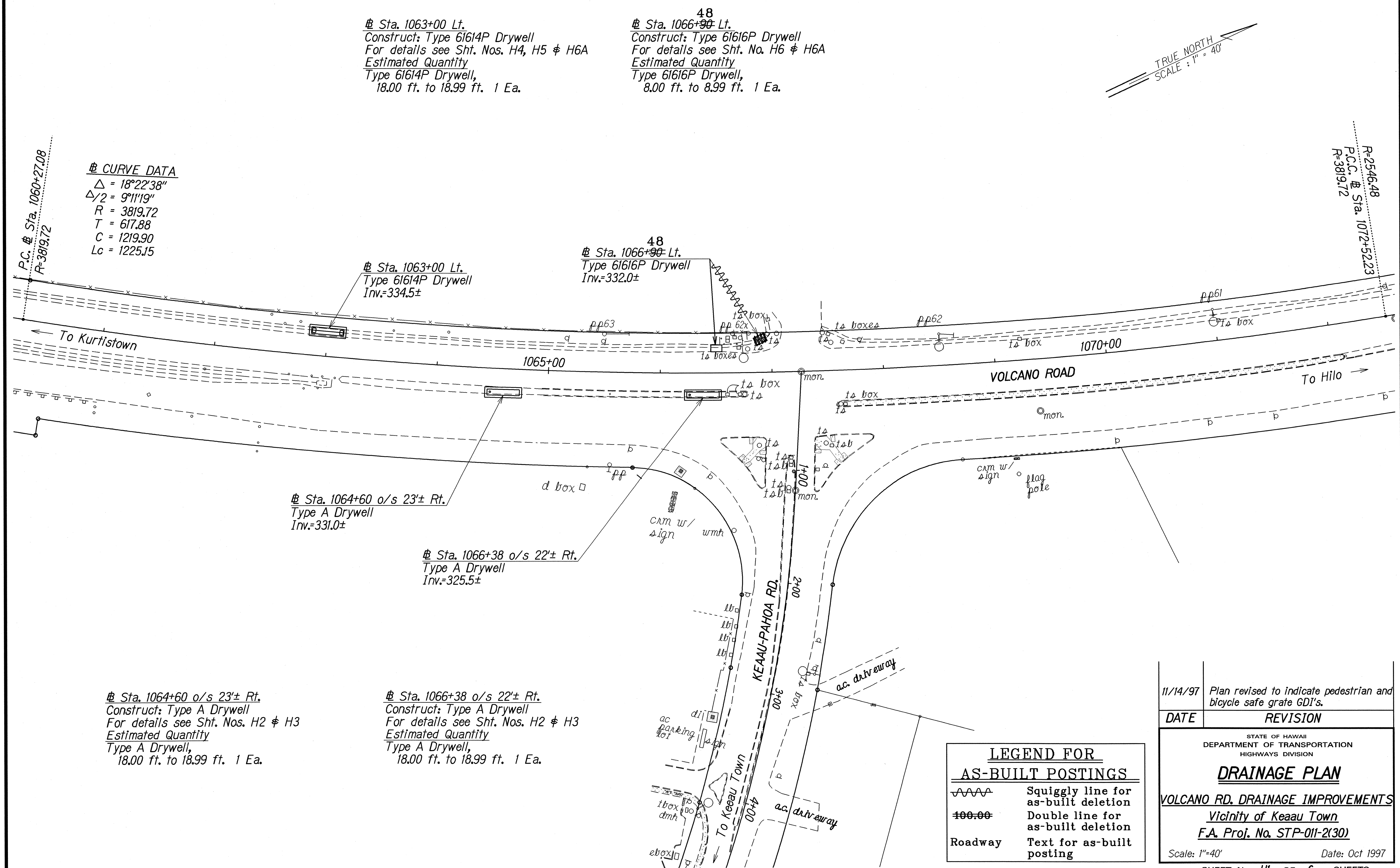
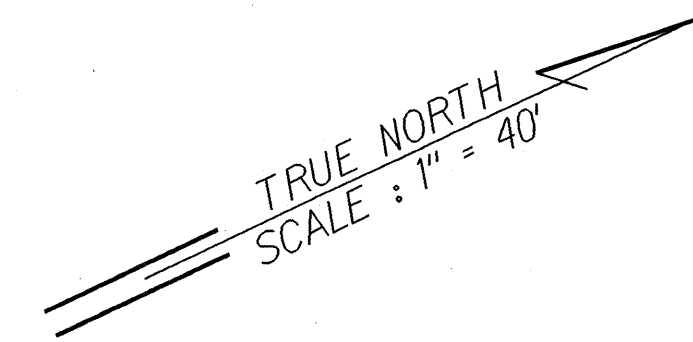


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	ADD. 5	13

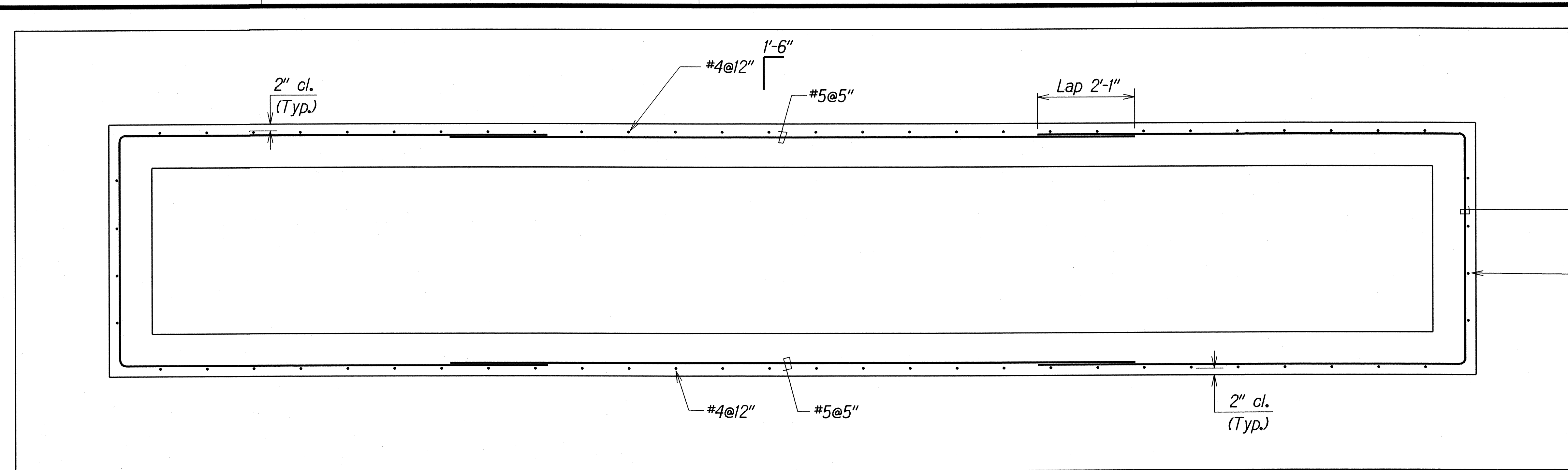


SURVEY PLOTTED BY	DATE
DRAWN BY A. Numa	1/23/97
NOTE BOOK	
QUANTITIES BY B. Salomon	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

