

### LIST OF COMMON ABBREVIATIONS

- |                                                                                                                       |                                    |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------|
| C.R.M. --- Cement Rubble Masonry                                                                                      | C.R.M.D.I. --- Masonry Drop Intake |
| D.R.M. --- Dry Rubble Masonry                                                                                         | C.R.M.H.W. --- Masonry Head Wall   |
| Circ. Culv. --- Circular culvert of precast concrete, cast-in-place concrete, or Corrugated Galvanized Metal Culvert. | E.P. --- Electric Pole             |
| Box Culv. --- Reinforced conc. box culvert as detailed.                                                               | T.P. --- Telephone Pole            |
| C.D.I. --- Concrete Drop Intake                                                                                       |                                    |

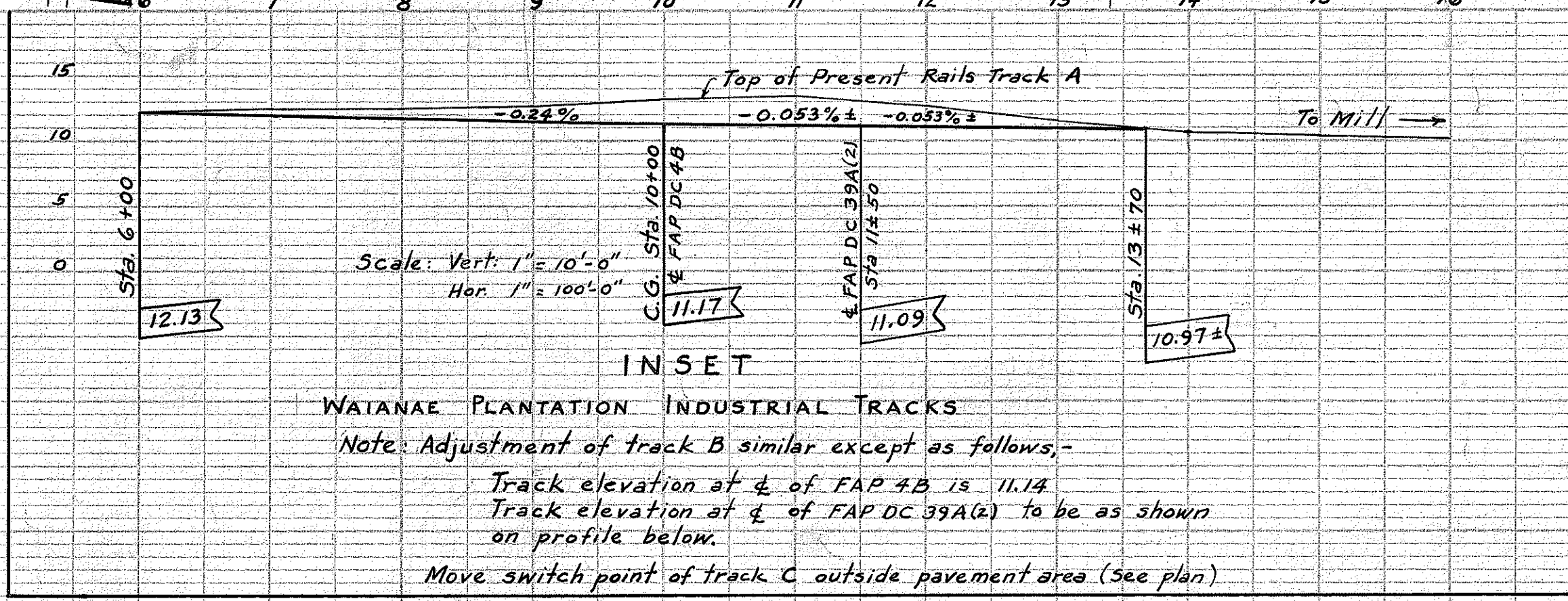
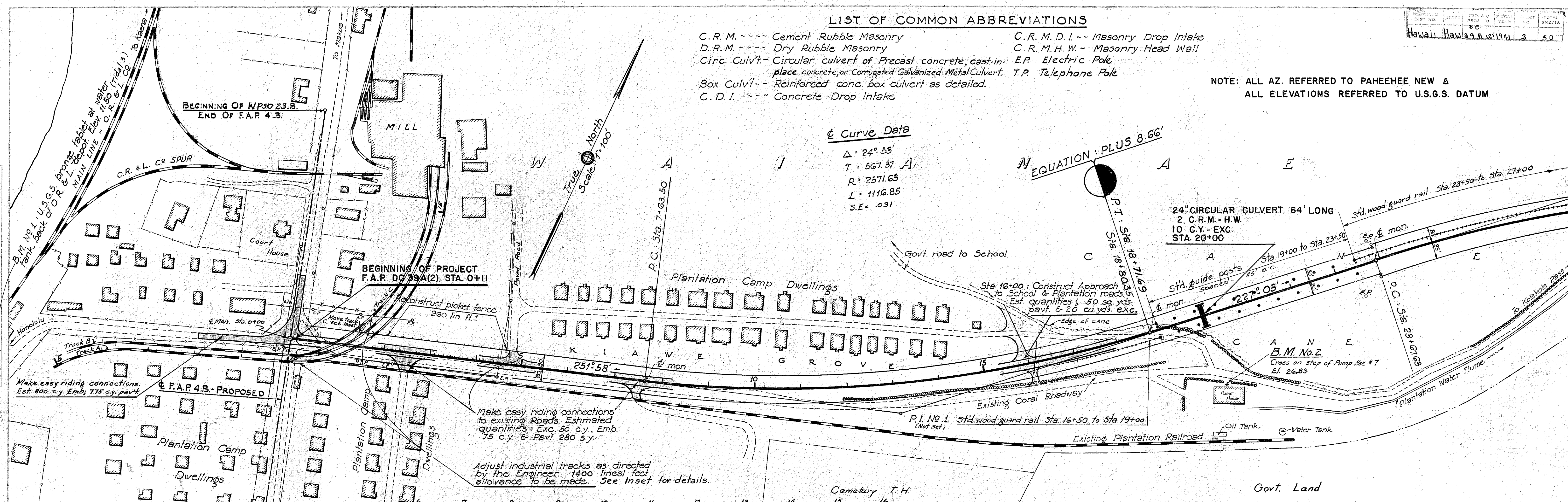
NOTE: ALL AZ. REFERRED TO PAHEEHEE NEW A  
ALL ELEVATIONS REFERRED TO U.S.G.S. DATUM

