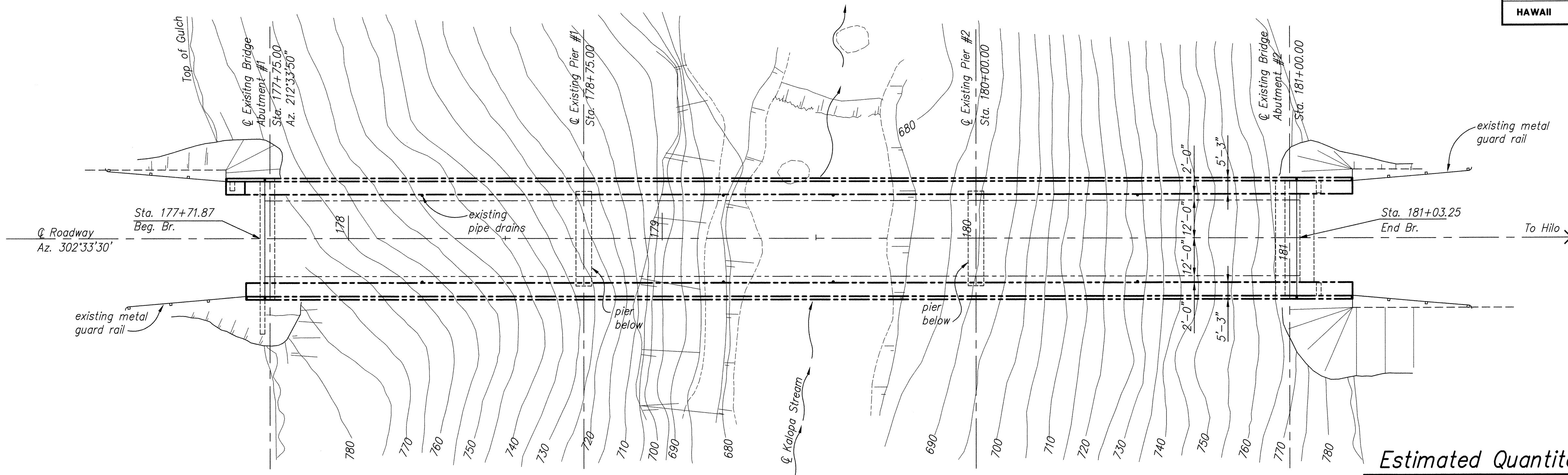


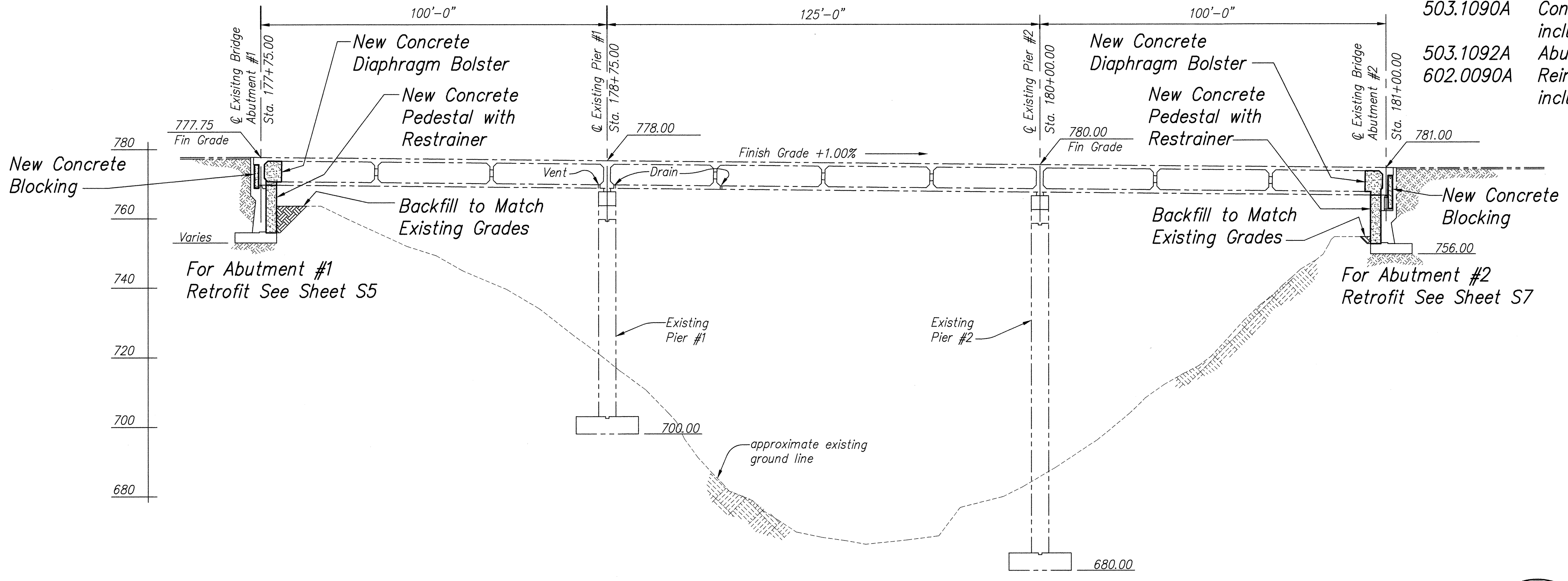
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(49)	2000	6	16



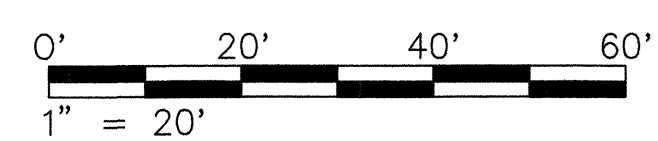
GENERAL PLAN LAYOUT
Scale: 1" = 20'-0"

Estimated Quantities for Kalopa Bridge

Item No.	Item	Approx Quantity
206.0100A	Structure Excavation	105 Cy
206.0200A	Structure Backfill	90 Cy
501.0200A	Structural Steel	5900 Lbs
503.1090A	Concrete in Bridge Superstructure Retrofit, including Bolsters and Pedestals	110 Cy
503.1092A	Abutment Concrete Blocking	40 Cy
602.0090A	Reinforcing Steel in Bridge Retrofit including Bolsters and Pedestals	13,800 Lbs



LONGITUDINAL SECTION
Scale: 1" = 20'-0"



