

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	110	122

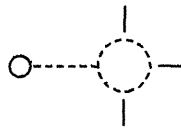
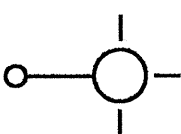
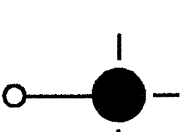
GENERAL NOTES

- The Contractor shall coordinate his work with HECO & HTCO prior to the start of construction. All work shall be arranged to maintain continuous power & telephone service.
- HECO and/or its Contractor will construct or relocate all HECO facilities.
- The Contractor shall provide HTCO & HECO and/or their Contractors 24 hour access to the site for accomplishment of thier work. The Contractor shall be responsible for any delays in company work due to his failure to provide access to company facilities.
- Any existing HECO and/or HTCO facilities damaged by the Contractor during construction shall be replaced and/or repaired by HECO and/or HTCO at Contractor's expense.
- HTCO to split existing conduits with cable where new split ducts are required over existing cable. Contractor to expose existing conduits.
- Where existing ductline is intercepted by pullbox, handhold or manhole, the existing conduit within the box, handhole or manhole shall be demolished as specified for demolition of duct bank in new manhole.
- Unless otherwise indicated, HTCO TPB is type 435-TB pullbox.
- All existing telephone facilities shall remain in place and in working condition until such time as new facilities are installed & activated.
- Temporary relocation of HTCO facilities to accomodate Contractor's work will be subject to HTCO approval and will be done at Contractor's expense.

CONSTRUCTION NOTES

- Contractor shall be responsible for cleaning & removal of silt & debris generated by the excavation work & deposited & accumulated within downstream waterways, drain pipes, ditches & roadways. Contractor agrees to reimburse the State of Hawaii for all cost expended in the performance of the above work if required for public health & safety or if made necessary by non-performance by the Contractor.
- Contractor shall at his expense keep the project & surrounding area free from dust niusance. The State shall require supplementary measures as necessary.
- All existing utilities, whether or not shown on the plans, shall be protected at all times during construction & any damages to them shall be repaired & paid for by the Contractor. Any digging to be done in the proximity of existing facilities shall be done by hand to prevent any undue damages.
- For additional information on location of existing underground utility lines, meter boxes & handholes, see civil plans.
- Prior to excavation in areas where HECO & HTCO facilities are close by, Contractor shall request the services of HECO & HTCO stand-by before scheduled excavation.

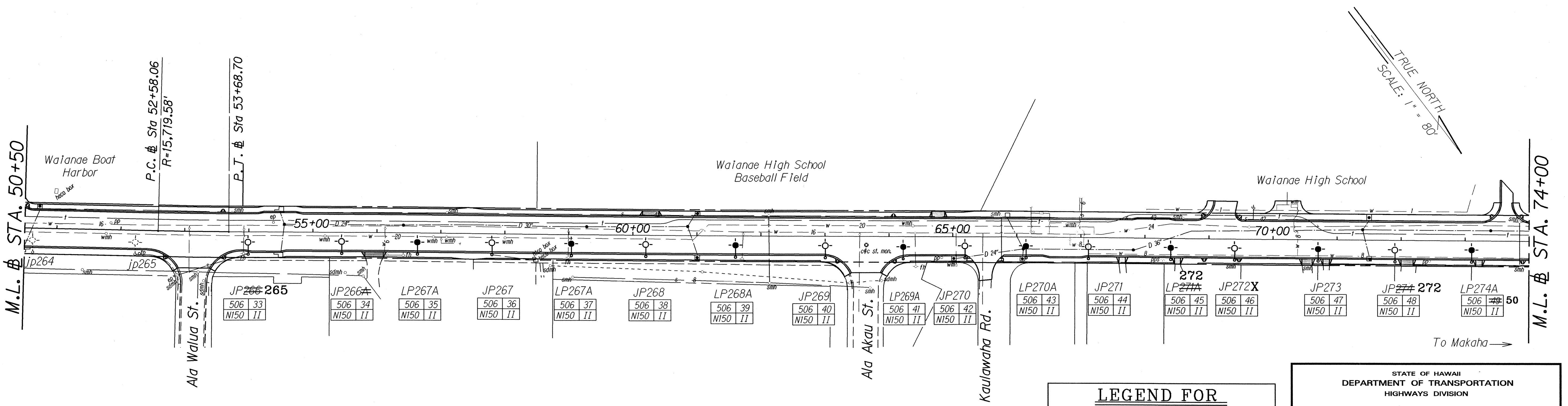
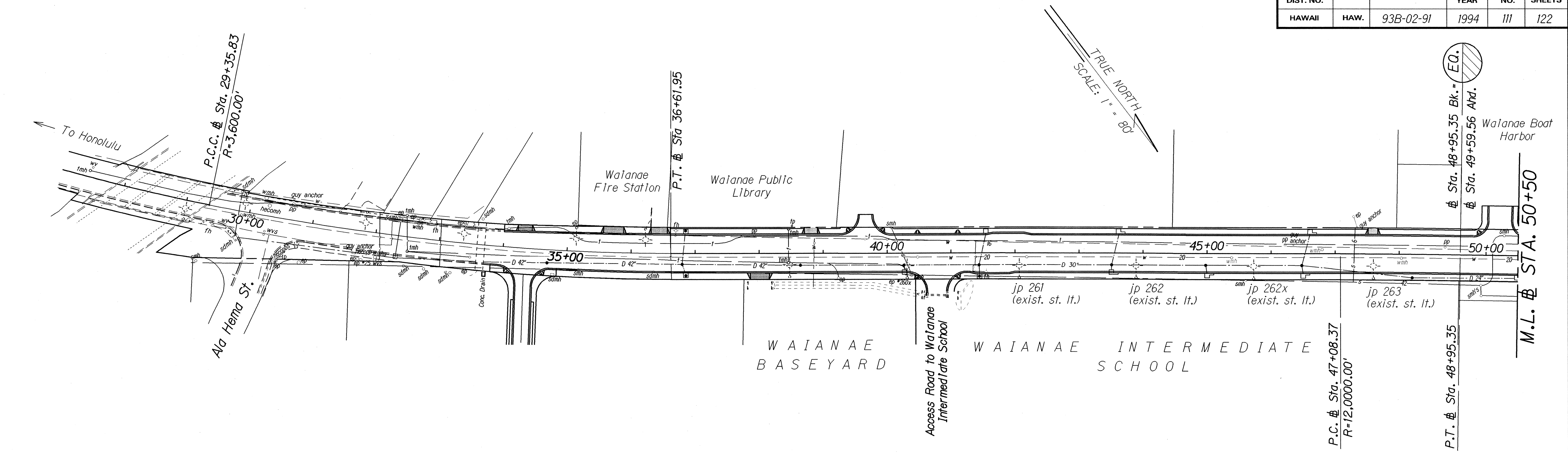
LEGEND

