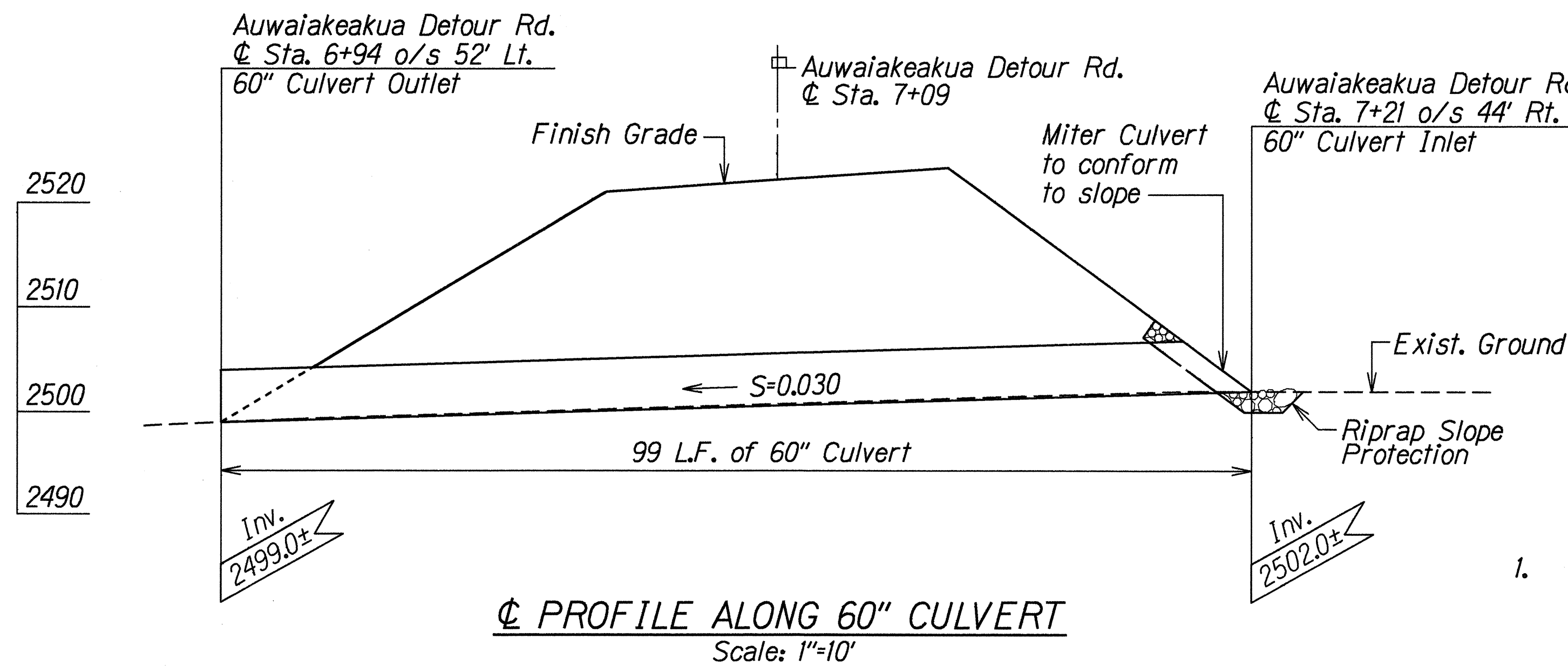
