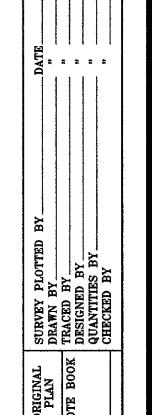


Scale: 1" = 20'





PAHEEHEE BRIDGE RETROFITS					
ITEM	LOCATION	QUAN PER LOC.		REFERENCE DRAWINGS	
Seat Extender	Abutments No. 1 and No. 2	2	4	S5.3, S5.4	
Seat Extender	Bent No. 2	4	4	S5.5, S5.9, S5.10, S5.11	
Type I Single Cable Restrainer	Bent No. 2	8	8	S5.11, S6.1, S6.3, S6.4	
Footing	Bent No. 4	2	2	S5.6, S5,7, S5.8	

LEGEND	FOR AS-BUILT POSTINGS			
	Squiggly line for as-built deletion			
-100.00	Double line for as-built deletion			
Roadway	Text for as-built posting			

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

PAHEEHEE BRIDGE

ELEVATION

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

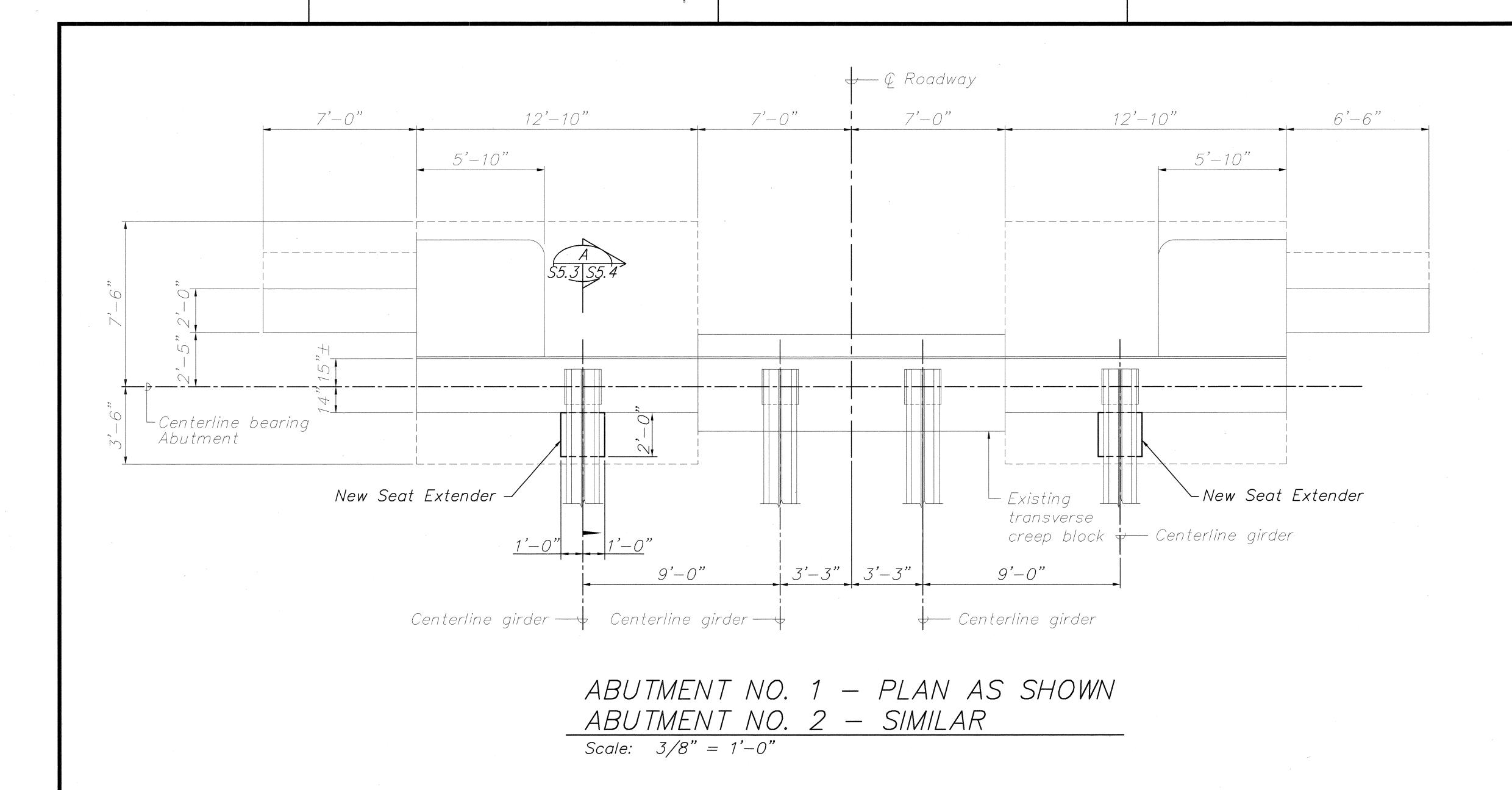
VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED

DATE: March 2001

SHEET No. S5.2 OF 76 SHEETS



FED. ROAD
DIST. NO.STATEFED. AID
PROJ. NO.FISCAL
YEARSHEET
NO.TOTAL
SHEETSHAWAIIHAW.BR-0100(57)20017488

LEGEND:

---- Existing Structure

----- New Construction

LICENSED PROFESSIONAL ENGINEER

NO. 8104-S

WAII, U.S.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE
ABUTMENTS NO.1 AND NO. 2

