

EL CAPITAN

Pipe Line Survey

TRANSIT No 5

POSTS

---

FIELD BOOK

---

W192

Our Leather Bound Engineers Note Books are carried in the following rulings:

- No. 380 LEVEL BOOK. Left and Right Hand Page the same as Left Hand Page of this Book.
- No. 382 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 4 x 4 to the inch, Center Line Red.
- No. 384 MINING TRANSIT BOOK. Left Hand Page as in this Book, Right Hand Page 8x8 to the inch, Center Line Red.
- No. 385 FIELD BOOK. Left Hand Page as in this Book, Right Hand Page 8 vertical and 4 horizontal lines to the inch, Center Line Red.

We also carry the Note Books listed above, bound in extra strong Fabri-Hide (otherwise the same quality of book), which can be furnished at a somewhat lower price.

In ordering Fabri-Hide covered books, add the letter "F" to catalog number.

**THE FREDERICK POST CO.**

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

**MICROFILMED**

JAN 7 1965

MICROFILMED  
JAN 11 1965

INDEX

From Page - To Page

1 7 El Capitan Pipe Line  
Proposed Relocation  
Abandoned From: Sta. 975+18°  
To: Sta. 1032+52<sup>75</sup>

8 29 El Capitan Pipe Line  
Final Location  
From: Sta. 802+17<sup>E</sup>  
To: Sta. 1000+63<sup>E7</sup>

72 and 73 Property Line  
From: NE Cor. Lot E of Lot 1  
To: NE Cor. Lot F.

79, 74 and 75 Property Line  
From: SE Cor. Lot E of Lot 70  
To: NE Cor. Lot E of Lot 70

76 Property Line  
From: N.E. Cor. Bruce  
Watings Property.  
To: N.E. Cor. Lot 61.

Index - Cont

From Page - To Page

77

78

Property Line

From: SE Cor. Lot

E. of Lot 70.

To: 2337<sup>70</sup> West

30

32

Line Change. Sta. 810+21.  
to Sta. 811+67.73.

33

34

Line Change. Sta. 911+13<sup>43</sup>  
to Sta. 918+86<sup>63</sup>

35 - 54.

Reference Points.

Sta. 811+11<sup>5</sup> to 939+75<sup>3</sup>

April 15

Converse  
Leach T  
Duermit  
Webb  
Newman

clear and warm

2

April 15

S25°40'30"W

F.C.

978+77° 25°08'45"L

B.C.

S50°49'15"W

F.C.

977+81° 43°28'34"L

B.C.

N85°42'11"W N87°30"W

F.C.

E=1°

976+40° 6°26'56"R

B.C.

SE75°53'W

F.C.

975+18° 28°49'30"R

979+33

==== Culvert 12" Concrete

Nail in road.



154°51'25"  
4 | 619°25'00"  
154°51'15"

136°31'30"  
4 | 546°05'45"  
136°31'26"

Nail in road



186°27'00"  
4 | 745°47'45"  
186°26'56"

Note-Contd. from Book #4.  
Page #69.

Mag -

April 15.

Converse  
Leach T.  
Duermit  
Webb  
New map

Clear and Warm.

Note: All angles turned  
to right -

FC

S40°36'41" W S39°00' W

△  
992+00 2°40'15" R

S37°56'26" W S36°20' W

FC

E = 3°

△  
987+11 13°37'19" L

BC

S51°33'45" W S49°55' W

FC

E = 2°

△  
983+89 6°41'15" R

BC

S44°52'30" W S43°05' W

FC

E = 12°

△  
981+77 19°2'00" R

S25°40'30" W

182°40'25"  
4730°41'00"  
182°46'15"

990+63 = Culvert 12" Concrete  
166°22'30"  
△ 4765°30'45"  
166°22'41"

987+00 Approximate axis of Mission  
Gorge Dam Site No. 3

985+17 = Culvert 12" Concrete  
186°41'15"  
△ 4796°45'00"  
186°41'15"

Hub in road

199°12'00"  
△ 4796°48'00"  
199°12'00"