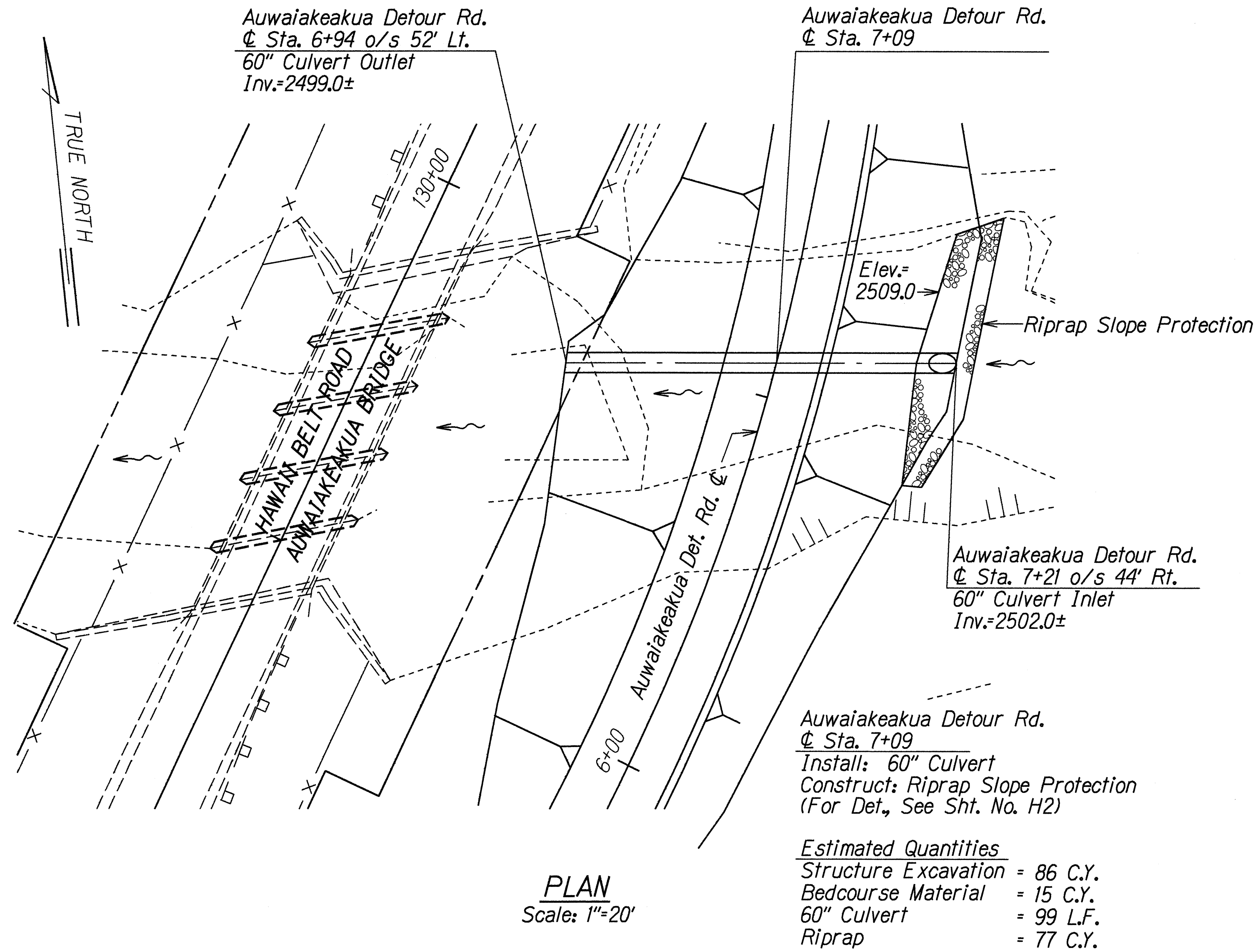
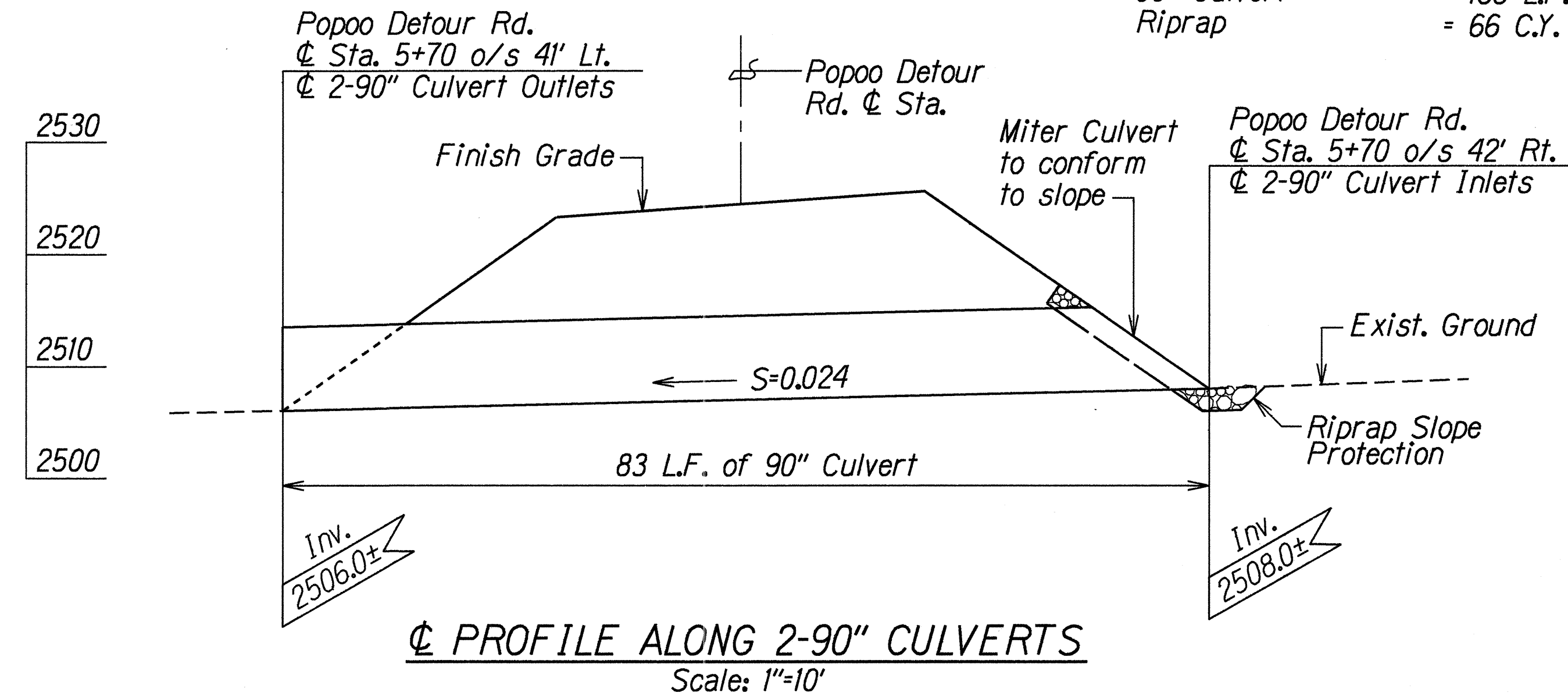
