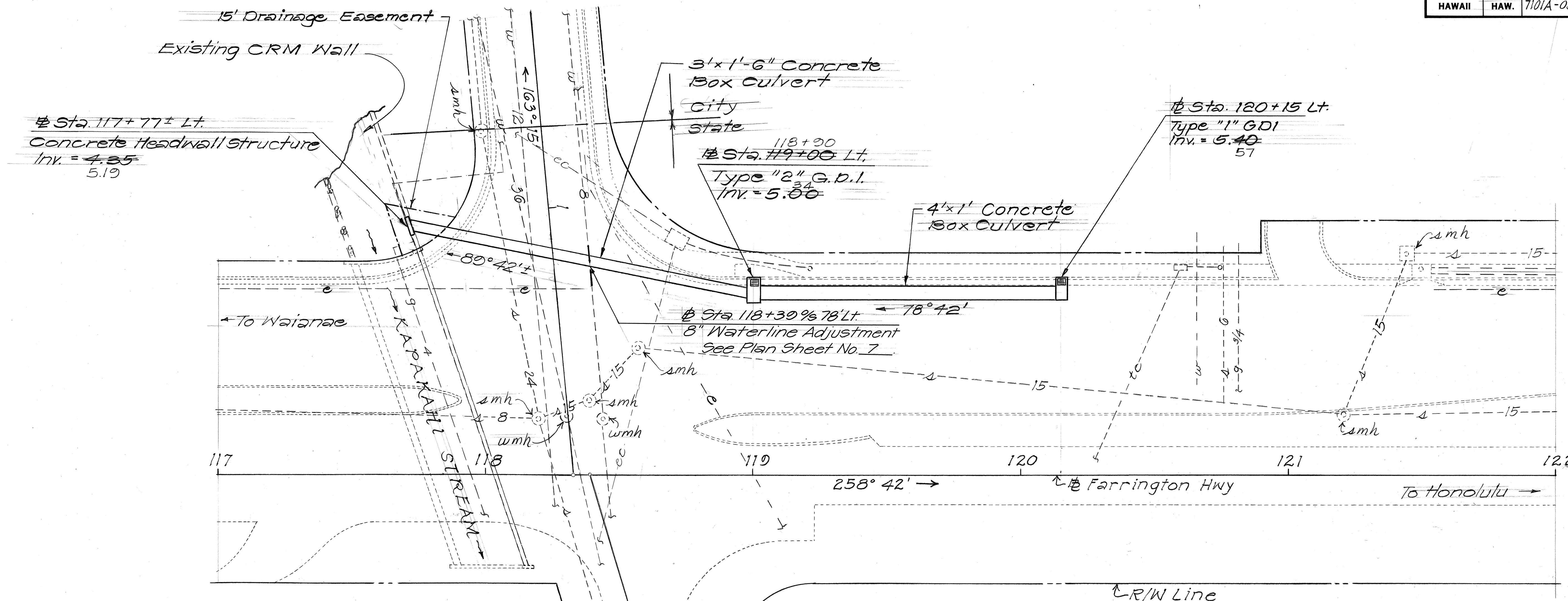


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-03-89	1990	C.O. ADD.6	15



Sta. 117+77.1 to Sta. 119+00 Lt.
Construct: Concrete Headwall Structure
(For detail, see Plan sht. no. C.O. 11.)
Type "2" Grated Drop Inlet
(For detail, see Plan sht. no. C.O. 10.)
Install: 3'x1'-6" Concrete Box Culvert
(For detail, see Plan sht. no. 8.)

Estimated Quantities
Structural Excavation = 123 C.Y.
3'x1'-6" Precast Module = 31 Ea.
Class A Concrete = 4 C.Y.
Reinforcing Steel = 210 Lb
Type "2" Grated Drop Inlet
2.00 ft. to 2.00 ft. = 1 Ea.
Aggregate Base Course = 30 C.Y.
Asphalt Concrete Base = 46 Tons

Sta. 119+00 Lt. to Sta. 120+15 Lt.
Construct: Type "1" Grated Drop Inlet
(For detail, see Plan sht. no. C.O. 9.)
Install: 4'x1' Concrete Box Culvert
(For detail, see Plan sht. no. 8.)

Estimated Quantities
Structural Excavation = 133 C.Y.
4'x1' Precast Module = 27 Ea.
Type "1" Grated Drop Inlet
2.00 ft. to 2.00 ft. = 1 Ea.
Asphalt Concrete Base = 22 Tons

PLAN
Scale: 1" = 20'

DRAINAGE NOTES:

- Existing Drainage System shall be functional at all times during construction. Contractor shall furnish materials, equipment, labor, tools, and incidentals necessary to accomplish maintenance of flow. The cost shall be incidental to the various contract items.
- Contractor shall verify the locations of all existing underground culverts and utilities in the field, prior to start of construction. Any existing culverts and utilities damaged during construction shall be repaired or replaced by the Contractor at his expense.
- Concrete shall be Class A unless otherwise noted.
- Where 4'x1' and 3'x1'-6" Precast Modules adjoin to Cast-in-Place Concrete Structures, all longitudinal reinforcing steel from Modules shall be extended 1'-6". For detail, see Plan sheet no. 8.

APPROVED:

Delvin P.K. Chung 9/22/89
CHIEF, PLANNING & ENG. BWS DATE

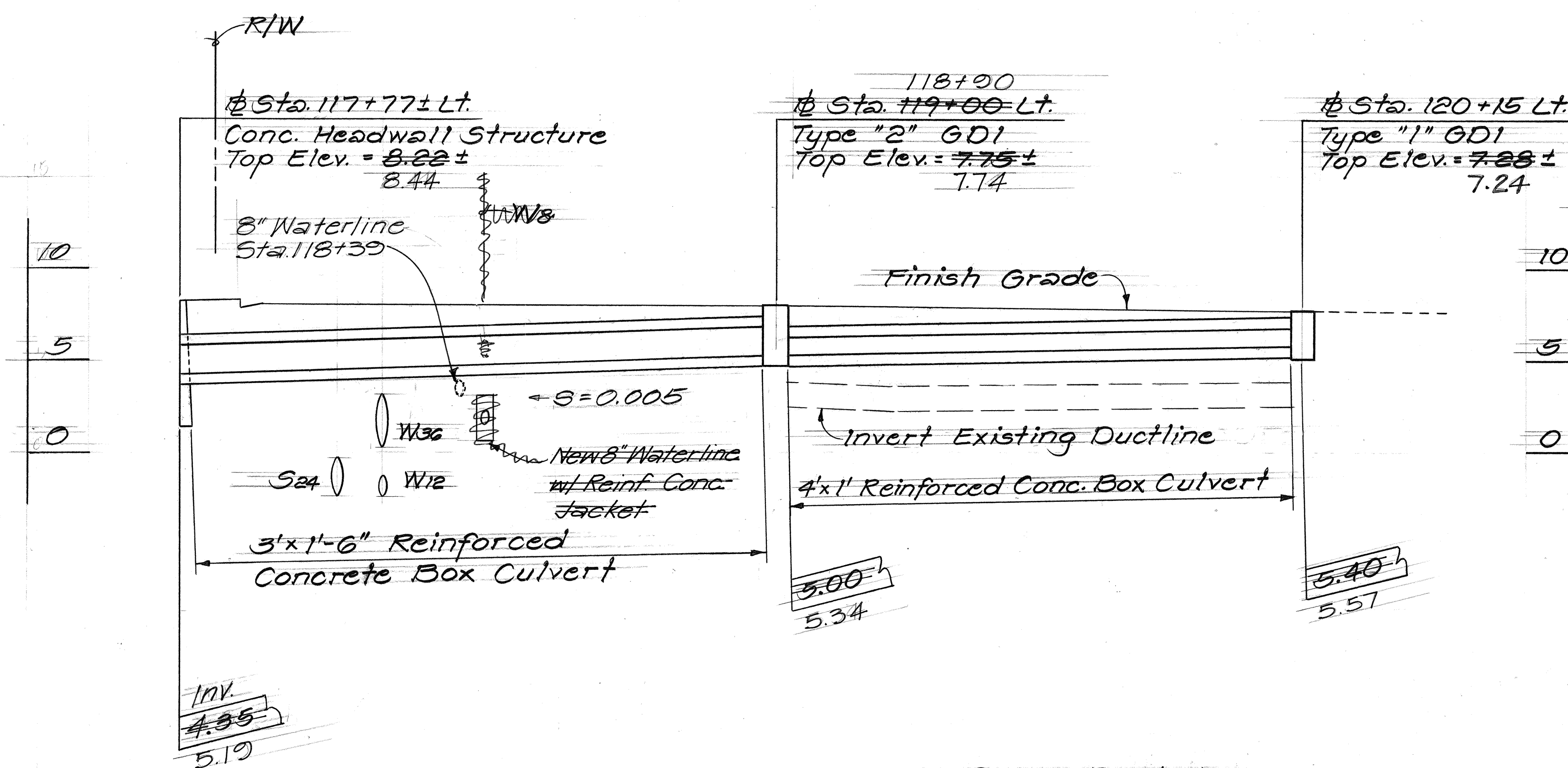
5-23-90 Revised Drainage Plans, and Estimated Quantities.
10-19-89 Revised Estimated Quantities

