

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	63A-01-82	1982	19	22

GENERAL NOTES

1. Demolishing, removing, and disposing a portion of the entire existing structure shall not be paid for seperately, but shall be incidental to the various contract items in the proposal.
2. Concrete shall be Type Class "A" for catch basin modification. It shall be Type Class "B" for spillway modification.
3. Only non-pneumatic type of drill as approved by the Engineer will be permitted for drilling holes in concrete. Where indicated on plans the approximate diameter of drilled holes for installation of dowels shall be 1/2" and voids after installing dowels shall be filled with grout as directed by the Engineer. The work (Drilling 1/2" holes and filling voids with grout) as mentioned above shall be considered incidental to the various contract items in the proposal.
4. In the event of plan alterations causing increase or decrease to the quantity of specified lump sum work, the following estimated quantities shall be used to determine the theoretical unit price as defined in Subsection 104.02(B) lump sum items:

TYPE	STATION	LUMP SUM ITEM NO.	206 1001	503 0011	503 2011	602 1001
			Structure Excavation Other Than at Bridges	Class A Concrete	Class B Concrete	Reinforcing Steel
	UNIT USED		C.Y.	C.Y.	C.Y.	LBS.
Spillway	160+00 ± Rt.		0.9		0.5	
Spillway	167+00 ± Rt.		1.1		0.6	
Spillway	171+70 ± Rt.		2.5		1.3	
Spillway	175+15 ± Rt.		2.5		1.3	
Spillway	180+00 ± Rt.		2.5		1.3	
Spillway	187+05 ± Rt.		2.1		1.1	
Catch Basin	190+15 ± Rt.		1.9	1.3		200
Spillway	204+70 ± Rt.		2.5		1.3	
Spillway	209+05 ± Rt.		1.8		0.9	
Spillway	213+70 ± Rt.		1.8		0.9	
Spillway	219+98 ± Rt.		2.1		1.1	
	TOTAL		21.7	1.3	10.3	200

