

GENERAL CONSTRUCTION NOTES

1. THE SCOPE OF WORK FOR THIS PROJECT CONSISTS OF INSTALLING NEW HIGHWAY LIGHTS, SERVICE EQUIPMENT AND DUCT LINES.
2. THE CONTRACTOR IS REMINDED OF THE REQUIREMENTS OF SUBSECTION 108.01 - SUBLETTING OF CONTRACT, WHICH REQUIRES HIM TO PERFORM WORK AMOUNTING TO NOT LESS THAN 50 PERCENT OF THE TOTAL CONTRACT COST LESS DEDUCTIBLE ITEMS. NON-COMPLIANCE WITH THIS SUBSECTION MAY BE GROUNDS FOR REJECTION OF BID.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FOLLOWING SECTIONS OF THE SPECIAL PROVISIONS: SUBSECTION 107.13 - PUBLIC CONVENIENCE AND SAFETY; SUBSECTION 107.21 - CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES; AND SECTION 645 - TRAFFIC CONTROL.
4. AT THE END OF EACH DAY'S WORK, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND OTHER OBSTRUCTIONS TO PERMIT FREE AND SAFE PASSAGE OF PUBLIC TRAFFIC.
5. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES, MANHOLES, MONUMENTS AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT THE ACCURACY IS NOT GUARANTEED. THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF WORK IS POSSIBLE. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGES INCURRED TO THE EXISTING FACILITIES AND/OR IMPROVEMENTS AS A RESULT OF HIS OPERATIONS.
6. EXISTING DRAINAGE SYSTEM WILL BE FUNCTIONAL AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO FURNISH MATERIALS, EQUIPMENT, LABOR, TOOLS AND INCIDENTALS NECESSARY TO MAINTAIN FLOW. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
7. THE CONTRACTOR SHALL PROVIDE FOR ACCESS TO AND FROM ALL EXISTING SIDE STREETS AT ALL TIMES.
8. LOCATION OF THE NEW UNDERGROUND DUCTLINES AND STRUCTURES IS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHOULD ANTICIPATE MAKING PROVISIONS FOR DEWATERING OF TRENCHES BELOW WATER LINE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NPDES AND DISCHARGE TO RECEIVING WATERS (SEE NPDES GENERAL NOTES). ALL TRENCHES SHALL BE DRY AND FREE OF WATER BEFORE DUCTS ARE INSTALLED.
9. LAYER OF GRAVEL BED UNDER UNDERGROUND DUCT BANKS, WHICH ARE AT OR BELOW THE WATER TABLE, MAY FACILITATE DEWATERING OF THE TRENCHES DURING CONSTRUCTION/INSTALLATION OF THE UNDERGROUND UTILITY SYSTEM. THE GRAVEL MATERIAL WILL NOT BE MEASURED AND SHALL BE CONSIDERED INCIDENTAL TO THE VARIOUS UNDERGROUND SYSTEM ITEMS.
10. THE CONTRACTOR SHALL SURVEY AND STAKE THE STATE HIGHWAY RIGHT-OF-WAY AND INSTALL ALL APPURTUNANCES ASSOCIATED WITH THE PROJECT WITHIN THE STATE RIGHT-OF-WAY.
11. THE SITING FOR STREET LIGHTS MAY BE ADJUSTED NOT MORE THAN 5 FEET PARALLEL WITH ROADWAY TO AVOID CONFLICTS.
12. STREET LIGHT STANDARDS AND POLES SHALL HAVE MINIMUM 2 FEET CLEARANCE FROM AERIAL TELEPHONE CABLES AND LINES.
13. STREET LIGHT STANDARDS AND POLES SHALL BE INSTALLED AT LEAST 2 FEET BEHIND METAL BARRIER RAILS.
14. ALL EXISTING FACILITIES SHOWN ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND SHALL MAKE ADJUSTMENTS TO ANY NEW OR EXISTING FACILITIES AS DIRECTED BY THE STATE'S RESIDENT ENGINEER.
15. THE TERM "ENGINEER FOR THE UTILITY COMPANIES" SHALL ALSO MEAN HIS DELEGATED REPRESENTATIVE AND/OR THE UTILITIES' INSPECTOR OF RECORD.
16. THE CONTRACTOR TO STAKEOUT ALL FACILITIES FOR VERIFICATION BY THE UTILITY INVOLVED AND/OR AFFECTED BEFORE PROCEEDING.
17. ALL DUCTLINES TO BE INSTALLED IN CONCRETE SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR BEFORE PLACING CONCRETE. NOTIFY INSPECTOR 48 HOURS BEFORE PLACING CONCRETE.
18. THE MINIMUM DEPTH OF DUCTLINES FROM FINISH GRADE TO TOP OF CONCRETE ENCASEMENT OR COVER IS AS FOLLOWS:

