

GENERAL NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7012A-01-21	2022	3	14

1.

The scope of work for this project consists of constructing new concrete sidewalks on the north side of Whitmore Avenue; and reconstructing curbs.

2.

The Contractor is reminded of the requirements of Subsection 105.16 - Subcontracts, 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 104.09 - Maintenance of Traffic; Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; and the 2005 Hawaii Standard Specifications for Road and Bridge Construction Section 645 - Work Zone Traffic Control.

4.

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 tone for the exact locations and depths of all underground utilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, installation of guardrail, catch basins, traffic signal, widening, etc. may affect these properties. Toning shall be considered incidental to the various contract items and will not be paid for separately. The Contractor shall be held liable for any damages incurred to the existing facilities and/or improvements as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State.

5.

The Contractor shall make an independent check on the ground by probing and/or checking with the various utility companies or government agencies to verify the exact locations and depths of the existing utilities and obstructions. The Contractor shall exercise proper care in excavating in the area. Whenever 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 excavating. The Contractor shall be held liable for any damaged incurred to the existing facilities and/or improvements as a result of his operations. All damaged portions shall be replaced or repaired and shall include all upgrades and betterments to the standards of the utility or agency.

6.

The Contractor shall independently tone areas of excavation not more than 30 days prior to excavation. Provide written notice of scheduled toning and specific locations to the Engineer at least one week adead of toning. If there is a potential conflict, the Contractor shall inform DOT within 24 hours of discovery. Contractor shall probe around area and take precautions to not damage utilities. This work shall be incidental to various contract items and shall not be paid for separately.

7.

All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction unless specified on the plans to be abandoned. The Contractor shall be held liable for any damages incurred to the existing utilities as a result of his operations. All damaged portions shall be replaced in accordance with the Standards and Specifications of the affected utility company at no cost to the State.

8.

The Contractor shall obtain all necessary permits prior to start of work at his own cost.

9.

The Contractor shall verify the presence of existing aerial and underground utilities which may conflict with construction activities and shall coordinate with the utility company for temporary relocations, as necessary. All costs associated with temporary relocations shall be borne by the Contractor.

10.

The Contractor shall indemnify and be solely responsible for the protection of adjacent properties, utilities and existing structures from damages due to construction. Repairing any damage shall be at the Contractor's own expense, to the satisfaction of the Engineer.

11.

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 MASH.

12.

The Contractor shall submit maintenance plans and schedules, including road or lane closures, lane switches, and the placement of temporary traffic control devices to the Engineer for acceptance prior to Construction.

13.

The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.

14.

The exact locations and limits of areas to be reconstructed and cold planed shall be determined in the field by the Engineer.

15.

The Contractor shall notify the Department of Transportation Services, Public Transit Division at ph. #768-8396 and the Oahu Transit Services, Inc. Bus Operations (ph. #848-4578 or 852-6016) and Paratransit Operations (ph. #454-5041 or 454-5020) of the scope of work, location, proposed closure of any street, traffic lane, sidewalk, or bus stop, and duration of project at least two (2) weeks prior to starting construction operations.

16.

The Contractor shall notify in writing, the Oahu Transit Services, Inc. (ph. #848-4571), of the scope of work, location, closure of the name of the highway and/or traffic lanes, and dates of closure at least two (2) weeks prior to starting construction operations. Coordination with OTS and the relocation of bus stop shall be incidental to the contract items and shall not be paid for separately.

17.

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.

18.

The existing drainage system shall be kept 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.

19.

Smooth riding connections shall be constructed at all limits of resurfacing including the beginning and end of project, connecting approaches, side streets, walkways and driveways as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to various contract items.

20.

The Contractor shall clean and remove any accumulation of aggregates along the roadside within 10 feet of the edge of pavement. This work shall be considered incidental to various contract items.

21.

Dressing of shoulder shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by the Engineer. This work shall be considered incidental to various contract items.

22.

Removal and disposal of existing gutter, curb, sidewalk, asphalt concrete pavement, and any debris shall be considered incidental to their res-pective bid items.

23.

