

GENERAL NOTES:

- The Contractor shall maintain one travel lane in each direction along Hana Highway during all phases of construction.
- The Contractor shall furnish and install portable concrete barrier sections prior to performing any excavations, and as shown on the plans. Upon completion of the project, the concrete barriers shall become the property of the State. The Contractor shall be responsible for delivering the barriers to the Highways Division, Maui District baseyard, located at 650 Palapala Drive, Kahului, Maui. The Contractor shall coordinate delivery of the barriers with the Engineer.
- The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company.
- 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 the 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's attention is directed to Subsection 106.05 – Storage of Materials, Subsection 107.13 – Public Convenience and Safety, 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.
- The Contractor shall notify the State in writing, two (2) weeks prior to starting paving operations.
- Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, connection approaches as shown on the plans and/or as directed by the Engineer.
- The Contractor shall provide for access to and from all existing driveways and streets at all times.
- Prime coat/Tack coat shall be incidental to Item No. 401.0300 – Asphalt Concrete Pavement, Mix No. III.
- Contractor's attention is directed to Section 401.03 of the Special Provisions. All longitudinal and transverse tapers within the traveled way shall be removed prior to commencing and continuing of paving operations.
- The Contractor shall be held liable for any damages incurred to the remaining existing trees as a result of his operations.
- After the project is completed, the Contractor shall restore grades and groundcover in the Construction Parcel to a condition equal or better than existing before such damage or injury was done.
- No construction parcels outside of the State R.O.W. have been provided for this project. The Contractor shall conduct his operations within the specified project limits, or shall make his own arrangements for obtaining construction parcels or additional access from property owners, including obtaining required permits, at his own discretion. The Contractor shall be solely responsible for any costs and/or time delays to the project associated with his attempts to obtain construction parcels or additional access.

GENERAL NOTES FOR TRAFFIC CONTROL PLAN:

- The permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., To fit field conditions.
- Cones or delineators shall be extended to a point where they are visible to approaching traffic.
- Traffic control devices shall be installed such that the sign or device farthest from the work area is placed first. The others shall then be placed progressively toward the work area.
- Regulatory and warning signs within the construction zone that are in conflict with the traffic control plans shall be removed or covered. All signs shall be restored upon completion of work.
- Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
- When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the traffic control plan(s).
- All traffic control lanes shall be a minimum of 10 feet wide.
- All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
- The backs of all signs used for traffic control plan appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
- As soon as each day's work is completed, the permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area shall be replaced with temporary or permanent markings before opening the roadway to public traffic each day.
- Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
- Cones and delineators shall be spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
- Permittee shall control traffic going in and out of driveway(s).
- Buffer and taper areas on approach to any work area shall be kept clear of vehicles and equipment.
- A high level warning device (flag tree) shall be installed on approach to all work areas.
- Provide a minimum 4' clear pedestrian walkway at all times.
- "No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area.
- Lane(s) shall be closed only to the extent of accomplishing each day's work.

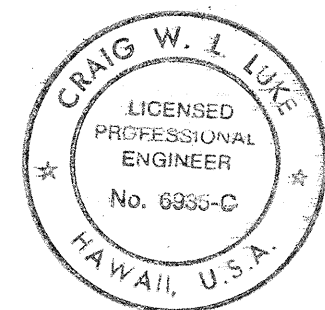
ABBREVIATION LIST

AC	ASPHALTIC CONCRETE		
BL	BASELINE		
BV	BOTTOM VERTICAL		
BVC	BEGIN VERTICAL CURVE		
CL	CENTER LINE		
C	CHORD LENGTH	S	SLOPE
CIG	CHANGE IN GRADE	SHT.	SHEET
CLR.	CLEARANCE	SLB	STREET LIGHT BOX
CONC.	CONCRETE	ST.	STREET
CONN.	CONNECTION	STA.	STATION
D.L.	DRAIN LINE	STD.	STANDARD
D24	24" DRAIN LINE	STRUCT.	STRUCTURAL
DIA.	DIAMETER	T	TANGENT LENGTH
DIP	DUCTILE IRON PIPE	TEMP.	TEMPORARY
DMH	DRAIN MANHOLE	TL	TRAFFIC LIGHT
E	EXISTING	TP	TOP PIPE
EMH	ELECTRICAL MANHOLE	TS	TOP STEM
E.W.	EACH WAY	TSB	TRAFFIC SIGNAL BOX
EMB.	EMBANKMENT	TV	TOP VERTICAL
ES	EDGE OF SHOULDER	TYP.	TYPICAL
ETW	EDGE OF TRAVEL WAY	V.C.	VERTICAL CURVE
EVC	END VERTICAL CURVE	VERT.	VERTICAL
EXC.	EXCAVATION	W.L.	WATER LINE
FH	FIRE HYDRANT	W8"	8" WATER LINE
FT.	FOOT	WMH	WATER MANHOLE
GDI	GRADED DROP INLET	WV	WATER VALVE
GV	GATE VALVE		
HECO	HAWAIIAN ELECTRIC COMPANY		
HGL	HYDRAULIC GRADE LINE		
HORIZ.	HORIZONTAL		
HT.	HEIGHT		
INT.	INTERSECTION		
INTER.	INTERSECTION (STREET)		
INV.	INVERT		
LAT.	LATERAL		
Lc	LENGTH OF CURVE		
LF	LINEAR FEET		
LT.	LEFT		
MIN.	MINIMUM		
MON.	MONUMENT		
N.T.S.	NOT TO SCALE		
O/S	OFFSET		
O.C.	ON CENTER		
PL	PROPERTY LINE		
P.O.C.	POINT ON CURVE		
PC	POINT OF CURVATURE		
PVC	POINT OF INTERSECTION, VERTICAL CURVE		
PRC	POINT OF REVERSE CURVE		
PRVC	POINT OF REVERSE VERTICAL CURVE		
PT	POINT OF TANGENCY		
R	RADIUS		
R.O.W.	RIGHT-OF-WAY		
RC	REINFORCED CONCRETE		
REINF.	REINFORCEMENT		
RT.	RIGHT		

