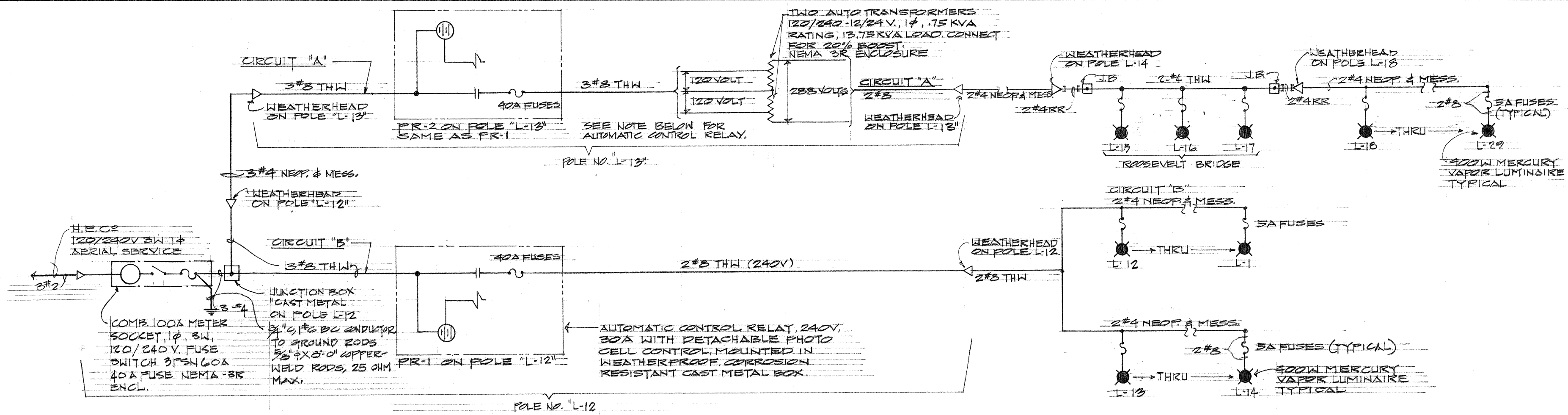
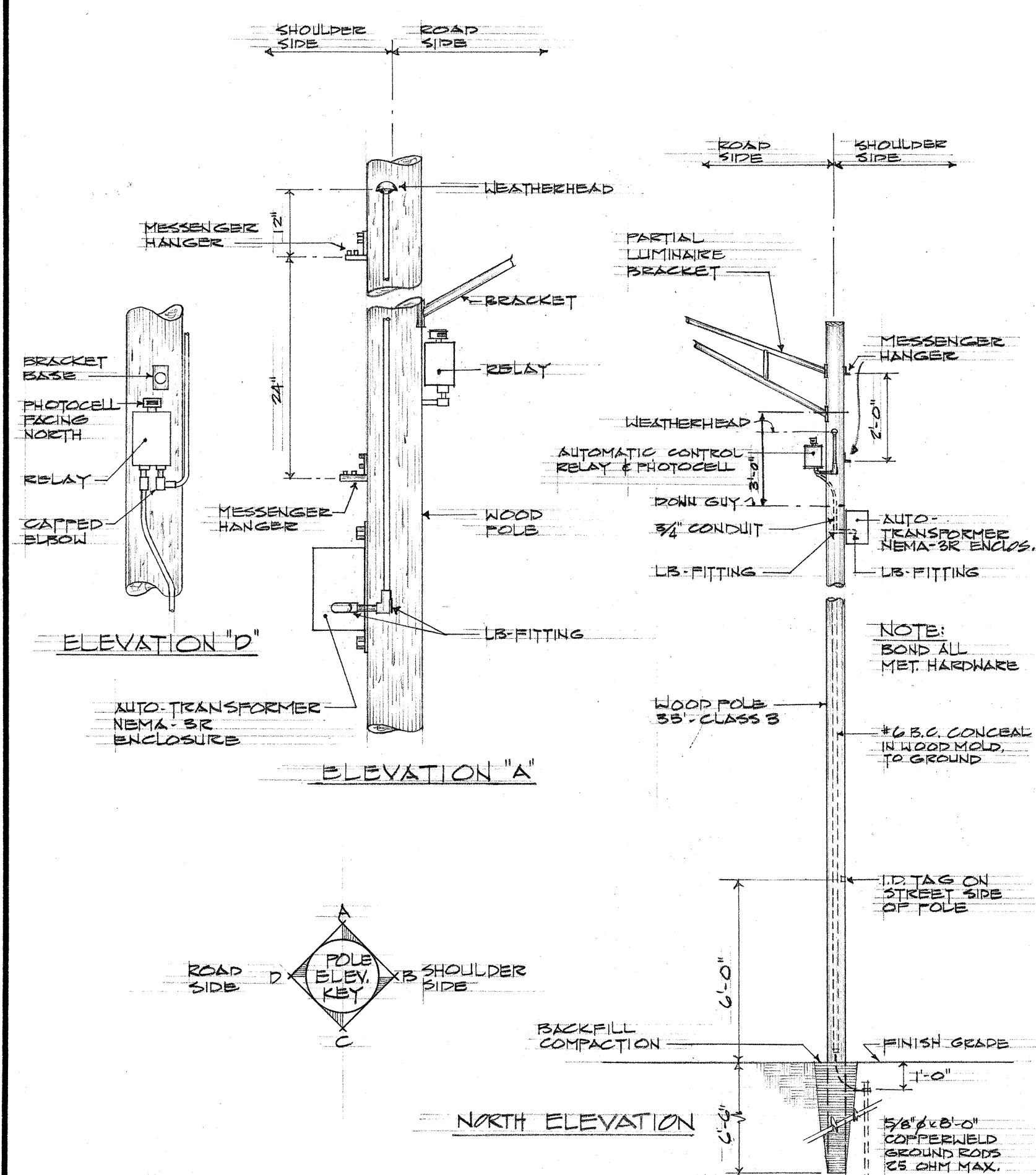


