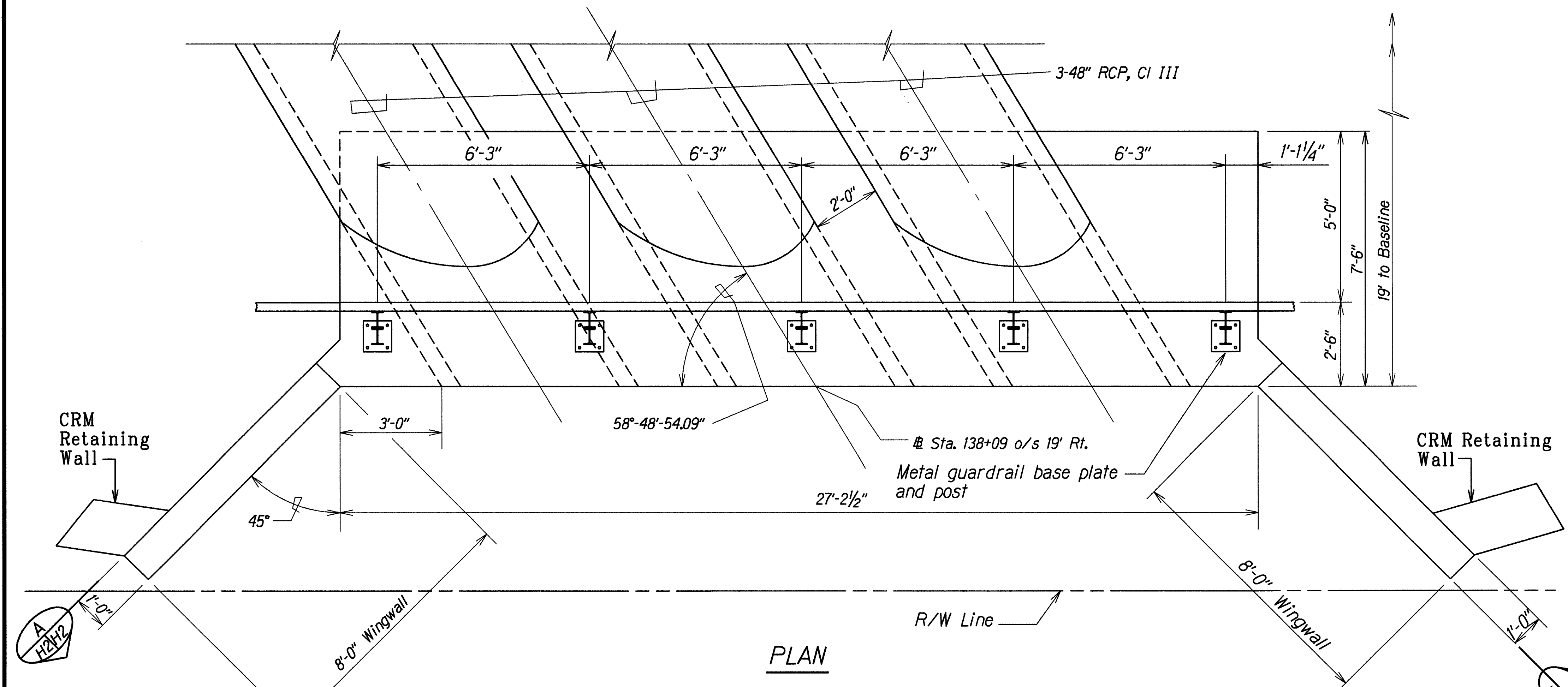


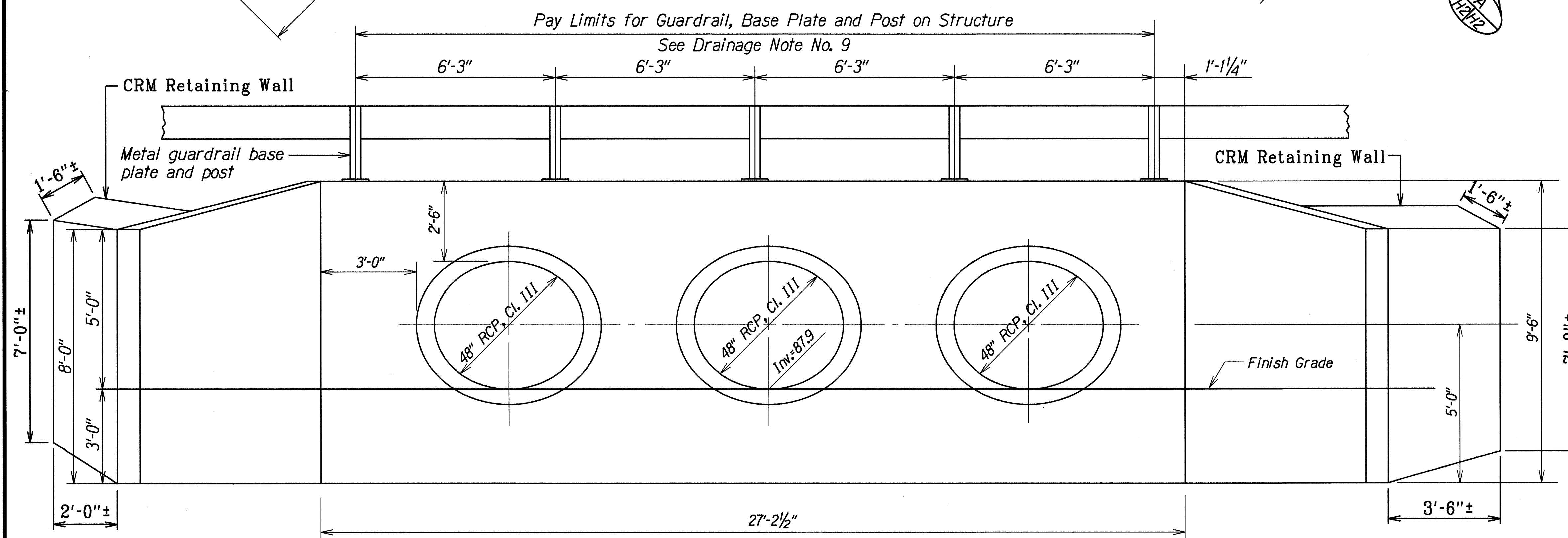
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-02-95M	1995	6	9

DRAINAGE NOTES

- All work shall conform to The Hawaii Standard Specifications for Road and Bridge Construction.
- All concrete shall have a minimum 28 day compressive strength of 3,000 psi.
- All deformed reinforcing steel shall have a minimum yield strength of 40 ksi.
- Foundation design is based on the following soil values:
Allowable Soil Bearing Pressure 2,500 psf
Active Pressure 35 pcf
Passive Pressure 300 pcf
Coefficient of Friction 0.4
- Existing drainage systems will be functional at all times during construction. The Contractor is to furnish materials, equipment, labor, tools and incidentals necessary to maintain flow. The cost for this work 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.
- Chamfer all exposed concrete edges 1 inch.
- Cost of removal of existing 36" pipes and appertenant structures shall not be paid for separately but shall be considered incidental to the structure excavation.
- The metal guardrail, base plate and post located on each headwall shall not be paid for separately but shall be considered incidental to Class A concrete.