### Curve Data

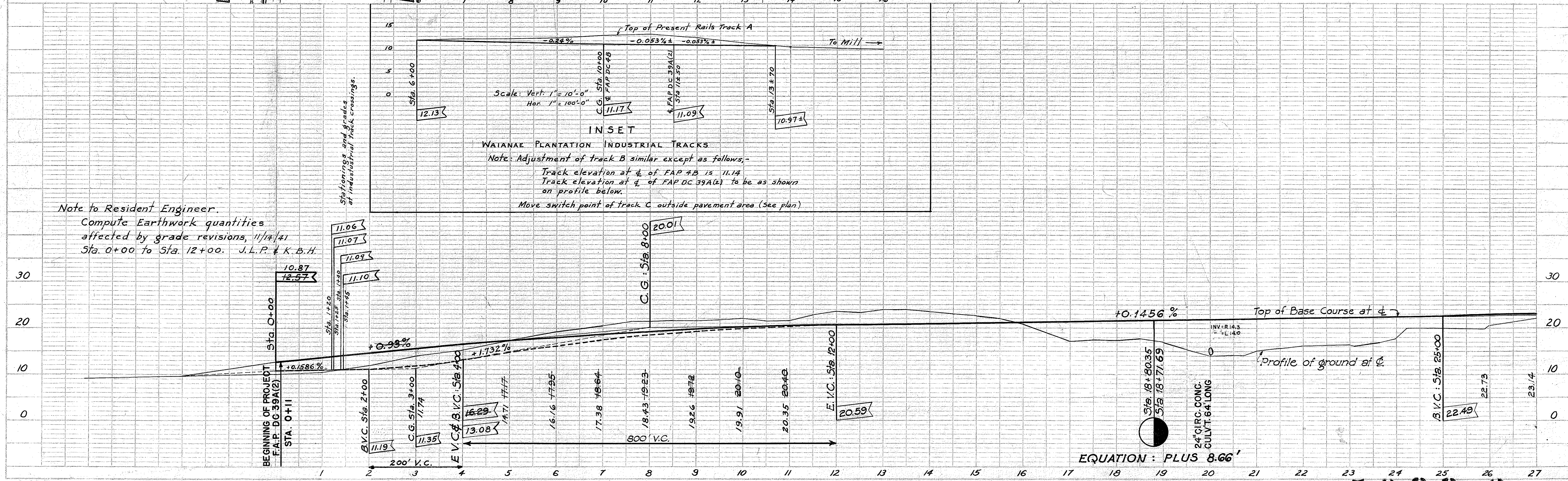
$\Delta = 24^\circ 53'$   
 $T = 567.87$   
 $R = 2571.63$   
 $L = 1116.85$   
 $S.E. = .031$