Mag. -

S64°16'11"W S62°30'W

F.C

E = 4°

A  
999+50° 11°09'00" R

BC

S53°07'11"N S51°45'W

F.C

E = 3°

A  
996+97° 21°21'38" R

BC

S77°28'49"W S76°00'W

F.C

E = 11°

A  
995+71° 69°26'00" R

BC

S8°02'49"W

F.C

E = 7°

A  
993+43° 32°33'52" R

BC

S40°36'41"W S39°00'W

A  
992+00°

4

Nail in road -

191°09'00"  
4764°36'00"  
191°09'00"

155°38'30"  
4622°33'30"  
155°38'22"

249°26'15"  
4997°49'00"  
249°26'00"

995+01

2' Arch Culvert Concrete

147°26'30"  
4589°44'30"  
147°26'08"

S37°03'26" W S35°15' W

EC

E=6°

1006+05° 26'46.45" R

BC

S10°16'41" W S33°15' W

EC

E=7°

1004+67° 29'26.30" L

BC

S34°43'11" W S32°40' W

EC

E=2°

1003+59° 12'26.52" R

BC

S22°16'19" W S20°30' W

EC

E=8°

1000+79° 41'59.52" L

BC

S24°16'11" W S62°30' W

EC

206°46'30"  
4 | 827°07'00"  
206 46'45"

1005+79 = Culvert 12" Concrete  
155°33'45"  
4 | 622°14'00"  
155°33'30"

192°26'45"  
769°47'30"  
192°26'52"

1001+79 = Culvert 12" Concrete  
138°00'15"  
4 | 552°00'30"  
138°00'08"



E.C

S25°57'12"E April 16,

Converse  
Leach  
Duermit  
Webb  
Clavert.

Warm and Hazy

6

△  
1021780° 12°26'38" R

B.C

S36°23'50"E

P.O.T.  
1020782°

S34°23'50"E S40°40' E

E.C

E = 30°

△  
1011762° 69°47'38" L

B.C

S26°23'48"W S24°25' W

E.C

E = 3°

△  
1008759° 10°59'36" L

B.C

S37°03'26"W

E.C

April 16.

On Hogs back △

192°26'45"  
4769'46'30"  
192°26'38"

