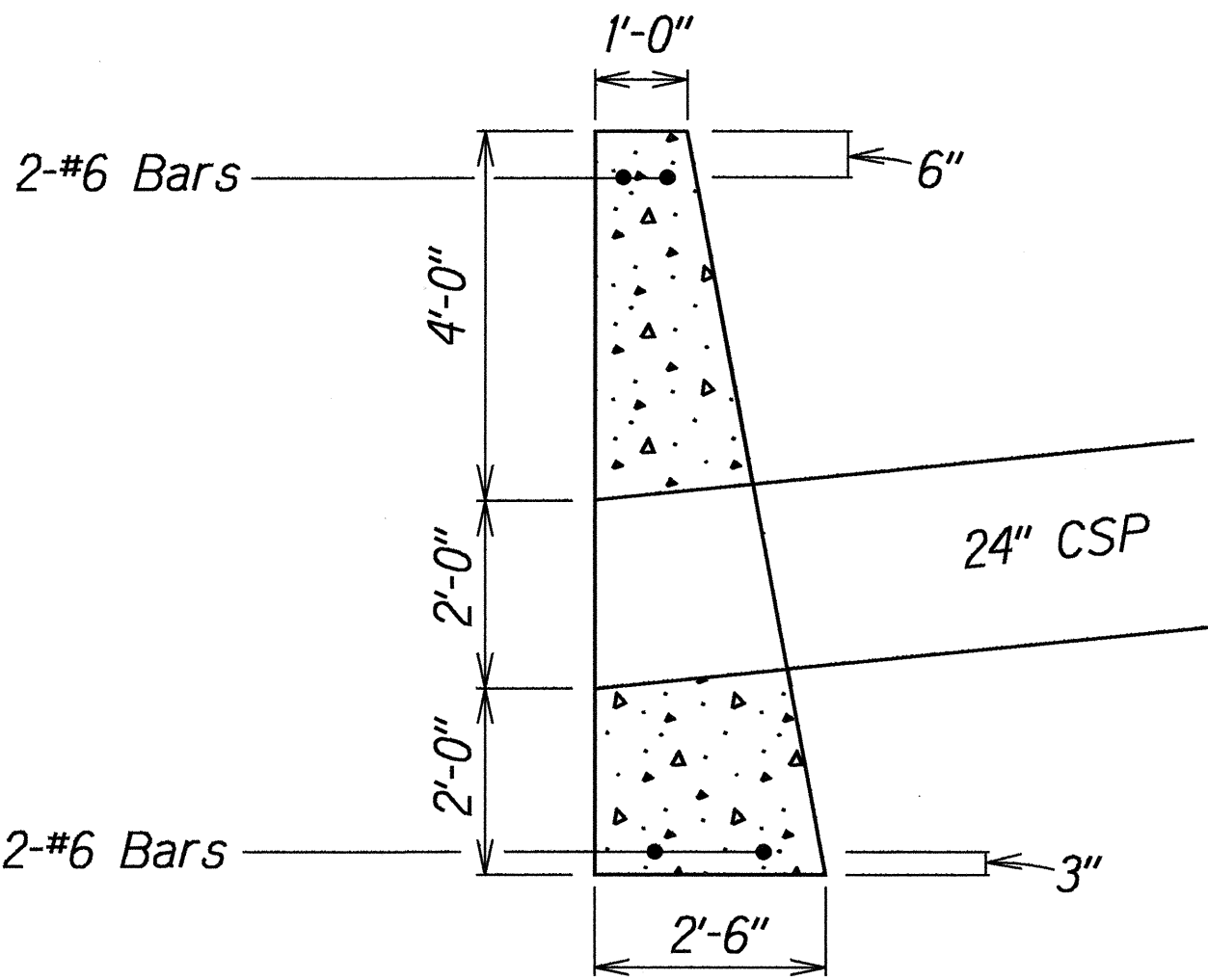


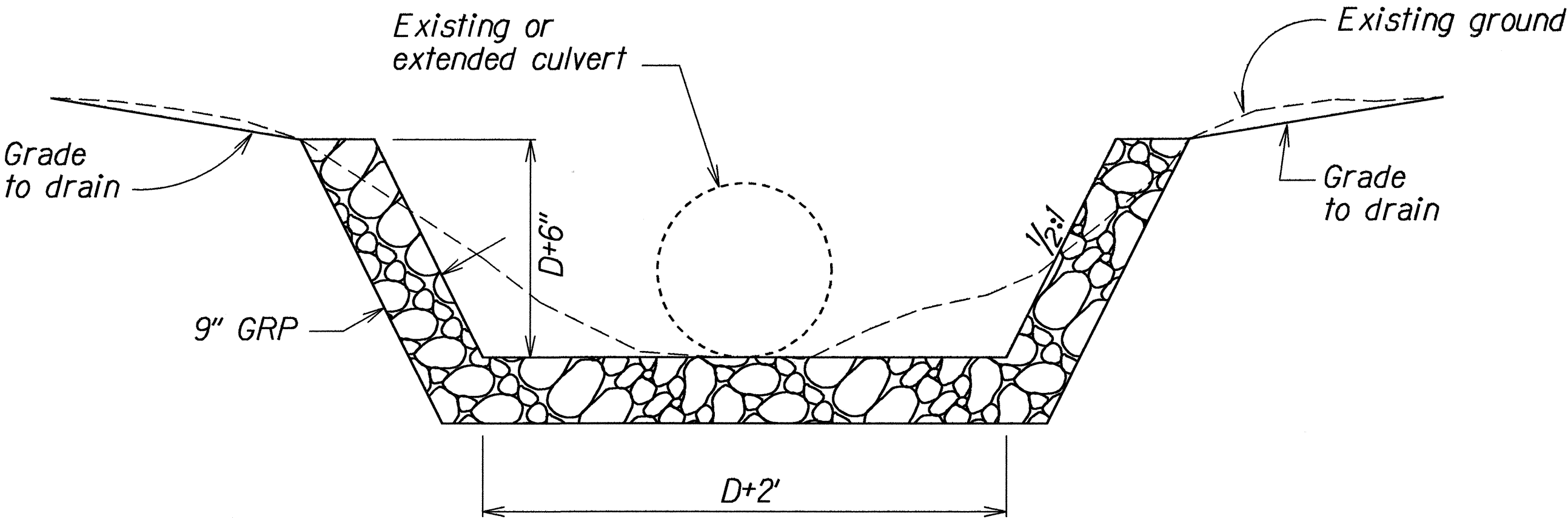
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-037-1(19)	1994	26	30

MISCELLANEOUS DRAINAGE NOTES:

- Existing drainage system will be functional at all times during construction. Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to accomplish maintenance of flow, the cost of which shall be incidental to the various contract items.
- Demolishing and removing a portion or the entire existing structure shall not be paid for separately, but shall be considered incidental to the various contract items.
- Culverts within the grated drop inlets shall be cut flush with the inside face of the wall. Above work shall be considered incidental to the various contract items.
- Contractor shall verify the locations of all culverts in the field. Any culvert damaged during construction shall be repaired or replaced by the Contractor at his expense.
- Concrete for grated drop inlets, headwalls and other structures shall be Class "A".
- Inlet and Outlet conditions shall be graded to permit free flow of run-off. Grading shall be to the satisfaction of the Engineer. Above work shall be considered incidental to the various contract items.