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

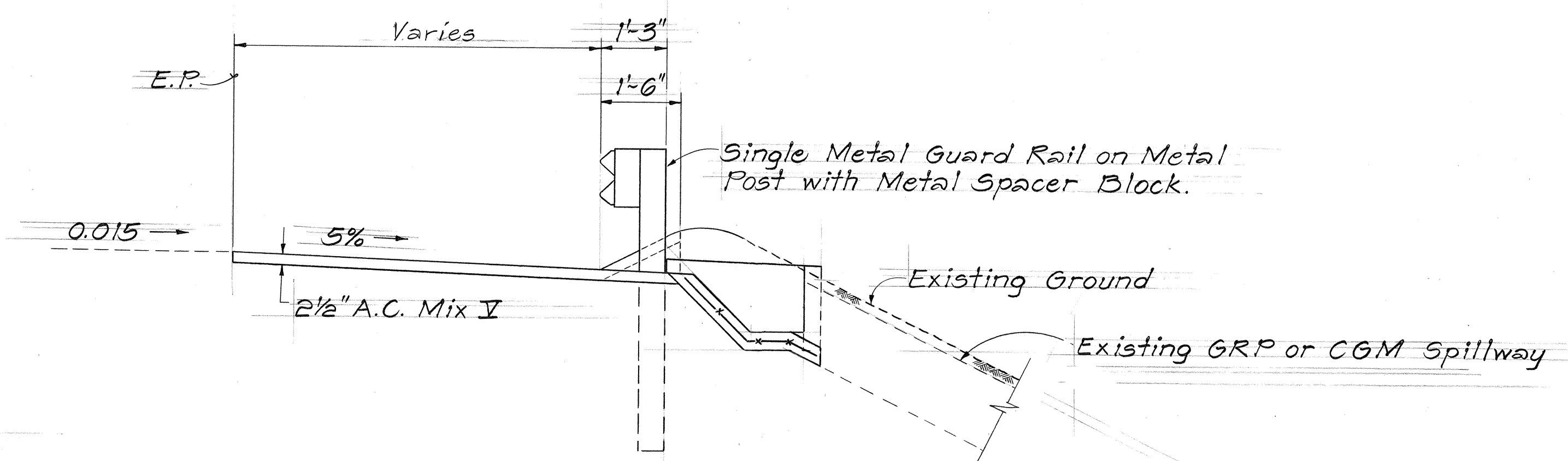
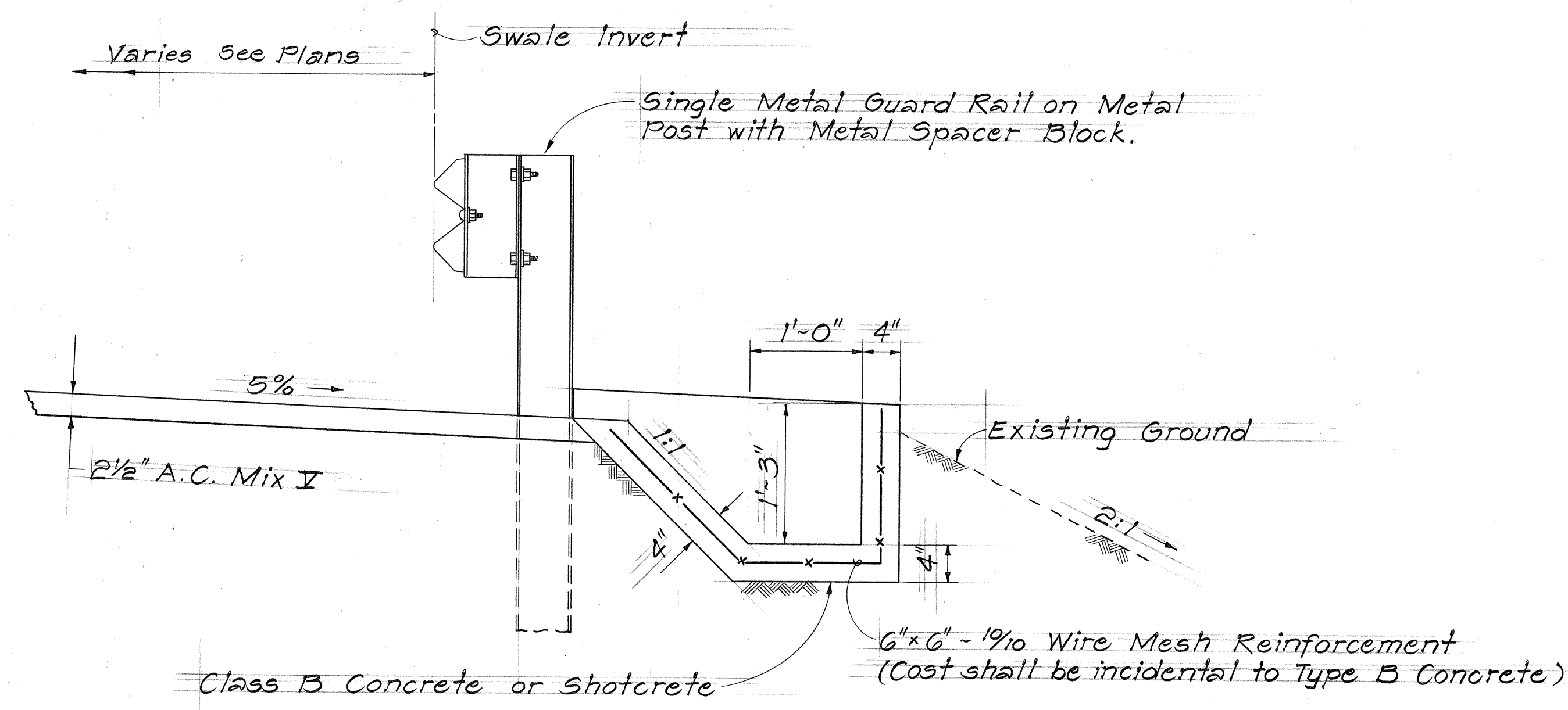
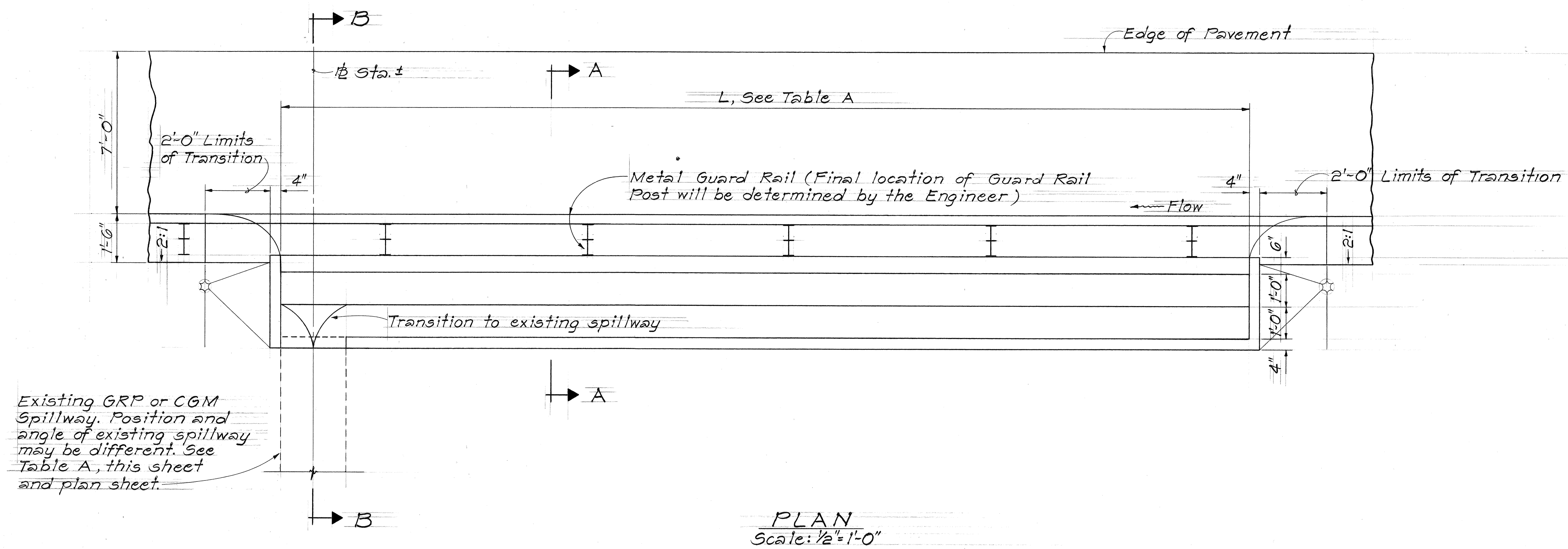
DRAINAGE DETAILS
LIKELIKE HIGHWAY

Burmeister Overpass towards Kahekili Hwy.
PROJECT NO. 63A-01-82

Date: Dec. 1981

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	G3A-01-82	1982	20	22

TABLE A		
Sta.	L, Ft.	Spillway Position
160+00 ± Rt.	10	Rt.
167+00 ± Rt.	12	Mid.
171+70 ± Rt.	25	Lt.
175+15 ± Rt.	30	Lt.
180+00 ± Rt.	30	Lt.
187+05 ± Rt.	25	Lt.
204+70 ± Rt.	30	Lt.
209+05 ± Rt.	20	Lt.
213+70 ± Rt.	20	Lt.
219+98 ± Rt.	25	Lt.