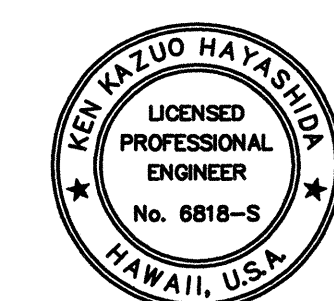
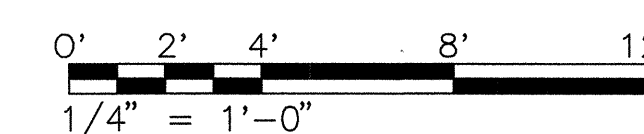
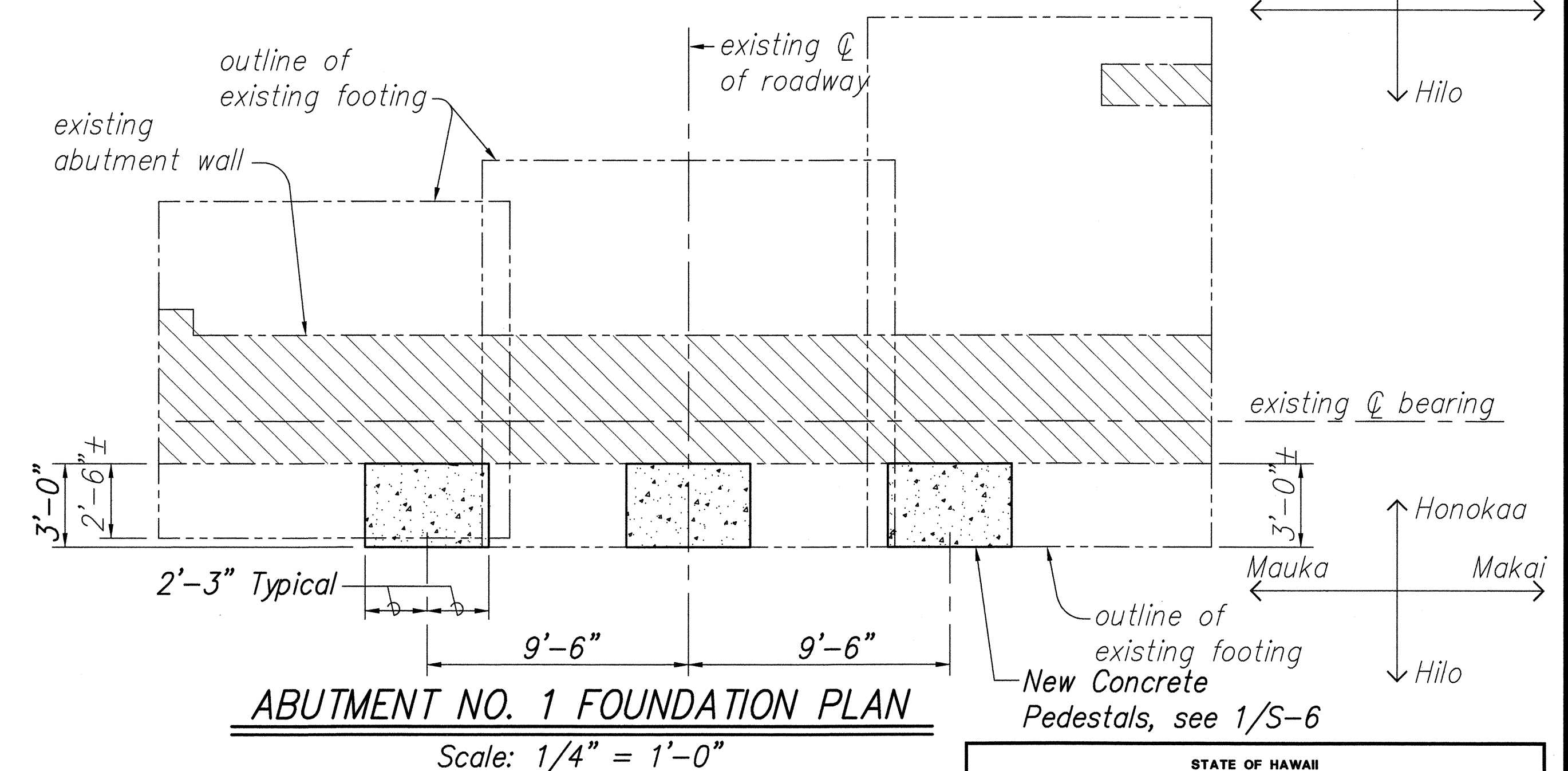
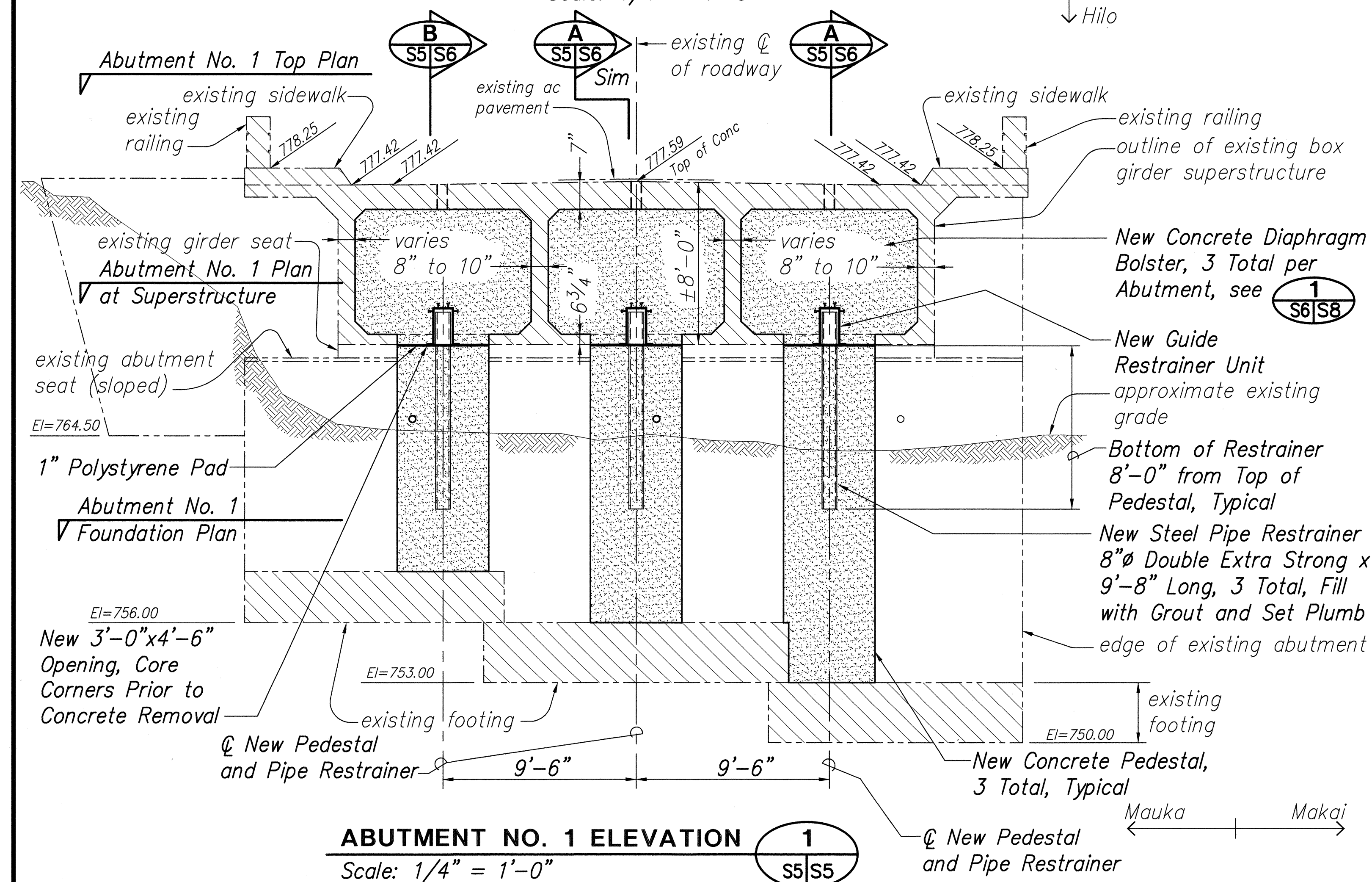
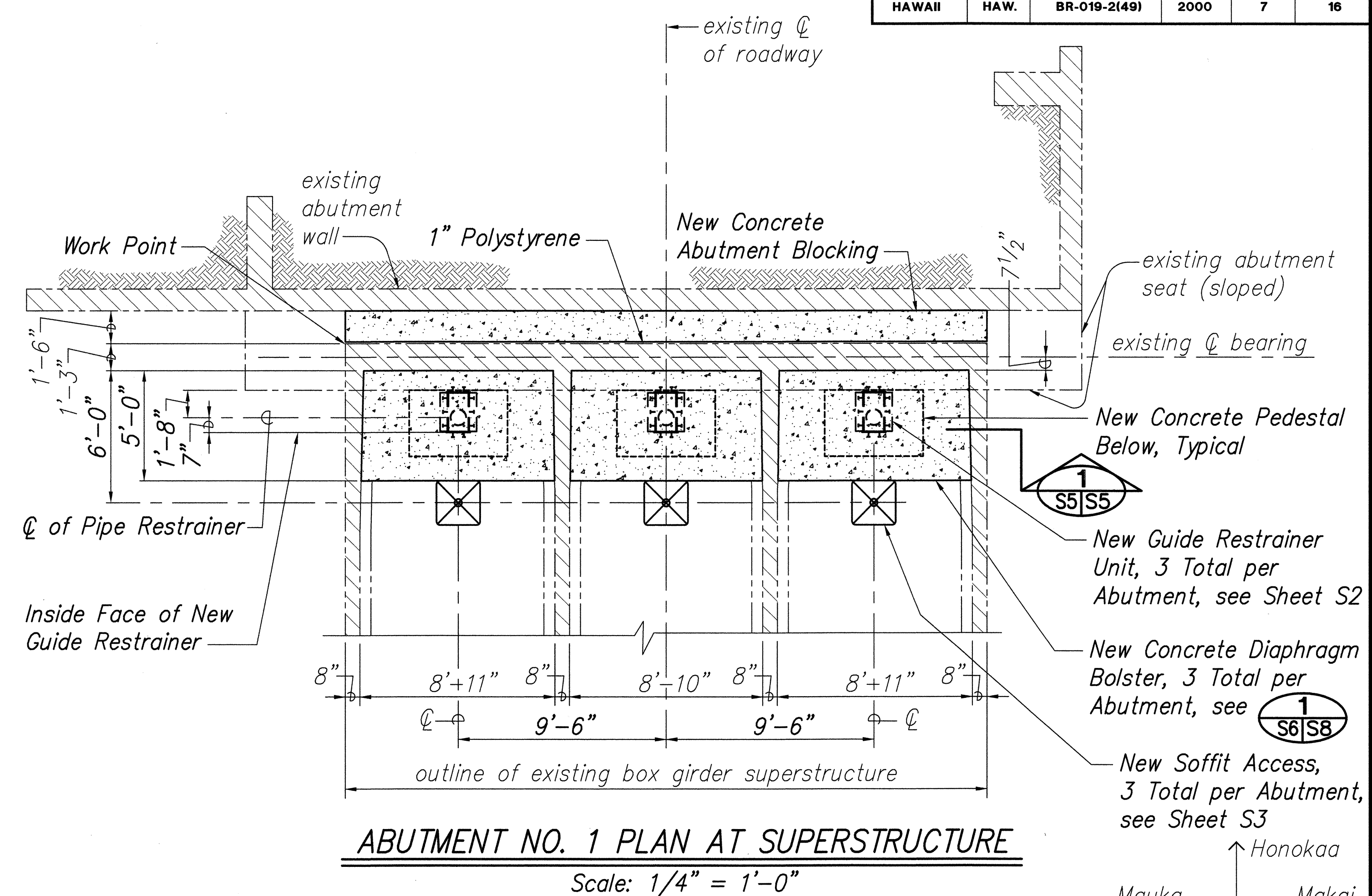
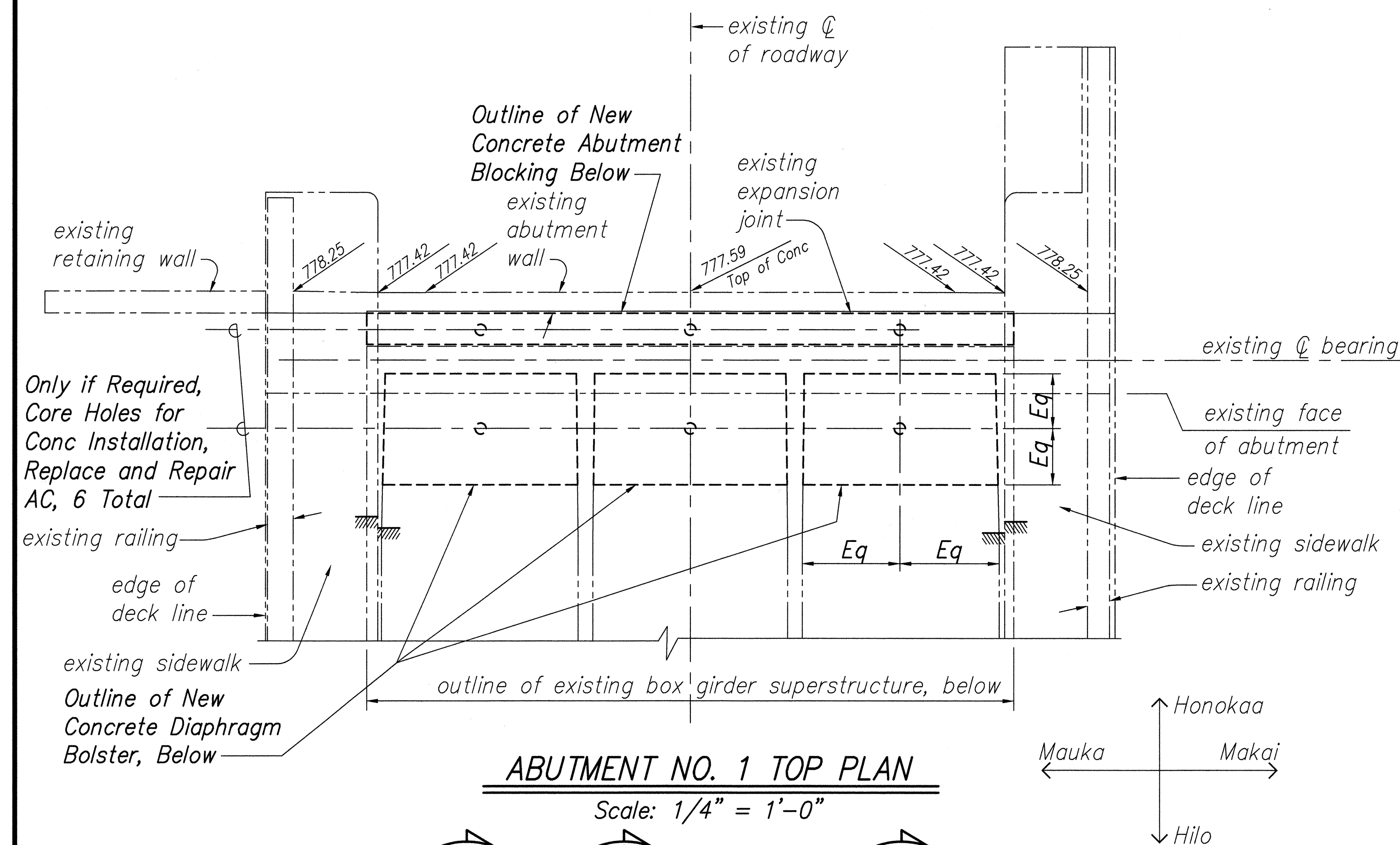
[Signature]
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
KALOPA BRIDGE
GENERAL PLAN LAYOUT AND
LONGITUDINAL SECTION
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF SOUTH OF HONOKAA
FEDERAL AID PROJECT NO. BR-019-2(49)
SCALE: AS NOTED
SHEET No. S4 OF 16 SHEETS