- 
- Existing Mast Arm on Joint Pole (to remain)
-
- 
- Single Mast Arm and 150 Watt H.P.S. Lamp
-
- Install on Joint Pole
-
- 
- Single Mast Arm and 150 Watt H.P.S. Lamp
-
- Installed on State Light Pole

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY H. Aul	12/93
10 miles	DESIGNED BY B. Ching	
Farrington	QUANTITIES BY	
No.	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY LIGHTING
LEGEND & NOTES
FARRINGTON HIGHWAY WIDENING
Ala Hema Street to Jade Street
Project No. 93B-02-91
Date: Jan., 1994
SHEET No. W-1 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	111	122



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTED	DRAWN BY	12/93
DESIGNED BY	CHECKED BY	
DATE		

LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

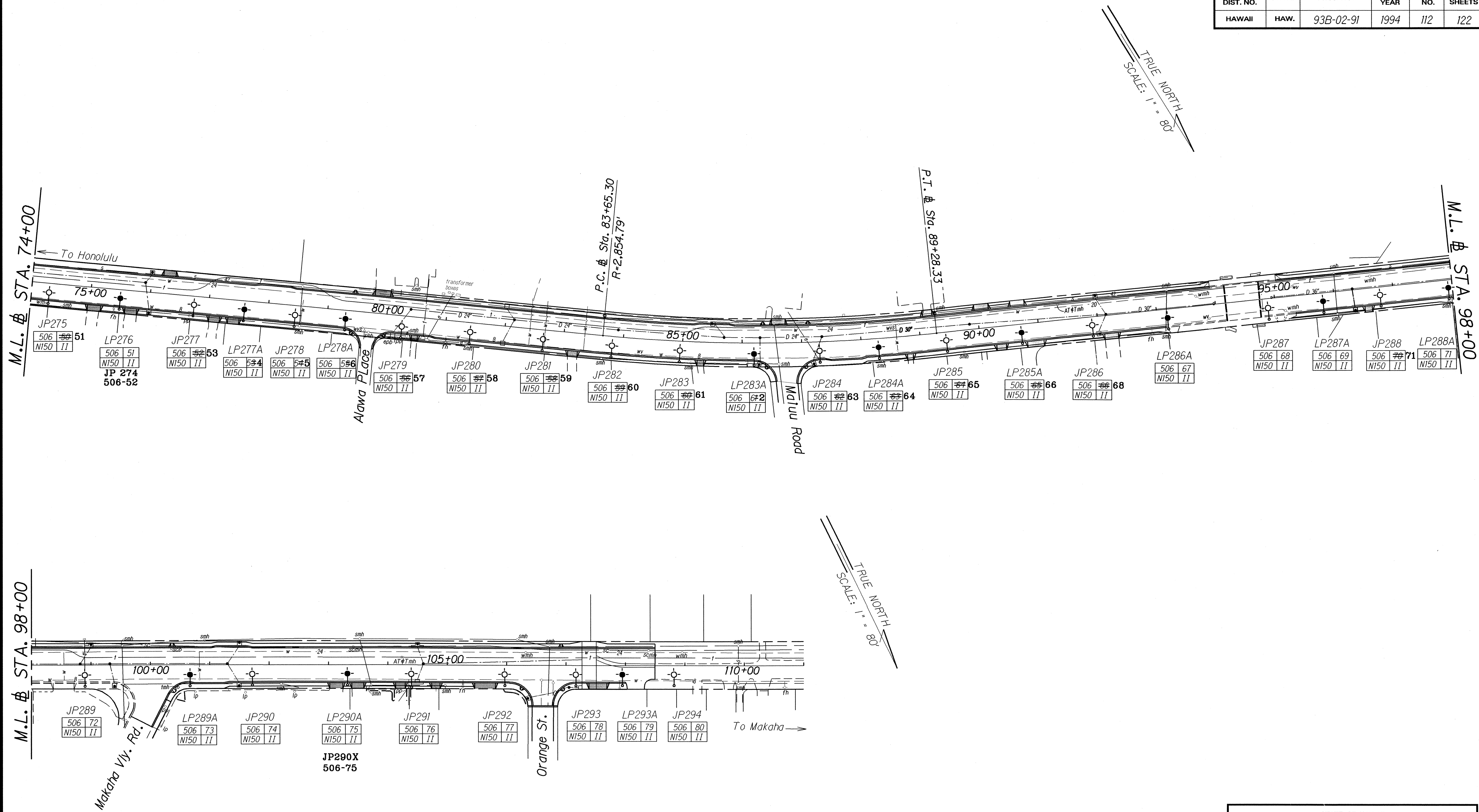
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING PLAN