PLAN

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

VICINITY OF PEPEEKEO, HAWAII — UNIT 1

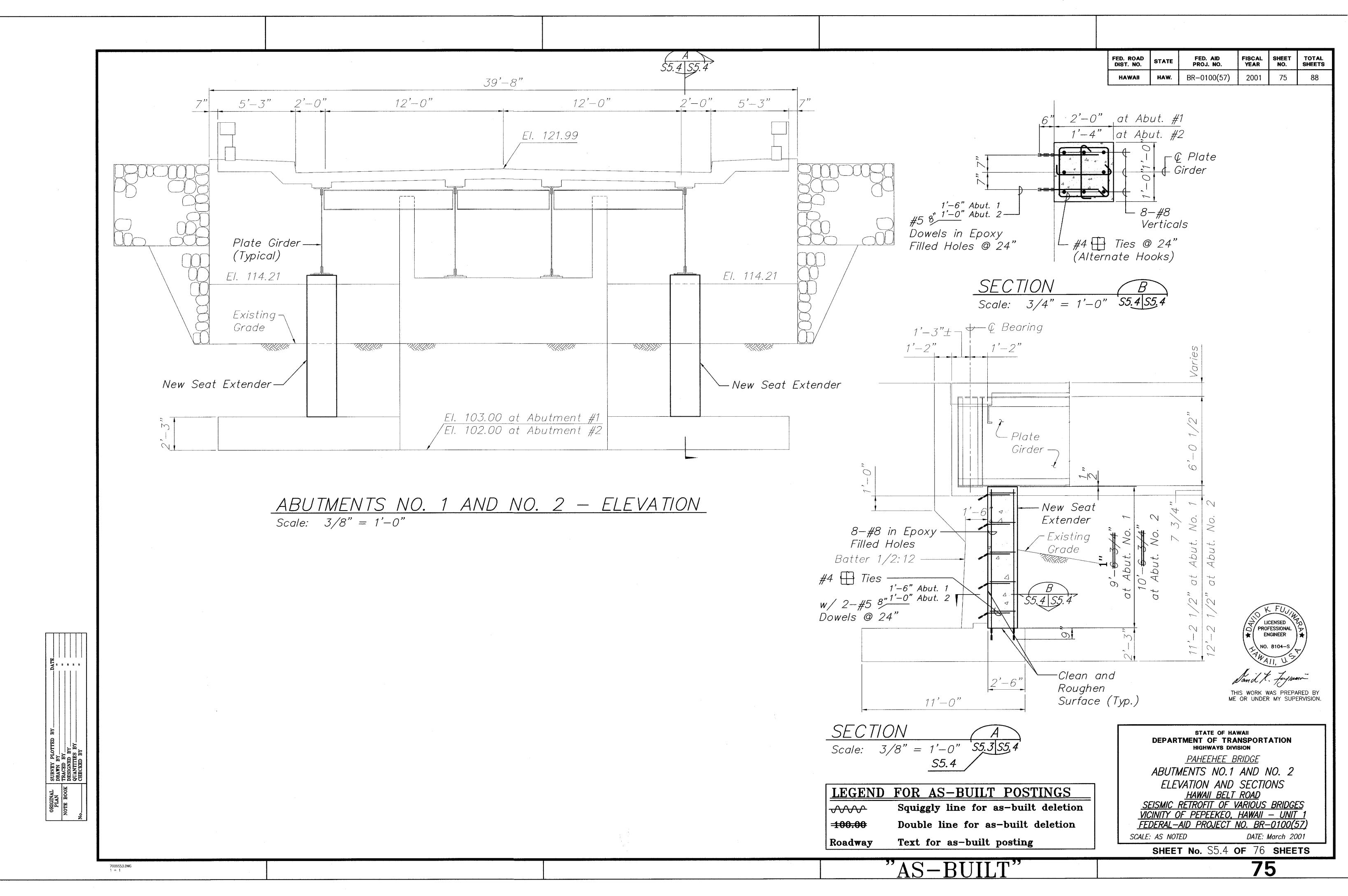
FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED

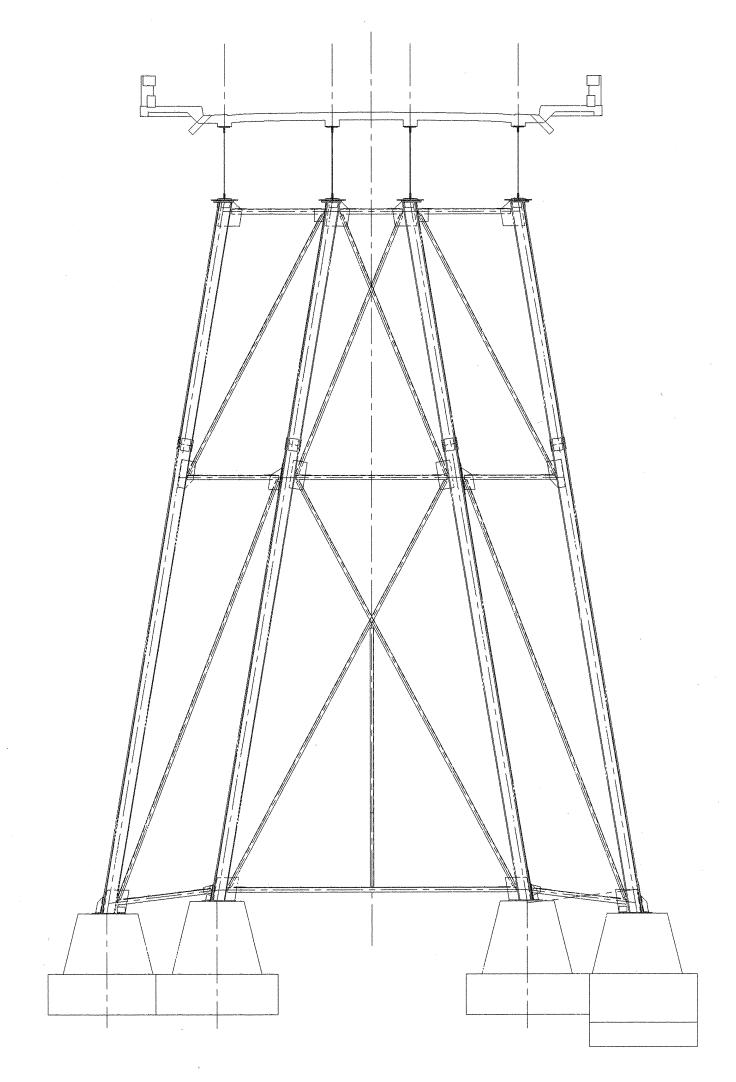
SHEET No. S5.3 OF 76 SHEETS

DATE: March 2001

74

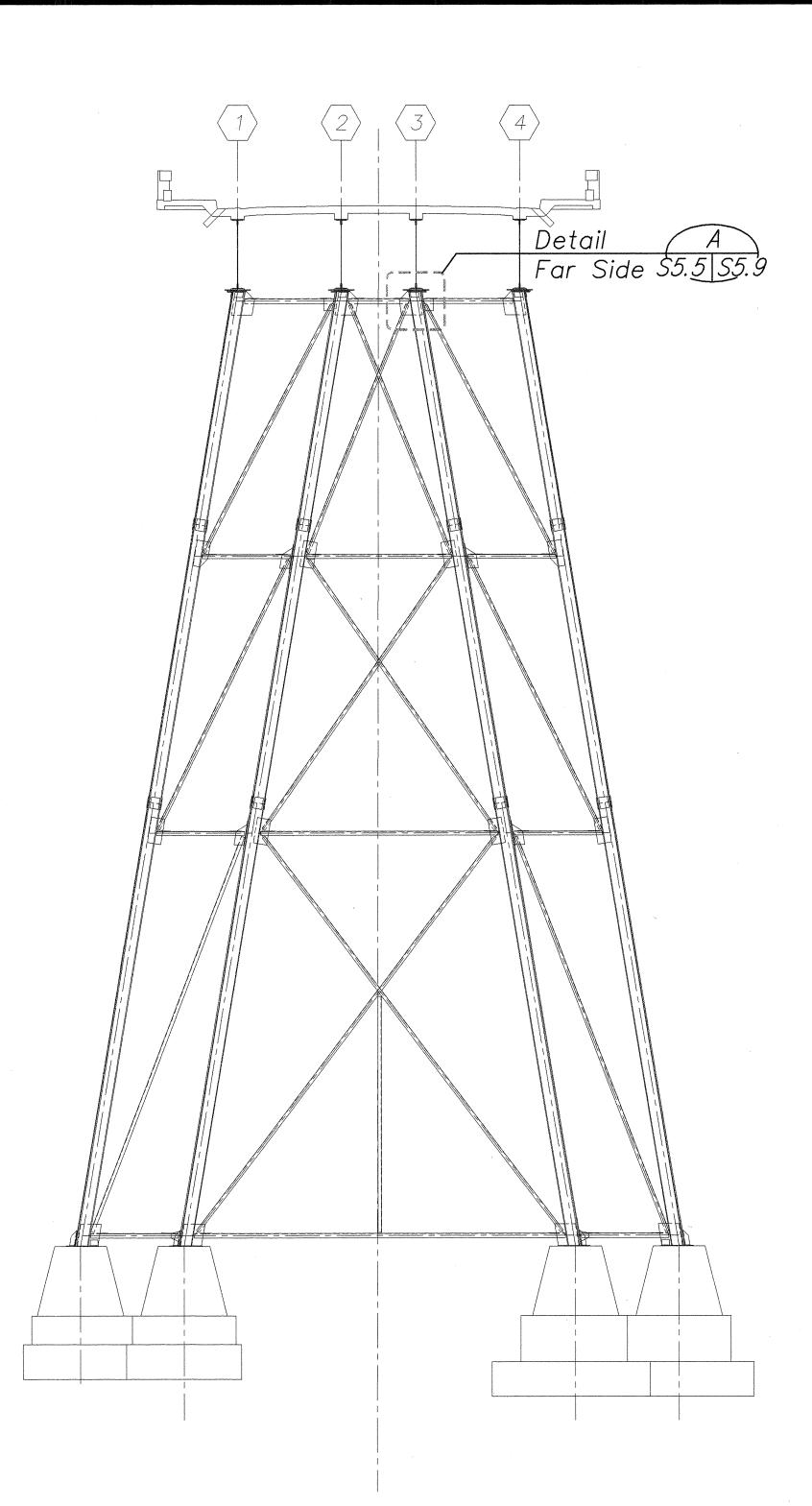


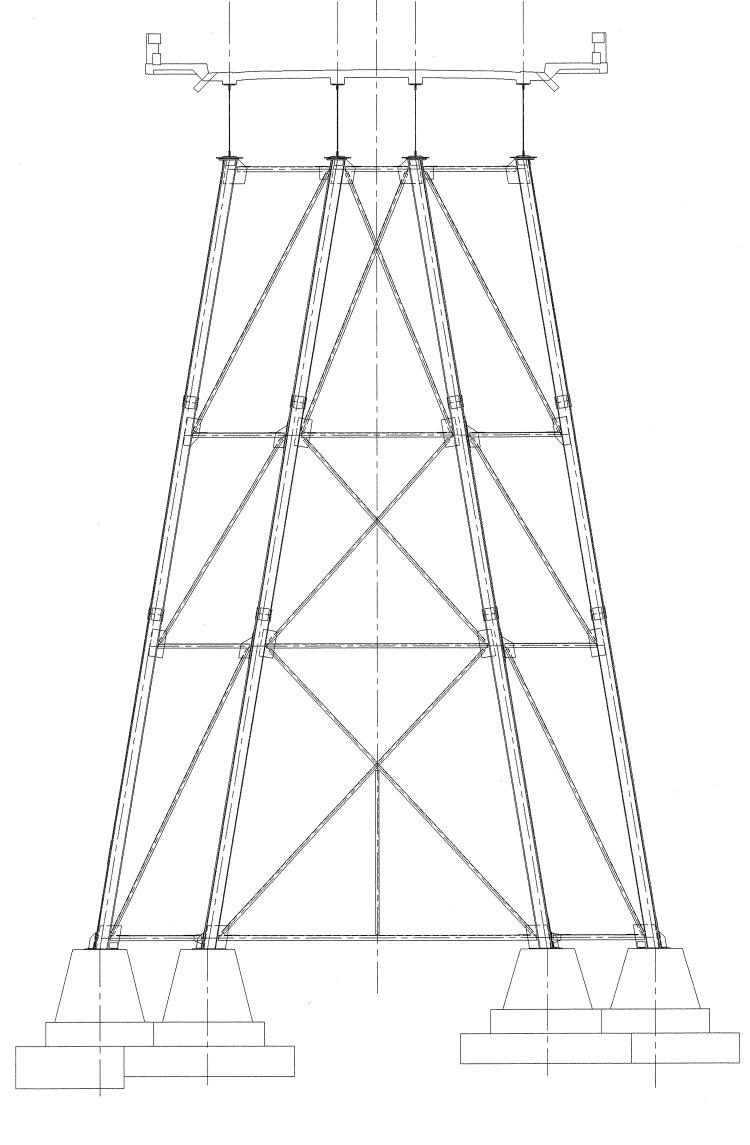
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0100(57)	2001	76	88



No Retrofit Required

 $\frac{ELEVATION - BENT NO. 1}{Scale: 1/8" = 1'-0"}$



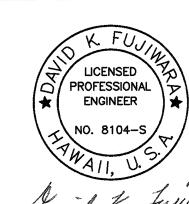


No Retrofit Required

 $\frac{ELEVATION - BENT NO. 3}{Scale: 1/8" = 1'-0"}$

Retrofit Required

 $\frac{ELEVATION - BENT NO. 2}{Scale: 1/8" = 1'-0"}$



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

BENT ELEVATIONS

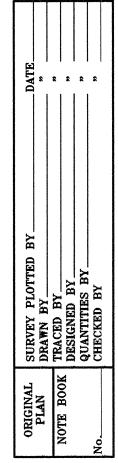
HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