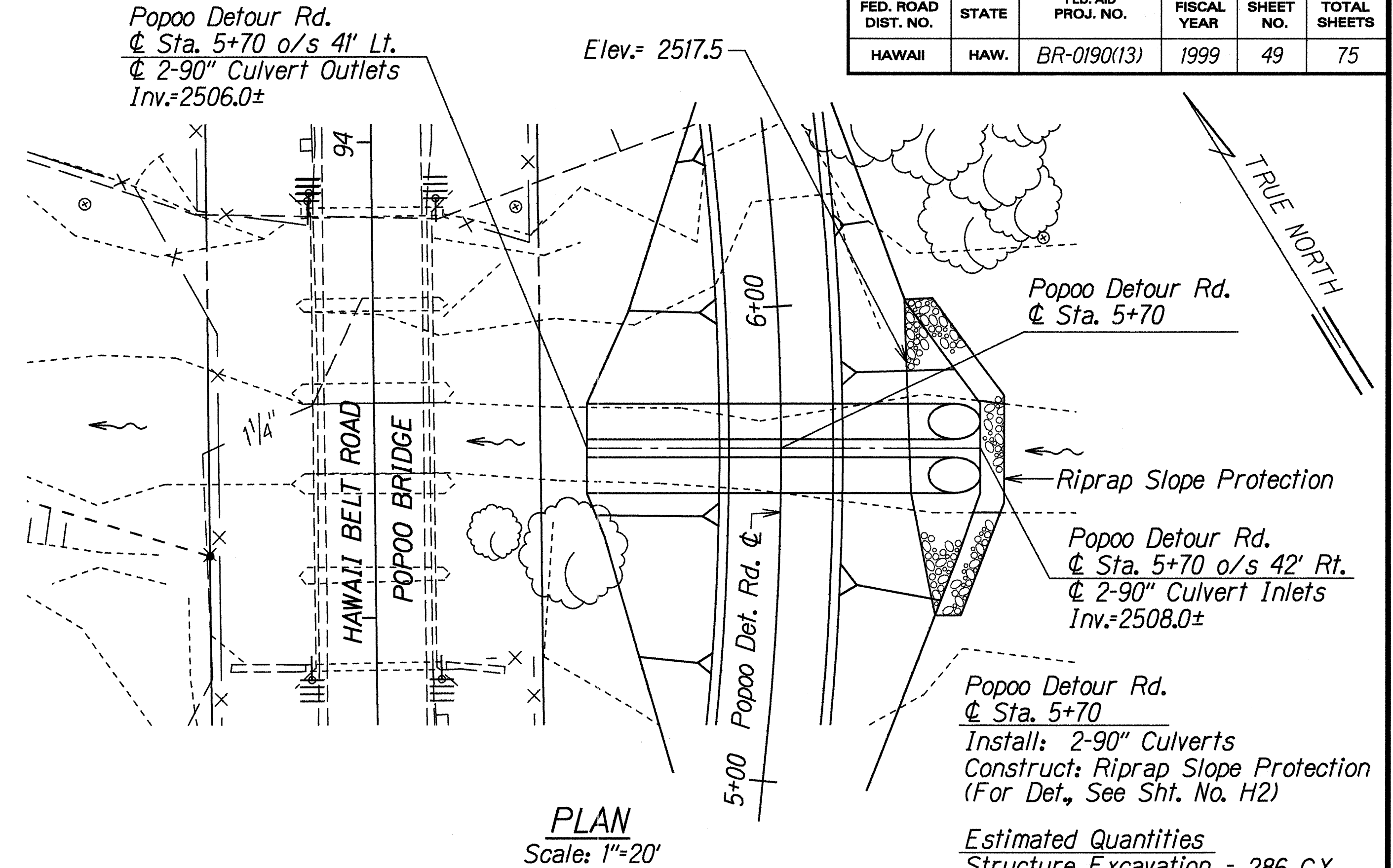