EQUATION: PLUS 8.66'

24" CIRCULAR CULVERT 64' LONG  
 2 C.R.M.-H.W.  
 10 C.Y. - EXC.  
 STA. 20+00

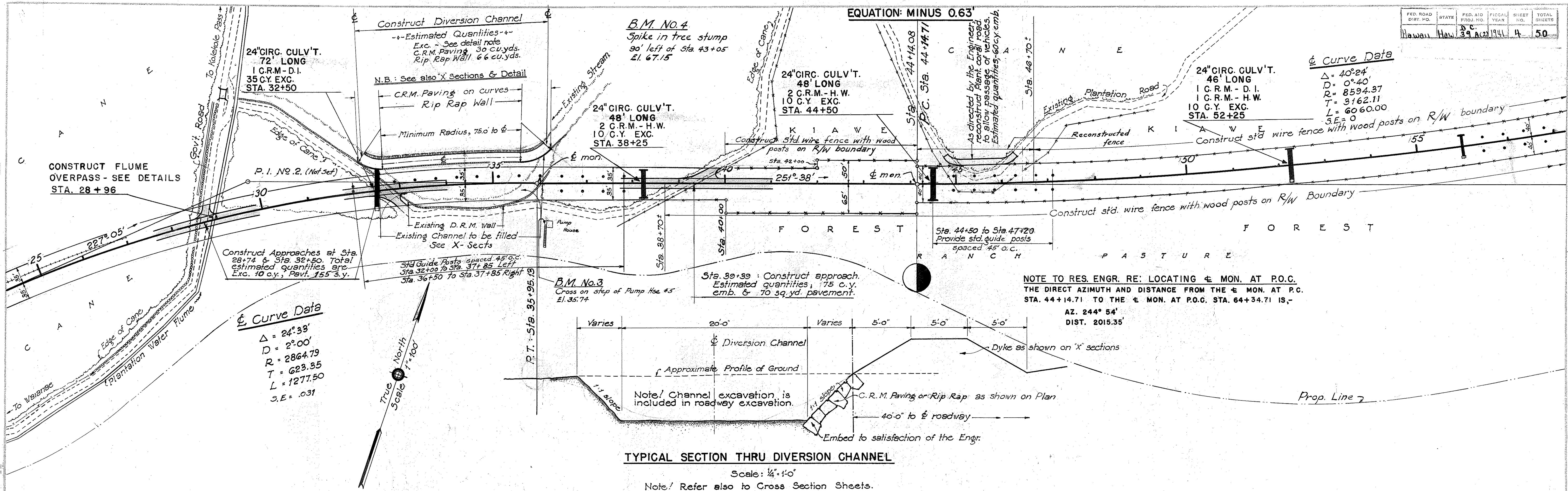


Note to Resident Engineer.  
 Compute Earthwork quantities  
 affected by grade revisions, 11/14/41  
 Sta. 0+00 to Sta. 12+00. J.L.P. & K.B.H.



|           |                      |
|-----------|----------------------|
| DATE      | 1/14/41              |
| BY        | J.L.E., G.P.F., H.C. |
| CHECKED   | J.L.E., G.P.F., H.C. |
| NOTE BOOK | NOTES                |
| STRUCTURE | NOTES                |
| NO.       |                      |