On Hogs back △

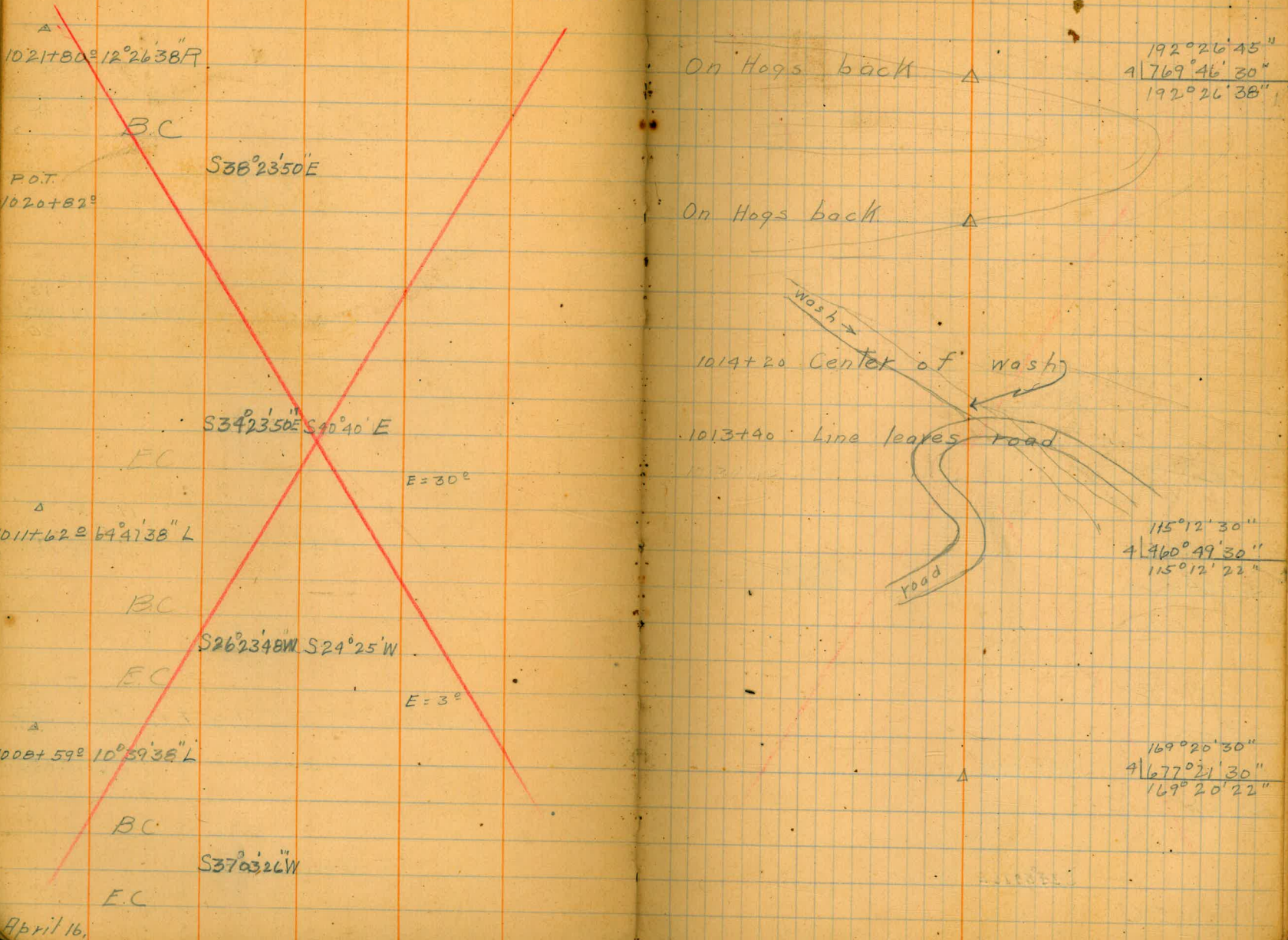
1014720 Center of wash

1013740 Line leaves road

1013712

115°12'30"  
4960'49'30"  
115°12'22"

169°20'30"  
41677°21'30"  
169°20'22"



April 17,

Converse  
Leach &  
Duerrmit  
Webb  
Clavert

Warm and Cloudy

7

$\Delta$   
1032+52<sup>75</sup>  
15+

April 17,

P.O.T.  
1028+47°

S25°57'12"E

S25°57'12"E S28°15'E

E.C

996+85<sup>±</sup> P.I.

1007+36<sup>±</sup>

Sta.  
Bissels line

5.8°03'E Bissels  
Bearing.

5.7°42'16"E

198°14'45"

4 | 792°59'45"  
198°14'56"

$\Delta$   
1025+90 center of Gully

Hogs back

Note. This Line from  
Sta. 801+02.1 to Sta. 810+42.9  
Later Abandoned and Line  
Rerun to follow County Highway  
Right-of-Way.  
For notes on Relocation see  
Page 30. this Book.

811+11<sup>50</sup> Δ 51°12' L.

E=15.6 ✓  
T=68.63  
R=143.24  
D=40°  
L=128.00

810+42<sup>80</sup> B.C.

~~N35°47'W~~  
~~N35°46'W~~

718.8 ✓

803+24<sup>+</sup> E.C.

1032  
15+

802+17<sup>8</sup> P.I.

APV

102

~~Continued from Book #4  
Page 35.~~

Mag  
Apr. 23

Converse  
Leach  
Duermit  
Webb  
Clavert

S59°51'W

S59°52'W

Δ ✓  
820+65° 4° 10' L

S64°01'W

S64°02'W S64°10'W

817+47° 5° 00' L

318.0

S69°01'W

S67°02'W S68°45'W

816+32° EC

114.0

E=2.9 ✓  
T=33.68  
R=190.99  
D=30°  
L 66.67

816+00 Δ 20° 00' L

815+66<sup>32</sup> B.C.

S89°01'W

S89°02'W ✓

815+00 Δ 4° 0' L

66.3

N86°53'W ✓

N 86° 53' W ✓

329.1

811+70<sup>22</sup> E.C.

T=68.63

811+11<sup>5</sup> Δ

Note: all reference points are  
at rt. angle to  $\pm$  unless  
other wise noted.