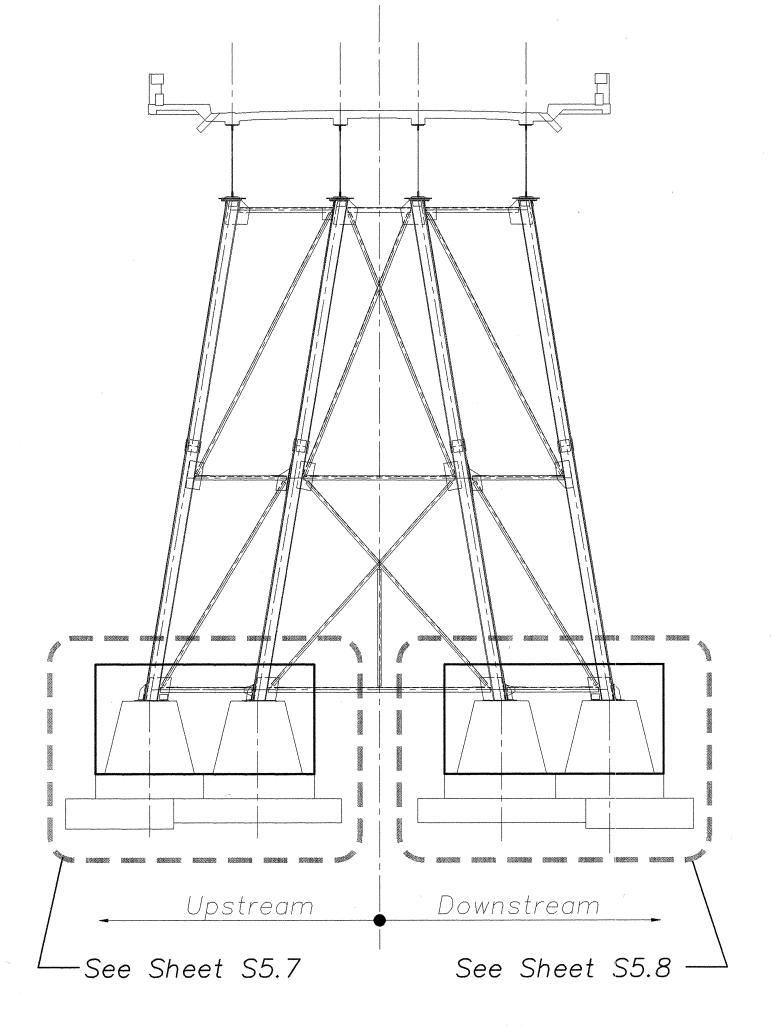
VICINITY OF PEPEEKEO, HAWAII — UNIT 1
FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED DATE: March 2001

SHEET No. S5.5 OF 76 SHEETS

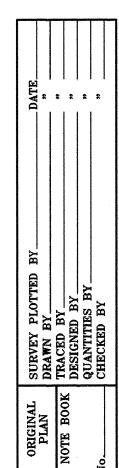


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0100(57)	2001	77	88



Retrofit Required

 $\frac{ELEVATION - BENT NO. 4}{Scale: 1/8" = 1'-0"}$





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

BENT ELEVATION

HAWAII BELT ROAD

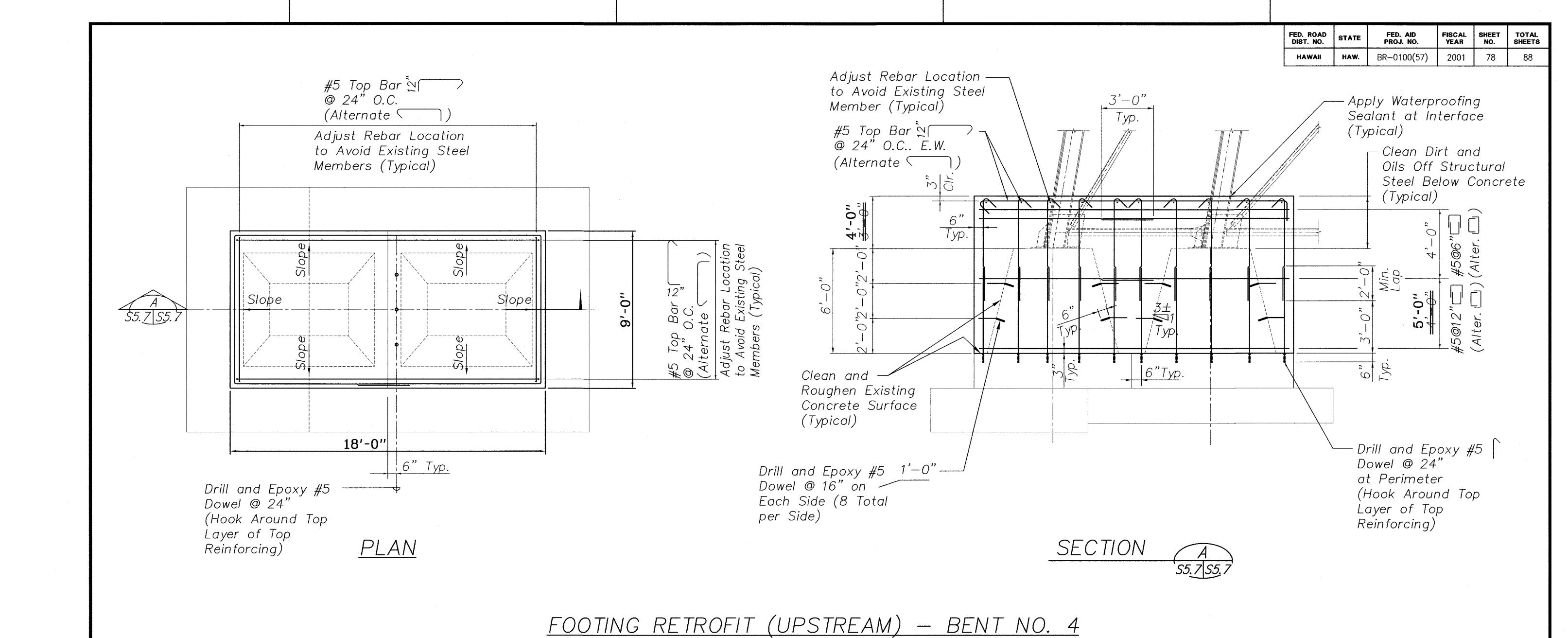
SEISMIC RETROFIT OF VARIOUS BRIDGES

VICINITY OF PEPEEKEO, HAWAII — UNIT 1
FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED

SHEET No. S5.6 OF 76 SHEETS

DATE: March 2001



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

Notes:

1. The Contractor Shall Verify All Controlling Field Dimensions Before Ordering or Fabricating Any Material.

2. Location of Drilled Dowel Holes Shown in the Plans are Approximate. Prior to Drilling Holes in Concrete the Contractor Shall Locate All Reinforcing Steel and Adjust the Location of the Holes to Clear all Reinforcing Bars. Final Hole Locations are Subject to the Approval of the Engineer.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

HIGHWAYS DIVISION PAHEEHEE BRIDGE

FOOTING RETROFIT

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

AND REINFORCEMENT

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

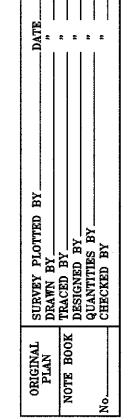
VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57)