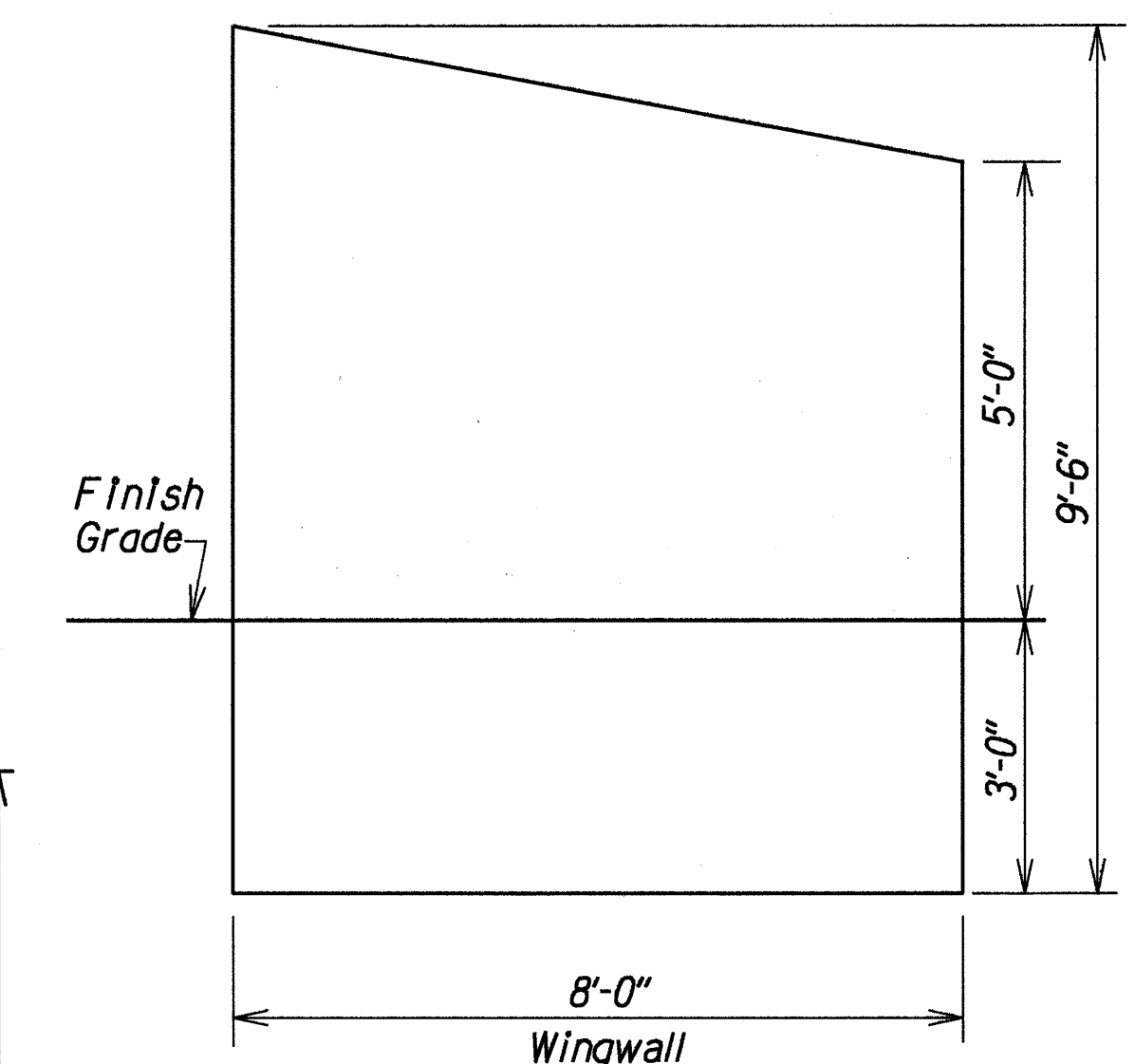


PLAN



FRONT ELEVATION

DETAIL OF INLET HEADWALL AT STA. 138+09 O/S 19' RT.



SECTION A

LEGEND FOR AS-BUILT POSTINGS

- Squiggly line for as-built deletion
