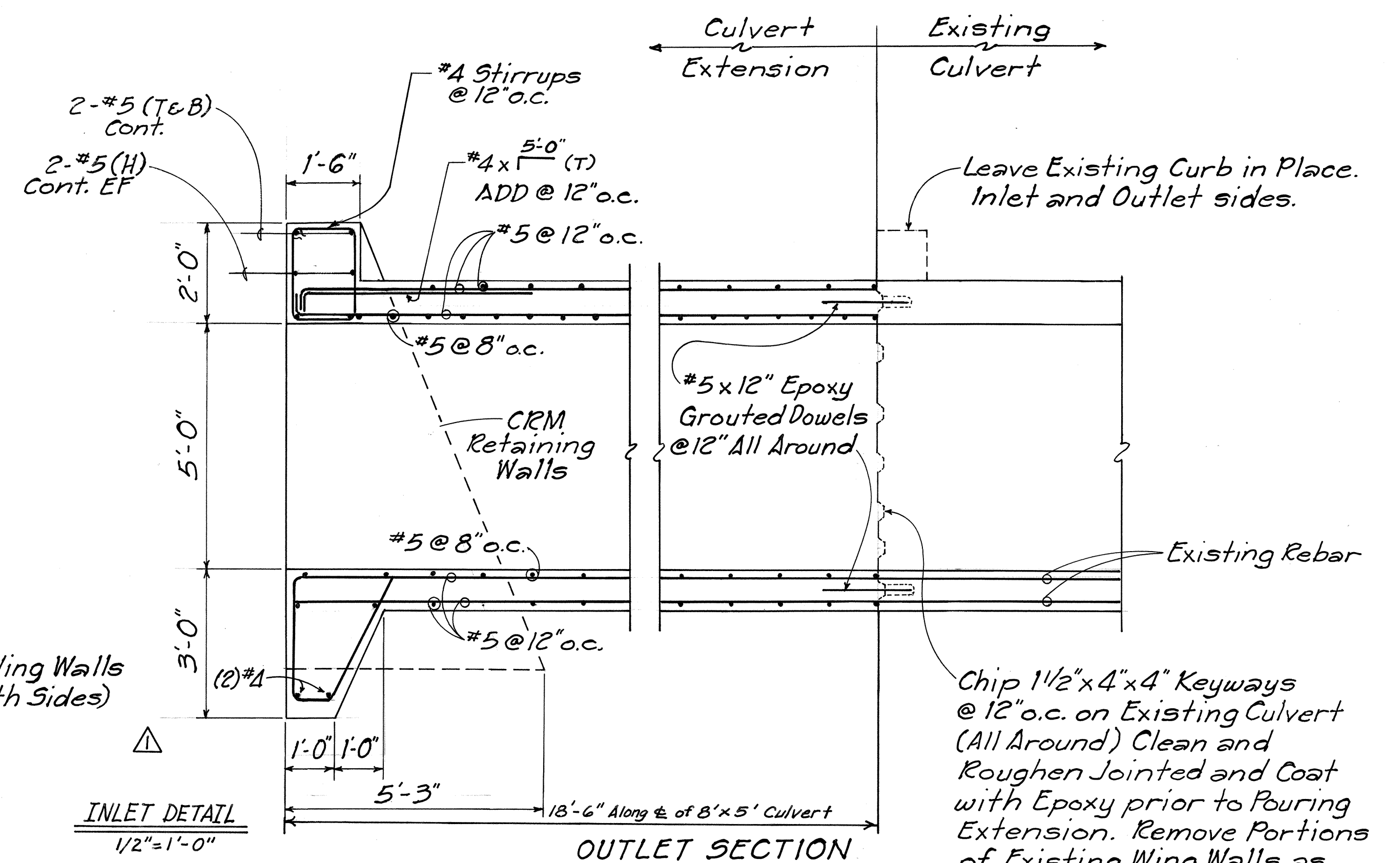