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	49	75



60" CULVERT AT AUWAIKEAKUA DETOUR RD. ¢ STA. 7+09



2-90" CULVERTS AT POPOO DETOUR RD. ¢ STA. 5+70

DRAINAGE 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 utilities in the field. Any existing utilities damaged during construction shall be repaired or replaced by the Contractor at his own expense.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

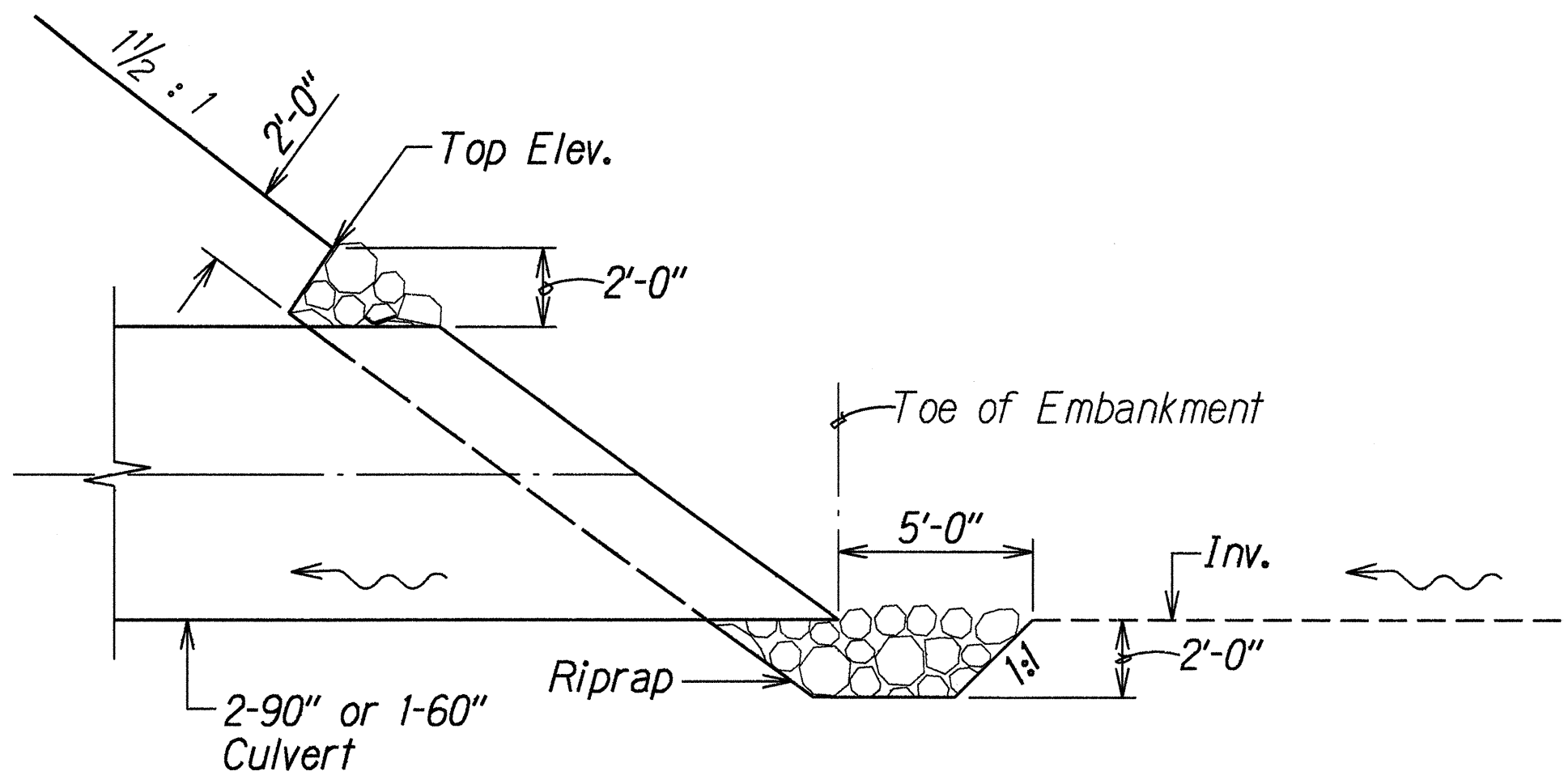
DRAINAGE PLAN

HAWAII BELT ROAD
Replacement of Auwaiakeakua
and Popoo Bridges
Federal Aid Proj. No. BR-0190(13)