LEGEND

— x —	Existing Chain Link Fence
— 45 —	Existing Contour
42.11	Existing Spot Elevation

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
QUANTITIES BY	_____
CHECKED BY	_____
ORIGINAL PLAN	_____
NOTE BOOK	_____
No.	_____



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *[Signature]* DATE: 7/26/00

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND  
HANA HIGHWAY  
REPLACEMENT OF KAUPAKULUA BRIDGE  
AND APPROACHES  
F.A.P. Proj. No. BR-036-1(15)

Scale: None      Date: June 30, 2000

SHEET No. C-1 OF 89 SHEETS

WATER NOTES:

1. The Contractor shall contact the Maui Department of Water Supply (DWS) at phone #(808) 270-7340 one (1) week prior to commencement of work.
2. The Contractor shall be responsible to verify the exact depth and location of existing waterlines in the project area prior to commencement of work and shall meet with the Department of Water Supply personnel out in the field to help locate the existing waterlines in the project area if necessary.
3. Maintain a minimum of three (3) feet clear horizontal separation between existing waterlines and installed utilities.
4. Maintain a minimum of six (6) inches clear vertical separation between existing waterlines and installed utilities at all crossings.
5. Any installed utility crossing an existing waterline shall be concrete jacketed a minimum of five (5) feet on both sides of the crossing.
6. The Contractor will not be allowed to discharge water from hydrotesting operations into any existing streams, drainageways, or State waters, including Kaupakulua Stream. If the Contractor elects to discharge hydrotesting water into any existing streams, drainageways or State waters, the Contractor shall be responsible for obtaining an NPDES permit from the Department of Health, Clean Water Branch, at no cost to the State. The Contractor shall be solely responsible for any delay caused by obtaining or attempting to obtain an NPDES permit for such discharge.
7. The Contractor shall contact DWS and coordinate any relocation of water lateral or water meter at least one (1) week prior to commencing the relocation work.

UTILITY POLE RELOCATION NOTES

1. The Contractor shall provide Maui Electric Company (MECO) with proper assistance in establishing correct right-of-way locations where new poles and anchors are to be installed, or where existing poles and anchors are to be relocated, at no additional cost to MECO or the State.
2. The Contractor shall be responsible for tree trimming and/or removal, as required for pole installation or relocation. All tree trimming shall be performed in accordance with Section 201 - Clearing and Grubbing of the Special Provisions. All tree trimming must be inspected by the MECO Field Inspector, who shall be provided with a minimum of three (3) working days advance notice prior to performing inspection services.
3. The Contractor shall provide finish grade at each new or relocated pole and anchor site prior to MECO's installation work, at no additional cost to MECO or the State.

GRADING NOTES:

1. All grading work shall be done in accordance with Chapter 20.08, Soil Erosion and Sedimentation Control, of the revised Code of the County of Maui, 1991, and the project geotechnical report entitled, "Geotechnical Engineering Exploration, Replacement of Kaupakulua Bridge and Approaches, Hana Highway Route 36," by Geolabs, Inc., dated March 17, 2000.
2. The Contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The costs incurred for any necessary remedial action by the Engineer shall be payable by the Contractor.
3. The Contractor, at his own expense, shall keep the project area and surrounding area free from dust and other nuisance. The work shall be in conformance with the air pollution standards and regulations of the State Department of Health.
4. All exposed slopes shall be hyrdo-mulched in accordance with the Specifications and the Grading Plans.
5. All slopes and exposed areas shall be sodded or planted as soon as final grades have been established. Planting shall not be delayed until all grading work has been completed. Grading to final grade shall be continuous, and any area within which work has been interrupted or delayed shall be planted.
6. Fills on slopes steeper than 5:1 shall be keyed and benched.
7. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior written notice to the Engineer.
8. The limits of the area to be graded shall be flagged by the Contractor before the commencement of the grading work.
9. The grading operations shall be performed in conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health.
10. Temprary erosion control procedures shall be submitted by the Contractor for approval by the Engineer prior to the start of actual grading operations.
11. Excavated material on site which will be exposed for more than 7 days shall be covered with plastic sheets within 2 days of placement or as directed by the Engineer.
12. During construction, silt fences shall be installed along the edges of open channels, swales and ditches in order to filter sediment from runoff before it enters the channel, swale or ditch.
13. Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.

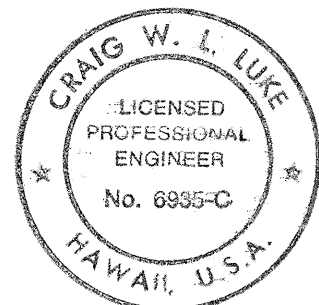
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-036-1(15)	2000	4	89

DESIGNED BY	DATE
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

APPROVED BY:

*Hubert Rogman*  
Director, Dept. of Water Supply, County of Maui  
(Approval is limited to water improvements which will be dedicated to the Department of Water Supply only.)

8/15/2000  
Date



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

*[Signature]*  
SIGNATURE  
*[Signature]*  
DATE

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES  
HANA HIGHWAY  
REPLACEMENT OF KAUPAKULUA BRIDGE  
AND APPROACHES  
F.A.P. Proj. No. BR-036-1(15)

Scale: None Date: June 30, 2000

SHEET No. C-2 OF 89 SHEETS