- A. WITHIN ROADWAY: 2'-0"  
B. WITHIN SIDEWALK AREA: 1'-6"  
C. ALL OTHERS: 1'-6"

19. ALL COMPLETED DUCTLINES SHALL BE MANDREL TESTED BY THE CONTRACTOR IN THE PRESENCE OF THE INSPECTOR.
20. DIRECT BURIED CONDUIT SHALL BE USED BEHIND METAL GUARD RAIL AND UNDER CONCRETE SIDEWALK. IN ALL OTHER INSTANCES USE CONCRETE ENCASED DUCT.
21. THE CONTRACTOR SHALL GIVE HECO FORTY (40) WORKING DAYS NOTICE TO PROCEED WITH IT'S PORTION OF THE WORK.
22. THE CONTRACTOR WILL IMMEDIATELY REPORT DAMAGES DISCOVERED OR CAUSED BY HIS WORK TO :  
A. HECO @ PH. NO.: 611  
B. HECO @ PH. NO.: 543-7874  
C. OCEANIC @ PH. NO.: 625-8437  
D. CHRONICLE CABLEVISION @ PH. NO.: 395-1847
23. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION WHEN THE EXCAVATION AND CONSTRUCTION CROSSES OR IS IN CLOSE PROXIMITY TO UNDERGROUND ELECTRICAL FACILITIES AND SHALL MAINTAIN MINIMUM 13'-0" CLEARANCE FOR HIS EQUIPMENT WHILE WORKING CLOSE TO AND/OR UNDER OVERHEAD FACILITIES.
24. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING UTILITIES, STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT, AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT IT FROM DAMAGE.
25. THE CONTRACTOR IS TO STAKE OUT ALL TEMPORARY & PERMANENT NEW POLE LOCATIONS SO AS NOT TO CONFLICT WITH ANY EXISTING OR PROPOSED UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST INCURRED BY CONFLICTING UTILITIES.
26. WHEN EXCAVATING NEAR UTILITY POLES, THE CONTRACTOR SHALL PROTECT, SUPPORT, SECURE AND TAKE ALL OTHER PRECAUTIONS TO PREVENT DAMAGE TO OR LEANING OF THESE POLES. CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED TO REPAIR OR STRAIGHTEN POLE.
27. PROVIDE 2.5 FT. MINIMUM CLEARANCE BETWEEN UNDERGROUND DUCTS AND GUARDRAIL POSTS.
28. ALL NEW WOOD POLES SHALL BE CLASS-3 OR OF LARGER DIAMETERS.
29. DRAWINGS INDICATE DIRECT BURIED CONDUIT BEHIND GUARD RAIL. IN INACCESSIBLE AREAS, THE CONTRACTOR HAS THE OPTION TO DISMANTLE AND REINSTALL GUARD RAIL FOR EQUIPMENT ACCESS OR PROVIDE CONCRETE ENCASED DUCT IN FRONT OF GUARDRAIL, BUT NOT WITHIN THE TRAVEL LANE.
30. 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 DISTRICT ENGINEER.
31. PRIOR TO COMMENCING TRENCH EXCAVATION WORK, THE CONTRACTOR SHALL TAKE A PROFILE ALONG THE CENTERLINE OF THE PROPOSED UTILITY TRENCH. THIS INFORMATION SHALL BE USED IN THE VERIFICATION OF RESTORING THE ROADWAY TO ITS ORIGINAL CONDITION. A COPY OF THE PROFILE SHALL BE SUBMITTED TO THE DISTRICT ENGINEER.
32. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE AND SAFE NON-SKID BRIDGING MATERIAL, INCLUDING SHORING, OVER TRENCHES IN PAVEMENT AREAS. THE BRIDGING SHALL BE ABLE TO SUPPORT ALL TYPES OF VEHICULAR TRAFFIC.
33. UNLESS OTHERWISE NOTED, NO TRENCH SHALL BE OPENED MORE THAN 300 FEET IN ADVANCE OF INSTALLED AND TESTED PIPELINE AND/OR DUCTLINE.
34. WHERE PEDESTRIAN WALKWAYS EXIST, THEY SHALL BE MAINTAINED IN A SAFE AND PASSABLE CONDITION, OR OTHER FACILITIES FOR PEDESTRIANS SHALL BE PROVIDED. PASSAGES BETWEEN WALKWAYS AT INTERSECTIONS SHALL LIKEWISE BE PROVIDED.
35. THE CONTRACTOR SHALL NOTIFY THE STATE HIGHWAYS' HIGHWAY LIGHTING AND TRAFFIC SIGNAL SUPERVISOR (834-4581), THREE (3) WORKING DAYS PRIOR TO COMMENCING WORK ON THE STREET LIGHTING SYSTEM.
36. THE CONTRACTOR SHALL NOTIFY OAHU TRANSIT SERVICES, INC. (OTS), ED SNIFFEN AT 848-4571, OR LOWELL TOM AT 848-4578, TWO WEEKS PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR SHALL INFORM OTS OF THE LOCATION AND SCOPE OF WORK, PROPOSED CLOSURE OF ANY STREET OF TRAFFIC LANES, AND THE NEED TO RELOCATE ANY BUS STOP.

