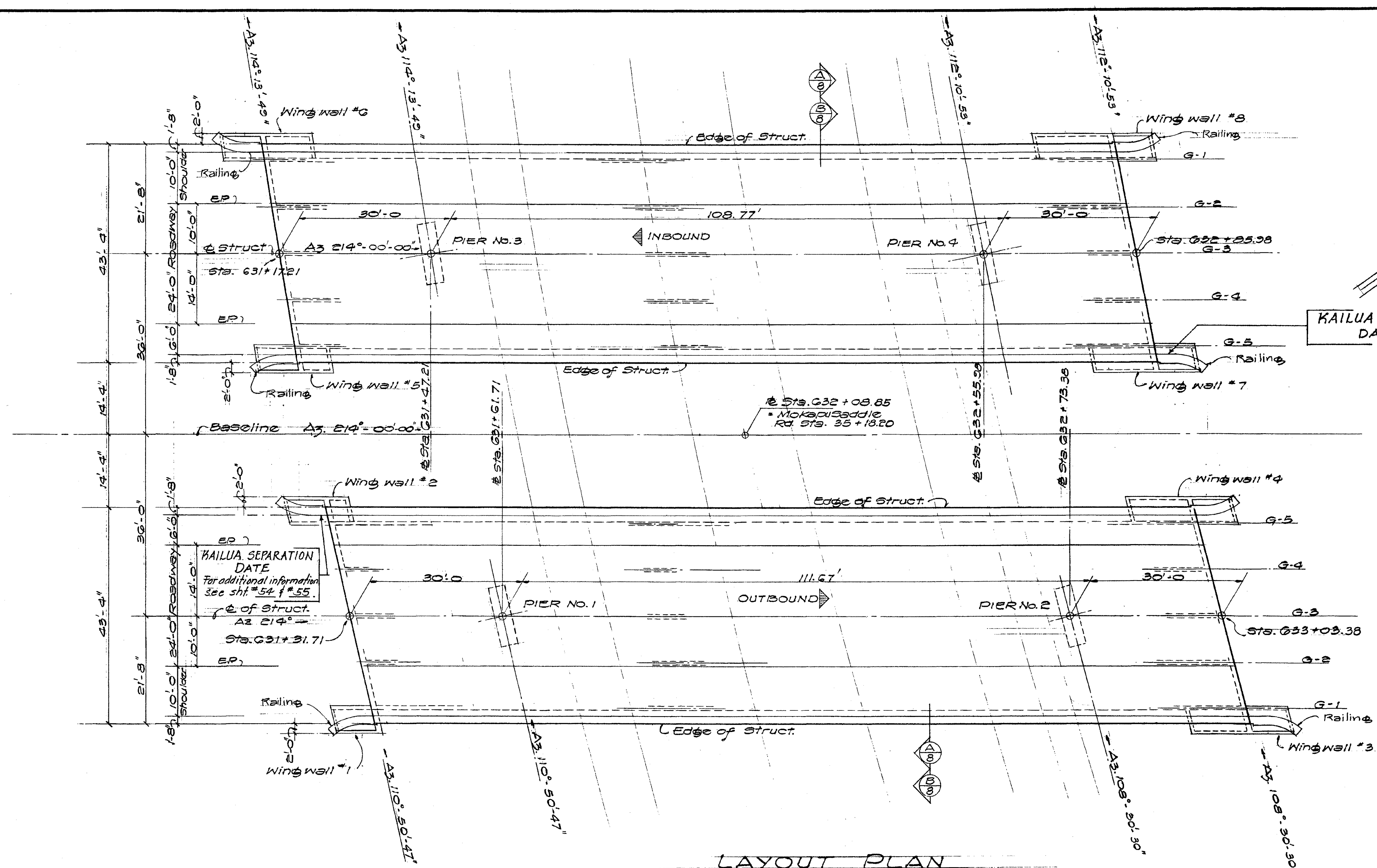


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	113-117-18	1998	43	50

NH-H3-1(78) 2002 16 19



KAILUA SEPARATION DATE For additional information see sht. #54 & #55.

LAYOUT PLAN
Scale: 1" = 10'

DATE	
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NOTE BOOK	
ORIGINAL PLAN	

