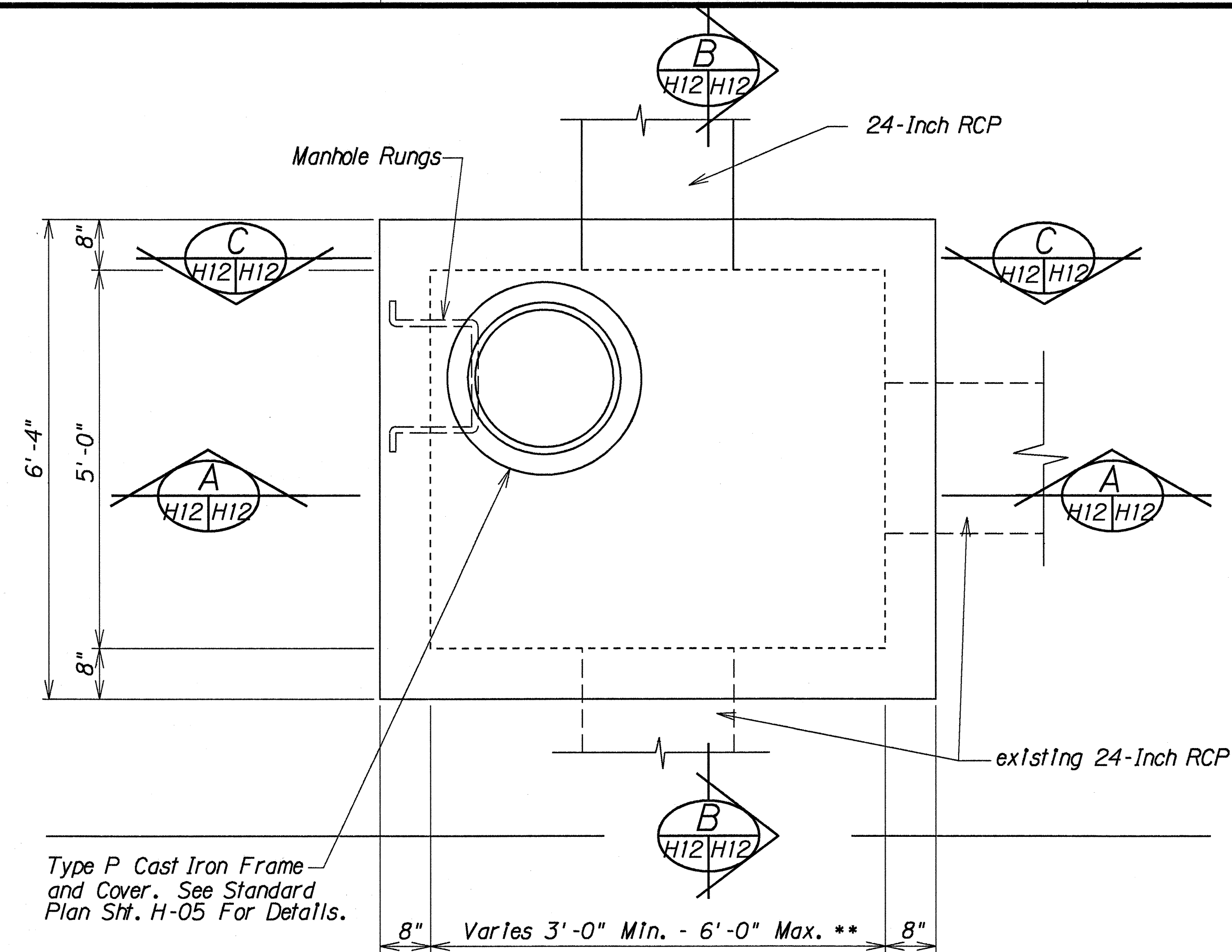
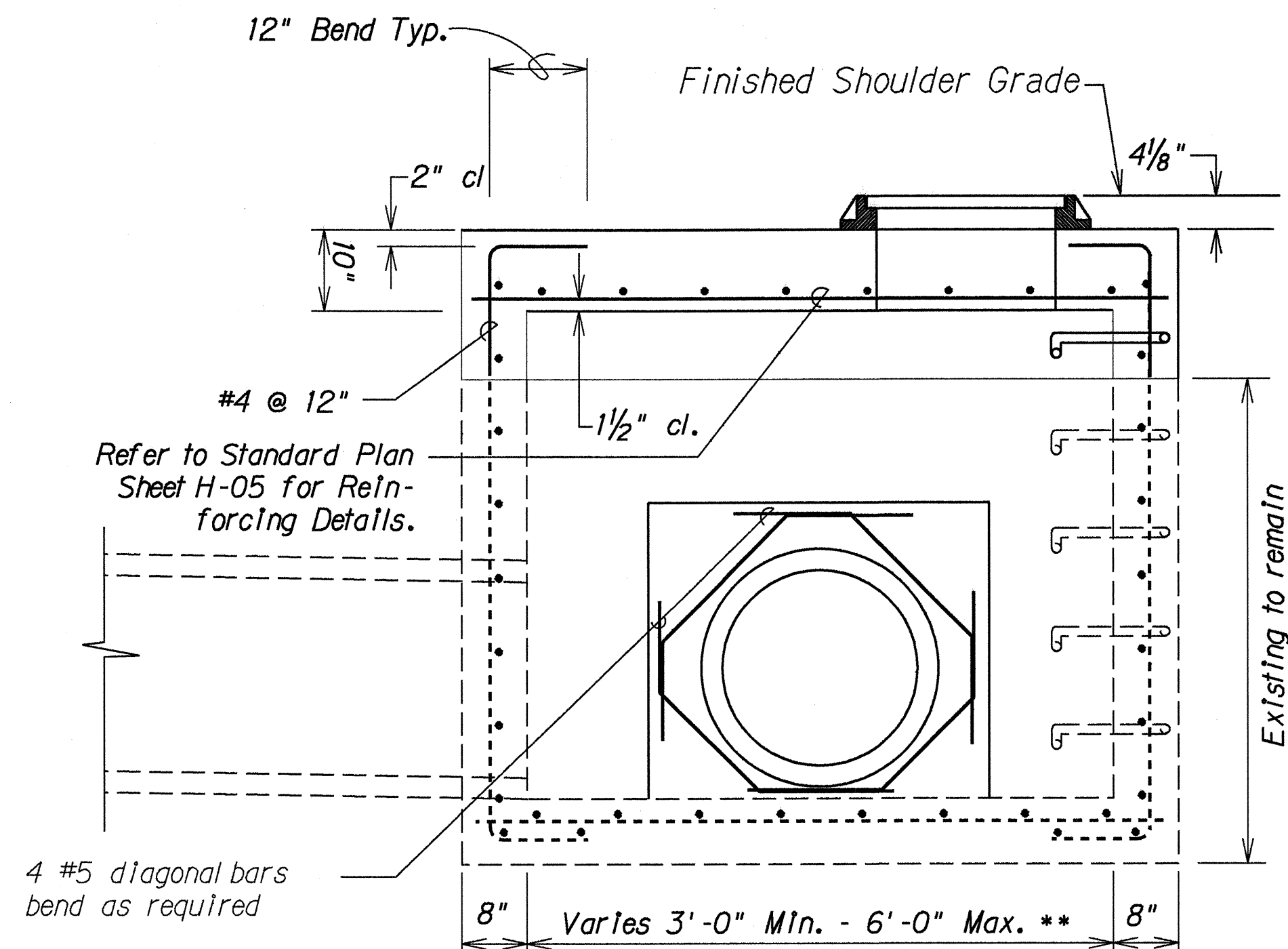


