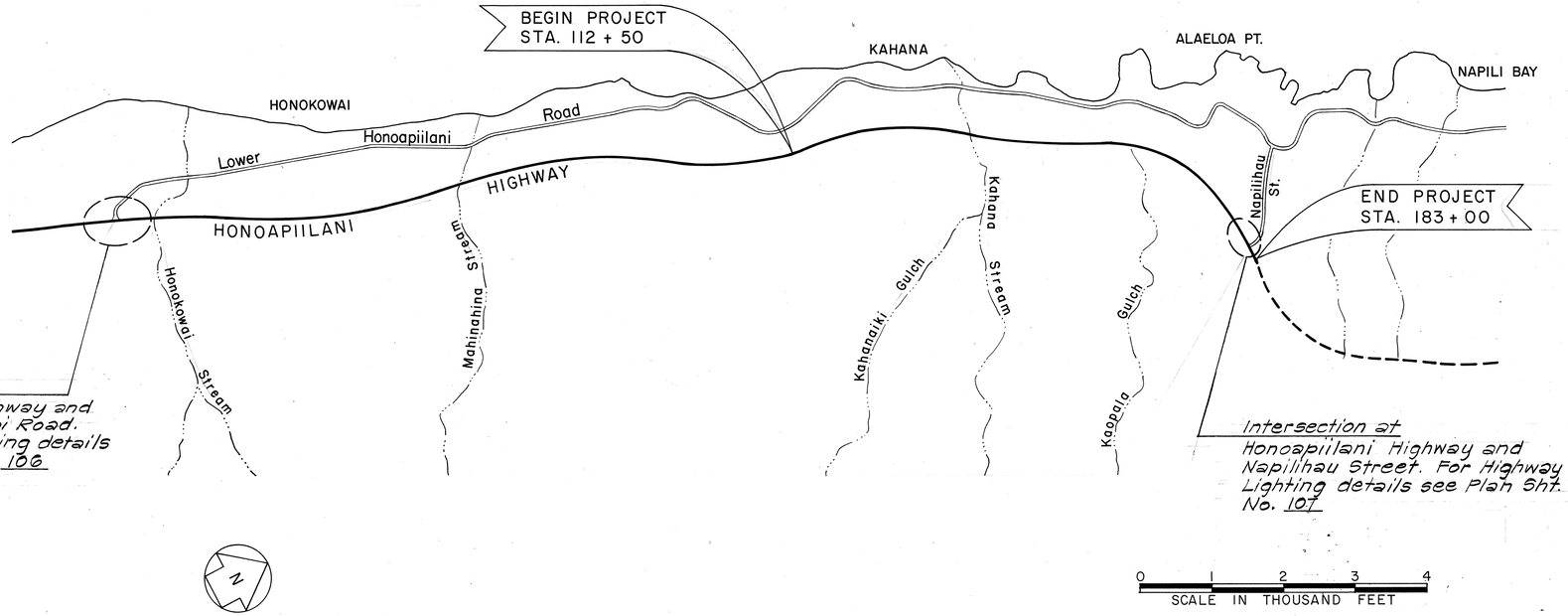
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F030-1(13)	1978	105	174



ORIGINAL PLAN

NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

INTERSECTION LIGHTING LOCATIONS

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. Proj. No. F-030-1(13)

Scale: As Shown Date: Feb., 1978

SHEET No. 1 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	106	174

APPROVED BY:

MAUI ELECTRIC CO. — DATE 9/28/78

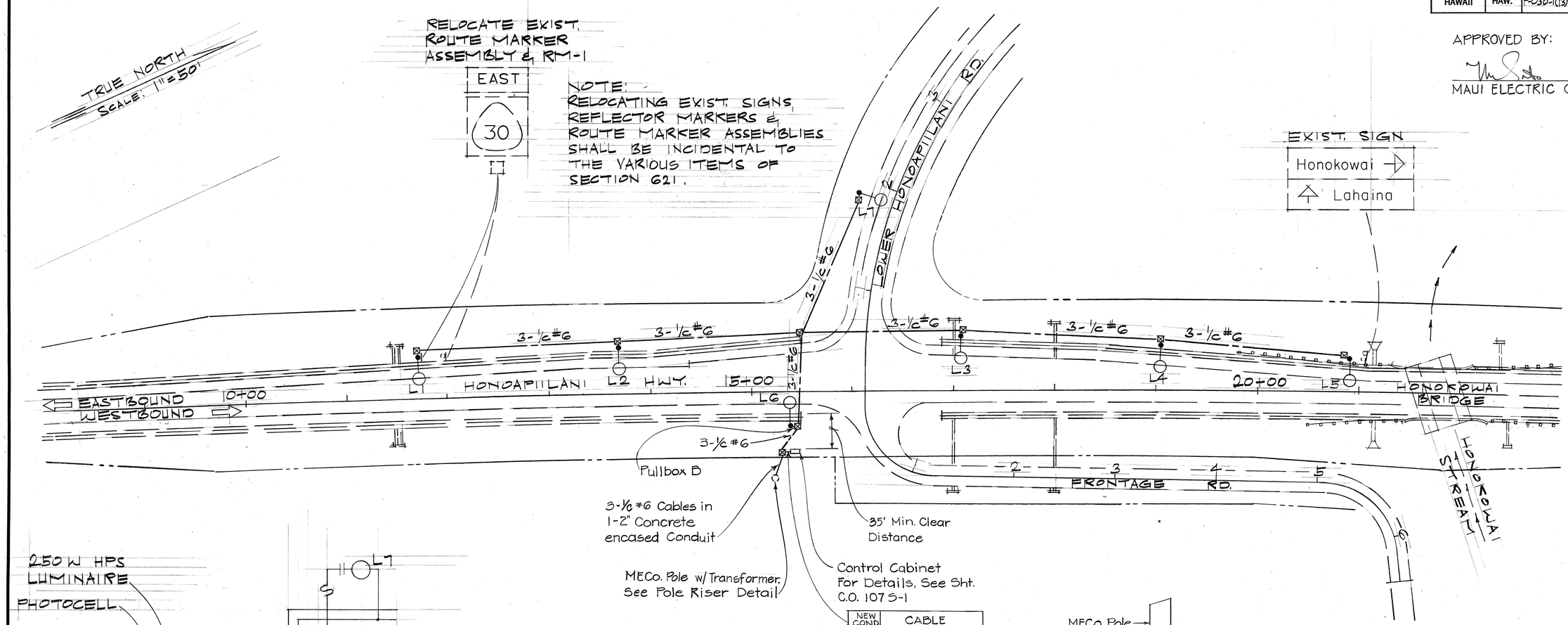
TRUE NORTH
SCALE: 1" = 50'

