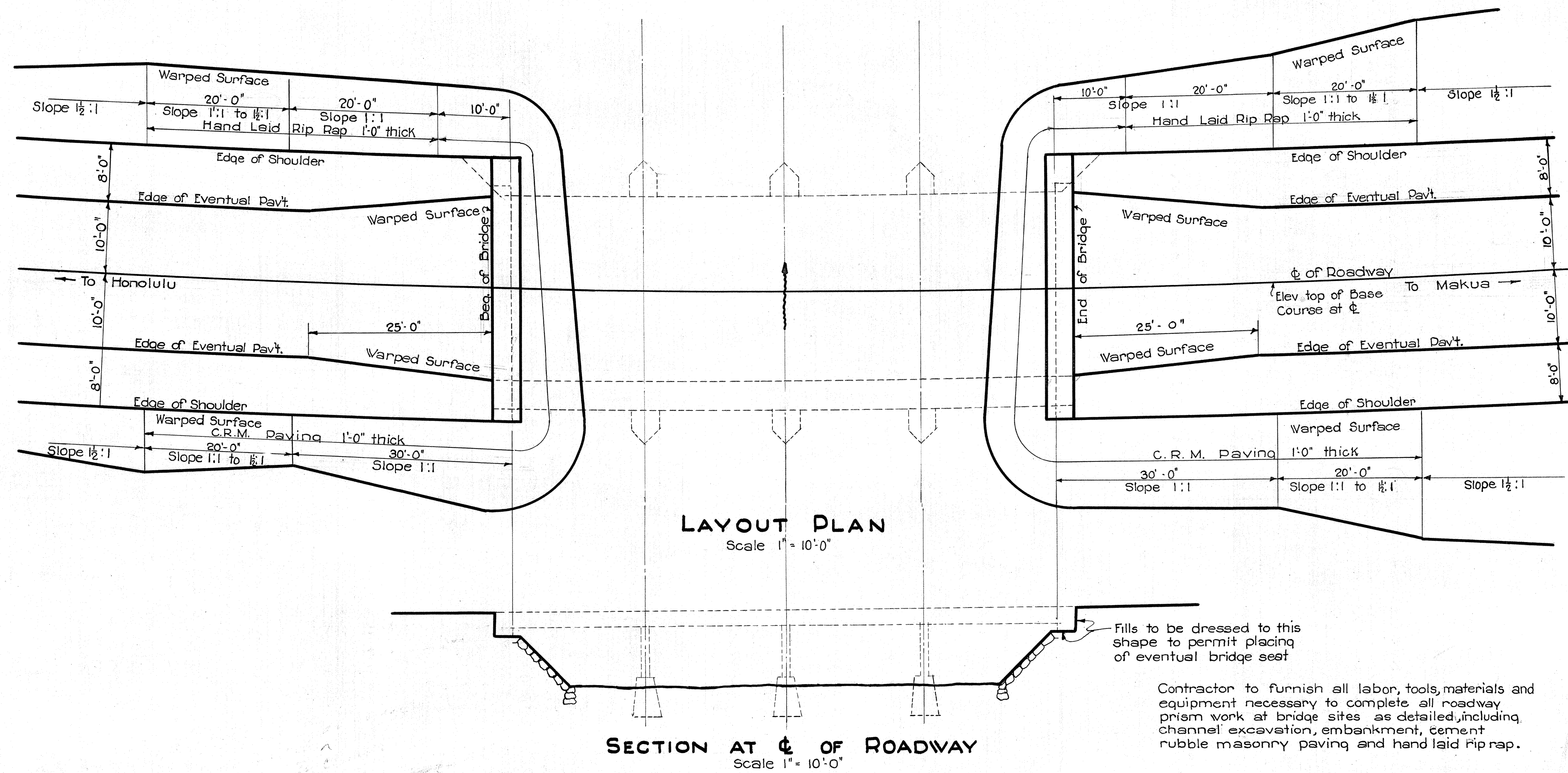




TYPICAL ROADWAY PRISM WORK AT BRIDGE SITE

The contractor will be furnished with details for each individual bridge site before work begins

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	Oct. 1936
No.	DRAWN BY	
	CHECKED BY	

