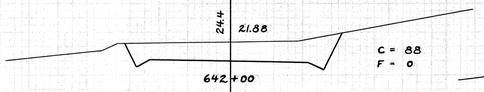
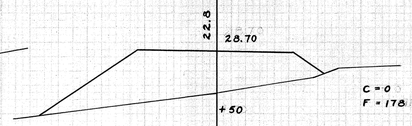
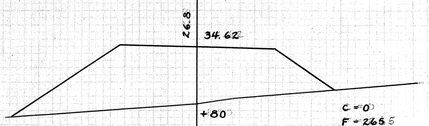
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E - 10B	1932	12	29

Sta. 642+00 Beginning of Emergency Construction
Highway Project F.A.P. E - 10B

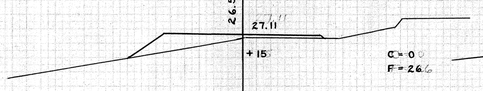




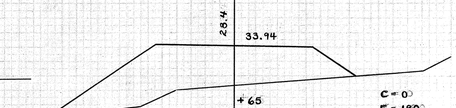
EXC. 0.0
EMB. 132.3



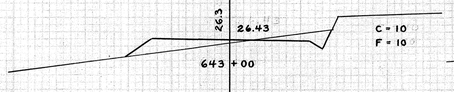
EXC. 0.0
EMB. 126.3



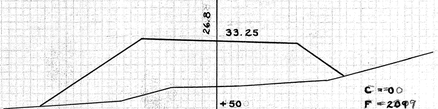
EXC. 2.7
EMB. 9.9



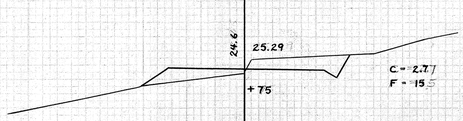
EXC. 0.0
EMB. 110.7

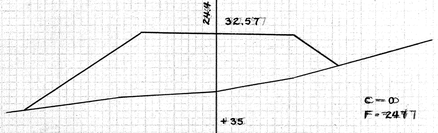


EXC. 17.0
EMB. 11.5



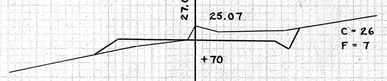
EXC. 0.0
EMB. 126.6

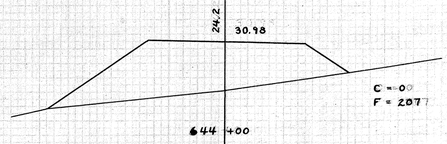




EXC. 14.9
EMB. 2.0

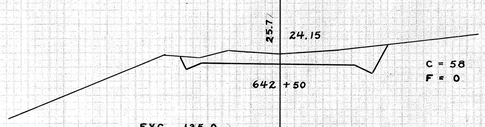
EXC. 0.0
EMB. 294.0

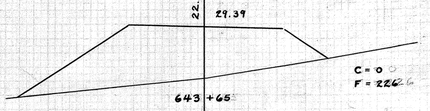




EXC. 37.2
EMB. 2.4

EXC. 0.0
EMB. 280.7





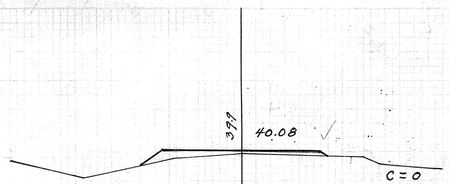
EXC. 135.0
EMB. 0.0

EXC. 0.0
EMB. 112.2

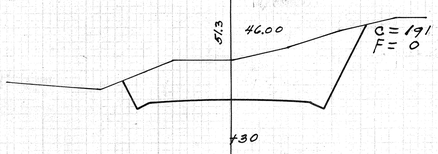
4273.12

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-10-B	1932	13	29

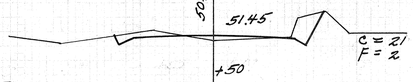
W.H.C.
J.G.H.
W.H.
B.L.



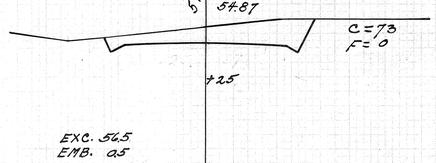
EXC. 0.3
EMB. 55.0



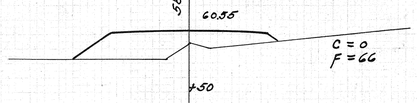
EXC. 94.5
EMB. 0.0



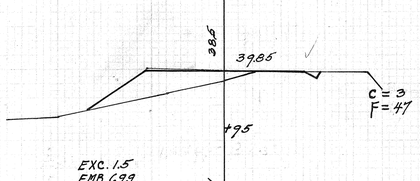
EXC. 89.0
EMB. 2.0



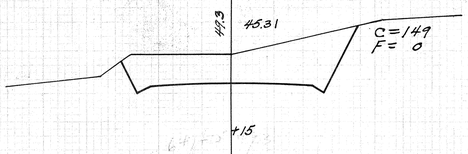
EXC. 56.5
EMB. 0.5



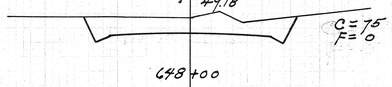
EXC. 0.0
EMB. 141.0



EXC. 1.5
EMB. 69.9

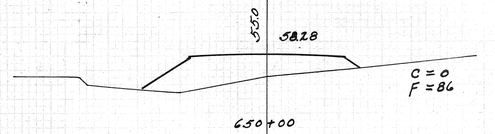


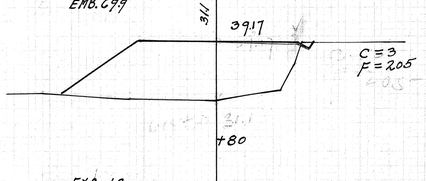
EXC. 78.6
EMB. 0.0



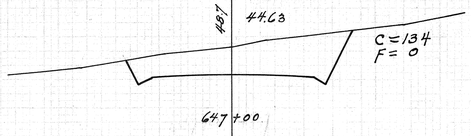
EXC. 54.6
EMB. 0.0

EXC. 23.2
EMB. 0.2

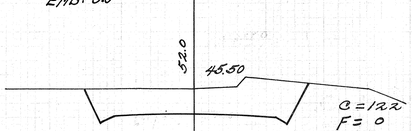




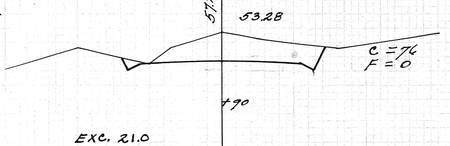
EXC. 1.2
EMB. 213.6



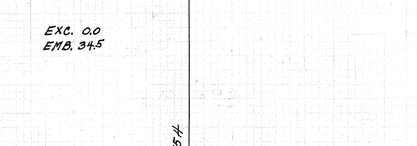
EXC. 210.0
EMB. 0.0



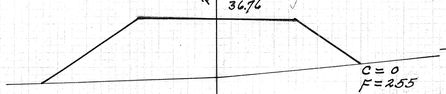
EXC. 72.0
EMB. 0.0



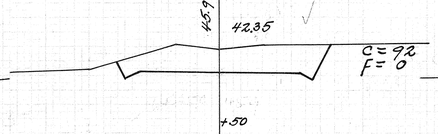
EXC. 21.0
EMB. 0.0



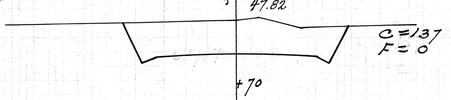
EXC. 0.0
EMB. 34.5



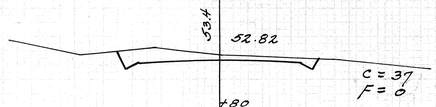
EXC. 0.0
EMB. 108.2



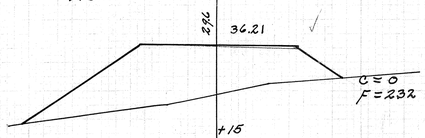
EXC. 42.9
EMB. 0.0



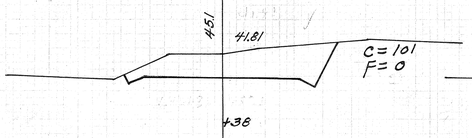
EXC. 50.4
EMB. 0.0



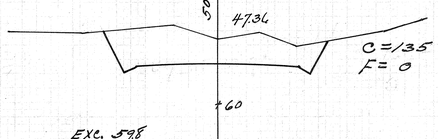
EXC. 2.8
EMB. 41.3



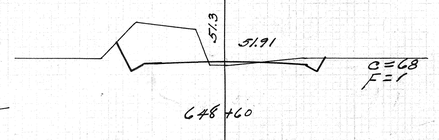
EXC. 0.0
EMB. 134.4



EXC. 30.9
EMB. 0.3

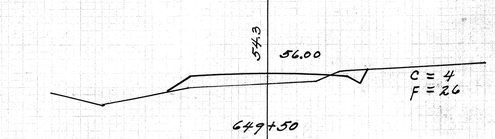


EXC. 59.8
EMB. 0.0

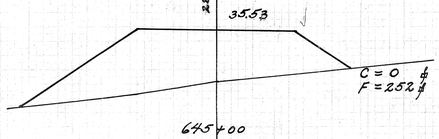


EXC. 36.8
EMB. 0.4

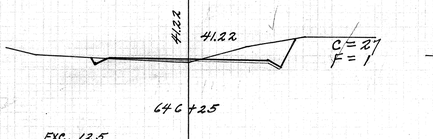
EXC. 16.4
EMB. 0.6



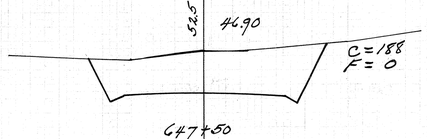
EXC. 35.5
EMB. 12.0



EXC. 0.0 Cu. yds.
EMB. 191.6 Cu. yds.



EXC. 12.5
EMB. 0.0



EXC. 140.4
EMB. 0.0

4273.13

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E.10-B	1932	14	29

STA	69.7	67.38	C = 86 F = 0
652 + 00			

EXC 153.3
EMB 0.0

STA	70.9	65.79	C = 151 F = 0
+ 65			

EXC 80.4
EMB 0.0

STA	69.3	65.10	C = 138 F = 0
+ 50			

EXC 13.1
EMB 1.4

STA	61.4	62.83	C = 4 F = 15
651 + 00			

EXC 0.8
EMB 10.6

STA	60.0	62.38	C = 0 F = 42
+ 90			

EXC = 0.6
EMB 19.5

STA	60.6	61.69	C = 2 F = 28
+ 75			

EXC 0.6
EMB 12.6

STA	58.3	61.24	C = 1 ∅ F = 4.0 ∅
650 + 65			

EXC = 03 C.Y.
EMB 29.4 C.Y.

