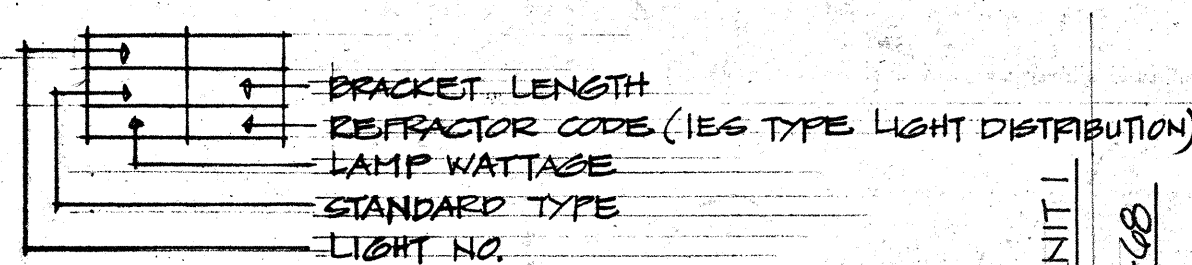


ELECTRICAL SYMBOL LIST

- 1-60" Pole
- 1" Anchor L=25"
- NEW LIGHT STANDARD, METAL
- EXISTING HIGHWAY LIGHT ON WOOD POLES
- PULLBOX OR HANDHOLE, TYPE AS INDICATED ON PLAN
- CONDUIT OR DUCTLINE, NEW
- CONDUIT OR DUCTLINE, EXISTING
- DUCTLINE INDICATOR. SEE DUCT SECTIONS
- NEW OR RELOCATED UTILITY POLE BY UTILITY CO.
- EXISTING UTILITY POLE TO REMAIN
- EXISTING UTILITY POLE TO BE REMOVED OR RELOCATED BY UTILITY CO.



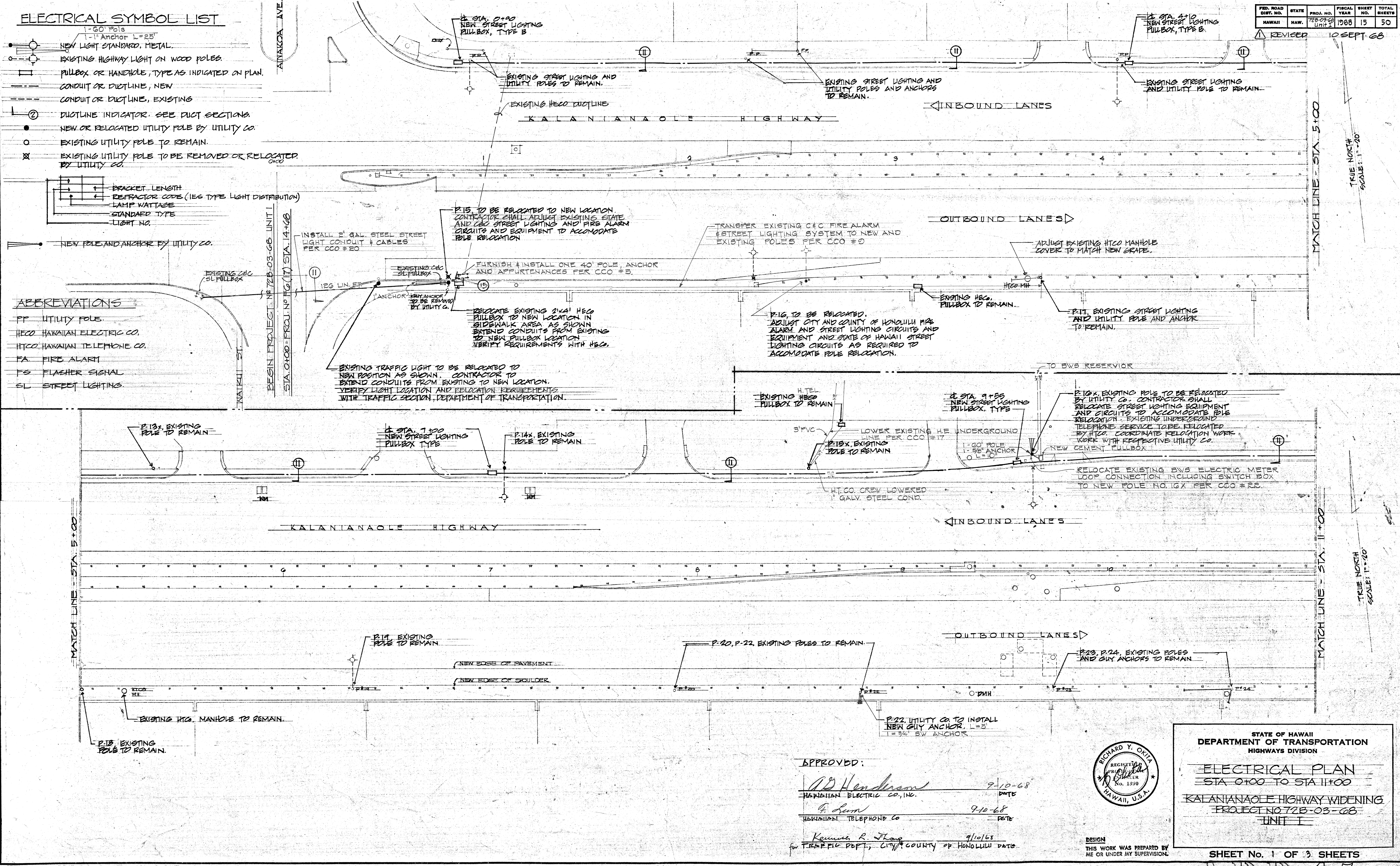
NEW POLE AND ANCHOR BY UTILITY CO.