RELOCATE EXIST. ROUTE MARKER ASSEMBLY & RM-1

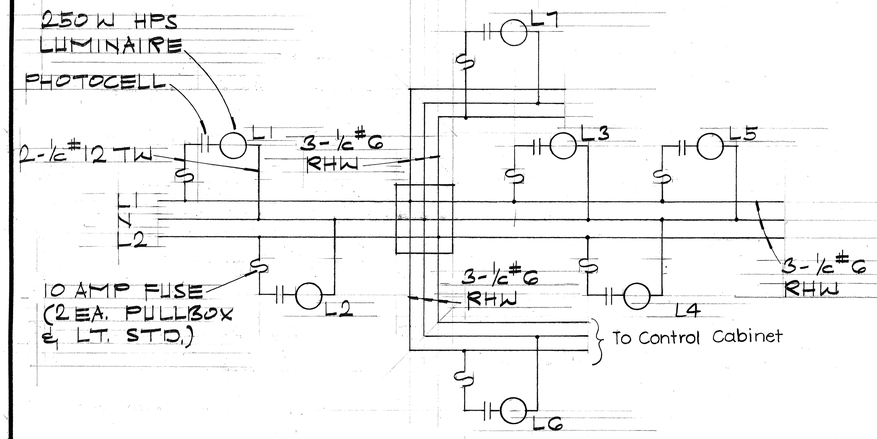
EAST
30

NOTE:
RELOCATING EXIST. SIGNS, REFLECTOR MARKERS & ROUTE MARKER ASSEMBLIES SHALL BE INCIDENTAL TO THE VARIOUS ITEMS OF SECTION 621.

EXIST. SIGN
Honokowai
Lahaina

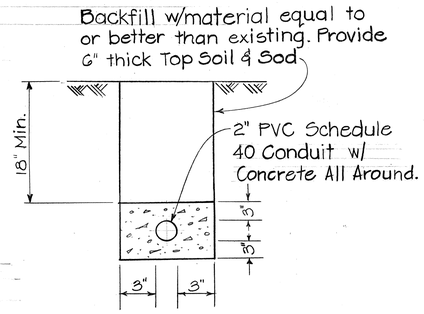


NEW COND	CABLE
2"	3-1/c #6
2"	3-1/c #6
2"	Spare w/Pull Wire



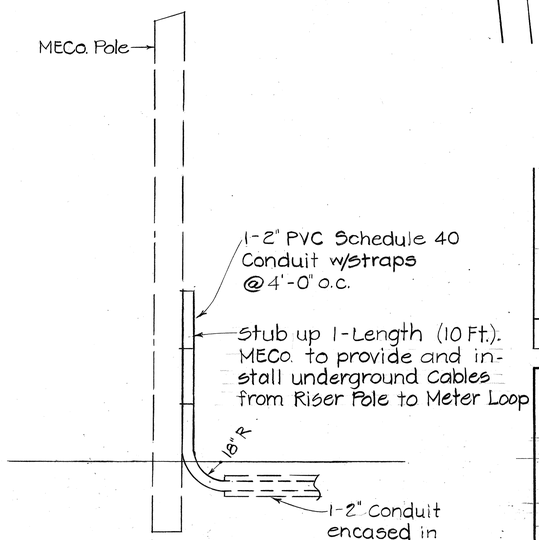
STREET LIGHT WIRING DIAGRAM AT LOWER HONOAPIILANI ROAD

NOT TO SCALE



CONCRETE ENCASED DUCTLINE DETAIL

Not to Scale



DATE	REVISION
8/24/78	Show power connection & details. Draw conduits to conform to legend.

ORIGINAL PLAN
NOTE BOOK
No.