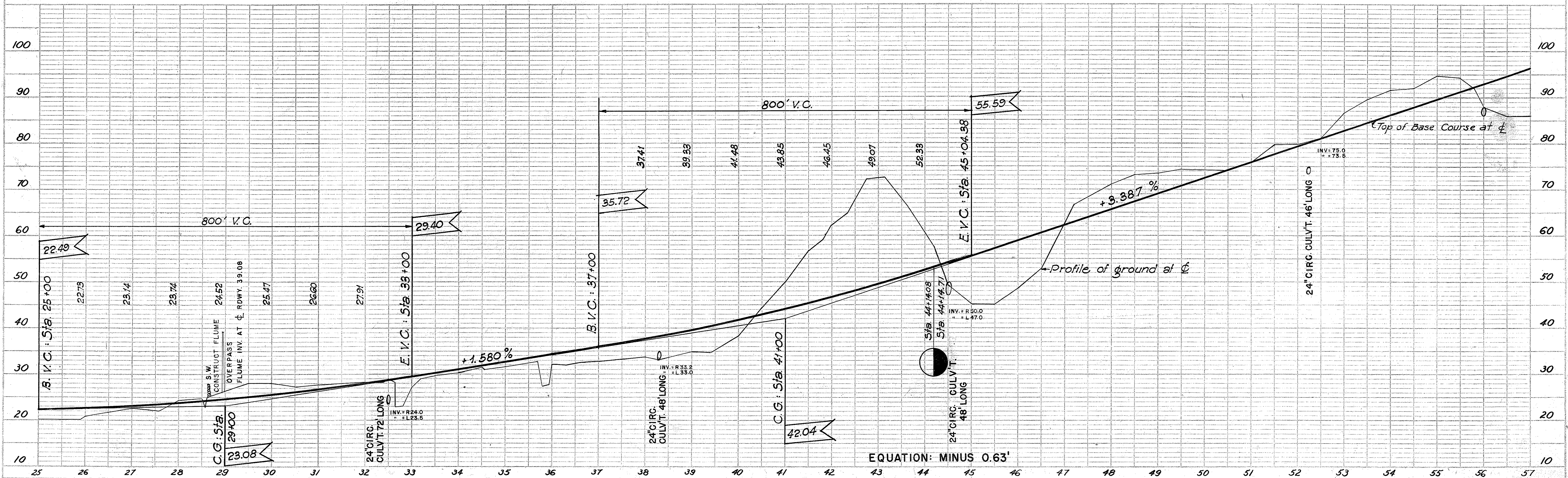
|           |                      |
|-----------|----------------------|
| DATE      | 1/14/41              |
| BY        | J.L.E., G.P.F., H.C. |
| CHECKED   | J.L.E., G.P.F., H.C. |
| NOTE BOOK | NOTES                |
| STRUCTURE | NOTES                |
| NO.       |                      |



TYPICAL SECTION THRU DIVERSION CHANNEL

Scale:  $\frac{1}{4}" = 1'-0"$

Note: Refer also to Cross Section Sheets.