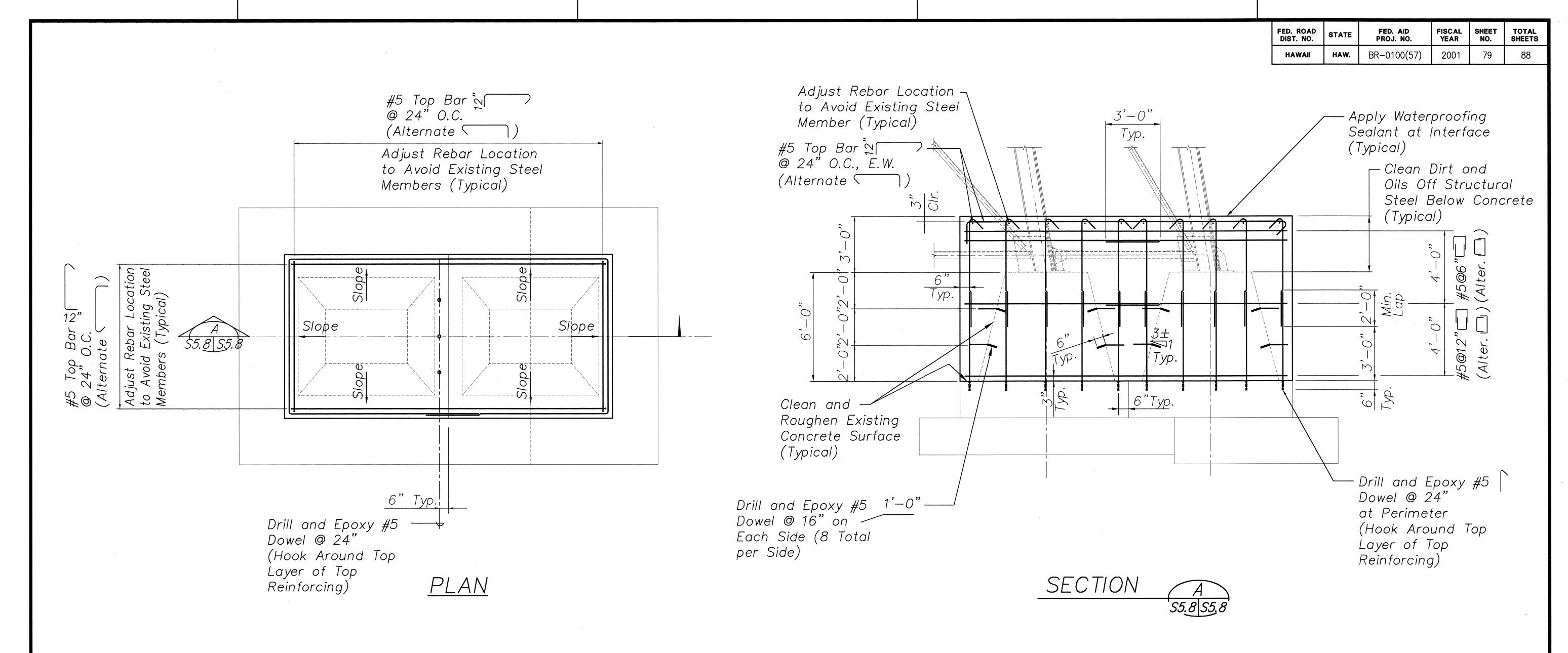
SCALE: AS NOTED DATE: March 2001 SHEET No. S5.7 OF 76 SHEETS

LEGEND FOR AS-BUILT POSTINGS

Squiggly line for as-built deletion **₩₩** 100.00 Double line for as-built deletion Text for as-built posting Roadway



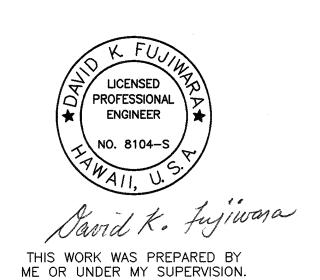
"AS-BUILT"



FOOTING RETROFIT (DOWNSTREAM) - BENT NO. 4 Scale: 3/8" = 1'-0"

Notes:

- 1. The Contractor Shall Verify All Controlling Field Dimensions Before Ordering or Fabricating Any Material.
- 2. Location of Drilled Dowel Holes Shown in the Plans are Approximate. Prior to Drilling Holes in Concrete the Contractor Shall Locate All Reinforcing Steel and Adjust the Location of the Holes to Clear all Reinforcing Bars. Final Hole Locations are Subject to the Approval of the Engineer.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION <u>PAHEEHEE BRIDGE</u>

FOOTING RETROFIT AND REINFORCEMENT

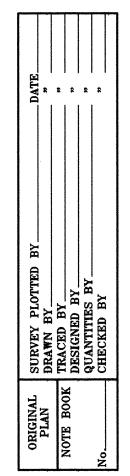
HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