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

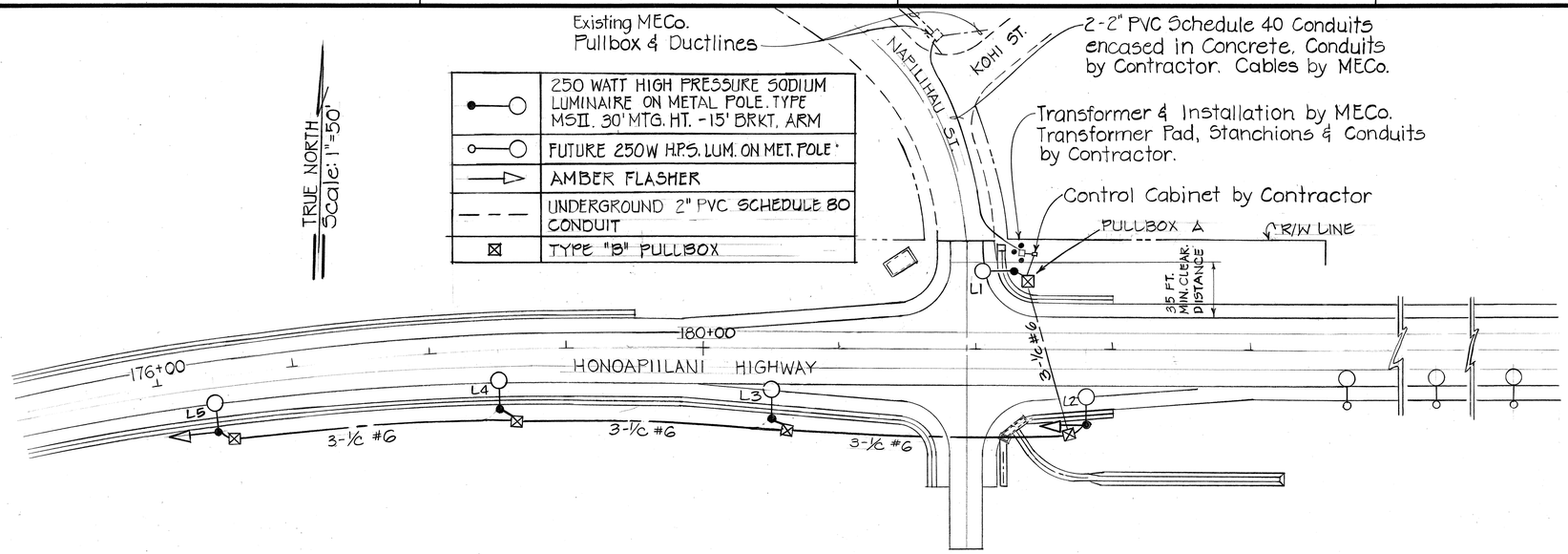
HIGHWAY LIGHTING

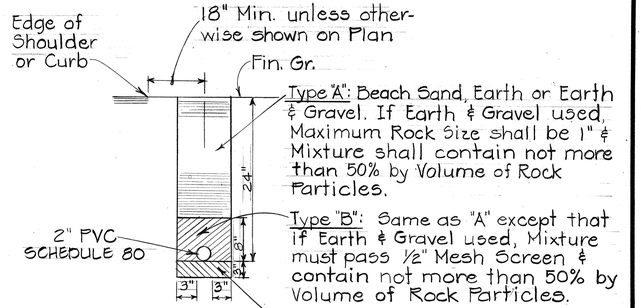
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. NO. F-030-1(13)
SCALE: AS SHOWN FEB. 1978

SHEET No. 2 OF 5 SHEETS

C. O. 106

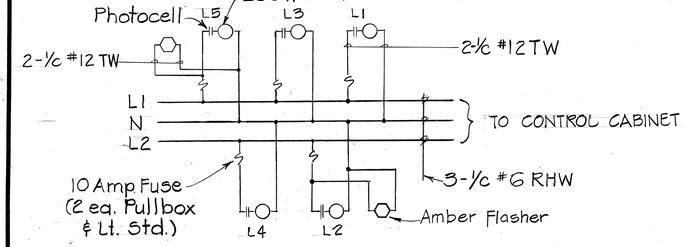
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	107	174





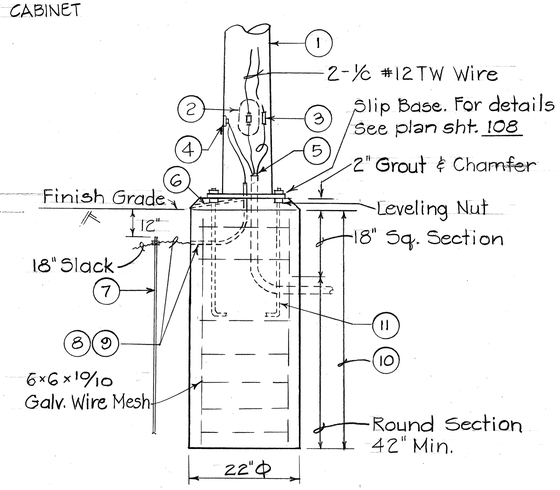
TYPICAL DUCT SECTION

N.T.S.



STREET LIGHT WIRING DIAGRAM AT NAPILIHAU STREET

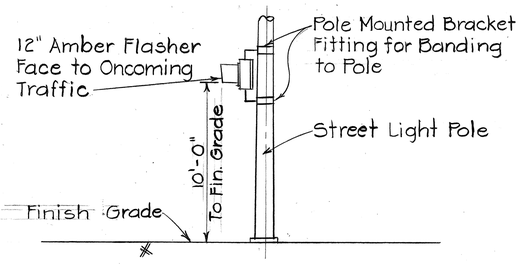
N.T.S.



ELEVATION

HWY. LT. ANCHOR BASE DETAIL

N.T.S.