### Curve Data

$\Delta = 40^{\circ}24'$   
 $D = 0^{\circ}40'$   
 $R = 8594.37$   
 $T = 3162.11$   
 $L = 6060.00$   
 $SE = 0$

24" CIRC. CULV'T. 48' LONG  
 1 C.R.M. - D.I.  
 1 C.R.M. - H.W.  
 10 C.Y. EXC.  
 STA. 56+00

24" SYPHON  
 84' LONG  
 SEE DETAILS  
 STA. 63+39

24" CIRC. CULV'T.  
 48' LONG  
 2 C.R.M. - H.W.  
 10 C.Y. EXC.  
 STA. 68+50

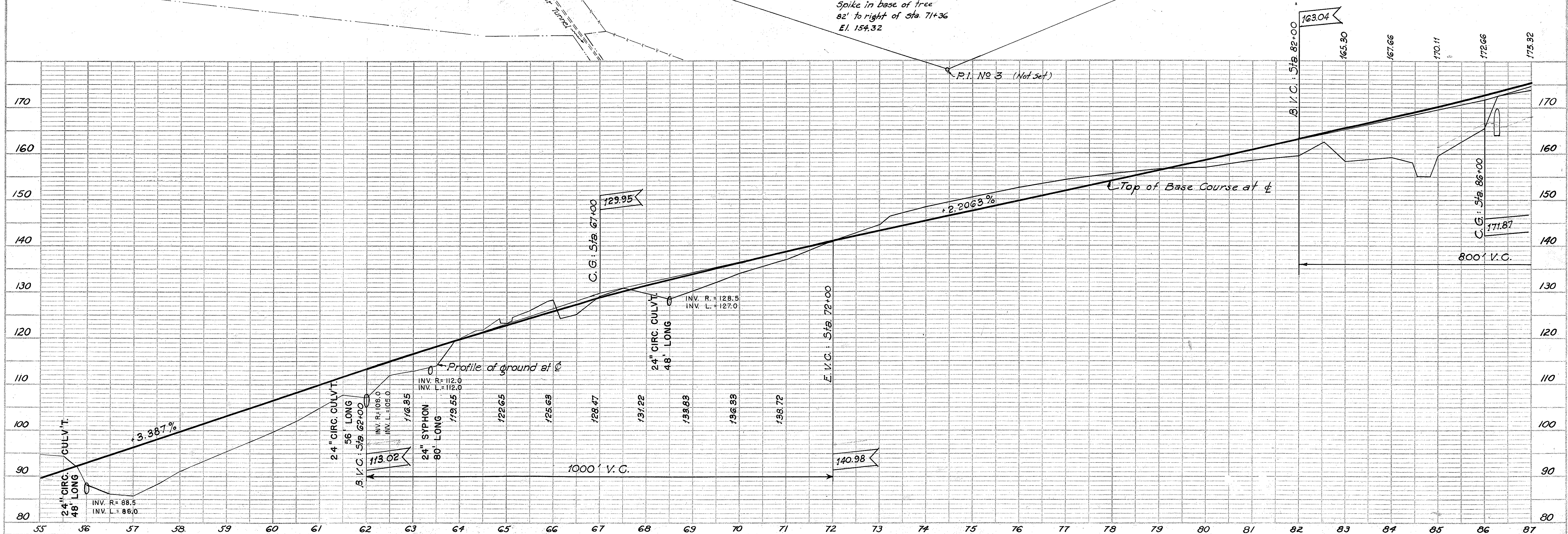
24" CIRC. CULV'T.  
 56' LONG  
 2 C.R.M. - H.W.  
 10 C.Y. EXC.  
 STA. 62+00

