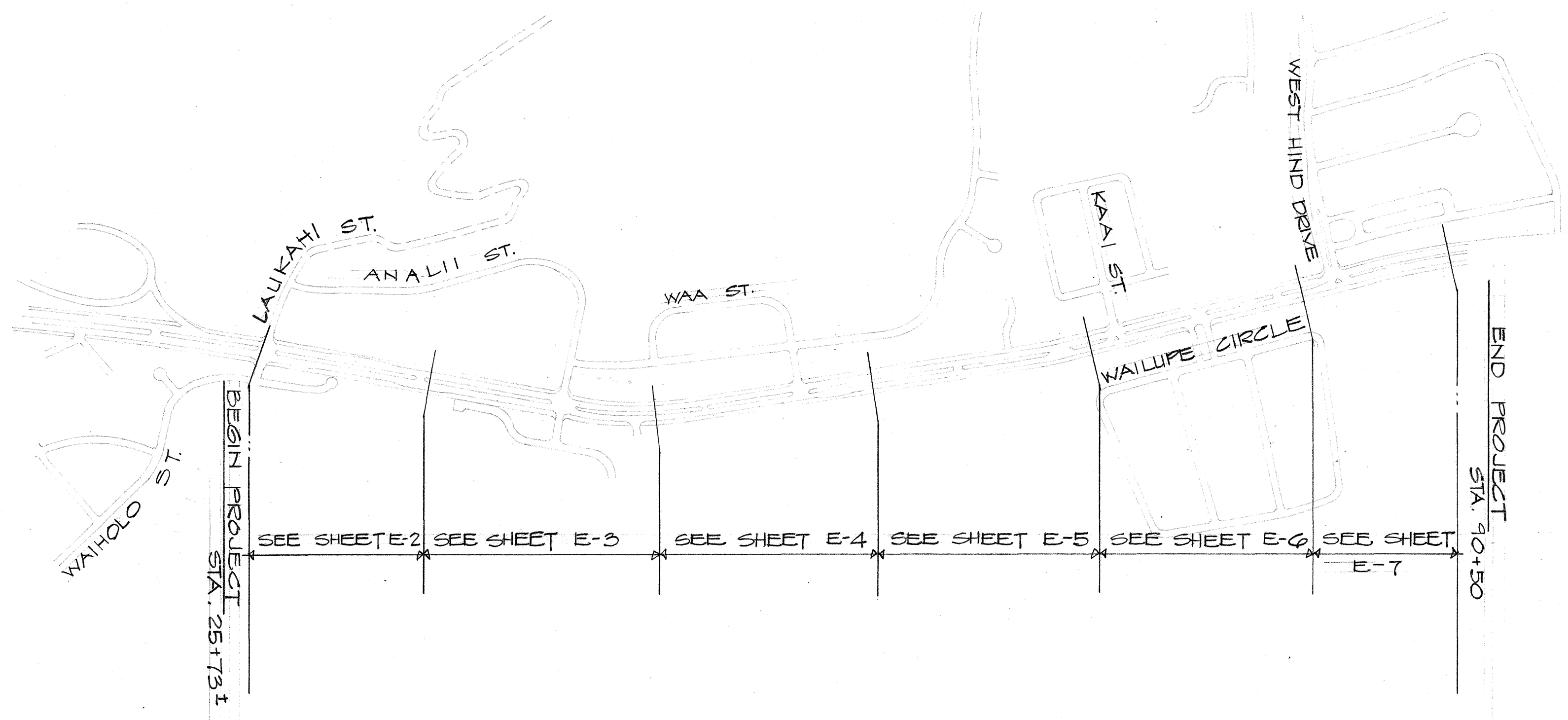




ELECTRICAL SYMBOL LIST

- 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
 - ② DUCTLINE INDICATOR. SEE DUCT SECTIONS
 - NEW OR RELOCATE UTILITY POLE BY UTILITY CO.
 - EXISTING UTILITY POLE TO REMAIN
 - ⊗ EXISTING UTILITY POLE TO BE REMOVED OR RELOCATED BY UTILITY CO.
-
- | | |
|---|--|
| ↑ | BRACKET LENGTH |
| → | REFRACTOR CODE (IES TYPE LIGHT DISTRIBUTION) |
| ↑ | LAMP WATTAGE |
| ↑ | STANDARD TYPE |
| ↑ | LIGHT NO. |
-
- 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