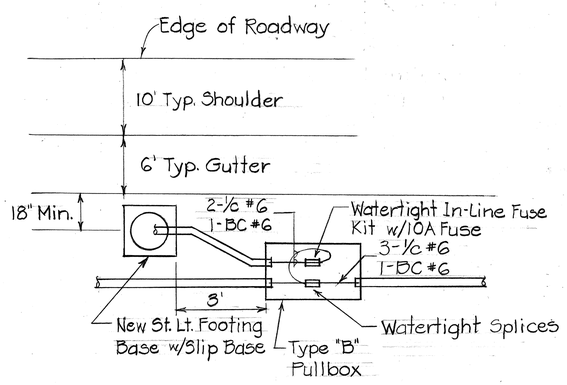


AMBER FLASHER DETAIL ON HWY. LIGHT. STANDARD

N.T.S.

MATERIAL LIST:

1. Pole Shaft 30' Luminaire Mounting Height.
2. Handhole
3. Watertight In-Line Molded Fuse Connector w/10A Fuse. Split Bolt Connector for Neutral Line.
4. Grounding Lug
5. Conduit Duct Seal
6. 1/2" Φ Weephole
7. 5/8" Φ x 10' Grd. Rod. Obtain 25Ω Resist.
8. 1/2" Φ Conduit Sleeve
9. Provide 1 #6 Grd. Wire in addition to CKT Cables & Bond all Ground Rods at Street Lights. (Costs shall be incidental to Highway Lighting Cable).
10. Concrete Base Depth shall be 5'.
11. 3-7/8" Φ x 40" L Galv. Anchor Bolt.



PLAN VIEW OF WIRING IN PULLBOX

N.T.S.

DATE	REVISION
8/24/78	Power Source & Distribution System Location shown. Signature by MECo.

APPROVED BY:

MAUI ELECTRIC CO.

9/28/78
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

HIGHWAY LIGHTING DETAIL

HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA

F.A. PROJ. NO. F-030-1(13)

Scale: As Shown Oct. 1977

SHEET No. 3 OF 5 SHEETS

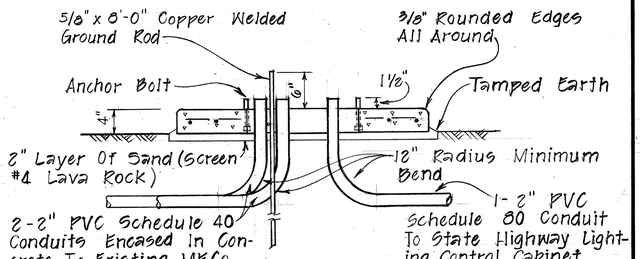
C.O. 107

ORIGINAL PLAN
NOTE BOOK
No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

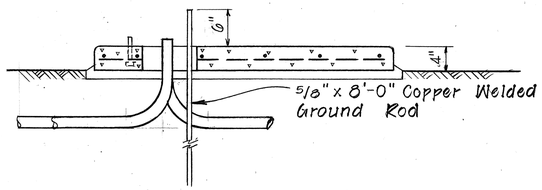
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1979	C0107 S-1	174

HIGHWAY LIGHTING NOTES:

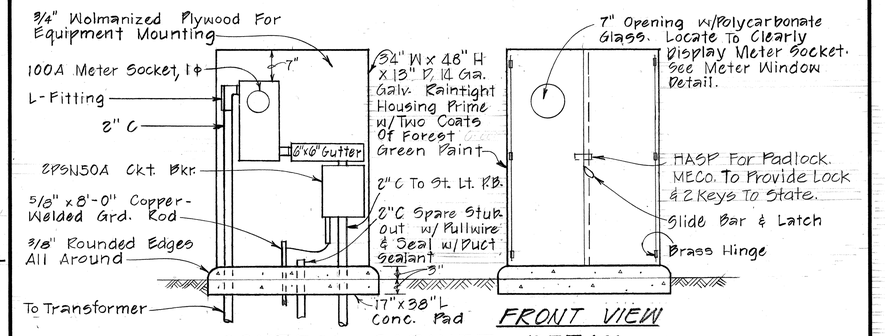
1. For Transformer Pad:
   a. Construct on firm undisturbed ground.
   b. Top of concrete pad to be smooth, true and level. Other exposed surfaces to be smooth and free from defects.
   c. Contractor to confirm with MECo. the location of conduit stubouts and anchor bolts to suit equipment to be furnished and installed by MECo.
   d. MECo. shall have 24-hour access to the pad installation without going through locked areas. MECo. shall have a minimum 10-foot wide vehicular access to the pad installation.
2. The Contractor shall contact and give MECo. at least 5-working days notice prior to doing any work requiring their services.
3. All equipment shall be of the type approved for use by local utility companies.
4. Location of existing utility lines are approximate only. The Contractor shall verify location and condition of all utilities to be affected.
5. For conduits carrying MECo. cables, minimum radius bends shall be 20'-0" unless noted otherwise on plans.