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

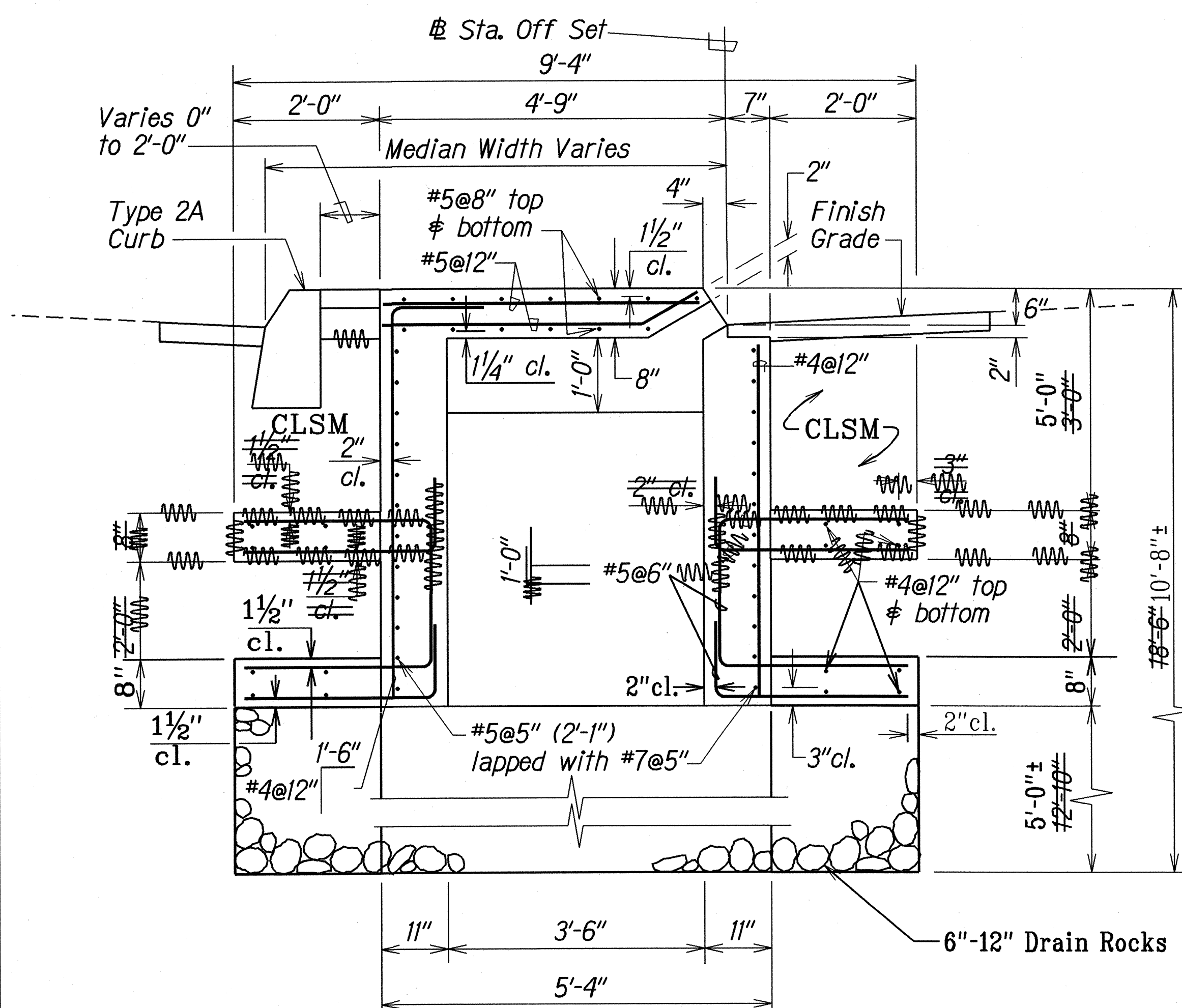
11/14/97	Plan revised to indicate pedestrian and bicycle safe grate GDI's.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE PLAN	
VOLCANO RD. DRAINAGE IMPROVEMENTS	
Vicinity of Keau Town	
F.A. Proj. No. STP-011-2(30)	
Scale: 1"=40'	Date: Oct 1997
SHEET No. <i>HI</i> OF 6 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	7	13



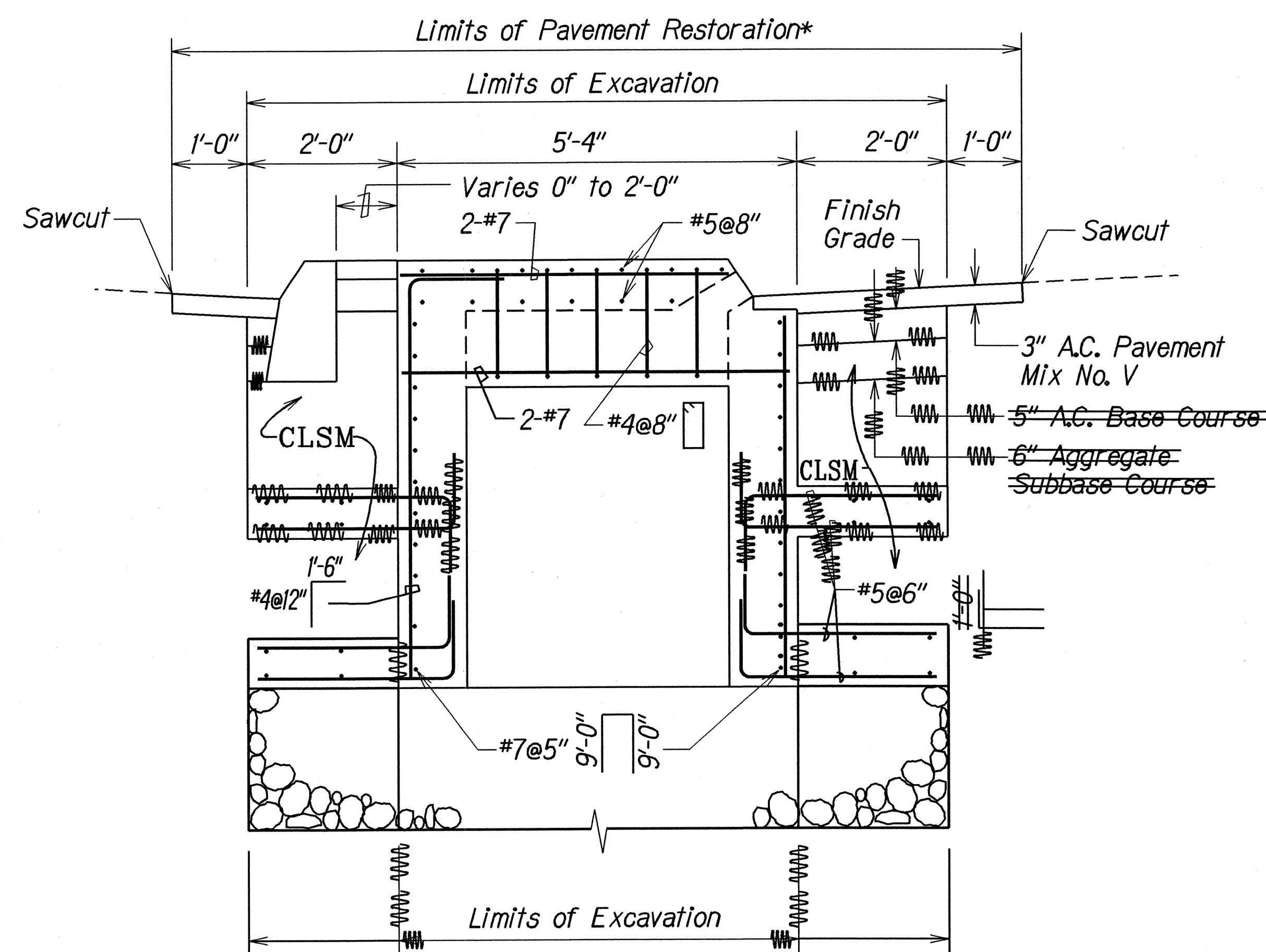
* Note: Pavement Restoration shall be incidental to the Drywell.