STA	73.8	74.09	C = 25 F = 6
+ 50			

EXC 2.7
EMB 15.0

STA	74.5	73.45	C = 29 F = 4
+ 35			

EXC 9.9
EMB 3.6

STA	71.9	72.80	C = 7 F = 9
+ 20			

EXC 22.8
EMB 3.2

STA	73.5	71.91	C = 55 F = 0
653 + 00			

EXC 63.6
EMB 0.0

STA	72.6	70.57	C = 60 F = 0
+ 70			

EXC 55.2
EMB 0.0

STA	72.5	69.65	C = 89 F = 0
+ 50			

EXC 55.6
EMB 0.0

STA	70.6	68.75	C = 61 F = 0
652 + 30			

EXC 78.6
EMB 0.0

STA	81.6	80.85	C = 28 F = 6
+ 50			

EXC 16.8
EMB 18.6

STA	78.2	80.03	C = 2 F = 28
+ 20			

EXC 4.0
EMB 13.2

STA	76.3	79.45	C = 9 F = 8
655 + 00			

EXC 6.4
EMB 6.8

STA	77.3	78.84	C = 8 F = 10
+ 80			

EXC 27.6
EMB 6.6

STA	78.7	77.86	C = 42 F = 2
+ 50			

EXC 22.0
EMB 3.0

STA	75.5	76.99	C = 5 F = 25
+ 25			

EXC 4.0
EMB 25.0

STA	74.5	76.07	C = 4 F = 29
654 + 00			

EXC 27.0
EMB 32.0

STA	82.7	83.88	C = 0 F = 16
657 + 00			

EXC 0.5
EMB 11.0

STA	82.6	83.43	C = 1 F = 8
+ 75			

EXC 0.5
EMB 19.0

STA	81.3	83.05	C = 0 F = 33
+ 50			

EXC 3.6
EMB 15.8

STA	81.2	82.48	C = 6 F = 13
+ 20			

EXC 18
EMB 50

STA	82.9	82.27	C = 4 F = 14
+ 10			

EXC 10
EMB 8.6

STA	80.8	82.05	C = 1 F = 32
656 + 00			

EXC 0.4
EMB 26.0

STA	79.8	81.59	C = 0 F = 38
655 + 80			

EXC 15.6
EMB 24.6

STA	87.5	86.03	C = 59 F = 0
+ 50			

EXC 19.2
EMB 0.0

STA	87.2	85.88	C = 45 F = 0
+ 40			

EXC 54.4
EMB 0.0

STA	90.5	85.65	C = 135 F = 0
+ 23.7			

EXC 84.4
EMB 0.0

STA	87.1	85.31	C = 57 F = 0
658 + 00			

EXC 21.2
EMB 32.4

STA	81.9	85.02	C = 0 F = 87
+ 80			

EXC 0.6
EMB 54.0

STA	83.7	84.60	C = 1 F = 10
+ 50			

EXC 0.4
EMB 22.8

STA	81.0	84.31	C = 0 F = 52
657 + 30			

EXC 0.0
EMB 37.0

4273.14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	15	29

W.H.C.
W.A.H.
W.S.H.
'31

PLOTTED
PLOTTED
REPLANT
NOTE BOOK
DATE
BY

FINAL SURVEY
ORIGINAL SURVEY

DATE
BY

12.8 87.81 +75 C=0 F=33
EXC 0.0 EMB 25.2

12.8 87.6 +60 C=0 F=58
EXC 0.0 EMB 19.0

13.1 87.46 +50 C=0 F=45
EXC 2.3 EMB 16.9

13.7 87.27 +37 C=10 F=25
EXC 3.0 EMB 21.4

14.7 87.03 +20 C=0 F=43
EXC 8.4 EMB 16.0

15.3 86.74 659+00 C=23 F=0
EXC 11.0 EMB 2.2

15.5 86.43 658+78 C=4 F=5
EXC 32.5 Cu.yds. EMB 2.8 Cu.yds.

90.5 90.24 +50 C=18 F=0
EXC 5.4 EMB 7.2

88.3 90.09 +37 C=5 F=30
EXC 2.8 EMB 3.8

90.2 89.97 +27 C=10 F=1
EXC 2.5 EMB 7.5

87.5 89.79 +13 C=0 F=28
EXC 0.8 EMB 8.8

88.9 89.61 661+00 C=3 F=9
EXC 65.0 EMB 8.0

91.1 88.89 +50 C=67 F=0
EXC 43.2 EMB 0.0

88.5 88.46 +20 C=11 F=0
EXC 6.4 EMB 2.4

87.2 88.17 660+00 C=6 F=7
EXC 3.0 EMB 18.5

91.0 90.96 +50 C=97 F=9
EXC 57.0 EMB 4.0

91.0 90.84 +25 C=25 F=0
EXC 12.7 EMB 1.6

90.0 90.76 +12 C=26 F=6
EXC 12.0 EMB 4.6

90.3 90.68 662+00 C=28 F=15
EXC 4.2 EMB 3.6

91.6 90.52 +80 C=12 F=0
EXC 5.7 EMB 4.2

90.2 90.39 661+65 C=9 F=15
EXC 7.5 EMB 4.2

93.3 91.04 664+00 C=23 F=0
EXC 37.2 EMB 0.0

91.1 91.04 +10 C=44 F=0
EXC 22.4 EMB 2.0

92.5 91.04 +50 C=17 F=5
EXC 9.5 EMB 17.5

92.0 91.04 +25 C=4 F=33
EXC 2.5 EMB 15.5

92.3 91.04 663+00 C=1 F=1
EXC 2.3 EMB 0.3

92.0 91.03 +87 C=9 F=0
EXC 17.2 EMB 0.2

91.3 91.00 662+65 C=33 F=1
EXC 36.0 EMB 2.7

87.2 91.07 665+00 C=0 F=70
EXC 0.0 EMB 32.0

87.9 91.04 +80 C=0 F=16
EXC 1.2 EMB 9.6

92.1 91.04 +50 C=2 F=1
EXC 33.4 EMB 0.7

91.8 91.04 664+15.2 C=50 F=0
EXC 20.7 EMB 0.0

PLATE 3-CROSS SECTION OF R.R. GRADE

4454. 4273.15

FED. ROAD DIST. NO.	STATE	F. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	16	29

94.0 93.34 C=18 F=0
668 + 00
EXC 14.8
EMB 0.4

94.0 92.82 C=22 F=1
+80
EXC 12.0
EMB 27.6

90.0 92.21 C=0 F=49
+50
EXC 0.0
EMB 108.0

88.4 91.46 C=0 F=68
667 + 00
EXC 0.0
EMB 96.3

88.8 91.11 C=0 F=49
666 + 55 ✓
665 + 10 = 666 + 55
EXC 0.0 Cu. Yds.
EMB 25.0 Cu. Yds.

09.2 05.42 C=0 F=63
+65
EXC 0.0
EMB 34.2

00.9 04.54 C=0 F=61
+50
EXC 16.2
EMB 33.6

03.5 02.74 C=29 F=0
+20
EXC 22.4
EMB 0.0

02.6 01.53 C=31 F=0
670 + 00
EXC 40.0
EMB 0.0

98.8 98.96 C=12 F=0
+50
EXC 24.0
EMB 2.0

96.7 96.11 C=14 F=2
669 + 00
EXC 15.0
EMB 15.0

94.6 95.73 C=2 F=14
668 + 50
EXC 19.0
EMB 13.0

20.6 19.54 C=35 F=0
673 + 00
EXC 64.8
EMB 15.8

19.2 17.17 C=54 F=22
+60 ±
EXC 19.7
EMB 6.1

19.1 16.54 C=48 F=9
+50
EXC 133.5
EMB 6.3

18.1 14.17 C=135 F=0
+10 ±
EXC 47.0
EMB 0.0

16.7 13.54 C=111 F=0
672 + 00
EXC 103.0
EMB 109.0

04.5 10.54 C=0 F=118
+50
EXC 0.0
EMB 234.0

02.4 07.54 C=0 F=135
671 + 00
EXC 0.0
EMB 127.4

35.3 35.55 C=11 F=0
676 + 00
EXC 10.0
EMB 16.0

32.7 33.43 C=0 F=17
+50
EXC 0.0
EMB 49.0

30.0 31.04 C=0 F=36
675 + 00
EXC 0.0
EMB 47.3

27.9 29.24 C=0 F=37
+65 ±
EXC 0.0
EMB 25.2

27.1 28.42 C=0 F=53
+50
EXC 1.0
EMB 81.0

24.8 25.54 C=1 F=34
674 + 00
EXC 156.0
EMB 31.0

23.3 22.54 C=168 F=0
673 + 50
EXC 188.0
EMB 0.0

44.2 45.11 C=0 F=20
679 + 00
EXC 0.0
EMB 19.0

42.9 43.60 C=5 F=1
+50
EXC 13.0
EMB 1.0

41.6 42.09 C=9 F=0
678 + 00
EXC 13.0
EMB 1.0

40.2 40.58 C=5 F=1
+50
EXC 7.4
EMB 2.8

38.5 39.07 C=3 F=2
677 + 00
EXC 5.3
EMB 2.0

37.7 37.93 C=5 F=1
+64 ±
EXC 4.2
EMB 0.3

37.6 37.44 C=11 F=0
676 + 50
EXC 20.0
EMB 0.0

PLATE B - CROSS SECTIONS

4273.16

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	17	29

M.H.C.
L.G.C.
M.F.F.

