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FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	1	37

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

MAUI, HAWAII

PLANS FOR

KAHULUI BEACH ROAD INTERSECTION IMPROVEMENTS AT KANALOA AVENUE

PROJECT NO. 3400A-01-20R

DISTRICT OF PU'ALI KOMOHANA

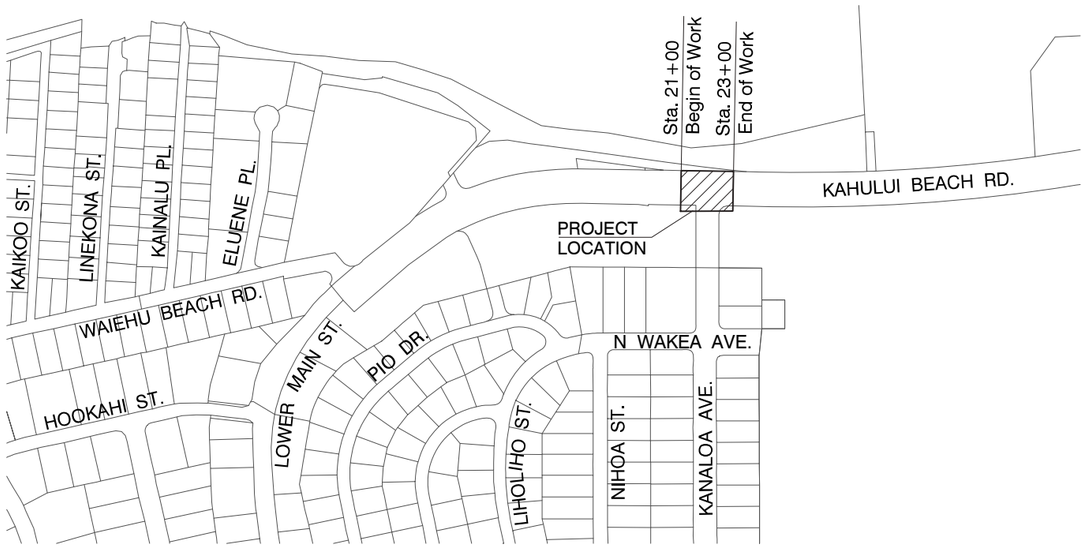
ISLAND OF MAUI

Austin Tsutsumi and Associates, Inc.
DESIGNED BY

HWY-M
MANAGED BY

873-3535
PHONE

MAY 2026
DATE



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LAYOUT PLAN

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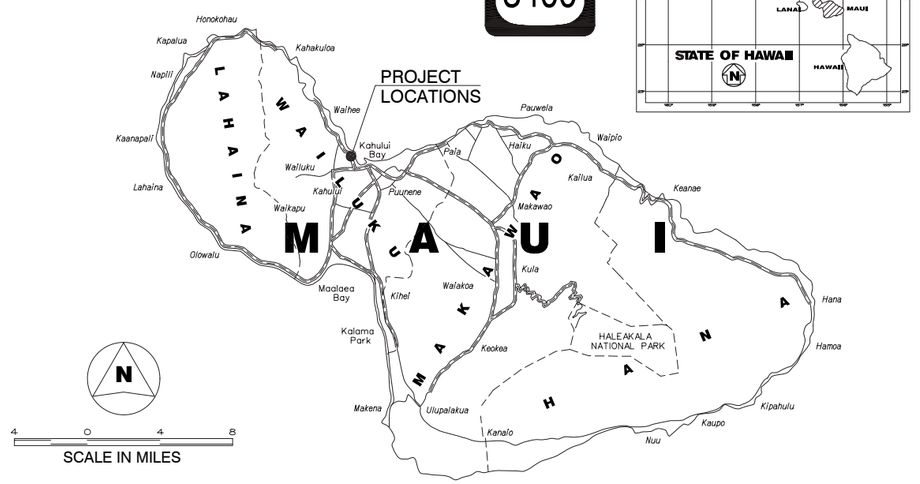

DEPARTMENT OF TRANSPORTATION STATE OF HAWAII	
APPROVED:	
For HIGHWAYS ADMINISTRATOR	DATE

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

STANDARD PLANS SUMMARY

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	2	37

STANDARD PLAN NO.	TITLE	DATE
B-01	Notes and Miscellaneous Details	05/31/07
B-03	Backfill Details at Earth Retaining Structures	05/31/07
B-12	Prestressed Concrete Piles and	05/31/07
	Compression Splice Can Details	
B-12A	Prestressed Concrete Piles, Pile and Compression	05/31/07
	Splice Can Details and Notes	
B-12B	Pile Interaction Diagram	05/31/07
B-13	Prestressed Concrete Pile Build-Up Details	05/31/07
D-01	Cattle Gate	05/31/07
D-02	Chain Link Fence with Toprail	05/31/07
D-03	Chain Link Fence without Toprail	05/31/07
D-04	Wire Fence with Metal Posts	05/31/07
D-05 ●	Typical Details of Curbs and/or Gutters	05/31/07
D-06	Typical Detail of Reinforced Concrete Drop Driveway	05/31/07
D-07	Centerline and Reference Survey Monuments	05/31/07
D-08	Street Survey Monument	05/31/07
D-15 ●	Concrete Sidewalk	05/31/07
D-16	P.C.C. Bus Pad	05/31/07
D-17	P.C.C. Bus Pad	05/31/07
D-18	P.C.C. Pavement Layout	05/31/07
D-19	P.C.C. Pavement w/ Permeable Base Joint Details	05/31/07
D-20	P.C.C. Pavement w/ Permeable Base Joint Details	05/31/07
D-21	P.C.C. Longitudinal Joint Details	05/31/07
D-22	P.C.C. Connection to Curbs and Gutters	05/31/07
D-23	Joints	05/31/07
H-01A	Type A Catch Basin	05/31/07
H-01B	Type B Catch Basin	05/31/07
H-01C	Type C Catch Basin	05/31/07
H-01D	Type D Catch Basin	05/31/07
H-01E	Catch Basin Sections	05/31/07
H-02A	Type A1 Catch Basin	05/31/07
H-02B	Type B1 Catch Basin	05/31/07
H-02C	Type C1 Catch Basin	05/31/07
H-02D	Type D1 Catch Basin	05/31/07
H-02E	Catch Basin Sections	05/31/07
H-03	Type A, B, and C Storm Drain Manhole	05/31/07
H-04	Type D Storm Drain Manhole	05/31/07
H-05	Typical Reinforcing Details for Drainage Structures	05/31/07
H-06	Typical Reinforcing Details for Drainage Structures	05/31/07
H-07	Catch Basin and Manhole Castings	05/31/07
H-08	Type 1A-9 and 1A-9P Grated Drop Inlet	05/31/07
H-09	Type 2A-9 and 2A-9P Grated Drop Inlet	05/31/07
H-10	Type A-9 or A-9P Steel Frames	05/31/07
H-11	Type A-9 and A-9P Steel Grates	05/31/07
H-12	Type 61614P and 1211214P Grated Drop Inlet	05/31/07
H-13	Type 61616P and 1211216P Grated Drop Inlet	05/31/07
H-14	Type 61214P Grated Drop Inlet	05/31/07
H-15	Type 1211214, 1211214P, 1211216, 1211216P	05/31/07
	Steel Frame and Grates	
H-16	Type 61614, 61614P, 61616, 61616P	05/31/07
	Steel Frame and Grates	
H-17	Type 61214 Steel Frame and Grates	05/31/07
H-18	Type 61214P Steel Grates	05/31/07

STANDARD PLAN NO.	TITLE	DATE
H-19	Type 61614B Steel Frame and Grates	05/31/07
H-20	Cement Rubble Masonry Structures	05/31/07
H-21	Concrete and Cement Rubble Masonry Structures	05/31/07
H-22	Inlet/Outlet Structure (18" TO 24")	05/31/07
H-23	Inlet/Outlet Structure (48" TO 180")	05/31/07
H-24	Flared End Section for Culverts	05/31/07
H-25	Flared End Section for Culverts	05/31/07
H-26	Concrete Spillway Inlet	05/31/07
H-27	Cap Coupling Details Standard Joint	05/31/07
H-28	Reinforced Concrete Collar and Jacket	05/31/07
H-29	Underdrain Cleanout Steel Frame and Cover	05/31/07
H-30	Underdrain Connection to Drainage Structure	05/31/07
L-01	Tree Planting	05/31/07
L-02	Tree Planting	05/31/07
L-03	Tree Transplanting	05/31/07
L-04	Palm Planting	05/31/07
L-05	Shrub Planting	05/31/07
L-06	Landscape Details	05/31/07
L-07	Landscape Details	05/31/07
L-08	Landscape Details	05/31/07
L-09	Landscape Details	05/31/07
L-10	Landscape Details	05/31/07
L-11	Planting Notes	05/31/07
L-12	Irrigation Details	05/31/07
L-13	Irrigation Details	05/31/07
L-14	Irrigation Details	05/31/07
L-15	Irrigation Details	05/31/07
L-16	Irrigation Details	05/31/07
L-17	Irrigation Details	05/31/07
L-18	Irrigation Details	05/31/07
L-19	Irrigation Details	05/31/07
L-20	Irrigation Details	05/31/07
L-21	Irrigation Details	05/31/07
L-22	Irrigation Details	05/31/07
L-23	Irrigation Details	05/31/07
L-24	Irrigation Notes	05/31/07
TE-01 ●	Sign Height and Location	05/31/07
TE-1A ●	Sign Installation	05/31/07
TE-02A	Galvanized Flanged Channel Sign Post Mounting	05/31/07
TE-02B	Galvanized Flanged Channel Sign Post Mounting	05/31/07
TE-02C	Galvanized Flanged Channel Sign Post Mounting	05/31/07
TE-03A	Galvanized Square Tube Sign Post Mounting	05/31/07
TE-03B	Galvanized Square Tube Sign Post Mounting	05/31/07
TE-04 ●	Regulatory Signs	05/31/07
TE-05 ●	Warning Signs	05/31/07
TE-06 ●	Miscellaneous Signs	05/31/07
TE-07 ●	Construction Signs	05/31/07
TE-08 ●	Miscellaneous Intersection Signs	05/31/07
TE-09	Bike Route Sign & Supplementary Plates	05/31/07
TE-10	Interstate Route Marker	05/31/07
TE-11	State Route Marker and Auxiliary Markers	05/31/07
TE-12	State Route Marker and Border Detail for Guide Signs	05/31/07
TE-12A	Route Sign Assemblies	05/31/07

STANDARD PLAN NO.	TITLE	DATE
TE-13 ●	Street name Sign on Mast Arm	05/31/07
TE-14 ●	Miscellaneous Reflector Markers	05/31/07
TE-15	Object Markers	05/31/07
TE-16	Mile Posts	05/31/07
TE-17A	Cantilever Overhead Sign Elevation & Details	05/31/07
TE-17B	Cantilever Sign Frame Detail and Sections	05/31/07
TE-17C	Cantilever Sign Frame Detail	05/31/07
TE-17D	Cantilever Sign Frame Sections	05/31/07
TE-17E	Cantilever Sign Frame Details	05/31/07
TE-18A	Two Post Overhead Sign Frame Elevations	05/31/07
TE-18B	Two Post Sign Framing Plan Section	05/31/07
TE-18C	Two Post Sign Framing Sections and Details	05/31/07
TE-18D	Two Post Sign Frame Details	05/31/07
TE-18E	Two Post Sign Frame Details	05/31/07
TE-19A	Overhead Sign Framing Schedule	05/31/07
TE-19B	Sign Post Drilled Shaft Foundation	05/31/07
TE-19C	Spread Footing	05/31/07
TE-19D	Sign Frame Foundation Schedule	05/31/07
TE-19D.1	Sign Frame Foundation Schedule	05/31/07
TE-19D.2	Sign Frame Foundation Schedule	05/31/07
TE-19D.3	Sign Frame Foundation Schedule	05/31/07
TE-19D.4	Sign Frame Foundation Schedule	05/31/07
TE-19D.5	Sign Frame Foundation Schedule	05/31/07
TE-19E	Anchorage Details	05/31/07
TE-19F	Anchorage Details	05/31/07
TE-19G	Miscellaneous Sign Frame Details	05/31/07
TE-19H	Luminaire Walkway Support	05/31/07
TE-19J	Fixed Message Luminaire Support	05/31/07
TE-19K	Miscellaneous Sign Details	05/31/07
TE-19L	Miscellaneous Sign Details	05/31/07
TE-19M	Miscellaneous Sign Frame Details	05/31/07
TE-20	Supports for Ground Mounted Guide Sign	05/31/07
TE-20A	Supports for Ground Mounted Guide Sign	05/31/07
TE-20B	Supports for Ground Mounted Guide Sign	05/31/07
TE-20C	Supports for Ground Mounted Guide Sign	05/31/07
TE-21A	Sign Breakaway Mounts	05/31/07
TE-21B	Sign Breakaway Mounts	05/31/07
TE-22	Laminated Aluminum Sign Panels (Overhead)	05/31/07
TE-23	Laminated Aluminum Sign Panels (Ground Mounted)	05/31/07
TE-24	Solid Aluminum Extruded Sign Panel	05/31/07
	and Accessory Details	
TE-25	Guide Signs Luminaire Mountings	05/31/07
TE-26 ●	Raised Pavement Markers and Striping	05/31/07
TE-27 ●	Raised Pavement Markers and Striping	05/31/07
TE-28	Entrance and Exit Pavement Markings	05/31/07

STANDARD PLAN NO.	TITLE	DATE
TE-28A ●	Miscellaneous Pavement Markings	05/31/07
TE-29	Pavement Arrows and Symbols	05/31/07
TE-30	Pavement Alphabets, Numbers & Symbols	05/31/07
TE-31	Pavement Alphabets, Numbers & Symbols	05/31/07
TE-32 ●	Type I & II Traffic Signal System	05/31/07
	Miscellaneous Details	
TE-33 ●	Type II Traffic Signal System	05/31/07
TE-33A.1 ●	Type II Traffic Signal Standard	05/31/07
TE-33A.2 ●	Type II Traffic Signal Standard	05/31/07
TE-34 ●	Loop Detector Details	05/31/07
TE-35 ●	Loop Detectors & Duct Details	05/31/07
TE-36 ●	Traffic Signal Details	05/31/07
TE-37 ●	Pullbox & Cover Details	05/31/07
TE-37A ●	Type "A" Traffic Pullbox	05/31/07
TE-37B ●	Type "A" Traffic Pullbox Reinforcing	05/31/07
TE-37C ●	Type "B" Traffic Pullbox	05/31/07
TE-37D ●	Type "B" Traffic Pullbox Reinforcing	05/31/07
TE-37E ●	Type "B" Traffic Pullbox Foundation	05/31/07
TE-37F ●	Type "C" Traffic Pullbox	05/31/07
TE-37G ●	Type "C" Traffic Pullbox Reinforcing	05/31/07
TE-37H ●	Type "C" Traffic Pullbox Foundation	05/31/07
TE-37J ●	Traffic Pullbox Cover and Details	05/31/07
TE-38	Type III Traffic Signal Standard	05/31/07
TE-38A.1	Type III Traffic Signal Standard	05/31/07
TE-38A.2	Type III Traffic Signal Standard	05/31/07
TE-39	Metal Guardrail Connection to Concrete Barrier	05/31/07
TE-40	Concrete Barrier Transition	05/31/07
TE-40A	Concrete Barrier Transition Sections	05/31/07
TE-41	Guardrail Type 6 (Single Slope Rigid Barrier)	05/19/21
TE-41A	Guardrail Type 6 (Single Slope Road Barrier)	05/19/21
TE-41B	Guardrail Type 6G (Single Slope Rigid Barrier	05/19/21
	with Glare Screen)	
TE-41C	Guardrail Type 6G (Single Slope Rigid Barrier	05/19/21
	with Glare Screen)	
TE-41D	Guardrail Type 6 & 6G (Single Slope Rigid Barrier)	05/19/21
TE-42	Portable Concrete Barrier	05/31/07
TE-43	Portable Concrete Barrier	05/31/07
TE-44	Guardrail Type 4 Miscellaneous Details	05/31/07
TE-45	Barricades	05/31/07
TE-46	Delineation & Pavement Markings at Narrow Bridges	05/31/07
TE-47	Highway Light Standard	05/31/07

NOTE:
Standard plans applicable to this project are indicated by a "●" next to the standard plan no. (For example: D-07 ●)

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
CIVIL ENGINEERS • STRUCTURAL ENGINEERS • SURVEYORS • HONOLULU, HAWAII

1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD PLANS SUMMARY

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown *Date: May 2026*

SHEET No. *G-1* OF *8* SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	3	37

GENERAL NOTES

1. The scope of work for this project includes replacing the existing traffic signal at Kahului Beach Road and Kanaloa Avenue Intersection.

2. The contractor shall perform all applicable construction work in accordance with the "Department of Transportation, Highways Division, Standard Plans", as amended and "Hawaii Standard Specifications for Road and Bridge Construction, 2005", as amended for the State of Hawaii.

3 The contractor shall verify the location of all existing utilities, whether shown on the plans or not, and shall be responsible for the repair or replacement of the same in the event of damages due to his construction practices, at no cost to the State.

4. All dimensions and details shown on the drawings shall be checked and verified prior to the start of construction, and any discrepancies shall be immediately brought to the attention of the Engineer for clarification.

5. 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.

6. The contractor is reminded of the requirements of Subsection 105.16 - Subcontracts, which requires him to perform work to not less than 30 percent of the total contract cost less deductible items. Non-compliance with the Subsection may be grounds for rejection of bid.

7. 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.

8. 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.

9. Prior to beginning work on the project, the Contractor shall request toning of utilities from One Call Center, phone 811 or 1-866-423-7287.

10. Contractor shall exercise extreme caution to preserve BENCHMARKS (Survey Monuments). Whenever the center of a Survey Monument is less than three (3) feet from the edge of construction, the contractor shall retain a Licensed Land Surveyor to reference the location of said Survey Monument.

11. Benchmarks that are disturbed or destroyed shall be restored under a Licensed Land Surveyor's direction. Copies of field notes, descriptions and new values of the new benchmark shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.

12. All new reference survey monuments shall be set under a licensed land surveyor's direction. Copies of field notes, descriptions and values of the new survey monuments shall be sent to the Department of Transportation, Highways Division, Cadastral Engineering Section, for review and approval prior to construction.

13. 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 and to the satisfaction of the Engineer.

14. Smooth riding connections shall be constructed at all limits of project or where work has occurred or both, 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. Walkways and driveways shall comply with Americans With Disabilities Act Accessibility Guidelines (ADAAG) and shall not have a difference in elevation between two adjoining surfaces of more than 0.25 inch. All of this work shall be considered incidental to asphalt concrete or other items of work and will not be paid for separately.

15. The Contractor shall clean and remove any accumulation of aggregates along the roadway 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.

16. Removal and disposal of existing asphalt concrete pavement, and any debris shall be considered incidental to their respective bid items.

17. All saw cutting work shall be considered incidental to Roadway Excavation or Asphalt Concrete or various contract items or their respective bid items.

18. Prior to placement of new aggregate subbase course, the existing subbase shall be compacted to a relative compaction greater than or equal to 95%.

19. 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 curb ramps, or sidewalk, or the various contract items and will not be paid for separately.

20. Provide and maintain in or near the work zone a temporary pedestrian-safe and easily accessible route or detour or both with barricades placed in accordance with the MUTCD. The temporary route or detour shall be smooth, solid, non-slip and ADAAG compliant which includes accommodations for people with vision disabilities. The temporary route or detour shall be paved with at least an inch of Hot Mix Asphalt (HMA) Pavement, Mix No. V or other non-slip material acceptable to the Engineer, e.g., steel plates or wood planks or combination of both. (The HMA paving or installation of other non-slip material is only applicable if the temporary route's or detour's existing surface is dirt or if the existing surface is non-ADA compliant.) Restore the temporary route or detour surface to pre-construction condition when no longer needed for the project's work.

21. The Contractor shall remove and dispose of all existing raised pavement markers, thermoplastic line markings, traffic tape, 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 separately.

22. Except during actual working hours, all signs which do not pertain to the construction activity, such as "MEN WORKING" and "FLAGMEN AHEAD" shall be covered or laid down. However, all signs necessary for safety of the public shall be maintained.

23. The contractor shall employ a Hawaii registered professional surveyor to perform all construction stakeouts, the cost of which shall be borne by the contractor.

24. The contractor shall make his own arrangements for, and pay for all temporary utilities required for his work.

25. The contractor shall procure and pay for all licenses and permits and shall give all notices necessary and incidental to the due and lawful prosecution of the work.

26. The contractor shall remove and dispose all silt and debris deposited in drainage facilities, roadways and other areas resulting from his work. The cost incurred for any necessary remedial action ordered by the Engineer shall be paid for by the Contractor.

27. The contractor shall not damage any roots of the protected trees during roadway excavation.

28. Any work specified in the contract but not listed separately in the proposal schedule shall be considered incidental to other various contact items and shall not be paid for separately.

29. Should historic sites such as walls, platforms, pavements and mounds, or remains such as artifacts, burials, concentration of charcoal or shells be encountered during construction work, work shall cease in the immediate vicinity of the find and the find shall be protected form further damage. The contractor shall immediately contact the State Historic Preservation Division ((808) 243-5169), which will assess the significance of the find and recommend an appropriate mitigation measure, if necessary. A minimum 3-meter/10-foot wide buffer zone exists around all sites in preservation during construction. It is highly important that the preserved sites remain undisturbed.

30. All workers within the State Right-Of-Way who are exposed to either vehicles using the roadway or to construction equipment shall wear high-visibility safety apparel that meets the requirements of ANSI/ISEA 107-2015, Type R or P, Performance Class 2 or 3. "Workers" is defined as people on foot whose duties place them within the State Right-Of-Way, such as, but not limited to construction and maintenance forces, equipment operator, survey crews, utility crews, responders to incidents (e.g., EMT and firemen), and law enforcement personnel directing traffic, investigating accidents, handling lane closures and obstructed roadways.

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

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2028

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1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES FOR CONSTRUCTION

Kahului Beach Road Intersection Improvements at Kanaloa Avenue Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-2 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	4	37

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT OF WAY

1. The Contractor shall obtain a construction permit from the State's Highway District Engineer at 650 Palapala Drive, Kahului, Maui, prior to commencement of work within State Highway Right-of-Way.

2. Work may be performed only between the hours of 8:30 A.M. and 3:00 P.M., Monday through Friday, except State holidays, unless when otherwise approved in writing by the District Engineer.

   During work hours, only one lane of traffic shall be closed, unless otherwise approved in writing by the District Engineer. All lanes closures must be approved by HDOT one (1) week in advance.

   At certain locations, "No Lane Closure" will be allowed during the "Back to School Jam", Thanksgiving weekend, Christmas/New Year period and at other times as directed by the Highways Division.

3. The Contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection and for the 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 Highway, Part VI Traffic Controls for Street and Highway Construction and Maintenance. A Traffic Control Plan shall be incorporated into the construction plans and must be approved by the Division prior to the issuance of the permit.

4. No material and/or equipment shall be stockpiled or otherwise stored within the Highway Right-of-Way except at locations designated in writing and approved by the Engineer. 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 Maui District office.

5. Compaction test shall be taken in accordance with the "Specifications for Installation of Miscellaneous Improvements within State Highways", as follows:

   A. Subbase: 1 compaction test per lift for each 300 lineal feet or fraction thereof or minimum 1 test per day.

   B. Base Course: 1 compaction test per lift for each 200 lineal feet of fraction thereof or minimum 1 test per day.

   C. One compaction test per lift for each 300 lineal feet of trench or fraction thereof. A copy of the results shall be submitted to the District Engineer.

7. The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas, to handle all types of vehicular traffic. Vehicles crossing the bridging material shall make no noise louder than a vehicle would driving on an adjacent un-bridged, untouched road. All bridging shall be at a minimum meet or exceed being Traffic-Rated and meet or exceed the requirements of HL-93.

8. Longitudinal drainage along the highway shall be maintained.

9. Pavement striping shall be done by the Contractor. Pavement marking and striping shall be Thermoplastic Extrusion.

10. Approval of permit construction plans shall be valid for a period of one year thereof from the date of notification of approval to the applicant. In the event construction does not commence within the one-year period, the applicant will be required to re-submit his construction plans for Division's review and approval.

11. All regulatory, guide and construction signs and barricades shall be of high-intensity reflective sheeting.

12. The contractor shall exercise care when excavating in this area. Damages to the existing facilities shall be immediately reported to the respective utility companies, county and state agency. The repair work shall be done at the contractor's expense.