DATE	REVISION
5-23-90	Revised Drainage Plans, and Estimated Quantities.
10-19-89	Revised Estimated Quantities

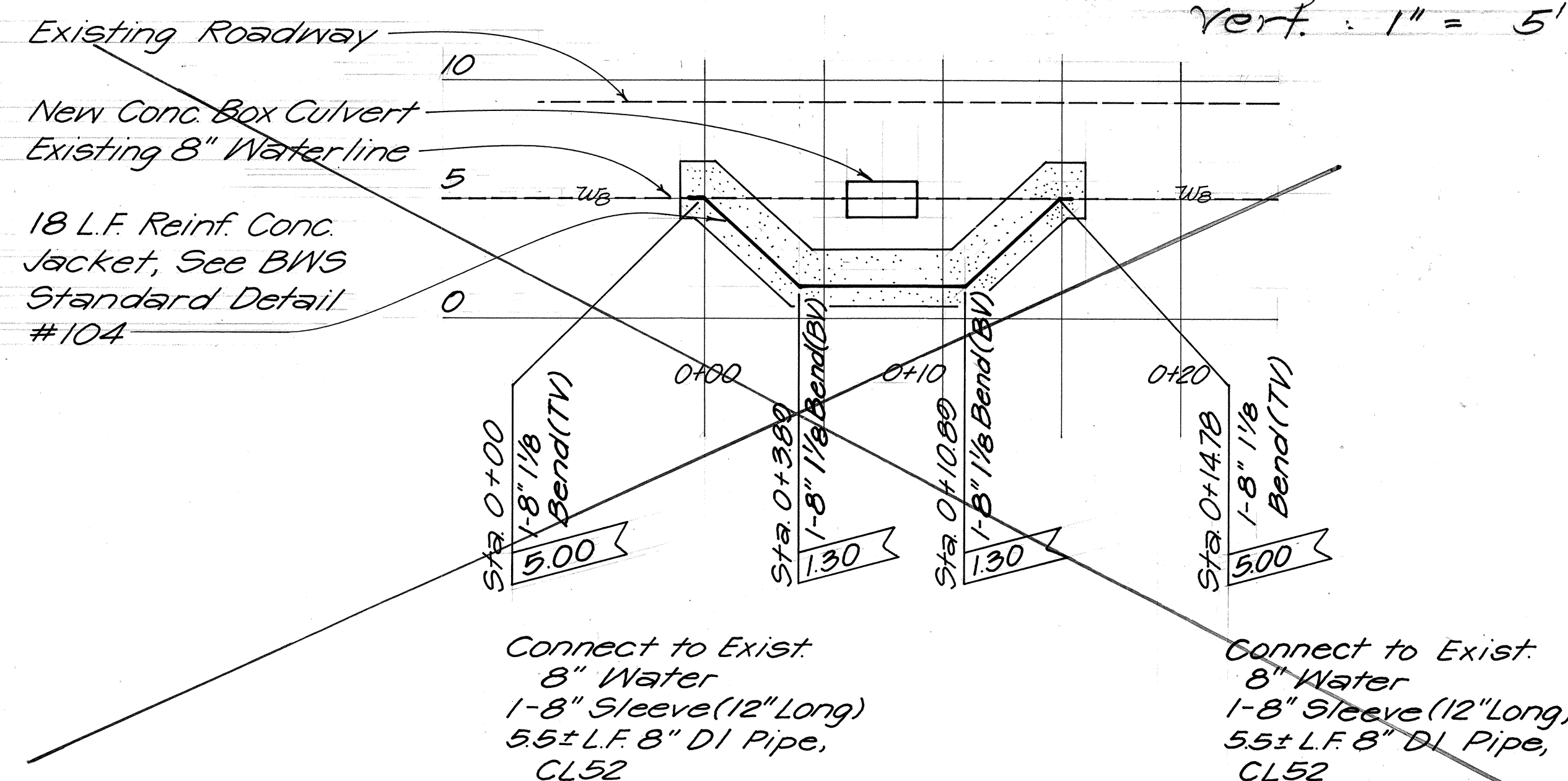
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
DRAINAGE PLAN
FARRINGTON HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Kapakahi Stream, Ph II
Project No. 7101A-03-89
Scale: 1" = 20' Date: May, 1989
SHEET No. 11 OF 6 SHEETS

C.O. ADD.6

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-03-89	1990	C.O. ADD. 7	15



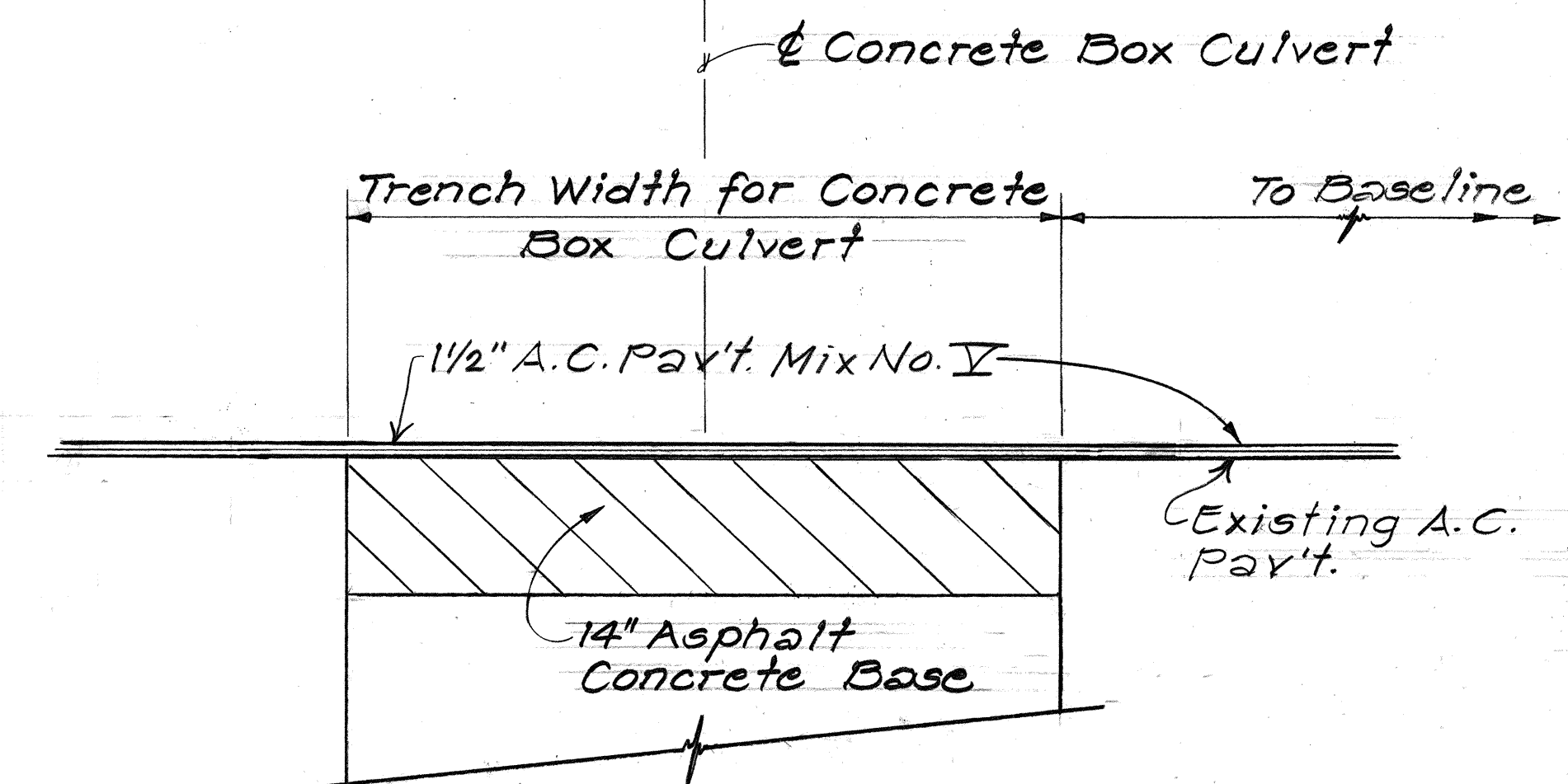
PROFILE
4'x1' AND 3'x1'-6" REINFORCED CONCRETE BOX CULVERT
 Scale: Horiz. 1" = 20'
 Vert. 1" = 5'