TYPICAL RECONSTRUCTION OF EXISTING SPILLWAY

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LIKELIKE HIGHWAY

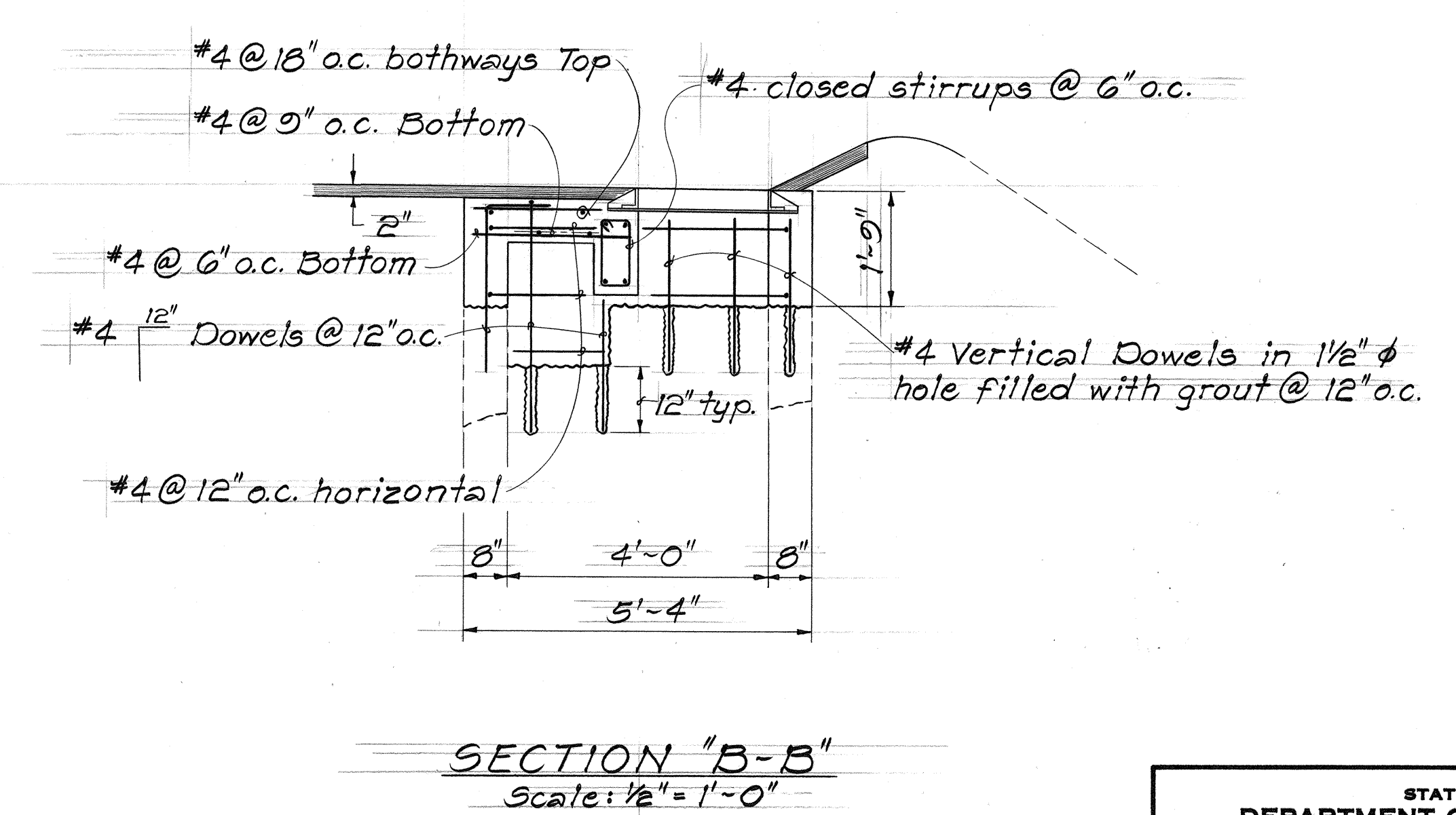
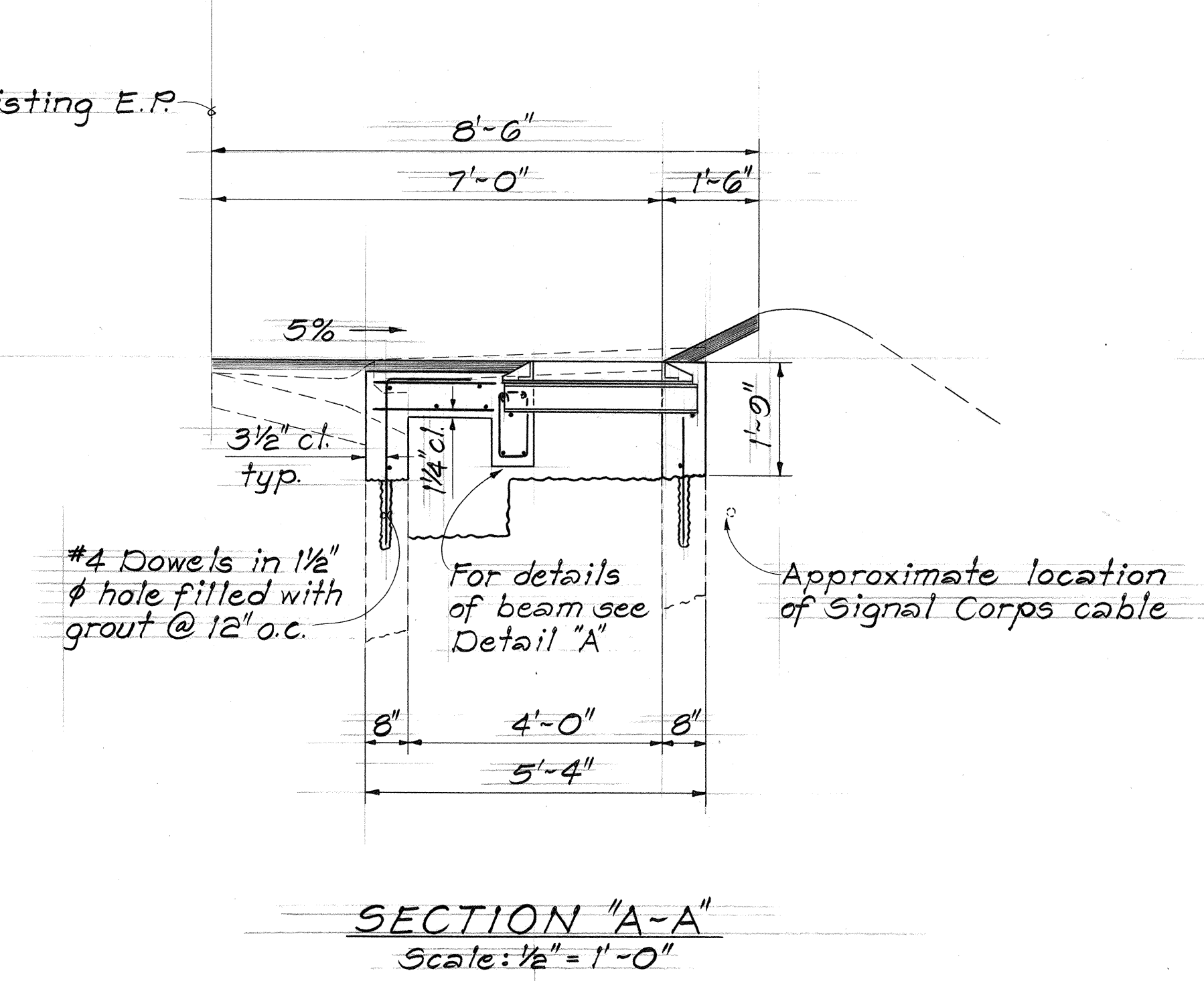
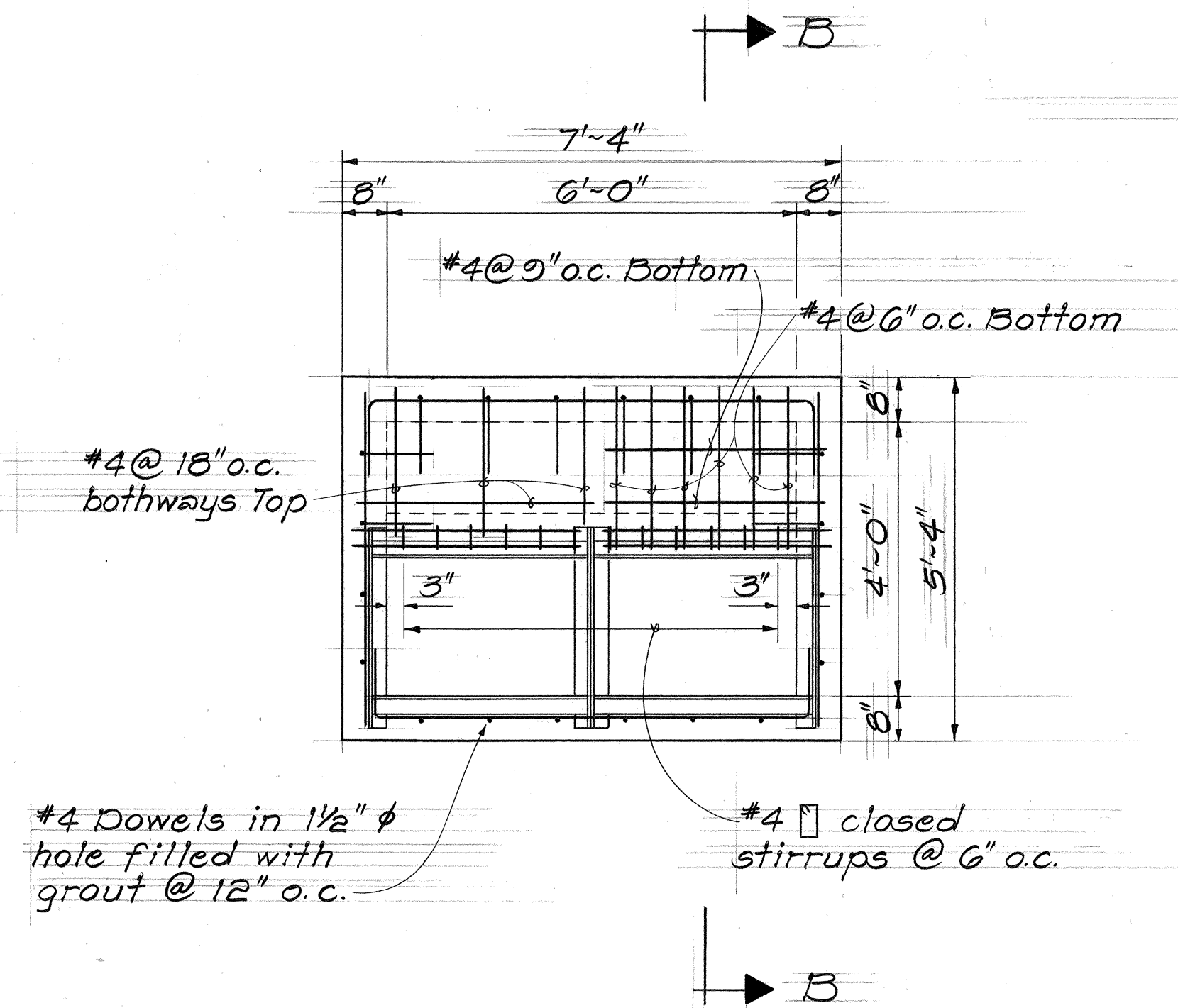