SURVEYED
PLOTTED
DRAWN
TRACED
CHECKED

FINAL
SURVEY
NOTE BOOK
PAGE

ORIGINAL
SURVEY
PLOTTED
DRAWN
NOTE BOOK
PAGE

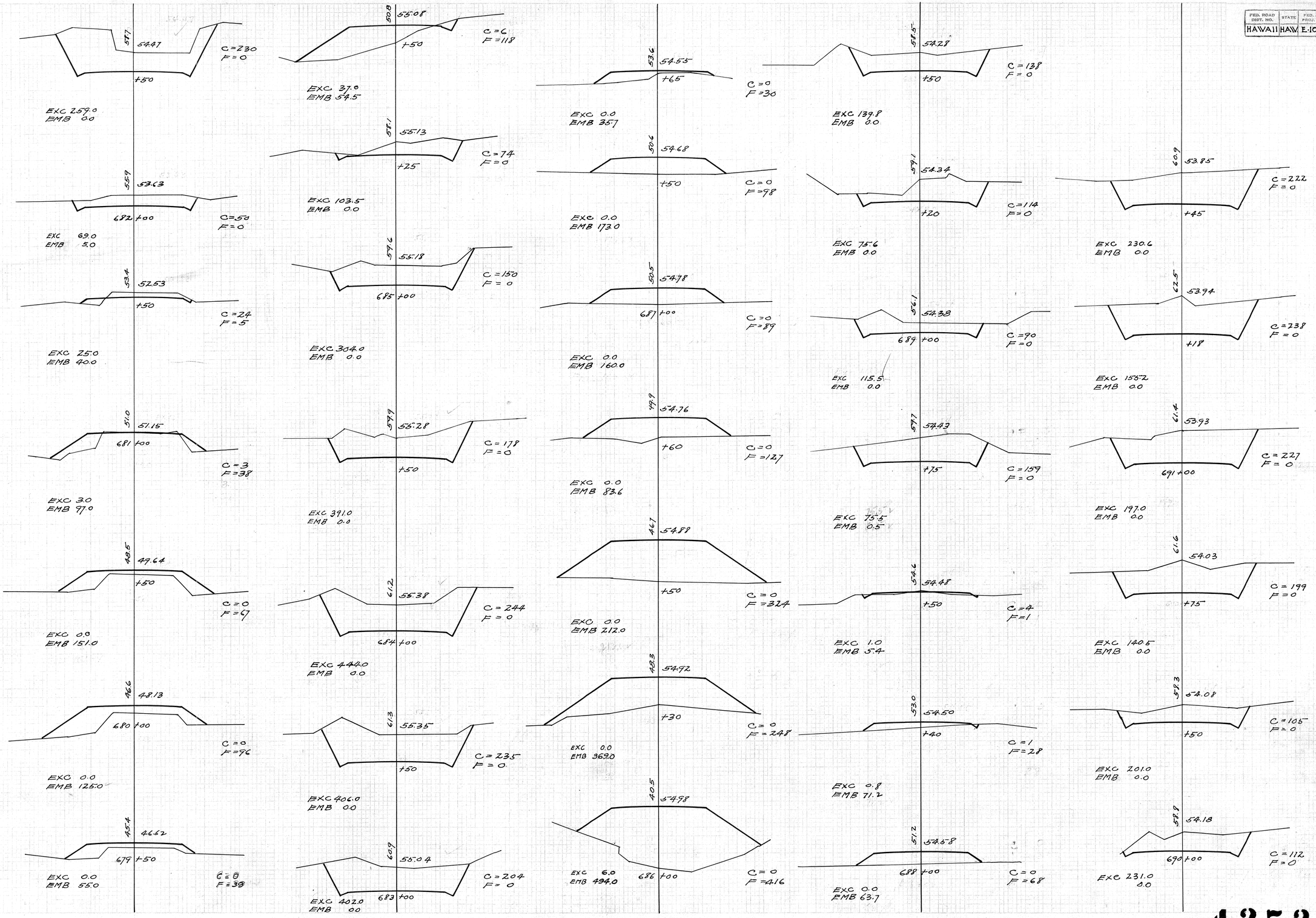
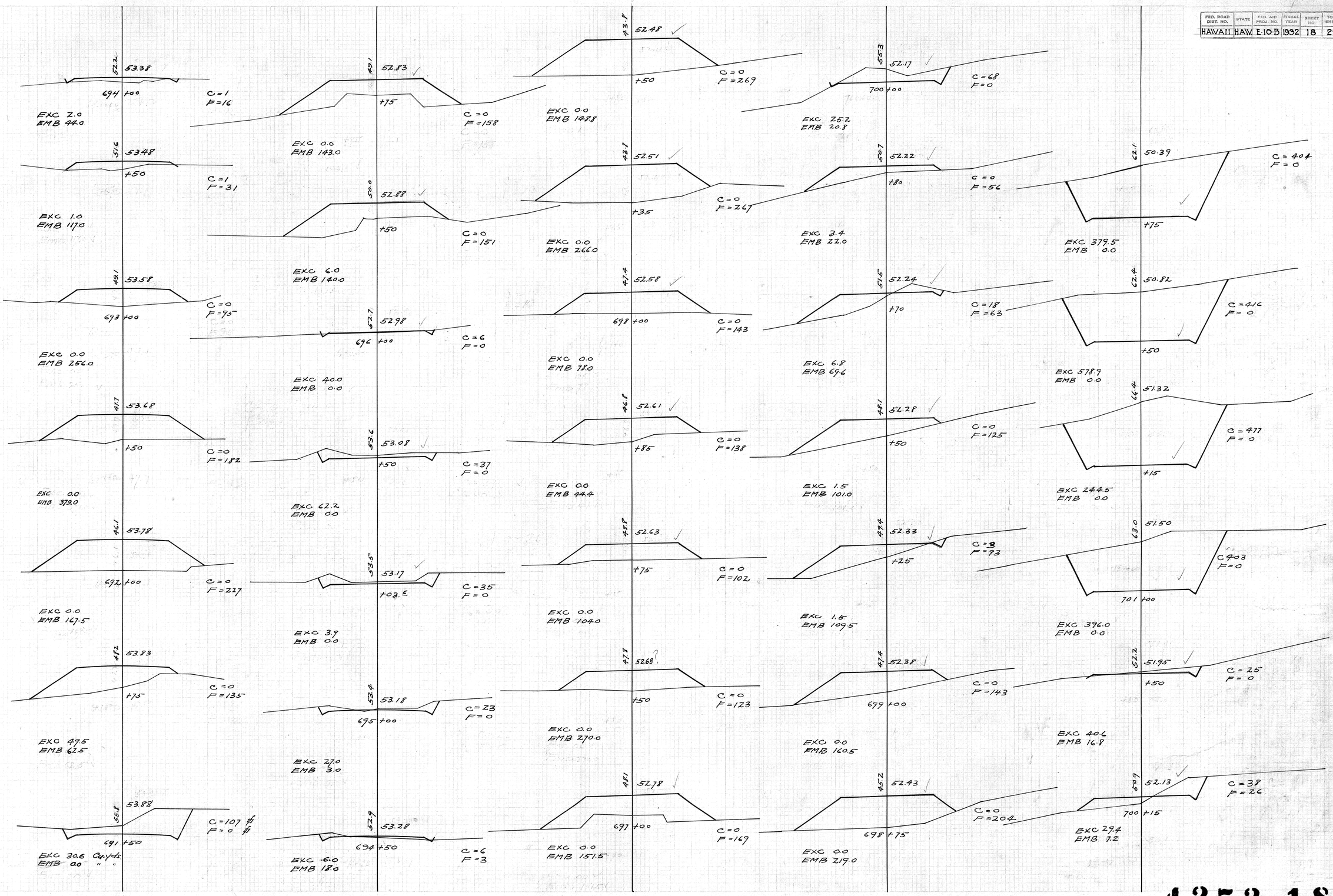


PLATE 3 - CROSS SECTIONS

4273.17

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-10-B	1932	18	29

W.H.G.
A.H.G.
W.H.



4273.18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	19	29

Chun 8-1-34 SCS

FINAL
SUBMITTED
APPROVED
FIELD BOOK
PAGES
NO. SHTS.

ORIGINAL SURVEY
SUBMITTED
APPROVED
DATE
NO. SHTS.

45.84 — 47.4 — +50 — C=167 F=39
EXC 223.3 EMB 21.7

46.75 — 50.1 — +20 — C=235 F=0
EXC 165.9 EMB 0.0

47.35 — 53.4 — 703+00 — C=213 F=0
EXC 197.5 EMB 0.0

48.08 — 55.0 — +75 — C=214 F=0
EXC 178.0 EMB 0.0

48.74 — 53.6 — +50 — C=171 F=0
EXC 286.3 EMB 0.0

43.57 — 51.7 — +15 — C=271 F=0
EXC 165.6 EMB 0.0

43.90 — 59.4 — 702+00 — C=325 F=0
EXC 337.5 EMB 0.0

41.33 — 39.0 — 705+00 — C=3 F=52
EXC 76.0 EMB 49.1

42.83 — 43.1 — +50 — C=79 F=1
EXC 37.6 EMB 0.2

43.14 — 45.3 — +40 — C=124 F=0
EXC 21.1 EMB 1.1

43.29 — 41.5 — +35 — C=104 F=12
EXC 52.3 EMB 65.8

44.34 — 36.4 — 704+10 — C=9 F=130
EXC 19.2 EMB 54.7

44.49 — 43.8 — +95 — C=60 F=67
EXC 13.3 EMB 38.4

44.85 — 39.7 — 703+83 — C=0 F=106
EXC 102.1 EMB 88.6

33.87 — 32.3 — 709+00 — C=3 F=26
EXC 2.8 EMB 65.8

34.00 — 31.9 — +50 — C=0 F=45
EXC 0.0 EMB 103.7

34.38 — 31.2 — 708+00 — C=0 F=67
EXC 0.0 EMB 167.6

35.00 — 31.4 — +50 — C=0 F=114
EXC 0.0 EMB 323.2

35.88 — 31.4 — 707+00 — C=0 F=235
EXC 0.0 EMB 392.6

37.01 — 32.1 — +50 — C=0 F=189
EXC 0.0 EMB 44.5

37.21 — 32.2 — C=0 F=140
706+40.3 = 706+42.7
EXC 0.0 EMB 214.2

38.32 — 33.2 — 706+00 — C=0 F=147
EXC 0.0 EMB 232.4

39.82 — 35.2 — 705+50 — C=0 F=104
EXC 2.8 EMB 144.4

33.87 — 29.8 — +75 — C=0 F=86
EXC 0.0 EMB 64.8

33.87 — 30.9 — +50 — C=0 F=54
EXC 0.0 EMB 47.2

33.87 — 30.9 — +25 — C=0 F=48
EXC 25.5 EMB 23.2

33.87 — 36.3 — 711+00 — C=√√ F=2
EXC 24.9 EMB 1.1

33.87 — 33.2 — +85 — C=35 F=2
EXC 22.7 EMB 21.4

33.87 — 32.7 — +50 — C=0 F=31
EXC 0.0 EMB 99.0

33.87 — 32.1 — 710+00 — C=0 F=76
EXC 0.0 EMB 103.7

33.87 — 32.5 — 709+50 — C=0 F=36
EXC 2.8 EMB 57.4

33.87 — 34.3 — +15 — C=56 F=0
EXC 46.1 EMB 0.0

33.87 — 32.2 — 713+00 — C=110 F=0
EXC 61.1 EMB 0.0

33.87 — 40.9 — +90 — C=210 F=0
EXC 68.9 EMB 0.0

33.87 — 39.3 — +80 — C=162 F=0
EXC 218.9 EMB 0.0

33.87 — 40.7 — +50 — C=232 F=0
EXC 11.0 EMB 0.0

33.87 — 43.0 — +48.2 — C=261 F=0
EXC 340.7 EMB 0.0

33.87 — 37.1 — 712+00 — C=116 F=0
EXC 47.8 EMB 2.8

33.87 — 36.0 — 711+85 — C=56 F=10
EXC 10.4 EMB 17.8

4273.19

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	20	29

W.H.C.
8-1-34
K.K.

ORIGINAL SURVEY | DATE | BY | SITED | TRANSMITTED | NOTE BOOK | PAGES | CHECKED | NO.