FARRINGTON HIGHWAY WIDENING
Ala Hema Street to Jade Street
Project No. 93B-02-91
Scale: 1"=80'

Date: Jan., 1994
SHEET No. **W-2** OF **4** SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	112	122



LEGEND FOR AS-BUILT POSTINGS	
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	12/93
DRAWN BY	
DESIGNED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

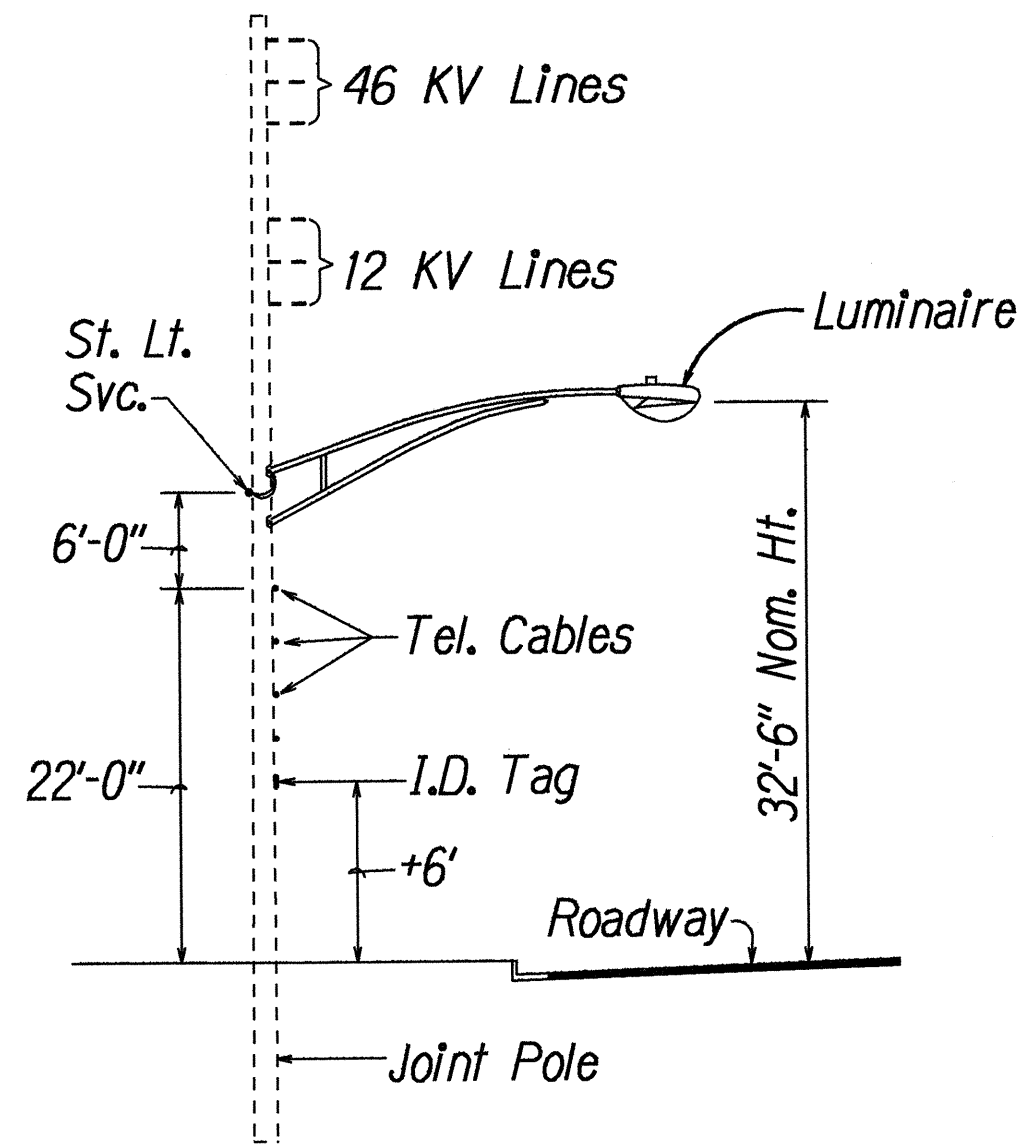
HIGHWAY LIGHTING PLAN

FARRINGTON HIGHWAY WIDENING
Ala Hema Street to Jade Street
Project No. 93B-02-91

Scale: 1"=80' Date: Jan., 1994

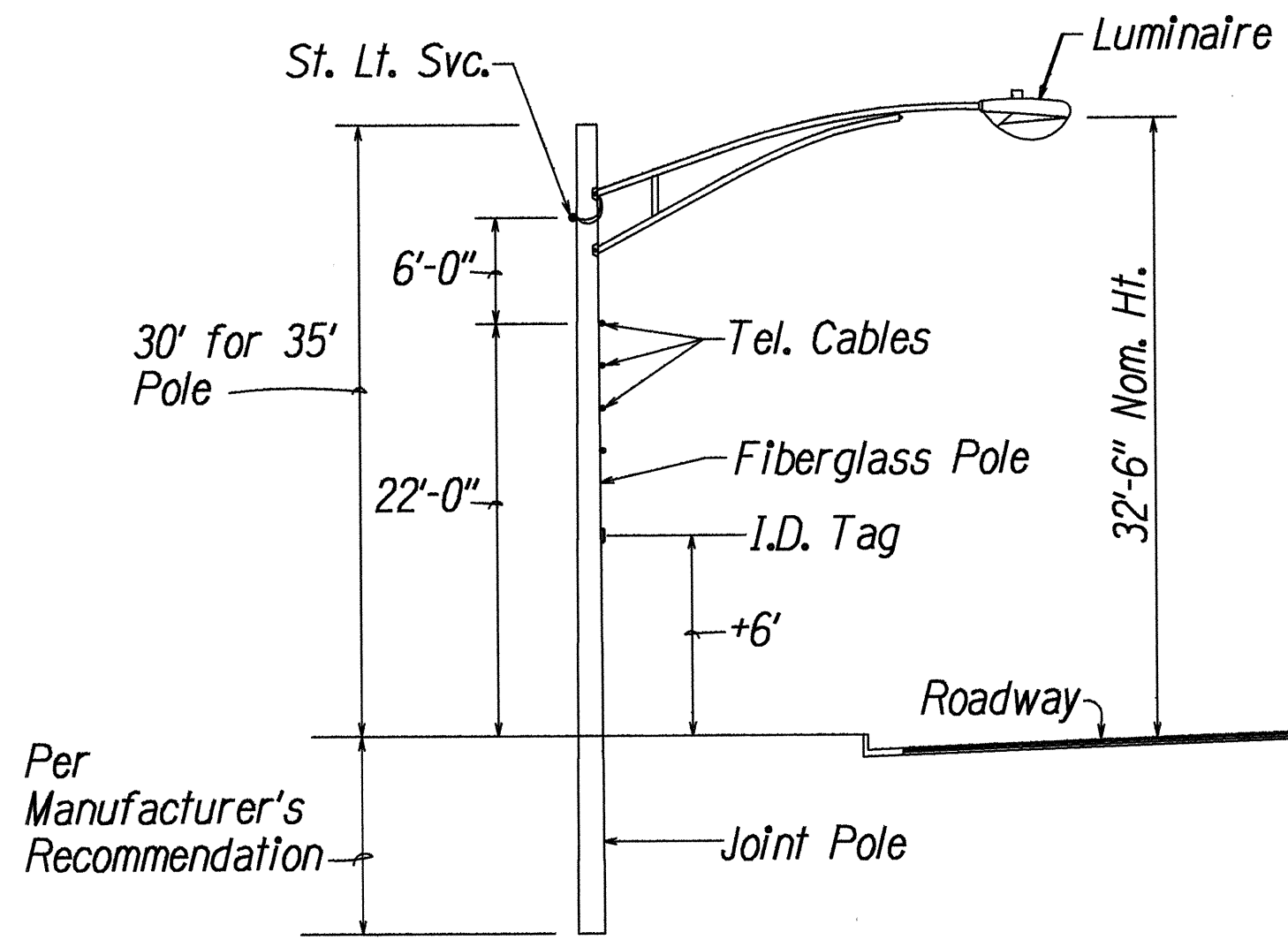
SHEET No. W-3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	93B-02-91	1994	113	122



JOINT POLE ELEV. TYP.