NOTES

1. CONTRACTOR SHALL REMOVE AND SALVAGE EXISTING STREET LIGHTING POLE AND EQUIPMENT. ALL SALVAGED EQUIPMENT SHALL BE DELIVERED AS DIRECTED BY ENGINEER.
2. EXISTING POLE TO BE RELOCATED BY UTILITY CO. CONTRACTOR SHALL ADJUST STATE OF HAWAII AND CITY AND COUNTY OF HONOLULU STREET LIGHTING AND FIRE ALARM EQUIPMENT TO ACCOMMODATE RELOCATION.
3. CONTRACTOR SHALL RELOCATE EXISTING HAWAIIAN ELECTRIC CO. OR HAWAIIAN TELEPHONE CO. HANDHOLE TO NEW SHOULDER AREA AND EXTEND CONDUITS AS REQUIRED BY HECO OR HTCO TO ACCOMMODATE RELOCATION. CABLE RELOCATION AND RECONNECTION SHALL ALSO BE COORDINATED WITH HECO OR HTCO.
4. EXISTING STREET LIGHTING STANDARD SHALL REMAIN.
5. CONTRACTOR SHALL ADJUST EXISTING HAWAIIAN TELEPHONE CO. MANHOLE FRAME AND COVER TO MATCH NEW GRADE.
6. EXISTING STATE OF HAWAII SERIES STREET LIGHTING EQUIPMENT ON MAUKA SIDE OF HIGHWAY SHALL BE RELOCATED TO MAKAI SIDE. SEE ONE LINE DIAGRAM FOR EXTENT OF RELOCATION REQUIREMENTS.
7. EXISTING POLE AND/OR ANCHOR SHALL BE REMOVED BY THE UTILITY CO. CONTRACTOR TO COORDINATE REMOVAL WITH UTILITY CO.
8. PROVIDE HECO AND HTCO CONDUIT RISERS AT EXISTING OR RELOCATED POLE. ARRANGE FOR RECONNECTION OF EXISTING OVERHEAD HOUSE SERVICE WITH RESPECTIVE UTILITY COMPANIES.
9. EXISTING TRAFFIC SIGNAL STANDARD SHALL BE RELOCATED AS SHOWN. CONTRACTOR TO PROVIDE ALL EXCAVATING, BACKFILLING CONCRETE AND RACEWAYS FOR RELOCATION OF STANDARDS AND CIRCUITS. RECONNECT CIRCUITS AS REQUIRED TO MAKE TRAFFIC SIGNAL SYSTEM OPERATIONAL.
10. POLE OFFSET (7' SIDEWALK) 3'-0" FROM FACE OF CURB TO 4" OF POLE (5' SIDEWALK) 1'-6" FROM FACE OF CURB TO FACE OF POLE.

11. EXERCISE EXTREME CAUTION WHEN BREAKING INTO EXISTING HT. CO. MANHOLES. COORDINATE WORK WITH HT. CO. PLANT INSPECTOR. PHONE NR 7376-300.
12. CONTRACTOR SHALL RELOCATE STREET LIGHTING AND FIRE ALARM CIRCUITS ON MAKAI SIDE FROM P-80 TO P-81 FROM OVERHEAD TO UNDERGROUND. NEW SYSTEMS SHALL BE RECONNECTED AND MADE OPERATIONAL BEFORE OVERHEAD IS REMOVED. COORDINATE WORK WITH RESPECTIVE AGENCY CONCERNED.
13. DRAWINGS ISSUED BY UTILITY COMPANIES SHALL BE CONSIDERED AS PART OF DOCUMENTS FOR THIS PROJECT.