13. The contractor shall notify the Highway Lighting and Traffic Signal Supervisor, Department of Transportation (State) three (3) working days prior to commencing work in this area (phone no. (808)873-3535).

14. Contractor shall inform the State permit office (phone no. (808)873-3535) at least two (2) days prior to closing any lanes.

15. Where pedestrian walkways exist, they shall be maintained in passable and accessible condition. Any detour or rerouting of pedestrian traffic shall comply with ADAAG 4.3 as required by ADAAG 4.1.1(4) and the MUTCD. Walkways at intersections shall be likewise provided.

16. Plastic marking tape: Provide plastic marking tape that is acid and alkali resistant polyethylene film 6 inches wide with minimum thickness of 0.004 inch. Provide tape with minimum strength of 1750 psi crosswise. Manufacture tape with integral wires, foil, backing or other means to enable detection by a metal detector when the tape is buried up to 3 feet deep. Manufacture tape specifically for marking and locating underground utilities. Provide the metallic core of the tape encased in a protective jacket or provided with other means to protect it from corrosion. Conform to the following tape color and bear a continuous printed inscription describing the specific utility.

    Red: Electric
    Yellow: Gas, Oil, Dangerous Materials
    Orange: Telephone, Telegraph, Television, Police, Fire and Communications
    Blue: Water Systems
    Green: Sewer Systems

17. The Contractor shall provide the District Engineer with As-Built plans upon completion of the work done in the State Right-of-Way. This shall be done prior to the Department's release of the performance bond and pre-final inspection.

PUBLIC HEALTH, SAFETY AND CONVENIENCE NOTES

1. The contractor shall observe and comply with all Federal, State, and Local laws required for the protection of public health and safety and environmental quality.

2. The contractor, at his own expense, shall keep the project and its surrounding areas free from dust nuisance. The work shall be in accordance with the air pollution standards and regulations of the State Department of Health. The County of Maui shall require supplemental measures as necessary.

3. The contractor shall be responsible for the cleaning and removal of all silt and debris deposited and accumulated within downstream waterways, ditches and drain pipes and on public and private roadways generated by his work. The contractor agrees to reimburse the County of Maui for all costs expended in performance of the above work if required for public health and safety, or made necessary by non-performance by the contractor.

4. The contractor shall provide, install, and maintain all necessary signs, lights, flares, barricades, markers, cones and other protective facilities and shall take all necessary precautions for the protection, convenience and safety of the public.

5. The contractor shall submit a noise pollution control plan when applying for a construction permit.

6. Temporary pedestrian routes shall be maintained in safe, passable and accessible condition complying with ADAAG 402.1.

NOTES FOR ENVIRONMENTAL PROTECTION

1. Environmental protection notes pertaining to air and water pollution shall be administered and monitored by the Department of Health.

2. The contractor, at his own expense shall provide effective measures for the control of fugitive dust emissions from the project and surrounding areas caused by his operations. these measures shall meet the requirements of State Administrative Rules, Department of Health, Air Pollution Control (11-60.1).

3. All grading operations shall be performed in conformance with the applicable provisions of the grading ordinance to prevent violation of the State Administrative Rules, Department of Health, Water Pollution Control and Water Quality Standards (11-54, 11-55) due to erosion and runoff to State waters.

4. Grub material, demolition wastes, and construction wastes shall be disposed of at an authorized site having a Department of Health Solid Waste Management Permit. Open burning is prohibited.

TRAFFIC NOTES FOR TRAFFIC CONTROL PLAN FOR CONSTRUCTION WITHIN COUNTY RIGHT OF WAY

1. "No Parking" signs shall be posted at a minimum of every 100 ft within any work area and for the buffer and taper areas approaching to work area.

2. Six (6) weeks minimum prior to start of work operations, submit for Engineer's review and acceptance detailed site-specific traffic control plans for each intersection covering all phases of work such as painting of mast arms, and replacing controller. Traffic control devices, signs and flagger positions shall be shown. Construction work shall not proceed until the traffic control plans have been accepted by the Engineer.

3. The Contractor shall be responsible for obtaining permission from the County of Maui and/or, obtaining a Road Permit for all work within the County R/W. The Contractor shall inform private property owners of the purpose and need of the project, and the specific work to take place onsite prior to work start, as applicable. This coordination work and obtaining permission and permit fee shall be considered incidental to the various contract items.

ORIGINAL PLAN
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CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

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LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
CIVIL ENGINEERS • HONOLULU, HAWAII

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES FOR CONSTRUCTION

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-3 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	5	37

DEPARTMENT OF WATER SUPPLY NOTES

1. The contractor shall notify the Department of Water Supply (DWS), in writing, one (1) week prior to commencement of work.

2. If construction of water system improvements will affect DWS consumers, contractor shall notify consumers by radio/newspaper two (2) days before and on day of connection. Contractor shall also notify consumers house-to-house one (1) day before connection work.

3. All materials used and methods of construction of water system facilities shall be in accordance with the latest revision of DWS water system standards. Contractor shall obtain the latest revisions of the DWS standards before commencing construction.

4. All water system work shall be performed by the contractors possessing valid state of Hawaii contractor's licenses, regardless of the value of the work.

5. Contractor shall follow all Local, State, Federal laws, rules and regulations regarding the handling, removal and disposal of asbestos pipe.

6. Contractor shall protect existing waterlines during course of construction and support exposed waterlines to prevent any movement.

7. The exact depth and location of existing waterlines, service laterals and other utilities are not known. It shall be the contractor's responsibility to locate prior to trenching for the new waterline. The cost of lowering, relocating or adjusting existing waterlines, service laterals and appurtenances, whether shown or not shown on the construction plans at the contractor's expense.

8. Pavement resurfacing/restoration:

   a. Contractor shall verify location of existing DWS valves and manholes, when affected by the work, prior to the start of construction.

   b. All water valve and water manhole concrete collars within the project limits shall be demolished and reconstructed per DWS standard detail v12 and v23, respectively, at the contractor's expense.

   c. The valve box riser and cover of all water valves within the project limits shall be replaced at the contractor's expense.

   d. Contractor shall adjust DWS sliding valve box assembly and manhole frame and cover to finished grade.

   e. Prior to pavement resurfacing/restoration work, the contractor shall schedule inspection with DWS.

9. Any sliding valve box assembly, manhole cover, or concrete collar, whether discovered damaged or not specified on the plans to be adjusted or replaced, shall be replaced at the contractor's expense.

10. Contractor shall adjust to finished grades, all utilities (i.e. water, sewer, drain, etc.) affected by the work whether shown or not shown on the construction plans at the contractor's expense.

11. Contractor shall restore all road improvements disturbed or damaged during construction in accordance with the 2005 "Hawaii Standard Specifications for Road and Bridge Construction" as amended, to the satisfaction of the Department of Public Works at the contractor's expense. Road improvements include, but not limited to, pavement, pavement markers, shoulder dressing, striping, and speed humps.

DEPARTMENT OF WATER SUPPLY NOTES (CONT.)

12. Concrete for reaction blocks and anchor blocks shall be DWS class 2500.

13. The maximum distance between valve nut and top of manhole cover shall be three (3) feet.

14. Contractor shall submit a materials list to DWS for approval prior to construction.

15. Connection to DWS system:

   a. Contractor shall be responsible for furnishing all necessary fittings and other materials and equipment required for the hookup. contractor shall, however, check with DWS before excavating for verification purposes.

   b. Whenever feasible, mechanical joint fittings shall be used for buried applications and flanged joint fittings shall be used for exposed applications.

   c. DWS personnel may be required to be present or assist with connections to the existing water system. the contractor shall be responsible for all costs incurred by DWS for said work.

   d. The contractor shall be responsible for furnishing all material, equipment and labor for trench excavation, backfilling, cleaning and chlorination, paving, and other work necessary to complete the hook-up, as directed by and to the satisfaction of DWS.

16. Minimum cover over water main, 6" diameter or larger, shall be 3'-0". Minimum cover for 4" diameter shall be 2'-6". Minimum cover for diameters less than 4" shall be 1'-6".

17. Contractor shall ensure installation of waterlines, service laterals and appurtenances have proper clearances from existing trees, walls, fences, etc. in accordance with current DWS water system standards.

18. Contractor shall verify and maintain 18" minimum clearance with waterline or service lateral crossing over existing sewerline or service laterals. Install reinforced concrete jacket around sewerline where sewer is above waterline or less than 18" below waterline. The length of jacket required shall be specified in table 100-5 of the DWS standards. Provide 6" minimum clearance from outside jacket to waterline or service lateral. Standard concrete jacket details for sewerline as specified by the Department of Public Works standards shall be followed.

19. Contractor shall have licensed surveyor stake out waterline baseline stationing, Right-of-Way limits, property lines, and easement lines to ensure proper location of water system improvements.

20. Bolts for exposed flanged ductile iron pipe joints shall be either silicon bronze bolts and nuts or 316 stainless steel bolts with the heavy duty stainless nuts (only) furnished with tripac 2000 blue coating system. Anti-seize shall not be used. T-bolts for ductile iron mechanical joint (MJ) pipe and fitting connections in underground situations shall be one of the following systems.

   a. 316 stainless steel T-bolts with the heavy duty stainless steel nuts (only) furnished with tripac 2000 blue coating system. Anti-seize shall not be used.

   b. Cor-ten T-bolts and nuts with high grade zinc sacrificial anodes, equivalent to "Duratron" sacrificial "Sac-Nut" modules, installed on the nuts for all standard Cor-ten T-bolts.

DEPARTMENT OF WATER SUPPLY NOTES (CONT.)

   c. Cor-ten T-bolts and nuts both factory coated with tripac 2000 blue coating system by "Tripac Fasteners". All hot forged stainless steel bolts are required to be passivated per ASTM A380. Manufacturer certificates are required for proof with each shipment.

21. Contractor shall furnish and install ductile iron nipples for complete installation of the waterline, whether shown or not shown on the construction plans, at the contractor's expense.

22. Contractor shall furnish temporary cleanouts when necessary to test, flush, and chlorinate the waterline at the contractor's expense.

23. Contractor shall remove and dispose of all portions of abandoned waterlines that are exposed or within 12-inches below the ground surface at the contractor's expense.

24. All buried metals, including copper pipes, shall be wrapped with poly-wrap. For all buried installation of ductile iron pipe and fittings, poly-wrap is required except within concrete jackets.

25. Lubricate hydrant nozzle threads with non-toxic grease.

26. Contractor shall paint and number fire hydrant(s). Numbering to be furnished by DWS.

27. Water mains and appurtenances shall be subject to hydrostatic testing in accordance with the latest revision of AWWA C600, under the "Hydrostatic Testing" section, to a pressure of at least 1.5 times the working pressure. Unless otherwise stated in the construction documents or limited by the pressure rating of equipment, the pressure test and leakage test shall be performed at 225 pounds per square inch pressure.

28. Developer shall submit a cost list along with an affidavit for the water system prior to acceptance.

29. Contractor shall submit one (1) set of record drawings via a consultant prior to acceptance of the water system. An electronic image file in PDF format at full page size (24"x36") shall be provided to the DWS for all projects.

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ORIGINAL PLAN
NOTE BOOK
No.

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

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LICENSE EXPIRES: APRIL 30, 2028

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES FOR CONSTRUCTION

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-4 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	6	37

GRADING NOTES

1. All grading and stockpiling work shall be in accordance with Maui County Code, Title 20, Chapter 8.
2. All debris shall be removed from the site and premises left in a "Rake Clean" condition.
3. The contractor, at his expense, shall keep the project and surrounding area free from dust nuisance.
4. All grading operations shall be performed in conformance with the applicable provisions of Chapter 54, Water Quality Standards, and Chapter 55, Water Pollution Control, of Title 11, Administrative Rules of the State Department of Health, and if applicable, the NPDES permit for the project.
5. All existing utilities, whether or not shown on the plans, shall be protected at all times, unless noted otherwise.
6. All planter 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. Planting shall be maintained to minimize erosion.
7. The contractor shall obtain a grading permit from the Development Services Administration two weeks prior to commencement of any clearing and grubbing work within County R/W. A site specific Erosion Control Plan showing structural & non-structural Best Management Practices must be submitted to and approved by the Development Services Administration prior to issuance of a grading permit and commencement of any clearing and grubbing work.
8. The underground pipes, cables or ductlines known to exist by the Engineer from his search of records are indicated on the plans. The contractor shall verify the location and depth of the facilities and exercise proper care in excavating in the area. Wherever connections of new utilities to existing utilities are shown on the plans, the contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.
9. The County 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.
10. No grading work shall be done on Saturdays, Sundays and holidays at any time without prior notice to the Chief Engineer.
11. The limits of the area to be graded shall be flagged before the commencement of the grading work.

LEGEND

- OH — Existing Electrical/Telephone Overhead Cables
- D18 — Existing Drainline
- S8 — Existing Sewerline
- W8 — Existing Waterline and Size
- Existing Tree
- 5 — Existing Contour Line and Elevation Text
- Existing Raised Pavement Markers
- Existing Sign
- Existing Wooden Fence
- Existing Drain Inlet
- Existing Delineator
- Right-of-Way
- New Concrete Slab
- D18 — New Drainline
- Direction of Flow
- 7.20 — Finish Grade
- New Catch Basin
- New SDMH
- New Delineator

ABBREVIATIONS

A.C.	Asphalt Concrete
ARV	Air Relief Valve
℄	Baseline
BC	Bottom of Curb
Blk.	Block
Blvd.	Boulevard
BV	Bottom Vertical
BVC	Begin Vertical Curve
BW	Bottom of Wall
CB	Catch Basin
Ch	Chord
℄	Centerline
CL	Class
C.O.	Cleanout
Conc.	Concrete
CG	Change in Grade
CRM	Concrete Rubble Masonry
CY	Cubic Yards
d or DIA.	Diameter
DI	Drain Inlet
Dr.	Drive
D/W or Drwy.	Driveway
△	Delta
EMB	Embankment
EVC	End Vertical Curve
EXC	Excavation
Exist.	Existing
FH	Fire Hydrant
Fin.	Finished
Fnd	Found
ga	Guy Anchor
GRP	Grouted Rubble Paving
△/2	Half Delta
h	Height
Horiz.	Horizontal
Hwy.	Highway
Inv.	Invert
Lbs	Pounds
Lc	Length of Curve
LF	Linear Feet
Lt	Left
Max.	Maximum
MH	Manhole
Min.	Minimum
M.L.	Matchline
NO.	Number
O.C.	On Center
O/S	Offset
Pav't	Pavement
Pb	Pullbox
PIVC	Point of Intersection Vertical Curve
℄	Property Line
PC	Point of Curve
PCC	Point of Compound Curve
POC	Point on Curve
PPB	Pedestrian Push Button
PPM	Parts Per Million
PRC	Point of Reverse Curve
PT	Point of Tangency
PRVC	Point of Reverse Vertical Curve
R	Radius
RCP	Reinforced Concrete Pipe
ref	Reflector
R.O.W. or R/W	Right-of-Way
rpm	Raised Pavement Marker
Rt.	Right
S	Spread
SDMH	Storm Drain Manhole
SF	Square Feet
SIC	Sandwich Isles Communications Inc.
SMH	Sewer Manhole
Sta.	Station
Std.	Standard
T	Tangent
TC	Top of Curb
Temp.	Temporary
TSS	Traffic Signal Standard
TV	Top Vertical
TW	Top of Wall
Typ.	Typical
UP	Utility Pole
V.C.	Vertical Curve
Vert.	Vertical
W/	With
WL	Water Line
WM	Water Meter
WMH	Water Manhole
WV	Water Valve

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES FOR CONSTRUCTION

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-5 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	7	37

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES

GENERAL NOTES:

1. The contractor shall install devices and utilize Best Management Practices (BMPS) appropriate for the project. The contractor shall reference the HDOT's Construction Best Management Practices Field Manual. A copy of this document shall be kept on the project site at all times, and shall be produced upon request of the district engineer or his designated representative. These documents shall serve as guidelines only, and it shall be the contractor's responsibility to ensure that safety relative to traffic, ponding problems, etc. are considered and addressed. This work shall be considered part of the project, and will not be paid for by the State.

2. The contractor shall consider and install BMP measures which take into account high intensity and prolonged rainfall, and to address the potential problems that may result.

3. All areas used in support of construction activities disturbed or damaged by the contractor, including but not limited to, staging areas, construction entrance/exit, and travel routes, shall be temporarily stabilized during construction in accordance with section 209 of the 2005 "Standard Specifications for Road and Bridge Construction". These areas shall be restored to their original condition or better after completion of construction. Disturbed and exposed areas shall be permanently stabilized using vegetative cover, pavement, or equivalent to match pre-existing or better condition as approved by the State.

4. Final stabilization and restoration of disturbed or damaged areas shall begin immediately as soon as construction is completed and the construction support areas are no longer used.

5. The State reserves the right to determine the appropriateness and adequacy of proposed and/or implemented BMPs. Additional BMP measures required by the State shall not be paid for by the State.

6. The contractor shall be responsible for all damages and/or injuries resulting from the BMPs.

7. The contractor shall designate at least one (1) person who will be responsible for inspection, maintenance, and repair activities. Personnel selected for the inspection and maintenance responsibilities shall receive training from the contractor, at the contractor's expense. Training shall include inspection and maintenance practices necessary for minimizing erosion and sediment and for retaining sediment on-site.

8. Discharges into State waters due to dewatering and/or hydrotesting activities require separate NPDES permit(s) from the State Department of Health (DOH). If the contractor chooses to discharge dewatering and/or hydrotesting effluent into state waters, he shall obtain the necessary permit(s) from the DOH, and shall submit a complete set of the permit to the department of transportation, highways division, Maui district (HWY-M) prior to commencing the permitted activity. No dewatering any/or hydrotesting activities will be authorized until the receipt of the NPDES permit(s) from the DOH.

9. The contractor shall be responsible for any citations or fines that may be levied as related to the NPDES program on this permit, whether directly levied against the contractor or the department of transportation.

10. The contractor may discuss proposed and implemented BMP measures and the adequacy of them, with the district engineer.

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES (CONT.)

STRUCTURAL BEST MANAGEMENT PRACTICES

Examples of structural BMPs include, but are not limited to:

- Silt Fences
- Stabilized Construction Entrance/exit
- Inlet Protection
- Coverings
- Vegetative Stabilization
- Hydro Mulching
- Filter Berms
- Sediment Traps
- Sediment Basins

1. The contractor shall inspect erosion and sediment control measures twice daily and after 0.25 inches of rainfall.

2. If repairs to or maintenance of the contractor's erosion control measures are necessary, the contractor shall initiate the repairs or maintenance within 24 hours after inspection and noting of the deficiency.

   Repairs and maintenance may include the following:

   a. Replacing silt fence fabric when tears are found, and ensuring that the fabric is securely attached to the fence posts and firmly in the ground.
   b. Removing and disposing of sediment material when sediment build-up reaches one-third (1/3) the height of the sediment control measure.
   c. Removing and disposing of sediment material when the depth in a sediment basin reaches ten percent (10%) of the design capacity.
   d. Restoring bare spots and washouts, and ensuring healthy plant growth in both temporary and permanent seeded and planted areas.

3. The contractor shall make every effort to install structural BMPs as near the pollutant source as practicable. inlet protection shall serve as the last measure to prevent pollutants from entering the storm drain system.

NON-STRUCTURAL BEST MANAGEMENT PRACTICES

1. Waste disposal

   a. Waste materials
      All waste materials shall be collected and stored in a securely lidded, leakproof metal dumpster. All dumpsters at the project site shall be emptied a minimum of once per week, and more often, if necessary. No construction materials shall be buried on-site. The contractor, at his expense, shall train supervisory personnel in the correct procedures for waste disposal.
   b. Hazardous waste
      All hazardous waste material shall be disposed of in a manner permitted by Local, State or Federal Regulations.
   c. Sanitary waste
      All sanitary waste shall be collected from portable restroom facilities a minimum of once per week, and more often, if necessary.

2. Erosion and sediment control inspection and maintenance practices

   a. All erosion and sediment control measures shall be inspected daily prior to and after each day's construction, especially during heavy rainfall. Contractor shall also ensure drainage through filter material is maintained.
   b. All control measures shall be maintained in good working order. If a repair is necessary, it shall be initiated within 24 hours of the problem being discovered.

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES (CONT.)

   c. The final lift of each day's work shall be compacted to prevent erosion of fill material.
   d. Ensure protection of roadways from mud, dirt, and debris.
   e. Ensure that all tires of construction vehicles are sufficiently cleaned off so that dirt or debris is not tracked off the construction site. Washing off tires with water will not be acceptable unless the runoff is completely contained and does not enter the storm drain system or onto the State's Right-of-Way.
   f. At the end of grading operations and at the completion of project, the contractor shall inspect all drainage structures surrounding the project site. Any accumulated sediment and debris found in the drainage structures shall be removed.
   g. Any dirt or grassed area disturbed shall be restored by re-grassing the area or by seeding hydromulch. The grass shall be fully established at completion of project.

3. SPILL PREVENTION

   a. The following material management practices shall be followed to reduce the risk of spills or other accidental exposure of material and substances to stormwater runoff and discharge.
      - Good housekeeping
        - Store only enough products and material required to perform the job.
        - Materials that may become potential pollutants that are stored outside shall be stored in a neat and orderly manner in their original containers, and if possible, covered or enclosed.
        - Products shall be kept in their original containers, with the original manufacturer's labeling.
        - Products shall not be mixed, except as recommended or allowed by the manufacturers.
        - Appropriate products shall have secondary containment.
        - Whenever possible, use all of a product prior to disposing of the container.
        - Manufacturer's directions for proper use and disposal shall be followed.
        - Material shall be disposed of in a manner permitted by Local, State or Federal regulations.
        - Contractor shall conduct daily inspections to ensure proper use and disposal of material.

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-6 OF 8 SHEETS

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES (CONT.)

- Litter shall be picked-up on a daily basis and disposed of properly.
- Dust shall be controlled by wetting or by the application of a soil binder.

♦ Hazardous products
- Products shall be kept in their original containers, with the original manufacturer's labeling.
- Safety Data Sheets (SDS) shall be retained and available for review by users.
- Manufacturer's directions for proper use and disposal shall be followed.
- All hazardous waste material shall be disposed of in a manner permitted by Local, State or Federal regulations.

b. Product specific practices

The following practices shall be followed on-site:

♦ Vehicles
All on-site vehicles shall be monitored for leaks and shall be subject to regular preventative maintenance to reduce the chance of leaks occurring. Leaks that cannot be repaired immediately shall be contained in spill pans or other appropriate containers.

♦ Petroleum products
Petroleum products shall be stored in tightly sealed containers that shall be clearly labeled. Asphalt-containing materials (such as tack and prime coats) used on-site shall be applied according to manufacturer's directions.

♦ Concrete trucks
Concrete trucks shall discharge drum wash water only at designated sites. Wash water shall not be discharged to the storm drain system. The contractor shall contain the discharged drum wash water at the designated site, and shall remove concrete and other residue as required by the engineer.

c. Spill control practices

In addition to good housekeeping and material management practices, the following spill prevention and cleanup practices shall be observed:

♦ Manufacturers' recommendations for spill cleanup shall be clearly posted, and site personnel shall be made aware of the procedures and location of cleanup supplies.
♦ Materials and equipment necessary for spill cleanup shall be kept in the material storage area on-site.
♦ All spills shall be cleaned up immediately after discovery.
♦ All spill areas shall be kept well ventilated, and cleanup personnel shall wear appropriate clothing and equipment.
♦ Hazardous materials spills, regardless of size, shall be immediately reported to the engineer. A report shall be prepared to include measures to prevent this type of spill in the future, and how to cleanup such a spill. A description of the spill, the cause, and the cleanup measure undertaken shall also be included in the report.
♦ The contractor shall be responsible for spill prevention and cleanup. He shall designate at least one on-site personnel to receive spill prevention and cleanup training. The contractor, at his expense shall do training. The name of this person shall be posted in the material storage area and in the on-site office trailer.

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES (CONT.)

♦ 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, the contractor shall notify the engineer as soon as the contractor has knowledge of the discharge. Note that the reportable quantity for oil and fuel products is a spill of 25 gallons or more, a spill not cleaned within 72 hours, or a spill that threatens ground or surface waters. The engineer will notify the National Response Center (NRC) at (800) 424-8802, the DOH Clean Water Branch at (808) 586-4309, the DOH Clean Water Branch via email at cleanwaterbranch@doh.hawaii.gov (during non-business hours), the DOH Hazard Evaluation and Emergency Response Office at (808) 586-4249, the U.S. coast guard Maui station office at (808) 986-0023, and the local emergency planning committee at (808) 720-7285. The contractor shall also provide to the engineer within 1 calendar day of knowledge of the release, the circumstances leading to the release, and the date of the release. The engineer will provide information to the NRC as required.

