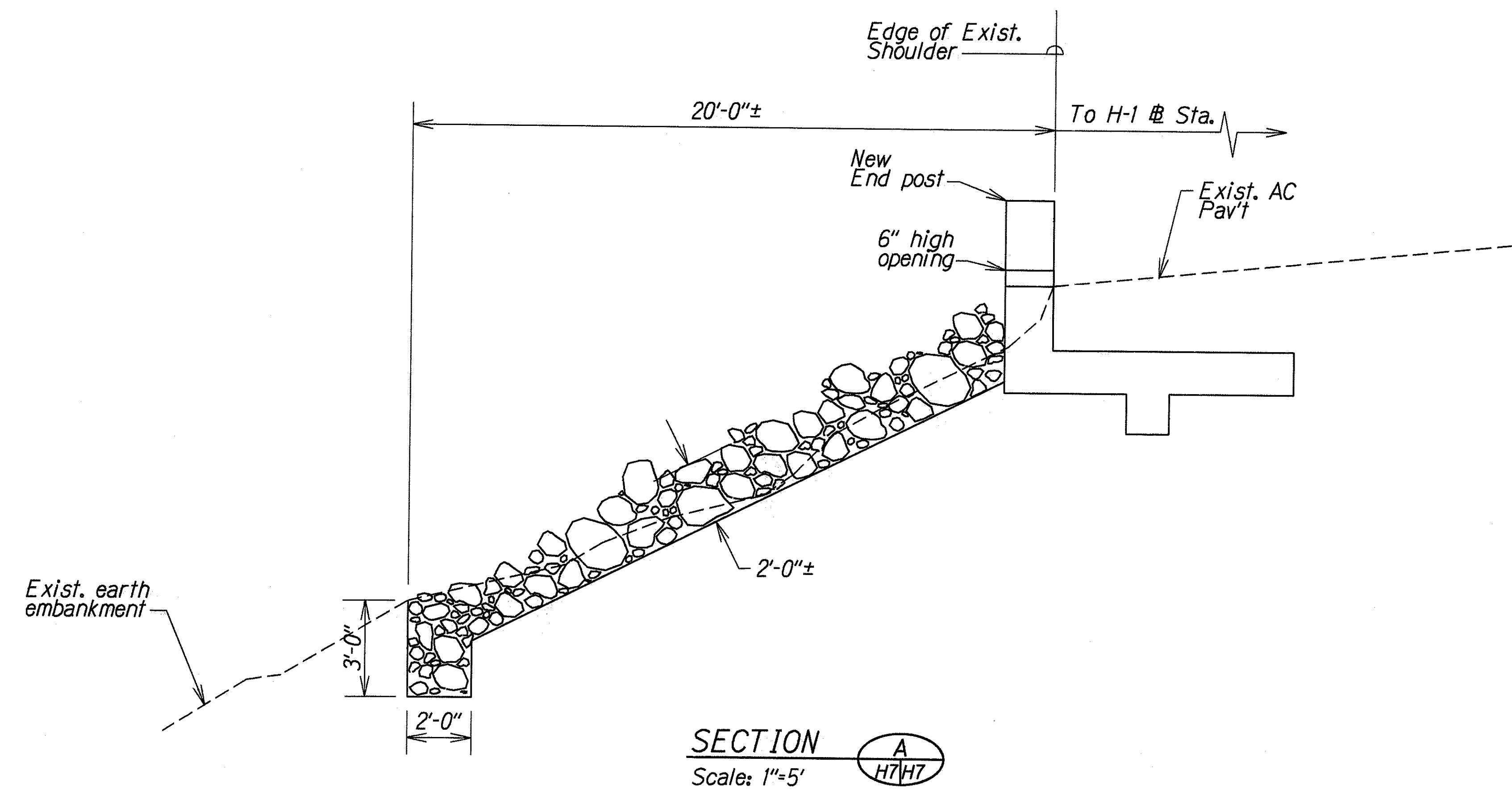
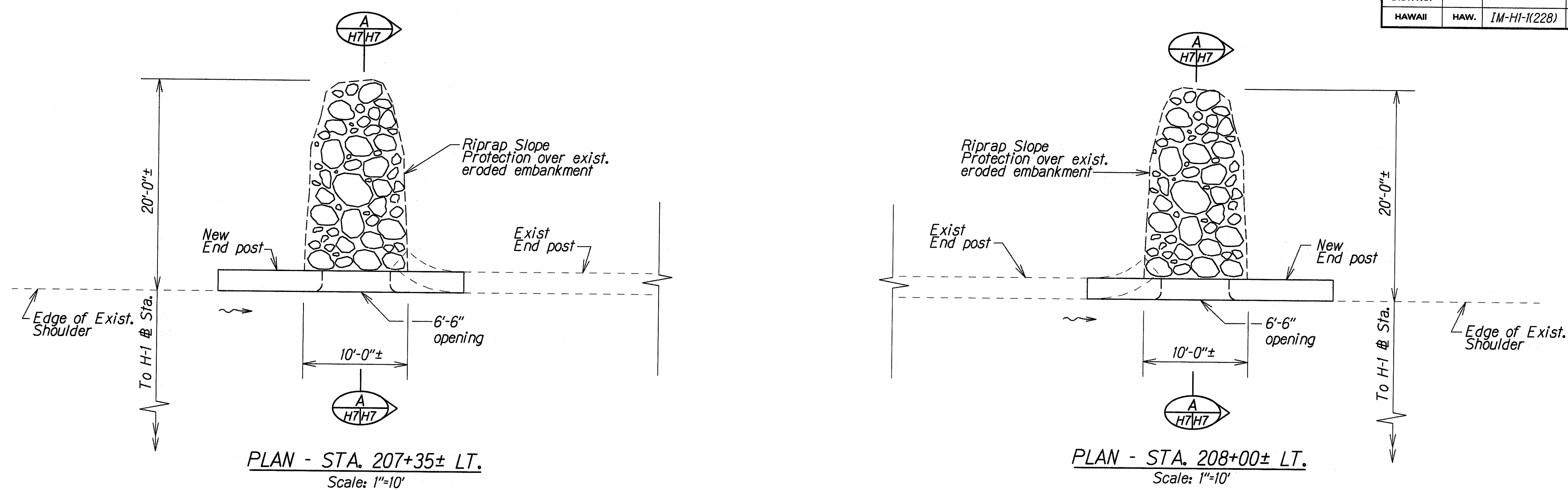


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	46	82



DETAILS OF RIPRAP SLOPE PROTECTION AT STA. 207+35± LT. & STA 208+00± LT.

ORIGINAL PLAN	DATE
DRAWN BY X	10/23/97
NOTED BY	
CHECKED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

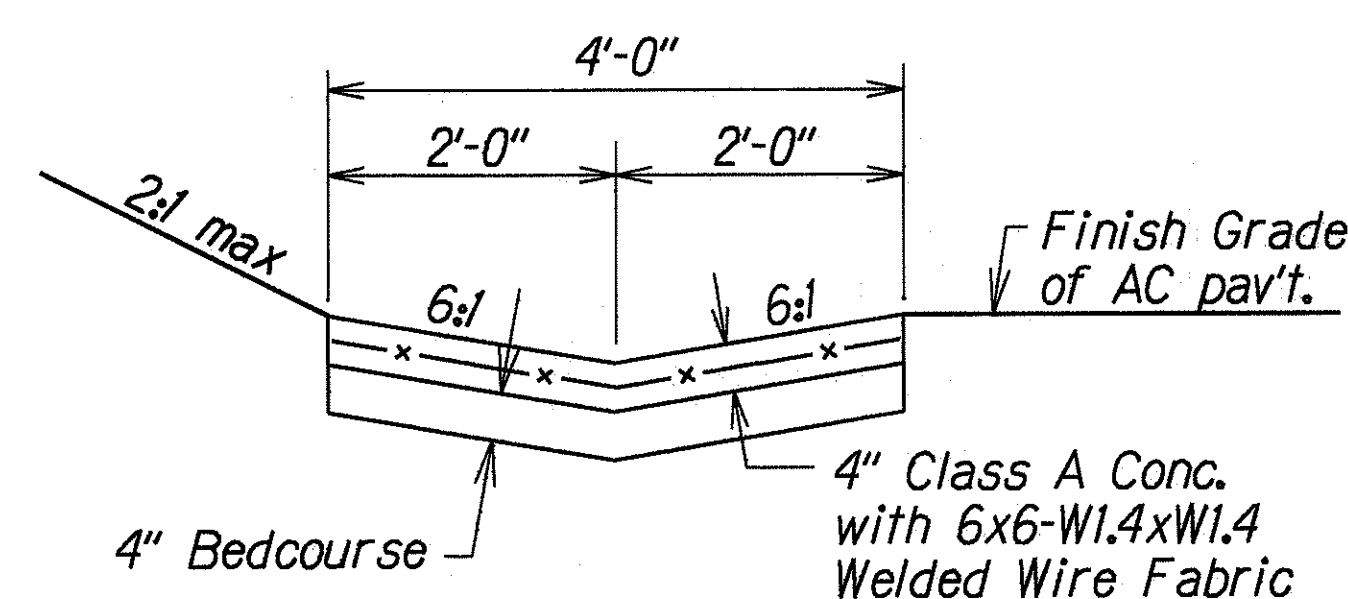
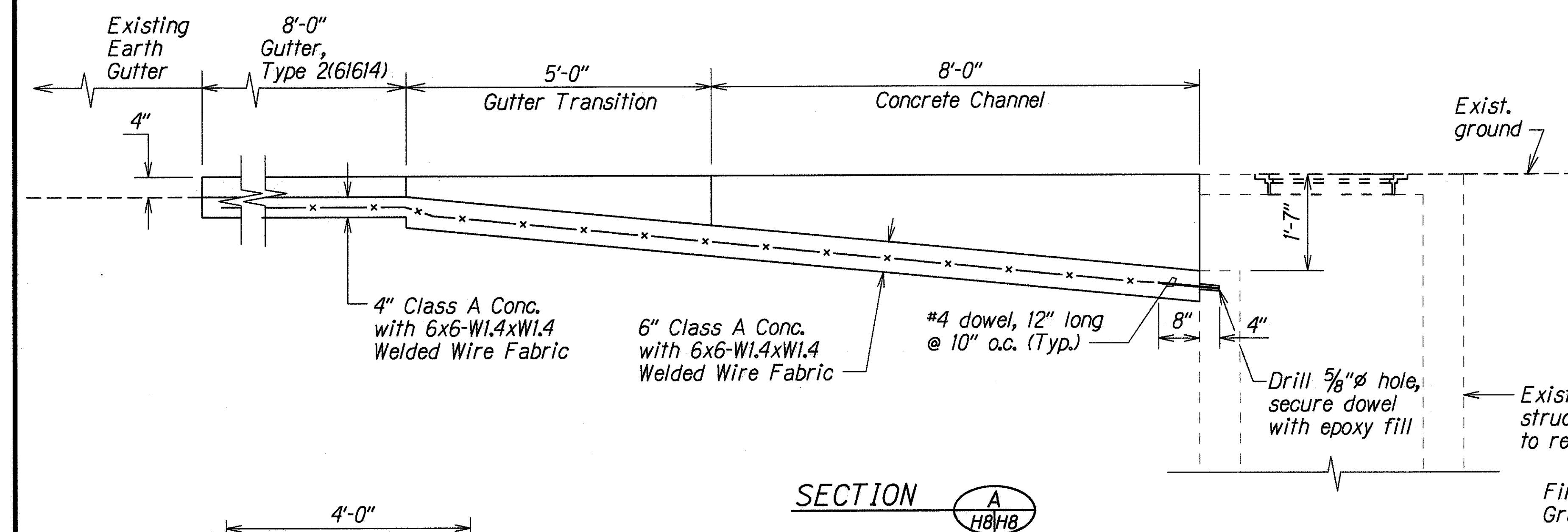
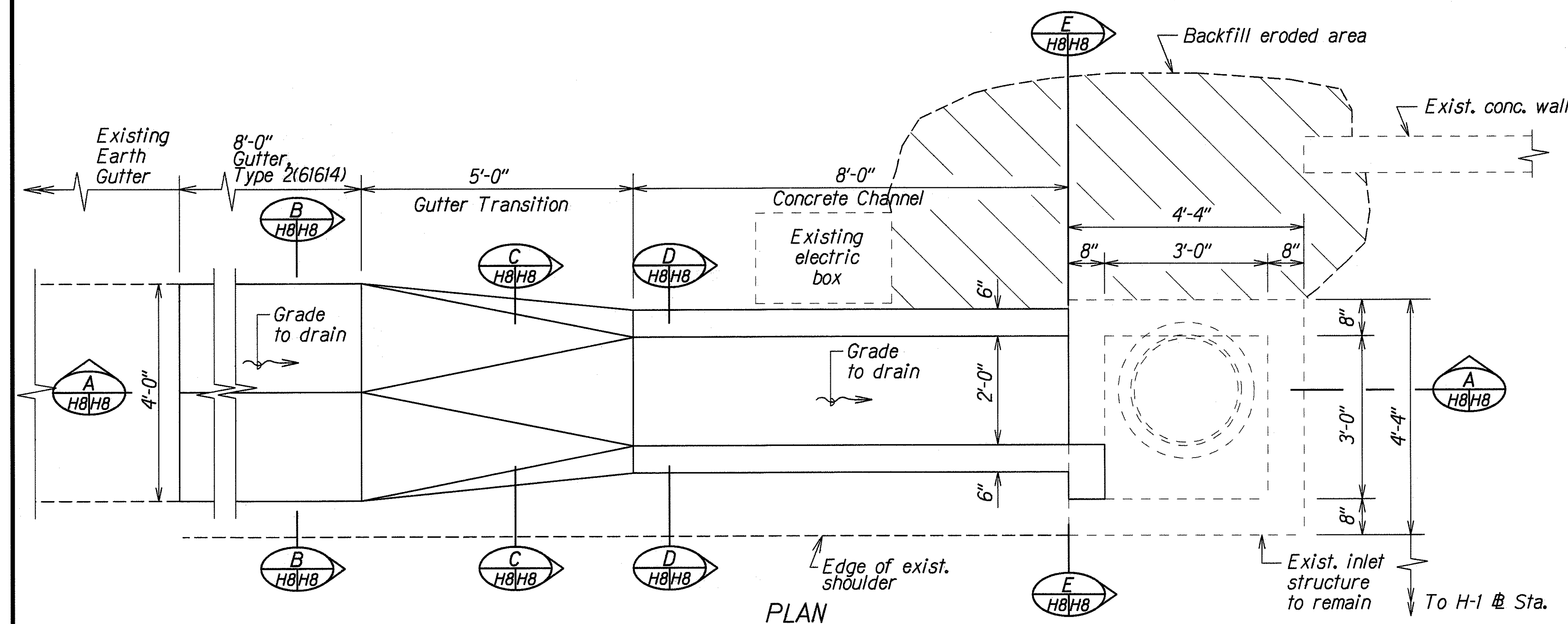
DRAINAGE DETAILS

INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Palehua Separation to Waialeale Bridge
Federal Aid Project No. IM-HI-1(228)

Scale: As Shown Date: Nov. 1997

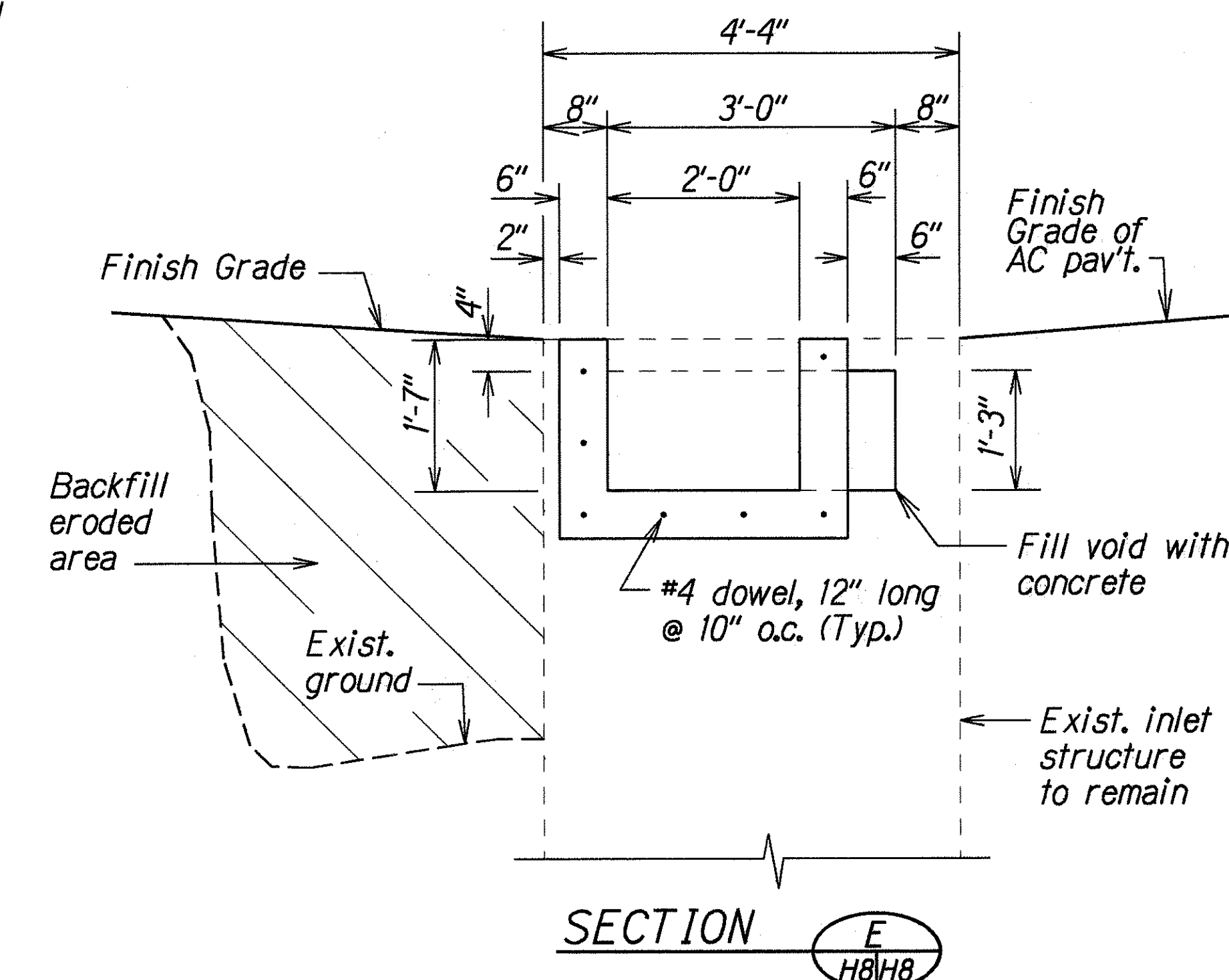
SHEET No. H7 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-1(228)	1999	47	82