SECTION "A-A"

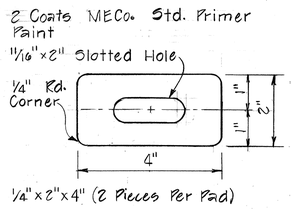


SECTION "B-B"



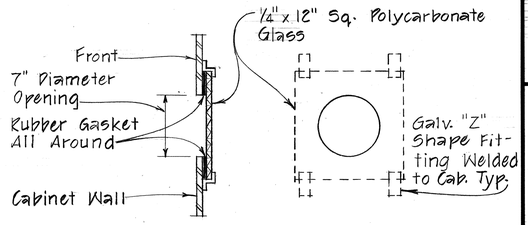
CONTROL CABINET DETAIL

Not to Scale



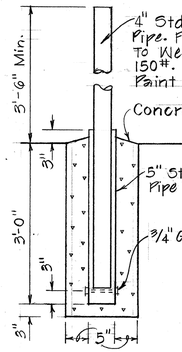
ANCHOR CLIP

Not to Scale



METER WINDOW DETAIL

Not to Scale



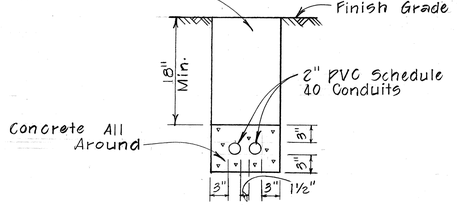
STANCHION DETAIL

Not to Scale

If Grassed Area, Provide 6" Thick Top Soil & Sod

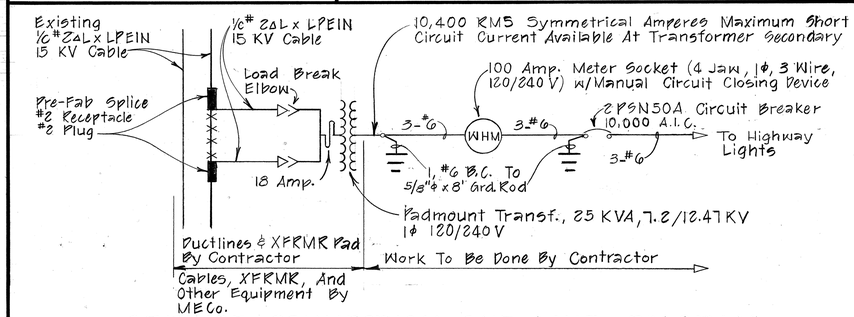
If Paved Area, Reconstruct Pavement Equal to, or Better Than Existing, Topping With 2"-Asphalt Concrete Mix V, Hot Mix.

If Sidewalk Area, Reconstruct Equal To Or Better Than Existing



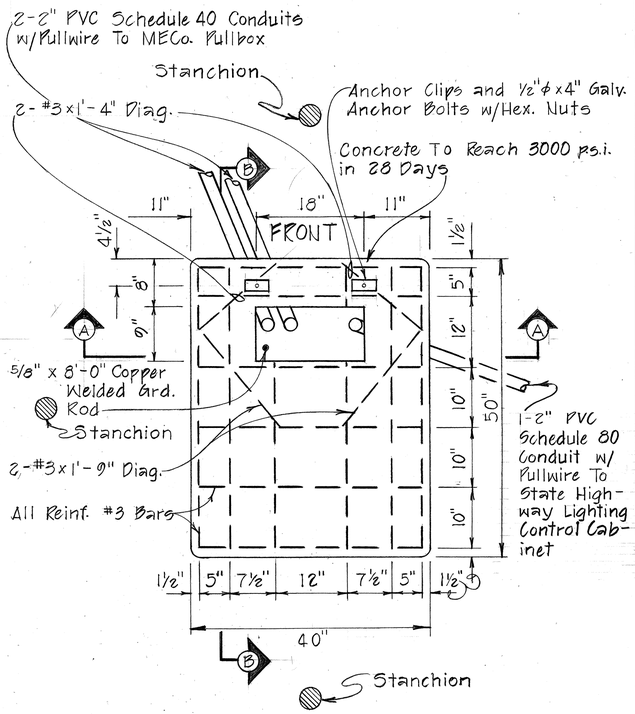
CONCRETE ENCASED DUCTLINE DETAIL

Not to Scale



SERVICE CONNECTION ONE-LINE DIAGRAM

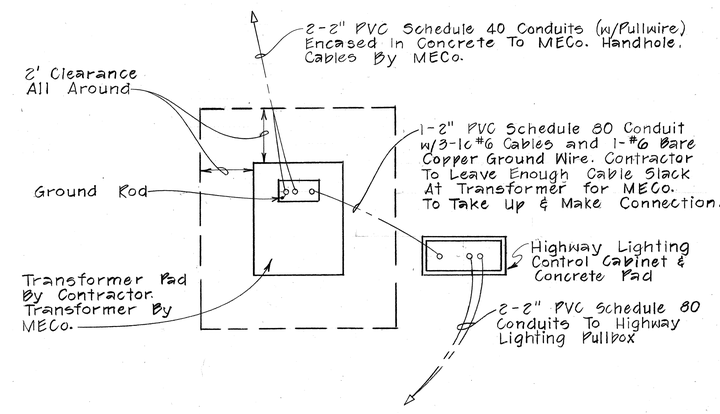
Not to Scale



PLAN VIEW

CONCRETE PAD FOR MECo. TRANSFORMER

Not to Scale



TRANSFORMER PAD & CONTROL CABINET LAYOUT PAD

Scale: 3/8"=1'-0"

APPROVED BY:

MAUI ELECTRIC CO. — DATE 9/28/78

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
No.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