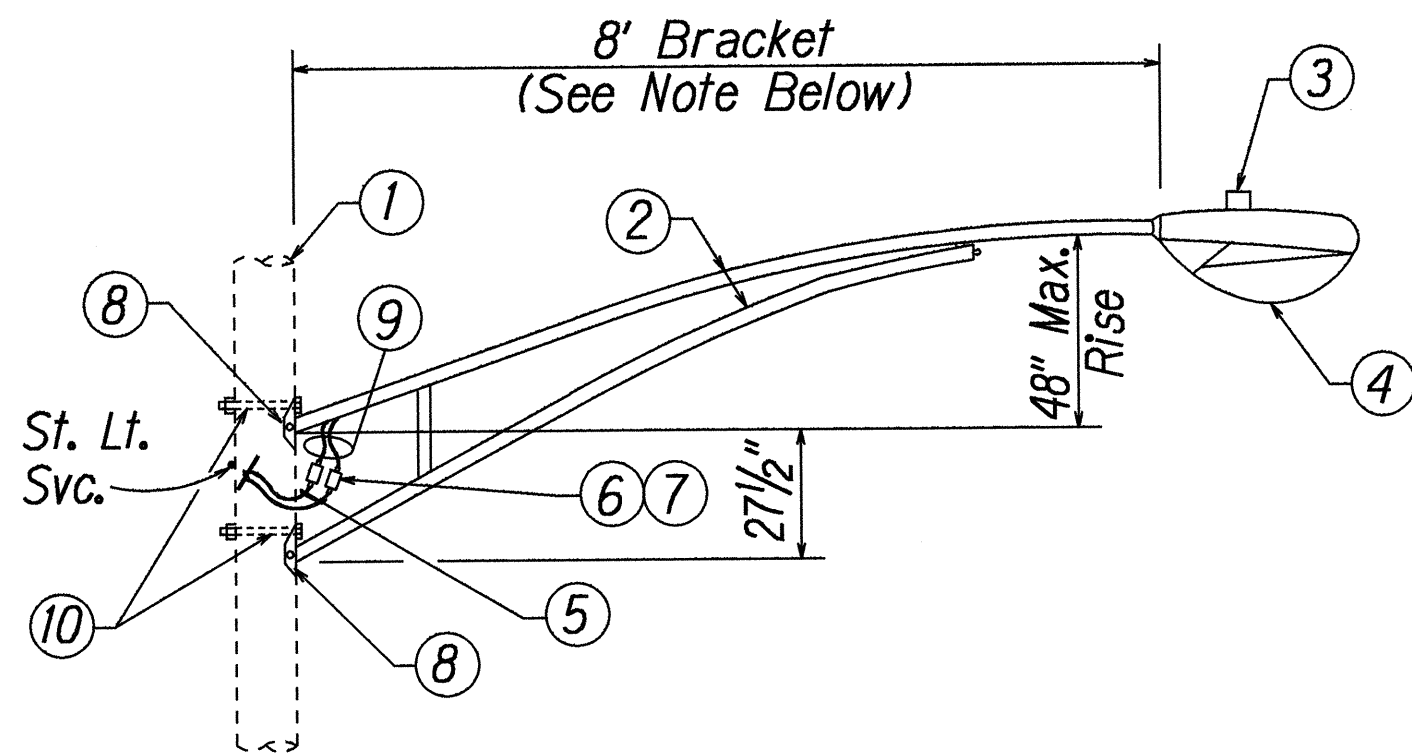
Not to scale



INTERMEDIATE POLE ELEV. TYP.

(STATE OWNED)