- Double line for as-built deletion
- Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

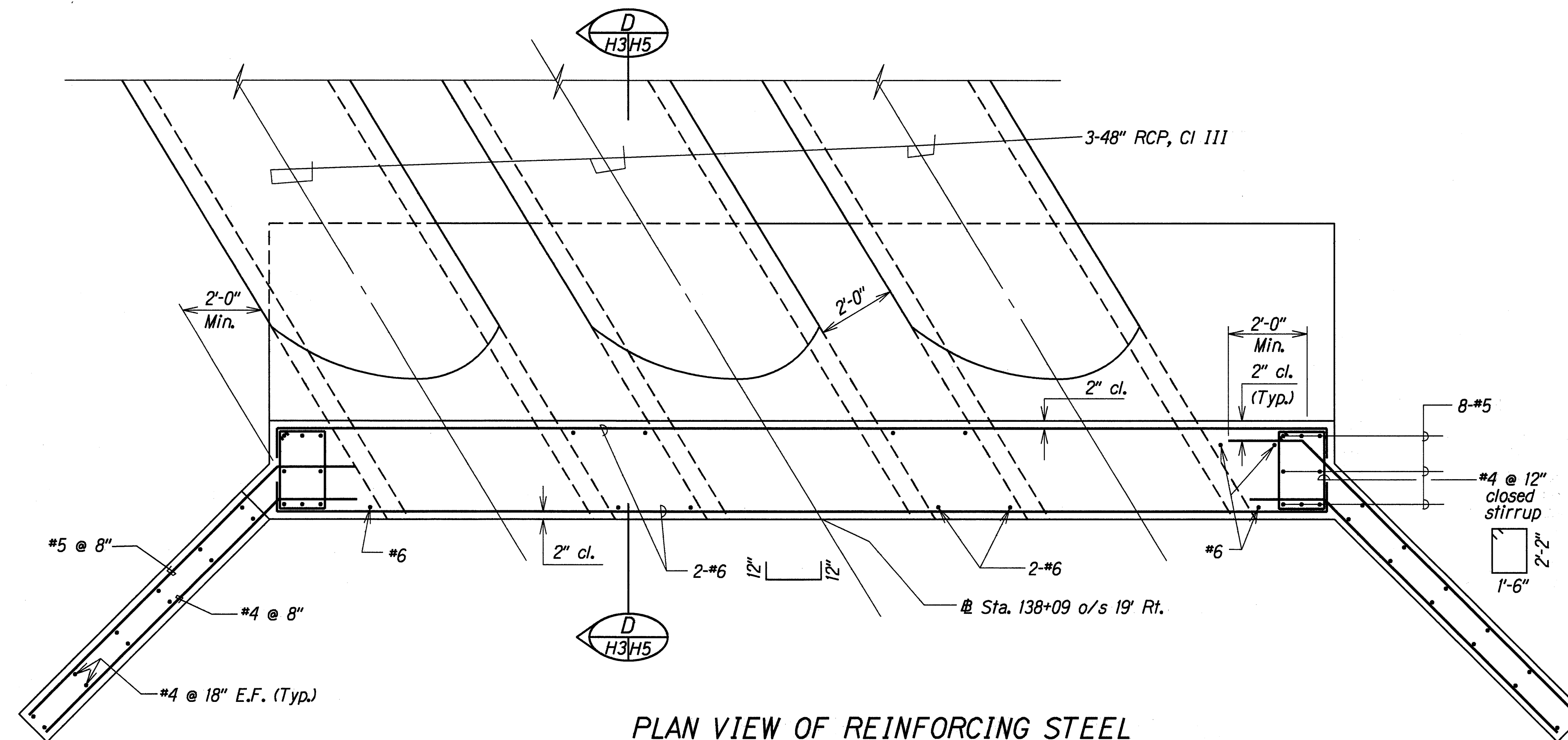
HANA HIGHWAY
Hanawana Stream Culvert Replacement
Proj. No. 360A-02-95M