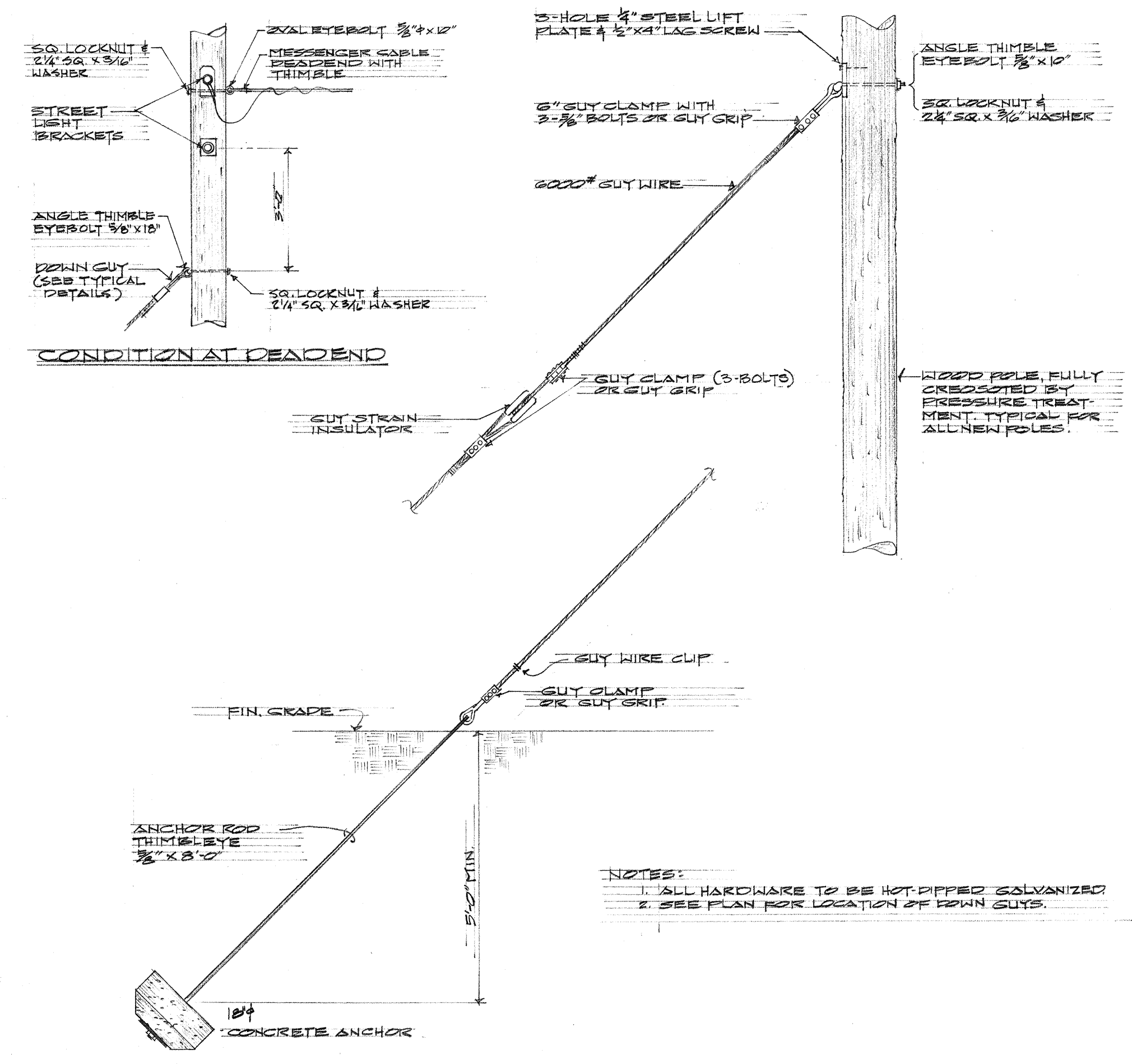
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-099-1(2)	1968	5	10



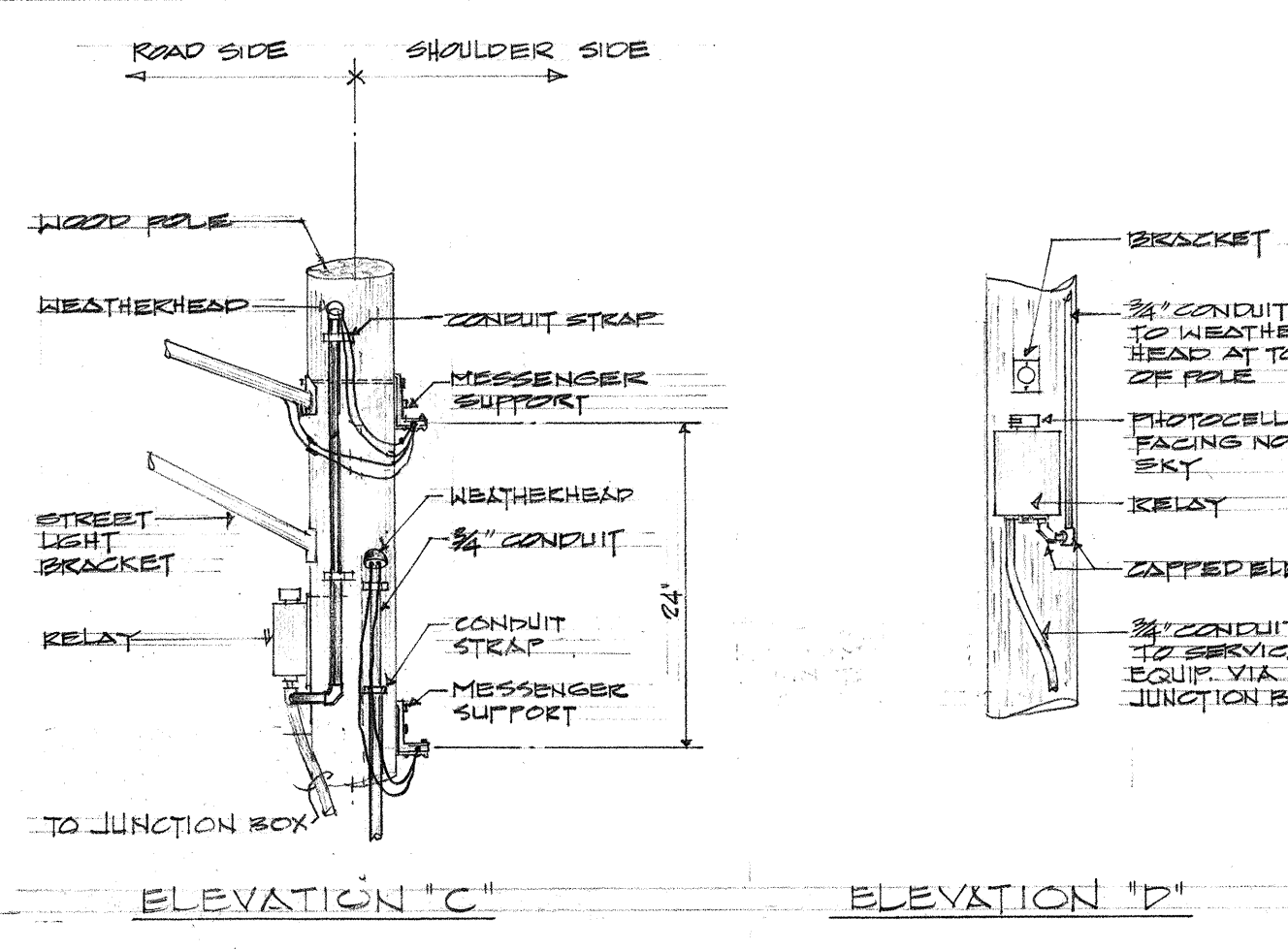
A
E-4
ONE-LINE DIAGRAM
FOR MILITARY PARK TO VICINITY OF ROOSEVELT BRIDGE.