NPDES GENERAL NOTES

1. DISCHARGES INTO RECEIVING WATERS (STREAMS, RIVERS, OCEAN CHANNELS, DRAINAGE SYSTEMS, ETC.) FROM DEWATERING AND/OR HYDROTESTING ACTIVITIES REQUIRE NPDES PERMIT(S) FROM THE DEPARTMENT OF HEALTH (DOH). IF THE CONTRACTOR OPTIONS TO DISCHARGE DEWATERING AND/OR HYDROTESTING EFFLUENT INTO RECEIVING WATERS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOUR (4) SETS OF BEST MANAGEMENT PRACTICES (BMP'S) AND FOUR (4) COPIES OF THE QUALITY OF DISCHARGE TEST RESULTS. THE PLANS AND TEST RESULTS SHALL BE SUBMITTED NO LATER THAN THIRTY (30) CALENDAR DAYS AFTER THE AWARD OF THE CONTRACT.
2. NO DEWATERING AND/OR HYDROTESTING ACTIVITIES WILL BE AUTHORIZED UNTIL THE RECEIPT OF THE NPDES PERMITS FROM DOH.
3. PROGRESS PAYMENT WILL NOT BE AUTHORIZED UNTIL RECEIPT OF THE BMP'S AND THE QUALITY OF DISCHARGE TEST RESULTS.
4. ANY CITATION (FINE) RECEIVED BY THE STATE FOR NON-COMPLIANCE OF THE NPDES PERMIT REQUIREMENTS SHALL BE DEDUCTED FROM THE PROGRESS PAYMENT.