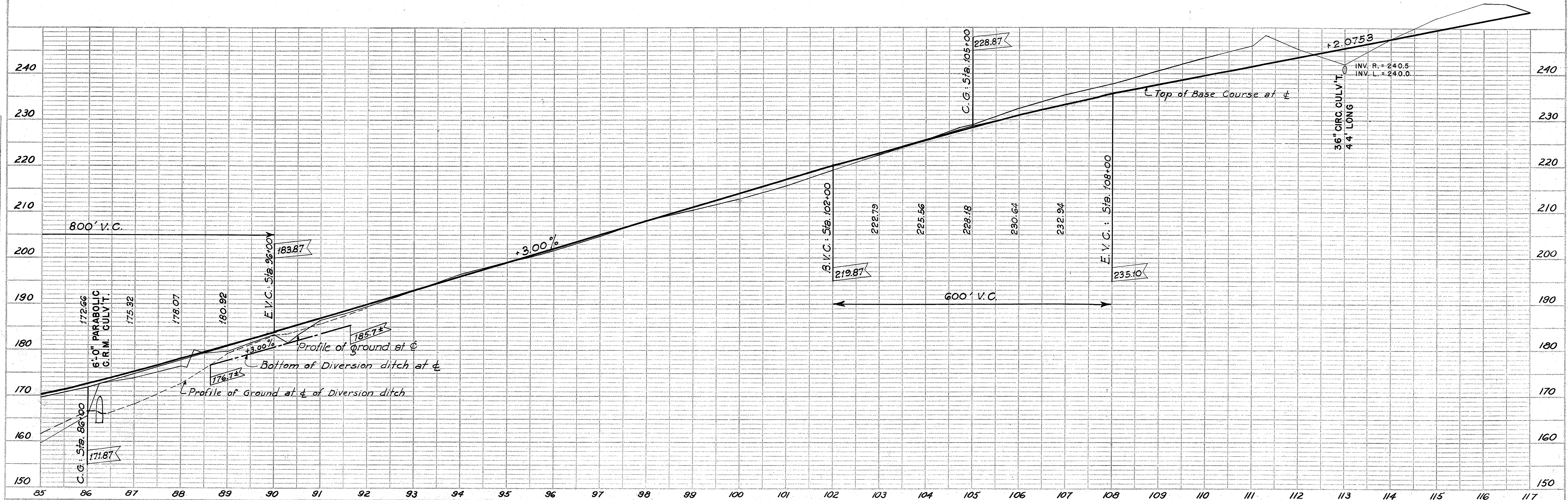
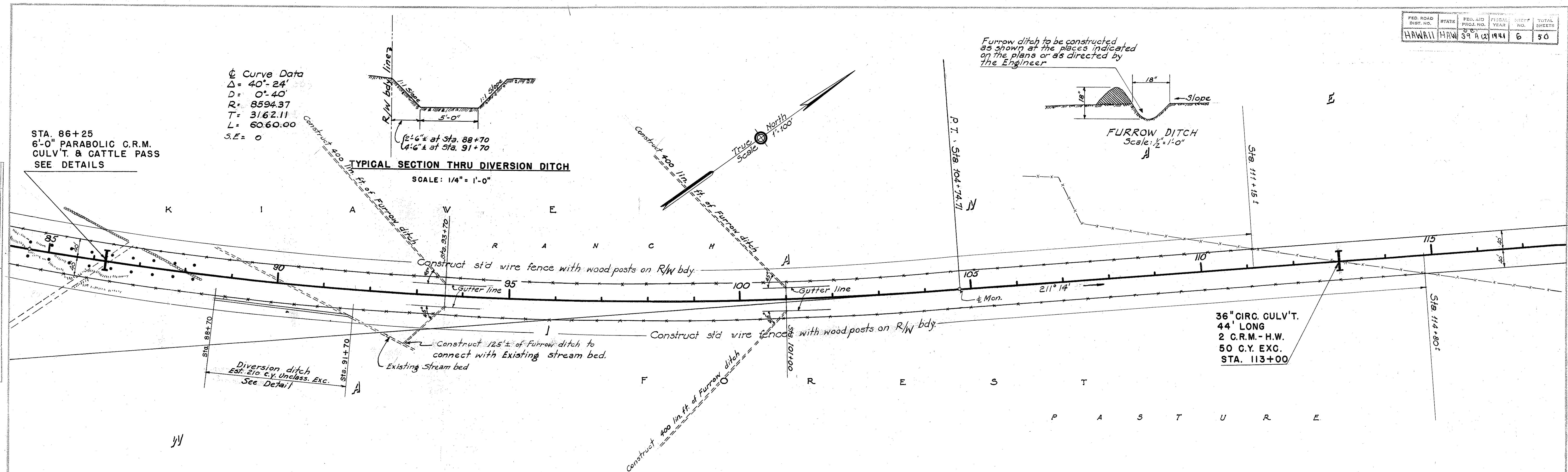
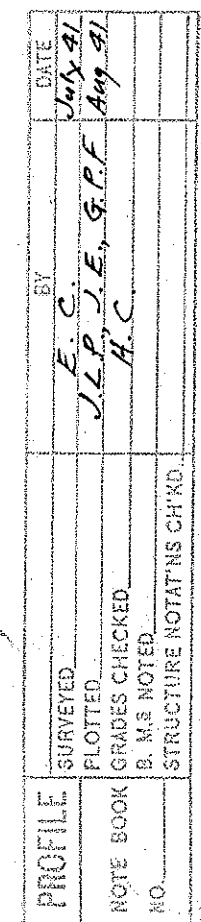
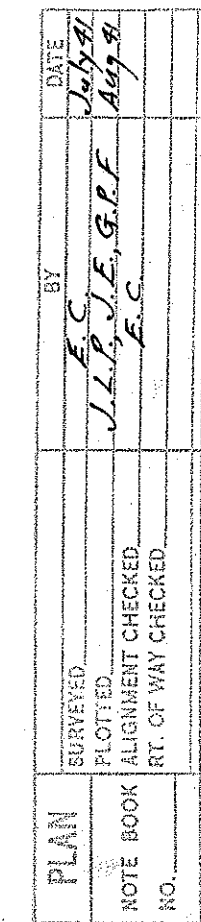
**B.M. No. 5**  
 Spike on crotch of tree  
 80' to right of Sta. 55+00  
 E.L. 89.29