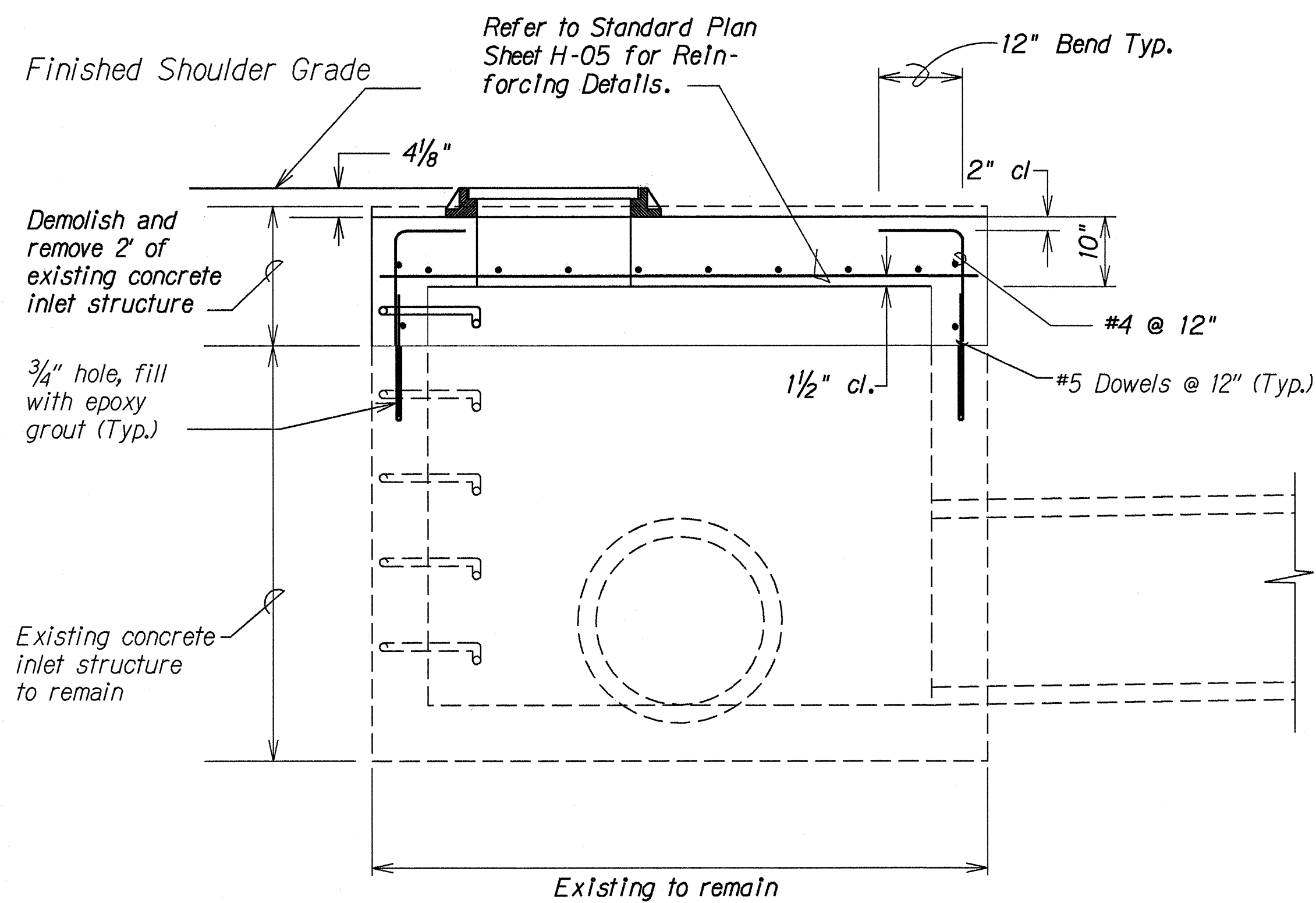
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37C-01-97	1998	4	10