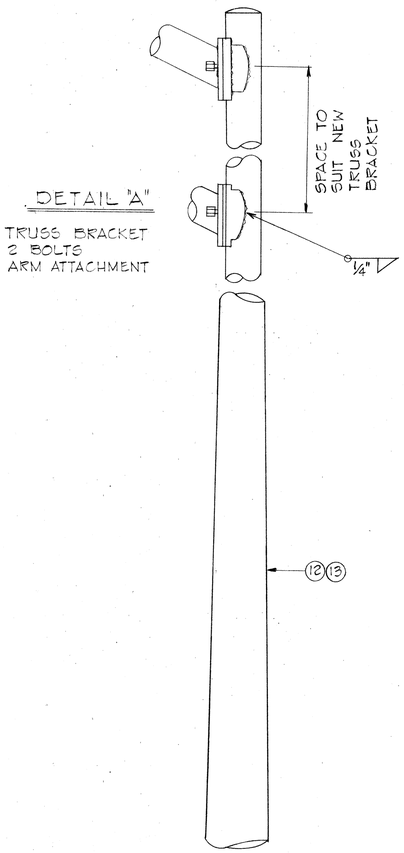
MISCELLANEOUS HIGHWAY LIGHTING DETAILS
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJECT NO. F-030-1(13)

Scale: As Shown Date: August 1978

SHEET No. OF SHEETS

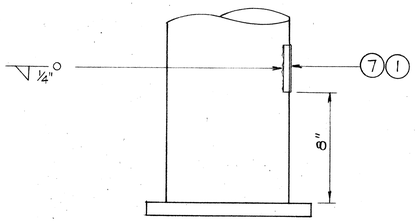
C.O. 107 S-1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(13)	1978	108	174



DETAIL "A"

TRUSS BRACKET
2 BOLTS
ARM ATTACHMENT



DETAIL B

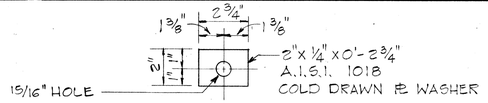
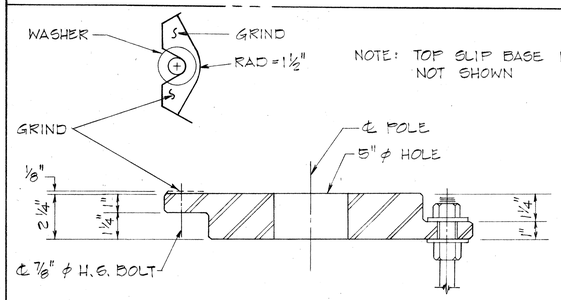
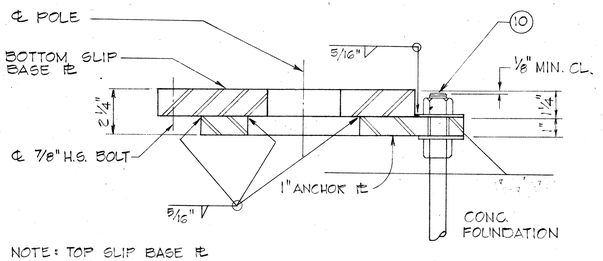


PLATE WASHER

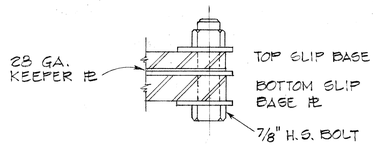


VIEW "E-E"
CAST OPTION
SCALE: 3" = 1'-0"

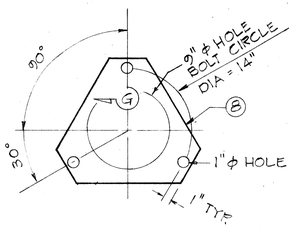


NOTE: TOP SLIP BASE ℄ NOT SHOWN

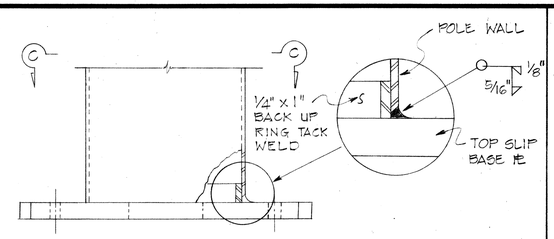
VIEW "E-E"
WELDED OPTION
SCALE: 3" = 1'-0"



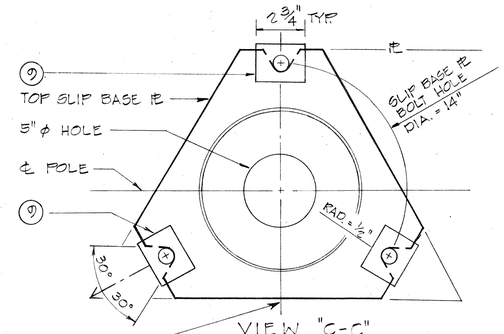
SECTION G-G



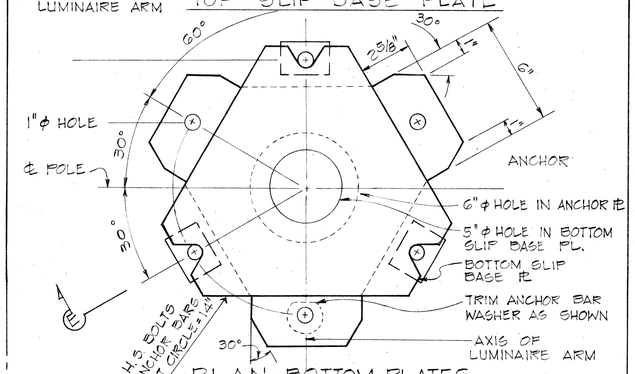
DETAIL "F"
KEEPER PLATE



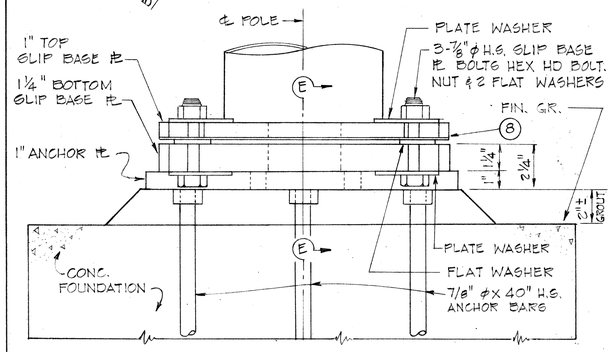
TOP SLIP BASE PLATE



VIEW "C-C"
TOP SLIP BASE PLATE



PLAN - BOTTOM PLATES



BOTTOM SLIP BASE PLATE

SLIP BASE DETAIL
SCALE: 3" = 1'-0"