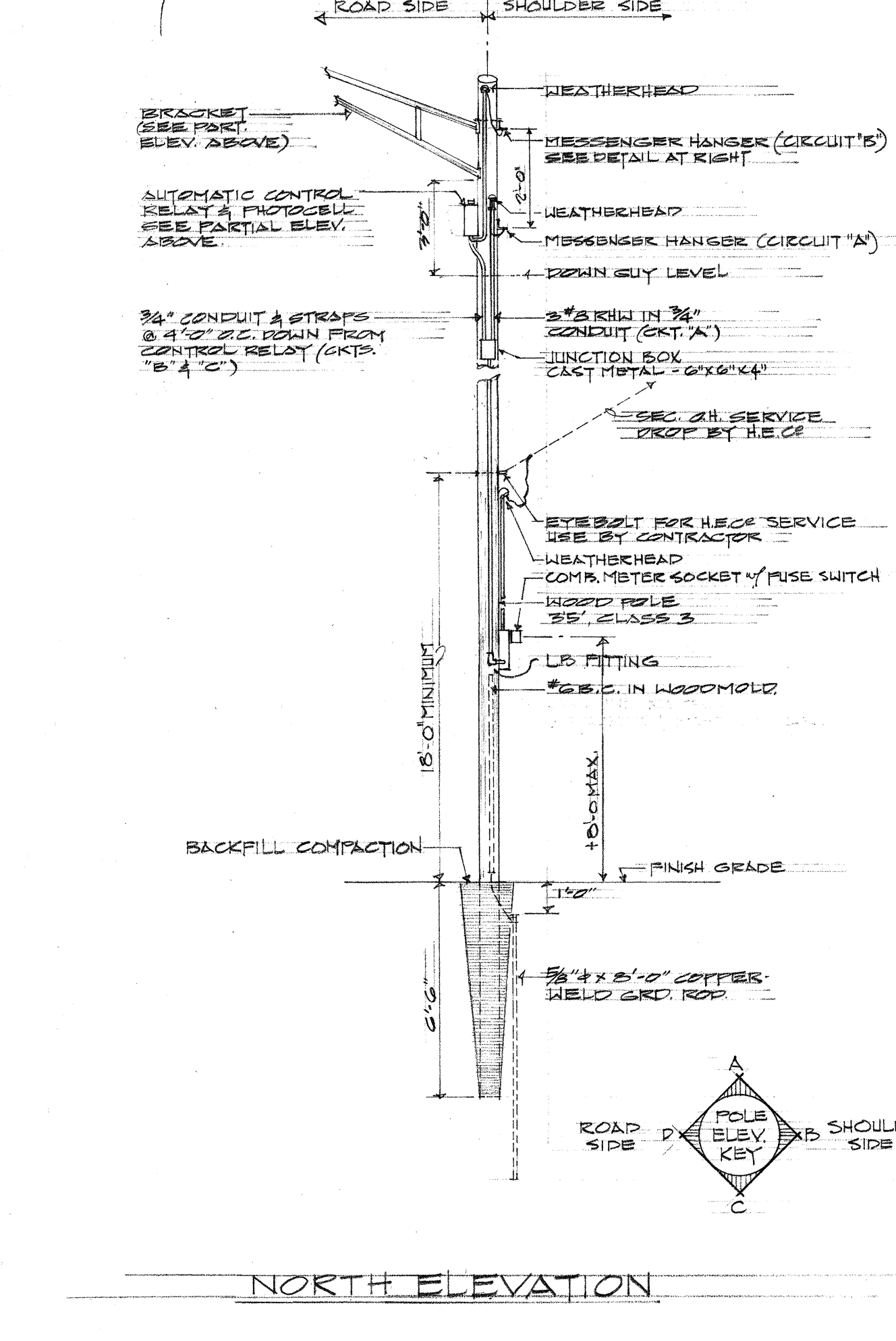
B
E-4
DETAILS AT POLE 'L-13'
NOT TO SCALE