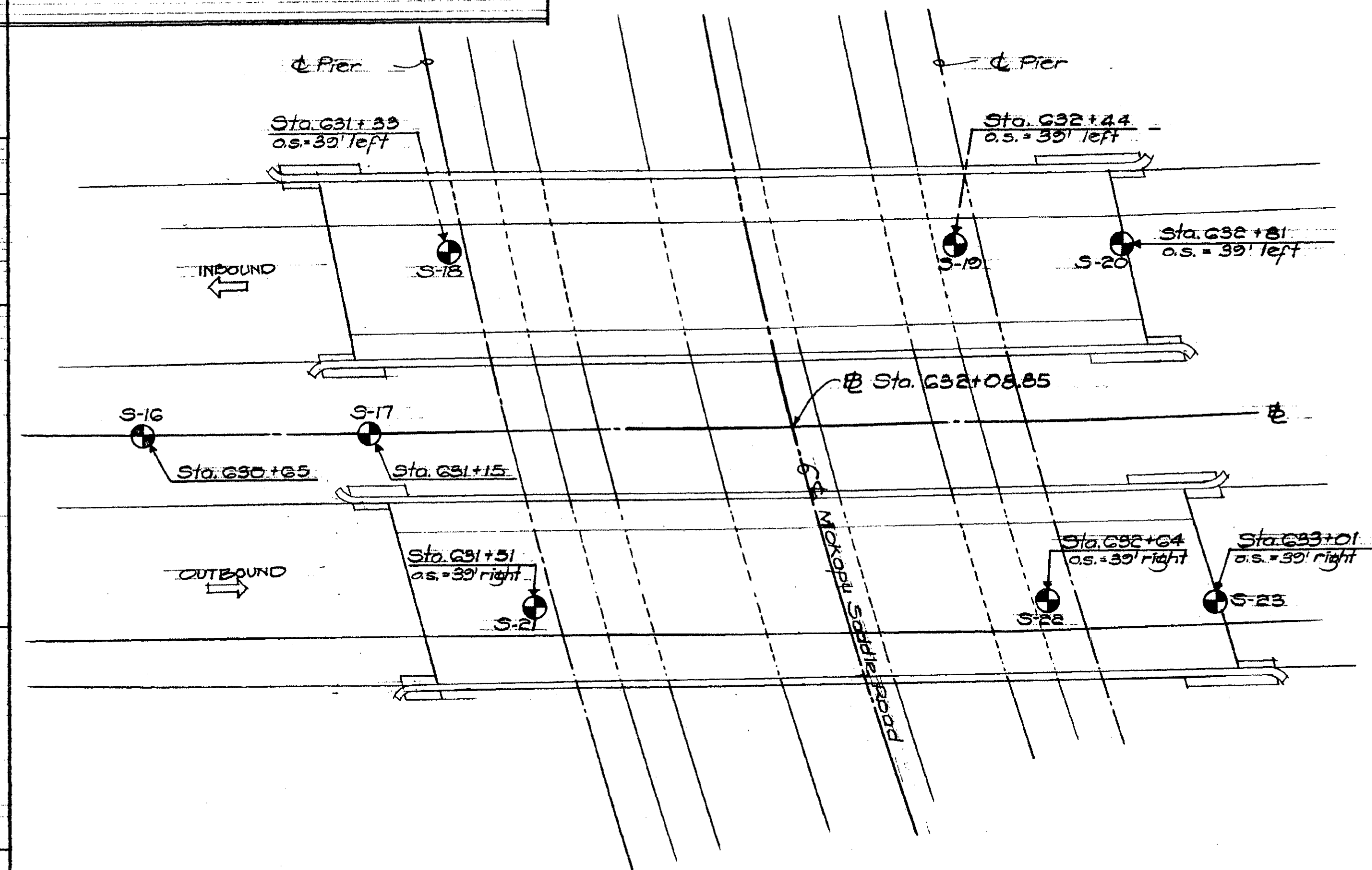


This work was prepared by me or under my supervision.
Kennedy Park

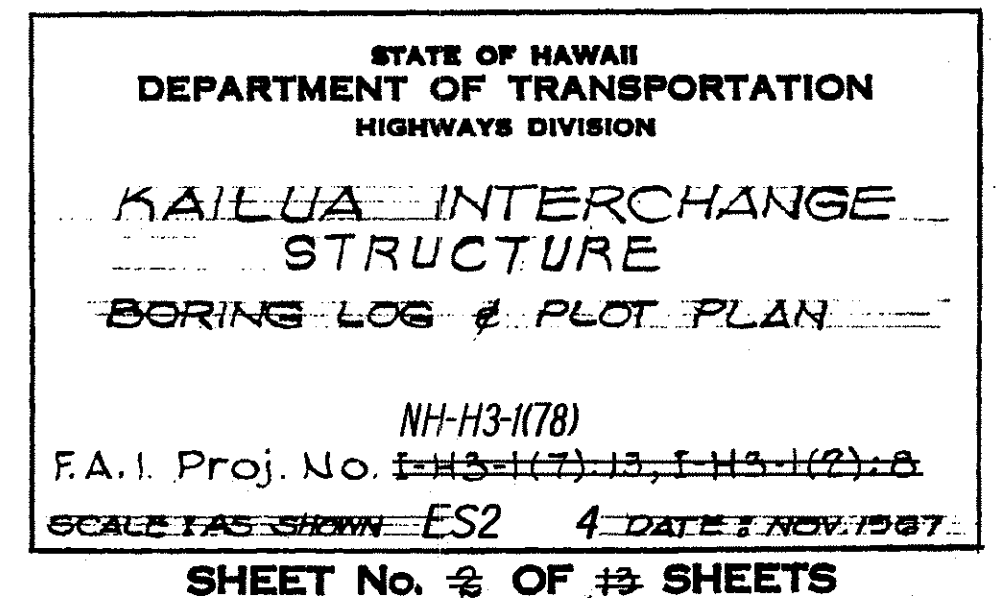
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAILUA INTERCHANGE STRUCTURE
LAYOUT PLAN

