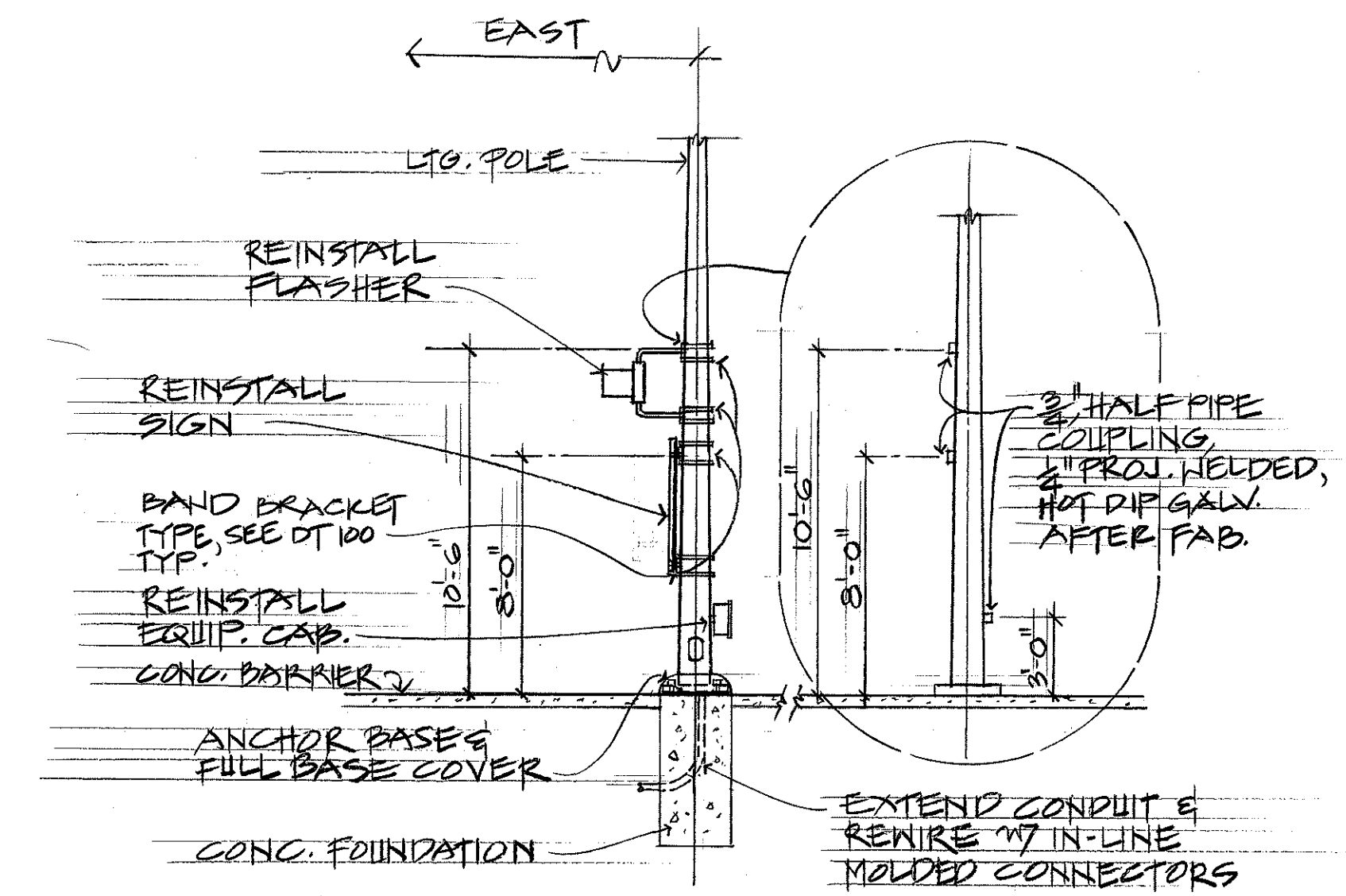
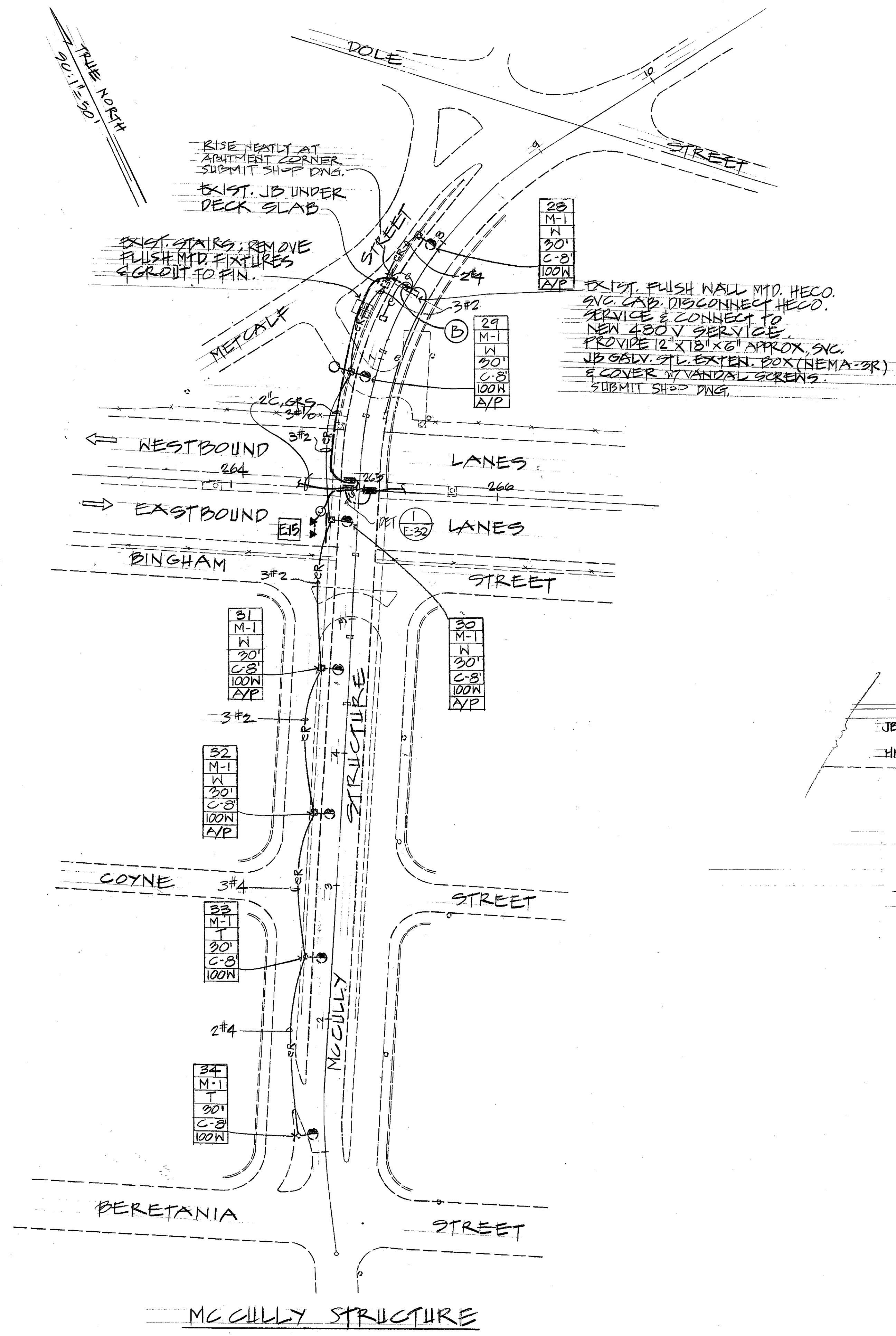
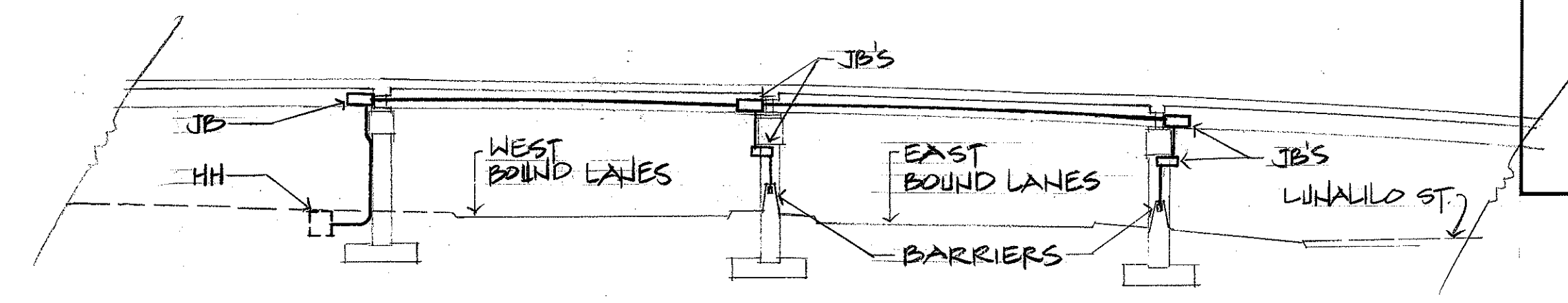