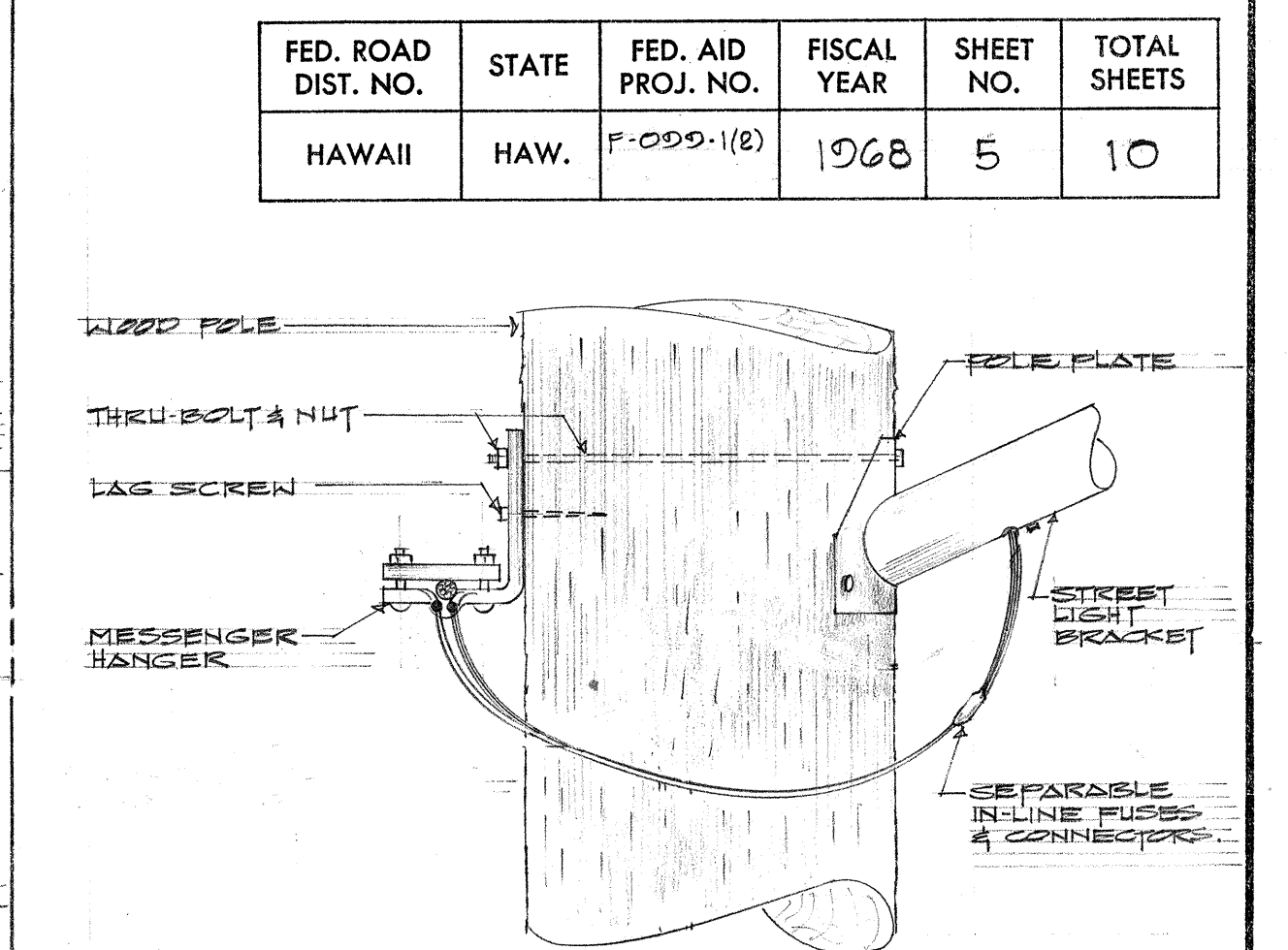
C
E-4
DOWN GUY DETAILS
NOT TO SCALE



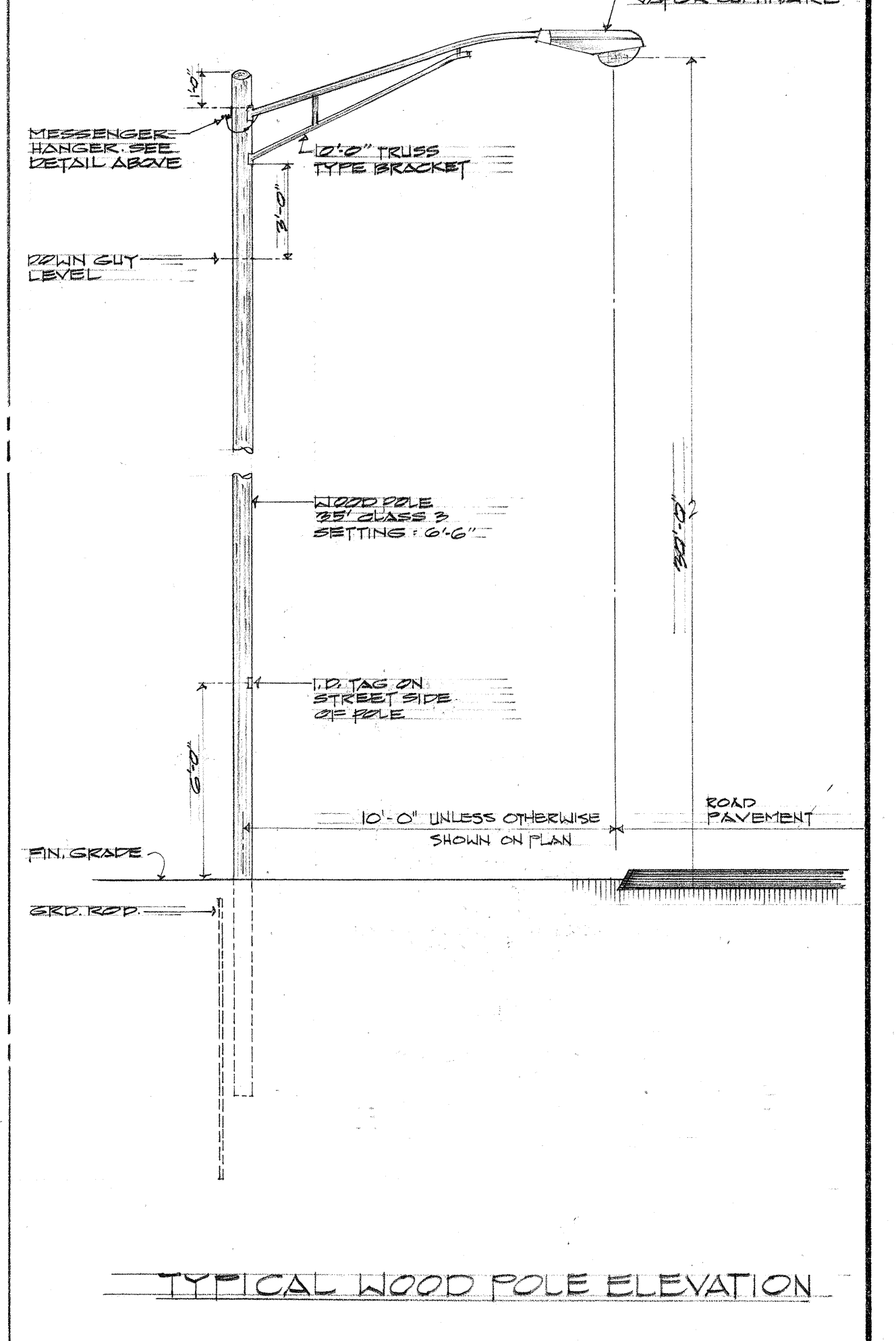
D
E-4
DETAILS AT POLE 'L-12'
NOT TO SCALE



D
E-4
DETAILS AT POLE 'L-12'
NOT TO SCALE



E
E-4
DETAILS AT POLE 'L-12'
NOT TO SCALE



E
E-4
STREET LIGHT DETAILS
NOT TO SCALE

ORIGINAL PLAN	DATE
DRAWN BY	DESIGNED BY
NOTE BOOK	CHECKED BY
NO.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM
KAMEHAMEHA HIGHWAY
MILITARY PARK TO VICINITY OF ROOSEVELT BRIDGE

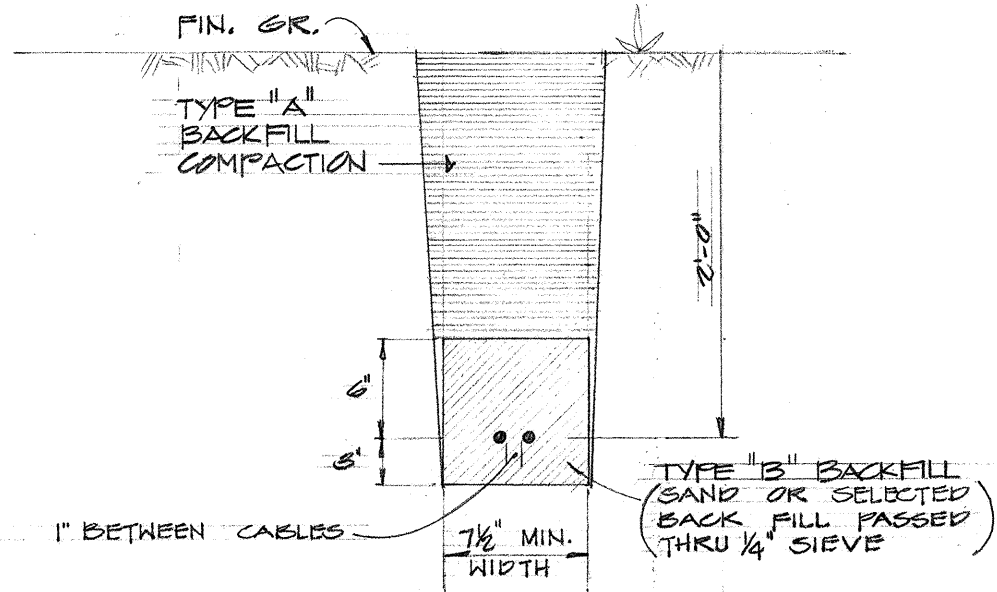
PROJECT NO. F-099-1(2)
ONE-LINE DIAGRAM & MISCELLANEOUS DETAILS
SCALE: AS SHOWN DATE: SEPT. 1967

SHEET No. 5 OF 7 SHEETS

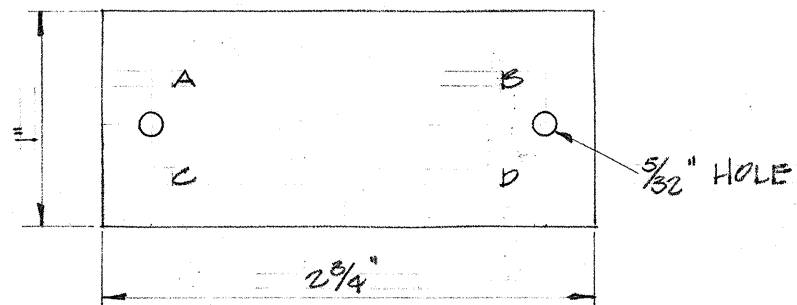
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Wynn M. Nakamura

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-000-1(2)	1968	6	10



A TRENCHING SECTION "B-B"



