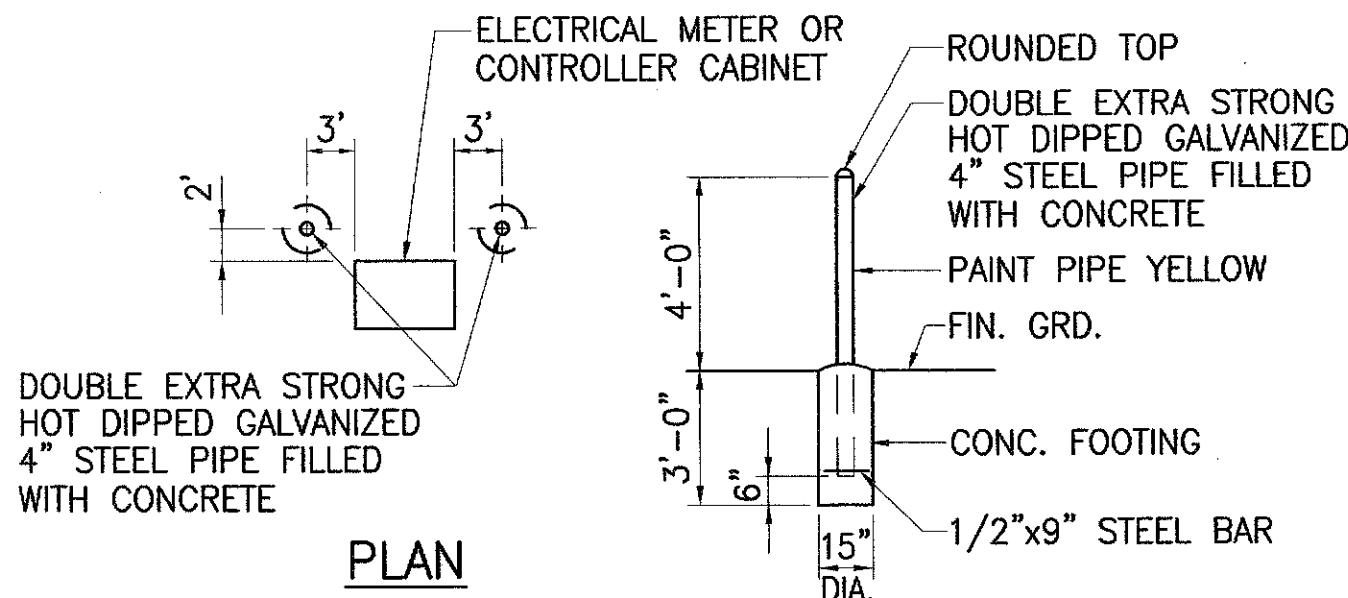
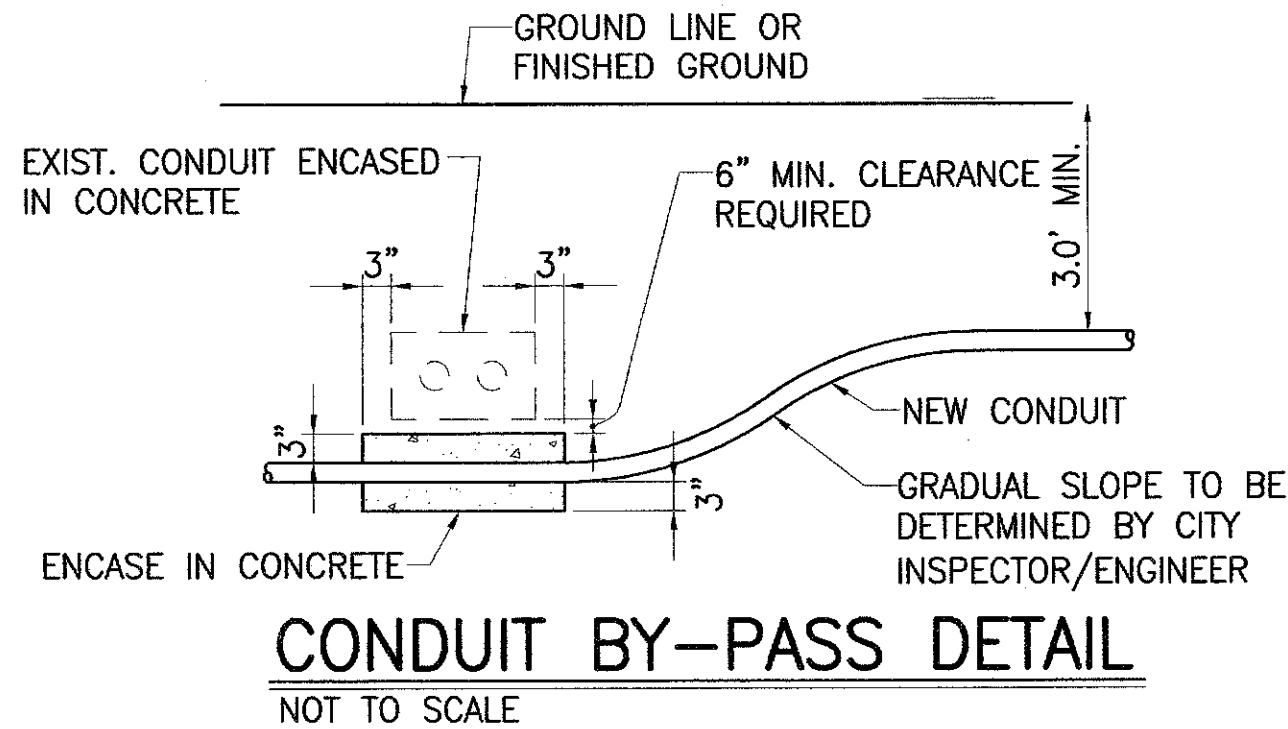


