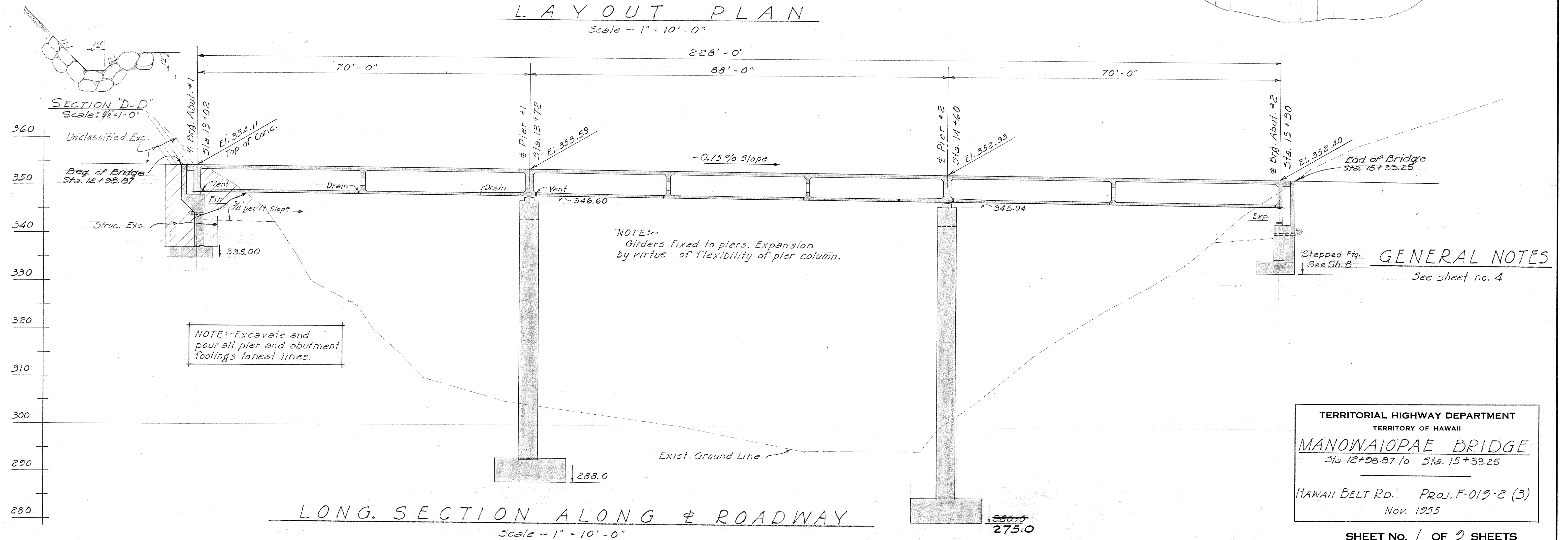
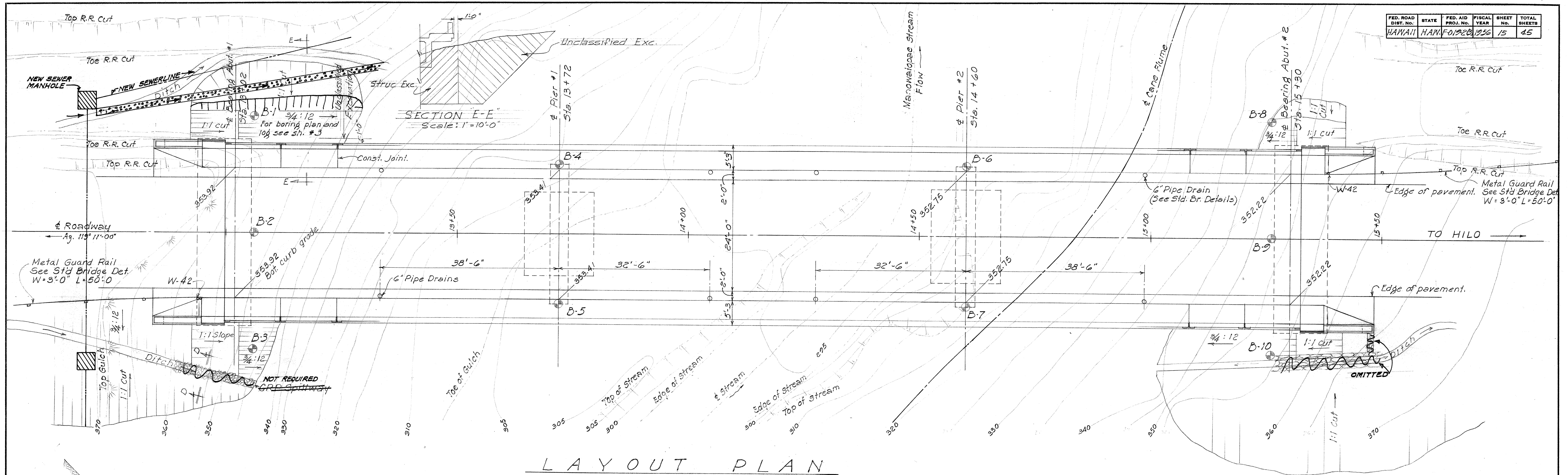


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	F-019-2	1955	15	45



GENERAL NOTES
See sheet no. 4

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MANOWAIOPAE BRIDGE
Sta. 12+98.87 to Sta. 15+33.25
HAWAII BELT RD. Proj. F-019-2 (3)
Nov. 1955

SHEET NO. 1 OF 2 SHEETS

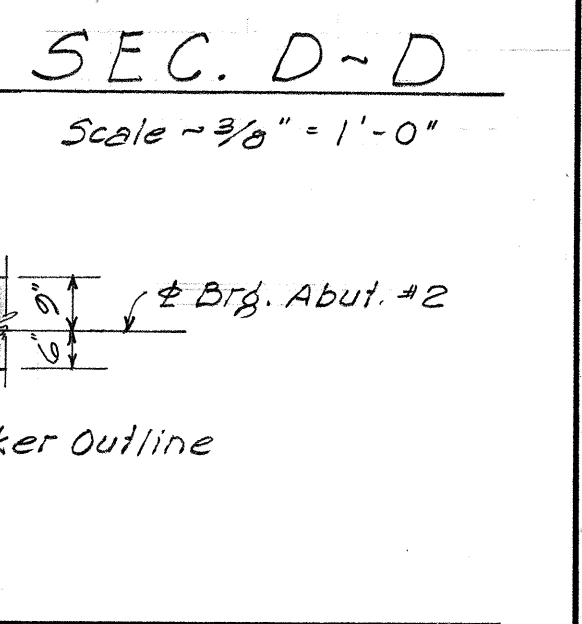
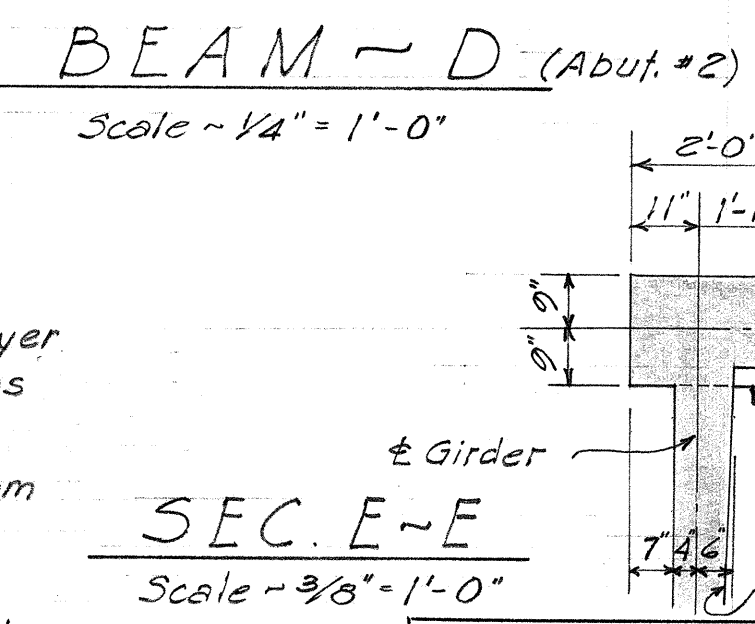
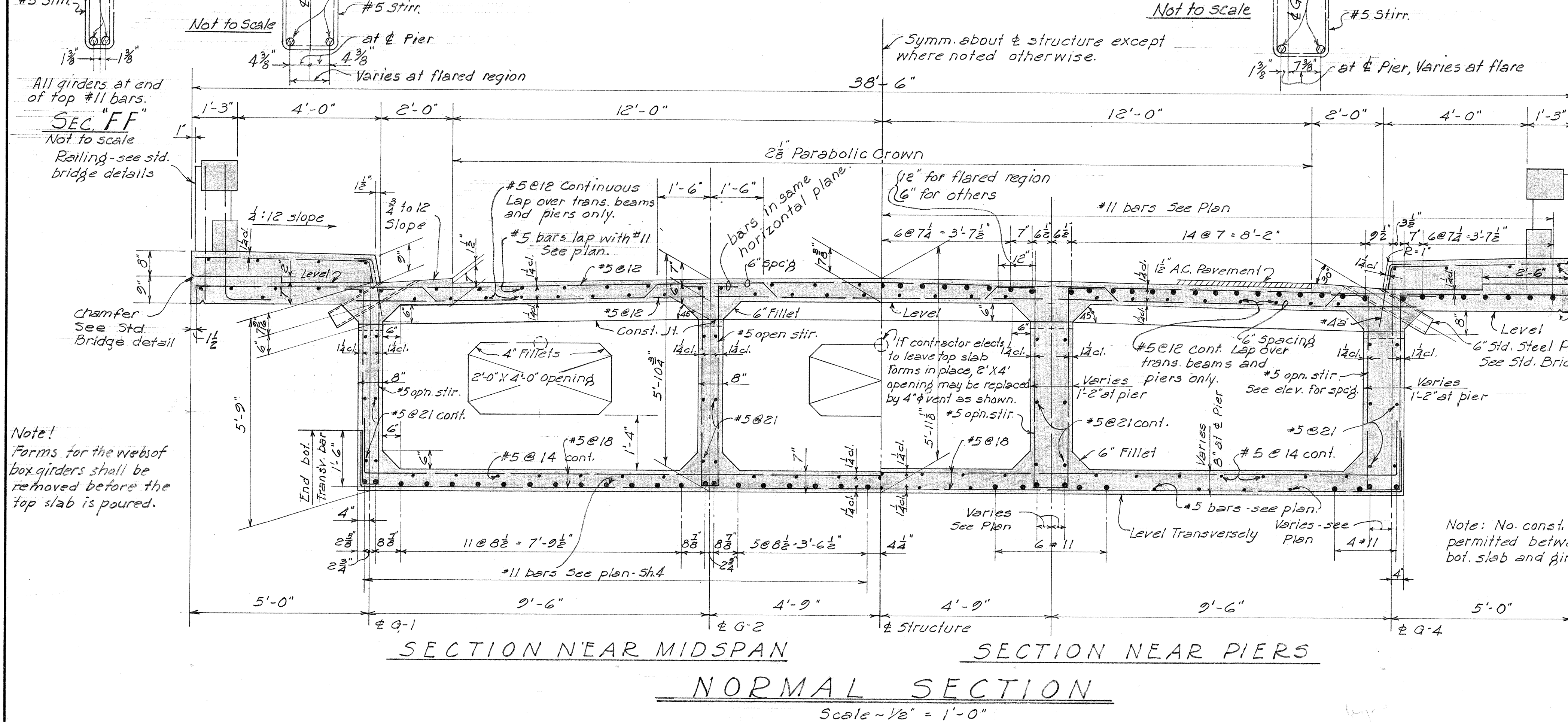
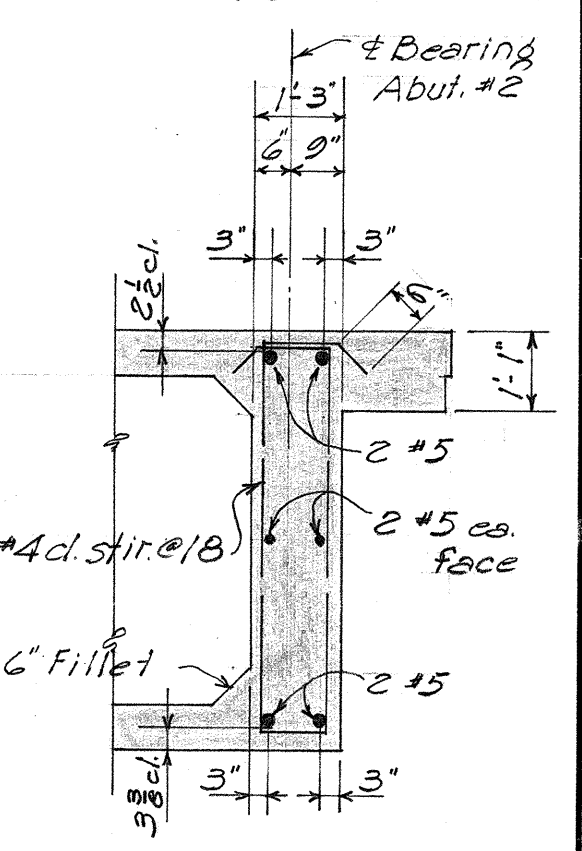
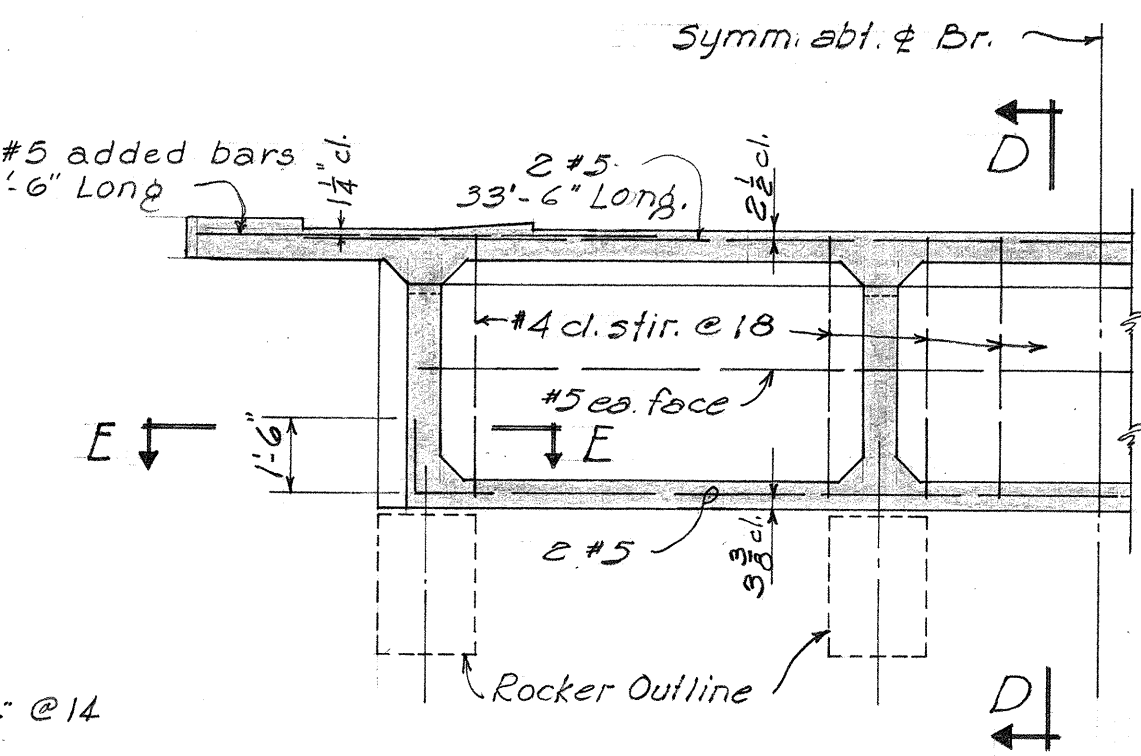
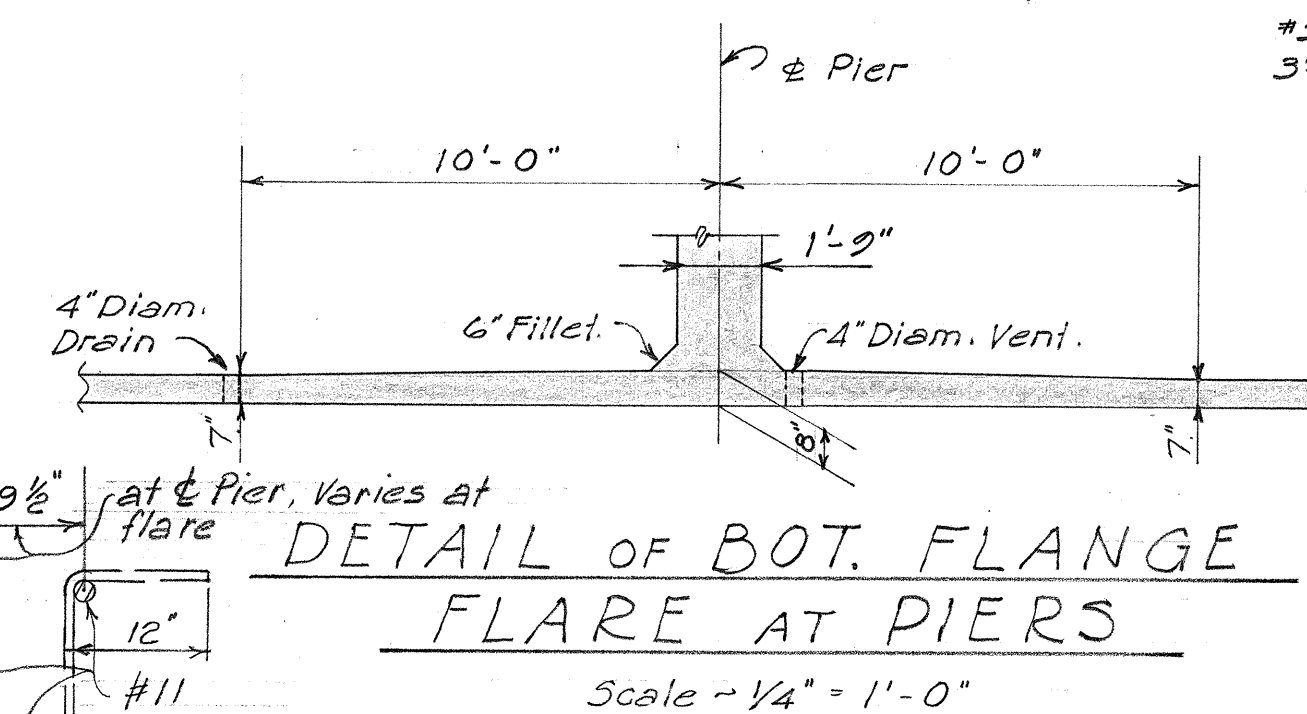
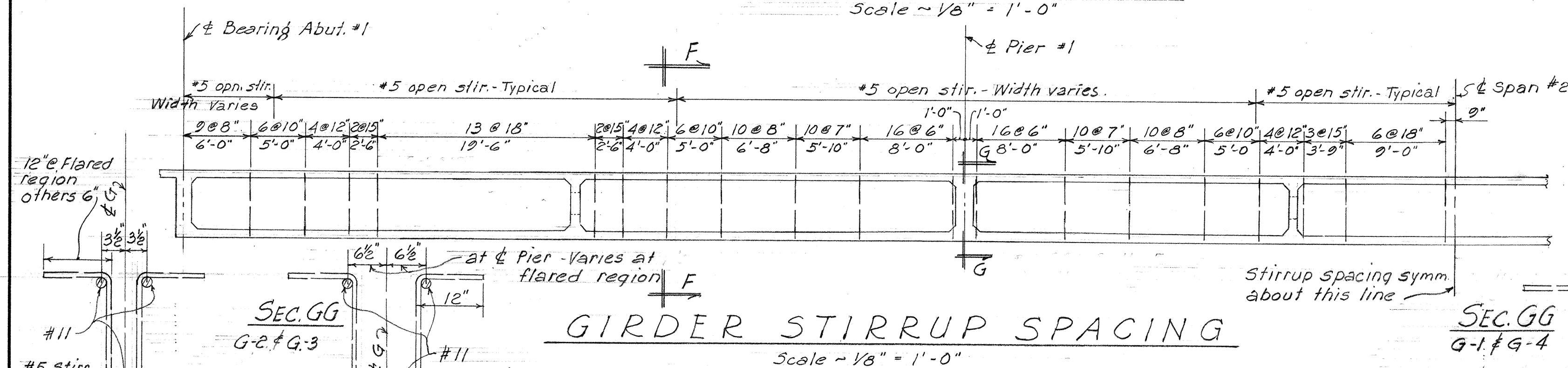
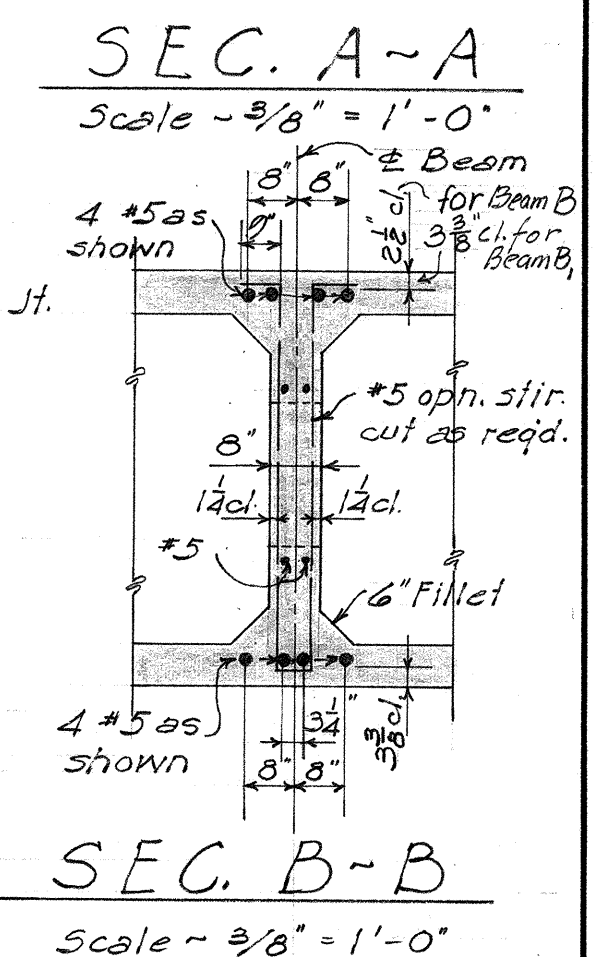
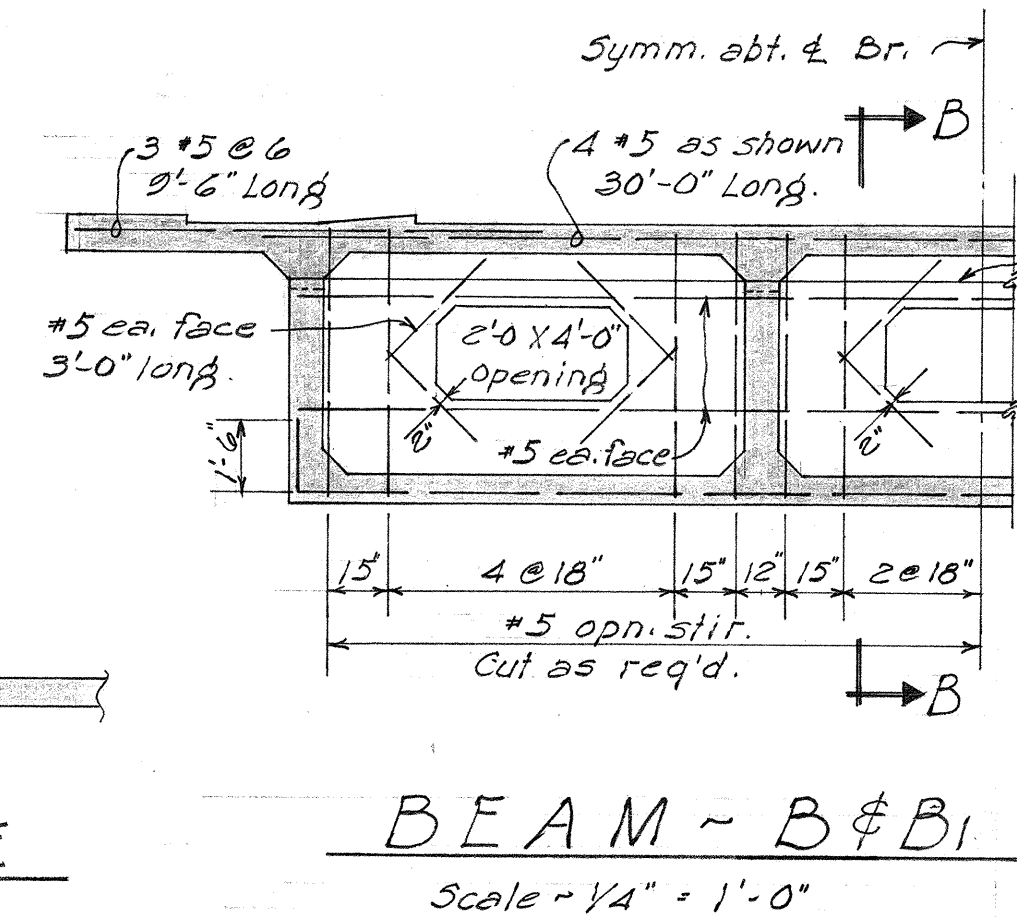
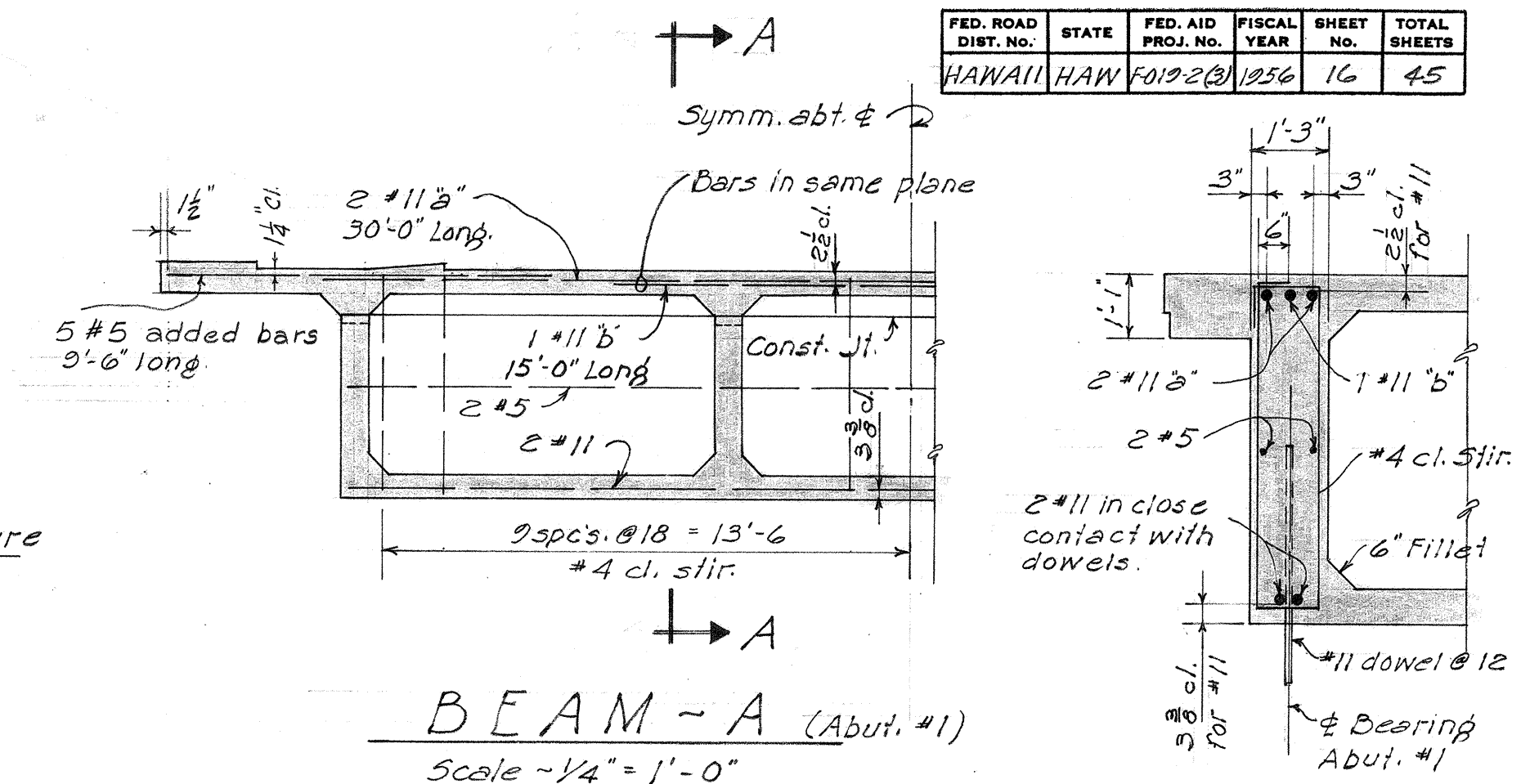
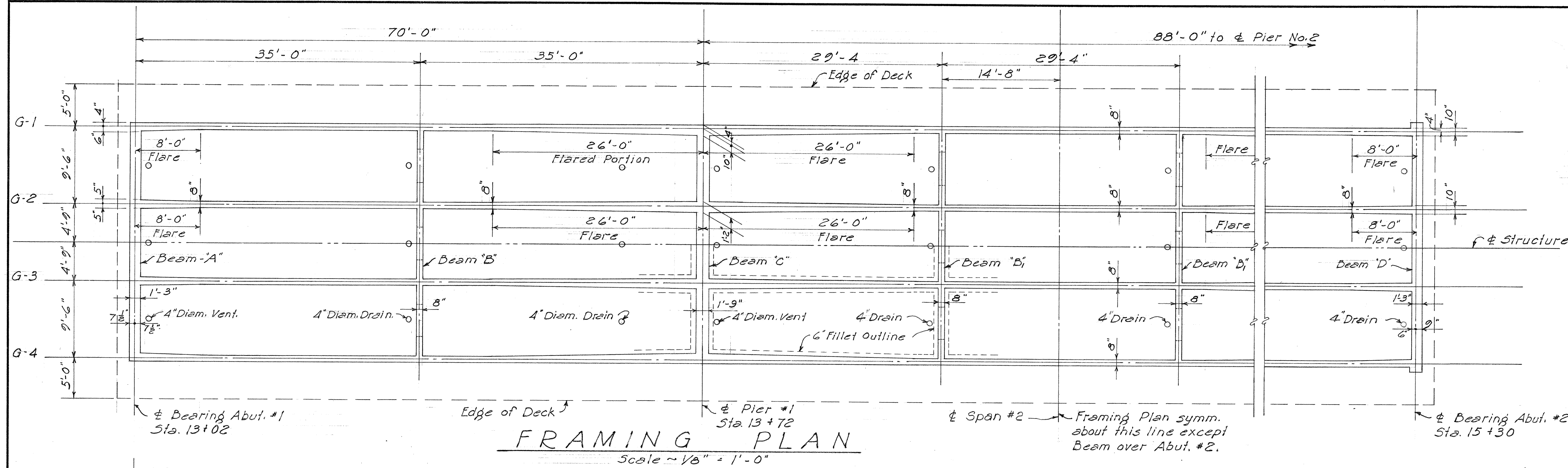
5 S 4 E 15