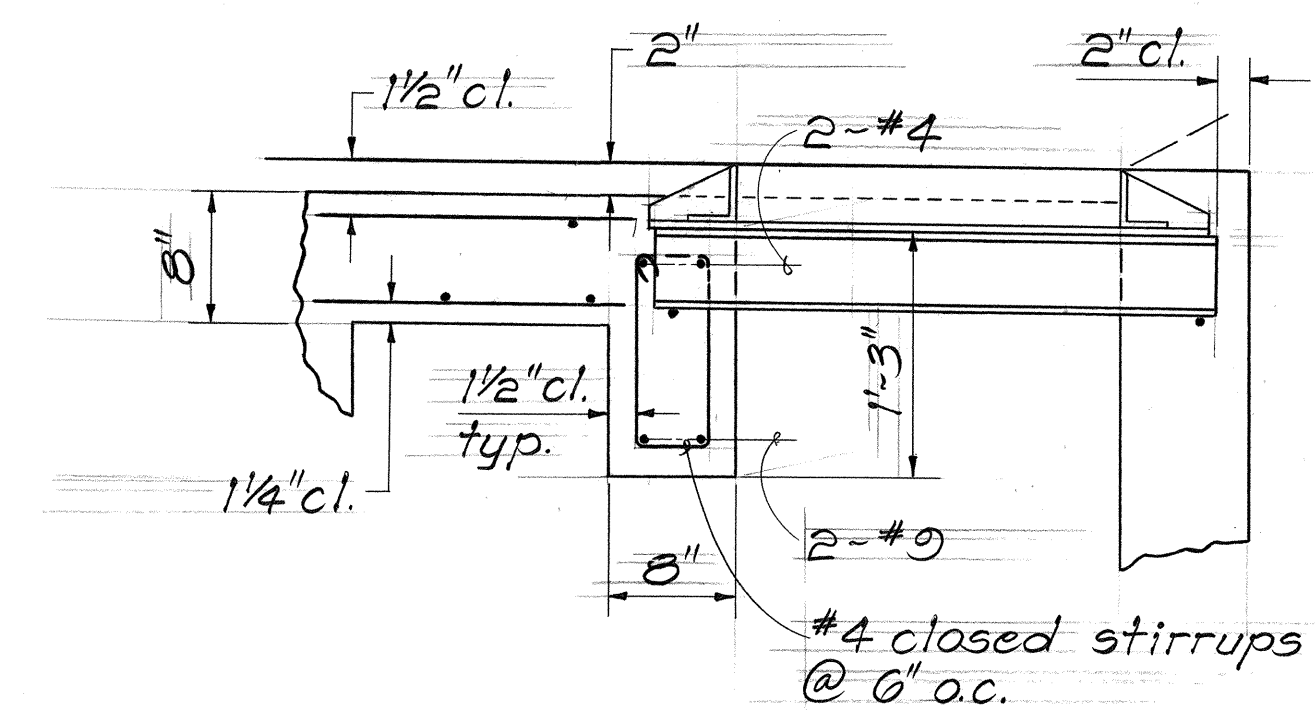
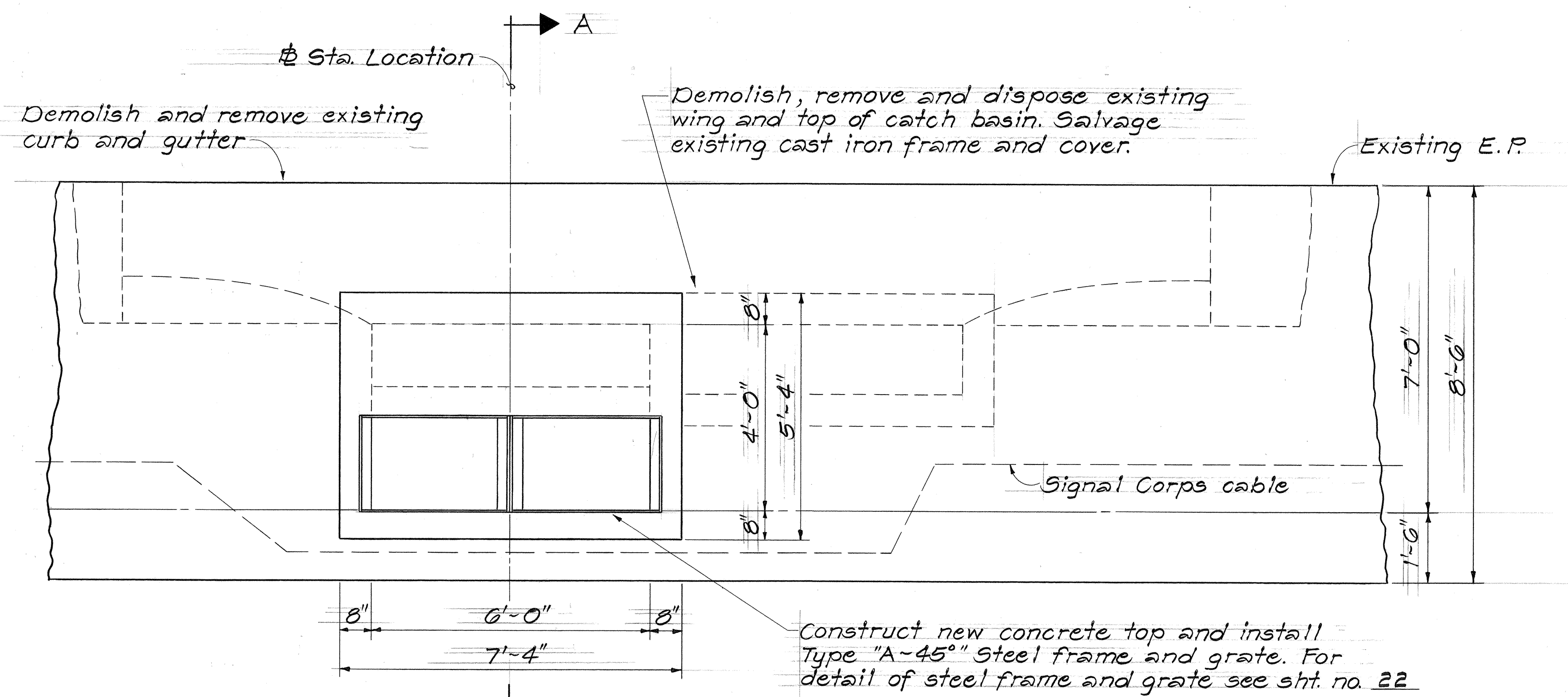
Burmeister Overpass towards Kahekili Hwy.
PROJECT NO. G3A-01-82