Not to scale

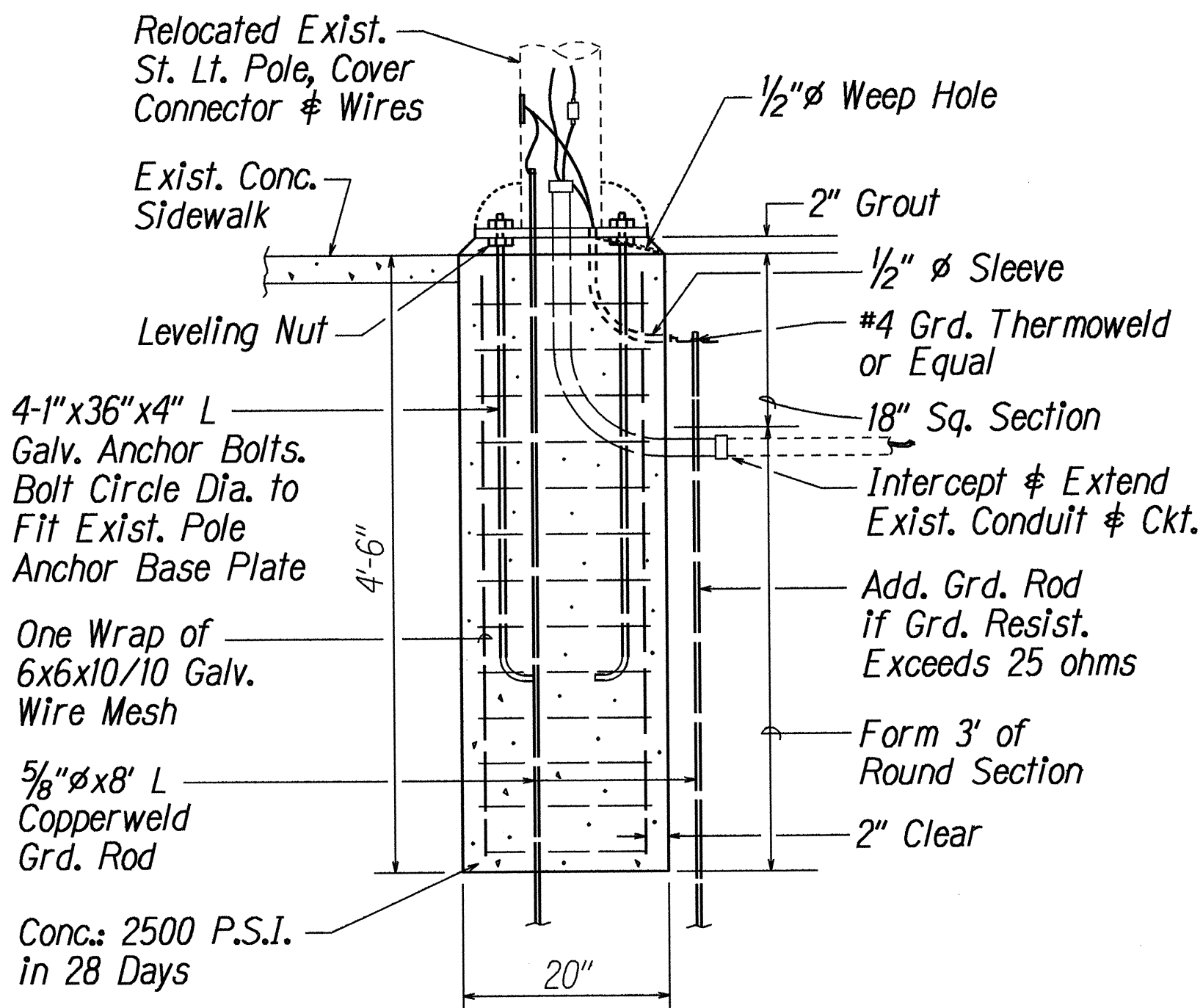
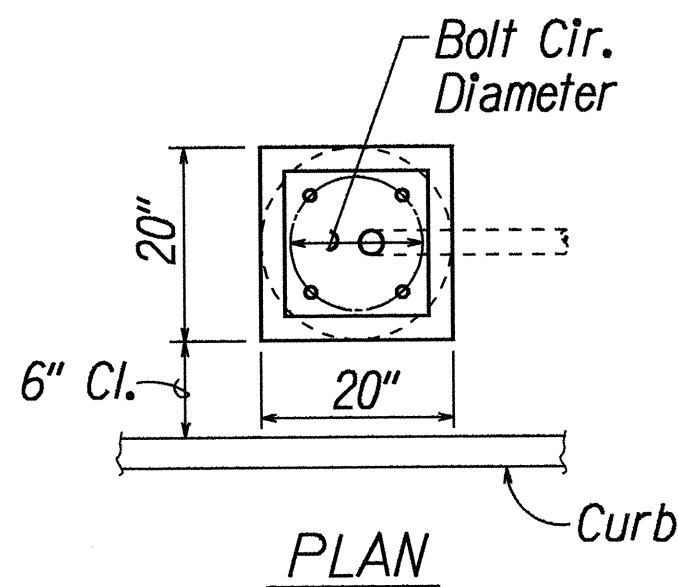


MATERIAL LIST

- ① Pole
- ② 2" Sched 40 Pipe-Arm Galv.
- ③ Photo-Cell Rated for 105-285 V Operation
- ④ Luminaire with High Pressure Sodium Lamp 250 Watts
- ⑤ 2- 1/c #8 XHHW-Use Provide Sufficient Length, to Splice to HECO. Secondary Lines. Connection to Secondary Lines by HECO.
- ⑥ 10 AMP Fuse Connector Kit, Waterproof, "TRON" Fuseholder of Approved Equal
- ⑦ Unfused Connector Kit
- ⑧ 1/4" Galv. Wood Pole Arm Mounting Plate 2-9/16" Dia. Holes Attached to Pole with 1/2" Dia. Lag Screw (2 ea.)
- ⑨ 2- 1/c #10 XHHW-Use Copper Stranded 600 V
- ⑩ 5/8" Dia. by Required Length Machine Bolt Washer, Nut, Galv. Steel

TYP. HIGHWAY LIGHT MTG. DETAIL

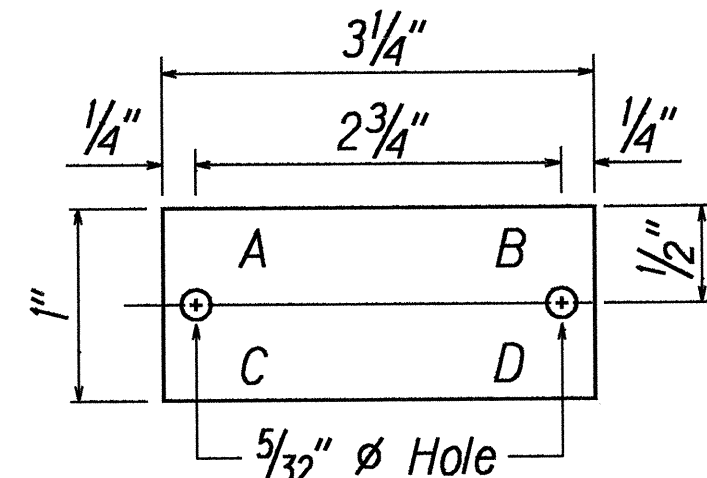
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STREET LIGHT CONC. FOUNDATION DET.

