

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7241A-01-13	2016	4	36

General Notes

- The Project Scope of Work involves construction of a new pedestrian bridge along Halawa Heights Road, Aiea, Oahu, Hawaii. Work includes clearing, grubbing, demolition, grading, pedestrian bridge, retaining walls, concrete sidewalk, pole and utility line relocation, mulching, and erosion controls.
- All construction work shall be done in accordance with the current version of Standards and Specifications of the State Department of Transportation for Road and Bridge Construction as amended, unless otherwise specified by the contract plans and specifications.
- Construction outside the State Department of Transportation right-of-way are subject to approval by the Engineer and the affected owner.
- The Contractor shall verify all dimensions and details shown on the drawings prior to the start of construction. Any discrepancy shall be immediately brought to the attention of the Engineer.
- The existence and location of utilities, manholes, monuments, pavements, and other features 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 make an independent check to verify the exact locations and depths of the existing utilities and obstructions. The work shall be incidental to various contract items.
- The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting paving operations.
- Contractor shall dispose or deliver any removed material, as described in Section 201 – Clearing and Grubbing, at no cost to the State.
- The Contractor shall be held liable for any damages incurred to the existing facilities, utilities and other features as a result of his operations. All damaged portions shall be replaced in accordance with the requirements of the affected owner or user at the Contractor's expense.
- All existing utilities to remain in use, whether or not shown on the plans, shall be protected at all times by the Contractor unless specified on the plans to be abandoned. Any damage to the existing utilities shall be repaired and paid for by the Contractor.
- Existing utilities shall remain in service and in place at all times. If relocation of the existing utilities is required by the Contract Documents or for the Contractor's convenience, interruption of service shall be kept to a minimum and shall be done at the Contractor's expense, and only with the approval of the Engineer and the affected utility company.
- The Contractor shall field verify the operational status of all existing utilities to be removed, relocated or abandoned in place. Any discrepancy shall be brought to the attention of the Engineer.
- The Contractor shall notify the Engineer and State Historic Preservation Division upon uncovering any potential historical artifacts or items of archaeological significance. See Section 107.13 in the 2005 State Standard Specifications.
- The existing improvements on the premises and in adjacent areas that are not to be removed shall be preserved and protected. Any and all damages resulting from the Contractor's construction operations shall be replaced and repaired to original condition, to the satisfaction of the owner.
- Azimuths and coordinates are referred to government survey triangulation Kapuai New.
- Elevations shown on these plans are referenced to Mean Sea Level (MSL).
- The Contractor shall adjust centerline and reference survey monuments to the finished pavement grade.
- The Contractor shall coordinate, if applicable, construction of electrical, telephone, cable television, water, sewer, fuel, oil, and gas line relocation work with Hawaiian Electric Company, Hawaii Tel Com, Oceanic Cable, Board of Water Supply, Department of Environmental Services, Chevron, Tesoro, HIRI, and GASCO Inc., respectively. All coordination shall be considered incidental to bikeway excavation work.
- The contractor shall coordinate with the land owners and users as needed to carry out the work.
- No material and/or equipment shall be stockpiled or otherwise stored within the former OR&L right-of-way except at locations designated in writing and approved by the Engineer. If use of a location is approved by the Engineer, a permit to use the property within the former OR&L right-of-way shall be obtained from the State Highways.
- The Contractor's attention is directed to the following subsections of the Special Provisions: Section 105.09 Coordination between the Contractors.

Construction Notes for Work Within State R/W

- All construction work shall be done in accordance with the Standard Plans and Specifications of the State Department of Transportation as amended, unless otherwise specified by the contract plans and specifications.
- Confined Space For entry by SDOT 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:
 - All safety equipment required by the confined space regulations applicable to all parties other than the construction industry, to include, but not limited to, the following:
 - Full body harnesses for up to two personnel.
 - Lifeline and associated clips.
 - Ingress/egress and fall protection equipment.
 - Two-way radios (walkie-talkies) if out of line-of-sight.
 - Emergency (escape) respirator (10 minute duration).
 - Cellular telephone to call for emergency assistance.
 - Continuous gas detector (calibrated) to measure oxygen, hydrogen sulfide, carbon monoxide and flammable (capable of monitoring at a distance at least 20-feet away).
 - Personal multi-gas detector to be carried by the inspector.
 - Continuous forced air ventilation adequate to provide safe entry conditions.
 - One trained attendant/rescue personnel topside (two, if conditions warrant it)

Public Health, Safety and Convenience Notes:

- 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 of the State Department of Health. The State may require supplementary measures as necessary.

