

ORIGINAL PLAN	NOTED BOOK	QUANTITIES BY	CHECKED BY	DATE	X				
						DESIGNED BY	X		
								TRACED BY	X

GENERAL NOTES

1. The scope of work for this project includes cold planing; resurfacing; reconstruction of weakened pavement areas; pavement marking and striping; guardrail improvements; adjusting utility manholes and boxes; drainage improvements; and installation of milled rumble strips.
2. The Contractor is reminded of the requirements of Subsection 105.16 - Subcontract Requirements, which requires him to perform work 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: Subsection 104.11 - Utilities and Services; Subsection 107.06 - Contractor Duty Regarding Public Convenience; and Section 645 - Work Zone 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 tone for the exact locations and depths of all underground facilities, either shown on or omitted from the plans, in areas where work, such as the placement of sign posts, traffic signal conduits, 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.
6. The Contractor shall notify, the Oahu Transit Services, Lowell Tom (848-4578) or Ed Sniffen (848-4571), two (2) weeks prior to construction, informing them of location, scope of work, and clo-sure of Name of Highway and/or traffic lanes and dates of clo-sure. (For Oahu projects only. For other islands, check with your local bus company.)
7. The Contractor shall notify the Engineer in writing, two (2) weeks prior to starting construction operations.
8. The Contractor shall obtain a Community Noise permit from the State Department of Health, Noise and Radiation Branch, 591 Ala Moana Blvd., Room 136, Honolulu, HI 96813-2498; Telephone No. 586-4700. This shall be considered incidental to the Various Contract Items and will not be paid for separately.
9. 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.
10. Contractor to restore all landscaped areas damaged according to Section 641, Hydro-Mulch Seeding. Grass restoration shall be considered incidental to Various Contract Items.
11. Earth swale shall be graded to drain. This work shall be considered incidental to Various Contract Items.
12. Smooth riding connections shall be constructed at all limits of project, 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 Asphalt Concrete and will not be paid for separately.

13. 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 Bulk of Work or the Various Contract Items and will not be paid for separately.
14. Removal and disposal of existing curb and gutter, curb, sidewalk and asphalt concrete pavement, curb, sidewalk and any debris shall be considered incidental to their res-pective bid items.
15. All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or Various Contract Items or their respective bid items.
16. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.
17. The top of the Asphalt Concrete Base Course prior to placement of the new A.C. Pavement, Mix No. IV shall comply with the ten-foot straight edge requirement. The variation of the surface from a straight edge with two contacts with the surface, shall not exceed 3/16."
18. After completion of resurfacing, the Contractor and the Engineer will test for, and determine ponding areas (i.e. low spots, within the resurfaced area). It shall be the responsibility of the Contractor to correct and resurface and/or repair all such ponding areas. Corrective measures shall be approved by the Engineer.
19. The Contractor shall be advised of the following neighboring projects during this project's duration:

Kamehameha Highway, Kaipapau Stream Bridge Replacement

Kamehameha Highway, Kamananui Rd and Wilikina Rehabilitation, Vicinity of Weed Circle to Route H-2

The Engineer will inform the Contractor when more information is known about the neighboring projects. The Contractor shall adjust trucking routes and loads accordingly. This cost shall be considered incidental to Various Contract Items.

The Contractor shall be advised of legal size and weight limits for vehicles and equipment in HRS 291-34 and HRS 291-35. In compliance with the law, the operation or transport of any equipment or truck which exceeds these limits shall apply for an Oversized and/or Overweight Vehicle permit through the Department of Transportation in accordance with HRS 291-36.
20. The Contractor shall provide and maintain for access to and from all existing driveways , sidewalks and ADA access routes, and side streets and cross streets at all times. This work shall be considered incidental to Sidewalk or the Various Contract Items and will not be paid for separately.
21. The Contractor shall provide and maintain a temporary pedestrian-safe and easily accessible route or detour with barricades in or near the work zone. This temporary route or detour shall be paved at least an inch of Asphalt Concrete Pavement, Mix No. IV or steel and/or wood planks and shall be American With Disabilities Act (ADA) compliant [This is only applicable if existing surface is dirt and/or if existing surface is non-ADA compliant.]. This work shall be incidental to Curb Ramps, or Sidewalk, or the Various Contract Items and will not be paid for separately.
22. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tapes, and epoxy adhesives 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.