(CITY OWNED)

Not to scale



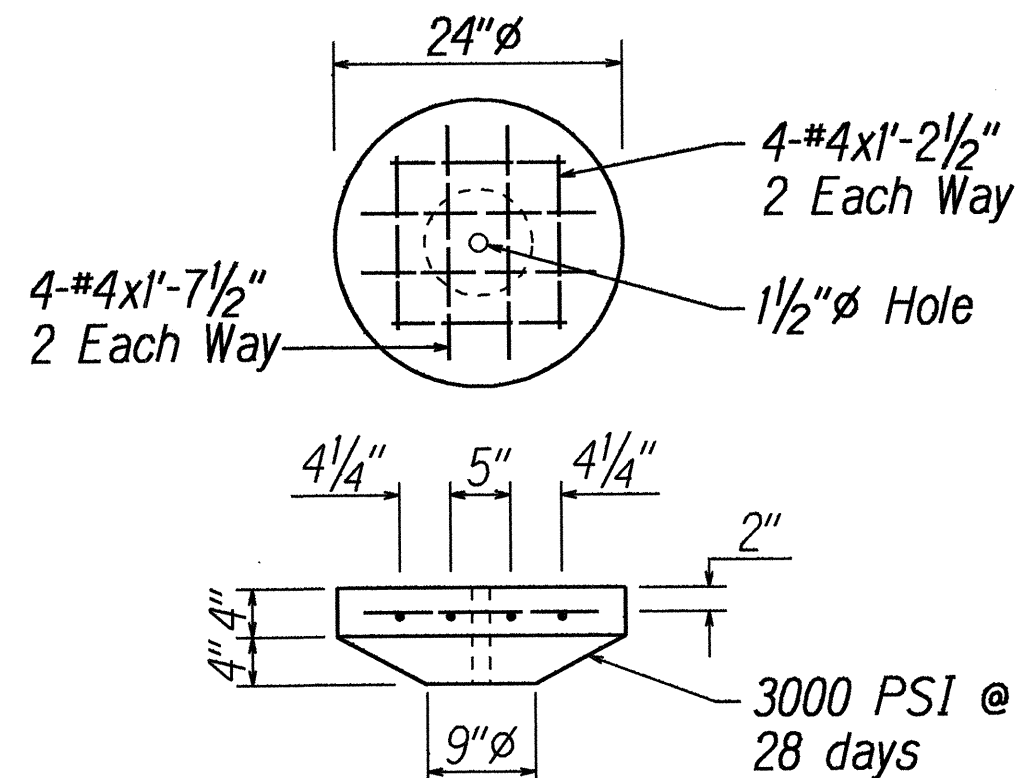
NOTES:

1. Tag shall be made from 3 ply black-white-black laminated plastic.
2. Attach to steel pole w/no. 7 cadmium plated drive screws no. 29 drill holes in pole.
3. Attach to fiberglass pole per manufacturer's recommendation.
4. Letters, no. 5 reduction 1/3" engraved.