NOTES

1. ALL STEEL SHAFTS, ℄'S, MAST ARMS, BOLTS, SCREWS NUTS & WASHERS TO BE GALV. AFTER FAB. OR MODIFICATION.
2. ℄'S TO CONFORM TO ASTM A-36.
3. CAST OPTION TO CONFORM TO ASTM A-486 CL. 70.
4. TORQUE 7/8" ϕ H.S. SLIP BASE ℄ BOLTS TO 84 FT. LBS
5. 7/8" ϕ H.S. ANCHOR BARS, WRENCH TIGHTEN - TORQUE REQUIREMENT WAIVED.
6. FABRICATORS ELECTING LARGER THAN MIN ARM DIAMETERS MUST ADJUST DETAILS AS REQUIRED TO PERMIT SOLID SEATING OF CAP SCREWS. IN LIEU OF TORQUE REQUIREMENTS FOR H.S. BOLTS, CAP SCREWS SHALL BE TIGHTENED BY THE TURN OF NUT METHOD 1/6 TURN FROM SNUG TIGHT CONDITION. NO WASHER WILL BE REQUIRED.
7. 4" x 6 1/2" HANDHOLE REINFORCED W/ #3 GA. RING 1 1/2" WIDE WELDED TO OUTSIDE OF POLE COVER OF 10 GA. ℄ LOCATE 90 DEGREES OF MAST ARM UNLESS SHOWN OTHERWISE.
8. 28 GA. KEEPER ℄, PLACE ON TOP OF MIDDLE FLAT WASHER ASTM A526 125 COMMERCIAL.
9. PLATE WASHER
10. 3-7/8" ϕ H.S. BARS, THREAD G" & GALV. 10", W/ HEX, HD, NUT, LEVELING NUT & WASHER
11. HEX. HD. NUT SHOWN OR AS AN ALT. DET. ANCHOR ℄'S MAY BE RETAINED W/ 5/16" FILLET WELDS ALL ROUND OR FORMED HEADS.
12. ROUND TAPERED STEEL TUBE W/ MAX. TAPER OF 0.15"/FOOT.
13. NO. 11 GAGE SHEET STEEL OF WELDABLE GRADE ACCEPTABLE IF STEEL AFTER FABRICATION HAS A MIN. YIELD STRENGTH OF 40,000 P.S.I.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
NOTE BOOK	TRACED BY	
No.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

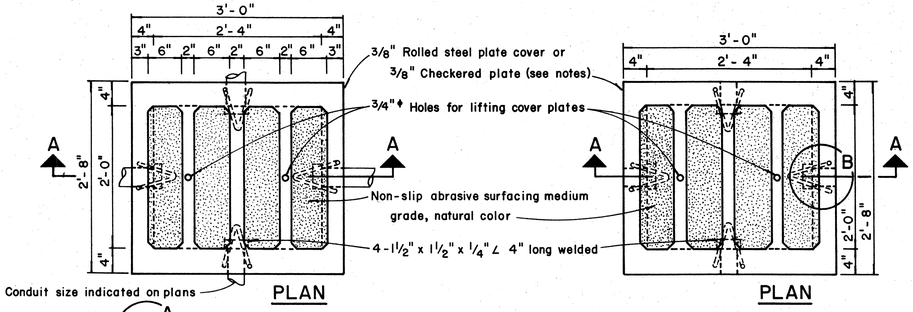
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

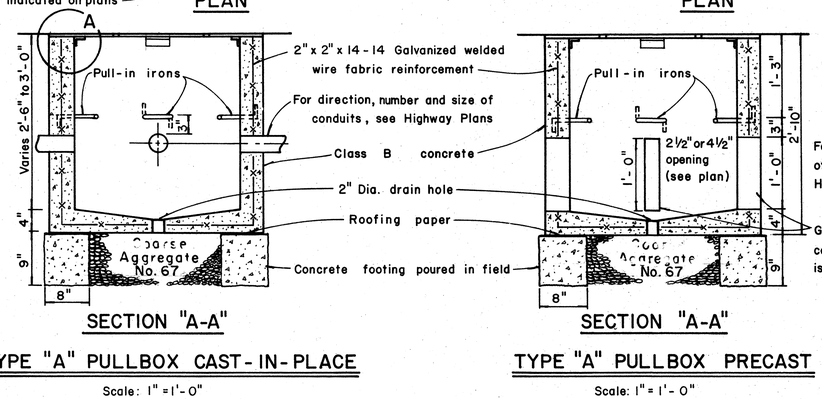
HIGHWAY LIGHTING
SLIP BASE POLE

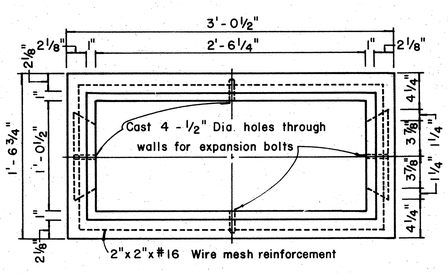
HONOAPIILANI HIGHWAY
KAHANA TO ALAELOA
F.A. PROJ. NO. F-030-1 (13)
Scale: As Shown Dec. 1977