PLAN VIEW OF WALL REINFORCING



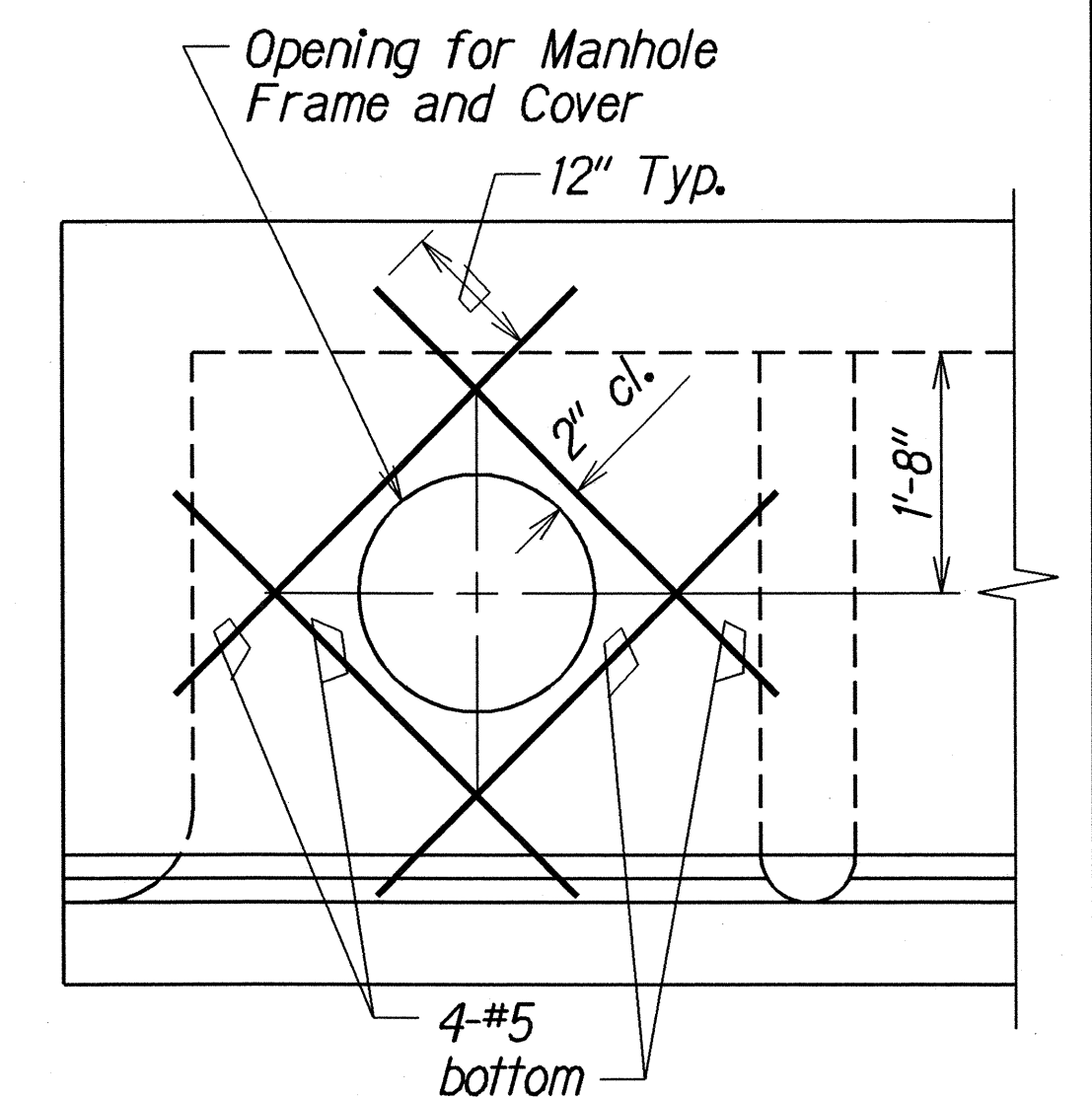
SECTION B
H2/H3

DETAILS OF TYPE A DRYWELL



SECTION C
H2/H3

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



ADDED REINFORCING FOR
MANHOLE OPENING

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

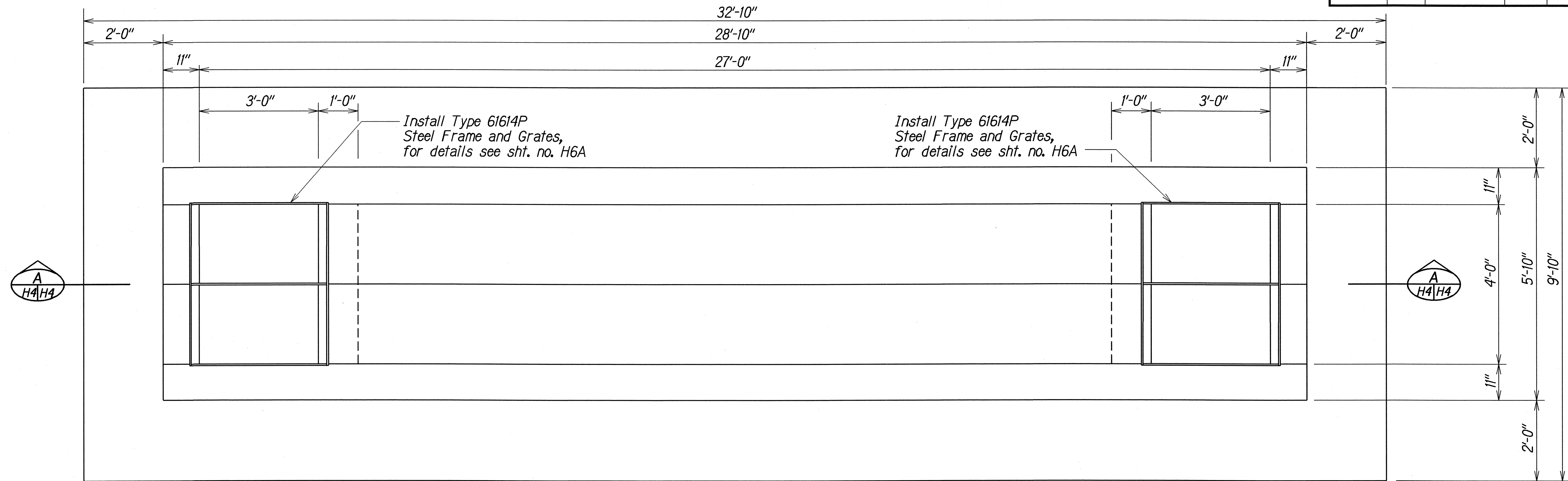
DRAINAGE DETAILS
VOLCANO RD. DRAINAGE IMPROVEMENTS
Vicinity of Keaau Town
F.A. Proj. No. STP-011-2(30)
Scale: 3/4" = 1'-0"
Date: Oct 1997

SHEET No. H3 OF 6 SHEETS

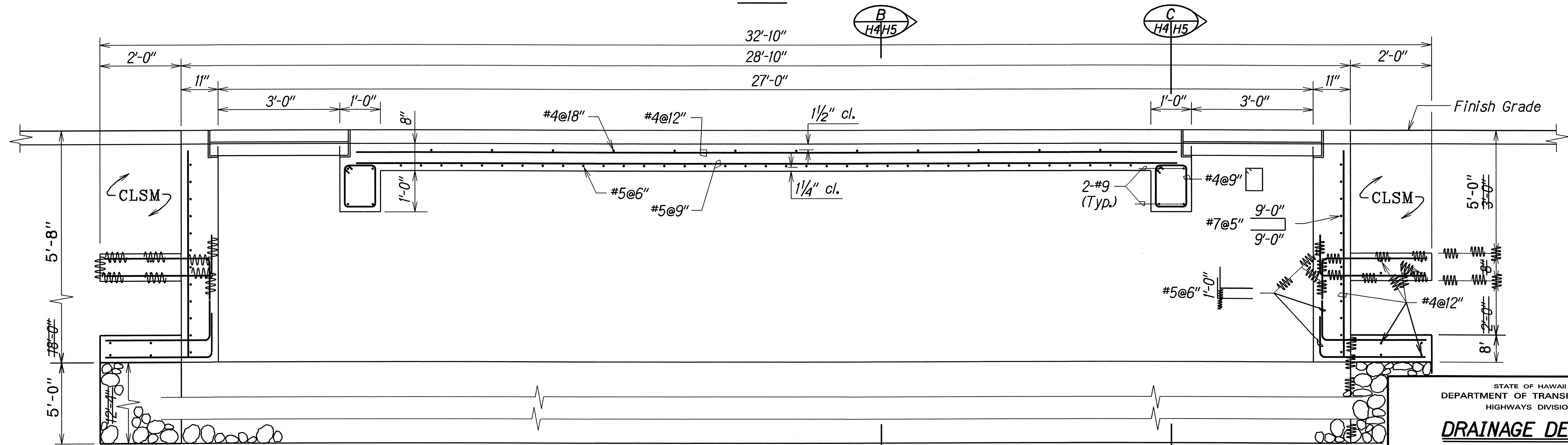
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
QUANTITIES BY	CHECKED BY	

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	ADD. 8	13



PLAN



SECTION

DETAILS OF TYPE 61614P DRYWELL AT STA. 1063+00 LT.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
012/0004/0	TRACED BY	
012/0004/0	CHECKED BY	
012/0004/0	QUANTITIES BY	
012/0004/0	CHECKED BY	

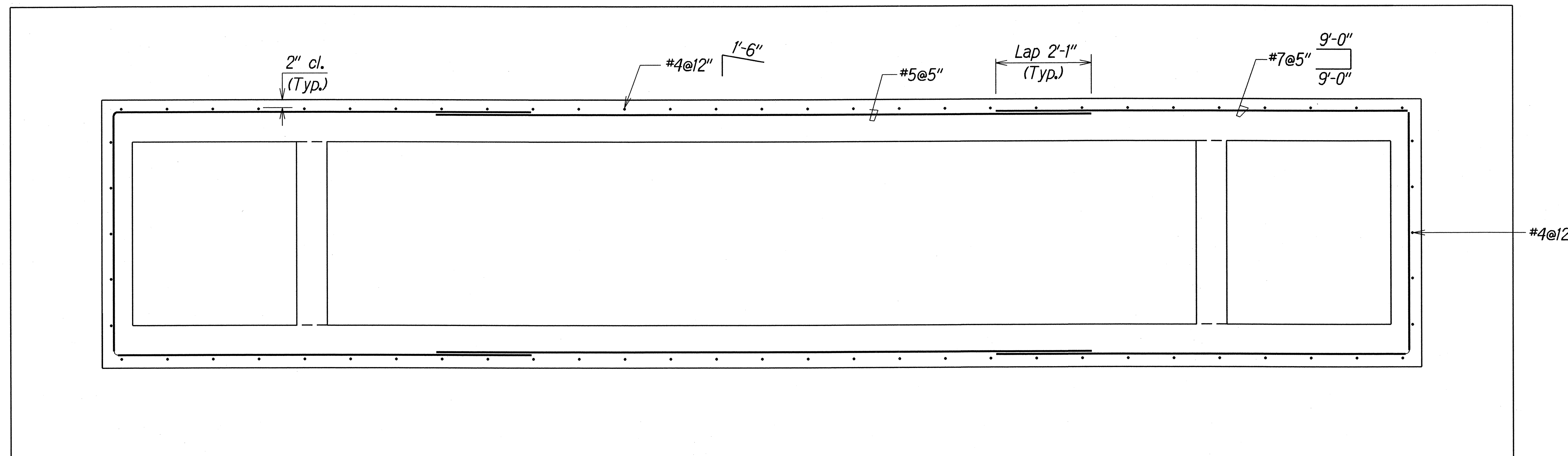
11/14/97	Revised to make grates pedestrian and bicycle safe.
DATE	REVISION