23. No material and/or equipment shall be stockpiled or otherwise stored within the highway right-of-way except at locations designed in writing and approved 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 Oahu District Office at Telephone No. 831-6712.
24. Probing for guardrail utilities shall be considered incidental to Guardrail Items and will not be paid for separately.
25. Removal of existing guardrail sections and end treatments shall be considered incidental to Various Guardrail Items and will not be paid for separately.
26. Drilling of holes shall be considered incidental to Various Guardrail Items and will not be paid for separately.
27. Temporary paving for recon areas to restore to original grades shall be removed during final cold planing and will not be paid for. Any temporary paving for recon areas not incorporated into the roadway pavement will not be paid for. This work shall be considered incidental to Cold Planing.
28. Any unfinished shoulder widening, metal railings, guardrails, and median drainage work shall not be left unshielded at the end of the work day. If such work is not completed within the work day, that section shall be shielded by NCHRP TL-2 rated portable physical barriers. The physical barriers shall be protected by end treatments in compliance with NCHRP TL-2 and the manufacturer's recommendations/requirements and State Standard Plan TE-43. At the end of the work day, all travel lanes shall be open. The contractor shall develop a Traffic Control Plan to include these portable physical barriers and all necessary Traffic Control Devices and shall be approved by the Engineer. All work mentioned above including furnishing, installing, and maintaining physical barriers shall be considered incidental to Contract Item No. 645.1000 - Traffic Control and shall not be paid for separately.
29. The exact locations and limits or areas to be excavated, reconstructed and cold planed shall be determined in the field by Engineer.
30. All lanes shall be open to traffic during the hours from 6:30 P.M. to 8:00 A.M. No lane closures shall be allowed during the period of November 15th to January 1st for North Shore related surfing events. Individual lane closure length shall not exceed 1,000 L.F., excluding lane closure tapers at both approaches. Consecutive lane closures shall be separated by a minimum distance of 1-mile. Refer to Section 645 of the Special Provisions for additional details regarding lane closure hours, no lane closures, and allowable closure length.

The Contractor shall close only one lane at a time, not exceeding more than 1000 feet excluding tapers. There shall be no more than 3 concurrent lane closures between the project limits spaced a minimum of 1 mile apart.

03/15/2021	Revised Note 19
03/17/2021	Revised Note 19
05/27/2021	Revised Note 30
DATE	REVISION
<div>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</div> <div>GENERAL NOTES & LEGEND</div> <div>KAMEHAMEHA HIGHWAY REHABILITATION</div> <div>Vicinity of Kapuhi Street to Dairy Road</div> <div>Federal Aid Project No. NH-083-1(77)</div> <div>Date: June, 2020</div>	
SHEET No. 1 OF 3 SHEETS	

GENERAL NOTES - Cont.

31. 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 shall include materials from roadway excavation, including topsoil and base material therefrom, and if necessary, additional materials from borrow outside the limits of the right of way. Asphalt concrete removed from cold planing, reconstruction and roadway excavation shall not be used for dressing of shoulder, sidewalk and bus turnout. Hydro-mulch all areas of shoulder that have been dressed. This work, including hydro-mulching, shall be considered incidental to the Various Contract Items.

32. 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.

33. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other Various Contract Items and will not be paid for separately.

34. The exact location and limits of guardrail improvements shall be determined in the field by the Engineer.

35. The vertical riding surface drop-off between adjacent surfaces shall not exceed a maximum of 3-inches. This shall include differences in height between adjacent pavement surfaces, bridge decks and new concrete slabs. All vertical riding surface drop-offs at the end of each day's work, shall have temporary transition tapers with maximum slopes of 48:l for travel in the longitudinal direction and 6:l in the transverse direction. This work shall be considered incidental to Various Contract Items.

36. Provide smooth transition where new sidewalk construction meets the existing grade or sidewalk. Transition shall not be steeper than 2% cross and longitudinal slopes and not less 6.0 feet long or as specified on the plans. This work shall be considered incidental to Sidewalk or the Various Contract Items and will not be paid for separately.

37. The Contractor is alerted to the presence of an underground Army Corps signal line owned by the U.S. Army that is located along the shoulder of Kamehameha Highway. The Contractor must exercise caution and take the necessary precautions to prevent damage to the Army Corps signal line during construction. The Contractor must verify the location of the Army Corps signal line two weeks prior to initiating construction operations in the area. This work is considered incidental to Various Contract Items.