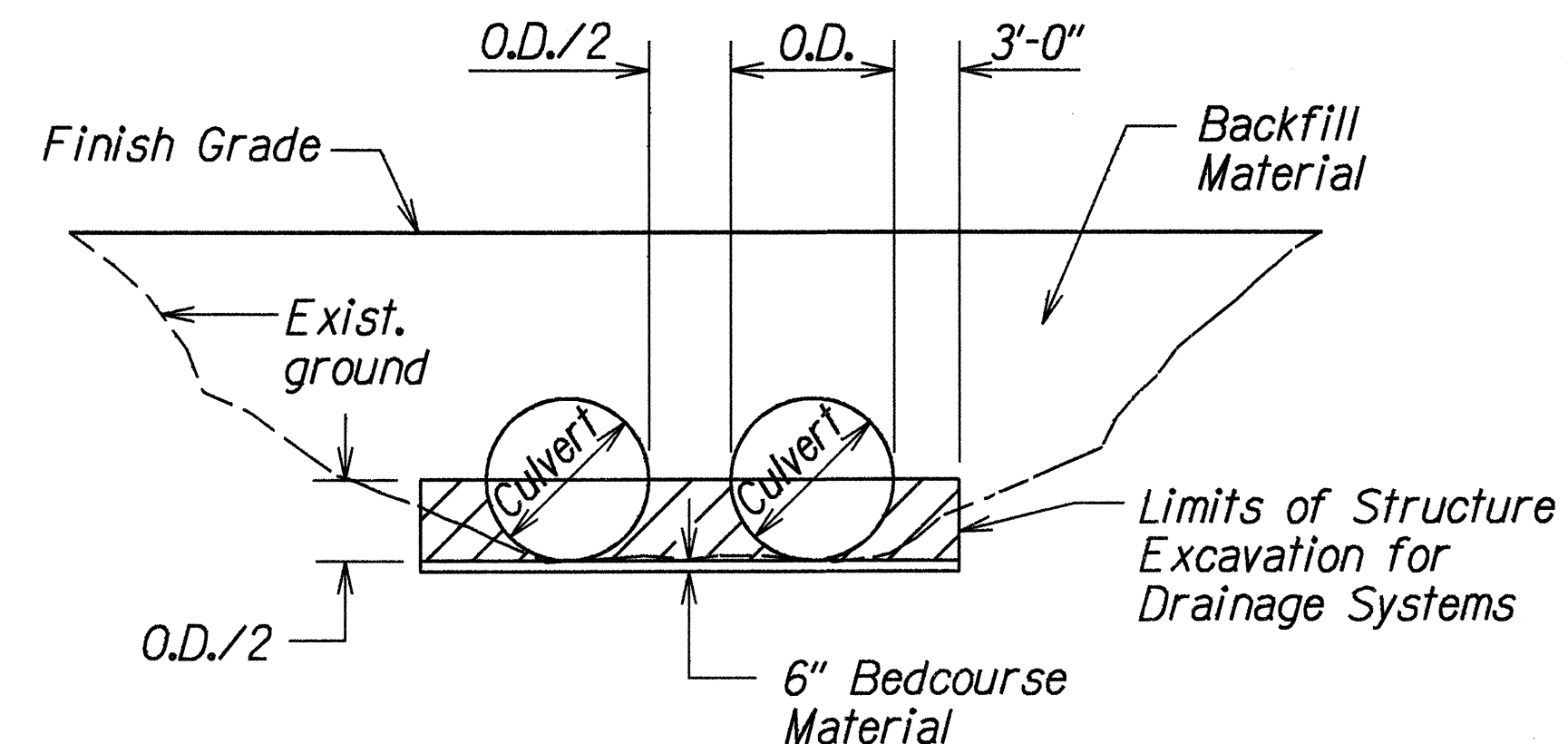
Scale: As Shown Date: July, 1998

SHEET No. H1 OF 2 SHEETS