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



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Signature: [Handwritten Signature] DATE OF LICENSE COPY: APR 30, 2018

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 1

HALAWA HEIGHTS ROAD
PEDESTRIAN BRIDGE
Proj. No. 7241A-01-13

Date: April 24, 2017

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7241A-01-13	2018	5	36

Grading Notes

- All grading work shall be done in accordance with State of Hawaii Standard Specifications for Road and Bridge Construction, Chapter 14, Articles 13, 14, 15 and 16, as related to Grading, Soil Erosion and Sediment Control of the Revised Ordinances of Honolulu, 1990, as amended, and Soils Memorandum by Geolabs, Inc. dated January 28, 2013.
- No contractor shall perform any grading operation 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 Contractor may be cited and the Contractor shall immediately make all remedial actions necessary.
- 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 contained in the Hawaii Administrative rules, Title 11, Chapter 60.1, "Air Pollution Control."
- 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 locations and depths of the facilities and exercise proper care in excavating in the area. Wherever 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 excavation for the new lines.
- Adequate provisions shall be made to prevent surface waters from damaging the cut face of an excavation or the sloped surfaces of a fill. Furthermore, adequate provisions shall be made to prevent sediment-laden run off from leaving the site.
- 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.
- Fills on slopes steeper than 5:1 shall be keyed.
- The city shall be informed of the location of the borrow/disposal site for the project when the application for a grading permit is made. The borrow/disposal site must also fulfill the requirements of the grading ordinance.
- No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the Director, D.P.P., provided such grading work is also in conformance with the community noise control standards contained in the Hawaii Administrative Rules, Title 11, Chapter 46, "Community Noise Control".
- The limits of the area to be graded shall be flagged before the commencement of the grading work.
- All grading operations shall be performed in conformance with the applicable provisions of the water quality and water pollution control standards contained in Hawaii Administrative Rules, Title 11, Chapter 54, "Water Quality Standards" and Title 11, Chapter 55, "Water Pollution Control" and applicable, the NPDES permit for the project.
- Where applicable and feasible the measures to control erosion and other pollutants shall be in place before any earth moving phase of the grading is initiated.
- Temporary erosion controls shall not be removed before permanent erosion controls are in-place and established.
- Temporary erosion control procedures shall be submitted for approval prior to application for grading permit.
- If the grading work involves contaminated soil, then all grading work shall be done in conformance with applicable State and Federal requirements.
- Building permit for retaining walls shall be obtained prior to commencement of grading work on site.
- For non-City projects, the Contractor shall notify the Civil Engineering Branch, D.P.P. at 768-8084 to arrange for inspectional services and submit two (2) sets of approved Construction Plans seven (7) days prior to commencement of construction work. For City projects, the Contractor shall coordinate inspectional services with responsible City agency.
- Non-compliance to any of the above requirements shall mean immediate suspension of all work, and remedial work shall commence immediately. All costs incurred shall be billed to the violator. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
- Place topsoil prior to placement of erosion control matting, in accordance with the requirements of Section 617-Topsoil, and Section 663-Erosion Control Matting.
- Any loose/soft soils encountered shall be removed and backfilled with proper compacted fill prior to mass grading.

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ORIGINAL PLAN	

Grading Notes (Cont.)