34.2	33.86	+15	C=35 F=0	Exc=21.4 EmB=0.0	
34.1	32.22	+75	C=98 F=0	Exc=19.6 EmB=0.0	
27.3	29.01	718+00	C=53 F=0	Exc=28.2 EmB=0.0	
23.1	20.91	+50	C=58 F=0	Exc=28.9 EmB=0.0	
07.6	14.43	+58	C=0 F=241	Exc=0.0 EmB=1121.2	
34.3	33.87	715+00	C=42 F=0	Exc=76.9 EmB=0.0	
32.0	32.40	+65	C=8 F=0	Exc=2.2 EmB=1.4	
32.8	29.73	+90	C=99 F=0	Exc=47.5 EmB=0.0	
24.2	21.25	+39	C=92 F=0	Exc=118.8 EmB=0.0	
03.9	14.75	+40	C=0 F=365	Exc=0.0 EmB=344.0	
34.8	33.87	+50	C=41 F=0	Exc=22.6 EmB=0.0	
32.3	32.66	+50	C=0 F=5	Exc=0.0 EmB=1.59	
31.2	29.79	+75	C=72 F=0	Exc=64.5 EmB=0.0	
24.1	22.53	720+00	C=70 F=0	Exc=72.0 EmB=0.0	
13.4	16.05	722+00	C=0 F=99	Exc=0.0 EmB=81.8	
36.7	33.87	+40	C=81 F=0	Exc=10.1 EmB=0.0	
32.0	32.96	+30	C=0 F=38	Exc=0.0 EmB=93.3	
32.9	30.49	+50	C=67 F=0	Exc=68.2 EmB=0.0	
24.2	24.15	+50	C=8 F=0	Exc=50.6 EmB=0.0	
14.6	17.00	+70	C=0 F=52	Exc=0.4 EmB=36.7	
34.7	33.87	714+00	C=52 F=0	Exc=18.1 EmB=0.6	
28.7	33.33	716+00	C=0 F=130	Exc=0.0 EmB=219.7	
33.9	31.11	+26	C=86 F=0	Exc=57.7 EmB=0.0	
22.8	25.52	+07	C=57 F=0	Exc=8.7 EmB=4.1	
14.9	17.67	+50	C=1 F=42	Exc=6.0 EmB=43.0	
33.5	33.87	+85	C=9 F=2	Exc=10.4 EmB=5.2	
26.3	33.64	+65	C=0 F=209	Exc=0.0 EmB=101.1	
24.0	25.77	719+00	C=3 F=28	Exc=6.0 EmB=33.0	
19.0	19.29	721+00	C=5 F=4	Exc=38.8 EmB=1.6	
37.3	33.87	713+50	C=7 F=69	Exc=40.8 EmB=3.9	
27.1	33.73	715+50	C=0 F=150	Exc=22.7 EmB=100.8	
37.2	31.40	+13	C=143 F=0	Exc=49.6 EmB=0.0	
26.5	27.39	718+50	C=3 F=8	Exc=52.0 EmB=7.0	
24.2	19.94	720+80	C=100 F=0	Exc=87.6 EmB=0.0	
32.8	31.71	717+00	C=52 F=0	Exc=69.5 EmB=0.0	

PLATE 3 - CROSS SECTIONS & QUANTITIES

4273.20

20

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-10-B	1932	21	29

W.H.Z.
M.E.F.

ORIGINAL SURVEY — SURVEYED / PLOTTED / TRACED / CHECKED / NOTE BOOK / DATE / PAGE / DESCRIPTION

FINAL SURVEY — SURVEYED / PLOTTED / TRACED / CHECKED / NOTE BOOK / DATE / PAGE / DESCRIPTION

0.54 09.57 C = 0 F = 166 — 724+00
Exc. 0.0 Emb. 101.0

0.67 10.38 C = 0 F = 52 — +75
Exc. 0.0 Emb. 47.0

0.88 11.19 C = 0 F = 50 — +50
Exc. 23.4 Emb. 27.6

1.36 12.16 C = 42 F = 0 — +20
Exc. 20.0 Emb. 4.0

1.27 12.81 C = 12 F = 11 — 723+00
Exc. 6.6 Emb. 126.6

0.17 13.78 C = 0 F = 217 — +70
Exc. 0.0 Emb. 128.2

0.97 14.33 C = 0 F = 1904 — 722+53
Exc. 0.0 cu. yds. Emb. 23.9 cu. yds.

