. Mandrel test is required after conduits are installed and before cable is run. Mandrel to be used shall be 3¾ inch by 12 inch and be tested bi-directionally.
6. All cables shall be 200 pair 19 ga OSP cable with gel filling and splices shall be made by a qualified telecommunications technician.
7. The Contractor shall notify Selders, Walter L CIV USA NETCOM 30 SIG BN at 656-8066 before a mandrel test is performed.
8. Schedule 40 Conduits shall meet NEMA standard TC-2.
9. Where bends are required, The Contractor shall use manufactured bends whenever possible. Bends made manually shall not reduce the internal diameter of the conduit.
10. The Right of Entry to relocate the signal corps line behind the fence has been obtained by the State. The Contractor shall access through Kawamura Gate and turn onto Lauhala Road to install the New Signal Corps Conduit. The Contractor shall obtain an installation access pass through the vehicle registration section.
11. The Contractor shall erect a "safety" fence between the work area and the family housing area to the rear of the project area.
12. The Contractor shall restrict their access to the installation to that of the project area (entering and departing the gate).

13. The Contractor is permitted to leave the material in the project area and park their vehicles in the park and ride area located across from the National Guard Armory when installing New Signal Corps Line.
14. 4' x 6'-6" Signal Corps Manhole is a reinforced manhole with Traffic Rated Cast Iron Frame and Cover similar to GTE Standard "GTE-466 Manhole" except with "USA Signal Corps" inscribed on cover. Provide security bolts (2 Each) with matching socket.
15. A slope of .125 inch per foot should be extended from the middle of span to each Signal Corps manhole where conduit extends between the Signal Corps Manhole.

LEGEND

	Existing P.C.C.		SCMH New Signal Corps Manhole
	Resurfacing Limits		Existing Gas Line
	Existing Electrical Line		Existing Utility Box
	Existing Power Pole		Existing Fuel Line
	Existing Electric Manhole		Existing Sewer Line
	Existing Electric Box		Existing Sewer Manhole
	Existing Telephone Line		Existing Storm Drain Manhole
	Existing Signal Corps Line		Existing Concrete Drainage Inlet
	Existing Joint Telephone/Signal Corps		Existing Catch Basin
	Existing Telephone Manhole		Existing Highway Lighting Standard
	Existing Telephone Box		New Highway Lighting Standard
	Existing Water Line		Existing Traffic Signal Pullbox
	Existing Water Manhole		Adjusted Traffic Signal Pullbox
	Adjusted Water MH Frame/Cover		Existing Traffic Signal Pullbox
	Existing Water Valve		Existing Guardrails & Posts
	Adjusted Water Valve Frame/Cover		New Guardrails & Posts

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
QUANTITIES BY	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

KAMEHAMEHA HIGHWAY REHABILITATION
Waihau Street to H-2 Interchange
Federal Aid Project No. NH-099-1(24)

Date: April, 2006

SHEET No. 2 OF 2 SHEETS