- Pursuant to Chapter 6e, HRS, in the event any artifacts or human remains are uncovered during construction operations, the Contractor shall immediately suspend work and notify the Honolulu Police Department, the State Department of Land and Natural Resources-Historic Preservation Division (692-8015). In addition, for non-city projects, the Contractor shall notify the Civil Engineering Branch, D.P.P. (768-8084); and for city projects, notify the responsible City agency.
- For all projects, which will disturb one (1) acre or more of land, the Contractor shall not start construction until a Notice of General Permit Coverage (NGPC) is received from the Department of Health, State of Hawaii, and has satisfied any other applicable requirements of the NPDES permit program. Also, for non-city and other non-governmental agency projects, the Contractor shall provide a written copy of the NGPC to the Permitting and Inspection Section, Civil Engineering Branch, DPP, at least seven (7) calendar days before the start of the construction. For City or other governmental projects, the Contractor should provide a written copy of the NGPC to the appropriate City department or governmental agency per their requirements.
- All grading and construction work shall implement measures to ensure that the discharge of pollutants from the construction site will be reduced to a maximum extent practicable and will not cause or contribute to an exceedance of water quality standards.
- Non-compliance to any of the above requirements shall mean immediate suspension of all work, and remedial work should commence immediately. All costs incurred shall be billed to the violator. Furthermore, violators shall be subjected to administrative, civil and/or criminal penalties.
- For Benchmarks, see sheet C1.1.

Sidewalk Notes

- All sidewalks shall provide a minimum clear width of 3'-0" (excluding curb) for pedestrian circulation. If this cannot be met, a minimum 32-inch clear width is allowed for a maximum distance of 24 inches.
- Narrow sidewalks (3'-0" min. width, excluding curb) may prohibit the installation of any sign posts, utility poles, fire hydrants, traffic signal standards, light poles, etc. in the sidewalk.
- Passing spaces along new sidewalks with 5' clear width or less shall be provided at maximum 200' intervals as required by ADA guidelines. The passing area shall be a minimum 5' wide by 5' long as feasible.
- For new construction, the minimum sidewalk width shall be 6'-0" (excluding curb). The cross slope shall not exceed 2%.
- Objects protruding from utility poles and walls adjacent to the sidewalks (i.e. wall mounted fire hydrants, telephones, meters on poles, etc.) shall be mounted to meet the current Americans with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.
- All new wheelchair-accessible curb ramps and flares shall be no steeper than 12H:1V. Ramps and flares shall be lengthened as required to achieve this maximum slope.



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION NOTES - 2
HALAWA HEIGHTS ROAD
PEDESTRIAN BRIDGE
Proj. No. 7241A-01-13
Date: April 24, 2017
SHEET No. C0.4 OF 18 SHEETS

Water Pollution And Erosion Control Notes

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7241A-01-13	2016	6	36

A. General:

- See Special Provisions Section 209 – Water Pollution and Erosion Control. Section 209 describes but is not limited to: submittal requirements; scheduling of a water pollution and erosion control conference with the engineer; construction requirements; method of measurement; and basis of payment. In addition, Appendix A lists potential pollutant sources and corresponding BMPS used to mitigate the pollutants.
- Follow the guidelines in the current HDOT construction Best Management Practices field manual in developing, installing and maintaining the Best Management Practices (BMP) for the project. For any conflicting requirements between the manual and applicable bid documents, the applicable bid will govern. Should a requirement not be clearly described within the applicable bid documents, the contractor shall notify the engineer immediately for interpretation. For the purposes of clarification under note A.2, "Applicable Bid Documents" include the construction plans, Standard Specifications, Special Provisions, Permits, and The Storm Water Pollution Prevention Plan (SWPPP) when applicable.
- Follow the guidelines in the Honolulu's City & County "Rules Relating to Soil Erosion Standards and Guidelines" along with applicable soil erosion guidelines for projects on Maui, Molokai, Kauai, and Hawaii.
- The engineer may assess liquidated damages of up to \$27,500 for non-compliance of each BMP requirement and each requirement stated in Section 209 and Special Provisions, for every day of non-compliance. There is no maximum limit on the amount assessed per day.
- The engineer will deduct the cost from the progress payment for all citations received by the department for non-compliance, or the contractor shall reimburse the state for the full amount of the outstanding cost incurred by the state.
- If necessary, install a rain gage prior to any field work including the installation of any site-specific best management practices. The rain gage shall have a tolerance of at least 0.05 inches of rainfall. Install the rain gage on the project site in an area that will not deter rainfall from entering the gage opening. Do not install in a location where rain water may splash into rain gage. The rain gage installation shall be stable and plumbed. Do not begin field work until the rain gage is installed and site-specific best management practices are in-place.
- Submit site-specific BMP plan to the engineer along with a completed site-specific BMP review checklist within 30 calendar days of contract execution. The site-specific BMP review checklist may be obtained from <http://www.stormwaterhawaii.com>