Warm

Δ 15° Δ 18° Δ

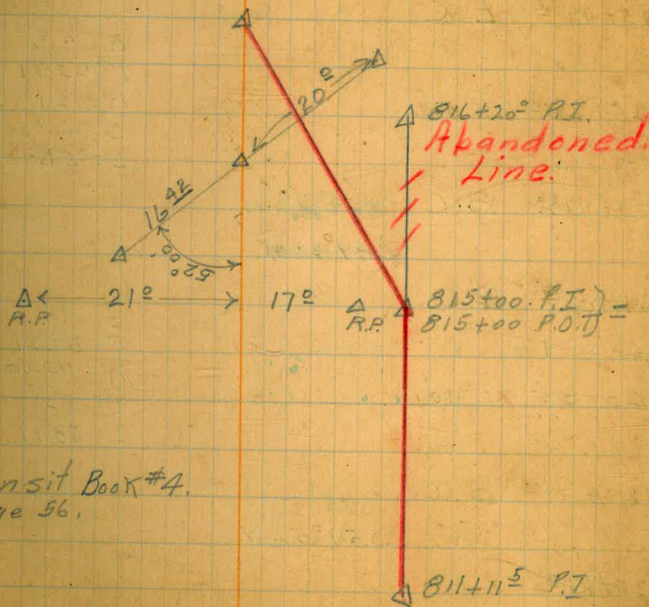
820+28. \_\_\_\_\_ 12" Concrete Culvert.

Slope Dist. = 162 ✓  
V. Angle = 35° 00' Δ

13<sup>68</sup> ✓

Δ 19° Δ

Δ 12° Δ 16° Δ



See Transit Book #4.  
Page 56.

April 24

Converse  
Leach T  
Duermit  
Webb  
Clovert

~~S57°41'W~~

Apr 26

~~S87°42'W~~

829+89<sup>4</sup> E.C.

E = 2.6  
T = 25.34  
R = 124.56  
D = 46°00'  
L = 50.00

829+65° 23°00' R

829+39<sup>6</sup> B.C

~~S64°42'W~~

S64°42'W S63°00'W

258.7

826+81° 2°50' L

~~S67°32'W~~

S67°32'W S66°30'W

131.3

825+49<sup>6</sup> E.C

E = 2.6  
T = 25.34  
R = 124.56  
D = 46°00'  
L = 50.00

825+25° 23°00' L

824+99<sup>6</sup> B.C

~~N89°29'W~~

N89°29'W

88.9

824+10<sup>7</sup> E.C.

April 24

E = 4.1  
T = 30.21  
R = 110.18  
D = 52°  
L = 58.97

823+82° 30°40' R

823+51<sup>8</sup> B.C

~~S59°52'W~~

S59°52'W

286.8

820+65°

Cool and Windy

88.9

30.21

119.11

25.34

19.11

44.45

10

△ 14° 15° △

△ 12° 16° △

827+38 ———— Culvert 8" Concrete

△ 15° 20° △

Slope Dist = 15°  
V Angle = 16°00'

14<sup>42</sup> ✓

18° △

△ 15° 25° △

△ 15° 15° △

824+06 ———— Culvert 12" Concrete

△ 15° 25° △

S54°24'W

Apr. 26

Converse  
Leach T  
Overmit  
Webb  
Clavert.

S54°22'W S52°05'W

Warm and Hazy

B36+60<sup>05</sup> E.C.

E=1.5  
T=19.36  
R=124.56  
D=46°  
L=38.41

Δ 14° Δ

B36+41<sup>12</sup> 17°40' R

B36+21<sup>64</sup> B.C. S36°41'W

S36°42'W

58.9

Δ 15° 15.4 Δ

B35+62<sup>69</sup> E.C.

E=3.7  
T=51.39  
R=358.10  
D=16°  
L=102.08

Δ 12° 15° Δ

B35+12<sup>2</sup> 16°20' L

B34+60<sup>6</sup> B.C. S53°41'W

S53°02'W S51°55'W

91.2

Δ 16° 15° Δ

B33+69<sup>43</sup> E.C.

E=5.9  
T=51.21  
R=229.37  
D=26°  
L=100.64

Δ 15° Δ 14° Δ

B33+20<sup>2</sup> 26°10' L

B32+68<sup>72</sup> B.C. S79°11'W

S79°12'W S78°20'W

93.1

Slope Dist=20°  
V Angle=16°51'

19.14 ✓ Δ 14° Δ

B31+75<sup>74</sup> E.C.