BEFORE GRADING AND CONSTRUCTION

The following practices will be observed:

1. Potential and actual pollution sources within the existing project area are not believed to be present. If there should be discovery of harmful concentrations of contaminants, the operator will immediately notify the Department Of Health (DOH) so that the contaminant can be curtailed.

2. Drain inlets, catch basin sediment control filters, and/or filter socks shall be installed prior to the start of construction.

3. Soil conditions adjacent to the work site will be inspected for stability prior to construction. The contractor will be instructed to avoid unstable or highly erodible areas for staging of construction equipment and materials. Crushed rock material and plastic will be used to add stability to staging areas.

DURING GRADING AND CONSTRUCTION

Should excessive runoff of sediments create high turbidity conditions in the downstream areas, the following measures will be undertaken:

1. Additional hydromulching may be used to stabilize new and existing ground areas subject to erosion and siltation.

2. Erosion control measures, as outlined in the erosion control plan, may be augmented with the additional construction of berms and sediment traps to increase the system capacity. Improvements to be in accordance with standard engineering practice and applicable County of Mauii standards. Additional berms will be constructed of crushed rock wrapped in geotech fabric.

3. Removed vegetation will be properly disposed at an approved disposal site or landfill.

4. Discharges associated with the operation and maintenance of equipment will be field monitored by the contractor and construction inspector. Any mechanical and hydraulic fluid leakage will be repaired as soon as it is identified and located. Large leakage of mechanical fluids will be contained, properly disposed, and not allowed to impact state waters.

5. Any non-storm water discharges such as hydrotesting effluent, washwater from construction equipment and concrete trucks will be diverted and deposited into process water basins that will be underlayed with an impermeable liner. Any leftover concrete debris will be disposed of at an appropriate facility.

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	8	37

EROSION CONTROL AND BEST MANAGEMENT PRACTICE NOTES (CONT.)

6. Dust created by construction activity will be controlled by watering with water wagon and area free from dust nuisance. The work shall be in conformance with the air pollution control standards and regulations of the State Department Of Health, and County Grading Ordinance.

MISCELLANEOUS GRADING NOTES

At a minimum, disturbed areas of construction site that will not be redisturbed for fourteen days or more will be stabilized (grassed or graveled) by no later than the fourteenth day after last disturbance.

AFTER CONSTRUCTION ACTIVITIES

Regular maintenance designed to ensure the long-term efficiency of the system will include:

1. The removal and reclamation of sediments that accumulate in the drainage system and vegetated swale, approximately every 6 months or sooner following heavy storm conditions. The reclaimed sediments will be used for fill, as a supplement to topsoil, and for other uses over various portions of the project.

2. Drainage swales and other storm control structures which are lined with grass shall be periodically inspected and maintained. Miscellaneous grading notes at a minimum, disturbed areas of construction site that will not be redisturbed for fourteen days or more will be stabilized (grassed or graveled) by no later than the fourteenth day after last disturbance.

DUST NUISANCE

1. The contractor at his own expense, shall keep the project area and surrounding area free from dust nuisance. The work shall conform with the air pollution control standards and regulations of the State Department Of Health, and the County of Maui.

3. The contractor shall provide dust control sprinklers, and/or water-wagons as necessary, weekends, and holidays included. All graded areas shall be thoroughly watered after construction activity has ceased for the day.

4. The contractor shall be responsible for responding to dust complaints from neighboring properties and will provide additional mitigation measures as necessary.

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CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

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LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
CIVIL ENGINEERS • STRUCTURAL ENGINEERS • HONOLULU, HAWAII

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EROSION CONTROL NOTES

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. G-7 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	9	37

NOTES:

Special conditions for land disturbances

The following special conditions apply to all land disturbance work conducted under this general permit:

A. CONSTRUCTION MANAGEMENT TECHNIQUES

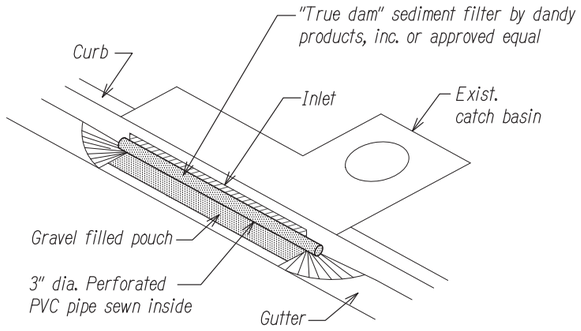
1. *Clearing and grubbing shall be held to the minimum necessary for grading and equipment operation.*
2. *Construction shall be sequenced to minimize the exposure time of the cleared surface area.*
3. *Construction shall be staged or phased for large projects. Areas of one phase shall be stabilized before another phase is initiated. Stabilization shall be accomplished by temporarily or permanently protecting the disturbed soil surface from rainfall impacts and runoff.*
4. *Erosion and sediment control measures shall be in place and functional before earth moving operations begin. Theses measures shall be properly constructed and maintained throughout the construction period.*
5. *All control measures shall be checked and repaired as necessary, for example, weekly in dry periods and within twenty-four hours after any rainfall of 0.25 inches or greater within a 24-hour period. During prolonged rainfall, daily checking is necessary. The permittee shall maintain records of checks and repairs.*
6. *The permittee shall maintain records of the duration and estimated volume of storm water discharge(s).*
7. *A specific individual shall be designated to be responsible for erosion and sediment controls on the project site.*

B. VEGETATION CONTROLS

1. *Pre-construction vegetative ground cover shall not be destroyed, removed, or disturbed more than fourteen calendar days prior to land disturbance.*
2. *Temporary soil stabilization with appropriate vegetation shall be applied on areas that will remain unfinished for more than fourteen calendar days.*
3. *Permanent soil stabilization with perennial vegetation or pavement shall be applied as soon as practical after final grading. Irrigation and maintenance of the perennial vegetation shall be provided for thirty calendar days or until the vegetation takes root, whichever is shorter.*

C. STRUCTURAL CONTROLS

1. *Storm water flowing toward the construction area shall be diverted by using appropriate control measures, as practical.*
2. *Erosion control measures shall be designed according to the size of disturbed or drainage areas to detain runoff and trap sediment.*
3. *Water must be discharged in a manner that the discharge shall not cause or contribute to a violation of the basic water quality criteria as specified in section 11-54-04.*

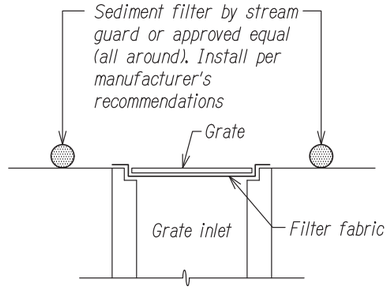


NOTES:

1. *To The Contractor sahll use best professional judgement (BPJ) to establish when inlet filters should be removed during times of above normal rainfall events to avoid threats to public health and/or safety. The contractor shall use BPJ to establish when inlet filters should be replaced once the event has passed.*
2. *To be installed at all existing catch basins adjacent and downstream of work areas.*

SEDIMENT CONTROL FILTER AT CATCH BASIN

Not To Scale

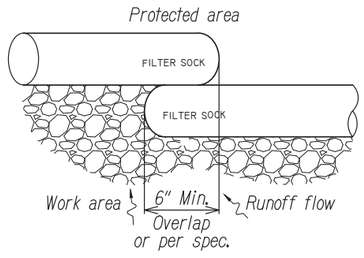


NOTES:

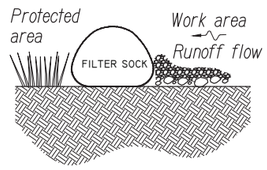
1. *Filter fabric shall be 15 mil (min.) "Envirofence #10800" by Nicolon Corp. or approved equal.*
2. *Contractor shall check the condition of the filter at the beginning and ending of each work day and repair/ clean as necessary.*

TEMPORARY SEDIMENT BARRIER AT DRAIN INLET

Not To Scale



PLAN



SECTION

NOTES:

1. *Stagger each row of filter socks so that connection points meet 6" minimum overlap with adjacent connection point.*

12" FILTER SOCK DETAIL

Not To Scale

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CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

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ENGINEERS, SURVEYORS ★ HONOLULU, HAWAII

1 2
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

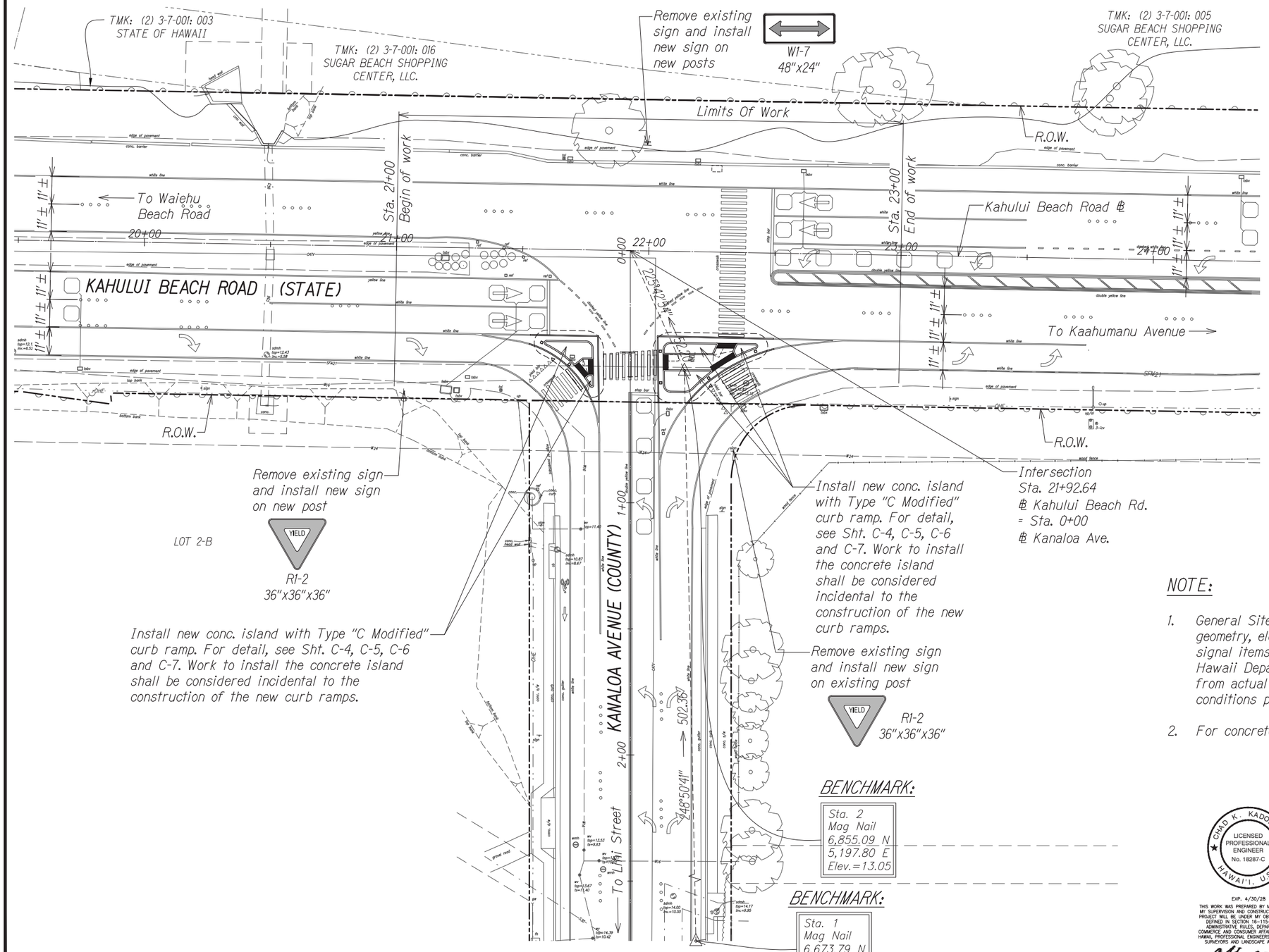
EROSION CONTROL NOTES AND DETAILS

Kahului Beach Road Intersection Improvements at Kanaloa Avenue Project No. 3400A-01-20R

Scale: As Shown *Date: May 2026*

SHEET No. G-8 OF 8 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	10	37



GENERAL SITE PLAN
Scale: 1"=20'

NOTE:

1. General Site Plan (including but not limited to intersection geometry, elevations, lane widths, striping, signs, traffic signal items, etc.) are based on a concept provided by the Hawaii Department of Transportation which may differ from actual field conditions. Contractor to verify field conditions prior to construction.

2. For concrete barrier details, see Structural sheets.

ORIGINAL PLAN
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CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

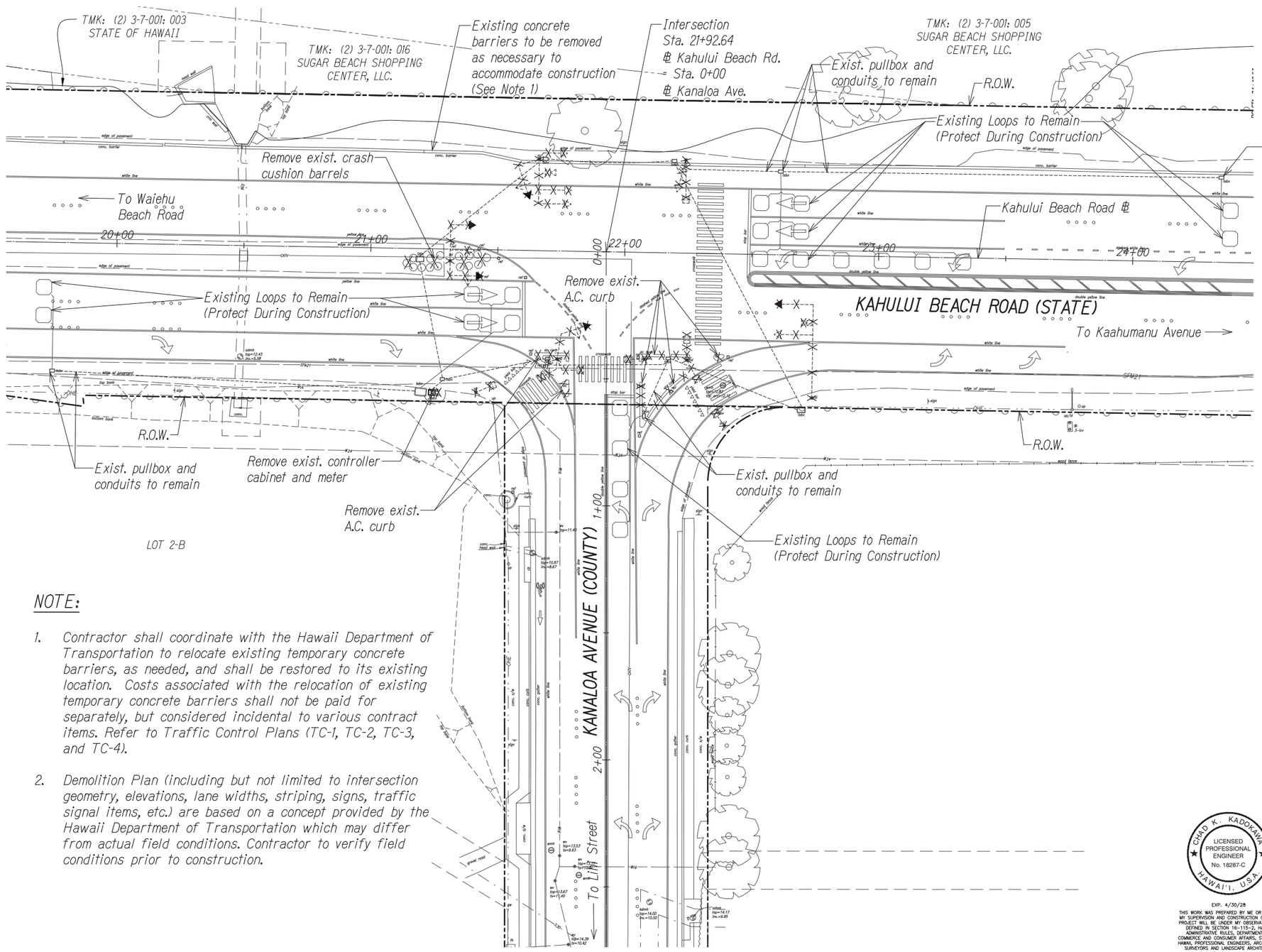
GENERAL SITE PLAN

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. C-1 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	11	37



NOTE:

1. Contractor shall coordinate with the Hawaii Department of Transportation to relocate existing temporary concrete barriers, as needed, and shall be restored to its existing location. Costs associated with the relocation of existing temporary concrete barriers shall not be paid for separately, but considered incidental to various contract items. Refer to Traffic Control Plans (TC-1, TC-2, TC-3, and TC-4).

2. Demolition Plan (including but not limited to intersection geometry, elevations, lane widths, striping, signs, traffic signal items, etc.) are based on a concept provided by the Hawaii Department of Transportation which may differ from actual field conditions. Contractor to verify field conditions prior to construction.

LEGEND:

X-X-X Existing traffic signal standards to be removed

TRUE NORTH
SCALE: 1"=20'

DEMOLITION PLAN

Scale: 1"=20'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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No.	DESIGNED BY	
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LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

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1 2
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DEMOLITION PLAN

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. C-2 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	12	37

CURB RAMP AND SIDEWALK NOTES:

1. These typical details are intended as curb ramp guidelines for design and construction. These guidelines shall not replace site specific curb ramp plans.
2. A 2% maximum cross slope shall be maintained in the direction of pedestrian traffic.
3. Subject to field conditions, the Engineer shall determine the final location of curb ramps.
4. All pullboxes shall be installed away from the curb ramp and within the sidewalk/unpaved area to the maximum extent feasible.
5. Where necessary, existing pullboxes, handholes, manholes, etc. shall be adjusted to match curb ramp grade. Adjustments shall not be paid for separately but shall be considered incidental to the various curb ramp items unless indicated otherwise.
6. Transitions from ramps to gutters and roadways shall be flush.
7. Curb ramps and sidewalks shall be constructed to eliminate ponding to the maximum extent feasible.
8. The pedestrian push button shall meet operational and reach requirements of the American with Disabilities Act Accessibility Guidelines (ADAAG):
   a. Forward Reach. The maximum height for forward reach shall be 48".
   b. Side Reach. The maximum height for side reach shall be 48".
   c. Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbf.
9. The maximum slopes of adjoining gutters or road surface immediately fronting the curb ramp shall not exceed 5% for Type A, D and Combination ramps and 8.33% for Type B, C, and E ramps.
10. There shall be a 30"x48" level ground surface (2% max. cross slope, both directions) for a forward or side approach, as appropriate, to a pedestrian push button.
11. Construction joints are required to join curb ramps with sidewalks.
12. Unless otherwise noted, new gutters are required as shown.
13. All curb ramps shall be reinforced with 6x6 W1.4/W1.4 welded wire fabric.
14. Surface of sidewalks and curb ramps shall be firm, stable, and slip-resistant. This includes the surfaces of pullboxes, valve covers, manhole covers, etc.
15. Bed course material is required for curb ramps, sidewalks, and gutters.
16. 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.
17. 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.
18. If possible, install utility poles, fire hydrants, light poles, sign posts, pullboxes, etc. off of sidewalk but within the right-of-way.
19. 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.
20. If a curb ramp is not constructed according to the plans, the Contractor shall reconstruct the curb ramp at no cost to the State. Construction tolerance for Portland Cement Concrete shall be based on ¼ inch per 10 ft. (±0.2%). Remedial measures will not be accepted.

ORIGINAL PLAN
NOTE BOOK No.
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HAWAI'I, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

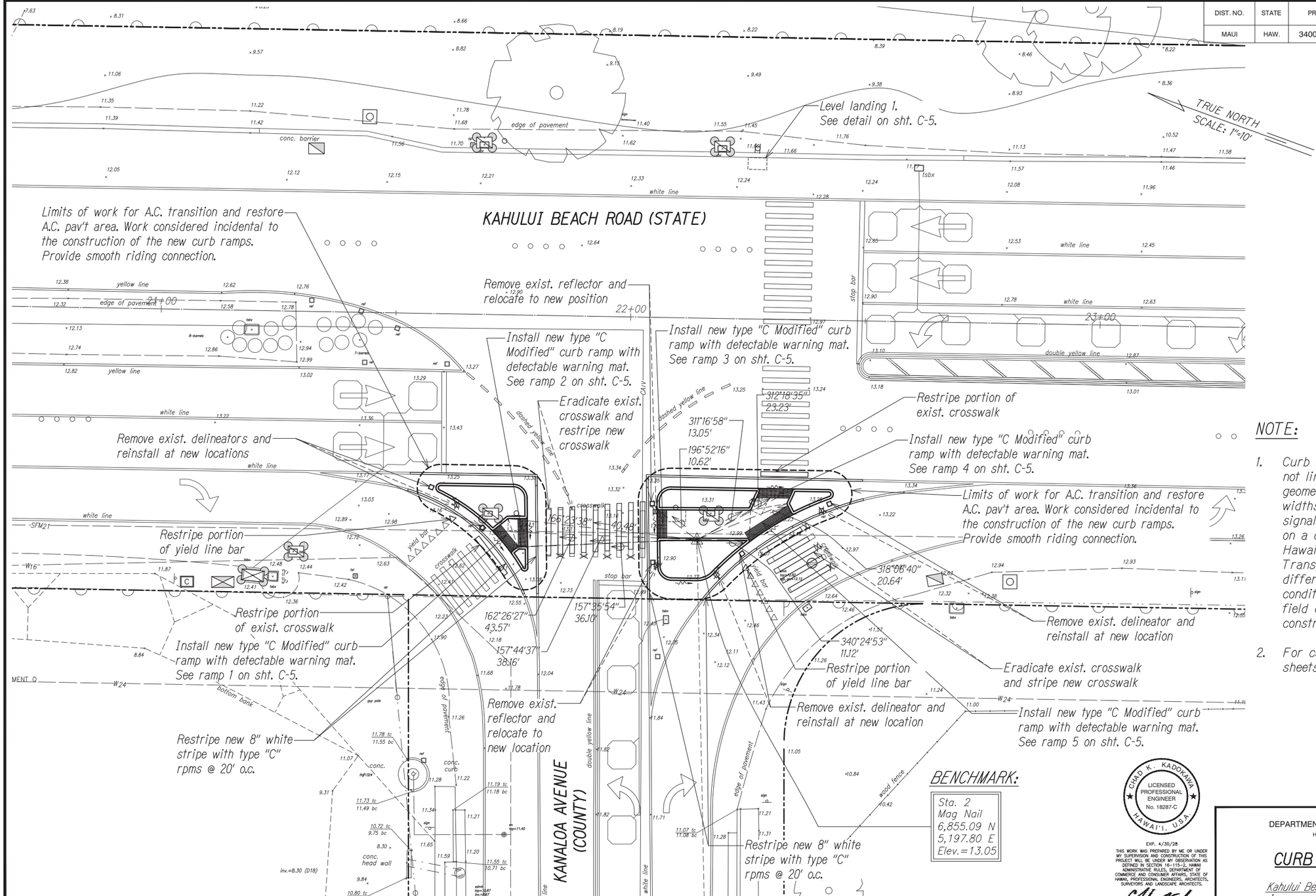
CURB RAMP AND SIDEWALK NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. C-3 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	13	37



CURB RAMP PLAN

Scale: 1"=10'

BENCHMARK:

Sta. 2
Mag Nail
6,855.09 N
5,197.80 E
Elev.=13.05

NOTE:

1. Curb Ramp Plan (including but not limited to intersection geometry, elevations, lane widths, striping, signs, traffic signal items, etc.) are based on a concept provided by the Hawaii Department of Transportation which may differ from actual field conditions. Contractor to verify field conditions prior to construction.
2. For curb ramp details, see sheets C-5, C-6, and C-7.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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ENGINEERS, SURVEYORS HONOLULU, HAWAII