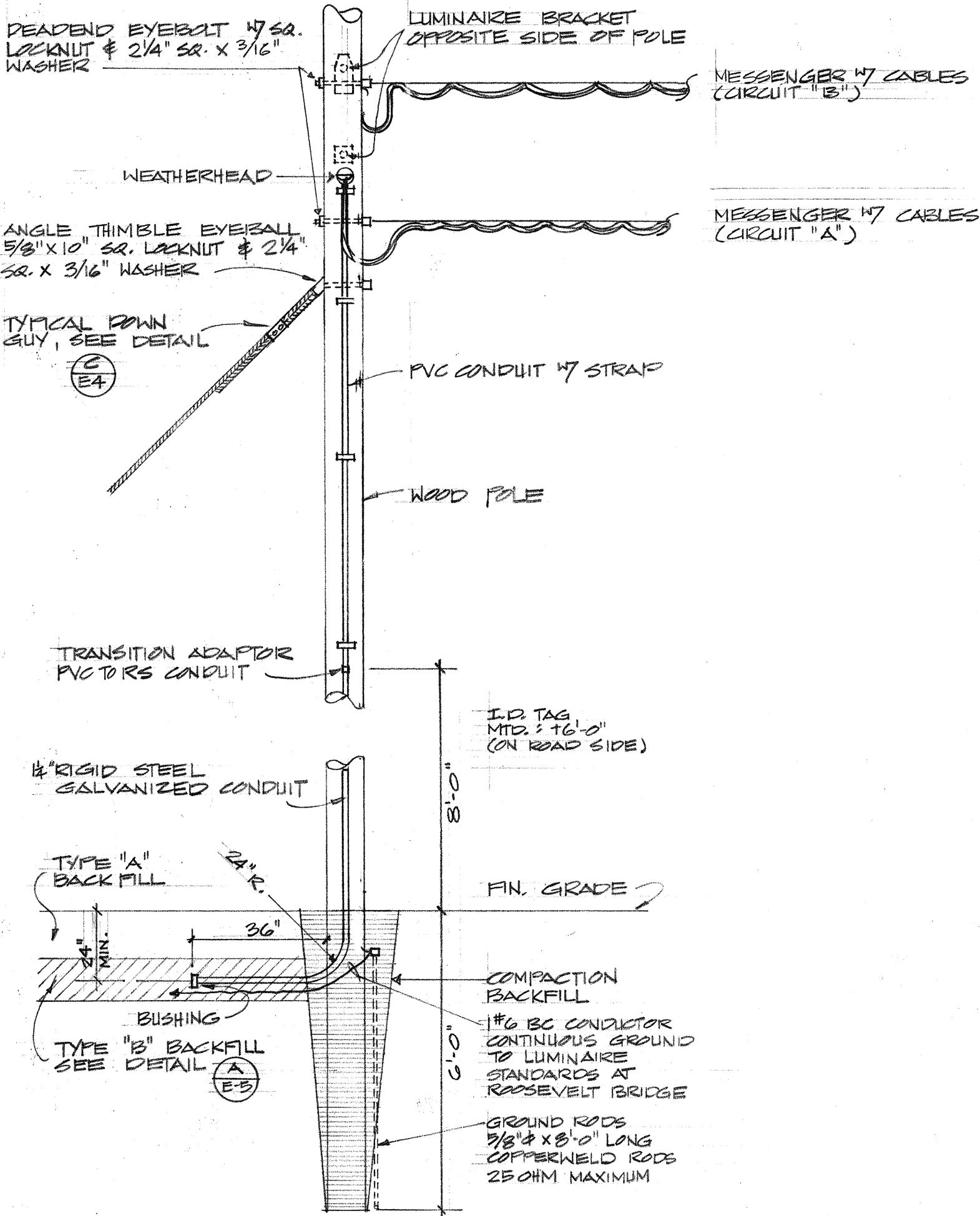
LEGEND:

- A = CONTRACT NUMBER
- B = LIGHT NUMBER. (NOTE: FOR NUMBER SEE PLAN)
- C = LAMP DATA: #400W
- D = REFRACTOR DATA: TYPE NO. (NOTE: FOR NUMBER SEE PLAN)

NOTES:

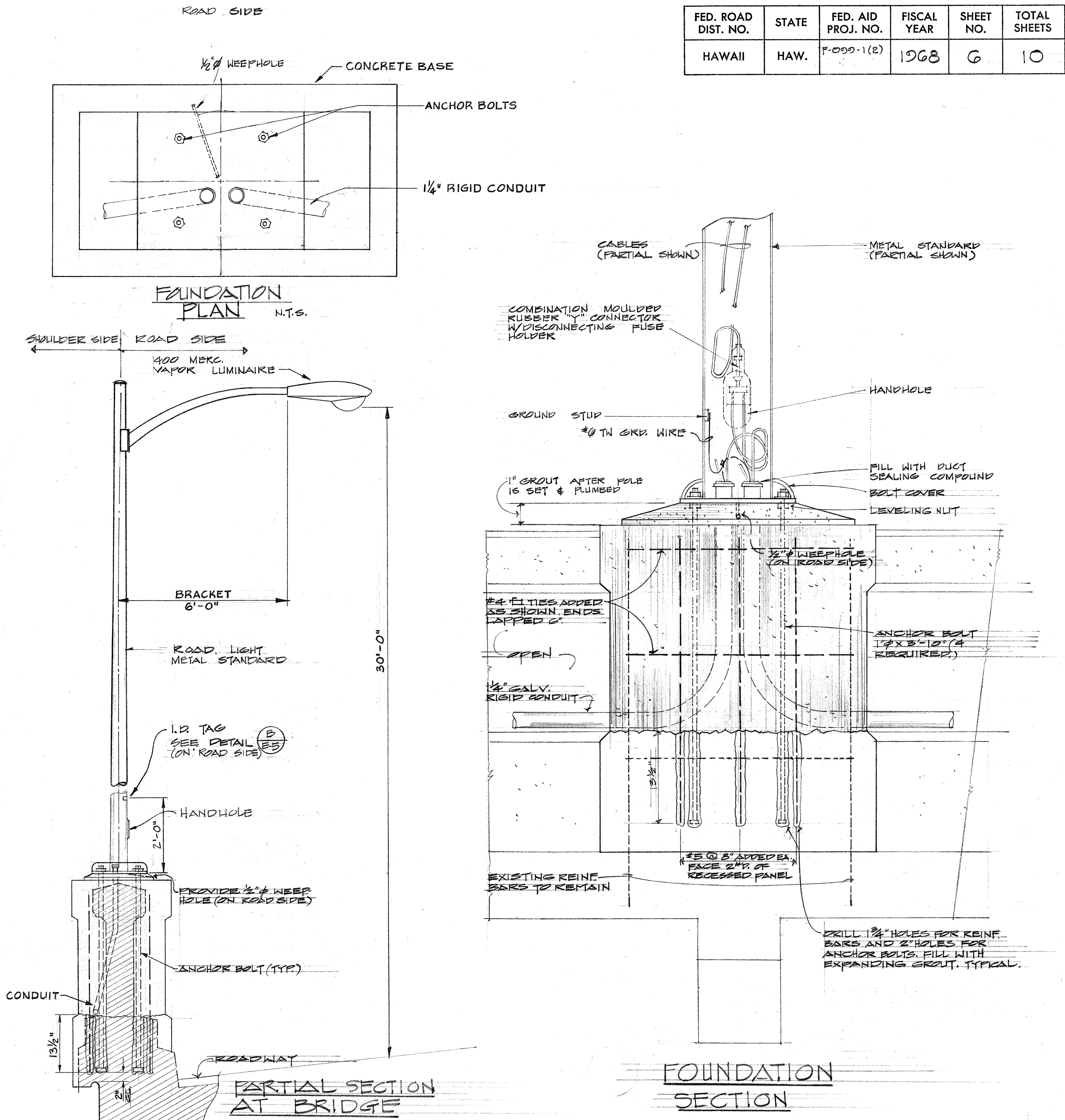
- 1 - TAG - MAKE FROM PLASTIC SHEET (GRAVOFLEX/3 PLY). LAMINATED BLACK-WHITE-BLACK.
- 2 - MOUNTING HEIGHT OF TAG = 6'-0" FROM FIN. GRADE.
- 3 - LETTERS - NO. 8 REDUCTION, 1/8, STENCILED
- 4 - ATTACH TO ALUMINUM POST WITH NO. 7 ALUMINUM DRIVE SCREW. ATTACH TO STEEL POST WITH NO. 7 CAD. PLATED DRIVE SCREW. ATTACH TO WOOD POLES WITH 4D NAILS

B IDENTIFICATION TAGS DET. NOT TO SCALE



C DETAILS of POLE L-14

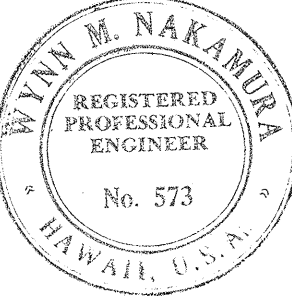
C DETAILS of POLE L-14



D LUMINAIRE & METAL STANDARD DETAILS

NOTE: SHADED PORTION TO BE REMOVED AND REBUILT TO MATCH ORIGINAL DIMENSIONS EXCEPT FOR CHANGES REQUIRED AS SHOWN.