PLAN

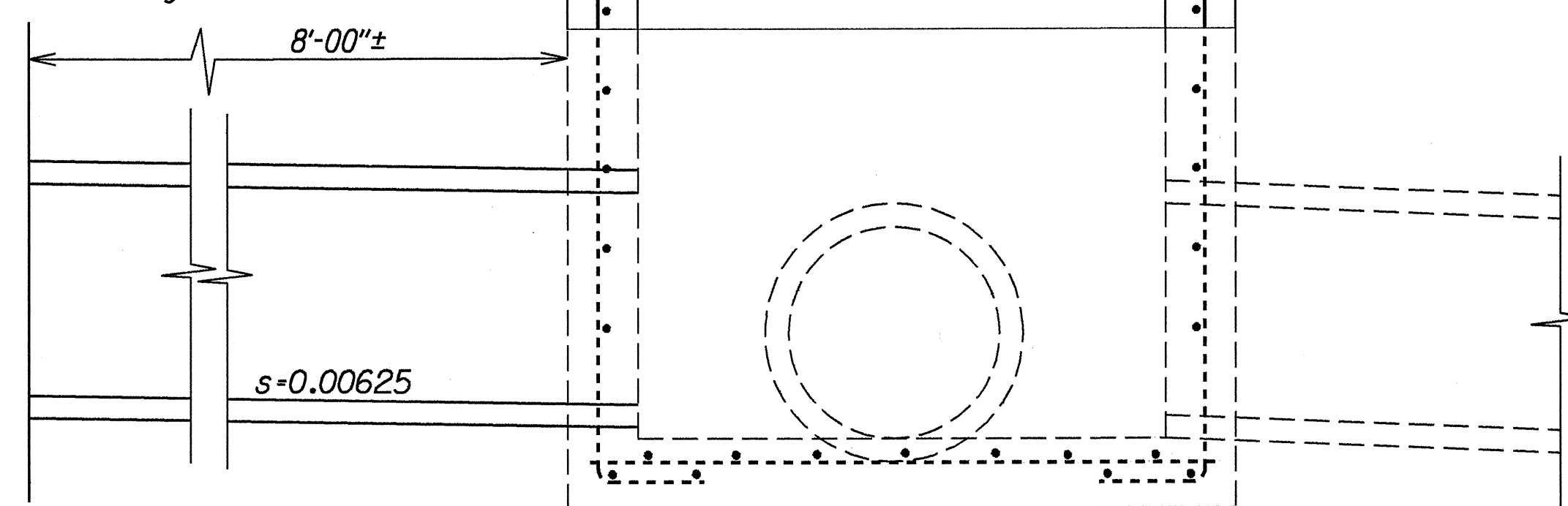


SECTION C
H12 H12



SECTION A
H12 H12

Refer to Standard Plan Sheet H-05 for Reinforcing Details.