DATE	DESIGNED BY	TRACED BY	QUANTITIES BY	CHECKED BY
11/55	J. J. J.	J. J. J.	J. J. J.	J. J. J.

DD-K F-019-2(3)

File Containing Separate Bridge

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW	F019-2(3)	1956	16	45

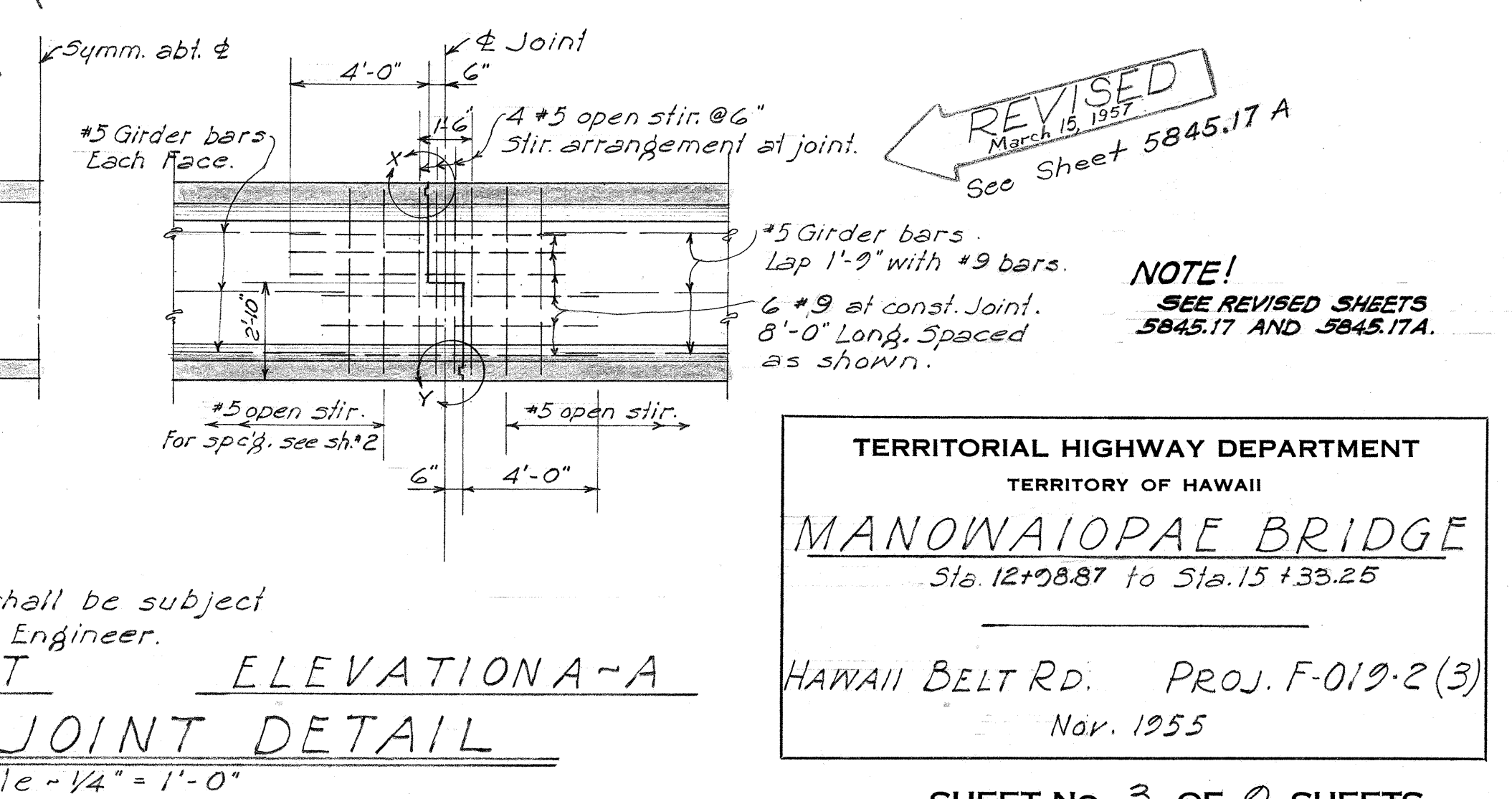
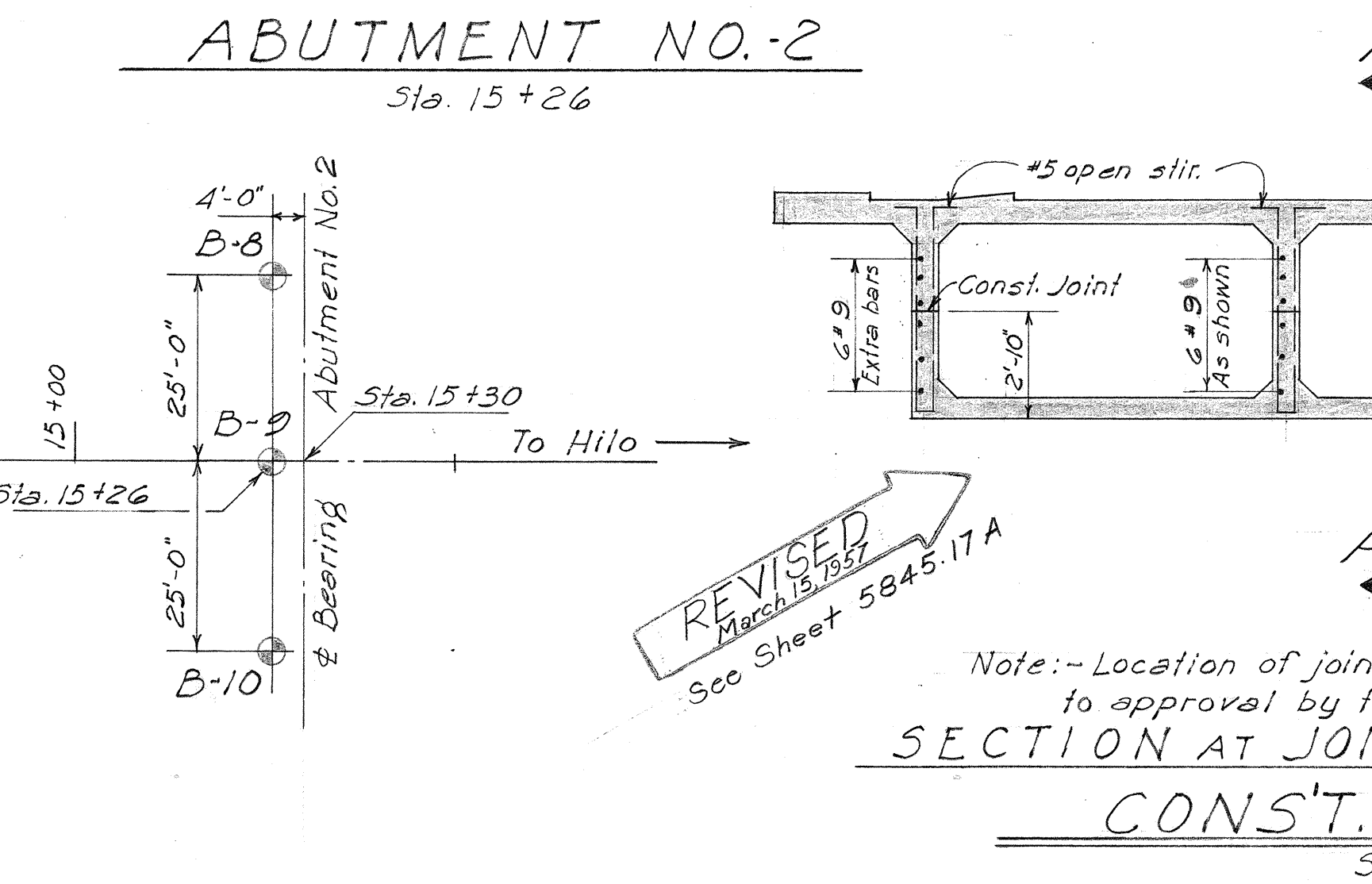
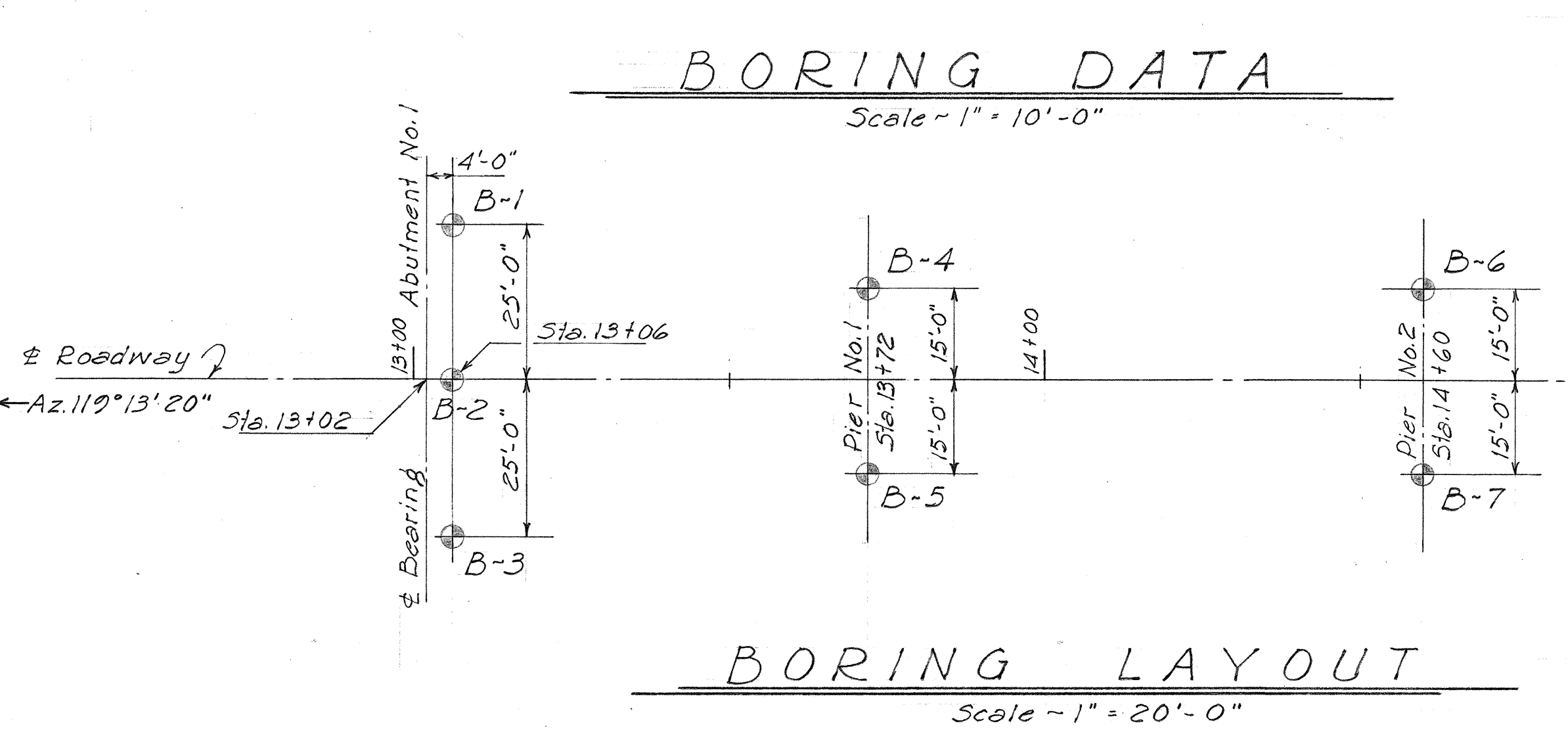
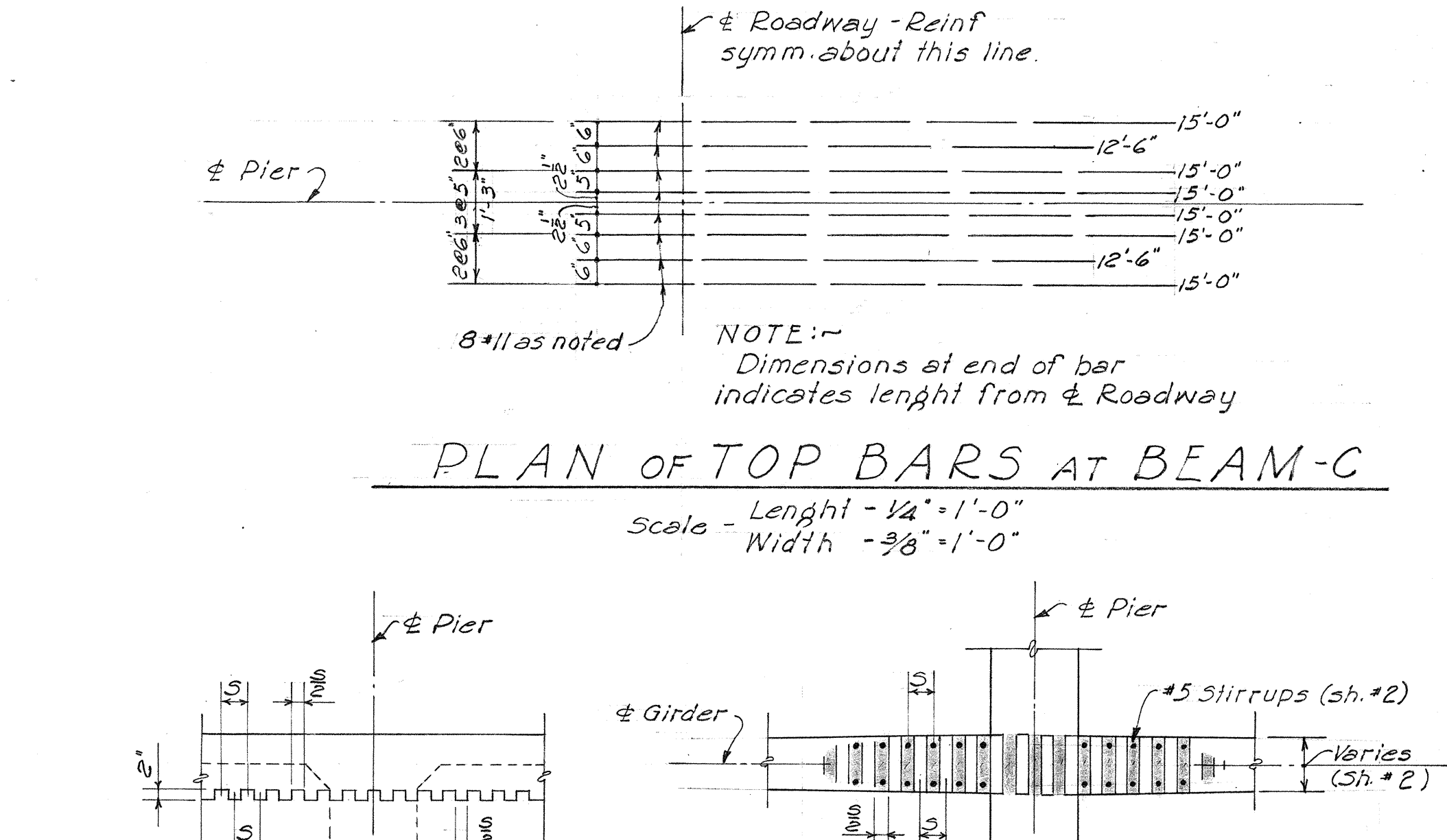