NH-H3-1(78)
F.A.I. Proj. No. 113-117-18, 113-117-18
SCALE: AS SHOWN ES 4 DATE: NOV. 1997
SHEET No. 43 OF 50 SHEETS



BORING PLOT PLAN

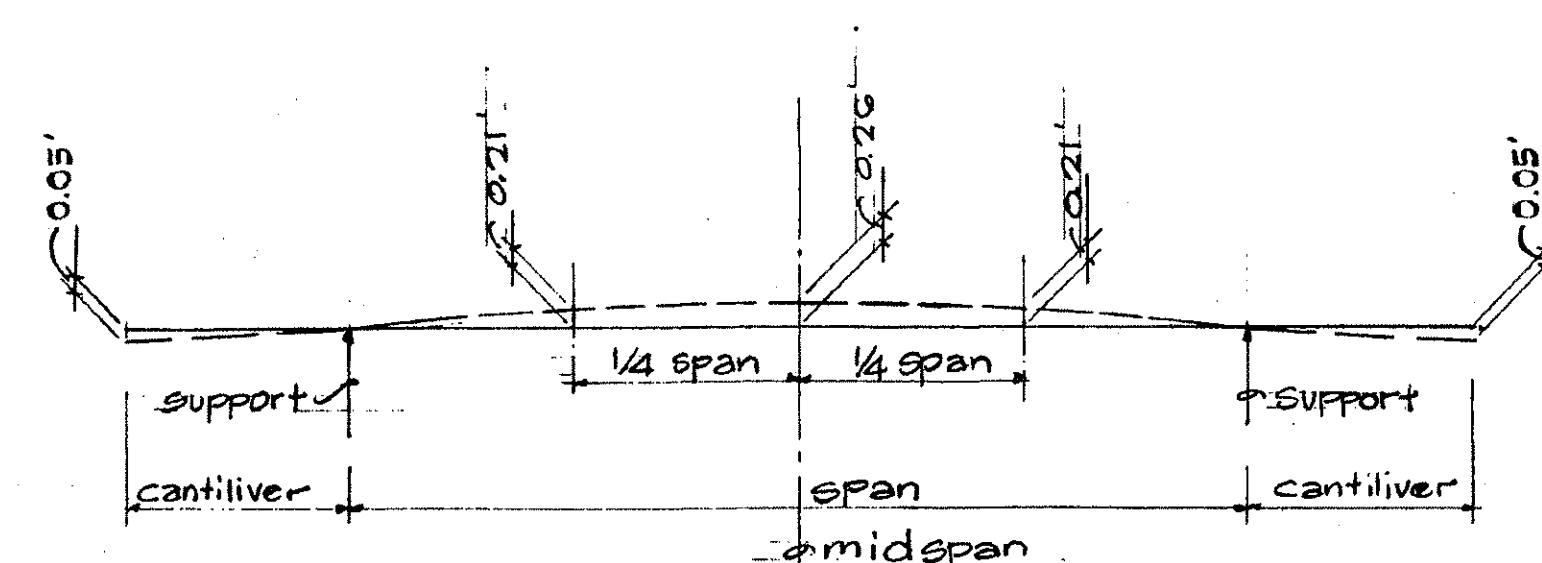
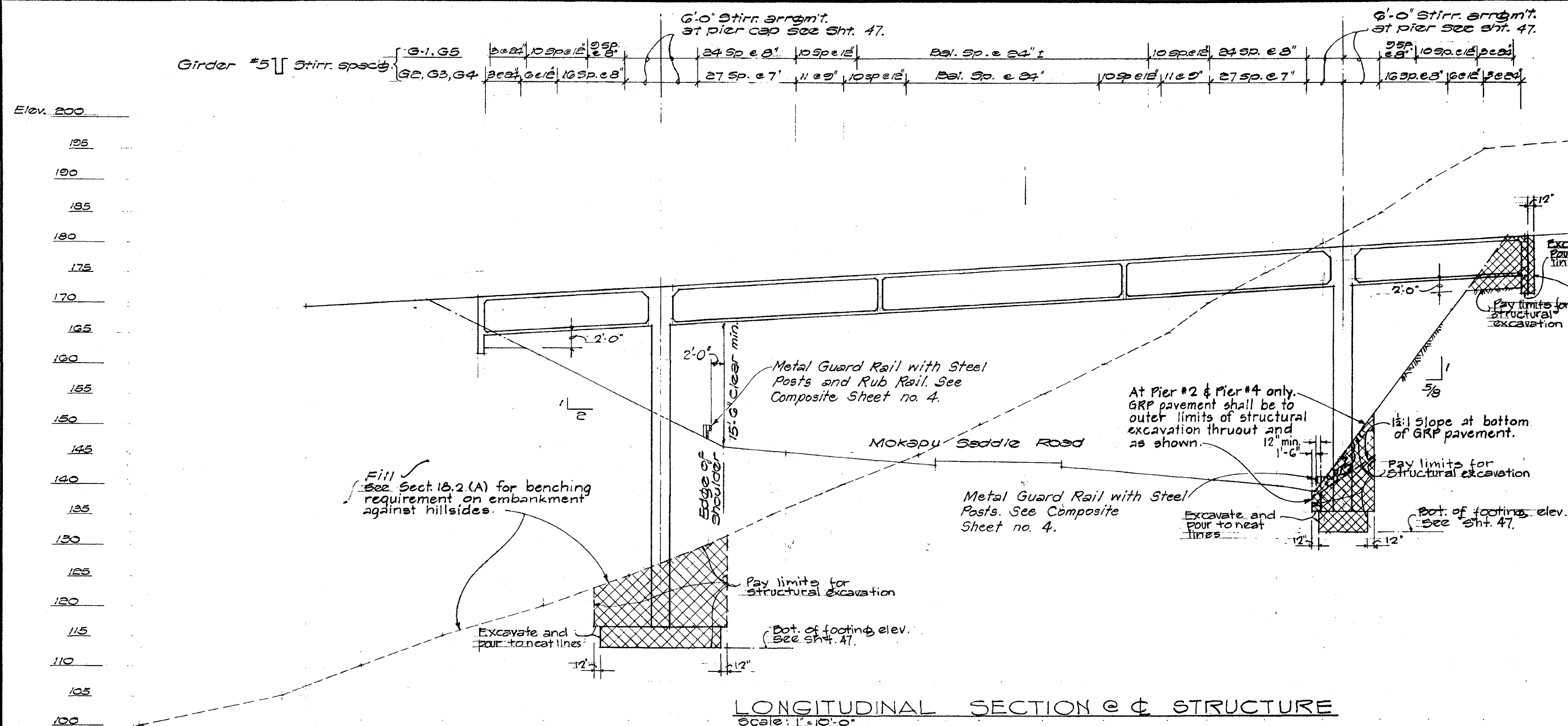


FOR INFORMATION ONLY

1 2 3 17

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEET
HAWAII	HAW.	113-117-13 113-119-8	1966	45	80

NH-H3-1(78)	2002	18	19
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ESTIMATED QUANTITIES

Concrete	- Lump Sum	L.S. (1,540 C.Y.)
Reinforcing Steel - Lump Sum		L.S. (235,353 LBS.)
Metal Bridge Railing (1-Rail Traffic Type)	619.6	64 L.F.
Concrete Bridge Railing (1-Rail Traffic Type)	146.9	76 L.F.
Structural Excavation		1258.8 +04 C.Y.
GRP		80.42 05 C.Y.

Reinforcing Steel - Lump Sum L.S. (535,353 LBS)

Metal Bridge Railings (1-Rail Traffic Type) 679.6 ~~68~~ L.F.

Concrete Bridge Railing (1-Rail Traffic Type) 746.9 ~~761~~ L.F.

Structural Excavation	1258.8	104 C.
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GRP 80.49 ~~95~~ C.Y

GENERAL NOTES

SPECIFICATIONS:

HAASCO Standard Specifications for Highway Bridges (9th Edition)
Hawaii Standard Specification for Road and Bridge
Construction (May, 1957)

DESIGN LOADS: HS-20-44 or Interstate Loading

DESIGN STRESSES:

See AASHTO specifications except as otherwise noted

$$\begin{array}{l|l} f'_c = 3,000 \text{ psi} & n = 10 \\ f_c = 1,200 \text{ psi} & f_s = 29,000 \text{ psi tension} \\ & f_s = 16,000 \text{ psi compression} \end{array}$$
$$f_c = 1,200 \text{ psi} \quad | \quad f_s = 29,000 \text{ psi tension}$$

ALS: f 5.16,000 PSI compression

MATERIALS:

1. All concrete shall be Class A-1 except as otherwise noted on plans.
2. See Special Provisions for admixture in concrete.
3. All reinforcing steel to be ASTM Designation A16 Billet steel, intermediate grade except as otherwise noted.

2. See Special Provisions for admixture in concrete.

3. All reinforcing steel to be AS IM Designation A15 steel, intermediate grade except as otherwise noted.

CONSTRUCTION METHODS:

1. See Standard Specifications & Special Provisions.
2. All footings shall be excavated and poured to neat lines, in case of over excavation, space between footing and ground shall be filled with concrete at contractors expense. The fill concrete shall have a minimum quality of Class D-1.
3. The contractor shall verify the location of all existing utility lines and notify the respective owners before commencing excavation work.
4. In general, top of concrete deck of structure shall be constructed to follow the finish roadway vertical and horizontal curves and grades.
5. For concrete finish see Special Provisions.
6. Embankment shall be brought up equally on all sides of the pier stem so that excessive unbalanced loads are not introduced against it. Embankment shall be constructed according to the applicable provisions of the "Standard Specifications".