B. Waste Disposal:

- Waste Materials**
Collect and store all waste materials in a securely lidded metal dumpster or roll off container with cover to keep rain out or loss of waste during windy conditions. The dumpster shall meet all local and state solid waste management regulations. Deposit all trash and construction debris from the site in the dumpster. Empty the dumpster weekly or when the container is two-thirds full, whichever is sooner. Do not bury construction waste materials onsite. The contractor's supervisory personnel shall be instructed regarding the correct procedure for waste disposal. Post notices stating these practices in the office trailer, on a weatherproof bulletin board, or other accessible location acceptable to the engineer. The contractor shall be responsible for seeing that these procedures are followed. Submit the solid waste disclosure form for construction sites to the engineer within 30 calendar days of contract execution. Provide a copy of all the disposal receipts from the facility permitted by the department of health to receive solid waste to the engineer monthly. This should also include documentation from any intermediary facility where solid waste is handled or processed.

- Hazardous Waste**
Dispose all hazardous waste materials in the manner specified by local or state regulations and by the manufacturer. The contractor's site personnel shall be instructed in these practices and shall be responsible for seeing that these practices are followed.
- Sanitary Waste**
Collect all sanitary waste from the portable units a minimum of once per week, or as required. Position sanitary facilities where they are secure and will not be tipped over or knocked.

C. Erosion and Sediment Control Inspection and Maintenance Practices:

- For projects with an NPDES permit for construction activities, inspect at the following intervals. For construction areas discharging to nutrient or sediment impaired waters, inspect all control measures at least once each week and within 24 hours of any rainfall event of 0.25 inches or greater within a 24 hour period. For construction areas discharging to waters not impaired for nutrient or sediments, inspect all control measures weekly. Inspections are only required during the project's normal working hours. The discharge point water classification may be found in the SWPPP.
- For projects without an NPDES permit for construction activities, inspect all control measures weekly.
- Maintain all erosion and sediment control measures in good working order. If repair is necessary, initiate repair immediately and complete by the close of the next work day if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance. When installation of a new erosion or sediment control or a significant repair is needed, install the new or modified control or complete the repair no later than 7 calendar days from the time of discovery. "immediately" means the contractor shall take all reasonable measures to minimize or prevent discharge of pollutants until a permanent solution is installed and made operational. If a problem is identified at a time in the day in which it is too late to initiate repair, initiation of repair shall begin on the following work day.
- Remove built-up sediment from silt fence when it has reached one-third the height of the fence. Remove sediment from other perimeter sediment control devices when it has reached one-half the height of the device.
- Inspect silt screen or fence for depth of sediment, tears, to verify that the fabric is securely attached to the fence posts or concrete slab and to verify that the fence posts are firmly in the ground. Inspect and verify the bottom of the silt screen is buried a minimum of 6 inches below the existing ground.
- Inspect temporary and permanent seeding and planting for bare spots, washouts and healthy growth.
- Complete and submit to the engineer a maintenance inspection report within 24 hours after each inspection.
- Provide a stabilized construction entrance at all points of exit onto paved roads to reduce vehicle tracking of sediments. Include stabilized construction entrance in the water pollution, dust, and erosion control submittals. Minimum length should be 50 feet. Minimum width should be 30 feet. Minimum depth should be 12 inches or as recommended by the soils engineer and underlain with geo-textile fabric. If minimum dimensions cannot be met, provide other stabilization techniques that remove sediment prior to exit. Clean the paved street adjacent to the site entrance daily or as required to remove any excess mud, cold-planed materials, dirt or rock tracked from the site. Do not hose down the street without containing or vacuuming wash water. Cover dump tracks hauling material from the construction site with a tarpaulin. Remove sediment tracked onto the street, sidewalk, or other paved area by the end of the day in which the track-out occurs.