**NOTE TO RES. ENGR. RE: LOCATING  $\epsilon$  MON. AT P.O.C.**  
 THE DIRECT AZIMUTH AND DISTANCE FROM THE  $\epsilon$  MON. AT P.O.C.  
 STA. 64+34.71 TO THE  $\epsilon$  MON. AT P.O.C. STA. 84+54.71 IS:

AZ.  $231^{\circ}26'$   
 DIST. 2015.35'  
 FROM P.O.C. STA. 84+54.71 TO THE  $\epsilon$  MON. AT P.T. STA. 104+74.71  
 AZ.  $217^{\circ}58'$   
 DIST. 2015.35'

**B.M. No. 6**  
 Spike in base of tree  
 82' to right of Sta. 71+36  
 E.L. 154.32





**B.M. NO. 7**  
Hub at foot of Kiawe tree  
100' to left of Sta. 126+10  
El. 294.98

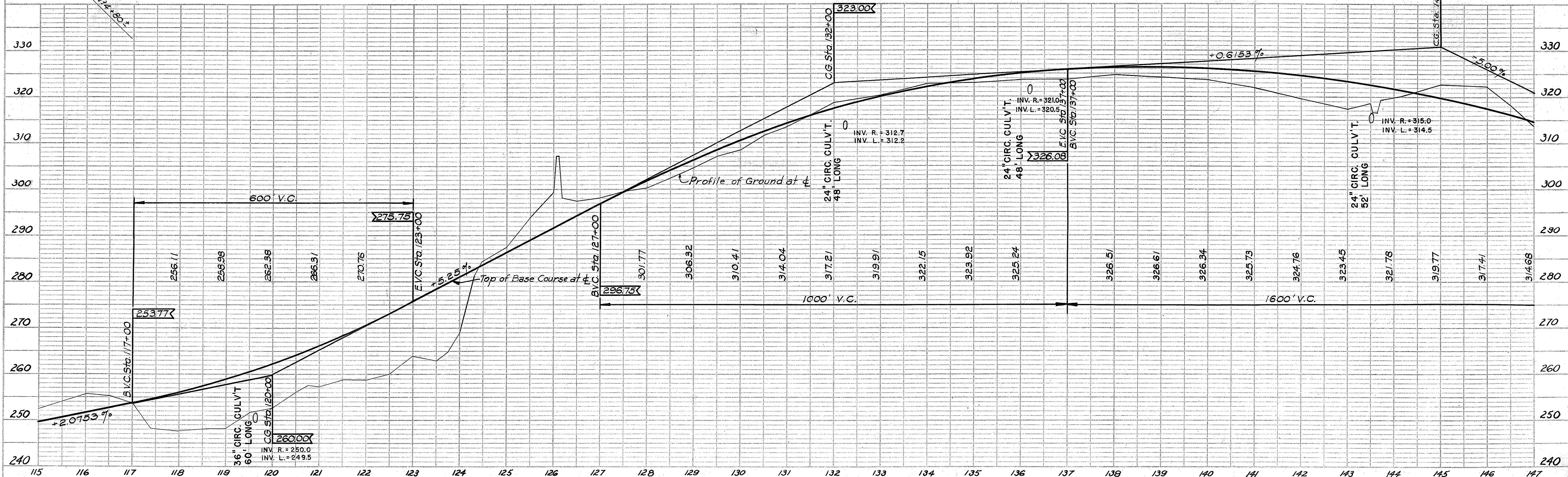
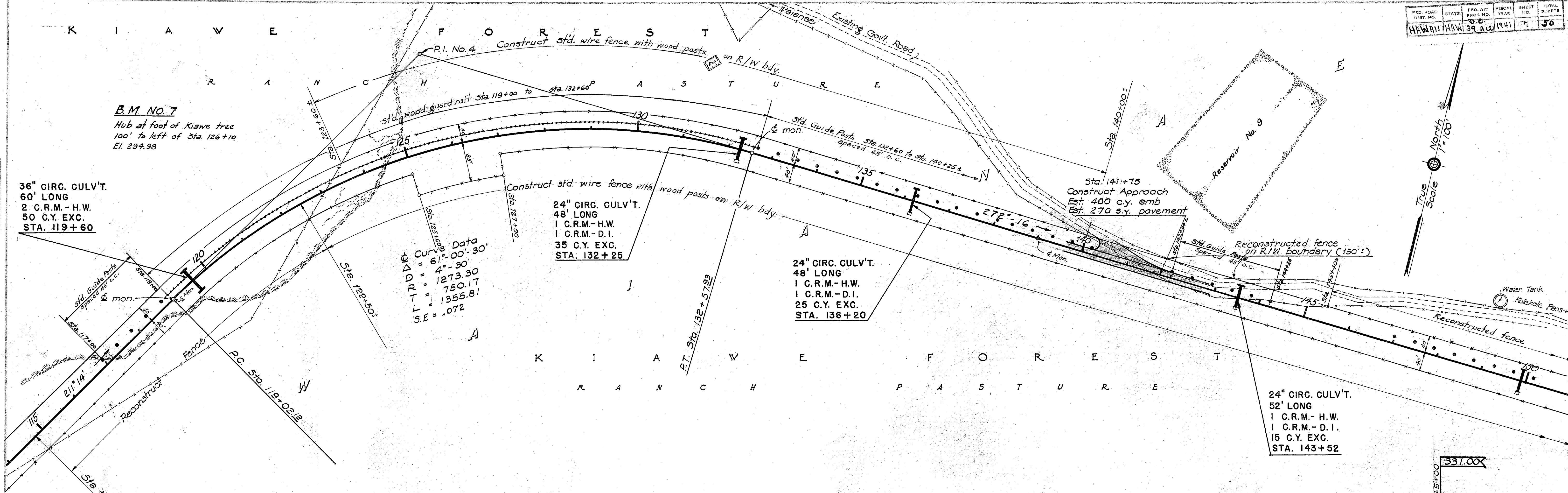
36" CIRC. CULV'T.  
60' LONG  
2 C.R.M.-H.W.  
50 C.Y. EXC.  
STA. 119+60

Curve Data  
D = 61'-00"-30"  
D = 4'-30"  
T = 1273.30  
L = 1355.81  
S.E. = .072