There are existing drainage and road facilities in the same location as the Army Corps signal line. The Army Corps signal line may have been relocated during previous construction. The signal line location is estimated to be the mauka shoulder (0' - 6' from the edge of shoulder) and 18" - 36" below existing ground. The installation of guardrail and drainage structures along the mauka shoulder are near the Army Corps signal line.

The U.S. Army does not participate in One Call Center services. Please contact the following contractors that specialize in toning of lead cable.

Choy Enterprises Incorporated

(808) 479-4607

Henkels and McCoy

(808) 455-1310

Verizon Federal

(808) 484-7990

38. The Contractor shall verify the exact location of any underground utilities within the project limits two weeks prior to installing new Type "D2" End Posts or guardrail posts. The Contractor shall adjust Type "D2" End Posts or guardrail posts within manufacturer's specifications to account for the actual locations of underground utilities. Probing for utilities and adjusting Type "D2" End Posts or guardrail posts shall be considered incidental to Various Items of Work. The Contractor shall be held liable for any damages incurred to 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 the Contractor's expense.

PAVING AROUND MANHOLES:

1. The Contractor shall use a pneumatic roller to roll the area around the manhole which is not rolled by the steel roller.

2. The Contractor shall fog seal or brush emulsion seal on the material placed as backfill on the area around the manhole that was not compacted by the roller. Black sand shall be used to blot out the area if the fog is too heavy.

DRAINAGE NOTES:

1. Existing drainage systems shall be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. The cost shall be incidental to the various Contract Items and will not be paid for separately.

2. The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.

3. For added reinforcing around culverts at new drainage structures, see Standard Plan H-06.

4. Chamfer all exposed concrete edges 1".

SEWER NOTES

1. Existing sewer system shall be functional at all times.

2. The location of all sewer manholes shall be marked prior to and after paving and the manhole restored within one week after paving is completed.

3. Manhole frames and covers are paired and are to be reinstalled as removed.

4. The Contractor is responsible for removing all asphalt and debris from manholes in conformance with OSHA Standards and all Federal, State and City laws and regulations applicable to Confined Space Entry.

5. All "Sewer Notes" as provided on the project plans are to be adhered to. No exceptions.

6. The Collection System Maintenance, General Foreman. (768-7250) shall be notified when manhole restoration on this project is scheduled to be initiated.

GUARDRAIL NOTES:

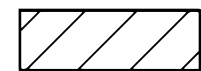
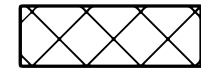
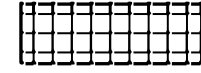

1. The pay limit for MSKT-SP-MGS (TL-3), Soft Stop Terminal (TL-3), and MAX-Tension (TL-3) is 50 L.F., which shall be measured from Post 1 of the end terminal. Should the manufactured end terminal be less than 50 L.F. in length, the remaining length shall be considered incidental to the end terminal. All end terminal hardware extending beyond Post 1, such as hardware connecting to Post 0, shall also be considered incidental to the end terminal.

2. The pay limit for MSKT-SP-MGS (TL-2), Soft Stop Terminal (TL-2), and MAX-Tension (TL-2) is 25 L.F., which shall be measured from Post 1 of the end terminal. Should the manufactured end terminal be less than 25 L.F. in length, the remaining length shall be considered incidental to the end terminal. All end terminal hardware extending beyond Post 1, such as hardware connecting to Post 0, shall also be considered incidental to the end terminal.

3. When installing guardrail posts within 3' from the waterline, the post shall be hand placed and not driven. the holes shall be backfilled and compressible material, ASTM C33 Coarse Aggregate, Size no. 57. This work shall be considered incidental to Guardrail items and shall not be paid for seperately.

4. Obstructions and nesting costs shall be considered incidental to Guardrail items and shall not be paid for seperately.

