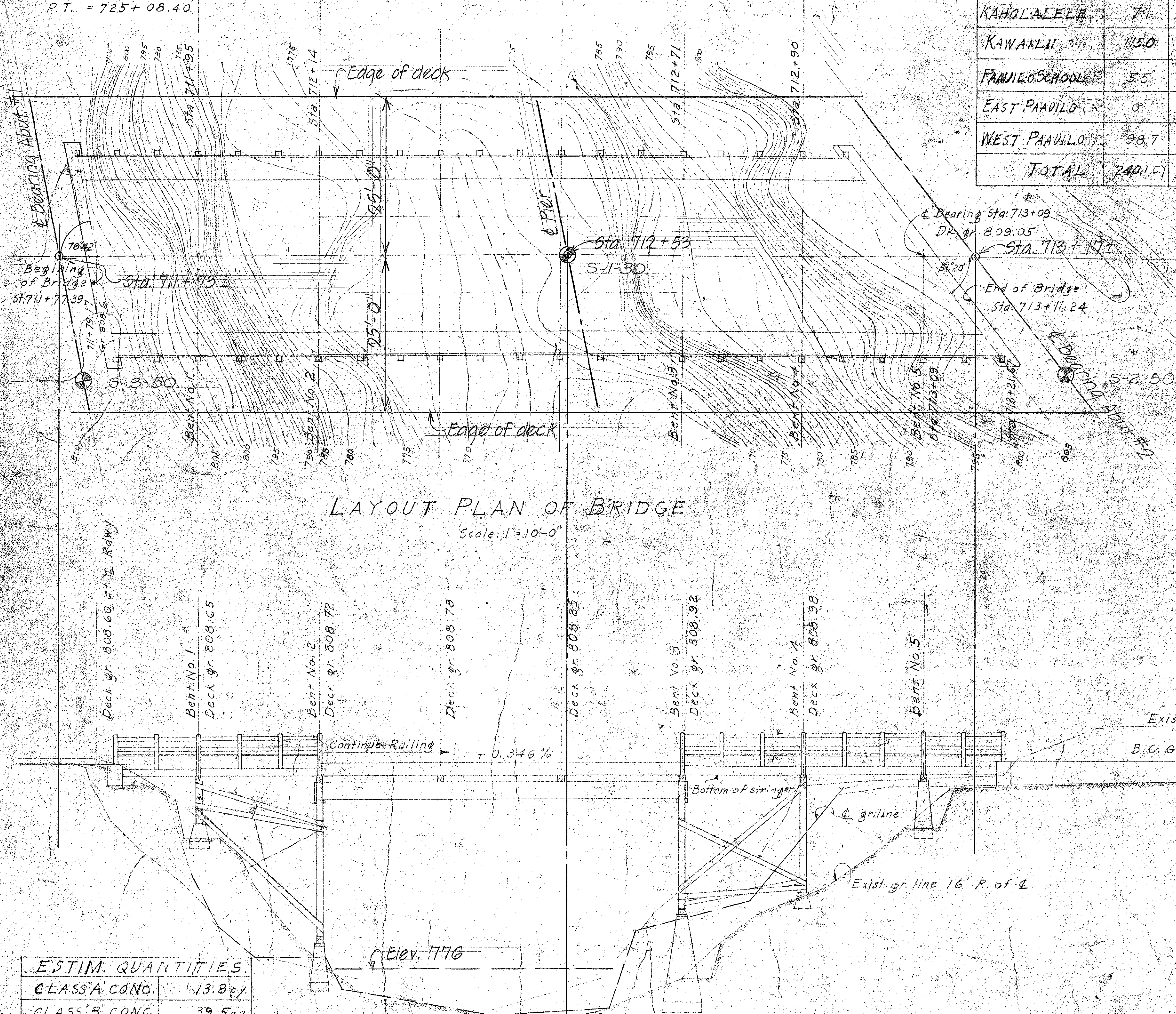


TIMBER BILL OF MATERIAL

MEMBER	NO	SIZE & LENGTH	KIND OF LUMBER	WILL WKK	FT. B.M.
DOUGLAS FIR COAST RGN.					
Solid Bridge	1	2" x 18" x 10'-0"	No. 1 Dimension	SIS	60
	2	4" x 18" x 18'-0"			648
	2	4" x 18" x 18'-0"			212
Cross	28	2" x 4" x 16'-0"	Rough		298
Splice Block	20	6" x 18" x 3'-0"	Select Joint & Plane	SIS	702
Straps	1	6" x 18" x 8'-0"	Structural Joist & Plane	Rough	72
	1	6" x 18" x 10'-0"			90
	2	6" x 18" x 12'-0"			216
	4	6" x 18" x 14'-0"			504
	5	6" x 18" x 16'-0"			720
	6	6" x 18" x 18'-0"			972
	82	6" x 18" x 20'-0"			14760
	2	6" x 18" x 22'-0"			396
	1	6" x 18" x 24'-0"			216
	1	6" x 18" x 26'-0"			234
	1	6" x 18" x 28'-0"			252
	1	6" x 18" x 30'-0"			270
Sidewalk Joist Bl.	13	12" x 18" x 3'-0"	Structural Joist & Plane	See detail	702
	4	8" x 18" x 4'-0"			92
Wheel Guard	1	10" x 12" x 10'-0"	SIS		100
	2	10" x 12" x 14'-0"			280
	12	10" x 12" x 20'-0"			2400
Wheel Grd. face	1	4" x 16" x 10'-0"			53
	2	4" x 16" x 14'-0"			149
	12	4" x 16" x 20'-0"			1280
Guard Rail	1	3" x 8" x 8'-0"	Structural Joist & Plane	S4S	16
	2	3" x 8" x 14'-0"			56
	12	3" x 8" x 20'-0"			480
	1	4" x 8" x 8'-0"			21
	2	4" x 8" x 14'-0"			75
	12	4" x 8" x 20'-0"			639
Bridge End pt.	2	2" x 16" x 10'-0"	Rough		53
Corner Blocking	3	2" x 4" x 3'-0"	SIS		6
	4	2" x 4" x 2'-0"			5
	1	2" x 4" x 6'-0"			4
End Timber	2	2" x 18" x 14'-0"	Structural Joist & Plane	SIS	252
	2	6" x 18" x 18'-0"			324
End Tim. Block	1	6" x 6" x 14'-0"	Rough		72
Wall Plate	1	6" x 8" x 34'-0"	Structural Joist & Plane		116
	2	6" x 8" x 22'-0"			176
Deck Starter	1	6" x 6" x 8'-0"	SIS		84
	1	6" x 6" x 14'-0"			102
Floor Decking	363	2" x 6" x 24'-0"	Structural Joist & Plane		25053
Sidewalk End pt.	1	8" x 12" x 18'-0"	Structural Joist & Plane		144
Sidewalk Planking	14	1" x 8" x 6'-0"	No. 1 Dimension	SIS	86
	374	1" x 8" x 4'-0"			937
	14	2" x 8" x 16'-0"			112
	374	2" x 8" x 4'-0"			1854
Railing Posts	17	8" x 8" x 8'-0"	Select Joist & Plane	S4S	725
	20	8" x 8" x 6'-0"			832
Posts	1	12" x 12" x 8'-0"	Structural Joist & Plane	Rough	96
	1	12" x 12" x 10'-0"			120
	1	12" x 12" x 12'-0"			144
	2	12" x 12" x 14'-0"			336
	1	12" x 12" x 16'-0"			192
	6	12" x 12" x 18'-0"			1296
	3	12" x 12" x 20'-0"			720