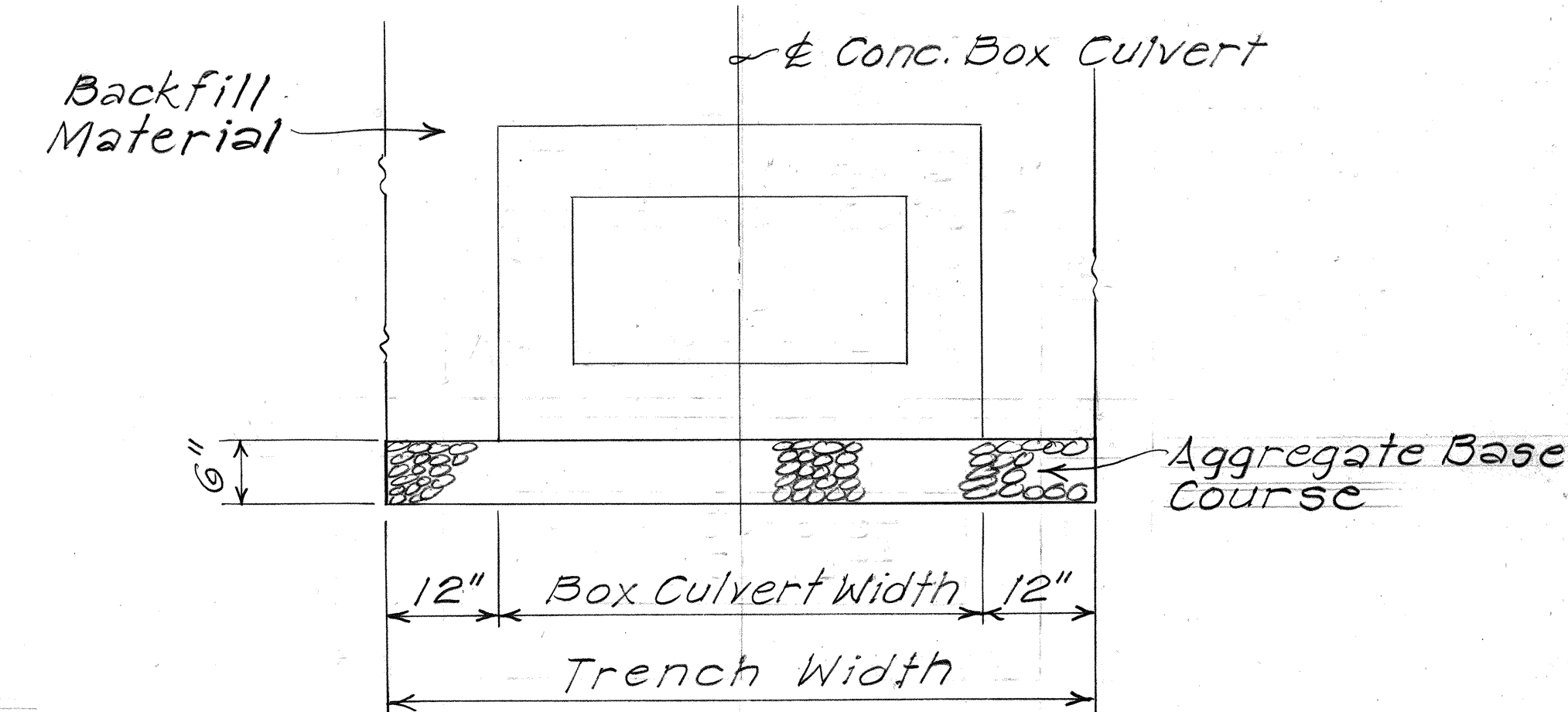
PROFILE - 8" WATERLINE ADJUSTMENT DETAIL
AT STA. 118+30 9/8 78' Lt.
 Scale: Horiz. 1" = 5'
 Vert. 1" = 5'

Notes:

- 8" Waterline adjustments at Sta. 118+30 9/8 78' Lt. shall be done between 0:00 a.m. Saturday and 10:00 p.m. Sunday, and maximum downtime shall be 8 hours.
- Reinforced concrete jacket section shall be prefabricated, tested, and chlorinated, then laid in place. Items for testing shall be provided by contractor.



RESTORATION OF PAVEMENT DETAIL
 Scale: 3/4" = 1' - 0"



DETAIL OF TRENCH BEDDING
 Not to Scale

5-23-90	Revised Drainage Profile
10-19-89	Revised Restoration of Pavement Detail.
DATE	REVISION

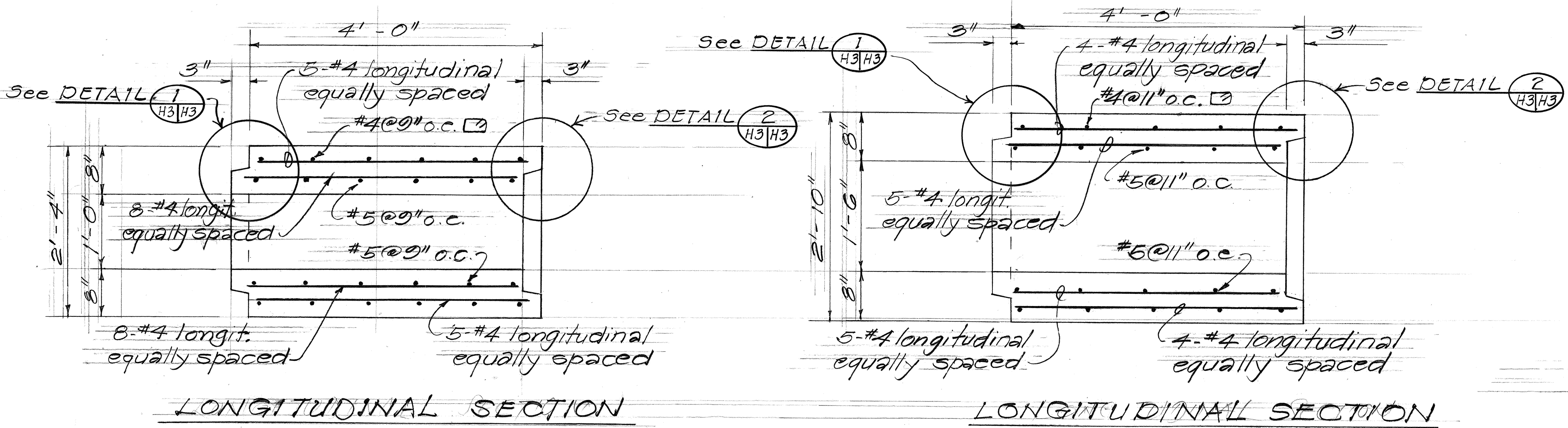
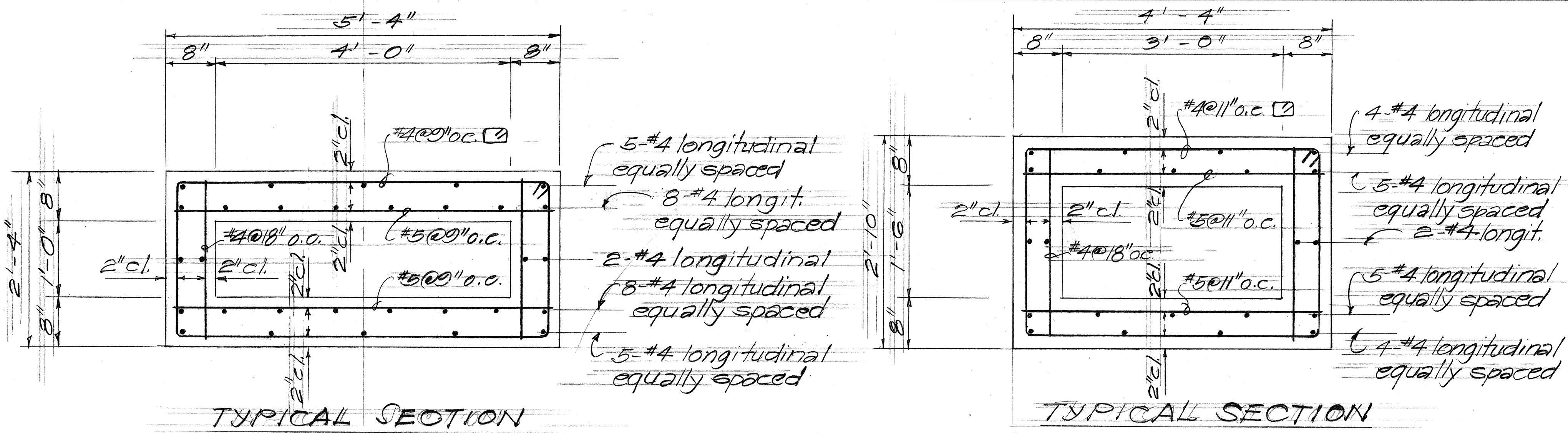
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAINAGE DETAILS
FARRINGTON HIGHWAY DRAINAGE IMPROVEMENTS Vicinity of Kapakahi Stream, Ph II Project No. 7101A-03-89
Scale: As Noted Date: May, 1989
SHEET No. H2 OF 6 SHEETS

APPROVED:

Delano P. K. Phung 9/22/89
 CHIEF, PLANNING & ENG. BWS & DATE

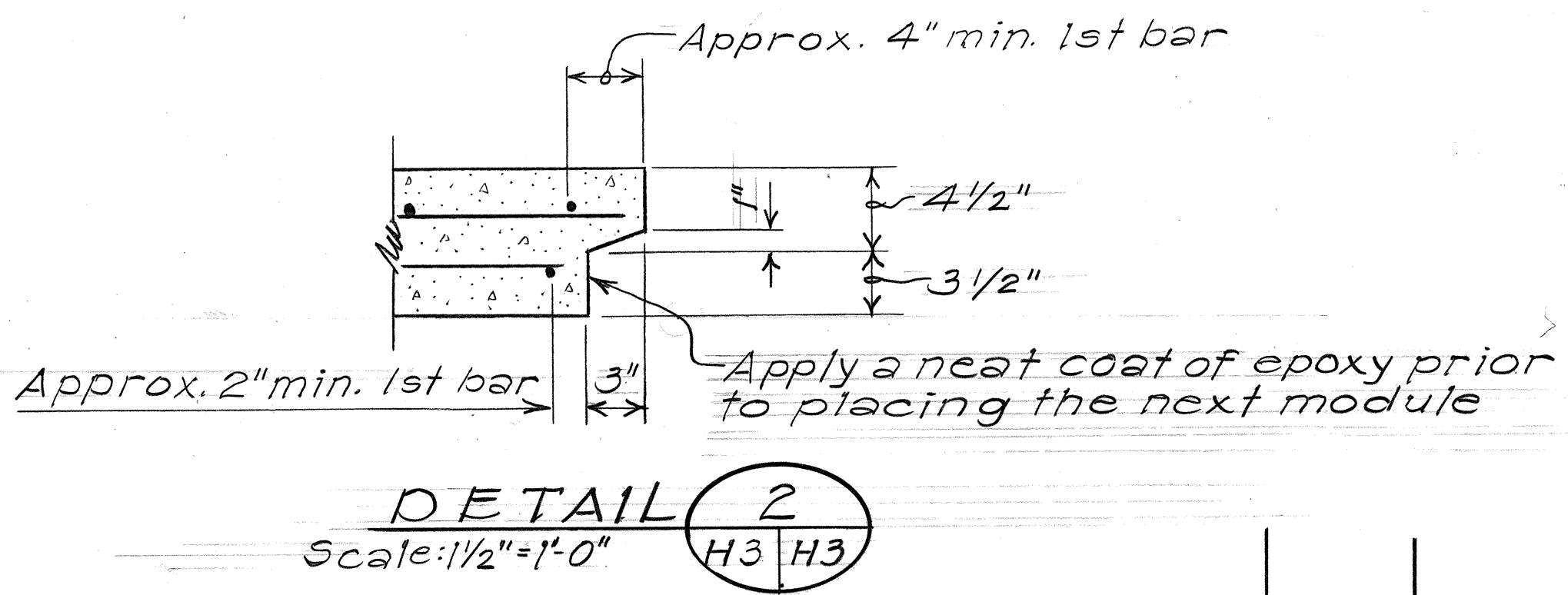
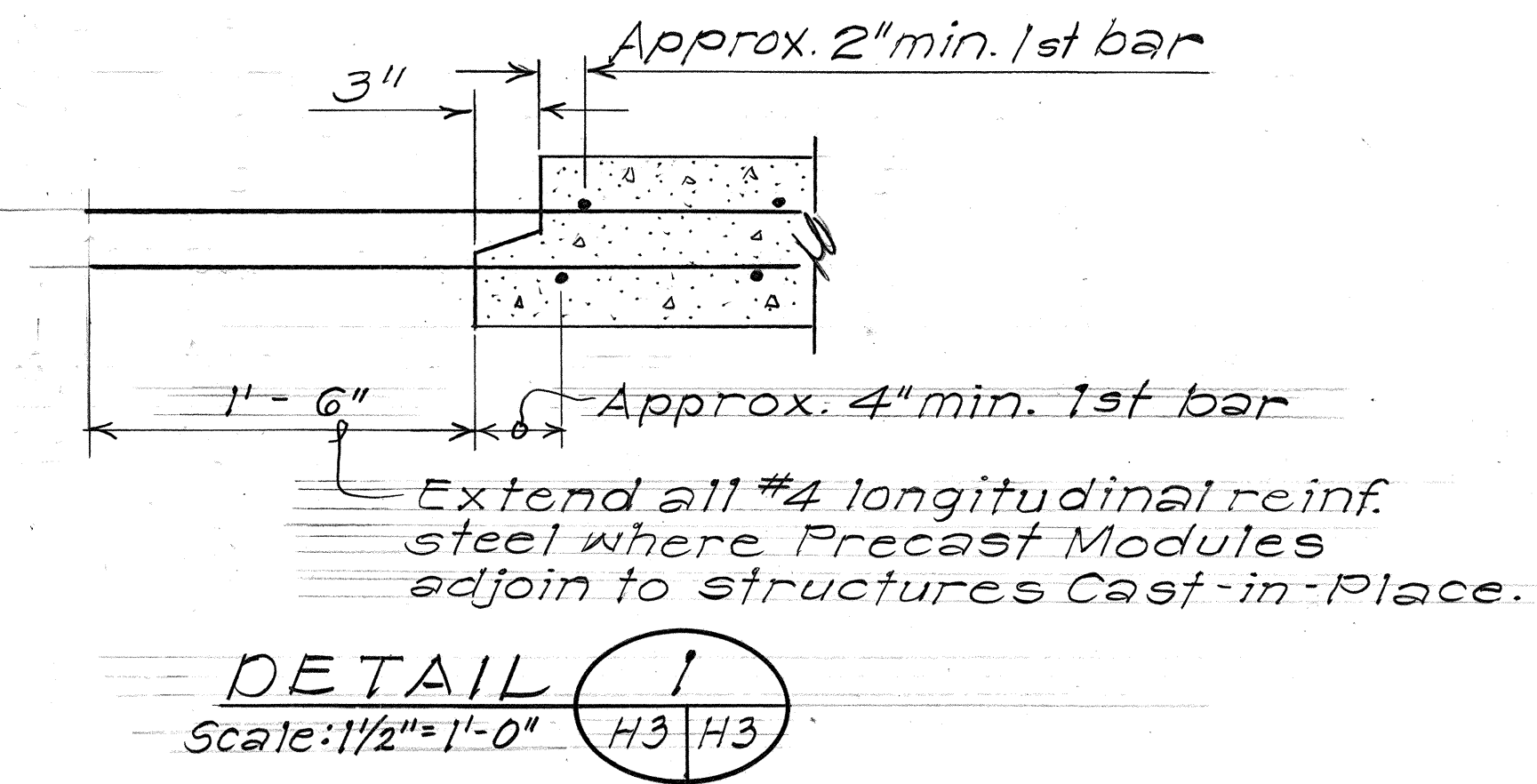
C.O. ADD. 7

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-03-89	1990	C08	15



4'x1' PRECAST MODULE DETAIL
Scale: 1" = 1'-0"

3'x1'-6" PRECAST MODULE DETAIL
Scale: 1" = 1'-0"