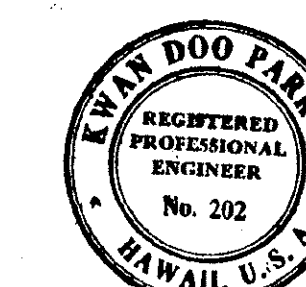
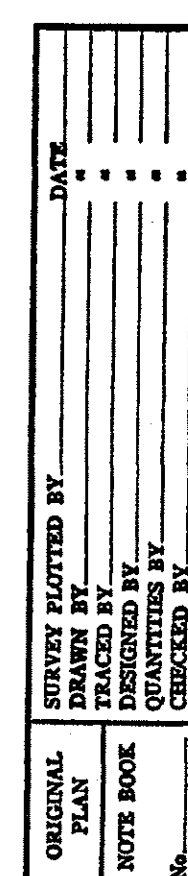
2. All footings shall be excavated and poured to neat line
edge of excavation space between footing and

ground shall be filled with concrete at contractors

expense. The fill concrete shall have a minimum grade of Class D-1.

3. The contractor shall verify the location of all existing

utility lines and notify the respective owners before commencing excavation work.



This work was prepared by m

or under my supervision,
Kenneth B. Poole

**STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION**

KAILUA INTERCHANGE
STRUCTURE
LONGITUDINAL SECTION

NH-H3-1(78)