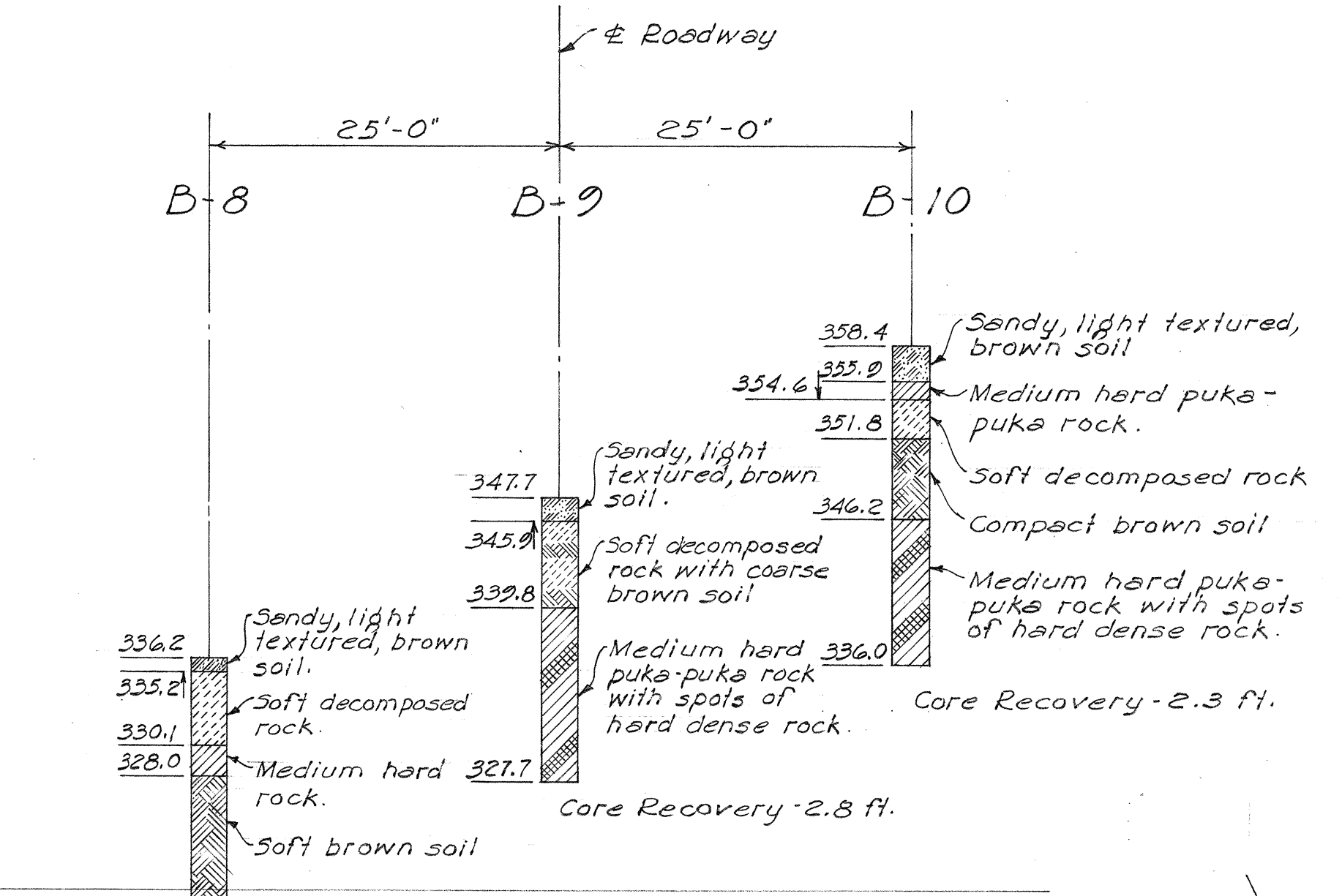
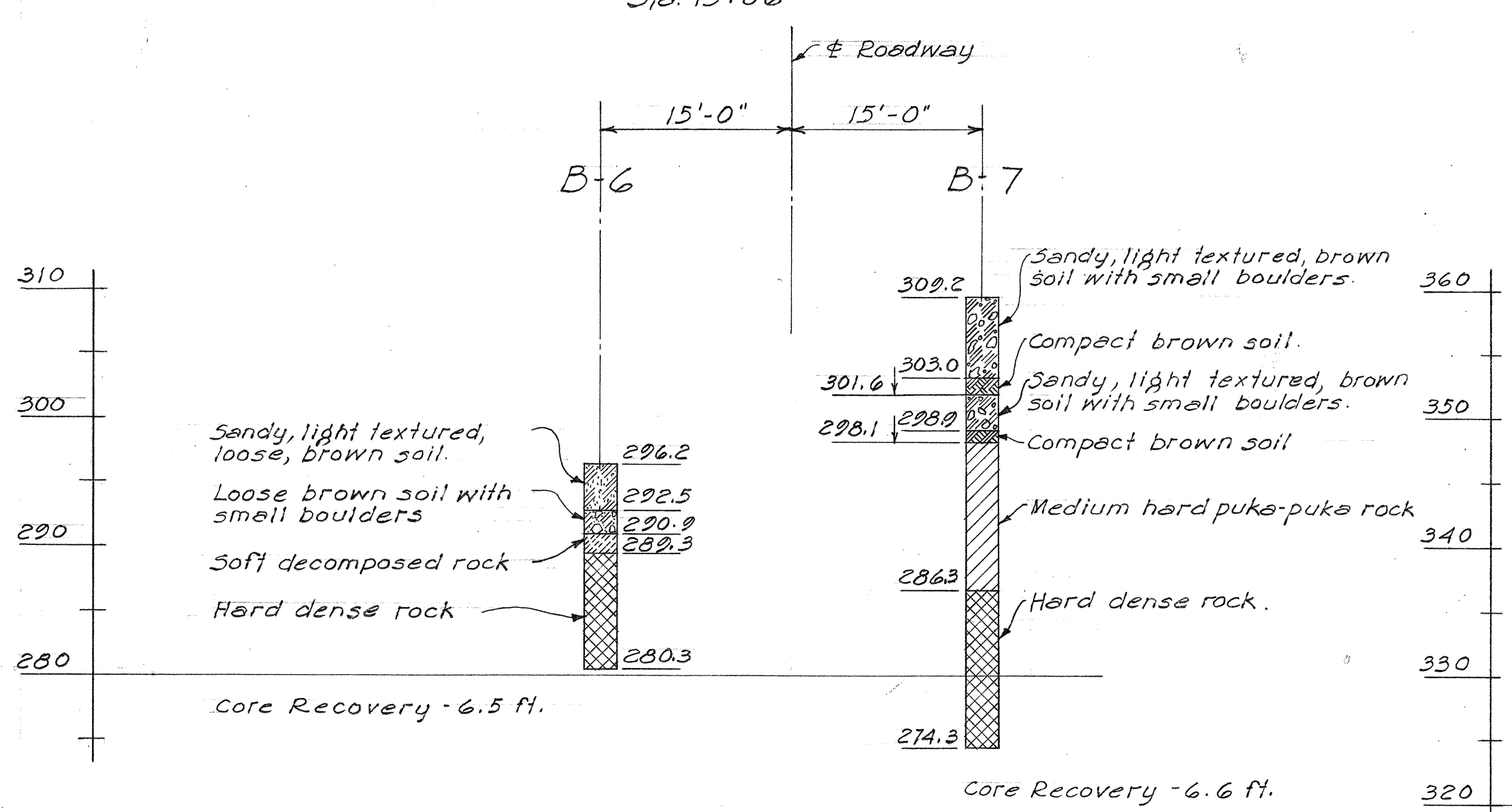
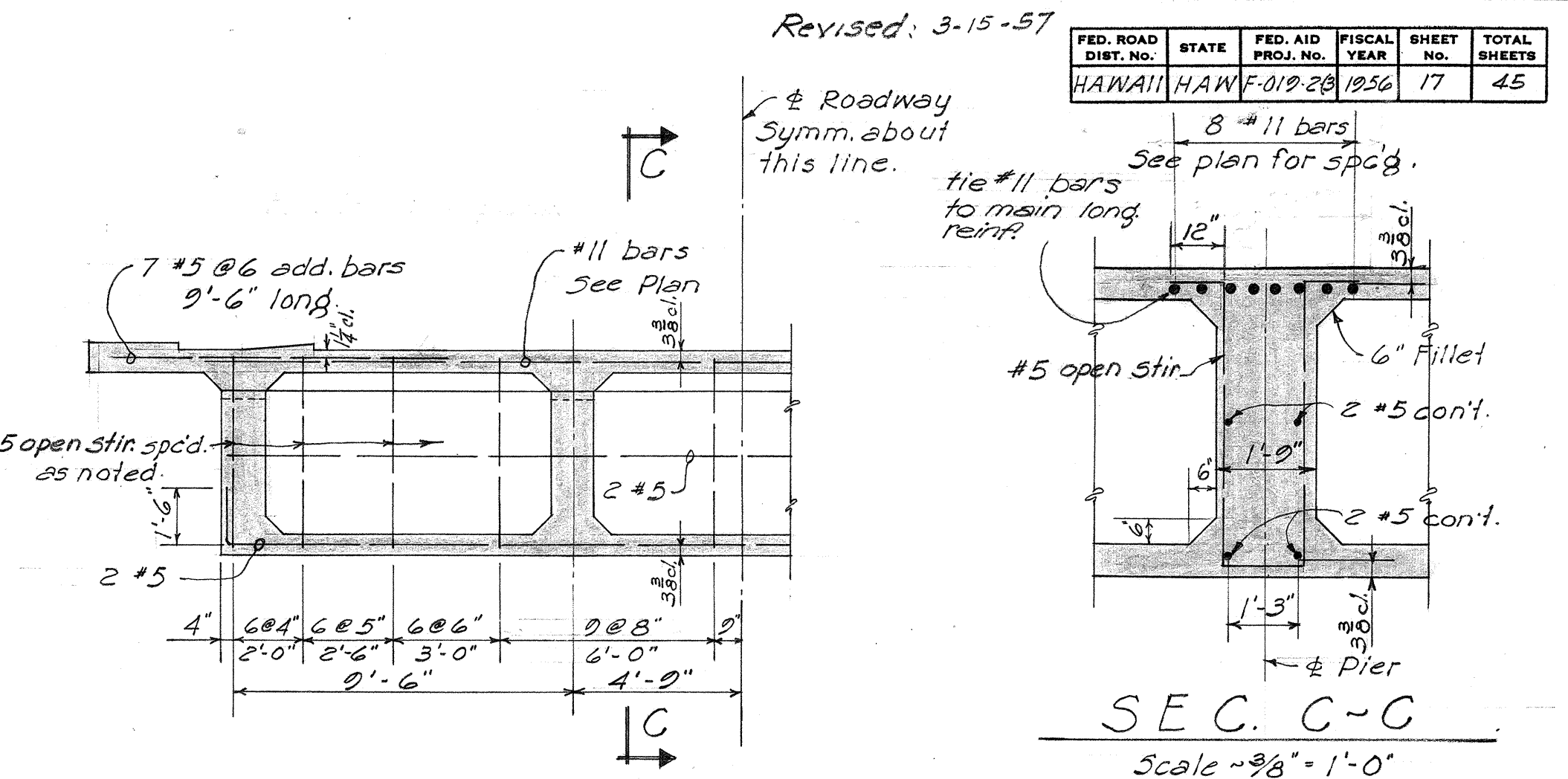
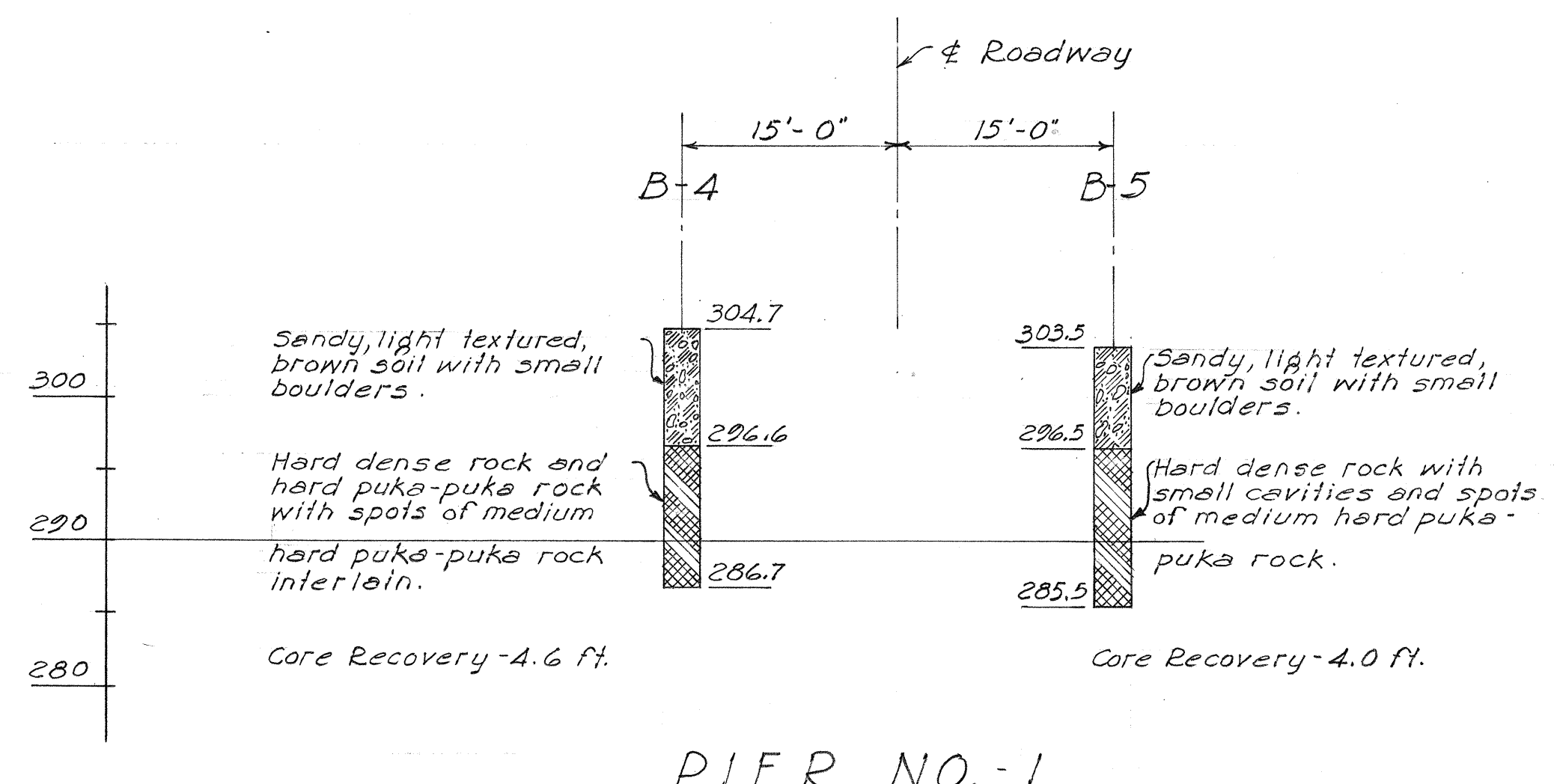
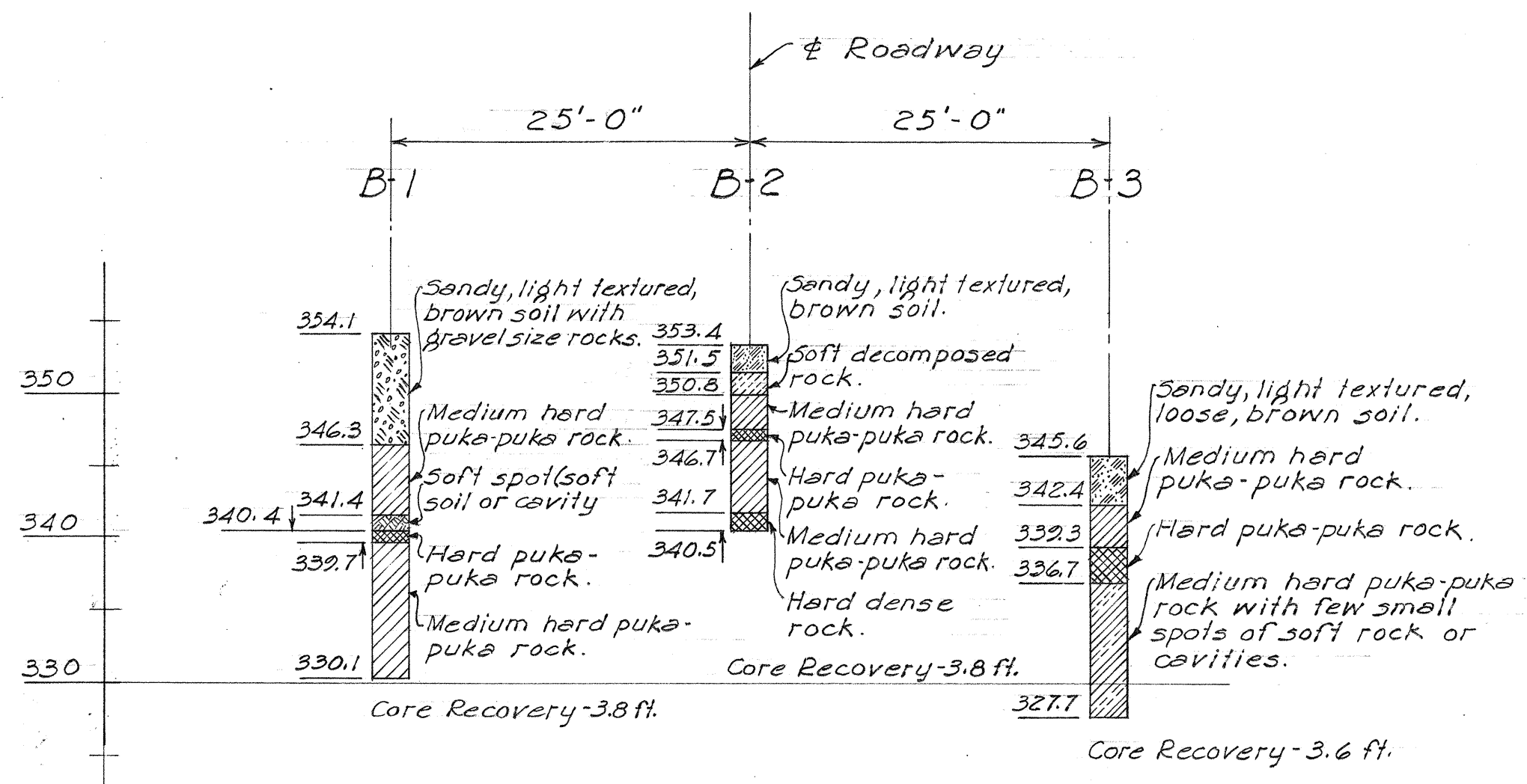


Note:
Longitudinal bars in top layer of top flange are designated as main top flange reinf.
Longitudinal bars in bottom layer of bottom flange are designated as main bottom flange reinf. See Sh.4 for plan.