DATE: October 1999

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(49)	2000	7	16



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

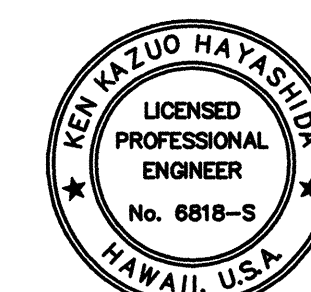
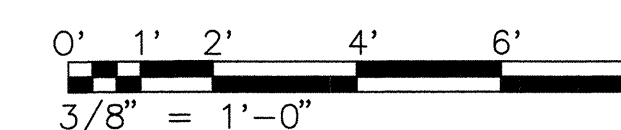
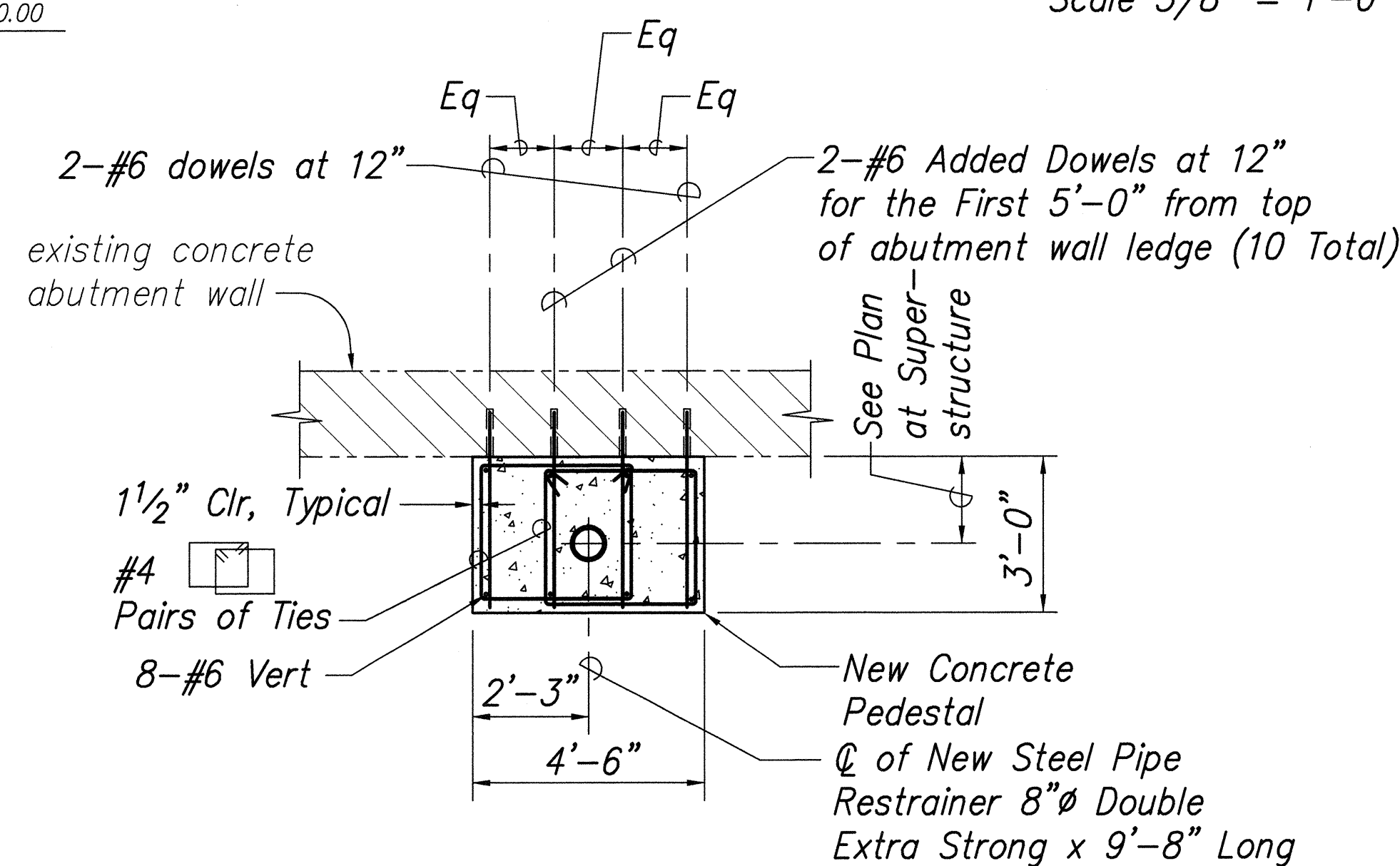
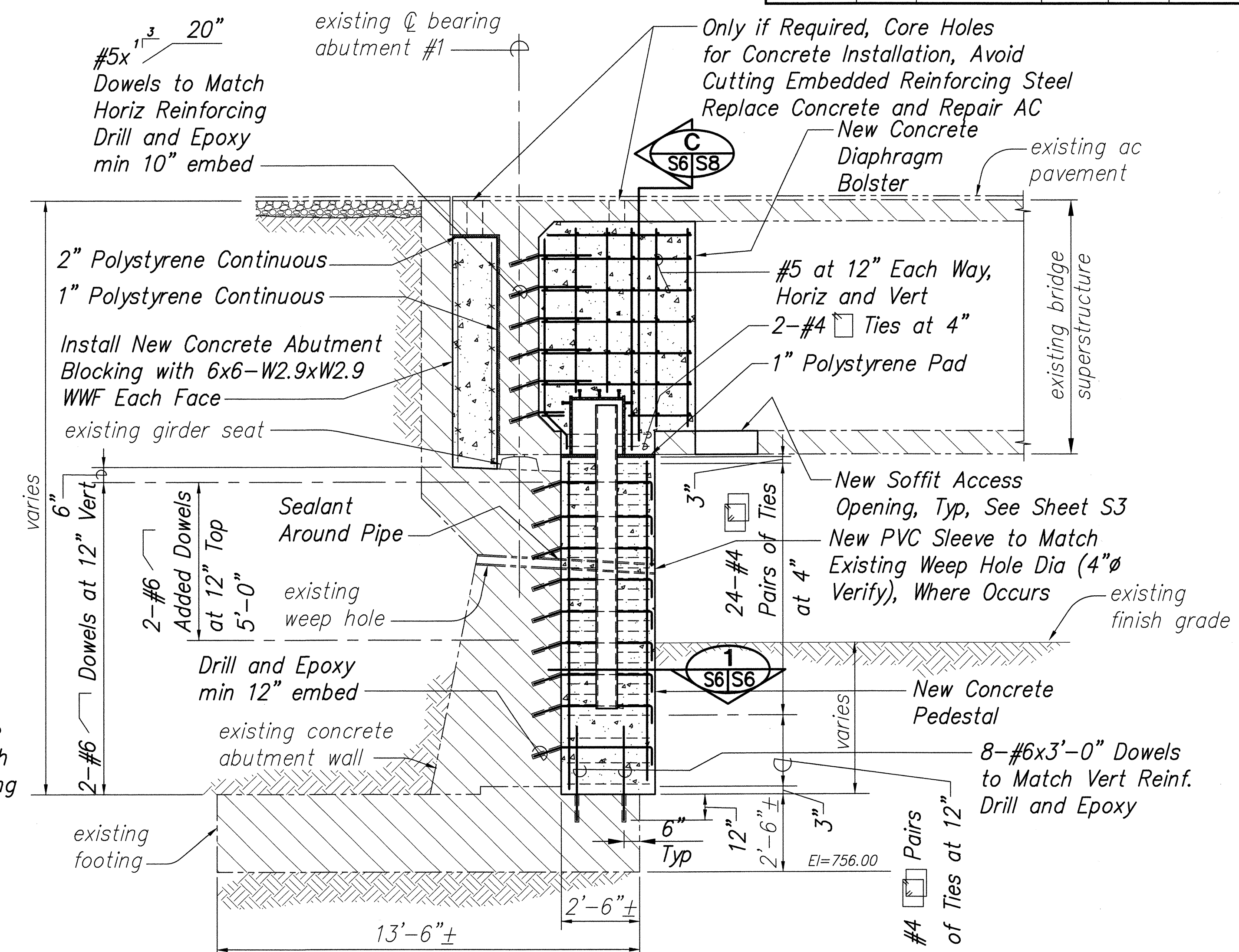
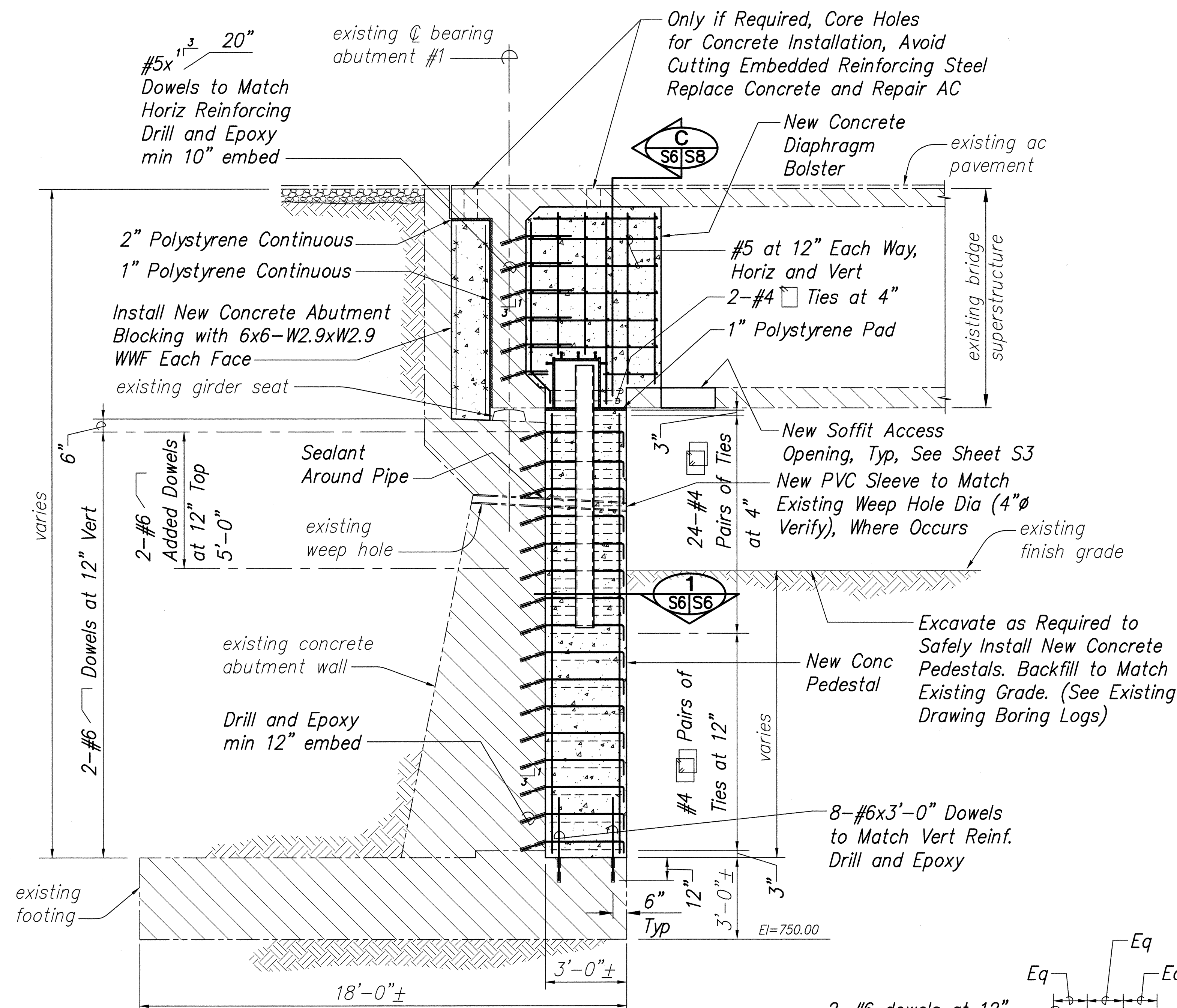
KALOPA BRIDGE
ABUTMENT NO. 1 -
PLANS AND ELEVATION

SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF SOUTH OF HONOKAA
FEDERAL AID PROJECT NO. BR-019-2(49)

SCALE: AS NOTED DATE: October 1999

SHEET No. S5 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(49)	2000	8	16



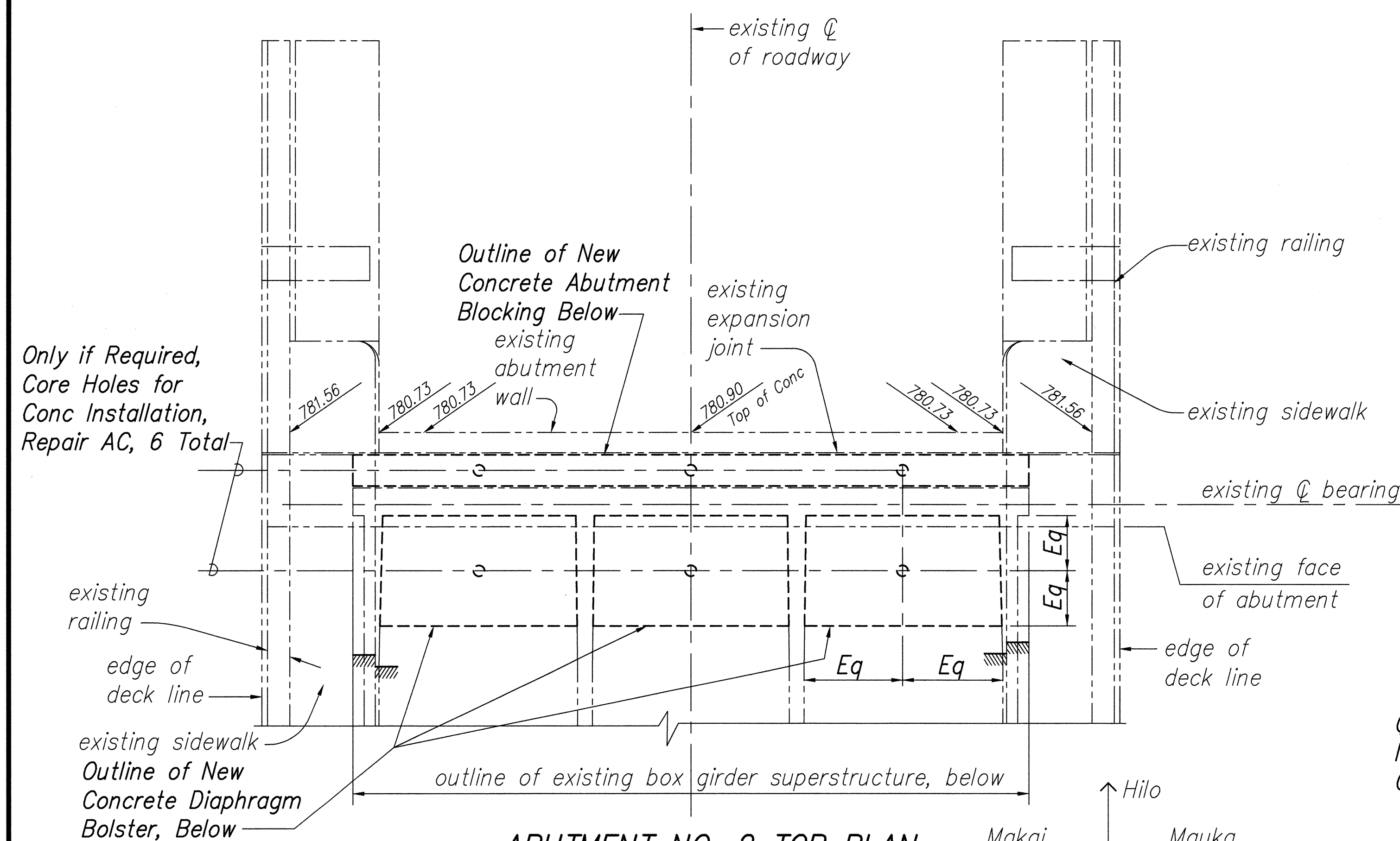
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KALOPIA BRIDGE
ABUTMENT NO. 1 -
SECTIONS AND DETAILS
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF SOUTH OF HONOKAA
FEDERAL AID PROJECT NO. BR-019-2(49)