APPROVED BY

[Signature] 1/22/68
HAWAIIAN ELECTRIC CO., INC. DATE

[Signature] 12/24/68
HAWAIIAN TELEPHONE CO. DATE

[Signature] 1/26/68
TRAFFIC ENGR., DEPT. OF TRAFFIC DATE



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

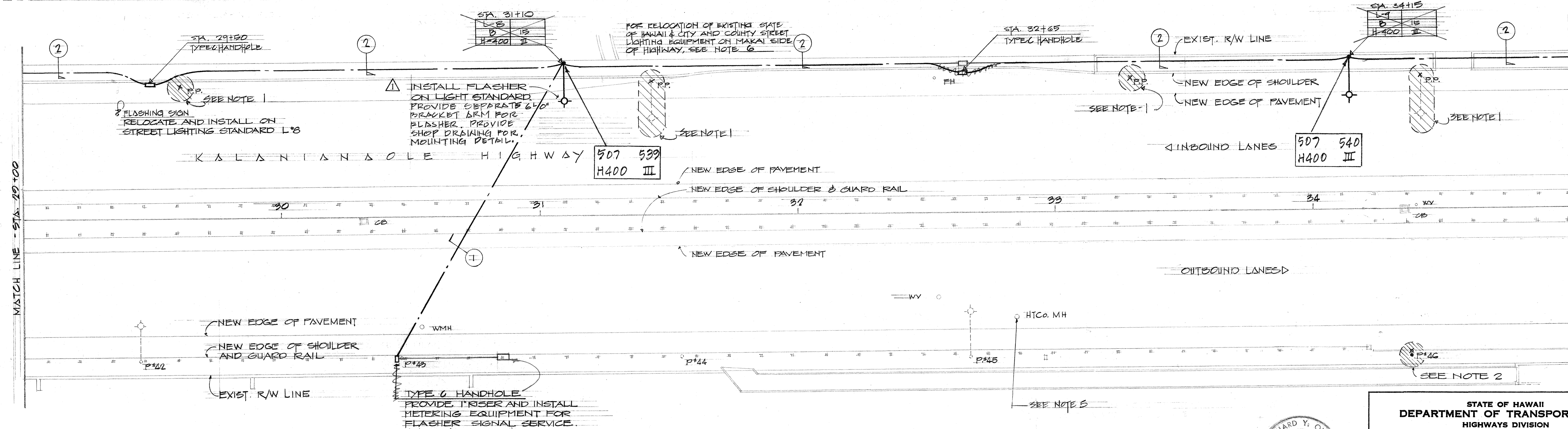
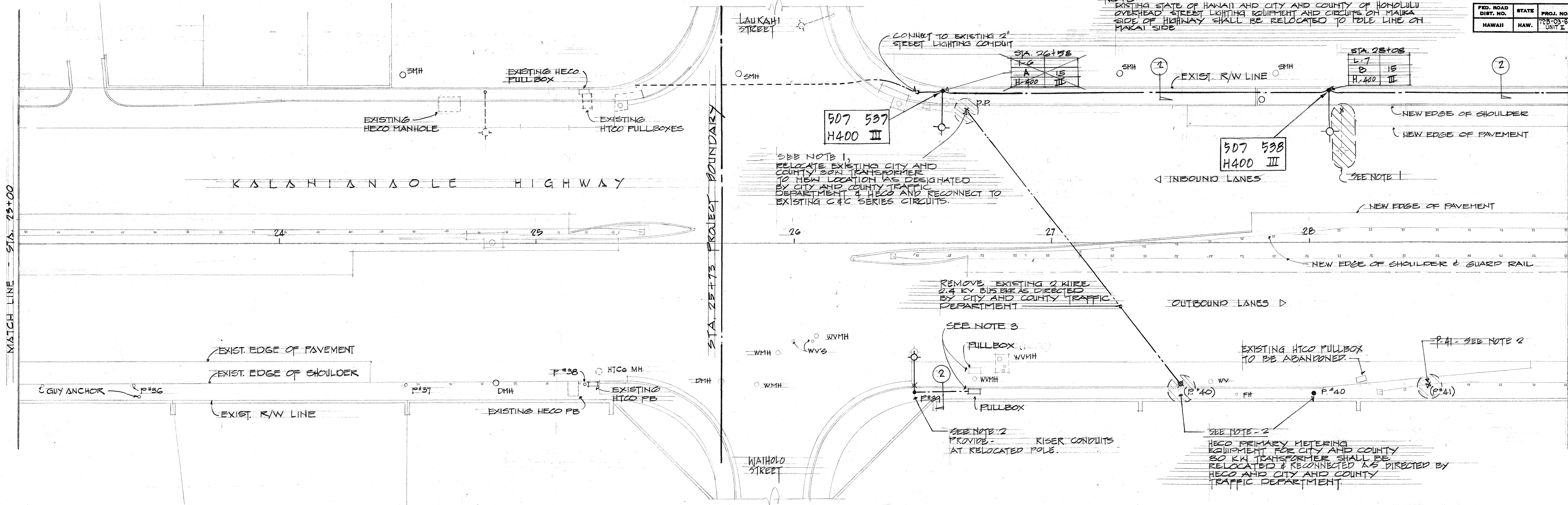
SHEET LAYOUT

**KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72B-03-68
UNIT II**

DATE
DESIGNED BY
CHECKED BY
ORIGINAL PLAN
NOTE BOOK
No.

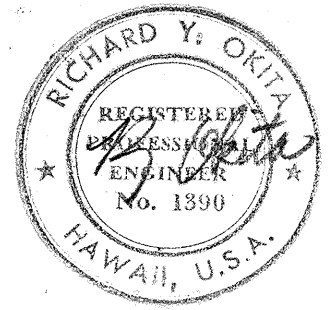
DD-D-5-6

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68 UNIT II	1968	27A	71



ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

APPROVED BY
[Signature] 1/24/68
 HAWAIIAN ELECTRIC CO., INC. DATE
[Signature] 12/24/68
 HAWAIIAN TELEPHONE CO. DATE
[Signature] 11/24/68
 TRAFFIC ENG. DEPT. OF TRAFFIC DATE



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

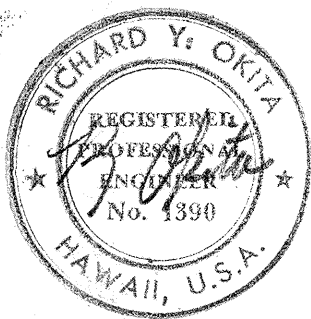
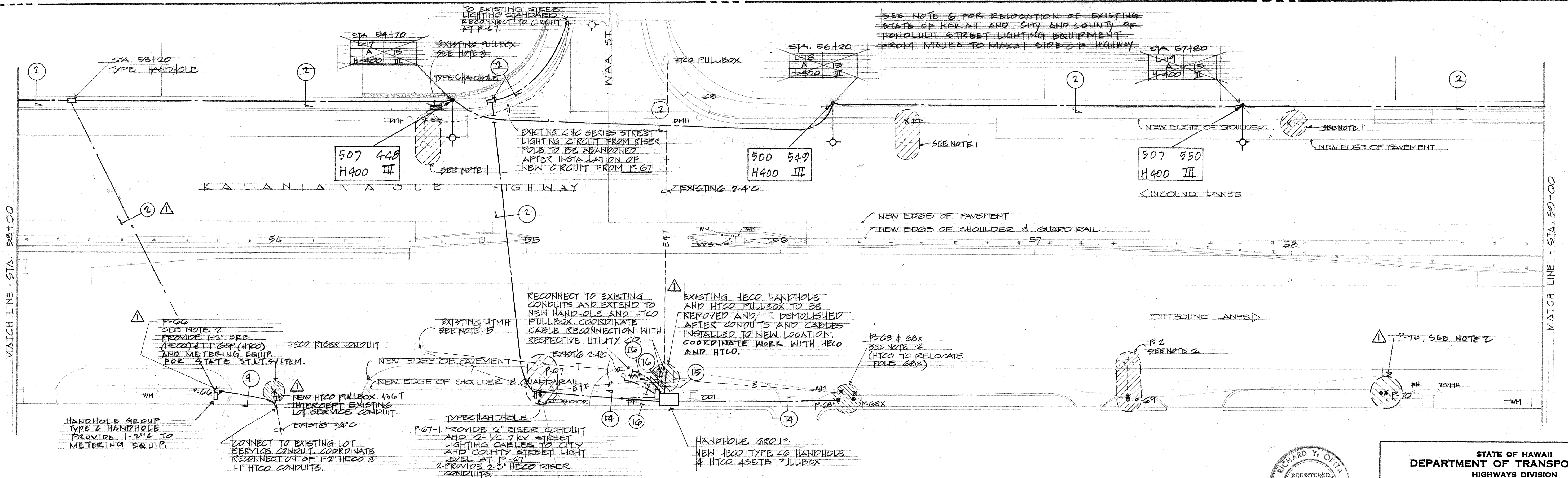
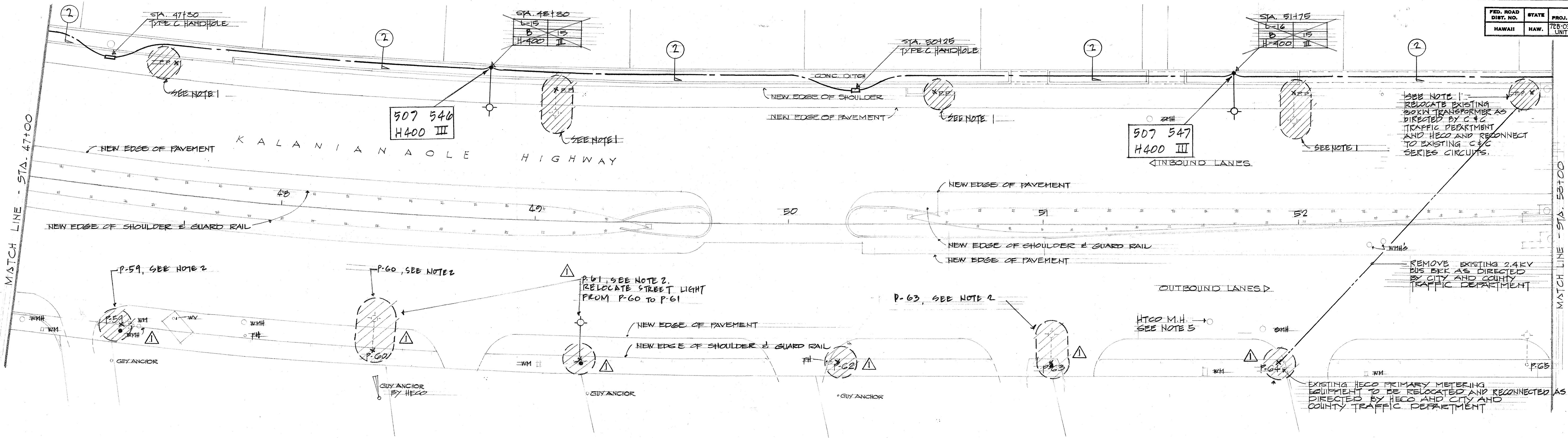
ELECTRICAL PLAN
 STA. 23+00 TO 35+00

KALANIANAʻOLE HIGHWAY WIDENING
 PROJECT NO. 72 B-03-68
 UNIT II

SHEET No. 2 OF 7 SHEETS

(C) (M) 27A

PRD. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68 UNIT II	1968	29A	71



APPROVED BY
[Signature] 1/20/69
HAWAIIAN ELECTRIC CO. INC. DATE
[Signature] 12/24/68
HAWAIIAN TELEPHONE CO. DATE
[Signature] 11/26/68
TRAFFIC ENGINEER DEPT. OF TRAFFIC DATE

