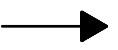


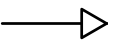
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	31A-02-17	2018	20	29

LEGEND

NEW



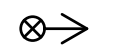
12" R Y \uparrow Traffic Signal Head



12" R Y G Traffic Signal Head



12" $\leftarrow\leftarrow\leftarrow$ Traffic Signal Head



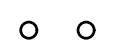
EVP Detector



Type "C" Pullbox



New Model 2070 Controller On New Base



Pipe Guards



New Wooden Pole



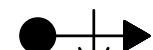
Guy Wire With Caisson



Traffic Signal Conduits (Underground)



Traffic Signal Span Wire (Overhead)



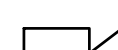
Traffic Signal Head Mounted On Wooden Pole



Traffic Signal Heads Mounted On Span Wire (Overhead): S = Spacing Between Heads



MECO Meter



VIVDS Detection Camera

TRAFFIC SIGNAL NOTES

- All Traffic Signal Controller Equipment Shall Be Completely Wired In The Cabinet And Shall Control The Traffic Signals As Called For In The Plans.
- Signal Indications During Clearance Interval:
 - If A Signal Is G Or $\leftarrow G$ And Will Remain G Or $\leftarrow G$ During The Next Phase, It Shall Be G Or $\leftarrow G$ During The Clearance Interval.
 - If A Signal Is G Or $\leftarrow G$ And Will Become R Or Extinguished During The Next Phase, It Shall Be Y Or $\leftarrow Y$ During The Clearance Interval.
 - If A Signal Is R And Will Remain R Or Becomes G During The Next Phase, It Shall Remain R During The Clearance Interval.
- Conduits And Pullbox Locations As Shown On The Plans Are Schematic. They May Be Modified By The Contractor With The Approval Of The Engineer.
- The Contractor Shall Install The Controller And Cabinet In The Indicated Location.
- All Work For The Installation 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 Department Of Transportation, Highways Division And As Shown On These Drawings.
- Span Wire Signal System shall conform to "4.0 Modifications to AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" as noted in HDOT "Design Criteria for Bridges and Structures", August 8, 2014.
- 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.
- The Concrete Jacket For The Conduit By-pass Detail Shown On Sheet TE-36 Shall Not Be Paid For Separately But Considered Incidental To The Various Contract Items.
- All Cable And Elements For Grounding Shall Be New.
- Cables Between Signal Faces, Pedestrian Heads, VIVDS Detection Cameras, And EVP Detectors And The Nearest Pullbox Or Wood Pole Are Not Called Out On The Plan, But Shall Be Furnished And Installed In Sufficient Numbers And Lengths As Required. Cost Shall Be Incidental To Various Traffic Signal Contract Items.
- Conduits And Cables Installed On Wood Poles Shall Be In Sufficient Number As Required. Cost Shall Be Incidental To The Installation Of The Span Wire System.
- Unless Otherwise Specified, All Underground Conduits Shall Be Concrete Encased PVC Schedule 40.
- 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: 873-3535).

CONSTRUCTION NOTES

- Locations Of Existing Underground Structures And Utilities Such As Pipe-lines, 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.
- The Contractor Shall Verify And Check All Dimensions And Details Shown On The Drawings Prior To The Start Of Construction. Any Discrepancy Shall Be Immediately Brought To The Attention Of The Engineer For Clarification.
- The Contractor Shall Notify All Agencies To Verify, Tone And Locate Their Existing Utilities Within The Project Area Prior To Excavating. The Contractor Shall Coordinate All Work.
- The Locations Of The New Wood Poles And Guy Wire Foundations 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.
- All Traffic Signal Work Shall Conform To The Requirements Of The "Manual On Uniform Traffic Control Devices For Streets And Highways, 2009 Edition", Federal Highway Administration (2009) As Amended.
- 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 As Amended And As Specified In The Special Provisions. The Contractor Shall Furnish And Maintain Adequate Barricades, Blinkers, Construction Signs, etc., For The Safety Of The Motoring Public.
- At The End Of Each Day's Work, The Contractor Shall Remove All Equipment And Other Obstruction To Permit Free And Safe Passage Of Public Traffic.
- The Contractor Shall Submit Product Data For Guy Wires, Messenger, and Tether Cables, Cable Fittings, and Hardware for Engineer Review and Approval.
- No signage, signals, or other appurtenances shall be added beyond what is shown in the drawings without engineer review and approval.

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



THIS WORK WAS PREPARED BY
ME, OR UNDER MY SUPERVISION.
Zey Tong
APRIL 30, 2020
LIC. EXP. DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TRAFFIC SIGNAL
NOTES AND LEGEND**

*Piilani Highway Improvements
Vicinity of Kulanihakai Street
Project No. 31A-02-17*

Scale: As Shown Date: Mar 2018

SHEET No. C-19 OF 24 SHEETS