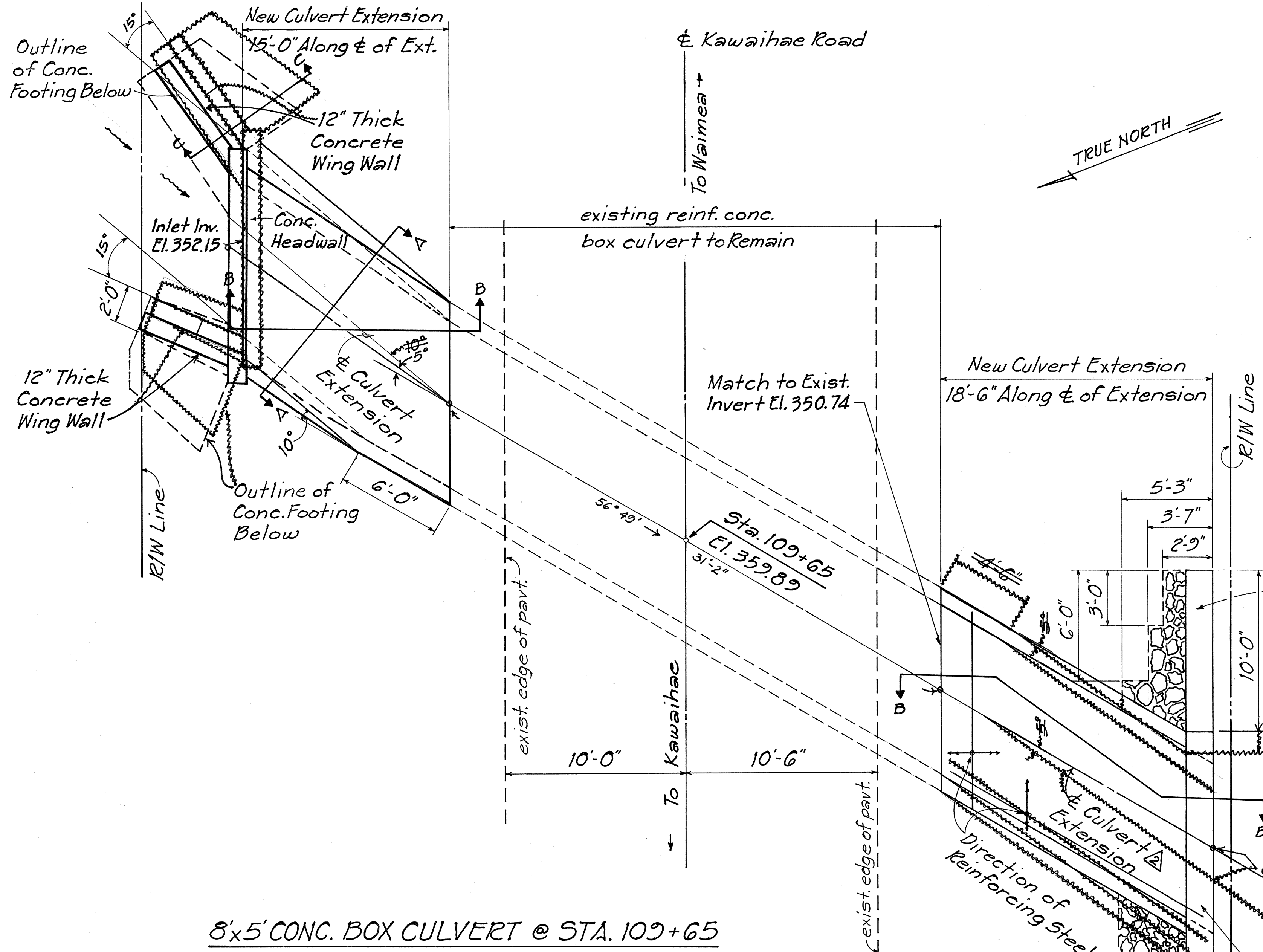