TRAFFIC SIGNAL NOTES

- 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 ~~G~~ AND WILL REMAIN G OR ~~G~~ DURING THE NEXT PHASE, IT SHALL BE G OR ~~G~~ DURING THE CLEARANCE INTERVAL.
 - 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.
 - IF A SIGNAL IS R AND WILL REMAIN R OR BECOMES G DURING THE NEXT PHASE, IT SHALL REMAIN R DURING THE CLEARANCE INTERVAL.
- 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.
- 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.
- CONDUITS AND PULLBOX LOCATIONS AS SHOWN ON THE PLANS ARE SCHEMATIC. THEY MAY BE MODIFIED BY THE CONTRACTOR WITH THE APPROVAL OF THE ENGINEER.
- 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 DEPARTMENT OF TRANSPORTATION, HIGHWAYS DIVISION AND AS SHOWN ON THESE DRAWINGS.
- ALL SPLICING SHALL BE DONE IN THE PULLBOXES.
- 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 THIS SHEET SHALL NOT BE PAID FOR SEPARATELY BUT CONSIDERED INCIDENTAL TO THE VARIOUS CONTRACT ITEMS. THE ENGINEER SHALL DETERMINE IF A CONCRETE JACKET IS REQUIRED.
- ALL CABLE AND ELEMENTS FOR GROUNDING SHALL BE NEW.
- CABLES BETWEEN SIGNAL FACES, PEDESTRIAN HEADS, PEDESTRIAN PUSH BUTTONS, AND EVP DETECTORS AND THE NEAREST PULLBOX 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 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.
- THE CONTRACTOR SHALL SALVAGE ALL EXISTING HEADS, STANDARDS, AND CABLES NOT USED IN THE NEW SYSTEM. COST SHALL BE INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
- UNLESS OTHERWISE SPECIFIED, ALL CONDUITS SHALL BE PVC SCHEDULE 40.
- WHILE MODIFYING THE EXISTING TRAFFIC SIGNAL SYSTEM, THE CONTRACTOR SHALL KEEP THE EXISTING SYSTEM OPERATIONAL UNTIL THE NEW TRAFFIC SIGNAL SYSTEM CAN BE PUT INTO SERVICE.
- ALL TRAFFIC SIGNAL HARDWARE REMOVED FROM THE INTERSECTION SHALL BE STOCKPILED AND DELIVERED TO A LOCATION DETERMINED BY THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE TRAFFIC CONTROL BRANCH, DEPARTMENT OF TRANSPORTATION SERVICES, THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE TRAFFIC SIGNAL SYSTEM (PHONE: 768-8388).