F.A.I. Proj. No. ~~I-H3-1(7)-13, I-H3-1(2)-6~~

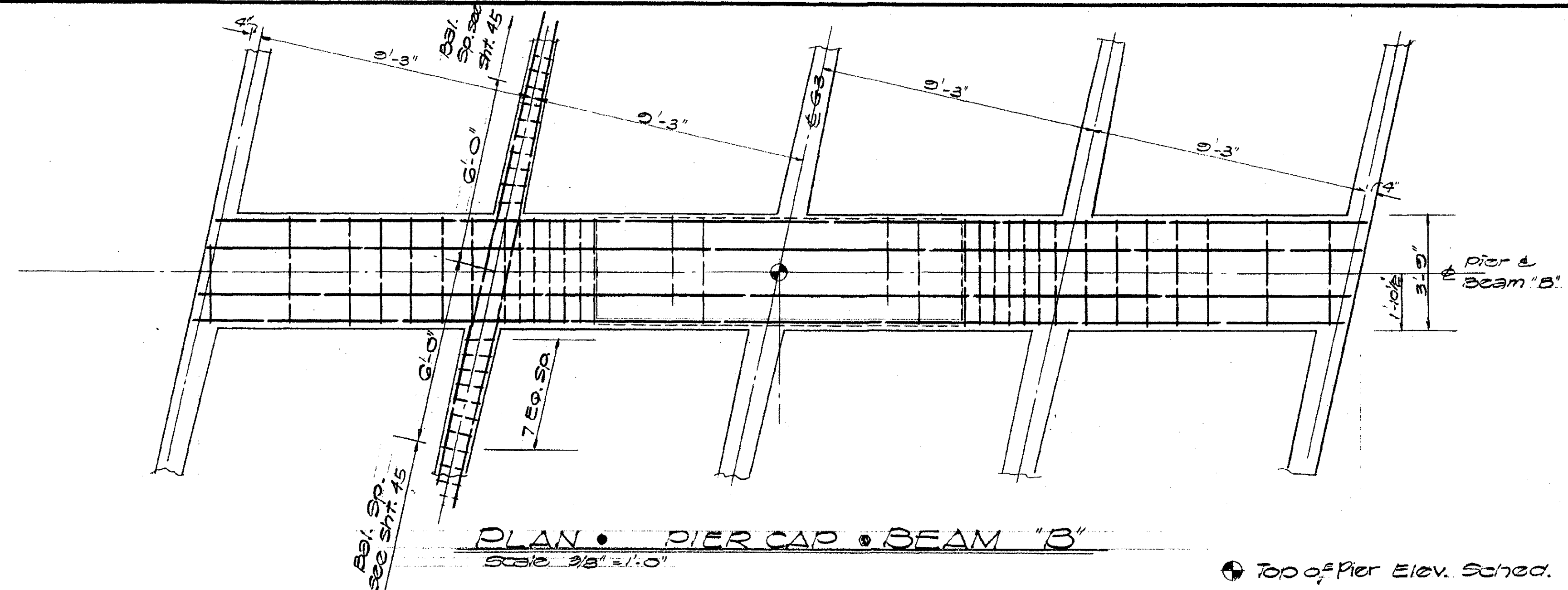
SCALE: AS SHOWN ES3 4 DATE: NOV. 1967

SHEET No. 2 OF 14 SHEETS

FOR INFORMATION ONLY 

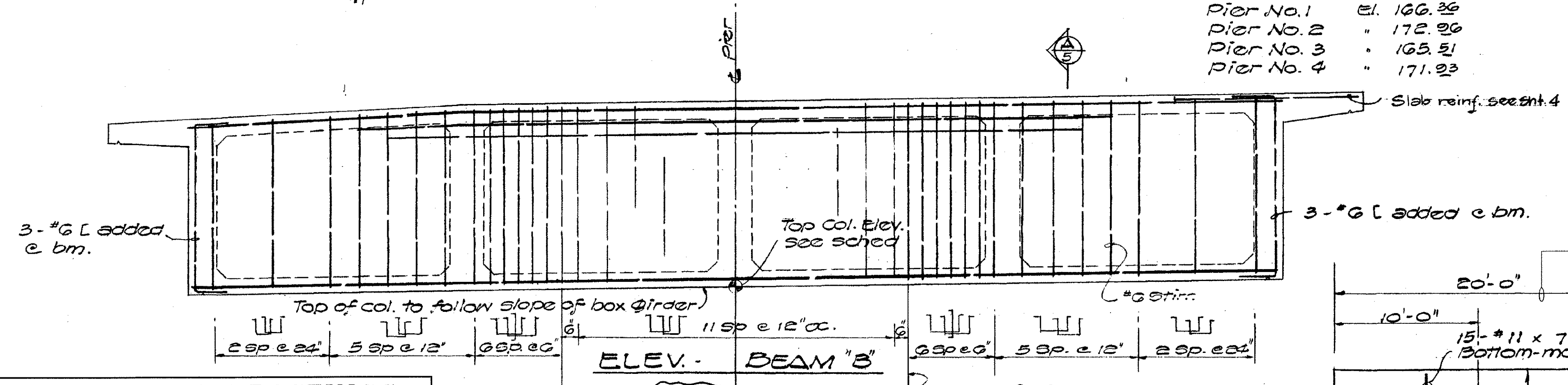
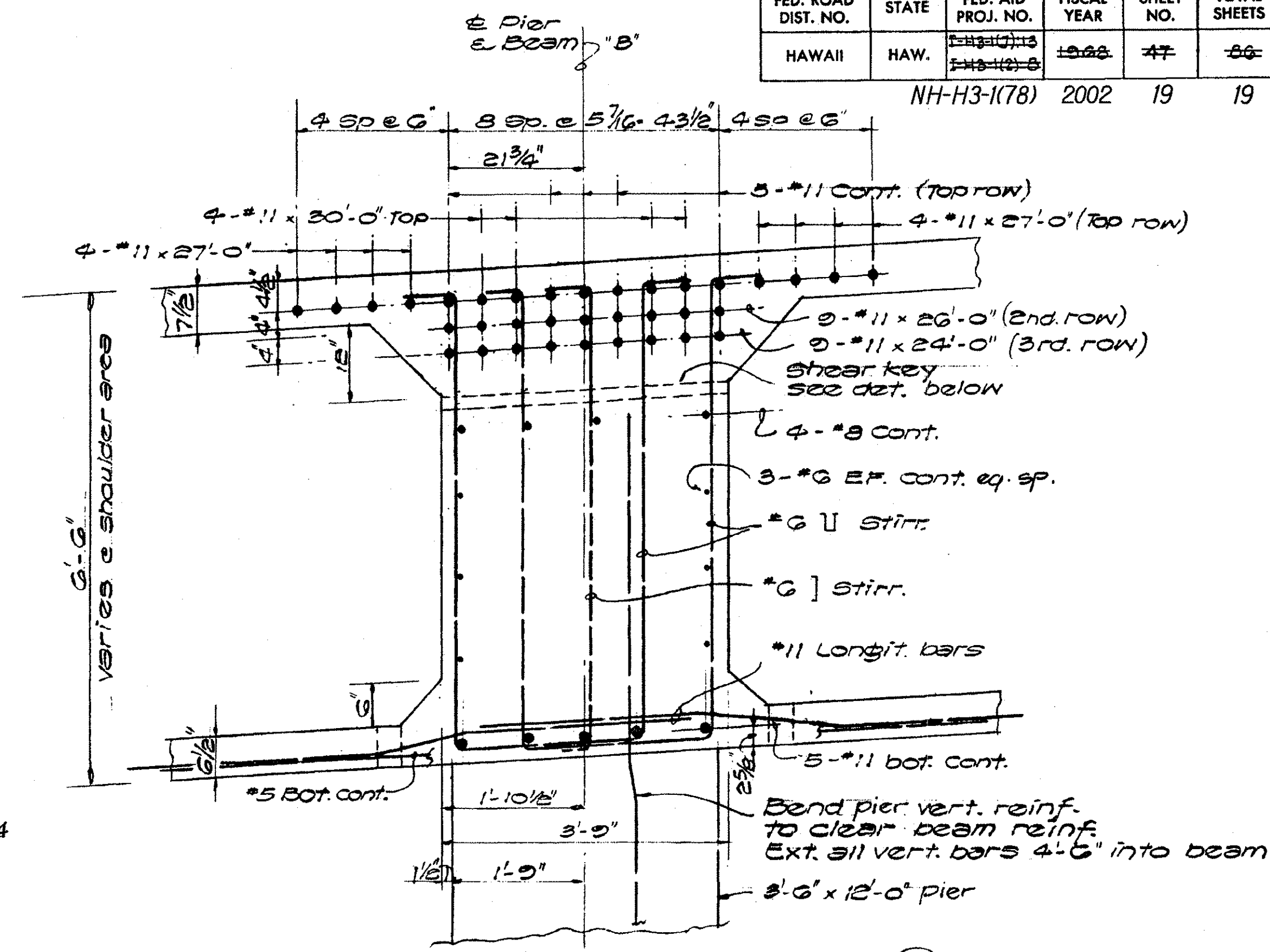
1128 18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H3-1(78)	2002	19	19