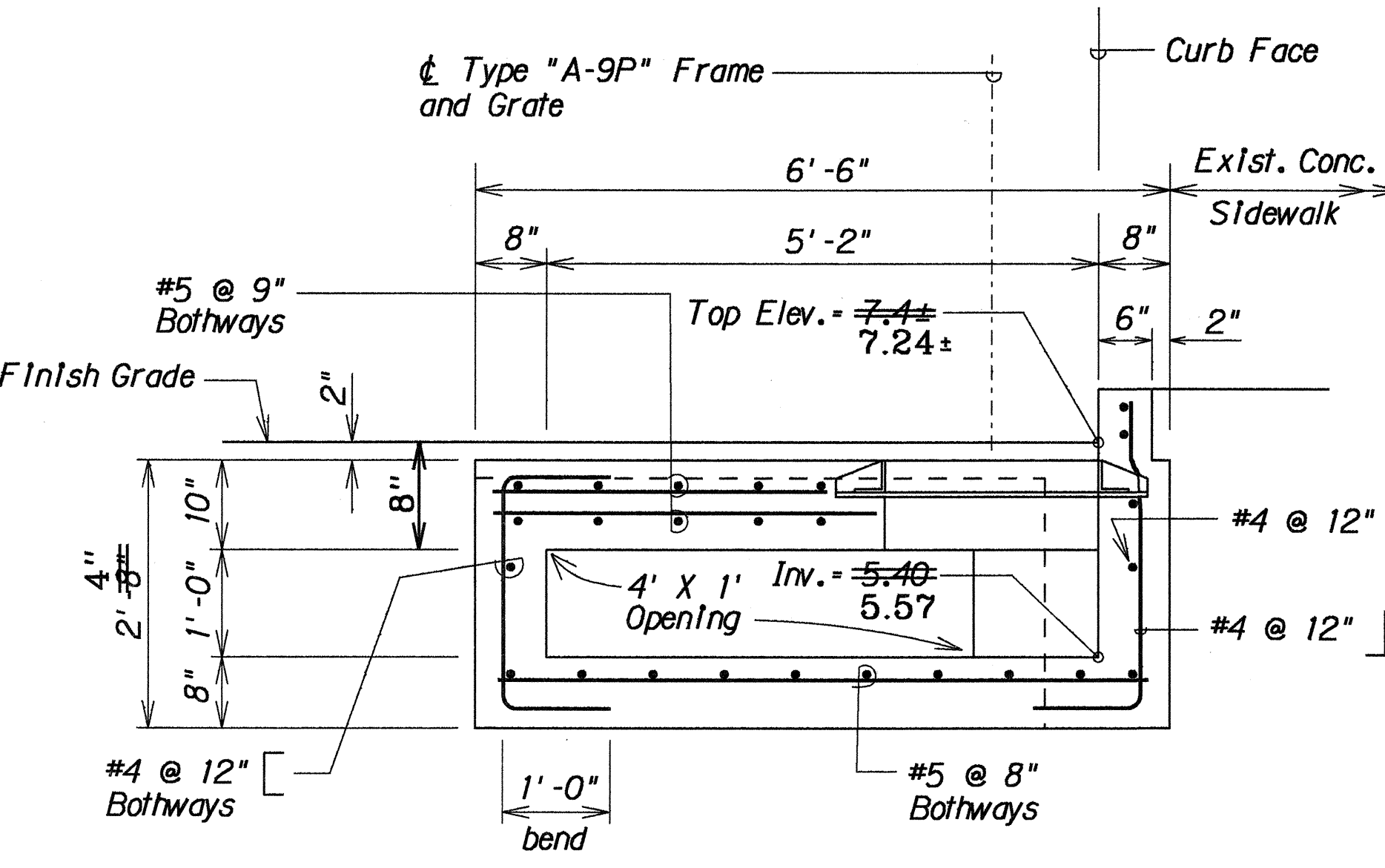
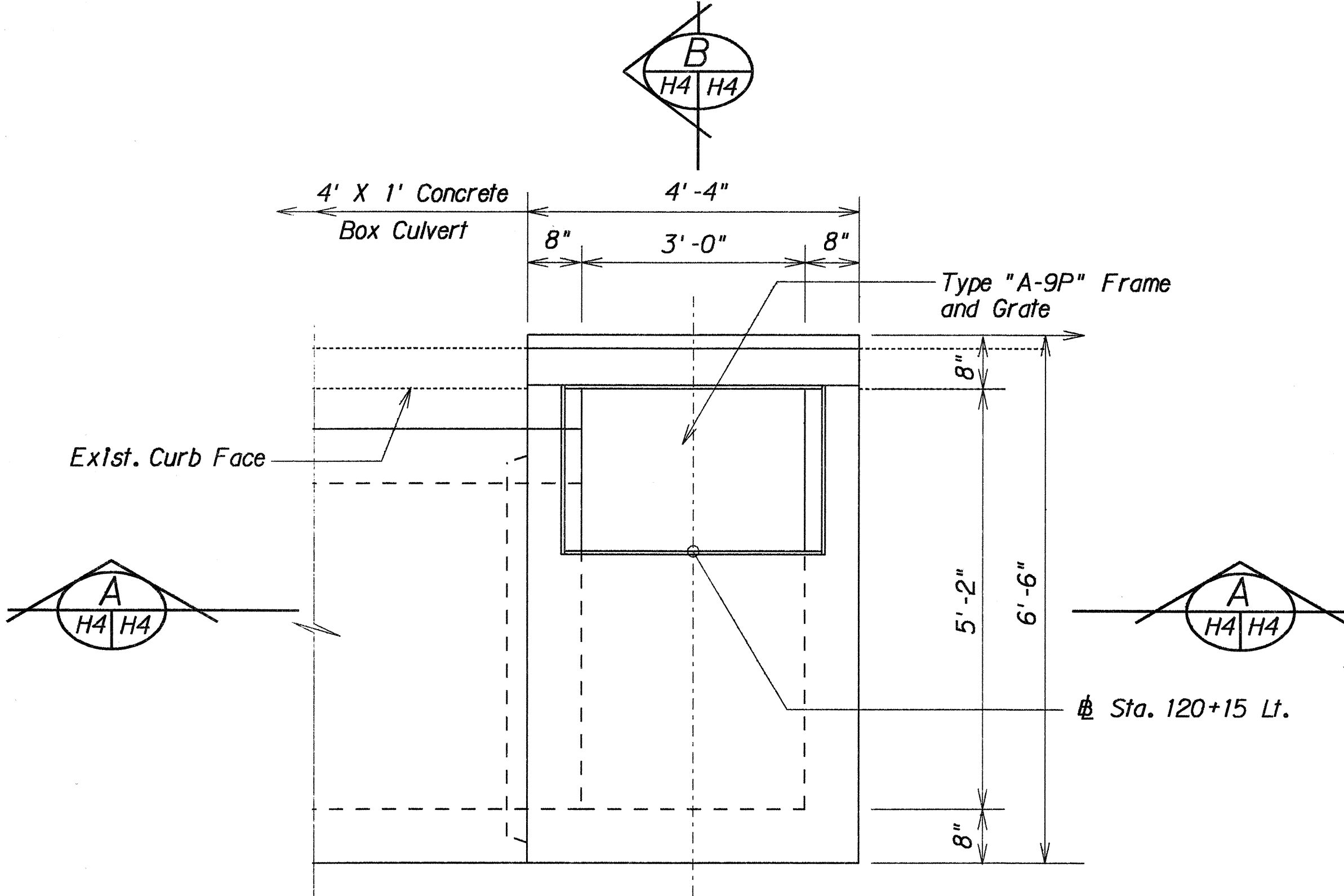
5/23/90 Revised reference sht. no.
per C.O. No. 1
DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

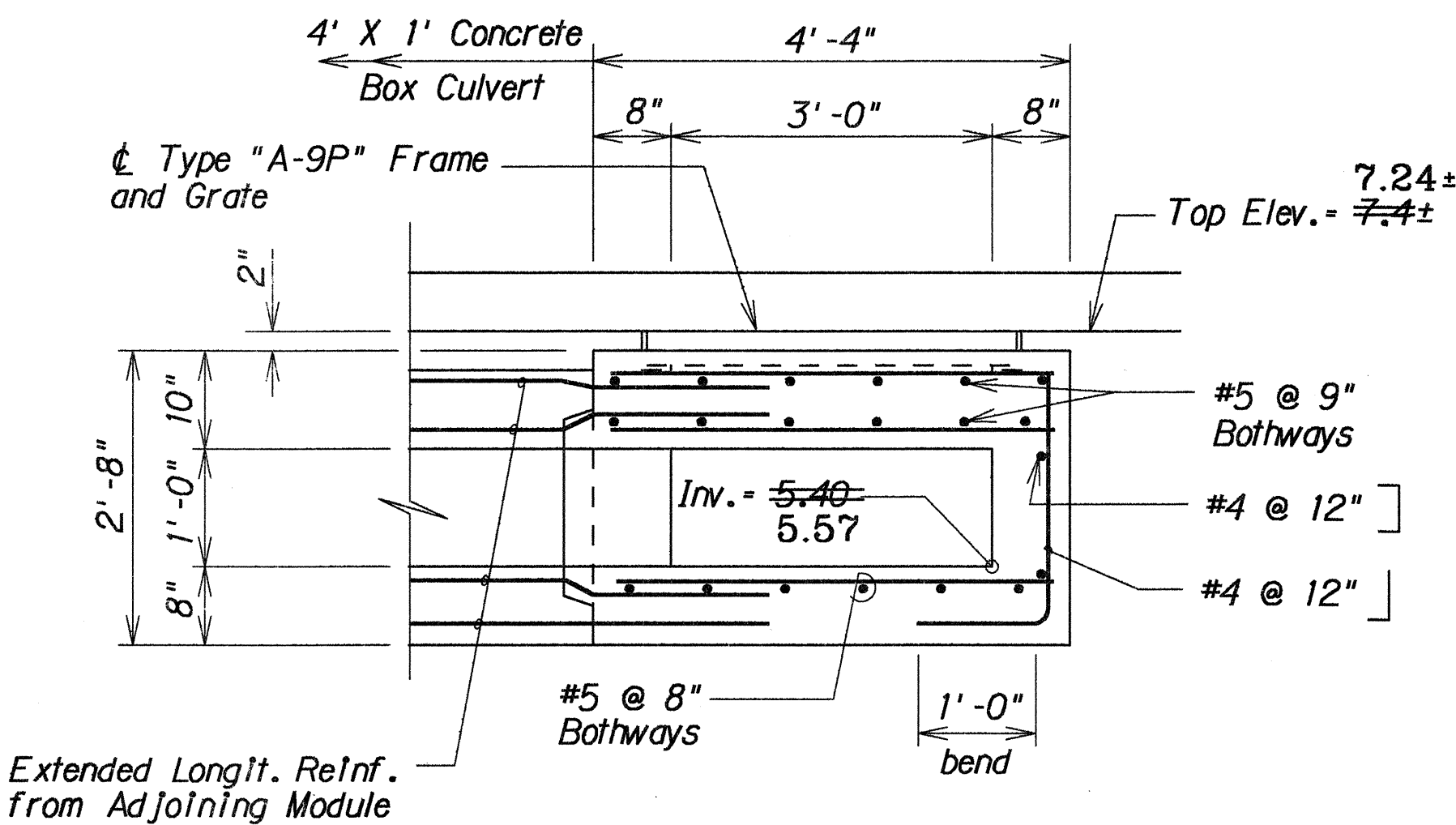
DRAINAGE DETAILS
FARRINGTON HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Kapakahi Stream, Ph II
Project No. 7101A-03-89
Scale: As Noted Date: May, 1989
SHEET NO. H3 OF 6 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7107A-03-89	1990	C.O. 9	15



PLAN



SECTION A

DETAILS OF TYPE "1" GRATED DROP INLET

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

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
FARRINGTON HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Kapakahi Stream, Ph II
Project No. 7107A-03-89