TERRITORIAL HIGHWAY DEPARTMENT TERRITORY OF HAWAII	
KAENA PT. ROAD	OAHU T.H.
W.P.S.O. 23B	AUG. 1936

SHEET NO OF SHEETS

4383.19

~ GENERAL NOTES ~

Specifications : All phases of construction and all materials are subject to the specifications of the Terr. Hy. Dept.
 Live Load : 2 - 15-ton trucks. No impact.
 Timber : All timber to be Coast Region Douglas Fir and to be graded according to the grading rules of the specifications.
 Treatment of Timber : All timber and lumber except railing & rail posts and all timber piles to be treated with "Grade 1 Creosote Oil" in the "Empty Cell Process with Initial Air" as follows :
 Timber and Lumber not less than 8" per cu. ft.
 Timber piles not less than 10" per cu. ft.
 Framing to be done before treating. Bolt holes which are bored in the field shall be impregnated with hot "Grade 1 Creosote Oil" by means of a pressure bolt hole treater.
 Rails : All railings and rail posts to be S4S and to be painted with 3 coats of specified white lead paint above top of wheel guards and 3 coats of specified black paint below top of wheel guards.
 Concrete : All concrete to be Class A.
 Hardware : All bolts, drift bolts, nails, spikes, nuts, washers, angles, etc., shall be galvanized.
 Dead Load : 5* per ft. B.M. Paving 15* per sq. ft. of roadway.

* These quantities are for Proj. No. W.P.S.O. 23B (Highway)

ITEMIZED QUANTITIES - ALL BRIDGES.

Station	Br. #	Str. Exc. C.Y.	C.R.M. C.Y.	C.R.M. Pav. C.Y.	H.L.R.R. C.Y.	Conc. C.Y.	Reinf. Steel lbs.	Treated Timber B.M.	Untreated Timber B.M.	Asphalt Plank #	Timber Piling lbs.	Str. Steel lbs.
866+44.48 867+05.52	1	* 114.0	* 145.0			* 59.8	* 1906	21,728	1,704	1,485		* 7,265
	R.R. Br.	* 65.0	* 99.0			* 7.5						
933+40.00 933+99.84	2	93.0	17.0	* 58.0	* 33.0	17.33	232	22,980	1,704	1,455		
946+52.72 946+77.28	2-A	* 205.0	* 80.0			* 37.0	* 5,550					
1013+54.58 1014+13.92	3	146.0	34.6	* 110.0	* 50.0	16.96	232	25,171	1,598	1,456		
	R.R. Br.	* 12.3	* 26.2			* 5.0						* 5,174
1017+54.58 1018+39.42	3-A	172.0	51.9	* 134.0	* 55.0	20.37	232	31,433	2,083	1,918		
1104+60.40 1105+20.22	3-B	66.0		* 50.0	* 34.0	18.75	1072	21,674	1,704	1,456	700	
1136+25.71 1137+61.55	4	318.0	120.7	* 63.0	* 13.0	30.62	232	54,939	3,219	3,905		
1146+09.17 1146+50.01	5	95.0	17.3	* 71.0	* 49.0	13.55	232	15,159	1,506	994		
1173+90.00 1174+11.84	5-A	69.0		* 90.0	* 48.0	10.13	232	7,264	947	532		
1215+60.45 1216+33.28	6	147.0	52.0	* 328.0	* 58.0	20.37	232	31,330	2,083	1,918		
GRAND TOTAL		1,502.30	649.70	* 904.0	* 340.0	248.76	19388	231,678	16,548	14,519	700	* 12,439
TOTAL W.P.S.O. 23B (Bridges)		1,106.	293.5			148.13 139.46	2,703 2,932	231,678	16,548	14,519	700	

TIMBER - BILL OF MATERIAL

MEMBER	No. REQD.	SIZE & LENGTH	KIND OF LUMBER	MILLWORK	Ft. B.M.
Douglas Fir - Coast Region					
Solid Bridging	4	4x18x16'-0"	No.1 dimension	S1E	384
"	5	4x18x10'-0"	"	S1E	300
End Timber	2	6x18x20'-0"	1600'f Structural beam & stringer	S1E	360
"	2	6x18x22'-0"	"	S1E	396
Stringers	36	6x18x20'-0"	1600'f	Ends squared to 11/2"	6,480
Wheel Guard	3	8x8x20'-0"	1100'f	Struct. posts & timbers	320
Deck Starter	2	6x6x20'-0"	1600'f	Struct. post & plank	120
"	2	6x6x22'-0"	"	"	132
Splice block	4	6x18x3'-0"	1200'f	Joist & plank	108
"	2	6x18x3'-0"	"	"	54
Decking (Floor)	428	2x6x26'-0"	1600'f	Struct. post & plank	11,128
"	13	1x6x26'-0"	"	"	13
Sidewalk Planking	1	2x8x6'-0"	No.1 Dimension	S1S	8
Wheel Guard	3	10x12x20'-0"	1100'f	Struct. posts & timbers	600
Railing	* 6	4x8x20'-0"	1600'f	Structural joist & plank	320
"	* 6	3x8x20'-0"	"	"	240
Railing Post	* 10	8x8x12'-0"	1600'f	Struct. joist & plank	640
Sidewalk Joist Block	1	8x14x10'-0"	1100'f	Struct. Posts & Timbers	93
"	1	8x14x12'-0"	"	"	112
Guard Rail	* 1	4x8x18'-0"	1600'f	Struct. joist & plank	48
"	* 1	3x8x18'-0"	"	"	36
" Post	2	12x12x10'-0"	"	"	240
Post Block	8	6x8x1'-5/2"	1200'f	Joist & plank	48
Cross Bridging	6	2x4x16'-0"	No.1 Dimension	Rough	64
"	6	2x4x14'-0"	"	"	56
Sidewalk Planks	23	2x8x16'-0"	"	"	491
Corner Blocking	1	3x14x10'-0"	1100'f	Struct. posts & timbers	35
Guard Rail	* 1	10x12x18'-0"	1600'f	Struct. joist & plank	180
Sidewalk end timber	1	8x8x10'-8	1100'f	Struct. posts & timbers	53
Wall plate	8	3x8x22'-0"	1200'f	Struct. Posts & Timbers	352
Bearing Block	14	3x8x1'-0"	"	"	21
Total					23,432