Note: No. const. joint flange reinf. See Sh. 4 for plan.
 bot. slab and girders.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MANOWAIOPAE BRIDGE
Sta. 12+28.87 to Sta. 15+35.25
HAWAII BELT RD. : PROJ. F-019-2 (3)
Nov. 1955

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	F-019-28	1956	17	45



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MANOWAIOPAE BRIDGE
Sta. 12+28.87 to Sta. 15+33.25
HAWAII BELT RD. PROJ. F-019-2(3)
Nov. 1955

SHEET No. 3 OF 9 SHEETS

5845.17

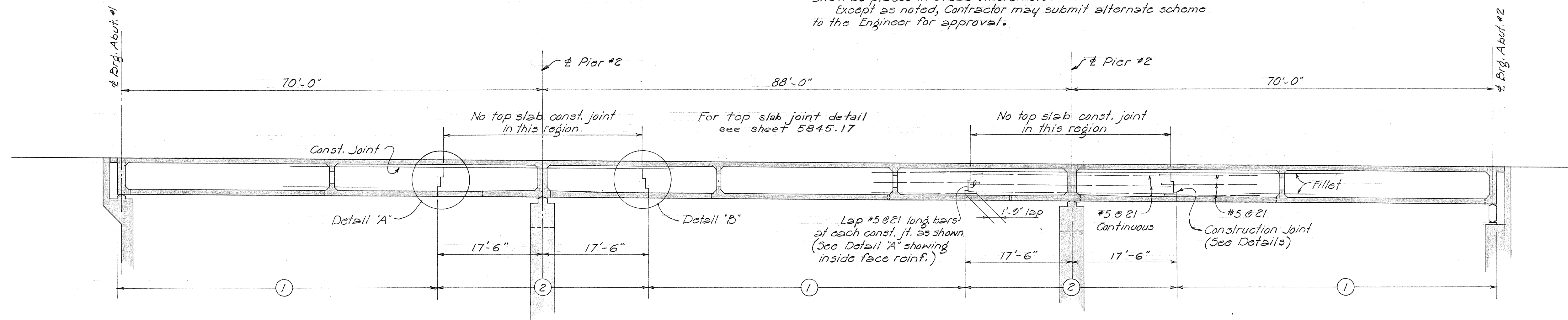
DATE: 2/55
DESIGNED BY: J. J. J.
DRAWN BY: J. J. J.
CHECKED BY: J. J. J.
NOTE BOOK NO.:

Revision: March 15, 1957
Construction joint detail revised.
Concrete placing diagram added.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-019-2(3)	1957	17A	45

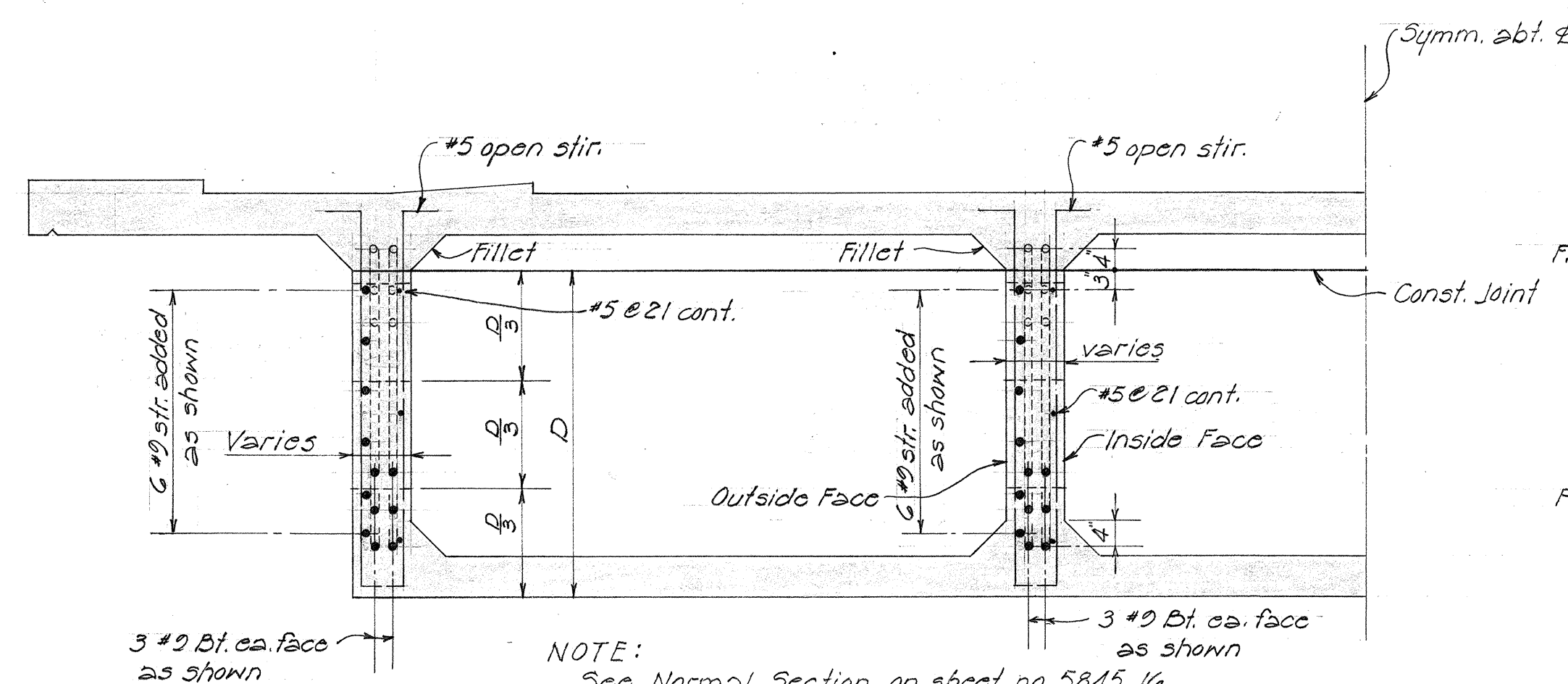
Revised: March 15, 1957

NOTE:
Numbers ① and ② indicate sequence of placing bottom slab and girder stems.
Top slab may be placed as desired except no const. joint shall be placed in areas where noted.
Except as noted, Contractor may submit alternate scheme to the Engineer for approval.



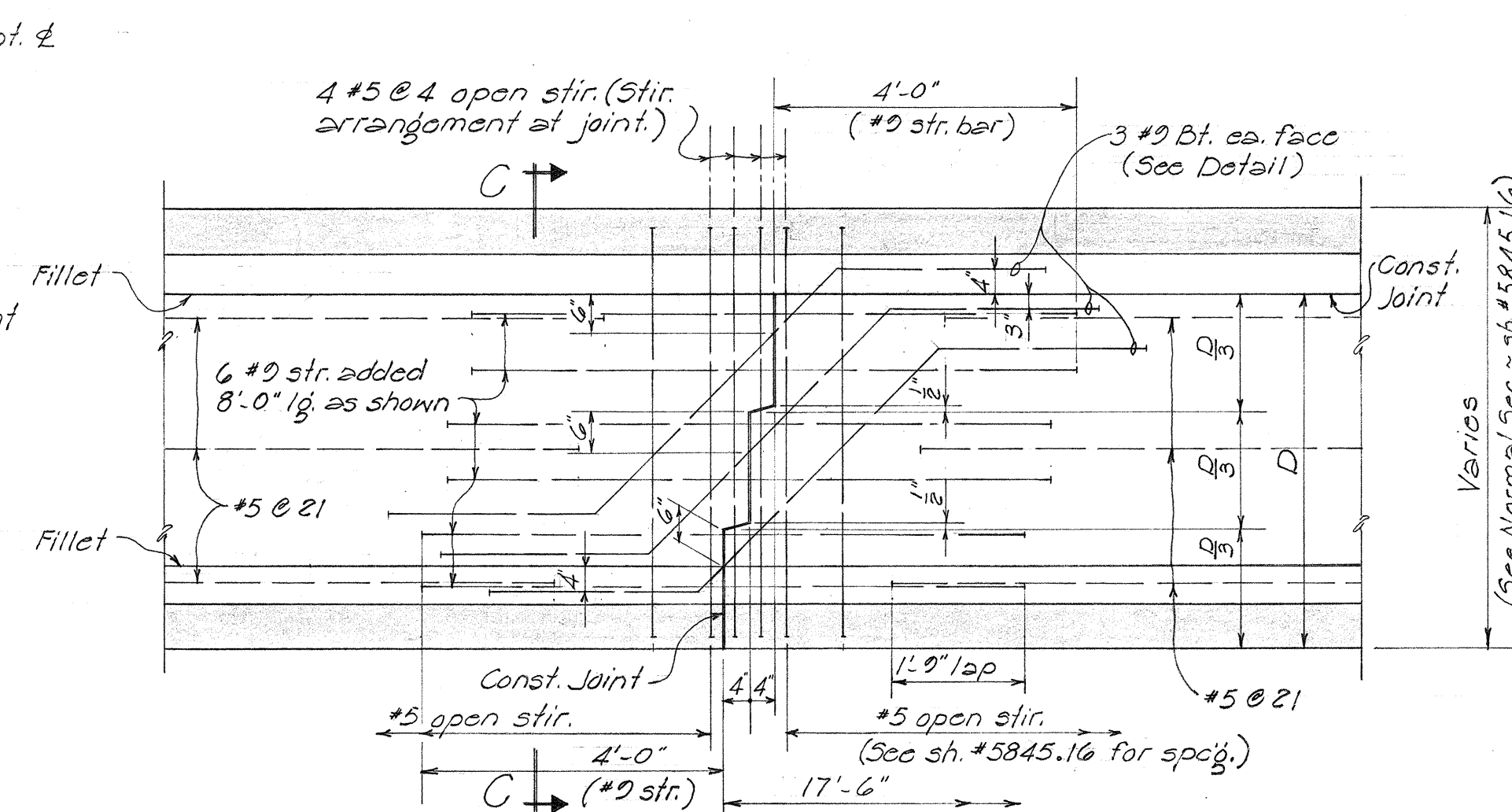
PLACING DIAGRAM FOR SUPERSTRUCTURE CONCRETE

Scale - 1" = 10'-0"



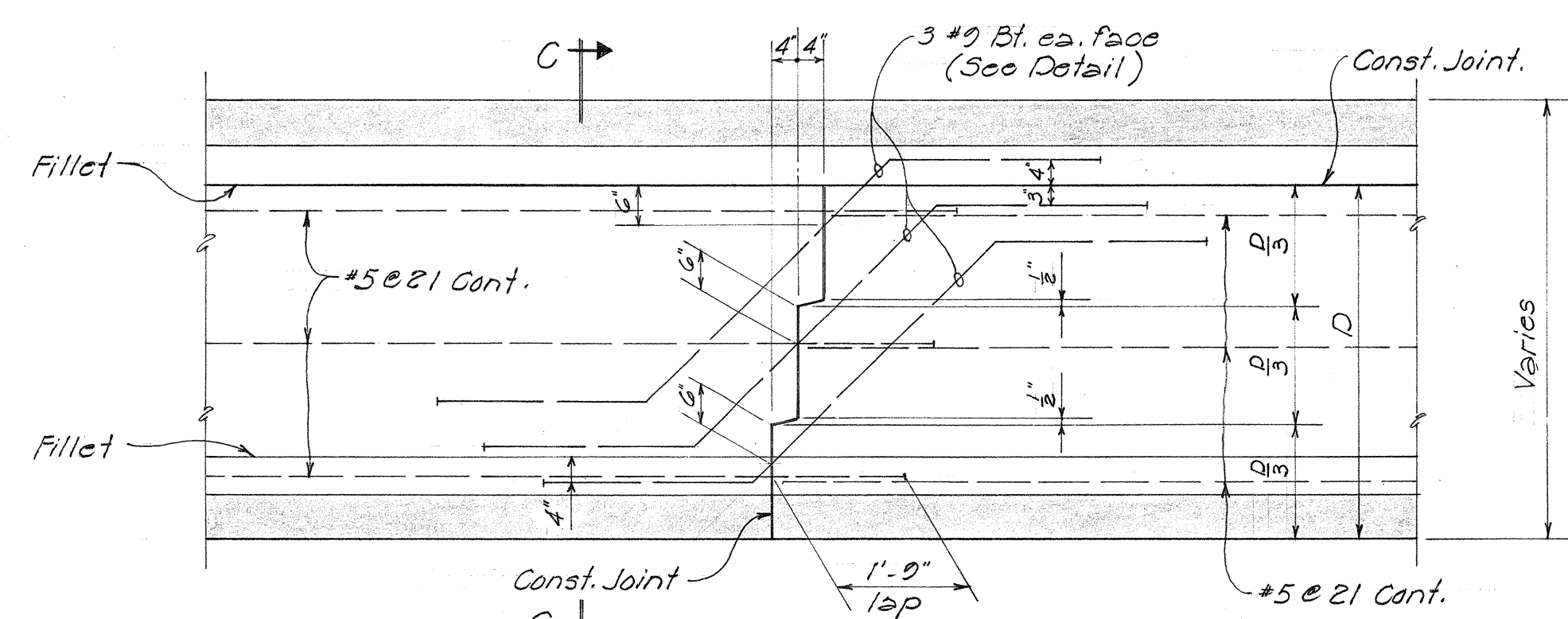
SECTION C-C

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



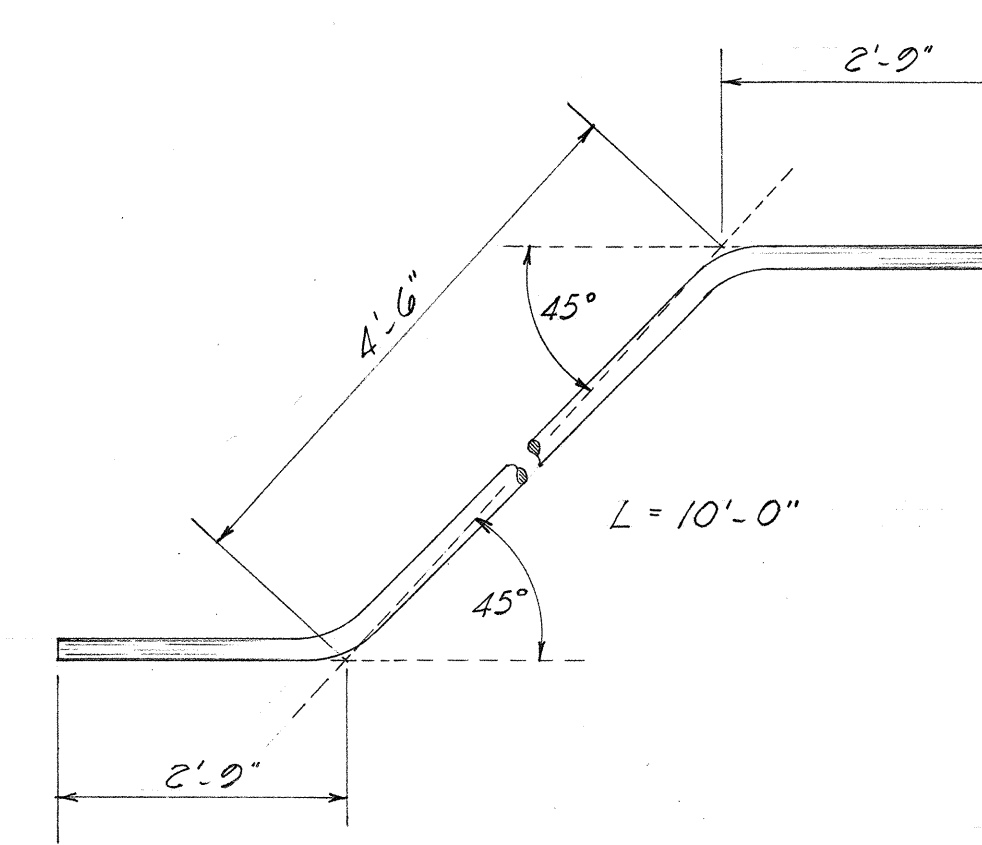
DETAIL 'A' (Showing Outside Face Reinf.)

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



DETAIL 'A' (Showing Inside Face Reinf.)