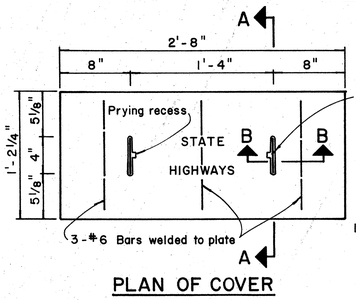
SHEET NO. 4 OF 5 SHEETS

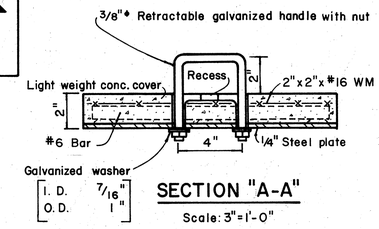
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(09)	1978	109	174

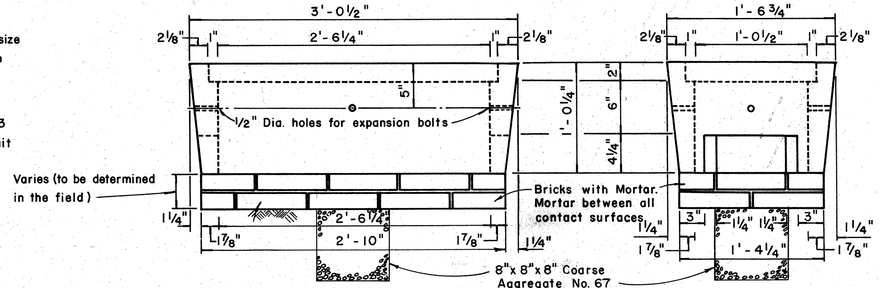


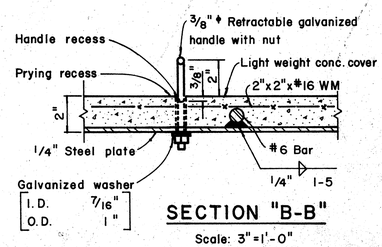


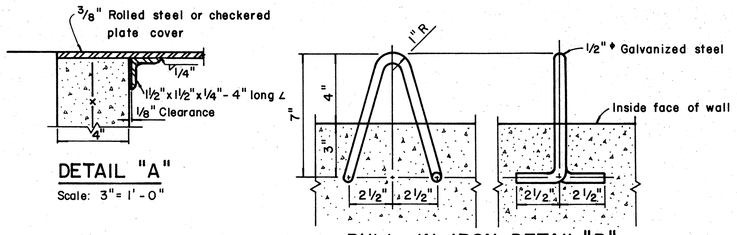


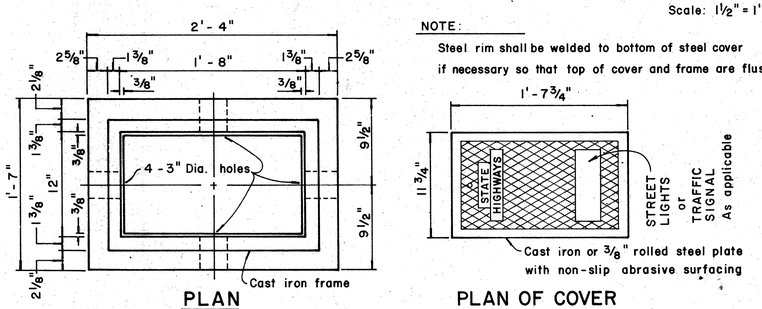


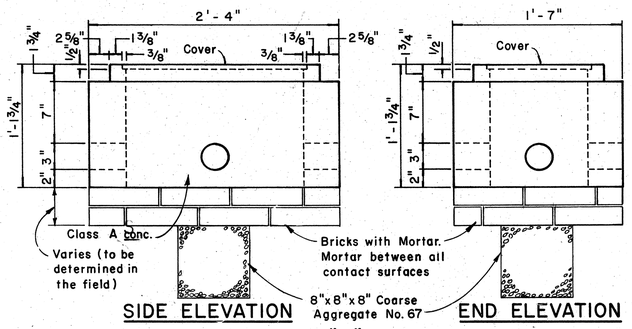












NOTES: (FOR TYPE "A" PULLBOX)

1. 3/8" Rolled steel plate cover with non-slip abrasive surfacing medium grade, natural color shall be used on all pullboxes located on sidewalk areas where pedestrians are walking.
2. 3/8" Checkered plate cover shall be used on all pullboxes located in median areas and other locations where there are no pedestrians walking.
3. Pull irons shall be placed opposite each conduit slot.
4. Covers on all pullboxes located in sidewalk areas shall be set flush with the concrete sidewalk.
5. Each pullbox shall have a pair of pull irons opposite each other for lifting purposes.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — DATE 12/1/69

APPROVED:
ASSISTANT CHIEF, ENGINEERING — DATE 12-30-69

NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	3-5-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
PULLBOXES

Scale as noted — Date

SHEET No. 5 OF 5 SHEETS DT 401

SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE
ORIGINAL PLAN
NOTE BOOK
No.

PRINTED ON NO. 1000H CLEARPRINT