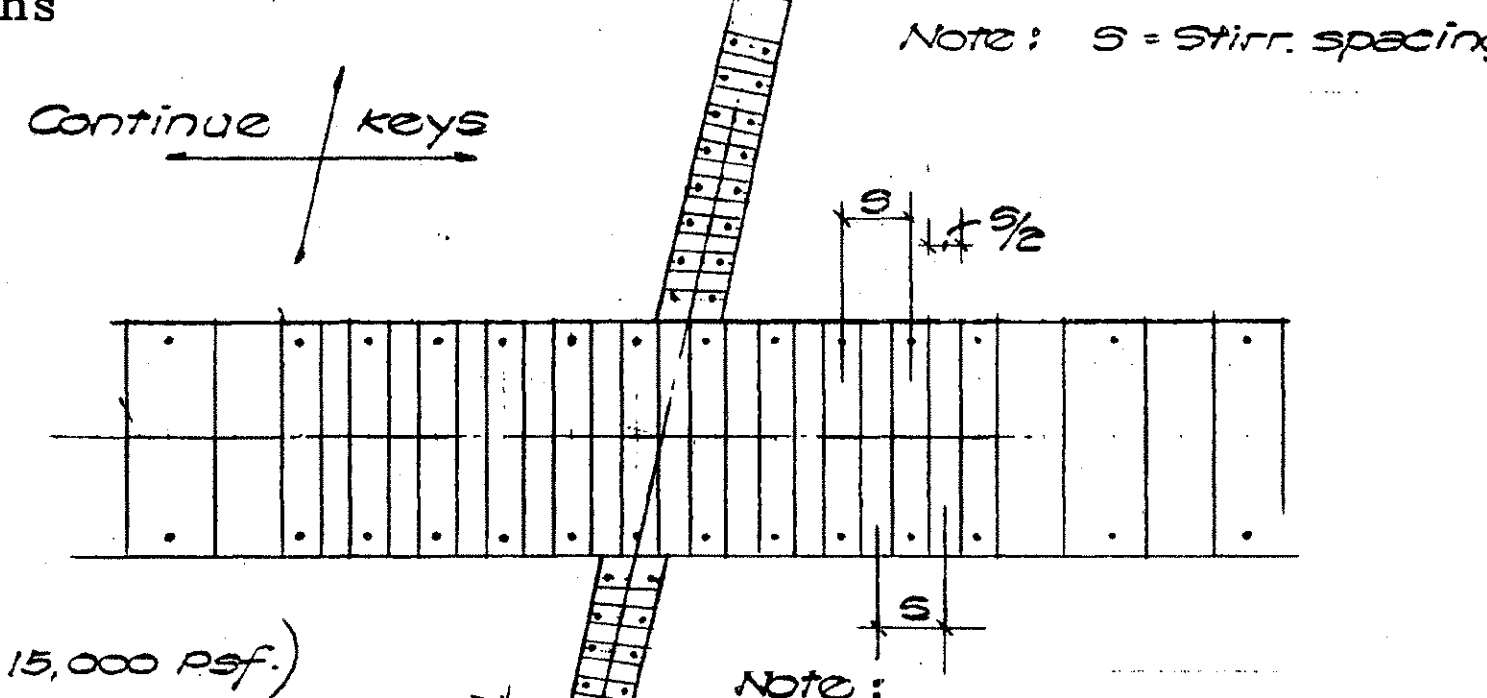
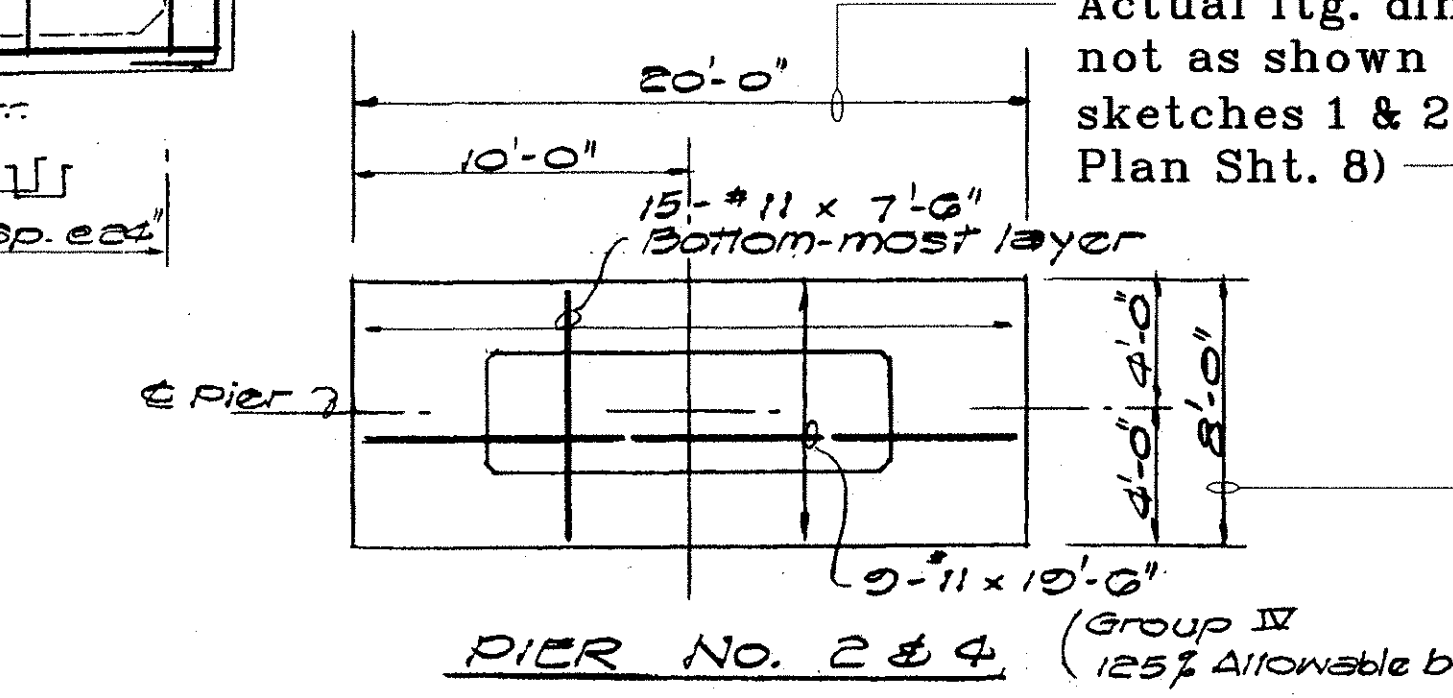