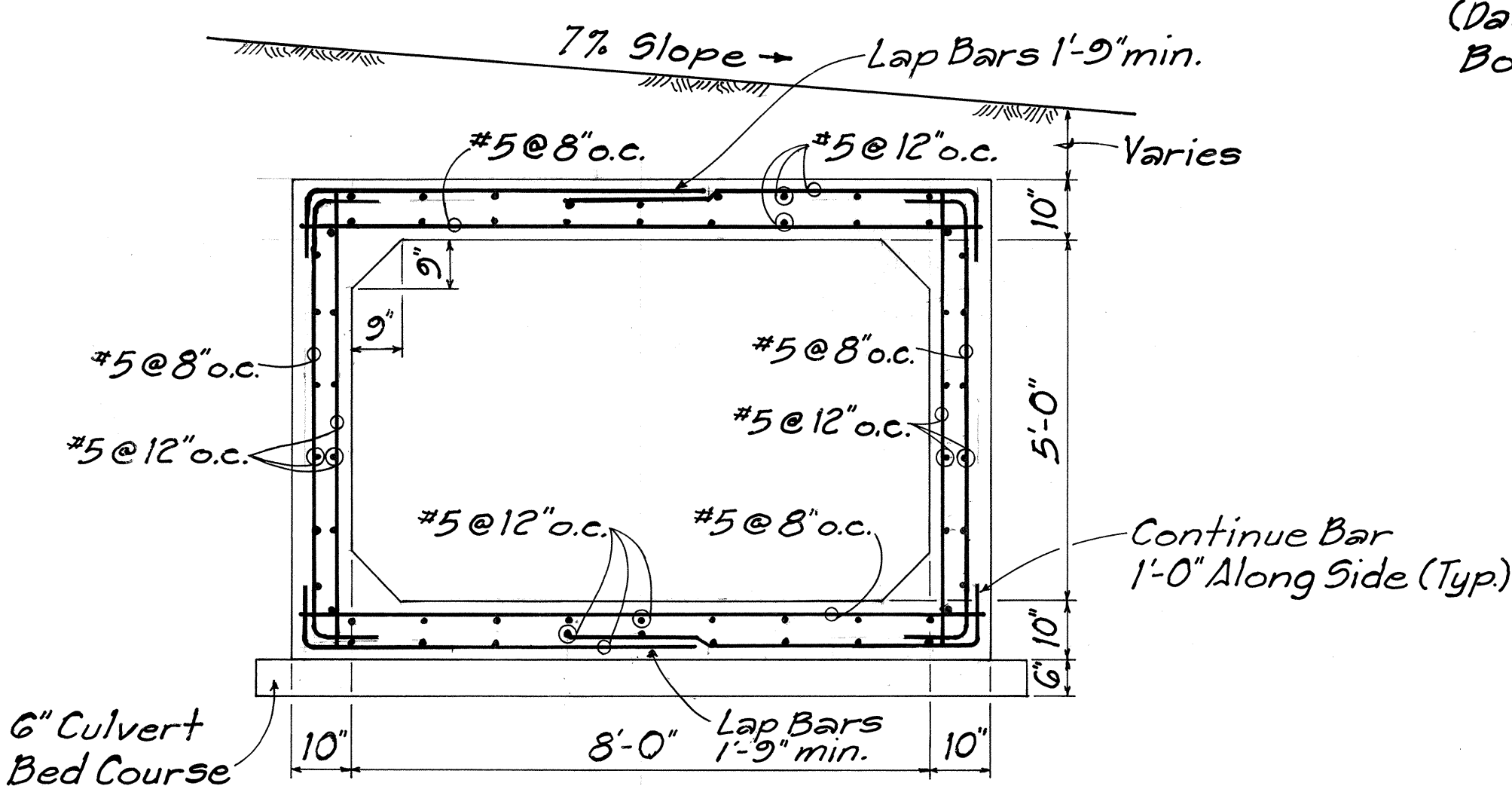