NOTE CONSTRUCT TIMBER SUPERSTRUCTURE ONLY UNDER THIS CONTRACT

LAYOUT OF HIGHWAY AND R.R. BRIDGE ABUTMENTS

Scale 1/8"=1'-0"

PLAN OF CHANGED R. R. BRIDGE

Scale 1/4"=1'-0"

GENERAL NOTE : Timbers marked * are untreated. Timbers marked @ are given to the nearest commercial length. They have to be cut to fit before treatment. Stringers having butt joints to be cut to lengths shown on the framing plan.

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
KAUPUNI BRIDGE
 BRIDGE No. 1
 STA. 866+44.48 TO STA. 867+05.52
 Kaena Pt. Road Oahu, T. H.
 W.P.S.O. 23B Sept. 1936

SHEET No. 1 OF 3 SHEETS

4391.2

4383.20

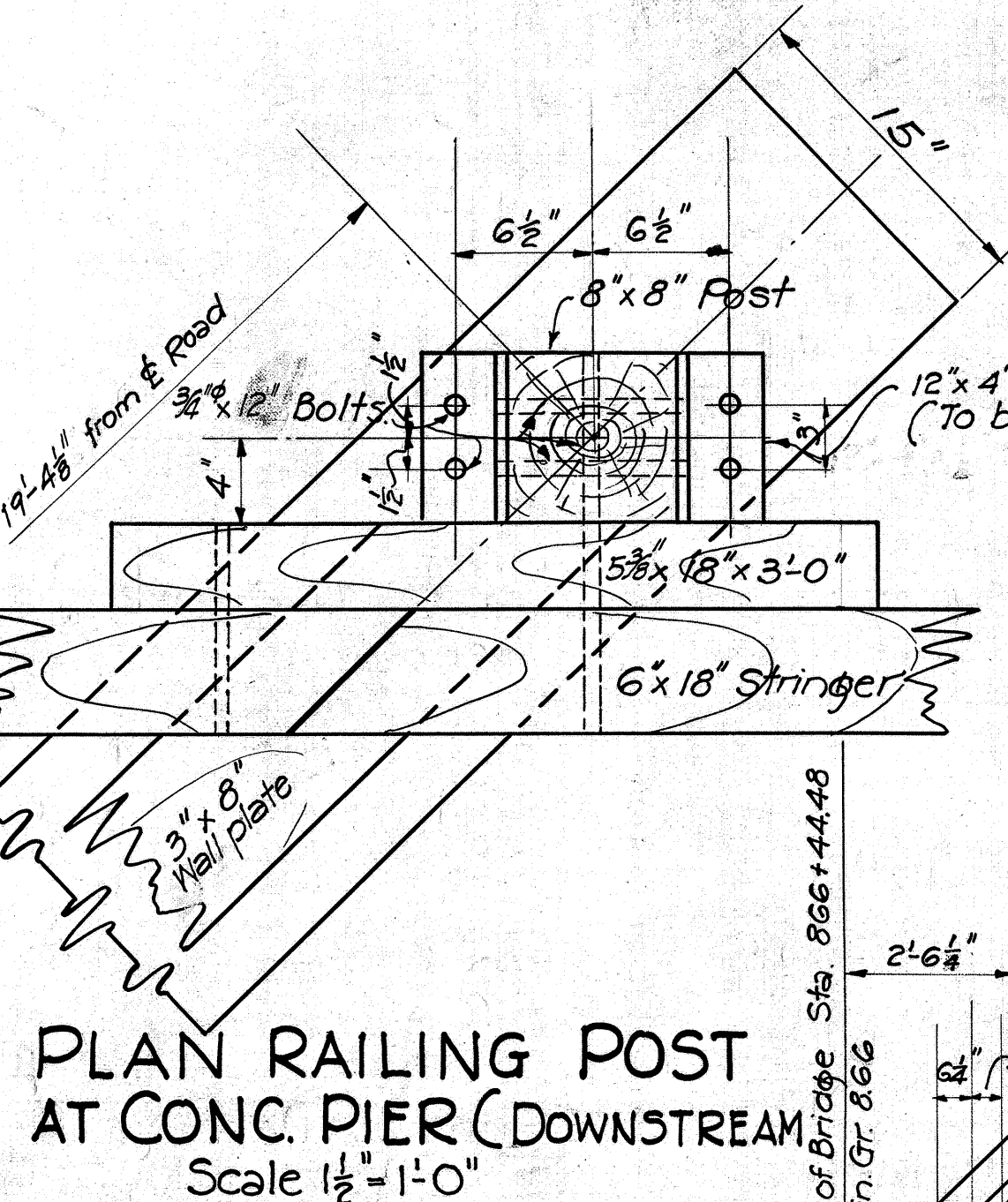
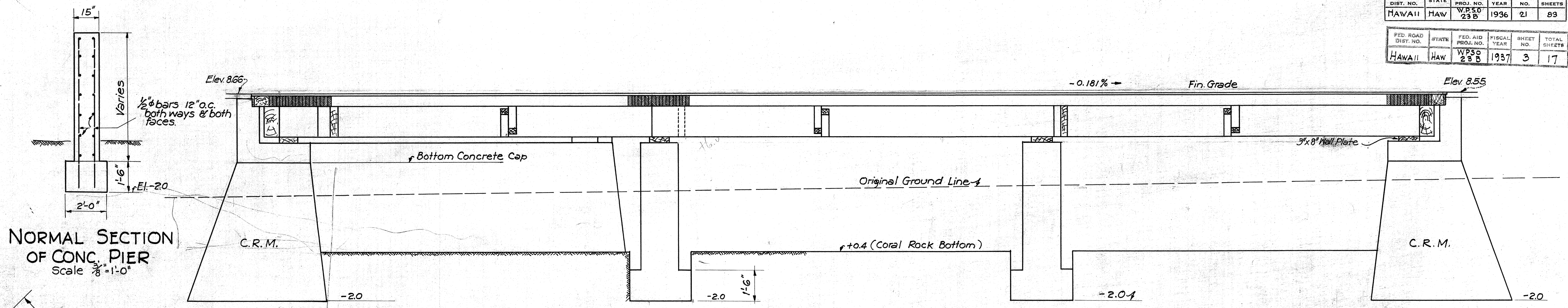
4391-2