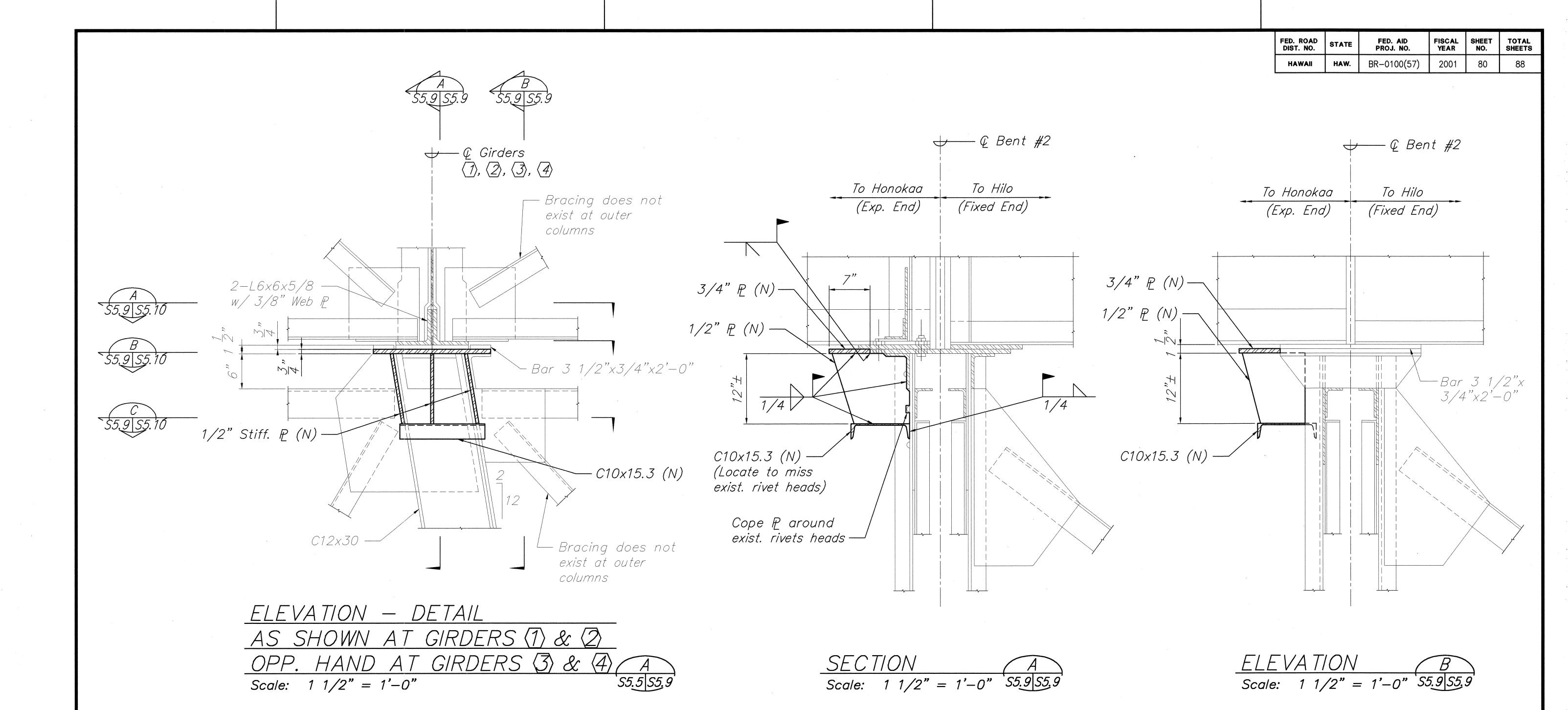
VICINITY OF PEPEEKEO, HAWAII — UNIT 1

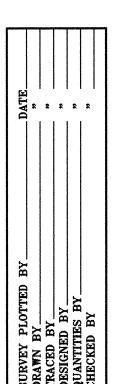
FEDERAL—AID PROJECT NO. BR—0100(57) SCALE: AS NOTED

DATE: March 2001 SHEET No. S5.8 OF 76 SHEETS



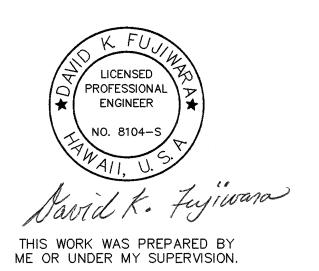
79





NOTES:

- 1. All Members Existing Unless Otherwise Noted.
- 2. New Members Indicated Thus (N).
- 3. The Contractor Shall Verify All Controlling Field Dimensions Before Ordering or Fabricating Any Material.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE SEAT EXTENDER AT GIRDER EXPANSION

JOINT — ELEVATIONS AND SECTION

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

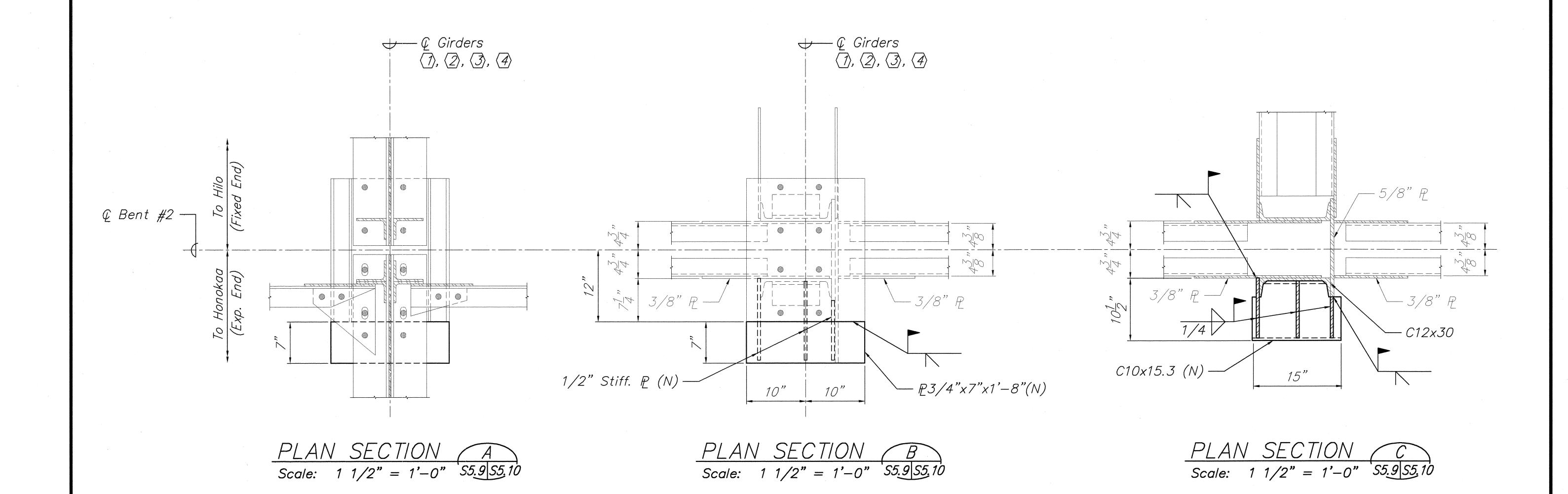
VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57)

DATE: March 2001 SCALE: AS NOTED

SHEET No. S5.9 OF 76 SHEETS

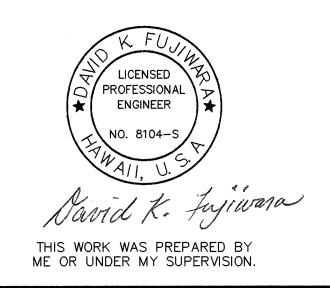
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0100(57)	2001	81	88





NOTES:

- 1. All Members Existing Unless Otherwise Noted.
- 2. New Members Indicated Thus (N).
- 3. The Contractor Shall Verify All Controlling Field Dimensions Before Ordering or Fabricating Any Material.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