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



#9 BENT BAR

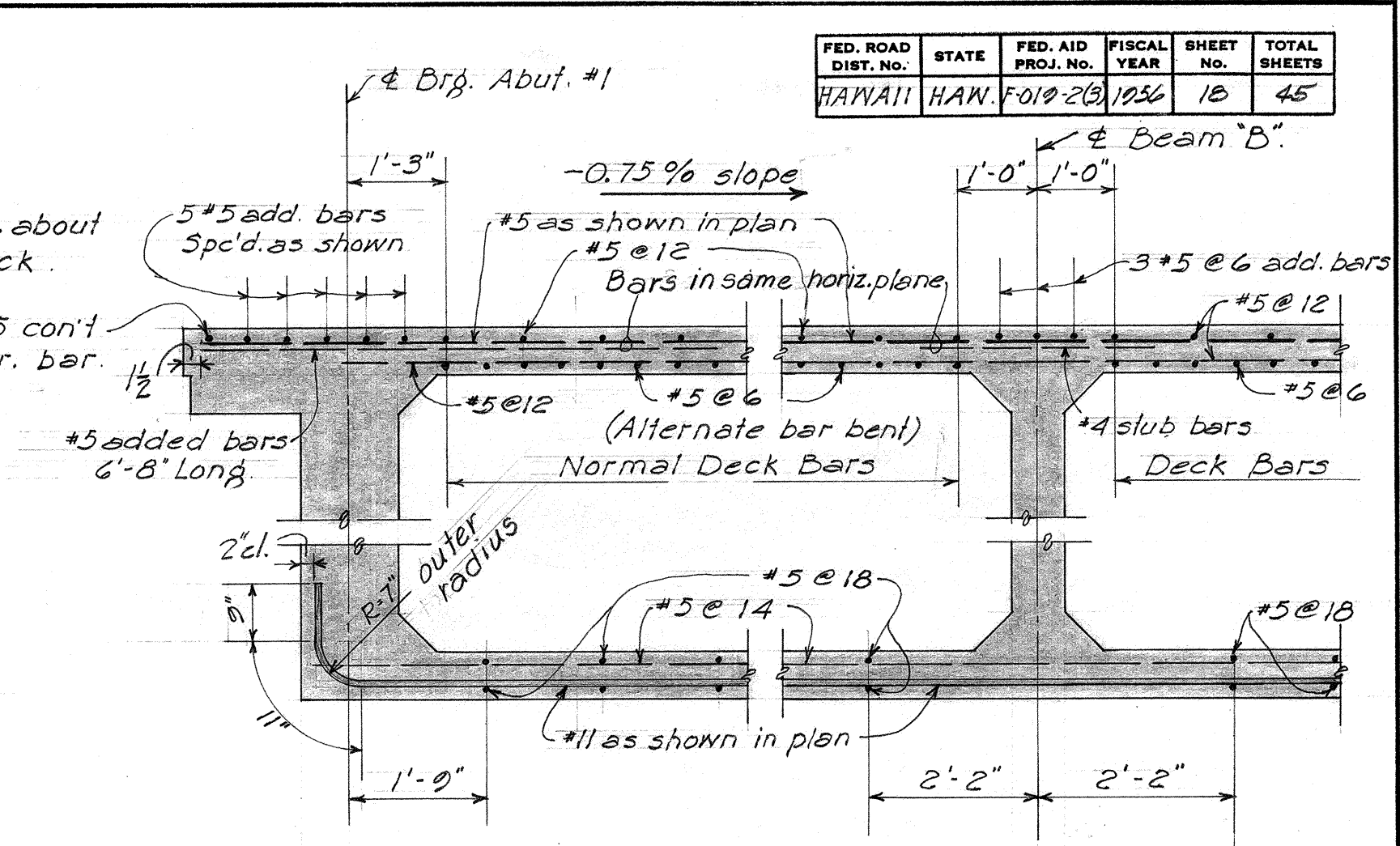
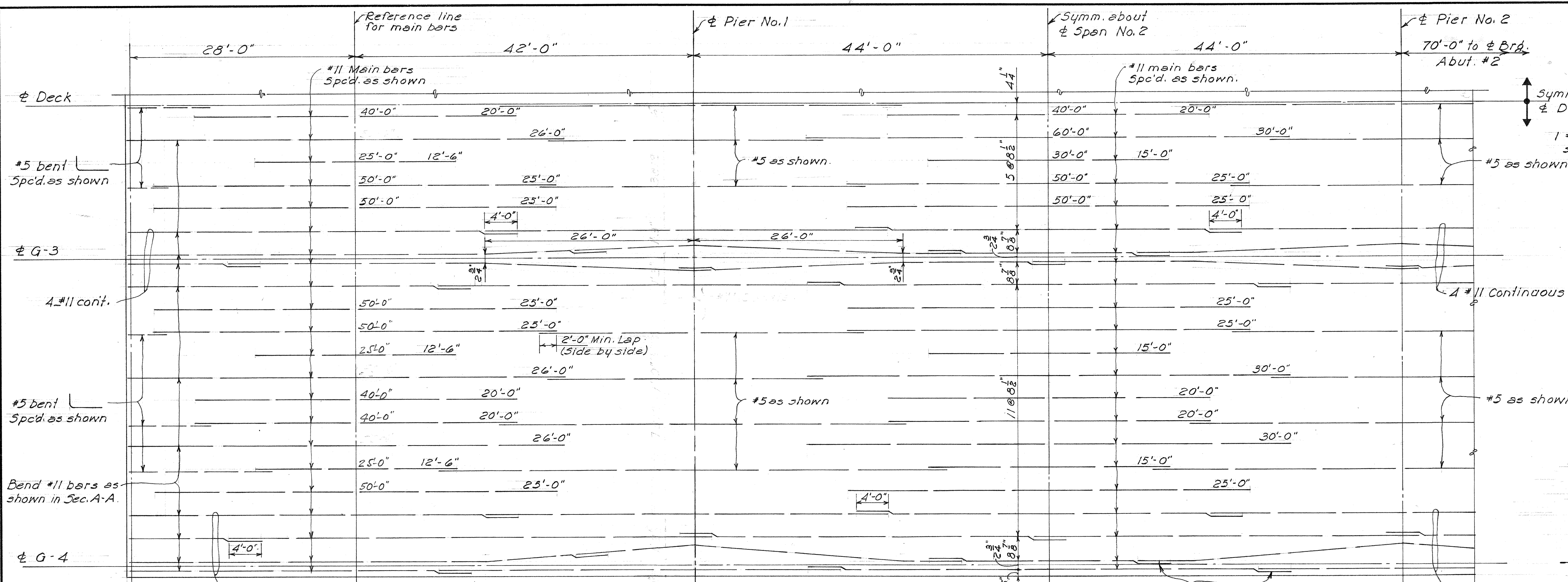
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MANOWAIOPAE BRIDGE
Sta. 12+98.87 to Sta. 15+33.25
HAWAII BELT RD. PROJ. F-019-2 (3)
March 1957

SHEET No. OF SHEETS

5845.17A

DESIGNED BY	DATE
DRAWN BY	3-57
CHECKED BY	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F019-2(3)	1955	18	45



GENERAL NOTES

MATERIALS

Concrete: All concrete class A-1, except class C-1 concrete in gravity retaining wall and class D-1 in fill concrete.

SPECIFICATION FOR ROLLED LEAD PLATE

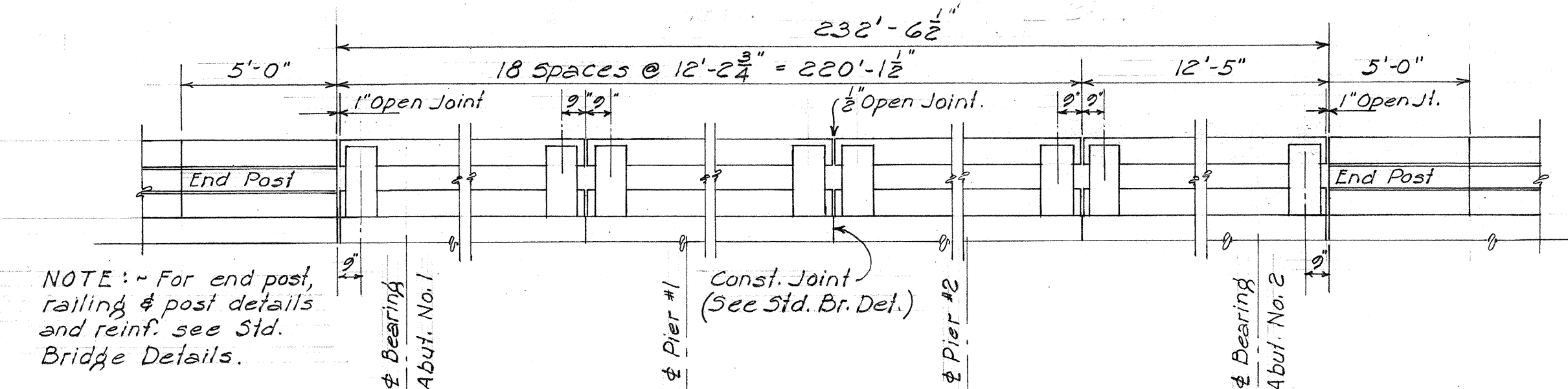
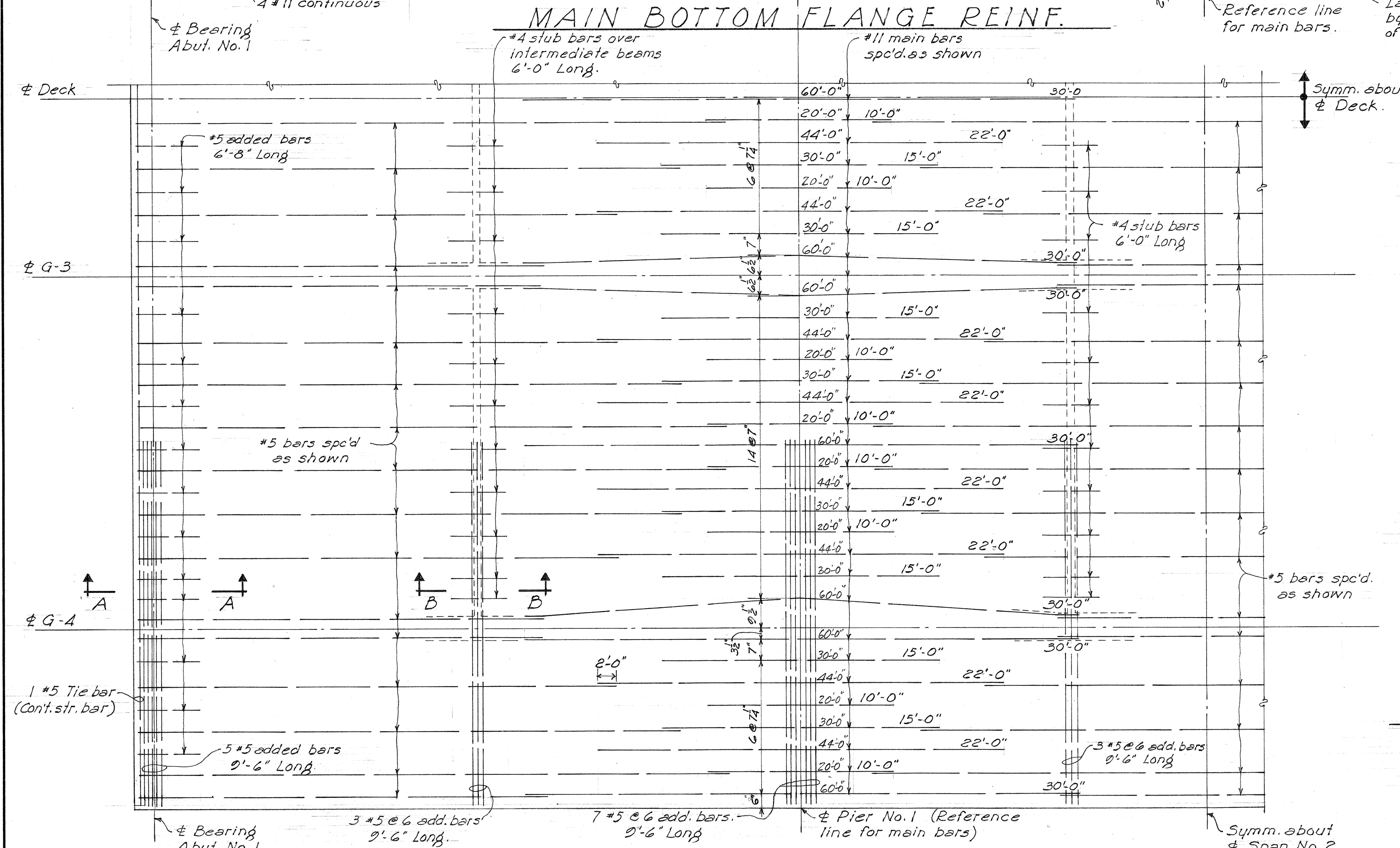
These plates shall be rolled from pig lead made from ore or other material by process of reduction and refining. The use of reclaimed lead shall not be permitted. The material shall contain a minimum of 99.85% of lead and shall fulfill the requirements of the "Standard Specification for Pig Lead," A.S.T.M. Designation B-29.

CONSTRUCTION METHOD

Backfill behind abutments: All backfill behind abutments shall be complete in place before pouring concrete for the superstructure. Sidewalk and railing pour: Sidewalk and railing shall be poured after the release of falsework. Where excavation is called for to neat lines the concrete shall be poured against the actual exposed material. Whatever quantity is involved beyond the dimension indicated on the plans will not be paid for.

Reinf. Notes:-

All laps are made by placing bars side by side except where noted otherwise. When no splices are shown for bars longer than 60 ft. contractor may use one splice at an arbitrary location. These splices shall not be bunched together and shall be staggered. Contractor shall furnish a splice layout plan to the Engineer. Dimensions at end of bars indicates distance from reference line. Dimensions at center of bar indicates length of bar. Does not include lap.



GENERAL NOTES (CONT.)

FALSEWORK AND FORMS.

Falsework and forms for the support of box girders shall be designed to support the load that would be superimposed were the entire superstructure poured at one time. Falsework and forms supporting the bottom slab of box girders shall not be removed until 14 days after the final top slab pour. All interior forms except those permitted to remain in place shall be completely removed and the inside cleared of all loose material and swept clean. Submission of falsework plans is required.

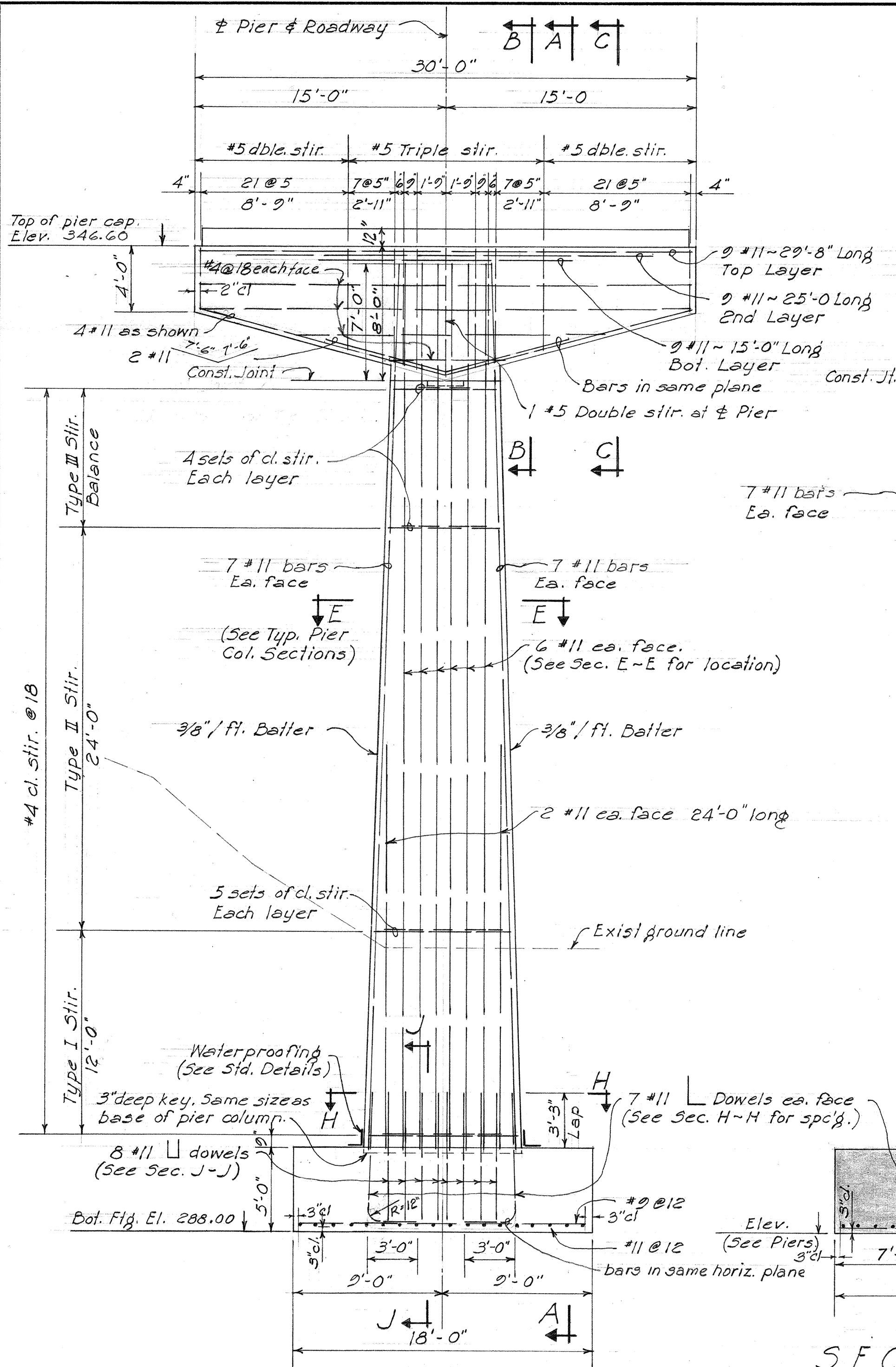
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

MANOWAIOPAE BRIDGE
Sta. 12+00.87 to Sta. 15+33.25

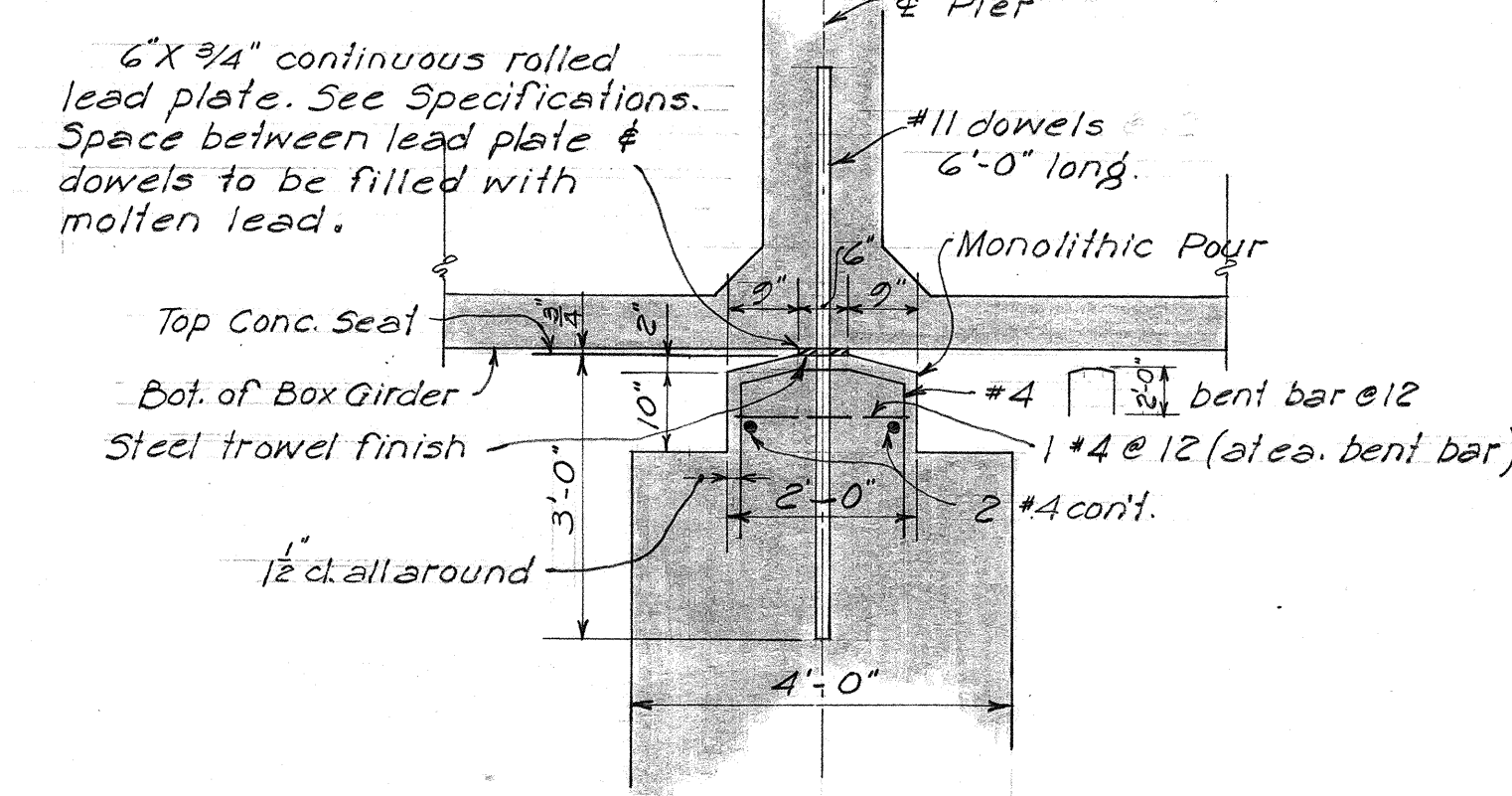
HAWAII BELT RD. PROJ. F-019-2(3)
Nov. 1955

DESIGNED BY	DATE
DRAWN BY	11/55
CHECKED BY	
NOTED BY	
QUANTITIES CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-012-2(3)	1956	10	45