Revised General Notes: C.F.M. Nov. 9 1936.

ORIGINAL PLAN	DATE
DESIGNED BY	June '36
TRACED BY	Sept. '36
QUANTITIES BY	
CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.S.O. 23B	1936	21	83

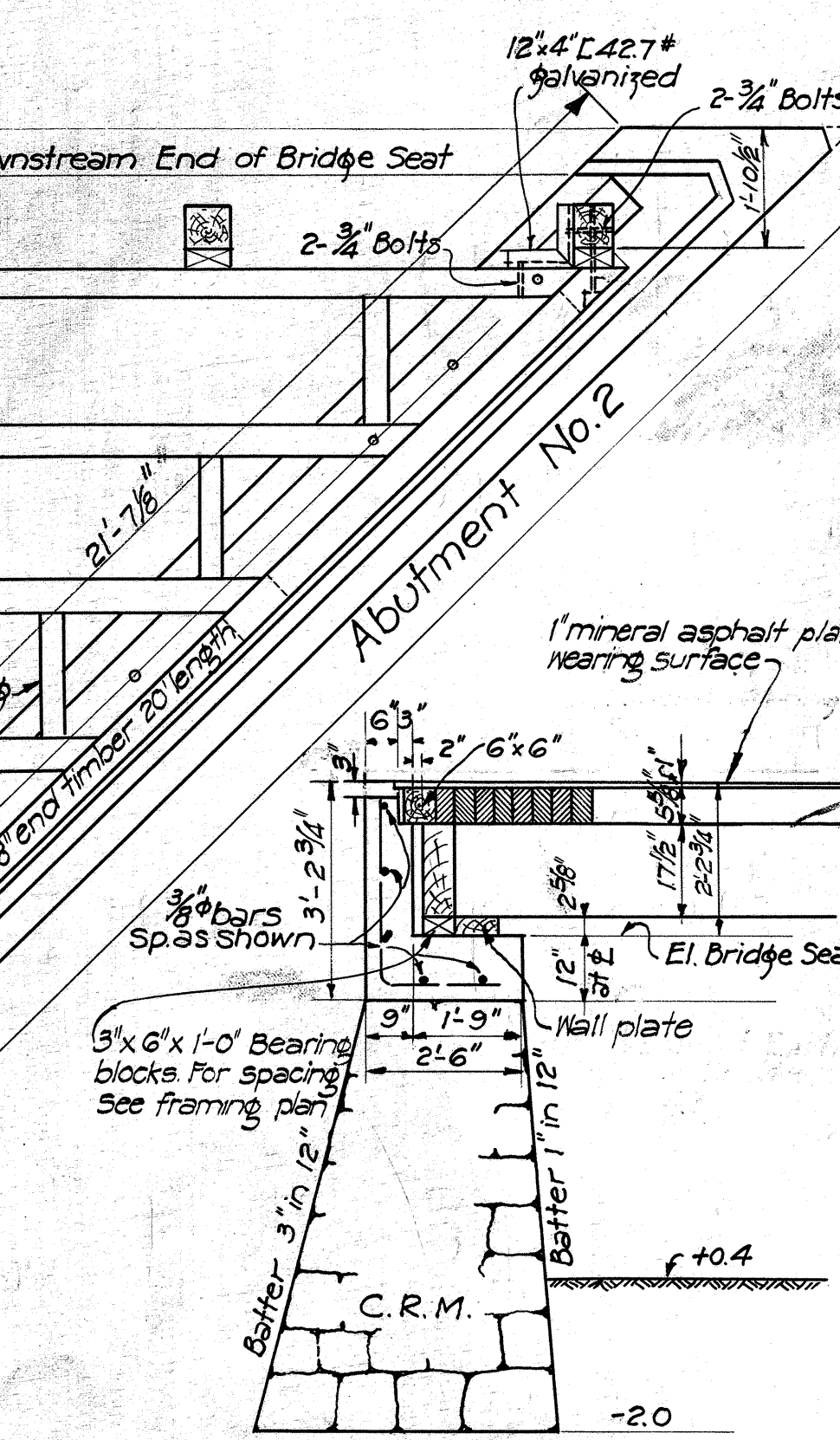
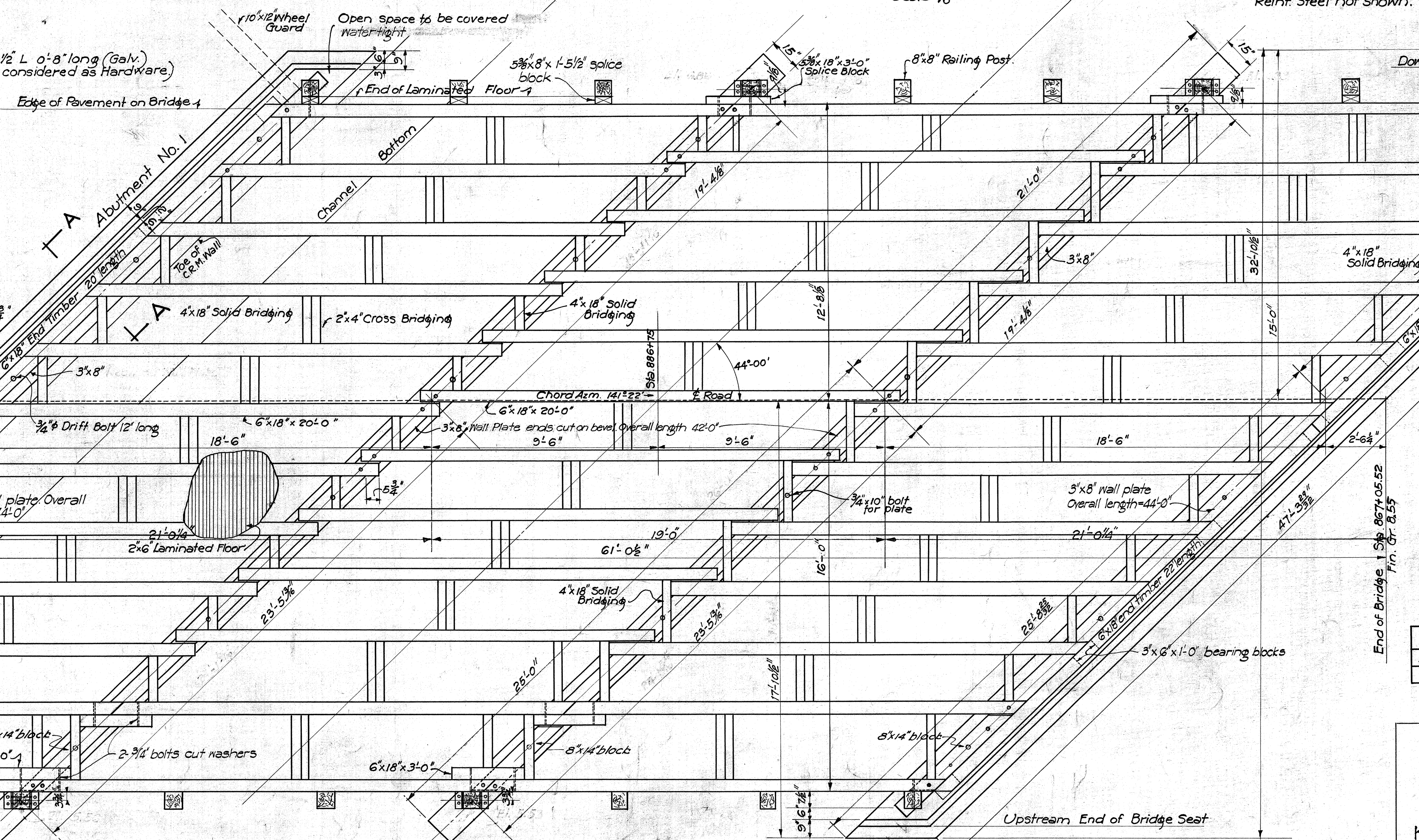
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.S.O. 23B	1937	3	17