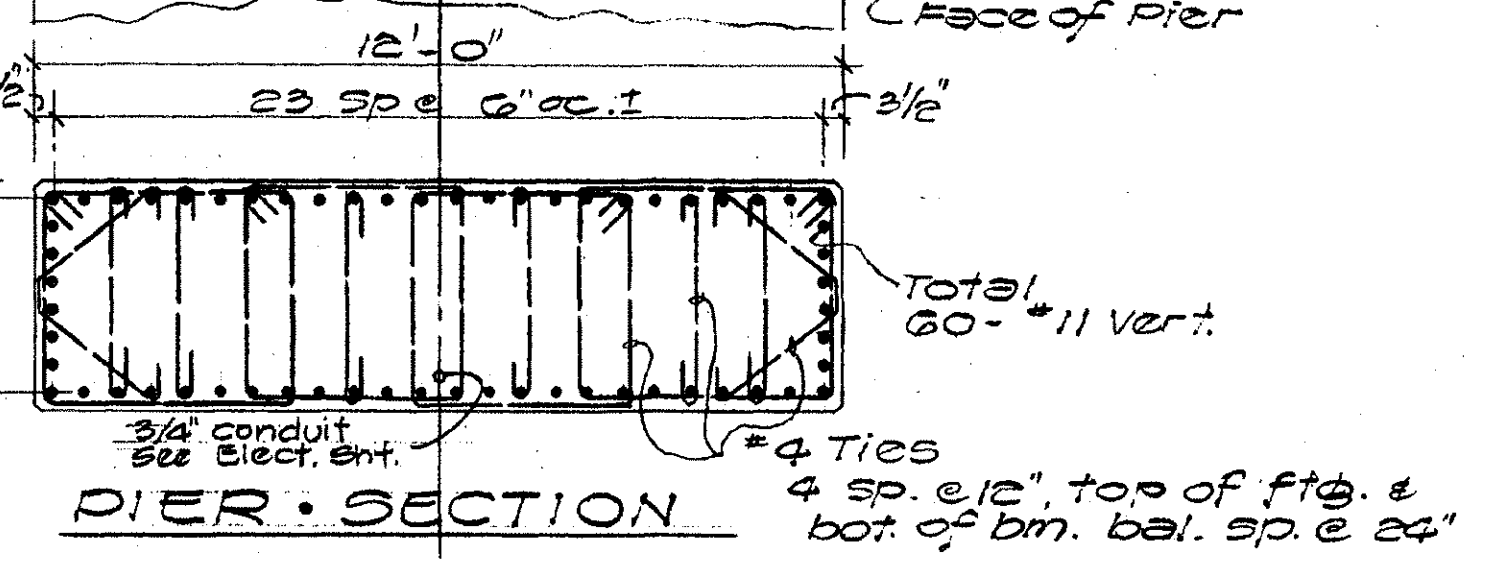
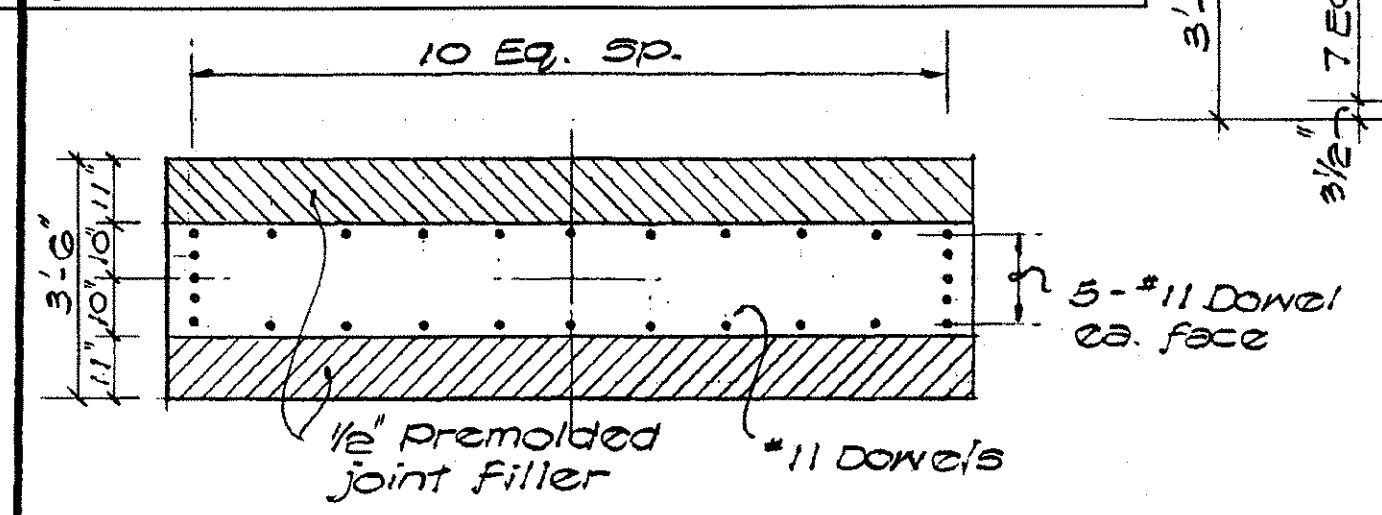
Top of Pier Elev. Sched.