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

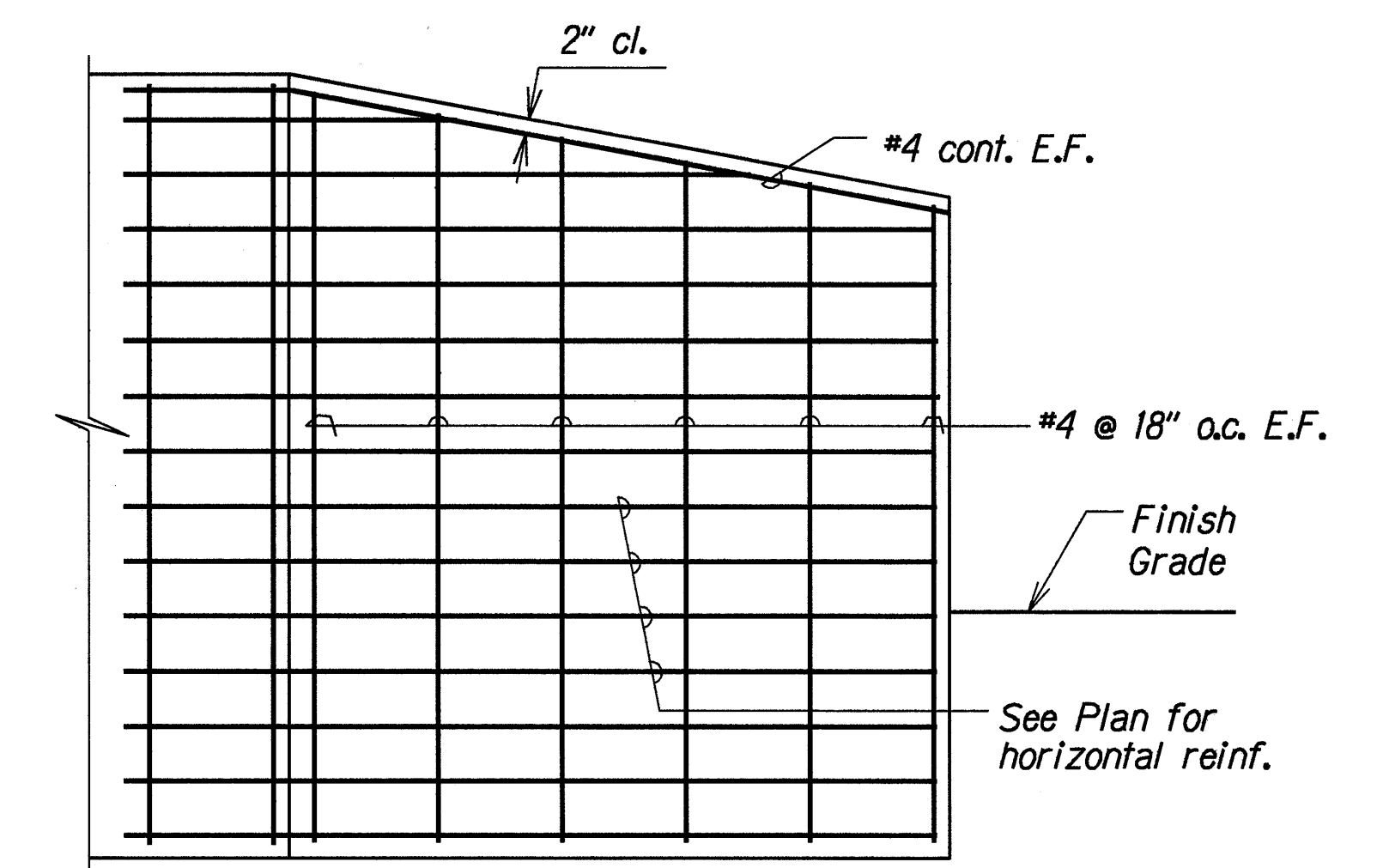
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SHEET No. H2 OF 5 SHEETS

