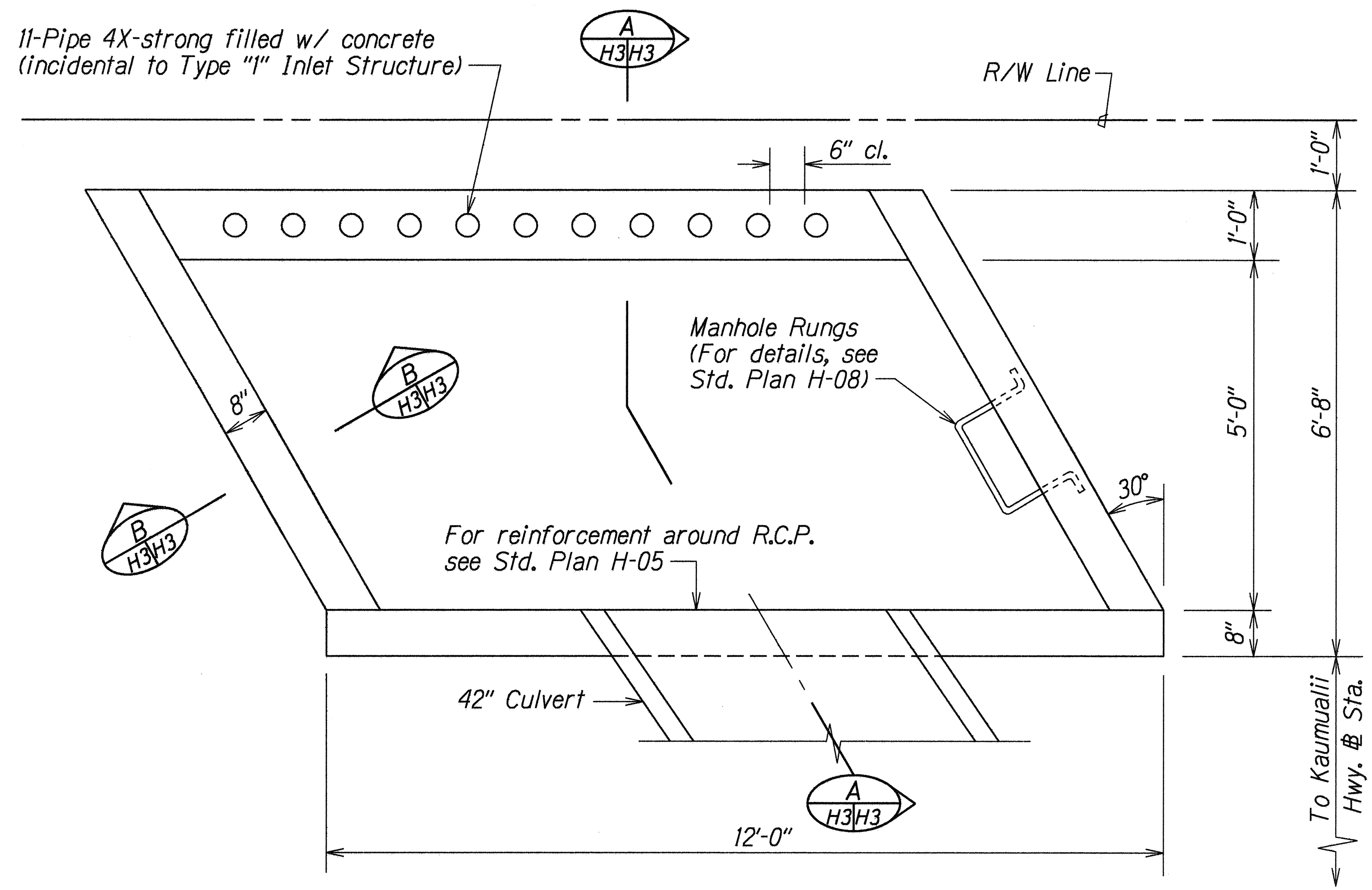
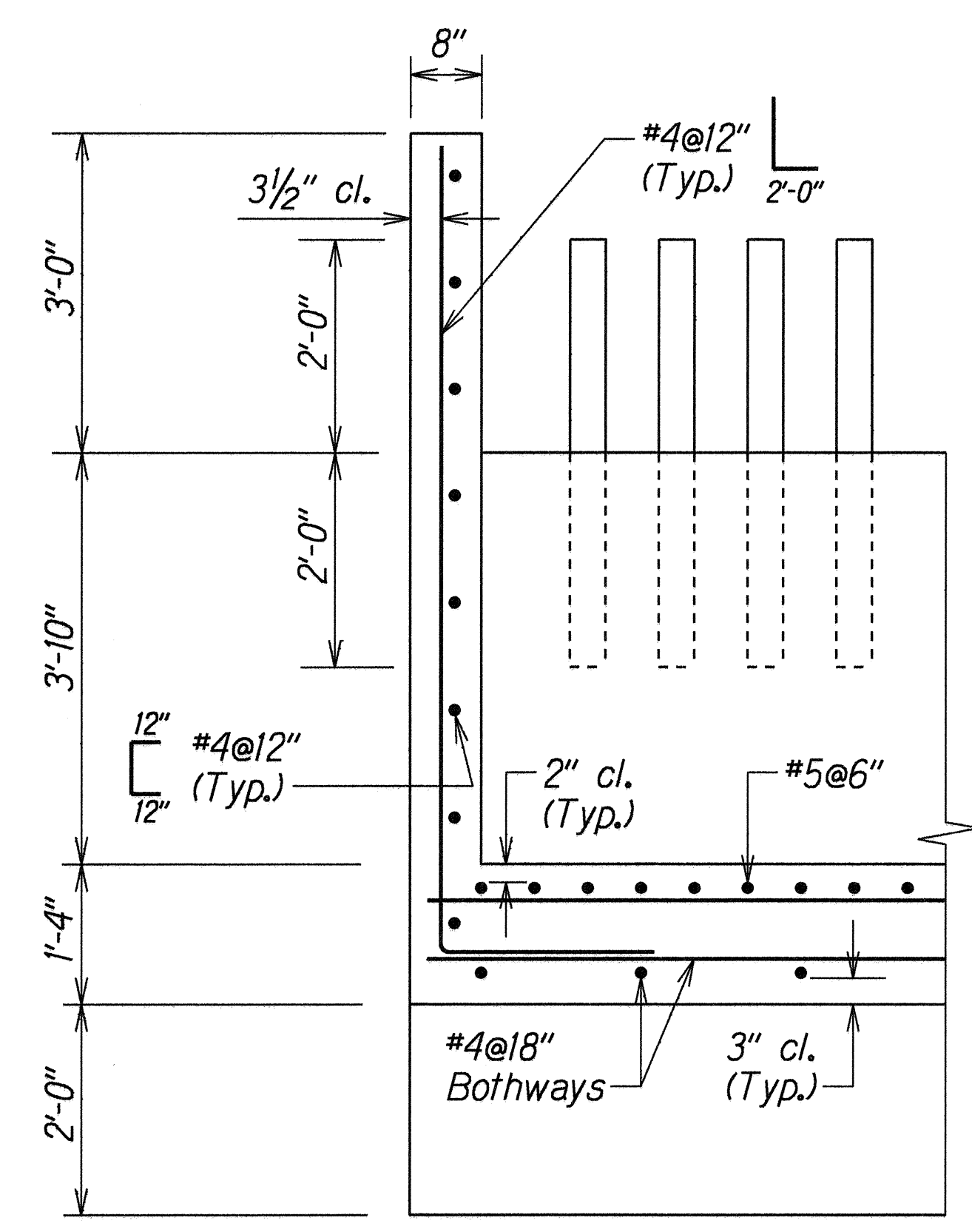


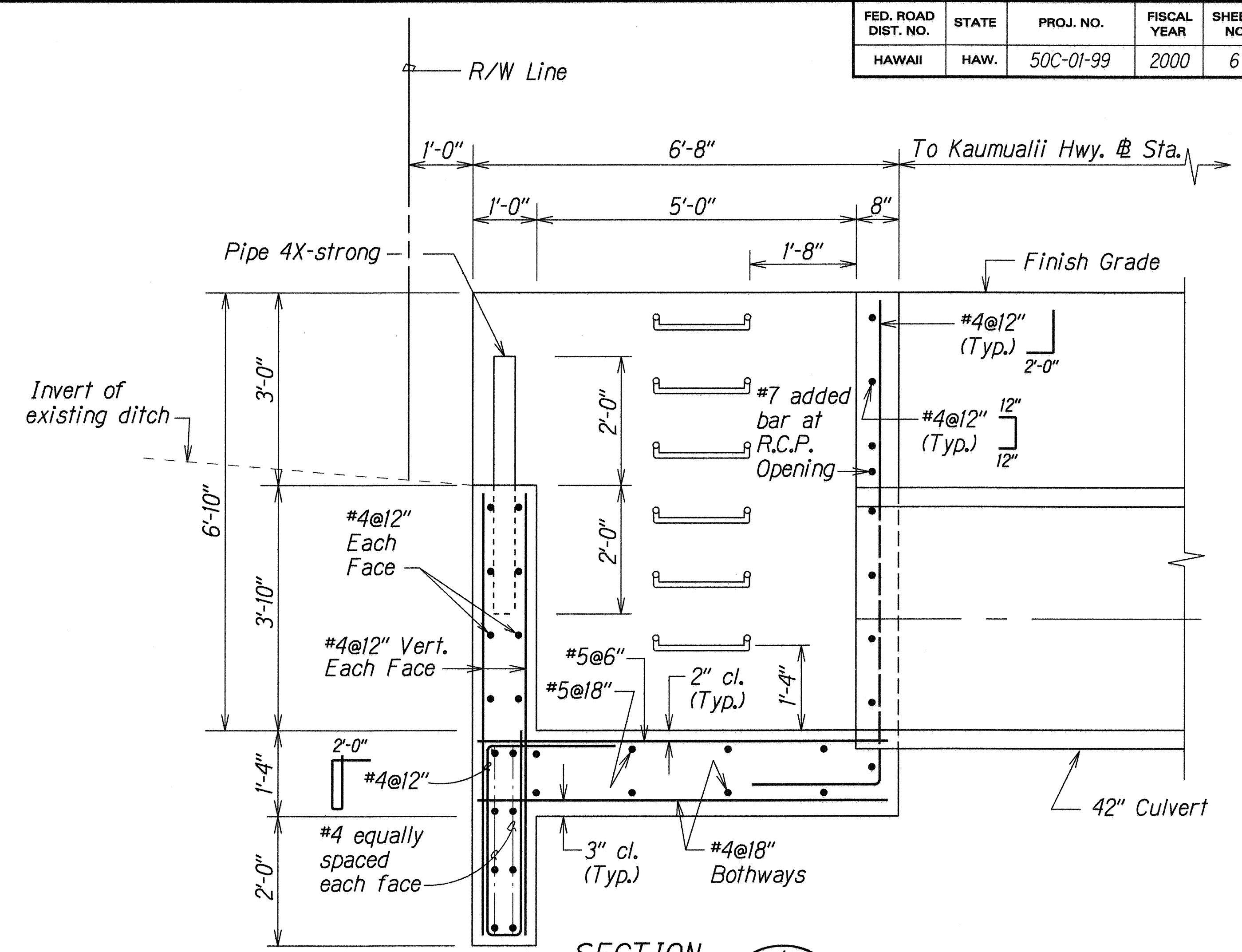
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-01-99	2000	6	10



PLAN



SECTION B
H3/H3



SECTION A
H3/H3

DETAILS OF TYPE "I" INLET STRUCTURE

ORIGINAL PLAN	DATE
11/15/99	
TRACED BY	
DESIGNED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

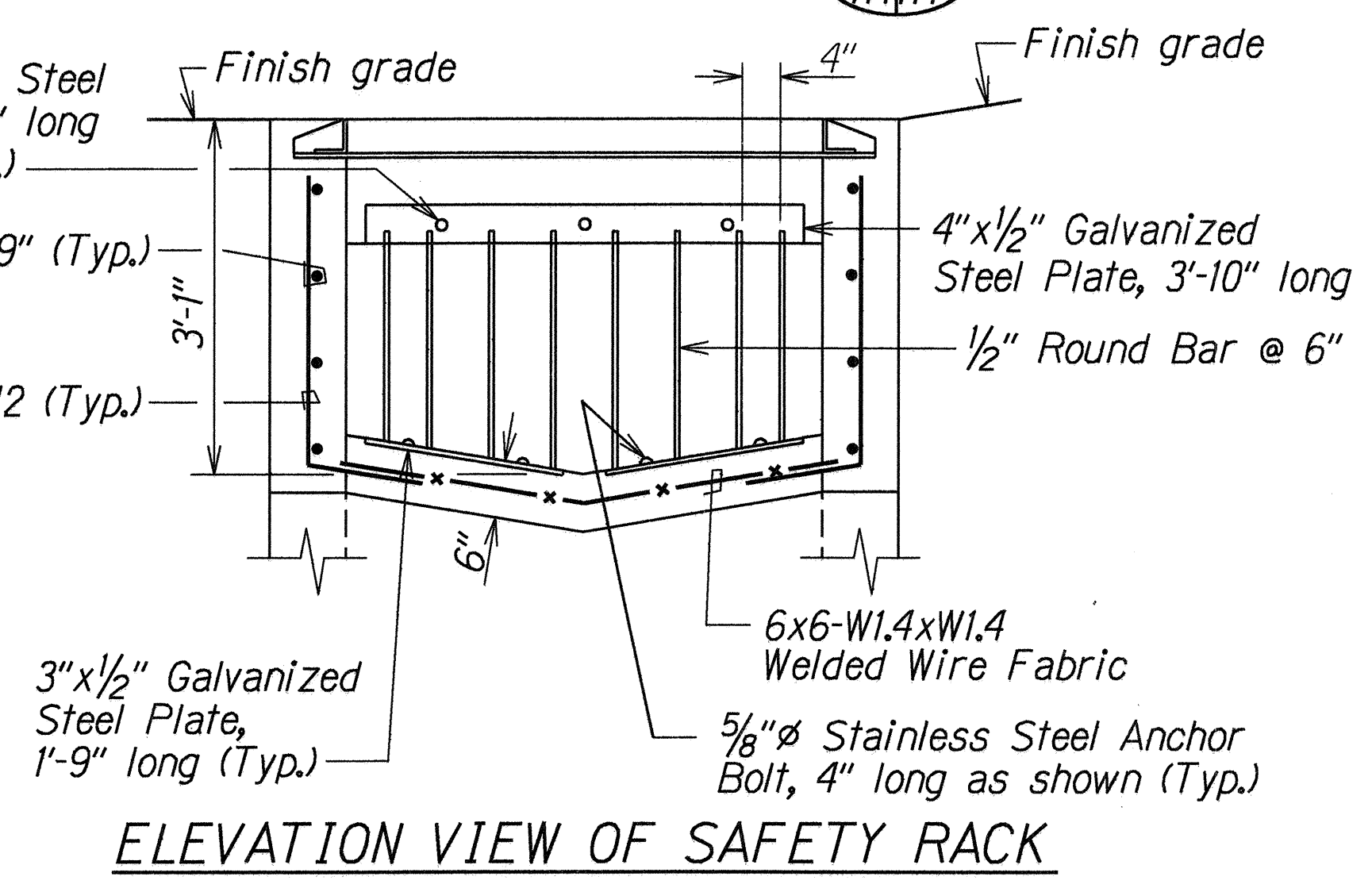
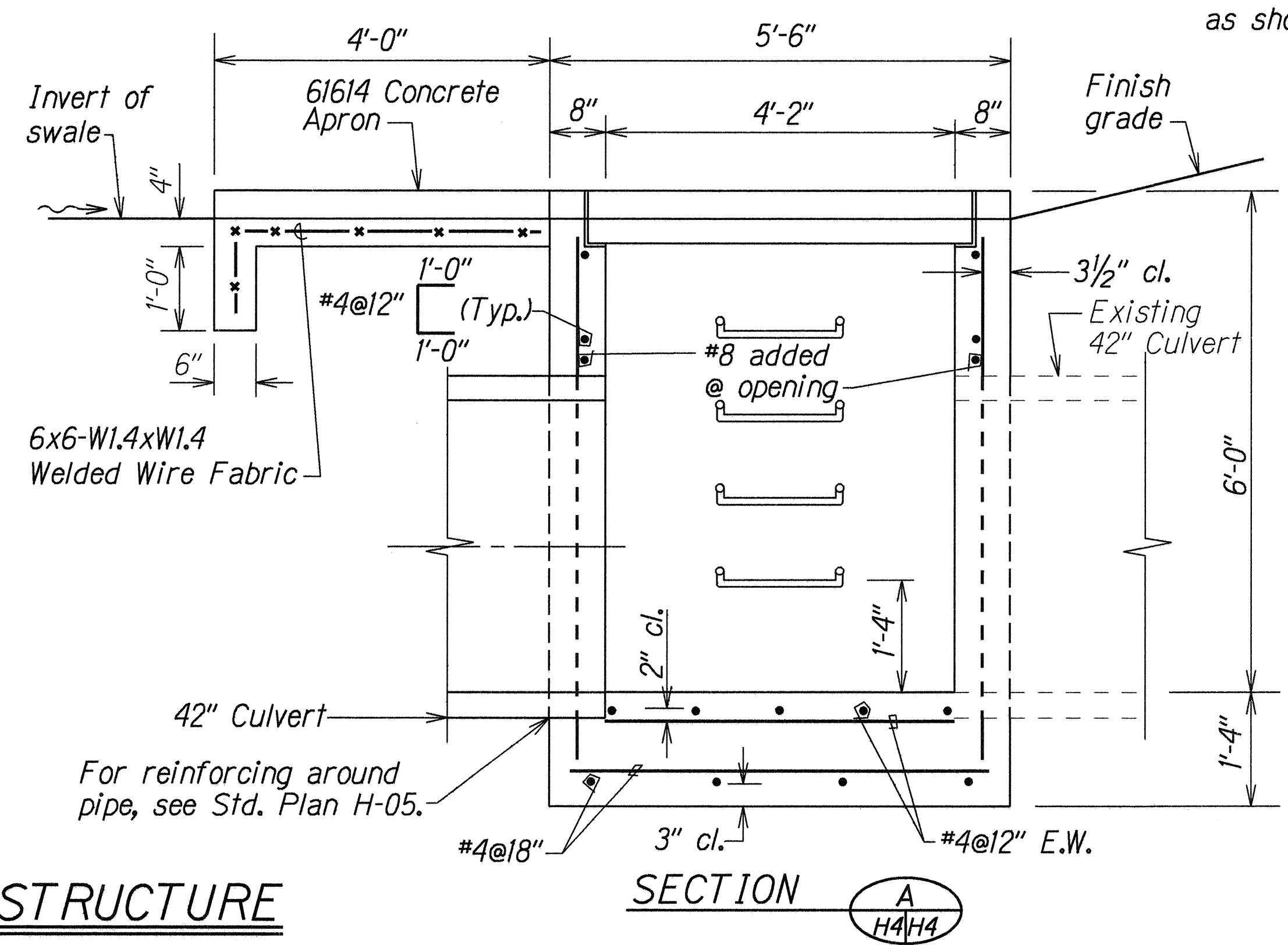
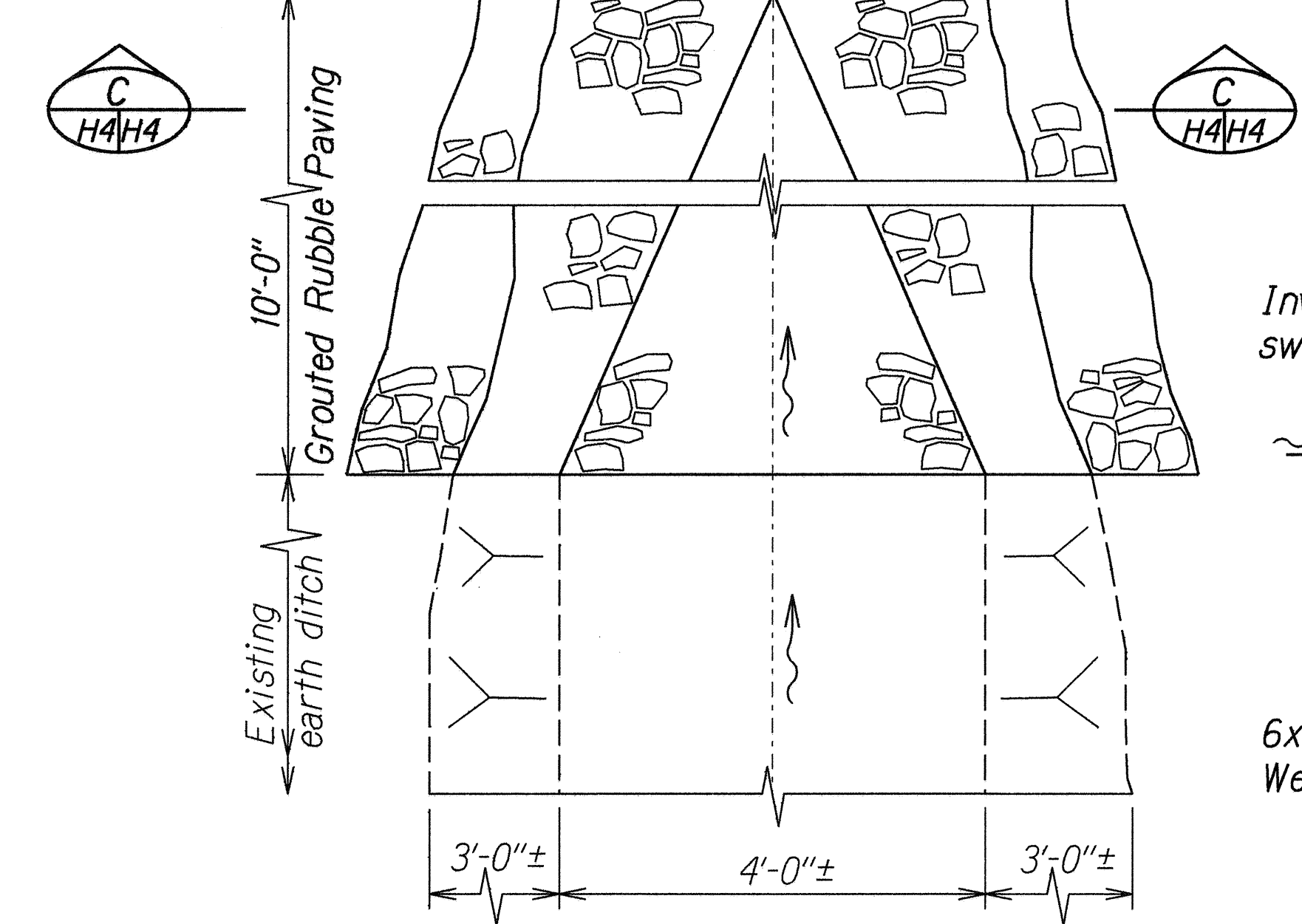
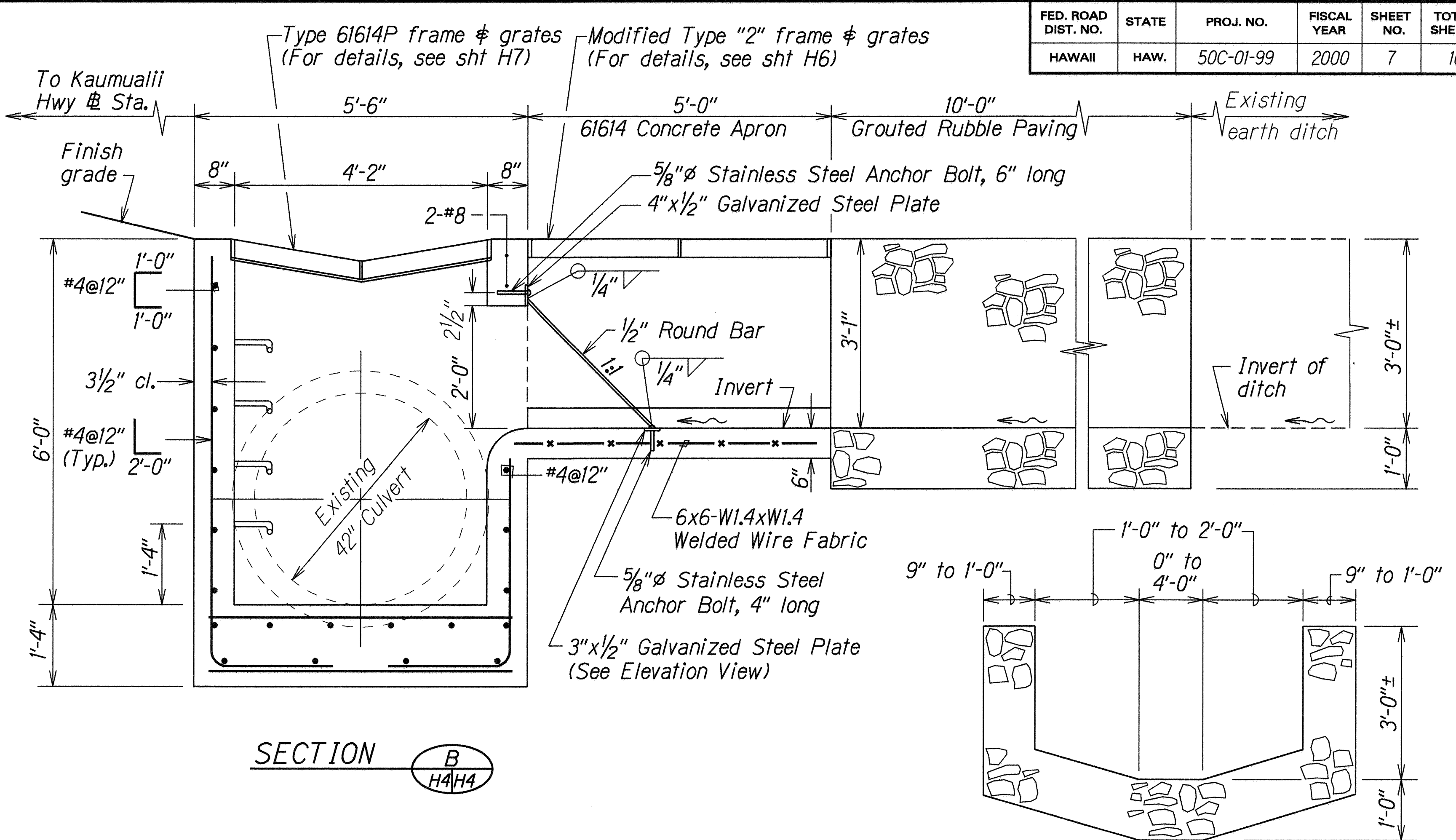
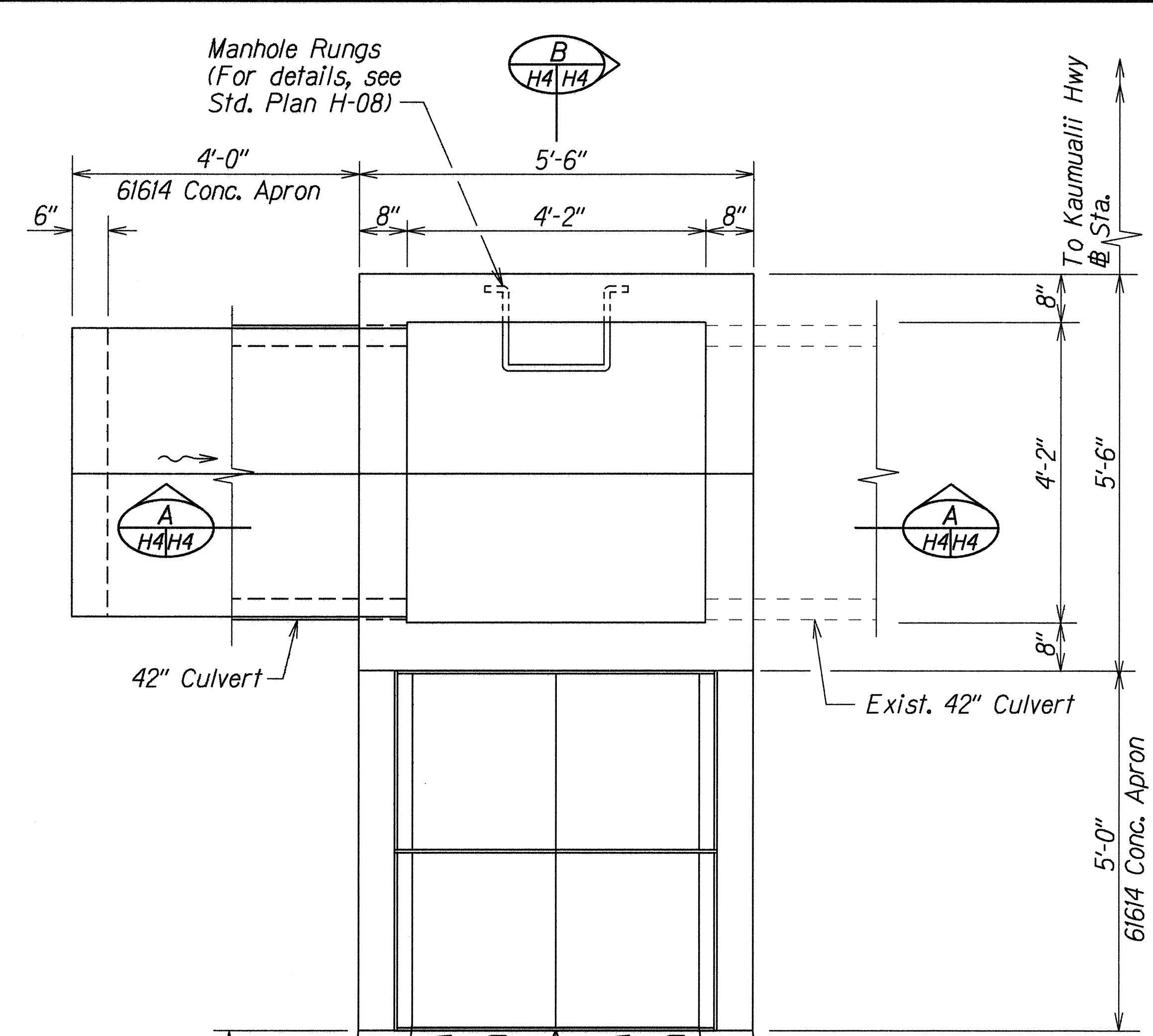
DRAINAGE DETAILS

KAUMUALII HWY. DRAINAGE IMPROVEMENTS
Vicinity of Hokua Road
Project No. 50C-01-99

Scale: 3/4"=1'-0" Date: Nov. 1999

SHEET No. H3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-01-99	2000	7	10



DETAILS OF TYPE "2" INLET STRUCTURE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

KAUMUALII HWY. DRAINAGE IMPROVEMENTS

Vicinity of Hokua Road

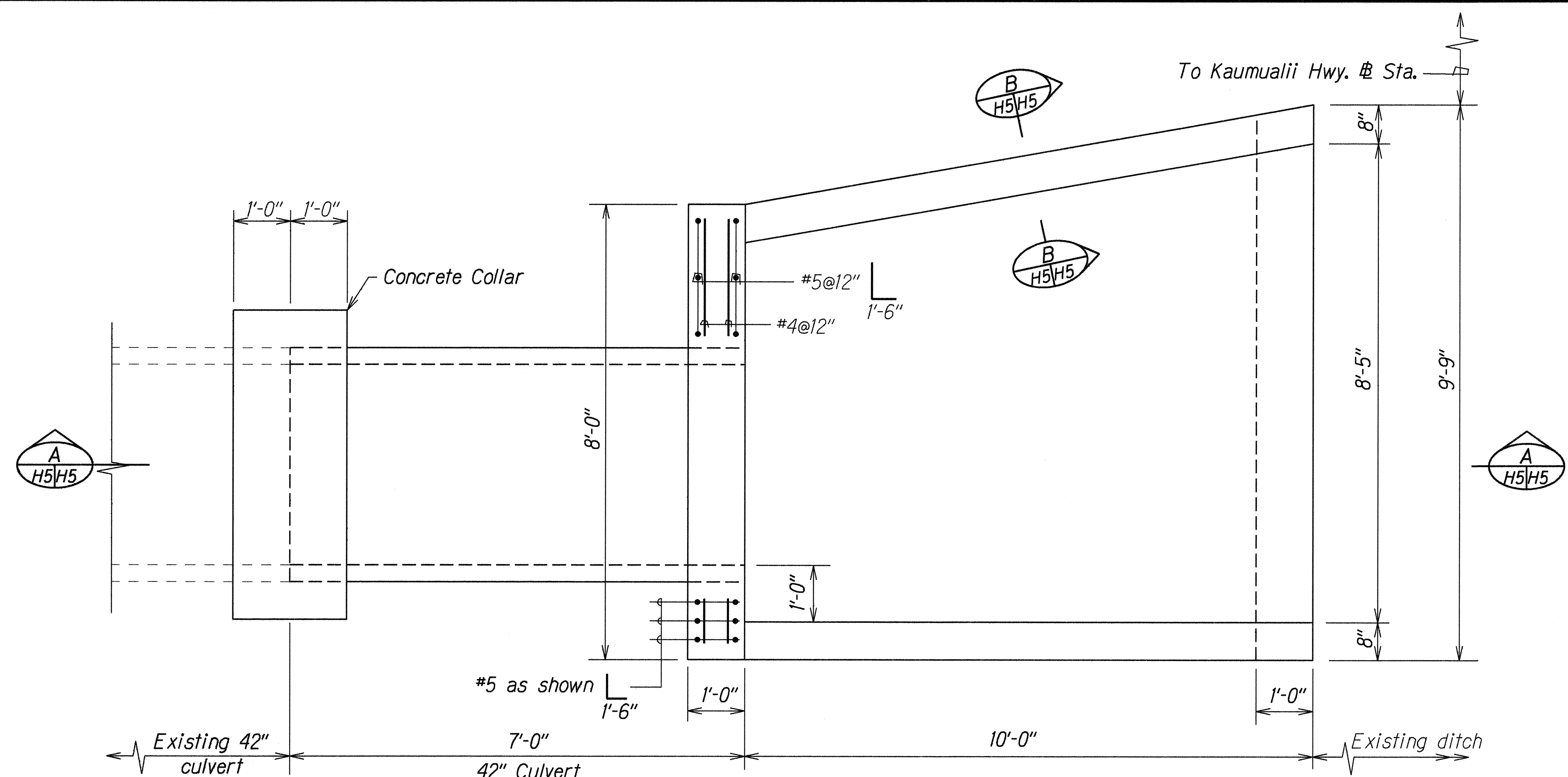
Project No. 50C-01-99

Scale: 3/4"=1'-0"
Date: Nov. 1999

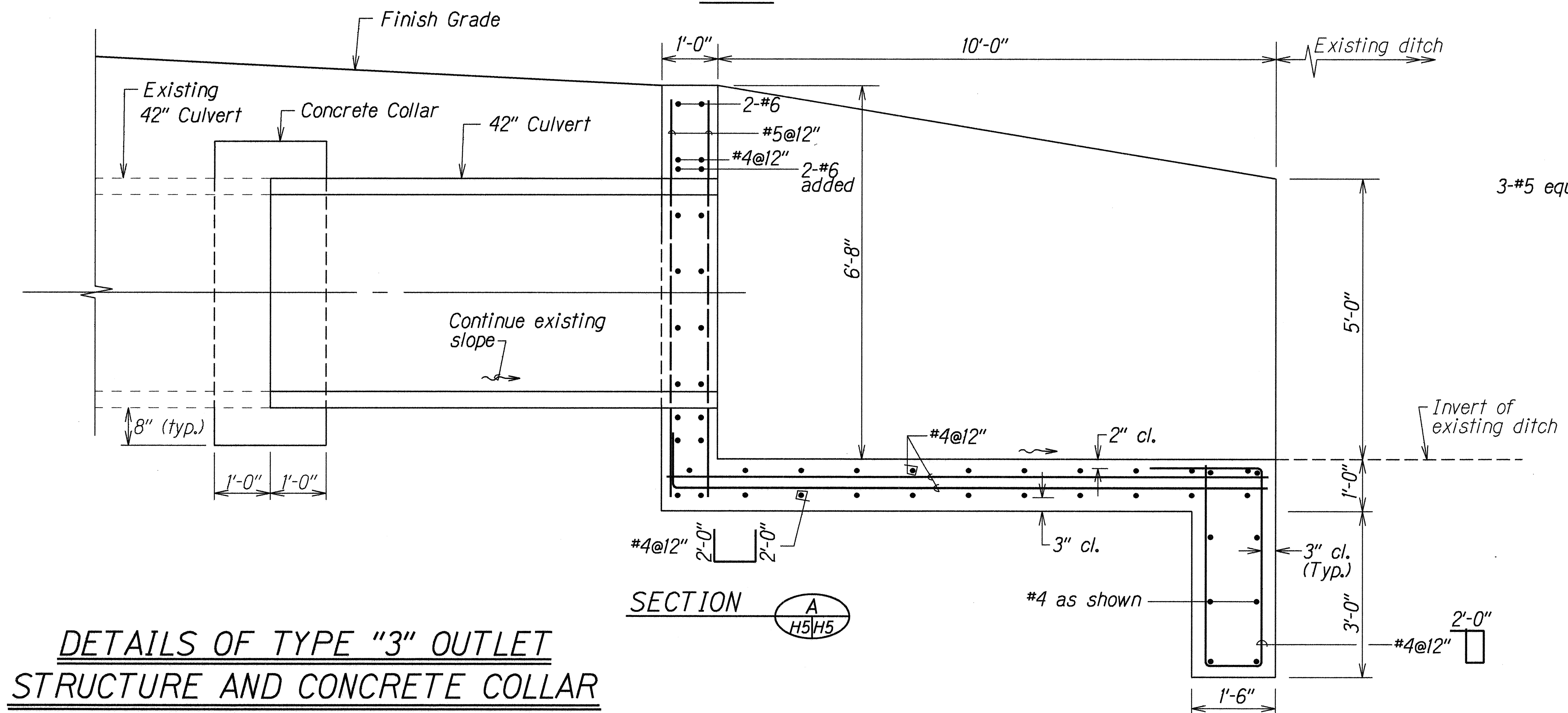
SHEET No. H4 OF 7 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY A. Muma	11/25/99
CH31.randy.km	TRACED BY R. Kawanuka, C. Matsuda	
CH31.randy.km	QUANTITIES BY	
CH31.randy.km	CHECKED BY	

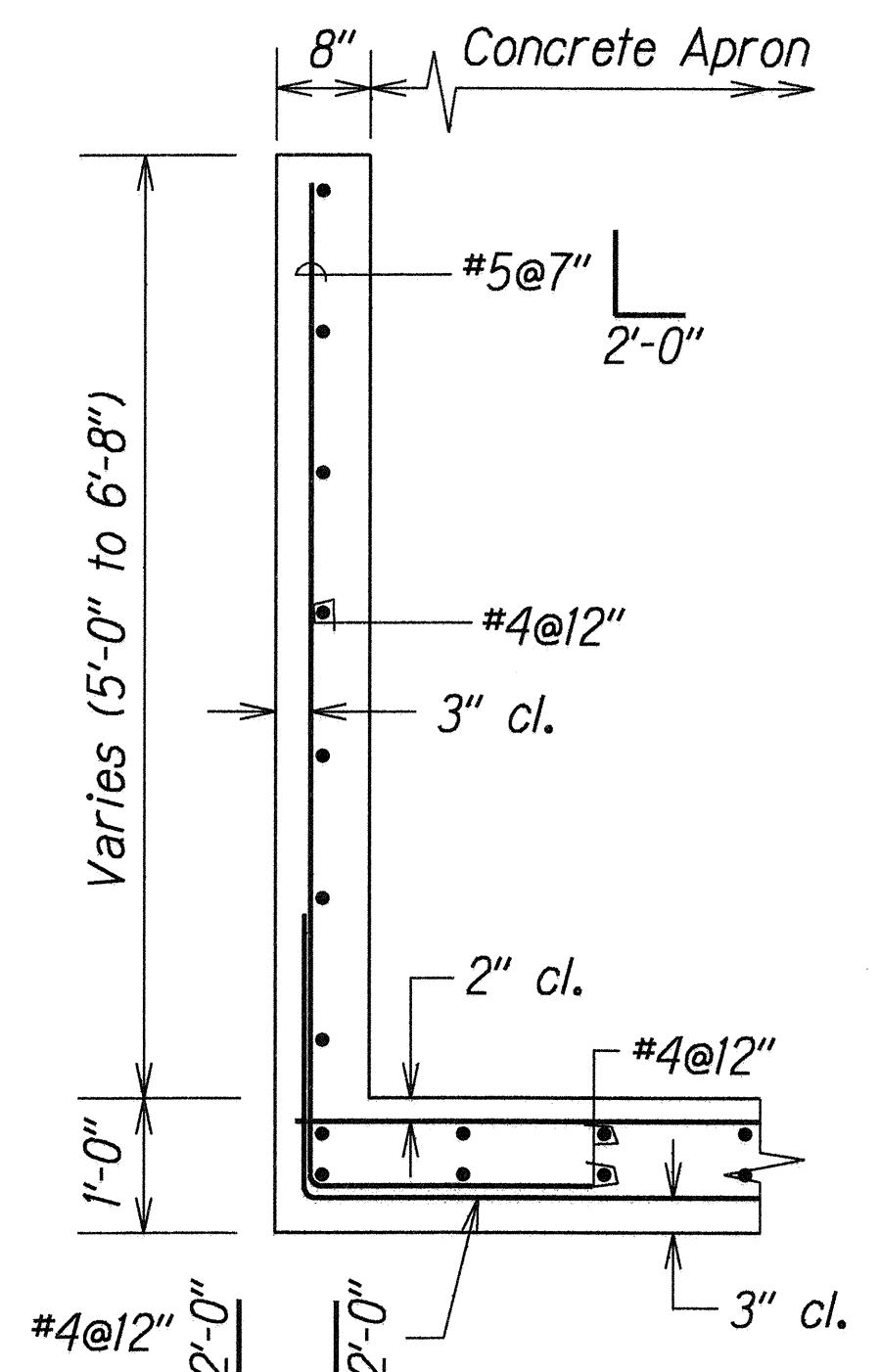
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-01-99	2000	8	10



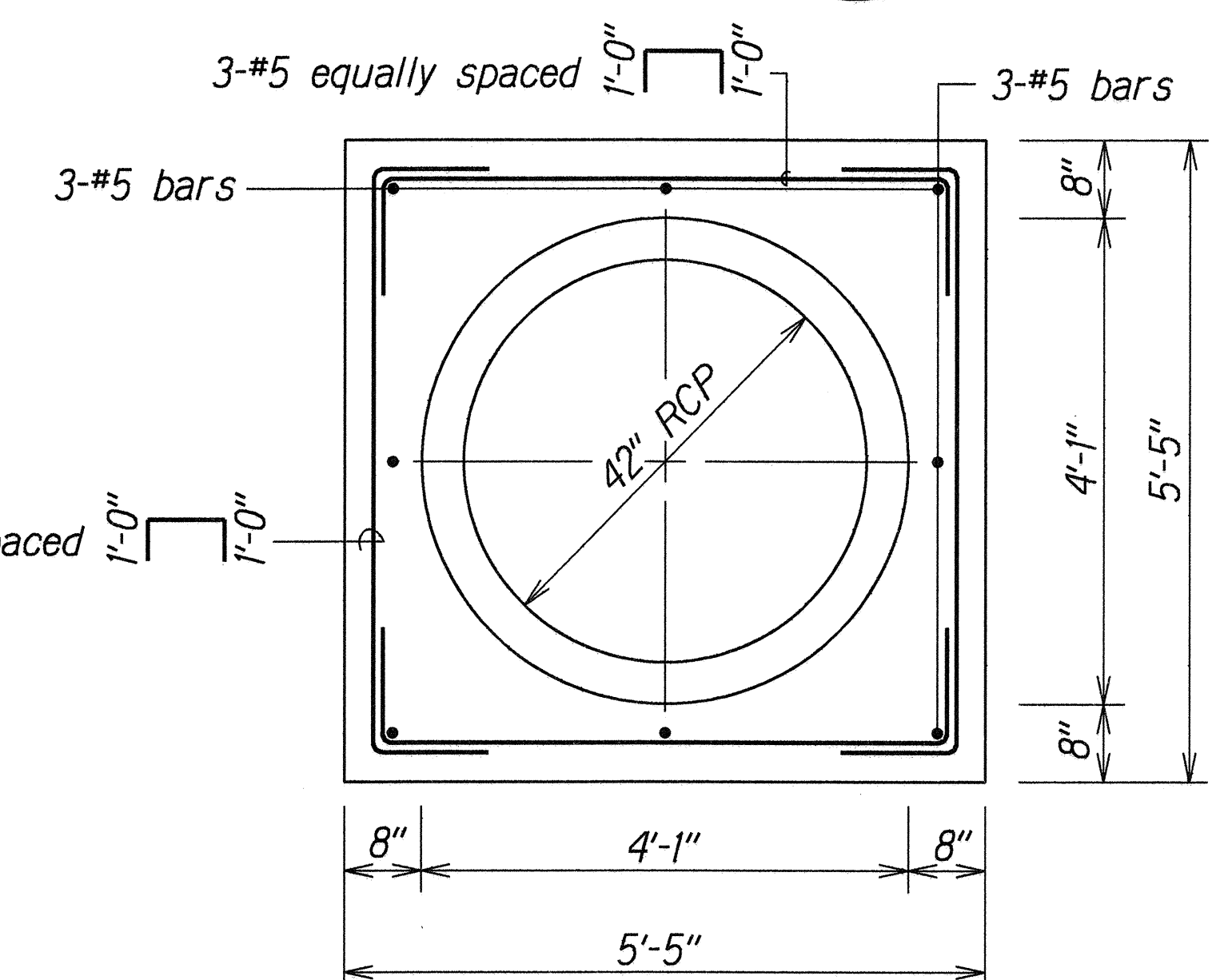
PLAN



SECTION A-A



SECTION B-B



SECTION - CONCRETE COLLAR

DETAILS OF TYPE "3" OUTLET STRUCTURE AND CONCRETE COLLAR

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

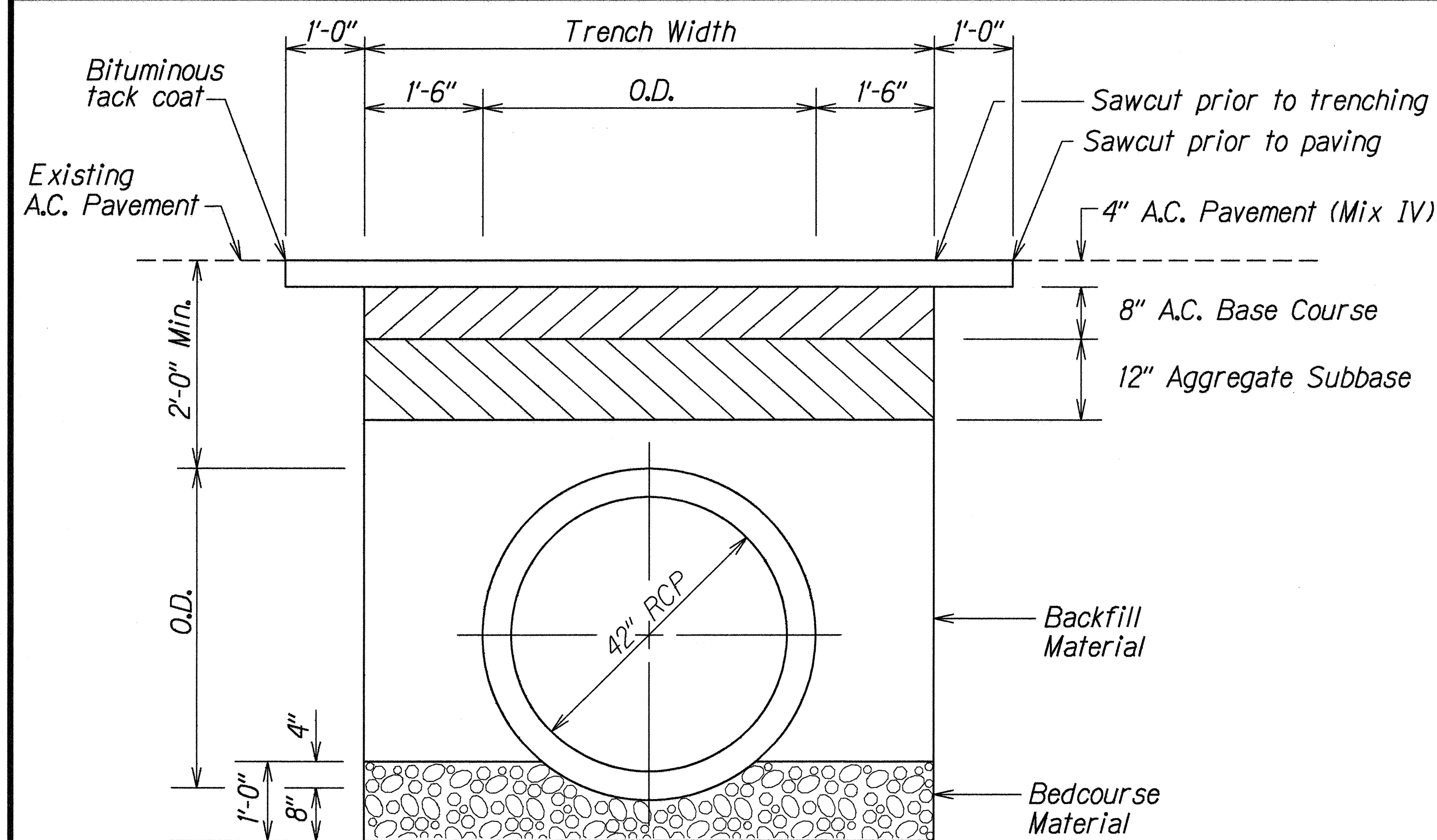
KAUMUALII HWY. DRAINAGE IMPROVEMENTS
Vicinity of Hokua Road
Project No. 50C-01-99

Scale: 3/4"=1'-0" Date: Nov. 1999

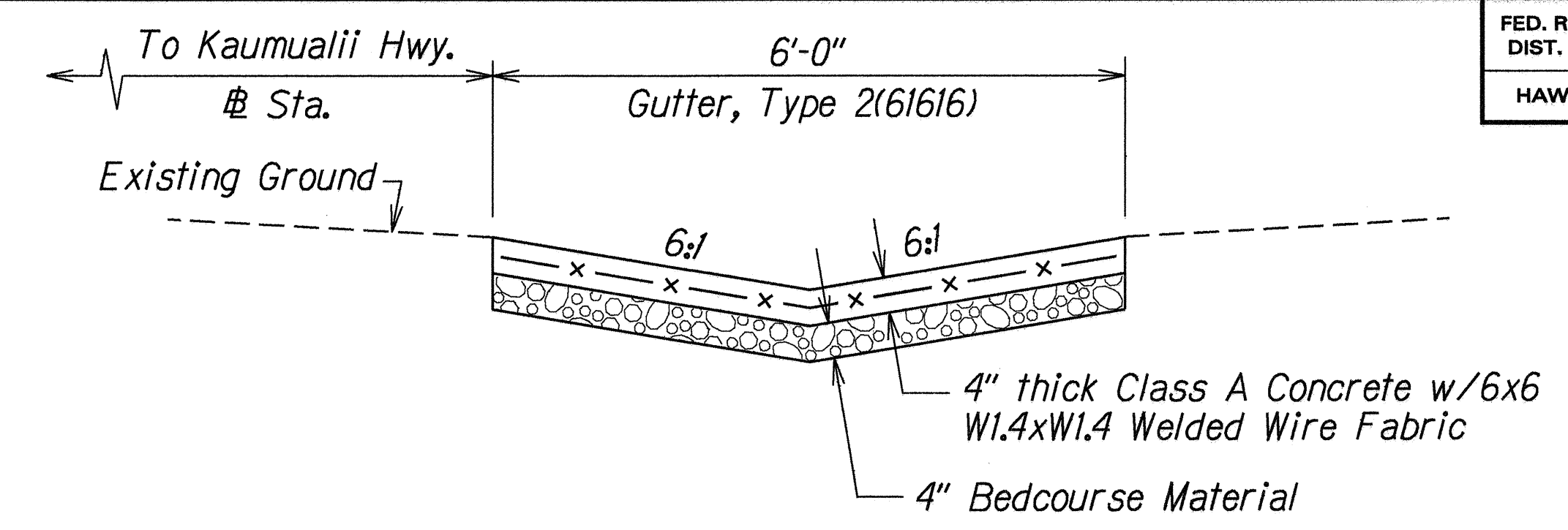
SHEET No. H5 OF 7 SHEETS

ORIGINAL PLAN
DATE: 11/15/99
DESIGNED BY: A. M. M. M.
CHECKED BY: B. K. M. M.
QUANTITIES BY: C. K. M. M.
CONSULTED BY: D. K. M. M.

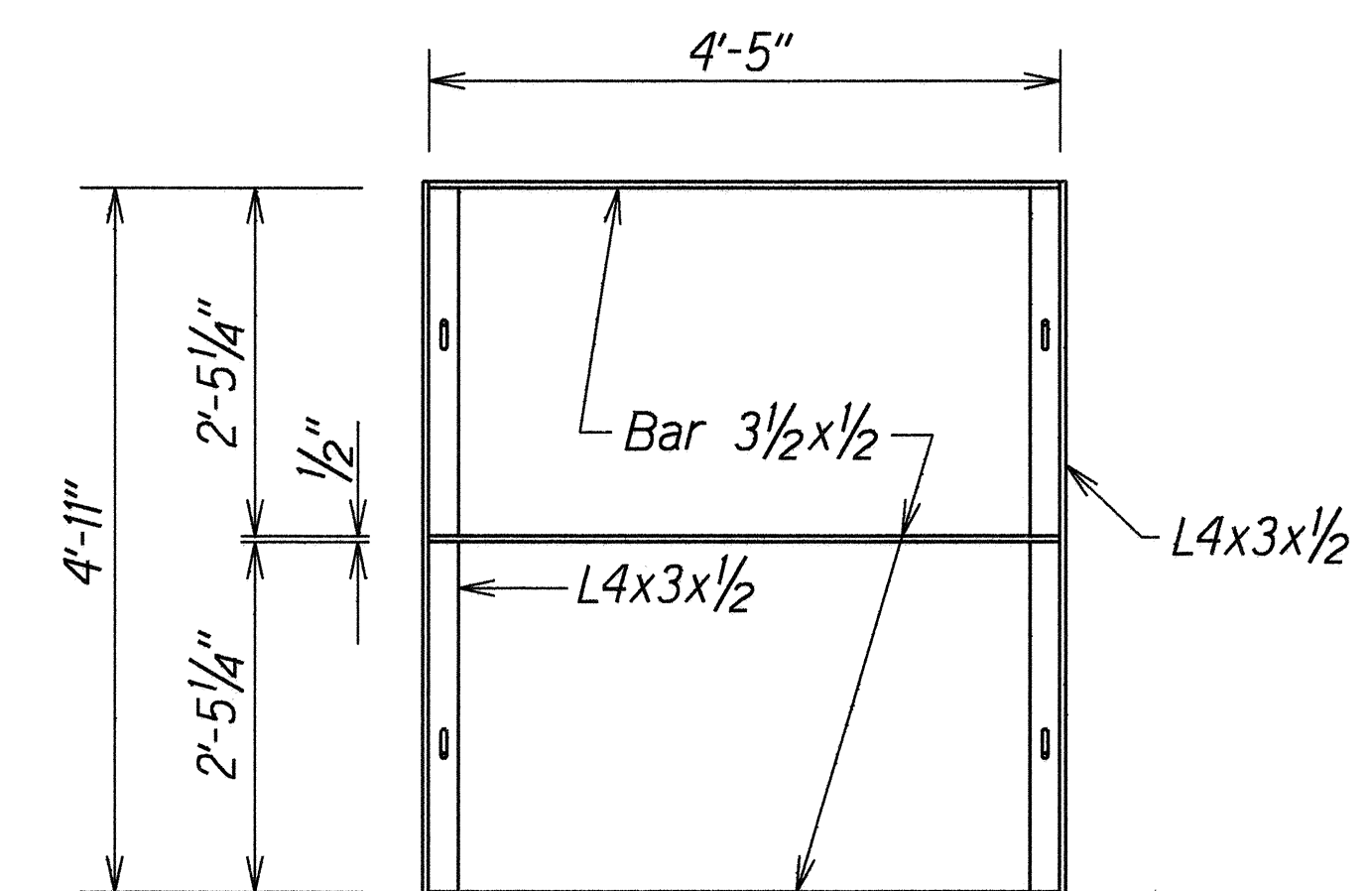
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-01-99	2000	9	10



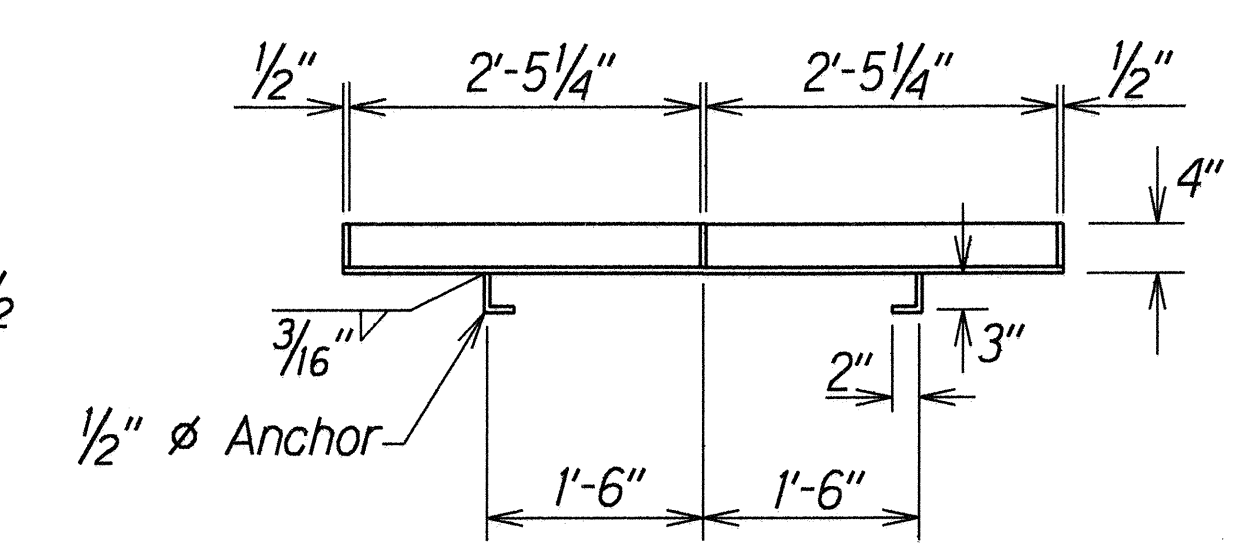
DETAIL OF CULVERT TRENCH RESTORATION IN PAVEMENT
Scale: 3/4"=1'-0"



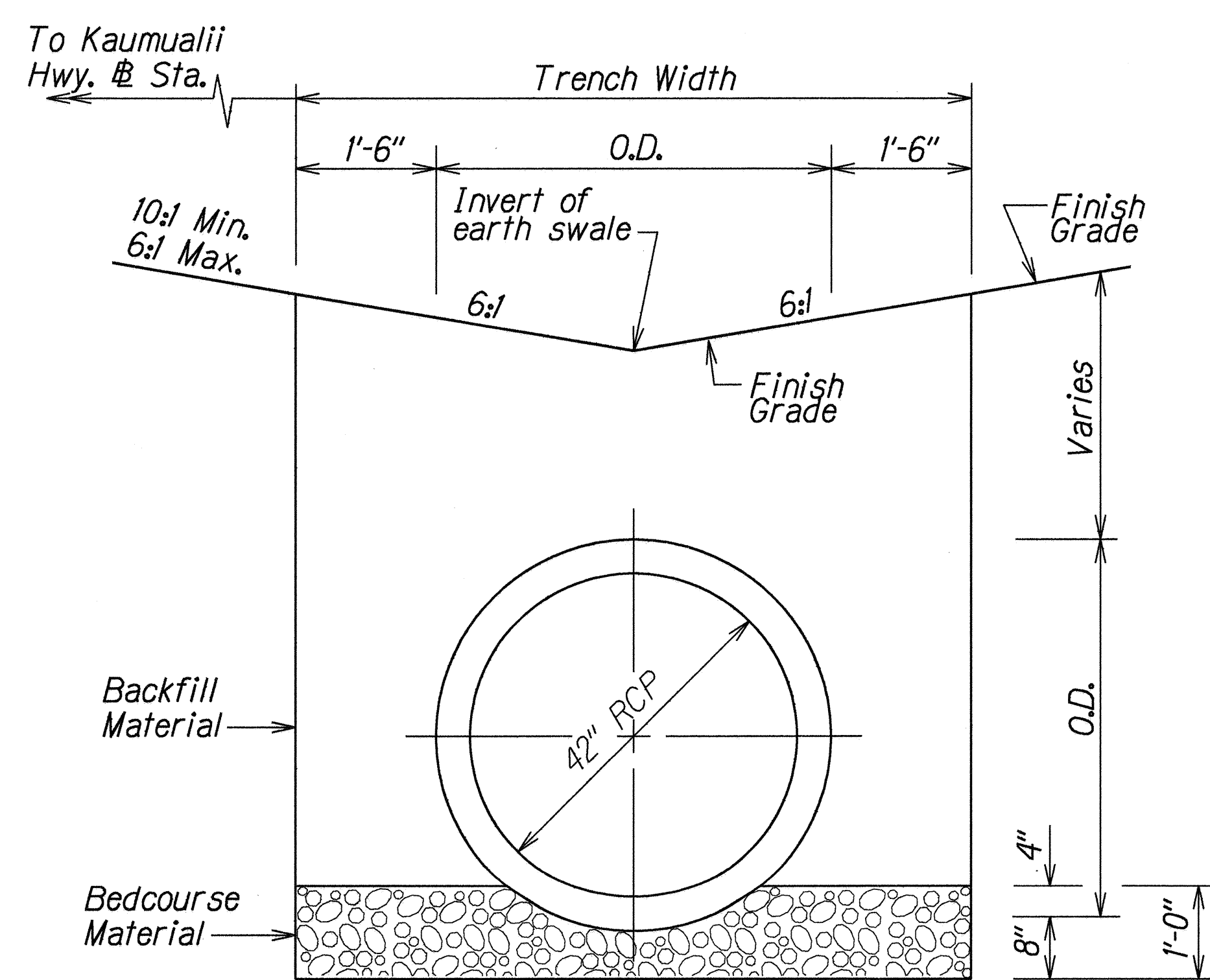
DETAIL OF GUTTER, TYPE 2(61616)
Scale: 3/4"=1'-0"



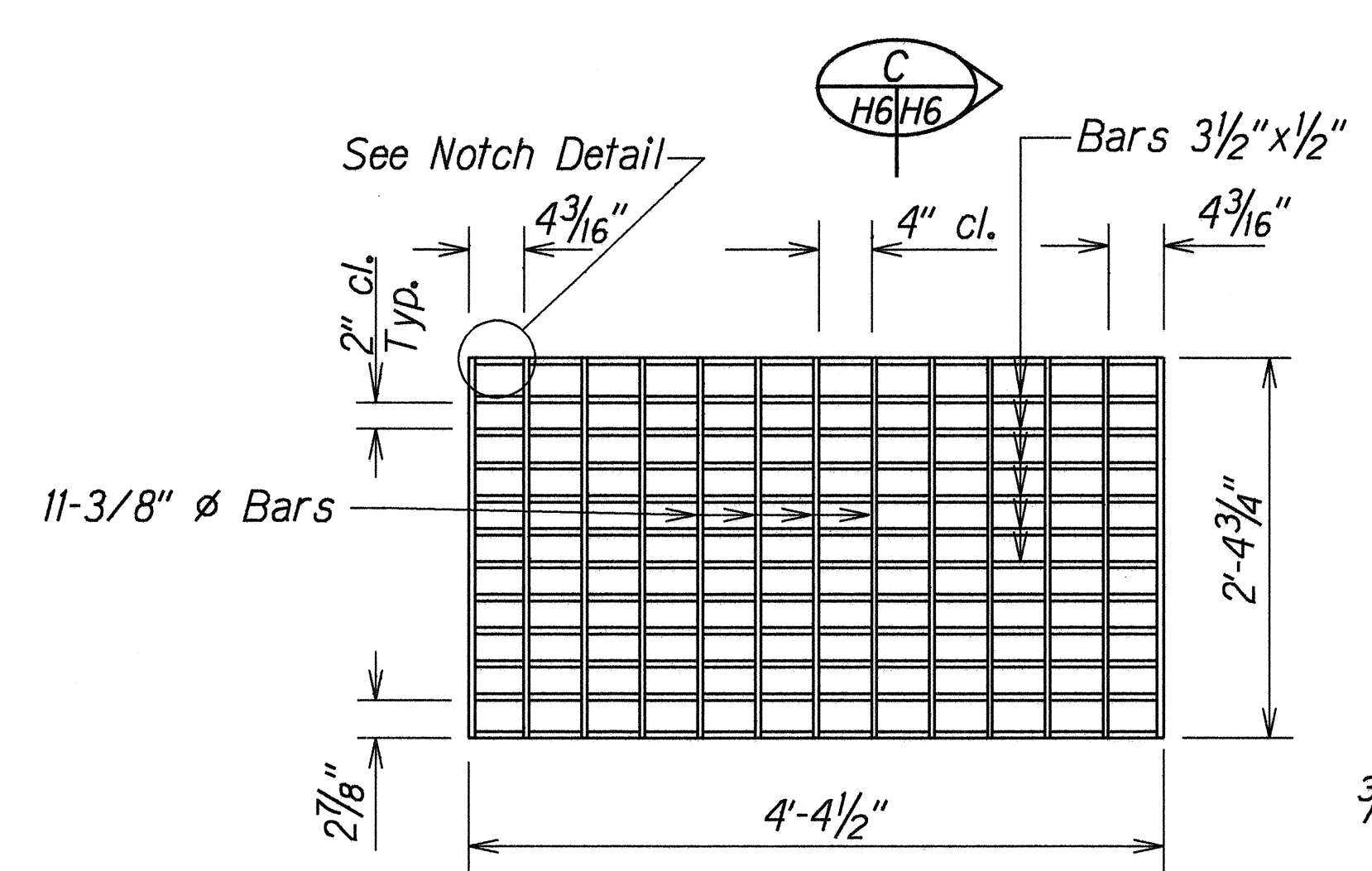
PLAN - FRAME
Scale: 3/4"=1'-0"



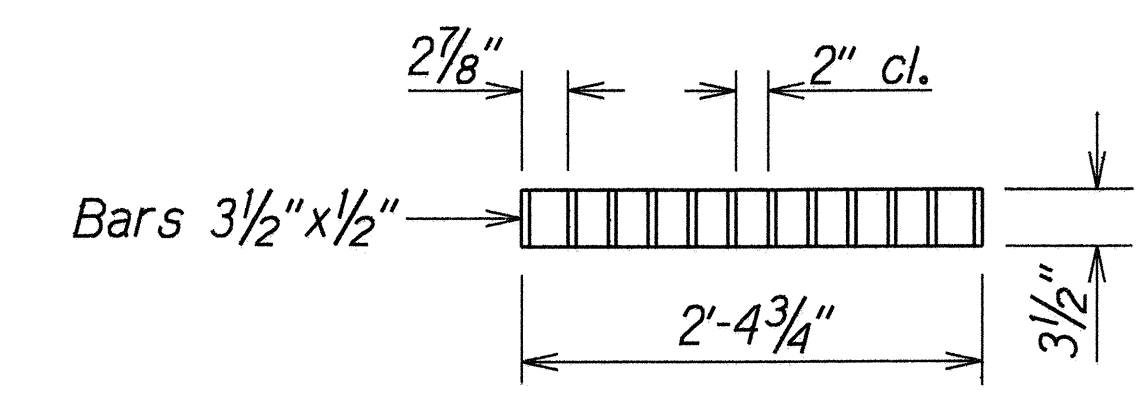
SECTION - FRAME
Scale: 3/4"=1'-0"



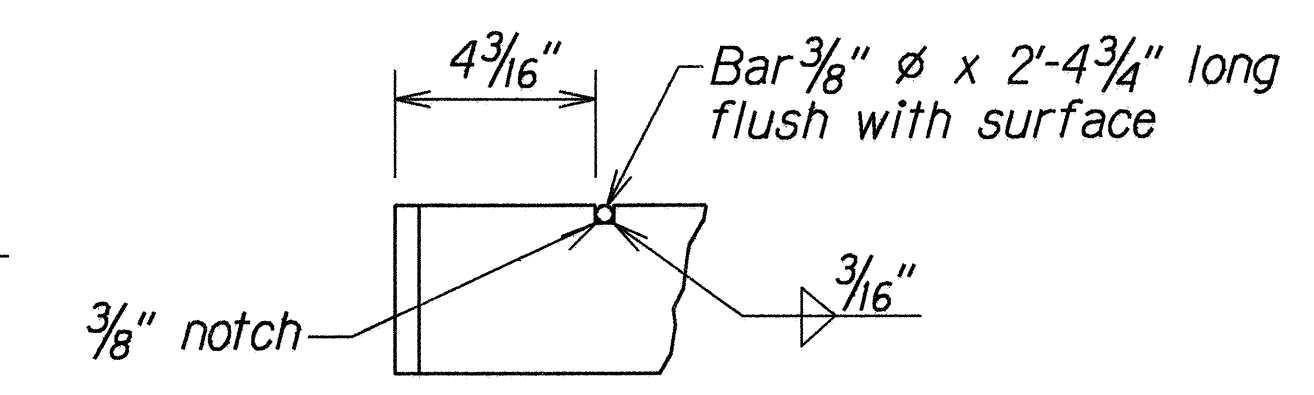
DETAIL OF EARTH SWALE AND CULVERT TRENCH RESTORATION IN SHOULDER
Scale: 3/4"=1'-0"



PLAN - GRATE
Scale: 1"=1'-0"



SECTION
Scale: 1"=1'-0"



NOTCH DETAIL
Scale: 3"=1'-0"

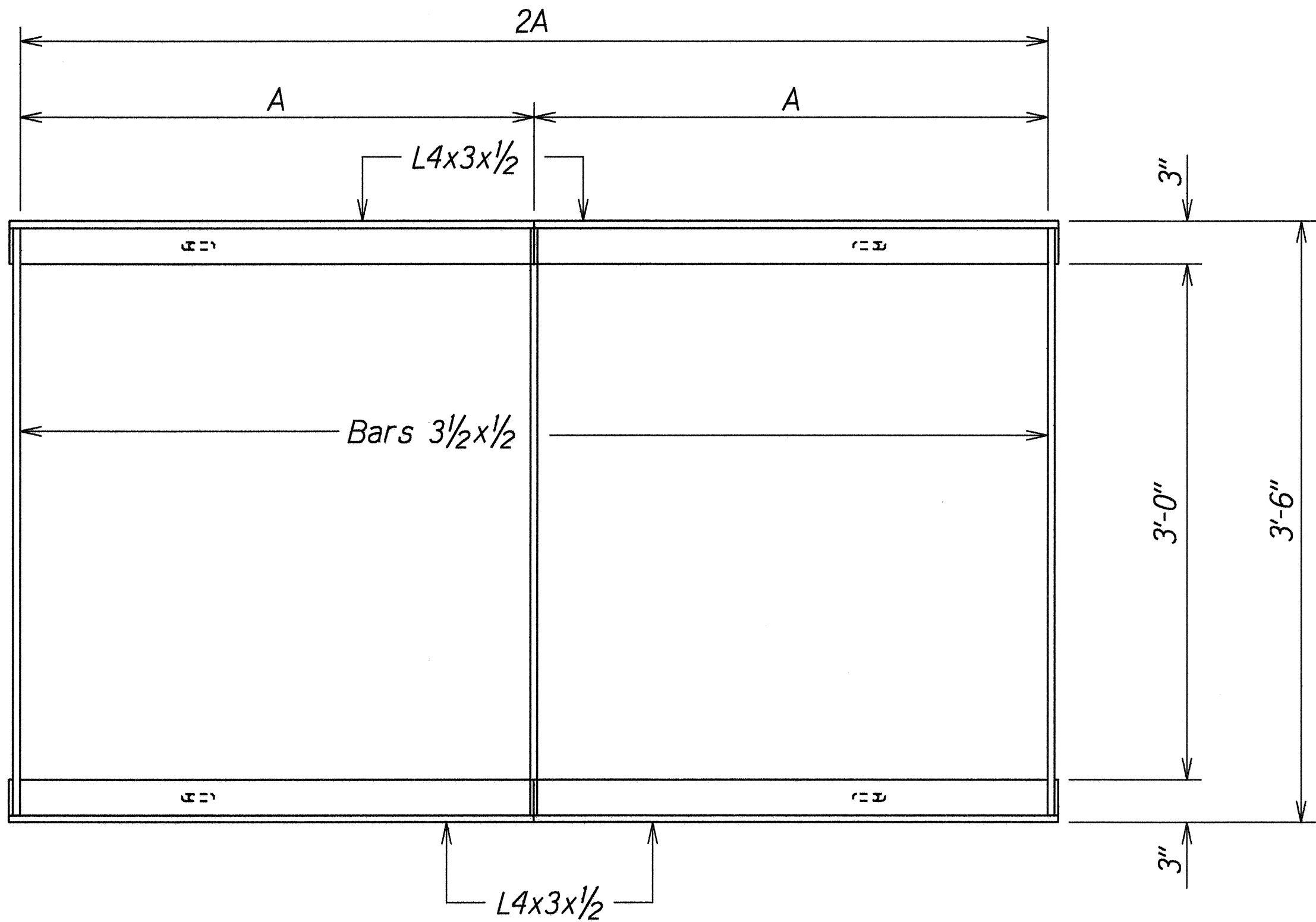
DETAILS OF MODIFIED TYPE "2" FRAME & GRATES

ORIGINAL PLAN	DATE	10/15/99
SURVEY PLOTTED BY	DATE	10/15/99
DRAWN BY	DATE	10/15/99
TRACED BY	DATE	10/15/99
NOTED BY	DATE	10/15/99
QUANTITIES BY	DATE	10/15/99
CHECKED BY	DATE	10/15/99

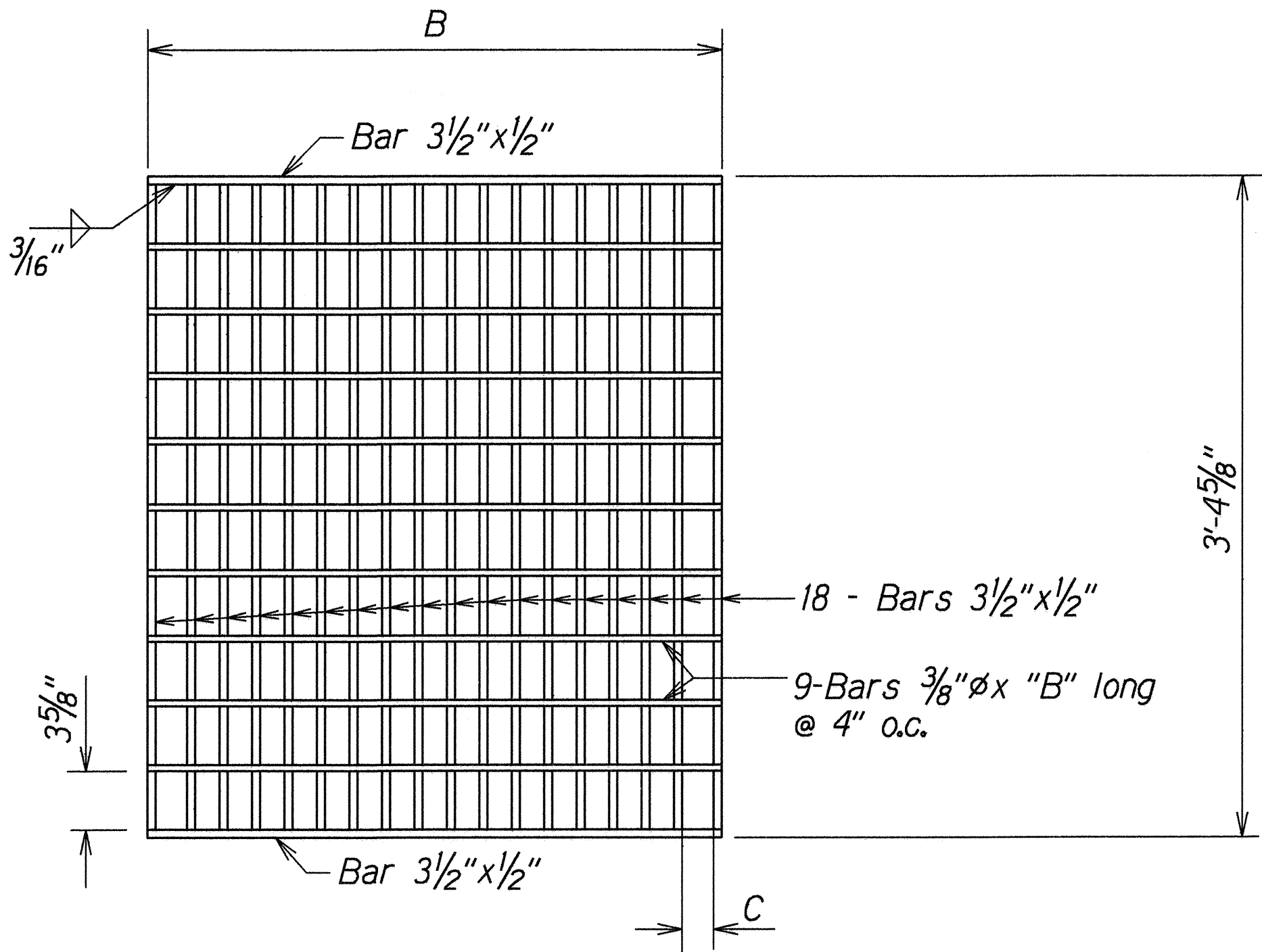
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
KAUMUALII HWY. DRAINAGE IMPROVEMENTS
Vicinity of Hoku Road
Project No. 50C-01-99
Scale: As Shown Date: Oct. 1999
SHEET No. H6 OF 7 SHEETS

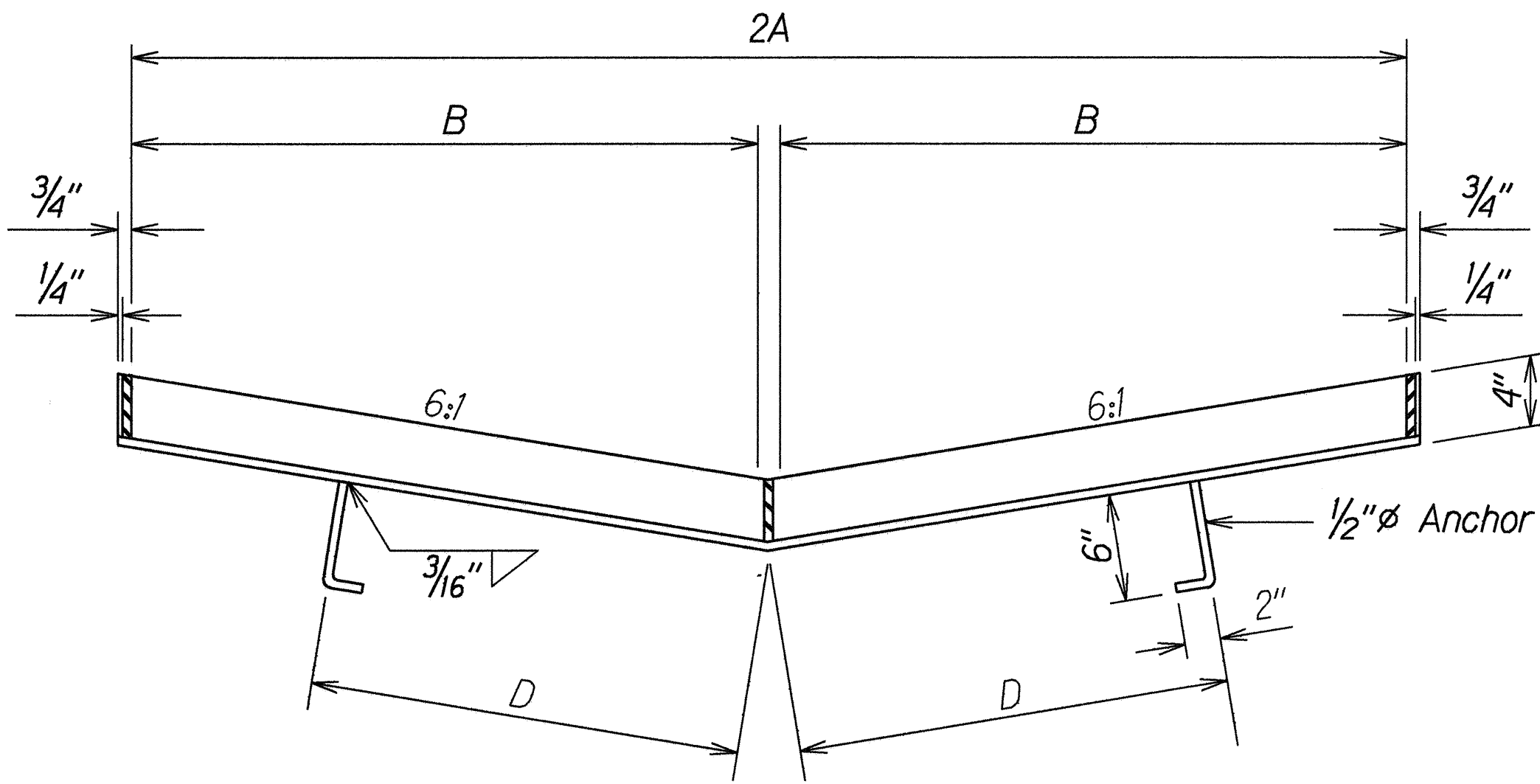
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	50C-01-99	2000	10	10



PLAN

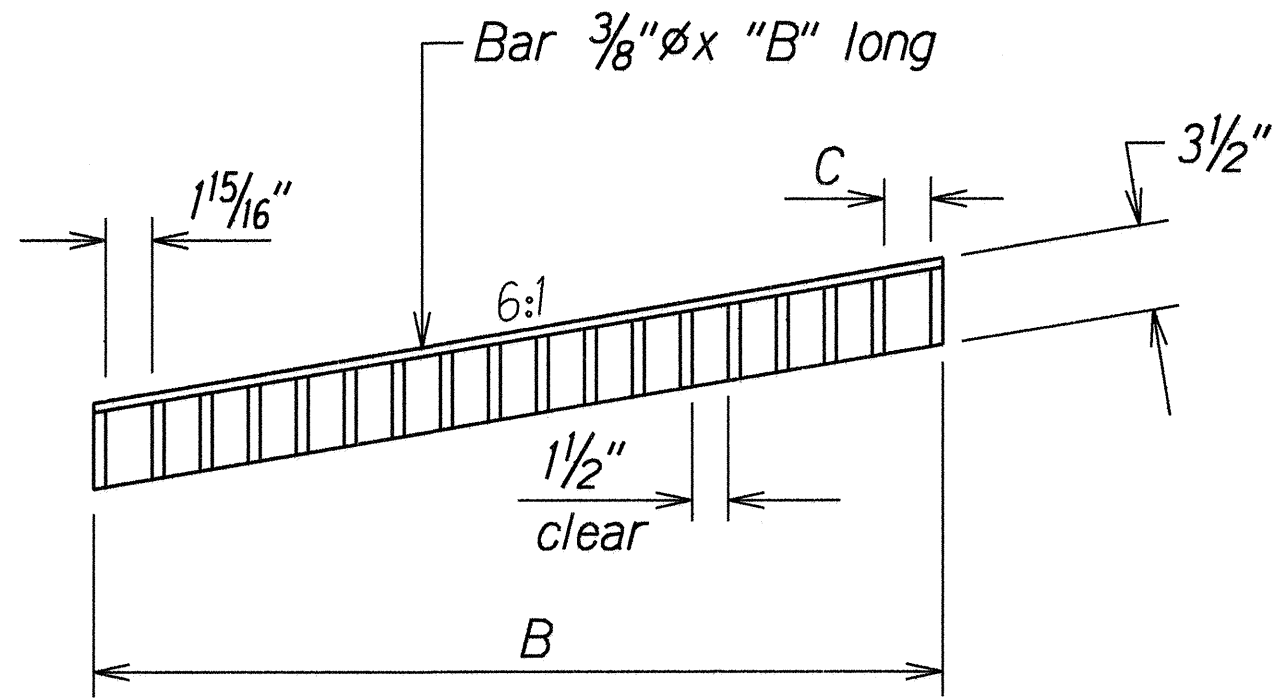


PLAN



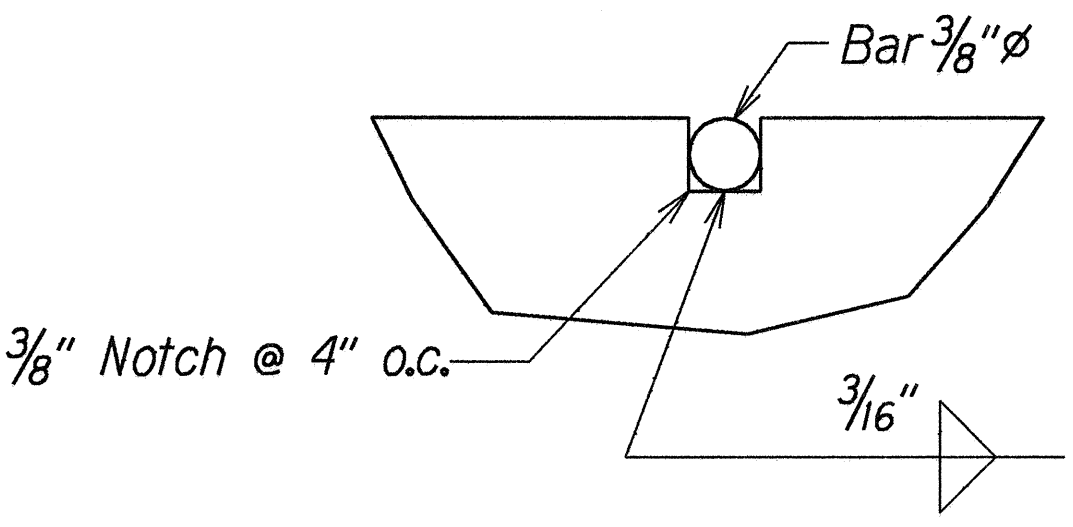
SECTION

FRAME



SECTION

GRATE



NOTCH DETAIL
Full Size

DIMENSIONS					
TYPE	NO. BARS	A	B	C	D
61614P	12	2'-0"	1'-11 1/2"	2"	1'-6"
61616P	18	3'-0"	2'-11 3/8"	1 15/16"	2'-0"

GENERAL NOTE
1. All welds 3/8" unless otherwise noted.

TYPE 61614P & 61616P STEEL FRAME AND GRATES

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
4/13/99/1/1/99	DESIGNED BY	
4/13/99/1/1/99	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
KAUMUALII HWY. DRAINAGE IMPROVEMENTS
Vicinity of Hoku Road
Project No. 50C-01-99
Scale: 1 1/2"=1'-0"
Date: NOV. 1999

SHEET No. H7 OF 7 SHEETS