TOTAL ESTIMATED QUANTITIES (INCIDENTAL TO VARIOUS ITEMS)
CLASS A-1 CONCRETE = 143 C.Y.
REINFORCING STEEL = 172 LBS.



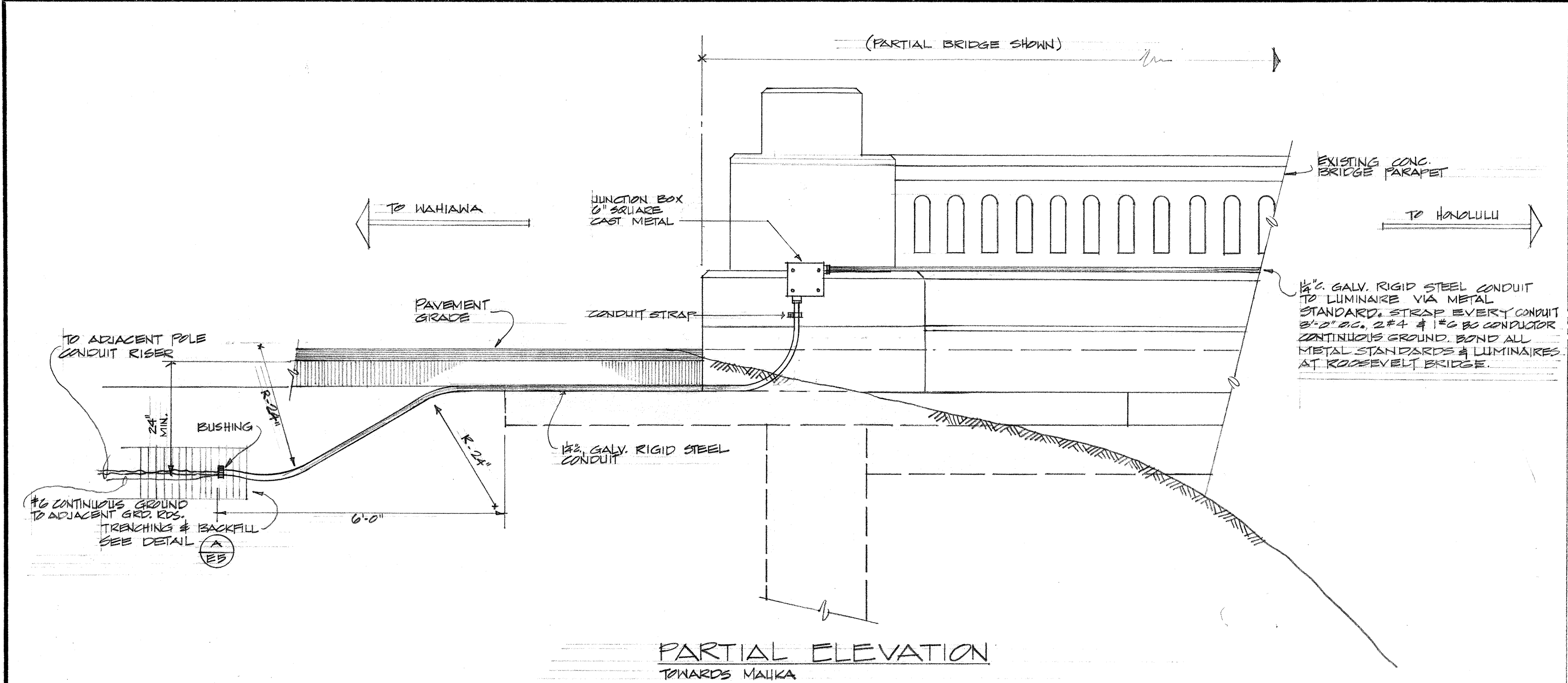
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION,
Wynn M. Nakamura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

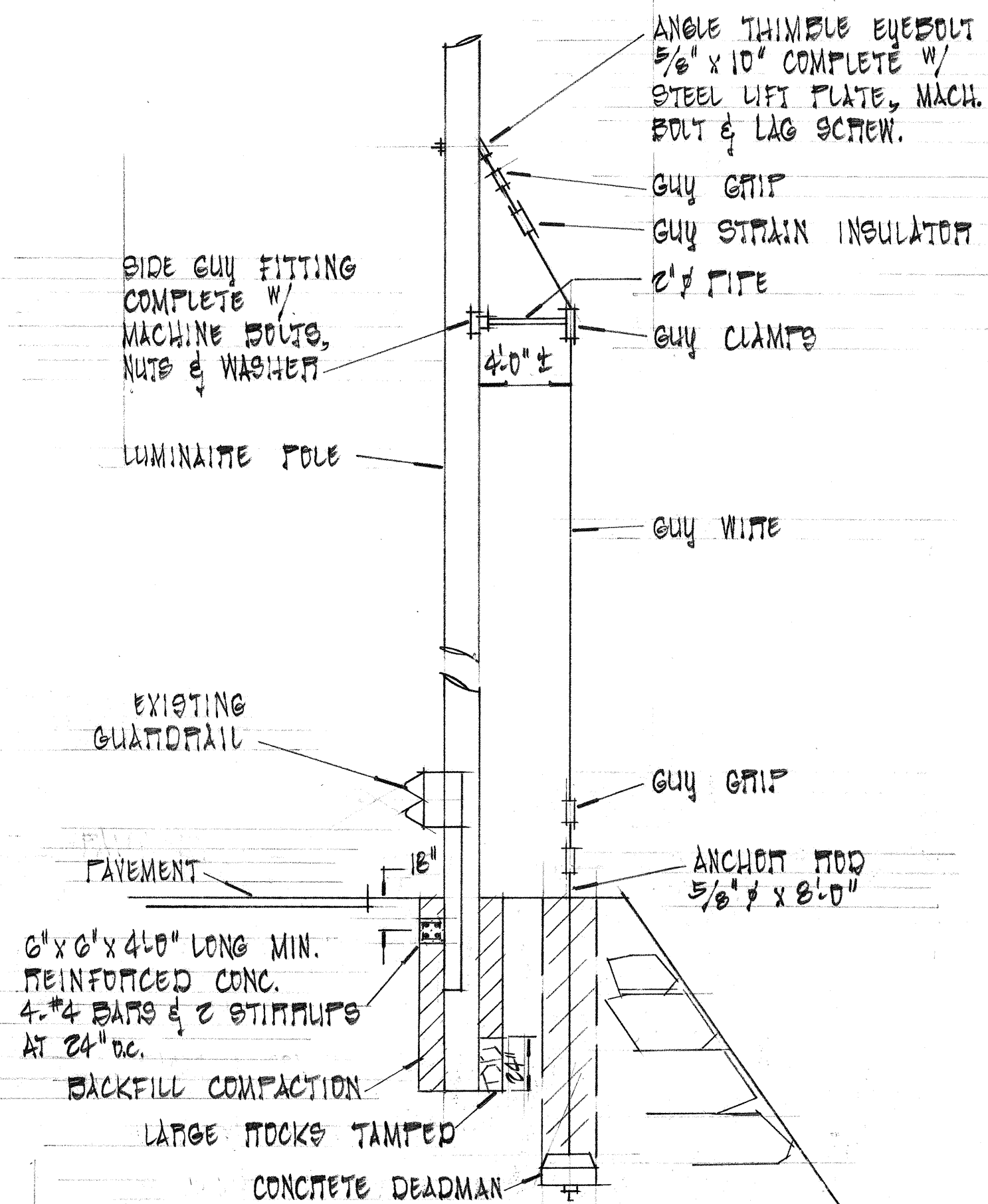
HIGHWAY LIGHTING SYSTEM
KAMEHAMEHA HIGHWAY
MILITARY PARK TO VICINITY OF ROOSEVELT BRIDGE
PROJECT NO. F-099-1(2)
LUMINAIRE & STANDARD DETAILS
SCALE: AS SHOWN DATE: SEPT. 1967

