

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(35)R	2006	4	79

1. The scope of work for this project includes: design, construction and environmental/permitting services to demolish and remove existing residential structures, foundations, and appurtenances; perform mass grading for the new roadway; install new concrete bridge structure for Kahoma Stream Crossing and Lahainaluna Road Grade Separation; install exit ramp from the south end of the bypass roadway to Lahainaluna Road; install two-lane roadway and paved shoulders; install a northbound on ramp from Lahainaluna Road to the new roadway; install off-site and onsite drainage improvements; install new parking facility and access to Kealaweo Mauka Park; install new access road and driveway to Department of Water Supply Facility, install retaining walls and sound walls as required; address mitigation of archaeological sites within the project limits; construct and remove temporary diversion roads; relocate underground and overhead utilities; install landscape planting and landscape irrigation system; install intersection lighting, installing surveying monuments; and perform other incidental work as required to complete the project. The new bridge structures, roadway, and other work required to complete the project shall meet current Federal, State, and County Standards.

2. The Contractor is reminded of the requirements of Subsection 108.01 – Subletting of Contract, 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 bid.

3. The Contractor's attention is directed to the following Sections of the Special Provisions : Subsection 107.13 – Public Convenience and Safety; Subsection 107.21 – Contractor's Responsibility For Utility Property And Services; and Section 645 –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.

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 be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations.

6. Existing drainage, sewer and water systems will be functional at all times during construction. The Contractor is to furnish all materials, equipment, labor, tools and incidentals necessary to maintain service. This work shall be considered incidental to various contract items. The alignments and profiles in the RFP Plan sheets for all utilities are shown for illustration purposes only. The Design-Builder shall be responsible to perform their own research to design and construct all necessary utilities relocations required to complete the project in accordance with County, State, MECO, Verizon, and Oceanic Time-Warner standards and guidelines.

7. The Contractor shall provide for free and safe access to and from all existing side streets at all times.

8. All saw cutting work shall be considered incidental to structural excavation or roadway excavation.

9. The location of overhead and underground facilities shown on the plans are from existing records with varying degrees of accuracy and are not guaranteed as shown. The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines and shall maintain adequate clearance when operating equipment within or under any overhead lines.

10. The Contractor shall obtain an excavation permit from MECO's Engineering Department located at 210 Kamehameha Avenue, two weeks prior to starting construction.

11. The Contractor shall be liable for any damages to Maui Electric Co.'s Facilities and shall immediately report such damages to Maui Electric Co.'s Trouble Dispatcher at 871-7777.

12. The Contractor shall comply with the directives of the State of Hawaii Occupational Safety And Health Law (DOSH). Any citation (fine) received by the State for noncompliance by the Contractor shall be deducted from the progress payment.

13. For verifying the location of underground ductlines and for assistance in providing proper support and protection of the underground duct lines, the Contractor is to contact Maui Engineering Department at 871-2390 a minimum of 72 Hours in advance.

14. The Contractor shall exercise extreme caution when the excavation and construction crosses or is in close proximity of underground telephone and signal cable facilities and shall maintain adequate clearance for his equipment while working close to and/or under overhead facilities. Any damages to the existing underground facilities shall be repaired and paid for by the Contractor.

15. For field location of Verizon Facilities, contact Verizon Outside Plant Engineering Section, a minimum of 72 hours in advance, prior to start of excavation at 242-5105.

16. Should field conditions and construction procedures require that utility poles be braced, the Contractor shall contact the following person for pole bracing instructions a minimum of 72 hours in advance of actual required bracing – Verizon – Lynette Yoshida – Area Construction Supervisor at 242-5105.

17. When trench excavation is adjacent to existing structures or facilities, the Contractor is 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 settlement, and facilities with beams, struts, or underpinning to fully protect it from damage. This work shall be considered incidental to various contract items.

18. The Contractor shall survey and stake out the State Highway right-of-way and install all appurtenances associated with the project within the State right-of-way or construction parcels as shown in the plans.

19. The term "Engineer for the Utility Companies" shall also mean his delegated Representative and/or the Utilities' Inspectors of Record.