All saw cutting and safety edge work shall be considered incidental to various contract items.

24.

Existing facilities and/or pavement to remain which has been damaged by the Contractor shall be restored to its original condition at no cost to the State.

25.

The Contractor shall be held liable for any damages incurred to the existing landscaping as a result of his operations.

26.

All material generated by the project and taken off-site shall be considered solid waste. The Contractor shall dispose of all removed material at an approved Department of Health waste management facility. Disposal of material shall be incidental to various contract items and shall not be paid for separately. Provide a copy of all the disposal receipts from the facility permitted by the Department of Health to receive solid waste to the Engineer by the last day of each month. Provide documentation from any intermediary facility where solid waste is handled or processed, haul tags, or any documentation as requested by the Engineer. If the Contractor elects to reclassify material as inert fill or reused, DOH HEER testing guidance shall be followed at no additional cost. No material generated from this project shall be classified as inert fill material for reuse without testing, obtaining required approvals/permits, providing disposal locations/quantities, and obtaining prior written approval from the Engineer. Failure to comply with these requirements will result in fines/liquidated damages in accordance with Special Provisions Section 209 and HDOT⁵/32s Enforcement Response Plan.

27.

The Contractor must provide and maintain vehicular and pedestrian ADA access routes complying with 2010 ADAAG Section 206.1, including side streets, and cross streets at all times, must also including signage and detours during construction. This work shall be considered incidental to various contract items and will not be paid for separately.

28.

Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%. Existing aggregate subbase course must be recompacted to relative compaction greater than or equal to 95%.
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| NOTE BOOK | No. 2w/m | |
- STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

WHITMORE AVENUE SIDEWALK IMPROVEMENTS
Uakanikoo Street to Ihiihi Avenue
Project No. 7012A-01-21

Scale: NTS Date: October, 2021
- SHEET No. 1 OF 5 SHEETS
- 3

GENERAL NOTES (Cont.)

29. The vertical riding surface drop-off between adjacent surfaces shall not exceed 3-inches. This shall include differences in height between adjacent pavement surfaces, cold planed surfaces, bridge decks and new concrete slabs. If a vertical riding surface drop-off exists at the end of each day's work, the Contractor shall provide temporary transition tapers with maximum slopes of 48:1 for travel in the longitudinal direction and 6:1 for transverse movements.
30. All public notices and advertisements shall be incidental to lump sum traffic control item 645.0100 - Traffic Control, and shall not be paid for separately, unless otherwise directed by Engineer.
31. The Contractor shall use the Traffic Control setup included in the 2005 Hawaii Standard Specifications for Road and Bridge Construction Section 645, MUTCD, or both to develop a site specific Traffic Control Plan where warranted or required..
32. The Contractor shall coordinate with the Honolulu Police Department Special Duty Section to hire police officers for traffic control operations and transporting of project equipment to ensure minimal delay due to lane closures.
33. Earth swale shall be graded to drain. This work shall beconsidered incidental to various contract items.
34. Trimming and dressing of shoulder, sidewalk and bus turnout shall consist of clearing, grubbing, grading, reshaping and compacting the unpaved shoulders with suitable material as shown on the plans and/or as directed by Engineer. Suitable materials
35. Material or equipment or both must not be stockpiled or stored within the highway right-of-way unless accepted in writing by the Engineer. If use of location is approved by the Engineer, the Contractor shall obtain a permit to use the property within the highway right-of-way from the State Highways Right-of-Way Branch at ph. #692-7332.
36. Concrete sidewalk shall be reinforced with 6x6 W1.4xW1.4 welded wire fabric.
37. Hydro-mulch Seed newly graded areas with Bermuda Seeding.
38. All curbing angle points within the curb ramps shall be rounded with R=6."
39. All work specified in the contract documents but not itemized in the proposal including all that is needed to complete the work shall be considered incidental to the various contract items and shall not be paid for separately.