24" CIRC. CULV'T.  
48' LONG  
1 C.R.M.-H.W.  
1 C.R.M.-D.I.  
35 C.Y. EXC.  
STA. 132+25

24" CIRC. CULV'T.  
48' LONG  
1 C.R.M.-H.W.  
1 C.R.M.-D.I.  
25 C.Y. EXC.  
STA. 136+20

24" CIRC. CULV'T.  
52' LONG  
1 C.R.M.-H.W.  
1 C.R.M.-D.I.  
15 C.Y. EXC.  
STA. 143+52



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW   | 39 A(2)            | 1941        | 8         | 50           |

| PLAN    | DATE   | BY     | CHECKED |
|---------|--------|--------|---------|
| PLANNED | Aug 31 | J.L.F. | G.P.F.  |
| NOTED   |        |        |         |
| NO.     |        |        |         |

| PROFILE | DATE   | BY     | CHECKED |
|---------|--------|--------|---------|
| PLANNED | Aug 31 | J.L.F. | G.P.F.  |
| NOTED   |        |        |         |
| NO.     |        |        |         |

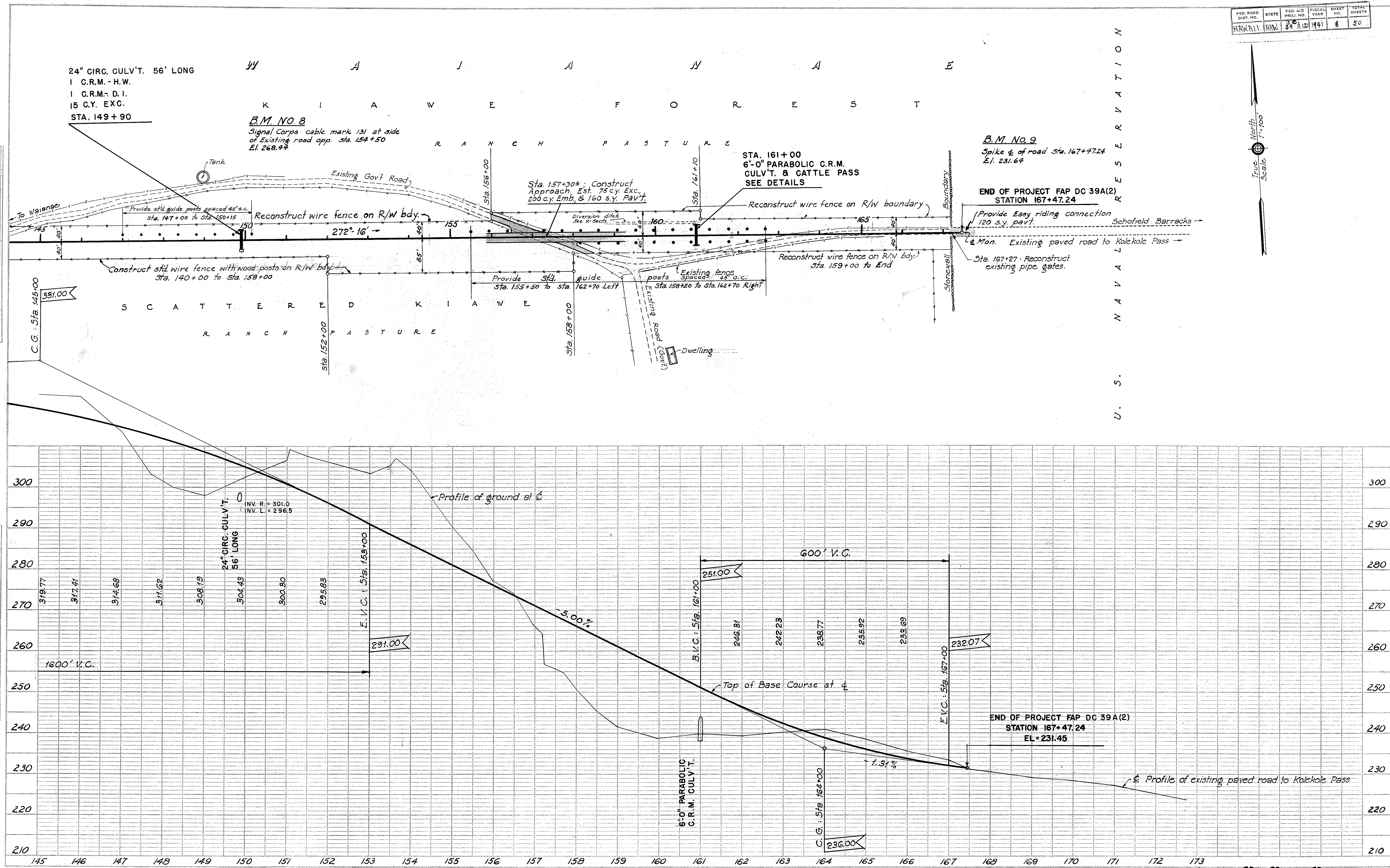


PLATE 1 - PLAN - PROFILE  
REUFFEL & SEER CO., NEW YORK

5088.S