Scale: As Shown Date: Dec. 1981

SHEET NO. 2 OF 4 SHEETS

SURVEY PLOTTED BY	DATE
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ORIGINAL PLAN	
NOTE BOOK	
No.	

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RECONSTRUCTION OF EXISTING C.B. @ STA. 190+15 ± RT.
Scale As Shown

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DRAINAGE DETAILS
LIKELIKE HIGHWAY

Burmeister Overpass towards Kahakili Hwy.
PROJECT NO. 63A-01-82

Scale: As Shown Date: Dec. 1981

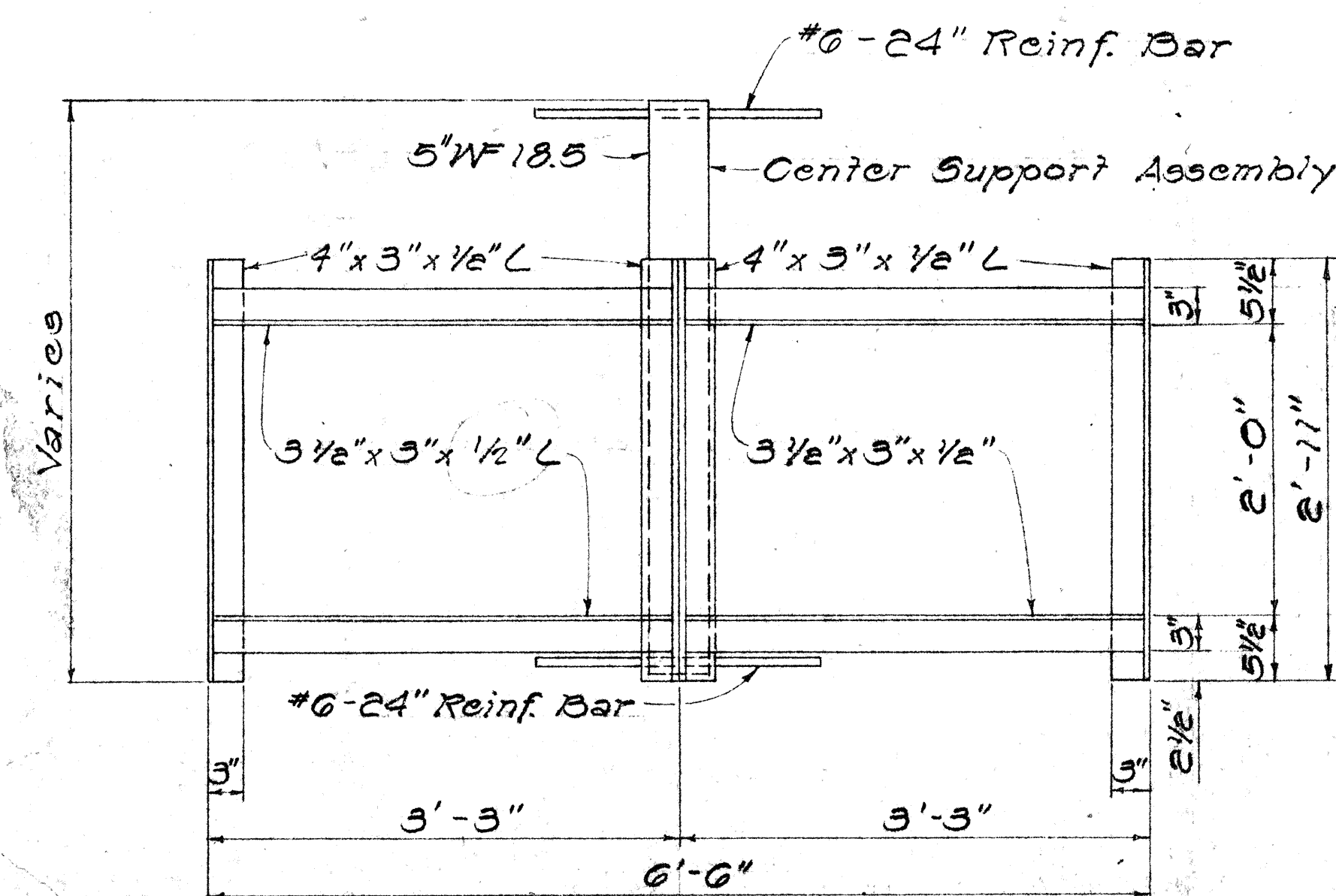
SHEET NO. 3 OF 4 SHEETS

SURVEY PLOTTED BY	DATE
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QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

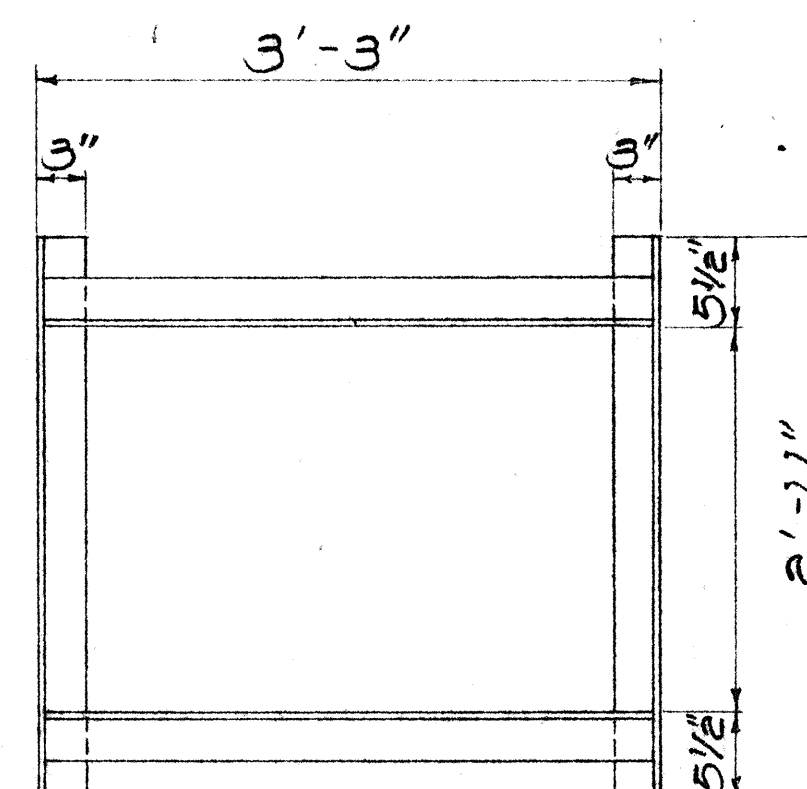
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
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NOTES:

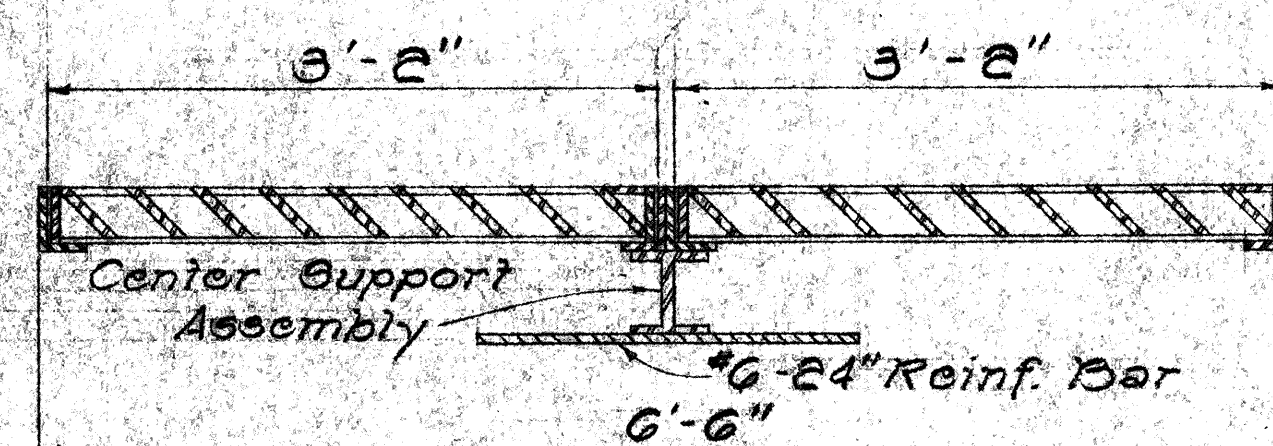
1. Grates and Frames shall be hot dip galvanized after fabrication, see specifications.
2. All welds 3/8" unless otherwise noted.
3. Center support assembly shall be used when two or more grates are specified. Incidental to Frame and Grates.



PLAN
(Single Grate)

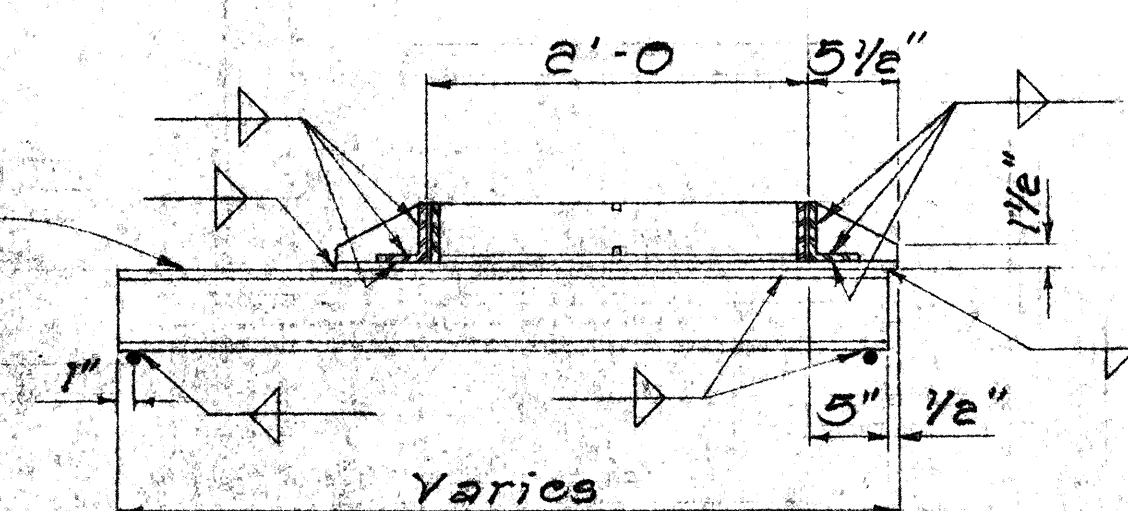


PLAN
(Two or More Grates)



LONGITUDINAL SECTION
(Thru Frame & Grate)