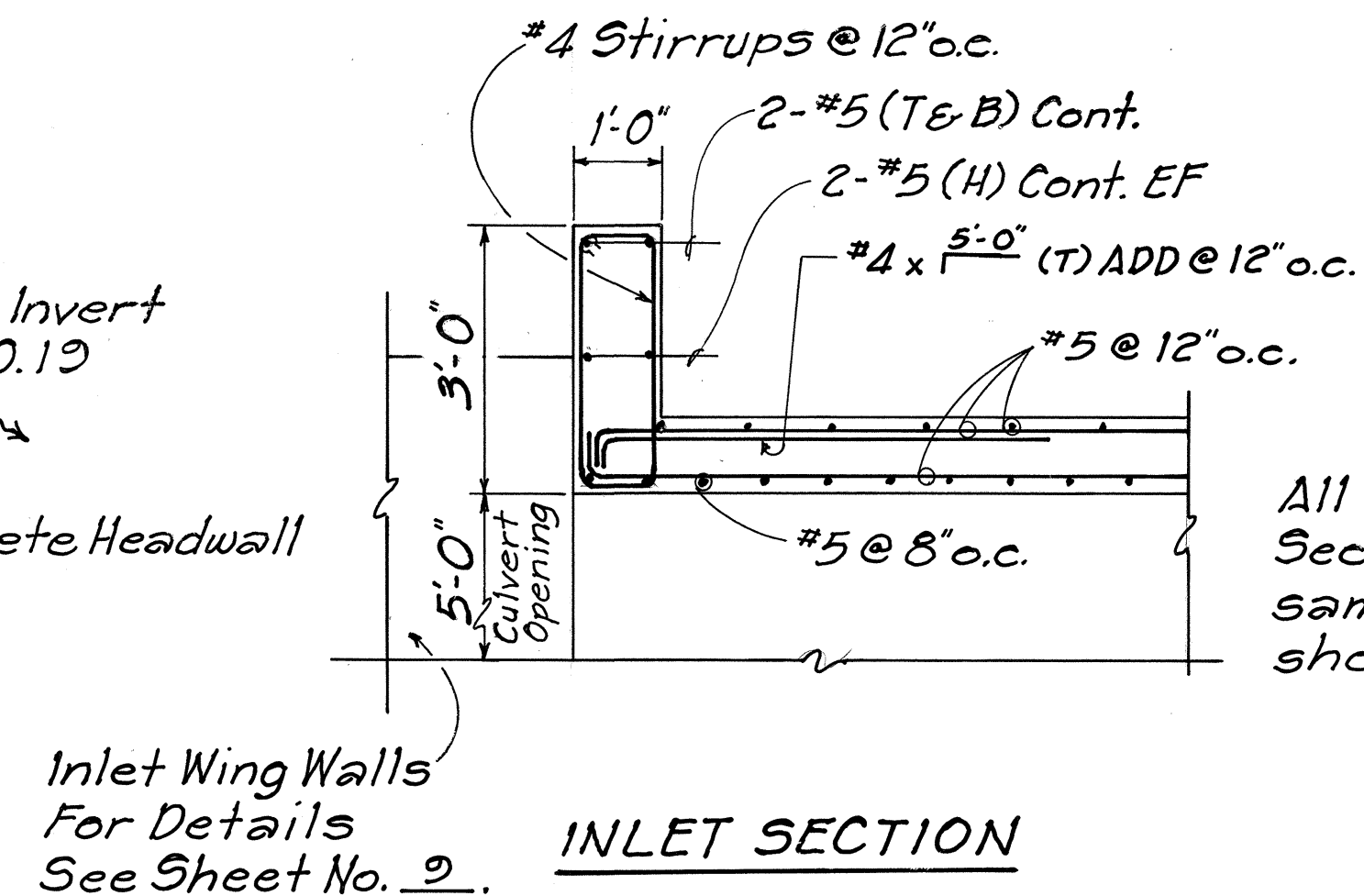
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19D-01-92M	1992	8	18