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

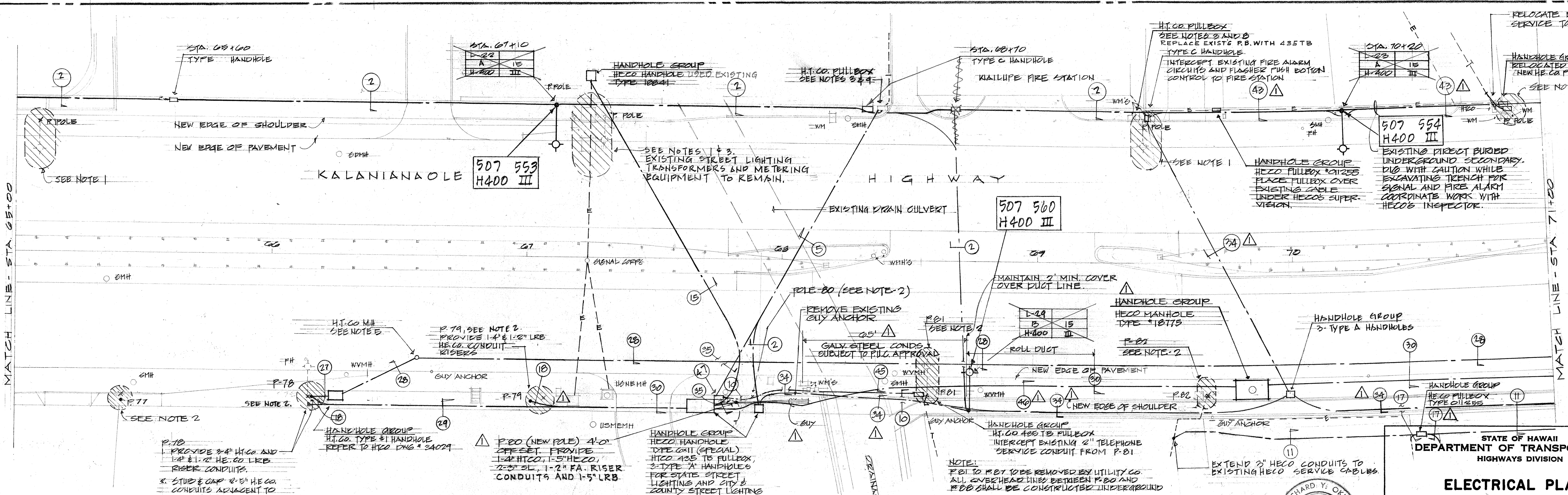
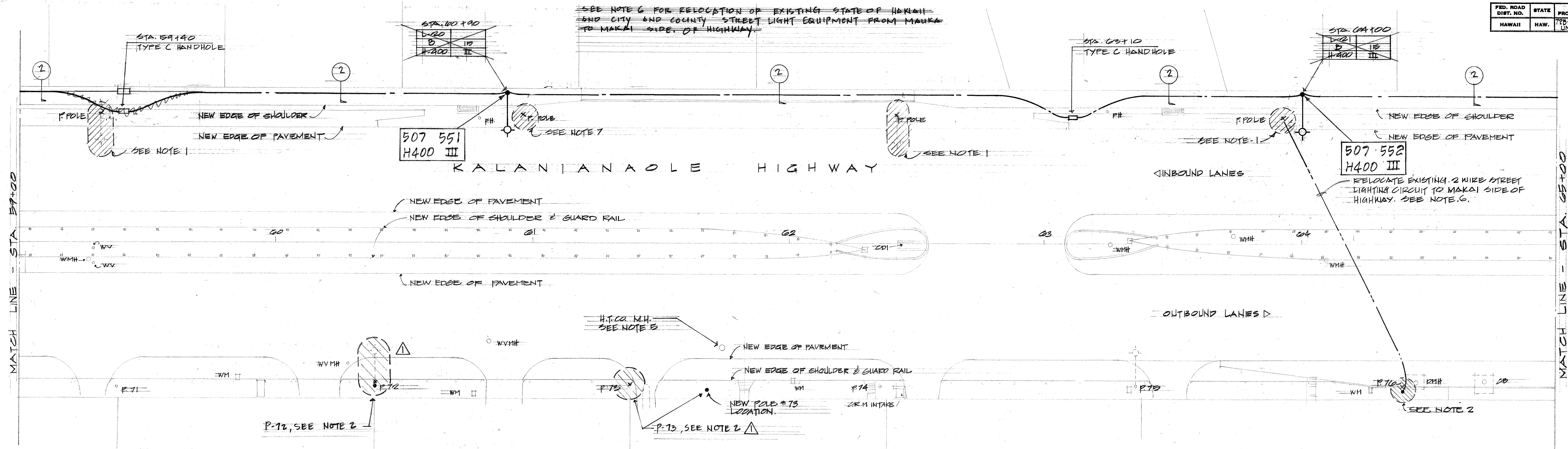
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELECTRICAL PLAN
STA. 47+00 TO 59+00
KALANIANAʻOLE HIGHWAY WIDENING
PROJECT NO. 72B-03-68
UNIT II