0.11 04.55 C = 0 F = 62 — +55
Exc. 0.0 Emb. 138

0.16 04.71 C = 0 F = 87 — +50
Exc. 0.0 Emb. 153

0.28 04.87 C = 0 F = 78 — +45
Exc. 0.0 Emb. 185

0.08 05.03 C = 0 F = 122 — +40
Exc. 0.0 Emb. 140.0

0.40 06.33 C = 0 F = 67 — 725+00
Exc. 0.0 Emb. 108.0

0.26 07.93 C = 0 F = 50 — +50
Exc. 0.0 Emb. 90.1

0.41 08.76 C = 0 F = 147 — 724+25
Exc. 0.0 Emb. 145.0

0.45 00.34 C = 139 F = 0 — +85
Exc. 113.4 Emb. 0.0

0.23 01.47 C = 36 F = 0 — +50
Exc. 13.0 Emb. 0.0

0.37 01.79 C = 34 F = 0 — +40
Exc. 6.2 Emb. 142

0.89 02.12 C = 0 F = 87 — +30
Exc. 54.5 Emb. 40.5

0.63 02.93 C = 118 F = 0 — +05
Exc. 15.8 Emb. 0.0

0.39 02.93 C = 53 F = 0 — 726+00
Exc. 44.7 Emb. 0.0

0.68 03.58 C = 108 F = 0 — 725+85
Exc. 60.0 Emb. 34.2

0.04 94.67 C = 88 F = 0 — +59.3
Exc. 44.4 Emb. 0.0

0.97 94.99 C = 154 F = 0 — +50
Exc. = 97.8 Emb. 0.0

0.13 95.48 C = 198 F = 0 — +35
Exc. 140.0 Emb. 0.0

0.44 96.61 C = 18 F = 0 — 728+00
Exc. 19.0 Emb. 19.0

0.79 98.23 C = 3 F = 20 — +50
Exc. 31.2 Emb. 152

0.47 99.83 C = 39 F = 0 — +10
Exc. 23.6 Emb. 0.0

0.27 99.85 C = 88 F = 0 — 727+00
Exc. 63.0 Emb. 0.0

87.0 88.51 C = 35 F = 10 — +50
Exc. 9.8 Emb. 6.0

87.0 88.83 C = 18 F = 22 — +40
Exc. 56.0 Emb. 17.6

92.3 91.3 C = 58 F = 22 — 730+00
Exc. 59.4 Emb. 3.0

92.4 91.10 C = 49 F = 3 — +70
Exc. 22.4 Emb. 14.8

90.4 91.75 C = 11 F = 37 — +50
Exc. 27.9 Emb. 11.1

93.4 92.24 C = 89 F = 3 — +35
Exc. 127.4 Emb. 2.1

93.8 93.37 C = 108 F = 0 — 729+00
Exc. 14.52 Emb. 0.0

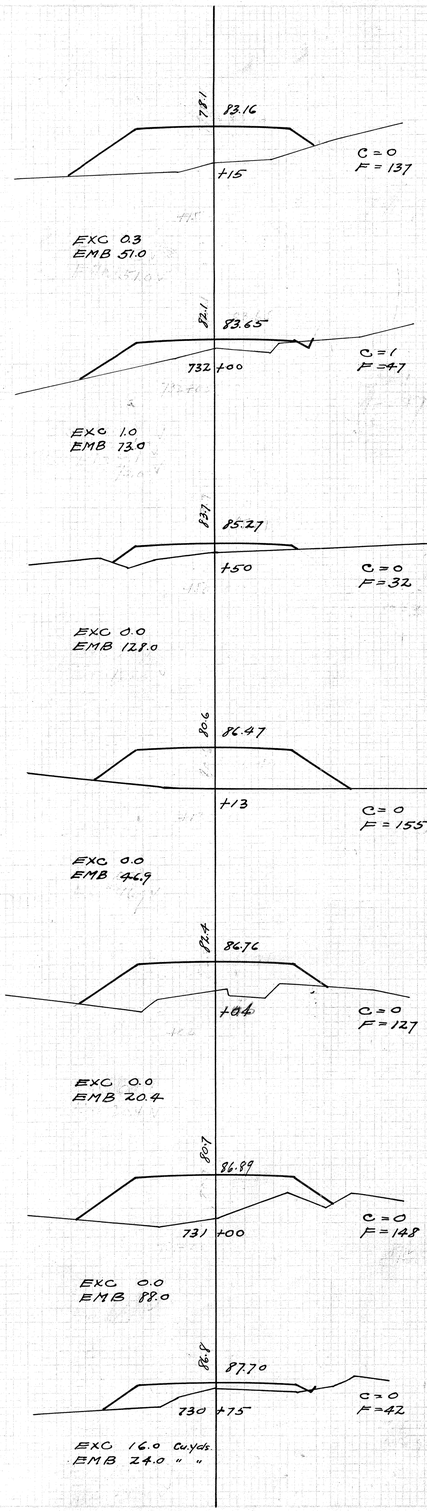
TATE'S CROSS SECTION & EARTHWORK

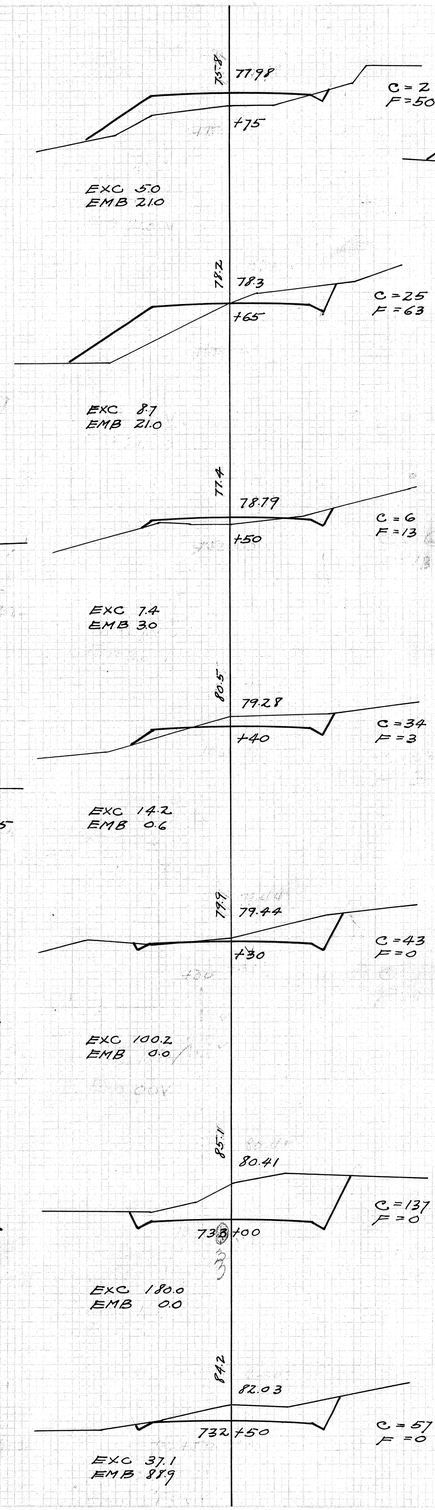
4273.21

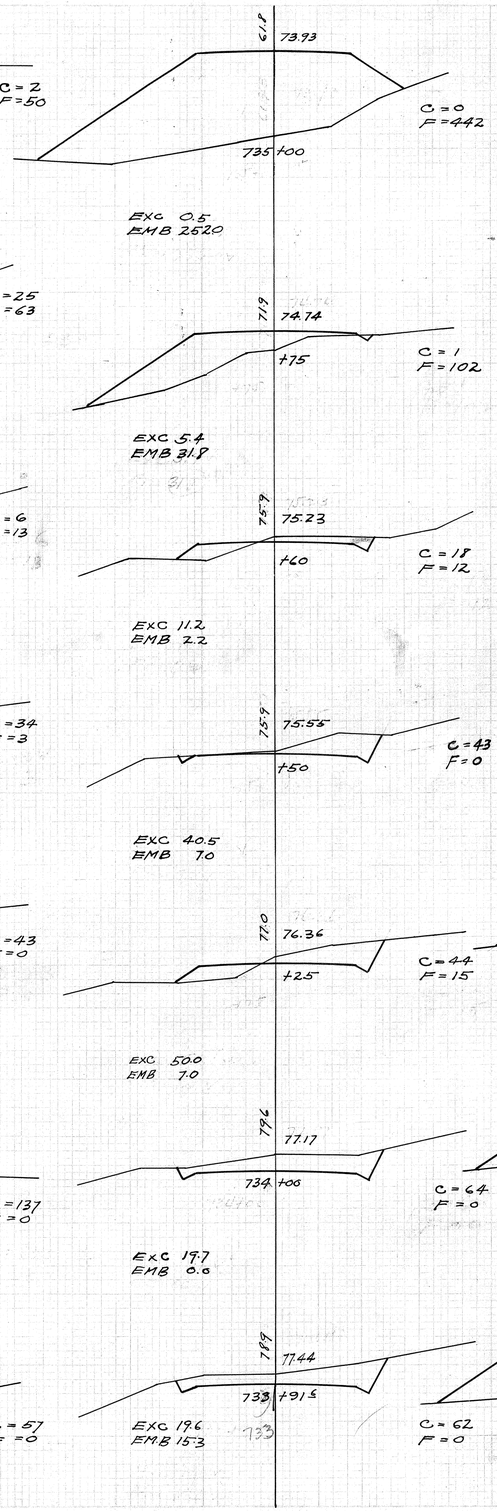
21

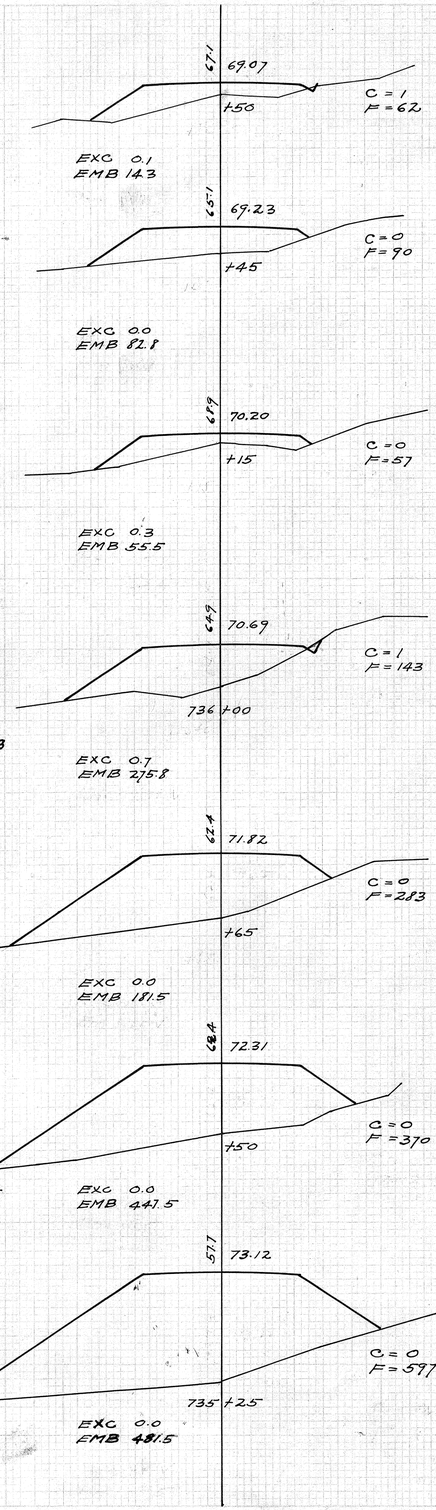
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	22	29

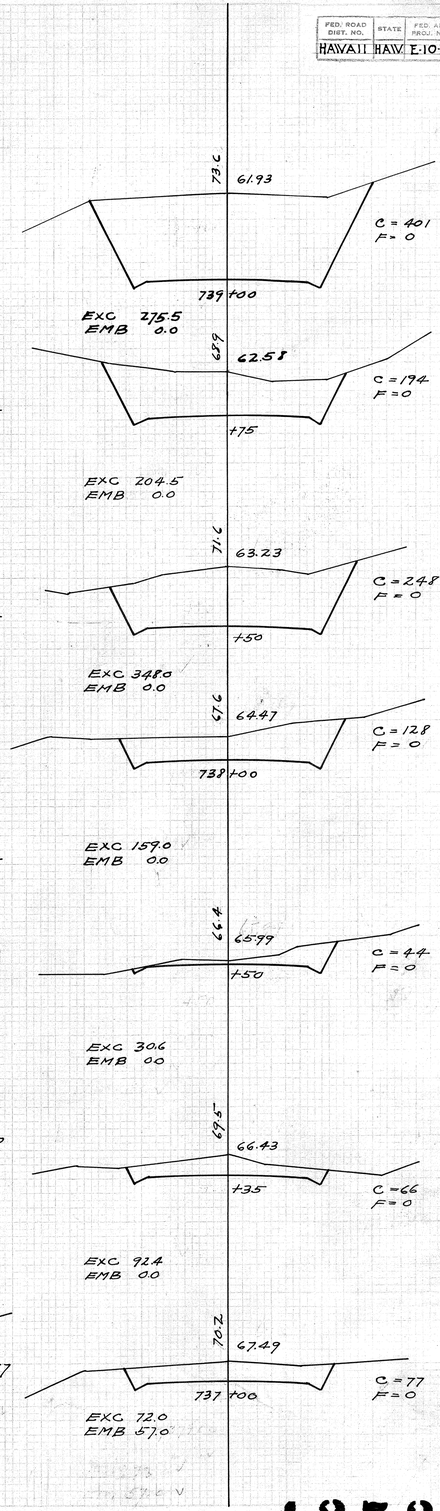
W.H.C.
W.P.
R.E.K.











4273.22

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	23	29

W.H.C. 8-5-31 M.G.

FINAL SURVEY | SURVEYED | PLOTTED | NOTE BOOK | NO. | DATE | BY | CHECKED | DATE

ORIGINAL SURVEY | SURVEYED | PLOTTED | NOTE BOOK | NO. | DATE | BY | CHECKED | DATE

PLATE 3 - CROSS SECTION

4273.23

23

744+00
C=119 F=0
Exc = 71.5 Emb = 2.5

744+75
C=35 F=5
Exc = 32.5 Emb = 3.0

745+50
C=35 F=2
Exc = 111.0 Emb = 2.0

743+00
C=85 F=0
Exc = 87.0 Emb = 36.0

744+50
C=9 F=32
Exc = 11.0 Emb = 15.5

742+25
C=15 F=2
Exc = 12.5 Emb = 1.0

742+00
C=12 F=0
Exc = 11.0 Emb = 61.0

741+50
C=0 F=66
Exc = 0.0 Emb = 70.5

741+25
C=0 F=86
Exc = 0.0 Emb = 85.5

741+00
C=0 F=99
Exc = 0.5 Emb = 67.0

746+00
C=44 F=0
Exc = 45.5 Emb = 0.0

746+75
C=54 F=0
Exc = 47.0 Emb = 0.0

747+50
C=48 F=0
Exc = 51.5 Emb = 0.0

747+25
C=63 F=0
Exc = 291.5 Emb = 0.0

745+00
C=567 F=0
Exc = 861.0 Emb = 0.0

744+50
C=363 F=0
Exc = 283.8 Emb = 0.0

744+28
C=334 F=0
Exc = 234.6 Emb = 0.0

748+00
C=75 F=0
Exc = 30.5 Emb = 3.0

748+75
C=2 F=6
Exc = 73.0 Emb = 3.0

749+50
C=156 F=0
Exc = 102.2 Emb = 36.4

749+15
C=2 F=56
Exc = 0.6 Emb = 20.4

747+00
C=0 F=17
Exc = 80.5 Emb = 11.2

746+65
C=124 F=0
Exc = 38.7 Emb = 1.2

746+50
C=15 F=4
Exc = 13.6 Emb = 12.6

746+10
C=3 F=13
Exc = 8.8 Emb = 2.4

749+00
C=0 F=47
Exc = 11.6 Emb = 17.6

750+00
C=31 F=1
Exc = 14.5 Emb = 66.0

750+25
C=0 F=142
Exc = 0.0 Emb = 116.5

749+00
C=0 F=110
Exc = 0.0 Emb = 21.7

749+95
C=0 F=124
Exc = 0.0 Emb = 168.3

750+50
C=0 F=78
Exc = 0.0 Emb = 84.5

748+25
C=0 F=104
Exc = 34.5 Emb = 48.0

739+062
C=3958 F=0.4
Exc = 914 Cu.yds. Emb = 0.0 " "

739+00
C=334 F=0
Exc = 220.3 Emb = 0.0

738+50
C=327 F=0
Exc = 586.0 Emb = 0.0

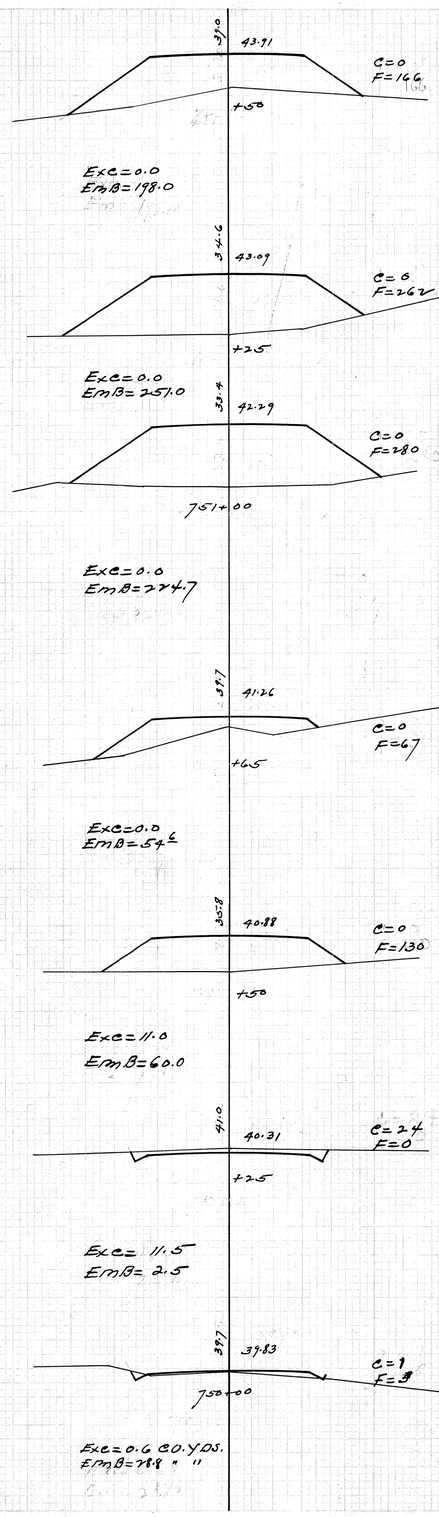
738+25
C=225 F=0
Exc = 331.5 Emb = 0.0

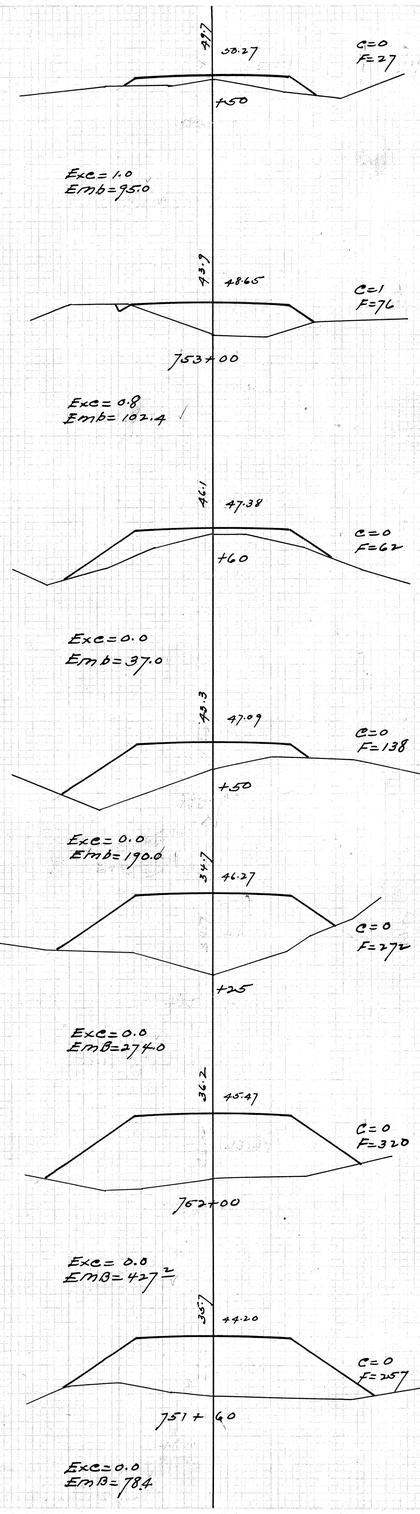
738+00
C=2 F=46
Exc = 1.5 Emb = 33.0

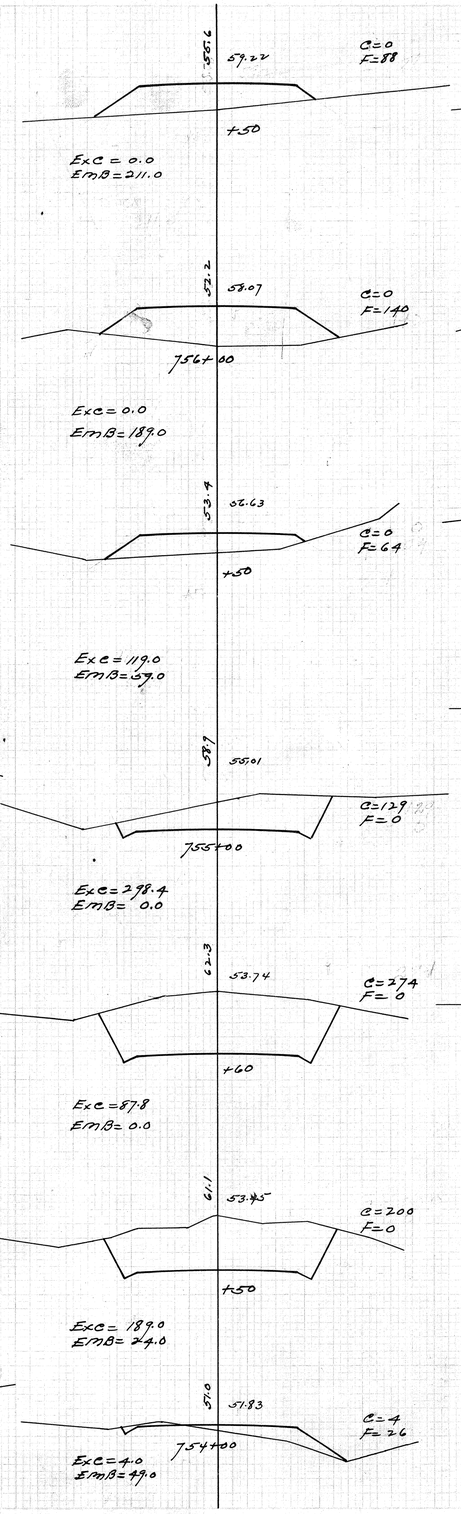
738+50
C=2 F=25
Exc = 102.6 Emb = 13.8

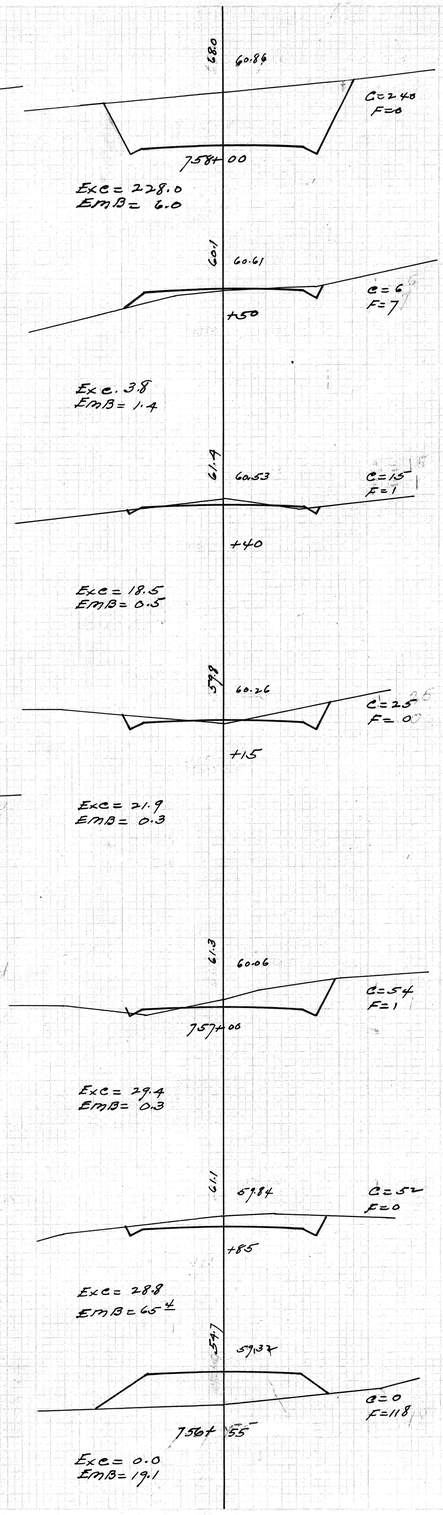
738+20
C=183 F=0
Exc = 151.2 Emb = 0.0

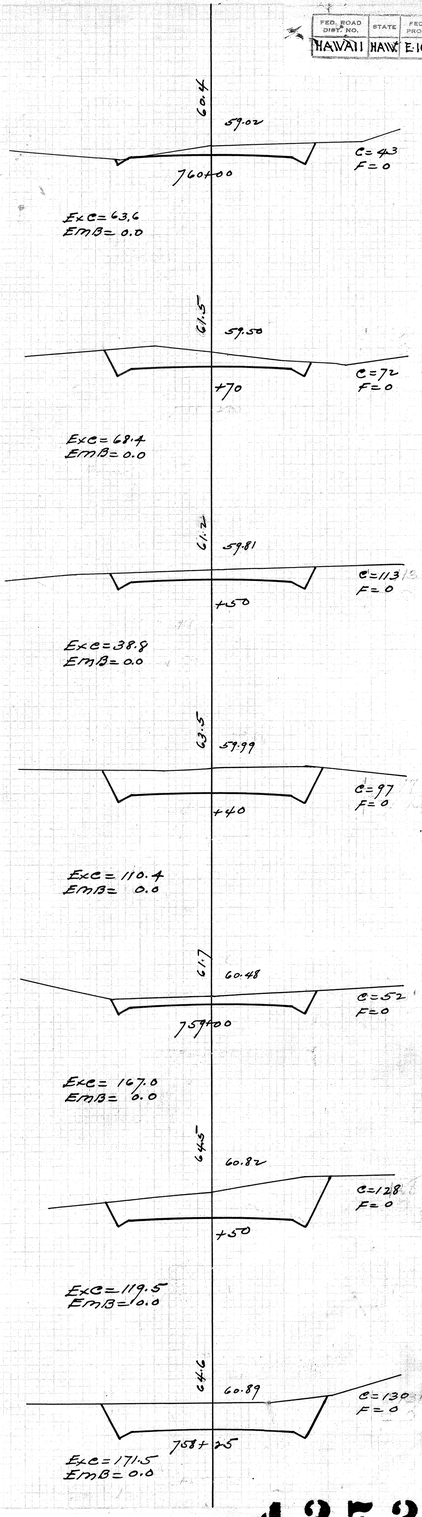
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-10-B	1932	24	25











4273.24

24

PLATE 3 CROSS SECTIONS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	E-10-B	1932	25	29

W.H.C. 6.57

ORIGINAL SURVEY — DRAWN / TRACED / CHECKED / APPROVED / DATE / FIELD BOOK / SHEETS / PLOTTED / FINAL SURVEY / DATE / FIELD BOOK / SHEETS / AREA / CHECKED / BY

48.4 54.09 +50 C=0 F=180
EXC 0.0 EMB 400.0

47.3 55.87 762+00 C=0 F
EXC 0.0 EMB 526.0

46.5 56.66 +50
El. invt.=45.0 El. invt.=48.0 C=0 F=316
24" circular pipe culvert - 44 ft. long. - 2 CRM. H.W.
EXC 0.0 EMB 573.0

48.2 57.45 761+00 C=0 F=303
EXC 0.0 EMB 593.1

46.8 58.15 +55 C=0 F=409
EXC 0.0 EMB 60.6

49.7 58.24 +50 C=0 F=246
EXC 8.8 EMB 91.6

58.8 58.55 760+30 C=24 F=1
EXC 37.2 Cu.yds. EMB 0.6 " "