SEWER NOTES

1. ALL SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY'S STANDARD SPECIFICATIONS, SEPT. 1986, THE DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS, SEPT. 1984, CURRENT CITY PRACTICES AND REVISED ORDINANCES OF HONOLULU, 1990 AS AMENDED, AND THE DESIGN STANDARDS OF THE DEPARTMENT OF WASTEWATER MANAGEMENT VOL. 1, JULY 1993.
2. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION SECTION, DEPARTMENT OF WASTEWATER MANAGEMENT AT 527-5820 OR 523-4345 TO ARRANGE FOR INSPECTION SERVICES AND SUBMIT FOUR SETS OF APPROVED CONSTRUCTION PLANS SEVEN DAYS PRIOR TO COMMENCEMENT OF SEWER WORK. THE CONTRACTOR SHALL PAY FOR ALL INSPECTIONS COSTS.
3. THE UNDERGROUND PIPES, CABLES OR DUCTLINES KNOWN TO EXIST BY THE ENGINEER FROM HIS RESEARCH OF RECORDS ARE INDICATED ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE AND SHALL PAY FOR ALL DAMAGED UTILITIES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING CONTINUOUS SEWER SERVICE TO ALL AFFECTED AREAS DURING CONSTRUCTION.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY SEWAGE SPILLS CAUSED DURING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE STATE DEPARTMENT OF HEALTH AND UTILIZE APPROPRIATE SAMPLING AND ANALYZING PROCEDURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PUBLIC NOTIFICATION AND PRESS RELEASES.
6. THE CONTRACTOR SHALL MAINTAIN A MINIMUM FIVE (5) FEET CLEAR WIDTH BETWEEN STREET LIGHTING POLES AND SEWER LINES.

HECO SERVICE LOCATION

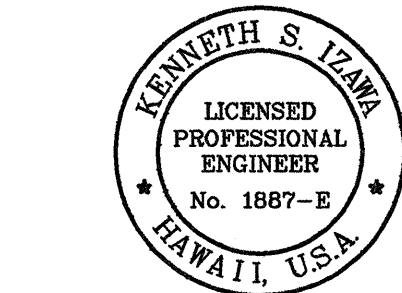
VOLTAGE/POLE #	SERVICE AT STREET LIGHT	STREET LIGHT SERVED	CONNECTED KVA
240V, 1Ø, 3W/JP170	M4-13	M4-7 TO 22	8
240V, 1Ø, 3W/JP138	M5-13	M5-1 TO 25	8
240V, 1Ø, 3W/JP111	M6-13	M6-1 TO 22	8

APPROVED:

CHIEF, DIV. OF PLANNING & SERVICE CONTROL, WWM  
(FOR SEWER WORK WITHIN PUBLIC R/W & EASEMENT ONLY)

5/15/96

by DATE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION

by

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93A-02-95	1996	3	13

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES

FARRINGTON HIGHWAY LIGHTING IMPROVEMENTS

MAPELA ST. TO LUALEI PLACE

PROJECT NO. 93A - 02 - 95

SCALE: NONE

May, 1996

SHEET No. 3 OF 13 SHEETS

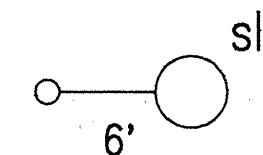


WATER NOTES

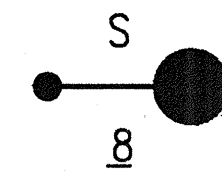
1. UNLESS OTHERWISE SPECIFIED, ALL MATERIALS AND CONSTRUCTION OF WATER SYSTEM FACILITIES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE CITY AND COUNTY OF HONOLULU BOARD OF WATER SUPPLY'S "WATER SYSTEM STANDARDS" VOLUME 1, DATED 1985, THE "APPROVED MATERIAL LIST AND STANDARD DETAILS FOR WATER SYSTEM CONSTRUCTION", VOLUME 2, DATED 1985, THE "WATER SYSTEM EXTERNAL CORROSION CONTROL STANDARDS", VOLUME 3, DATED 1991, AND ALL SUBSEQUENT AMENDMENTS AND ADDITIONS.
2. ALL PLANS APPROVED BY THE BOARD OF WATER SUPPLY ARE BASED SOLELY ON THE ADEQUACY OF THE WATER SUPPLY. ALL OTHER FEATURES OF THE WATER SYSTEM, SUCH AS LINES, GRADES, FITTINGS, DRAINAGE, ETC., AND OTHER FEATURES OF IMPROVEMENTS SHALL NOT BE THE RESPONSIBILITY OF THE BOARD OF WATER SUPPLY.
3. THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES AND STRUCTURES AS SHOWN ON THE PLANS ARE FROM THE LATEST AVAILABLE DATA BUT IS NOT GUARANTEED AS TO THE ACCURACY OR THE ENCOUNTERING OF OTHER OBSTACLES DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE AND PAY FOR ALL DAMAGES TO EXISTING UTILITIES. THE CONTRACTOR SHALL NOT ASSUME THAT WHERE NO UTILITIES ARE SHOWN, THAT NONE EXIST.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL WATER LINES DURING CONSTRUCTION. THE CONTRACTOR SHALL BE ESPECIALLY CAREFUL WHEN EXCAVATING BEHIND WATER LINES, TEES, AND BENDS WHEREVER THERE IS A POSSIBILITY OF WATER LINE MOVEMENT DUE TO THE REMOVAL OF THE SUPPORTING EARTH BEYOND THE EXISTING REACTION BLOCKS. THE CONTRACTOR SHALL TAKE WHATEVER MEASURE NECESSARY TO PROTECT THE WATER LINES, SUCH AS CONSTRUCTING SPECIAL REACTION BLOCKS (WITH BWS APPROVAL) AND/OR MODIFYING HIS CONSTRUCTION METHOD.
5. RE-APPROVAL SHALL BE REQUIRED IF THIS PROJECT IS NOT UNDER CONSTRUCTION WITHIN A PERIOD OF TWO YEARS.
6. AT THE ELECTRICAL/SIGNAL DUCTLINE WATER CROSSINGS, ADJUST ALL ELECTRICAL/SIGNAL DUCTLINE ELEVATIONS TO MAINTAIN 6" VERTICAL CLEAR SEPARATION FROM ALL WATERLINES (12" CLEAR FOR ALL ELECTRICAL/SIGNAL DUCTLINE STRUCTURES LARGER THAN 16") AT NO COST TO THE BOARD OF WATER SUPPLY.
7. MAINTAIN 3'-0" MIN. HORIZONTAL CLEAR SEPARATION BETWEEN ALL WATERLINE SYSTEMS AND NEAREST ELECTRICAL/SIGNAL DUCTLINES PARALLELING THE WATER SYSTEM AT NO COST TO THE BOARD OF WATER SUPPLY.
8. THE CONTRACTOR SHALL NOTIFY BWS PLANNING AND ENGINEERING DIVISION, CONSTRUCTION SECTION, ONE WEEK PRIOR TO COMMENCING WORK ON THE WATER SYSTEM.
9. THE CONTRACTOR SHALL VERIFY ALL EXISTING SERVICE LATERAL LOCATIONS WHETHER SHOWN OR NOT SHOWN ON PLANS PRIOR TO COMMENCING WITH ANY OF THE WORK AND SHALL NOT ASSUME THAT WHERE NO SERVICES ARE SHOWN NONE EXIST.
10. PRIOR TO ANY EXCAVATING, THE CONTRACTOR SHALL VERIFY IN THE FIELD THE LOCATION OF EXISTING WATER MAINS AND APPURTENANCES.
11. METER NUMBERS AND SERVICE NUMBER ARE NOT SHOWN ON THE PLANS BECAUSE NO WORK SHALL BE DONE ON THE SERVICES.

UTILITY SYMBOLS AND LEGEND

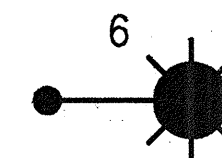
- e — Existing Electrical Line
- o jp Existing Joint Pole
- o pp Existing Power Pole
- o emh Existing Electric Manhole
- t — Existing Telephone Line
- o tp Existing Telephone Pole
- o tmh Existing Telephone Manhole
- o TMH New Telephone Manhole
- w-8 — Existing 8" Water Line
- o wmh Existing Water Manhole
- o av Existing Water Air Valve
- o wv Existing Water Valve Box
- wv Existing Water Meter
- fh Existing Fire Hydrant
- o tsp Existing Traffic Signal Pole
- = tspb Existing Traffic Signal Pullbox
- s-8 — Existing Sewer Line
- o smh Existing Sewer Manhole
- g-6 — Existing 6" Gas Line
- o gmh Existing Gas Manhole
- mon. Existing Monument
- d-16 — Existing 16" Drain Line
- o sdmh Existing Storm Drain Manhole
- gdi Existing Grated Drop Inlet
- cb Existing Catch Basin
- Existing Traffic Sign
- Existing Highway Lighting Standard
- P170 Existing Utility Company Wood Joint Pole to Remain, Joint Pole Number "170" Indicated.



EXISTING STREET LIGHT TO REMAIN.  
6' DENOTES EXISTING BRACKET ARM LENGTH.



NEW METAL STANDARD ON GRADE WITH FOUNDATION AND 250 WATT H.P.S. LUMINAIRE. 8 DENOTES LENGTH IN FEET FOR BRACKET ARM. 8 DENOTES DISTANCE IN FEET OF STANDARD FROM ROADWAY EDGE, S DENOTES SLIP BASE (SEE SHTS. NO. 11 & 12), WITHOUT DESIGNATION DENOTES TRANSFORMER BASE (SEE SHT. 13)



NEW LIGHTING SYSTEM LUMINAIRE, BRACKET ARM AND WOOD POLE.  
6 DENOTES LENGTH IN FEET FOR BRACKET ARM



NEW UNDERGROUND LIGHTING SYSTEM DUCT, 2" PVC CONCRETE ENCASED



NEW UNDERGROUND LIGHTING SYSTEM DUCT,  
2" PVC DIRECT BURIED



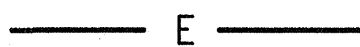
NEW ABOVE GROUND LIGHTING SYSTEM AERIAL CABLE



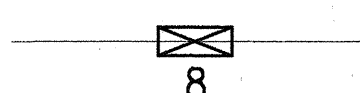
NEW ABOVE GROUND AERIAL CABLE FOR HECO SERVICE AT EXISTING UTILITY POLE, SEE SHEET 10



NEW PULLBOX, TYPE "B", (SEE STANDARD PLAN TE-41)



NEW ELECTRICAL LINE



NEW REINFORCED CONCRETE JACKET FOR EXISTING SEWER PIPE.  
8 DENOTES LENGTH OF JACKET. JACKET WILL EXTEND EQUIDISTANT ON EITHER SIDE OF STREET LIGHT DUCT CROSSING.



TRAFFIC SIGNAL ASSEMBLY, (SEE STANDARD PLAN TE-38)



PEDESTRIAN PUSHBUTTON, (SEE STANDARD PLAN TE-38)



PEDESTRIAN SIGNAL HEADS (HAND/MAN), (SEE STANDARD PLAN TE-38)



PEDESTRIAN SIGNAL HEADS (HAND/MAN), (SEE STANDARD PLAN TE-38)

ABBREVIATIONS

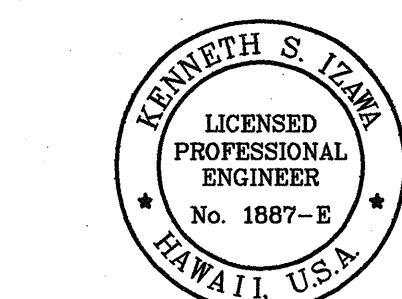
- AERW AT EDGE OF RIGHT-OF-WAY
- HECO HAWAIIAN ELECTRIC CO.
- HTCO HAWAIIAN TELEPHONE CO.
- N250 250 WATT HIGH PRESSURE SODIUM STREET LIGHT

APPROVED:

for *Matthew*  
CHIEF, PLANNING & ENGINEERING, BWS

5/17/96  
DATE

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**GENERAL NOTES (CONTINUED),  
UTILITY SYMBOLS, AND LEGEND**  
FARRINGTON HIGHWAY LIGHTING IMPROVEMENTS  
MAIPELA ST. TO LUALAI PLACE  
PROJECT NO. 93A - 02 - 95  
SCALE: 1" = 50' May, 1996  
SHEET No. 4 OF 13 SHEETS