ABBREVIATIONS

- PP UTILITY POLE
- HECO HAWAIIAN ELECTRIC CO.
- HTCO HAWAIIAN TELEPHONE CO.
- FA FIRE ALARM
- FS FLASHER SIGNAL
- SL STREET LIGHTING

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68	1968	15	50

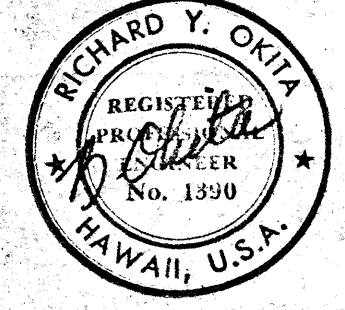
REVIEWED 10 SEPT 68



DATE	BY
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
DATE	

APPROVED:

Richard Y. Okita 9/10/68
HAWAIIAN ELECTRIC CO., INC. DATE
G. Lum 9/10/68
HAWAIIAN TELEPHONE CO. DATE
Kevin R. Long 9/10/68
FOR TRAFFIC DEPT., CITY & COUNTY OF HONOLULU DATE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL PLAN
STA 0+00 TO STA 11+00
KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO 72B-03-68
UNIT I

SHEET No. 1 OF 3 SHEETS

DESIGN
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

115

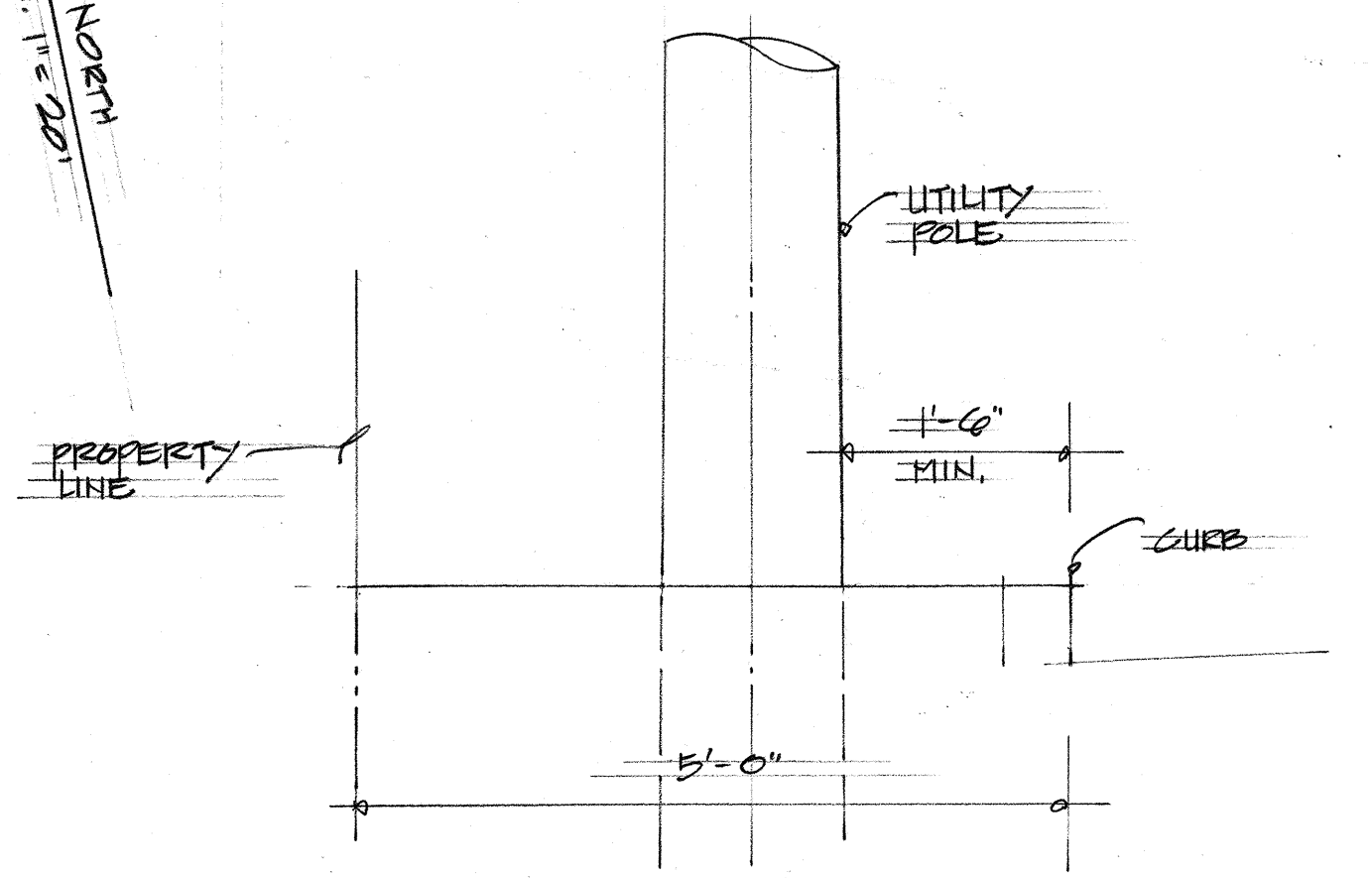
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68	1968	17	50