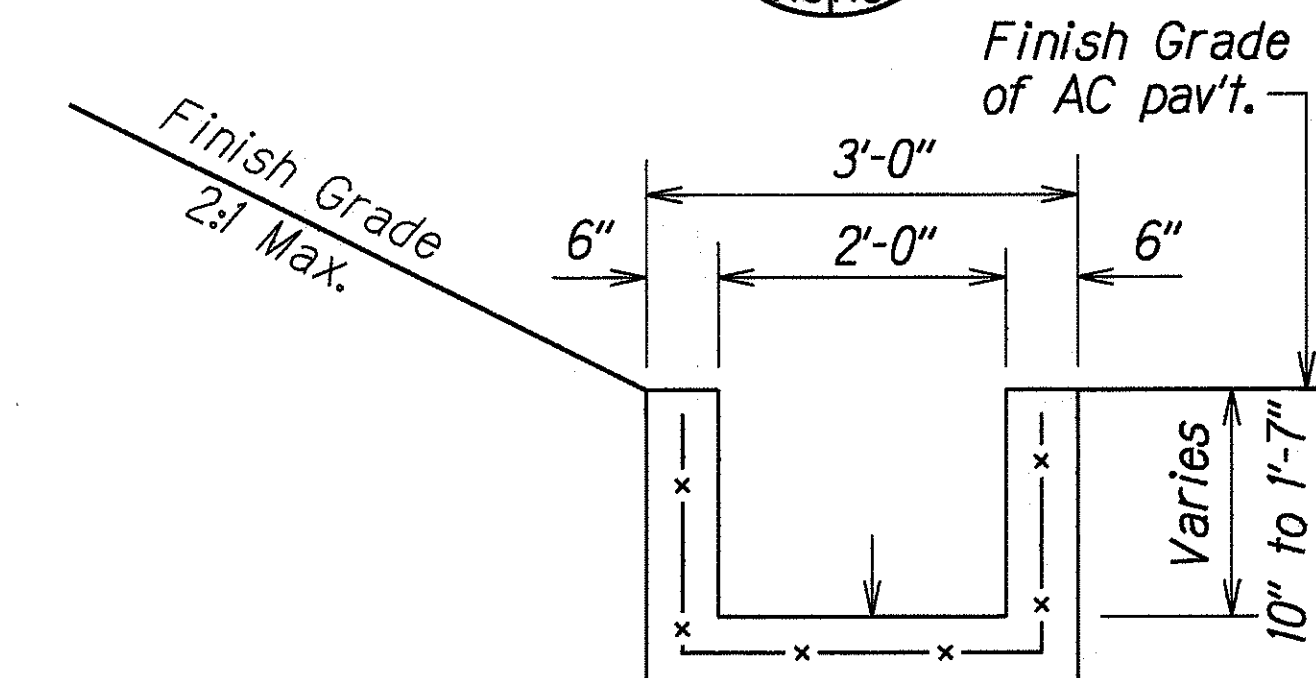


SECTION B
H8/H8

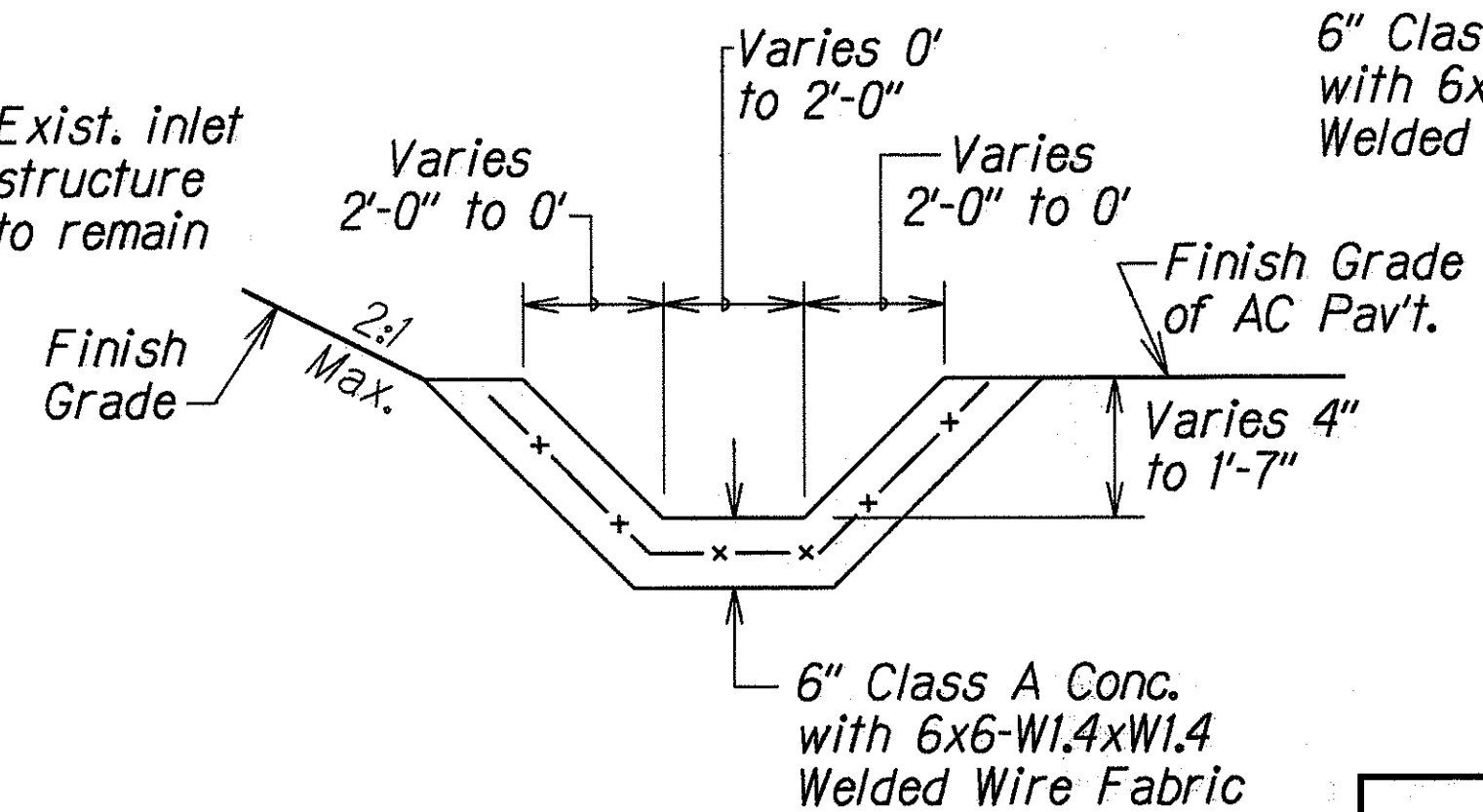
SECTION A
H8/H8



SECTION E
H8/H8



SECTION D
H8/H8



SECTION C
H8/H8

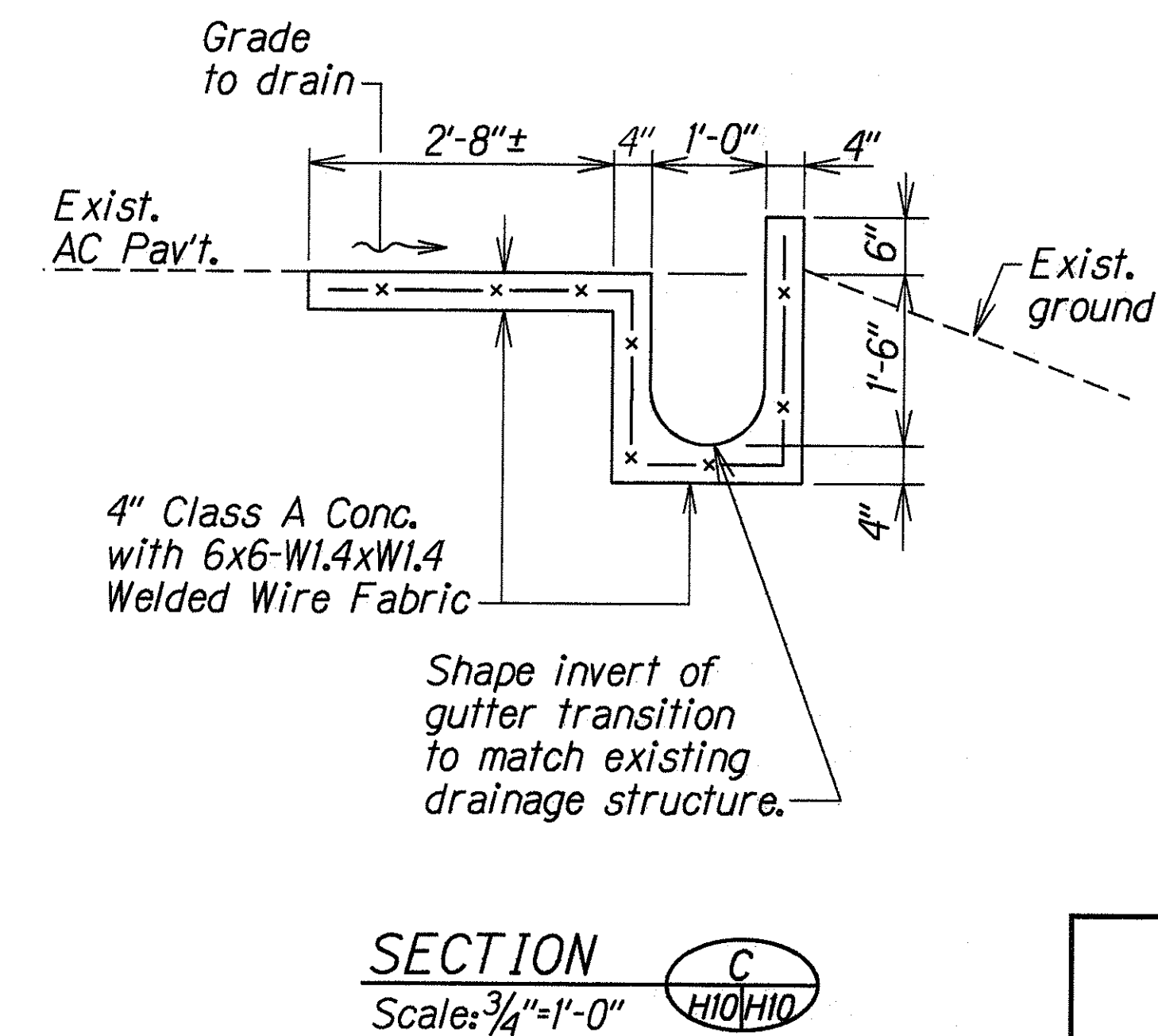
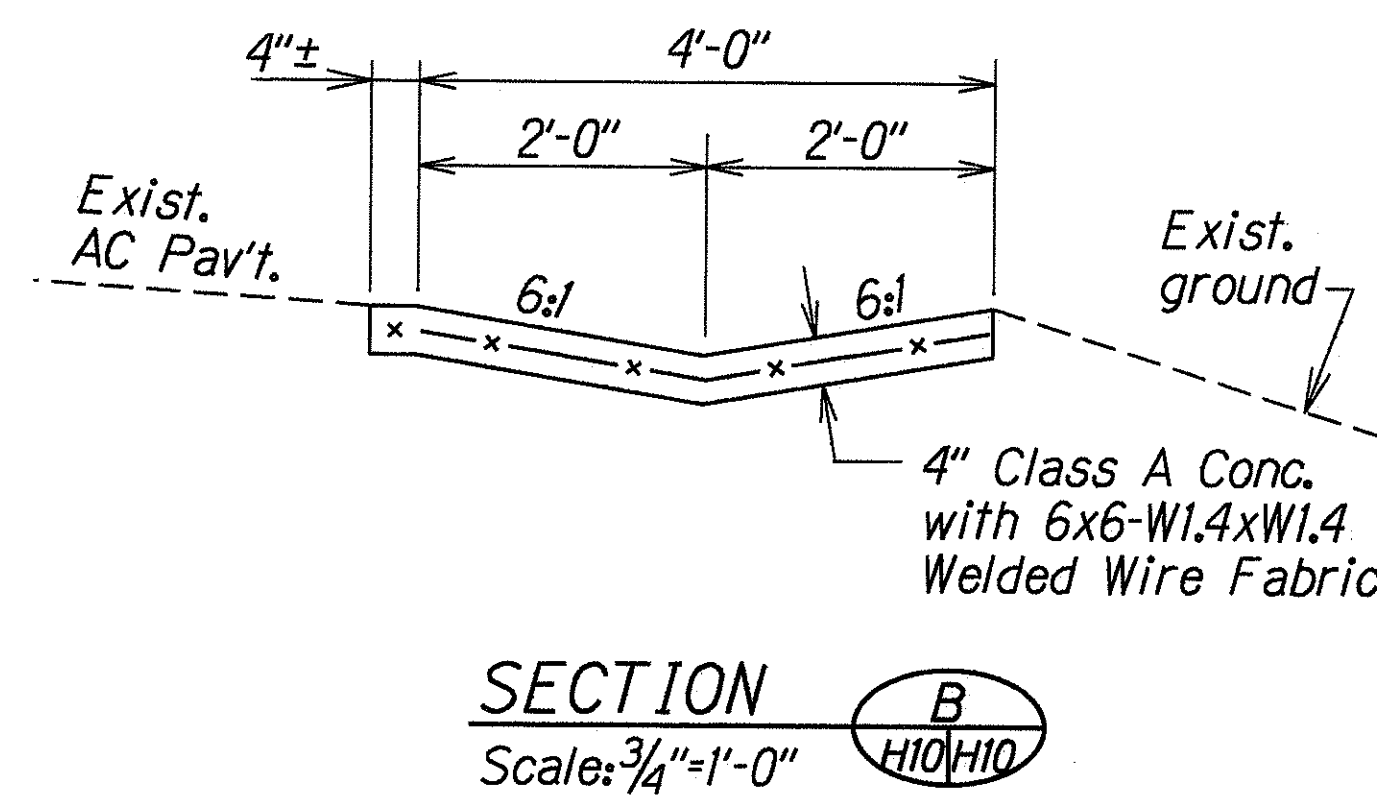
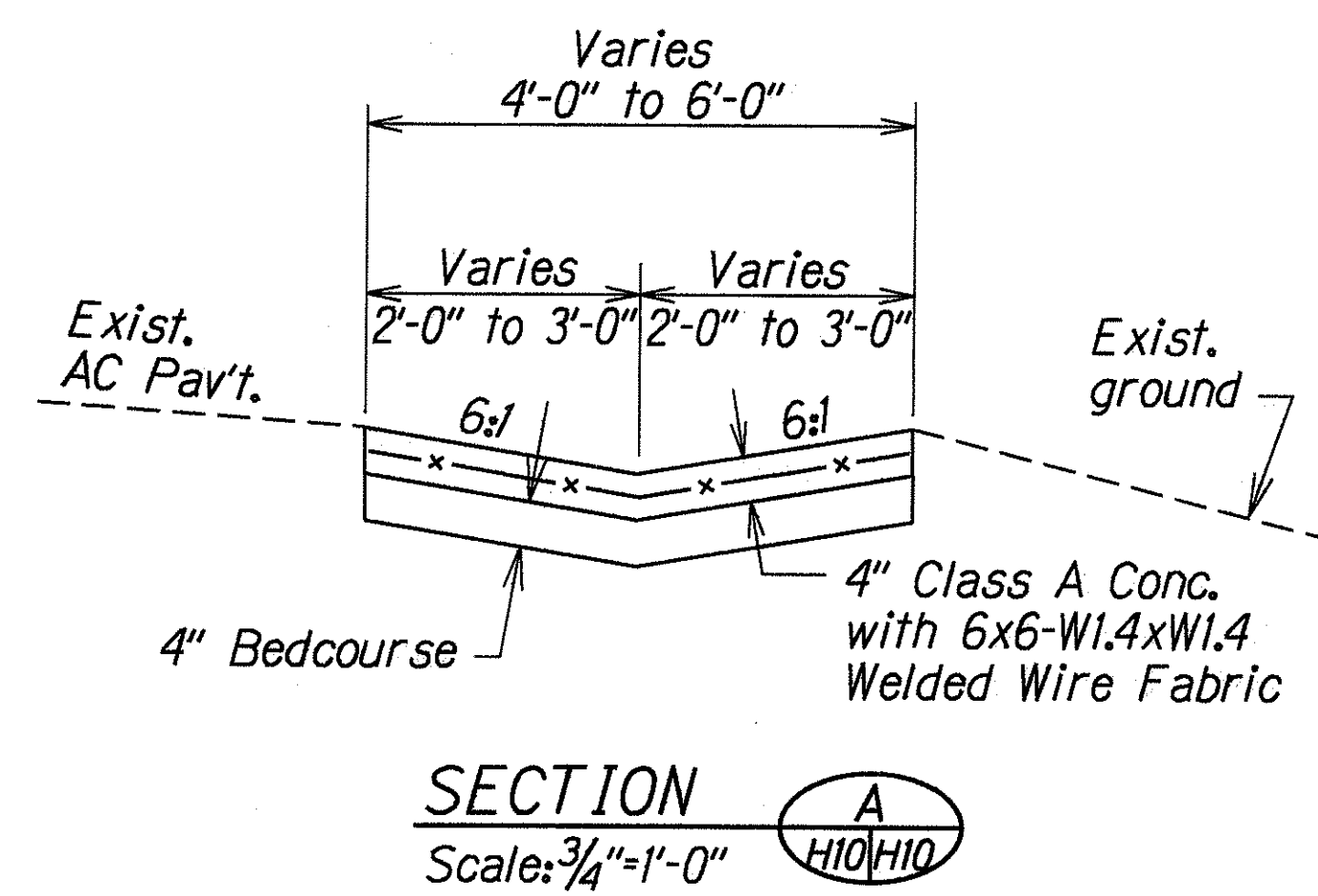
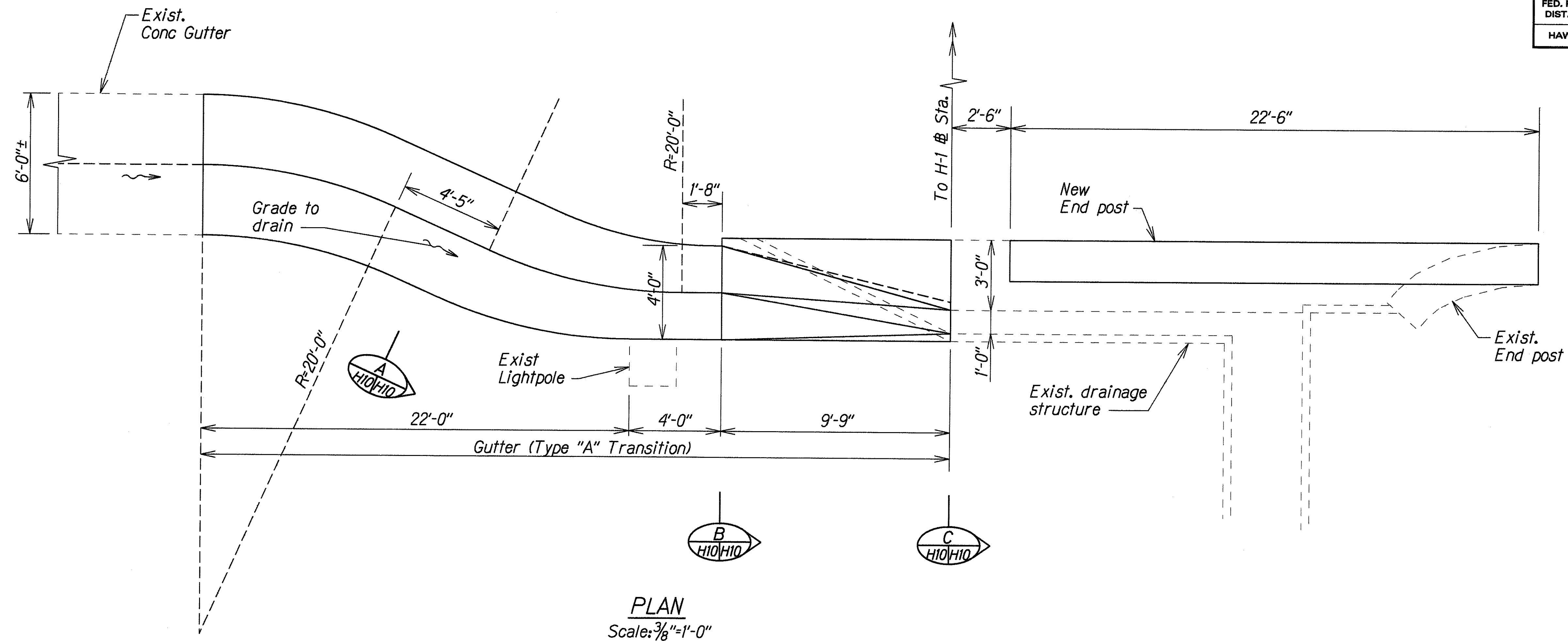
DETAILS OF GUTTER, TYPE 2(61614) & LINED CONCRETE DRAINAGE DITCH AT STA. 278+36± LT.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Pahua Separation to Waialea Bridge
Federal Aid Project No. 1M-HI-1(228)