1 2
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

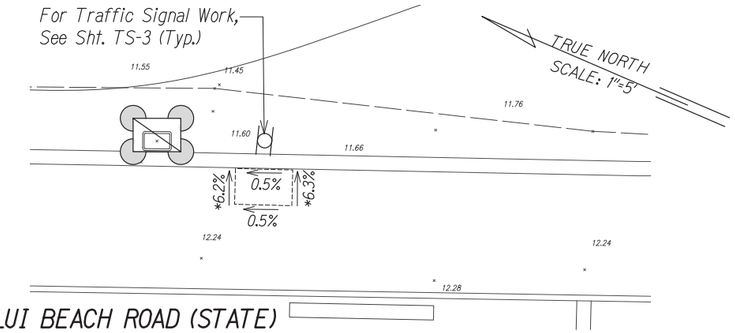
CURB RAMP PLAN

Kahului Beach Road Intersection Improvements at Kanaloa Avenue Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. C-4 OF 7 SHEETS

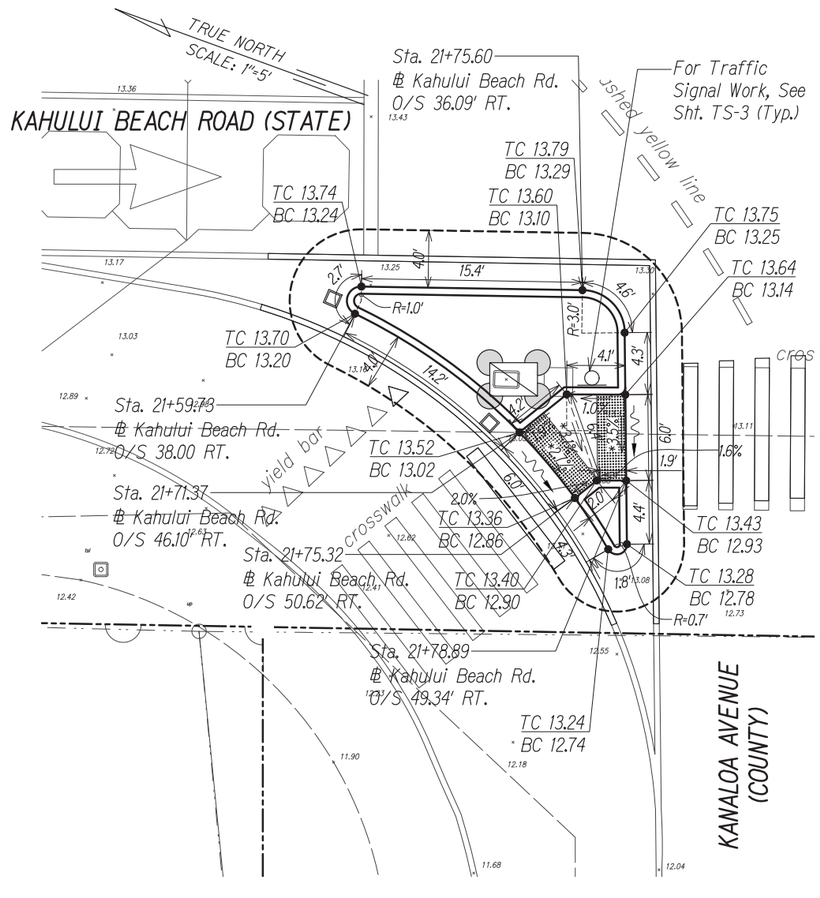
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	14	37



* TI Statement to be filed

LEVEL LANDING 1

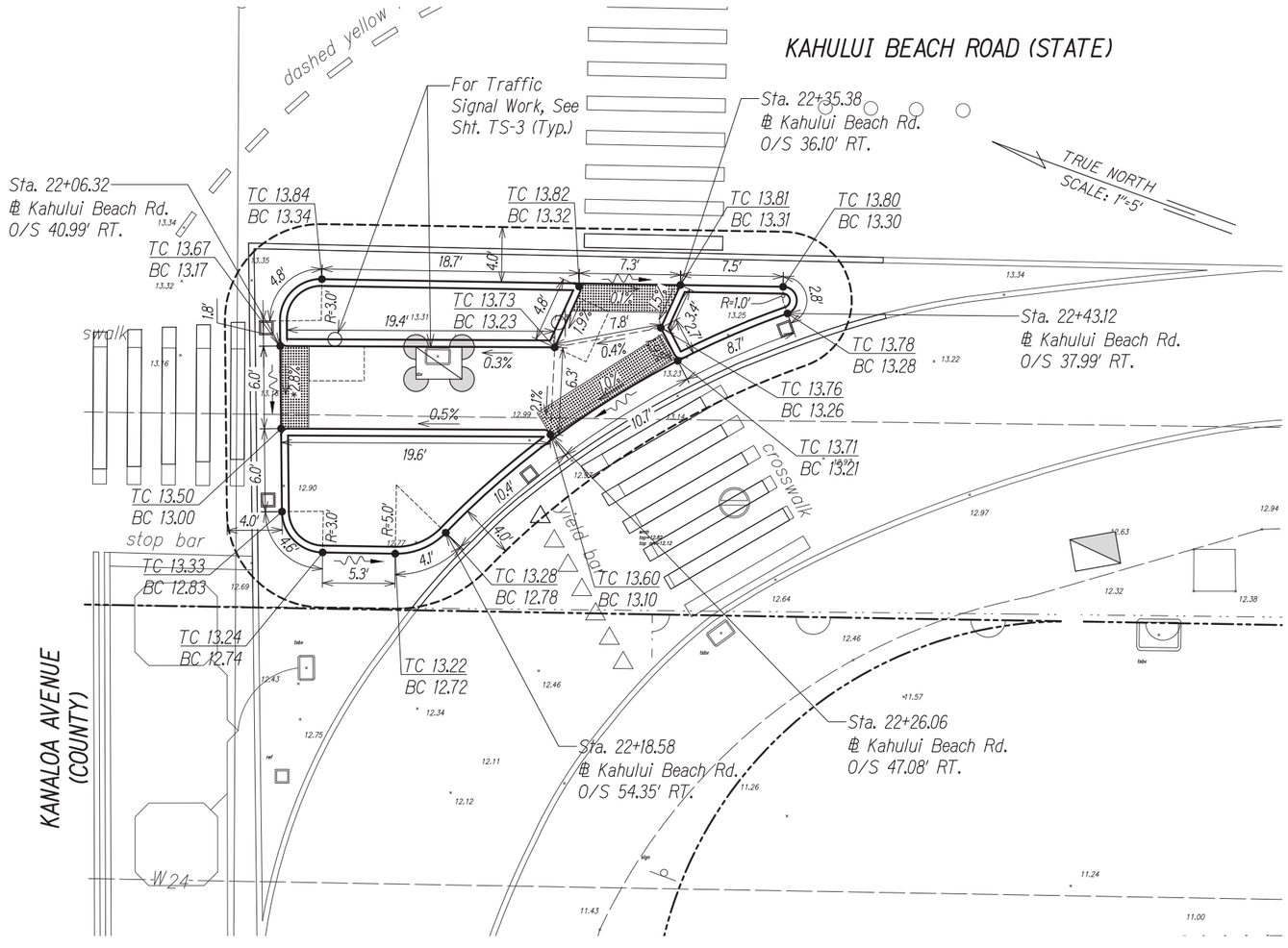
Scale: 1"=5'



* TI Statement to be filed

RAMP 1 & 2

Scale: 1"=5'



* TI Statement to be filed

RAMP 3, 4 & 5

Scale: 1"=5'

NOTE:

1. Curb Ramp Plan (including but not limited to intersection geometry, elevations, lane widths, striping, signs, traffic signal items, etc.) are based on a concept provided by the Hawaii Department of Transportation which may differ from actual field conditions. Contractor to verify field conditions prior to construction.

2. For curb ramp details, see sheets C-6 and C-7.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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LICENSED PROFESSIONAL ENGINEER
No. 18287-C
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LICENSE EXPIRES: APRIL 30, 2028

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CIVIL ENGINEERS • STRUCTURAL ENGINEERS • SURVEYORS • HONOLULU, HAWAII

1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

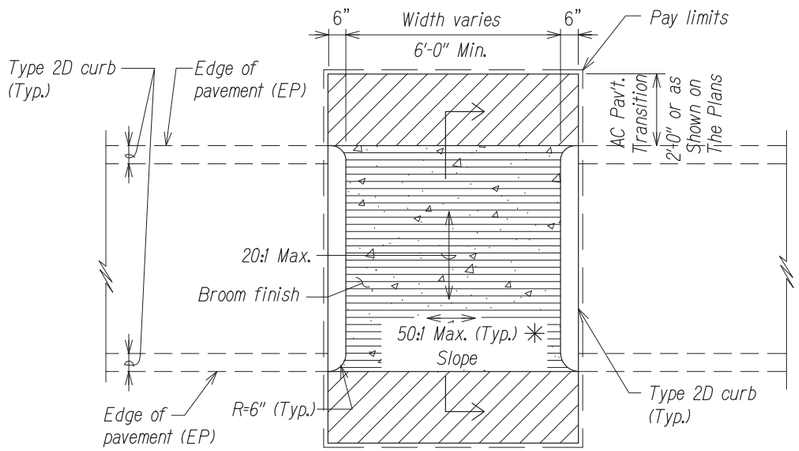
CURB RAMP DETAILS

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

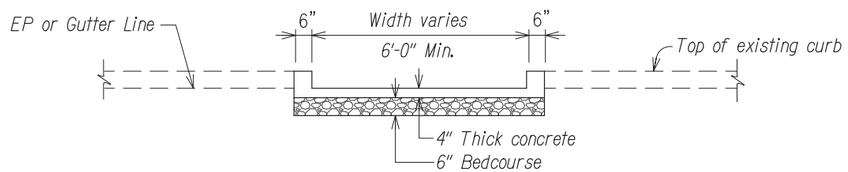
SHEET No. C-5 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	15	37

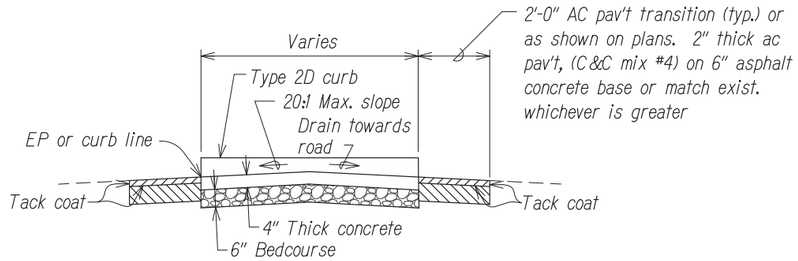


* If roadway slope >2%, conform to roadway slope and technical infeasibility statement.

PLAN
Scale: ½"=1'-0"

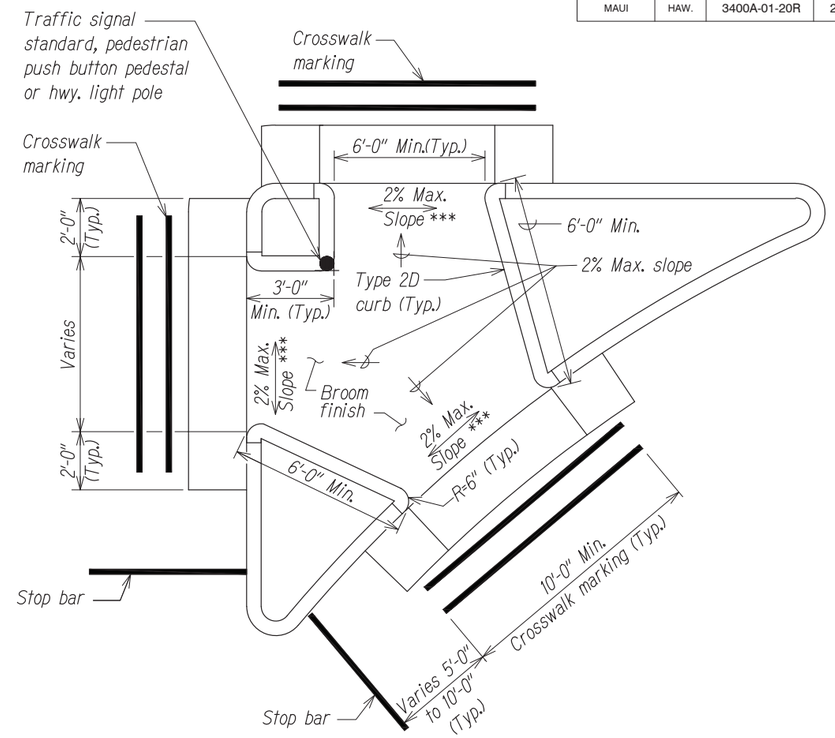


ELEVATION
Scale: ½"=1'-0"



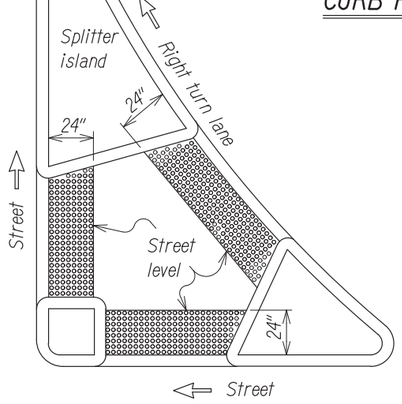
SECTION
Scale: ½"=1'-0"

CURB RAMP - TYPE "C"



CURB RAMP - TYPE "C" MODIFIED

Not to Scale



REFUGE ISLAND WITH DETECTABLE WARNING

TYPICAL INSTALLATION OF DETECTABLE WARNINGS

Not to Scale

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

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.
EXP. 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS HONOLULU, HAWAII

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CURB RAMP TYPICAL DETAILS

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

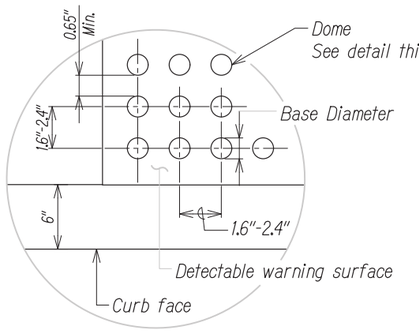
Scale: As Shown Date: May 2026

SHEET No. C-6 OF 7 SHEETS

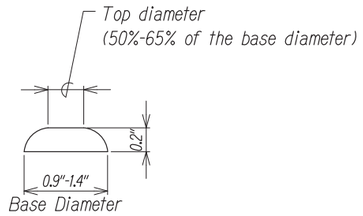
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	16	37

NOTES:

1. Detectable warnings shall be 24 inches in the direction of travel and extend the full width of the curb ramp or flush surface (does not include flares).
2. Truncated domes shall have a diameter of 0.9 to 1.4 inch at the bottom, a diameter of 50%-65% of the base diameter at the top, a height of 0.2 inch and a center-to-center spacing of 1.6 to 2.4 inches measured along one side of a square arrangement.
3. Dome shall be aligned on a square grid in the predominant direction of travel to permit wheels to roll between the domes.
4. There shall be a minimum of 70 percent contrast in light reflectance between the detectable warning and an adjoining surface, or the detectable warning shall be "safety yellow".
5. The material used to provide visual contrast shall be an integral part of the detectable warning surface.
6. The detectable warning shall be located so that the edge nearest the curb line or other potential hazard is 6 to 8 inches from the curb line.



ENLARGMENT



DOME SECTION

DETECTABLE WARNING DETAIL

Not to Scale

ORIGINAL PLAN
NOTE BOOK
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DESIGNED BY _____
QUANTITIES BY _____
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CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
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LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
CIVIL ENGINEERS HONOLULU, HAWAII

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETECTABLE WARNING DETAILS

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. C-7 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	17	37

GENERAL TRAFFIC CONTROL NOTES

1. The permittee shall make minor adjustments at intersections, driveways, bridges, structures, etc., to fit actual 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 areas shall be placed first. The others shall then be placed progressively toward the work area.
4. Regulatory and warning signs within the construction zone that are in conflict with the Traffic Control Plans shall be removed or covered. All signs shall be restored upon completion of the work.
5. Flaggers and/or police officers shall be in sight of each other or in direct communication at times.
6. When required by the issuing office, the permittee shall install a flashing arrow signal as shown on the traffic control plans.
7. Signs spacings (D), taper lengths (T) and spacings of cones or delineators shall be as shown in Table 1, unless otherwise noted on the Traffic Control Plans.
8. Traffic lanes shall be a minimum of 10' wide.
9. All construction warning signs shall be promptly removed or covered whenever the message is not applicable or not in use.
10. The backs of all signs used for traffic control shall be appropriately covered to preclude the display of inapplicable sign messages (i.e., when signs have messages on both faces).
11. At the end of each day's work, or as soon as the work is completed, the permittee shall remove all traffic control devices no longer needed to permit free and safe passage of public traffic. Removal shall be in the reverse order of installation. Replace existing faded or obliterated pavement markings that are necessary for safe traffic flow in the construction area with temporary or permanent markings before opening the roadway to public traffic each day.
12. Replace permanent pavement markings and traffic sign upon completion of each phase of work.
13. The contractor shall control traffic in and out of driveways.
14. Traffic control shall be in accordance with part VI, standards and guides for traffic controls for street and highway construction, maintenance, utility, and incident management operations, of the Manual on Uniform Traffic Control Devices, (MUTCD) 11th edition (2023).
15. The Contractor shall notify the County of Maui Department of Transportation (CDOT), three (3) weeks prior to commencing any work. The Contractor shall inform CDOT of the location and scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stops.
16. All traffic control signs shall be of standard size, unless otherwise directed by the Hawaii Department of Transportation (HDOT). The exact location of all traffic control devices shall be approved by the HDOT engineer or inspector. The locations of temporary traffic control signs shall not block any existing traffic control devices or signs. The Contractor shall trim any existing vegetation or trees that may obstruct the view of temporary construction signs, as deemed necessary by HDOT.

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DESIGNED BY .....
QUANTITIES BY .....
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ORIGINAL PLAN
NOTE BOOK
No. .....

CHAD K. KADOKAWA
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AUSTIN, TSUTSUMI & ASSOCIATES, INC.
CIVIL ENGINEERS HONOLULU, HAWAII

1 2
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TC-1 OF 4 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	18	37

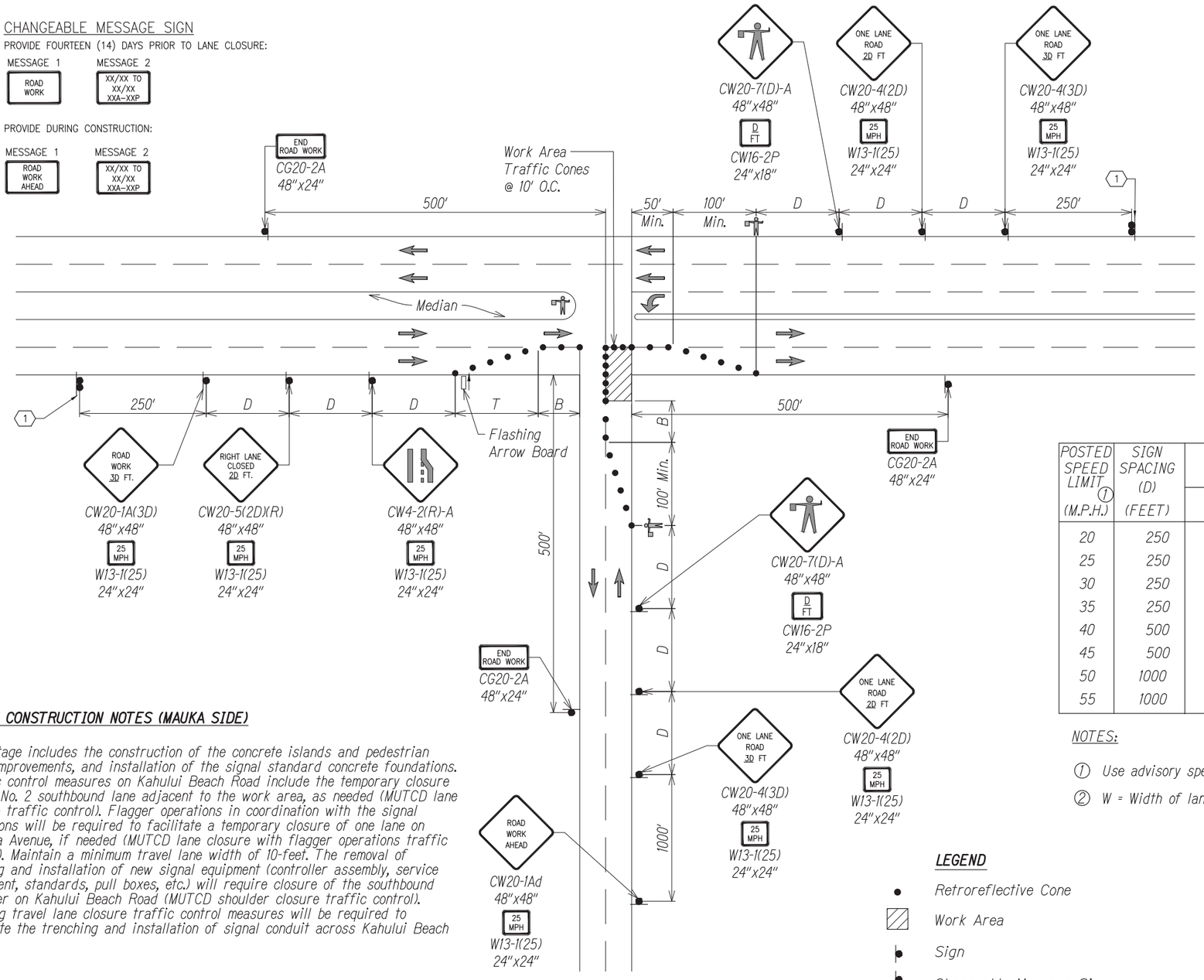
(1) CHANGEABLE MESSAGE SIGN

PROVIDE FOURTEEN (14) DAYS PRIOR TO LANE CLOSURE:

MESSAGE 1	MESSAGE 2
ROAD WORK	XX/XX TO XX/XX XXA–XXP

PROVIDE DURING CONSTRUCTION:

MESSAGE 1	MESSAGE 2
ROAD WORK AHEAD	XX/XX TO XX/XX XXA–XXP



INTERSECTION - ONE LANE CLOSED AND RIGHT LANE CLOSED

STAGE CONSTRUCTION NOTES (MAUKA SIDE)

This stage includes the construction of the concrete islands and pedestrian ramp improvements, and installation of the signal standard concrete foundations. Traffic control measures on Kahului Beach Road include the temporary closure of the No. 2 southbound lane adjacent to the work area, as needed (MUTCD lane closure traffic control). Flagger operations in coordination with the signal operations will be required to facilitate a temporary closure of one lane on Kanaloa Avenue, if needed (MUTCD lane closure with flagger operations traffic control). Maintain a minimum travel lane width of 10-feet. The removal of existing and installation of new signal equipment (controller assembly, service equipment, standards, pull boxes, etc.) will require closure of the southbound shoulder on Kahului Beach Road (MUTCD shoulder closure traffic control). Shifting travel lane closure traffic control measures will be required to facilitate the trenching and installation of signal conduit across Kahului Beach Road.

TYPICAL TRAFFIC CONTROL PLAN

Not To Scale

NOTES

1. See table 1 for additional dimensions.
2. One lane road (CW20-4) and flagger ahead (CW20-7) signs shall be removed or covered when no work is being performed and lane is not closed.
3. Cones or delineators shall be installed at 25' o.c. max. on tapers.