SURVEY PLANNED BY	DATE
DRAWN BY	
CHECKED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-000-1(2)	1968	7	10

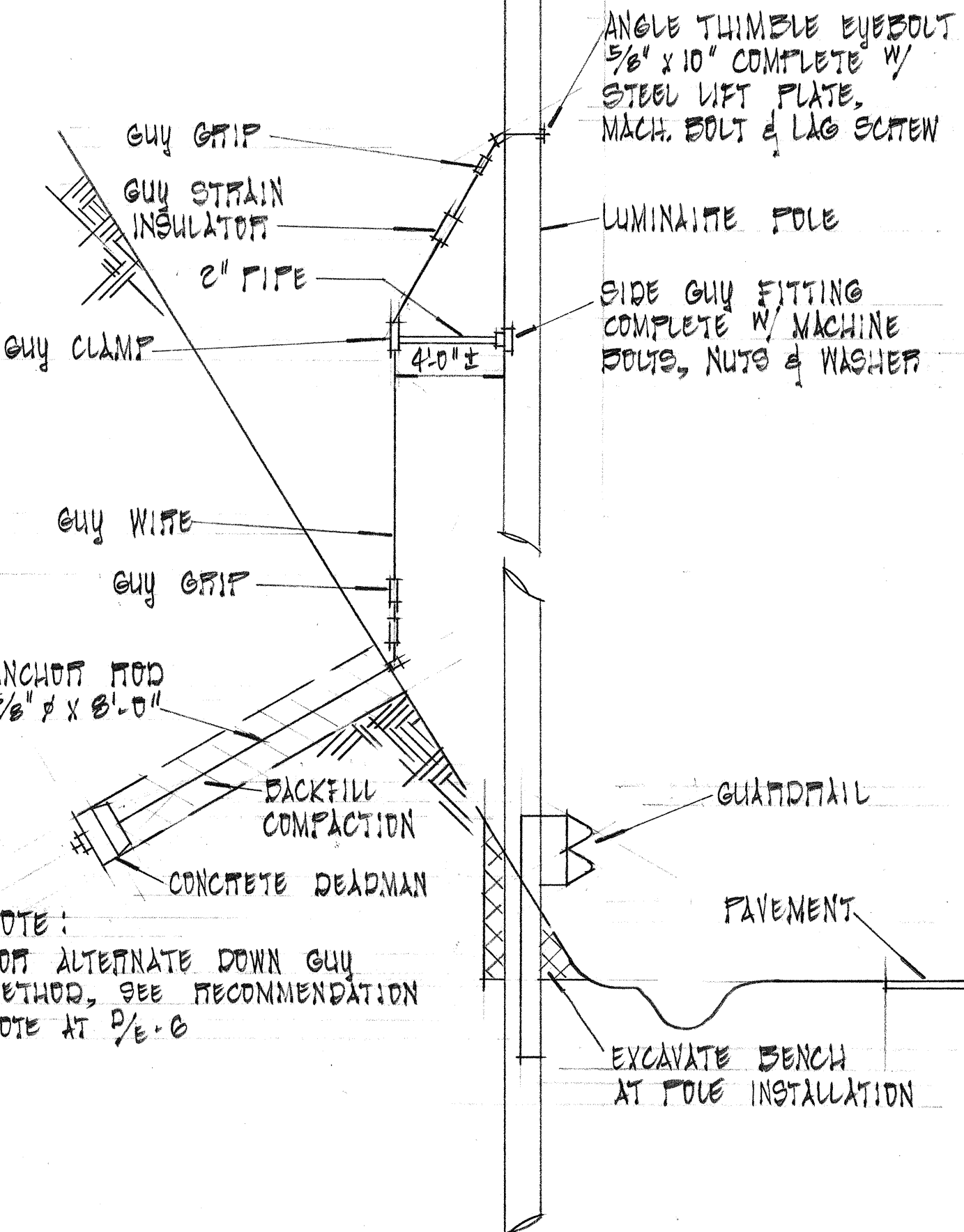


(A) RACEWAY ROUTING & ROOSEVELT BRIDGE
N.T.S.