Pier No. 1	El. 166.26
Pier No. 2	" 172.20
Pier No. 3	" 165.51
Pier No. 4	" 171.23



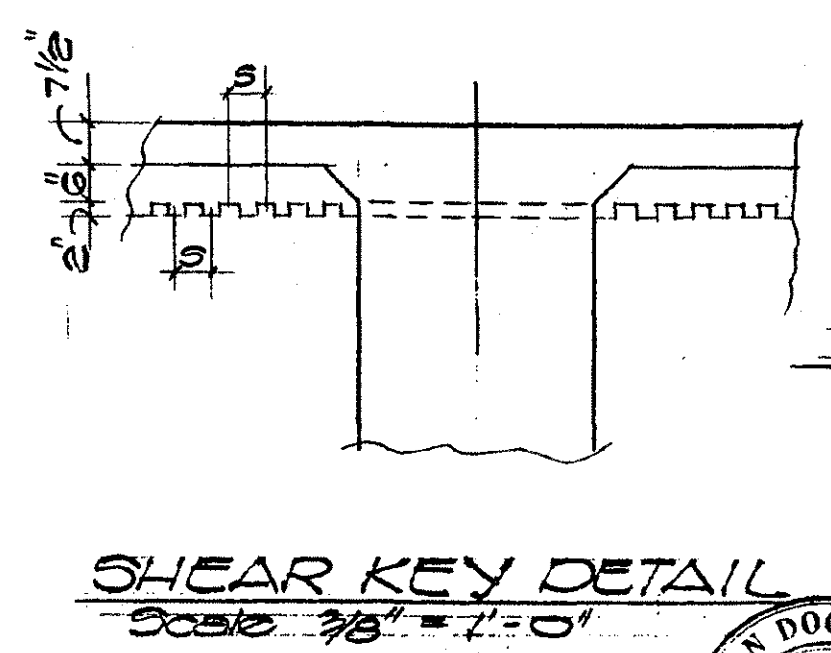
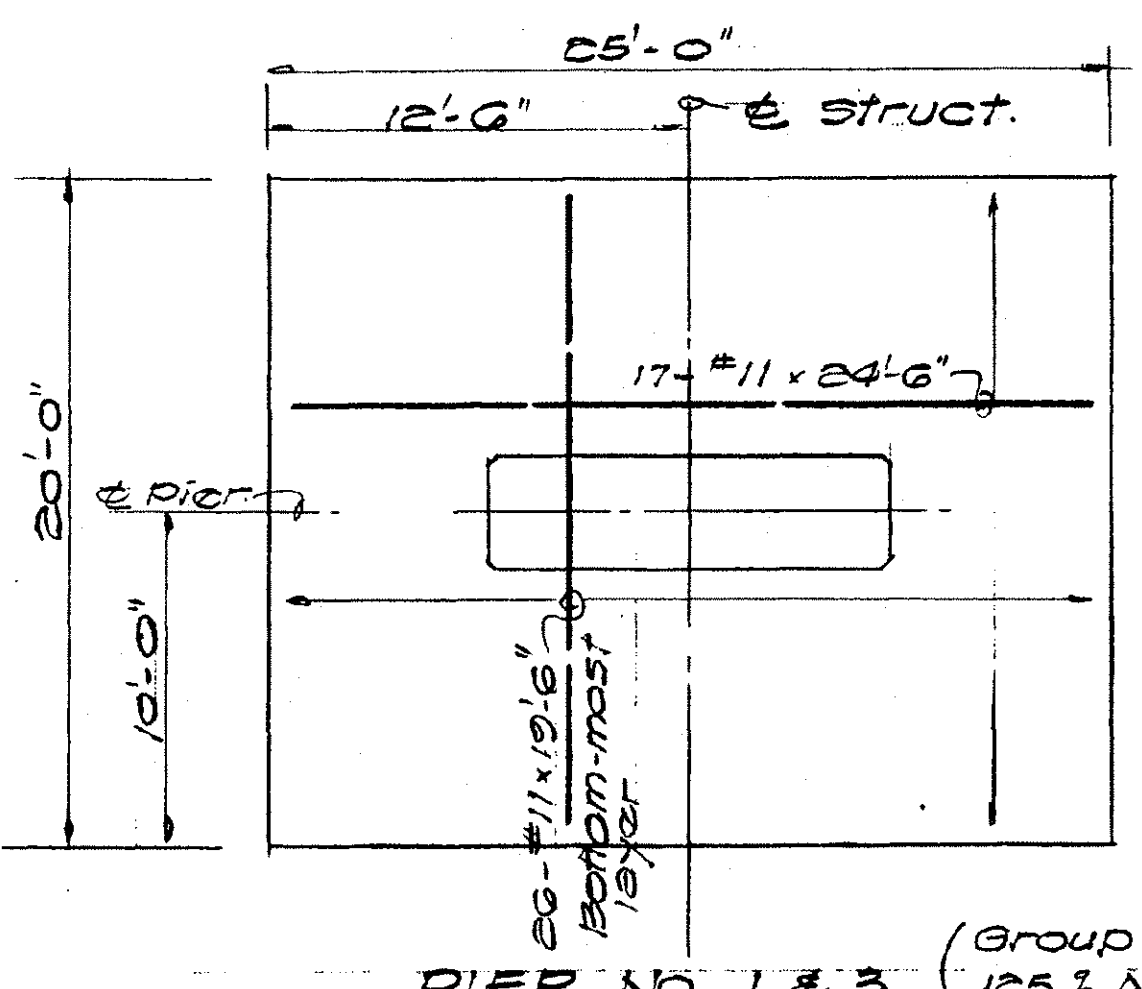
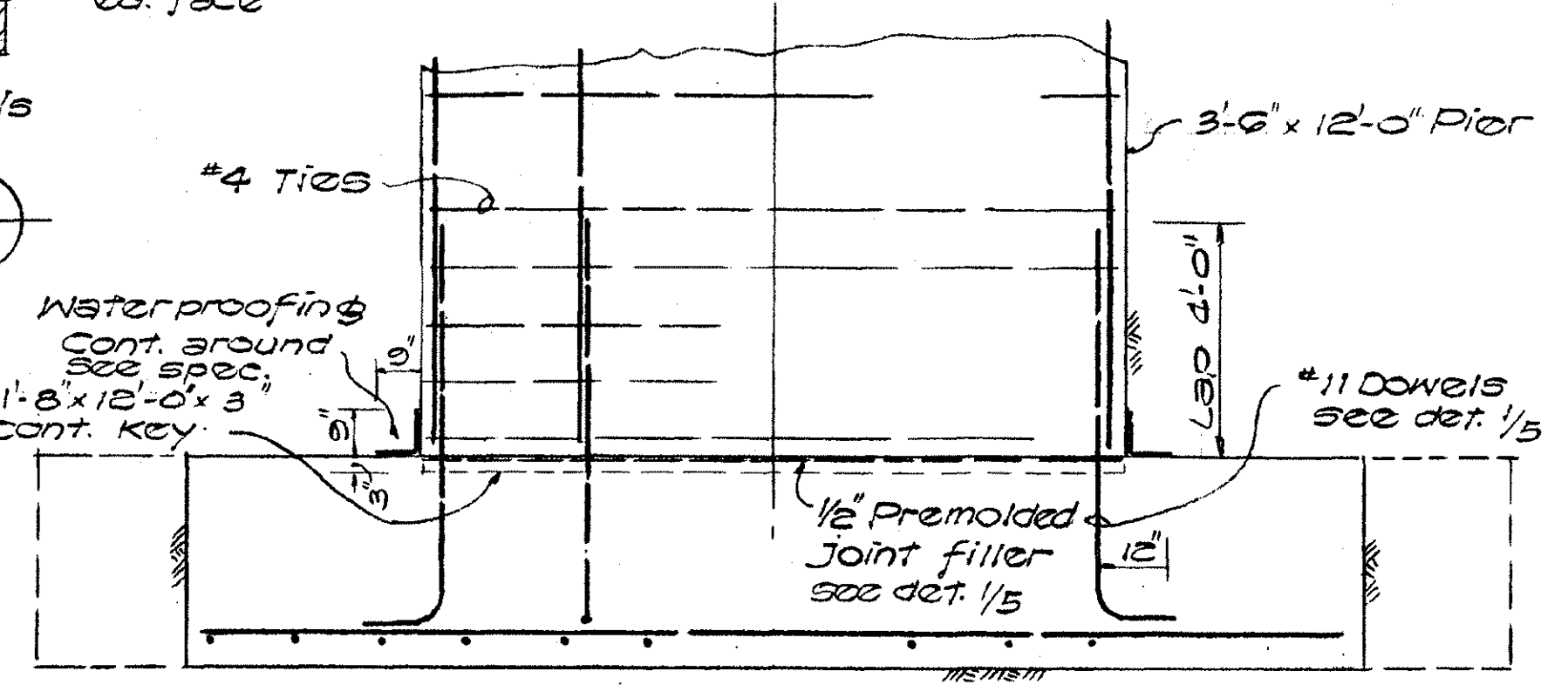
LEGEND FOR AS-BUILT POSTINGS

	Squiggly line for as-built deletion
	Double line for as-built deletion
	Text for as-built posting



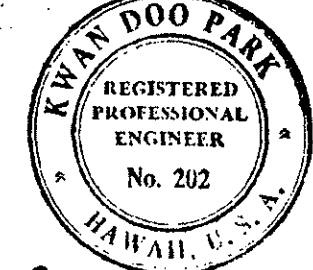
Actual ftg. thickness varies at piers 2 & 4 (See Plan Sht. 8)

Pier No. 1	Elev. 113.2
Pier No. 2	Elev. 132.2
Pier No. 3	Elev. 115.2
Pier No. 4	Elev. 137



Note: Shear keys may be eliminated, provided construction joint surface is cleaned of surface laitance, curing compound & other materials foreign to the concrete, and clean coarse aggregate is exposed by abrasive blast methods immediately prior to placing of concrete.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Signature: *Kenneth Park*



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KAILUA INTERCHANGE
STRUCTURE
PIER & BEAM
PLAN, SECTIONS & ELEVATIONS

NH-H3-1(78)
F.A.I. Proj. No. 1-H3-1(78)-1, 1-H3-1(78)-2
SCALE: AS SHOWN ES4 4 DATE: 1 NOV. 1967

SHEET No. 5 OF 13 SHEETS