TABLE 1 FOR TRAFFIC CONTROL PLAN

POSTED SPEED LIMIT (1) (M.P.H.)	SIGN SPACING (D) (FEET)	TAPER LENGTH (T) (FEET)		LONGITUDINAL BUFFER SPACE (B) (FEET)	SPACING OF CONES OR DELINEATORS (FEET) (3)		
		W = 12' or less (2)	W = Greater than 12' (2)		Taper	Tangent	Work Area
20	250	200	W x 17	35	20	20	10
25	250	200	W x 17	55	25	25	10
30	250	250	W x 20	85	30	30	10
35	250	250	W x 20	120	35	35	10
40	500	350	W x 30	170	40	40	10
45	500	550	W x 45	220	45	45	10
50	1000	600	W x 50	280	50	50	10
55	1000	700	W x 55	335	55	55	10

NOTES:

(1) Use advisory speeds when posted

(2) W = Width of lane or offset

LEGEND

- Retroreflective Cone
- Work Area
- Sign
- Changeable Message Sign
- Direction Of Traffic
- Flagger and/or Police Officer
- Flashing Arrow Board
- XX MPH — Advisory Speed Limit Signs

ORIGINAL PLAN | NOTE BOOK | No. | DATE
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DESIGNED BY
QUANTITIES BY
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CHAD K. KADOKAWA
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AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS HONOLULU, HAWAII

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

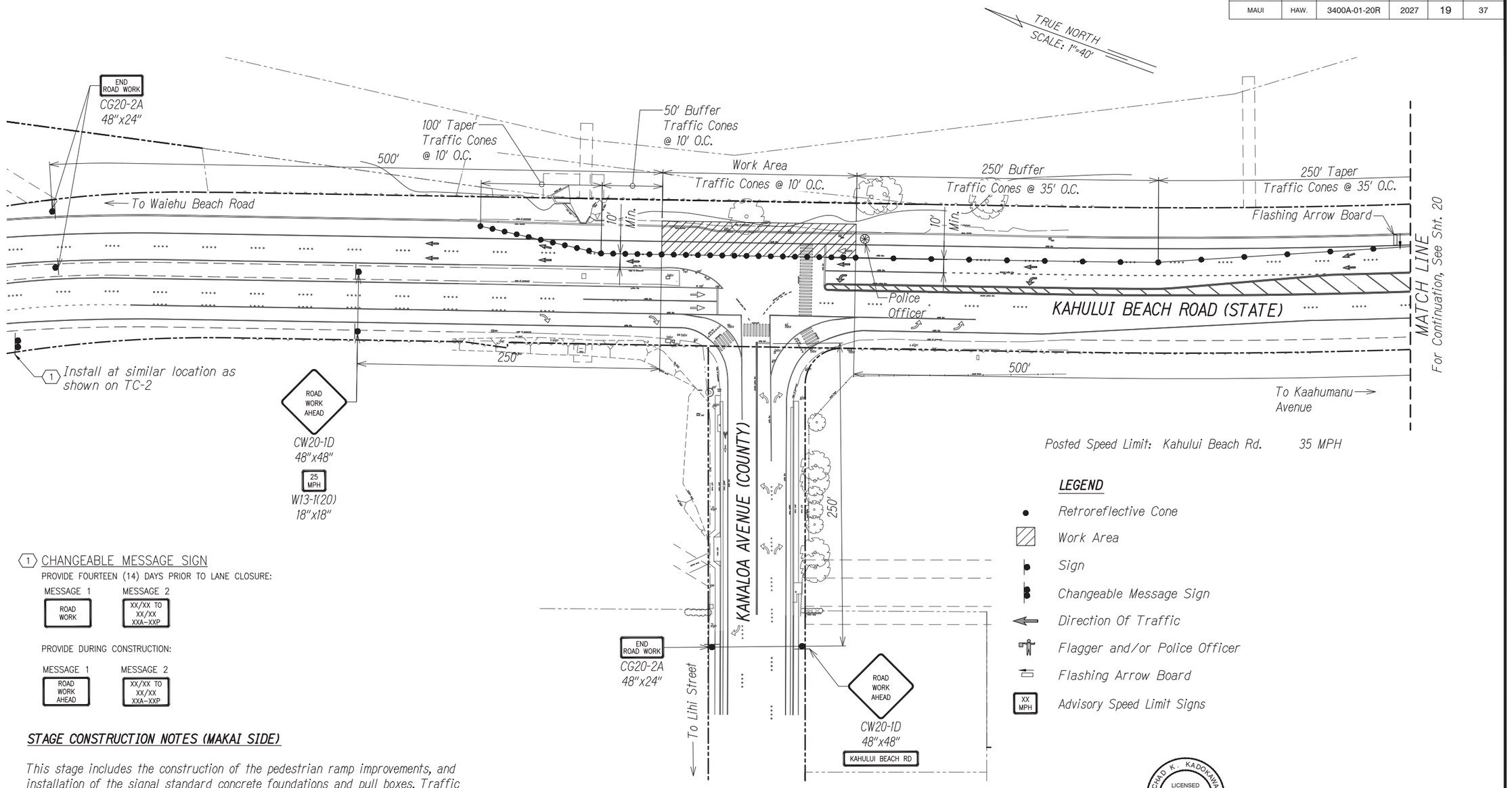
TYPICAL TRAFFIC CONTROL PLAN

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TC-2 OF 4 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	19	37



LEGEND

- Retroreflective Cone
- Work Area
- Sign
- Changeable Message Sign
- Direction Of Traffic
- Flagger and/or Police Officer
- Flashing Arrow Board
- XX MPH — Advisory Speed Limit Signs

TRAFFIC CONTROL PLAN - 1

Scale: 1"=40'

1 CHANGEABLE MESSAGE SIGN

PROVIDE FOURTEEN (14) DAYS PRIOR TO LANE CLOSURE:

MESSAGE 1	MESSAGE 2
ROAD WORK	XX/XX TO XX/XX XXA–XXP

PROVIDE DURING CONSTRUCTION:

MESSAGE 1	MESSAGE 2
ROAD WORK AHEAD	XX/XX TO XX/XX XXA–XXP

STAGE CONSTRUCTION NOTES (MAKAI SIDE)

This stage includes the construction of the pedestrian ramp improvements, and installation of the signal standard concrete foundations and pull boxes. Traffic control measures on Kahului Beach Road include the temporary closure of the northbound shoulder and No. 2 northbound lane adjacent to the work area, as needed (refer to detail for lane closure traffic control). Maintain a minimum travel lane width of 10-feet. Construction operations will require the moving (shifting) of the existing (temporary) concrete barriers for access to the work areas in the shoulder and beyond the edge of pavement. The existing (temporary) barriers may remain in the work zone area, possibly just to north of immediate work area (coordinate with HDOT and construction management staff). The existing (temporary) concrete barriers shall be replaced at the end of each workday.

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

CHAD K. KADOKAWA — LICENSED PROFESSIONAL ENGINEER — No. 18287-C — HAWAI'I, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN - KAHULUI & KANALOA - 1

Kahului Beach Road Intersection Improvements at Kanaloa Avenue Project No. 3400A-01-20R

Scale: As Shown — Date: May 2026

SHEET No. TC-3 OF 4 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	20	37

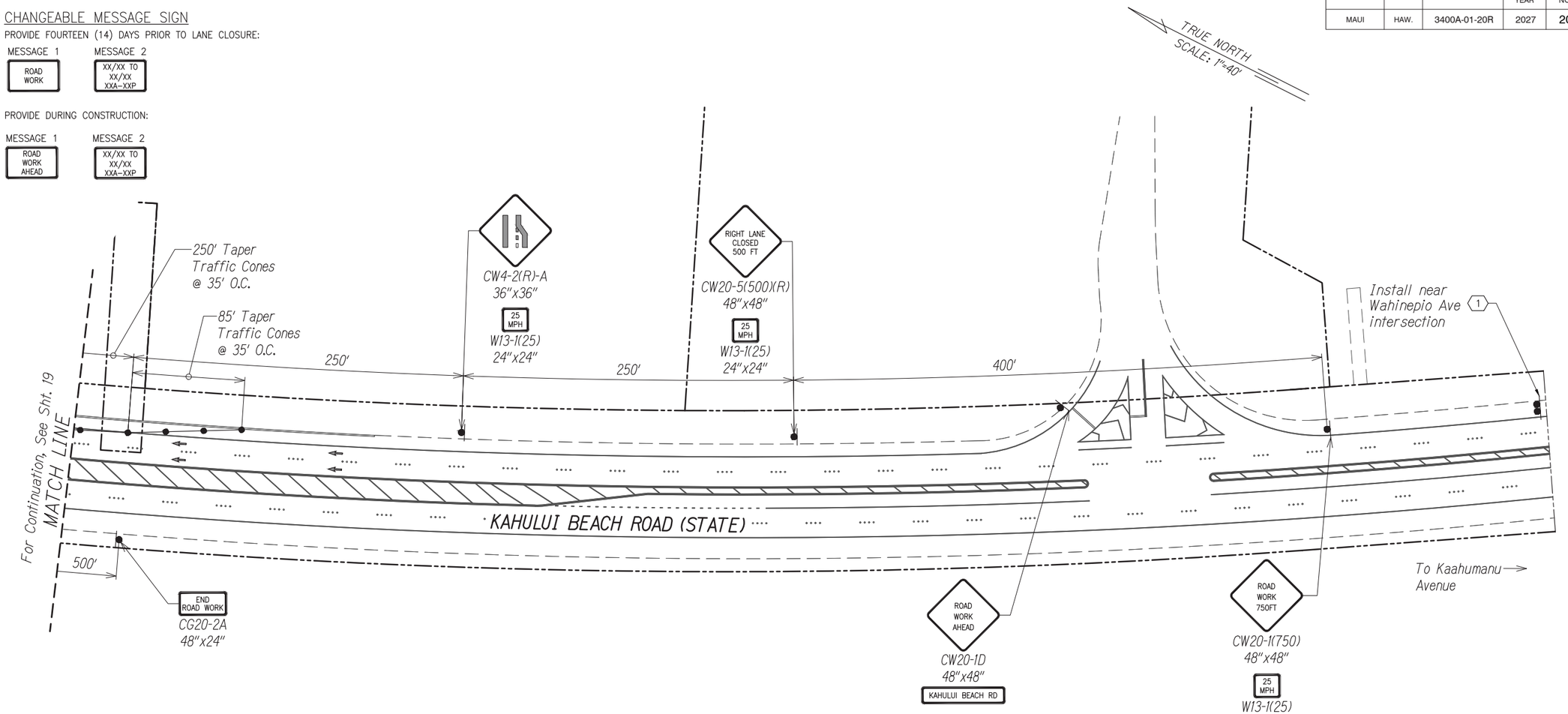
1 CHANGEABLE MESSAGE SIGN

PROVIDE FOURTEEN (14) DAYS PRIOR TO LANE CLOSURE:

MESSAGE 1	MESSAGE 2
ROAD WORK	XX/XX TO XX/XX XXA–XXP

PROVIDE DURING CONSTRUCTION:

MESSAGE 1	MESSAGE 2
ROAD WORK AHEAD	XX/XX TO XX/XX XXA–XXP



Posted Speed Limit: Kahului Beach Rd. 35 MPH

TRAFFIC CONTROL PLAN - 2

Scale: 1"=40'

LEGEND

- Retroreflective Cone
- Work Area
- Sign
- Changeable Message Sign
- Direction Of Traffic
- Flagger and/or Police Officer
- Flashing Arrow Board
- XX MPH — Advisory Speed Limit Signs

ORIGINAL PLAN
NOTE BOOK No.
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN - KAHULUI & KANALOA - 2

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TC-4 OF 4 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	21	37

LEGEND

NEW	EXISTING
Pedestrian count down signal head mounted on Type I Signal Standard, height=8'	
12" ↑ ↑ ↑ Traffic signal head	
12" R Y G Traffic signal head	
Pedestrian head with count down signal head	
12" ← ← ← Traffic signal head	
12" R Y G ← Traffic signal head	
(A) 3 / 2 / 1 — Standard traffic and pedestrian signal heads mounted on Type I signal standard pole designation A, TS head A-1 & A-3 and ped. head A-2	
(B) 50' 11' 11' — Traffic signal heads mounted on Type II signal standard 50' M.A. : 11' between heads pole designation B, TS head B-1 and B-2	
Detection Camera (Miovision or Approved Equal)	
EVP Detector	
Type "A" pullbox	
Type "B" pullbox	
Type "C" pullbox	
Existing pullbox	
Replace existing pullbox with new Type "A" pullbox	
Replace existing pullbox with new Type "B" pullbox	
Replace existing pullbox with new Type "C" pullbox	
C — Eagle 352S ATC Cabinet on new base (See HDOT STD. Det. TE-33) with ATC FLeX Controller and Omni eX software (or approved equal).	C
Loop detectors	
Sign	
(1) — Traffic signal conduits (underground) number "1"	
Meter for Traffic Signal (See Electrical Plans)	
Camera Detection Zone	

TRAFFIC SIGNAL NOTES:

1. All traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
2. Signal indications during clearance interval:
   A. If a signal is G or ~~<G~~ and will remain G or ~~<G~~ during the next phase, it shall be G or ~~<G~~ during the clearance interval.
   B. If a signal is G or ~~<G~~ and will become R or extinguished during the next phase, it shall be Y or ~~<Y~~ during the clearance interval.
   C. If a signal is R and will remain R or becomes G during the next phase, it shall remain R during the clearance interval.
3. The loop amplifier units furnished for this project shall be capable of operating the loop detector configurations shown on the plans. Cost for the loop amplifier shall be incidental to the installation of the loop detector.
4. A solid #8 bare copper wire shall be pulled with the traffic control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
5. Conduits and pullbox locations as shown on the plans are schematic. They may be modified by the contractor with the approval of the engineer.
6. The contractor shall install the electrical meter, controller and cabinet in the indicated location shown on the plans.
7. All work for the installation or modification of the traffic signal system shall conform to the latest revisions of the "Hawaii Standard Specifications for Road and Bridge Construction, 2005" and the "Standard Plans" of the State of Hawaii, Department of Transportation, Highways Division, 2008 and as shown on these drawings.
8. All splicing shall be done in the pullboxes.
9. Furnishing and installing the conduit stubouts (pullboxes to edge of pavement) will not be paid for separately but shall be considered incidental to the various contract items.
10. The concrete jacket for the conduit by-pass detail shall not be paid for separately but considered incidental to the various contract items. The engineer shall determine if a concrete jacket is required.
11. All cable and elements for grounding shall be new.
12. Cables between signal faces, pedestrian heads, video imaging vehicle detection cameras and EVP detectors and the nearest pullboxes are not called out on the plans, but shall be furnished and installed in sufficient numbers and lengths as required. Cost shall be incidental to various traffic signal contract items.
13. The proposed locations of signal heads on mast arms shall be determined in the field after final location/placement of the respective mast arm pole.
14. Conduits between the traffic signal standard and the pullbox shall be in sufficient number as required. Cost shall be incidental to the installation of the traffic signal standard foundation.
15. All conduits shall be concrete encased PVC Schedule 40 and in conformance with the Hawaii Standard Specifications section 623.
16. While modifying the existing traffic signal system (if applicable), the contractor shall keep the existing system operational until the new traffic signal system can be put into service.
17. The contractor shall notify the State of Hawaii Department of Transportation Highways Division, Maui District Office three (3) working days prior to commencing work on the traffic signal system. (Phone: (808)873-3535)
18. All traffic signal hardware removed from the intersection shall be stockpiled and delivered to a location determined by HDOT.
19. Louvered back plates with a 5-inch border containing a 1-inch wide retro-reflective tape shall be installed on all mast arm mounted traffic signal heads as indicated on the plans.

TRAFFIC SIGNAL NOTES: (CONT.)

20. All traffic signal standards shall conform to section 4.0 modifications to AASHTO Standard Specifications for Structural Supports for Highway Signs Luminaries and Traffic Signals, as noted in the State of Hawaii Department of Transportation, Highways Division, "Design Criteria for Bridges and Structures" dated August 8, 2014, as amended. Contractor is advised that the use of grout under the base plate for the Type II Traffic Signal Standard is explicitly prohibited per subsection 4.04 of the aforementioned document.
21. The contractor shall select poles, mast arm standards, anchor bolts, etc., based on the footing details for Type II traffic signal standards shown in these plans and shall verify all dimensions, anchor bolt spacing and reinforcing prior to fabrication.
22. Should the contractor encounter issues during trenching or the construction of foundations that require the support of a geotechnical or structural engineer, contractor shall consider these costs as incidental to the various contract items.
23. All Signal-Drop Cables (Type 5 Cables) from the various Types of Traffic Signal Head on the traffic signal standards and mast arms to the pullboxes shall not be paid for separately but considered incidental to the Traffic Signal Head.
24. After installing the Traffic Signal System, the Contractor shall apply grease to all parts of the Traffic Signal System (i.e. fittings, brackets, nipples, elbows, screws, signal head assemblies, bolts, hinges, etc.) as directed by the Traffic Signal Inspector, to prevent rust and corrosion. The grease material shall be approved by the Signal Inspector.
25. For Type II Traffic Signal Standards, the Contractor shall be responsible to coordinate the foundation with the Traffic Signal Standard provided; any changes required to the foundation due to the Traffic Signal Standard provided shall be designed by a licensed Structural engineer. All design and construction cost for these changes will be borne by the Contractor.
26. All conduits between pullboxes and Traffic Signal/Highway Lighting Standards shall not be paid for separately but shall be considered incidental to the various contract items.
27. After installing all the traffic signal cables, the Contractor shall duct seal all conduits in the pullboxes, traffic signal standards and traffic signal controller cabinet concrete base. The duct seal material shall be approved by the Traffic Signal Inspector/Engineer and shall not be paid for separately but considered incidental to the direct buried and/or concrete encased conduits.
28. Connecting into existing traffic signal system and making all necessary adjustments shall not be paid for separately, but considered incidental to the various traffic signal contract items.
29. Removal of any existing traffic signal items including, but not limited to traffic signal heads, traffic signal standards, concrete bases, etc. shall not be paid for separately, but considered incidental to the various traffic signal contract items.

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

CHAD K. KADOKAWA — LICENSED PROFESSIONAL ENGINEER No. 18287-C — HAWAII, U.S.A.

EXP. 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC. ENGINEERS SURVEYORS HONOLULU, HAWAII

1 2 — LINE IS 2 INCHES AT FULL SIZE (If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL LEGEND AND NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown — Date: May 2026

SHEET No. TS-1 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	22	37

CONSTRUCTION NOTES

1. Locations of existing underground structures and utilities such as pipelines, conduits, cables, etc., shown on plans are approximate only. It is not the intent of these plans to show the exact location of all underground utilities and structures. It is the responsibility of the contractor to verify the locations of all existing utilities with the respective owners. Existing utilities damaged by the contractor shall be repaired by the contractor at his own cost.

2. The contractor shall verify and check all dimensions and details shown on the drawings prior to the start of furnishing materials and construction. Any discrepancy shall be immediately brought to the attention of the engineer for clarification.

3. The contractor shall notify all agencies to verify, tone and located their existing utilities within the project area prior to excavating, and shall coordinate all work.

4. The locations of the new traffic signal standards, traffic signal standards with mast arms, pedestrian push buttons, traffic controller, pullboxes, conduits and loop detectors shall be staked out in the field by the contractor and approval of the locations shall be obtained from the engineer prior to construction and installation.

5. All traffic signal work shall conform to the requirements of the "Manual on Uniform Traffic Control Devices for Streets and Highways, 11th Edition (2023)", Federal Highway Administration (2009) as amended and the Hawaii Standard Specifications for Road, Bridge, and Public Works Construction, 2005, unless otherwise noted in the construction documents.

6. Maintenance of traffic through the construction area shall be in accordance with part VI of the "Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 edition", Federal Highway Administration (2009) as amended and as specified in the specifications. the contractor shall furnish and maintain adequate barricades, blinkers, construction signs, etc., for the safety of the motoring public.

7. 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.

8. The contractor shall provide the required minimum vertical clearance between traffic signal conduits and all existing utility lines.

9. The indicated trench widths for all new work are schematic. Trenches shall be constructed in accordance with the trench details and notes shown on this sheet.

10. Contractor shall provide a 3-foot minimum horizontal clearance between all water utilities and traffic signal poles/footings.

11. Contractor shall replace all existing pavement markings, landscape and irrigation damaged or removed as a direct result of any trenching work for conduit and pole foundation installation and as directed by the engineer.

12. The contractor at his own expense shall restore all concrete sidewalks/walkways, curb ramps, existing driveways and pavement to original or better condition as a result of any trenching work for utility installation and/or TSS foundation installation. For sidewalk and ramp areas affected, remove and replace concrete to nearest scoreline(s) or joint(s).

13. 1/8 polyester or polyolefin pull line shall be included in each conduit.

14. Tracer wire to be installed above concrete encasement. See trench detail on dwg. TS-5.

15. Should any defect be encountered during the warranty period, the manufacturer will be notified and shall promptly correct such defect. Service call (by factory qualified representative) during the warranty period for repairs or other maintenance shall be answered within 24 hours and shall be done at no expense to the State. All repairs shall be done as soon as possible.

16. Type I and II Traffic Signal Standards shall be coated with Valmont product F-540 or approved equal according to product specifications. Refer to Specification Section 770.

17. Pullboxes within roadway pavement shall be traffic rated.

18. Contractor shall coordinate with the applicable utility companies should any Type II TSS mastarm conflict with exist. overhead lines. Any relocation or adjustments shall be the responsibility of the contractor and any costs associated with these changes shall be considered incidental to the various contract items.

19. Contractor shall protect existing loop detectors and cables during construction and shall be operational after construction is complete. Costs to repair or replace existing loop detectors and/or cables, shall be bourne by the Contractor.

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

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.

EXP. 4/30/28

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LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
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1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

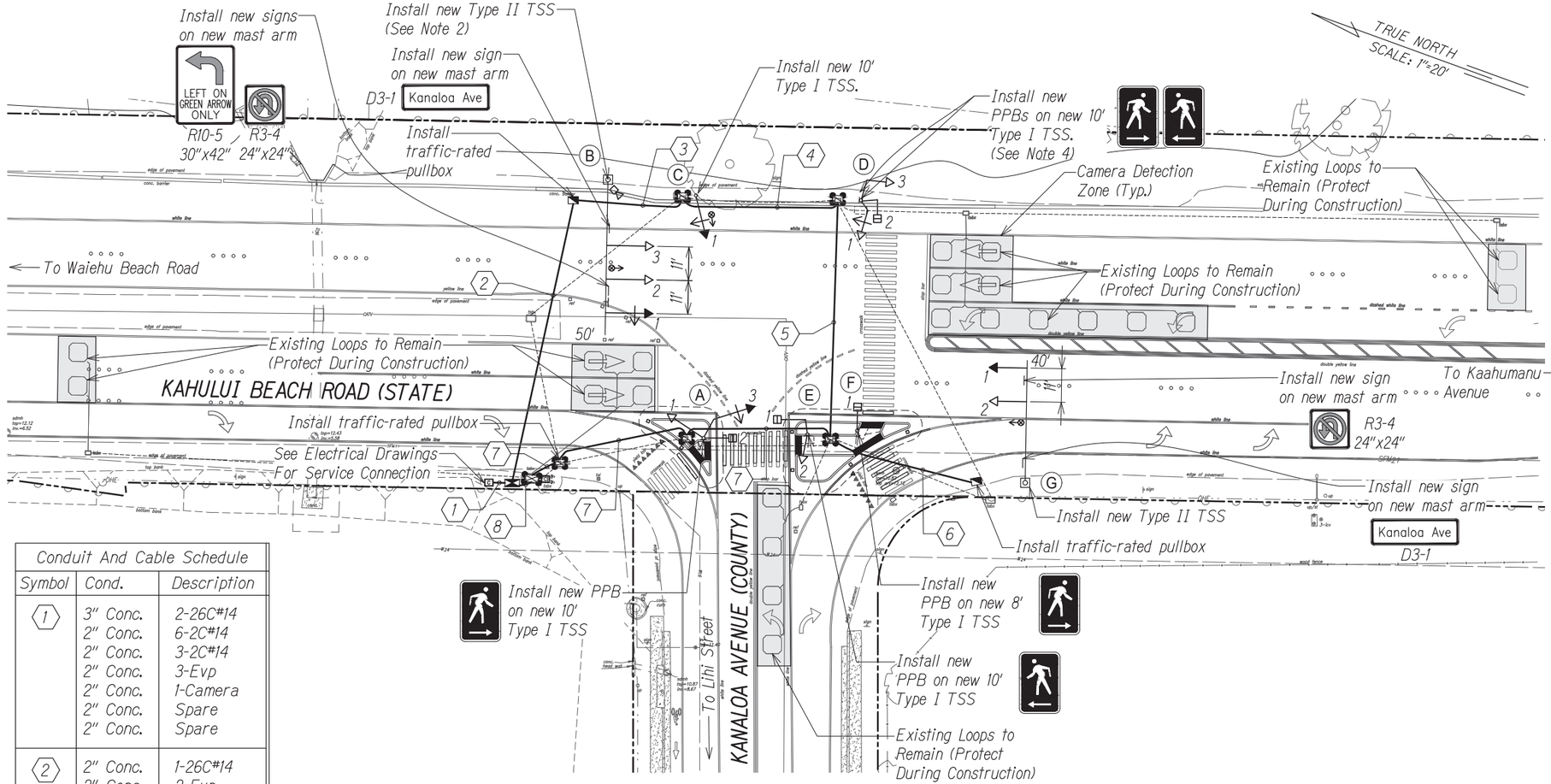
CONSTRUCTION NOTES

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

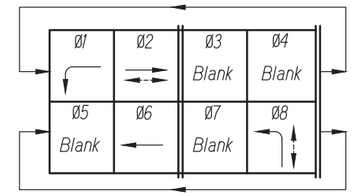
SHEET No. TS-2 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	23	37



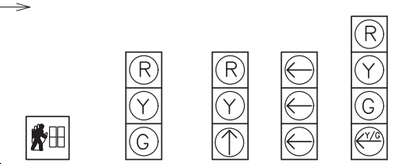
TRAFFIC SIGNAL PLAN

Scale: 1"=20'



PHASE DIAGRAM

New Model Flex Controller
New 332L Cabinet



SIGNAL INDICATIONS

\+ Indicates Back Plate W/ Retro Reflective Border

Conduit And Cable Schedule		
Symbol	Cond.	Description
1	3" Conc.	2-26C#14
	2" Conc.	6-2C#14
	2" Conc.	3-2C#14
	2" Conc.	3-Evp
	2" Conc.	1-Camera
	2" Conc.	Spare
	2" Conc.	Spare
2	2" Conc.	1-26C#14
	2" Conc.	2-Evp
	2" Conc.	1-Camera
	2" Conc.	Spare
3	2" Conc.	1-26C#14
	2" Conc.	1-Evp
	2" Conc.	Spare
	2" Conc.	Spare
4	2" Conc.	1-26C#14
	2" Conc.	Spare
	2" Conc.	Spare
	2" Conc.	Spare
5	2" Conc.	1-26C#14
	2" Conc.	5-2C#14
	2" Conc.	Spare
	2" Conc.	Spare
6	2" Conc.	1-26C#14
	2" Conc.	1-26C#14
	2" Conc.	1-Evp
	2" Conc.	Spare
	2" Conc.	Spare

Symbol	Cond.	Description
7	2" Conc.	1-26C#14
	2" Conc.	6-2C#14
	2" Conc.	1-2C#14
	2" Conc.	1-Evp
	2" Conc.	Spare
	2" Conc.	Spare
8	2" Conc.	1-26C#14
	2" Conc.	6-2C#14
	2" Conc.	3-2C#14
	2" Conc.	1-Evp
	2" Conc.	Spare
	2" Conc.	Spare

NOTES:

1. Traffic Signal Plan (including but not limited to intersection geometry, elevations, lane widths, striping, signs, traffic signal items, etc.) are based on a as-built plans provided by the Hawaii Department of Transportation which may differ from actual field conditions. Contractor to verify field conditions prior to construction.
2. Contractor shall verify the dimensions of Pole B prior to procurement to ensure minimum clearances and maximum height thresholds comply with MUTCD requirements due to the raised foundation at this location. Costs (including the procurement of additional Type II TSS to meet these thresholds) shall be considered incidental to the various contract items.
3. Costs associated with existing loop detectors including, but not limited to splicing, additional cables, etc., shall be considered incidental to the various contract items. Contractor shall ensure that loop detectors are operational before, during, and after construction is complete.
4. Costs associated with PPB extensions shall be considered incidental to the various contract items.