SECTION B
H12 H12

MODIFIED SDM @ Sta. 107+00± o/s 14'

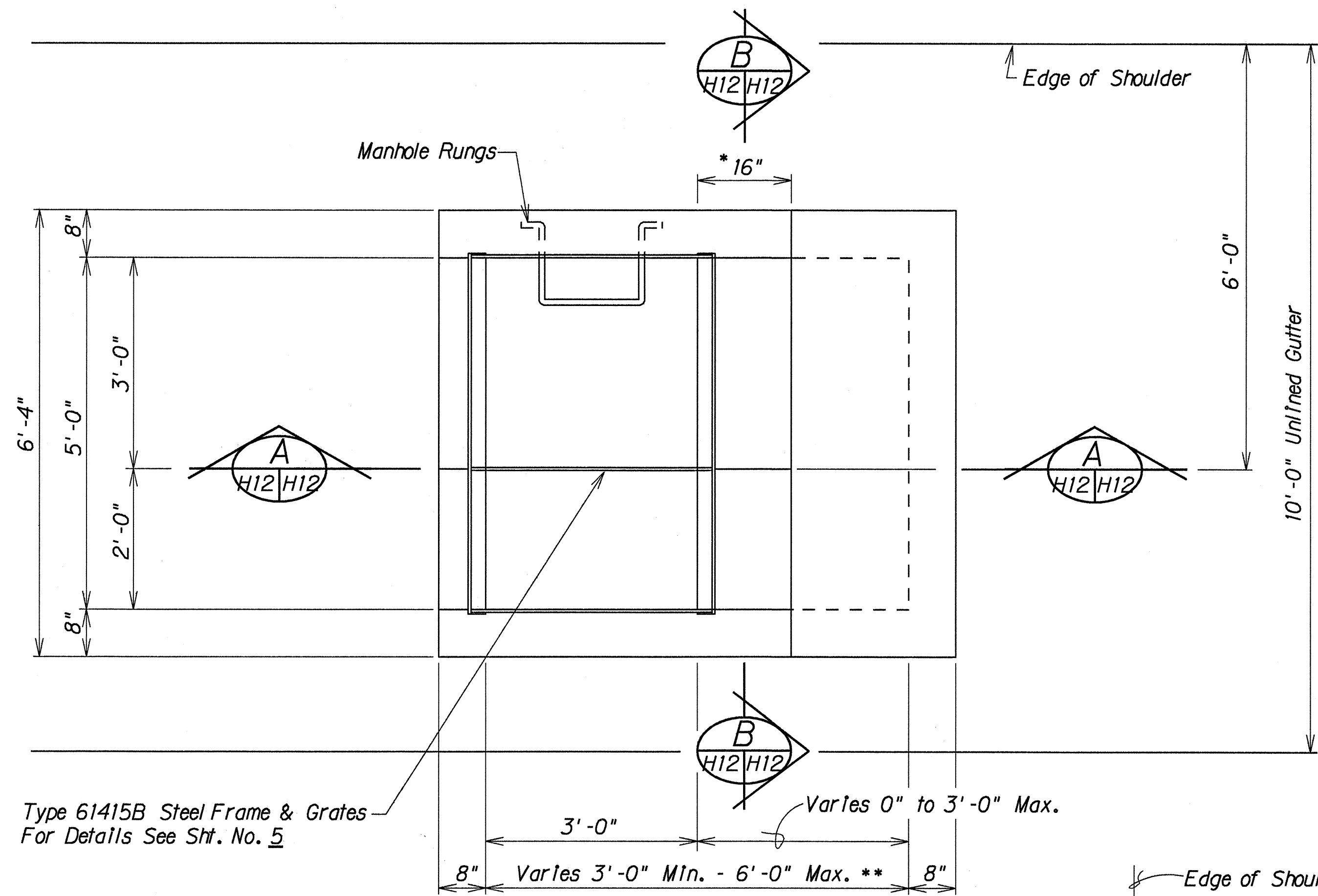
Scale: 3/4"=1'-0"

GENERAL DRAINAGE NOTES:

- Existing drainage system 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 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 on his own expense.
- Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. Where indicated on plans the approximate diameter of drilled holes for installation of dowels shall be 3/4", and voids after installing dowels shall be filled with epoxy grout as directed by the Engineer.
- Concrete shall be Class "A" unless otherwise noted.
- Locations and elevations of new structures shall be laid out in the field for the Engineer's approval.
- Exact invert elevations of proposed drop intakes shall be verified in the field by the Contractor.
- Furnishing and providing backfill materials for drainage structures, extended culverts will not be paid for separately but shall be considered incidental to various contract items.
- Inlet and Outlet conditions shall be graded to permit free flow of run-off. Grading shall be to the satisfaction of the Engineer. The above work shall be considered incidental to the various contract items.
- The Contractor shall provide type "C" bedding materials for culvert. Payment for this work will not be paid for separately but shall be considered incidental to various contract items.
- Reinforcing Steel for Concrete Structures will not be paid for separately but shall be considered incidental to various concrete items.

