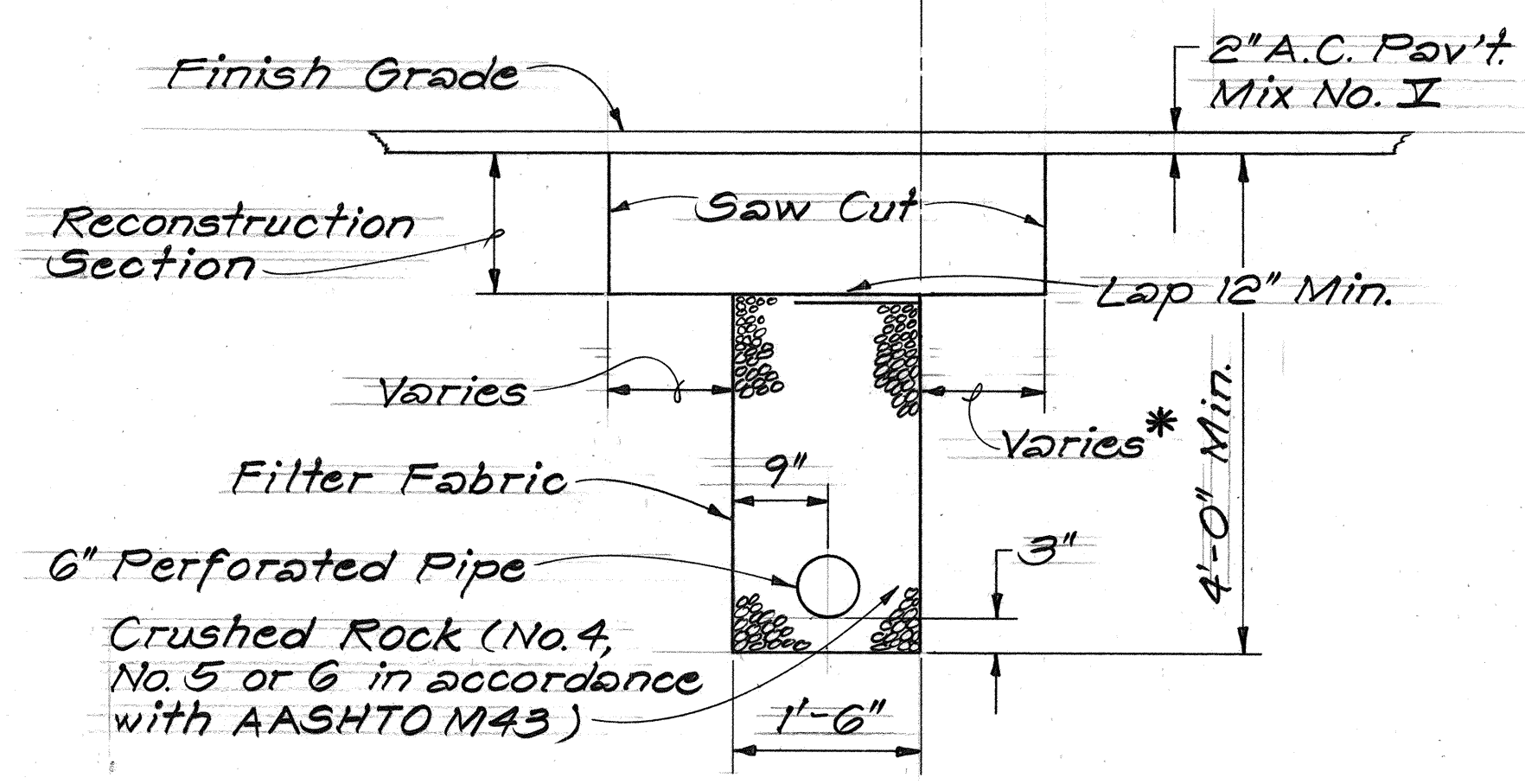


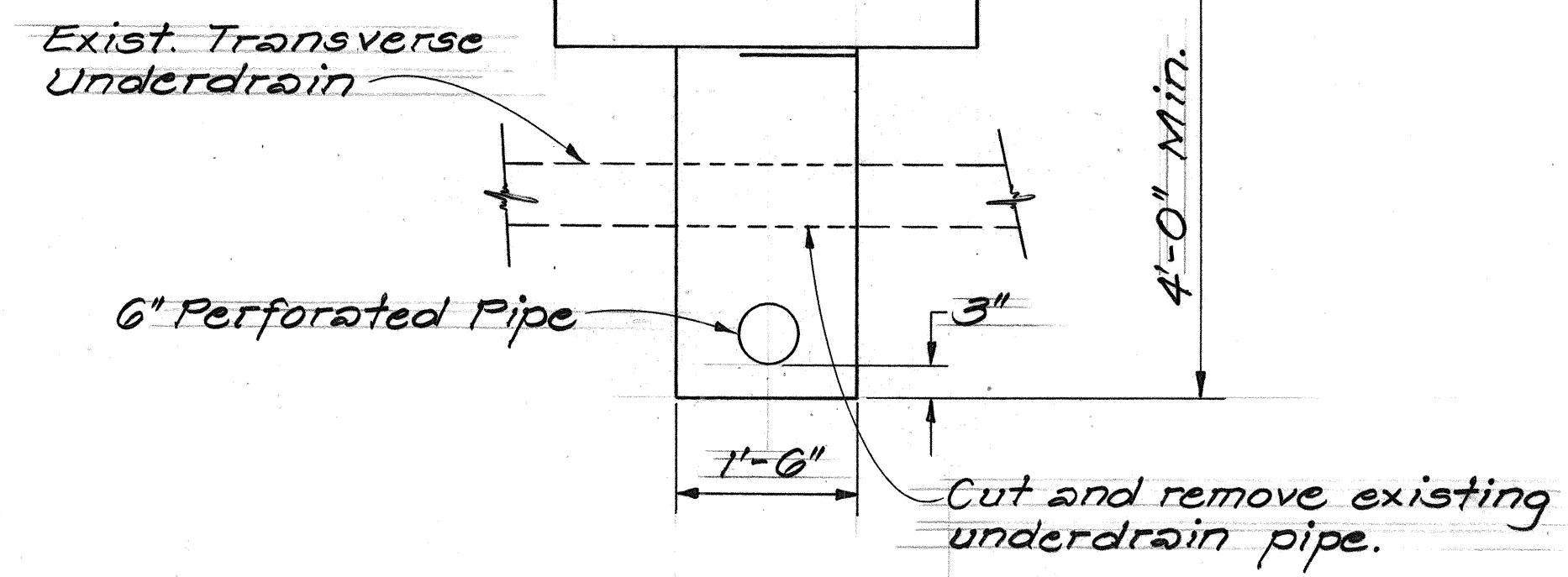
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD. 21	44

Edge of PCC, Edge of A.C. or $\frac{1}{2}$ of Roadway. (See Plans for Location)

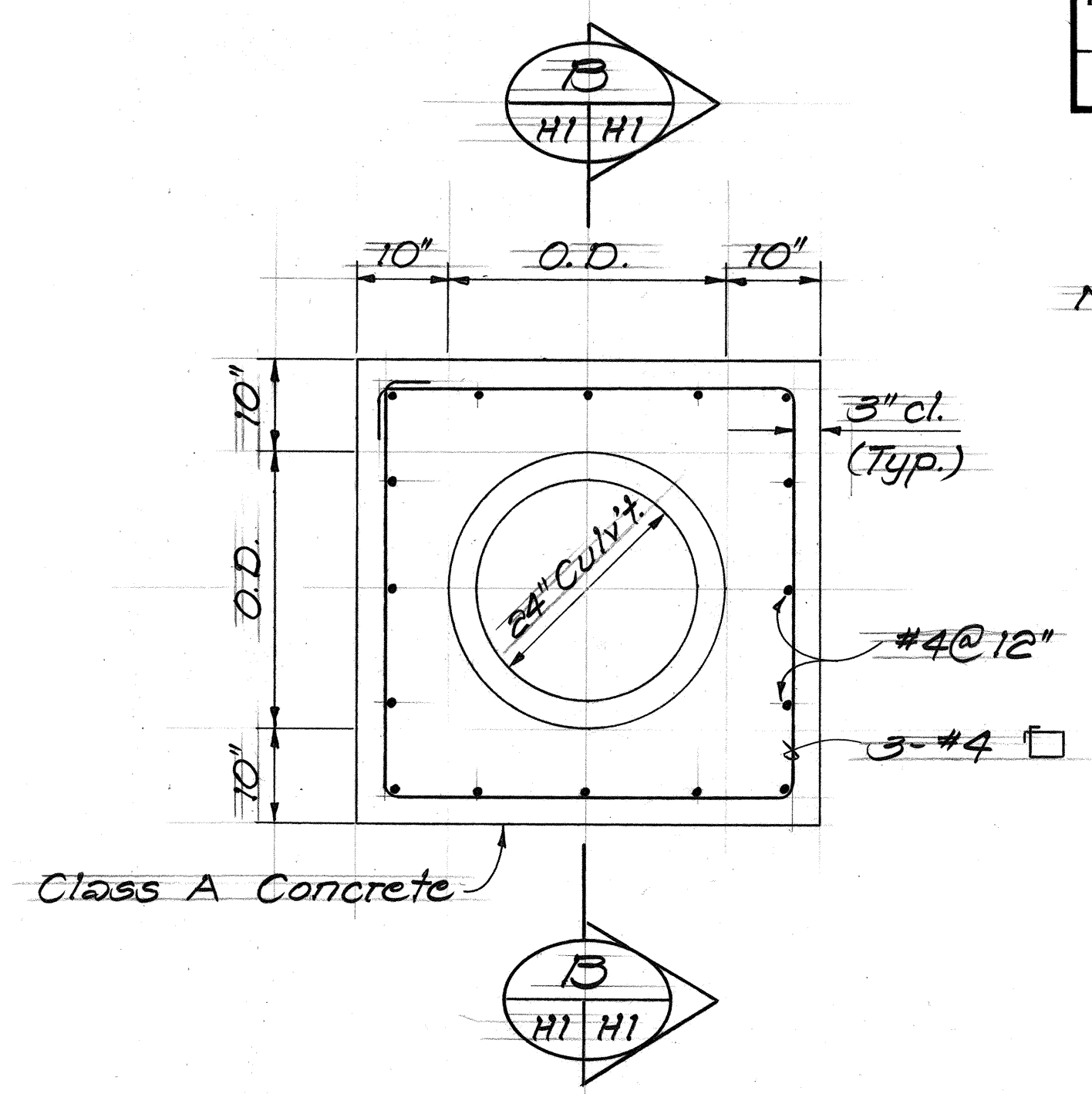


* 0" if underdrain constructed at edge of roadway

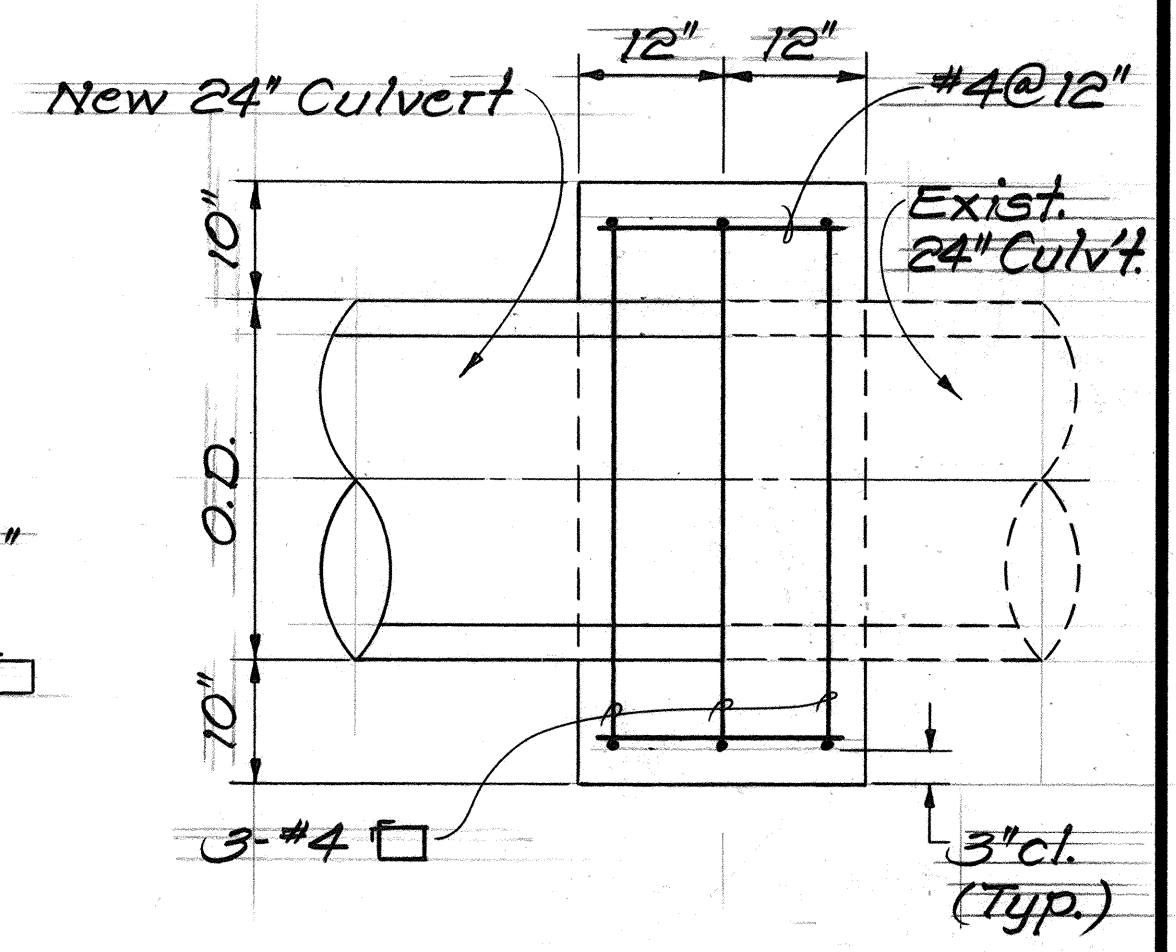
TYPICAL SECTION FILTER FABRIC UNDERDRAIN



DETAIL OF FILTER FABRIC UNDERDRAIN AT TRANSVERSE DRAIN CROSSING



FRONT ELEVATION

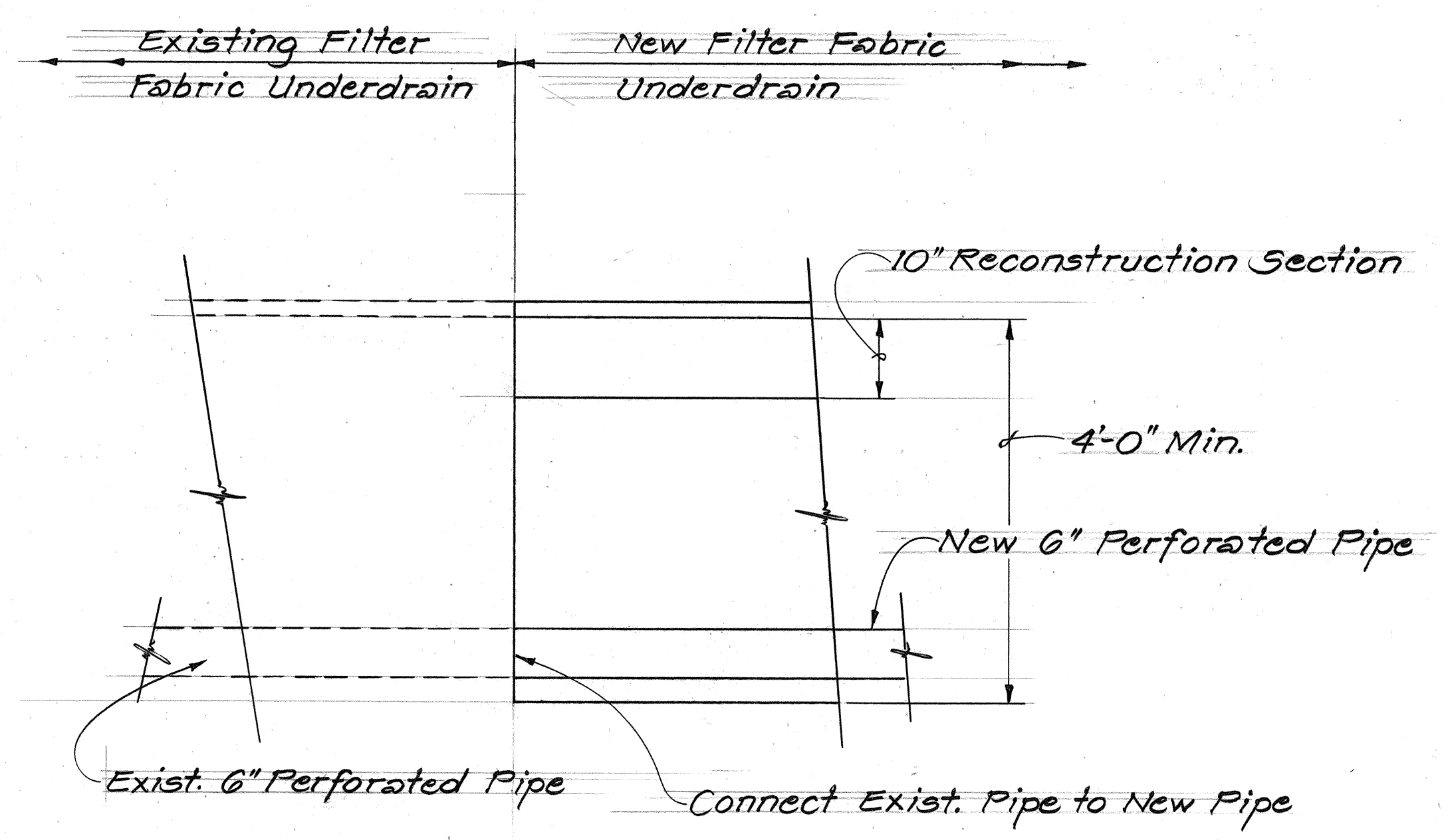


SECTION B

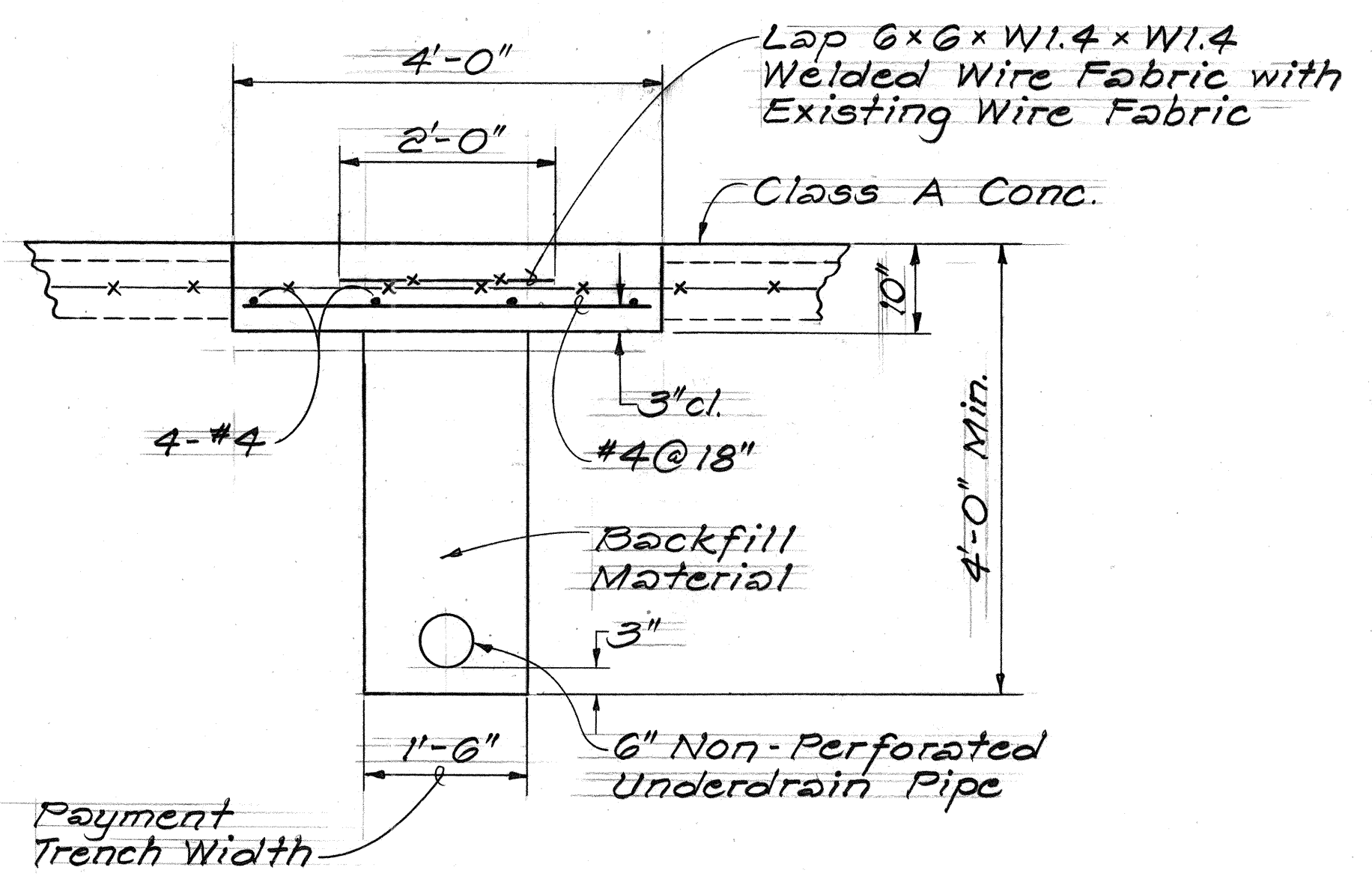
TYPICAL REINFORCED CONCRETE COLLAR

GENERAL NOTES:

- Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various Contract Items.
- The Contractor shall verify the locations of all existing culverts and utilities in the field. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.
- Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. The work mentioned above shall be considered incidental to the various Contract Items.
- For A.C. Pavement Restoration Detail, see Sht. No. 5
- For Underdrain Cleanout Detail, see Plan Sht. No. 22
- For Underdrain Outlet Detail, see Plan Sht. No. 22
- For Underdrain Outlet @ Catch Basin Detail, see Plan Sht. No. 22
- For Connection of Existing Underdrain to New Underdrain Detail, see detail on this sheet.
- Concrete shall be Class A unless otherwise noted.
- Demolishing and removing a portion of the existing structure shall not be paid for separately, but shall not be considered incidental to the various contract items.
- Underdrain into structure shall not be paid for separately, but shall be considered incidental to various contract items.



CONNECTION DETAIL OF EXISTING TO NEW 6" PERFORATED PIPE



NOTE:
Sawcut concrete shoulder 1 1/2" deep. Remove existing concrete. Existing wire fabric to remain.

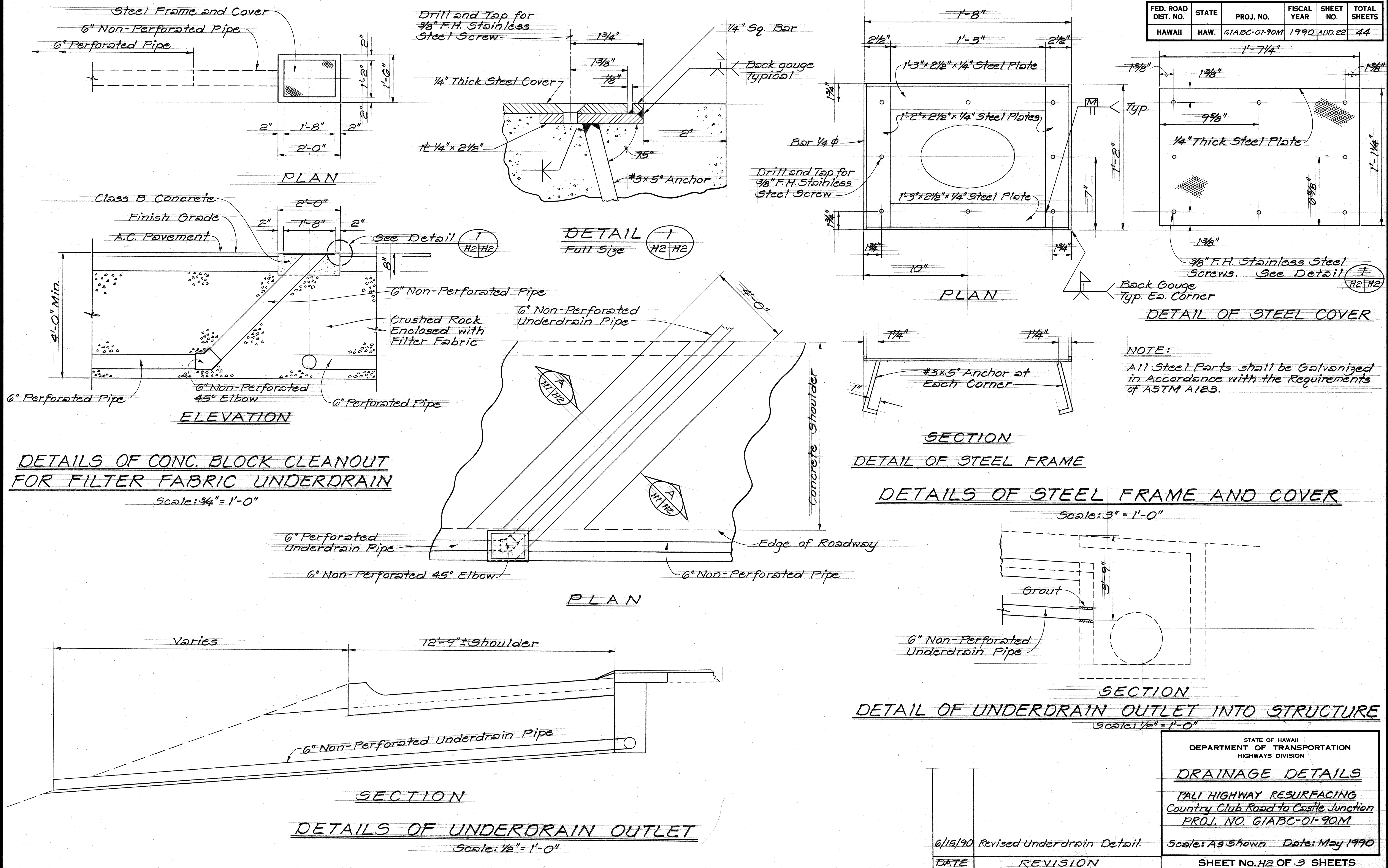
SECTION A

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
PALI HIGHWAY RESURFACING Country Club Road to Castle Junction PROJ. NO. 61ABC-01-90M	
6/15/90	Revised Note, Add No. 11.
DATE	REVISION
SHEET No. 21 OF 3 SHEETS	

Scale: 3/4" = 1'-0" Date: May 1990

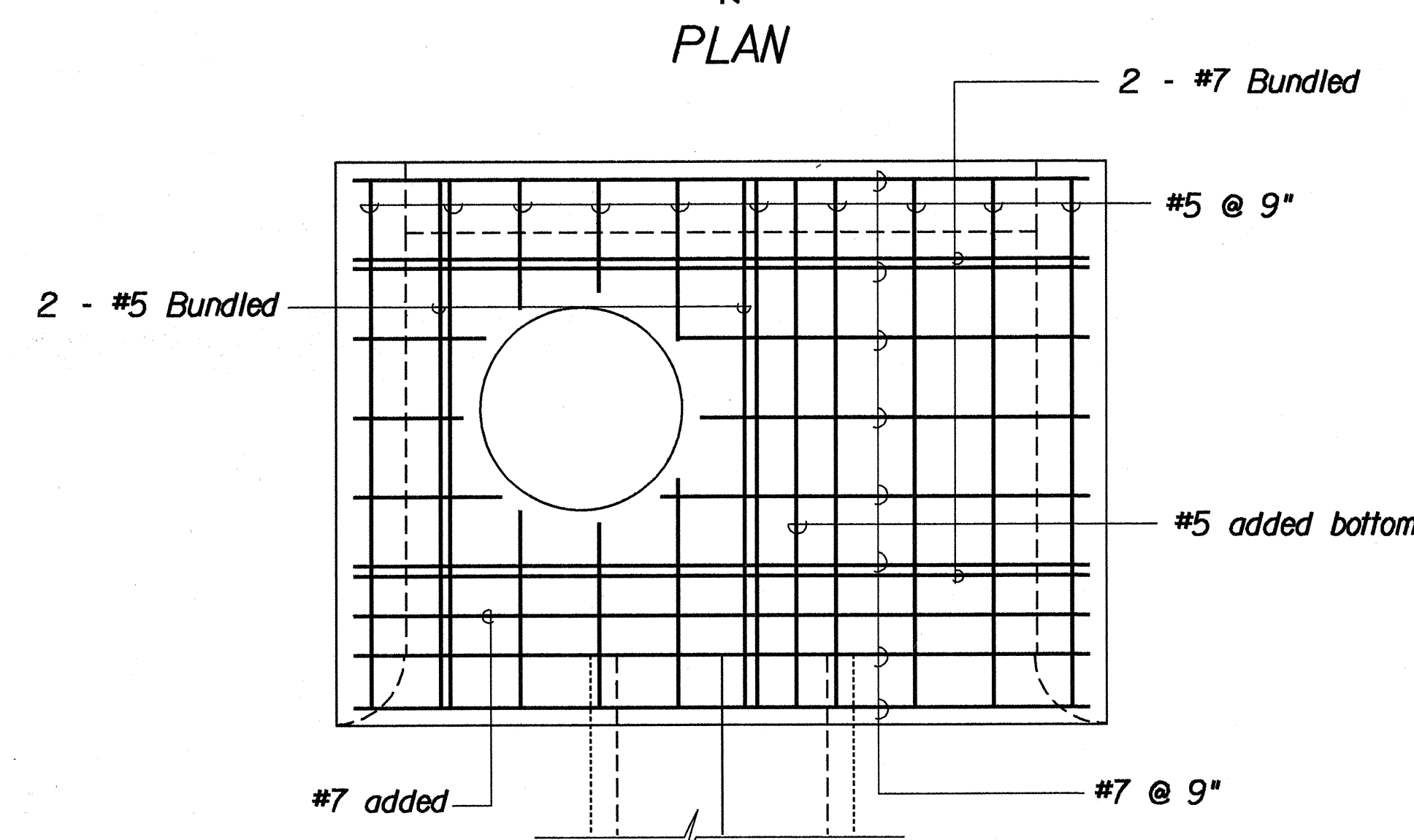
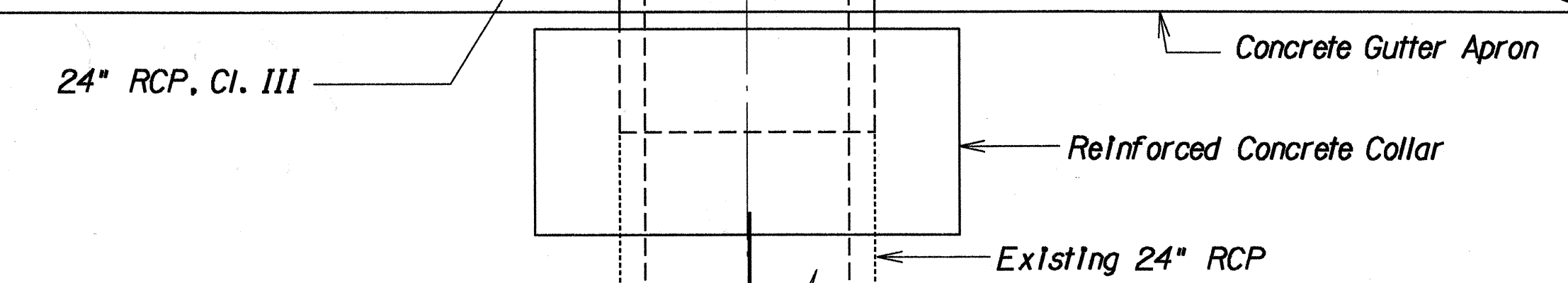
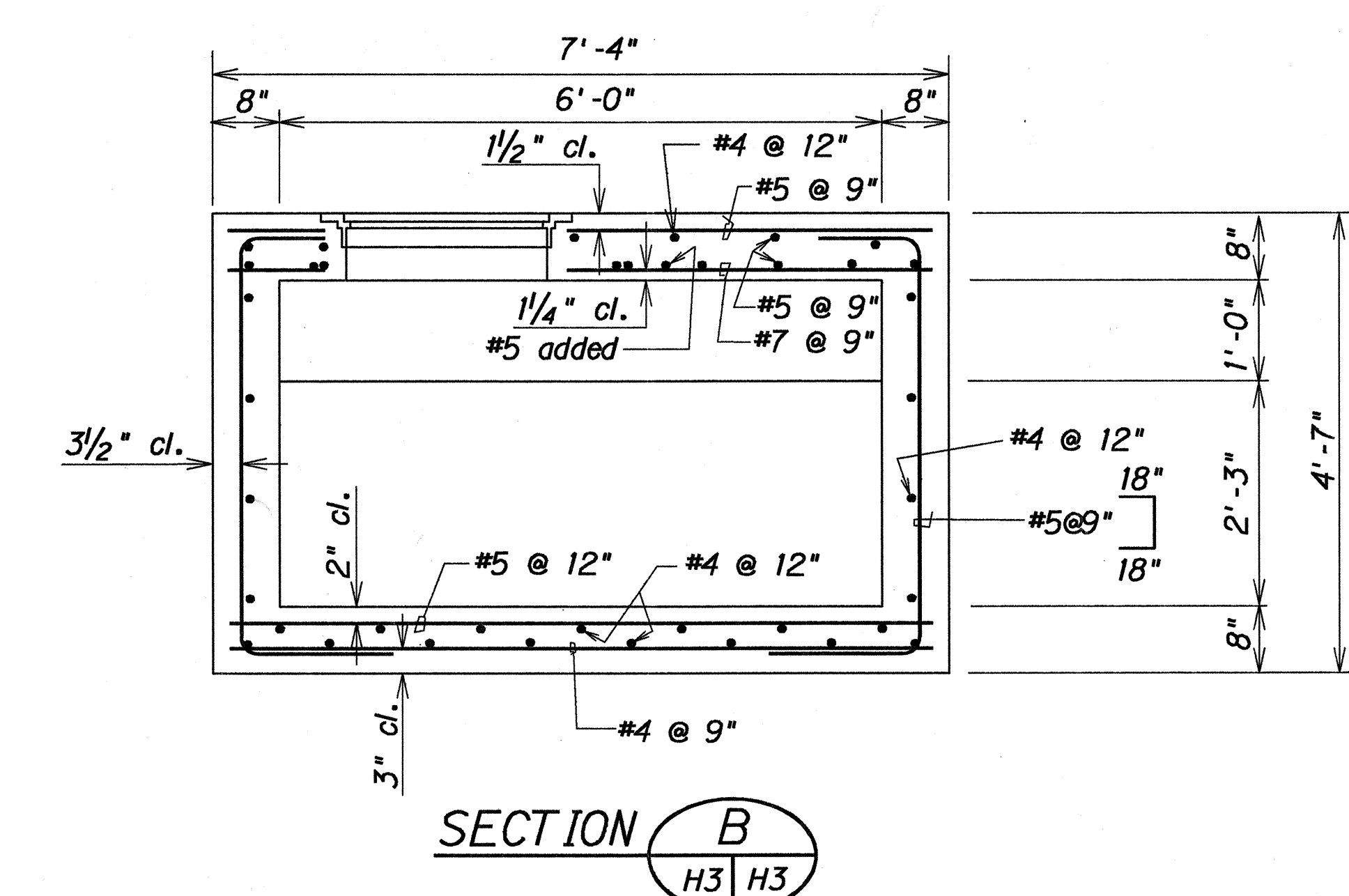
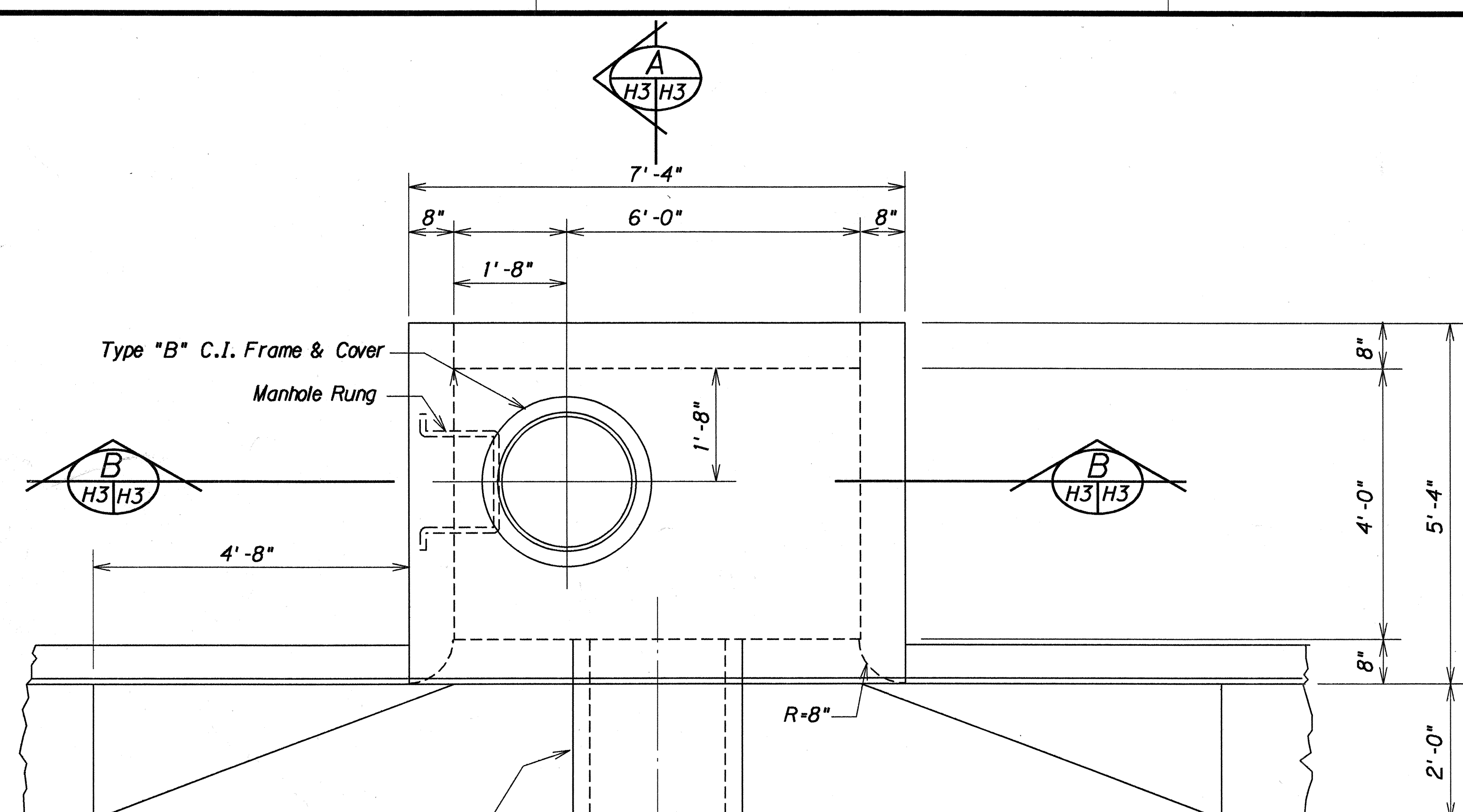
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	ADD.22	44



ORIGINAL PLAN	DATE
DRAWN BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	
NO.	

6/15/90 Revised Underdrain Detail.		Scale: As Shown Date: May 1990	
DATE	REVISION	SHEET No. H2 OF 3 SHEETS	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61ABC-01-90M	1990	23	44

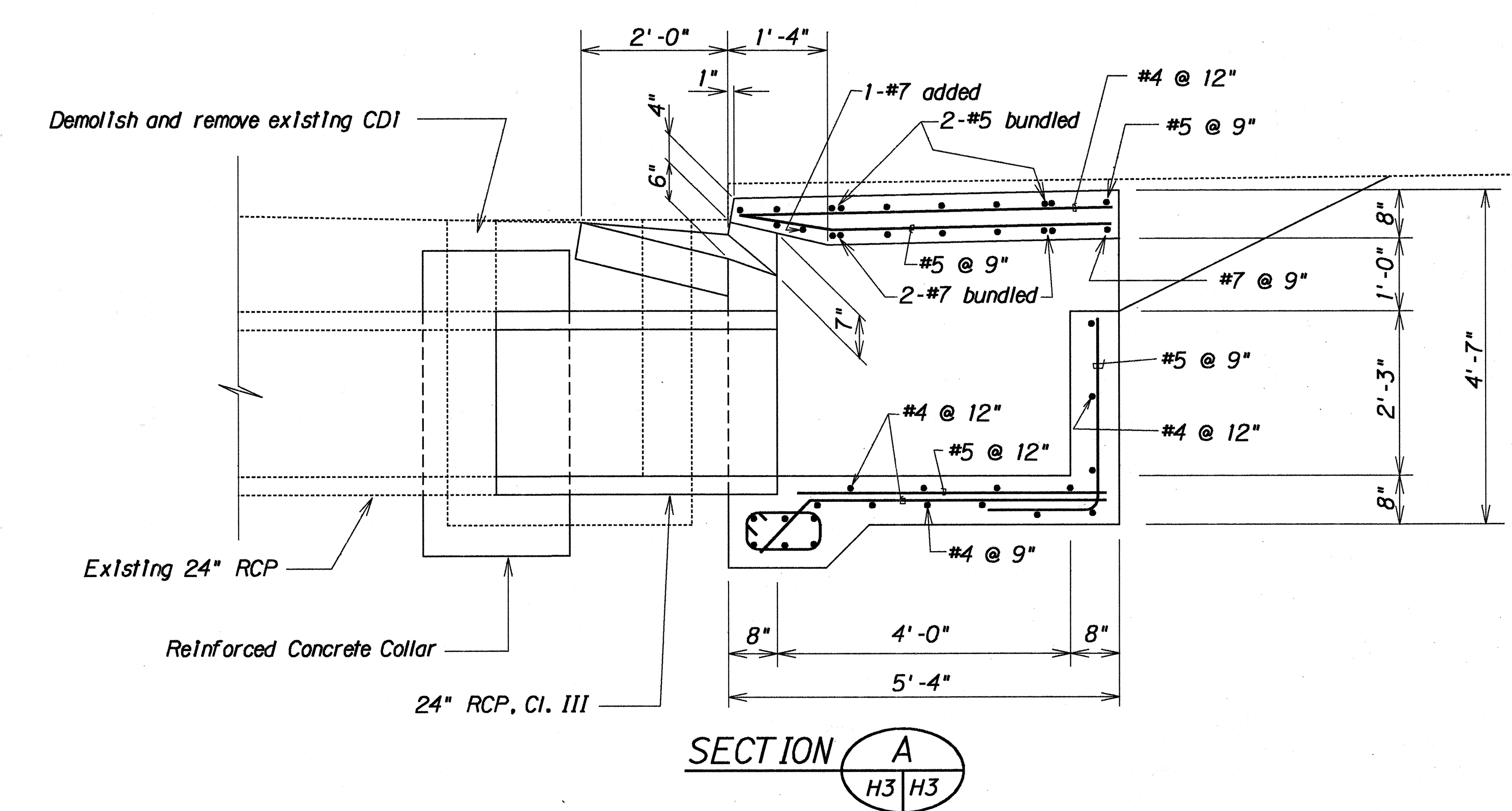


NOTE: For added reinforcing for manhole, see Standard Plan H-04.

PLAN VIEW OF TOP SLAB REINFORCING (BOTTOM LAYER)

DETAILS OF MODIFIED TYPE "D" CATCH BASIN

SCALE - 3/4" = 1'-0"



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
PALI HIGHWAY RESURFACING
Country Club Road to Castle Junction
PROJ. NO. 61ABC-01-90M

Scale: As Shown
Date: May, 1990

SHEET No. H3 OF 3 SHEETS