TRAFFIC SIGNAL LEGEND New Traffic Signal Controller New Traffic Signal Conduits & Cables Existing Traffic Signal Conduits & Cables New 12" RYG Traffic Signal Head New 12" RY↑ Traffic Signal Head New 12" RY← Traffic Signal Head New 12" RY← Traffic Signal Head (Programmed Visibility) New 12" RYG \leftarrow Fiber Optic Traffic New Type I Traffic Signal Standard w/Traffic Signal Head as specified on plan New Type II Traffic Signal Standard w/Mast Arm and Traffic Signal Heads (length of mast arm ≠ distance between signal heads as specified on plan) Existing Traffic Signal Standard Otop New Pedestrain Signal Head

New Type A Pullbox

New Type B Pullbox

New Loop Detectors

New Pipe Guard

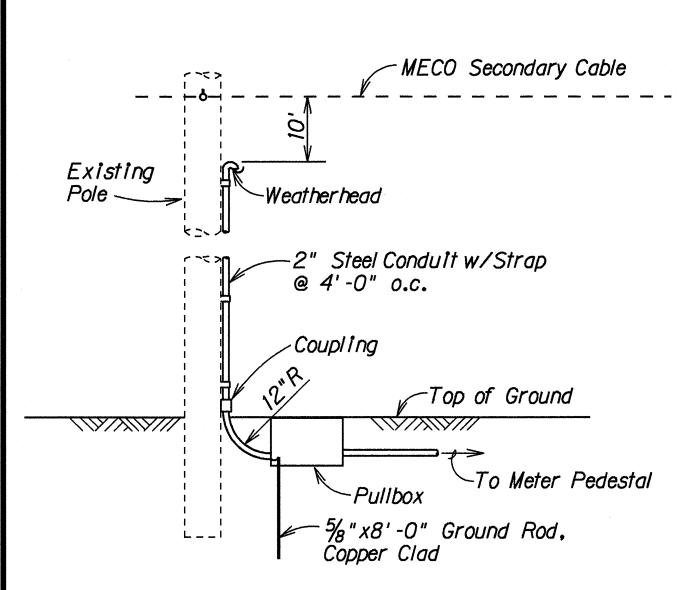
New Type B Pullbox w/Modified Cover

Existing Traffic Signal Pullbox

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SURVEY PLOTTED DRAWN BY R. AL TRACED BY C. A QUANTITIES BY CHECKED BY

ORIGINAL PLAN NOTE BOOK fol.ruby No. Shalffsleg



TRAFFIC SIGNAL NOTES

- 1. The locations of the Traffic Signal Standards, 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 the construction and installation.
- 2. All splicing shall be done in the pullboxes.
- 3. 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.
- 4. A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.
- 5. All Traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
- 6. The Contractor shall install one meter socket and 50 amp, breaker as shown on the plans in accordance with MECO requirements. The Meter shall be mounted between 5 feet and 6 feet above ground. Meter socket shall be 4-prong, complete with a manual circuit colsing device.
- 7. 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.
- 8. Should any defect be encountered during the warranty period, the manufacturer will be notified and he shall promptly correct such defect. Service call (by factory qualified representative) during the warranty period for repairs or other maintenance ahall be answered within 24 hours and shall be done at no expense whatsoever to the State. All repairs shall be done as soon as possible.
- 9. In order to expedite the installation of the new traffic signal system, the contractor shall coordinate with the State Project Engineer and Peter Dangaran (Phone No. 523-4831) of the City & County of Honolulu Traffic Signal Baseyard for picking-up the City & County of Honolulu-Furnished Type II Traffic Signal Standards with 28-Foot Mast Arm and Controller Assembly with Cabinet & Equipment. The Contractor shall prepare the materials and equipment for shipment, ship them to Maui and install them at the project site on Maui. The Engineer will pay for the accepted quantities per each, complete in place. The price includes picking up the City & County of Honolulu-furnished standards and controller assembly from the Traffic Signal Baseyard, preparing the materials for shipment, shipping the materials to Maui, and installing the materials at the project site on Maui, furnishing all labor, materials, tools, equipment, and incidentals necessary to complete the work.
- 10. The Contractor shall replace the City & County of Honolulu-Furnished Type II Traffic Signal Standards with 28-Foot Mast Arm and Controller Assembly with Cabinet \$ Equipment, by ordering them from the manufacturer as soon as possible. The Contractor shall coordinate with the State Project Engineer and Peter Dangaran (Phone No. 523-4831) of the City & County of Honolulu Traffic Signal Baseyard for delivering the Contractor-Ordered Type II Traffic Signal Standards with 28-Foot Mast Arm and Controller Assembly with Cabinet \$ Equipment. The Engineer will pay for the accepted quantities per each, as specified in the proposal. The price includes ordering, furnishing, and delivering the Contractor-Ordered materials to the City & County of Honolulu Traffic Signal Baseyard, all labor, materials, tools, equipment, and incidentals neessary to complete the work.

Notes:

1. Pedestal shall be hot-dipped galv. after fabrication.

2. All fastening bolts, nuts \$ washers shall be stainless steel.

3. Provide 4 ft. cl. in front of meter. — 4-JAW Self Contained 4. * Sealable enclosure 6"Dx10"Wx12"H. Underground Meter Socket w/manual closing device (similar to circle aw - Plug 3" Pipe cat #2414 MTB) w/1/4" Plate \bigoplus $\frac{3}{16}$ (typ.) -21/2"x21/4"x1/4" L Meter Socket 6"Dx10"Wx12"H Welded to Pipe Pullbox Pullbox NEMA 3R*-−3"ø Pipe Galv. Steel #8 Cu Grd. Wire Conc. Base — 1/2" C, #8 Grd. --Coupling 5 : 2500 psi Exist. Gr. — Thermoweld-24" min. 5/8" Ø x8' Long Grd. Rod -To Pullbox To Pullbox Box -To Traffic └─2" PVC Conduit, Sch. 80 Controller 90° Bend, 3' Radius FRONT ELEVATION SIDE ELEVATION

> METER PEDESTAL FOR UNDERGROUND SERVICE Not to scale

NOTES:

- 1. Maui Electric Co. shall assist the Contractor in Power Source connection.
- 2. Contractor shall make all electrical connections to controller, provide breaker, ground and 2" PVC conduit, schedule 80.
- 3. Contractor shall provide Maui Electric Co. one week advance notice for any work by Maui Electric Co.
- 4. A utility company standby man is required to be at the site at the time any non-utility company personnel will be breaking into or entering any facilities that contain energized utility company equipment or cables.
- 5. Three working days advance notice is required by the utility company for any inspection service or standby man. Call - phone 871-7777.
- 6. The installation of the meter pedestial for underground service will not be paid for separately but considered incidental to the Meter Socket and Breaker (50 amps).

ELECTRICAL SERVICE DETAIL

DEPARTMENT OF TRANSPORTATION

PROJ. NO.

37B-02-94

HAW.

1995

TRAFFIC SIGNAL LEGEND, DETAILS & NOTES

HALEAKALA HIGHWAY Traffic Signals at Kula Junction Fed. Aid Project No. STP-037-1(20)

Not to Scale

Date: June, 1995 SHEET No. 1 OF 2 SHEETS

SERVICE POLE DETAIL Not to Scale