Scale: As Noted Date: May, 1990
SHEET No. H4 OF 6 SHEETS

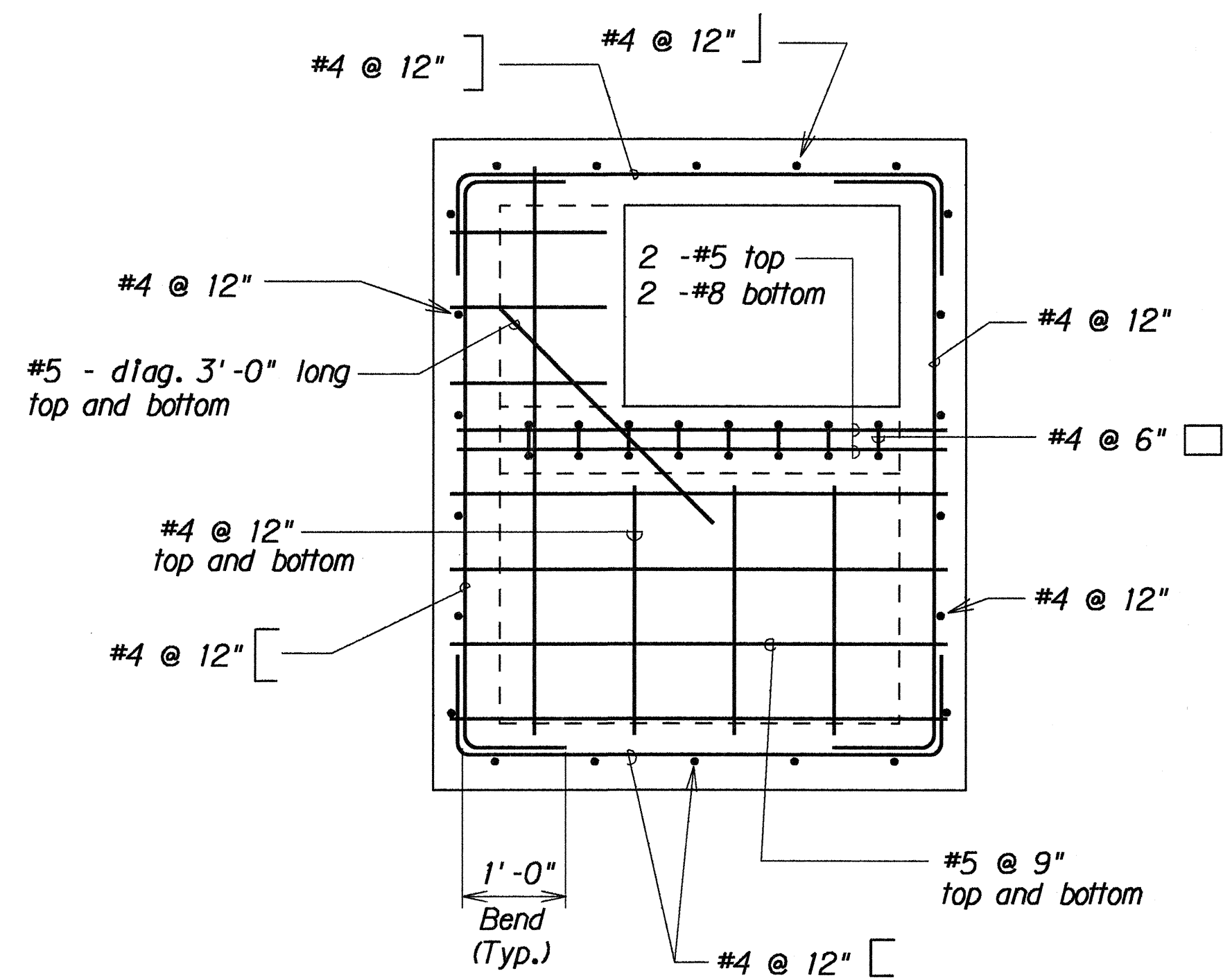
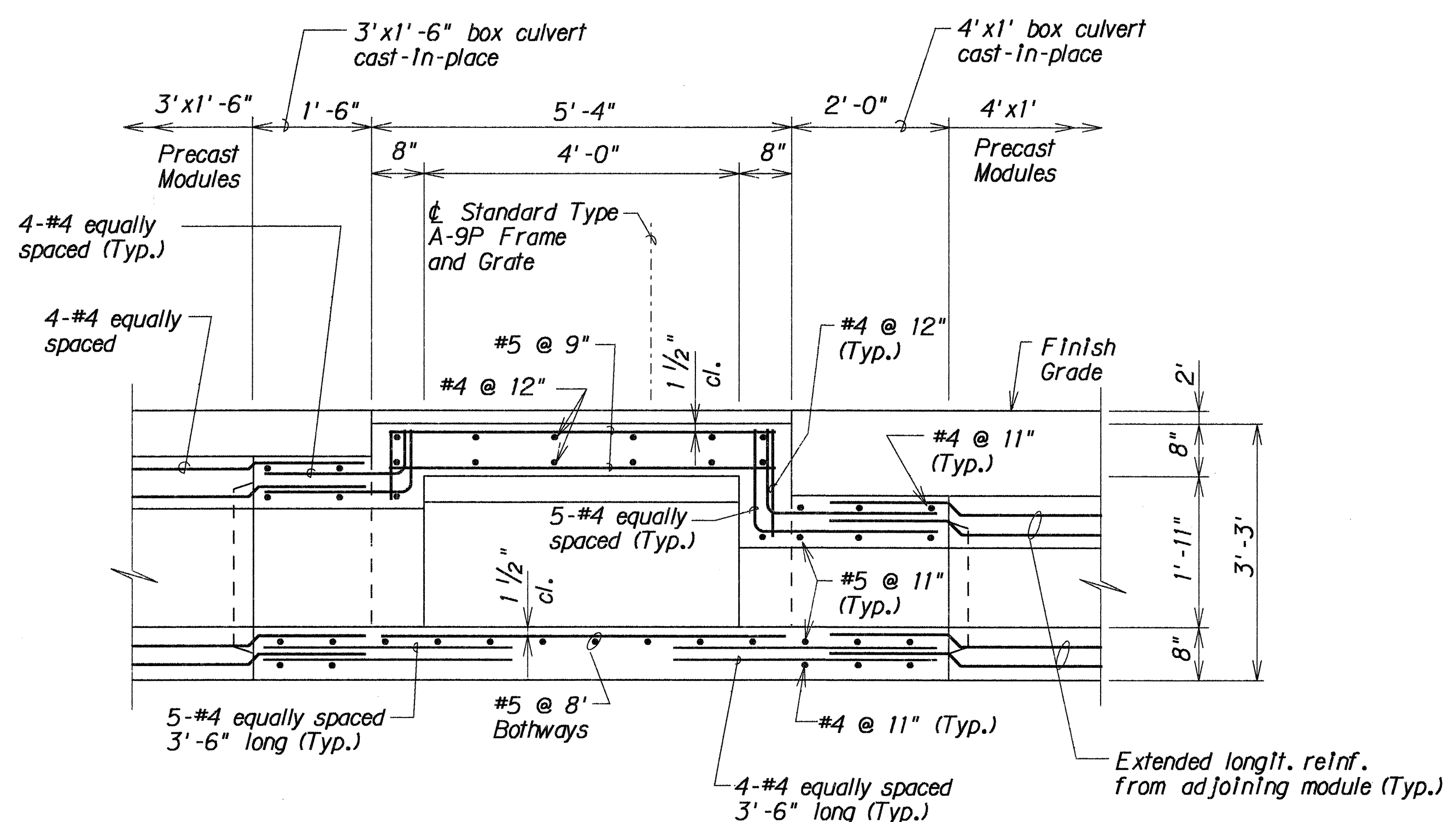
