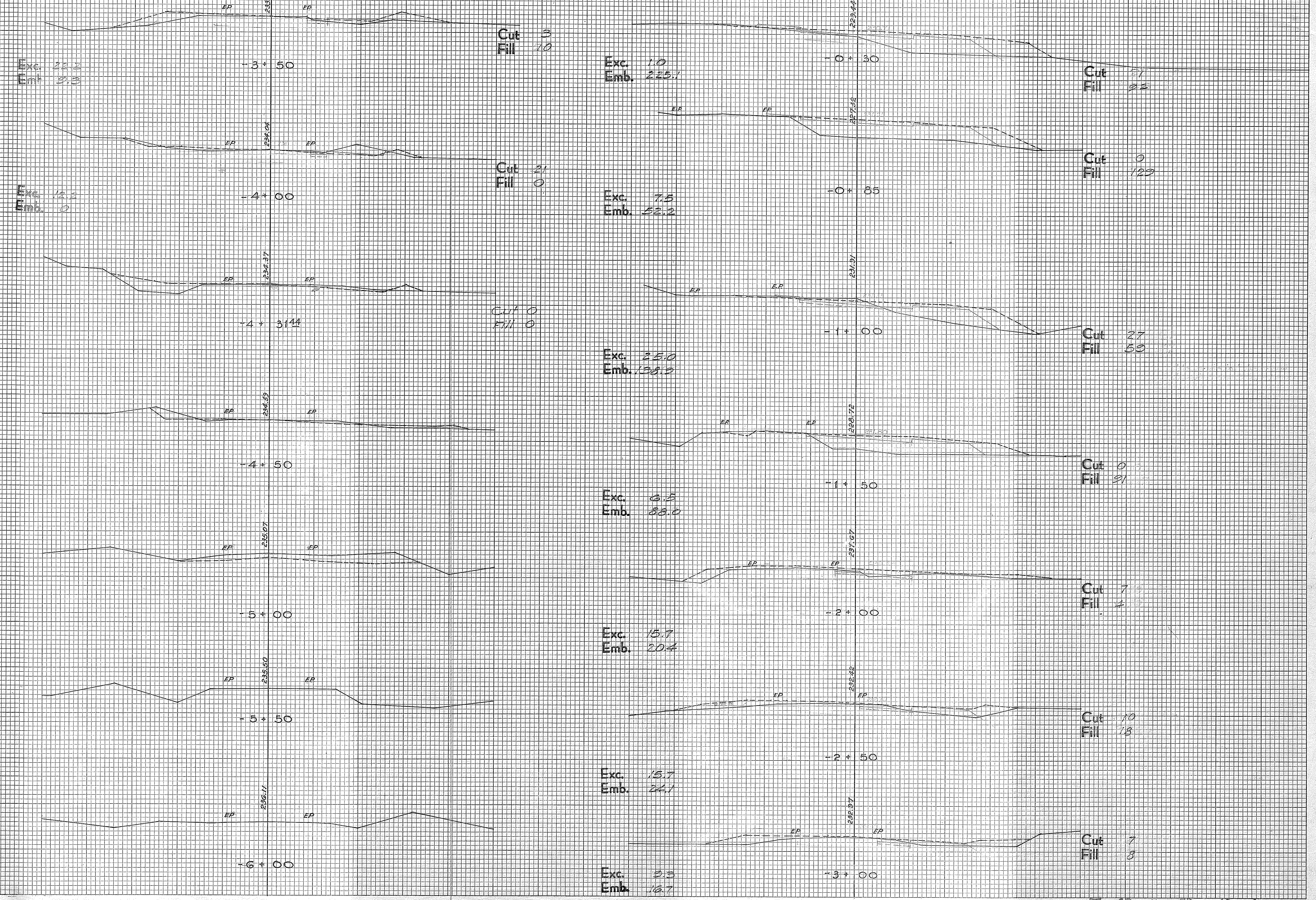
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1949 | 26 | 42 |


EP
EP
233.59
Cut 3
Fill 10
Exc. 22.2
Emb. 9.3
-3 + 50
EP
EP
234.04
Cut 21
Fill 0
Exc. 12.2
Emb. 0
-4 + 00
EP
EP
234.37
Cut 0
Fill 0
-4 + 31.44
EP
EP
234.59
-4 + 50
EP
EP
235.07
-5 + 00
EP
EP
235.50
-5 + 50
EP
EP
236.11
-6 + 00
229.44
Exc. 1.0
Emb. 225.1
-0 + 30
Cut 21
Fill 92
E.P.
E.P.
227.32
Cut 0
Fill 129
Exc. 7.5
Emb. 52.2
-0 + 85
EP
E.P.
231.91
-1 + 00
Cut 27
Fill 59
Exc. 25.0
Emb. 138.2
EP
EP
228.72
Cut 0
Fill 91
-1 + 50
Exc. 6.5
Emb. 88.0
EP
EP
231.67
Cut 7
Fill 4
-2 + 00
Exc. 15.7
Emb. 20.4
EP
EP
232.42
Cut 10
Fill 18
-2 + 50
Exc. 15.7
Emb. 24.1
EP
EP
232.37
Cut 7
Fill 8
Exc. 9.3
Emb. 16.7
-3 + 00

NOTE: Dash lines denote road prism as built

| ORIGINAL SURVEY |  | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED |  |  |
|  | PLOTTED |  |  |
| NO. | TEMPLATE |  |  |
|  | AREAS | T.F. 3118 | 11/23/48 |
|  | AREAS CHECKED |  |  |

Checked by R.K. 11/19/48
11/24/48 by T. Aina (Lasico No. 3128)

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

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

5398.26

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1940 | 27 | 42 |

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

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| NO. | PLOTTED | checked by R.K. | 11/1/47 |
| | TEMPLATE | T.E. 3118 | 11/24/48 |
| | AREAS | | |
| | AREAS CHECKED | | |

T.D. 3117 11/26/48

Exc = 28.5
Exc. 350.7
Emb 0
1258+50
237.31
237.95
Cut 409
Fill 0
Exc = 38.5
Exc. 506.9
Emb. 0
1258+31
Cut 531
Fill 0
235.20
Exc = 13.9
Exc. 241.2
Emb. 0
1258+00
Cut 352
Fill 0
230.47
Exc. 113.4
Emb. 6.5
1257+75
Cut 163
Fill 0
230.20
Exc. 90.7
Emb. 32.4
1257+50
Cut 76
Fill 14
EP
229.27
229.27
Exc. 77.3
Emb. 17.1
1257+00
Cut 22
Fill 21
EP
233.02
229.58
Exc. 101.4
Emb. 14.4
1256+75
Cut 145
Fill 16
EP
228.99
229.87
Exc. 57.3
Emb. 9.1
1256+50
Cut 74
Fill 15
EP
233.02
230.04
Exc. 98.0
Emb. 114.0
1256+36
Cut 147
Fill 20
EP
EP
226.32
230.42
Exc. 0.6
Emb. 135.0
1256+00 Beg. of Project
Cut 0
Fill 151
230.45
1260+60
Exc = 1.9
Exc. 185.4
Emb. 0
Cut 372
Fill 0
225.98
1260+43
Cut 217
Fill 0
Exc = 2.3
Exc. 223.2
Emb. 0
231.86
1260+22
Cut 357
Fill 0
Exc = 33
Exc. 231.8
Emb. 20.0
229.41
1260+00
Exc = 6.3
Exc. 120.0
Emb. 16.3
Cut 212
Fill 49
224.79
1259+82
Exc = 30.6
Exc. 273.0
Emb. 0
Cut 148
Fill 0
233.99
1259+60
Exc = 64.8
Exc. 750.6
Emb. 0
Cut 522
Fill 0
238.10
1259+25
Exc = 48.1
Exc. 606.5
Emb. 0
Cut 636
Fill 0
236.77
1259+00
Exc = 37.0
Exc. 650.9
Emb. 0
Cut 674
Fill 0
238.65
1258+75
Exc = 33.8
Exc. 529.2
Emb 0
Cut 732
Fill 0

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

5398.27

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1940 | 28 | 42 |

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

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| NO. | PLOTTED | | 11/13/42 |
| | TEMPLATE | | |
| | AREAS | | |
| | AREAS CHECKED | | |

1262 +90
218.54
220.57
Cut 0
Fill 58
Exc. 1.4
Emb. 191.7
1262 +65
212.51
Cut 0
Fill 356
Exc. 0
Emb. 189.4
1262 +50
214.27
Cut 0
Fill 326
Exc. 0
Emb. 373.3
1262 +20
215.61
221.64
Cut 0
Fill 347
Exc. 0
Emb. 256.7
1262 +00
218.56
Cut 0
Fill 346
Exc. 77.8
Emb. 298.6
1261 +75
224.28
Cut 168
Fill 299
Exc = 6.5
Exc. 200.0
Emb. 190.3
1261 +50
229.96
Cut 264
Fill 112
Exc = 17.5
Exc. 403.1
Emb. 72.6
1261 +15
231.45
223.30
Cut 358
Fill 0
Exc = 4.7
Exc. 143.9
Emb. 0
1261 +00
226.67
Cut 160
Fill 0
Exc = 3.0
Exc. 394.1
Emb. 0
Exc. 472.2
Emb. 0
1266 +50
217.65
Cut 244
Fill 0
Exc. 374.1
Emb. 0
1266 +00
220.45
215.16
Cut 266
Fill 0
Exc. 167.6
Emb. 8.3
1265 +50
217.56
216.06
Cut 138
Fill 0
Exc. 121.9
Emb. 11.7
1265 +00
217.42
216.94
Cut 43
Fill 9
Exc. 94.0
Emb. 150.4
1264 +65
219.99
Cut 145
Fill 9
Exc. 0
Emb. 237.8
1264 +30
215.03
218.16
Cut 0
Fill 223
Exc. 0
Emb. 233.8
1264 +00
214.03
218.67
Cut 0
Fill 205
Exc. 0
Emb. 231.0
1263 +75
212.98
219.09
Cut 0
Fill 300
Exc. 0
Emb. 519.2
1263 +50
215.14
Cut 0
Fill 199
Exc. 1.4
Emb. 305.6
1263 +15
210.89
220.10
Cut 0
Fill 602
℄
℄

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

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

5398.28

3

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Han | F 2(3) | 1949 | 29 | 42 |

FINAL SURVEY
NOTE BOOK
NO.

| | BY | DATE |
|---|---|---|
| SURVEYED | | |
| PLOTTED | | |
| TEMPLATE | | |
| AREAS | | |
| AREAS CHECKED | | |

check R.K. 11/5/48

ORIGINAL SURVEY
NOTE BOOK
NO.

| | BY | DATE |
|---|---|---|
| SURVEYED | | |
| PLOTTED | | |
| TEMPLATE | | |
| AREAS | R.P. 3118 | 11/24/48 |
| AREAS CHECKED | | |

219.12
Exc = 84.3
Exc. 273.1
Emb. 0
1269 + 50
Cut 593
Fill 0
218.62
209.48 209.47
Exc = 38.9
Exc. 471.2
Emb. 0
1269 + 00
Cut 458
Fill 0
215.35
210.16 210.17
Exc = 11.6
Exc. 136.2
Emb. 6.3
1268 + 65
Cut 269
Fill 0
210.35
210.59
Exc = 3.6
Exc. 100.7
Emb. 5.3
1268 + 46
Cut 119
Fill 18
214.25
210.85
Exc = 2.8
Exc. 180.0
Emb. 4.4
1268 + 30
Cut 222
Fill 0
212.55
211.40
Cut 102
Fill 8
1268 + 00
Exc. 31.1
Emb. 2.9
214.95
211.90
Exc. 111.2
Emb. 55.0
1267 + 95
Cut 138
Fill 14
Cut 44
Fill 76
208.65
212.10
Exc. 210.0
Emb. 49.3
1267 + 60
215.59
212.85
Exc. 268.5
Emb. 0
1267 + 25
Cut 280
Fill 0
216.97
213.32
Exc. 503.7
Emb. 0
1267 + 00
Cut 300
Fill 0
215.18
Exc = 76.9
Exc. 620.8
Emb. 0
202.76 202.77
1272 + 25
Cut 707
Fill 0
214.07
Exc = 124.1
Exc. 1,203.7
Emb. 0
1272 + 00
203.50
Cut 634
Fill 0
215.80
204.10
Exc = 76.7
Exc. 847.8
Emb. 0
1271 + 50
Cut 666
Fill 0
220.61
Exc = 70.0
Exc. 568.1
Emb. 0
205.00
1271 + 20
Cut 860
Fill 0
216.36
Exc = 104.4
Exc. 770.6
Emb. 0
205.41 205.42
1271 + 00
Cut 674
Fill 0
212.71
206.14
Exc = 39.4
Exc. 424.7
Emb. 0
1270 + 65
Cut 515
Fill 0
220.37
Exc = 130.3
Exc. 1,143.2
Emb. 0
206.54
1270 + 46
Cut 692
Fill 0
216.45
Exc = 84.7
Exc. 522.2
Emb. 0
207.15
1270 + 00
Cut 650
Fill 0
215.46
Exc = 66.2
Exc. 495.8
Emb. 0
207.95
1269 + 75
Cut 478
Fill 0

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

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

5398.29

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1940 | 30 | 42 |

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

check R.C. 11/17/41

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| NO. | PLOTTED | | |
| | TEMPLATE | J.F. 3118 | 11/24/48 |
| | AREAS | | |
| | AREAS CHECKED | | |

R/W
℄ Rd.
℄ P/W
R/W
R/W
P/W 107.5 R
206.02
Exc. 388.1
Emb. 0
1274+50
Cut 510
Fill 0
203.19
Exc. 383.1
Emb. 0
1274+24
Cut 296
Fill 0
209.15
EXC = 13.3
Exc. 412.4
Emb. 0
1274+00
Cut 566
Fill 0
215.91
Exc = 26.2
Exc. 487.9
Emb. 0
1273+82.96
Cut 741
Fill 0
208.56
Exc = 42.6
Exc. 484.7
Emb. 0
1273+63
Cut 579
Fill 0
208.13
Exc = 37.4
Exc. 451.5
Emb. 0
1273+40
Cut 559
Fill 0
214.31
Exc = 25.9
Exc. 537.8
Emb. 0
1273+20
Cut 660
Fill 0
215.45
Exc = 39.5
Exc. 909.4
Emb. 0
1273+00
Cut 792
Fill 0
211.89
Exc = 33.0
Exc. 571.9
Emb. 0
1272+65
Cut 611
Fill 0
218.31
Exc = 57.8
Exc. 607.4
Emb. 0
1272+45
Cut 933
Fill 0
R/W
183.11
Cut 0
Fill 453
Exc. 441.1
Emb. 503.3
1277+60
198.26
Exc. 379.9
Emb. 0
1277+00
Cut 397
Fill 0
R/W
R/W
201.01
Exc. 462.2
Emb. 0
1276+74
Cut 392
Fill 0
200.10
Cut 441
Fill 0
Exc. 623.9
Emb. 0.8
1276+44.04
199.66
Cut 324
Fill 1
Exc. 258.1
Emb. 0.3
1276+00
202.45
Cut 496
Fill 0
Exc. 556.7
Emb. 0
1275+83
203.83
Exc. 397.0
Emb. 0
1275+50
Cut 415
Fill 0
198.76
Cut 517
Fill 0
Exc. 454.5
Emb. 0
1275+27
199.44
Cut 392
Fill 0
Exc. 317.8
Emb. 0
1275+00
206.07
Cut 466
Fill 0
Exc. 542.2
Emb. 0
1274+80
R/W
R/W
R/W

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

5398.30

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1940 | 31 | 42 |

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

chck R.K. 11/10/42
T.A. 11/26/48 3179

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | | |
| | TEMPLATE | J.F. 3118 | 11/26/42 |
| NO. | AREAS | | |
| | AREAS CHECKED | | |

183.35
182.98
Cut 1
Fill 73
Exc. 2.4
Emb. 48.3
1279 + 00
184.56
187.45
Cut 6
Fill 66
1278 + 81.25 – END OF BRIDGE
~~Exc.~~
~~Emb.~~
~~175.60~~
~~1278 + 48~~
PANAEWA BRIDGE
~~181.17~~
~~1278 + 30~~
Cut
Fill
~~Exc.~~
~~Emb.~~
~~184.06~~
Cut
Fill
~~1278 + 00~~
~~Exc.~~
~~Emb.~~
190.14
184.1
1277 + 72.75 – BEG. OF BRIDGE
Cut 0
Fill 294
Exc. 0
Emb. 176.4
168.20
166.7
Exc. 0
Emb. 494.4
1284 + 00
Cut 0
Fill 308
170.32
Exc. 14.8
Emb. 253.7
1283 + 50
Cut 0
Fill 226
175.22
175.60
Exc. 14.4
Emb. 36.1
1283 + 00
177.91
Cut 16
Fill 48
1282 + 75 SIDE ROAD
Exc. 6.9
Emb. 45.4
Cut 15
Fill 30
175.47
Exc. 0
Emb. 269.4
1282 + 50
Cut 0
Fill 68
174.22
Exc. 0
Emb. 525.0
1282 + 00
Cut 0
Fill 223
173.09
Exc. 0
Emb. 611.1
1281 + 50
Cut 0
Fill 344
174.77
Exc. 0
Emb. 575.9
1281 + 00
Cut 0
Fill 316
176.32
Exc. 0
Emb. 525.9
1280 + 50
Cut 0
Fill 306
178.18
Exc. 0
Emb. 413.0
1280 + 00
Cut 0
Fill 262
180.41
Exc. 0.9
Emb. 238.0
1279 + 50
Cut 0
Fill 184
R/W
C/W

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

5398.31

6

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1940 | 32 | 42 |

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

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | | |
| | TEMPLATE | | |
| NO. | AREAS | S. Kalin Jr. | 11/26/60 |
| | AREAS CHECKED | | |

[illegible] 11/[illegible]

165.64
166.11
Exc. 175.0
Emb. 0.9
1289 + 00
Cut 91
Fill 1
166.65
Cut 98
Fill 0
Exc. 438.0
Emb. 0
1288 + 50
172.65
167.63
Cut 375
Fill 0
Exc. 518.5
Emb. 0
1288 + 00
170.26
Cut 185
Fill 0
Exc. 248.1
Emb. 13.9
1287 + 50
169.02
Cut 83
Fill 15
Exc. 142.6
Emb. 29.6
1287 + 00
169.60
170.50
Cut 71
Fill 17
Exc. 112.0
Emb. 37.0
1286 + 50
169.86
Cut 50
Fill 23
Exc. 46.3
Emb. 72.2
1286 + 00
169.49
Cut 0
Fill 55
Exc. 0
Emb. 137.0
1285 + 50
169.71
Cut 0
Fill 93
Exc. 0
Emb. 268.5
1285 + 00
168.65
Cut 0
Fill 197
166.0
Exc. 0
Emb. 467.6
1284 + 50
159.01
Cut 100
Fill 0
Exc. 240.7
Emb.
1294 + 00
160.31
Cut 160
Fill 0
Exc. 491.7
Emb. 0
1293 + 50
164.33
Cut 371
Fill 0
Exc. 702.8
Emb. 0
1293 + 00
165.70
Cut 588
Fill 0
Exc. 682.4
Emb. 0
1292 + 50
165.97
Cut 1349
Fill 0
Exc. 628.7
Emb. 0
1292 + 00
166.29
Cut 330
Fill 0
Exc. 450.9
Emb. 0
1291 + 50
164.38
Cut 157
Fill 0
Exc. 262.0
Emb. 0
1291 + 00
164.62
Cut 126
Fill 0
Exc. 225.0
Emb. 0
1290 + 50
164.75
Cut 117
Fill 0
Exc. 212.0
Emb. 0
1290 + 00
165.45
Cut 112
Fill 0
Exc. 188.0
Emb. 0.9
1289 + 50
R/W

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

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

5398.32

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1949 | 33 | 42 |

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

| ORIGINAL SURVEY | BY | DATE |
|---|---|---|
| SURVEYED | | |
| PLOTTED | | |
| TEMPLATE | | |
| AREAS | | |
| AREAS CHECKED | | |
| NOTE BOOK | 3.11.5 | 11/26/48 |
| NO. | | |

Exc. 105.6
Emb. 109.3
1297+50
Cut 0
Fill 118
149.06
Exc. 293.5
Emb. 0
1297+00
Cut 114
Fill 0
154.27
Exc. 116.7
Emb. 0
1296+50
Cut 28
Fill 0
156.00
Exc. 73.5
Emb. 4.2
1296+28.34
℄ Palai St.
Cut 88
Fill 0
155.09
Exc. 61.1
Emb. 169.4
1296+00
Cut 52
Fill 8
154.49
Exc. 13.0
Emb. 452.8
1295+50
Cut 14
Fill 175
154.06
Exc. 0.8
Emb. 260.0
1295+00
Cut 0
Fill 314
154.06
Exc. 0.8
Emb. 191.5
1294+76
Cut 2
Fill 271
154.22
Exc. 0
Emb. 28.1
1294+54
Cut 0
Fill 139
150.35
Exc. 92.6
Emb. 166.7
1294+50
Cut 0
Fill 180
154.75
Exc. 70.8
Emb. 23.1
1301+66.98
Cut 144
Fill 0
145.11
Exc. 7.0
Emb. 130.7
1301+42
Cut 9
Fill 50
141.88
Exc. 0
Emb. 363.9
1301+00
Cut 0
Fill 118
140.95
Exc. 0
Emb. 435.2
1300+50
Cut 0
Fill 275
141.29
Exc. 0
Emb. 1,046.8
1300+00
Cut 0
Fill 195
141.70
Exc. 0
Emb. 1,279.6
1299+05
Cut 0
Fill 400
141.17
Exc. 0
Emb. 184.1
1298+55
Cut 0
Fill 382
140.65
Exc. 0
Emb. 187.6
1298+50
Cut 0
Fill 1,006
140.57
Exc. 0
Emb. 1,449.1
1298+45
Cut 0
Fill 1020
140.93
Exc. 0
Emb. 552.5
1297+95
Cut 0
Fill 545
141.67

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

5398.33

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1949 | 34 | 42 |

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

| ORIGINAL SURVEY | BY | DATE |
|---|---|---|
| SURVEYED | | |
| PLOTTED | | |
| TEMPLATE | | |
| AREAS | J.J. 3118 | 11/26/48 |
| AREAS CHECKED | | |
| NOTE BOOK NO. | | |

Check R.K. 1/9/41

Exc. 1371.3
Emb. 0
1306+00
146.97
145.36
Cut 925
Fill 0
Exc. 1354.6
Emb. 0
1305+50
145.43
Cut 772
Fill 0
Exc. 1332.4
Emb. 0
1305+00
148.04
Cut 691
Fill 0
Exc. 1272.2
Emb. 0
1304+50
147.43
Cut 748
Fill 0
Exc. 1045.0
Emb. 0
1304+00
145.38
Cut 626
Fill 0
Exc. 309.2
Emb. 0
1303+45
143.68
Cut 400
Fill 0
Exc. 252.6
Emb. 0
1303+22
144.88
Cut 326
Fill 0
Exc. 563.0
Emb. 0
1303+00
143.94
Cut 294
Fill 0
Exc. 489.8
Emb. 0
1302+50
145.12
Cut 314
Fill 0
Exc. 219.5
Emb. 0
1302+00
Cut 215
Fill 0
Exc. 656.7
Emb. 0
1308+50
138.83
Cut 757
Fill 0
Exc. 169.5
Emb. 0
1308+16
138.39
134.26
Cut 285
Fill 0
Exc. 121.6
Emb. 0
1308+00
132.64
Cut 287
Fill 0
Exc. 358.5
Emb. 0
1307+88
133.83
Cut 260
Fill 0
Exc. 210.2
Emb. 0
1307+50
133.97
Cut 250
Fill 0
Exc. 221.6
Emb. 0
1307+25
136.09
Cut 204
Fill 0
Exc. 273.5
Emb. 0
1307+00
137.70
Cut 275
Fill 0
Exc. 356.0
Emb. 0
1306+75
140.14
Cut 315
Fill 0
Exc. 545.5
Emb. 0
1306+50
146.30
Cut 454
Fill 0
Exc. 938.5
Emb. 0
1306+28
Cut 885
Fill 0

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

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

5398.34

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1949 | 35 | 42 |

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

Checked R.K. 11/1/48

| ORIGINAL SURVEY |  | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | T. Yamashita |  |
| NO. | PLOTTED | T. Yamashita | 11/48 |
|  | TEMPLATE |  |  |
|  | AREAS |  |  |
|  | AREAS CHECKED |  |  |

125.61
Exc. 200.0
Emb. 243.0
1311 + 40
Cut 248
Fill 30
121.11
Exc. 21.3
Emb. 434.4
1311 + 00
Cut 22
Fill 283
121.28
Exc. 0.5
Emb. 203.2
1310 + 50
Cut 1
Fill 245
120.51
Exc. 5.4
Emb. 68.6
1310 + 25
Cut 0
Fill 194
121.96
Exc. 18.1
Emb. 5.9
1310 + 08
Cut 17
Fill 24
125.17
Exc. 92.7
Emb. 4.7
1310 + 00
Cut 105
Fill 16
129.31
Exc. 215.1
Emb. 0
1309 + 84
Cut 208
Fill 0
131.41
Exc. 151.9
Emb. 0
1309 + 62
Cut 320
Fill 0
129.66
Exc. 440.0
Emb. 0
1309 + 48
Cut 226
Fill 0
129.93
Exc. 913.0
Emb. 0
1309 + 00
Cut 229
Fill 0
115.60
Exc. 35.6
Emb. 0
1314 + 76
Cut 127
Fill 0
115.60
Exc. 74.0
Emb. 28.9
℄ KAWAILANI ST.
1314 + 68.34
Cut 123
Fill 0
115.39
Exc. 55.6
Emb 113.4
1314 + 50
Cut 95
Fill 85
114.25
Exc. 32.4
Emb. 116.2
1314 + 25
Cut 25
Fill 160
115.60
Exc. 75.9
Emb. 103.7
1314 + 00
Cut 45
Fill 91
116.37
Exc. 58.3
Emb. 50.0
1313 + 50
Cut 37
Fill 21
116.86
Exc. 65.7
Emb. 43.5
1313 + 00
Cut 26
Fill 33
118.47
Exc. 163.9
Emb. 13.0
1312 + 50
Cut 45
Fill 14
121.37
Exc. 205.6
Emb. 0.6
1312 + 00
Cut 132
Fill 0
125.91
Exc. 270.0
Emb. 22.2
1311 + 70
Cut 238
Fill 1

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

5398.35

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1040 | 36 | 42 |

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

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| NO. | PLOTTED | | |
| | TEMPLATE | | |
| | AREAS | [illegible] | [illegible] |
| | AREAS CHECKED | | |

101.46
Exc. 0
Emb. 364.8
1318+50
Cut 0
Fill 182
102.33
Exc. 0
Emb. 313.0
1318+00
Cut 0
Fill 212
103.45
Exc. 0
Emb. 231.5
1317+50
Cut 0
Fill 126
105.69
Exc. 162.0
Emb. 114.8
1317+00
Cut 0
Fill 124
112.81
Exc. 302.8
Emb. 0
1316+50
Cut 175
Fill 0
113.59
Exc. 318.5
Emb. 0
1316+00
Cut 152
Fill 0
115.41
Exc. 170.0
Emb. 0
1315+50
Cut 102
Fill 0
114.35
Exc. 92.6
Emb. 0
1315+20
Cut 114
Fill 0
115.26
Exc. 100.0
Emb. 0
1315+00
Cut 136
Fill 0
116.95
116.61
Exc. 38.4
Emb. 0
1314+82.80
Cut 178
Fill 0
102.74
105.01
Cut 14
Fill 102
Exc. 2.1
Emb. 37.5
1321+25
100.40
Cut 0
Fill 151
Exc. 0
Emb. 102.3
1321+17
100.85
Cut 0
Fill 174
Exc. 0
Emb. 73.3
1321+00
101.79
105.14
Cut 0
Fill 90
1320+85
Exc. 90.0
Emb. 50.0
108.15
105.32
1320+55
Exc. 223.0
Emb. 0
Cut 162
Fill 0
107.39
105.52
1320+20
Exc. 168.5
Emb. 426.9
Cut 182
Fill 0
101.27
105.24
Exc. 0
Emb. 405.1
1319+70
Cut 0
Fill 461
100.43
1319+50
Exc. 0
Emb. 725.4
Cut 0
Fill 633
101.52
Exc. 0
Emb. 377.8
1319+00
Cut 0
Fill 226

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

5398.36

11

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1949 | 37 | 42 |

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

92.16
1325+00
Exc. 0
Emb. 2,823.1
Cut 0
Fill 1,659
92.76
1324+50
Exc. 0
Emb. 2,001.9
Cut 0
Fill 1,390
R/W
93.09
1324+00
Exc. 0
Emb. 1,242.6
Cut 0
Fill 772
94.79
R/W
1323+50
Exc. 0
Emb. 428.0
Cut 0
Fill 570
99.09
1323+23
Exc. 0
Emb. 204.9
Cut 0
Fill 286
100.29
1323+00
~~Exc.~~
~~Emb.~~
Cut 0
Fill 10.5
102.72
~~1322+75~~
Exc. 0
Emb. 575.9
Cut 0
Fill 97
99.67
1322+50
Exc. 0
Emb. 329.6
Cut 0
Fill 211
100.74
1322+00
Exc. 5.6
Emb. 203.7
Cut 0
Fill 145
101.65
1321+50
Exc. 9.3
Emb. 61.9
Cut 6
Fill 75
R/W
113.51
Exc. 6815
Emb. 0
1328+00
Cut 297
Fill 0
R/W
115.73
1327+50
Exc. 788.0
Emb. 0
Cut 439
Fill 0
114.90
1327+00
Exc. 311.1
Emb. 0
Cut 412
Fill 0
111.26
Exc. 209.3
Emb. 0
1326+75
Cut 260
Fill 0
110.03
R/W
Exc. 250.9
Emb. 52.8
1326+50
Cut 192
Fill 0
R/W
106.67
Exc. 42.6
Emb. 68.5
1326+00
Cut 79
Fill 57
105.89
Exc. 20.0
Emb. 338.9
1325+80
Cut 36
Fill 128
99.75
Exc. 0
Emb. 1,036.7
1325+50
Cut 0
Fill 482
92.56
Exc. 0
Emb. 1,127.0
1325+20
Cut 0
Fill 1,384
R/W

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

5398.37

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1049 | 38 | 42 |

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

checked by K.K. 11/16/48

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | T.Y. | |
| | TEMPLATE | T.Y. | |
| NO. | AREAS | KALOI Jr. | |
| | AREAS CHECKED | | |

108.38
Exc. 61.3
Emb. 35.8
1332+96
Cut 38
Fill 19
108.41
Exc. 114.8
Emb. 22.2
1332+50
Cut 34
Fill 23
109.81
Exc. 214.8
Emb. 0.9
1332+00
Cut 90
Fill 1
111.27
Exc. 379.6
Emb. 0
1331+50
Cut 142
Fill 0
113.61
Exc. 488.9
Emb. 0
1331+00
Cut 268
Fill 0
113.37
Exc. 449.1
Emb. 0
1330+50
Cut 260
Fill 0
113.02
Exc. 371.3
Emb. 0
1330+00
Cut 225
Fill 0
112.26
Exc. 324.1
Emb. 0
1329+50
Cut 176
Fill 0
111.83
Exc. 392.6
Emb. 0
1329+00
Cut 174
Fill 0
112.87
Exc. 506.5
Emb. 0
1328+50
Cut 230
Fill 0
103.08
D.C.=16
D.Exc.=17.2
Exc. 0
Emb. 131.7
1335+00
Cut 0
Fill 110
104.00
D.C.=15
D.Exc.=14.4
Exc. 0
Emb. 213.3
1334+70
Cut 0
Fill 127
102.21
D.C.=11
D.Exc.=23.0
Exc. 1.5
Emb. 310.4
1334+40
Cut 0
Fill 257
104.80
D.C.=20
D.Exc.=18.1
Exc. 0.9
Emb. 133.8
1334+00
Cut 2
Fill 162
104.66
D.C.=19
D.Exc.=15.7
Exc. 1.4
Emb. 78.2
1333+75
Cut 0
Fill 127
106.44
D.C.=15
Exc. 28.7
Emb. 33.3
1333+50
Cut 3
Fill 42
108.39
Exc. 12.9
Emb. 1.9
1333+19
Cut 47
Fill 16
109.32
Exc. 19.4
Emb. 0.9
1333+14
Cut 38
Fill 5
109.56
Exc. 27.5
Emb. 2.0
1333+08.34
℄ KAHAOPEA ST.
Cut 36
Fill 4
109.18
Exc. 8.3
Emb. 2.1
1333+00
Cut 82
Fill 3

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

R/W

5398.38 Sheet 13

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1049 | 39 | 42 |

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

checked by R.K. 11/20/41

| ORIGINAL SURVEY | | BY | DATE |
|---|---|---|---|
| NOTE BOOK | SURVEYED | | |
| | PLOTTED | | |
| | TEMPLATE | | |
| | AREAS | D.F. 3118 | 11/27/43 |
| NO. | AREAS CHECKED | | |

103.23
101.33
Exc. 146.3
Emb. 201.9
1339+50
Cut 158
Fill 0
96.44
Exc. 0
Emb. 413.9
1339+00
Cut 0
Fill 218
97.64
Exc. 32.4
Emb. 236.1
1338+50
Cut 0
Fill 229
101.86
Exc. 45.4
Emb. 53.7
1338+00
Cut 35
Fill 26
101.74
Exc. 15.0
Emb. 110.2
1337+50
Cut 14
Fill 32
102.08
Exc. 0
Emb. 75.3
1337+00
Cut 0
Fill 87
101.74
Exc. 0
Emb. 730.5
1336+85
Cut 0
Fill 184
96.86
Exc. 0
Emb. 1637.0
1336+50
Cut 0
Fill 245
99.25
106.14
D.C.=4
D. Exc.=11.1
Exc. 0
Emb. 973.1
1336+00
Cut 0
Fill 225
102.00
D.C.=8
D. Exc.=22.2
Exc. 0
Emb. 311.1
1335+50
Cut 0
Fill 226
95.13
Exc. 163.0
Emb. 5.6
1343+50
Cut 68
Fill 6
96.49
Exc. 206.8
Emb. 0
1343+00
Cut 108
Fill 0
97.75
Exc. 239.8
Emb. 0
1342+50
Cut 115
Fill 0
99.05
Exc. 244.4
Emb. 0
1342+00
Cut 144
Fill 0
99.49
Exc. 229.6
Emb. 0
1341+50
Cut 120
Fill 0
100.44
Exc. 289.8
Emb. 0
1341+00
Cut 128
Fill 0
102.07
Exc. 341.7
Emb. 0
1340+50
Cut 185
Fill 0
102.20
Exc. 137.0
Emb. 11.1
1340+00
Cut 184
Fill 0
101.74
Exc. 125.0
Emb. 11.1
1339+75
1399+75
Cut 112
Fill 24

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

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

5398.39

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F2(3) | 1949 | 40 | 42 |

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

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

71.45
Exc. 0
Emb.
1348+50
Cut 0
Fill 1594
73.01
Exc. 0
Emb. 1286.1
1348+00
Cut 0
Fill 757
75.05
Exc. 0
Emb. 870.4
1347+50
Cut 0
Fill 632
88.22
81.21
Exc. 0.9
Emb. 352.8
1347+00
Cut 0
Fill 308
86.53
89.36
Exc. 51.9
Emb. 81.5
1346+50
Cut 1
Fill 73
89.77
90.45
1346+00
Cut 55
Fill 15
Exc. 95.4
Emb. 30.6
90.42
91.52
Exc. 135.2
Emb. 19.4
1345+50
Cut 48
Fill 18
92.70
92.53
1345+00
Cut 98
Fill 3
Exc. 127.8
Emb. 20.4
92.64
Exc. 93.5
Emb. 20.4
1344+50
Cut 40
Fill 19
93.97
94.46
Exc. 119.4
Emb. 8.3
1344+00
Cut 61
Fill 3
curb
74.80
Exc.
Emb.
1352+50
Cut 52
Fill 16
curb
75.70
Exc.
Emb.
1352+00
Cut 56
Fill 14
curb
76.05
Exc.
Emb.
1351+50
Cut 42
Fill 14
77.50
Exc.
Emb.
1351+00
Cut 42
Fill 297
78.35
80.14
Exc.
Emb.
1350+50
Cut 35
Fill 551
79.07
Exc.
Emb.
1350+25
Cut 17
Fill 369
75.98
81.30
Exc.
Emb.
1350+00
Cut 0
Fill 219
74.65
82.45
Exc.
Emb.
1349+50
Cut 0
Fill 393
71.78
83.61
Exc.
Emb.
1349+00
Cut 0
Fill 1410

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

53998.40

| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1949 | 41 | 42 |

NOTE: From Sta 1350+50 to Sta. 1354+34.33 Connection Cross-Sections.
Existing elevations on these Cross-Sections are approximations.

END OF PROJECT — STA 1354+36.63

90
80
70
80.15
1350+50
C= 8
F= 3
68.64 Finished Elevation - 5 18 (1)
67.46 Existing Ground
Cut 0
Fill 0
1355 + ~~47.87~~ 41.53
Exc. 5.3
Emb. 2.7
69.24
69.75
Cut 6
Fill 3
1355+00
Exc. 53.3
Emb. 2.8
71.51
70.90
Cut 57
Fill 0
1354+50
Exc. 131.5
Emb. 0
72.62
72.06
Cut 85
Fill 0
1354+00
Exc. 205.6
Emb. 0
74.21
73.21
Cut 137
Fill 0
1353+50
Exc. 199.1
Emb. 0
73.67
74.37
Cut 78
Fill 0
1353+00
Exc. 120.4
Emb. 14.8
82.33
C= 0
F= 0
Exc = 45.1
Emb = 0
1354+34.33
81.53
C= 71
F= 0
Exc = 136.1
Emb = 0
1354+00
80.38
C= 76
F= 0
Exc = 237.9
Emb = 0
1353+50
79.22
C= 181
F= 0
Exc = 328.7
Emb = 0
1353+00
78.07
curb
C= 174
F= 0
Exc = 355.5
Emb = 0
1352+50
77.45
curb
C= 210
F= 0
Exc = 272.2
Emb = 3.7
1352+00
78.91
curb
C= 84
F= 4
Exc = 182.4
Emb = 3.7
1351+50
78.29
C= 113
F= 0
Exc = 112.0
Emb = 2.8
1351+00

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

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

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

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

539S.41

# Centerline Profile & Cross-section of Proposed Channel
at
Station 1284+00 - 20 ft. from East of R/W Bdy.

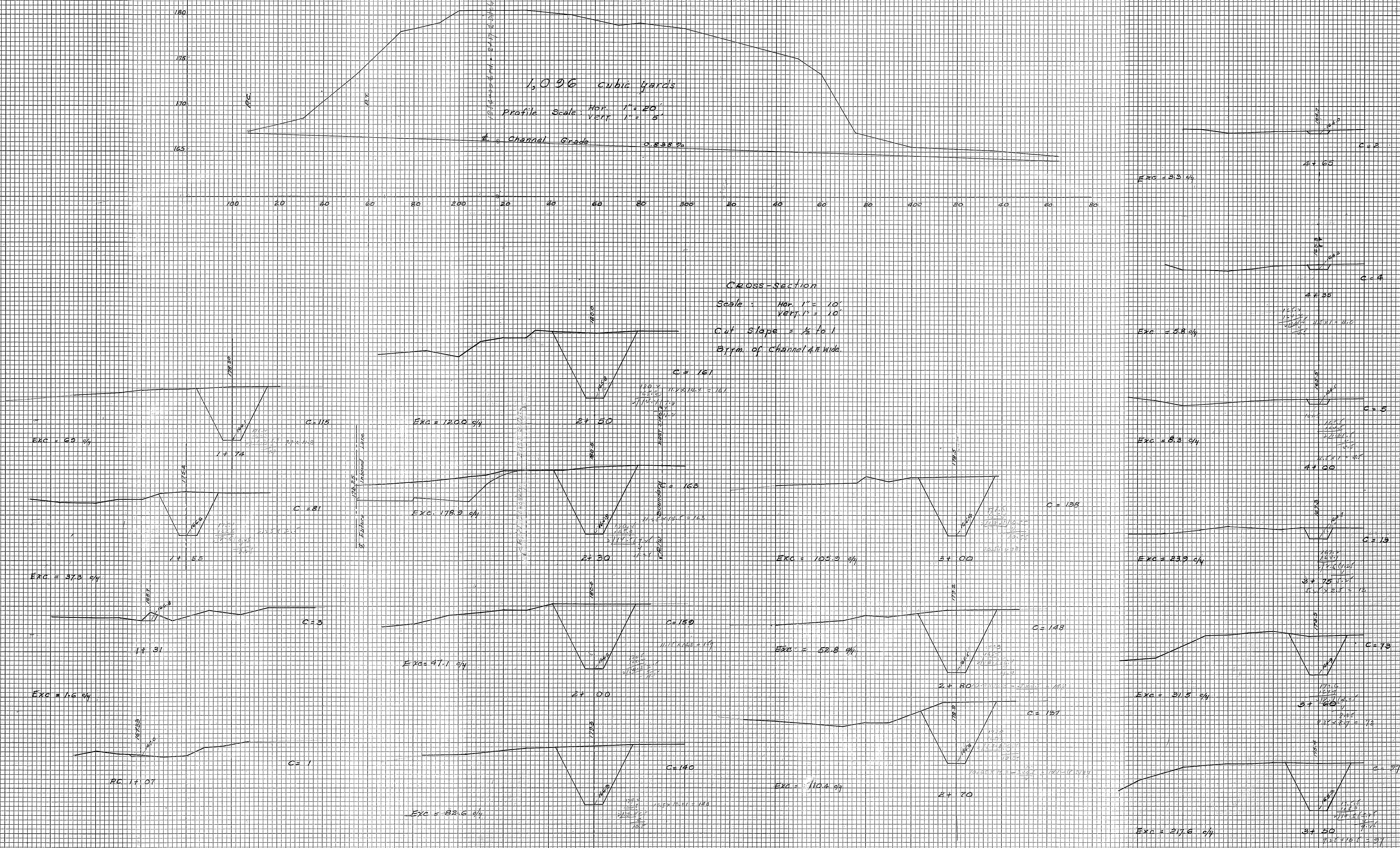
| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---|---|---|---|---|---|
| Hawaii | Haw | F 2(3) | 1940 | 42 | 42 |

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


180
175
170
165
P.C.
P.T.
100
20
40
60
80
200
20
40
60
80
300
20
40
60
80
400
20
40
60
80
℄ Channel Grade
0.838 %
1+74
C = 115
Exc = 69 c/y
1+55
C = 81
Exc = 37.3 c/y
1+31
C = 3
Exc = 1.6 c/y
P.C. 1+07
C = 1
2+50
C = 161
11.1 × 14.4 = 161
Exc = 120.0 c/y
2+30
C = 163
Exc. 178.9 c/y
2+00
C = 159
Exc = 47.1 c/y
C = 140
Exc = 82.6 c/y
3+00
C = 138
Exc = 105.9 c/y
2+80
C = 148
Exc = 52.8 c/y
2+70
C = 137
Exc = 110.4 c/y
4+60
C = 2
Exc = 33 c/y
4+35
C = 4
Exc = 5.8 c/y
4+00
C = 5
Exc = 8.3 c/y
3+75
C = 13
Exc = 23.9 c/y
3+60
C = 73
Exc = 31.5 c/y
3+50
C = 97
Exc = 217.6 c/y

1,096 cubic yards

Profile Scale: Hor. 1" = 20'
Vert. 1" = 5'

CROSS-SECTION

Scale: Hor. 1" = 10'
Vert. 1" = 10'

Cut Slope = ½ to 1

Bttm. of Channel 4 ft. wide.

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

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

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