LEGEND

-----	Milled Rumble Strips	⌋	Existing Traffic Sign
	Shoulder Widening Areas	●	New Traffic Sign
	Reconstruction Areas	⊕	Existing Fire Hydrant
	Cold Planing Areas	⌋ ⌋	Existing Metal Guardrail
	Resurfacing Limits	■ ■	New Metal Guardrail
—e—	Existing Electrical Line	■ ■	Adjusted and/or Relocated Metal Guardrail
—E—	New Electrical Line	—Δ—12—	Existing Sewer Line
∘pp	Existing Power Pole	—S—12—	New 12" Sewer Line
∘emh	Existing Electric Manhole	∘Δmh	Existing Sewer Manhole
●EMH	Adjusted Elec. MH Frame/Cover	●SMH	Adjusted Sewer MH Frame/Cover
⌐epb	Existing Electric Pullbox	●SMH	New Sewer Manhole
∘imh	Existing Telephone Manhole	⊙mon.	Existing Monument
●TMH	Adjusted Tele. MH Frame/Cover	⊙MON.	Adjusted Monument
∘ipb	Existing Telephone Pullbox	⊙MON.	New Monument
—w—12—	Existing 12" Water Line	---d--24---	Existing 24" Drain Line
∘wmh	Existing Water Manhole	∘Δdmh	Existing Storm Drain Manhole
●WMH	Adjusted Water MH Frame/Cover	●SDMH	Adjusted Storm Drain MH Frame/Cover
●WMH	New Water Manhole	⊞gdi	Existing Grated Drop Inlet
∘av	Existing Water Air Valve	⊞GDI	New Grated Drop Inlet
●AV	Adjusted Water Air Valve	■GDI	Adjusted/Reconstructed Drain Inlet or Replaced Steel Grate
∘wv	Existing Water Valve Box		
●WV	Adjusted Water Valve Box		
⌐wm	Existing Water Meter		
⌐WM	Adjusted Water Meter		
■WM	New Type "X" Water Meter Box		

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GENERAL NOTES & LEGEND

KAMEHAMEHA HIGHWAY REHABILITATION

Vicinity of Kapuhi Street to Dairy Road

Federal Aid Project No. NH-083-1(77)

Date: June, 2020

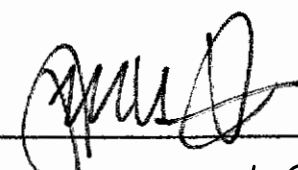
BOARD OF WATER SUPPLY NOTES:

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-083-1(77)	2021	5	87

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the State of Hawaii Department of Transportation Highways Division's STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, DATED 2005, as amended, and the City and County of Honolulu Board of Water Supply's "WATER SYSTEM STANDARDS", DATED 2002, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, and all subsequent amendments and additions.
2. The Contractor shall notify BWS Capital Projects Division, Construction Section in writing and submit six (6) sheets of approved construction plans one (1) week prior to commencing work on the water system.
3. The existence and location of underground utilities and structures as shown on the plans are from the latest available data, but are not guaranteed as to their 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 utilites. The Contractor shall not assume that where no utilties are shown, that none exist.
4. The Contractor shall be responsible for the protection of all waterlines during construction. The Contractor shall be especially careful when excavating behind waterlines, tees, and bends wherever there is a possibility of waterline movement due to the removal of the supporting earth beyond the existing reaction blocks. The Contractor shall take whatever measures necessary to protect the waterlines, such a constructing special reaction blocks (with BWS approval) and/or modifying his construction method.
5. Re-approval shall be required if this project is not under construction within a period of two (2) years.
6. Prior to any excavating, the Contractor shall verify in the field, the location of existing waterlines and appurtenances.
7. Any adjustments to the existing water system required during construction, to meet the requirements of the BWS Standards, whether shown on the plans or not, shall be done by the Contractor at no cost to the Board.
8. The Contractor and State DOT-HWY shall notify BWS Capital Projects Division, Construction Section (748-5730) sixty (60) days prior to construction at/or near areas in conflict with the BWS project Kamehameha Highway WSI Pupukea Road Vicinity (Job No. 2019-029) and Kamehameha Highway 16-In. Water Main Part I (Job No. 1999-041B01) to avoid delays and conflict during construction.

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

Approved:


For Manager and Chief Engineer, BWS *
(For Work Affecting BWS Facilities
in City/State R/W and BWS Easement Only)

SEP 14 2020

Date

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION BOARD OF WATER SUPPLY NOTES KAMEHAMEHA HIGHWAY REHABILITATION Vicinity of Kapuhi Street to Dairy Road Federal Aid Project No. NH-083-1(77) Date: June, 2020 SHEET No. 3 OF 3 SHEETS