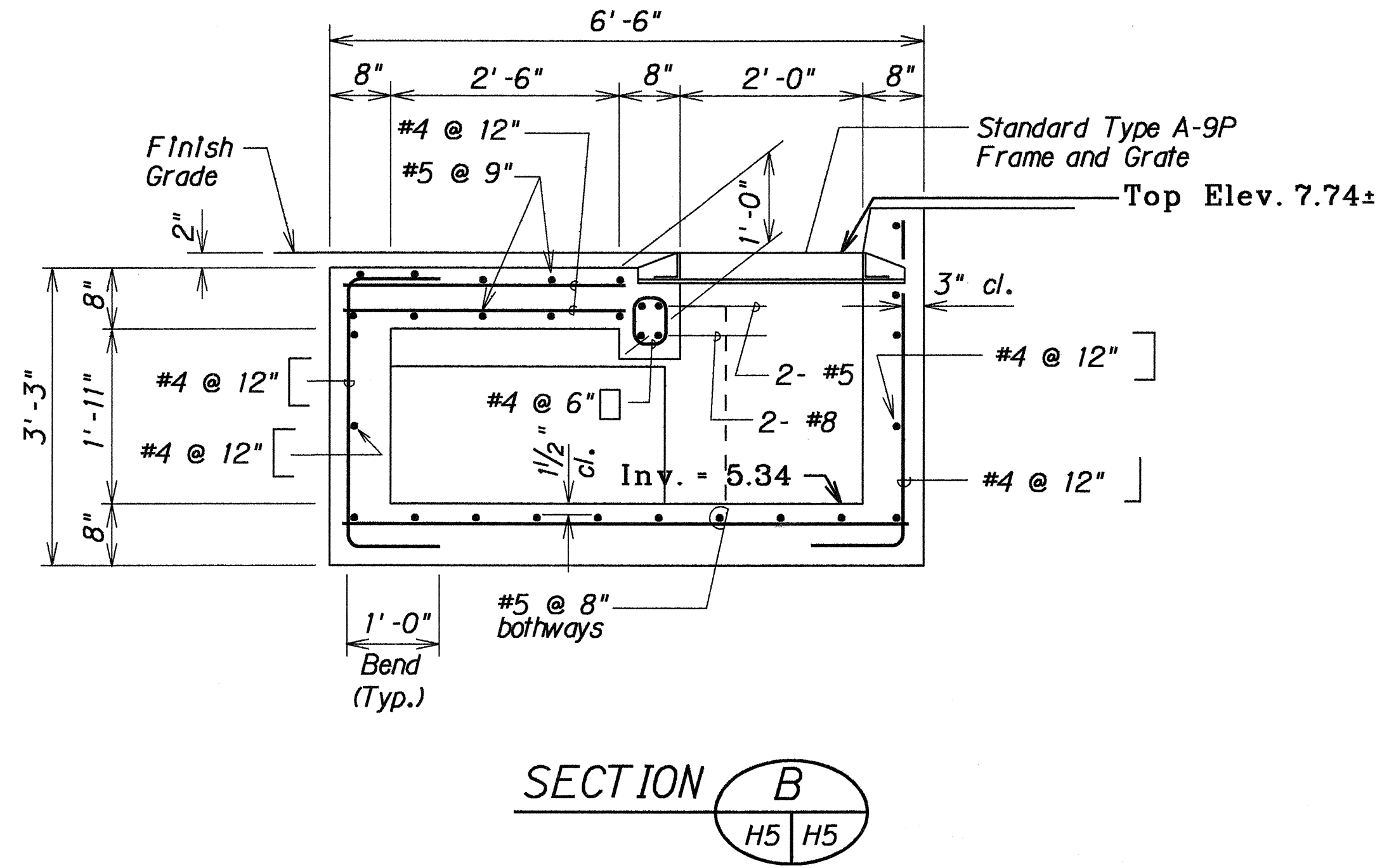
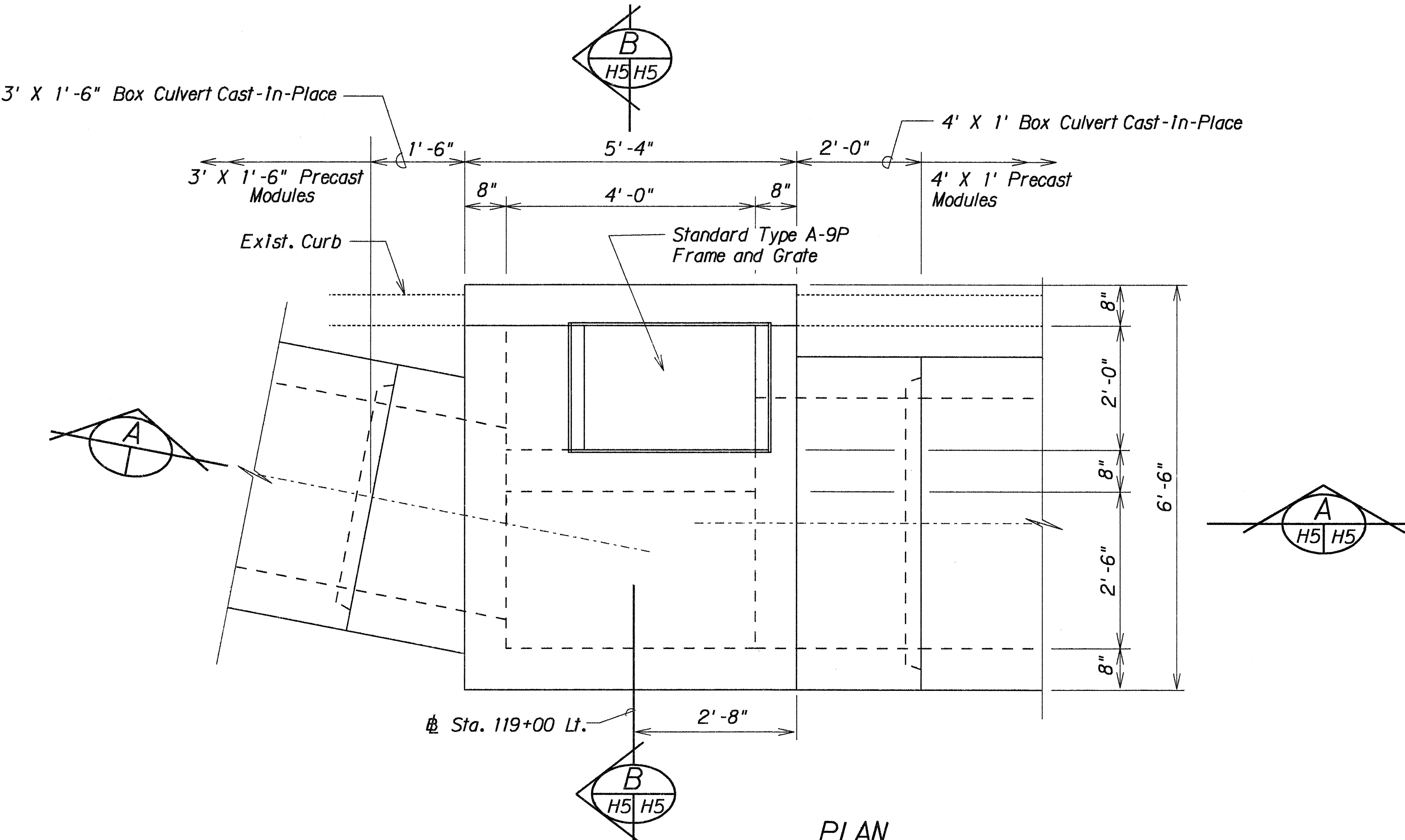
5/23/90 Plan Sheet Replaced.