52.7 50.37 +50 C=84 F=0
EXC 273.0 EMB 0.0

58.0 51.16 765+00 C=211 F=0
EXC 158.5 EMB 0.0

55.3 51.55 +75 C=131 F=0
EXC 156.0 EMB 0.0

57.0 51.95 +50 C=204 F=0
EXC 309.0 EMB 0.0

56.9 52.73 764+00 C=130 F=0
EXC 130.0 EMB 6.0

53.1 53.52 +50 C=10 F=6
EXC 9.0 EMB 100.0

49.7 54.30 763+00 C=0 F=102
EXC 0.0 EMB 261.0

49.3 47.18 768+00 C=55 F=0
EXC 69.0 EMB 4.0

47.0 47.4 +50 C=19 F=4
EXC 69.0 EMB 4.0

49.1 48.01 767+00 C=56 F=0
EXC 31.2 EMB 0.0

51.6 48.16 +90 C=112 F=0
EXC 144.8 EMB 0.0

50.7 48.80 +50 C=84 F=0
EXC 84.0 EMB 0.0

52.4 49.19 +25 C=97 F=0
EXC 66.0 EMB 0.0

50.7 49.58 766+00 C=46 F=0
EXC 120.0 EMB 0.0

53.5 57.51 +50 C=226 F=0
EXC 105.5 EMB 1.5

49.4 50.66 +25 C=2 F=3
EXC 1.0 EMB 49.5

45.5 49.91 770+00 C=0 F=104
EXC 0.0 EMB 132.0

46.5 48.68 769+50 C=0 F=39
EXC 0.0 EMB 12.4

47.2 48.47 +40 C=0 F=28
EXC 0.0 EMB 133.6

41.9 47.81 El. invt.=43.5 El. invt.=40.0
36" circular pipe culvt 29ft. long-2 CRM H.W.
769+00 C=0 F=152
EXC 0.0 EMB 203.0

43.8 47.30 768+50 C=0 F=67
EXC 51.0 EMB 62.0

53.8 61.42 El. invt.=53.6 El. invt.=54.0
24" circular pipe culvt. 38 ft. long=2 CRM H.W.
+50 C=0 F=216
EXC 0.0 EMB 107.5

58.6 59.98 +25 C=0 F=16
EXC 4.5 EMB 7.5

58.6 57.53 772+00 C=10 F=0
EXC 130.0 EMB 0.0

59.8 55.52 +50 C=130 F=0
EXC 758.0 EMB 0.0

72.0 53.48 771+00 C=639 F=0
EXC 267.0 EMB 0.0

72.8 53.05 +90 C=752 F=0
EXC 395.1 EMB 0.0

70.8 52.45 770+75 C=670 F=0
EXC 415.0 EMB 0.0

PLATE 3 - CROSS SECTION

4273.25

25

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	26	29

CHKD. REC. W.F.F. H.F.F.

ORIGINAL SURVEY — PLOTTED, TRACED, CHECKED, NOTE BOOK, NO., FINAL SURVEY — PLOTTED, TRACED, CHECKED, NOTE BOOK, NO.

84.5 — 77.32 — C = 238, F = 0
EXC. 177.5, EMB. 0.0
+25
79.7 — 75.87 — C = 145, F = 0
775+00
EXC. 134.0, EMB. 60.0
74.1 — 72.98 — C = 0, F = 65
+50
EXC. 0.0, EMB. 239.0
64.1 — 70.09 — C = 0, F = 193
774+00
EXC. 0.0, EMB. 251.4
56.4 — 68.36 — C = 0, F = 260
+70
EXC. 0.0, EMB. 213.6
56.7 — 67.20 — C = 0, F = 317
+50
EXC. 0.0, EMB. 394.0
55.3 — 64.31 — C = 0, F = 325.4
773+00
EXC. 0.0 Cu. yds., EMB. 501.0 Cu. yds.

80.1 — 95.50 — El. invt. = 78.5
24" circular pipe culvert - 60 ft. long. 2 CRM. HW, C = 0, F = 64.1
+50
EXC. = 0.0, EMB. = 923.0
82.5 — 93.06 — C = 0, F = 3.56
778+00
EXC. 151.0, EMB. 330.0
85.3 — 90.32 — C = 16.3, F = 0
+50
EXC. 330.0, EMB. 0.0
89.4 — 87.43 — C = 193, F = 0
777+00
EXC. 359.0, EMB. 0.0
92.5 — 84.54 — C = 195, F = 0
+50
EXC. 331.0, EMB. 0.0
86.1 — 81.65 — C = 16.2, F = 0
776+00
EXC. 318.0, EMB. 0.0
83.9 — 78.76 — C = 181, F = 0
775+50
EXC. 194.0, EMB. 0.0

16.3 — 03.88 — C = 433, F = 0
EXC. 681.0, EMB. 0.0
+50
12.3 — 03.23 — El. invt. = 81.5, C = 303, F = 0
781+00
EXC. 499.0, EMB. 0.0
10.7 — 02.28 — C = 236, F = 0
+50
EXC. 435.4, EMB. 0.0
14.2 — 01.45 — C = 436, F = 0
+15
EXC. 233.1, EMB. 0.0
12.4 — 01.04 — C = 403, F = 0
780+00
EXC. 447.0, EMB. 0.0
07.3 — 99.49 — C = 80, F = 0
+50
EXC. 37.0, EMB. 65.5
93.4 — 98.61 — C = 0, F = 142
+25
EXC. 0.0, EMB. 280.5
89.8 — 97.65 — C = 0, F = 464
777+00
EXC. 0.0, EMB. 1024.0

06.5 — 05.95 — C = 47, F = 0
EXC. 115.2, EMB. 0.0
+45
15.8 — 05.74 — C = 368, F = 0
+30
EXC. 317.1, EMB. 0.0
29.7 — 05.54 — C = 773, F = 0
+15
EXC. 528.9, EMB. 0.0
32.2 — 05.38 — C = 1131, F = 0
783+00
EXC. 527.3, EMB. 0.0
34.5 — 05.26 — C = 1241, F = 0
+88
EXC. 1424.2, EMB. 0.0
25.57 — 04.88 — C = 782, F = 0, El. invt. = 92.5
+50
EXC. 1271.0, EMB. 0.0
20.5 — 04.38 — C = 590, F = 0
782+00
EXC. 948.0, EMB. 0.0

92.6 — 11.71 — El. invt. = 90.0
El. invt. 89.0
30" circular pipe culvert - 75 ft. long - 1 CRM. HW, 1 CRM. Slip Drop Intake, C = 0, F = 1000
+50
EXC. = 0.0, EMB. 175.3
94.5 — 11.51 — C = 0, F = 894
+45
EXC. 0.0, EMB. 1248.3
94.9 — 09.83 — C = 0, F = 604
785+00
EXC. 0.0, EMB. 1106.0
94.5 — 08.26 — C = 0, F = 590
+30
EXC. 0.0, EMB. 1065.0
93.5 — C = 0, F = 560
784+00
EXC. 0.0, EMB. 300.0
93.0 — 06.47 — El. invt. = 93.5
24" circular pipe culvt. 56 ft. long - 2 CRM. HW
- +75
C = 0, F = 520
EXC. - 0.0, EMB 259.0
94.4 — 06.03 — C = 0, F = 39
783+50
EXC. 44, EMB. 3.6

PLATE 3 - CROSS SECTIONS 5 Y 4 TRAVERSE

4273.26

26

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	27	29

788+00 — C=0, F=266 — Exc 7.0, Emb 250.0

787+00 — C=13, F=0 — Exc 6.0, Emb 124.5

787+75 — C=0, F=269 — Exc 00, Emb 427.0

786+00 — C=0, F=866 — Exc 00, Emb 1387.8

785+55 — C=0, F=799 — Exc 00, Emb 166.6

+50 — C=8, F=4 — Exc 71.0, Emb 2.0

+25 — C=145, F=0 — Exc 73.0, Emb 00

+50 — C=0, F=65 — Exc 00, Emb 1407.0

791+00 — C=1, F=33 — Exc 1.0, Emb 82.0

+50 — C=0, F=56 — Exc 00, Emb 63.0

790+00 — C=0, F=12 — Exc 29.0, Emb 11.0

789+00 — C=7, F=5 — Exc 6.0, Emb 106.0

+50 — C=0, F=108 — Exc 00, Emb 347.0

+50 — C=63, F=0 — Exc 59.0, Emb 31.0

+50 — C=0, F=95 — Exc 00, Emb 245.0

794+00 — C=0, F=170 — Exc 39.8, Emb 120.3

+61.7 — C=56, F=0 — Exc 29.3, Emb 00

+50 — C=79, F=0 — Exc 184.0, Emb 00

793+00 — C=20, F=0 — Exc 136.0, Emb 30

+50 — C=31, F=0 — Exc 35.0, Emb 50

+50 — C=27, F=3 — Exc 63.0, Emb 30

792+00 — C=41, F=0 — Exc 84.5, Emb 00

791+75 — C=141, F=0 — Exc 94.5, Emb 00

+20 — C=46, F=0 — Exc 17.6, Emb 156

796+00 — C=2, F=42 — Exc 0.8, Emb 58.4

+80 — C=0, F=116 — Exc 19.8, Emb 642

+50 — C=36, F=0 — Exc 121.0, Emb 00

795+00 — C=95, F=0 — Exc 60.8, Emb 00

794+82 — C=88, F=0 — Exc 51.8, Emb 56.3

797+00 — C=102, F=0 — Exc 51.1, Emb 2.3

+77 — C=18, F=5 — Exc 30.6, Emb 1.7

+60 — C=79, F=0 — Exc 22.6, Emb 00

+50 — C=43, F=0 — Exc 26.8, Emb 00

+30 — C=29, F=0 — Exc 13.8, Emb 00

PLATE 3 - CROSS SECTIONS OF EXCAVATION

4273.27

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E-10-B	1932	28	29

The ground elevations shown on the offset line are actually on the original ℄ there →

63.7 70.58 — 72.3 71.33 — C=31 F=0 — C=0 F=204 — 798 +00 — +50
EXC 79.2 EMB 0.0
EXC 0.0 EMB 147.8

74.5 71.96 — C=18 F=14 — +75
EXC 38.0 EMB 8.0

58.9 72.47 — 12" S.L. RIP-RAP — C.R.M. WALL — +78 — C=0 F=538
EXC 0.0 EMB 108.0

62.6 72.68 — 12" — +20 — C=0 F=301
EXC 0.0 EMB 143.4

63.7 70.48 — 75.4 71.19 — C=120 F=0 — C=0 F=195 — +80 — +21.7
EXC 110.2 EMB 0.0
EXC 11.7 EMB 108.3

79.3 71.83 — C=64 F=3 — +50
EXC 130.5 EMB 1.5

61.7 72.44 — 12" — +71.3 — C=0 F=332
EXC 0.0 EMB 248.4

59.9 72.63 — 12" — +09 — C=0 F=403
EXC 0.0 EMB 176.4

76.4 71.08 — C=154 F=0 — 799+00
EXC 81.0 EMB 0.0
EXC 51.5 EMB 0.0

70.9 70.33 — C=0 C=21 F=0 — +50

73.9 71.71 — C=218 F=0 — +25
EXC 164.0 EMB 0.0

62.7 72.33 — 12" — +50 — C=0 F=298
EXC 0.0 EMB 259.5

53.7 72.58 — 12" — 802+00 — C=0 F=655
EXC 0.0 EMB 133.4

75.3 70.23 — 75.8 71.01 — C=138 F=0 — C=153 F=0 — +34 — +85
EXC 91.7 EMB 28.7
EXC 66.2 EMB 0.0

75.5 71.58 — C=136 F=0 — 800 +00
EXC 83.5 EMB 0.0

64.1 72.21 — 12" — +25 — C=0 F=262
EXC 0.0 EMB 185.0

51.3 72.55 — 12" — El. invt=52.00 — El. invt=51.0 — 8'x8' conc. box culvt-46'-8" long — +98 — C=0 F=374
EXC 00 EMB 122.8

68.4 70.83 — C=3 F=44 — 798 +50 — C=131 F=0 — 70.14 — +30 — 797 +21.8
EXC 2.8 EMB 222.7
EXC 92.4 Cu. Yds. EMB 00 Cu. Yds.

71.9 71.46 — C=44 F=0 — 799 +75
EXC 34.5 EMB 0.0

63.0 72.08 — 12" — C=0 F=138 — 801 +00
EXC 8.5 EMB 70.5

51.4 72.52 — 12" — 801+87 — C=0 F=730
EXC 0.0 EMB 211.5

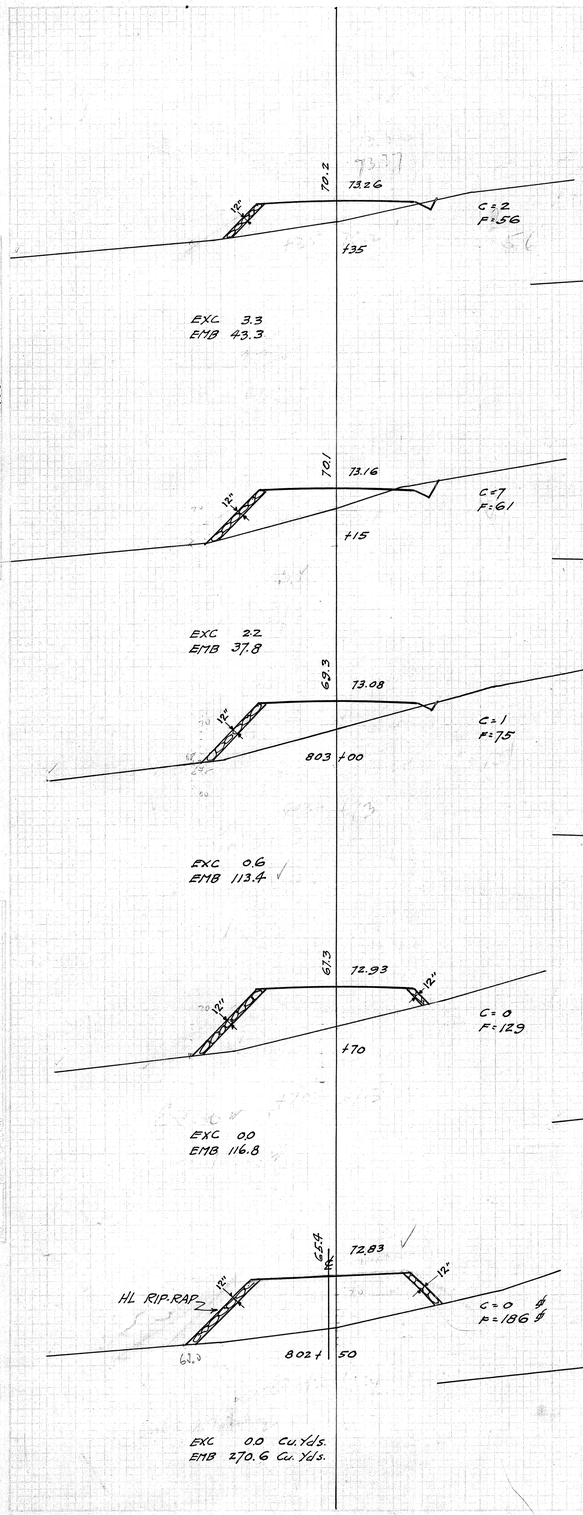
PLATE 3 - CROSS SECTION SHEET

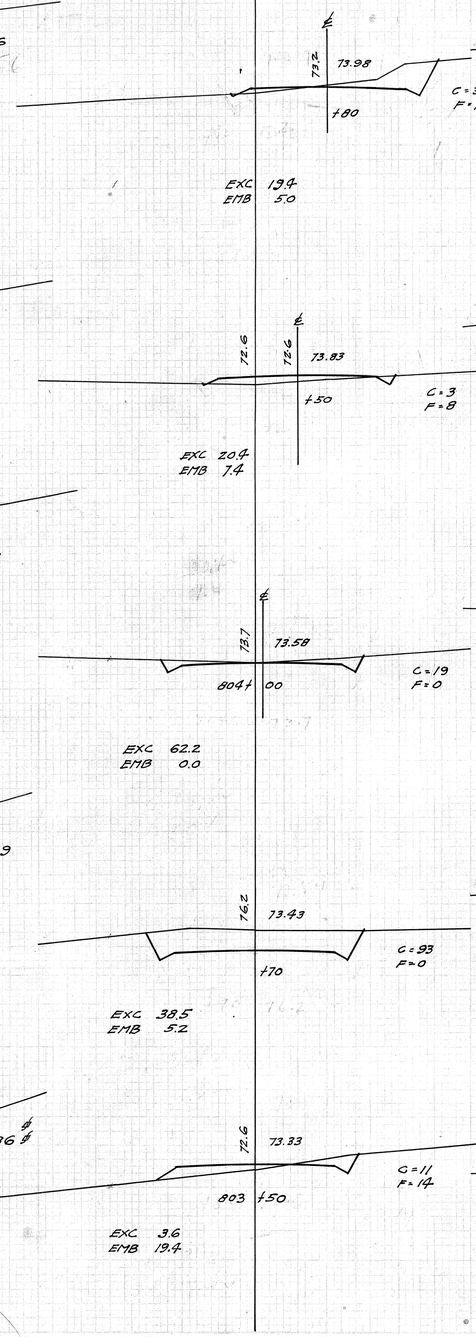
4273.28

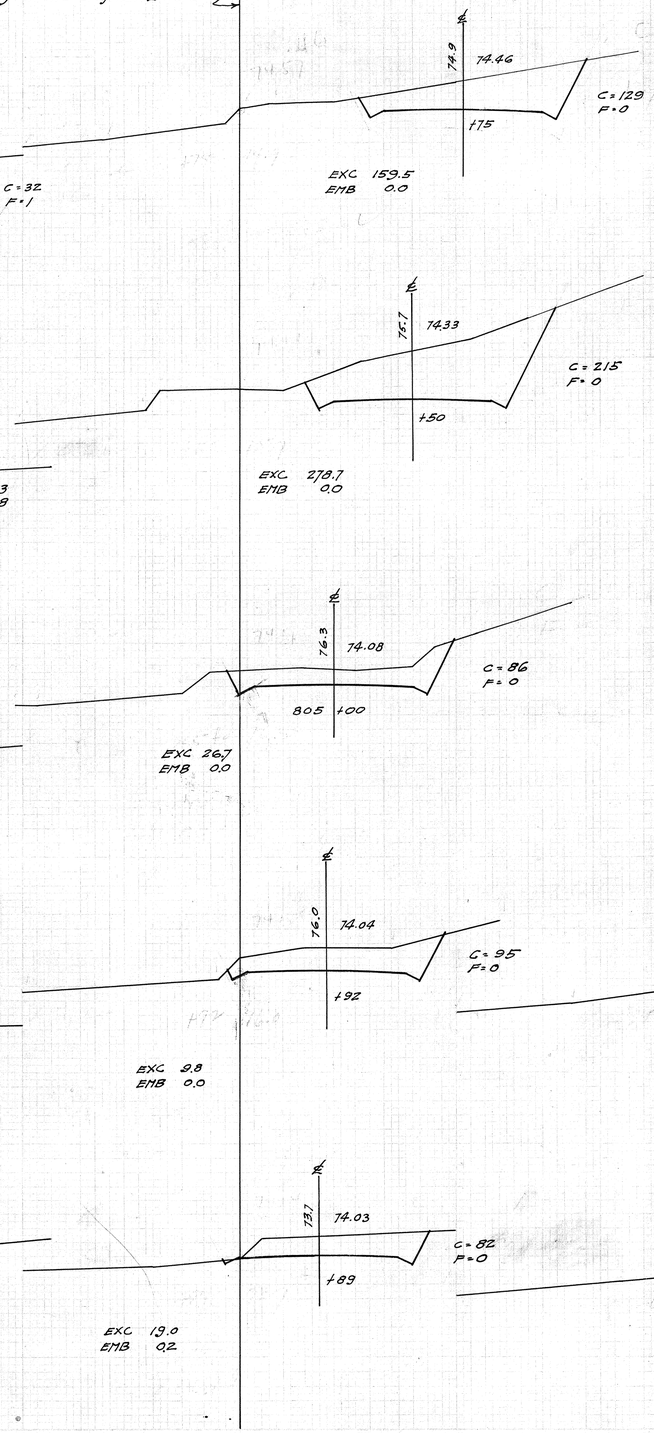
28

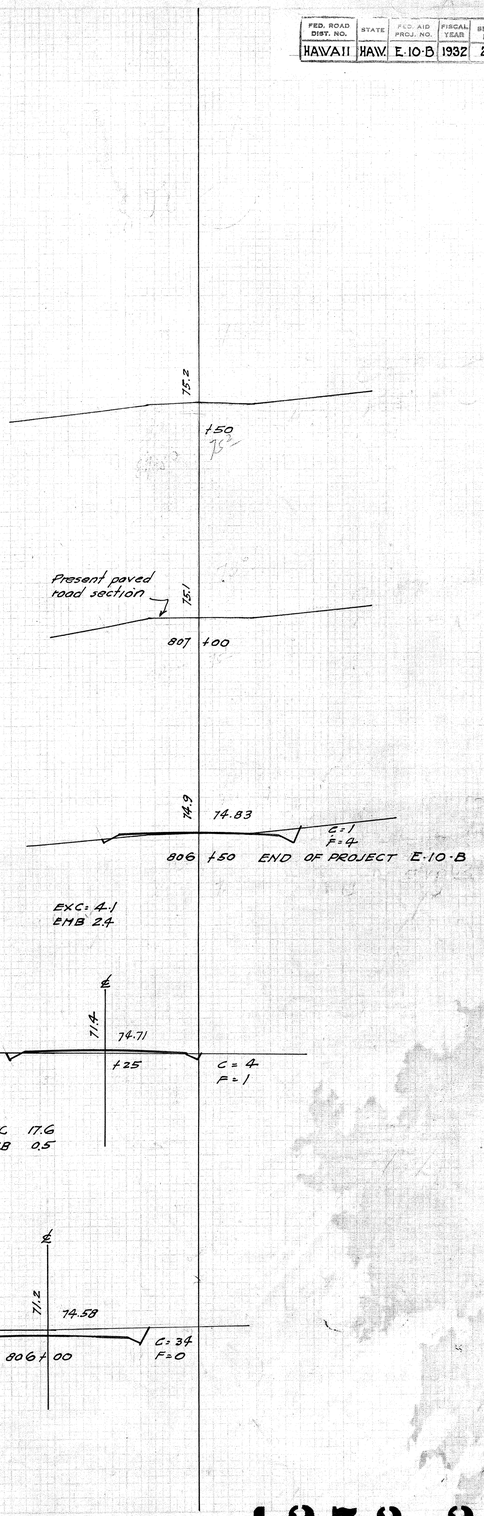
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	E.10-B	1932	29	29

The ground elevations shown on the offset line are actually on the original ℄ here →









4273.29