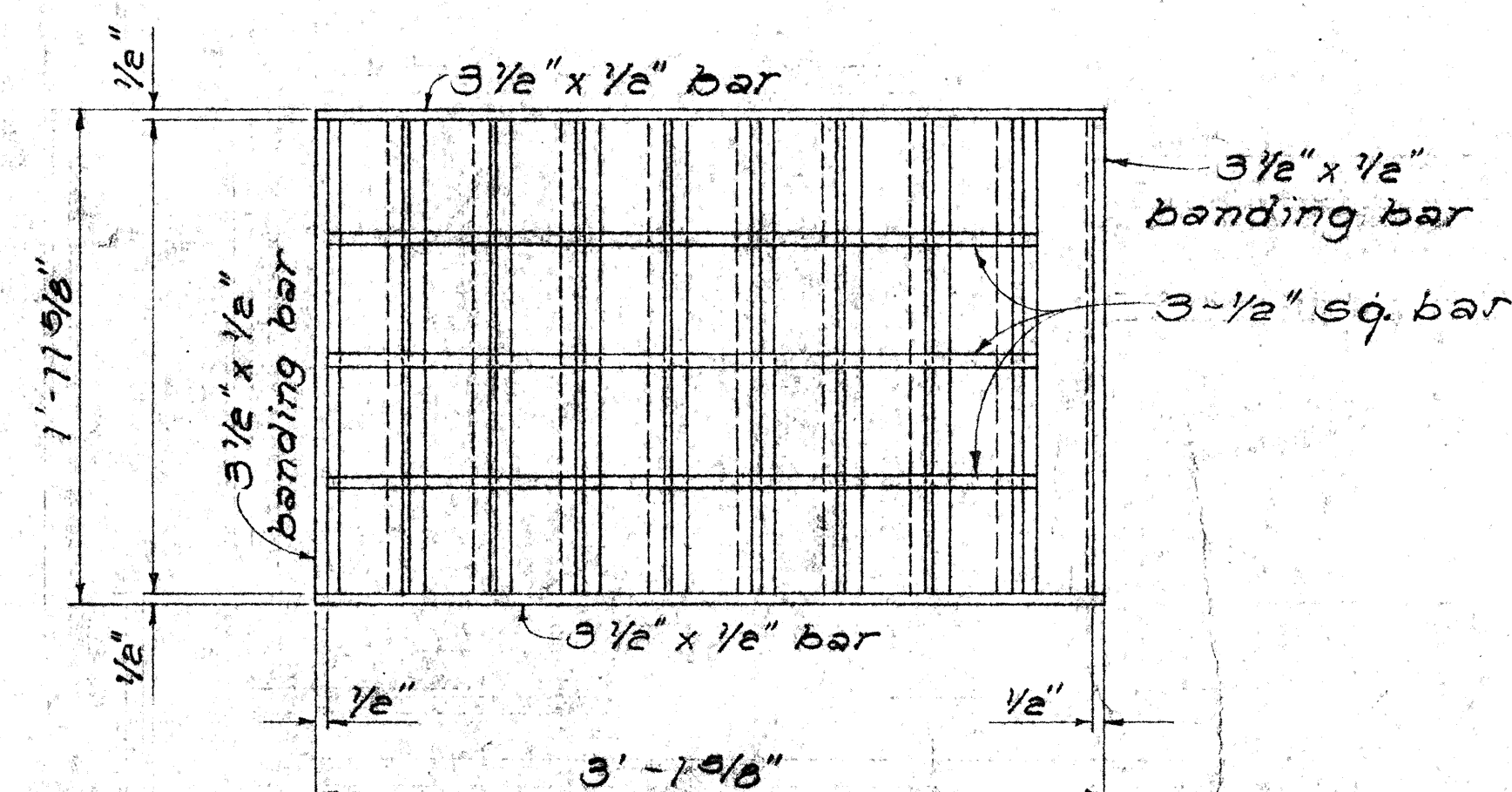
Center Support Assembly



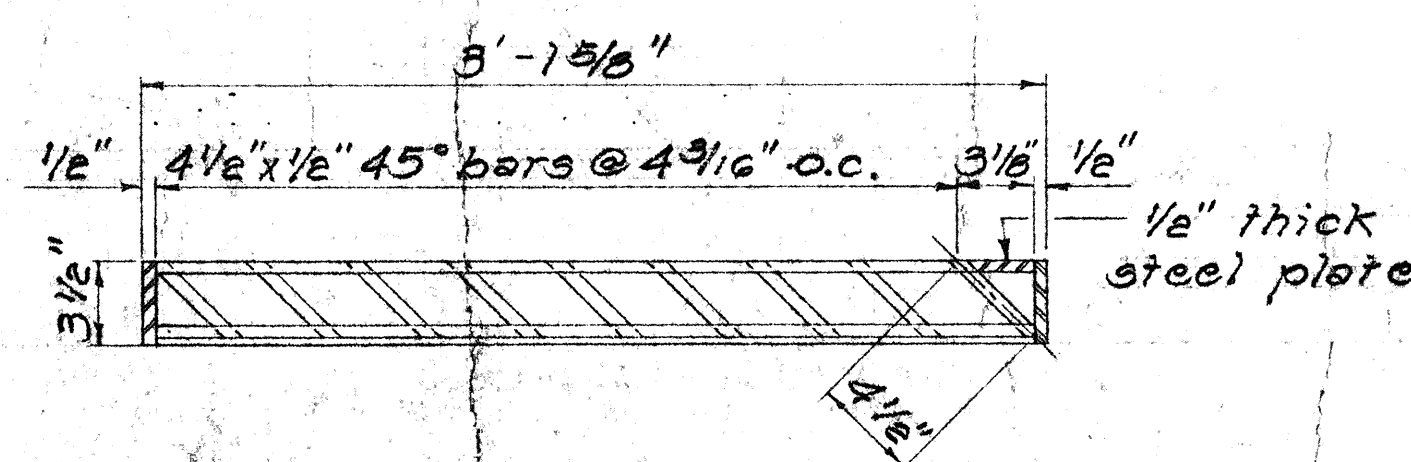
CROSS SECTION
(Thru Frame & Grate)

FRAME DETAILS

Scale: 1" = 1'-0"



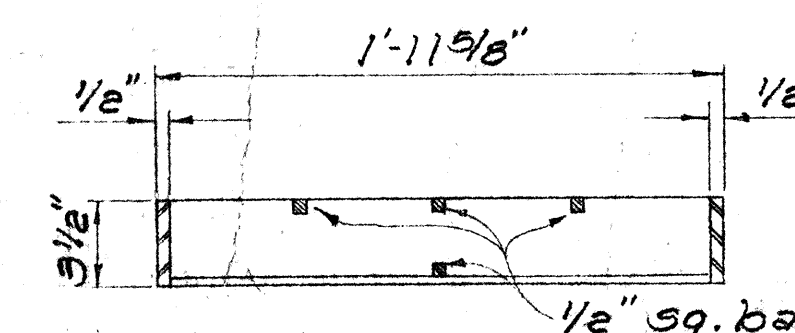
PLAN



LONGITUDINAL SECTION

GRATE DETAILS

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



CROSS SECTION

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SHEET No. 4 OF 4 SHEETS