- Include designated concrete washout area(s) in the water pollution, dust, and erosion control submittals.
- Submit the name of a specific individual designated responsible for inspections maintenance and repair activities and filling out the inspection and maintenance report.
- Personnel selected for the inspection and maintenance responsibilities shall receive training from the contractor. They shall be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used onsite in good working order.
- Contain, remove, and dispose slurry generated from saw cutting of pavement in accordance with approved bmp practices. Do not allow discharge into the drainage system or state waters.
- For projects with an NPDES permit for construction activities, immediately initiate stabilizing exposed soil areas upon completion of earth-disturbing activities for areas where earth-disturbing activities have permanently or temporarily ceased. Earth-disturbing activities have permanently ceased when clearing and excavation within any area of the construction site that will not include permanent structures has been completed. Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future. For construction areas discharging into waters not impaired for nutrients sediments, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities. For construction areas temporary or permanent cessation of earth-disturbing activities. For construction areas discharging into nutrient or sediment impaired waters, complete initial stabilization within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities. Classification of water at the discharge point may be found in the SWPPP.
- For projects without an NPDES permit for construction activities, complete initial stabilization within 14 calendar days after the temporary or permanent cessation of earth-disturbing activities.

D. Good housekeeping Best Management Practices:

- Materials Pollution Prevention Plan**
A. Applicable materials or substances listed below are expected to be present onsite during construction. Other materials and substances not listed below shall be added to the inventory.

Concrete	Cleaning solvents	Adhesive
Detergents	Wood	Tar
Paints (enamel and latex)	Masonry block	Fertilizer
Metal studs	Herbicides and pesticides	
Petroleum based products	Curbing compounds	



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APR 30, 2018
DATE OF LICENSE EXPIRY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES – 3

HALAWA HEIGHTS ROAD
PEDESTRIAN BRIDGE
Proj. No. 7241A-01-13

Date: April 24, 2017

DATE	_____
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Water Pollution And Erosion Control Notes (Cont.)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7241A-01-13	2016	7	36

- B. Use material management practices to reduce the risk of spills for other accidental exposure of materials and substances to storm water runoff. Make an effort to store only enough product as is required to do the job.
- C. Store all materials stored onsite in a neat, orderly manner in their appropriate containers and if possible under a roof or other enclosure.
- D. Keep products in their original containers with the original manufacturer's label.
- E. Do not mix substances with one another unless recommended by the manufacturer.
- F. Whenever possible, use a product up completely before disposing of the container.
- G. Follow manufacturer's recommendations for proper use and disposal.
- H. Conduct a daily inspection to ensure proper use and disposal of materials onsite.

2. Hazardous Material Pollution Prevention Plan

- A. Keep products in original containers unless they are not reseal-able.
- B. Retain original labels and Safety Data Sheets (SDS), formerly Material Safety Data Sheets (MSDS).
- C. Dispose of surplus products according to manufacturers' instructions and local and state regulations.

3. Onsite and offsite product specific plan the following product specific practices shall be followed onsite:

A. Petroleum Based Products:

Monitor all onsite vehicles for leaks and perform regular preventive maintenance to reduce the chance of leakage. Store petroleum products in tightly sealed containers which are clearly labeled. Apply asphalt substances used onsite according to the manufacturer's recommendation.

B. Fertilizers:

Apply fertilizers used only in the minimum amounts recommended by the manufacturer and federal, state, and local requirements. Avoid applying just before a heavy rain event. Apply at the appropriate time of year for the location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth. Once applied, work fertilizer into the soil to limit exposure to storm water. Do not apply to storm conveyance channels with flowing water. Storage shall be in a covered shed or in an area where fertilizer will not come into contact with precipitation or storm water. Transfer the contents of any partially used bags of fertilizer to a seal-able plastic bin to avoid spills.

C. Paints:

Seal and store all containers when not required for use. Do not discharge excess paint to the drainage system, sanitary sewer system, or state waters. Dispose properly according to manufacturers' instructions and state and local regulations.

D. Concrete trucks:

Washout or discharge concrete truck drum wash water only at a designated site as far as practicable from storm drain inlets or state waters. Do not discharge water in the drainage system or state waters. Disposal by percolation is prohibited. Clean disposal site as required or as requested by the engineer.