HAWAII ONE CALL CENTER

1. The Contractor shall contact Hawaii One Call Center to have repective utility companies and agencies mark where their underground utilities are located. The Contractor shall comply with all requirements of Hawaii One Call Law. The Contractor shall be liable for any damages if Hawaii One Call requirements are not strictly adhered to. In accordance with Hawaii State Law Section 269E-7, the Hawaii One Call Center (HOCC) shall provide an inquiry identification number for each location request provided by the Contractor. The inquiry identification number and utility marks shall remain valid for not more than twenty-eight (28) calendar days from the date of issuance and after that date shall require the Contractor to submit a new request for HOCC revalidation. The Contractor shall provide all inquiry identification numbers for each location request to the Engineer.
2. Before conducting any excavation in the public right of way or on private property, the Contractor shall call the Hawaii One Call Center at least five (5) working days before beginning excavation operations. Be sure to give them the address and location of the nearest cross street(s) near the planned excavation site.
- Call 811 toll-free 24 hours a day. For more information, go to www.callbeforeyoudig.org
3. The Hawaii One Call Center will contact all utility companies to tone, mark, or identify the location of their underground utilities for free. Mark the area where you plan to excavate in White and label all of the other utilities as listed below.
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|--------|---|
| RED | Electric power lines, cables, or conduits, and lighting cables. |
| YELLOW | Gas, oil steam, petroleum or other hazardous liquid or gaseous materials. |
| ORANGE | Communications, cable TV, alarm or signal lines, cables, or conduits. |
| BLUE | Water, irrigation, and slurry lines. |
| GREEN | Sewers, storm sewer facilities or other drain lines. |
| WHITE | Proposed excavation. |
| PINK | Temporary survey markings. |
| PURPLE | Reclaimed water, irrigation and slurry lines. |

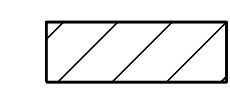

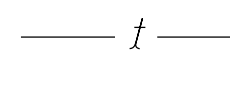
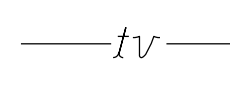
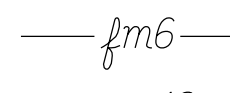
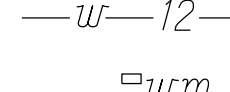
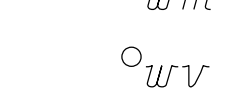
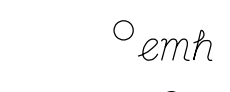
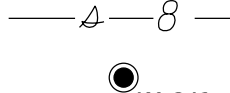
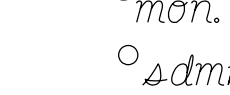


SPECTRUM NOTES

1. Spectrum has coax and fiber that occupies both CATV and Hawaiian Telcom (HTCO) duct systems within the project area. The exact locations, depth and routing of all underground CATV facilities must be verified in the field due to construction variances. Toning, through the Hawaiian One Call Center, will identify Spectrum facilities in the immediate area.

SIDEWALK NOTES

1. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
2. Curb ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
3. Construction joints are required to join curb ramps with sidewalks.
4. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
5. Bed course material is required for curb ramps, sidewalks, and gutters.
6. 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 distance of 24-inches.
7. 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.
8. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
9. 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 American with Disabilities Act Accessibility Guidelines (ADAAG) and will be subject to Engineer's approval.

LEGEND

- | | |
|---|--------------------------------|
|  | Reconstruction Areas |
|  | Existing Power Pole |
|  | Existing Telephone Line |
|  | Existing TV Cable |
|  | Existing Force Main Sewer Line |
|  | Existing 12" Water Line |
|  | Existing Water Meter |
|  | Existing Water Valve Box |
|  | Existing Electric Manhole |
|  | Existing Sewer Line |
|  | Existing Monument |
|  | Existing Storm Drain Manhole |

- | | |
|---|--------------------------|
|  | Existing Catch Basin |
|  | Existing Street Lighting |
|  | Existing Traffic Sign |
|  | Existing Utility Pullbox |

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES AND LEGEND

WHITMORE AVENUE SIDEWALK IMPROVEMENTS

Uakanikoo Street to Ihiihi Avenue

Project No. 7012A-01-21

Scale: NTS

Date: October, 2021

SHEET No. 2 OF 5 SHEETS

HAWAIIAN ELECTRIC COMPANY NOTES

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7012A-01-21	2022	5	14

1. Location of Hawaiian Electric Facilities.

The location of Hawaiian Electric's 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 verify in the field the locations of the Facilities and shall exercise proper care in excavating and working in the area. Wherever connections of new utilities to existing utilities and utility crossings are Shown, the Contractor shall expose the existing lines at the proposed connections And crossings to verify the depths prior to excavation for the new lines. The Contractor shall be responsible for any damages to Hawaiian Electric's facilities Whether shown or not shown on the plans.