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS
VOLCANO RD. DRAINAGE IMPROVEMENTS Vicinity of Keaau Town F.A. Proj. No. STP-011-2(30)
Scale: 3/4" = 1'-0" Date: Oct 1997
SHEET No. H4 OF 6 SHEETS

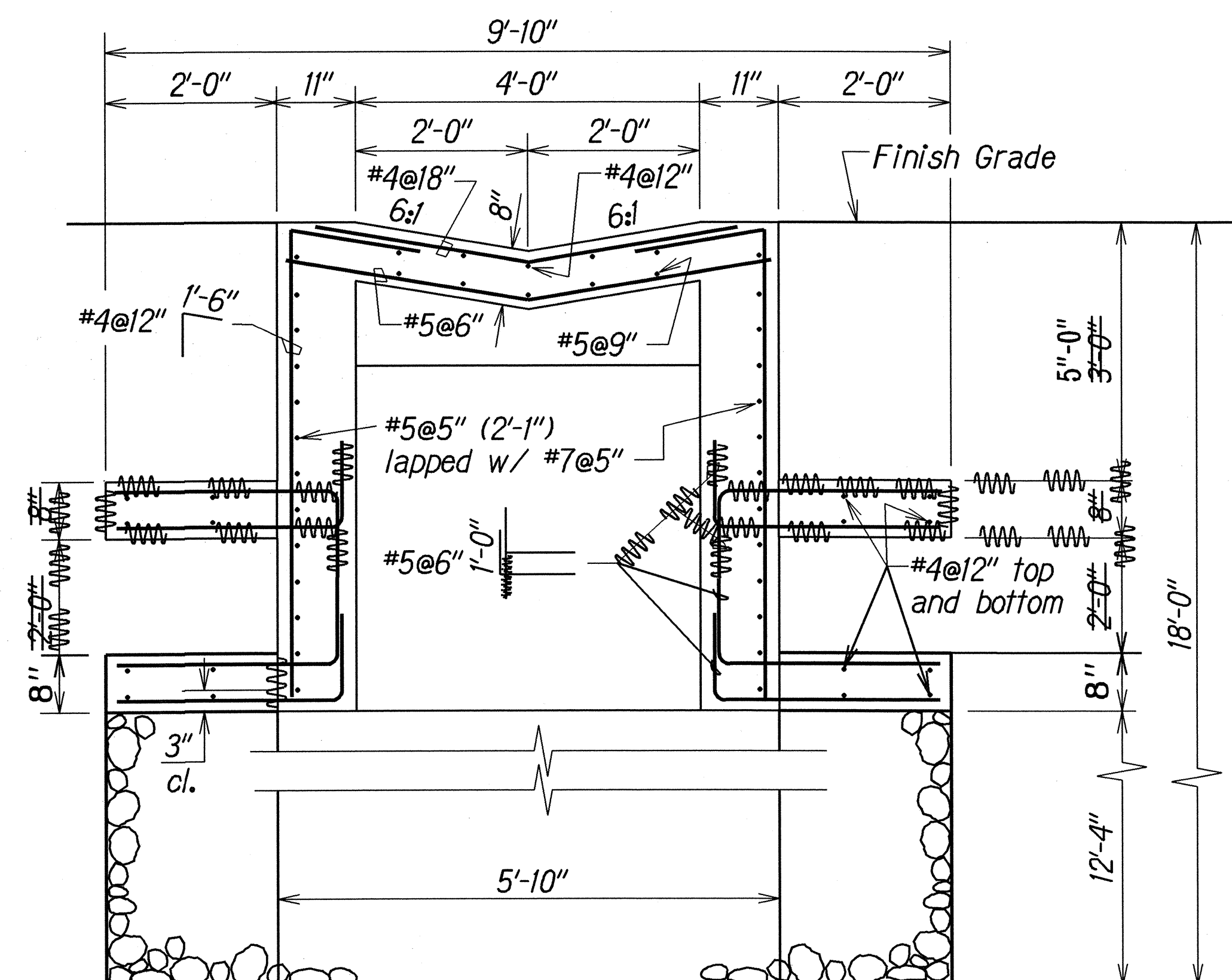
"AS-BUILT"

ADD. 8

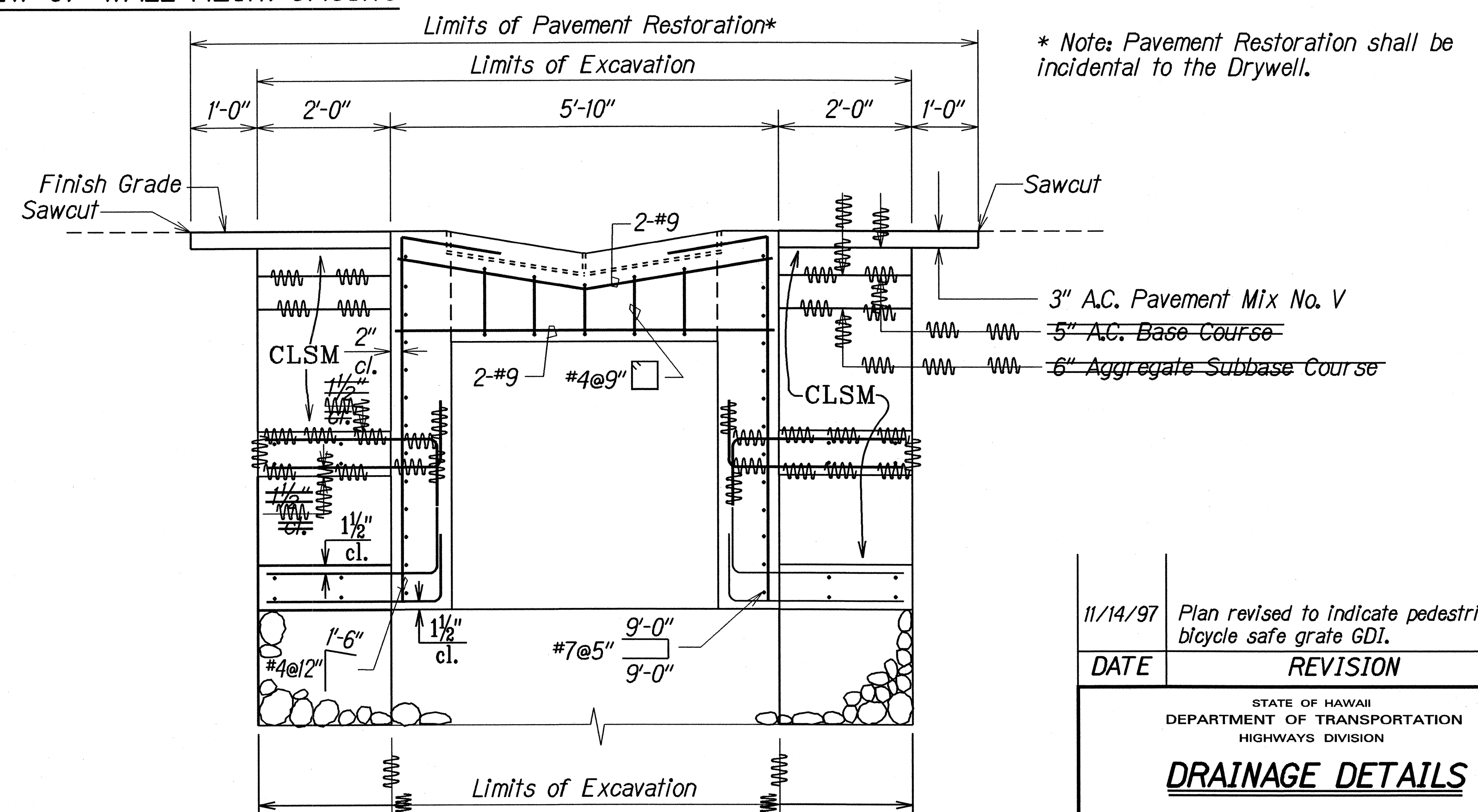
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	ADD. 9	13



PLAN VIEW OF WALL REINFORCING



SECTION B H4/H5



SECTION C H4/H5

* Note: Pavement Restoration shall be incidental to the Drywell.