4. Spill Control Plan

- a. Post a spill prevention plan to include measure to prevent and clean up each spill
- b. The contractor shall be the spill prevention and cleanup coordinator. Designate at least three site personnel who shall receive spill prevention and cleanup training. These individuals shall each become responsible for a particular phase of prevention and cleanup. Post the names of responsible spill personnel in the material storage area on a waterproof bulletin board or other accessible location acceptable to the engineer and in the office trailer onsite.
- A. Clearly post manufacturers' recommended methods for spill cleanup. Make site personnel aware of the procedures and the location of the information and cleanup supplies.
- B. Keep ample materials and equipment necessary for spill cleanup in the material storage area onsite.
- C. Clean up all spills immediately after discovery.
- D. Keep the spill area well ventilated. Personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- E. Report spills of toxic hazardous material to the appropriate State or Local Government Agency, regardless of the size. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR part 110, 40 CFR part 117, or 40 CFR part 302 occurs during a 24-hour period, the contractor shall notify the engineer as soon as the contractor has knowledge of the discharge. The engineer will notify the National Response Center (NRC) at (800) 424-8802, the Clean Water Branch during regular business hours at 586-4309, and the Hawaii State Hospital operator at 247-2191 and the Clean Water Branch (DOH-CWB) via email at cleanwaterbranch@doh.hawaii.gov during non-business hours immediately. The contractor shall also provide to the engineer, within 7 calendar days of knowledge of the release, a description of the release, the circumstances leading to the release, and the date of the release. The engineer will provide this information to the DOH-CWB. The engineer will provide information to the NRC if requested.

E. Permit Requirements:

1. A National Pollutant Discharge Elimination System (NPDES) permit for construction activities of one acre or more of disturbed area is required for this project. If the contractor requires extra land disturbance, including staging and storage areas, that is not covered by the npdes permit obtained by the county, the contractor shall be responsible for obtaining the required NPDES construction activities permit to cover this additional disturbed area. See Hawaii Administrative Rules Chapter 11-55, Appendix C for definition of land disturbance. The contractor's attention is directed to the applicable NPDES permit documents on the bid package compact disc.
2. Comply with all applicable state and federal permit conditions. Permits may include, but not limited to the following:

- a. NPDES permit for construction activities

F. Site specific BMP requirements:

Each BMP below is referenced to the corresponding section of the current HDOT construction best management practices field manual and appropriate supplemental sheets. The manual may be obtained from the HDOT statewide Stormwater Management Program website at <http://www.stormwaterhawaii.com/resources> under construction best management practices field manual. Supplemental bmp sheets are located at http://stormwaterhawaii.com/contractors/contractors_bmpmanual.aspx under concrete curing and irrigation water.

General Notes for Traffic Control Plan:

1. The Permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit field conditions.
2. Cones or delineators 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 is placed first. The others shall then be placed progressively towards 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.
5. All traffic lanes shall be a minimum of 10 feet wide.
6. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
7. The back 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).
8. Cones and delineators shall spaced at a maximum distance of 20 feet apart. a minimum of six channelizing devices shall be used for each taper length.
9. Driveways shall be kept open unless the owners of the property using the right-of-way are otherwise provided for satisfactorily. Further, the Permittee shall control traffic going in and out of driveways.
10. Buffer and taper areas on approach to any work area shall be kept clear of vehicles and equipment.
11. Traffic control plans are approved for work on any city street area only between the hours of 8:30 a.m. and 3:30 p.m.

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DESIGNED BY	_____
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APR 30, 2018
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CONSTRUCTION NOTES - 4

HALAWA HEIGHTS ROAD
PEDESTRIAN BRIDGE
Proj. No. 7241A-01-13

Date: April 24, 2017

SHEET No. C0.6 OF 18 SHEETS

Water Notes for Navy Water System

Contractor Checklist for new water connection:

1. Install new water system to within 5 ft of new connection point at NAVFAC HI water main. It is the Contractor's responsibility to completely install and test all new exterior waterlines.
2. Pressure test ("hydrotest") new water system per contract specifications or as indicated below, whichever is more stringent. if making a new water connection via a tapping sleeve, also include hydrotest results on the installed sleeve. Hydrotest results shall be documented as indicated in Note 4 below.
3. Disinfect new water system per contract specifications or as indicated below, whichever is more stringent. Disinfection results shall be documented as indicated in Note 5 below.
4. Submit both written hydrotest and disinfection results to NAVFAC HI Water Utilities at least 24 hours in advance of the scheduled connection date. If either test results are unacceptable, contractor shall be required to re-schedule the connection date and re-test at his cost.
5. Await confirmation/acceptance of test results by NAVFAC HI Water Utilities.
6. After the new connection is made to the NAVFAC HI water system, the expectation is that new water line shall be charged up within 8 hours of the actual connection. In general, NAVFAC HI will not allow a connection to be made into its system if the new system is not intended to be charged up on that same day.

Type of Connection being made:

1. Typically there are 2 methods to connect to the existing NAVFAC Hawaii water system:
 - 1.a. A wet (also known as a "hot" or "live") tap allows a connection into an existing water main while the main is still under pressure. This method enables a connection to be made without interrupting water supply to adjacent facilities. All wet taps 12-in and smaller shall be made only by NAVFAC HI Water Utilities. Contractor shall provide minimum 5 ft clearance to enable insertion of the tapping machine. All taps over 12-in in size shall be made by the Contractor in the direct presence of NAVFAC HI Water Utilities personnel.
 - 1.b. Cutting-in a fitting, which typically involves installing a fitting onto the existing water main, such as a tee or an elbow. In order to do this, the existing water main has to be shut down so that the Contractor can de-pressurize and dewater the main when it is cut open. Shutting down a main requires NAVFAC Hawaii water system valves to be operated, and only NAVFAC HI Water Utilities crews are allowed to operate its water valves.
2. Wet Tap Materials:
 - a. Tapping Sleeves:

Tapping sleeves 4-in and larger shall be split body, cast or ductile iron with mechanical joints. Any exceptions to this type of tapping sleeve shall require written approval from NAVFAC HI Water Utilities. No fabricated stainless steel, compression-type sleeves shall be allowed.
 - b. Tapping Saddles:

Service lateral taps shall be made with a bronze double strapped saddle No single strap saddles allowed. Also, no direct taps into a water main shall be allowed unless the tap is made at a bossed fitting.

Adequate Thrust Restraint:

Contractor shall ensure that adequate thrust restraint is in place prior to the connection. If concrete thrust blocks are used, concrete shall have been cured for at least 5 days prior to the connection. If steel l-beams/braces are used to provide structural support at a pipe fitting, the l-beam/brace shall not be welded directly to the pipe. A steel cradle shall be bent to the radius of the fitting outer diameter (OD) and shall be welded to the l-beam/brace. Do not use wedged wood blocking for thrust restraint.

Hydrotest Requirements:

The contractor shall notify NAVFAC HI Water Utilities at telephone number 473-0037 at least three (3) working days prior to hydrotesting a new line. Hydrotest pressure shall be 260 psi. Hold this pressure for not less than 2 hours.

Submitted hydrotest documentation shall include:

- a. Indicate project name, contract number, location, prime contractor, and subcontractor performing hydrotest.
- b. Indicate date and time of test.
- c.Indicate weather conditions.
- d. Indicate type of pipe material being tested.
- e.Clearly indicate what section of pipe is being tested (i.e. "Waterline-A, Sta 0+00 to 2+00")
- f.If including tapping sleeve hydrotest results, indicate size/material of sleeve.
- g. Indicate start/end time and pressures
- h. Contractor QC Manager shall certify test results.