SEAT EXTENDER AT GIRDER EXPANSION

JOINT — PLAN SECTIONS

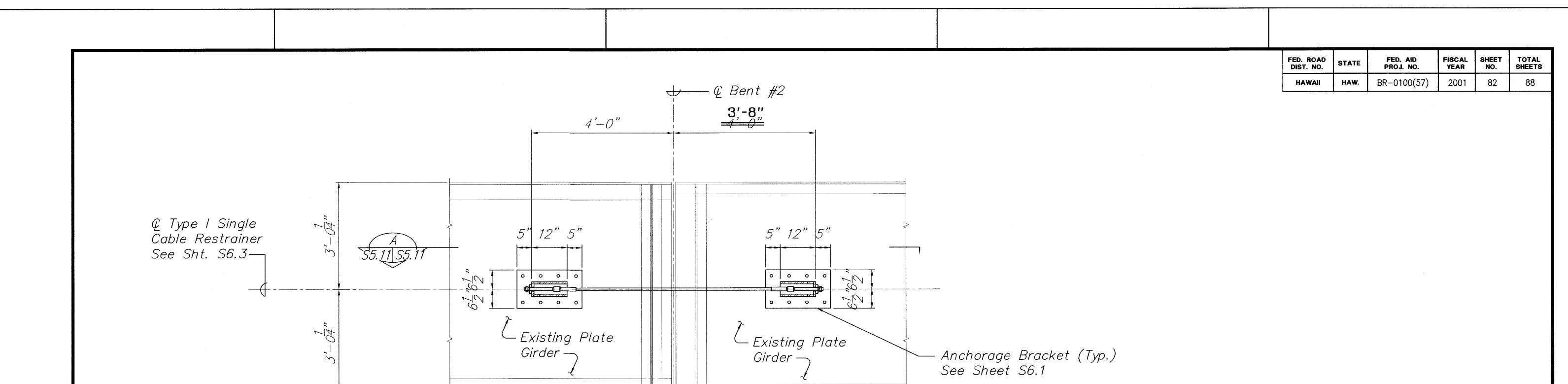
HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

VICINITY OF PEPEEKEO, HAWAII — UNIT 1
FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED DATE: March 2001

SHEET No. S5.10 OF 76 SHEETS



Fixed End

ELEVATION

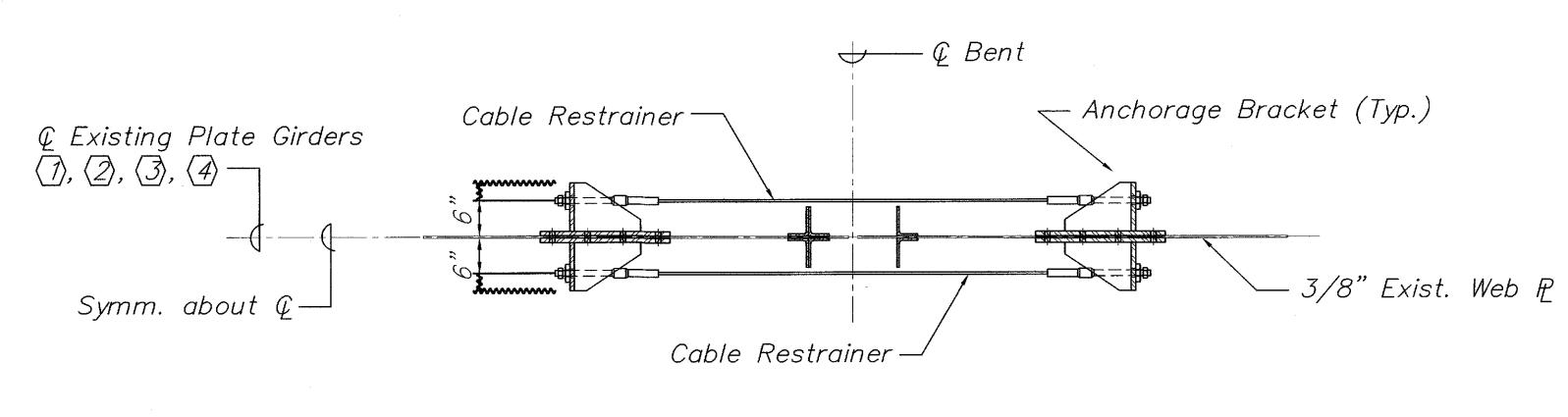
Scale: 3/4" = 1'-0"

Expansion End

New Seat Extender

See Sheets S5.9

and S5.10



PLAN SECTION (A)

Scale: 3/4" = 1'-0" S5.11 S5.11

SEAT EXTENDER AND CABLE RESTRAINER
AT GIRDER EXPANSION JOINT

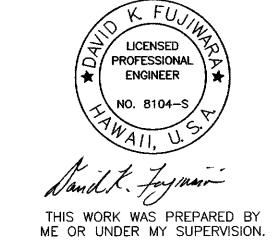
LEGEND	FOR AS-BUILT POSTINGS		
	Squiggly line for as-built deletion Double line for as-built deletion		
-100.00			
Roadway Text for as-built posting			

NOTE:

The Contractor Shall Verify All Controlling Field Dimensions Before Ordering or Fabricating Any Material.

WORK SEQUENCE

- 1. Clean Surface and Remove Lead Paint.
- 2. Drill Holes in Plate Girder.
- 3. Repaint Entire Surface Area Previously Removed.
- 4. Install Anchorage Bracket.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

SEAT EXTENDER AND

TYPE I CABLE RESTRAINER

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57)

