

ORIGINAL PLAN	DATE	SURVEY PLANNED BY	_____
		DESIGNED BY	_____
		NOTED BY	_____
		CHECKED BY	_____
NOTE BOOK HIMP-GN		DESIGNED BY	_____
		NOTED BY	_____
		CHECKED BY	_____

GENERAL NOTES:

- The scope of work includes restoration of eroded shoulder; construction and repair of drainage facilities such as concrete ditch, swales and GRP; rebuilding CRM walls; pavement reconstruction; restoration of guardrail, reflectors, signs and pavement markings; water pollution control; and all incidental work. Cost of the incidental work, if not specified in the proposal, shall be considered incidental to various contract items.
- The Contractor's attention is directed to Subsection 107.13 - Public Convenience and Safety: Section 645 - Traffic Control and Subsection 104.04 Maintenance of Traffic.
- 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.
- The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
- Dressing shoulder, shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders 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. Shoulder areas without guardrails shall be dressed at 6:1 slope (max.) unless shown on plans or directed by the Engineer. All dressing materials shall be free of all rocks.
- The contractor shall provide for safe access to and from all existing driveways and streets at all times.
- All saw cutting and/or cold planing of existing pavement shall not be measured or paid for separately, but shall be considered incidental to various contract items.
- Smooth riding connections shall be constructed at all pavement connections as shown on the plans and/or as directed by the Engineer.
- All construction work along the roadway shall be done between the hours of 8:30 am to 3:30 pm unless approved otherwise by the Engineer. Construction work must be clear from roadway by 3:30 pm. Contractor shall submit traffic control plan to the Engineer.
- During non-working hours no construction equipment shall be parked within the road right-of-way in such a manner that the equipment will obstruct the normal movement and sight distance of the driving motorist.
- Except during actual working hours, all signs which do not pertain to the construction activity, such as "MEN WORKING" and "FLAGMEN AHEAD" shall be covered or laid down. However, all signs necessary for the safety of the public shall be maintained.
- The contractor shall make his own arrangements for, and pay for all temporary utilities required for his work.
- When trench or structure excavation is adjacent to or under existing structures or facilities, the contractor shall be responsible for properly sheeting and bracing the excavation and stabilizing the existing ground to render it safe and secure from possible slides, cave-ins and settlements, and properly support existing structures and facilities with beams, struts or underpinning to fully protect it from damage.

- Demolishing, removing, and disposing portions of existing structures shall not be paid for separately, but shall be considered incidental to the various Contract Items unless otherwise shown on the proposals.
- Concrete shall be 3000 psi @ 28 days unless otherwise noted.
- Unless otherwise noted in the proposal, excavation and providing backfill materials for the new structures (walls, concrete lined ditch, etc.) will not be paid for but shall be considered incidental to various Contract Items.

CONTRACTOR'S RESPONSIBILITY FOR UTILITY LINES, PIPES AND SERVICES:

- The Contractor shall contact the owners of the various utilities (electrical, telephone, water, etc.) prior to construction to obtain from them any information pertaining to existing utilities that will either supplement the information shown on the plans or will correct any such information that may be in error.
- Existing utility structures (manholes, valve boxes, etc.) whether shown or not on the plans shall be adjusted to match the new finish grades. Unless otherwise specified in the proposal, the cost shall be considered incidental to the various items of work.
- In the event the utilities are damaged or disturbed by the Contractor, the Contractor shall be held liable for the damages or disturbed utilities and be responsible for the repair thereof.

SOLID WASTE CONSTRUCTION NOTES:

- Unless otherwise specified, the Contractor is responsible for the proper handling, storage and/or disposal of all waste generated by the construction including grubbing and excess excavated material. Any material brought to the County landfills will be subjected to the instituted tipping fee system, with no exceptions or exemptions. See Water Pollution and Erosion Control Notes.

DRAINAGE NOTES:

- Existing drainage system will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various Contract Items.
- The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
- Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. Where indicated on Plans, the approximate diameter of drilled holes for installation of dowels shall be 5/8", and voids after installing dowels shall be filled with epoxy grout as directed by the Engineer.

PERMANENT EROSION CONTROL MEASURES:

- The Contractor shall grass all exposed areas as indicated in the plans that have been constructed to final grades within a period of 15 calendar days. Any cost for permanent erosion control measure will be borne by the Contractor unless otherwise noted in the proposals.
- The exact location and limits or areas to be provided with permanent soil erosion matting shall be determined in the field by the Engineer.

WATER SYSTEM:

- The Contractor shall notify Hotel Hana-Maui, in writing, one week prior to commencement of work.
- All materials used and methods of adjusting and lowering of existing water lines shall be in accordance with the Plumbing Code.
- The exact depth and location of existing waterlines are not known. It shall be the Contractor's responsibility to locate same prior to construction. The cost of lowering, relocating or adjusting existing waterlines shall be considered incidental to the cost of the various contract items, unless noted otherwise, and will not be paid for separately.
- The Contractor shall be responsible for maintaining water service to consumers at all times. If water service disruption is necessary, the Contractor shall coordinate all disruptions of service with the users.
- Any items to be removed and salvaged shall be taken to Hotel Hana-Maui at Contractor's expense, unless otherwise directed by the Engineer.
- The Contractor shall be responsible for restoration of all existing improvement disturbed or damaged during construction to the satisfaction of the State Department of Transportation.

PUBLIC HEALTH, SAFETY & 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 State may require supplementary measures as necessary.
- The Contractor shall be responsible for the cleaning and removal of all silt and debris generated by his work and deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways. The Contractor agrees to reimburse the State for all costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the Contractor.
- The Contractor shall obtain a Community Noise Permit from the State Department of Health prior to any construction activities.

NOTES ON BRIDGE LOADING:

The Contractor shall verify load limitations of existing bridges on Hana Highway with the Highways Division's Maui District Office prior to bidding. Load Capacities of existing bridges shall not be exceeded during delivery of construction materials and equipment.

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	ER-12(5)	2001	9	26

LEGEND:

	Pavement Reconstruction Area
RCP	Reinforced Concrete Pipe
eac	Edge A. C. Pavement
p	Existing Traffic Sign With 1 Post
CRM	Cement Rubble Masonry
RCBC	Reinforce Concrete Box Culvert
GRP	Grouted Rubble Paving
- - - - -	Existing Metal Guardrail
- ■ - ■ -	New Single Strong Post W-Beam Metal Guardrail
- x - - - x -	Existing Fence
	RM-2 Reflector
	New CRM Wall
- ● - ● -	New Fence



THIS WORK WAS PREPARED BY ME  
OR UNDER MY DIRECT SUPERVISION  
*Kirk T. Tanaka* 02/13/01  
R. T. TANAKA ENGINEERS, INC.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

HANA HIGHWAY  
EMERGENCY FEDERAL-AID PROJECT  
ROADWAY REPAIRS  
AT VARIOUS LOCATIONS  
FED. AID PROJ. NO. ER-12(5)

SCALE: AS NOTED

DATE: FEBRUARY 2001

SHEET No. 1 OF 1 SHEET