DATE REVISION

AS-BUILT

C.O. 9

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-03-89	1990	C.O. 10	15



LEGEND FOR AS-BUILT POSTINGS	
	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

PLAN VIEW OF TOP SLAB STEEL REINFORCING

DETAILS OF TYPE "2" GRATED DROP INLET

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

FARRINGTON HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Kapakahi Stream, Ph II
Project No. 7107A-03-89

Scale: As Noted Date: May, 1990

SHEET No. H5 OF 6 SHEETS

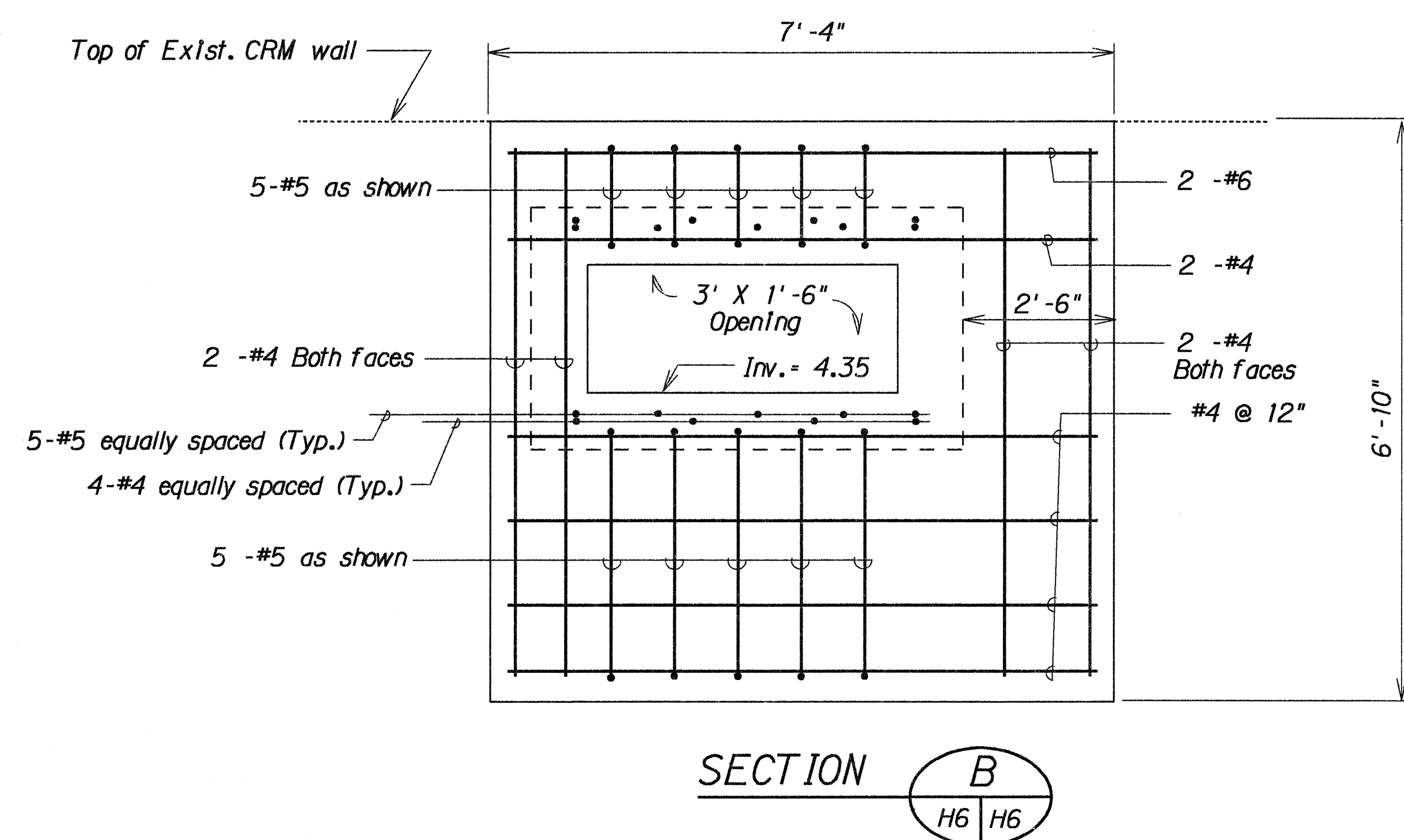
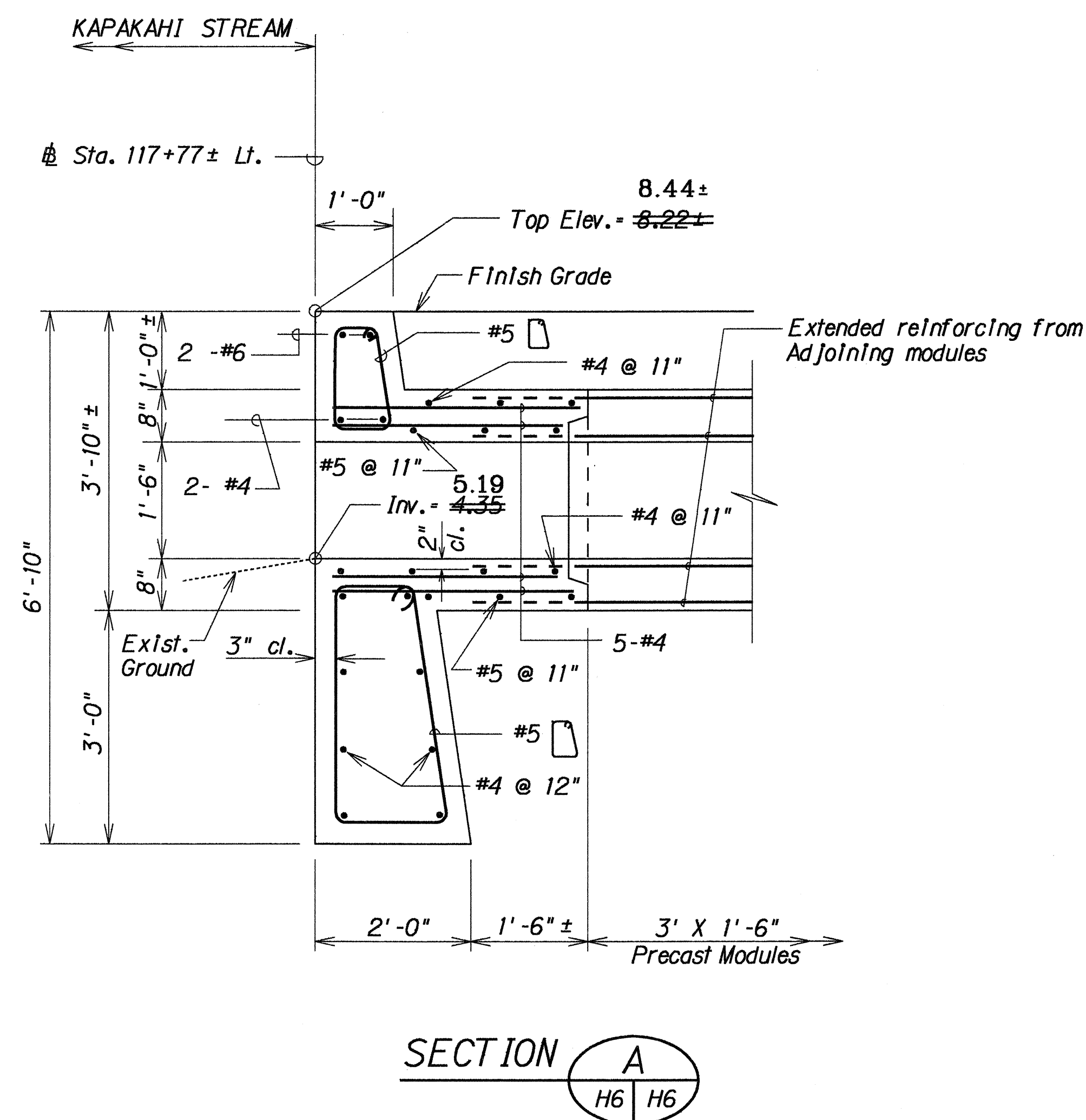
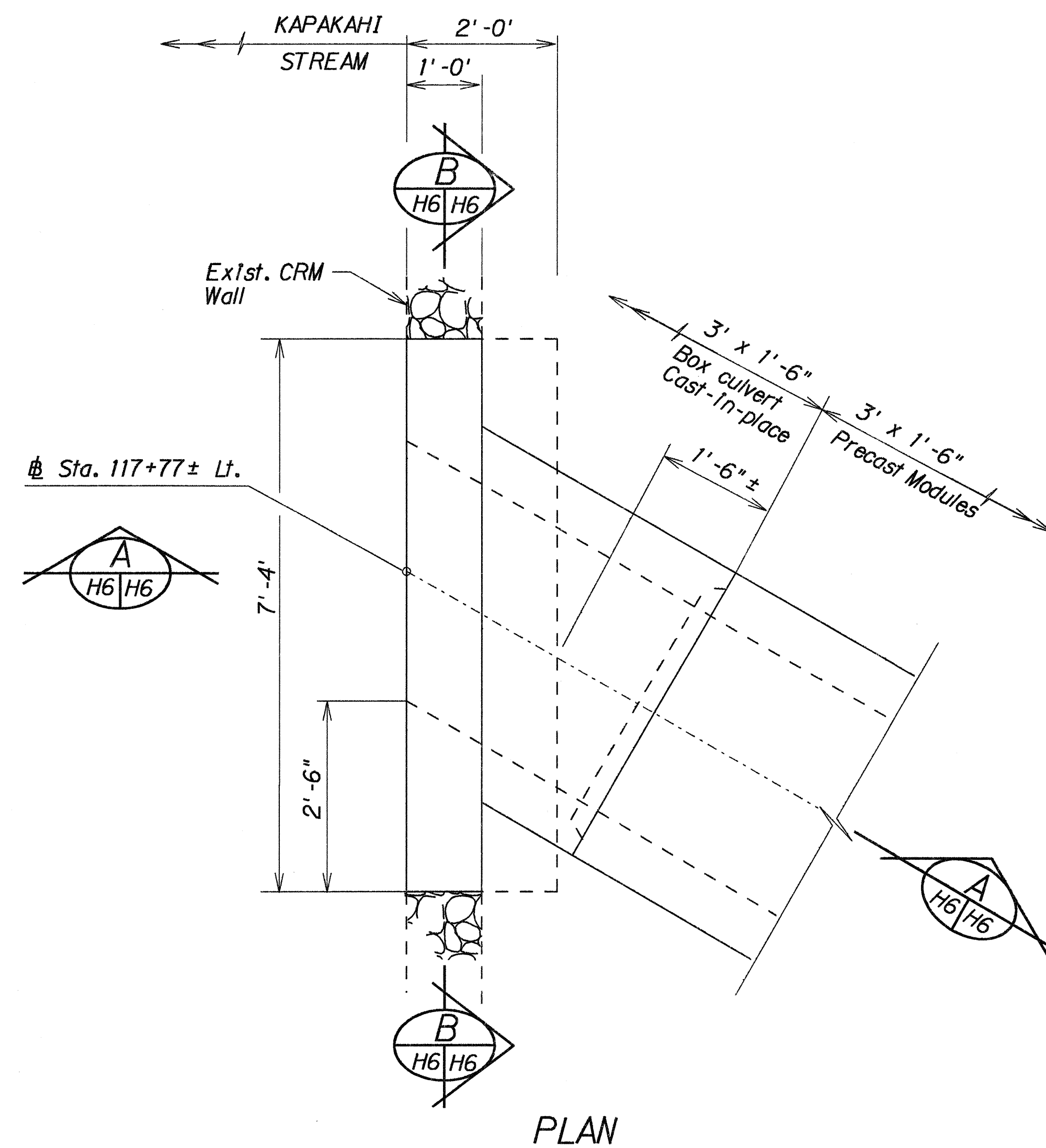
5/23/90 Plan Sheet Replaced.

DATE REVISION

AS-BUILT

C.O. 10

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	7101A-03-89	1990	C.O. 11	15



DETAILS OF CONCRETE HEADWALL STRUCTURE

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

LEGEND FOR AS-BUILT POSTINGS	
	squiggly line for as-built deletion
	double line for as-built deletion
Roadway	text for as-built posting

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
DRAINAGE DETAILS	
FARRINGTON HIGHWAY DRAINAGE IMPROVEMENTS Vicinity of Kapakahi Stream, Ph II Project No. 7107A-03-89	

5/23/90 Plan Sheet Replaced. Plan Sheets 12-15 Deleted from Contract per C.O. No.1

DATE REVISION

Scale: As Noted Date: May, 1990

SHEET No. H6 OF 6 SHEETS

AS-BUILT

C.O. 11