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
HALEAKALA HIGHWAY (PUKALANI BYPASS)	
Right Turn Deceleration Lane at Makani Road	
Project No. 37C-01-97	
Scale: As Noted	Date: March, 1997
SHEET NO. 1 OF 3 SHEETS	

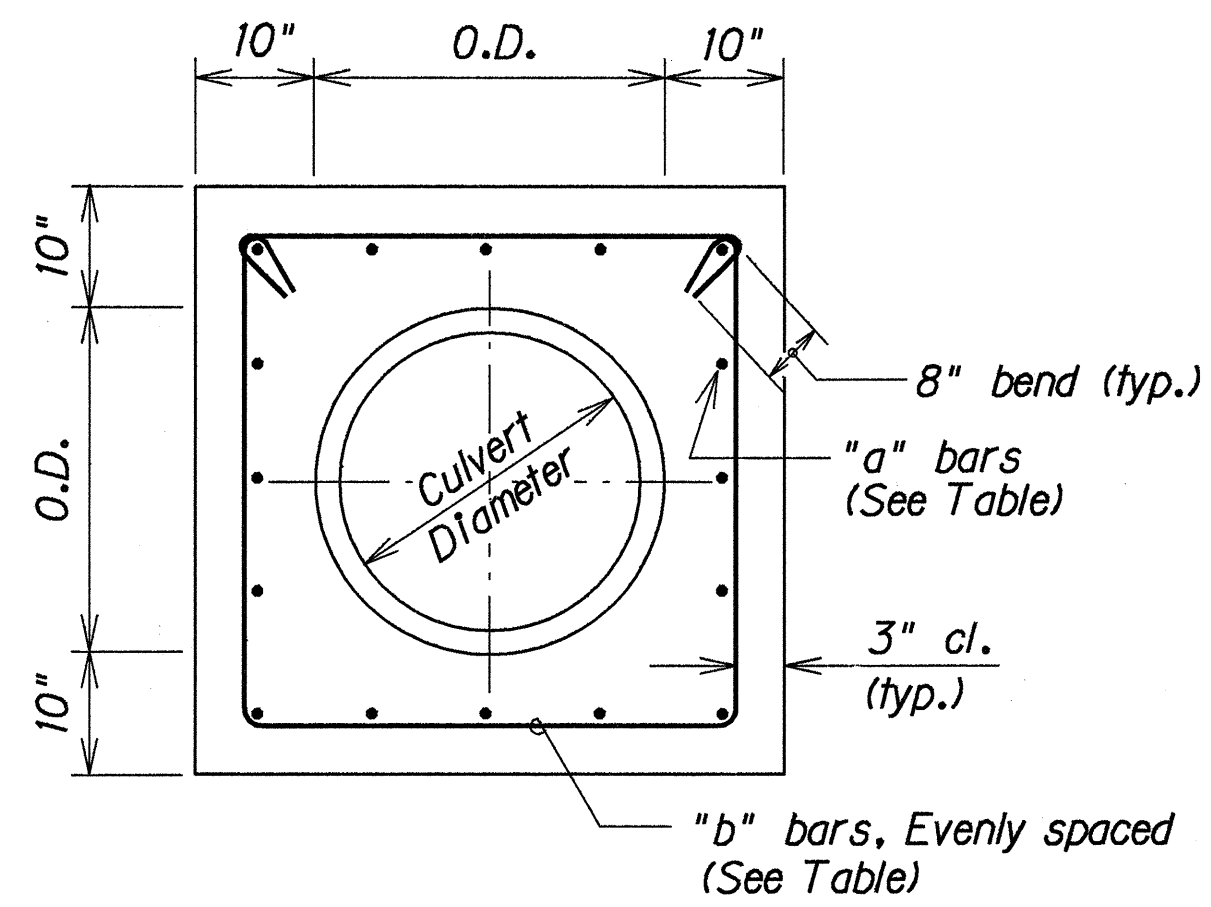
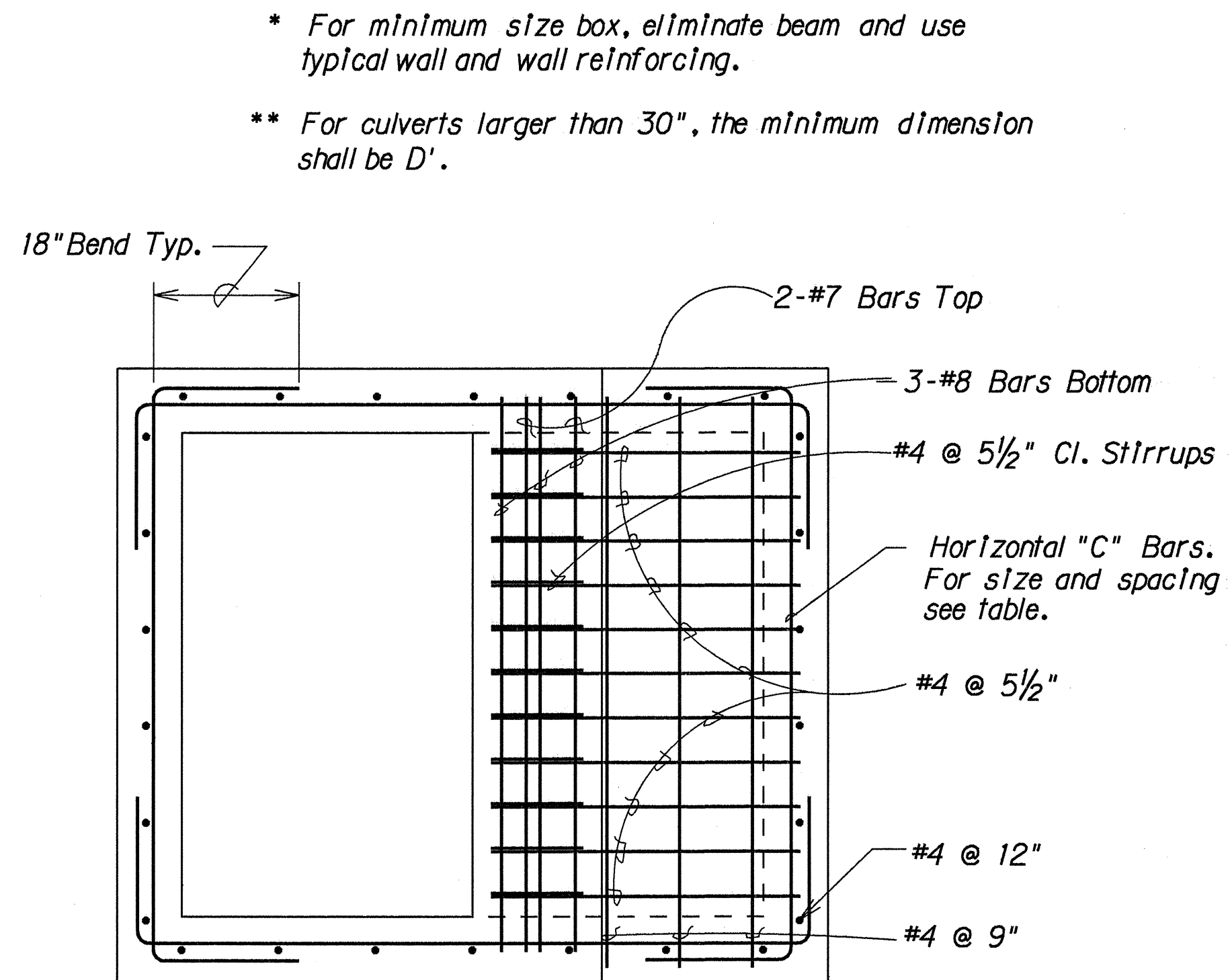
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	37C-01-97	1998	5	10