2. Compliance With Hawaii Occupational Safety and Health Laws.

The Contractor shall comply with the state of Hawaii's occupational safety and Health laws and regulations, including without limitation, those related to working on or near exposed or energized electrical lines and equipment.

3. Excavation Clearance.

The Contractor shall obtain an excavation clearance from Hawaiian Electric's Planning and Design Section of the Customer Installations division (543-5654) located At 820 Ward Avenue, 4Th floor, a minimum of ten (10) working days prior to starting construction.

4. Caution!!! Electrical Hazard!!!

Existing Hawaiian Electric overhead and underground lines are energized and will remain energized during construction unless prior special arrangements have been made with Hawaiian Electric. Only Hawaiian Electric personnel are to handle these energized lines and erect temporary guards to protect these lines from damage. The Contractor shall work cautiously at all times to avoid accidents and damage to existing Hawaiian Electric facilities, which can result in electrocution.

5. Overhead Lines.

State law (OSHA) requires that a worker and the longest object he or she may contact cannot come closer than a specified minimum radial clearance when working close to or under any overhead lines. It is the Contractor's responsibility To be informed of and comply with the law. At any time should the Contractor anticipate that his work will result in the need to encroach within the minimum required clearance as stated in the law, the Contractor shall notify Hawaiian Electric at least three (3) months prior to the planned encroachment so that, if feasible, the necessary protections (e.g. relocate Or de-energize Hawaiian Electric lines) can be investigated. Hawaiian Electric may also be able to blanket its distribution (12kv and below) lines to provide a visual aid in preventing accidental contact. Hawaiian Electric's cost of safeguarding or identifying its lines will be charged to the Contractor. Contact Hawaiian Electric's customer installations division at 543-7070 for assistance in identifying and safeguarding overhead power lines.

6. Pole Bracing.

The Contractor shall not excavate within 10 feet from Hawaiian Electric's utility poles Or any anchor system supporting the utility pole. If the Contractor must excavate Closer than 10 feet from a utility pole or its anchor system, the Contractor will be responsible for protecting, supporting, securing and taking all precautions to prevent damage to or leaning of existing poles. Before commencing such excavation, the Contractor must submit its bracing calculations and drawings, prepared and stamped by a licensed structural engineer, to Hawaiian Electric's Customer Installations Division (543-7070) for review. Hawaiian Electric requires a minimum of ten (10) working days to conduct the review of the Contractor's submittal. The Contractor shall be responsible for the design, installation, and removal of the temporary pole bracing system, as well as all costs incurred by Hawaiian Electric to review the Contractor's drawings and to repair or straighten poles impacted by the Contractor's activities, including response and restoration costs incurred by Hawaiian Electric arising out of or related to outages caused by the Contractor's failure to meet the foregoing requirements. Hawaiian Electric's review and approval of any Contractor submittals including its work procedure shall not relieve the Contractor from any liability resulting from the Contractor's excavation near or around Hawaiian Electric's utility poles.

7. Underground Lines.

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of underground lines. Hawaiian Electric's existing electrical cables are energized and will remain energized during construction. Only Hawaiian Electric personnel are to break into existing Hawaiian Electric facilities, handle these cables, and erect temporary guards to protect these cables from damage. The cost of Hawaiian Electric's assistance in providing proper support and protection of its underground lines will be charged to the Contractor. For assistance/coordination in providing proper support and protection of these lines, the Contractor shall call Hawaiian Electric's customer installations division at 543-7070 a minimum of ten (10) working days in advance.