REVISD 10 SEPT 68

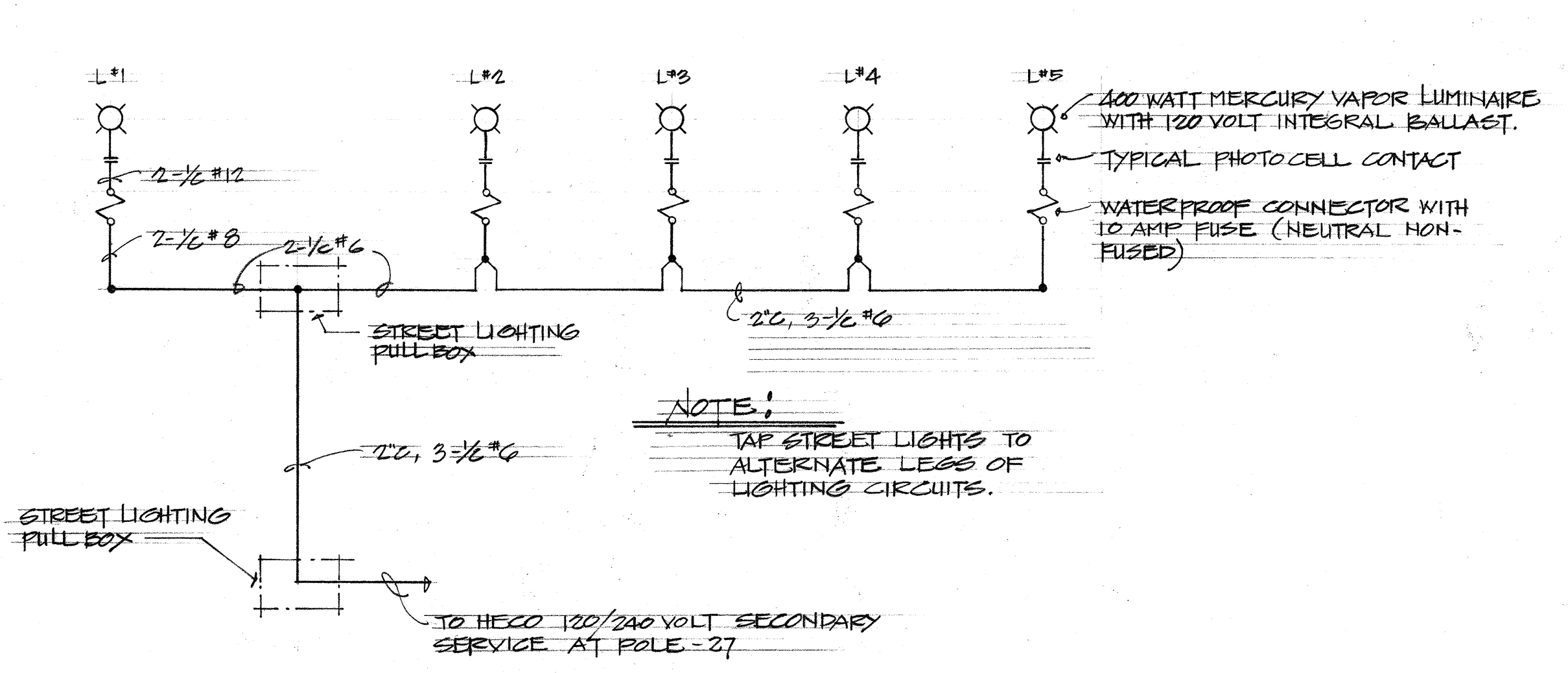