Scale: 3/4"=1'-0" Date: Nov. 1997

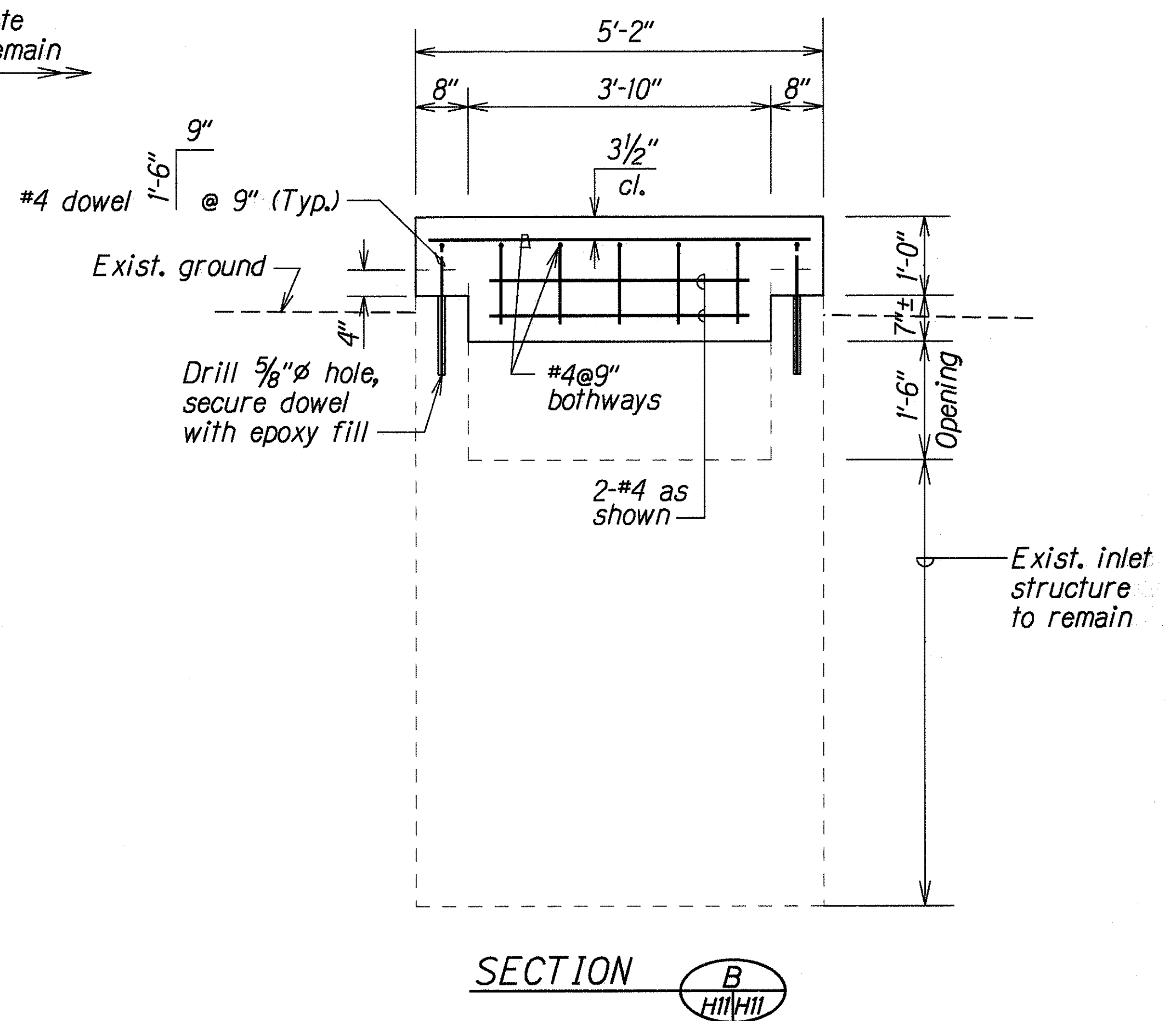
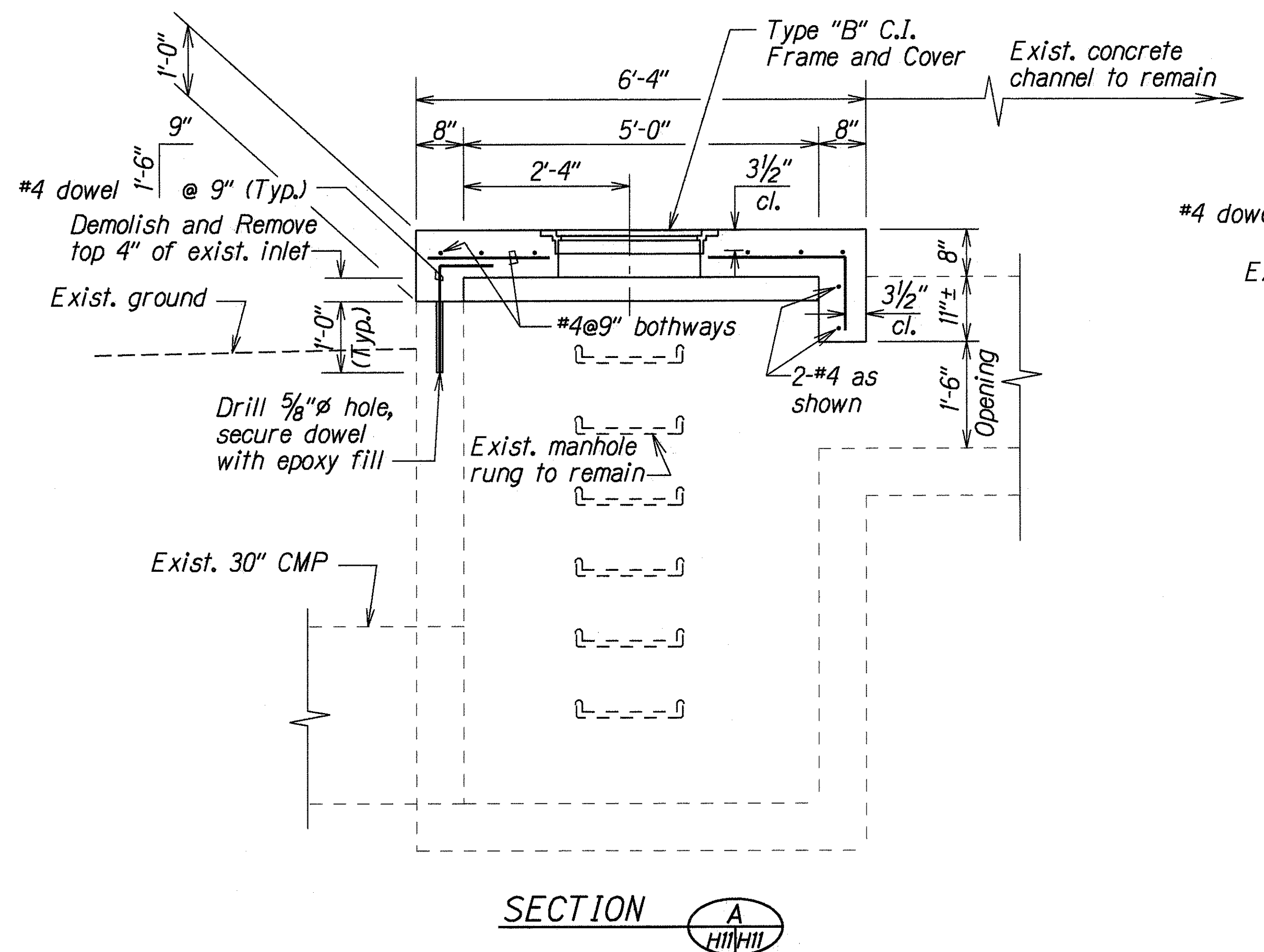
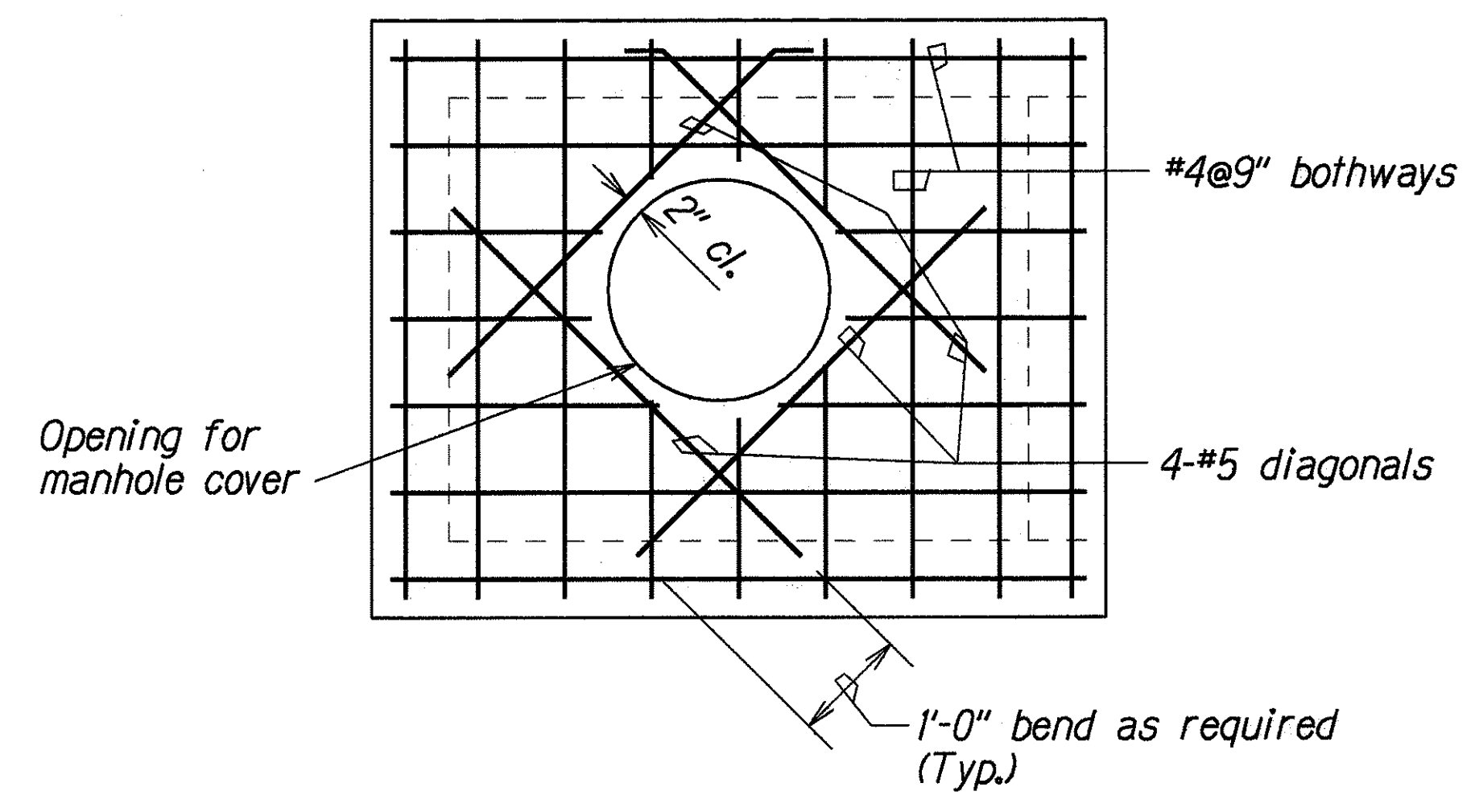
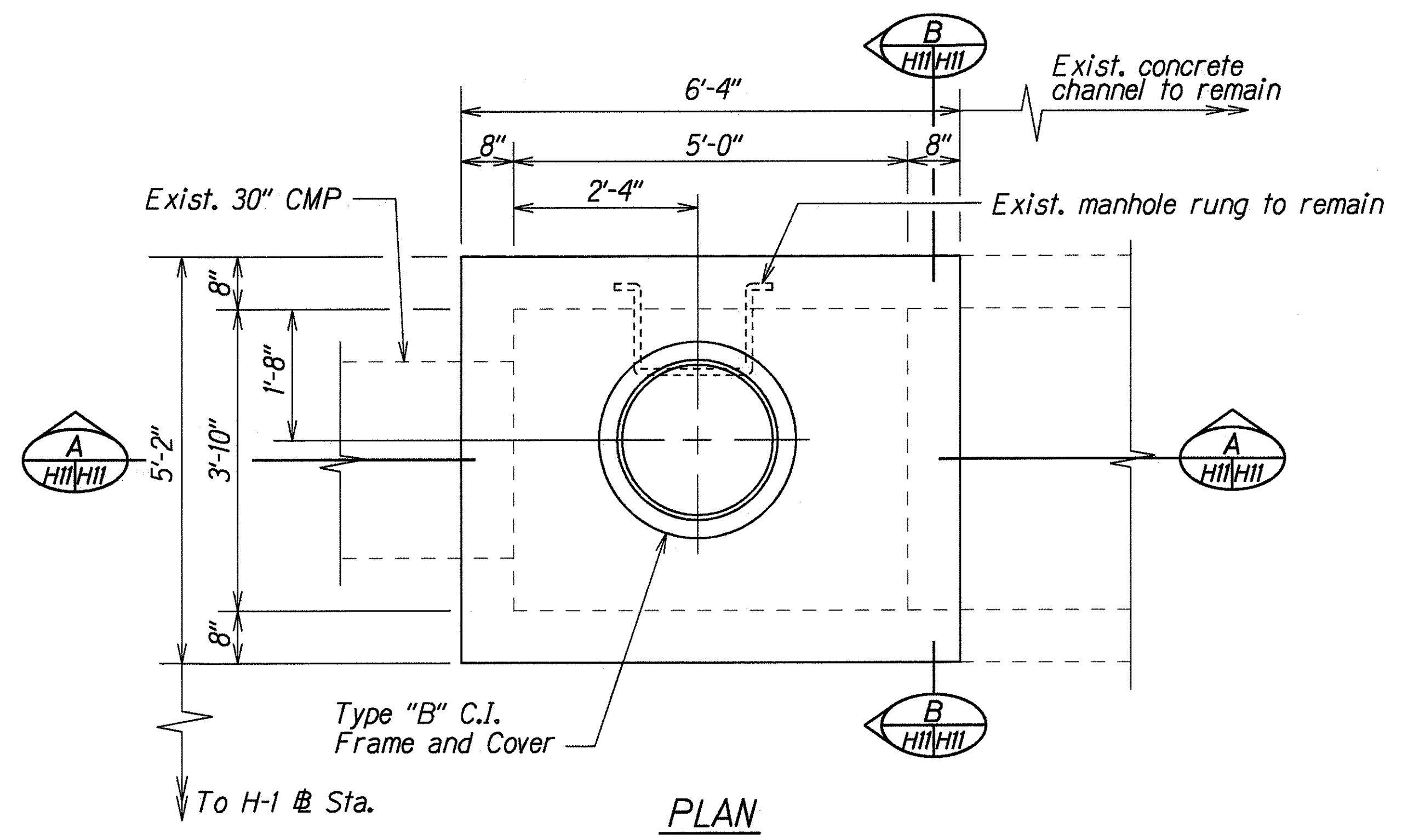
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-HI-K(228)	1999	49	82



DETAILS OF DRAINAGE IMPROVEMENTS AT # STA. 360+00± RT.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS
INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Palehua Separation to Waialea Bridge
Federal Aid Project No. 1M-HI-K(228)
Scale: As Shown
Date: Nov. 1997
SHEET No. H10 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	50	82



DETAILS OF MODIFIED TYPE "2" INLET STRUCTURE AT STA. 385+02± LT.