Special precautions are required when excavating near Hawaiian Electric's 138kv or 46kv underground lines (see Hawaiian Electric instructions to Consultants/Contractors on "Excavation Near Hawaiian Electric's Underground 138kv and/or 46kv Lines" for detailed requirements).

For verification of underground lines, the Contractor shall call the Hawaii One Call Center at 866-423-7287 a minimum of five (5) working days in advance.

8. Underground Fuel Pipelines.

The Contractor shall exercise extreme caution whenever construction crosses or is in close proximity of Hawaiian Electric's underground fuel oil pipelines. Special precautions are required when excavating near Hawaiian Electric's underground fuel oil pipelines (see Hawaiian Electric's specific fuel pipeline "Guidelines" to Consultants/Contractors on excavation near Hawaiian Electric's underground fuel pipelines for detailed requirements).

9. Excavations. When trench excavation is adjacent to or beneath Hawaiian Electric's existing structures or facilities, the Contractor is responsible for:
- a) Arranging for Hawaiian Electric standby personnel to observe work at Contractor's cost.
 - b) Sheeting, bracing, or otherwise supporting the excavation and stabilizing the existing ground to render it safe and secure and to prevent possible slides, Cave-ins, and settlements.
 - c) Properly supporting existing structures or facilities with beams, struts, under-pinnings, or other necessary methods to fully protect it from damage.
 - d) Backfilling with proper backfill material including special thermal backfill where existing (refer to engineering division for thermal backfill specifications).

10. Relocation of Hawaiian Electric Facilities.

Any work required to relocate or modify Hawaiian Electric facilities shall be done by Hawaiian Electric, or by the Contractor under Hawaiian Electric's supervision. The Contractor shall be responsible for all coordination, and shall provide necessary support for Hawaiian Electric's work, which may include, but not be limited to, staking of pole/anchor locations, identifying right of way and property lines, excavation and backfill, permits and traffic control, barricading, and restoration of pavement, sidewalks, and other facilities.

All costs associated with any relocation or modification (either temporary or permanent) for the convenience of the Contractor, or to enable the Contractor to perform his work in a safe and expeditious manner in fulfilling his contract obligations shall be borne by the Contractor.

11. Conflicts. Any redesign or relocation of Hawaiian Electric's facilities not shown on the plans May be cause for lengthy delays. The Contractor acknowledges that Hawaiian Electric is not responsible for any delay or damage that may arise as a result of any conflicts discovered or identified with respect to the location or construction of Hawaiian Electric's electrical facilities in the field, regardless of whether the Contractor has met the requested minimum advance notices. In order to minimize any delay or impact arising from such conflicts, Hawaiian Electric should be notified immediately upon discovery or identification of such conflict.

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NOTE BOOK		
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

WHITMORE AVENUE SIDEWALK IMPROVEMENTS
Uakanikoo Street to Ihiihi Avenue
Project No. 7012A-01-21

Date: October, 2021

SHEET No. 3 OF 5 SHEETS

HAWAIIAN ELECTRIC COMPANY NOTES (Cont.)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7012A-01-21	2022	6	14

12. Damage To Hawaiian Electric Facilities.

The Contractor shall be responsible for the protection of all Hawaiian Electric surface and subsurface utilities and shall be responsible for any damages to Hawaiian Electric's facilities as a result of his operations. The Contractor shall immediately report such damages or any hazardous conditions related to Hawaiian Electric's lines to Hawaiian Electric's trouble dispatcher at 548-7961. Repair work shall be done by Hawaiian Electric or by the Contractor under Hawaiian Electric's Supervision. Costs for damages to Hawaiian Electric's facilities shall be borne by the Contractor.

In case of damage or suspected damage to Hawaiian Electric's fuel pipeline, the Contractor shall immediately notify Hawaiian Electric's security command center at 543-7685 (a 24-hour number) so Hawaiian Electric personnel can secure the damaged section and report any oil spills to the proper authorities. All costs associated with the damage, repair, and oil spill cleanup shall be borne by the Contractor.

13. Hawaiian Electric Stand-by Personnel.

The Contractor may request Hawaiian Electric to provide an inspector to stand-by during construction near Hawaiian Electric's facilities. The cost of such inspection Will be charged to the Contractor. The Contractor shall call Hawaiian Electric's customer installations division at 543-7070 a minimum of three (3) months in advance to arrange for Hawaiian Electric stand-by personnel.

14. Clearances.

The following clearances shall be maintained between Hawaiian Electric's ductline and all adjacent structures (charted and uncharted) in the trench:

GUIDELINES FOR MINIMUM HORIZONTAL (PARALLEL) CLEARANCES BETWEEN HAWAIIAN ELECTRIC AND OTHER UNDERGROUND UTILITIES				
UNDERGROUND UTILITY	HAWAIIAN ELECTRIC DIRECT BURIED CABLE	HAWAIIAN ELECTRIC DIRECT BURIED IN CONDUIT (no conc. encasement)	HAWAIIAN ELECTRIC 3" (MIN.) CONCRETE ENCASEMENT	APPLICABLE NOTES:
Hawaiian Electric DB Conduits	12"	3"	0"	
Hawaiian Electric 3" Encasement	0"	0"	0"	
Telephone / CATV DB	12"	12"	6"	
Telephone / CATV DB Ducts	12"	12"	6"	
Telephone / CATV 3" Encasement	0"	0"	0"	5
Traffic Signal	12"	12"	12"	
Water DB (BWS Owned)	36"	36"	36"	1, 4
Customer Owned Water Service Laterals	12"	12"	12"	
Water (Concrete Jacketed) (BWS Owned)	36"	36"	36"	1, 4
Gas DB	12"	12"	12"	1
Gas (Concrete Jacketed)	12"	12"	12"	1
Sewer DB	36"	36"	36"	1, 2
Sewer (Concrete Jacketed)	36"	36"	36"	1, 2
Drain	12"	12"	12"	1
Fuel Pipelines				3
Notes: 1. Where space is available, parallel clearance to other utilities, or foreign structures other than communication or traffic signal shall be 36". 2. If 36" clearance cannot be met: - If clearance is less than 12", jacket sewer line with reinforced concrete (per Hawaiian Electric's std. 30-1030) for a distance of 5' plus pipe diameter. - If clearance is between 12" and 36", jacket sewer line with plain concrete. 3. All Fuel Pipeline crossings shall be reviewed and approved by the company that owns and maintains it. 4. 5 feet clear to water mains 16" and larger. 5. For situations with 0" minimum separation, a 6" separation is recommended. 6. Clearances measured from outer edges or diameters of utilities. Whenever concrete jackets are involved, clearances shall be total clear distance between the concrete jacket and utility concerned.				

GUIDELINES FOR MINIMUM VERTICAL (CROSSINGS) CLEARANCES BETWEEN HAWAIIAN ELECTRIC AND OTHER UNDERGROUND UTILITIES				
UNDERGROUND UTILITY	HAWAIIAN ELECTRIC DIRECT BURIED CABLE	HAWAIIAN ELECTRIC DIRECT BURIED IN CONDUIT (no conc. encasement)	HAWAIIAN ELECTRIC 3" (MIN.) CONCRETE ENCASEMENT	APPLICABLE NOTES:
Hawaiian Electric DB Conduits	6"	3"	0"	
Hawaiian Electric 3" Encasement	0"	0"	0"	
Telephone / CATV DB	12"	12"	6"	
Telephone / CATV DB Ducts	12"	12"	6"	
Telephone / CATV 3" Encasement	0"	0"	0"	3
Traffic Signal	12"	12"	6"	
Water DB (BWS Owned)	12"	12"	12"	5
Customer Owned Water Service Laterals	6"	6"	6"	
Water (Concrete Jacketed) (BWS Owned)	12"	12"	12"	5
Gas DB	12"	12"	12"	
Gas (Concrete Jacketed)	12"	12"	12"	
Sewer DB	24"	24"	24"	1
Sewer (Concrete Jacketed)	24"	24"	24"	1
Drain	12"	12"	6"	
Fuel Pipelines				2
Notes: 1. If clearance cannot be met: - If clearance is less than 12", jacket sewer line with reinforced concrete (per Hawaiian Electric's std. 30-1030) for a distance of 5' plus pipe diameter. - If clearance is between 12" and 24", jacket sewer line with plain concrete. 2. All Fuel Pipeline crossings shall be reviewed and approved by the company that owns and maintains it. 3. For situations with 0" minimum separation, a 6" separation is recommended. 4. Clearances measured from outer edges or diameters of utilities. Whenever concrete jackets are involved, clearances shall be total clear distance between the concrete jacket and utility concerned. 5. 36" clearance is required for trenchless installation work.				

The Contractor shall notify the construction manager & Hawaiian Electric of any heat sources (power cable duct bank, steamline, etc.) encountered that are not properly identified on the drawing

15. Indemnity.

The Contractor shall indemnify, defend and hold harmless Hawaiian Electric from and against all losses, damages, claims, and actions, including but not limited to reasonable attorney's fees and costs based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by contractor or anyone acting under its direction or control or on its behalf; provided contractor's indemnity shall not be applicable to any liability based upon the sole negligence of Hawaiian Electric.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

WHITMORE AVENUE SIDEWALK IMPROVEMENTS
Uakanikoo Street to Ihiihi Avenue
Project No. 7012A-01-21

Date: October, 2021

SHEET No. 4 OF 5 SHEETS

HAWAIIAN ELECTRIC COMPANY NOTES (Cont.)

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7012A-01-21	2022	7	14

ADDITIONAL NOTES WHEN WORK INVOLVES CONSTRUCTION OF HAWAIIAN ELECTRIC FACILITIES

16. Schedule.

The Contractor shall furnish his construction schedule six (6) months prior to starting work on Hawaiian Electric Facilities. The Contractor shall give Hawaiian Electric, in writing, three (3) months notice to proceed with Hawaiian Electric's portion of work.

17. Authority.

All construction, restoration work, and inspection shall be subject to whichever governmental agency has authority over the work.

18. Specifications.

Construction of Hawaiian Electric's underground facilities shall be constructed in accordance with the latest revisions of Hawaiian Electric Specifications CS7001, CS7003, CS7202, CS9301 and CS9401 and applicable Hawaiian Electric Standards.

19. Construction.

The Contractor shall furnish all labor, materials, equipment, and services to properly perform and fully complete all work shown on the contract, drawings, and specifications. All materials shall be new and manufactured in the United States of America. All manhole, handhole, and ductline installations shall be inspected and approved by Hawaiian Electric prior to excavation and prior to placing concrete. The Contractor shall notify Hawaiian Electric's Inspection Group at 543-4399 at least five (5) working days prior to installing facilities or placing concrete.

The Contractor to coordinate work to break into Hawaiian Electric's existing electrical facilities with Hawaiian Electric's Inspection Group at 543-4399 at least ten (10) working days in advance.

20. Stakeout.

The Contractor shall arrange for toneouts of all underground facilities and shall stakeout all proposed Hawaiian Electric facilities within the project area so as to not conflict with any utility (existing or proposed) and any proposed construction or improvement work for verification by Hawaiian Electric before proceeding with Hawaiian Electric work.

21. Ductlines.

All ductline installations shall be PVC Schedule 40 encased in concrete, unless otherwise noted. All completed ductlines shall be mandrel tested by the Contractor in the presence of Hawaiian Electric's Inspector using Hawaiian Electric's Standard Practice. The Contractor shall install 1800# tensile strength muletape pull line in all completed ductlines after mandrel testing is complete.

22. Joint Pole Removal.

The last joint pole occupant off the poles shall remove the poles.

23. As-Built Plans.

The Contractor shall provide Hawaiian Electric with a set of electronic and hard copy plans of each sheet showing the offsets, stationing, and vertical elevation of the ductline(s) constructed.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
	NOTED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

WHITMORE AVENUE SIDEWALK IMPROVEMENTS
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SHEET No. 5 OF 5 SHEETS