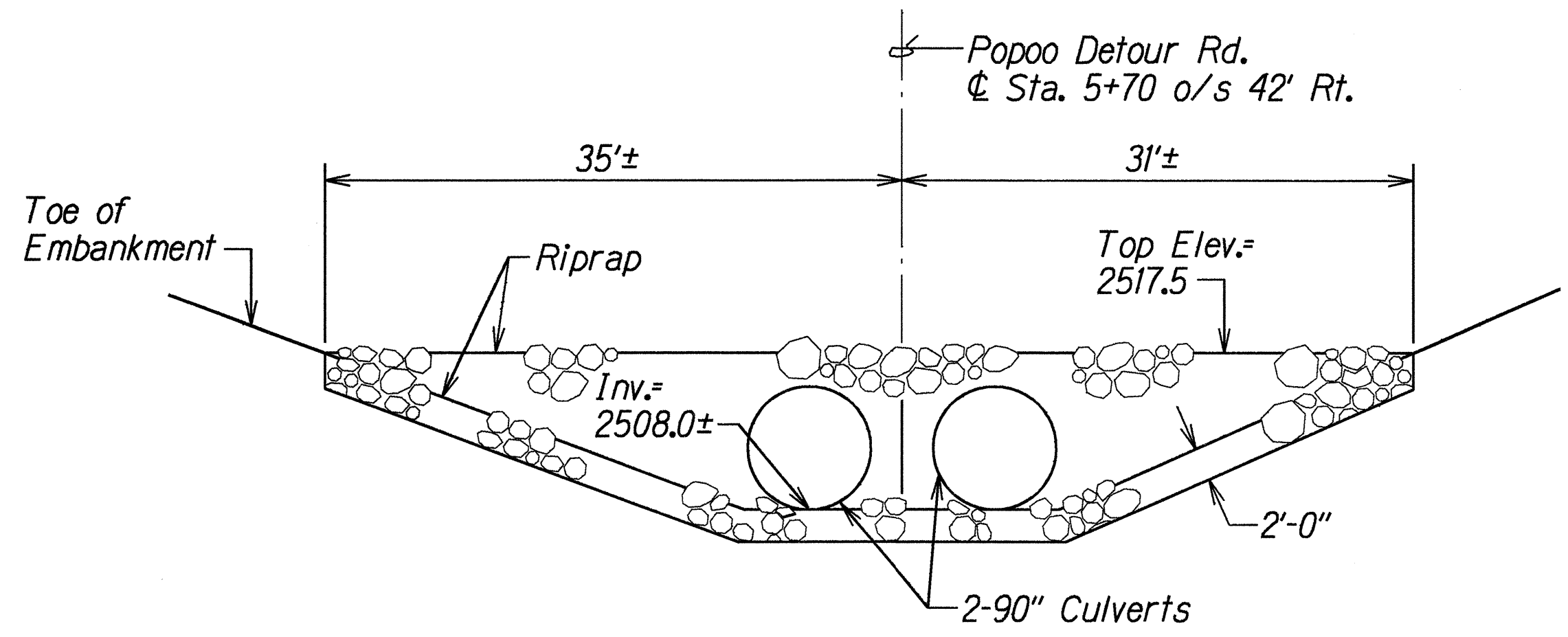
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	50	75