HIGHWAY LIGHT ID TAG DETAIL

Not to scale

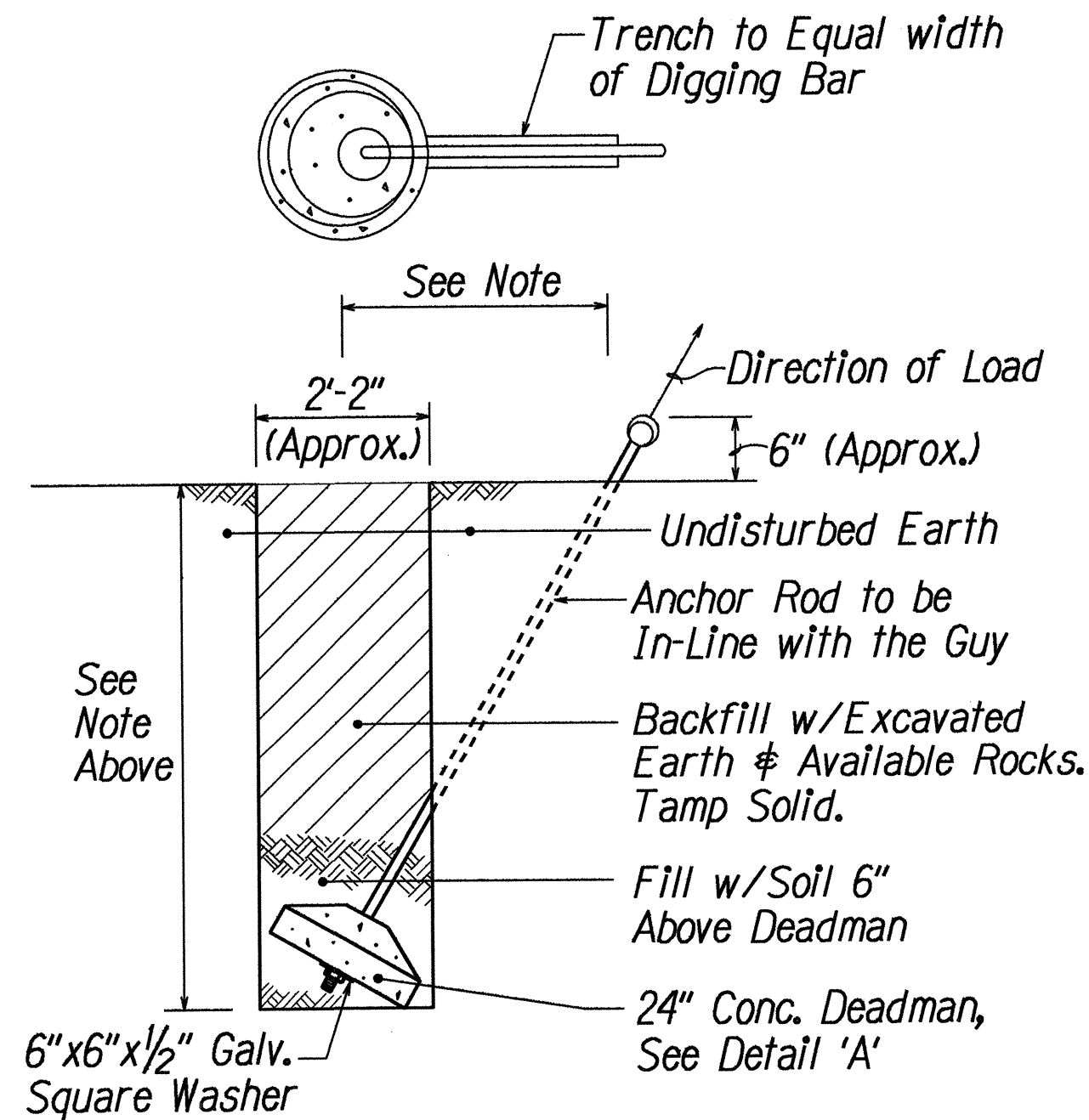
LEGEND
A- Contract Number
B- Light Number, See Plan
C- Lamp Data, N for H.P.S.
D- Refractor Date



DETAIL 'A'

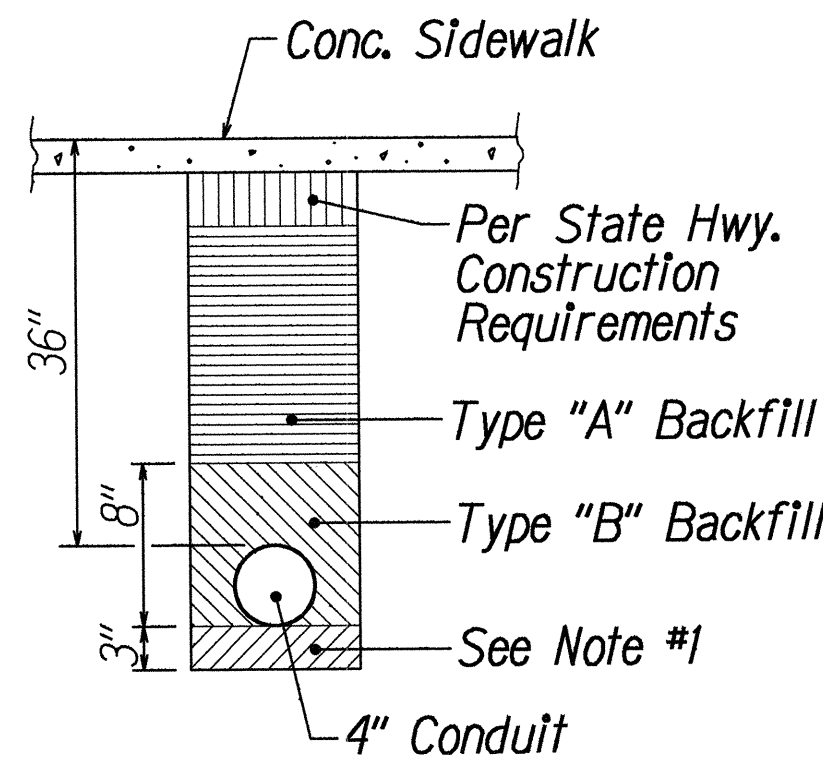
NOTE:

Refer to HTCo. Dwg. No. 34021 for other Anchoring Data.



ANCHOR DETAIL

Not to scale



DUCT SECTION

Not to scale

TYPE "A"

Beach sand, earth or earth & gravel. If earth & gravel used, max. rock size shall be 1" & mixture shall contain not more than 50% by volume of rock particles.

TYPE "B"

Same as Type "A" except that if earth & gravel used, the mixture shall pass a 1/2" mesh screen & contain not more than 20% by volume of rock particles.

NOTE #1

If the normal material in the bottom of the trench is not Type "B", an additional 3" shall be excavated & Type "B" backfill shall be provided

BACKFILL DATA

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
SYMBOL LIST & DETAILS	
FARRINGTON HIGHWAY WIDENING Ala Hema Street to Jade Street Project No. 93B-02-91	
Scale: As shown	Date: Jan., 1994
SHEET No. W-4 OF 4 SHEETS	