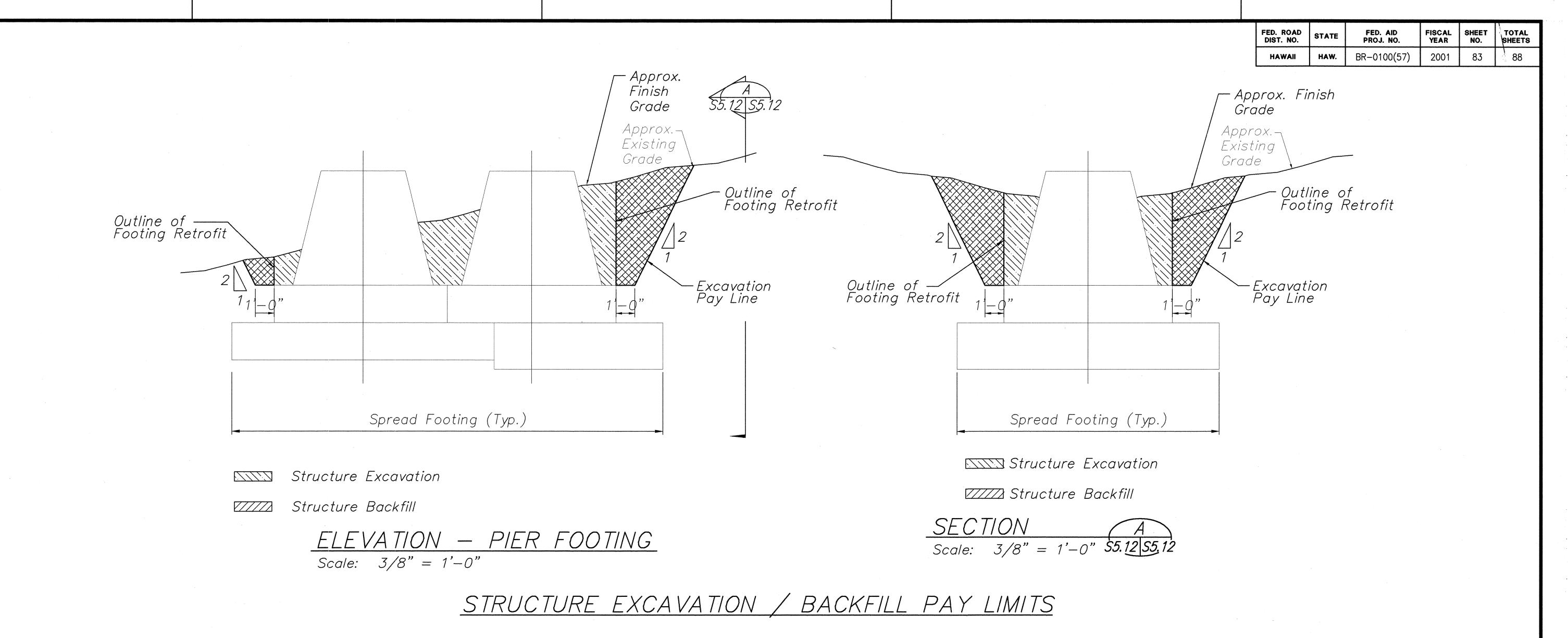
SHEET No. S5.11 OF 76 SHEETS

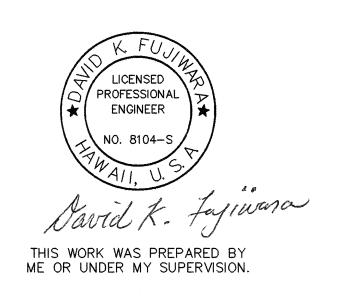
SCALE: AS NOTED

"AS-BUILT"

<u>82</u>

DATE: March 2001





STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

PIER NO. 4 - STRUCTURE

EXCAVATION/BACKFILL PAY LIMITS

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

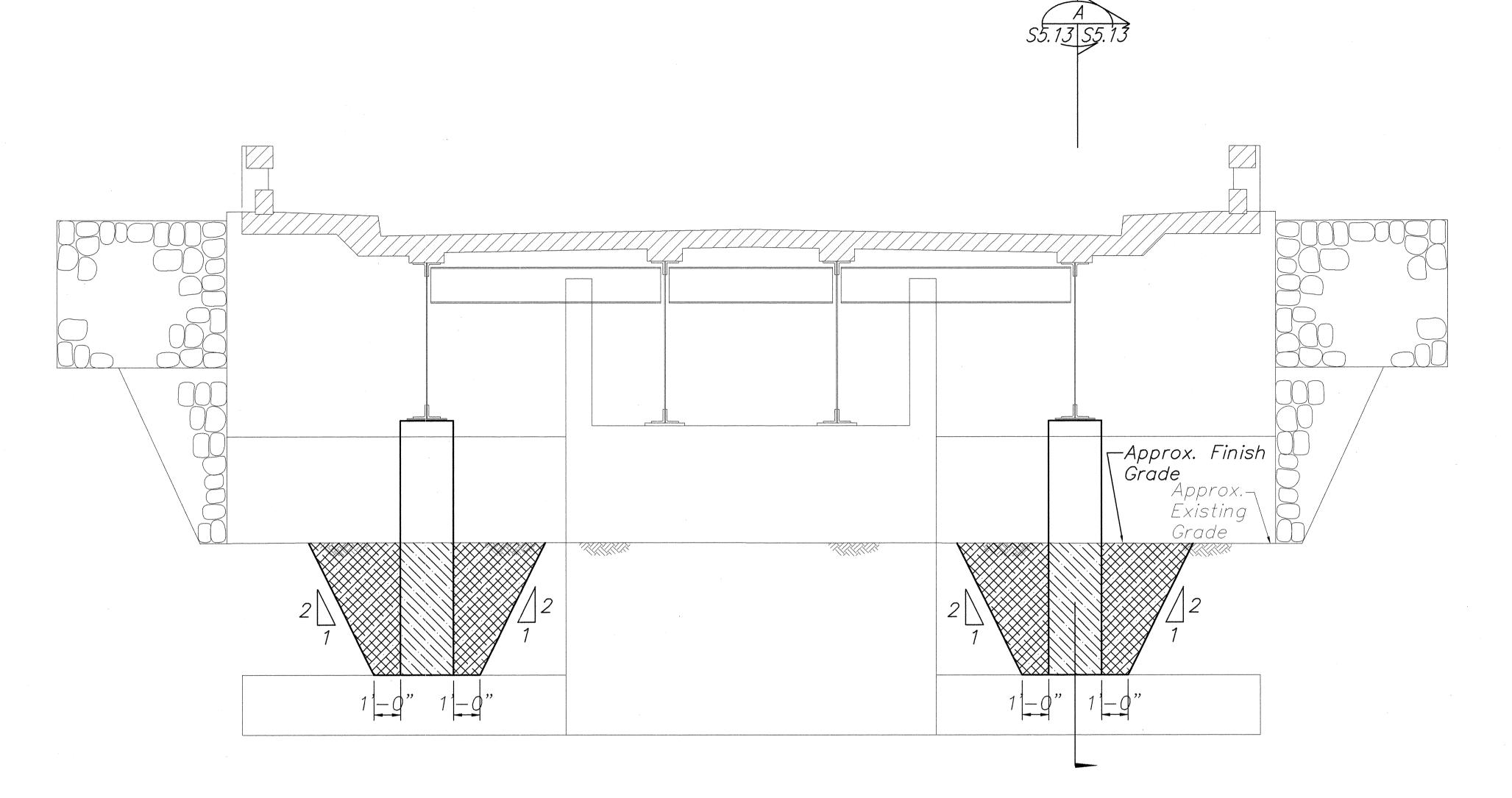
VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57)

SCALE: AS NOTED DATE: March 2001 SHEET No. S5.12 OF 76 SHEETS

FED. ROAD DIST. NO. FISCAL YEAR 2001

PApprox. Finish Grade



Structure Excavation

VIIII Structure Backfill

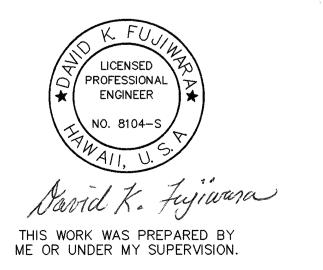
SECTION A Scale: 3/8" = 1'-0" \$5.13 \$5.13

Structure Excavation

Structure Backfill

ELEVATION - ABUTMENTS NO. 1 AND NO. 2 Scale: 3/8" = 1'-0"

STRUCTURE EXCAVATION / BACKFILL PAY LIMITS



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAHEEHEE BRIDGE

ABUTS. NO.1 AND NO. 2 - STRUCTURE

EXCAVATION/BACKFILL PAY LIMITS

HAWAII BELT ROAD

SEISMIC RETROFIT OF VARIOUS BRIDGES

VICINITY OF PEPEEKEO, HAWAII — UNIT 1

FEDERAL—AID PROJECT NO. BR—0100(57) SCALE: AS NOTED DATE: March 2001

SHEET No. S5.13 OF 76 SHEETS