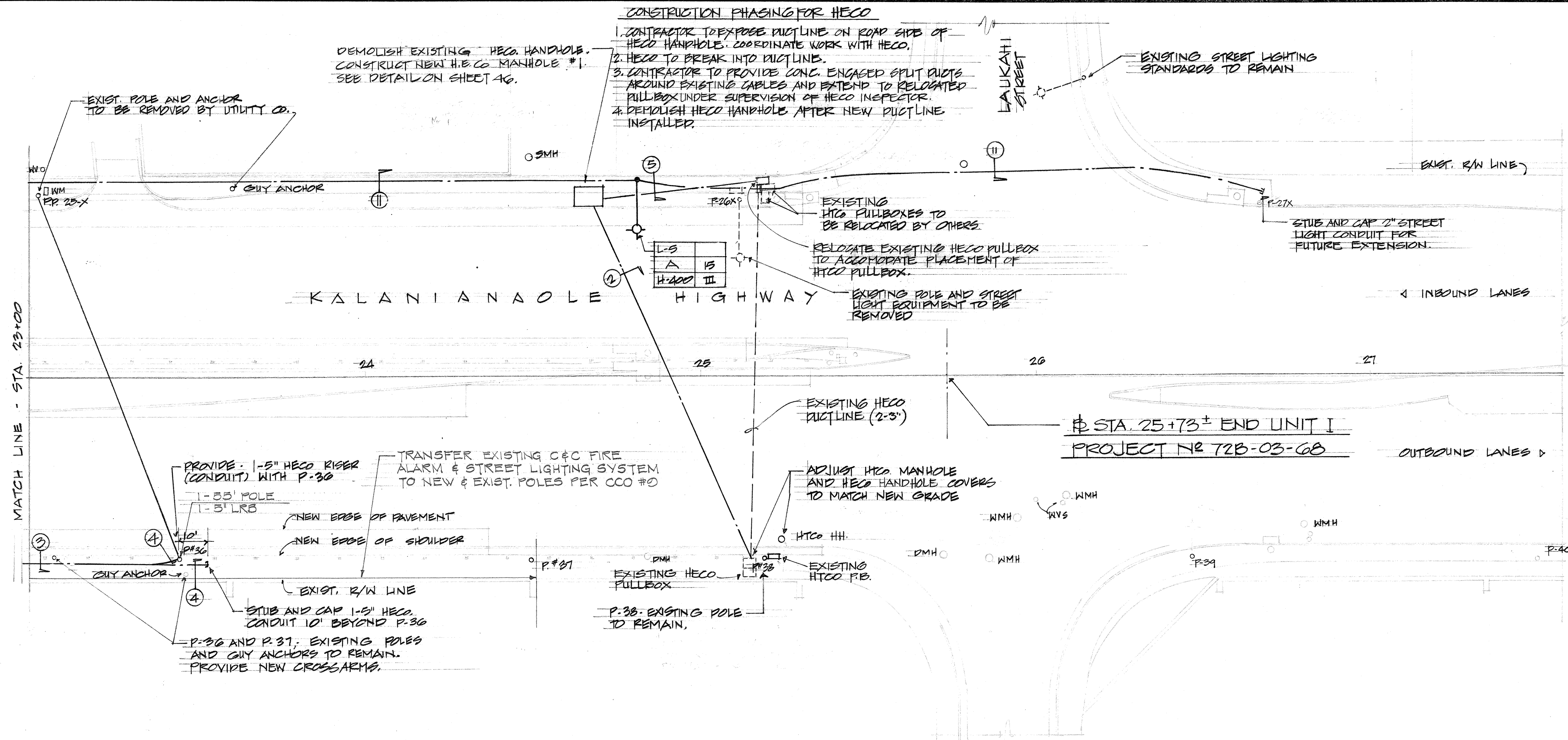
CITY AND COUNTY STREET LIGHTING AND FIRE ALARM NOTES:

1. THE CONTRACTOR SHALL NOTIFY THE STREET LIGHTING DESIGN SECTION, DEPT OF TRAFFIC, CITY & COUNTY OF HONOLULU, 72 HOURS IN ADVANCE BEFORE CONSTRUCTION WORKS. PHONE 5473-351
2. THE CONTRACTOR SHALL OBTAIN TRENCH EXCAVATION PERMIT FROM STATE HIGHWAY DIVISION.
3. THE STREET LIGHT AND FIRE ALARM CONDUIT SYSTEM SHALL COMPLY WITH RULES FOR CONSTRUCTION OF UNDERGROUND ELECTRIC AND COMMUNICATION SYSTEMS, GENERAL ORDER NO. 12, PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII.

TRUE NORTH
SCALE 1"=20'

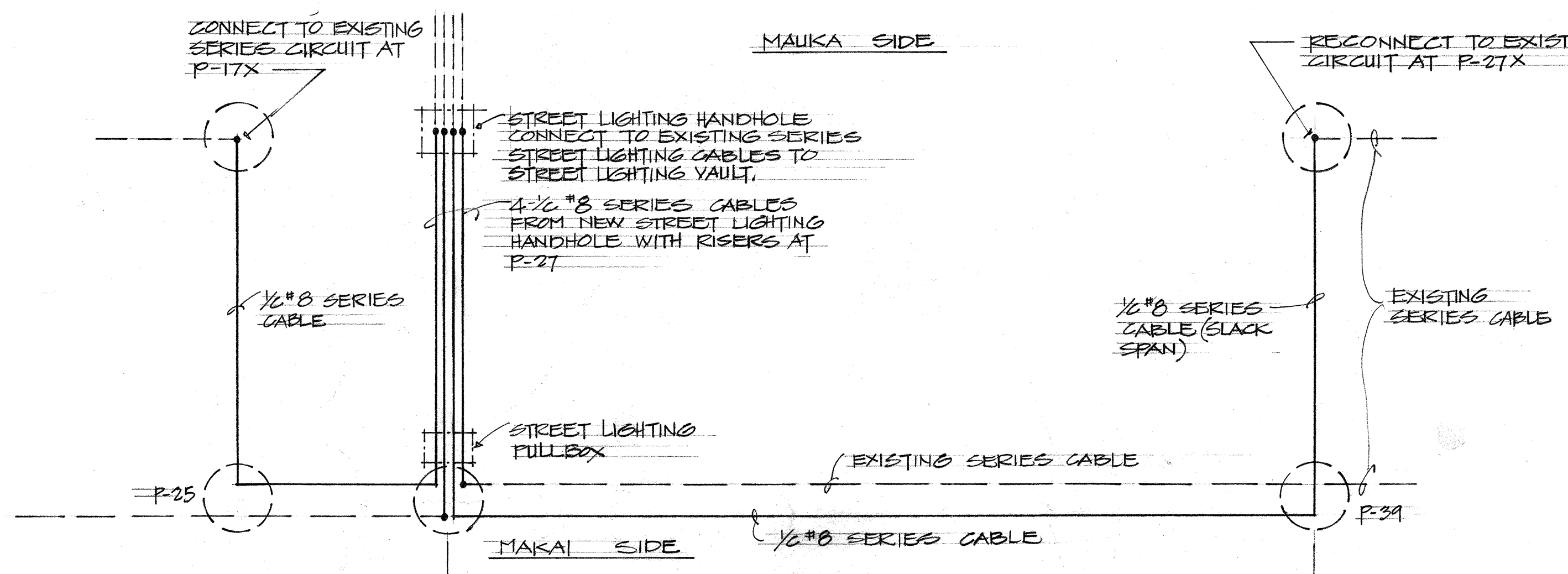


TYPICAL UTILITY POLE LOCATION IN SIDEWALK AREA
NOT TO SCALE



NOTE:
TAP STREET LIGHTS TO ALTERNATE LEGS OF LIGHTING CIRCUITS.

ONE LINE DIAGRAM
MULTIPLE STREET LIGHTING SYSTEM
L#1 TO L#5



- NOTE:
1. RELOCATE ONE SERIES CABLE FROM MAUKA TO MAKAI SIDE OF KALANIANA'OLE HIGHWAY BETWEEN P-25 AND P-34.
 2. PROVIDE NEW CROSSARMS, CABLES, INSULATIONS AND ACCESSORIES AS REQUIRED TO COMPLETE RELOCATION AND KEEP SYSTEM OPERATIONAL.
 3. PRIMARY ELEC. CIRCUITS ON SAME CROSS ARM SHALL BE RELOCATED BY HECO.
 4. PROVIDE NEW CROSSARM AND INSULATORS FOR P-26, P-27, P-34 AND P-36. SEE SHEET 41 FOR CROSSARM DETAIL.
 5. PROVIDE ADDITIONAL INSULATORS AND ACCESSORIES AS REQUIRES FOR P-25, P-28, P-33, P-35, P-37, P-39 TO ACCOMMODATE RELOCATION OF CIRCUIT FROM MAUKA TO MAKAI SIDE OF HIGHWAY.

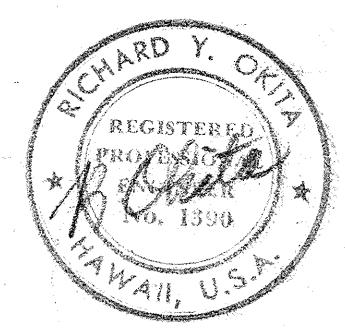
ONE LINE DIAGRAM - RELOCATION OF
EXISTING STATE OF HAWAII SERIES LIGHTING CIRCUITS

APPROVED:

O. Henderson 9-10-68
HAWAIIAN ELECTRIC CO., INC. DATE

P. Lum 9-10-68
HAWAIIAN TELEPHONE CO. DATE

Kenneth P. Thong 9/10/68
TRAFFIC DEPT., CITY & COUNTY OF HONOLULU DATE



DESIGN
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL PLAN
STA 23+00 TO STA 25+73
KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72B-03-68
UNIT I

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