ORIGINAL PLAN	DATE
DESIGNED BY	10/21/97
CHECKED BY	
QUANTITIES BY	
NOTED BY	
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
NOTED BY	

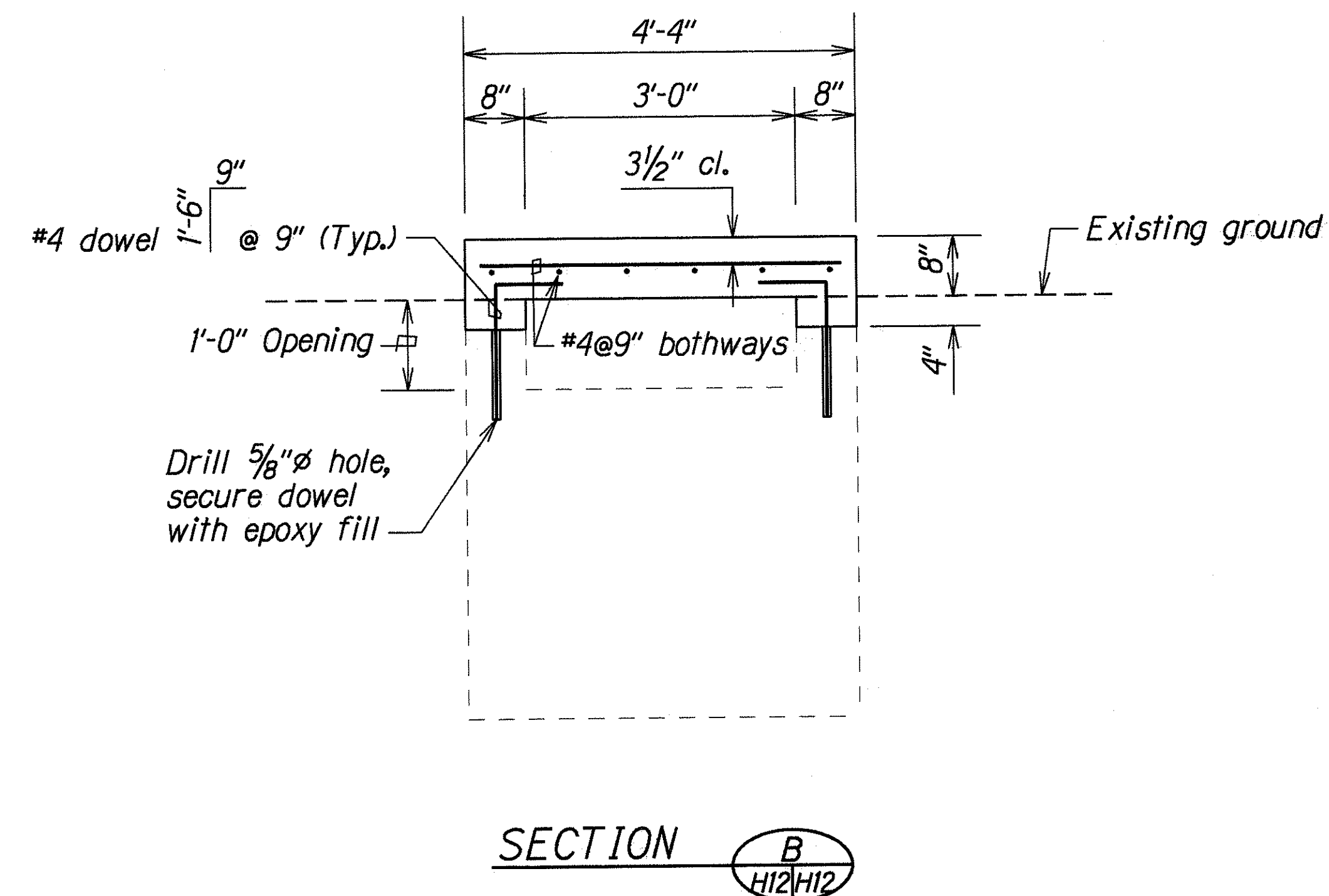
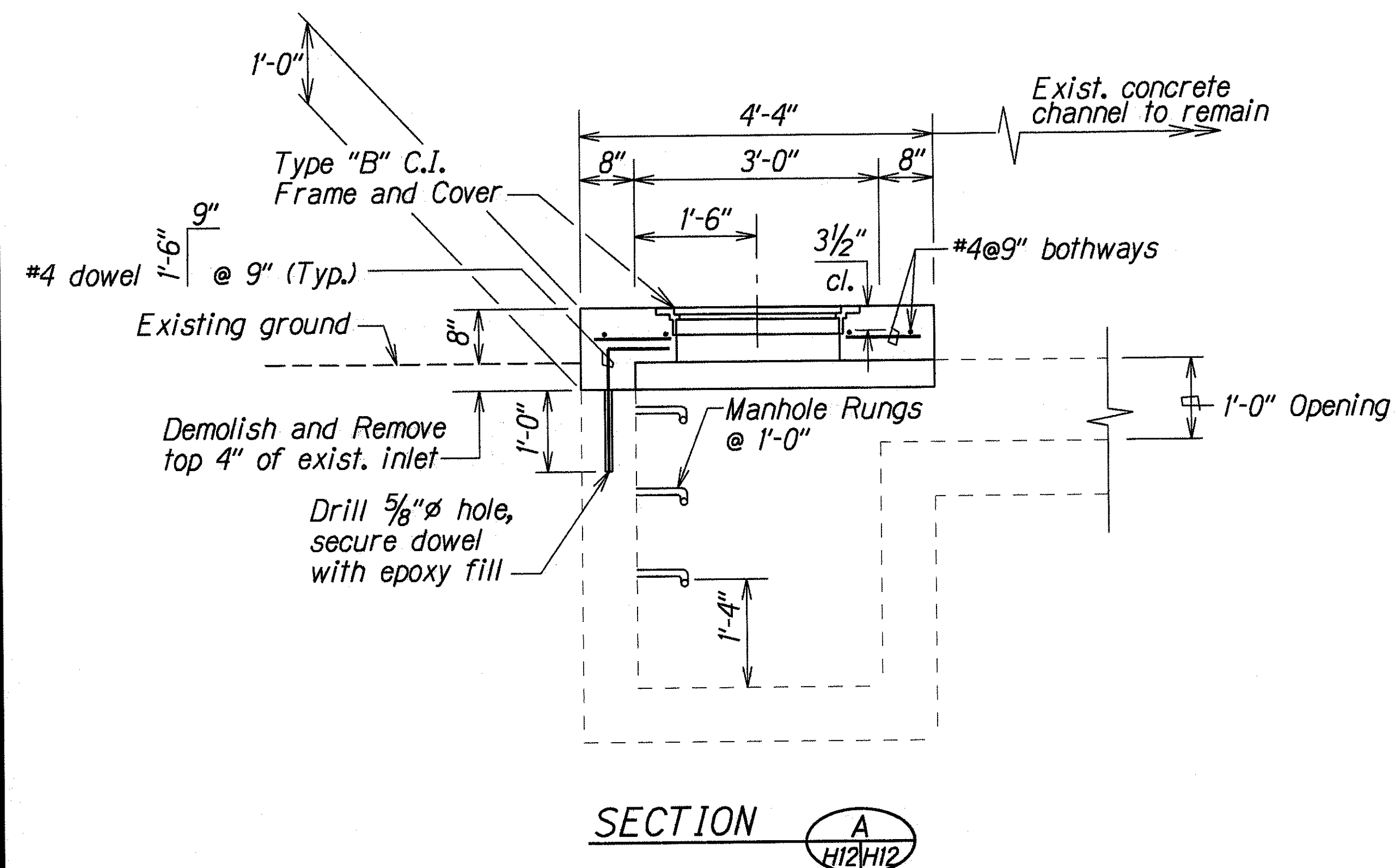
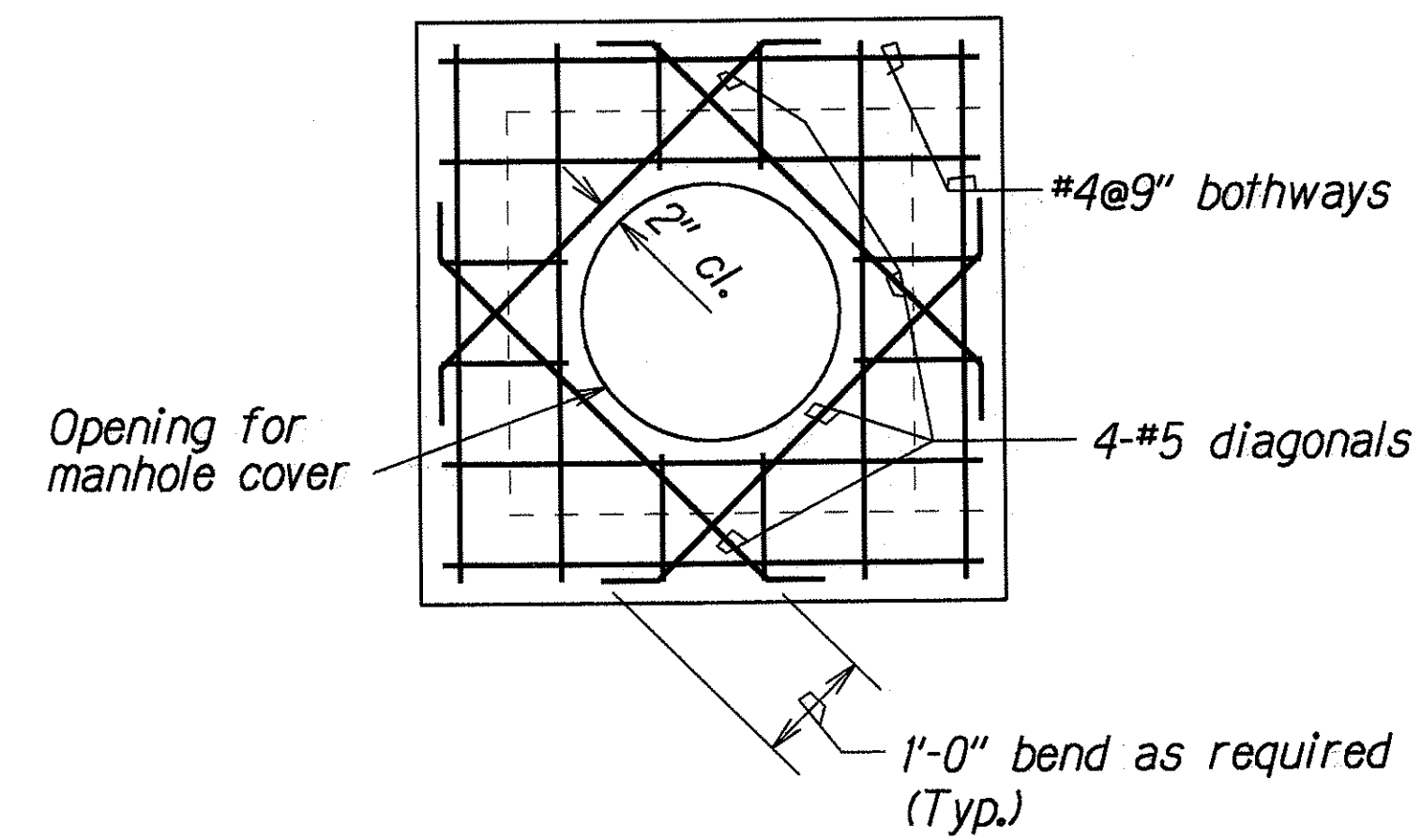
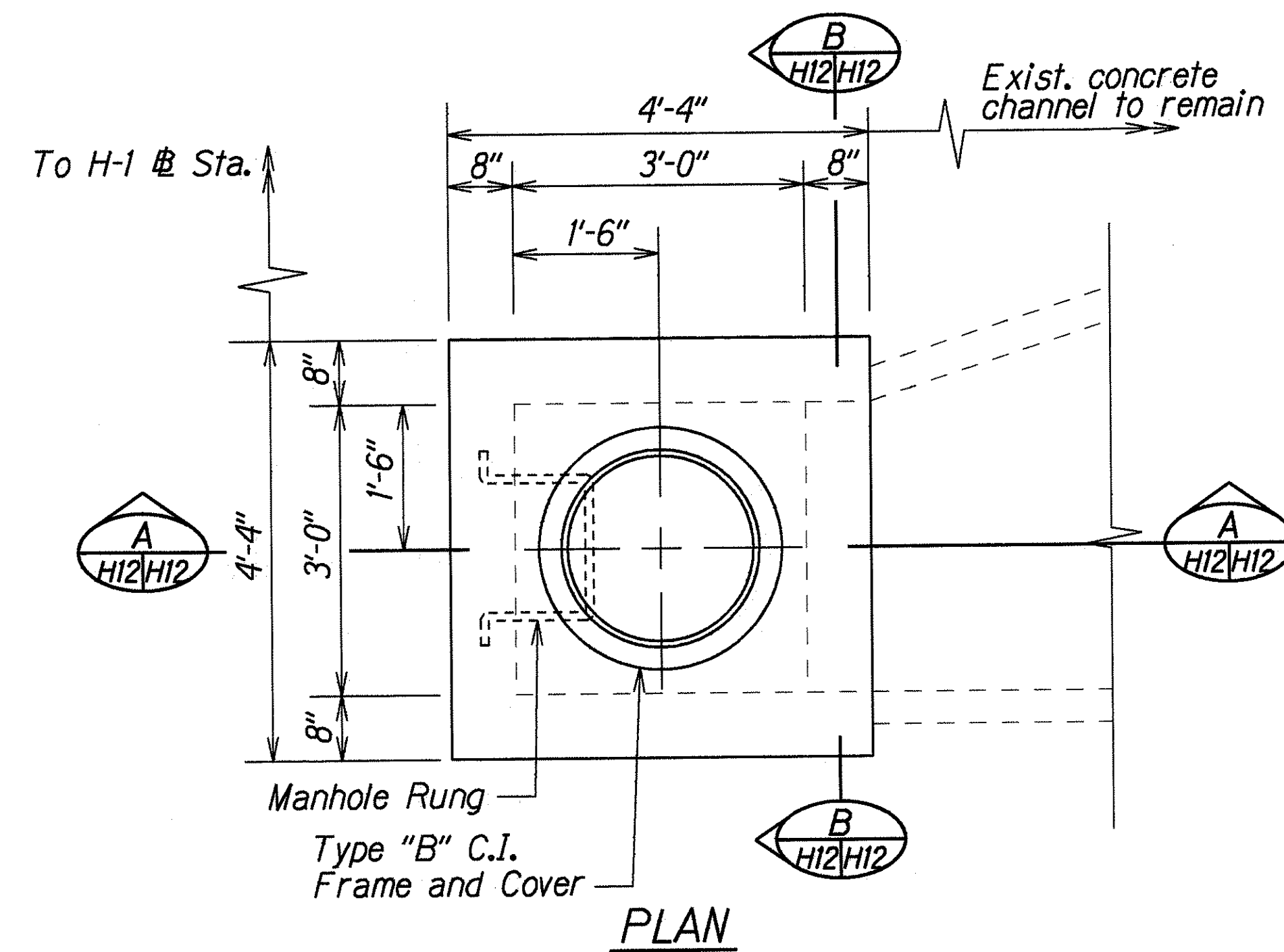
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Pahoa Separation to Waialeale Bridge
Federal Aid Project No. IM-HI-1(228)

Scale: 3/4"=1'-0" Date: Nov. 1997

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	51	82



DETAILS OF MODIFIED TYPE "3" INLET STRUCTURE AT # STA. 385+02± RT.