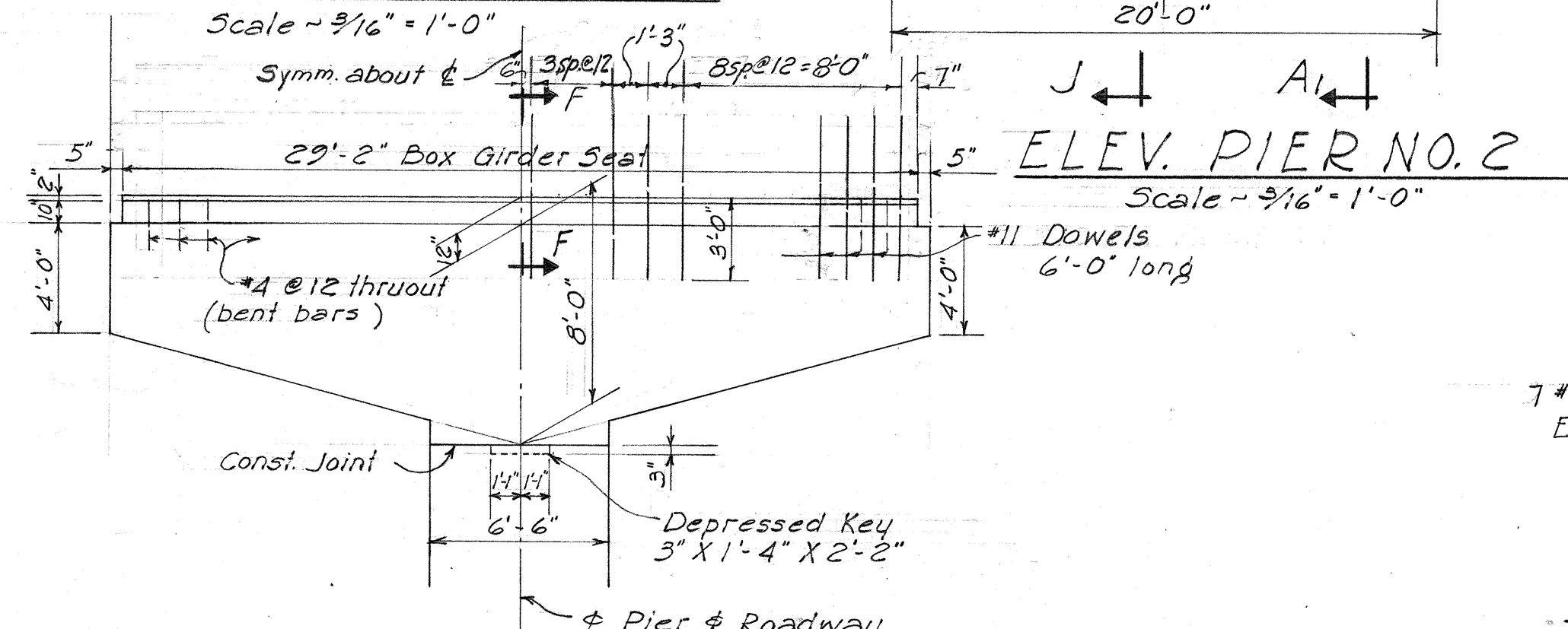


ELEV. PIER NO. 1
Scale - 3/16" = 1'-0"

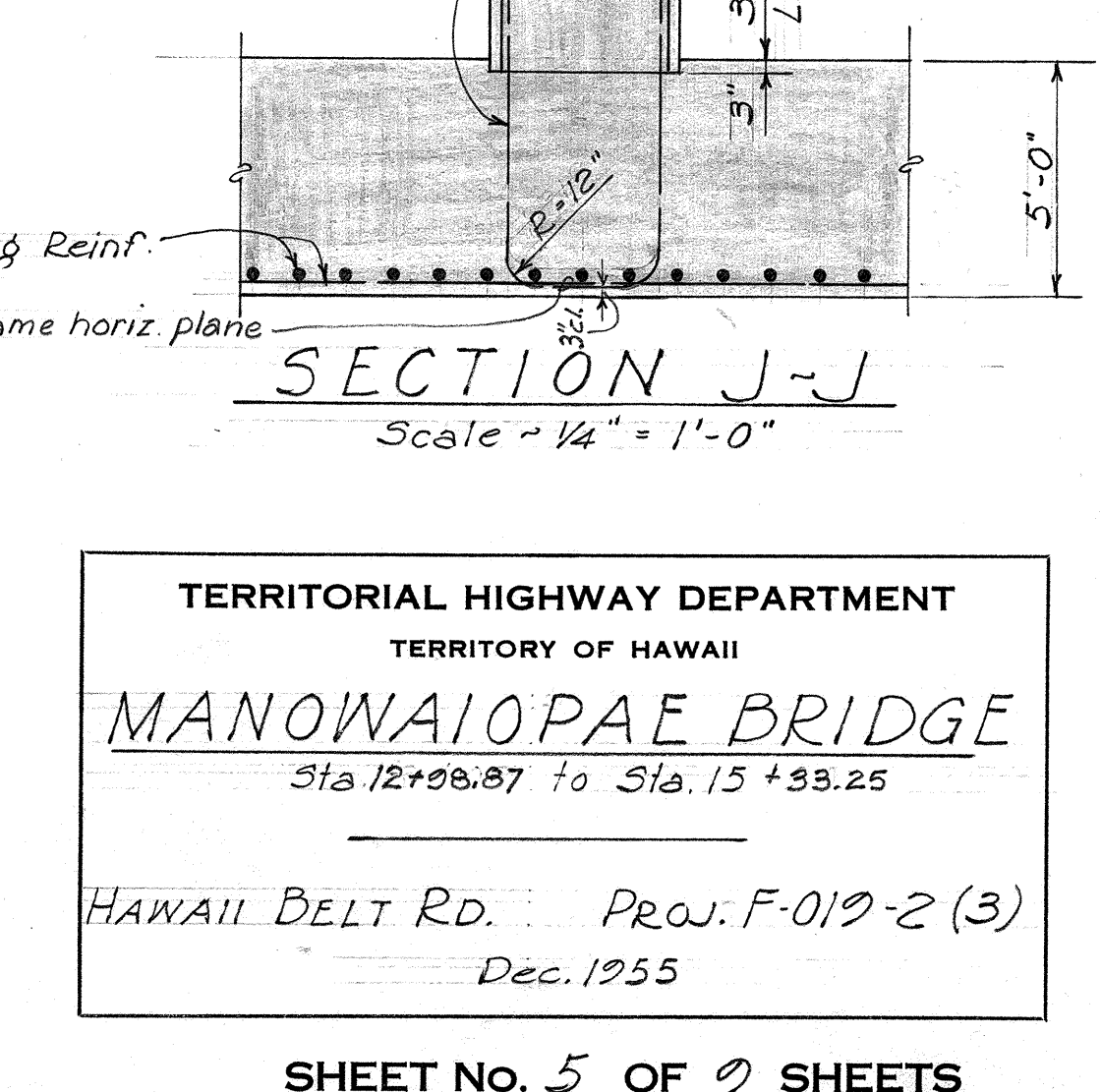
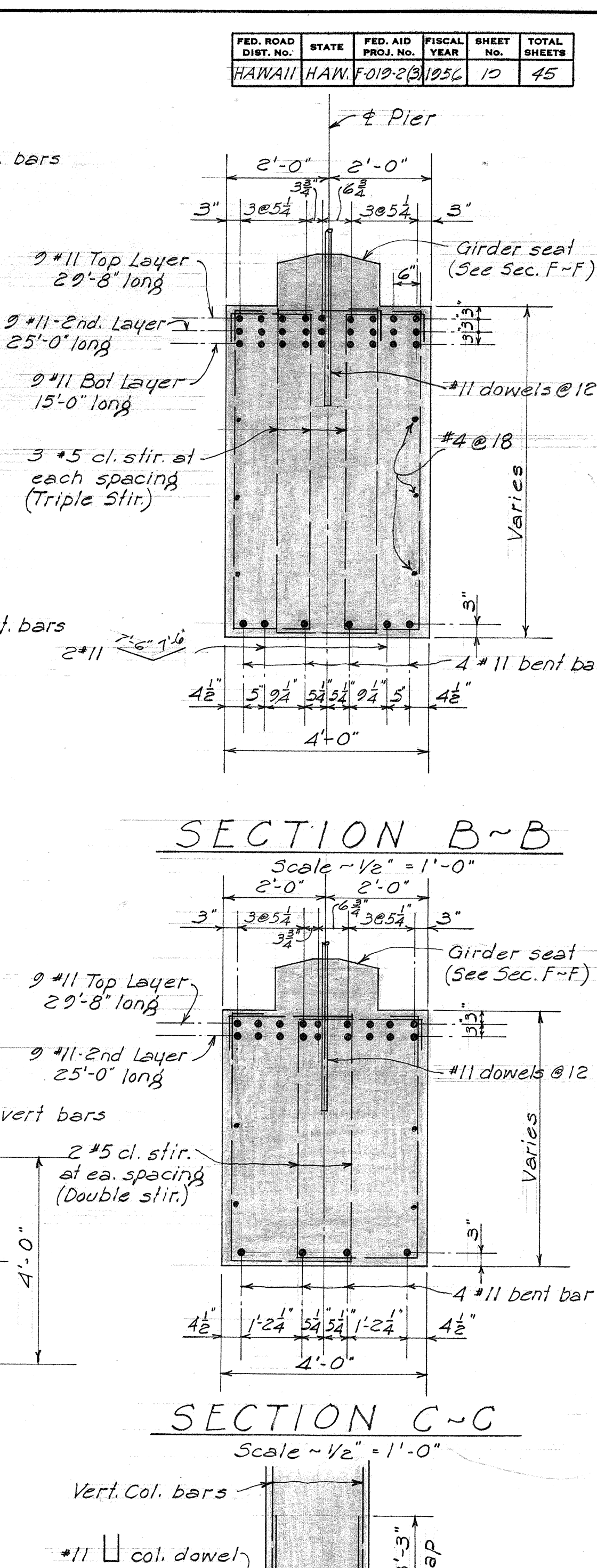
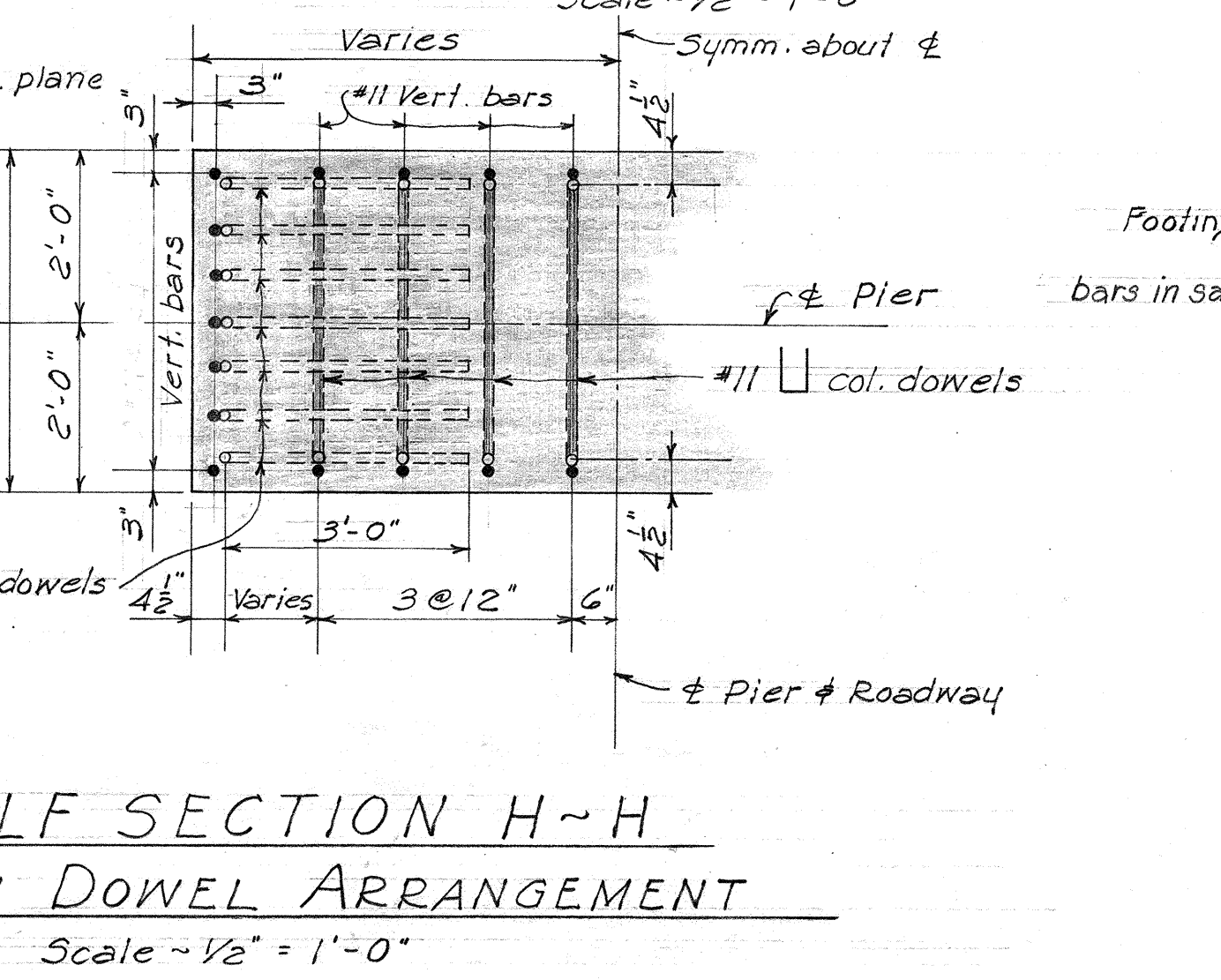
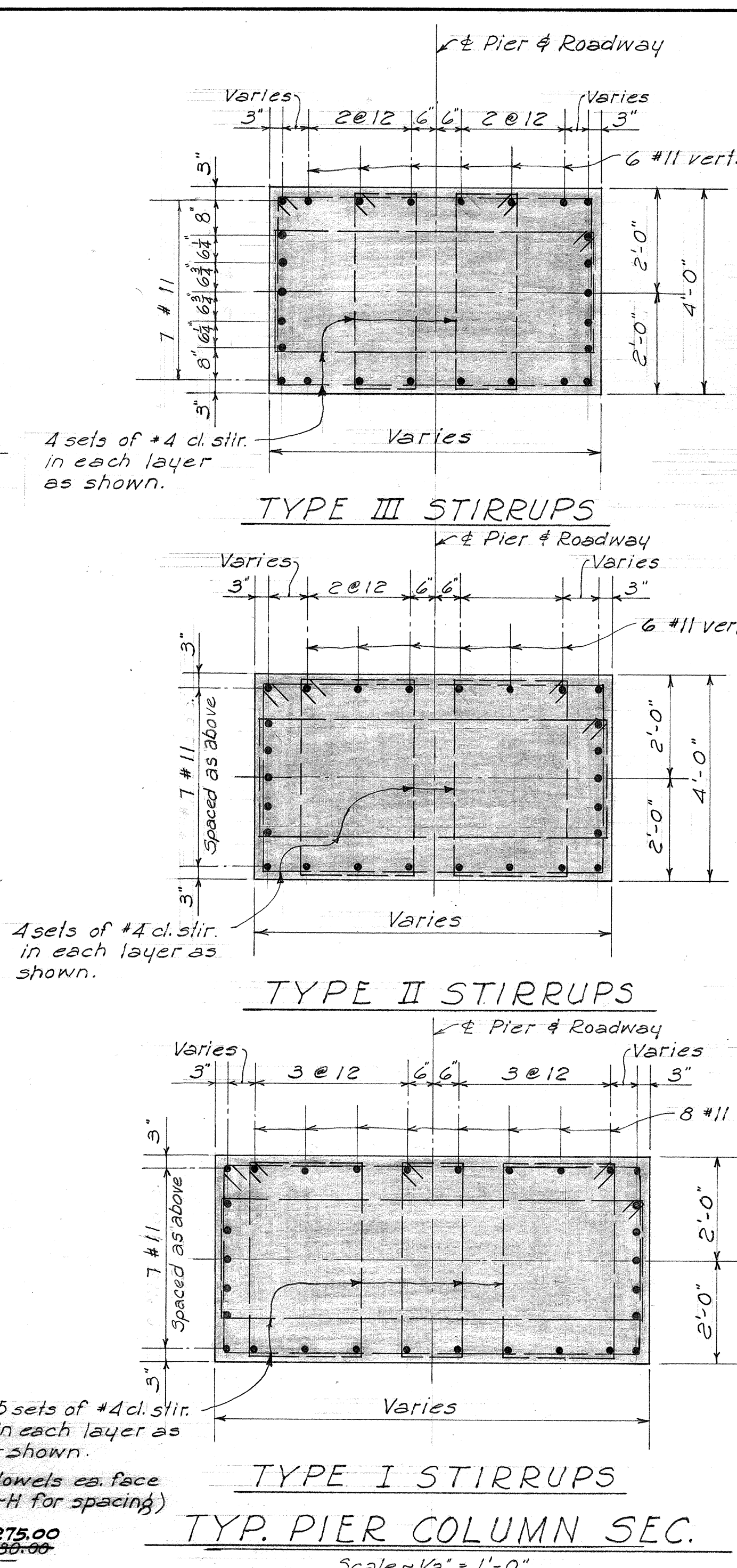
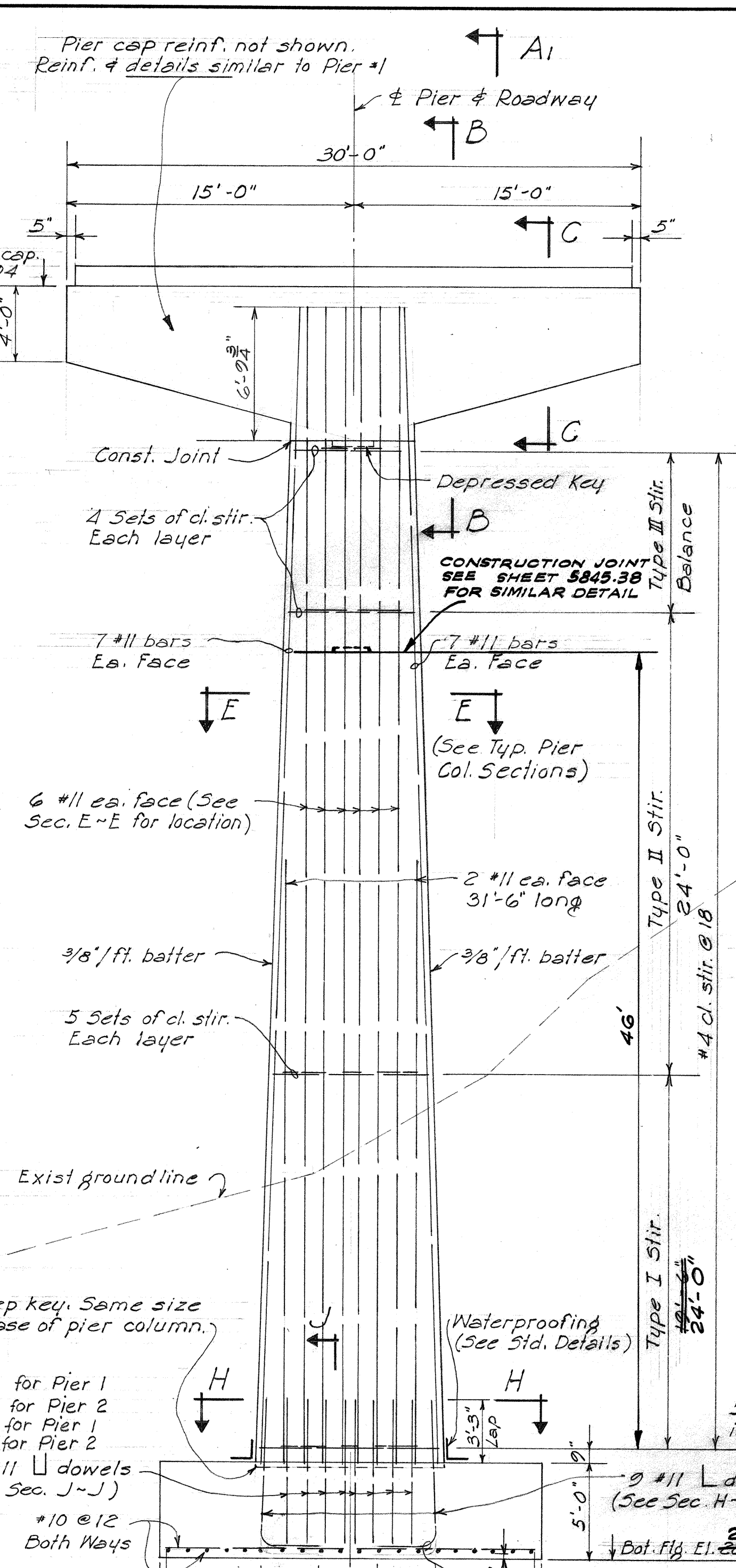


SECTION F-F
Scale - 1/2" = 1'-0"

SECTION A-A
SEC. A1-A1 PIER #2 SIMILAR
EXCEPT WHERE NOTED OTHERWISE
Scale - 3/16" = 1'-0"



TYPICAL PIER CAP DET.
Scale - 3/16" = 1'-0"