8x5' CONC. BOX CULVERT @ STA. 109+65
Scale: 1/4" = 1'-0"



BOX CULVERT "A-A"
CROSS SECTION, NORMAL to ϵ
Scale: 1/2" = 1'-0"



HEADWALL DETAIL - SECTION "B-B"
Scale: 1/2" = 1'-0"

- Note:
1. All exposed head and wing wall concrete edges to be Chamfered 1/2"
 2. All Concrete Cover over Reinforcing Steel to be 3".
 3. For Concrete Inlet Wing Wall Details, See Sheet No. 2.
 4. For CRM Wall At Culvert Outlet, See Sheet No. 2

9-16-92 REVISED OUTLET DETAILS
9-16-92 INLET DETAIL

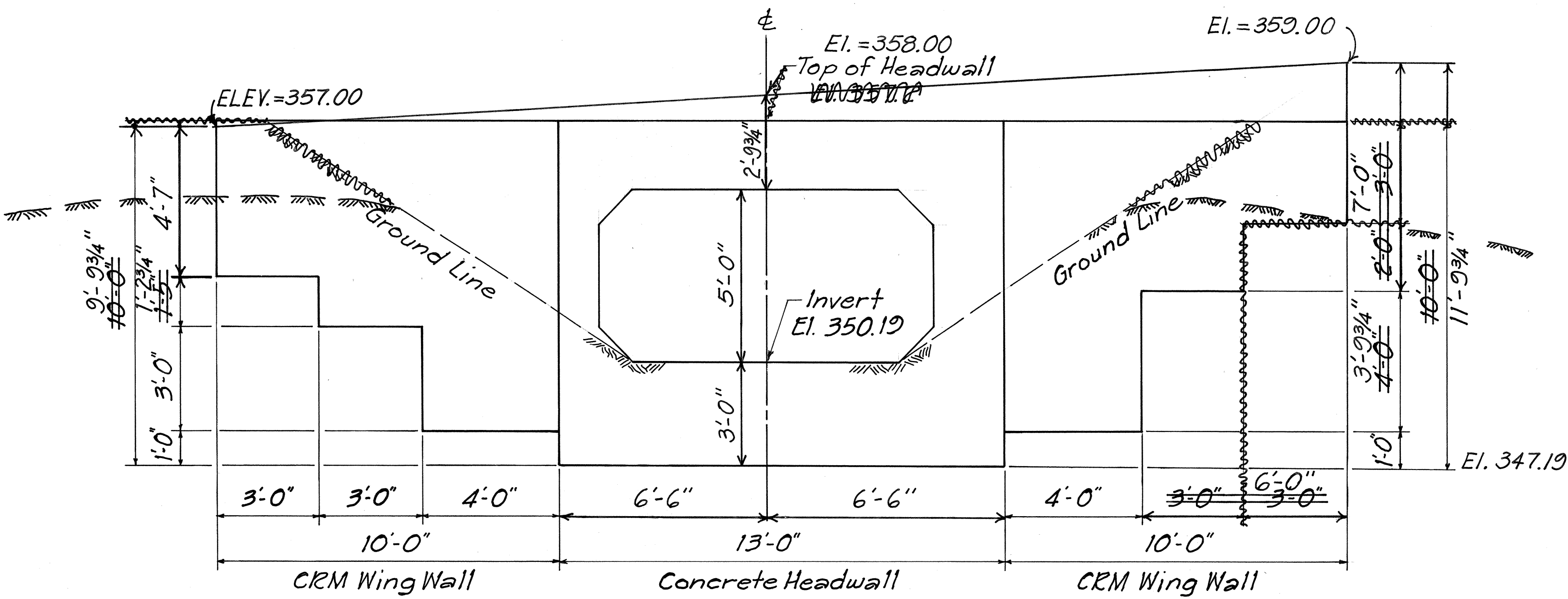
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