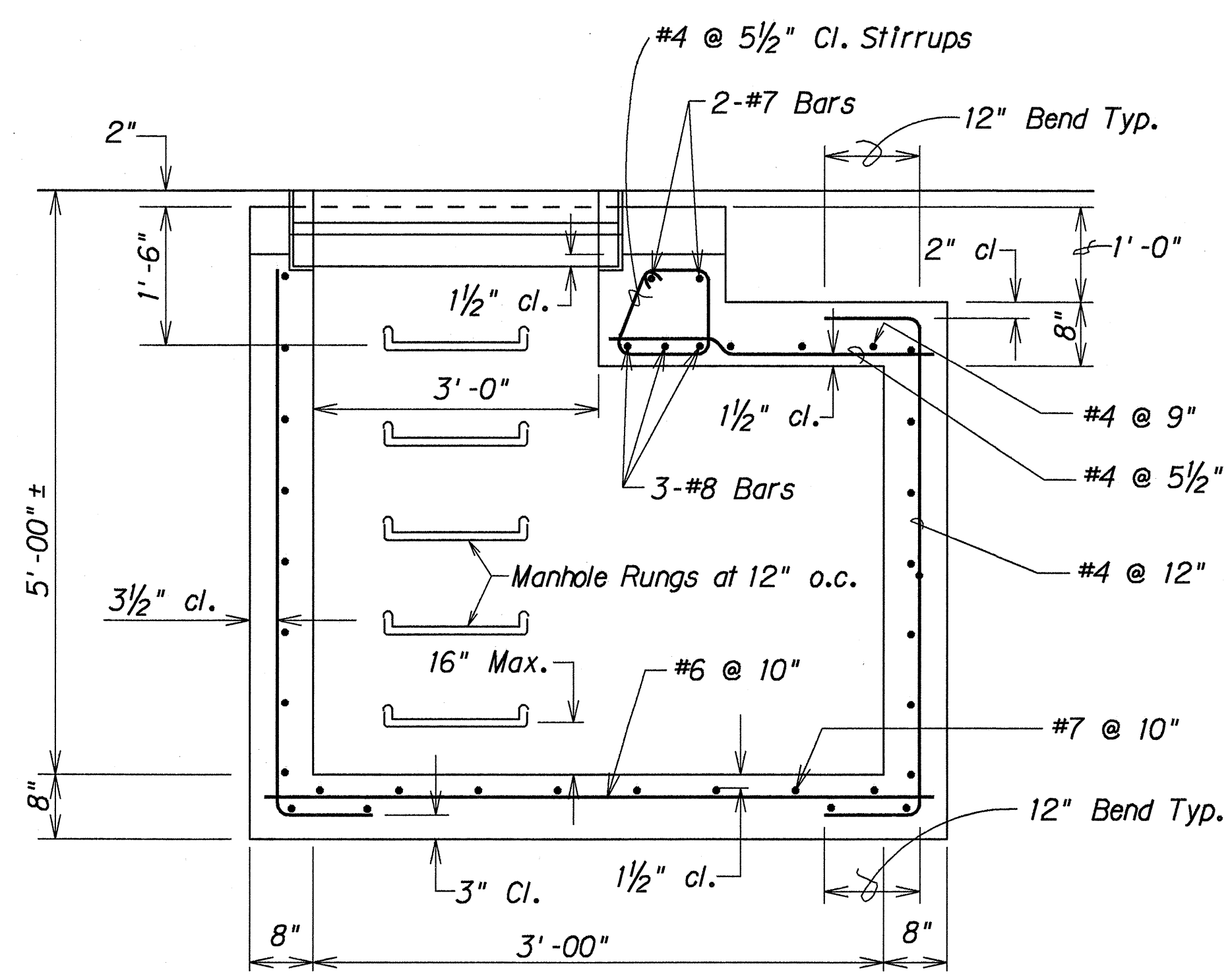
Type 61415B Steel Frame & Grates
For Details See Sht. No. 5