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

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.
EXP. 4/30/28
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LICENSE EXPIRES: APRIL 30, 2028
AUSTIN, TSUTSUMI & ASSOCIATES, INC.
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LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

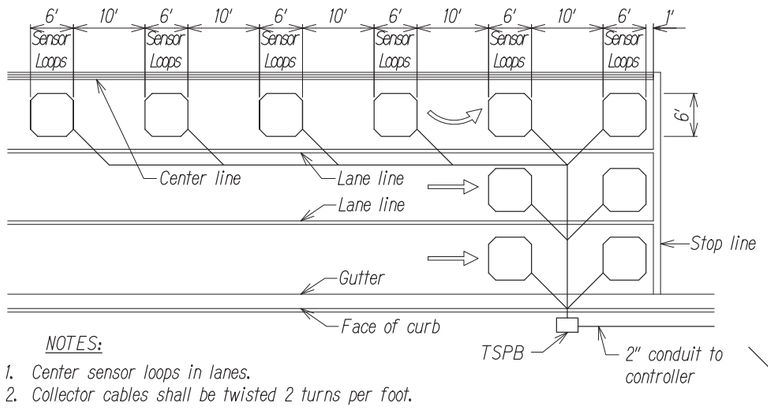
TRAFFIC SIGNAL PLAN

Kahului Beach Road Intersection Improvements at Kanaloa Avenue Project No. 3400A-01-20R

Scale: As Shown
Date: May 2026

SHEET No. TS-3 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	24	37

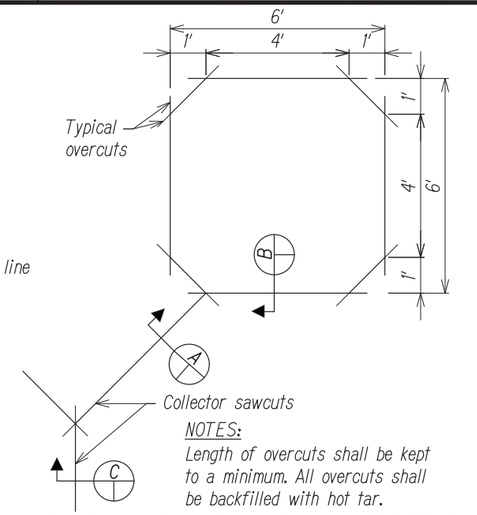


NOTES:

1. Center sensor loops in lanes.
2. Collector cables shall be twisted 2 turns per foot.
3. Number of loops and locations vary. See project plans.
4. Number and locations of collector sawcuts may be varied in the field to suit.

TYPICAL SENSOR LOOP LAYOUT

Not to scale

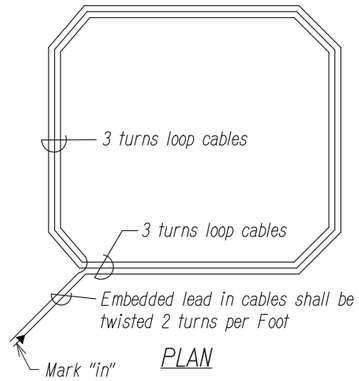


NOTES:

Length of overcuts shall be kept to a minimum. All overcuts shall be backfilled with hot tar.

TYPICAL SENSOR LOOP SAWCUT DETAIL

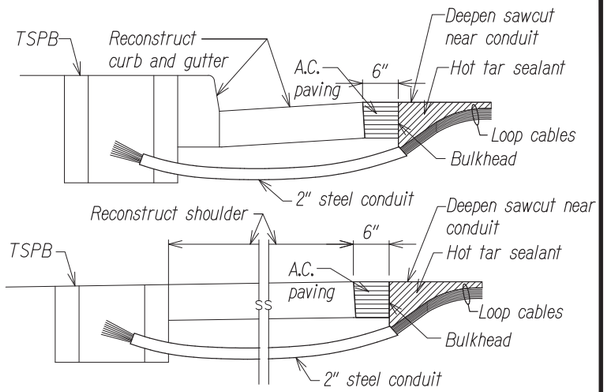
Not to scale



PLAN

TYPICAL SENSOR LOOP WIRING DIAGRAM

Not to scale

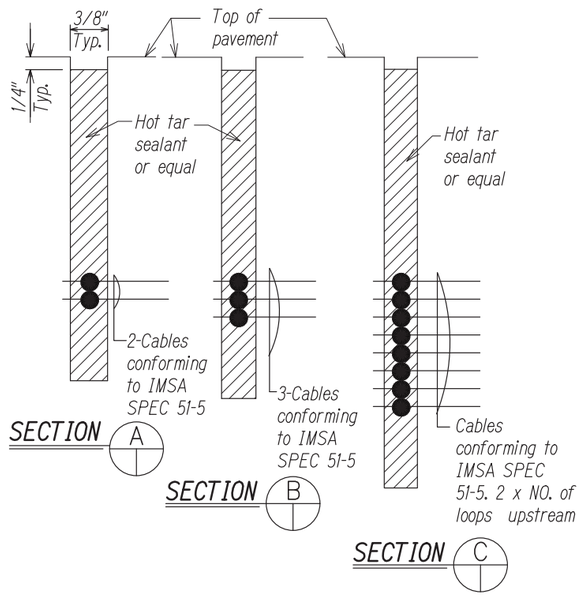


NOTES ON CONSTRUCTION AT END OF SAWCUT

1. Seal roadway end of conduit after installation of conductors.
2. Install bulkhead across conduit trench.
3. Place hot tar in sawcut.
4. Backfill over conduit with new A.C.
5. Reconstruct curb and gutter as required.

DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY

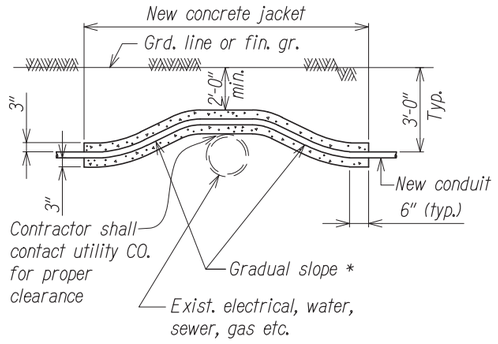
Not to scale

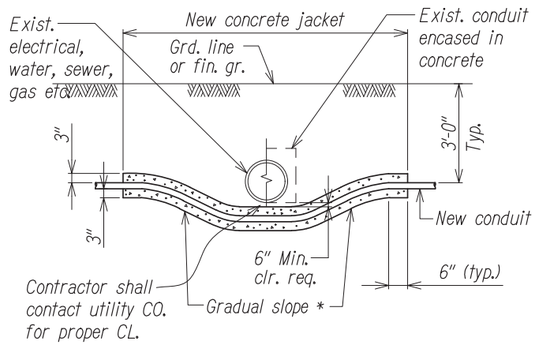


SECTION A

SECTION B

SECTION C

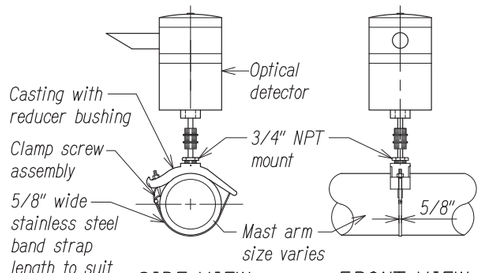




* To be determined by State Electrical Inspector/Engineer

CONDUIT BY-PASS DETAIL AT VARIOUS UTILITIES

Not To Scale



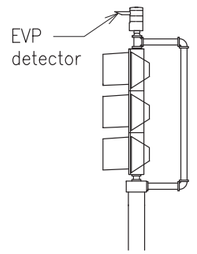
SIDE VIEW FRONT VIEW

NOTES:

1. Optical detector shall be "Model 711 preemption detector", or approved equal, unless noted otherwise in the special provisions.
2. Support saddle assembly shall be "ASTRO MINI-BRAC, AB-0132-29", or approved equal, unless noted otherwise in the special provisions.

OPTICAL DETECTOR FOR MAST ARM MOUNTING

Not to scale



POST TOP TP-EVP MOUNTING

Not to scale

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ORIGINAL PLAN
NOTE BOOK
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CHAD K. KADOKAWA
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LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS — HONOLULU, HAWAII

1 2
LINE IS 2 INCHES AT FULL SIZE
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

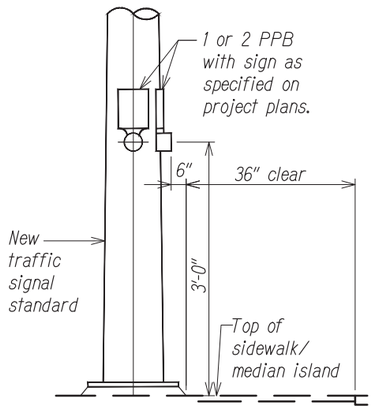
TRAFFIC SIGNAL DETAILS - 1

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TS-4 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	25	37



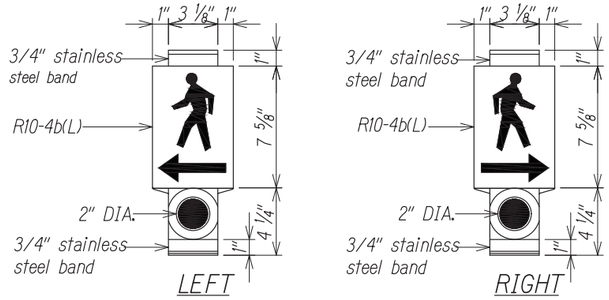
PPB ON TSS

Not To Scale

The color scheme shall be:

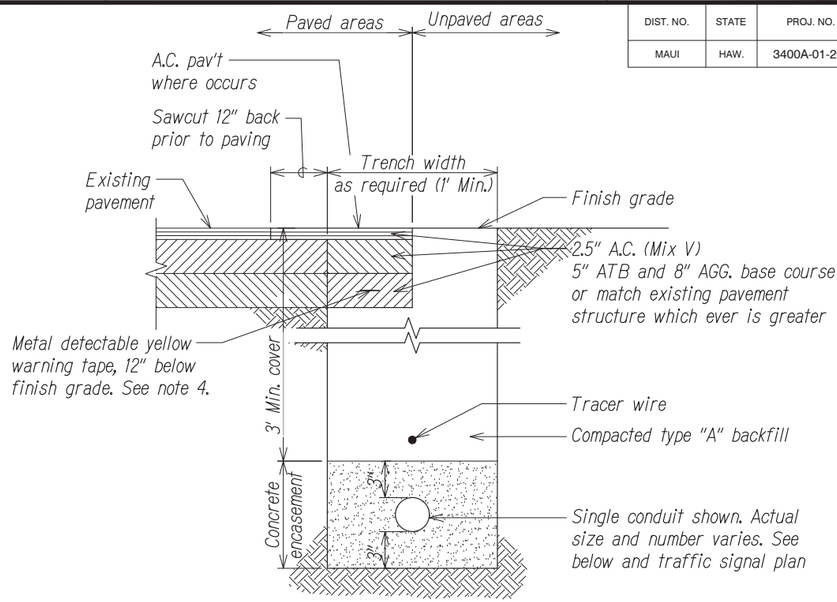
White - Man, arrow and push button
Black - Background

NOTE: On plan sheet, use applicable detail. see state STD. DET. for PPB pedestal.



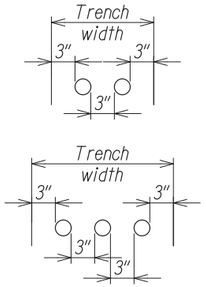
PEDESTRIAN PUSH BUTTON DETAILS

Not To Scale



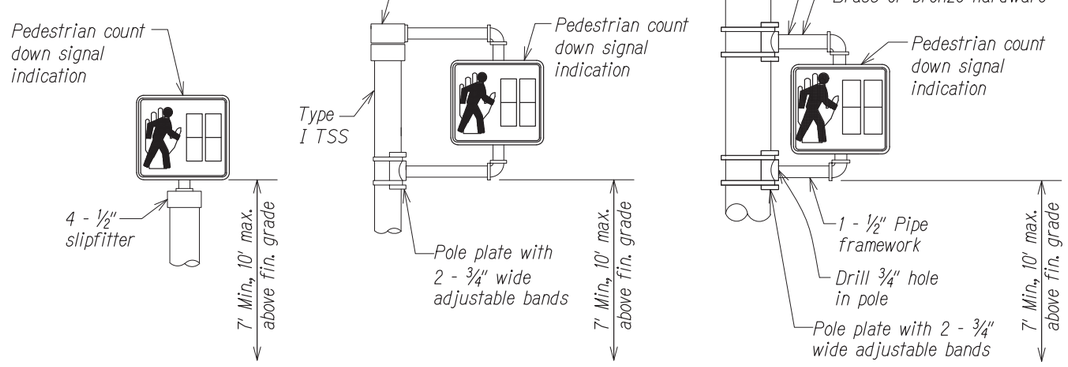
NOTES:

1. Detail for multiple conduit trenches shall be similar. provide 3" min. clr. spacing between conduits.
2. Excavation and backfill shall be in accordance with Section 204 - Excavation and Backfill for Miscellaneous Facilities of the Hawaii Standard Specifications, as amended.
3. Deflect traffic signal conduits under water mains where encountered to attain a 6" minimum clearance.
4. The metal detectable yellow plastic warning tape shall be a minimum 5 mils thick and 4" wide with a continuous metallic backing and corrosion resistant 1± mil thick foil core. the message on the tape shall read, "caution-roadway lighting buried below", utilizing 1-1/2" series "C" black lettering. The message shall be repeated with a 4-1/4" spacing between top of the line message & start of the next repeat. The tape shall not be paid for separately but considered incidental to the direct buried conduits.



TYPICAL TRENCH RESTORATION DETAIL FOR TRAFFIC SIGNAL CONDUIT

Not To Scale



PEDESTRIAN SIGNAL MOUNTING

Not To Scale

NOTES:

1. Stainless steel bands shall be 1/2" wide x .050" thick, minimum. Tensile strength shall be 100,000 psi minimum.
2. Upper arm, lower arm and vertical support tube shall be of 356 cast aluminum.
3. All wiring shall be concealed.
4. Vertical tube clamp shall be of malleable iron, grade 32510.
5. All aluminum parts shall have an alodine 1200 finish.

Pedestrian countdown signal indication

PEDESTRIAN COUNTDOWN SIGNAL

Not To Scale

ORIGINAL PLAN | NOTE BOOK | No. ____

SURVEY PLOTTED BY ____ DATE ____
DRAWN BY ____
TRACED BY ____
DESIGNED BY ____
QUANTITIES BY ____
CHECKED BY ____

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
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HAWAI'I, U.S.A.

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LICENSE EXPIRES: APRIL 30, 2028

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1 2
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

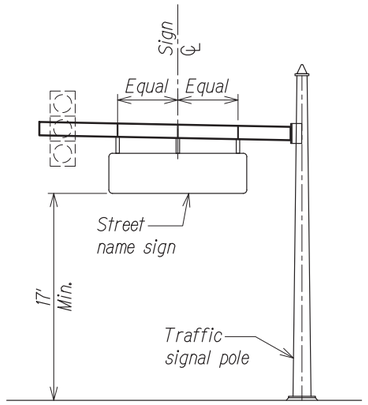
TRAFFIC SIGNAL DETAILS - 2

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TS-5 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	26	37



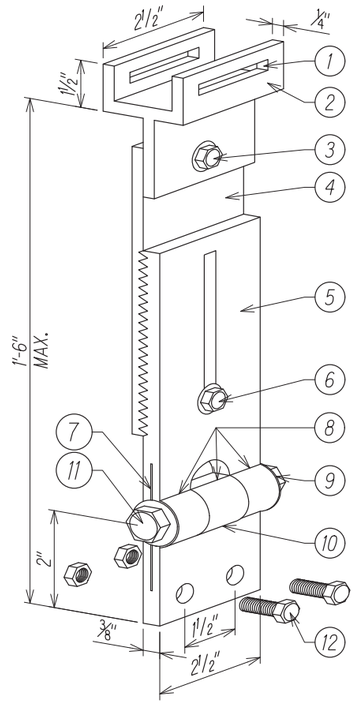
MAST ARM MOUNTING INSTALLATION

(STD. Plan TE-13, Revised 04/29/16)

Not To Scale

NOTES:

1. Font size and spacing shall conform to Federal Highway Administration Standard Highway Sign convention.
2. Text legend shall be as specified in contract documents.
3. Legend shall be the same on both sides of sign.
4. Colors: Legend - White
   Background - Green
5. Number of swing sign bracket per sign:
   3 brackets - 7' or less wide (show above)
   3 brackets - 7' or less wide (show above)
6. Adjust swing sign bracket lengths to level sign.



NOTES:

1. Dimensions may vary slightly.
2. Aluminum 6061t6 alloy unless otherwise specified.

(1) 15⁄8" x ¼" Slot for double strapping to mast arm

(2) Upper bracket

(3) ½"-13 x 1½" Stainless steel hex head bolt with stainless steel hex lock nut and 1⁄16" stainless steel washer (both sides)

(4) 8¼" Overall length upper adjustable sign bracket section

(5) 9" Overall length lower adjustable sign bracket section, including axle housing (8" overall length to top of axle housing)

(6) ½"-13x1½" Stainless steel hex head bolt with stainless steel hex lock nut and 1⁄16" stainless steel washer (both sides), loosen lock nut, adjust bracket teeth to level sign

Stainless stell dompener spring (removable)

(7) Oilite bushing

(8) Stainless steel hex lock nut with 1⁄16" stainless steel washer

(9) 1" O.D. Axle housing

(10) ½"-13x4" Stainless steel hex head bolt with 1⁄16" stainless

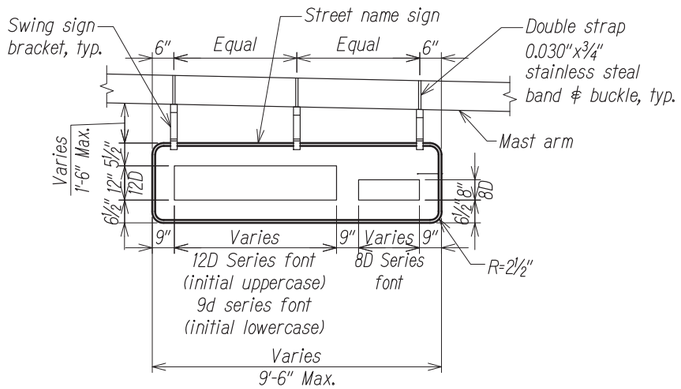
(11) Steel washer

(12) Sign mounting sets, consisting of two each 5⁄16"-18x1" stainless stell hex head bolt with stainless steel hex lock nut; two holes on 1½" centers provide positive lock sign mounting to bracket

ADJUSTABLE LENGTH SWING SIGN BRACKET

(STD. Plan TE-13, Revised 04/29/16)

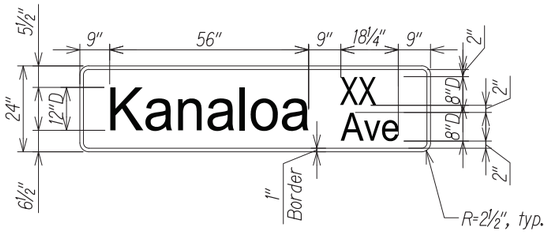
Not To Scale



STREET NAME SIGN ON MAST ARM

STD. Plan TE-13, Revised 04/29/16)

Not To Scale



COLOR:

Legend, border	- White (retroreflective)
Background	- Green (retroreflective)
Background (alternate)	- Blue or brown (retroreflective)

NOTES:

1. Street name signs shall have white message and border on green background.
2. All sign faces shall be completely reflectorized with Type "B" reflective sheeting.
3. The sign shall be in conformance with the requirements of Section 712.20 of the Standard Specification.

STREET NAME SIGN DETAILS

Not To Scale

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

CHAD K. KADOKAWA
LICENSED PROFESSIONAL ENGINEER
No. 18287-C
HAWAI'I, U.S.A.
EXP. 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

LICENSE EXPIRES: APRIL 30, 2028

AUSTIN, TSUTSUMI & ASSOCIATES, INC.
ENGINEERS, SURVEYORS HONOLULU, HAWAII

1 2
1

LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNAL DETAILS - 3

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: As Shown Date: May 2026

SHEET No. TS-6 OF 6 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	27	37

GENERAL NOTES:

1. Obtain All Standards and Drawings Related to this Project From the Utility Companies. Verify that the Utility Company's Project Drawings are the Same as the Contract Drawings. Notify the Engineer of any Differences Between Them. If Differences Exist, Obtain a Resolution Prior to Proceeding with the Work Which is Affected.

2. Prior to Starting Work, Notify the Utility Companies in Writing When Work Will Start, and Provide Them with a Construction Schedule.