CONSTRUCTION NOTES

- 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.
- 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 COMPANIES 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 TRAFFIC SIGNAL STANDARDS, TRAFFIC SIGNAL STANDARDS WITH MASTARM, 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.
- ALL TRAFFIC SIGNAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," FEDERAL HIGHWAY ADMINISTRATION (2003) AND AMENDMENTS.
- MAINTENANCE OF TRAFFIC THROUGH THE CONSTRUCTION AREA SHALL BE IN ACCORDANCE WITH PART VI OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," FEDERAL HIGHWAY ADMINISTRATION (2003) 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 OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
- THE CONTRACTOR SHALL PROVIDE A 3-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN TRAFFIC SIGNAL CONDUIT AND ALL EXISTING UTILITY LINES.
- THE INDICATED TRENCH WIDTHS FOR ALL NEW WORK AS SHOWN ON PLANS ARE SCHEMATIC. TRENCHES SHALL BE CONSTRUCTED IN ACCORDANCE WITH TRENCH DETAILS AND TRENCH DETAIL NOTES.



NOTE:

COST OF CONC. FILLED GALVANIZED POSTS SHALL BE INCIDENTAL TO OTHER ITEMS OF WORK.

PIPE GUARD DETAIL

NOT TO SCALE

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-0001(36)	2008	26	42

LEGEND

NEW	EXISTING
	EXISTING TRAFFIC SIGNAL HEAD
	FLASHING YELLOW LIGHT BEACON WITH "STOP AHEAD WHEN FLASHING" SIGN
	12" R Y G STANDARD TRAFFIC SIGNAL HEAD
	12" R Y G STANDARD TRAFFIC SIGNAL HEAD
	STANDARD TRAFFIC AND PEDESTRIAN SIGNAL HEADS MOUNTED ON TYPE I SIGNAL STANDARD, HEIGHT=10'
	12" R Y G STANDARD TRAFFIC SIGNAL HEAD
	12" R Y G STANDARD TRAFFIC SIGNAL HEAD
	PROGRAMMED VISIBILITY
	PEDESTRIAN SIGNAL HEAD
	EVP DETECTOR
	TYPE "A" PULLBOX
	TYPE "B" PULLBOX
	TYPE "C" PULLBOX
	REPLACE EXIST. PULLBOX W/ NEW TYPE "B" PULLBOX
	LOOP DETECTOR
	MODEL 170 CONTROLLER ON BASE
	SIGN
	TYPE I TRAFFIC SIGNAL STANDARD
	TYPE II TRAFFIC SIGNAL STANDARD
	TYPE III TRAFFIC SIGNAL STANDARD
	TRAFFIC SIGNAL HEADS MOUNTED ON TYPE II SIGNAL STANDARD 35' M.A. : 8' BETWEEN HEADS
	TRAFFIC SIGNAL HEADS MOUNTED ON TYPE III SIGNAL STANDARD 35' M.A. : 8' BETWEEN HEADS
	HECO METER WITH PEDESTAL AND PIPE BOLLARDS
	HECO METER
	NEW CONDUIT(S) AND TRENCH REPAVING BOUNDARY WITH SIZE, NUMBER AND TYPE OF NEW CABLES AS INDICATED.
	CONDUIT(S)
	TRENCH REPAVING BOUNDARY (ONLY AC REPAVING LIMITS SHOWN - SCHEMATIC ONLY REFER TO SHEET C-18 FOR TRENCH DETAILS)
	CONDUIT(S) WITH SIZE, NUMBER AND TYPE OF NEW CABLES AS INDICATED.

REVISION	DATE	DESCRIPTION	ENGINEER	APPROVED
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DEPARTMENT OF TRANSPORTATION SERVICES
CITY & COUNTY OF HONOLULU

TRAFFIC CONTROL SIGNALIZATION
AT VARIOUS LOCATIONS ON OAHU, PHASE X
FEDERAL-AID NO. STP-0001(36)

TRAFFIC SIGNAL NOTES AND LEGEND

DESIGN	LHY	C-26
DRAWN	LHY	
CHECKED	KKN	
DATE	08/04/08	SHEET 26
PROJECT NO.	FILE	OF 42 SHEETS
FILE	DRAW	FOLDER

FILE	POCKET	FOLDER	NO.
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