	5	12" x 12" x 22'-0"			320
Caps	6	12" x 12" x 34'-0"	Structural Joist & Plane	SIS	2448
	1	12" x 12" x 16'-0"			192
Sills	2	12" x 12" x 34'-0"	Structural Joist & Plane	Rough	816
Sill Blocks	20	4" x 8" x 16'-0"	SIS		80
Braces	1	3" x 10" x 14'-0"	Structural Joist & Plane	Rough	35
	2	3" x 10" x 16'-0"			80
	3	3" x 10" x 18'-0"			135
	4	3" x 10" x 20'-0"			200
	17	3" x 10" x 22'-0"			935
	10	3" x 10" x 24'-0"			600
	4	3" x 10" x 26'-0"			260
	3	3" x 10" x 28'-0"			210
	3	3" x 10" x 30'-0"			225
	2	3" x 10" x 36'-0"			180
	2	3" x 10" x 38'-0"			190
Struts	4	4" x 12" x 28'-0"	Structural Joist & Plane		448
Post Scabs	20	6" x 12" x 6'-0"	Structural Joist & Plane		720
Solid Br. @ I	8	2" x 9" x 4'-0"	No. 1 Dimension		96
	16	4" x 12" x 4'-0"			256
Blocks @ I	16	6" x 12" x 3'-0"	Select Joist & Plane	SIS	288
	4	10" x 12" x 3'-0"	See detail		120
Blocks @ Struts	16	4" x 12" x 1'-0"	Rough		64
			Total		71,950

CURVE DATA

$\Delta = 10^\circ - 08'$
 $D = 0^\circ - 44' - 49''$
 $R = 7669.64'$
 $T = 680.0'$
 $L = 1356.45'$
 $Super = 0.019'$ per ft.
 $P.C. = 711+51.95$
 $P.T. = 725+08.40$



LAYOUT PLAN OF BRIDGE

Scale: 1" = 10'-0"

ESTIM. QUANTITIES.		
CLASS A CONC.	13.8 cy	
CLASS B CONC.	39.5 cy	
REINF. STEEL	1,932 #	
STRUCT. STEEL	41,636 #	
TREATED TIMBER	71,050 BM.	
STRUCT. EXCAV.	160.10 cy	
UNCLASS. EXCAV.	93.0 cy	

DOWNSTREAM ELEVATION OF BRIDGE

Scale: 1" = 10'-0"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	17G-02-72	1973	2	5

ESTIMATED QUANTITIES

NAME OF BRIDGE	CLASS A CONC.	CLASS B CONC.	REINF. STEEL	STRUCT. STEEL	TREATED TIMBER	TREATED PILING	G.R.M.	STRUCT. EXCAV.	UNCLASS. EXCAV.
KAIHEHE	18.8	39.5	1,932 #	41,636 #	71,050	0	0	160.10	93.0
KAHOLAHELE	7.1	38.9	1,052 #	41,636 #	141,505	150.1	0	158.0	96.0
KAWAII	15.0	0	15,300 #	0	0	0	8500	420.0	0
PAVILLO SCHOOL	5.5	22.5	863	41,636	80,501	200	115 cy	178.0	65.0
EAST PAVILLO	0	49.3	12,14	41,636	137,149	300	0	185.0	61.0
WEST PAVILLO	98.7	32.5	6,740	41,888	62,189	0	0	209.0	40.0
TOTAL	240.15	182.7	27,101 #	208,382 #	492,394	650.1	36500	1,310.0	358.0

TERRITORIAL HIGHWAY DEPARTMENT
 TERRITORY OF HAWAII
KAIHEHE BRIDGE
 STA. 711+77.39 TO STA. 713+11.24
 Hawaii Belt Rd.
 F.A.P. 26-A
 Jan. 1938
 SHEET NO. 1 OF 5 SHEETS

4441.11