E=2.6  
T=70.96  
R=954.93  
D=6°  
L=141.67

B31+97

Culvert 12" Concrete

Δ 15° 14° Δ

B31+05<sup>2</sup> 8°30' L

B30+34<sup>04</sup> B.C.

Δ 15° Δ 19° Δ

B29+89<sup>64</sup> E.C. S91°41'W

S87°42'W

44.3

Mag.

Converse  
Leach T.  
Duermit  
Webb  
Clovert

S8°31'W

Apr. 27

S8°32'W S6°55'W

893+19° 4° 20' R

S4°11'W

S4°12'W

72.5

892+46<sup>50</sup> E.C.

E=7.1  
T=58.78  
R=238.73  
D=24°  
L=115.28

891+90° 27° 40' L

891+31<sup>22</sup> B.C.

S31°51'W

S31°52'W S29°35'W

60.2

890+71° 4° 20' R

S27°03'W

S27°32'W S25°55'W

41.7

890+29<sup>36</sup> E.C.

E=2.0  
T=26.76  
R=179.05  
D=32°  
L=53.12

890+03° 17° 00' R

899+76<sup>24</sup> B.C.

S10°21'W

S10°32'W S9°00'W

118.6

838+51<sup>41</sup> E.C.

E=8.9  
T=46.10  
R=114.59  
D=50°  
L=87.67

838+16° 43° 50' L

+698<sup>Police</sup>  
837+59<sup>2</sup> B.C.

Apr. 27

836+60<sup>05</sup>

S54°21'W

S54°22'W

99.9

109.9

Cool and Cloudy

Slope Dist = 21°

V. Angle = 39° 11' A

16.28

11°

Δ

Slope Dist = 22°

V. Angle = 40° 52' A

16.64

16°

Δ

Nail in rd.

Slope Dist = 16°

V. Angle = 36° 30' A

12.86

11°

Δ

890+98

Culvert 16" C.M.P.

Slope Dist = 12.2

V. Angle = 33° 41' A

10.57

11°

Δ

Nail in rd.

Slope Dist = 23.6

V. Angle = 29° 45' A

20.49

12°

Δ

Slope Dist = 19°

V. Angle = 23° 45' A

17.39

11°

Δ

Δ

13°

13°

Δ

Δ

16°

15°

Δ

Bear. Moq. Apr 28.  
516°41'W  
516°42'W S15°25'W

Converse  
Leach T  
Duermit  
Webb  
Clarent

Warm and Cloudy

850+38<sup>71</sup> E.C.

Δ 8<sup>2</sup> Δ 14<sup>2</sup> Δ

850+18<sup>2</sup> 10°50'R

E=1.0  
T=20.90  
R=220.37  
D=26°  
L=41.67

849+97<sup>10</sup> B.C.

S5°51'W  
S5°52'W

60.0

Δ 8<sup>2</sup> Δ 13<sup>2</sup> Δ

849+37<sup>06</sup> E.C.

Apr. 28. 26

849+25<sup>2</sup> 9°40'R

E=0.5  
T=12.11  
R=143.24  
D=40°  
L=24.17

Δ 9<sup>2</sup> Δ 11<sup>2</sup> Δ

849+12<sup>29</sup> B.C.

S3°49'E  
S3°48'E S5°00'E

189.9

Δ 10<sup>2</sup> Δ 12<sup>2</sup> Δ

847+23<sup>2</sup> 2°40'R

S6°29'E  
S6°28'E

170.0

848+42 Culvert 12" Concrete

Δ 9<sup>2</sup> Δ 12<sup>2</sup> Δ

845+53<sup>2</sup> 5°00'L

S1°29'E  
S1°28'E S3°30'E

47.1

845+63 Culvert 15" C.M.P.

Δ 6<sup>2</sup> Δ 11<sup>2</sup> Δ

Nail in rock Bank

845+05<sup>2</sup> E.C.

E=2.2  
T=50.13  
R=572.96  
D=10°00'  
L=100.00

Δ 5<sup>2</sup> Δ 10<sup>2</sup> Δ

Nail in Bank

844+56<sup>2</sup> 10°00'L

844+05<sup>2</sup> B.C.

S8°31'W  
S8°32'W S6°55'W

86.9

Δ 7<sup>2</sup> Δ 10<sup>2</sup> Δ

Nail in Bank

843+19<sup>2</sup> 4°20'R



S60°51'W

~~S60°52'W~~

Apr. 29, 1926

Converse  
Leach - T  
Duermitt  
Webb  
Clavert.