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1R-HI-1(186)	1987	85	97



**(A) "ROAD CLOSED" SIGN
E-20 HIGH WATER ALARM FLASHER
BEACON REINSTALLATION
N.T.S. STATION 7+37**



AS-BUILT POSTED

Contract Change Order No. 13

Lap Weld

Existing Bolt

New Bolt

Lap Weld

Sect. AA

Cut & remove
Rusted portion

New bolt extension

Patch w/ 3000 ppsi
Concrete (Minimum)

1" min. cover over cut bolt

4" minimum lap weld
2 sides

Limits of
Chipping

5" min.

E 70 Electrode
or better
(Galvanize Welds)

Existing Bolt

Typical Details- Rusty Bolts Repair
Not to Scale

LOCATION OF REPAIRED BASES (AMOUNT):

Ramp "H" (Pali Ramp to HI (EB)	(7)
Queen Emma St. Bridge	(3)
Pali Highway Bridge	(3)
Nuuanu Avenue Structure	(3)
Ramps "F" & "G" (HI (W) & Punchbowl to Pali)	(2)
Keeaumoku Structure	(3)
McCully Structure	(7)

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
CHECKED BY	
NO.	

RAKAMURA, OYAMA & ASSOC., INC.
One Kapiolani Blvd., Suite 403
600 Kapiolani Blvd.
Honolulu, Hawaii 96813



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.

W. Nakamura

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM

INTERSTATE ROUTE H-1
HIGHWAY LIGHTING IMPROVEMENTS
AAIA STREET TO PUNCHBOWL STREET
KEEAUMOKU STREET TO OLD WAIALAE ROAD
PROJECT NO. 1R-HI-1(186)

SCALE: AS NOTED

DATE: 30 JAN '87

SHEET NO. E-20 OF 30 SHEETS