SCALE: AS NOTED DATE: October 1999
SHEET No. S6 OF 16 SHEETS

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

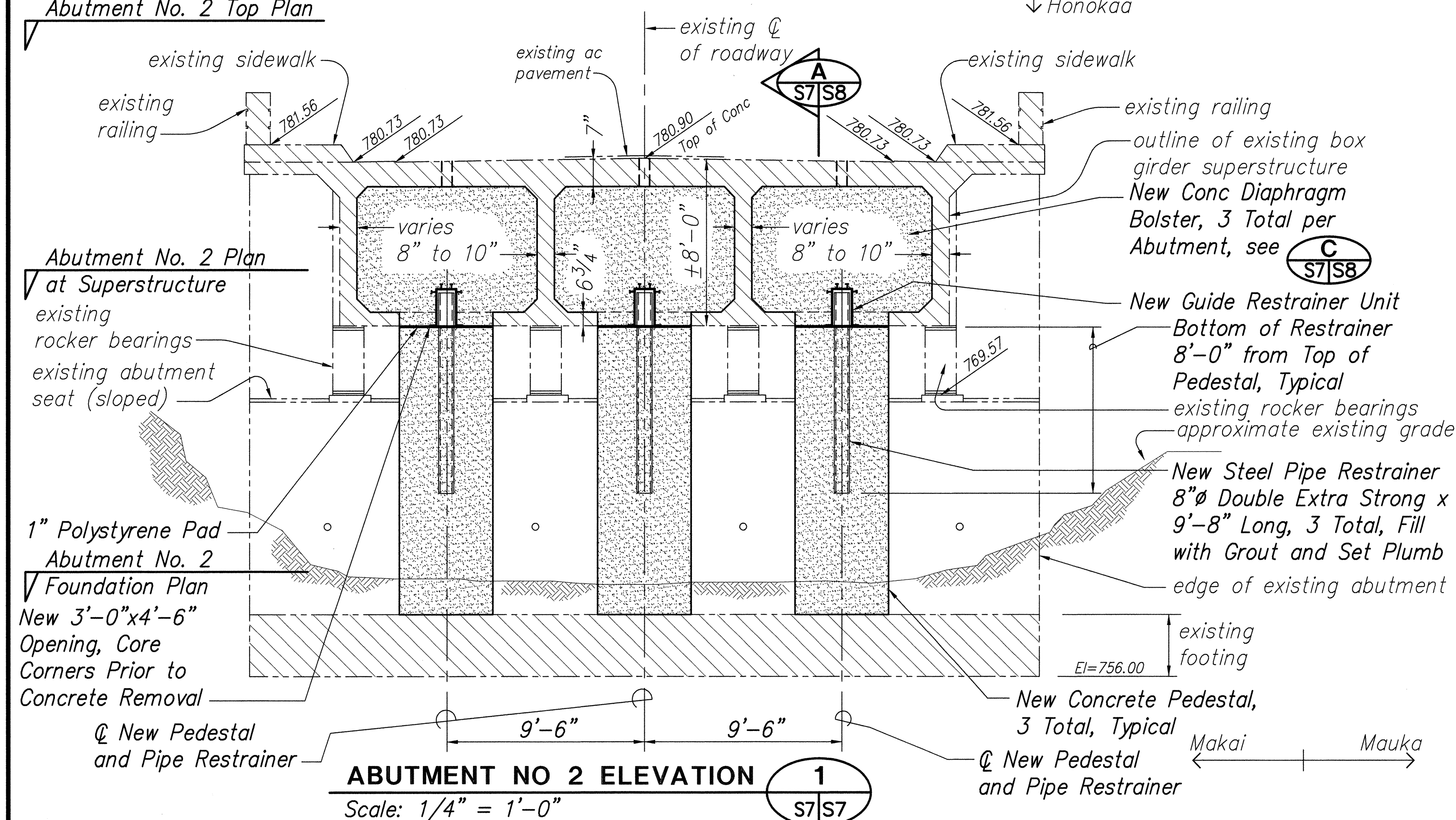
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(49)	2000	9	16



ABUTMENT NO. 2 TOP PLAN

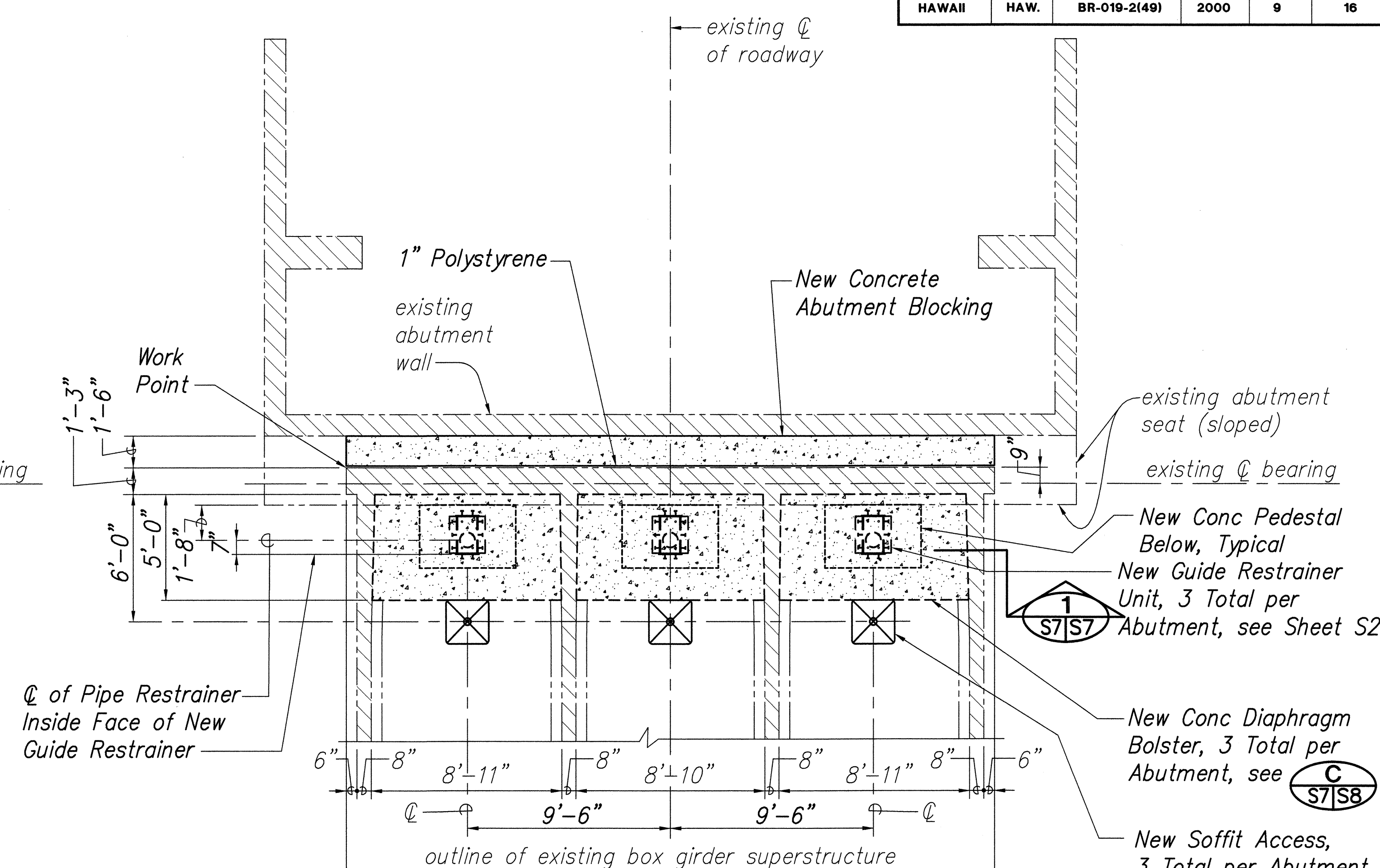
Scale: 1/4" = 1'-0"