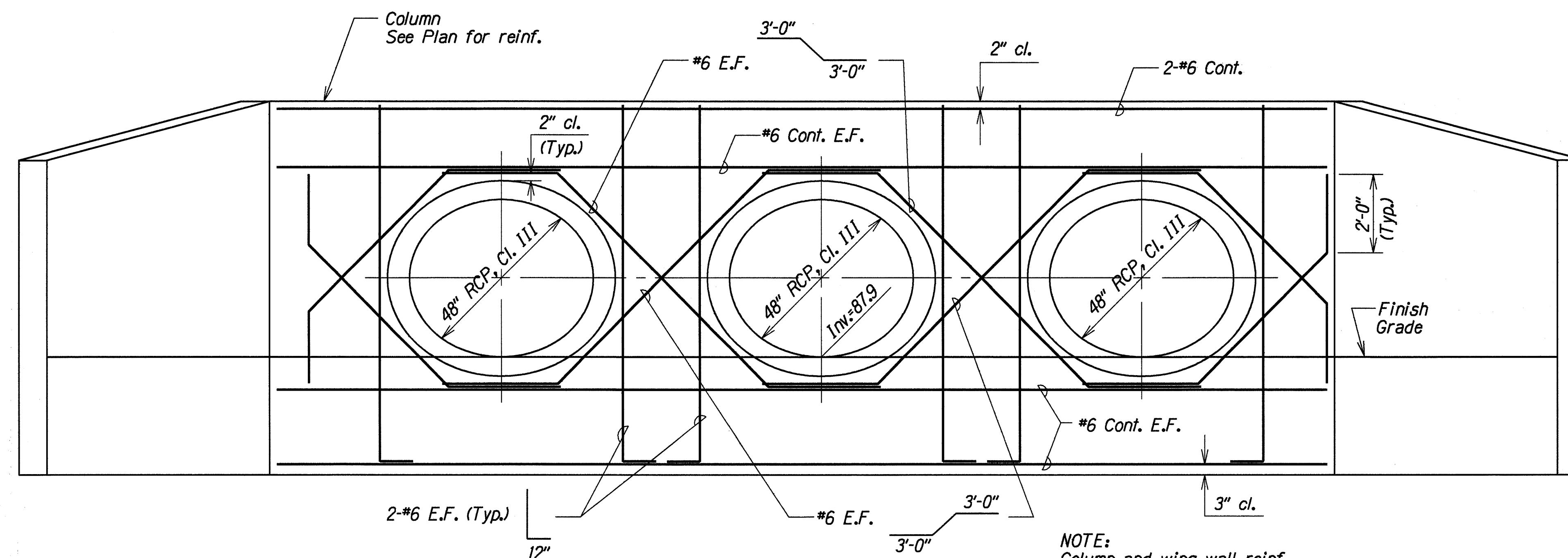
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	360A-02-95M	1995	7	9



PLAN VIEW OF REINFORCING STEEL



WALL REINFORCING FOR INLET WINGWALLS



ADDED REINFORCING FOR CULVERT OPENINGS

DETAIL OF INLET HEADWALL AT STA. 138+09 O/S 19' RT.

ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DRAWN BY	
NOTED BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

HANA HIGHWAY
Hanawana Stream Culvert Replacement
Proj. No. 360A-02-95M

Scale: 1/2"=1'-0" Date: Aug, 1994

SHEET No. H3 OF 5 SHEETS