20. The Contractor shall stake out all facilities for verification by the utility involved and/or affected.

21. The Contractor shall Give MECO forty (40) working days notice to proceed with it's portion of the work.

22. The Contractor will immediately report damages discovered or caused by his work to :

a. Verizon

611 (24 Hours)
242-5105 (M-F except Holidays)
871-7777

b. MECO

847-4425 (ext. 838)

c. Oceanic/Time Warner

23. The Contractor is to stake out all temporary and permanent new pole locations so as not to conflict with any existing or proposed utility and obstruct any roadway sign. The Contractor shall be responsible for cost incurred by conflicting utilities.

25. When excavating near utility poles, the Contractor shall protect, support, secure and take all other precautions to prevent damage to or leaning of these poles. The Contractor is responsible for all costs associated to repair and/or straighten pole.

26. Where pedestrian walkways exist, they shall be maintained in a safe and passable condition, or other facilities for pedestrians shall be provided. Passages between walkways at intersections shall likewise be provided at all times.

27. Structural and drainage design of the pavement is to be in accordance with the Pavement Design Manual Published by the Materials Testing and Research Branch, Highways Division, March 2002. Subgrade R-value is to be derived from field investigation and testing by the Contractor. The design values in the Pavement Design Manual shall be used for the asphalt concrete, portland cement concrete, asphalt concrete base course, and aggregate subbase course in the pavement section. The pavement section shall have a permeable layer that is positively drained.

28. The Contractor is responsible for hiring a State of Hawaii licensed electrical engineer to provide stamped electrical shop drawings of the proposed electrical work prior to the physical start of construction. The plan shall include but not be limited to electrical layouts of temporary and permanent pole locations, street lighting, and other utilities details that conform to the latest requirements of the National Electrical Code "NEC," General Order Nos. 6 and 10 of the Hawaii Public Utilities Commission, The standards of the ASTM, and ANSI, local power company rules, and local ordinances that may apply. Only upon written approval by the State, shall the Contractor proceed with accepted portions of the proposed construction work. Any delays incurred during this process shall be borne by the Contractor at no additional cost and/or time to the State.

29. The Contractor is responsible for hiring State of Hawaii licensed civil, structural, environmental, and electrical engineers to provide stamped shop drawings of a traffic control plan; a NPDES plan and erosion control plan; shop drawing details of the roadway, detour road, bridge and culvert structures, temporary structures, and all other temporary or permanent improvements required to complete the work. Only upon written approval by the State, shall the Contractor proceed with accepted portions of the proposed construction work.

30. A Final Supplemental Environmental Statement dated 4/12/02 with Record of Decision (ROD) dated 10/14/03 have been prepared for the Honoapiilani (FAP Route 30), Launiupoko to Honokowai. All design and construction work shall conform to all legal commitments contained in these documents. Copies of the SEIS and ROD can be borrowed from the HDOT.

31. HDOT is in the process of executing a Utility Agreement with Maui Electric, Verizon and Oceanic/Time Warner. HDOT assumes that power poles and underground conduits will need to be relocated, along with temporary relocation required to facilitate contractor's construction work.

32. Contractor shall exercise extreme caution and coordinate relocation of overhead Fiber Optic Cable with Oceanic/Time Warner Cable company. Contact Mr Bill Hanke at (808) 877-4425 ext. 838.
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- STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES
AND CONSTRUCTION NOTES

HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1A

Future Keawe Street Extension
to Lahainaluna Road

Federal Aid Project No. NH-030-1(35)R

Scale: As Noted Date: April 2006

SHEET No. 1 OF 3 SHEETS
- 4

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(35)R	2006	5	79

GENERAL NOTES – CONTINUED

33. A security fence to protect the tenants from vandalism or theft shall be installed within five working days from any removal of existing fence sections. The fence shall be installed a minimum 10 feet away from the detour road edge-of-pavement.
34. Provide handicapped accessible pedestrian routes along Lahainaluna Road. These routes may be incorporated into the temporary detour road, and shall be in compliance with all ADA and AASHTO standards.
35. The Contractor shall conduct three Public Information Meetings (PIM) described in the Technical Provisions. If required and as solely determined by HDOT, any additional PIM conducted by the Contractor may be considered as extra work and compensable by contract change order. The Contractor shall publish an HDOT approved notice in the Maui News and Lahaina News and the Contractor shall provide technical assistance, data, and information necessary to produce display board, printed materials, video graphics, and other forms of information necessary for exchanging dialogue with the public.
36. Design and construction of guardrail and guardrail end treatments shall conform to the latest edition of the AASHTO Roadside Design Guide, current National Cooperative Highway Research Program (NCHRP) 350 and HDOT requirements.
37. The Contractor is advised that in addition to other contractors working in the same areas, various utility companies (or their contractors) including Maui Electric Company, Verizon, Cable Television and Maui County Department of Wastewater Management may be performing work within the project area. The Contractor is to coordinate all work with other contractors in the area and to coordinate the design. In case of unreasonable conflict among contractors regarding access or work sites, the Engineer will make the final determination of priorities.
38. The Contractor's attention is directed to the Right-of-Way Maps on Sheet nos. 22 and 23 where a Limited Access is shown under the Kahoma Stream Bridge structures and through the highway parcel. When needed, the Contractor shall allow passage of Pioneer Mill or County of Maui personnel and/or equipment through this area during design and construction.
39. Grading and permanent ground cover shall be installed at the remnant LOT NOs. 41, 42, 43 and 44 located outside of the roadway corridor. In addition to general Note 47, no permanent improvements, including tiebacks and other underground anchors, will be installed anywhere outside the permanent bypass roadway corridor or loop area Parcel 33 that will cause future ownership and maintenance issues for HDOT with abutting landowners or future property owners
40. The Contractor shall coordinate the design and construction with all County projects within or adjacent to the construction area.
41. The Contractor shall design the bridge structure to accommodate a 100 year flood. The design shall be consistent with the Kahoma Stream Flood Control, General Memorandum, Phase II, June 1981. The following 100 year flow rate shall be used: $Q = 15,200$ CFS. Design shall use a minimum free board of 5 feet. The HEC-RAS Software program shall be utilized to determine water surface profiles. The flow rate for the 500 year recurrence interval shall be 1.7 times the 100 year flow rate. Offsite storm water shall not enter into construction areas inside or immediately adjacent to stream and ditch channels for demolition, foundation, and superstructure work.
42. Structural design criteria for all structures shall be in accordance with AASHTO LRFD Bridge Design Specifications, 2nd Ed. (1998) and all subsequent amendment, and HWY-DB MEMO 2.7490, Aug. 13, 2002.

43. For the Seismic design, the following criteria shall be used:
- A. Seismic Zone = 2B
- B. Soil Profile = The contractor's geotechnical report shall be required by the winning Contractor to determine the actual soil profile type.
44. The Contractor shall obtain approval of lane closure hours and traffic control plans for all County streets from the Maui County, Division of Engineering.
45. A minimum 5 hazmat testing/sampling for area used by the contractor for baseyard or storage activities shall be performed when directed by HDOT.
46. Install permanent roadway monuments as required.
47. HDOT acquired 31 permanent acquisition parcels and 4 construction parcels for the Project. All permanent improvements shall be constructed in the permanent acquisition parcels and all temporary improvements such as detour roads and dewatering basins shall be constructed within the construction parcels or permanent acquisition parcels. The Contractor shall design the improvements such that no additional land taking will be required.
48. Four spare 4-inch PVC conduits with expansion fittings as required shall be installed for the Lahainaluna Road Grade Separation Structure and for the Kahoma Stream Bridge. The spare conduits shall terminate into a 4'x2' manhole located in the roadway shoulder and the manhole shall be equipped with a traffic rated cover. No more than two conduits shall terminate into a given manhole. Additionally, conceptual plans for the future inbound Kahoma Stream Bridge shall show provisions for similar spare conduits and appurtenances.
49. The Contractor is advised that the building structure and other improvements at 843 South Hakau Place shall be demolished and disposed by the Contractor when Construction NTP is issued by the Engineer in accordance with the Technical Provisions and special Provisions.
50. All permanent cuts and embankments shall be done within the permanent acquisition parcels or slope easements. Temporary cuts and embankments shall be done within the permanent acquisition parcels, construction parcels, or slope easements. If additional slope easements or construction parcels are needed in addition to that provided by HDOT as shown in the RFP documents, the Contractor shall obtain these additional construction parcels or slope easements.
51. HDOT will not accept Mechanically Stabilized Earth (MSE) walls with a flapped geotextile facing. The MSE walls should have a masonry or concrete block facing with a positive mechanical connection between the facing and the geogrid.

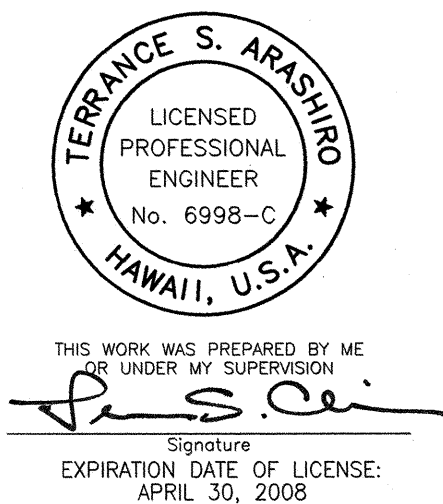
NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

1. The Contractor shall obtain a Permit to Perform Work Upon State Highway from the Maui District, State Highways, at 650 Palapala Drive, prior to commencement of work within the State highway right-of-way.
2. Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the 1994 Standard Specifications for Road, Bridge and Public Works Construction, and the Specifications for Installation of Miscellaneous Improvements within State Highways of the State Highway Division.
3. Work may be performed only between the hours of 7:00 a.m. and 3:30 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer. Any work affecting County roadways will be subject to work hours permitted by the County of Maui.

4. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones, and other protective facilities, and shall take necessary precautions for the protection, convenience, and safety of public traffic. All such protective facilities and precautions to be taken shall conform with the "Administrative Rules of Hawaii Governing the Use of Traffic Control Devices at Work Sites on or Adjacent to Public Streets and Highways", adopted by the Director of Transportation, and the current U.S. Federal Highway Administration "Manual on Uniform Traffic Control Devices for Streets and Highways, Part VI – Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations" and NCHRP 350.
5. 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.
6. The Contractor shall be required to provide adequate, safe, non-skid bridging material over any trench, including shoring, when trenching in pavement areas to handle all types of vehicular traffic. The use of steel plates shall not be used in the freeway travelway.
7. No trench shall be opened more than 200 feet in advance of the installed and tested pipe and/or ductline. No jumps or spaces will be permitted unless approved in writing by the Engineer.
8. Longitudinal drainage along the highway shall be maintained, at all times to allow freeflow.
9. All regulatory, guide and construction signs and barricades shall be high intensity reflective sheeting.
10. Stop work and contact the State Historic Prevention Division at (808) 692-8083 immediately should any unidentified archaeological site or remains (such as artifacts, shells, bones, charcoal deposits, road or coral alignments, pavings or walls) been countered during construction.
11. The Contractor shall inform the HDOT-Maui District Office at 873-3535 at least five (5) working days prior to any lane closures or changes to lane closures.
12. All signs, pavement markings, striping, etc. removed or damaged by the Contractor shall be replaced by the Contractor at no additional cost to the State.

NOTES FOR PUBLIC ACCESSIBILITY

1. Design and construction of public access shall be in accordance with the Americans with Disability Act.
2. Design standards for accessibility shall conform to the applicable sections of the Americans with Disability Act Accessibility Guidelines as amended.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES AND CONSTRUCTION NOTES	
HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1A	
Future Keawe Street Extension to Lahainaluna Road	
Federal Aid Project No. NH-030-1(35)R	
Scale: As Noted	Date: April 2006
SHEET No. 2 OF 3 SHEETS	

NOTES FOR CONSTRUCTION WITHIN COUNTY RIGHT-OF-WAY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-030-1(35)R	2006	6	79

1. The Contractor shall obtain a "Work to be performed on County Roads permit" from the Division of Land Use and Codes Administration two weeks prior to comment of work.

2. Specifically referred items from the Standard Detail Drawings and Standard Specifications of the Department of Public Work shall be included as part of the construction plans.

3. All construction work shall conform strictly to the applicable sections of the "Hawaii Standard Specifications for Road, Bridge and Public Works Constructions (1994)", and "Standard Details", Sept. 1984, for Public Works Construction, of the Department of Public Works.

4. All existing utilities, whether or not shown on plans, if damaged during construction by the contractor, shall be repaired at his expense.

5. Contractor shall provide, install and maintain all necessary signs, lights, flares, barricades, and other protection, safety and convenience of the Public according to the "Manual on Uniform Traffic Control Devices for Streets and Highways", 2003, and to the " Rules and Regulations Governing the Use of Traffic Control Devices at Works Sites on or Adjacent to Public Streets and Highways" adopted by the Highway Safety Coordinator and the U.S. Federal Highway Administration's "Manual on Uniform Traffic Control Devices for Highway Construction and Maintenance Operations", dated 1980.

6. The Director of Public Works and/or the Director of the Department of Water Supply has the right to stop construction should any work be found contrary to the approved construction plan or detrimental to the public's interest.

7. The contractor shall schedule a pre-construction meeting with the Land Use & Codes Administration five (5) days prior to commencement of construction.

8. The contractor, at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Department of Health and the County Grading Ordinance.

9. The contractor shall remove all silt and debris resulting from his work and deposited in drainage facilities, roadways and other areas. The cost incurred for any necessary remedial action ordered by the Director of Public Works shall be paid by the contractor.

10. Construction debris and wastes shall be deposited at an appropriate work site. The contractor shall inform the Director of Public Works of the location of the disposal sites. The disposal site must fulfill the requirement of Grading Ordinance.

11. The contractor shall submit a microfilm copy and six (6) copies of the "as- built" drawings prior to the final approval of the improvements.

12. If the clearance between a Wastewater line and a new or existing Water line is eighteen inches (18") or less, the Wastewater line shall be concrete-jacketed in accordance with the Standard Details of Public Works Construction dated September 1984.
13. Should Historic Sites such as Walls, Platform, Pavements, Mounds or remains such as Artifacts, Burials, Concentration of Shell or Charcoal be encountered during construction activities, work shall cease immediately in the immediate vicinity of the find and the find shall be protected from further damage. The contractor and/or landowner shall contact the State Historic Preservation Division (808-692-8023), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary.

14. Pursuant of Maui County Code Section 3.44.015(C). The County of Maui is not responsible for any Park, Roadway, Easement (including but not limited to Drainage, Sewer, Access, Reclaimed Water or Avigation Easement), or any other interest in Real Property shown on the Map or shown on these Plans, unless the Maui County Council has accepted its dedication by a resolution approved by a majority of Council's members at a regular or special meeting of the Maui County Council or granted exception to the Department of Hawaiian Home Lands.

15. Testing of materials should be conducted by an approved independent testing agency in accordance with ASTM Standard methods or as specified by the Department of Public Works, Engineering Division, as follows:

A. Embankment/Select borrow and subgrade materials: one (1) compaction test per 600 square yards;

B. Aggregate subbase course: one (1) compaction test per 400 square yards; one (1) gradation and sand equivalent test per project;

C. Aggregate base course: one (1) compaction test per 300 square yards; one (1) gradation and sand equivalent test per project;

D. Asphalt concrete pavement or asphalt treated base course; three (3) a.c. cores for thickness and density tests per project;

E. Trench backfill material: one (1) test for each 300 lineal feet of trench per lift of material.

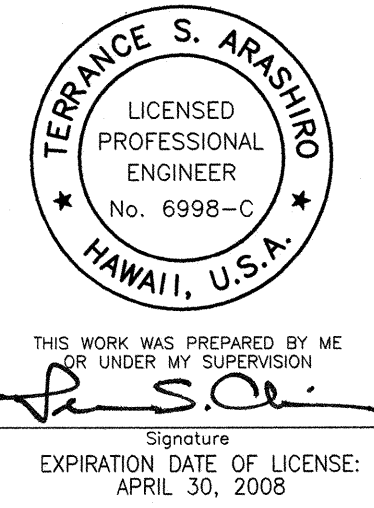
16. Contractor shall submit all testing reports including results to the county's inspection agency for review and approval prior to county's acceptance of work.

17. The contractor shall be required to notify the County of any testing failures and correct each failure prior to proceeding to the next phase of construction.

18. All benchmarks and monuments shall be established by Hawaii licensed professional land surveyor.

19. All grading and stockpiling shall be in accordance with Maui County Code, Title 20, Chapter 8.

19. A minimum of two lanes shall be open to traffic at all times. The entire width of pavement, including the paved shoulders, may be utilized for traffic purposes. All lanes shall be open to traffic during the peak periods of 6:00 am to 8:30 am and 3:30 pm to 6:00 pm and during non-working hours.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**GENERAL NOTES
AND CONSTRUCTION NOTES**

HONOAPIILANI HIGHWAY REALIGNMENT, PHASE 1A

Future Keawe Street Extension
to Lahainaluna Road

Federal Aid Project No. NH-030-1(35)R

Scale: As Noted Date: April 2006