8x5' CONC. BOX CULV. DETAIL

KAWAIHAE ROAD
CULVERT EXTENSIONS
PROJECT NO. 19D-01-92M

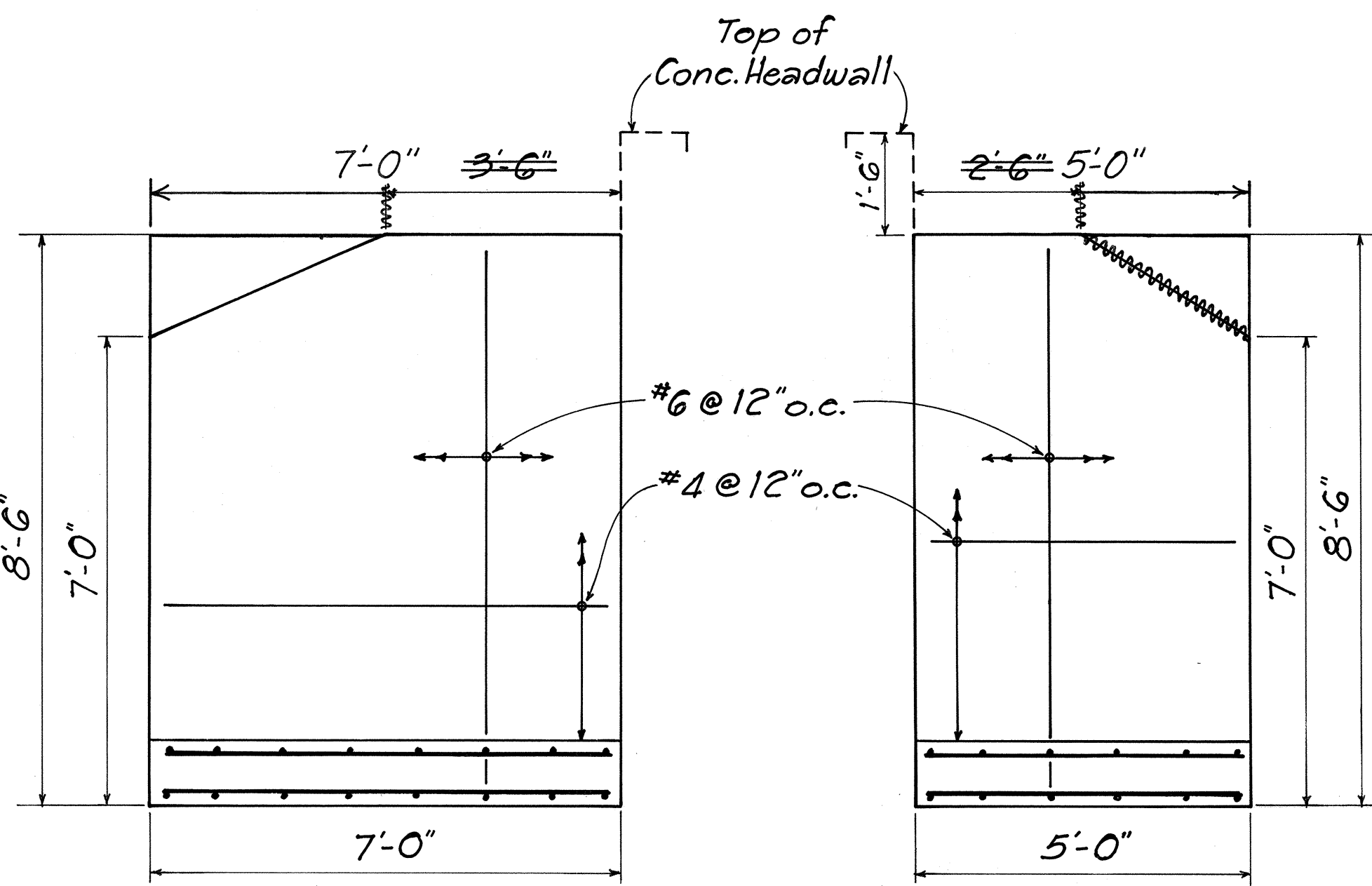
Scale: As Noted Date: Apr. 1992

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