SHEET No. 4 OF 7 SHEETS

29A

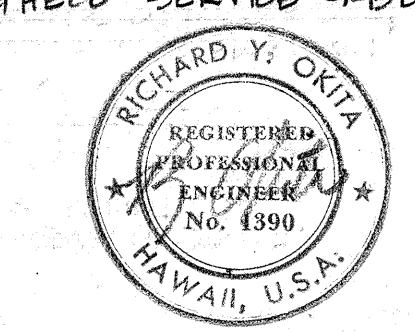
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68 UNIT II	1968	30A	71



DATE	...
DESIGNED BY	...
DRAWN BY	...
CHECKED BY	...
NOTED BY	...
NO.	...

NOTE: P.O. 1 TO P.O. 10 BE REMOVED BY UTILITY CO. ALL OVERHEAD LINES BETWEEN P.O. 0 AND P.O. 8 SHALL BE CONSTRUCTED UNDERGROUND.

APPROVED BY
[Signature]
 HAWAIIAN TELEPHONE CO. INC. DATE 1/26/69
[Signature]
 HAWAIIAN TELEPHONE CO. DATE 12/24/68
[Signature]
 HAWAIIAN TELEPHONE CO. DATE 11/26/68
 TRAFFIC ENGR. DEPT. OF TRAFFIC DATE



STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

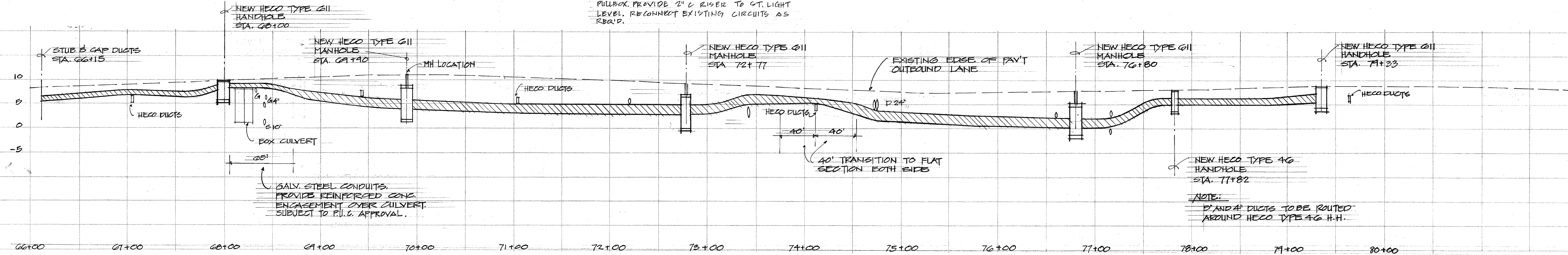
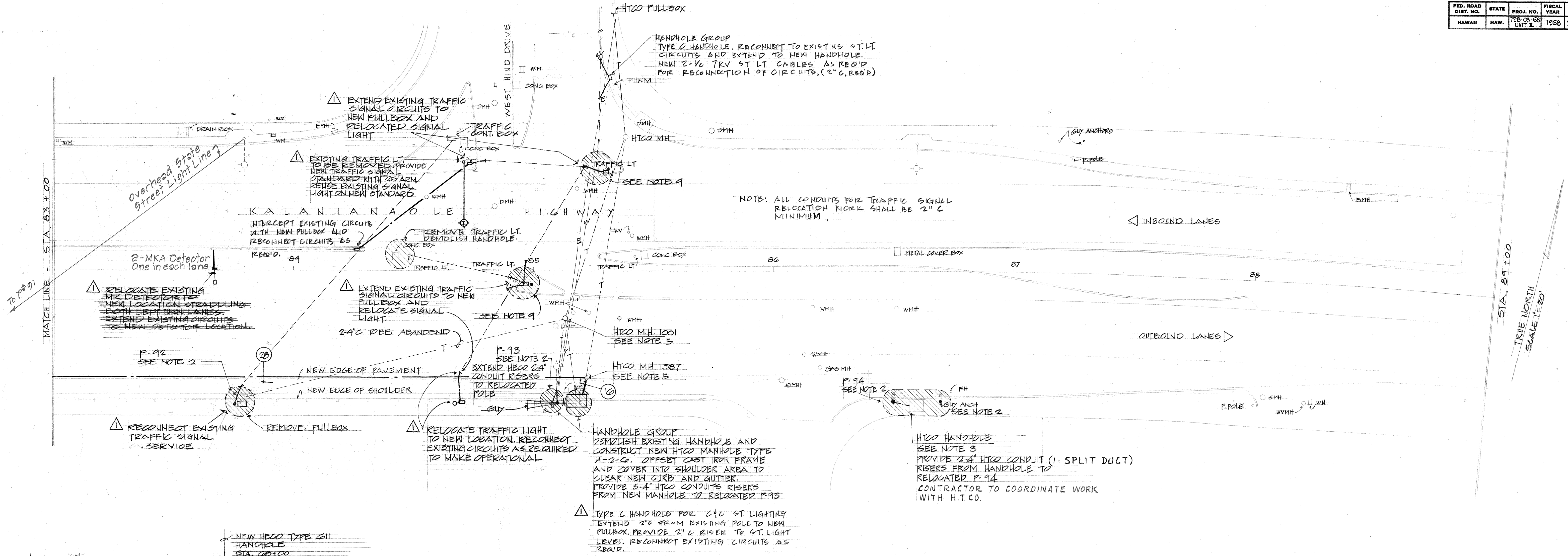
ELECTRICAL PLAN
 STA. 59+00 TO 71+00

KALANIANA'OLE HIGHWAY WIDENING
 PROJECT NO. 72B-03-68
 UNIT II

SHEET No. 5 OF 7 SHEETS

30A

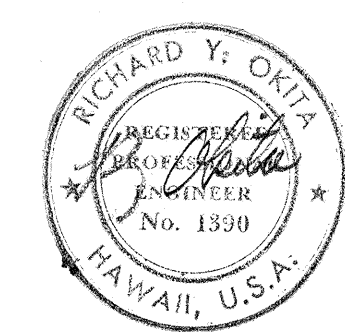
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	72B-03-68 UNIT II	1968	32A	71



PROFILE (HECO)
 SCALE:
 HORIZONTAL: 1"=50'
 VERTICAL: 1"=10'

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
APPROVED BY	
DATE	

APPROVED BY
[Signature] 1/22/69
 HAWAIIAN ELECTRIC CO. INC. DATE
[Signature] 12/24/68
 HAWAIIAN TELEPHONE CO. DATE
[Signature] 11/26/68
 TRAFFIC ENGR. DEPT. OF TRAFFIC DATE



DESIGN
 THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
ELECTRICAL PLAN
STA. 83+00 TO 89+00
KALANIANA'OLE HIGHWAY WIDENING
PROJECT NO. 72B-03-68
UNIT II