3. MECo - Maui Electric Company
   HECo - Hawaiian Electric Company

SITE ELECTRICAL SYMBOLS

- Wood Pole
- Guy Anchor
- Meter/Main, See (A / E-3)
- Street Light
- Equipment Connection
- Underground Ductline
- Conduit & Wiring Concealed Within Concrete Structure
- Exposed Conduit PVC 40 or PVC 80 as Indicated & Wiring
- Ductline, Stub-out
- OH/P/S/N/T/V — Overhead UtilitY Lines
  - CATV
  - Telephone
  - Neutral
  - Secondary
  - Primary Electric
  - OH - Overhead (New)
  - eOH - Overhead (Existing)
- (A) → Note Indicator

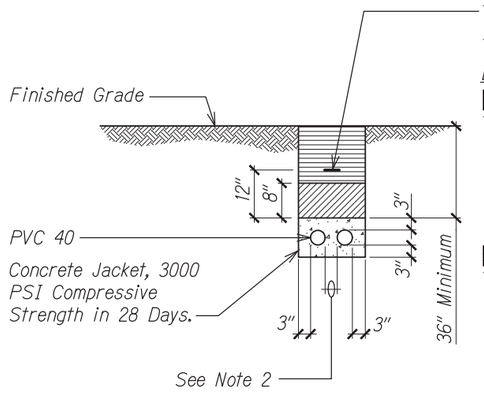
ONE-LINE SYMBOLS

- Transformer
- (WHM) Watt-Hour Meter
- Ground Connection

DUCT DESIGNATION

2 S 4 (A)

- Duct Section "A" See Duct Section Details
- Conduit Size
- System
  "S" Secondary Electric
- Number of Ducts



BACKFILL:

TYPE "A": Non-Contaminated Native Soil Material Which Does Not Contain More Than 50% Gravel, and Also, Does Not Contain Hard Lumps of Earth 3 Inches in Greatest Dimension, Rocks Larger Than 3 Inches in Largest Dimension, Highly Plastic Clay, Poorly-Graded Sand and Gravel (Classified as SP and GP Using the United Soil Classification System), Organics, Debris, or Other Unsuitable or Deleterious Materials.

TYPE "B": Select Granular Material Passing a One (1) Inch Sieve Such as Three-Quarter (3/4) Inch Aggregate Base Course Gravel, S4C or Material That is Free of Organics, Debris or Highly-Plastic Clay and Meets the Following Gradation:

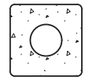
SIEVE SIZE	PERCENT PASSING BY WEIGHT
1"	100
3/4"	90 - 100
No. 4	35 - 100
No. 40	10 - 30
No. 200	3 - 15

(A / E-1) TYPICAL DUCT SECTION (DIRECT BURIED)

NTS

NOTES:

1. Provide 3" Separation Between Ducts of Same System and 12" Separation Between Electrical Ducts and Ducts of Different Systems.



DUCT SECTION (A)

(B / E-1) DUCT SECTION DETAIL

NTS

NOTES:

1. For Dimensions, See (A / E-1).

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

ORIGINAL PLAN
NOTE BOOK
No.

RUSSELL K. MORI
LICENSED PROFESSIONAL ENGINEER
No. 9013-E
HAWAII, U.S.A.
4/23/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE ELECTRICAL SYMBOLS NOTES AND DETAILS

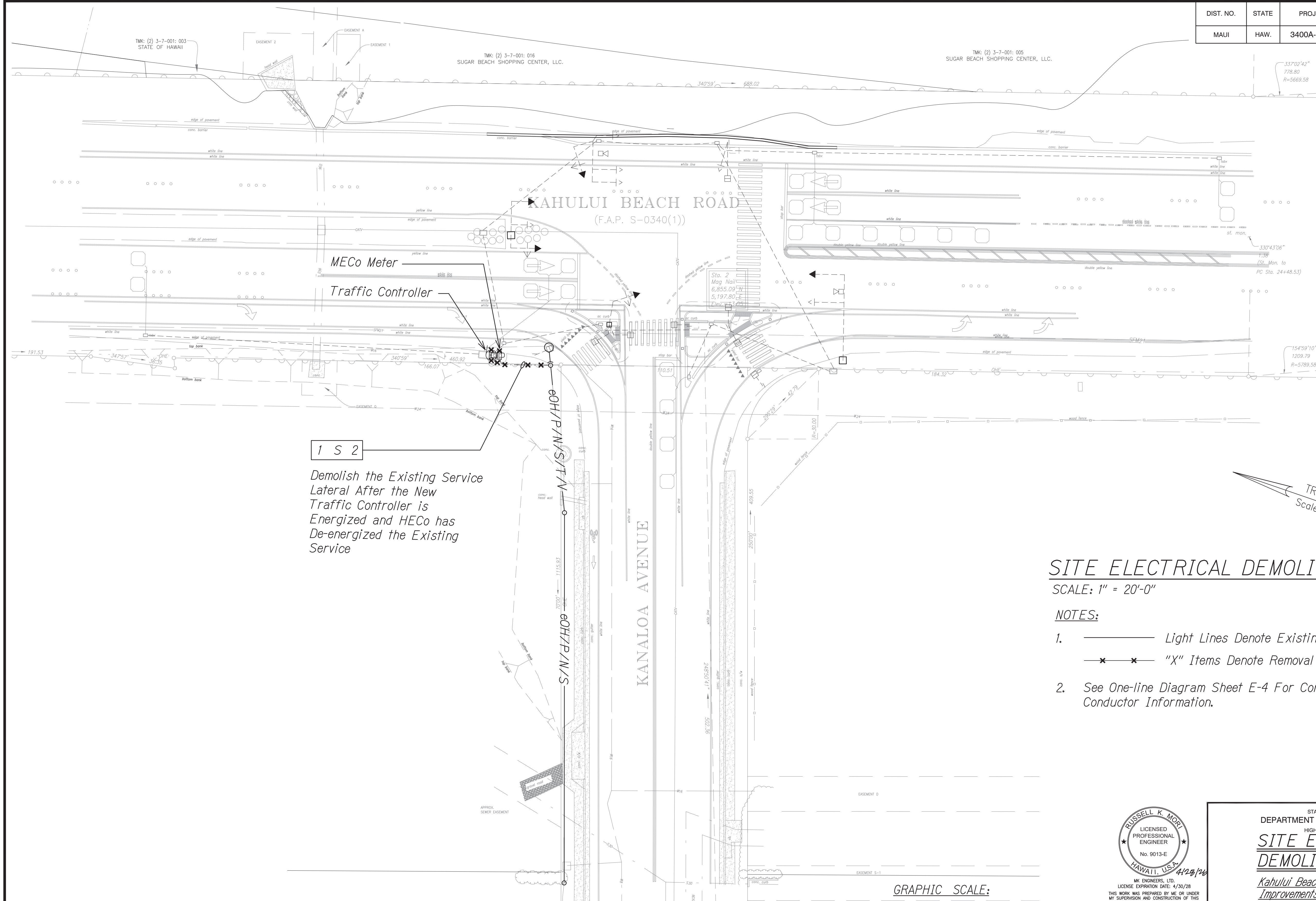
Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale:

Date: May 2026

SHEET No. E-1 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	28	37



SITE ELECTRICAL DEMOLITION PLAN

SCALE: 1" = 20'-0"

NOTES:

1. ——— Light Lines Denote Existing Condition
   —x—x— "X" Items Denote Removal Work
2. See One-line Diagram Sheet E-4 For Conduit And Conductor Information.

GRAPHIC SCALE:

0' 20' 40' 60'

1" = 20'-0"

RUSSELL K. MORI
LICENSED PROFESSIONAL ENGINEER
No. 9013-E
HAWAII, U.S.A.
4/23/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE ELECTRICAL DEMOLITION PLAN

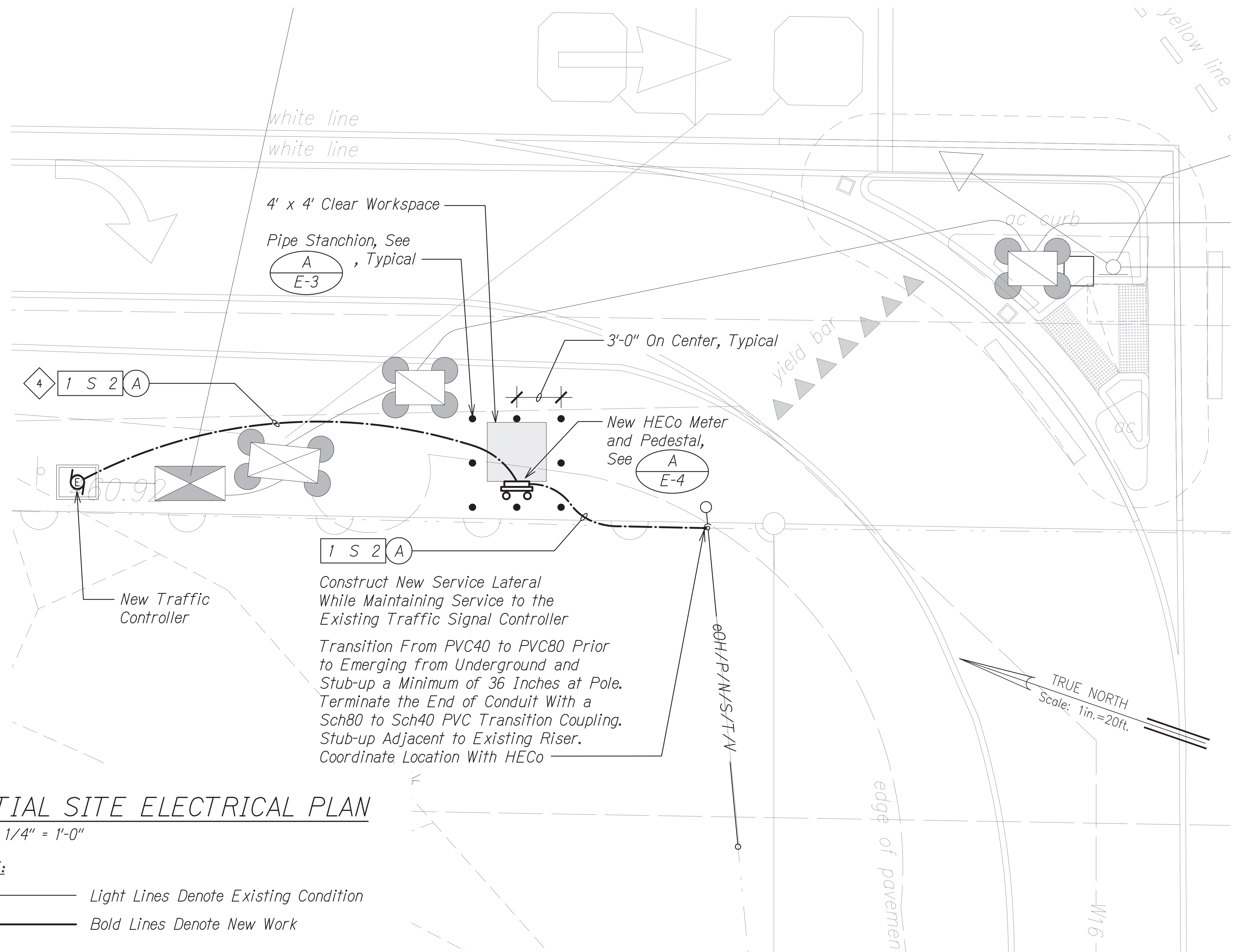
Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: Date: May 2026

SHEET No. E-2 OF 7 SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	29	37



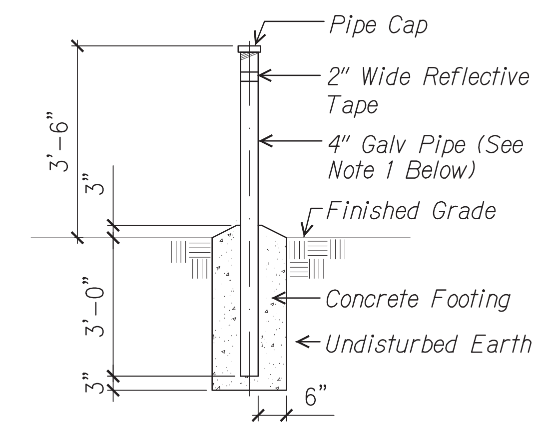
PARTIAL SITE ELECTRICAL PLAN

SCALE: 1/4" = 1'-0"

NOTES:

1. ———— Light Lines Denote Existing Condition
   ———— Bold Lines Denote New Work
2. See One-line Diagram Sheet E-4 For Conduit And Conductor Information.
3. Coordinate with HECo to Inspect the Trench and Meter Pedestal Prior to Backfill/Service.

◇4 Extreme Caution Must be Taken When Trenching for the New Duct Line to Avoid Damaging Existing Utility Lines and Loop Detector Conduit/Cabling in the Area. Tone the Area to Locate All Existing Utilities Prior to Trenching. Any Existing Utility Lines and Loop Detector Conduit/Cabling Damaged As a Result of Trenching Work Must be Repaired/Replaced with New at No Additional Cost to the Project and Will Be Considered Incidental to The Various Contract Items.



A/E-3 PIPE STANCHION DETAIL

NTS

NOTES:

1. Permanent Non Removable, Non Concrete Filled Post Barrier. Minimum Wall Thickness of 0.188 Inches. Prime and Paint Bollard Yellow Per ANSI Z535.1 in Compliance With OSHA 1910.144.

GRAPHIC SCALE:

0' 4' 8' 12'

1/4" = 1'-0"

RUSSELL K. MORI LICENSED PROFESSIONAL ENGINEER No. 9013-E HAWAII, U.S.A. 4/28/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE ELECTRICAL PLAN

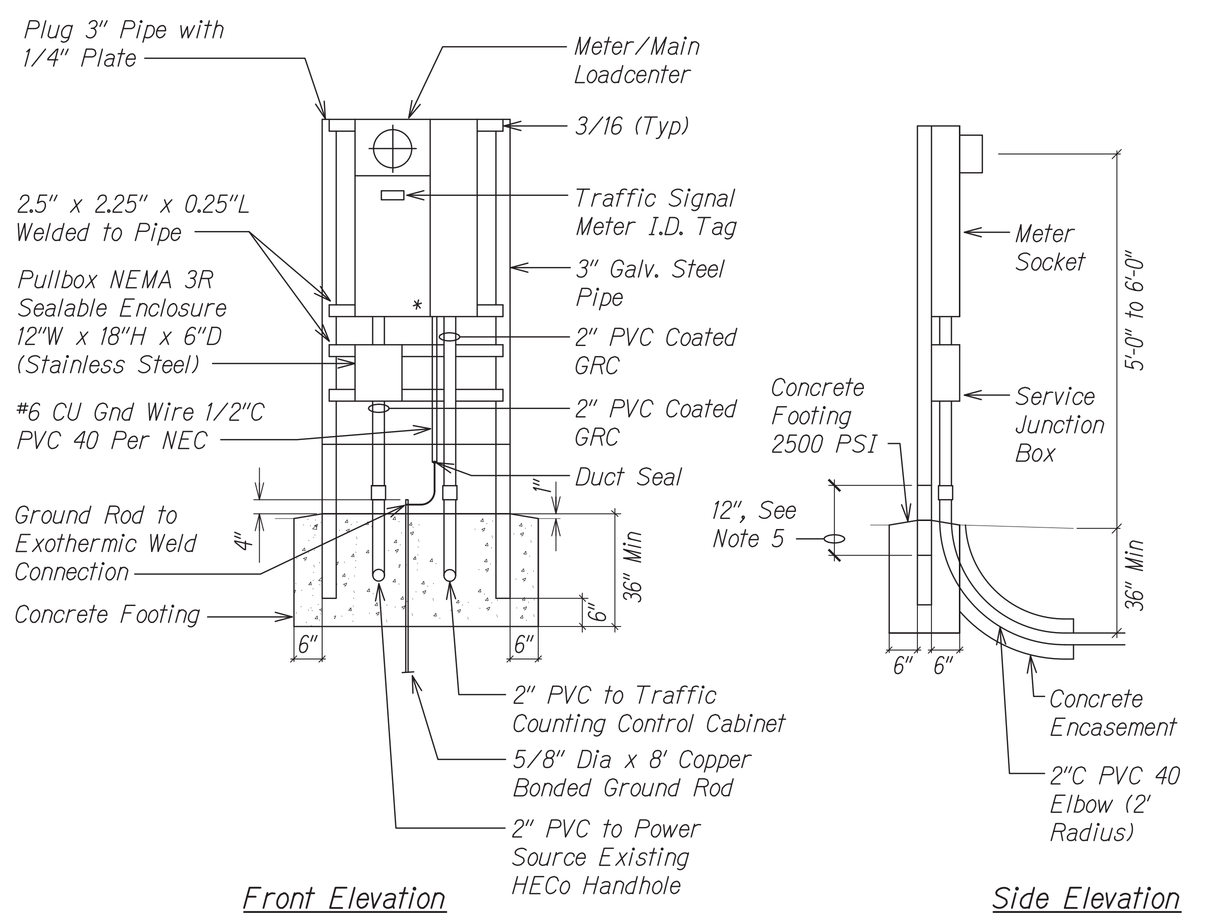
Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: Date: May 2026

SHEET No. E-3 OF 7 SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	30	37



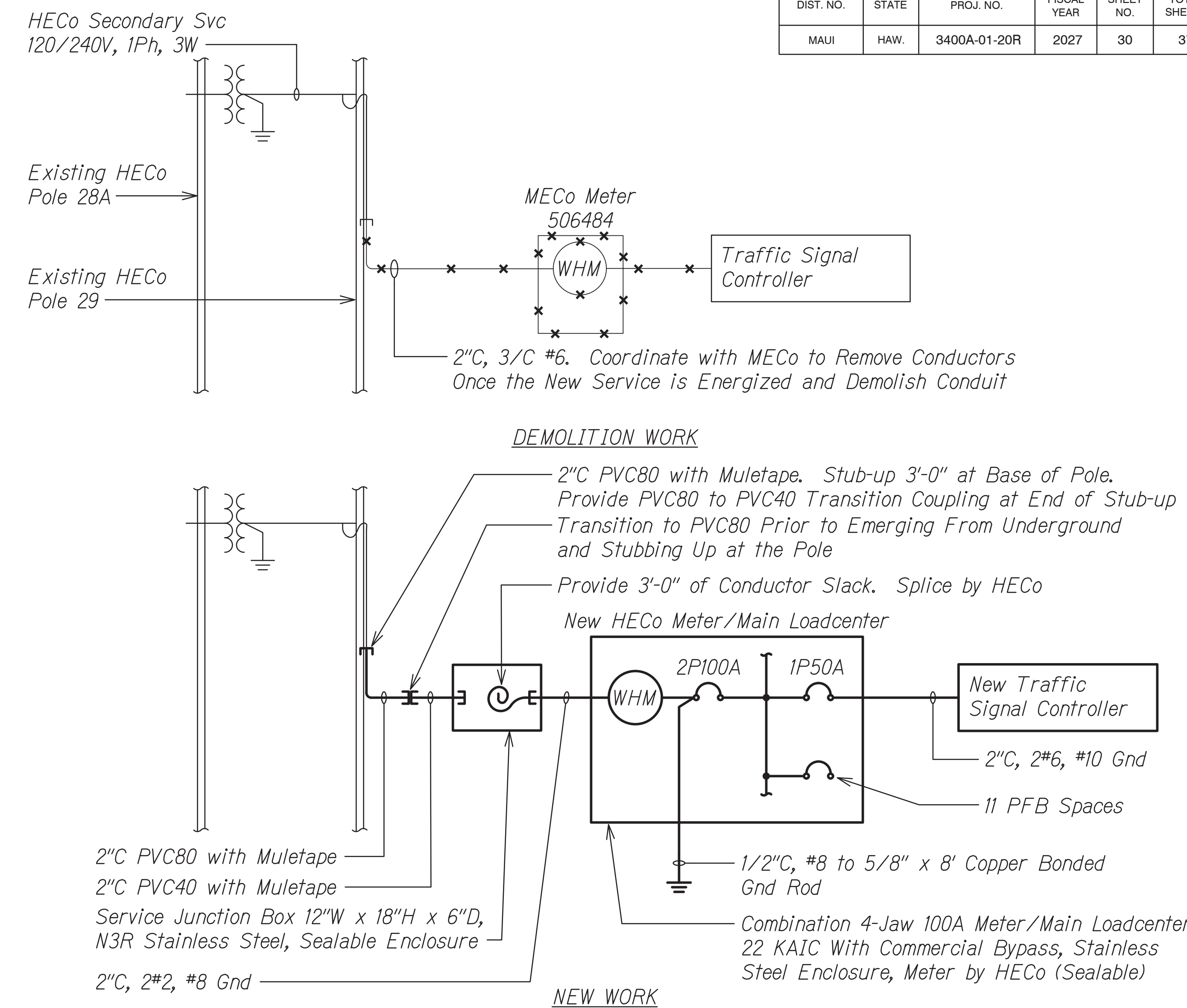
TYPICAL METER PEDESTAL FOR UNDERGROUND SERVICE ELECTRICAL SERVICE DETAIL

A
E-4

NTS

NOTES:

1. Pedestal Shall be Hot Dipped Galvanized After Fabrication.
2. All Fastening Bolts, Nuts, and Washers Shall be Stainless Steel.
3. Provide 4 Feet Clearance in Front of Meter.
4. * Denotes Sealable, NEMA 3R.
5. Coat Portion of Post 6" Above & Below Conc Foundation with Two Coats Asphaltic Based Paint or Tape with Electrical Tape, Half Lapped.
6. Meter Shall be Provided by HECo.
7. Meter Pedestal Shall be Installed Within State Right-of-Way.



ONE-LINE DIAGRAM

B
E-4

NTS

NOTES:

1. ——— Light Lines Denote Work Done by Others
   ━━━ Bold Lines Denote New Work
   —×—×— "X" Items Denote Removal Work

RUSSELL K. MORI
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HAWAII, U.S.A.
4/28/26

MK ENGINEERS, LTD.
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL METER PEDESTAL DETAIL & ONE-LINE DIAG

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: Date: May 2026

SHEET No. E-4 OF 7 SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	31	37

HAWAIIAN ELECTRIC COMPANY NOTES:

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

Contractor Shall not Excavate Within 10 Feet From Hawaiian Electric's Utility Poles or Any Anchor System Supporting the Utility Pole. If Contractor Must Excavate Closer than 10 Feet From a Utility Pole or its Anchor System, 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, 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 Contractor's Submittal. 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 Contractor's Drawings and to Repair or Straighten Poles Impacted by Contractor's Activities, Including Response and Restoration Costs Incurred by Hawaiian Electric Arising Out of or Related to Outages Caused by 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 Contractor From Any Liability Resulting From 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 Detail Requirements).

For Verification of Underground Lines, the Contractor Shall Call the Hawaii One Call Center at 866-423-7287 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 Excavations 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 Electrics Work, Which May Include, but Not be Limited to, Staking of Pole/Anchor Locations, Identifying Right of Way and Property Lines, Excavations 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.

RUSSELL K. MORI
LICENSED PROFESSIONAL ENGINEER
No. 9013-E
HAWAII, U.S.A.
4/28/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HECo NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: Date: May 2026

SHEET No. E-5 OF 7 SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	32	37

HAWAIIAN ELECTRIC COMPANY NOTES (CONT'D):

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.

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 Concrete Encasement)	Hawaiian Electric 3" (Minimum) 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 (Crossing) Clearances Hawaiian Electric and Other Underground Utilities				
Underground Utility	Hawaiian Electric Direct Buried Cable	Hawaiian Electric Direct Buried In Conduit (No Concrete Encasement)	Hawaiian Electric 3" (Minimum) 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.

RUSSELL K. MORI
LICENSED PROFESSIONAL ENGINEER
No. 9013-E
HAWAII, U.S.A.
4/23/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION AS DEFINED IN SECTION 16-115-2, HAWAII ADMINISTRATIVE RULES, DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, STATE OF HAWAII, PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HECo NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale:
Date: May 2026

SHEET No. E-6 OF 7 SHEETS

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

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	33	37

HAWAIIAN ELECTRIC COMPANY NOTES (CONT'D):

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. Idemnity

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.

Additional Notes When Work Involves Construction of Hawaiian Electric Facilites

16. Schedule

Contractor Shall Furnish His Construction Schedule Six (6) Months Prior to Starting Work on Hawaiian Electric Facilities. 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

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. Contractor Shall Notify Hawaii Electric's Inspection Group at 543-4325 at Least Five (5) Working Days Prior to Installing Facilities or Placing Concrete.

Contractor to Coordinate Work to Break into Hawaiian Electric's Existing Electrical Facilities with Hawaiian Electric's Inspection Group at 543-4325 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 Duct Line(s) Constructed.

GENERAL CONSTRUCTION NOTES

A. Trenching to be by Hand Digging Near Across Existing Utility Lines.

B. Unless Otherwise Requested by the Board of Water Supply, Minimum Clearance Between Water Lines and Conduits Shall be:
Horizontal = 3 Feet
Vertical = 6 Inches

C. Adjust New Conduit Alignment, if Required to Provide Clearances. If Conduit Cannot be Realigned, Adjustments to Existing Water System Shall be Performed in Accordance with Standards of the Board of Water Supply.

D. Minimum Clearance Between Highway Light Standards and Fire Hydrants Shall be 3 Feet.

E. Underground Utilities Shown Heron are for Information Only. No Guarantee is Made on the Accuracy or Completeness of Said Information.

F. All New and Existing Concrete Pullbox and Handhole Covers Which are Located in New Finished Sidewalks Shall be Provided with New Exposed Aggregate Concrete Covers to Match New Exposed Aggregate Concrete Sidewalk Finish.

G. Where Necessary, Reconstruction of Sidewalk, Gutter and Driveway Areas Shall Conform to the Standard Details of the Governmental Agency Having Jurisdiction Over the Work.

H. The Contractor Shall be Responsible for Removal of a Silt and Debris Resulting from His Work and Deposited in Drainage Facilities, Roadways and Other Areas. The Cost for any Necessary Remedial Action by the Chief Engineer Shall be Payable by the Contractor.

I. The Contractor, at His Own Expense, Shall Keep the Project Area Free from Dust Nuisance. The Work Shall be in Conformance with the Air Pollution Control Standards and Regulations of the State Department of Health.

ORIGINAL PLAN
NOTE BOOK
No.____
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DRAWN BY ____ " ____
TRACED BY ____ " ____
DESIGNED BY ____ " ____
QUANTITIES BY ____ " ____
CHECKED BY ____ " ____

RUSSELL K. MORI
LICENSED PROFESSIONAL ENGINEER
No. 9013-E
HAWAII, U.S.A.
4/28/26

MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/28
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STATE OF HAWAI'I
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HECo NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale:
Date: May 2026

SHEET No. E-7 OF 7 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	34	37

General:

A. *Workmanship and materials shall conform to the AASHTO LRFD bridge design specification, 9h edition (including most recent interims), AASHTO LRFD bridge construction specification, 4th edition (including most recent interims), and the Hawaii Standard Specifications for Road and Bridge Construction (2005 edition), and all applicable special provisions by the State of Hawaii Department of Transportation.*
B. *The contractor shall compare all the contract documents with each other and report in writing to the engineer all inconsistencies and omissions.*
C. *The contractor shall take field measurements and verify field conditions and shall compare such field measurements and conditions with the drawings before commencing work. Report in writing to the engineer all inconsistencies and omissions.*
D. *The contractor shall be responsible for coordinating the work of all trades.*
E. *The contractor shall be responsible for means and methods of construction, workmanship and job safety.*
F. *The contractor shall provide temporary shoring and bracing as required for stability of structural members and systems.*
G. *Construction loading shall not exceed design live load unless special shoring is provided. Permitted construction loads shall be properly reduced in areas where the structure has not attained full design strength.*
H. *The contractor shall be responsible for protection of the adjacent properties, structures, streets and utilities during the construction period. Any damaged or deteriorated property shall be restored to the condition prior to the beginning of work or better at no cost to the State.*
I. *Details noted as typical on the structural drawings shall apply in all conditions unless specifically shown or noted otherwise.*
J. *A licensed geotechnical engineer in the state of Hawaii, hired by the contractor, shall monitor all excavation and backfilling requirements.*

Design Criteria:

A. *Wind*
   1. Basic Wind Speed: 145 MPH
   2. Guest Effect Factor: 1.14
   3. Mean Recurrence Interval: 1700 Years
B. *Seismic*
   1. Mapped Spectral Response Acceleration Coefficients
      i. Short Period: 0.74g
      ii. 1-Sec Period: 0.22g
   2. Site Class: D
   3. Response Spectral Acceleration Coefficients
      i. Short Period: 0.6g
      ii. 1-Sec Period: 0.38g
C. *Soils*
   1. Allowable Bearing Pressure: 1500 Psf

Foundation:

A. *Foundation design is based on Hirata and Associates, Inc. Report Dated September 28, 2021.*
B. *Contractor shall provide design and installation of all cribbing, sheeting, and shoring necessary to preserve excavations and earth banks. Shoring shall conform to OSHA regulations.*
C. *Footings shall bear on undisturbed in-situ firm soils bottom of footings shall be compacted to provide a relatively firm and smooth bearing surface prior to placement of reinforcing steel and concrete. If soft and/or loose materials are encountered at the bottom of footing excavations, they shall be over-excavated to expose the underlying firm materials. The over-excavated area shall be backfilled with select granular material compacted to a minimum of 95% relative compaction or the footing bottom may be extended down to the underlying competent material. Contractor may substitute flowable concrete or the granular material upon approval from the engineer.*

Foundation Continued:

D. *Excavations for structures and footings shall be approved by the licensed geotechnical engineer in State of Hawaii (provided by contractor) prior to placement of concrete and reinforcing.*
E. *Engineered fill and backfill shall be in accordance with section 703.20 of the Hawaii Standard Specifications for Road and Bridge Construction, 2005 edition.*
F. *Fill should be moisture conditioned to within two percent of the optimum moisture content and placed in horizontal lifts not to exceed six inches. Fill shall be compacted to minimum 90% relative density as measured by HDOT TM-100 and HDOT TM-300.*
G. *Geotechnical report mentioned encountering groundwater in one exploratory boring at 9.8 feet below grade. See concrete notes for placement requirements where groundwater is present.*
H. *Temporary non-corrugated steel casing shall be used to prevent collapse of the drilled hole. The use of permanent casing will not be allowed.*

Concrete:

A. *Concrete construction shall conform to AASHTO bridge construction specifications.*
B. *Concrete shall be normal weight hard rock concrete and shall have 4500 psi minimum 28 day compressive strengths:*
C. *Concrete delivery tickets shall record all free water in the mix at batching plant, added for consistency by driver, and any additional request by contractor up to the maximum amount allowed by the mix design.*
D. *All inserts, anchor bolts, plates, and other items to be cast in the concrete shall be hot-dipped galvanized according to ASTM A153 unless otherwise noted.*
E. *Reinforcing bars, anchor bolts, inserts, and other items to be cast in the concrete shall be secured in position prior to placement of concrete.*
F. *Spacers shall be used to ensure minimum clearances and tolerances. If concrete spacer blocks are used they must be of the same strength of concrete used.*
G. *Use tremie concrete with anti-washout admixture for all concrete placed in locations where groundwater is present at no additional cost to the State.*
H. *A corrosion inhibiting admixture shall be included in the concrete mix for all concrete. The admixture shall be Rheocrete CNI corrosion inhibitor from BASF, DCIs corrosion inhibitor from grace construction products or an approved equal.*
I. *Concrete w/cm ratio shall not exceed 0.45.*

Reinforcing Steel:

A. *Reinforcing steel shall be deformed bars conforming to ASTM A1035/A1035M Grade 100.*
B. *Reinforcing steel shall be spliced where indicated on plans. Provide lap splice length per AASHTO LRFD. Any longitudinal #4 bars in the slab that needs to be lapped for whatever reason should be lapped at least 18 inches or mechanically spliced.*
C. *Mechanical splice connectors shall develop in tension 125 percent of the specified minimum yield strength of reinforcing bars.*
D. *Minimum reinforcement bend diameters shall comply with AASHTO 5.10.2.3.*

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
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	CHECKED BY	

SAEID POURJALALI
LICENSED PROFESSIONAL ENGINEER
No. 11475-S
HAWAII, U.S.A.
EXP. 4/30/28

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Saeid Pourjalali

LICENSE EXPIRES: APRIL 30, 2028

1 2
1
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: AS NOTED *Date: May 2026*

SHEET No. *S0.1* OF *4* SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	35	37

MINIMUM SPLICE & EMBEDMENT LENGTHS

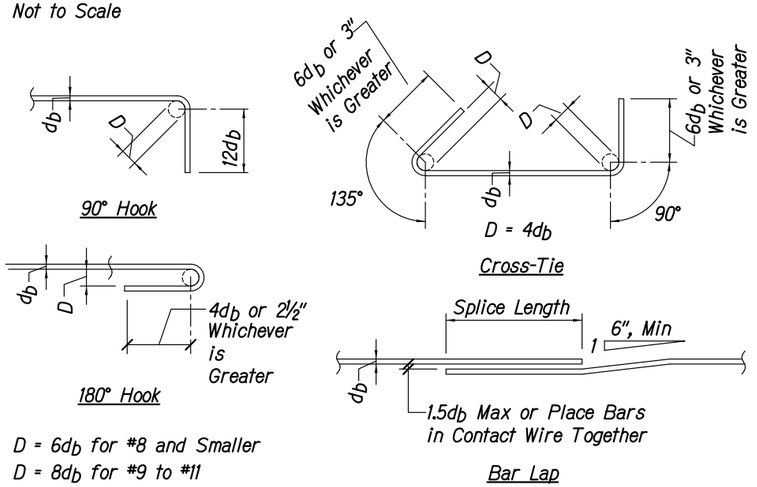
	CONCRETE STRENGTH = 4,500 PSI				
	LAP SPLICE		EMBEDMENT		
			STRAIGHT		
BAR SIZE	OTHER BARS	TOP BAR	OTHER BARS	TOP BAR	WITH STANDARD 90° HOOK
#3, #4	21"	29"	12"	17"	9"
#5	26"	36"	15"	21"	11"
#6	31"	43"	18"	26"	13"
#7	39"	54"	23"	32"	15"
#8	51"	71"	30"	42"	17"
#9	64"	90"	38"	53"	20"
#10	81"	114"	48"	67"	22"
#11	100"	140"	59"	82"	24"

Notes:
1. "Top Bars" are horizontal bars with 12" or more of concrete cast below.
2. Splice lengths may be reduced by multiplying the tabulated values by 0.765 if the centerline of splice of adjacent bars are staggered 6'-0" o.c. for #9 bar and smaller and 9'-0" o.c. for #10 bar and larger.
3. Embedment lengths for straight bars may be reduced by multiplying the tabulated values by 0.80 if the bars are spaced laterally not less than 6" center-to-center, with not less than 3" clear cover measured in the direction of the spacing.
4. Embedment lengths for bars with 90° hook are bars with side cover, normal to plane of hook, of not less than 2½" and cover on bar extension beyond hook not less than 2". Increase embedment length by 43% for bars not meeting these requirements.

TYPICAL REBAR SPLICE AND EMBEDMENT LENGTH SCHEDULE

1 S0.2 | S0.2

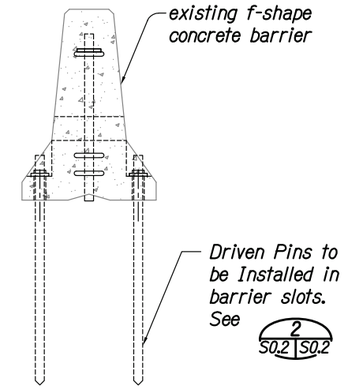
Not to Scale



STANDARD HOOKS AND CROSS-TIE DETAIL

2 S0.2 | S0.2

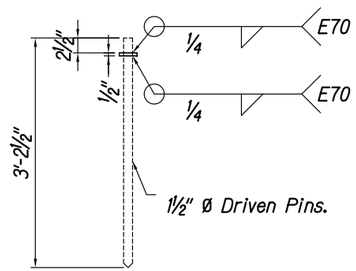
Not to Scale



F-SHAPED PORTABLE CONCRETE BARRIER

1 S0.2 | S0.2

Scale: 1" = 1'-0"



F-SHAPED PORTABLE CONCRETE BARRIER PINS

2 S0.2 | S0.2

Scale: 1" = 1'-0"

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	QUANTITIES BY	
	CHECKED BY	

0' 1' 2' 3' 4' 5' 6'
1/2" = 1'-0"

SAEID POURJALALI
LICENSED PROFESSIONAL ENGINEER
No. 11475-S
HAWAII, U.S.A.

EXP. 4/30/28

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LICENSE EXPIRES: APRIL 30, 2028

1 2
LINE IS 2 INCHES AT FULL SIZE
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

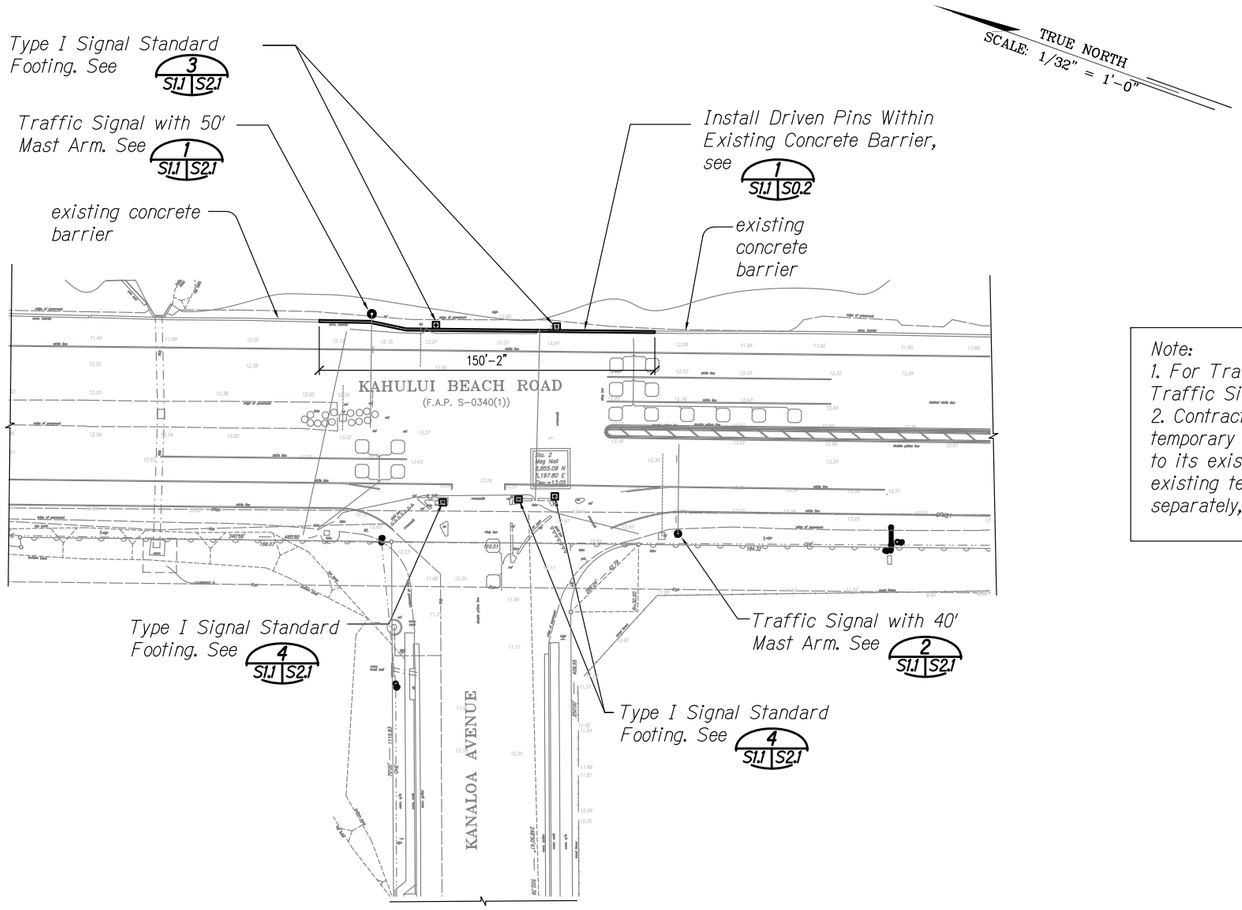
TYPICAL DETAILS AND DRIVEN PIN DETAIL

Kahului Beach Road Intersection
Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: AS NOTED Date: May 2026

SHEET No. S0.2 OF 4 SHEETS

DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	36	37



Note:
1. For Traffic Signal and Signal Standard Locations see Traffic Signal Drawings
2. Contractor shall coordinate with HDOT to relocate existing temporary concrete barriers, if needed, and shall be restored to its existing location. Costs associated with the relocation of existing temporary concrete barriers shall not be paid for separately, but considered incidental to various contract items.

SITE PLAN 1 S1.1 S1.1
Scale: 1/32" = 1'-0"

0' 16' 32' 64' 96'
1/32" = 1'-0"

ORIGINAL PLAN
NOTE BOOK No.
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HAWAII, U.S.A.
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Saeid Pourjalali
LICENSE EXPIRES: APRIL 30, 2028

1 2
1
LINE IS 2 INCHES AT FULL SIZE
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

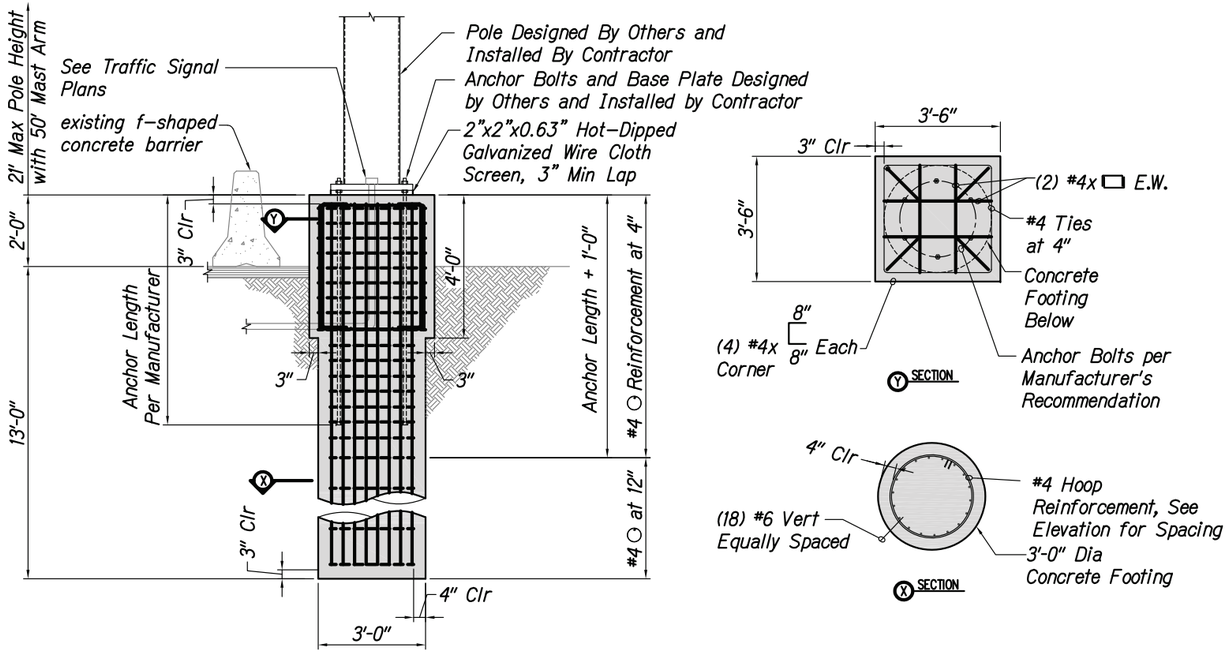
SITE PLAN

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: AS NOTED Date: May 2026

SHEET No. S1.1 OF 4 SHEETS

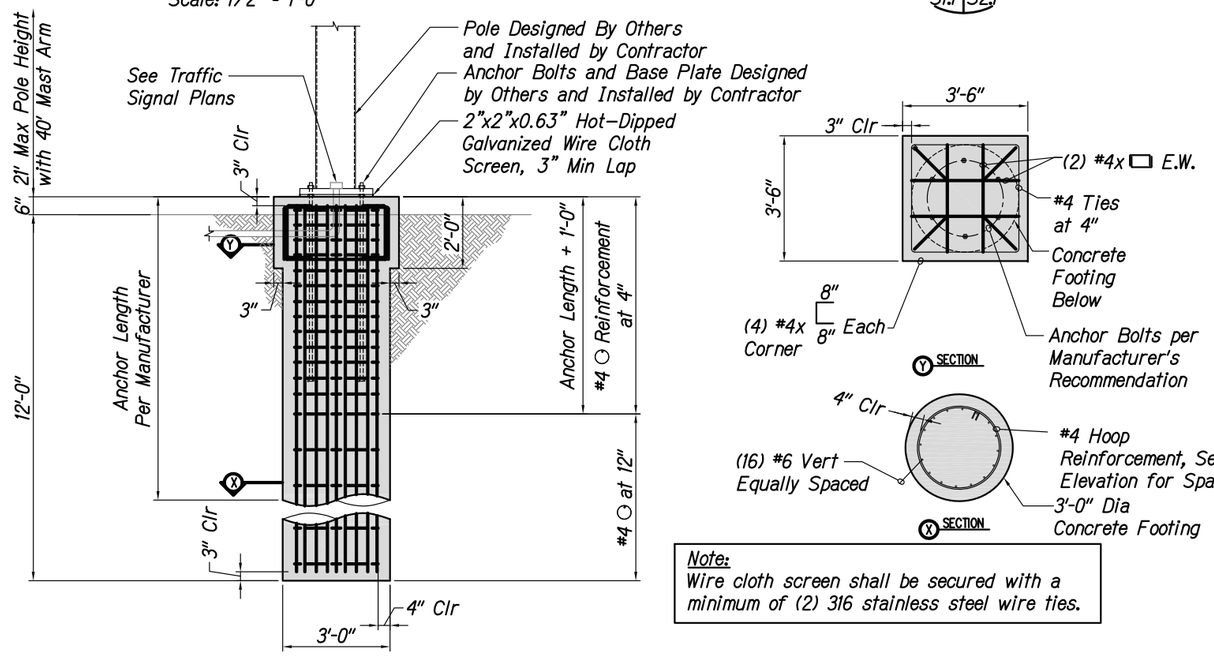
DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MAUI	HAW.	3400A-01-20R	2027	37	37



TRAFFIC POLE WITH 50' MAST ARM FOUNDATION DETAIL

1 | S1.1 | S2.1

Scale: 1/2" = 1'-0"

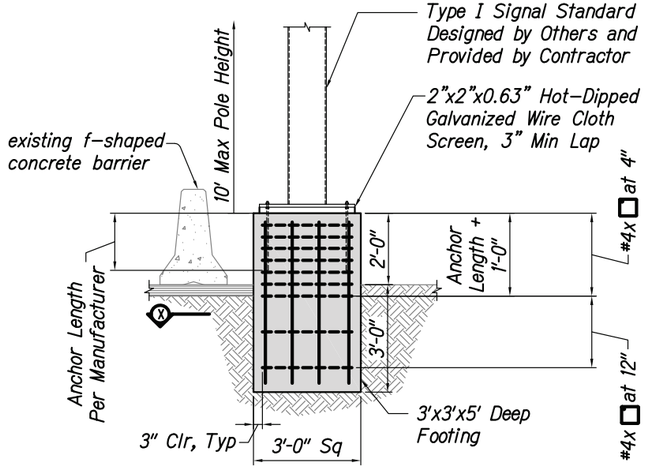


TRAFFIC POLE WTH 40' MAST ARM FOUNDATION DETAIL

2 | S1.1 | S2.1

Scale: 1/2" = 1'-0"

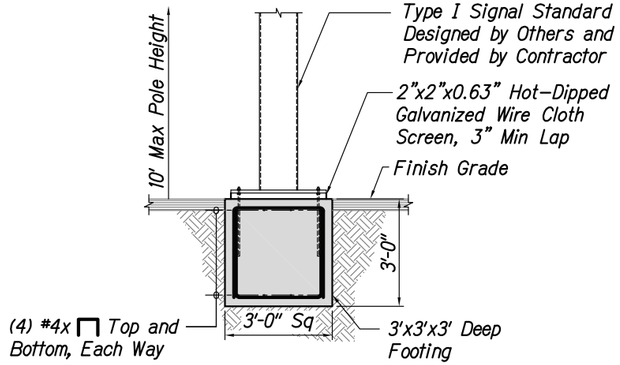
Note:
Wire cloth screen shall be secured with a minimum of (2) 316 stainless steel wire ties.



TYPE I TRAFFIC SIGNAL FOOTING AT CONCRETE BARRIER

3 | S2.1 | S2.1

Scale: 1/2" = 1'-0"



TYPE I TRAFFIC SIGNAL FOOTING

4 | S2.1 | S2.1

Scale: 1/2" = 1'-0"

0' 1' 2' 3' 4' 5' 6'
1/2" = 1'-0"

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Saeid Pourjalali
LICENSE EXPIRES: APRIL 30, 2028

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC POLE AND TRAFFIC SIGNAL FOUNDATION

Kahului Beach Road Intersection Improvements at Kanaloa Avenue
Project No. 3400A-01-20R

Scale: AS NOTED Date: May 2026

SHEET No. S2.1 OF 4 SHEETS

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