19D-01-92M	1992	2	18

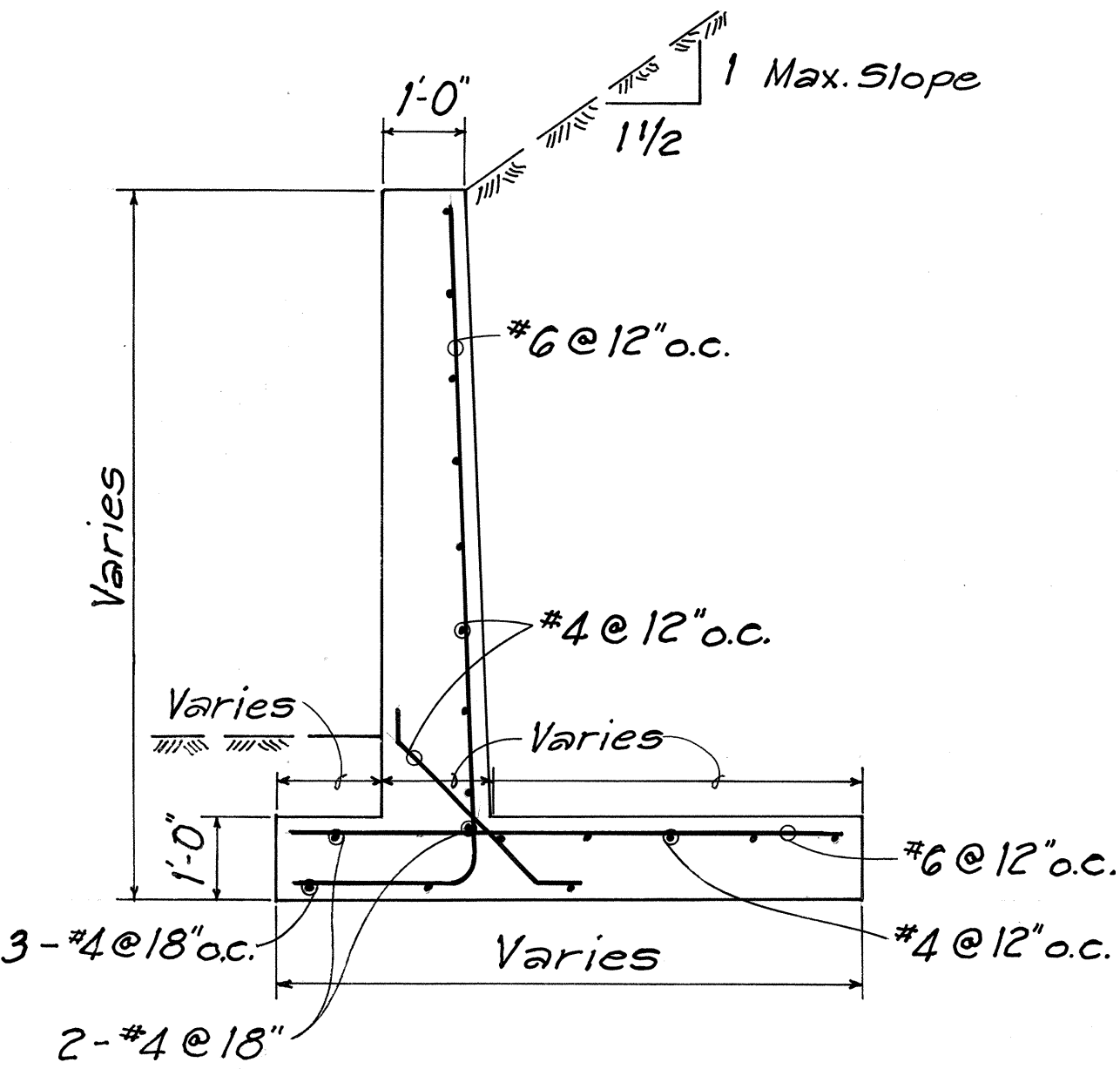


CRM WALL AT CULVERT OUTLET
Scale: 3/8" = 1'-0"

Note: Refer to Sheet No. 3 for
Typical Section of CRM Wall.