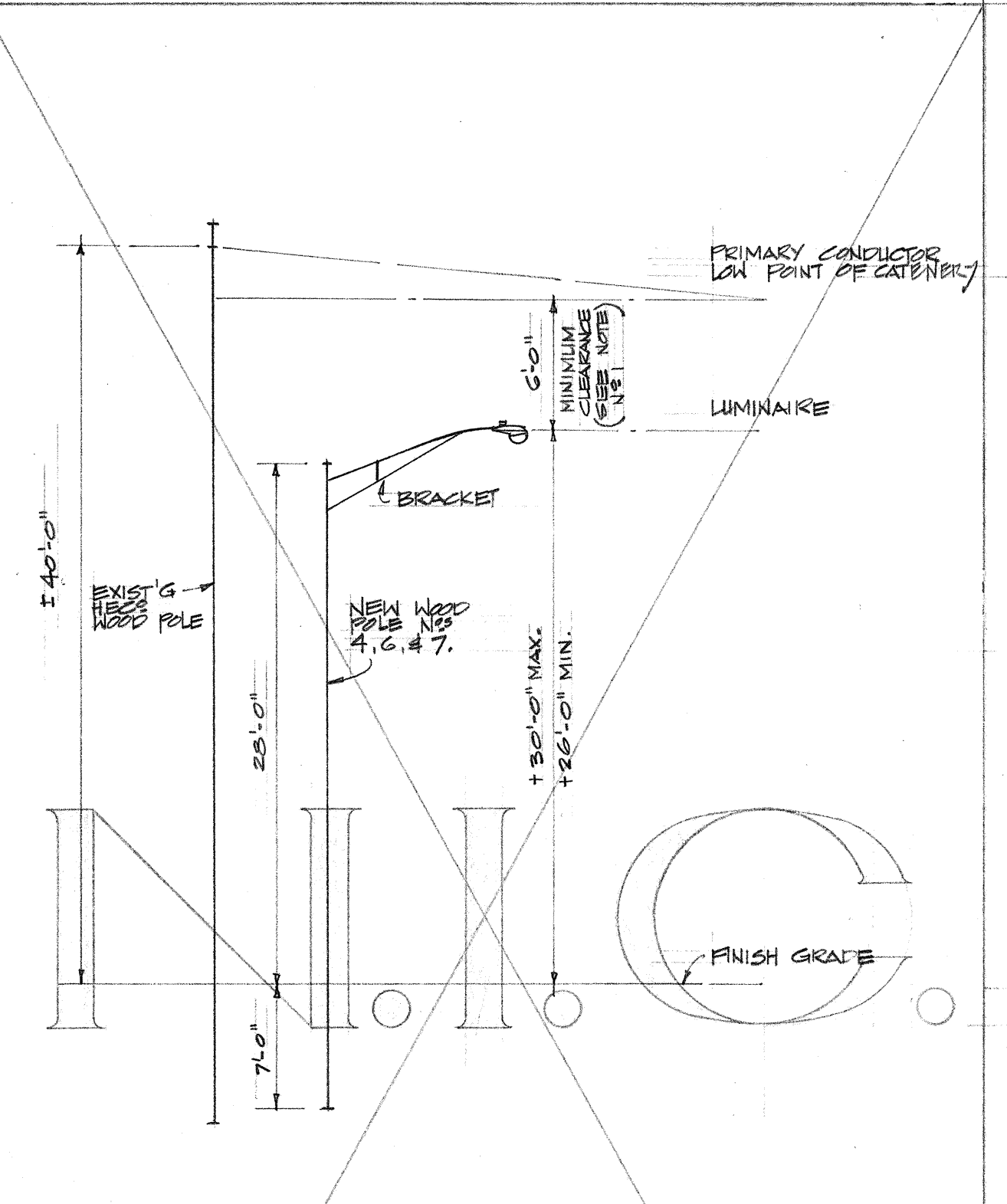
NOTE:
IF CONTRACTOR CHOOSES ALTERNATE DOWN GUY CONSTRUCTION METHOD OTHER THAN SHOWN, SUBMIT SKETCH W/ REQUIREMENTS CONFORMING TO KURTZ'S LINEMAN PRACTICES HANDBOOK 4TH EDITION PUBLICATION, TO ENGINEER-IN-CHARGE FOR APPROVAL BEFORE INSTALLATION.

(D) SIDE GUY DETAIL
METHOD No. 2
N. T. S.



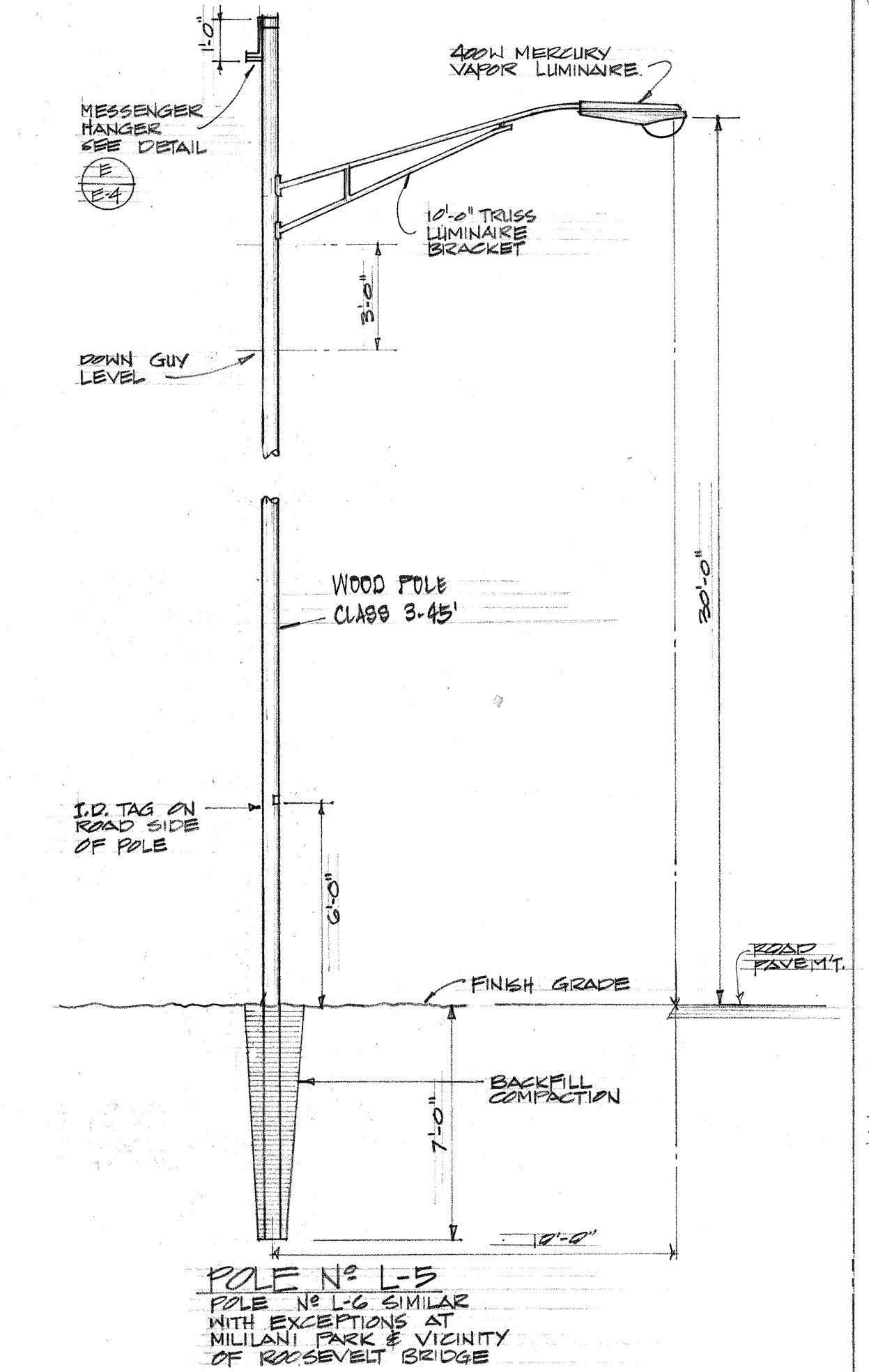
NOTE:
FOR ALTERNATE DOWN GUY METHOD, SEE RECOMMENDATION NOTE AT P/E-6

(C) DOWN GUY DETAIL
METHOD No. 1
N. T. S.



(C) POLE LEVEL ASSIGNMENT
E.G. & WAIKALANI DRIVE
N.T.S.

NOTE:
1. IF LUMINAIRE DOES NOT HAVE 6'-0" MINIMUM CLEARANCE WITH HAWAIIAN ELECTRIC CO. PRIMARY CONDUCTORS, CONTRACTOR SHALL LOWER LUMINAIRE TO OBTAIN PROPER CLEARANCE.
2. ANY DEVIATION FROM DRAWINGS CONTRACTOR SHALL NOTIFY STATE DEPT. OF TRANSPORTATION'S ENGINEER-IN-CHARGE.



(B) STREET LIGHT DETAILS
N.T.S.

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

WYNN M. NAKAMURA
REGISTERED PROFESSIONAL ENGINEER
No. 573
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Wynn Nakamura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM

KAMEHAMEHA HIGHWAY

MILITARY PARK TO VICINITY OF ROOSEVELT BRIDGE
FA. PROJ. NO. F-099-1(2)

MISCELLANEOUS ELECTRICAL DETAILS

SCALE: AS SHOWN DATE: SEPT. 1967

SHEET No. 7 OF 7 SHEETS