Abutment No. 2 Top Plan



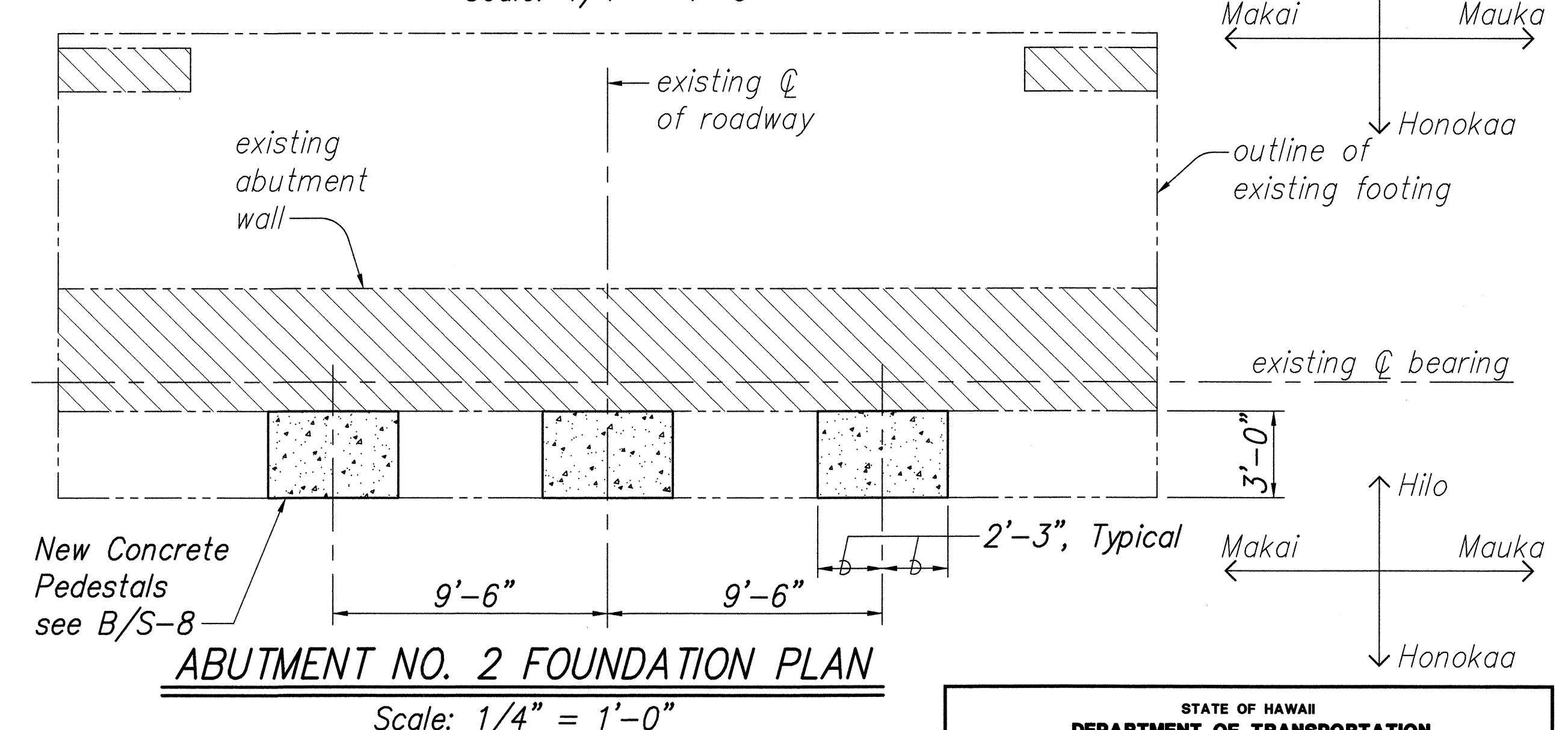
ABUTMENT NO. 2 ELEVATION

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



ABUTMENT NO. 2 PLAN AT SUPERSTRUCTURE

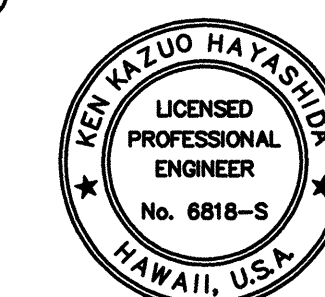
Scale: 1/4" = 1'-0"



ABUTMENT NO. 2 FOUNDATION PLAN

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

0' 2' 4' 8' 12'
1/4" = 1'-0"



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KALOPIA BRIDGE

ABUTMENT NO. 2 -
PLANS AND ELEVATION

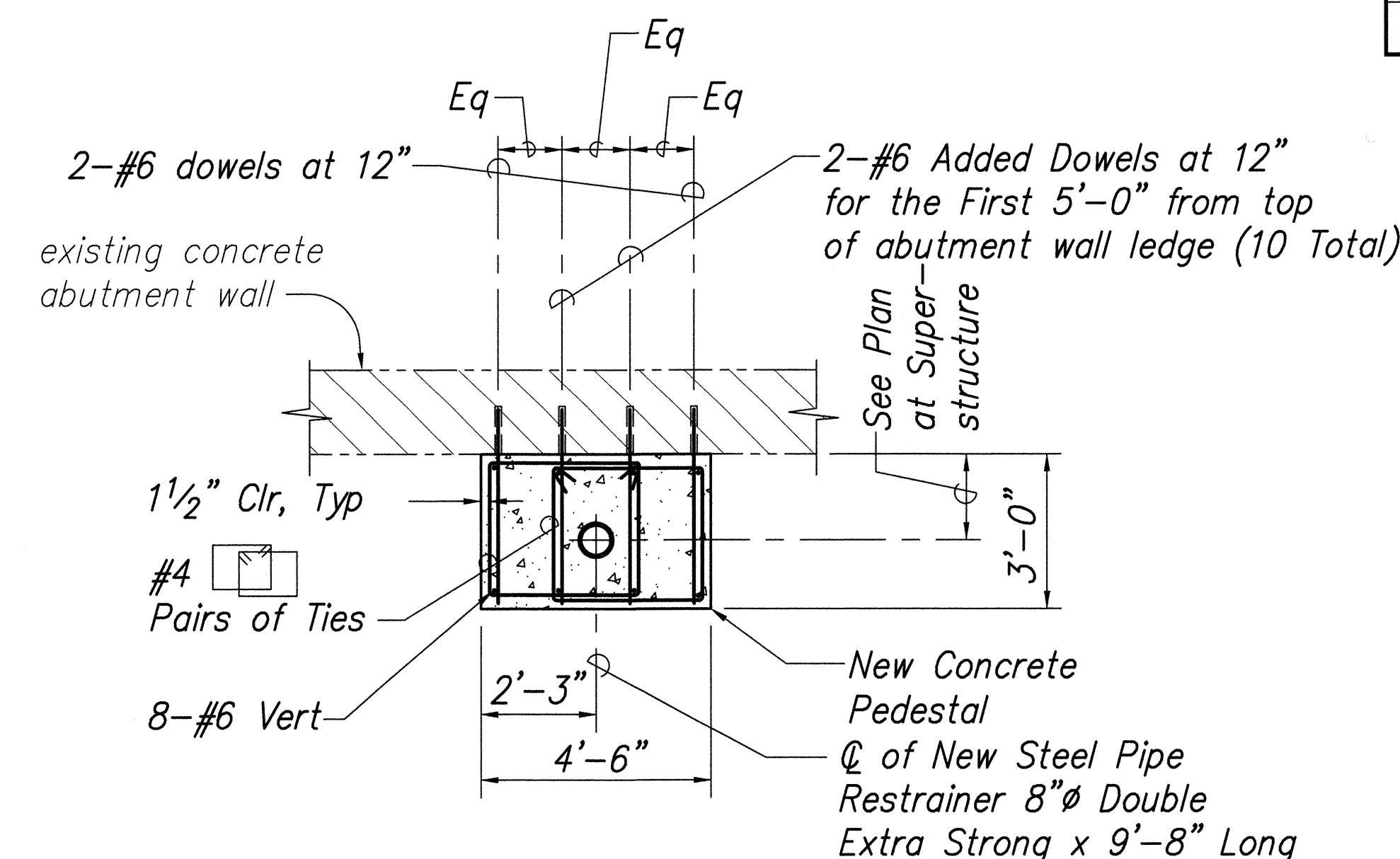
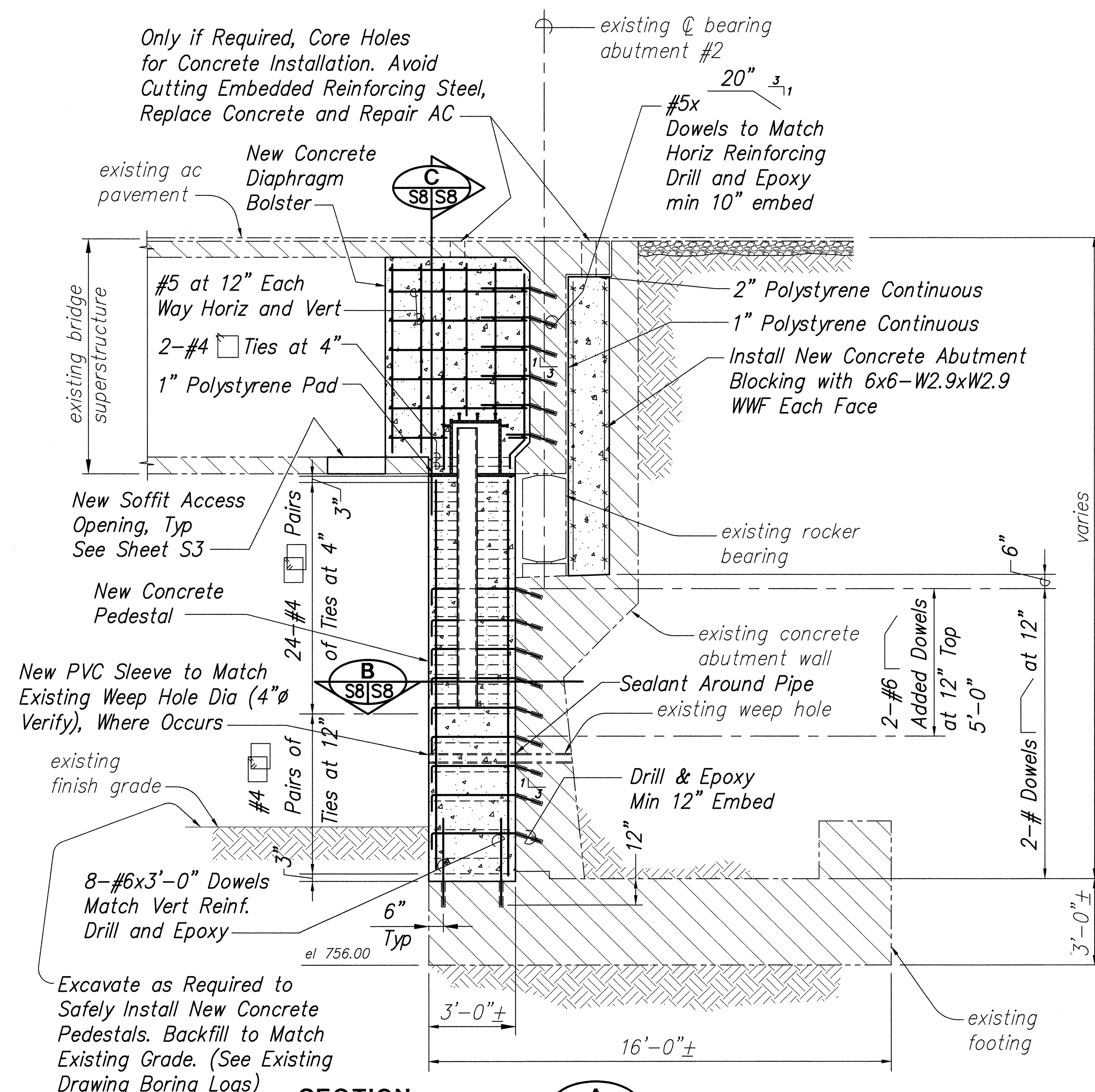
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF SOUTH OF HONOKAA

FEDERAL AID PROJECT NO. BR-019-2(49)

SCALE: AS NOTED DATE: October 1999

SHEET No. S7 OF 16 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-019-2(49)	2000	10	16

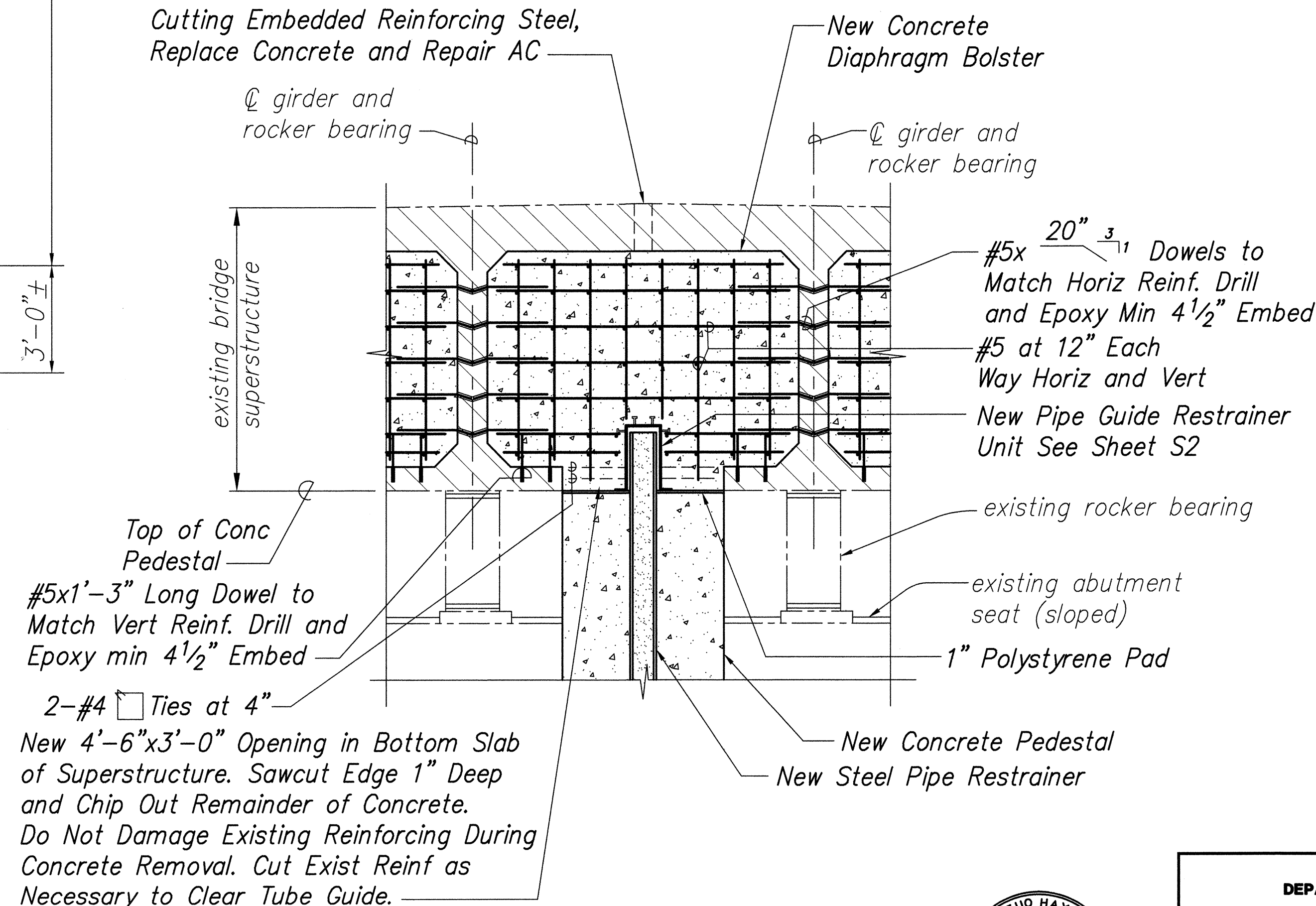


SECTION B

Scale 3/8" = 1'-0"

S8/S8

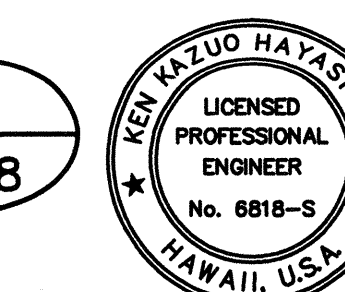
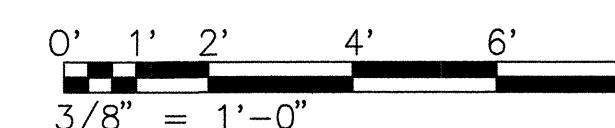
Only if Required, Core Holes for Concrete Installation. Avoid Cutting Embedded Reinforcing Steel, Replace Concrete and Repair AC



SECTION - NEW CONCRETE DIAPHRAGM BOLSTER C

Scale 3/8" = 1'-0"

S6,S7,S8/S8



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KALOPE BRIDGE
ABUTMENT NO. 2 -
SECTIONS AND DETAILS
SEISMIC RETROFIT OF VARIOUS BRIDGES
VICINITY OF SOUTH OF HONOKAA
FEDERAL AID PROJECT NO. BR-019-2(49)

SCALE: AS NOTED DATE: October 1999

SHEET No. S8 OF 16 SHEETS

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