ELEVATION

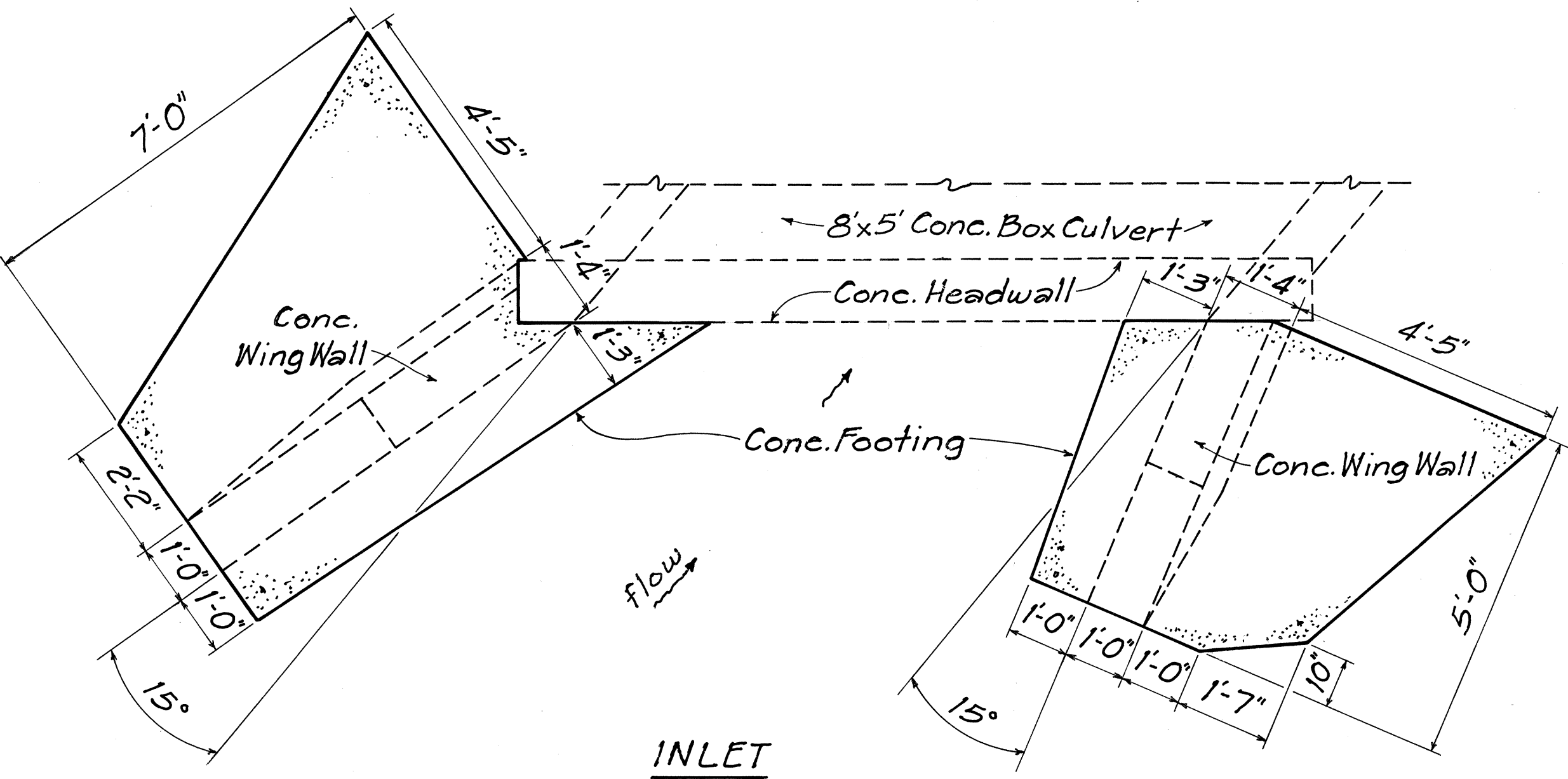


SECTION "C-C"

INLET WING WALL DETAILS
Scale: 1/2" = 1'-0"

DRAINAGE NOTES:

1. It shall be the Contractors Responsibility to Provide Adequate Temporary Shoring and Bracing of the Structure for all Loads that may be Imposed upon it during construction.
2. Foundations shall Rest on Well Compacted Material or Bedrock. Soft Spots shall be Removed and Replaced with Compacted Granular Backfill Material.
3. Demolition of Portions of the Existing Culverts shall be considered incidental to the various contract items.
4. Existing drainage system will be functional at all times during construction. 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.



WING WALL FOOTING DETAIL
Scale: 1/2" = 1'-0"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
8'x5' CONC. BOX CULV. DETAIL

KAWAIHAE ROAD
CULVERT EXTENSIONS
PROJECT NO. 19D-01-92M
Scale: As Noted Date: Apr. 1992
SHEET NO. 2 OF 2 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	