Elev. of top of 1" asphalt plank wearing surface is 2" above base course in normal road section. Top of base course to be laid flush with finish grade at beginning of end of bridge.

SURVEY PLOTTED BY: DATE: June 36
DRAWN BY: H.S. Pugh, H.S. Mendenhall, C.F. Wagner
CHECKED BY: C.F. Wagner
SEPT. 36

NOTE!
Stringers having lap joints to be cut to lengths shown on the framing plan.
Stringers in end spans having lap joints to be beveled at outer end.



BRIDGE SEAT ELEVATIONS

	Center Line	Upstr. End	Downstr. End
Abutment No. 1	6.43	6.46	6.40
Abutment No. 2	6.32	6.35	6.29

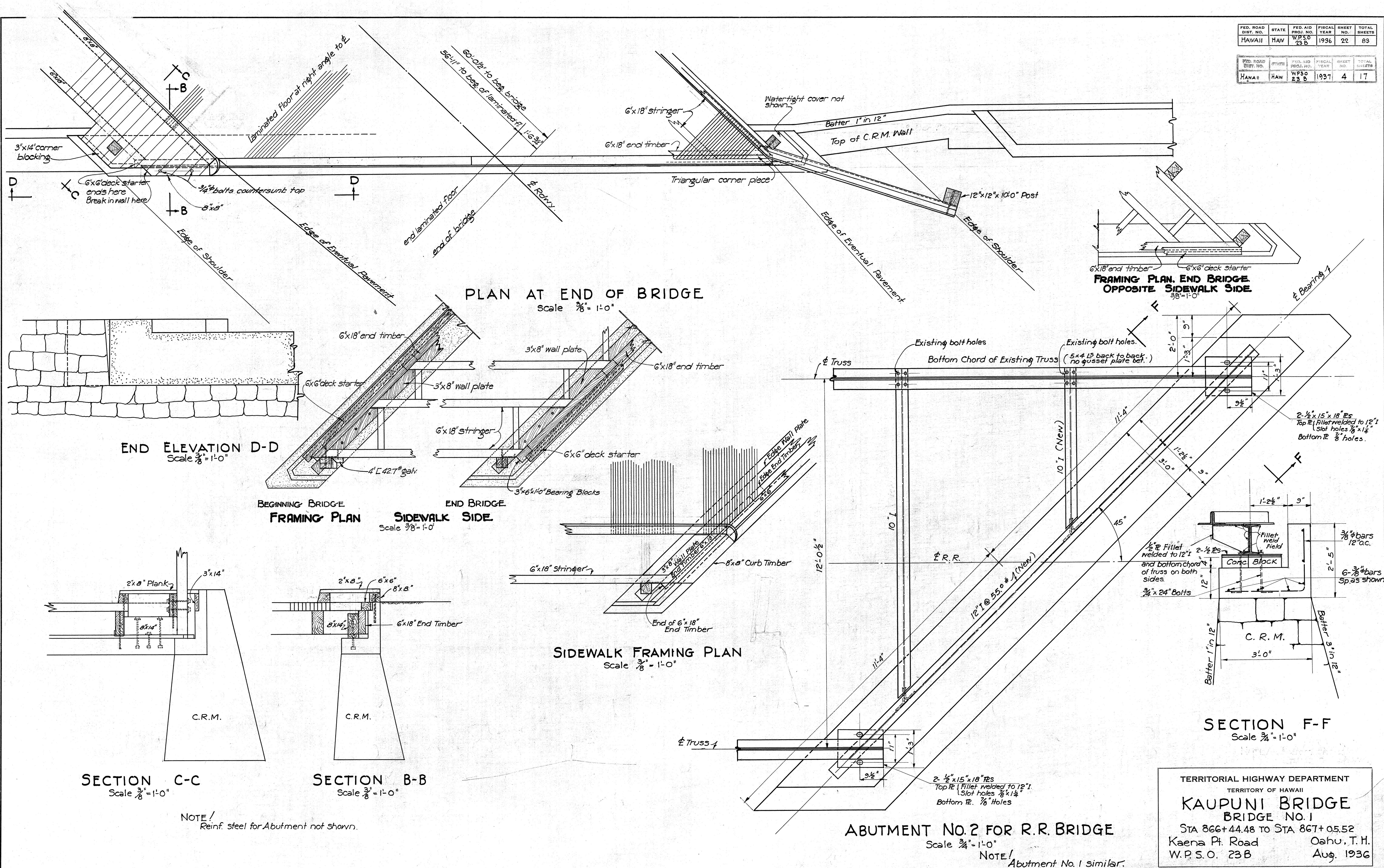
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
KAUPUNI BRIDGE
BRIDGE NO. 1
STA. 866+44.48 TO STA. 867+05.52
Kaena Pt. Road Oahu, T. H.
W. P. S. O. 23B Sept. 1936