- The Contractor shall provide bedding materials for culvert, Class "C" bedding. Payment for this work will not be paid for separately but will be considered incidental to the appropriate Culvert pay items.
- The Contractor's attention is directed to Section 102.05 of the Standard Specifications. It is anticipated that borrow materials will be used to backfill the new drainage structures; culverts, etc. Payment for this work will be considered incidental to various Culvert pay items.
- Reinforcing Steel for Concrete Structures will not be paid for separately but shall be considered incidental to various concrete pay items.
- Location and elevations of new structures must be laid out in the field for the Engineer's approval.
- Chamfer all exposed edges 1".
- Furnishing and installing Coupling Band shall be considered incidental to CSP Culverts.



MODIFIED CONCRETE HEADWALL DETAIL
Scale: 1/2" = 1'-0"



TYPICAL SECTION OF GRP APRON
Scale: 3/4" = 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY J. Chaitan	1-3-94
NOTED BY	DESIGNED BY C. Radeski	
QUANTITIES BY	CHECKED BY	
BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS & NOTES
KULA HIGHWAY
GUARDRAIL & SHOULDER IMPROVEMENTS
Vicinity of Kekaulike Ave. to Lower Kula Rd.
Fed. Aid Proj. No. STP-037-1(19)
Scale: As Shown Date: March, 1994
SHEET No. 1 OF 1 SHEETS