ORIGINAL PLAN	DATE
10/22/97	
DESIGNED BY	
CHECKED BY	
NOTED BY	
DATE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

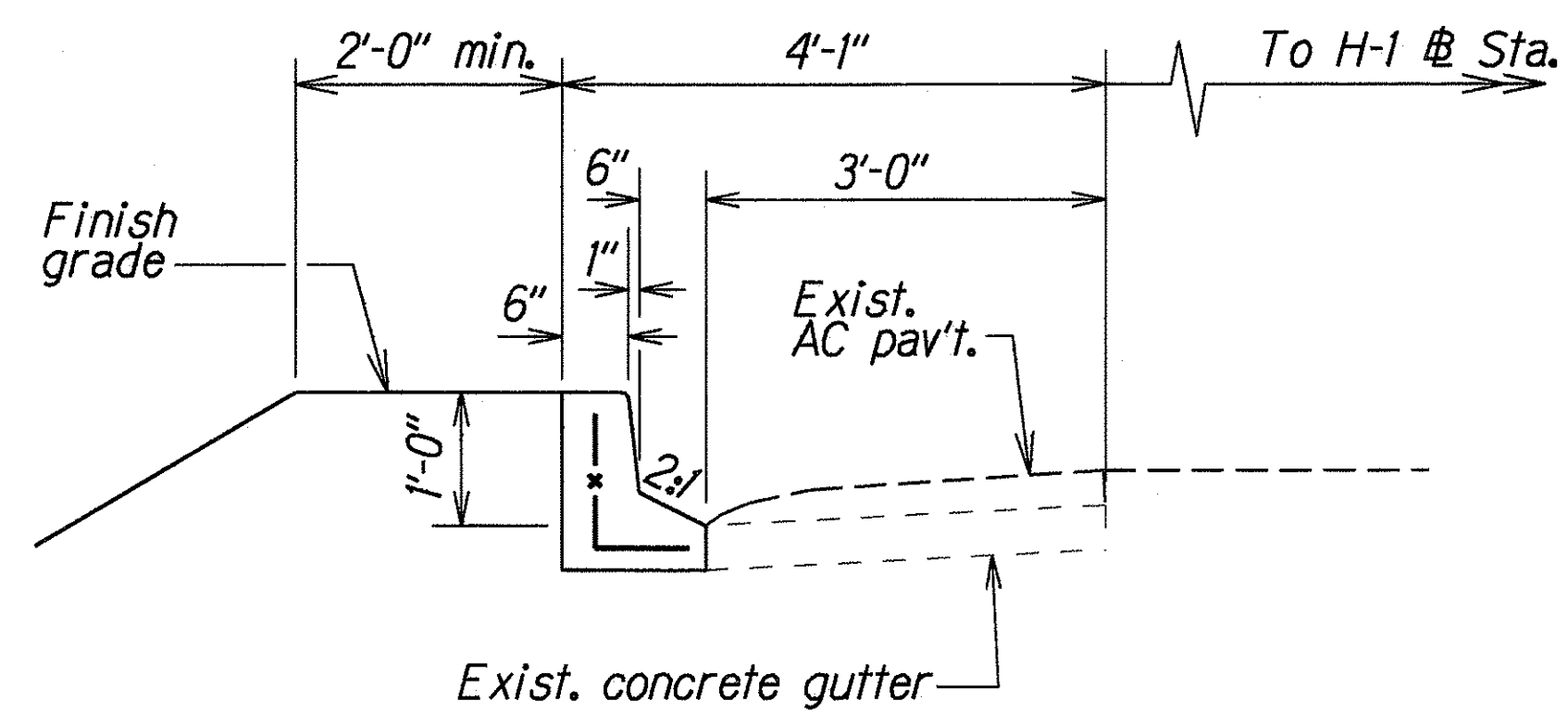
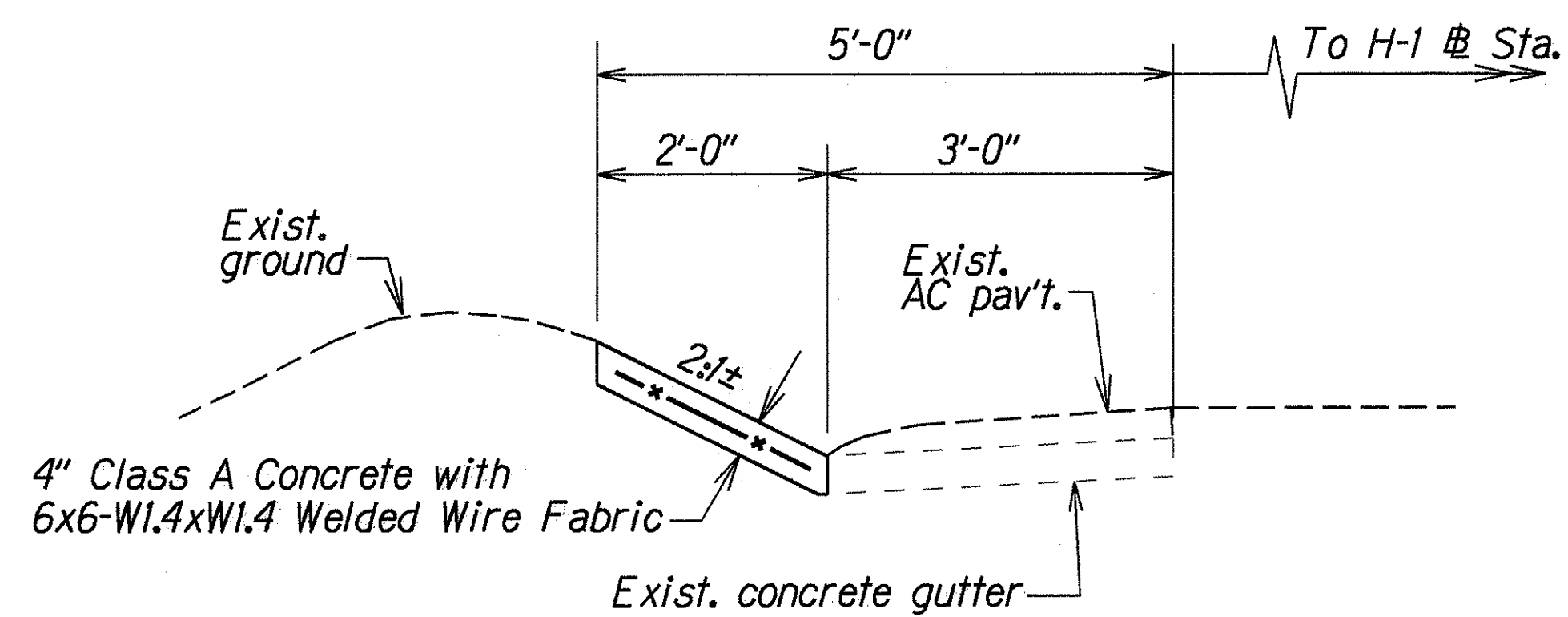
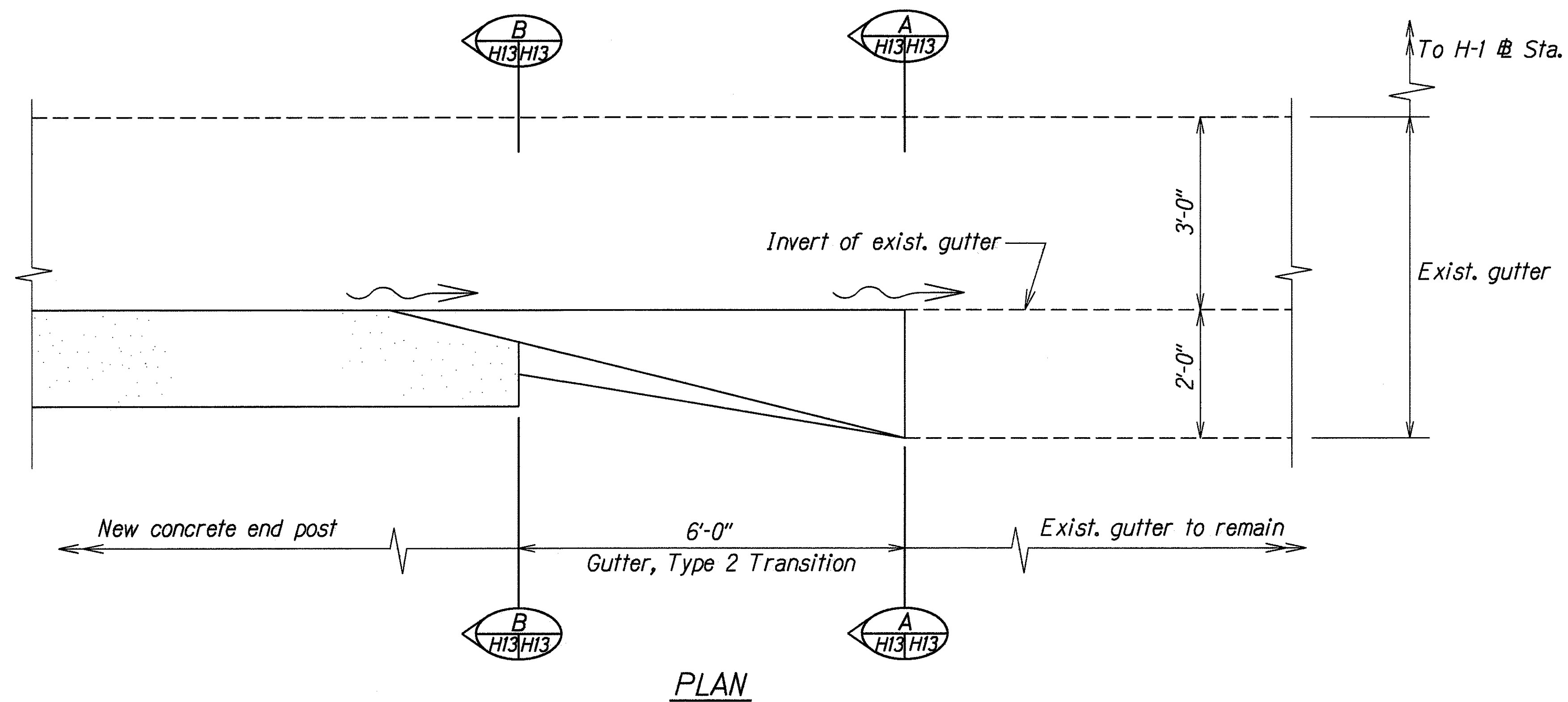
DRAINAGE DETAILS

INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Palehua Separation to Waikale Bridge
Federal Aid Project No. IM-HI-1(228)

Scale: 3/4"=1'-0" Date: Nov. 1997

SHEET No. H12 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	52	82



GUTTER, TYPE 2 (TYPE "B" TRANSITION) AT STA. 416+00± RT.

DESIGNED BY	DATE
TRACED BY	10/23/97
DESIGNED BY C. Matsuda, R. Kawamata	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1

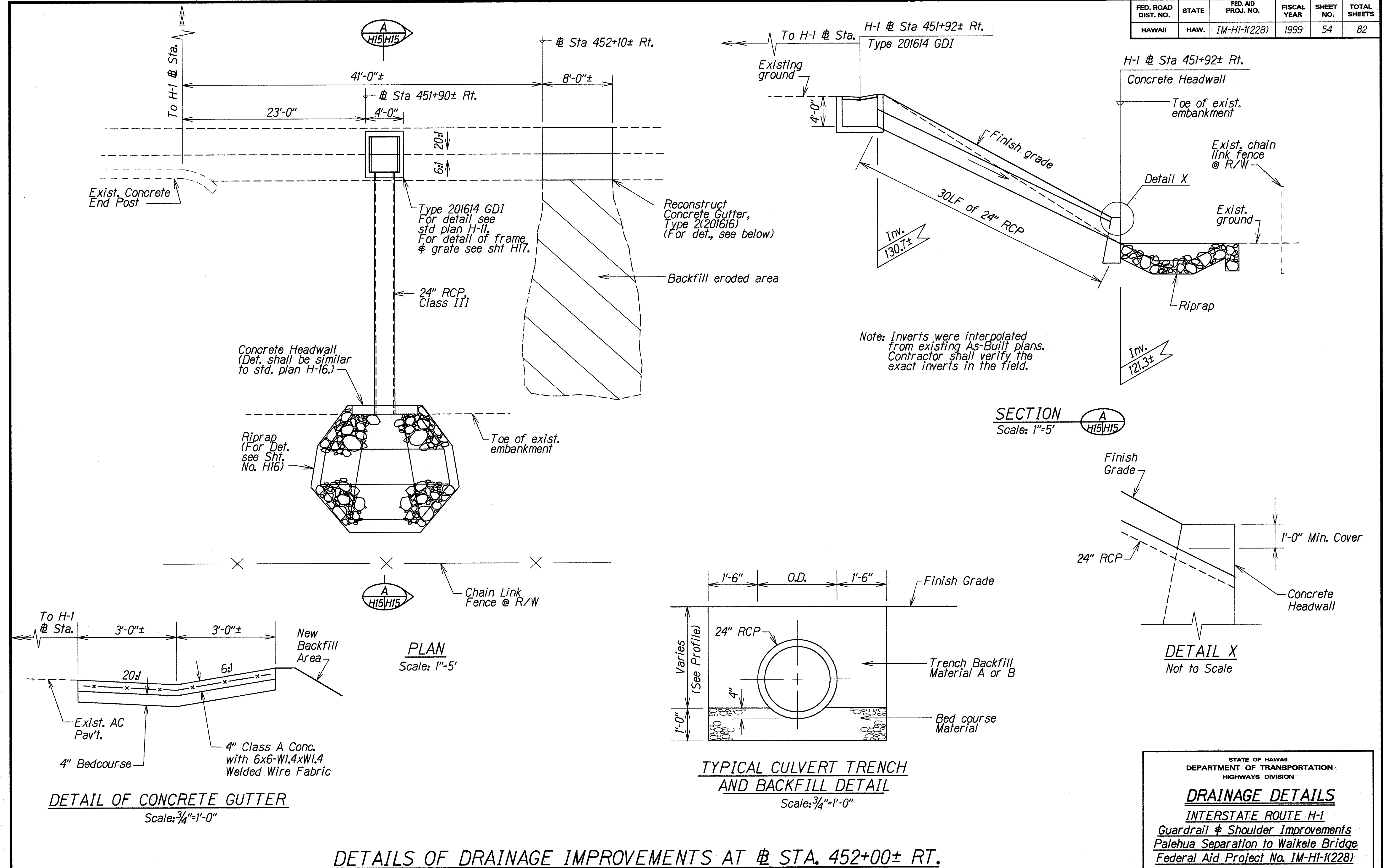
Guardrail & Shoulder Improvements

Palehua Separation to Waialeale Bridge

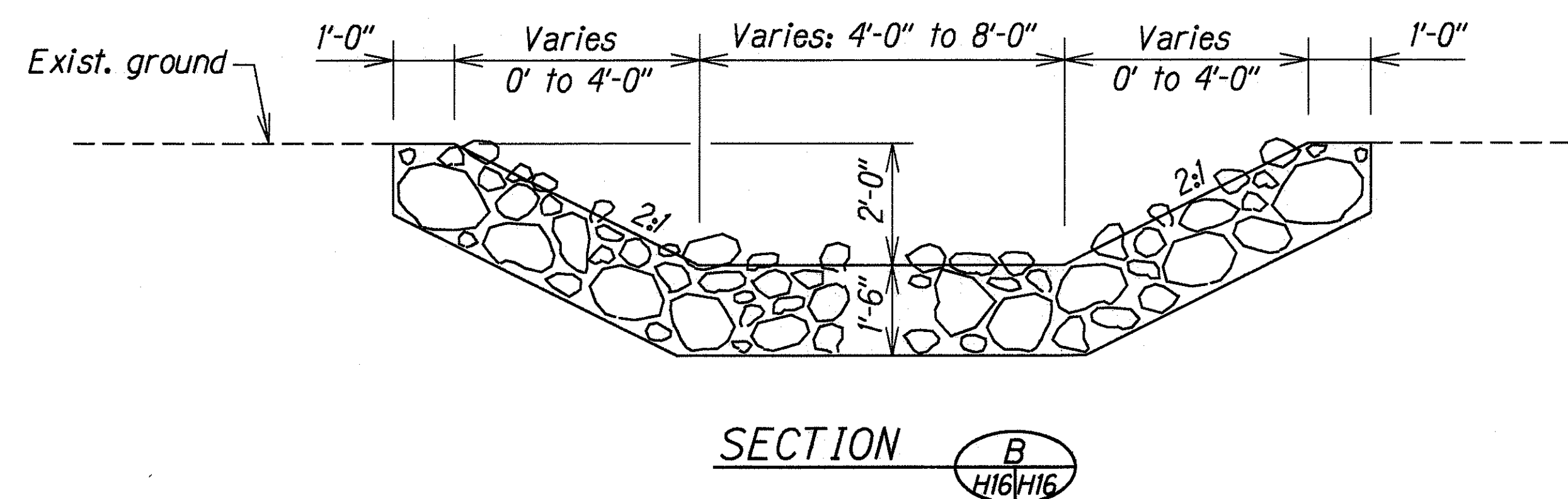
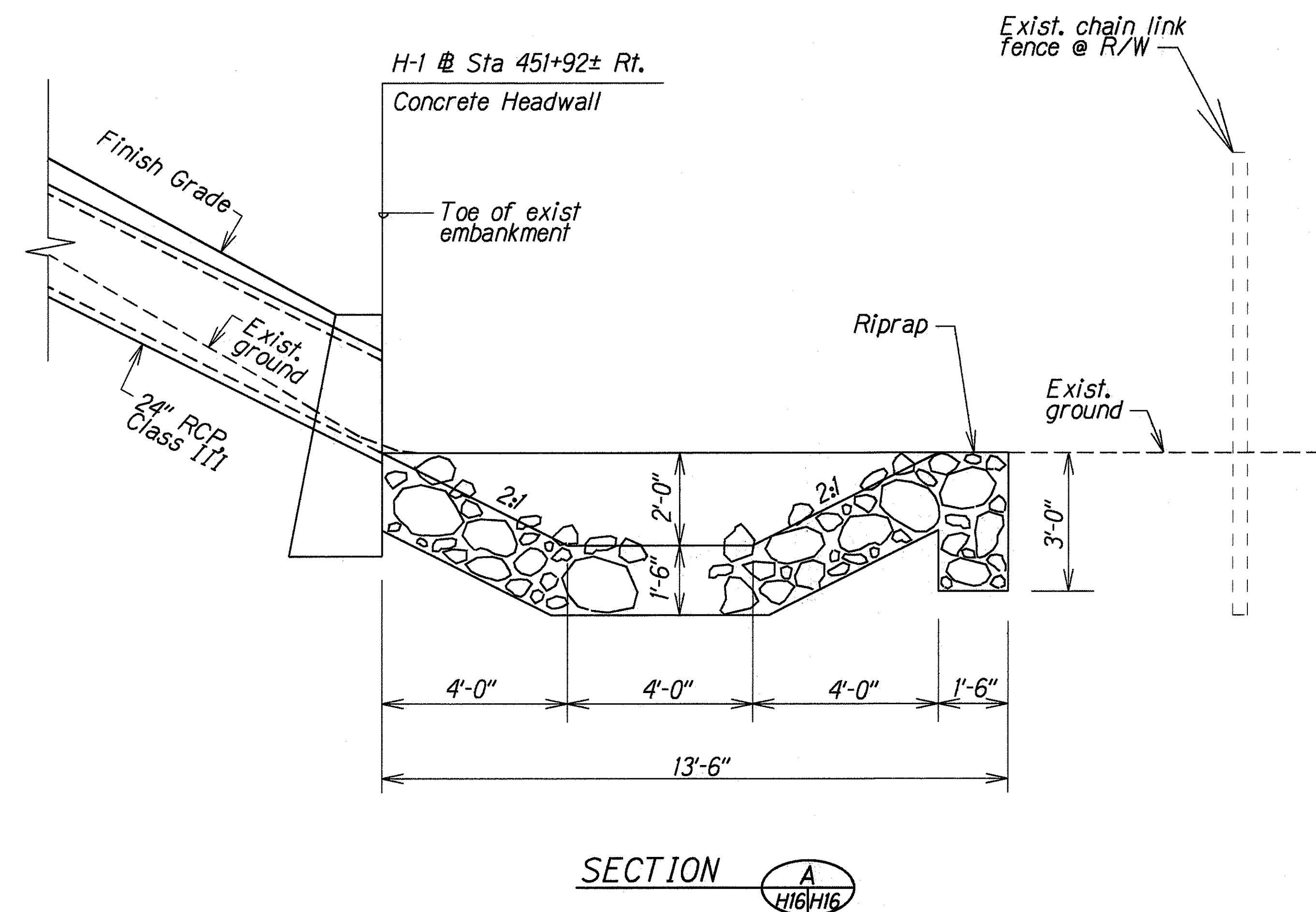
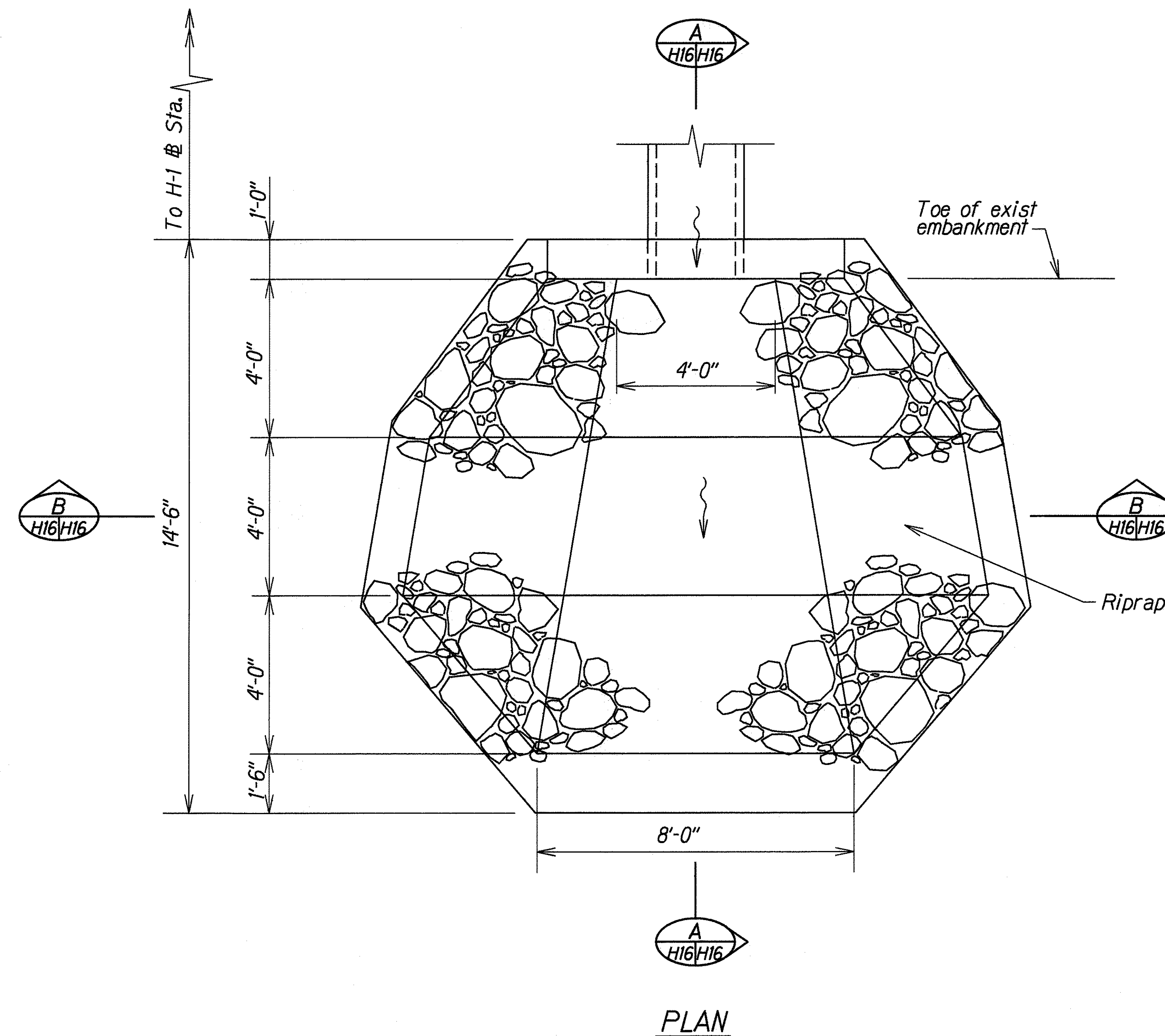
Federal Aid Project No. IM-HI-1(228)

Scale: 3/4"=1'-0" Date: Nov. 1997

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	54	82



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-K(228)	1999	55	82



DETAILS OF RIPRAP STRUCTURE AT STA. 451+90± RT.

ORIGINAL PLAN	DATE
DESIGNED BY	10/22/97
DESIGNED BY	C. Matsuda, R. Kawamura
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