SHEET NO 2 OF 3 SHEETS

4391.3 4383.21

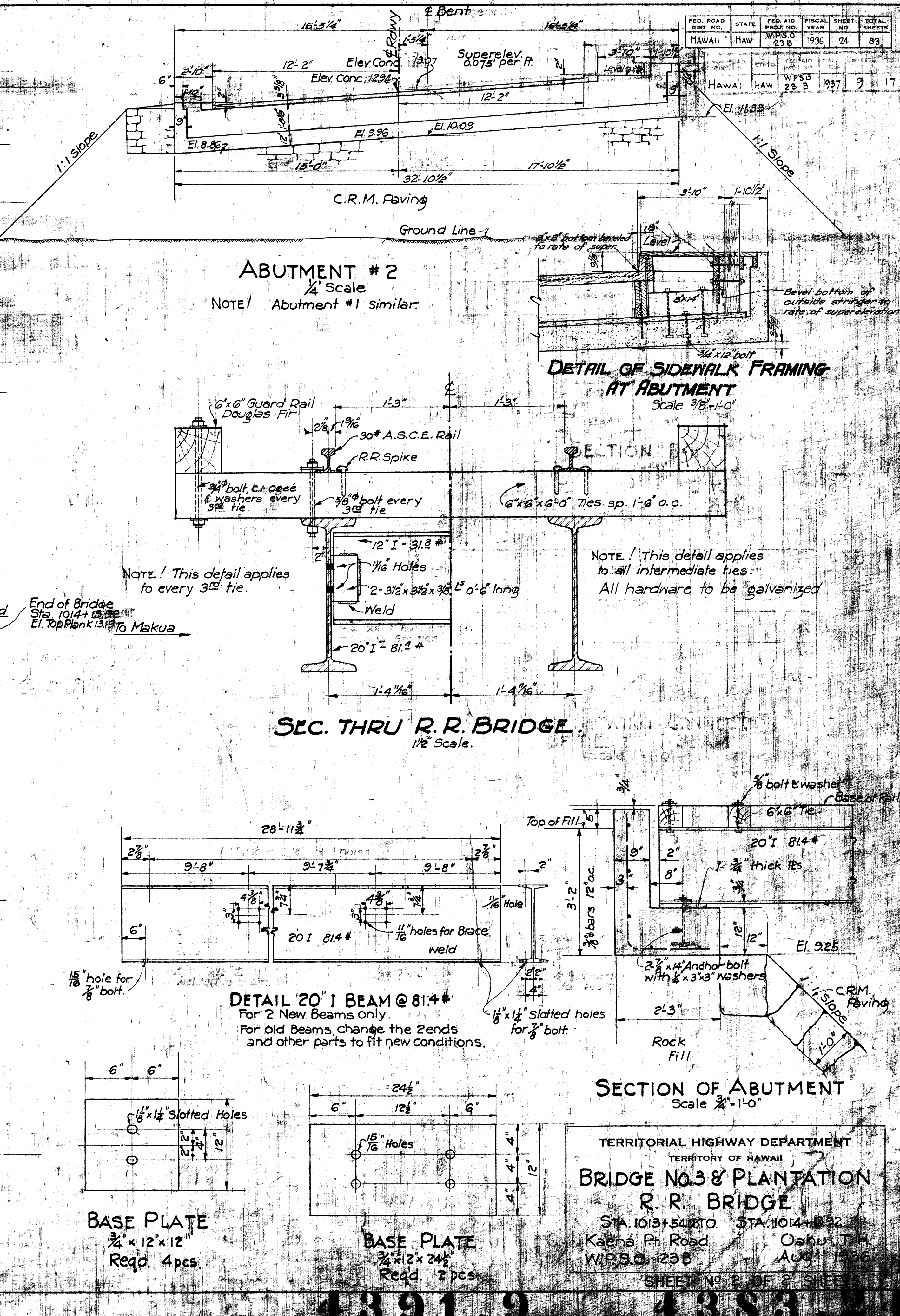
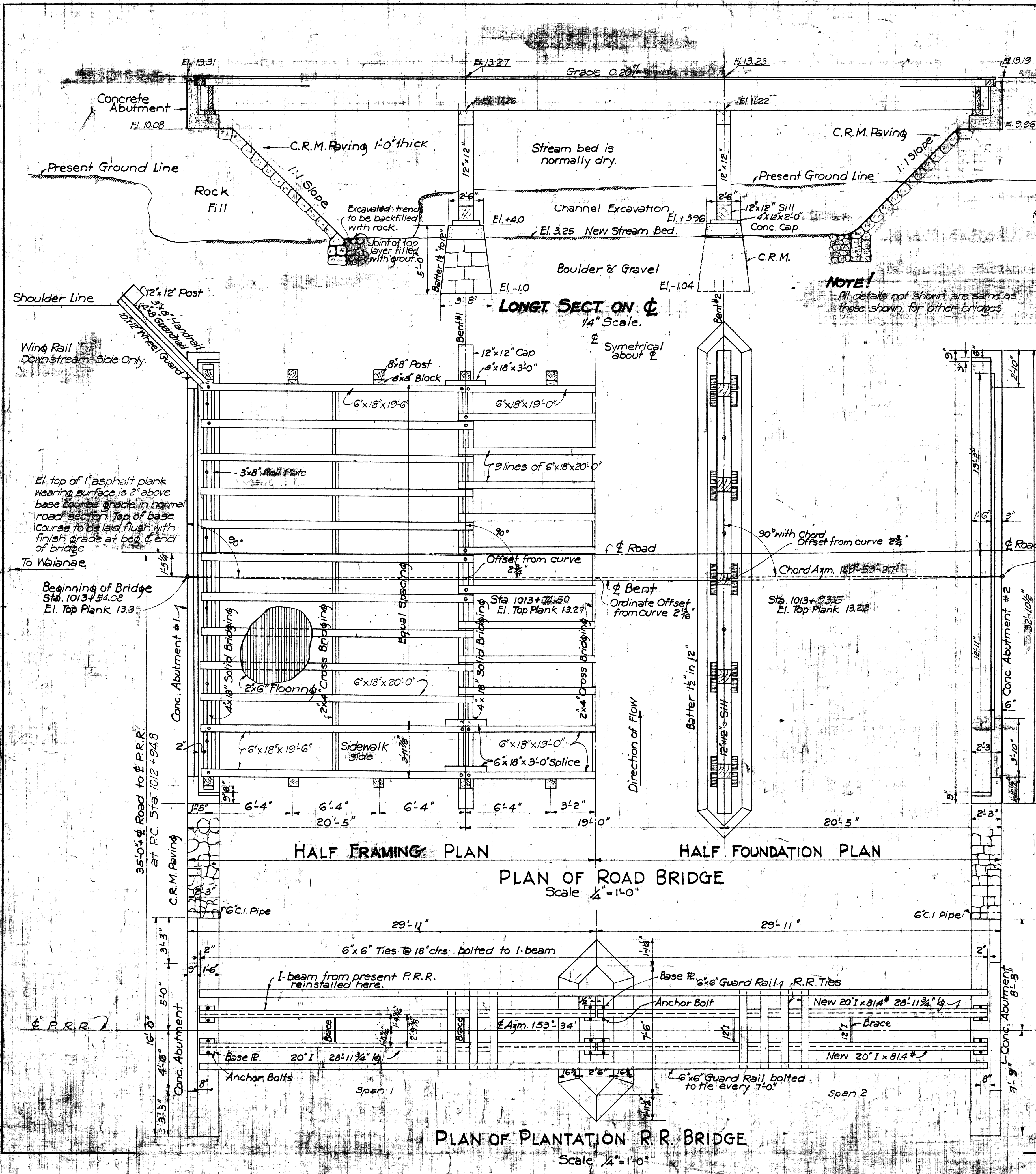
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.S.O. 23 B	1936	22	83

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.S.O. 23 B	1937	4	17



4391.4 4383.22

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	W.P.S. 0 238	1936	24	83
		W.P.S. 0 238	1937	9	17



DESIGNED BY
CHECKED BY
DATE

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BRIDGE NO. 38 PLANTATION R. R. BRIDGE
STA. 1013+54.0 TO STA. 1014+53.2
Kaena Pt. Road Oahu, T.H.
W.P.S. 0 238 AUG. 1936
SHEET NO. 2 OF 2 SHEETS

4391.9 4383.2