

GENERAL NOTES

1. The scope of work for this project consists of resurfacing and reconstructing existing pavement; cold planing; installing pavement markings and signage; upgrading/replacement of guardrails and end treatments; replacing existing galvanized steel light poles with aluminum poles; cleaning/repairing of culverts, inlets & drainlines; adjusting manholes, valve boxes, survey monuments; and water pollution control.
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 50 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. The exact locations and limits of areas to be filled with leveling course, reconstructed and cold planed shall be determined in the field by the Engineer.
7. 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.
8. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
9. 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 seperately.
10. All holes, depressions and wheel ruts shall be filled and compacted with Asphalt Concrete Pavement, Mix No. V prior to resurfacing. This work will be paid for under Item 401.0500 Asphalt Concrete Pavement, Mix No. V.
11. Smooth riding connections shall be constructed at all limits of resurfacing, including the beginning and end of project, connecting approaches, side streets and driveways as shown on the plans and/or directed by the Engineer.

12. Existing drainage system will be 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 various contract items.
13. The Contractor shall provide for access to and from all existing side streets at all times.
14. All saw cutting work shall be considered incidental to Item 651.01, Excavation for Reconstruction of Weakened Pavement Areas.
15. Layer of gravel bed under underground duct banks, which are at or below the water table, may facilitate dewatering of the trenches during construction/installation of the underground utility system. The gravel material will not be measured and shall be considered incidental to the various contract items.
16. 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.
17. The location of street lights may be adjusted not more than 5 feet parallel with roadway to avoid conflicts.
18. Street light standards and poles shall have a minimum 2 feet clearance from aerial telephone cables and lines.
19. Street light standards and poles shall be installed at least 2-3 feet behind metal barrier rails as per AASHTO Roadside Design Guide. Any exceptions, the Contractor shall consult with the Engineer.
20. All existing facilities shown are approximate only. The Contractor shall verify their locations and shall make adjustments to any new or existing facilities as directed by the Engineer.
21. The term "Engineer for the Utility Companies" shall also mean his delegated Representative and/or the Utilities' Inspectors of Record.
22. The Contractor shall stake out all facilities for verification by the utility involved and/or affected.
23. All ductlines to be installed in concrete shall be inspected and approved by the State inspector and the State electrical maintenance supervisor before placing concrete. Notify the inspector and supervisor 48 hours before placing concrete.
24. The minimum depth of ductlines from finish grade to top of concrete encasement or cover is as follows:
a. Within Roadway 3'-0"
b. Within Sidewalk Area 1'-6"
c. All Others 1'-6"
25. All completed ductlines shall be mandrel tested by the Contractor in the presence of the Inspector.
26. The Contractor shall give HECO forty (40) working days notice to proceed with its portion of the work.

27. The Contractor will immediately report damages discovered or caused by his work to:
a. HTCO 611 (24 Hours)
483-8085 (M-F except Holidays)
b. HECO 543-7874
c. Oceanic 625-8437
d. Chronicle Cablevision 395-1847
28. 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.
29. The Contractor shall notify the State Highways' Highway Lighting Supervisor (837-8056), three (3) working days prior to commencing work on the Street Lighting System.
30. Concrete buried conduits located outside the edge of travelway shall be constructed and installed 2 feet behind the existing light pole standards as applicable. If the existing grade is too steep to accommodate the new concrete buried conduit, then the Contractor is responsible to make necessary adjustments at no additional cost to the State.
31. The Contractor is advised that in addition to other contractors working in the same areas, various utility companies (or their contractors) including Hawaiian Electric Company, Hawaiian Telephone Company, Oceanic Cable, The Gas Company, the City and County's Board of Water Supply, and the City and County's 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.

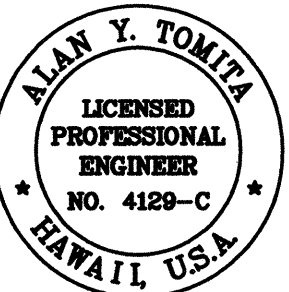
PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. 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.
2. 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 control standards and regulations of the State Department of Health. The City may require supplementary measures as necessary.
3. No Contractor shall perform any trenching operation so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets or natural water-courses. Should such violations occur, the cost incurred for any remedial action by the Director D.P.P. shall be payable by the Contractor.
4. The 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. The Contractor shall apply for a construction permit with a noise pollution control plan.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(41)	2000	3	90

GENERAL CONSTRUCTION NOTES

1. The Contractor shall notify all agencies to verify the actual location of all utilities in the project area prior to excavating. The Contractor shall coordinate all work.
2. When trench 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 settlement, and for properly supporting existing structures and facilities with beams, struts or underpinning to fully protect them from damage.
3. Backfill under existing structures or facilities shall be sandy and granular material completely placed as soon as the ducts are laid. The backfill material shall be rammed with proper tools until compacted to 90-95% of its maximum density.
4. All work called for on the plans and not itemized in the proposal and all work not called for but required for the construction of this project shall be considered incidental to trench excavation.
5. The Contractor shall restore to their original condition all improvements damaged as a result of the construction, including pavements, embankments, curbs, signs, landscaping, structures, utilities, walls, fences, etc. unless provided for specifically in the proposal. Demolition and restoration of existing items shall be incidental and included within the amount paid for trench excavation.
6. The Contractor shall observe and comply with the administrative rules of The Department of Health regarding noise control of Oahu.
7. The Contractor shall provide access to and from driveways and public streets at all times.
8. No section of incomplete guardrail, footing and/or excavation shall be left unshielded at the end of each work day. Intermediate concrete barriers and crash cushion end treatments used for shielding shall meet current SOH DOT standards and guidelines along with manufacturer's specifications. All shielding used during construction shall be considered incidental to various guardrail items.



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Alan Y. Tomita

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
GENERAL NOTES
KAMEHAMEHA HIGHWAY RESURFACING
Kaneohe Bay Drive to Kahiko Street
F. A. Project No. NH-083-1(41)
Scale: As Shown Date: June, 1999
SHEET No. 1 OF 5 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
TRACED BY	_____
CHECKED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

KS-100-1-99-1 (Kamehameha Highway) 06/99 21/99 21/99 21/99

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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- The Contractor shall obtain a Permit to Perform Work Upon State Highway from the Oahu District, State Highways, at 727 Kakoi Street, prior to commencement of work within the State highway right-of-way.
- 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 Installations of Miscellaneous Improvements within State Highways of the State Highway Division.
- Work may be performed only between the hours of 9:00 a.m. and 3:00 p.m., Monday through Friday, except holidays, unless otherwise permitted by the Engineer. During work hours only one lane of traffic shall be closed in each direction, unless otherwise approved in writing by the Engineer.
- 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 IV - Standards and Guides for Traffic Controls for Street and Highway Construction, Maintenance, Utility and Incident Management Operations." The costs for all such protective facilities and precautions shall be incidental to the various contract items.
- 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.
- Compaction test shall be considered incidental to the various contract items and shall be taken in accordance with the Specifications for Installation of Miscellaneous Improvements Within State Highways as follows:
 - Subbase: One (1) compaction test per lift per 200 lineal feet of roadway or when directed by State Inspector.
 - Base Course: One (1) compaction test per lift per 200 lineal feet of roadway or when directed by State Inspector.
 - One (1) compaction test per lift per 300 lineal feet of trench.
 - A copy of the test results shall be submitted to the Engineer.
- Prior to commencing trench excavation work, the Contractor shall take a profile along the new centerline of utility trench and that such information shall be used in the Verification of restoring the roadway to its original condition. A copy of the profile shall be submitted to the Engineer. This work shall be considered incidental to structure or trench excavation and backfill.
- The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas to handle all types of vehicular traffic.

- 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.
- Longitudinal drainage along the highway shall be maintained, at all times to allow freeflow.
- Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within this one-year period, the applicant will be required to resubmit his construction plans for division's review and approval.
- All regulatory, guide and construction signs and barricades shall be high intensity reflective sheeting.
- Stop work and contact the State Historic Site Office, at 587-0014 immediately should any unidentified archaeological site or remains (such as artifacts, shells, bones, charcoal deposits, road or coral alignments, pavings or walls) be encountered during construction.
- The Contractor shall inform the State Permit Office at 831-6712 at least two (2) working days prior to any lane closure.
- 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.
- The Contractor shall notify the Oahu Transit Services Inc. (OTS), Ed Sniffen, At 848-4571 or Lowell Tom at 848-4578 two weeks prior to beginning any work, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.

WATER NOTES

- Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the Standard Specifications for Road and Bridge Construction, dated 1994, as amended, of the Hawaii Highways Division, Department of Transportation, and the City and County of Honolulu, Board of Water Supply's "Water System Standards", Volume 1, dated 1985, the "Approved Material List and Standard Details for Water System Construction", Volume 2, dated 1985, and the "Water System External Corrosion Control Standards", Volume 3, dated 1991, and all subsequent amendments and additions.
- All plans approved by the Board of Water Supply are based solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, drainage, etc., and other features of improvements shall not be the responsibility of the Board of Water Supply.
- The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or

the encountering of other obstacles during the course of the work. The Contractor shall be responsible and pay for all damages to existing utilities. The Contractor shall not assume that where no utilities are shown, that none exist.

- The Contractor shall be responsible for the protection of all water lines during construction. The Contractor shall be especially careful when excavating behind water lines, tees, and bends wherever there is a possibility of water line movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measure necessary to protect the water lines, such as constructing special reaction blocks (with BWS approval) and/or modifying his construction method at no additional cost to the State.
- Re-approval shall be required if this project is not undertaken within a period of two years.
- At the electrical/signal ductlines water crossings, adjust all electrical/signal ductline elevations to maintain 6" vertical clear separation from all water lines (12" clear for all electrical/signal ductline structures larger than 16") at no cost to the Board of Water Supply and the State.
- Maintain 3'-0" min. horizontal clear separation between all water line systems and nearest electrical/signal ductlines paralleling the water system at no cost to the Board of Water Supply and the State
- The Contractor shall notify BWS Planning and Engineering Division, Construction Section in writing, one week prior to commencing work on the water system. Phone No. 527-5205.
- The Contractor shall verify all existing service lateral locations whether shown or not shown on plans prior to commencing with any of the work and shall not assume that where no services are shown none exist.
- Prior to any excavating, the Contractor shall verify in the field the location of existing water mains and appurtenances.
- The Contractor shall adjust all manholes frames/valve boxes and meter boxes within the resurfaced area. Prior to resurfacing, BWS will initially locate all water manholes/valve boxes that will require adjustments. The Contractor shall then be responsible for "referencing" these manholes/valve boxes to facilitate the adjustments. The cost for adjustments shall be made at their respective unit prices in the Bid based on the actual number adjusted. Cost for referencing shall be incidental and shall not be paid directly. Any additional request to BWS to again locate the manholes/valve boxes shall be done at the expense of the Contractor. (BWS will charge and bill the Contractor for all cost said additional work.)
- Any adjustments to the existing water system required during construction to meet requirements of BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board and the State.

- Two-way blue reflective hydrant markers Type DB shall be installed or re-installed at all fire hydrant locations.
- Maintain 3'-0" minimum cover for all existing waterlines (18" minimum for service laterals) from new finish grade. The Contractor shall probe the waterlines and service laterals and submit the probing data to BWS Construction Section. Any adjustments to the existing water system to meet the minimum cover and the requirements of the BWS standards, whether shown on plans or not, shall be done by the Contractor at no cost to BWS and the State.
- Maintain 3'-0" min. horizontal clear separation between street light/traffic signal, standards (including any modular units) and the nearest water system. Contractor shall field verify for any conflicts at each street light/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the project engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the BWS and the State.
- Any adjustments to the existing water system required during construction to meet requirements of the Board of Water Supply Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board and the State.
- The Contractor shall have existing water mains toned before construction of work in vicinity of water mains, call the investigation section at 527-5296 for toning services. Guardrail post locations are to be kept to a minimum clear distance of 18 inches to any 2-1/2 inch water lines and meter boxes. No post driving will be allowed when post is to be installed closer than 3 feet from water main. Excavated areas shall be restored to their original conditions.
- The Contractor shall coordinate his work with another contractor working within common work areas. The Contractor shall accommodate and allow the other contractor to install new water main at the intersection of Kamehameha Highway and Likelike Highway prior to resurfacing work in this area.

APPROVED:

Michael J. J... 7/6/99
Chief, Planning & Engineering, B.W.S. Date



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Alan Y. Tomita

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES	
KAMEHAMEHA HIGHWAY RESURFACING Kaneohe Bay Drive to Kahiko Street F. A. Project No. NH-083-1(41)	
Scale: As Shown	Date: June, 1999
SHEET No. 2 OF 5 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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SEWER NOTES

1. All sewer construction shall be performed in accordance with the City's Standard Specifications, September 1986, the Department of Public Works Standard Details, September 1984, Current City Practices and Revised Ordinances of Honolulu, 1990 as amended, and the Design Standards of the Department of Wastewater Management Vol. 1, July 1993.
2. The Contractor shall notify the Inspection Section, Wastewater Branch, DPP, at 527-5820 or 527-6241 to arrange for inspection services and submit three sets of approved construction plans seven days prior to commencement of sewer work. The Contractor shall pay for all inspection costs.
3. The underground pipes, cables or ductlines known to exist by the Engineer from his research of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavation the area. The Contractor shall be responsible and shall pay for all damaged utilities.
4. The Contractor shall be responsible for maintaining continuous sewer service to all affected areas during construction.
5. The Contractor shall be responsible for any sewage spills caused during construction. The Contractor shall notify the State Department of Health and utilize appropriate sampling and analyzing procedures. The Contractor shall be responsible for all public notification and press releases.
6. The Contractor shall maintain a minimum five (5) feet clear width between street lighting poles and sewer lines.
7. **CONFINED SPACE**

For entry by State or City personnel, including inspectors, into a permit required confined space as defined in 29 CFR PART 1910.146(B), the Contractor shall be responsible for providing:

1. All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include but not be limited to the following:
 - A. Full body harness for up to two personnel
 - B. Lifeline and associated clips
 - C. Ingress/egress and fall protection equipment
 - D. Two-way radios (walkie-talkies) if not out of line-of-sight

- E. Emergency (escape) respirator (10 minute duration)
 - F. Cellular telephone to call for emergency
 - G. Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammables (capable of monitoring at a distance at least 20-feet away)
 - H. Personal multi-gas detector to be carried by inspector
2. Continuous forced air ventilation adequate to provide safe entry conditions.
 3. One attendant/rescue personnel topside (two; if conditions warrant it).

CONSTRUCTION NOTES FOR GAS FACILITIES

1. The Gas Company gas pipelines in the project area are plastic coated and cathodically protected. The Contractor shall be extremely careful when working near these gas pipelines.
2. Prior written clearances must be obtained from The Gas Company, Maps and Records Department, 515 Kamakee Street, at least five (5) working days prior to starting excavation near these gas pipelines.
Since gas line locations on field maps are approximate, the Contractor, after obtaining written clearance, shall call USA North a minimum of two (2) working days before starting excavation to arrange for field location of the existing gas pipelines. The telephone number is 1-800-227-2600.
3. The Contractor shall excavate and backfill around gas pipelines in the presence of a The Gas Company representative. All backfill within six inches of any gas pipeline shall be select cushion material approved by The Gas Company.
4. For relocation of any gas pipeline, the Contractor shall notify The Gas Company five (5) working days before starting work. The Contractor shall provide the necessary excavation and backfill, obtain traffic permits, and restore pavement, sidewalks, and other facilities. Any relocation of gas facilities shall be done by The Gas Company and paid for by the Contractor.
5. The Contractor shall notify The Gas Company immediately after any damage has been caused to existing gas pipelines, coatings, or its cathodic protection devices. Repair work on such damage shall be done by The Gas Company and paid for by the Contractor.
6. Minimum vertical and horizontal clearance between the gas pipelines and other pipelines, conduits, or ductlines, or other facilities shall be 12 inches. Adequate support and protection for gas pipelines exposed in the trench shall be provided by the Contractor and approved by The Gas Company.

7. The Contractor shall work in an expeditious manner in order to keep the uncovered gas pipelines exposed for as short a period of time as possible.

NOTES FOR CONSTRUCTION WITHIN CITY RIGHT-OF-WAY

1. The Contractor shall perform all applicable construction work in accordance with the Standard Details for Public Works Construction, dated September 1986, of the Department of Public Works, City and County of Honolulu, and the Revised Ordinances of Honolulu, 1978, as amended.
2. The Contractor, at his expense shall keep the project and surrounding areas free from dust nuisance. The work shall be in accordance with the Air Pollution Control Standards and Regulations of the State Department of Health. The City may require supplemental measures as necessary.
3. Utilities shall be installed in accordance with Ordinance No's. 2875 and 3357(Underground Utilities).
4. Construction activities will not be permitted on city streets during weekends and holidays without prior approval from the Chief Engineer, City and County of Honolulu.
5. Location of underground utilities and pipes shown on these plans are approximate only. The Contractor shall verify the exact location of the existing utilities that must be removed or otherwise disturbed to accomplish the work called for on these plans and shall reconstruct or restore these utilities to their original conditions at his own expense.
6. The Contractor shall notify the Civil Engineering Branch, D.P.P., at 523-4881 seven (7) days prior to commencement of construction.
7. The Contractor shall comply with the provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title II, Administrative Rules of the State Department of Health, during all phases of work. Adequate measures shall be taken to comply with these rules.
8. The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the location and depth of the facilities and exercise proper care in excavating in the area. Whenever connections of new utilities to existing 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 excavation for the new lines at no additional cost to the State.
9. The Contractor shall restore curb and gutters, and sidewalks per City and County Standard Details. This work shall be considered incidental to various contract items.

10. No Contractor shall perform any construction activity so as to cause falling rocks, soil or debris in any form to fall, slide or flow onto adjoining properties, streets, or natural watercourses. Should such violations occur, the costs incurred for any remedial action by the Director, D.P.P. shall be payable by the Contractor.

PUBLIC TRANSIT DIVISION (DTS) NOTE

1. The Contractor shall notify Oahu Transit Services, Inc., (OTS-Thebus Contractor), Ed Sniffen (848-4571) or Lowell Tom (848-4578), two weeks prior to construction, informing them of location, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stops.

HAWAIIAN ELECTRIC COMPANY (HECO) NOTES

See Sheet 84

GENERAL NOTES FOR TRAFFIC SIGNAL SYSTEM

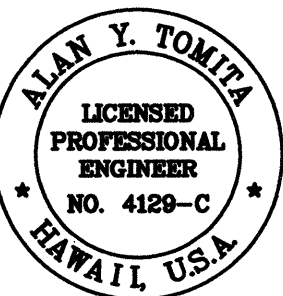
See Sheet 72

GENERAL NOTES FOR HIGHWAY LIGHTING SYSTEM

See Sheet 60

APPROVED:

M. J. P. 7/29/99
Chief, Civil Engineering Branch, DPP Date



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Alan Y. Tomita

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES	
KAMEHAMEHA HIGHWAY RESURFACING Kaneohe Bay Drive to Kahiko Street F. A. Project No. NH-083-1(41)	
Scale: As Shown	Date: June, 1999
SHEET No. 3 OF 5 SHEETS	

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NPDES GENERAL NOTES

(A) Erosion and sediment control inspection and maintenance practices.

- (1) The contractor shall inspect the erosion and sediment control measures at least once a week or after 0.5 inches of rainfall.
- (2) The contractor shall maintain the erosion and sediment control measures according to the contract. If a repair is necessary, the contractor shall initiate the repairs within twenty-four (24) hours after the inspection such as:
- (a) When sediment build-up reaches one-third (1/3) the height of the silt fence, the contractor shall remove and dispose of the sediment build-up from the silt fence.
- (b) When the depth of the sediment basin reaches ten percent (10%) of the design capacity, the contractor shall remove and dispose of the sediment build-up.
- (c) When tears are found on the silt fence, the contractor shall replace the fabric.
- (d) The contractor shall check to see if the fabric is securely attached to the fence posts and to see that the fence posts are firmly in the ground.
- (e) The contractor shall inspect the diversion dike and repair the breaches.
- (f) The contractor shall inspect temporary and permanent seeding and planting for bare spots, washouts, and healthy growth.

(3) The contractor shall have its personnel make a maintenance inspection report promptly after each inspection. The contractor shall select a minimum of three (3) personnel who will be responsible for inspection, maintenance, repair activities, and filling out the inspection and maintenance report. Personnel selected for the inspection and maintenance responsibilities will receive training from the contractor. The contractor shall train these personnel in the inspection and maintenance practices necessary for keeping the erosion and sediment used onsite according to the contract.

(B) Submittal requirements:

- (1) Construction activities of five (5) acres or more.
- (a) Storm water discharges into state waters due to construction activities of five (5) acres or more, will require an NPDES permit from the Department of Health (DOH). The contractor shall submit to the engineer four (4) sets of site-specific Best Management Pans (BMP). The plans shall be submitted no later than thirty (30) calendar days after the award of contract.

GENERAL NOTES FOR TRAFFIC CONTROL PLAN
FOR WORK ON CITY & COUNTY STREETS

1. The permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
2. Cones or delineations shall be extended to a point where they are visible to approaching traffic.
3. Traffic control devices shall be installed such that the sign or device farthest from the work area shall be placed first. The others shall then be placed progressively toward the work area.
4. 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 the work.


5. Flaggers and/or police officers shall be in sight of each other or in direct communication at all times.
6. When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the traffic control plan(s).
7. All traffic lanes shall be a minimum of 10 feet wide.
8. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
9. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e. when signs have messages on both faces).
10. Lane closure shall be limited only to the extent of accomplishing each day's work. 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.
11. Permanent pavement markings and traffic signs shall be replaced upon completion of each phase of work.
12. Cones and delineations shall be spaced at a maximum distance of 20 feet apart. A minimum of six channelizing devices shall be used for each taper length.
13. Driveways shall be kept open unless the owners of the property using the Right-of-Way are otherwise provided for satisfactorily. Further, permittee shall control traffic going in and out of driveway(s) at no additional cost to the State or City & County.
14. Buffer and taper areas on approach to any work area shall be kept clear of vehicles and equipment.
15. A high level warning device (flag tree) shall be installed on approach to all work areas.
16. "No Parking" signs shall be posted within any work area and for the buffer and taper areas approaching the work area.
17. Traffic control plans are approved for work on any City street area only between the hours of 9:00 a.m. and 3:00 p.m.

COLD PLANING NOTES

1. All saw cutting work shall be considered incidental to Cold Planing and will not be paid for separately.
2. Exposure of existing aggregate base is possible when cold planing deeper than 5 inches. (Refer to typical sections for existing pavement structure.) The Contractor shall pave over exposed existing aggregate base with new Glassphalt Concrete Base Course at the end of each day, as follows (unless otherwise noted): The Contractor shall compact the existing aggregate base in accordance with action 304 - Aggregate Base Course and apply Prime Coat in accordance with Section 408 - Prime coat, prior to laying the new Glassphalt Concrete Base Course. This preparation work shall be considered incidental to the new Glassphalt Concrete Base Course, and will not be paid for separately.

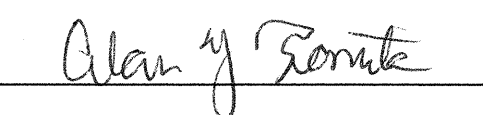
3. The vertical pavement drop-off shall not exceed 4-inches. If a vertical pavement drop-off exists at the end of each day's cold planing and paving, the Contractor shall provide a temporary wedge with a 48:1 minimum transition taper for transverse drop-off and no steeper than 6:1 for longitudinal drop-off, as approved by the Engineer. Temporary wedge shall be removed at no cost to the State. This work shall be considered incidental to Cold Planing. All transition tapers shall be removed prior to resuming paving operations. All transition tapers shall be removed prior to resuming paving operations.
4. The Contractor shall lower manholes, C&C street monuments & water valve boxes prior to Cold Planing, backfill with hot mix and re-adjust after final paving. Covering of lowered manholes shall be considered incidental to Manhole Adjustments.
5. The Contractor shall remove asphalt concrete from existing gutters and swales and shall exercise caution in doing so. The Contractor shall be held liable for any damage caused to the gutters by this removal. This work shall be considered incidental to Cold Planing.
6. The exact locations and limits or areas to be cold planed will be determined in the field by the Engineer.
7. Prior to cold planing over an existing structure, the Contractor shall determine the actual depth of the existing asphalt concrete pavement. The Contractor shall take several cross section measurements throughout the structure. If the thickness of the existing pavement is less than the proposed resurfacing thickness, the Contractor shall remove the existing pavement to the level of the structure and resurface to the original thickness. This work shall be considered incidental to cold planing and will not be paid for separately.
8. In cold planing the pavement over an existing structure, the Contractor shall exercise care not to damage any portion of the structure, especially the slab, joints, drain pipes or reinforcement. Any damage to the structure during the cold planing operations shall be repaired by the Contractor at no cost to the State. Repair work shall be as directed by the Engineer. The Contractor shall verify the existing pavement thickness by hand digging at various locations. This work shall be considered incidental to cold planing and will not be paid for separately.

APPROVED:

 7/19/99
Chief, Traffic Review Branch, DPP Date
(For Construction w/in City R/W Only)



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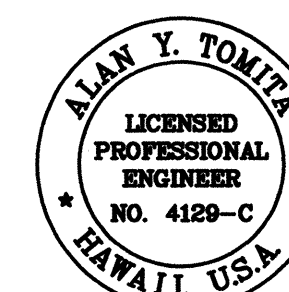
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GENERAL NOTES	
KAMEHAMEHA HIGHWAY RESURFACING Kaneohe Bay Drive to Kahiko Street F. A. Project No. NH-083-1(41)	
Scale: As Shown	Date: June, 1999
SHEET No. 4 OF 5 SHEETS	

Figure 1

ABBREVIATIONS

BR	Bottom of Ramp
CBMH	Catchbasin Manhole
G	Gas
GRD	Ground
JP	Joint Pole
PED	Pedestrian
PL	Property Line
RPM	Raised Pav't Markers
SL	Sewer Line
SIG	Signal
TC	Top of Curb
TR	Top of Ramp

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



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Clon y Tarnu

LEGEND AND ABBREVIATIONS

Scale: As Shown Date: June, 1999

SHEET No. 5 OF 5 SHEETS