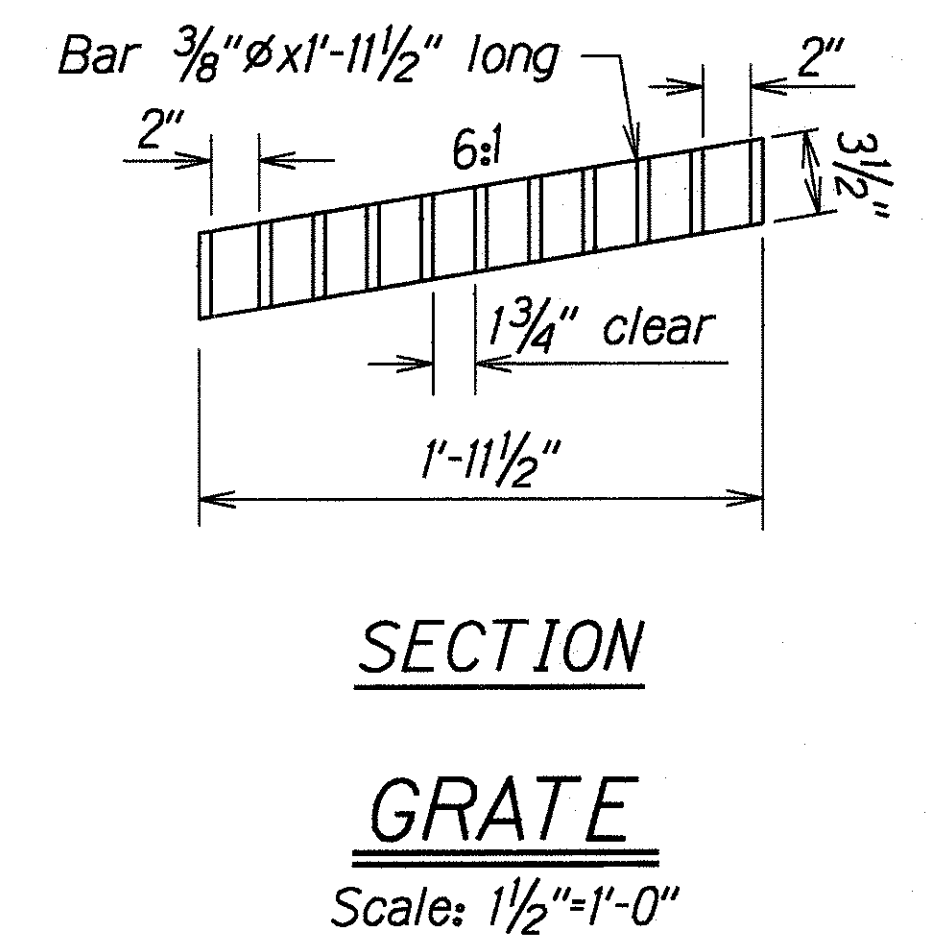
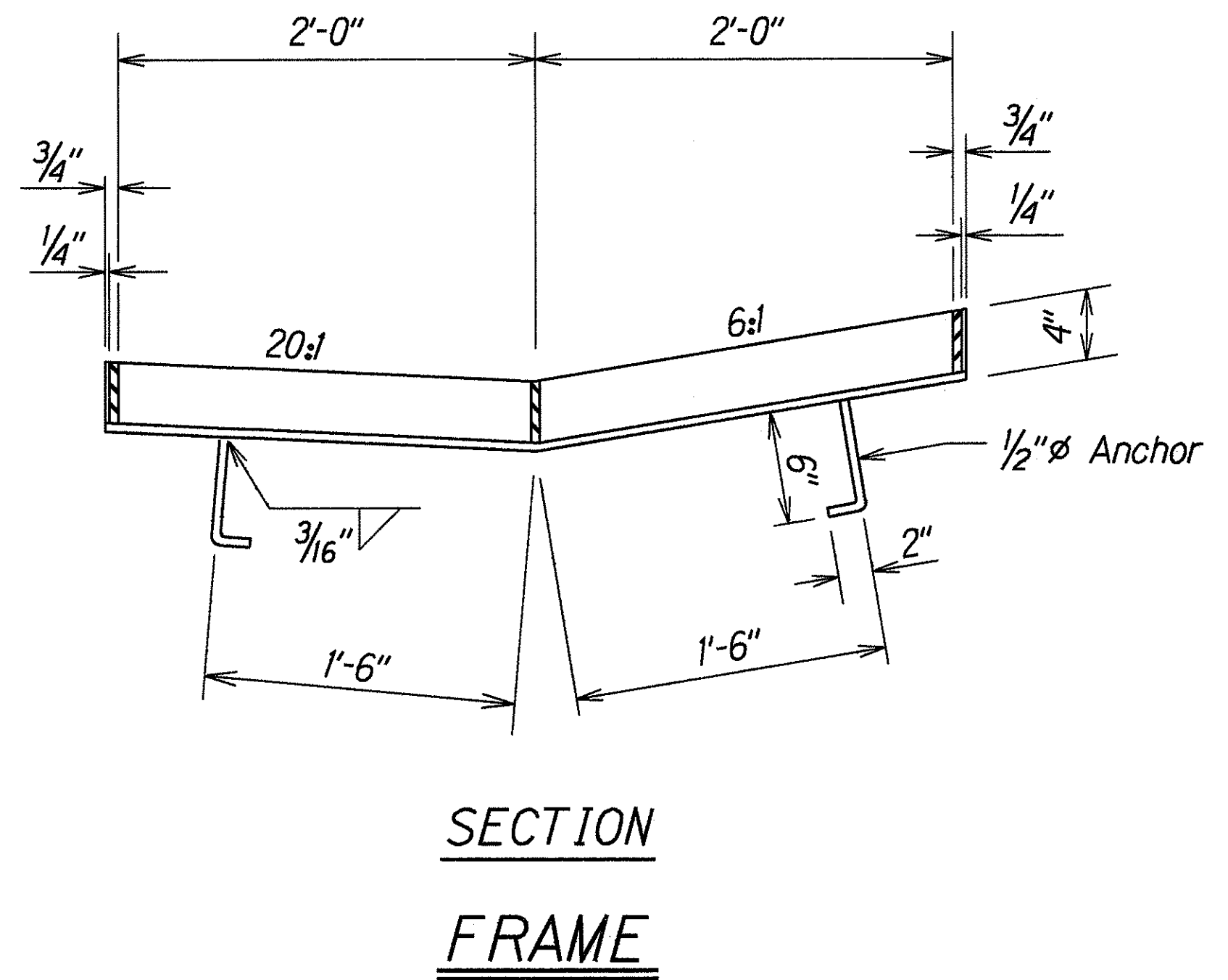
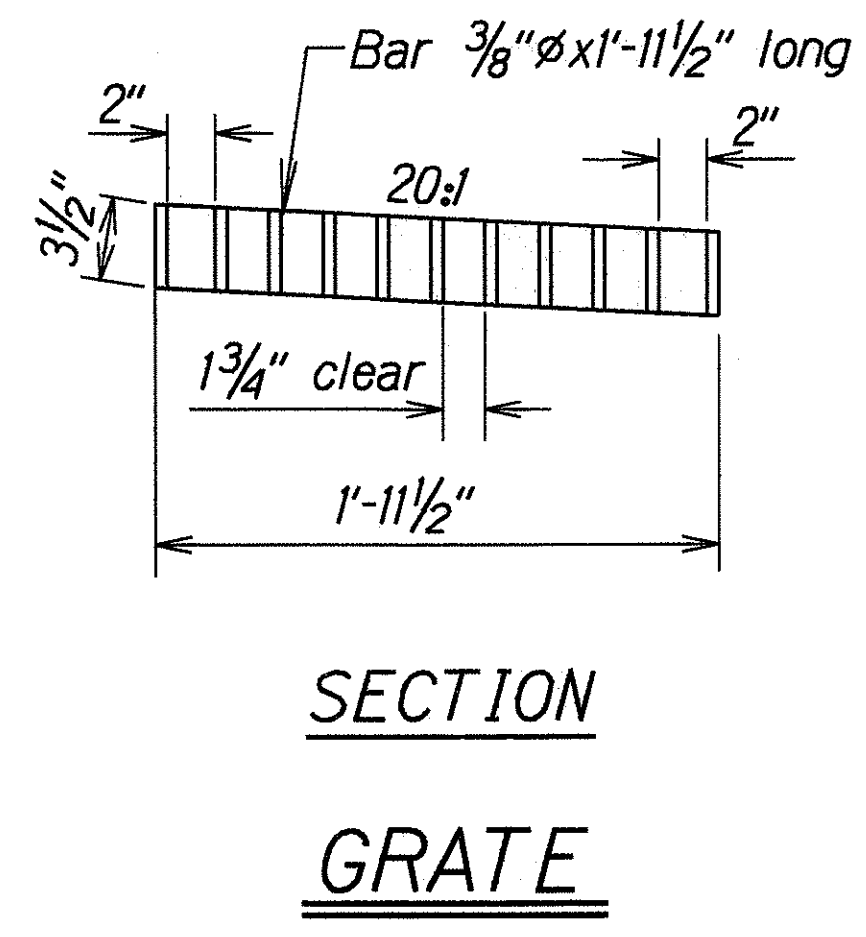
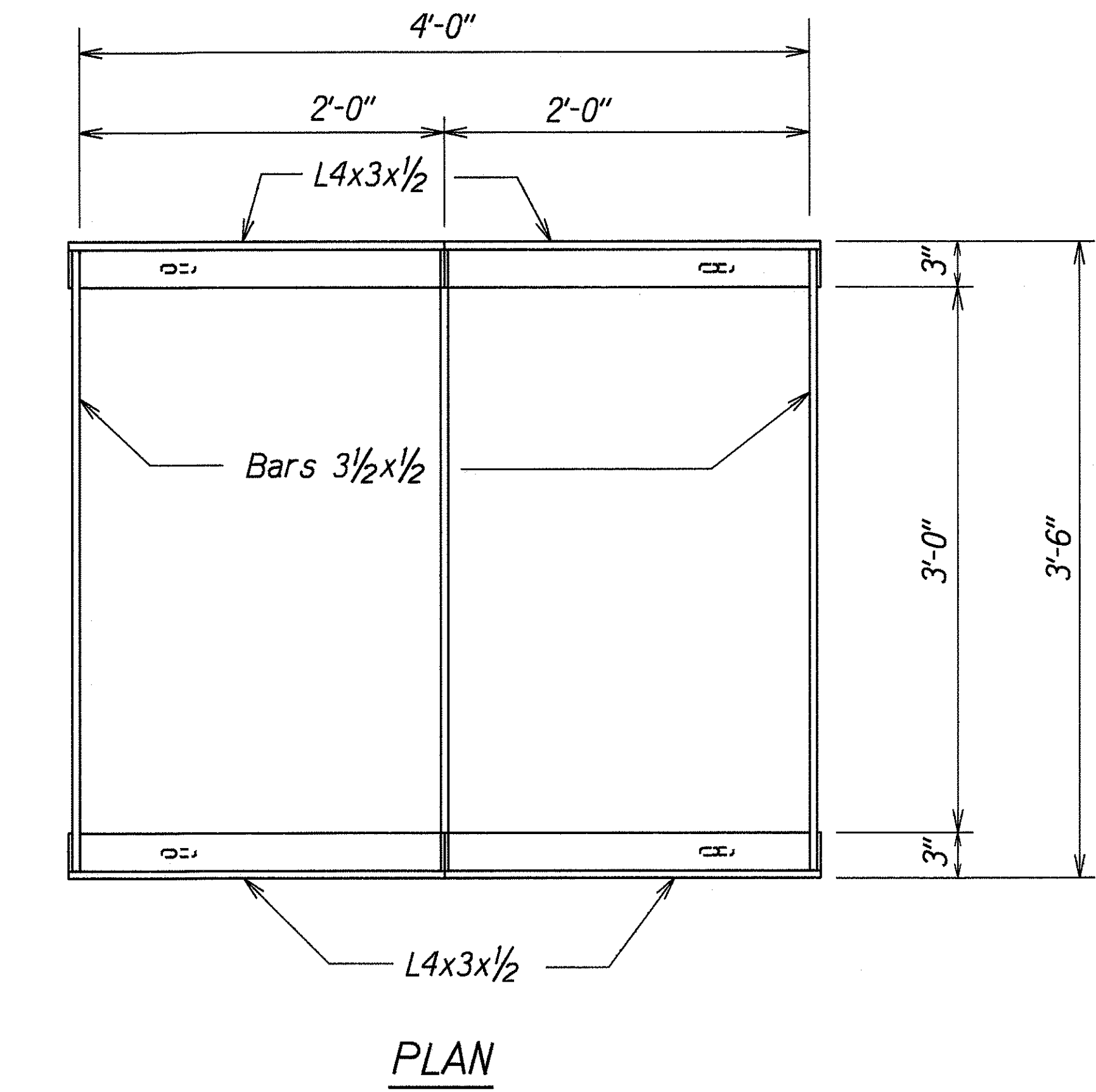
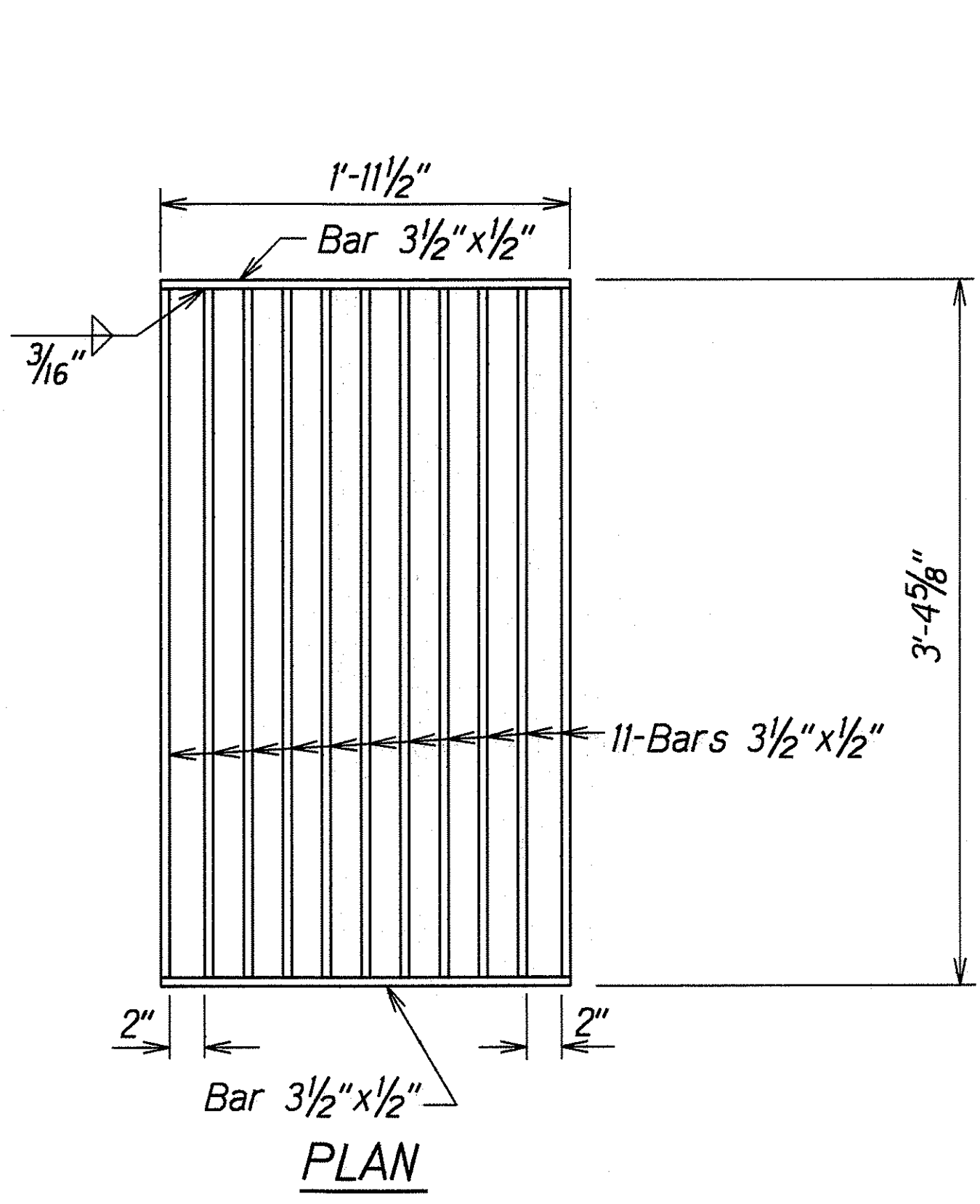
DRAINAGE DETAILS

INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Pahua Separation to Waialea Bridge
Federal Aid Project No. IM-HI-K(228)

Scale: 1/2"=1'-0" Date: Nov. 1997

SHEET No. H16 OF 17 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-HI-1(228)	1999	56	82



NOTE:
All welds 3/8" unless otherwise noted.

DETAILS OF TYPE 201614 STEEL FRAME AND GRATES

ORIGINAL PLAN	DATE 3/15/96
DESIGNED BY C. M. M. M.	
CHECKED BY C. M. M. M.	
NOTED BY C. M. M. M.	
QUANTITIES BY C. M. M. M.	
CHECKED BY C. M. M. M.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

INTERSTATE ROUTE H-1
Guardrail & Shoulder Improvements
Pahoa Separation to Waialeale Bridge
Federal Aid Project No. IM-HI-1(228)

Scale: 1 1/2"=1'-0" Date: Nov. 1997

SHEET No. H17 OF 17 SHEETS