Disinfection Requirements:

- a. The contractor shall notify NAVFAC HI Water Utilities at telephone number 473-0037 at least three (3) working days prior to disinfecting a new line.
- b. At minimum, personnel performing the disinfection shall have a State of Hawaii Water Distribution System Operator (DSO) I license.
- c. Disinfection of water lines, including flushing and bacteriological testing, shall be in accordance with AWWA C651 (latest edition) except as otherwise indicated below.
- d. All connections to existing water lines shall be done in the "dry"(i.e. no standing water in the trench shall be allowed to get inside either new or existing waterline). When the existing water line has to be dewatered, the contractor shall accomplish the dewatering of the line in a manner such that the connection to the existing system can be done in the "dry".
- e. For new pipe sections, chlorine shall be applied by the continuous feed method unless prior approval has been obtained to use a different method.
- f. When the line is chlorinated, water entering the line shall receive a dose of chlorine fed at a constant rate such that the water will have not less than 50 mg/L of free chlorine.
- g. At the end of a 24-hour period the treated water shall have a residual of not less than 25 mg/L free chlorine.
- h. During the chlorination period all valves and hydrants in the section being treated shall be operated a sufficient number of times to thoroughly disinfect the appurtenances.
- i. All meters shall be disinfected with the water line except when otherwise approved by the Contracting Officer.
- j. Submitted disinfection documentation shall include:
 - certification from both contractor performing disinfection work and certified laboratory conducting the analysis.
 - Both certifications shall indicate project name, date of disinfection, sampling date and section of piping being disinfected (i.e. "8-in Waterline A, Sta 0+00 to 3+00)"
- k. Depending on the actual length of piping to be disinfected, NAVFAC HI Water Utilities may waive the normal disinfection process and allow the pipe/fitting to be swabbed with a 5% chlorine solution. Only NAVFAC HI Water Utilities shall grant approval for this process. If approved, the swabbing process shall be photo documented by the contractor and submitted to NAVFAC HI Water Utilities as proof of disinfection.

Disinfection Timing Requirements:

Contractor shall note that the disinfection process typically takes several days from actual chlorination to receipt of laboratory results. Therefore, contractor needs to ensure they schedule the disinfection several days in advanced of the connection date to enable delivery of the disinfection results to NAVFAC HI in a timely manner. However, note that once the new line has been disinfected, NAVFAC HI Water Utilities requires that this line be connected and charged up within seven (7) days. If the disinfected line has not been connected and charged up within 7 days, the line shall be required to be flushed prior to the connection being made. Additionally, should the new line sit unconnected beyond 14 days of being disinfected, it shall be rechlorinated at contractor's expense. These requirements are to prevent stagnant water from developing in the new piping and being introduced into the Navy water system upon connection.

Transmittal of Hydrotest and Disinfection Documentation:

Hardcopies of both hydrotest and disinfection results shall be submitted to NAVFAC Hawaii Water Utilities at least 24 hours in advance of the scheduled connection. If either test results are not received within 24 hours of the connection date, it will be cancelled. Test results shall be transmitted either via fax or as an email attachment. Verbal confirmation via phone shall not be accepted.

Construction Notes:

1. The Contractor shall request water outages in writing, via the contracting officer, 30 days prior to the desired date of the outage. All water outages shall be performed by NAVFAC HI Water Utilities.
2. The Contractor shall provide NAVFAC HI Water Utilities 14 days notice prior to connecting to any waterline.
3. Install warning and identification tape for all waterlines.
4. Maximum deflection for pipe joints shall be limited to 80% of the deflection recommended by the manufacturer.
5. Ductile iron pipe and fittings shall confirm to AWWA C151, and shall be thickness class 53 (min.). Flanged pipe shall conform to AWWA C115, and flanged fittings shall conform to AWWA C110 or AWWA C153. Pipe and fittings shall have cement-mortar lining conforming to AWWA C104, standard thickness. Provide polyethylene encasement in conformance with AWWA C105. Bolts and nuts shall be type 316 stainless steel or high-strength low-alloy corrosion resistant steel (Corten) with fluoropolymer protective coating and lubrication (blue).

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7241A-01-13	2016	C.O. 7S-1	36

ORIGINAL PLAN	NO. _____	DATE _____	SURVEY PLOTTED BY _____
			DRAWN BY _____
			CHECKED BY _____
			CHECKED BY _____



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature: *Eric K. Yoncoski*
DATE OF LICENSE EXPIRY: APR. 30, 2019

5/30/18	New Sheet
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
CONSTRUCTION NOTES – 5	
HALAWA HEIGHTS ROAD PEDESTRIAN BRIDGE Proj. No. 7241A-01-13	
Date: April 24, 2017	
SHEET No.C0.6A OF 18 SHEETS	