PLAN

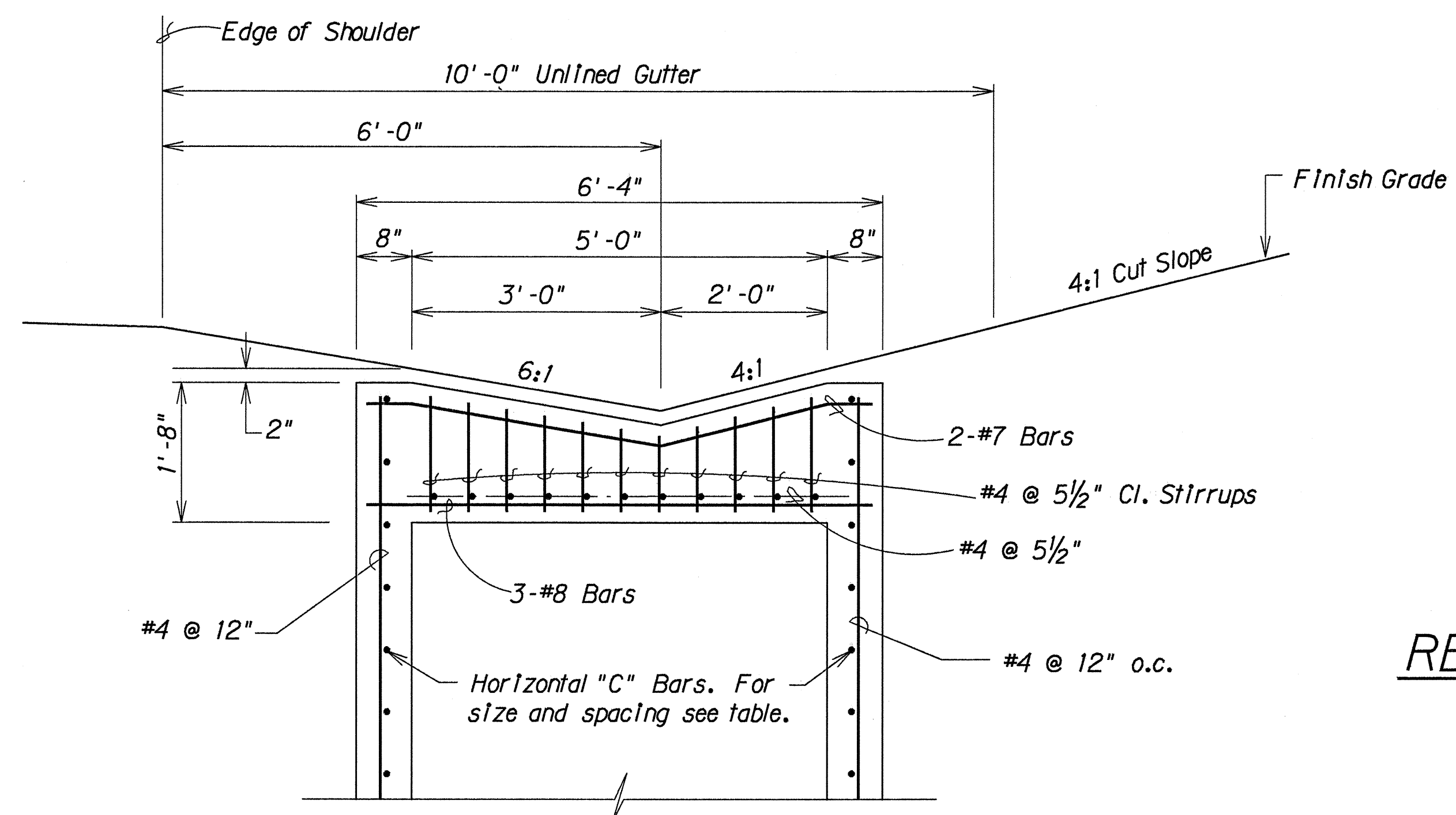
PLAN VIEW OF REINFORCING STEEL



ELEVATION



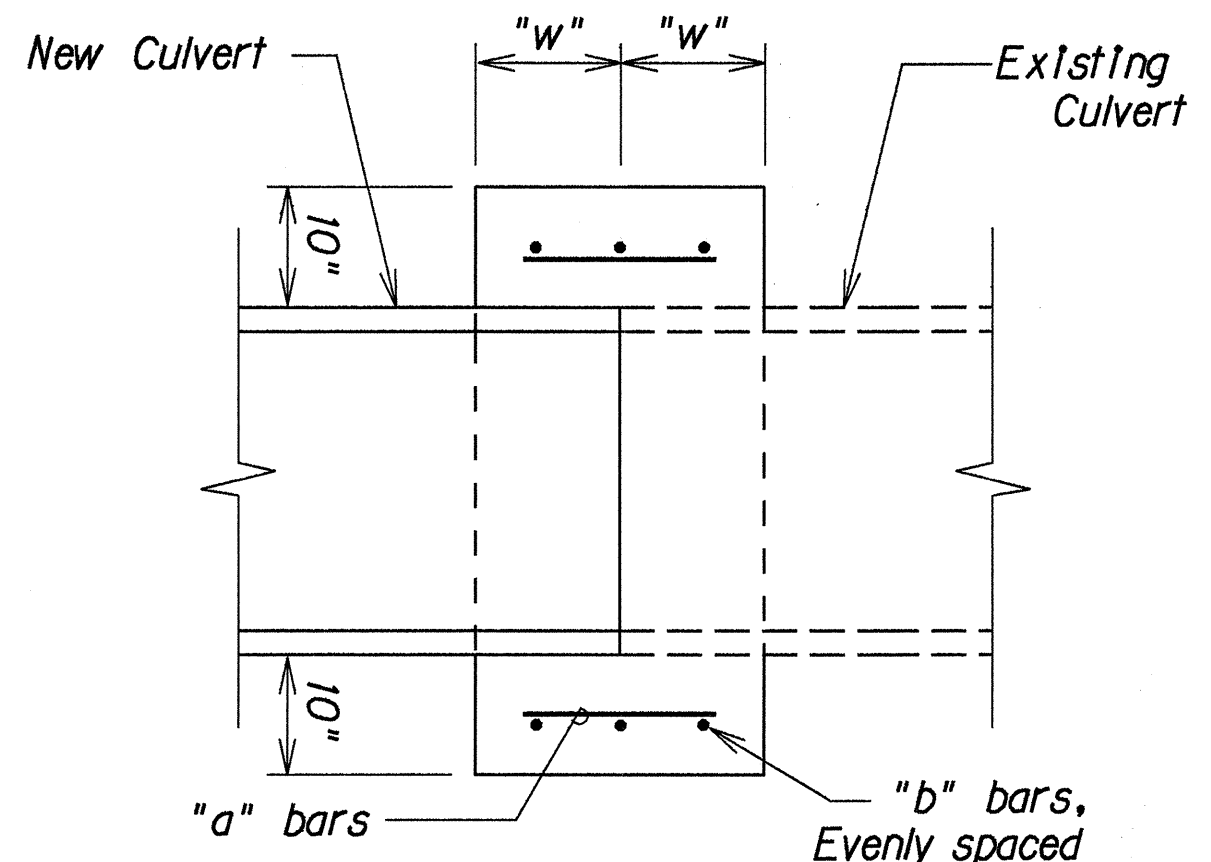
SECTION A
H12 H12



SECTION B
H12 H12

NOTE
Construct culvert seat @ GDI's as required.
For Detail, see Standard Plan Sht H-04

DETAILS OF TYPE I GDI



SECTION

TYPICAL DETAILS OF
REINFORCED CONCRETE COLLAR

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS
HALEAKALA HIGHWAY (PUKALANI BYPASS)
Right Turn Deceleration Lane at Makani Road
Project No. 37C-01-97
Scale: 3/4" = 1'-0" Date: March, 1997
SHEET No. 2 OF 3 SHEETS