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

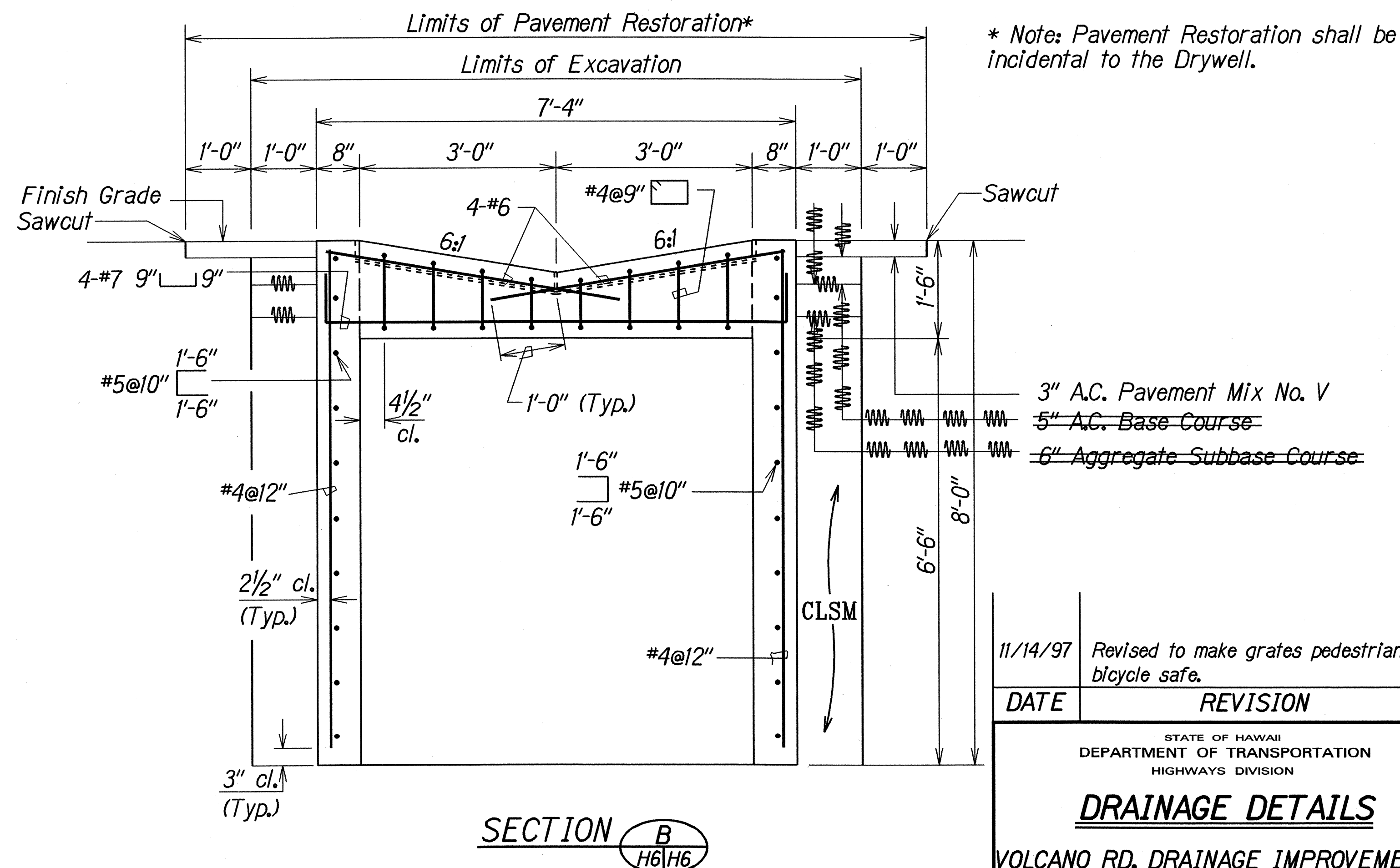
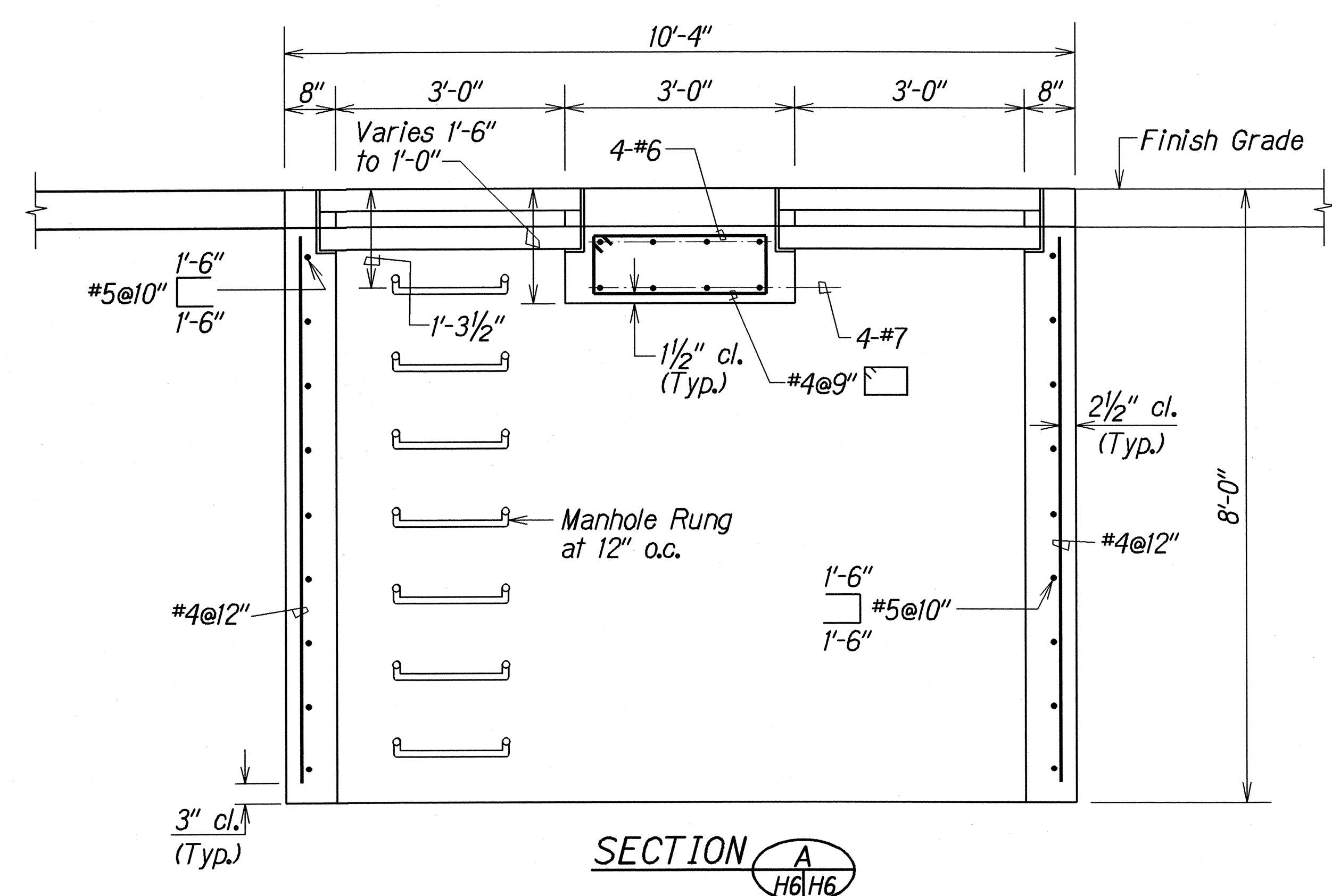
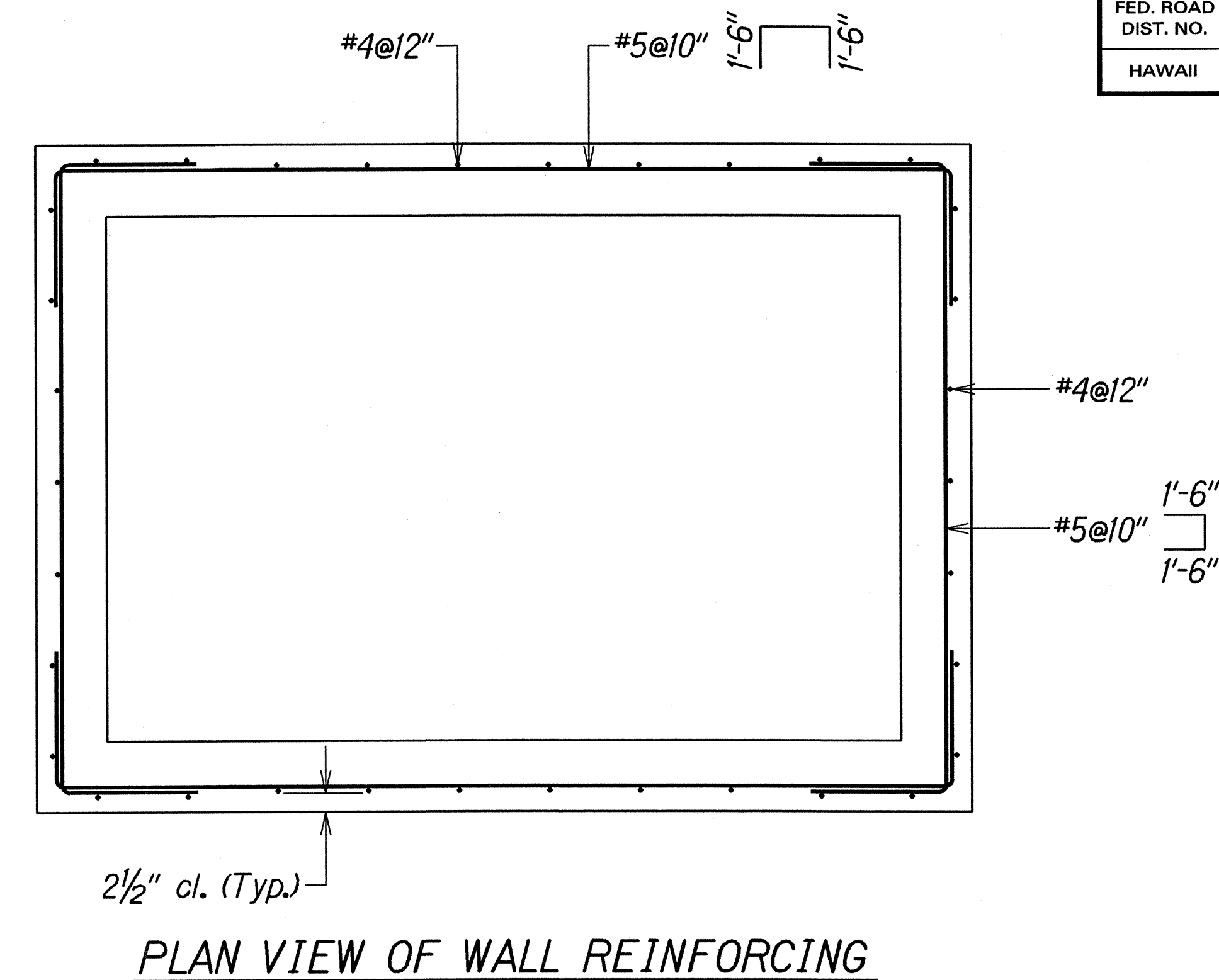
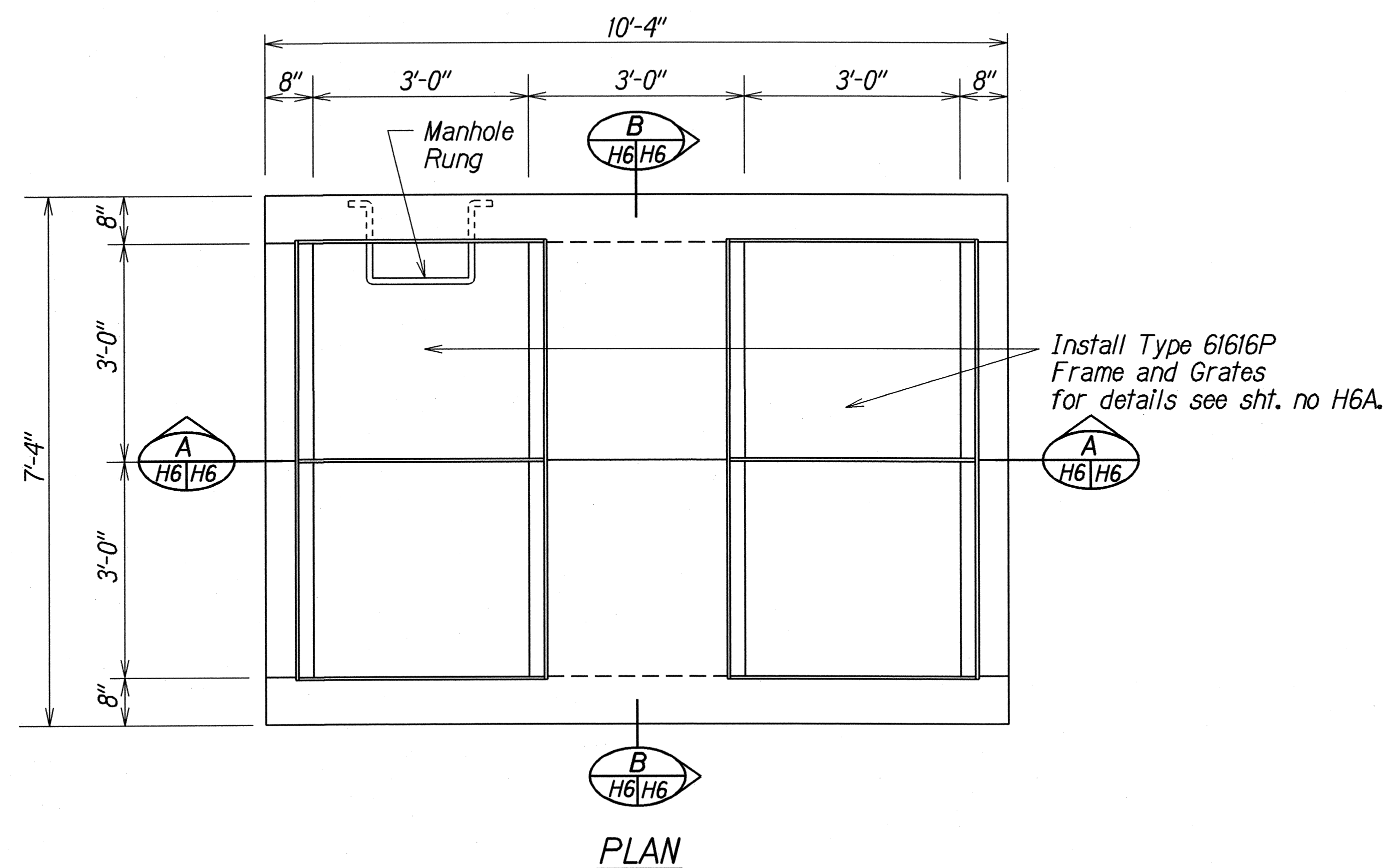
DETAILS OF TYPE 61614P DRYWELL AT STA. 1063+00 LT.

11/14/97	Plan revised to indicate pedestrian and bicycle safe grate GDI.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
VOLCANO RD. DRAINAGE IMPROVEMENTS	
Vicinity of Keaau Town	
F.A. Proj. No. STP-011-2(30)	
Scale: 3/4" = 1'-0"	Date: Oct 1997
SHEET No. H5 OF 6 SHEETS	

"AS-BUILT"

ADD. 9

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	ADD. 10	13



* Note: Pavement Restoration shall be incidental to the Drywell.

ORIGINAL PLAN	DATE	2/1/97
SURVEY PLOTTED BY		
DRAWN BY		
CHECKED BY		
NOTED BY		
DESIGNED BY		
QUANTITIES BY		
CHECKED BY		

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

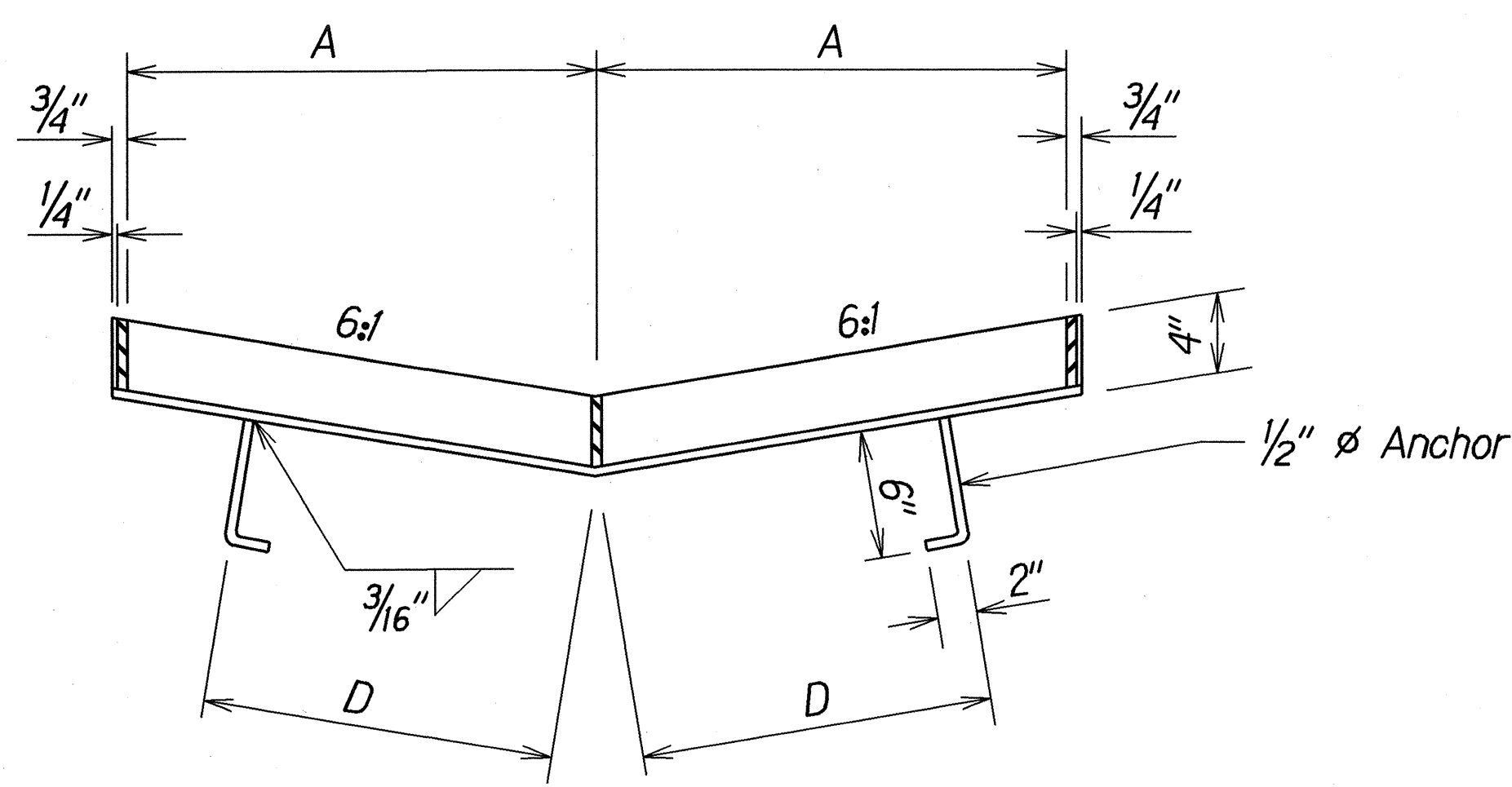
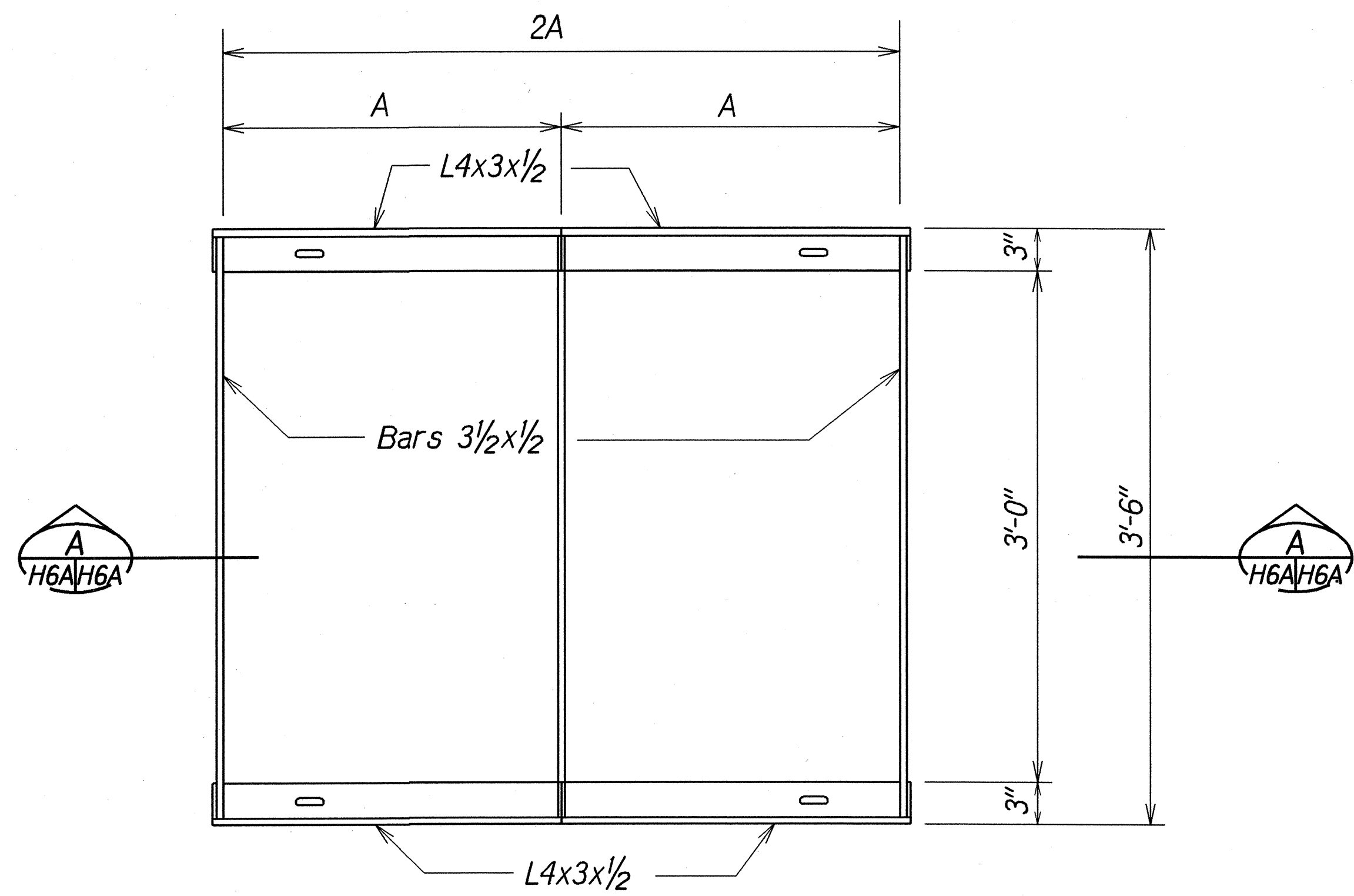
DETAILS OF TYPE 61616P DRYWELL AT # STA. 1066+90 LT.

11/14/97	Revised to make grates pedestrian and bicycle safe.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
VOLCANO RD. DRAINAGE IMPROVEMENTS	
Vicinity of Keaau Town	
F.A. Proj. No. STP-011-2(30)	
Scale: 3/4"=1'-0"	Date: Oct 1997
SHEET No. H6 OF 6 SHEETS	

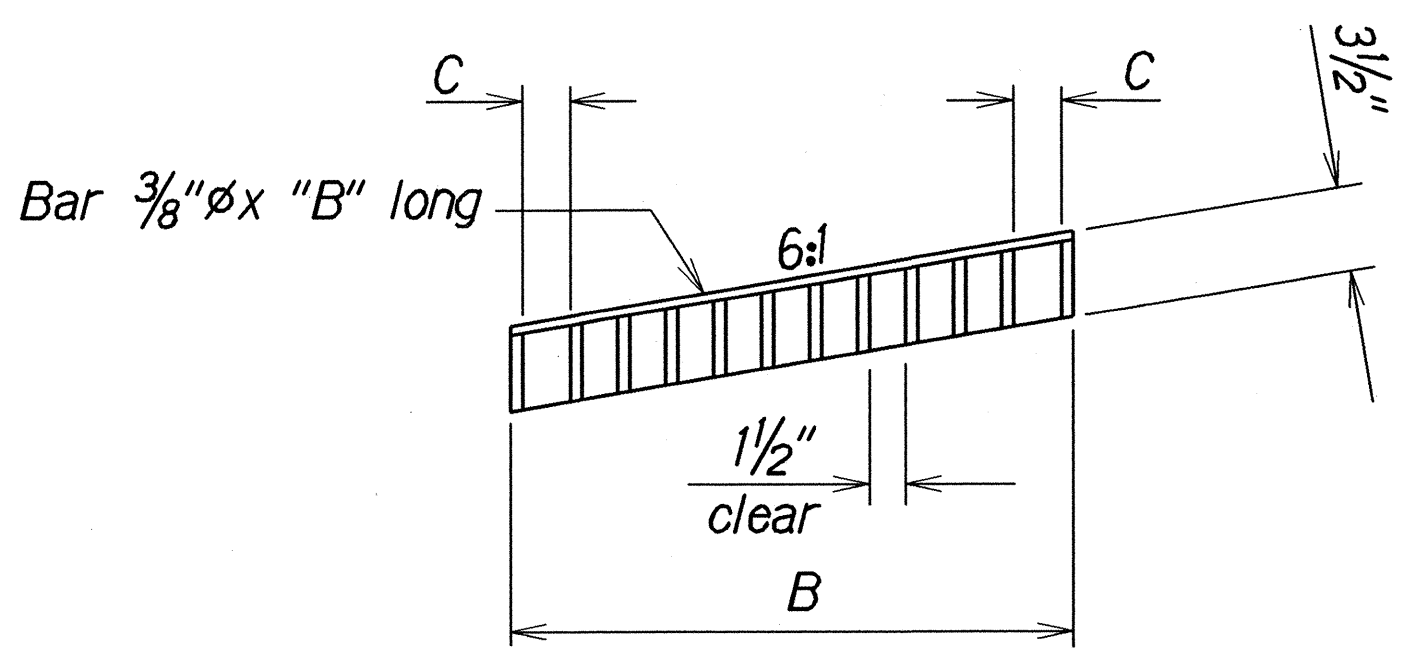
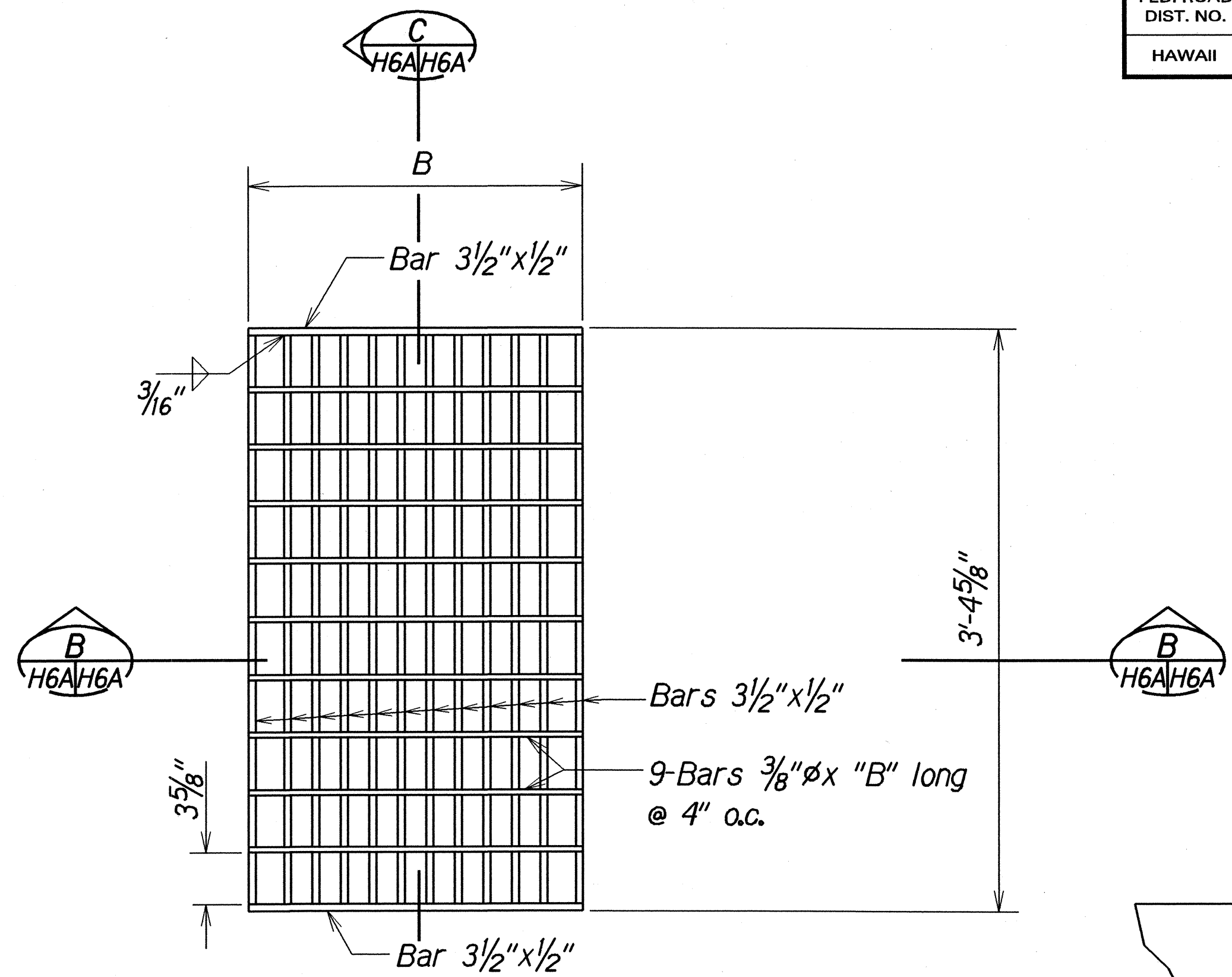
"AS-BUILT"

ADD. 10

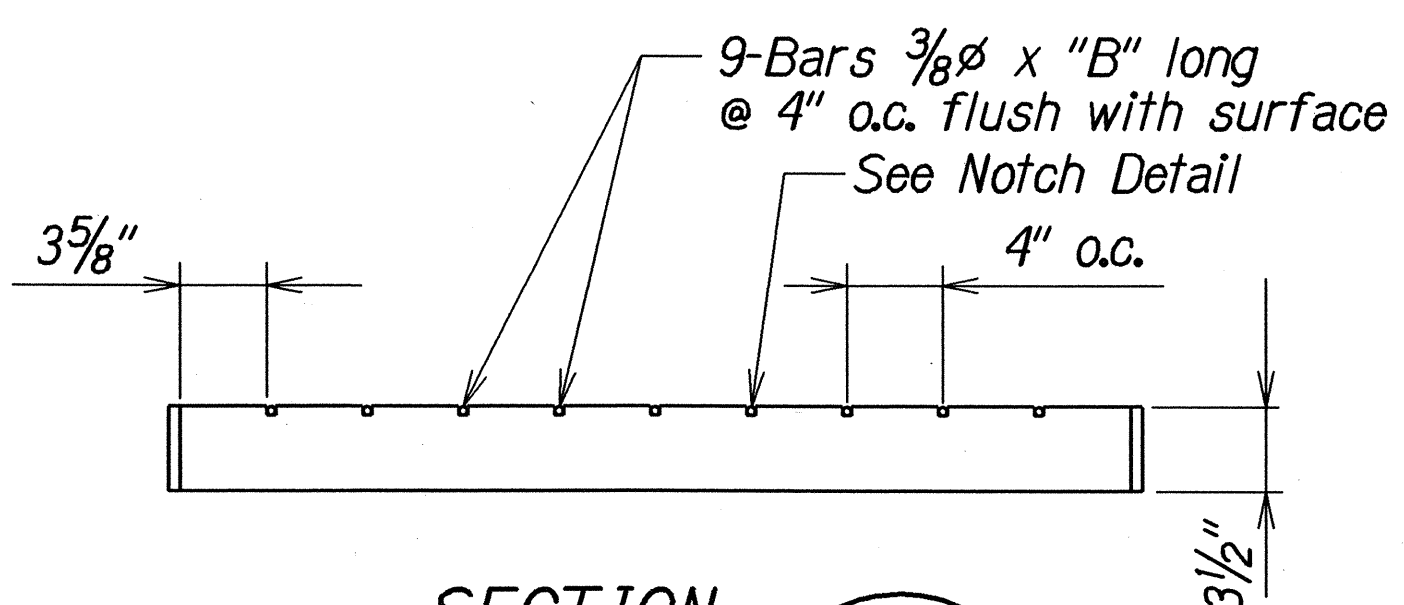
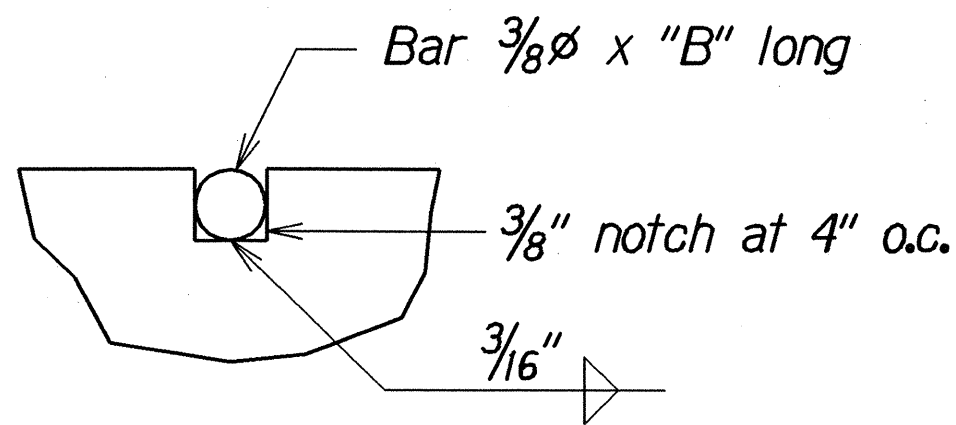
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-011-2(30)	1998	ADD. 10 S-1	13



FRAME



GRATE



NOTE:
All welds 3/8 unless otherwise noted.

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"

DETAIL OF TYPE 61614P & 61616P STEEL FRAME & GRATES

Scale: 1 1/2" = 1'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY A. Kama	
DESIGNED BY R. SAKAMOTO	
QUANTITIES BY	
CHECKED BY	

11/14/97	Sheet added to show details of pedestrian and bicycle safe frame & grates.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION DRAINAGE DETAILS VOLCANO RD. DRAINAGE IMPROVEMENTS Vicinity of Keaau Town F. A. Proj. No. STP-011-2(30) Scale: 1 1/2" = 1'-0" Date: Nov. 1997 SHEET No. H6A OF 6 SHEETS	