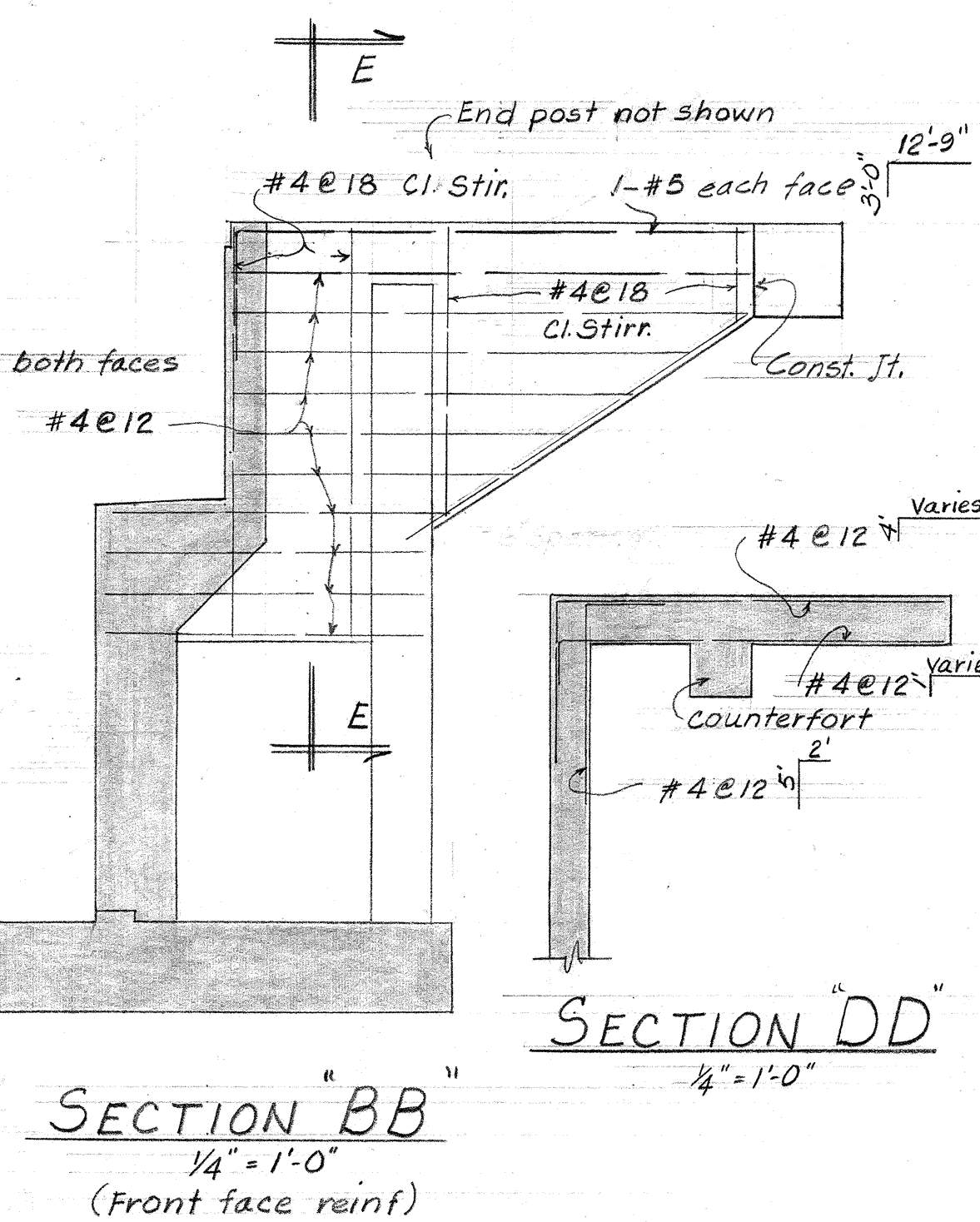
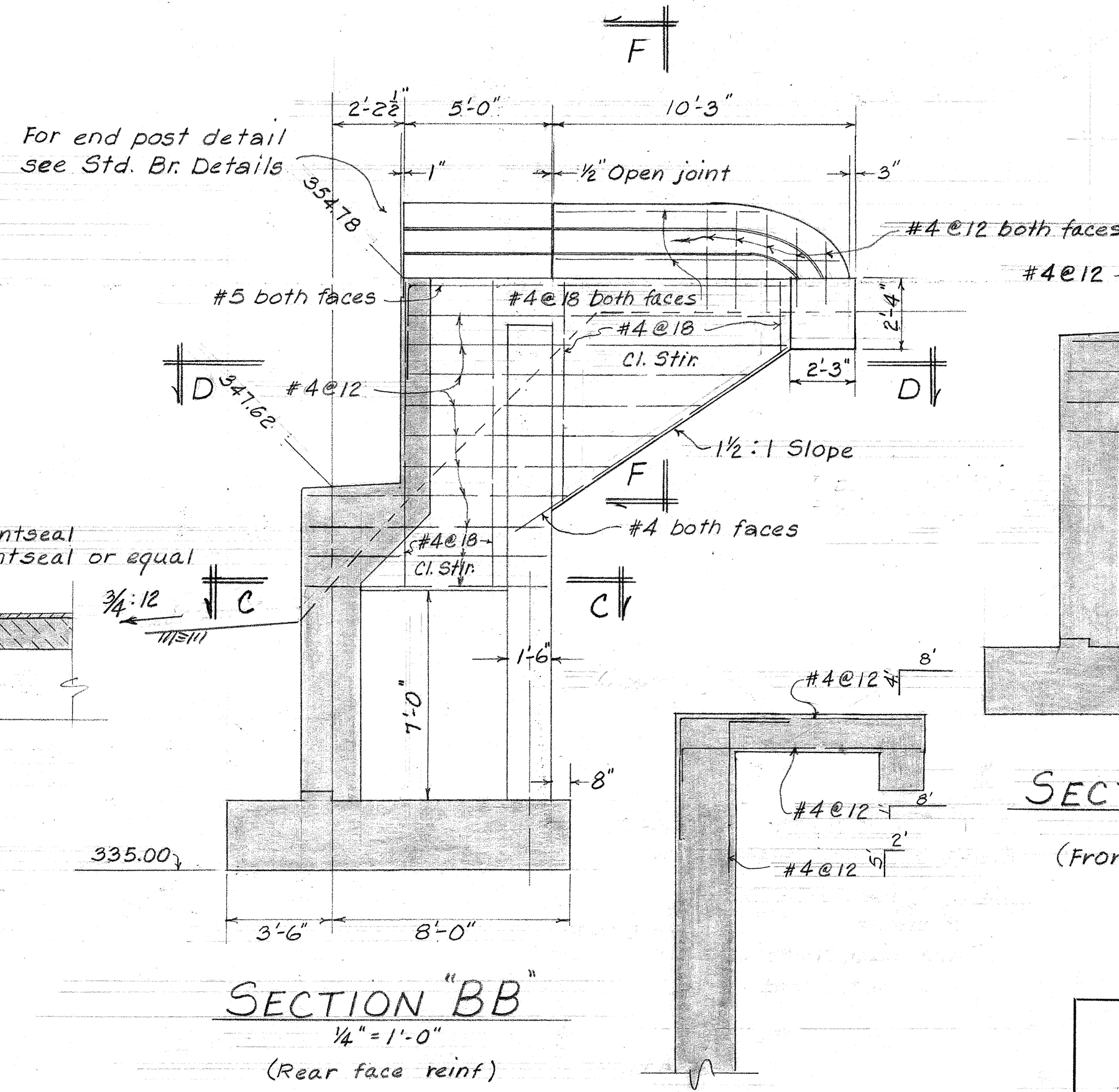
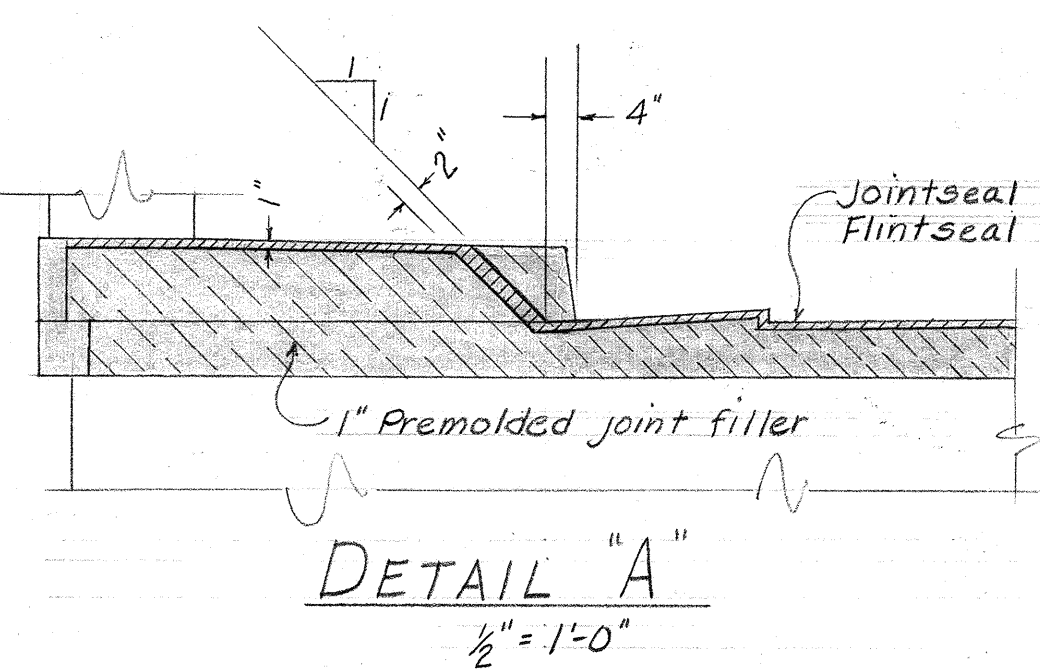
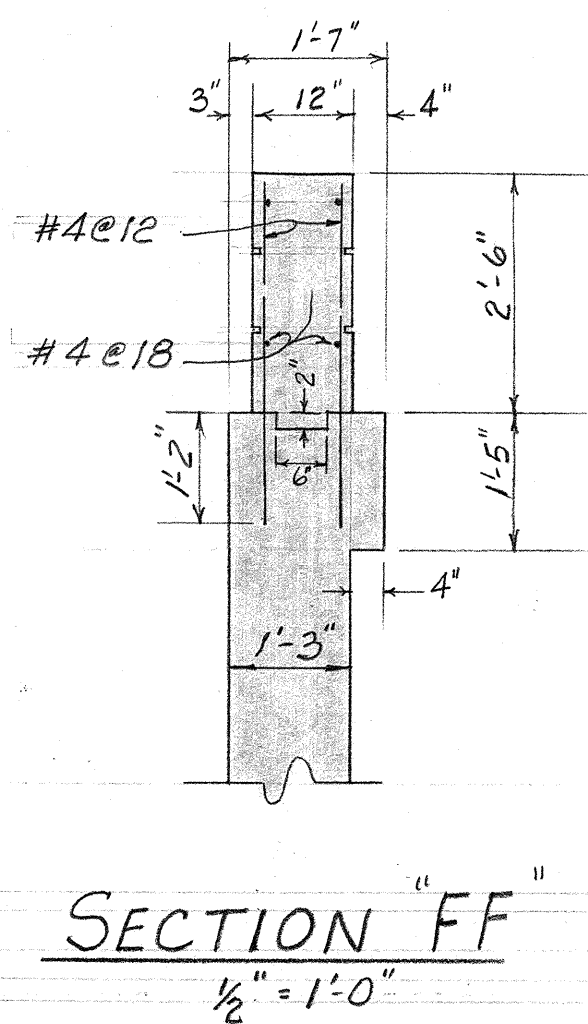
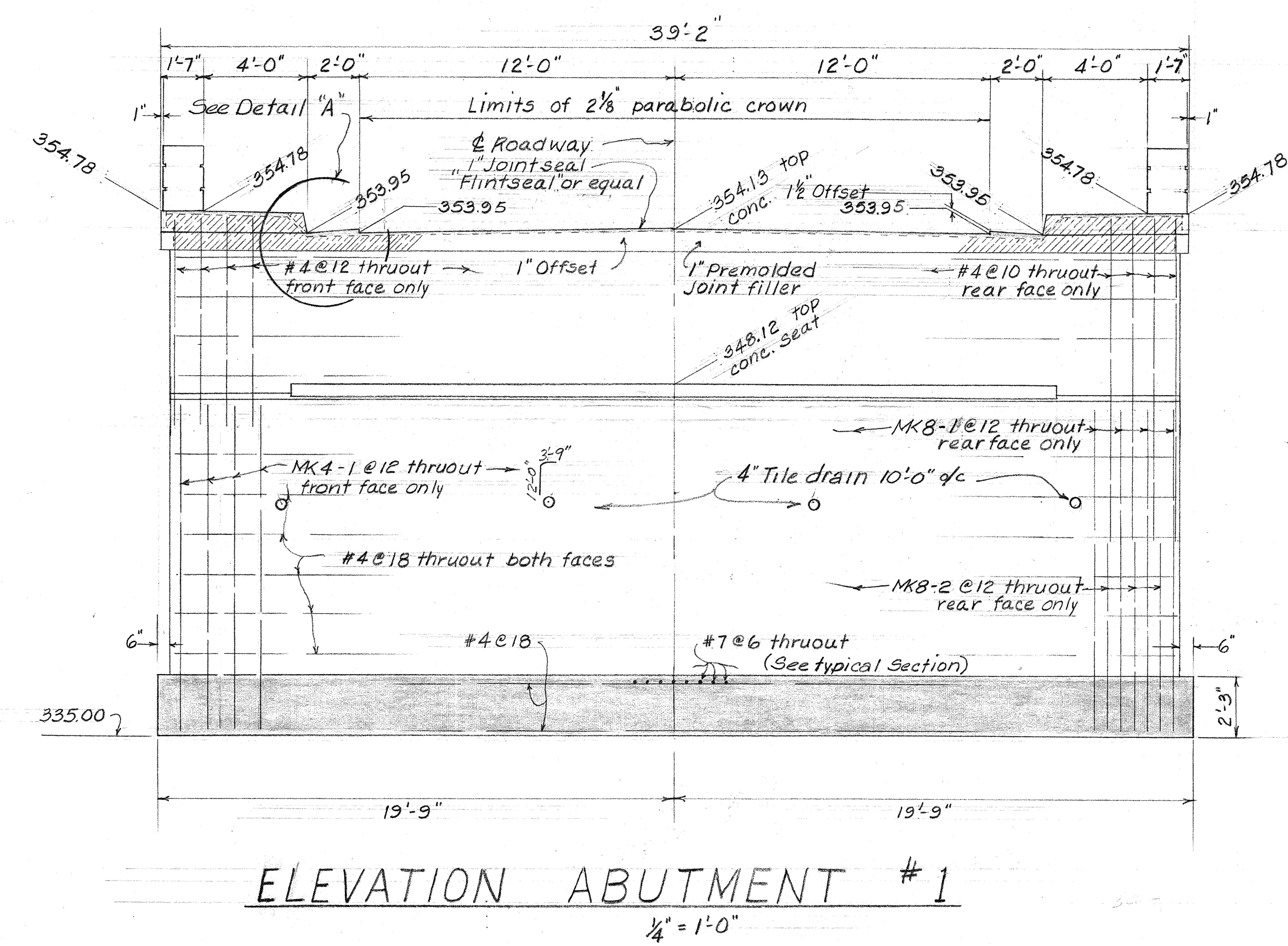
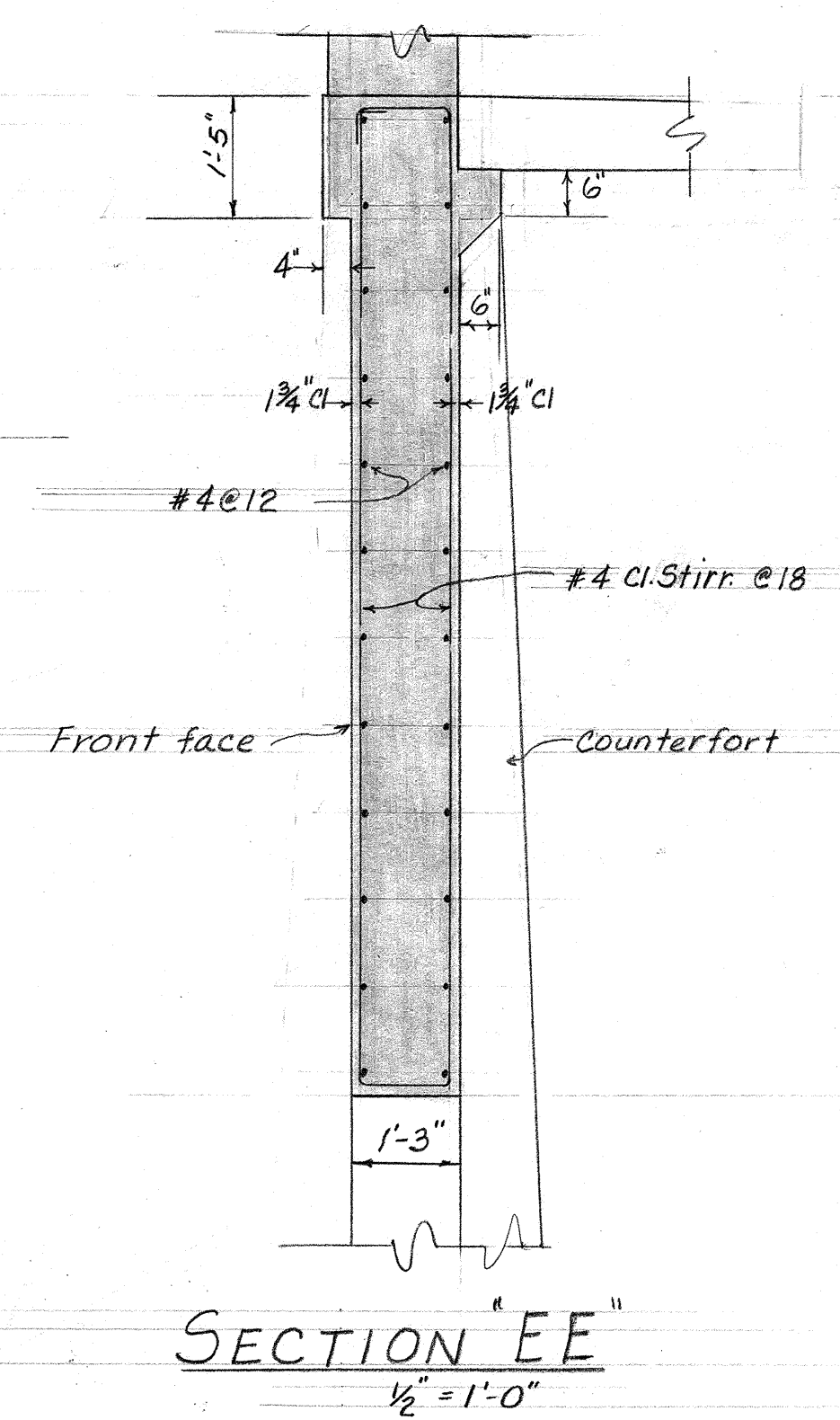
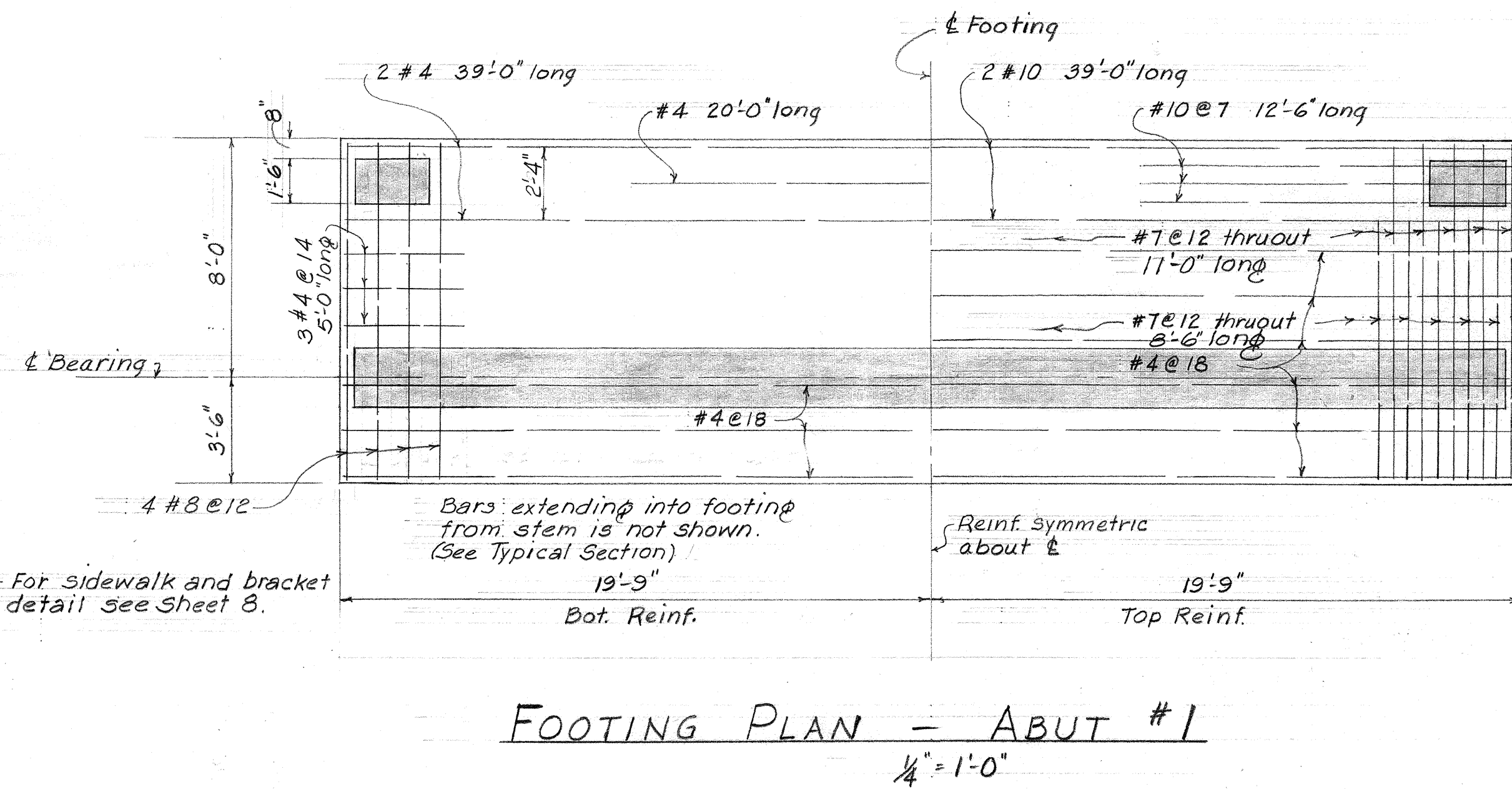
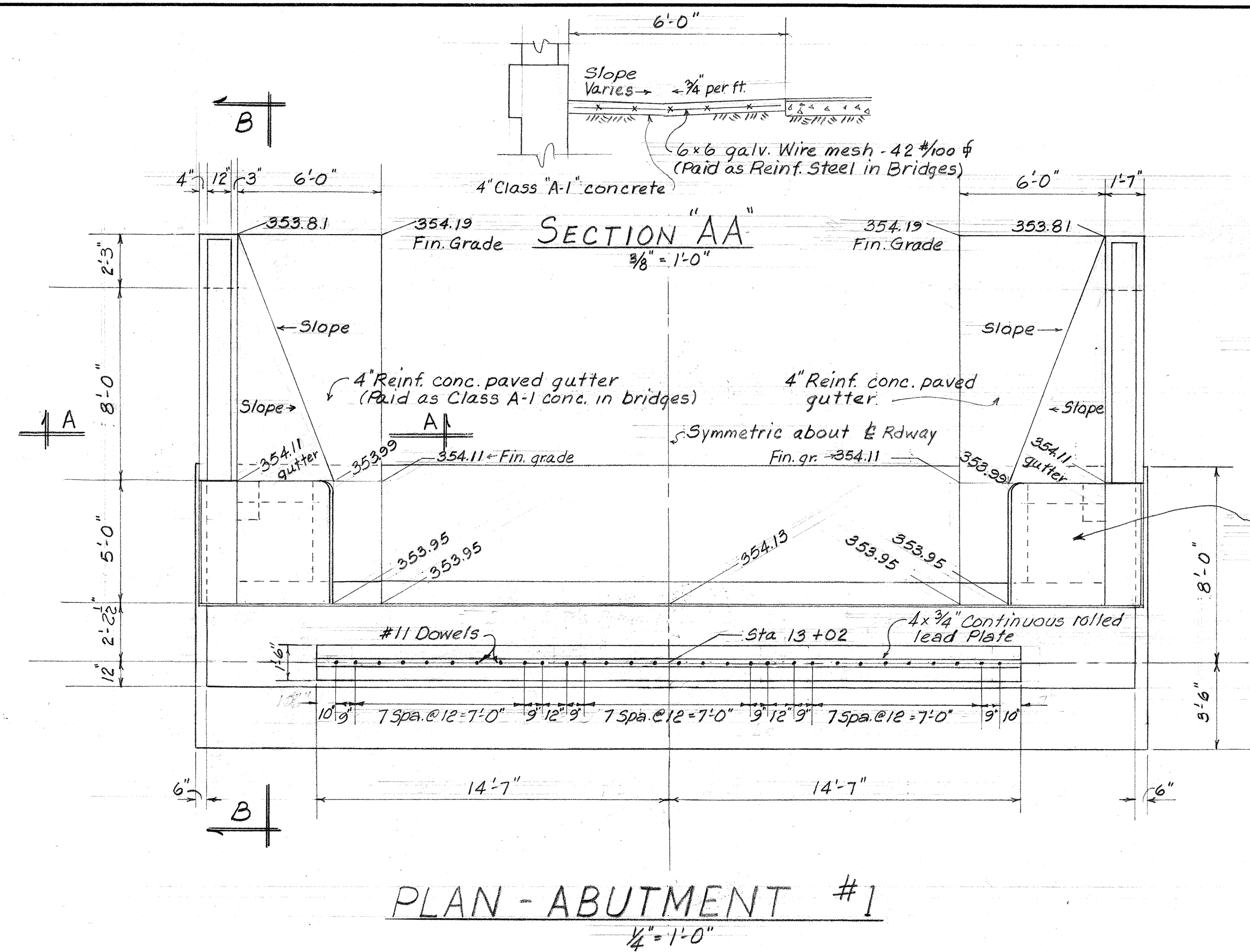


TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
MANOWAIOPAE BRIDGE
Sta. 12+98.87 to Sta. 15+33.25
HAWAII BELT RD. Proj. F-012-2 (3)
Dec. 1955

SHEET NO. 5 OF 9 SHEETS

5845.19

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	F-019-2(3)	1956	20	45



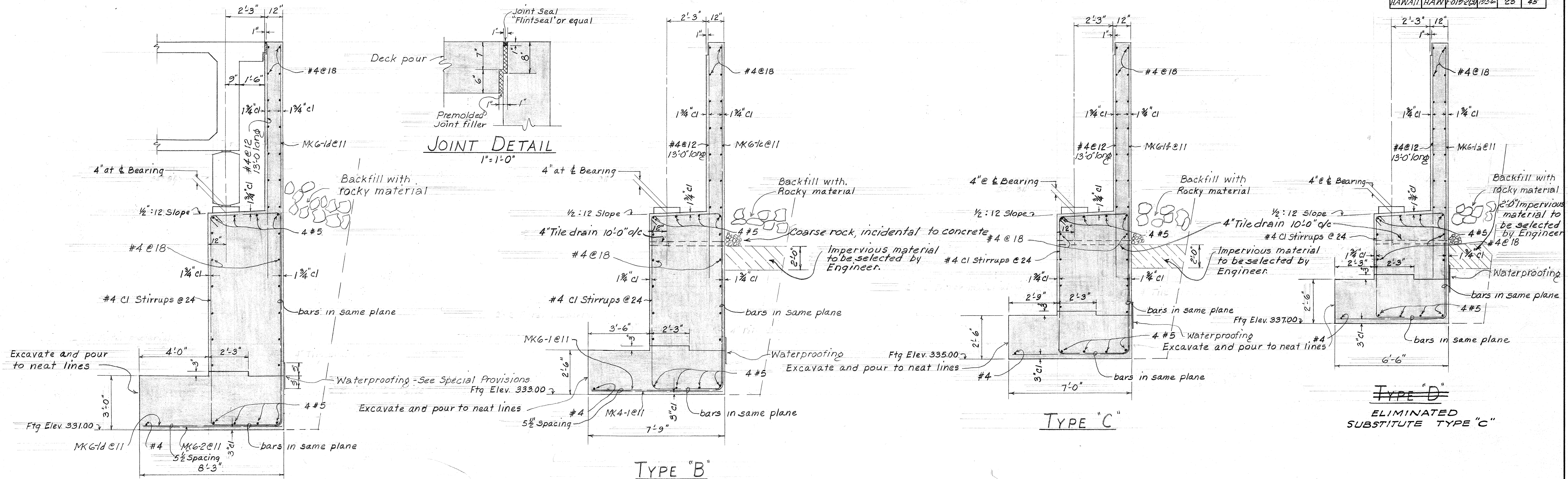
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NOTE BOOK No.		

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

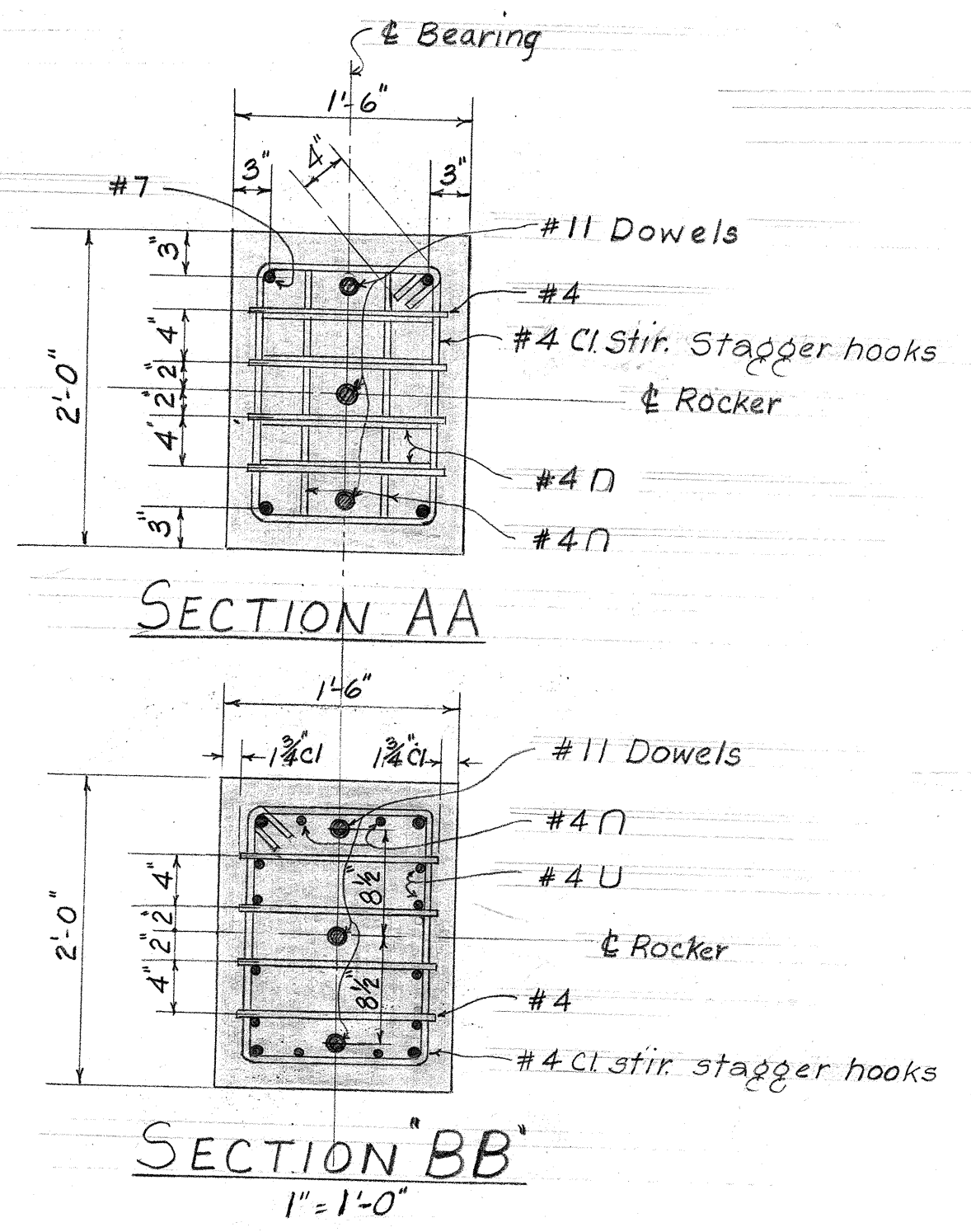
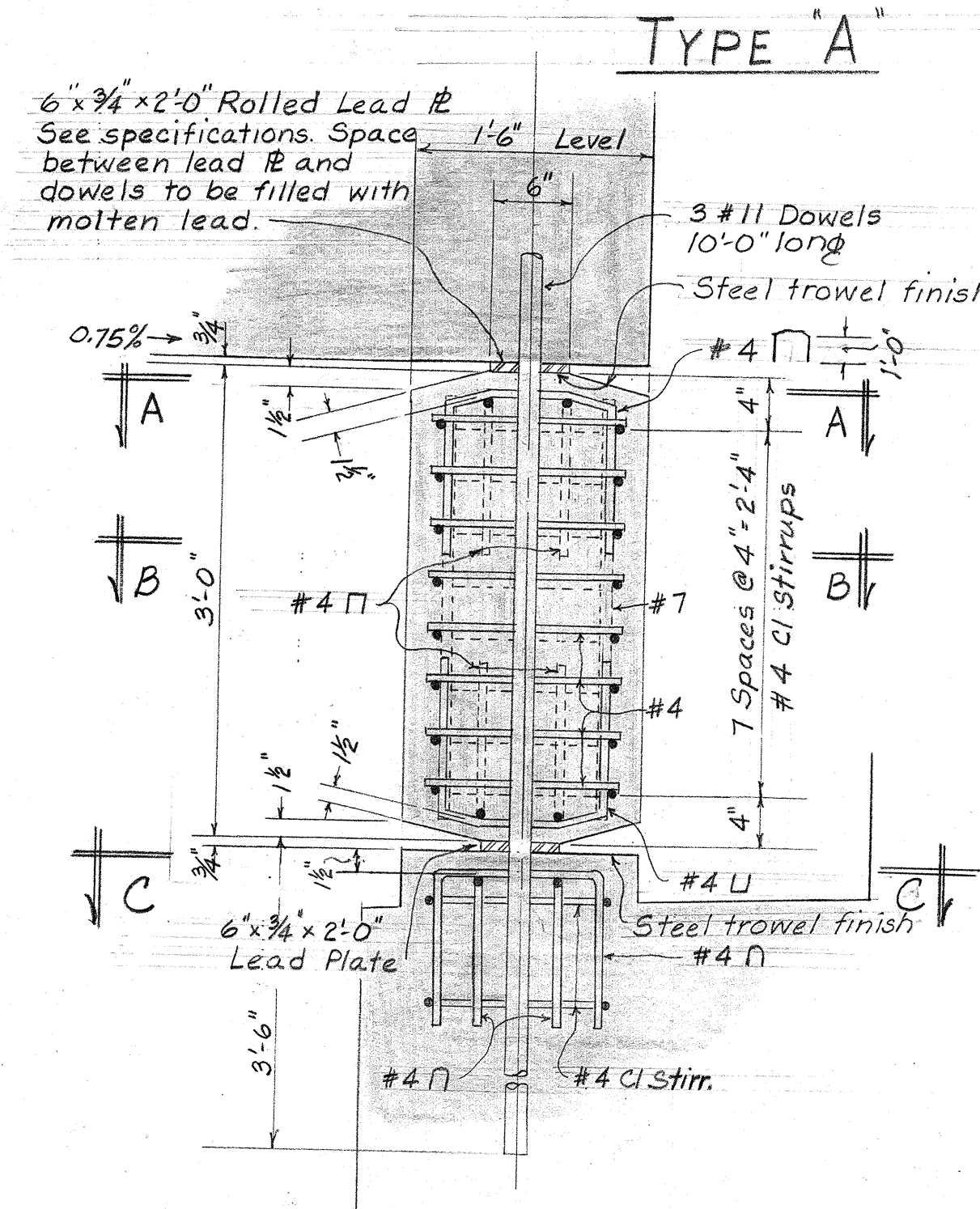
MANOWAIOPAE BRIDGE
Sta 12+08.87 to Sta 15+33.25

HAWAII BELT RD PROJ F-019-2(3)
NOV. 1955

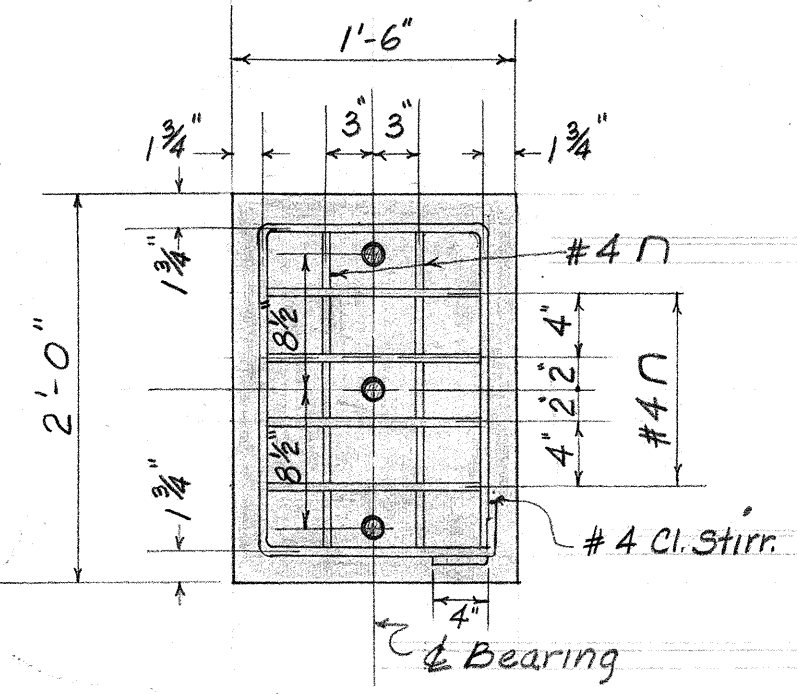
ORIGINAL	SURVEY PLOTTED BY	DATE
PLAN	DRAWN BY <i>K. Shimabukuro</i>	"
	TRACED BY	"
NOTE BOOK	QUANTITIES BY	"
No.	QUANTITIES CHECKED BY	"
	CHECKED BY	"



TYPICAL SECTIONS - ABUT No. 2

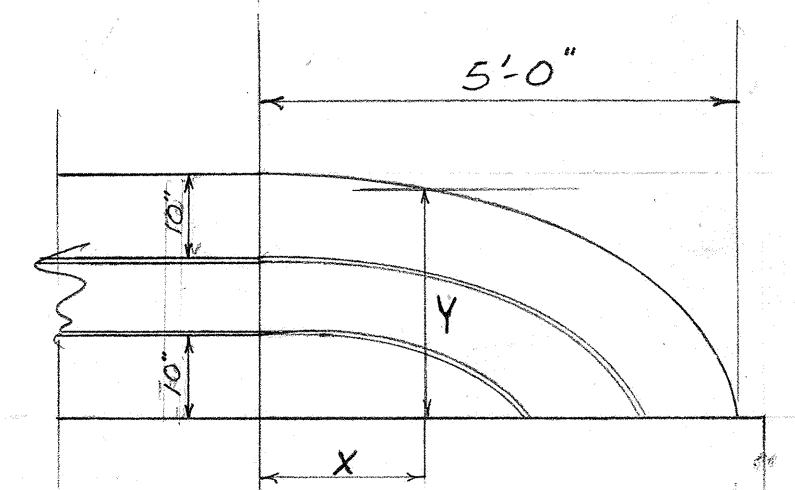


$\frac{3}{8}" = 1'-0"$



Top of Wall	X	0	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-3"	4'-6"	4'-9"	4'-10 1/2"	5'-0"
	Y	2'-6"	2'-5 3/8"	2'-4 3/8"	2'-3 1/2"	2'-2"	2'-0"	1'-9 1/2"	1'-6"	1'-3 1/2"	1'-1 1/2"	9 3/8"	6 1/2"	0
Top Line of Upper Groove	X	0	6"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"	4'-1"	4'-2"
	Y	1'-8"	1'-7 7/8"	1'-7 1/8"	1'-6 1/2"	1'-5 1/2"	1'-4"	1'-1 1/8"	1'-0 1/2"	10 3/8"	8 3/8"	5 3/8"	4"	0
Top Line of Lower Groove	X	0	6"	1'-0"	1'-6"	2'-0"	2'-6"	2'-9"	3'-0"	3'-2"	3'-3"	3'-4"		
	Y	10"	9 3/8"	9 3/8"	8 3/8"	8"	6 3/8"	5 3/8"	4 3/8"	3 3/8"	2 3/8"	0		

ELLIPSE ORDINATES



ESTIMATED QUANTITIES

CONCRETE.	LUMP SUM
REINF. STEEL	LUMP SUM
STRUCTURAL EXC.	1,300 cu. yd.
CEMENT RUBBLE MASONRY	1.0 cu. yd.
GROUTED RUBBLE PAVING	13.0 cu. yd.
A.C. PAVING	54.0 TONS
BITUMINOUS TACK COAT	153.0 GALS.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

MANOWAIOPAE BRIDGE
Sta 12+93.87 to Sta 15+33.25

HAWAII BELT RD PROJ F-019-2(3)
Nov. 1955

DATE: 11/55
DESIGNED BY: [Signature]
DRAWN BY: [Signature]
CHECKED BY: [Signature]
NOTED BY: [Signature]
NO.: