| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAWSDR 3(12) | 1960 | 22 | 34 | |

6/13/50
6/14/50

NOTE!
Thickness of Special Borrow and Ash layers to be determined by the Engineer. Quantities shown are for estimation purpose only.

0 50

700

196.25

C = 7.5
F = 1.0
SB = 2.7

18+71

Exc. = 28.8
Emb. = 0
SB = 28.4

700

197.00

C = 4.9
F = 0
SB = 4.6

18+50

Exc. = 76.9
Emb = 0
SB = 57.1

700

198.67

C = 3.4
F = 1.0
SB = 1.6

18+00

Exc. = 55.6
Emb = 0
SB = 64.8

700

200.18

C = 2.6
F = 1.0
SB = 5.4

17+50

Exc. = 61.1
Emb = 0
SB = 77.8

700

201.54

C = 4.0
F = 1.0
SB = 3.0

17+00

Beg. of Proj. No. SDR 3(12)

℄

PLATE 3 - CROSS SECTION P.R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U. S. A.

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

5442.22

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDA 3(9) | 1950 | 23 | 34 |

6/13/50

FINAL SURVEY — SURVEYED, PLOTTED, TRIMLINE, REVISIONS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRIMLINE, REVISIONS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

180 — 178.16 — 23+50 — Exc = 12.0, Emb = 50.5, SB = 93.5 — Cut = 0, Fill = 55, SB = 55

180 — 180.05 — 23+00 — Exc = 62.0, Emb = 0, SB = 62.0 — Cut = 13, Fill = 0, SB = 46

180 — 181.94 — 22+50 — Exc = 128.7, Emb = 0, SB = 1.9 — Cut = 32, Fill = 0, SB = 2

180 — 183.84 — 22+00 — Exc = 190.7, Emb = 0 — Cut = 85, Fill = 0

190 — 185.73 — 21+50 — Exc = 66.20, Emb = 0 — Cut = 121, Fill = 0

190 — 187.62 — 21+00 — Exc = 333.3, Emb = 0, SB = 4.2 — Cut = 163, Fill = 0

190 — 190.46 — 20+25 — Exc = 50.2, Emb = 0, SB = 0.6 — Cut = 77, Fill = 0, SB = 3

190 — 190.87 — 20+13[I] — Exc = 89.3, Emb = 0 — Cut = 163, Fill = 0

190 — 191.40 — 20+00 — Exc = 277.8, Emb = 0 — Cut = 189, Fill = 0

190 — 193.30 — 19+50 — Exc = 140.7, Emb = 0 — Cut = 111, Fill = 0

190 — 195.19 — 19+00 — Exc = 35.4, Emb = 0, SB = 12.5 — Cut = 41, Fill = 0

℄

150 — 163.74 — 27+50 — Exc = 0, Emb = 1175.9, SB = 268.5 — Cut = 0, Fill = 655, SB = 145

150 — 165.22 — 27+00 — Exc = 0, Emb = 960.2, SB = 262.0 — Cut = 0, Fill = 615, SB = 145

150 — 166.89 — 26+50 — Exc = 0, Emb = 675.0, SB = 241.1 — Cut = 0, Fill = 222, SB = 138

150 — 168.70 — 26+00 — Exc = 0, Emb = 505.6, SB = 170.4 — Cut = 0, Fill = 307, SB = 123

160 — 170.59 — 25+50 — Exc = 0, Emb = 351.7, SB = 113.0 — Cut = 0, Fill = 239, SB = 61

160 — 172.48 — 25+00 — Exc = 0, Emb = 275.0, SB = 113.0 — Cut = 0, Fill = 184, SB = 61

170 — 174.38 — 24+50 — Exc = 0, Emb = 157.2, SB = 113.0 — Cut = 0, Fill = 114, SB = 61

170 — 176.27 — 24+00 — Exc = 0, Emb = 122.6, SB = 107.2 — Cut = 0, Fill = 90, SB = 61

℄

150 — 157.72 — 31+00 — Exc = 0, Emb = 204.2, SB = 113.0 — Cut = 0, Fill = 109, SB = 61

150 — 158.11 — 30+50 — Exc = 0, Emb = 777.8, SB = 194.4 — Cut = 0, Fill = 209, SB = 61

150 — 158.64 — 30+00 — Exc = 0, Emb = 1261.1, SB = 273.9 — Cut = 0, Fill = 431, SB = 149

150 — 159.36 — 29+50 — Exc = 0, Emb = 1051.0, SB = 282.1 — Cut = 0, Fill = 731, SB = 149

150 — 160.21 — 29+00 — Exc = 0, Emb = 685.2, SB = 222.2 — Cut = 0, Fill = 405, SB = 120

150 — 161.23 — 28+50 — Exc = 0, Emb = 736.1, SB = 231.5 — Cut = 0, Fill = 335, SB = 120

150 — 162.40 — 28+00 — Exc = 0, Emb = 1032.4, SB = 254.6 — Cut = 0, Fill = 460, SB = 130

℄

5412.23

4

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | NO. SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | DK-2(3) | 1950 | 54 | 94 |

6/13/50

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — DRAWN — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

158.26
33+57
130
Cut = 0
Fill = 717
SB = 103

158.05
Exc = 0
Emb = 1108.1
SB = 213.8
130

33+35
Exc = 0
Emb = 2051.2
SB = 489.4

157.78
140
33+00
Exc = 0
Emb = 1262
SB = 312.0

157.53
150
32+50
Cut = 0
Fill = 1064
SB = 876

157.43
Exc = 0
Emb = 492.6
SB = 113.0
150
32+00
Cut = 0
Fill = 899
SB = 61

157.50
Exc = 0
Emb = 348.1
SB = 103.7
150
31+50
Exc = 0
Emb = 183.3
SB = 103.7
Cut = 0
Fill = 89
SB = 51

160.93
150
35+67
Exc = 0
Emb = 950.2
SB = 213.5
Cut = 0
Fill = 566
SB = 179

160.71
35+50
140
Exc = 0
Emb = 322.7
SB = 102.3
Cut = 0
Fill = 459
SB = 146

160.06
Exc = 0
Emb = 788.0
SB = 252.8
140
35+00
Exc = 0
Emb = 713.0
SB = 245.4
Cut = 0
Fill = 303
SB = 127

159.41
140
34+50
Exc = 0
Emb = 676.0
SB = 235.2
Cut = 0
Fill = 377
SB = 138

158.76
34+00
140
Exc = 0
Emb = 852.8
SB = 246.1
Cut = 0
Fill = 352
SB = 116

Exc = 0
Emb = 326.2
SB = 240.4

163.96
150
38+00
Cut = 0
Fill = 501
SB = 140

163.31
150
37+50
Exc = 0
Emb = 327.8
SB = 212.0
Cut = 0
Fill = 526
SB = 140

162.66
150
37+00
Exc = 0
Emb = 876.0
SB = 275.0
Cut = 0
Fill = 476
SB = 142

162.01
140
36+50
Exc = 0
Emb = 950.4
SB = 231.8
Cut = 0
Fill = 471
SB = 142

161.46
150
36+08
Exc = 0
Emb = 714.3
SB = 160.3
Cut = 0
Fill = 751
SB = 142

161.24
140
35+91
Cut = 0
Fill = 1518
SB = 362

PLATE 5 - CROSS SECTION C. & D. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 348-3 MADE IN U. S. A.

5442.24

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SOR 31(2) | 1950 | 25 | 34 |

6/13/50

FINAL SURVEY — NOTE BOOK — NO. — DATE — BY — SURVEYED — PLOTTED — TEMPLATE — PROFILE — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — DATE — BY — SURVEYED — PLOTTED — TEMPLATE — PROFILE — AREAS CHECKED

170 — 166.42 — 43+00 — Exc = 663.0, Emb = 0 — Cut = 343, Fill = 0

170 — 166.71 — 42+50 — Exc = 700.9, Emb = 0 — Cut = 373, Fill = 0

170 — 166.88 — 42+00 — Exc = 545.4, Emb = 0 — Cut = 384, Fill = 0

160 — 166.93 — 41+50 — Exc = 225.9, Emb = 0, SB = 13.9 — Cut = 205, Fill = 0

160 — 166.85 — 41+00 — Exc = 37.0, Emb = 73.1, SB = 51.9 — Cut = 39, Fill = 0, SB = 15

166.64 — 40+50 — Cut = 1, Fill = 70, SB = 41

150 — 166.31 — 40+00 — Exc = 0.9, Emb = 262.0, SB = 94.4 — Cut = 0, Fill = 204, SB = 61

150 — 165.85 — 39+50 — Exc = 0, Emb = 456.5, SB = 150.3 — Cut = 0, Fill = 289, SB = 111

150 — 165.26 — 39+00 — Exc = 0, Emb = 633.3, SB = 227.8 — Cut = 0, Fill = 395, SB = 135

150 — 164.61 — 38+50 — Exc = 0, Emb = 875.3, SB = 263.0 — Cut = 0, Fill = 415, SB = 135

℄

160 — 162.60 — 45+70 — Exc = 90.2, Emb = 63.3, SB = 31.4 — Cut = 155, Fill = 0

150 — 162.30 — 45+56 — Exc = 0, Emb = 134.3, SB = 60.7 — Cut = 0, Fill = 211, SB = 121

150 — 163.25 — 45+38 — Exc = 0, Emb = 106.1, SB = 48.6 — Cut = 0, Fill = 130, SB = 61

160 — 163.66 — 45+16 — Exc = 5.2, Emb = 33.3, SB = 20.2 — Cut = 0, Fill = 107, SB = 61

163.96 — 45+00 — Exc = 82.8, Emb = 0, SB = 2.4 — Cut = 17, Fill = 0, SB = 5

160 — 164.40 — 44+74 — Exc = 187.1, Emb = 0 — Cut = 155, Fill = 0

164.76 — 44+50 — Exc = 558.3, Emb = 0 — Cut = 266, Fill = 0

165.43 — 44+00 — Exc = 633.3, Emb = 0 — Cut = 337, Fill = 0

163.99 — 43+50 — Exc = 638.9, Emb = 0 — Cut = 347, Fill = 0

℄

160 — 154.76 — 48+50 — Exc = 1804.6, Emb = 0 — Cut = 675, Fill = 0

160 — 156.46 — 48+00 — Exc = 1047.2, Emb = 0 — Cut = 626, Fill = 0

160 — 158.02 — 47+50 — Exc = 889.8, Emb = 0 — Cut = 505, Fill = 0

160 — 159.46 — 47+00 — Exc = 813.9, Emb = 0 — Cut = 456, Fill = 0

160 — 160.77 — 46+50 — Exc = 687.0, Emb = 0 — Cut = 423, Fill = 0

160 — 161.95 — 46+00 — Exc = 263.3, Emb = 0 — Cut = 319, Fill = 0

℄

PLATE 3 - CROSS SECTIONS — U.S.B.P.R. STANDARD
KEUFFEL & ESSER CO. NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A.

5442.25

6

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDR 2(12)1050 | 26 | 34 | |

C/13/50

FINAL SURVEY — DATE / BY / SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED / NOTE BOOK / NO.

ORIGINAL SURVEY — DATE / BY / SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED / NOTE BOOK / NO. 21

160

145.42

Exc = 1407.4
Emb = 0

Cut = 802
Fill = 0

51+00

160

147.30

Exc = 1270.4
Emb = 0

Cut = 718
Fill = 0

50+50

160

149.18

Exc = 1187.0
Emb = 0

Cut = 654
Fill = 0

50+00

160

151.06

Exc = 1132.6
Emb = 0

Cut = 628
Fill = 0

49+50

160

152.94

Exc = 1236.1
Emb = 0

Cut = 660
Fill = 0

49+00

℄

150

136.01

Exc = 1983.3
Emb = 0

Cut = 1113
Fill = 0

53+50

150

137.89

Exc = 1825.9
Emb = 0

Cut = 1029
Fill = 0

53+00

150

139.77

Exc = 1662.0
Emb = 0

Cut = 943
Fill = 0

52+50

160

141.66

Exc = 1544.4
Emb = 0

Cut = 852
Fill = 0

52+00

160

143.54

Exc = 1438.1
Emb = 0

Cut = 816
Fill = 0

51+50

℄

150

128.48

Exc = 2690.7
Emb = 0

Cut = 1556
Fill = 0

55+50

150

130.36

Exc = 2375.9
Emb = 0

Cut = 1370
Fill = 0

55+00

150

132.25

Exc = 2165.7
Emb = 0

Cut = 1196
Fill = 0

54+50

150

134.13

Exc = 2088.9
Emb = 0

Cut = 1143
Fill = 0

54+00

℄

PLATE 3-CROSS SECTION PAPER A.R.E. STANDARD
KEUFFEL & ESSER CO. NEW YORK.
K & E CO. NO. 345-3 MADE IN U.S.A.

5442.26

7

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDR 3(12) | 1956 | 27 | 34 |

6/13/50

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED. NOTE BOOK NO. BY DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED. NOTE BOOK NO. BY DATE

150
Exc = 2223.9
Emb = 0
Cut = 1680
Fill = 0
121.56
57+34

150
Exc = 3414.8
Emb = 0
Cut = 1852
Fill = 0
122.84
57+00

160
Exc = 3275.9
Emb = 0
Cut = 1836
Fill = 0
124.72
56+50

150
Exc = 2938.1
Emb = 0
Cut = 1702
Fill = 0
126.60
56+00

130
Exc = 1935.7
Emb = 0
Cut = 1065
Fill = 0
117.19
58+50

130
Exc = 361.5
Emb = 0
Cut = 565
Fill = 0
117.98
58+29

120
Exc = 263.2
Emb = 0
Cut = 411
Fill = 0
118.74
58+09

120
Exc = 275.3
Emb = 0
Cut = 425
Fill = 0
119.37
57+92

130
Exc = 329.5
Emb = 0
Cut = 566
Fill = 0
119.94
57+77

150
Exc = 880.9
Emb = 0
Cut = 1293
Fill = 0
120.96
57+50

140
Exc = 1959.7
Emb = 0
Cut = 1628
Fill = 0
112.15
59+84

140
Exc = 2869.4
Emb = 0
Cut = 1548
Fill = 0
113.43
59+50

140
Exc = 2002.1
Emb = 0
Cut = 1551
Fill = 0
115.31
59+00

140
Exc = 2864.4
Emb = 0
Cut = 1371
Fill = 0
116.70
58+63

PLATE 3 - CROSS SECTION PAPER
K & E STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A.

5442.27

8

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SUR 3(4) | 1950 | 28 | 34 |

6/13/50

FINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — PROFILE — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK — NO. — BY — DATE — SURVEYED — PLOTTED — TEMPLATE — PROFILE — AREAS CHECKED

110

107.88

60+47

Exc = 670.8
Emb = 0

Cut = 868
Fill = 0

100

106.92

61+50

Cut = 13
Fill = 0
SB = 17

107.99

70

62+50

Exc = 409.3
Emb = 0
SB = 24.1

Exc = 0
Emb = 2119.8
SB = 568.5

Cut = 0
Fill = 2075
SB = 545

140

110.36

60+33

Exc = 2141.9
Emb = 0

Cut = 1754
Fill = 0

100

108.29

61+00

Cut = 429
Fill = 0
SB = 9

105.84

62+00

Cut = 0
Fill = 201
SB = 69

140

111.55

60+00

Exc = 1001.2
Emb = 0

Cut = 1751
Fill = 0

Exc = 612.9
Emb = 0
SB = 82

100

109.29

60+66

Exc = 513.7
Emb = 0
SB = 1.4

Cut = 592
Fill = 0
SB = 4

Exc = 1.3
Emb = 67.0
SB = 28.4

106.21

61+82

Exc = 10.1
Emb = 0
SB = 20.1

Cut = 4
Fill = 0
SB = 17

℄ ℄ ℄

PLATE 3 - CROSS SECTIONS — U.S.B.P.R. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A.

5442.28

SP 51-32 9

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDR 3(8) | 1950 | 20 | 34 |

6/13/50

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

103+99

50

Exc = 0
Emb = 11,693.7
SB = 2098.1

64+00

104+01

Cut = 0
Fill = 6061
SB = 1644

50

Exc = 0
Emb = 5629.6
SB = 5380.6

63+50

10436

Cut = 0
Fill = 6525
SB = 1854

60

Exc = 0
Emb = 5502.3
SB = 1402.3

63+00

Cut = 0
Fill = 3875
SB = 977

℄

PLATE 3-CROSS SECTION O.P.R.&R.N. 5(8)50(3)
KRUEGER-THIEME CO., HONOLULU
K & E CO. NO. 3493 MADE IN U.S.A.

5442.29

10

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW. | SCR 2(6)/2(10) | 30 | 34 | |

6/13/50

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

90

104.51

64+ 70.86

Exc = 0
Emb = 1644.8
SB = 434.6

Cut = 0
Fill = 1208
SB = 306

80

104.30

64+ 50

Exc = 0
Emb = 5181.8
SB = 1414.2

Cut = 0
Fill = 3050
SB = 810

50

104.06

64+ 17.38

Exc = 0
Emb = 3720.1
SB = 1012.5

Cut = 0
Fill = 5581
SB = 1466

℄

136.32

100

65+ 70

Exc =
Emb =

Cut =
Fill =

102.70

100

65+ 60

Exc =
Emb =

Cut =
Fill =

103.04

100

65+ 40

Exc =
Emb =

Cut =
Fill =

102.33

100

65+ 20

Exc =
Emb =

Cut =
Fill =

104.92

100

65+ 00

Exc = 0
Emb = 651.3
SB = 176.5

END OF PROJECT

Cut = 0
Fill = 0
SB = 21

PLATE 3 | CROSS SECTION C.P.R.& E. STANDARD
MENTZER, BUSH & CO., SCRANTON, PA.
E. E. CO. No. 345-3 MADE IN U. S. A.

5

5+42.30

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDR-3(12) | 1950 | 31 | 164 |

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

## Curve 4

190 — 195.70 — 0+82.47
Cut = 0' Fill = 35'
Exc. = 0' Emb. = 19.6'

190 — 194.93 — 0+60
Cut = 0' Fill = 12'
Exc. = 0.8' Emb. = 4.9'

190 — 194.42 — 0+41.24
Cut = 2' Fill = 2'
Exc. = 4.7' Emb. = 0.4'

190 — 194.74 — 0+20
Cut = 10' Fill = 0'
Exc. = 8.1' Emb. = 0'

190 — 193.11 — 0+00
Cut = 12' Fill = 0'

E/p

## Curve 1

190 — 194.69 — 1+34.73
Cut = 0' Fill = 27'
Exc. = 0' Emb. = 40.4'

190 — 196.27 — 1+08.23
Cut = 0' Fill = 55'
Exc. = 0' Emb. = 35.5'

190 — 196.87 — 0+91.1
Cut = 0' Fill = 81'
Exc. = 0' Emb. = 61.1'

190 — 198.01 — 0+70
Cut = 0' Fill = 56'
Exc. = 0' Emb. = 56.5'

190 — 199.37 — 0+44.32
Cut = 0' Fill = 57'
Exc. = 0' Emb. = 33.6'

190 — 200.54 — 0+20
Cut = 0' Fill = 22'
Exc. = 0' Emb. = 15.6'

190 — 201.31 — 0+00
Cut = 0' Fill = 20'

E/p

## Curve 13

200 — 193.74 — 0+97.68
Exc. = 28.7' Emb. = 0'

200 — 198.67 — 0+70
Exc. = 42.2' Emb. = 0'

200 — 197.85 — 0+50
Exc. = 63.3' Emb. = 0'

200 — 197.11 — 0+30
Exc. = 37.0' Emb. = 0'

200 — 196.98 — 0+01.63

E/p

## Exist. Govt. Rd. & 60° Turnoff
## Curve 12

200 — 202.91 — 1+16.76
Cut = 19' Fill = 0'
Cut = 382' Fill = 0'
Exc. = 377.2' Emb. = 0'

200 — 202.58 — 0+90
Cut = 378' Fill = 0'
Exc. = 280.0' Emb. = 23.9'

200 — 202.26 — 0+63.78
Cut = 37' Fill = 0'
Cut = 137' Fill = 42'
Exc. = 164.7' Emb. = 47.6'

200 — 201.83 — 0+30
Cut = 77' Fill = 0'
Cut = 38' Fill = 19'
Exc. = 67.2' Emb. = 0'

200 — 201.45 — 0+00
Cut = 70' Fill = 0'
Cut = 54' Fill = 0'
Exc. = 108.2' Emb. = 0'

200 — 201.08 — -0+30
Cut = 125' Fill = 0'
Exc. = 156.7' Emb. = 0'

200 — 200.70 — -0+60
Cut = 157' Fill = 0'
Cut = 31' Fill = 0'

℄

## 60° Turnoff & Curve to Ch. Ch.
## Curve 10

210 — 211.42 — 2+21.43
Cut = 200' Fill = 0'
Exc. = 206.8' Emb. = 0'

210 — 207.04 — 1+95.84
Cut = 232' Fill = 0'
Exc. = 255.0' Emb. = 0'

210 — 204.21 — 1+73.32
Cut = 372' Fill = 0'
Exc. = 298.4' Emb. = 0'

210 — 203.12 — 1+47.7
Cut = 265' Fill = 0'
Exc. = 156.4' Emb. = 0'

210 — 202.30 — 1+30
Cut = 212' Fill = 0'
Exc. = 108.5' Emb. = 0'

210 — 202.73 — 1+16.76
Cut = 232' Fill = 0'

E/p

## 60° Turnoff & Curve to SDR-3(12)

200 — 196.06 — 3+00
Cut = 146' Fill = 0'
Exc. = 88.9' Emb. = 0'

200 — 196.23 — 2+85.52
Cut = 174' Fill = 0'
Exc. = 83.3' Emb. = 0'

200 — 197.97 — 2+68.22
Cut = 107' Fill = 0'
Exc. = 76.5' Emb. = 0'

200 — 199.67 — 2+42.43
Cut = 89' Fill = 0'
Exc. = 106.2' Emb. = 0'

200 — 201.21 — 2+15.87
Cut = 128' Fill = 0'
Exc. = 101.3' Emb. = 0'

200 — 202.08 — 2+00
Cut = 218' Fill = 0'
Exc. = 58.4' Emb. = 0'

200 — 202.28 — 1+92.30
Cut = 226' Fill = 0'
Exc. = 213.2' Emb. = 0'

200 — 202.69 — 1+66.24
Cut = 219' Fill = 0'
Exc. = 171.0' Emb. = 0'

200 — 202.97 — 1+40
Cut = 192' Fill = 0'
Exc. = 126.3' Emb. = 0'

200 — 202.73 — 1+16.76
Cut = 162' Fill = 0'
Exc. = 58.1' Emb. = 0'

190 — 193.66 — 3+61.63
Cut = 23' Fill = 0'
Exc. = 27.1' Emb. = 0'

190 — 194.51 — 3+35.97
Cut = 32' Fill = 0'
Exc. = 15.6' Emb. = 0'

190 — 195.13 — 3+18.2
Cut = 20' Fill = 0'
Exc. = 58.1' Emb. = 0'

E/p

INTERSECTION
Sta 18+17.76

Sheet 1 of 3

5 4 4 2 . 3 1

PLATE 3-GRID SECTION OF PAPER USED
KEUFFEL & ESSER CO., NEW YORK
K & E CO. No. 340-3 MADE IN U.S.A.

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAW | SDR-3(12) | 1950 | 32 | 34 |

SDR-3(12)

Exist. Govt. Rd.

190 — Exc = 0 — Emb = 224.8 — 1+20 — Cut = 0 — Fill = 362

190 — Exc = 0 — Emb = 161.5 — 1+00 — Cut = 0 — Fill = 245

190 — Exc = 0 — Emb = 115.9 — 0+80 — Cut = 0 — Fill = 191

190 — Exc = 0 — Emb = 57.5 — 0+60 — Cut = 0 — Fill = 122

190 — 0+45.63 — Cut = 0 — Fill = 95

190 — 0+45.63 — Cut = 0 — Fill = 65

Exc = 0 — Emb = 28.2

190 — Exc = 0 — Emb = 16.1 — 0+30 — Cut = 0 — Fill = 32

Surface Area = 217
Average Height = 2

190 — 0+03.29

190 — Exc = 136.1 — Emb = 6.5 — 2+50 — Cut = 129 — Fill = 0

190 — Exc = 10.0 — Emb = 55.6 — 2+00 — Cut = 18 — Fill = 14

190 — Exc = 0 — Emb = 154.1 — 1+70 — Cut = 0 — Fill = 86

190 — 2+02.40 / 1+37.14 — Cut = 0 — Fill = 147

190 — 2+02.40 — Cut = 0 — Fill = 134

Exc = 0 — Emb = 134.8

190 — 1+80 — Cut = 0 — Fill = 121

Exc = 0 — Emb = 134.3

190 — 1+55.6 — Cut = 0 — Fill = 233

Exc = 0 — Emb = 228.7

190 — Exc = 0 — Emb = 220.8 — 1+35.2 — Cut = 0 — Fill = 388

200 — 18+50 — Cut = 39 — Fill = 19

Exc = 10.8 — Emb = 5.9

200 — 18+40.41 — Cut = 22 — Fill = 14

Exc = 25.8 — Emb = 32.9

200 — 18+00 — Cut = 12 — Fill = 30

Exc = 11.1 — Emb = 71.4

200 — 17+68.1 — Cut = 7 — Fill = 92

Exc = 2.3 — Emb = 222

200 — 17+59.16 — Cut = 7 — Fill = 43

200 — 17+59.16 — Cut = 20 — Fill = 43

Exc = 6.7 — Emb = 10.9

200 — 17+50 — Cut = 18 — Fill = 12

Exc = 48.6 — Emb = 21.2

200 — 17+02.31 — Cut = 37 — Fill = 5

200 — 17+02.31 — Cut = 37 — Fill = 30

Exc = 3.3 — Emb = 2.3

200 — 17+00 — Cut = 40 — Fill = 25

190 — 19+50.38 — Cut = 104 — Fill = 0

Exc = 1.5 — Emb = 0

190 — 19+50 — Cut = 98 — Fill = 0

Exc = 9.59 — Emb = 0

190 — 19+35.65 — Cut = 74 — Fill = 0

190 — 19+35.65 — Cut = 50 — Fill = 0

Exc = 40.3 — Emb = 0.2

190 — 19+00 — Cut = 11 — Fill = 1

Exc = 3.6 — Emb = 2.3

190 — 18+87.1 — Cut = 5 — Fill = 9

Exc = 20.3 — Emb = 10.1

190 — 18+73.3 — Cut = 71 — Fill = 89

Exc = 32.0 — Emb = 13.2

190 — 18+58.8 — Cut = 48 — Fill = 20

Exc = 18.2 — Emb = 6.0

FINAL SURVEY — ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
REVISED
NO.
DATE
BY
AREAS CHECKED

Sheet No. 1 of 3

5442.32

PLATE 3-CROSS SECTION SHEET

K & E CO. NO. 345-3 MADE IN U.S.A.

55° Return & Curve to Ch. Ch.

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAWAII | SOR 52(1)-950 | | 33 | 34 |

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

200
198.71
Cut = 388
Fill = 0
1+00
Exc. = 375.3
Emb. = 0

200
197.32
Cut = 294
Fill = 0
0+70
Exc. = 131.1
Emb. = 0

200
197.07
Cut = 311
Fill = 0
0+58 31
Exc. = 26.1
Emb. = 0

200
197.07
Cut = 230
Fill = 0
0+58 31

200
197.04
Cut = 256
Fill = 0
0+55
Exc. = 133.2
Emb. = 0

200
197.38
Cut = 77
Fill = 0
0+23
Exc. = 21.7
Emb. = 0

Surface Area = 20.2
Average Height = 2.9

200
198.12
0+06 25

208.80
Cut = 292
Fill = 0
200
2+30
Exc. = 255.2
Emb. = 0

206.06
Cut = 397
Fill = 0
200
2+10
Exc. = 214.5
Emb. = 0

205.00
Cut = 187
Fill = 0
200
1+96 21

205.00
Cut = 211
Fill = 0
200
1+96 21
Exc. = 474.1
Emb. = 0

203.90
Cut = 304
Fill = 0
200
1+80
Exc. = 278.9
Emb. = 0

202.99
Cut = 445
Fill = 0
200
1+65 2
Exc. = 557.1
Emb. = 0

200.66
Cut = 393
Fill = 0
200
Exc. = 453.9
Emb. = 0
1+30

240
Cut = 0
Fill = 0
A+50
Exc. = 253.5
Emb. = 0

220
220.58
Cut = 370
Fill = 0
3+10
Exc. = 111.3
Emb. = 0

220
219.43
Cut = 404
Fill = 0
3+02 21
Exc. = 133.2
Emb. = 0

220
216.16
Cut = 404
Fill = 0
2+80
Exc. = 308.3
Emb. = 0

210
213.22
Cut = 430
Fill = 0
2+60
Exc. = 216.1
Emb. = 0

220
211.16
Cut = 442
Fill = 0
2+46 02
Exc. = 557.1
Emb. = 0

220
211.16
Cut = 255
Fill = 0
2+46 02
Exc. = 162.1
Emb. = 0

Sheet 3 of 3

5442.33

PLATE 3 - GRID SHEET SCALE 1 INCH = 5 SPACES
PRINTED IN U.S.A.
K & E CO. No. 345-3 MADE IN U.S.A.

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| HAWAII | HAWAII | SDR 3(12) | 1950 | 34 | 34 |

FINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, BY, DATE

70

C = 578

42.0

EXC = 741 cy.

1+00

50

135

C = 222

0+50

EXC = 210 cy.

40

45.0

C = 5

0+00

100

EXC = 1174 cy.

39.9

1+70

C = 1782

90

40.5

C = 1387

1+50

EXC = 1819 cy.

40

36.3

EXC = 429 cy.

2+83.5

C = 3

70

37.5

C = 689

2+50

EXC = 1866 cy.

100

38.7

C = 1830

2+10

EXC = 2676 cy.

# X-SECTION FOR CHANNEL CHANGE KAAHAKINI STR.

HAWAII BELT ROAD PROJ. SDR 3(12)

SCALE: HOR. 1"=10' VER. 1"=10'

AUG 1949

Sheet 1 of 1

5442.34

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