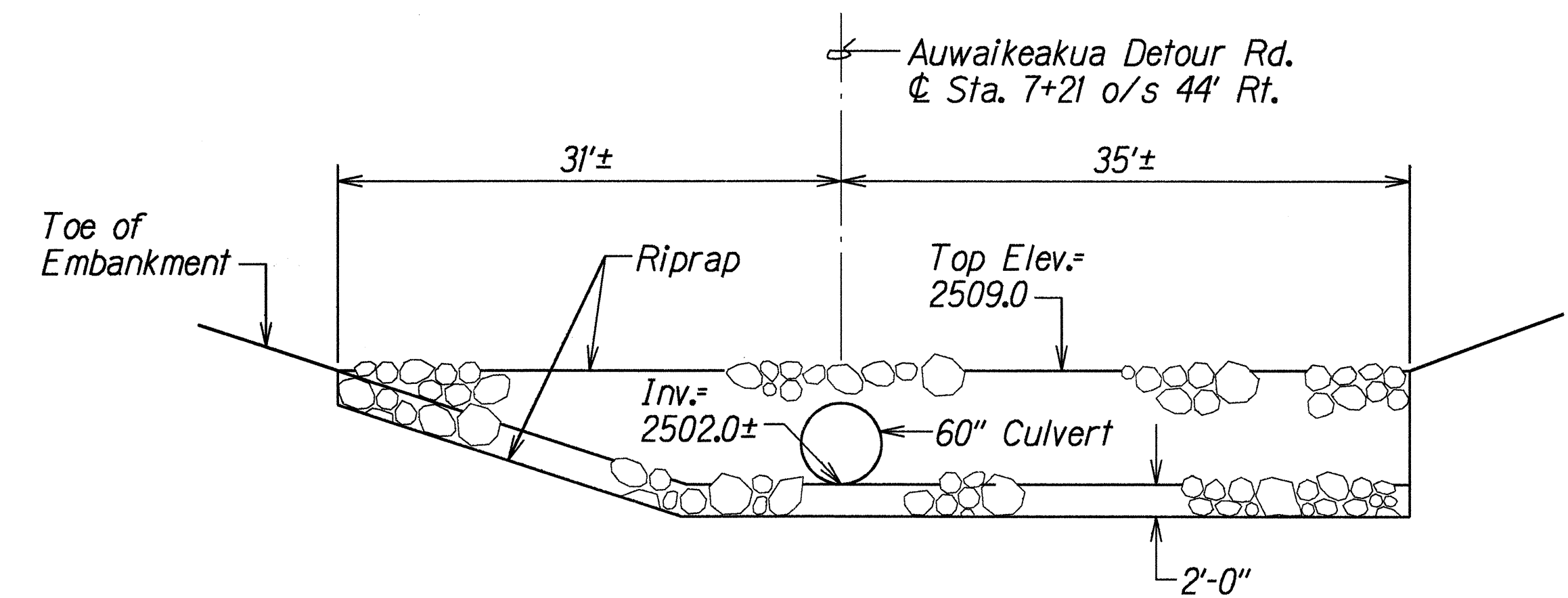
TYPICAL SECTION
Scale: 1/4" = 1'-0"



TYPICAL TRENCH RESTORATION DETAIL
Scale: 1/8" = 1'-0"



ELEVATION VIEW
Scale: 1/8" = 1'-0"



ELEVATION VIEW
Scale: 1/8" = 1'-0"

DETAILS OF RIPRAP SLOPE PROTECTION

ORIGINAL PLAN	DATE
SURVEY PLATTED BY	9/24/98
DRAWN BY Russell Sato	
DESIGNED BY C. Matsuda	
CHECKED BY	
NOTED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

HAWAII BELT ROAD
Replacement of Auwaikeakua
and Popoo Bridges
Federal Aid Proj. No. BR-0190(13)

Scale: As Shown Date: July, 1998

SHEET No. H2 OF 2 SHEETS