B59+83<sup>29</sup> E.C.

Apr. 29

B59+45° 12°20' R

E=2.1  
T=38.69  
R=358.10  
D=16°  
L=77.08

B59+06<sup>31</sup> B.C.

S48°31'W

S48°32'W

234.3

B56+72<sup>2</sup> 4°50' R

S43°41'W

S43°42'W

293.2

B53+78<sup>22</sup> E.C.

B53+62° 13°30' R

E=1.0  
T=16.95  
R=143.24  
D=40°  
L=33.75

B53+45<sup>25</sup> B.C.

S30°11'W

S30°12'W

80.6

B52+64<sup>41</sup> E.C.

B52+39° 9°10' R

E=1.0  
T=25.52  
R=318.31  
D=18°  
L=50.93

B52+13<sup>48</sup> B.C.

S21°01'W

S21°02'W S19°30'W

113.5

B51+00° 4°20' R

S16°41'W

S16°42'W S15°25'W

61.2

B50+38<sup>22</sup>

Cool and Foggy

Slope Dist = 19°

V. Angle = 25°09' A

17.20

18° A

Slope Dist = 17°

V. Angle = 34°20' A

14° V

13° A

Slope Dist = 11°

V. Angle = 23°25' A

10° V

13° A

B55+05

Slope Dist = 9°

V. Angle = 26°30' A

8.14 V

14° A

4x13 Wooden Culvert

27.04



Slope Dist = 9°

V. Angle = 18°35' A

8.63 V

13° A

Nail in Bank

Slope Dist = 11°

V. Angle = 25°19' A

10.31 V

12° A

8.3

13° A

561°11'W  
561°12'W

868+12<sup>23</sup> E.C.

E 1.4 ✓  
T = 28.43  
R = 286.48  
D = 20°  
L = 56.67

Δ  
867+84° 11°20' L

867+55<sup>57</sup> B.C.

572°31'W  
S72°32'W S71°25'W

83.5 ✓

866+72<sup>11</sup> E.C.

E = 1.0 ✓  
T = 24.22  
R = 286.48  
D = 20°  
L = 48.33

Δ  
866+48° 9°40' R

866+23<sup>78</sup> B.C.

562°51'W  
S62°52'W S61°50'W

112.8 ✓

Δ  
865+11° 4°20' R

558°31'W  
S58°32'W S57°25'W

436.0 ✓

860+75° 2°20' L

560°51'W  
S60°52'W

91.6 ✓

859+83<sup>39</sup> E.C.

868+15

Culvert 18" C.M.P.

Slope D = 17°  
V. Angle = 10°54' Δ

16<sup>69</sup> ✓

11° Δ

Slope D = 11°  
V. Angle = 17°47' Δ

10<sup>47</sup> ✓

12° Δ

Δ 10<sup>1</sup>

14° Δ

Slope D = 19°  
V. Angle = 27°6' Δ

16<sup>89</sup> ✓

19° Δ

Slope Dist = 12°  
V. Angle = 29°26' Δ

10<sup>45</sup> ✓

13° Δ

864+29

Culvert 16" C.I.P.

861+34

Culvert 18" C.M.P.

Δ 10<sup>2</sup>

11° Δ

875+34<sup>79</sup> E.C.  
 Δ  
 875+10° 18°00' L  
 874+84<sup>79</sup> B.C.  
 R.P. 30  
 873+79° 3°20' R  
 E = 2.0  
 T = 25.21  
 R = 159.16  
 D = 36°  
 L = 50.00

873+05<sup>32</sup> E.C.  
 Δ  
 872+61° 10°40' L  
 872+16<sup>43</sup> B.C.  
 871+37° 3°40' R  
 870+72<sup>75</sup> E.C.  
 Δ  
 870+54° 22°50' L  
 870+34<sup>72</sup> B.C.  
 868+12<sup>29</sup> E.C.

516°41' W  
 516°42' W  
 334°41' W  
 531°41' W  
 542°00' W  
 542°02' W  
 538°21' W  
 561°11' W  
 561°12' W

R.P. 30, '26  
 Converse  
 Leach  
 Duermit  
 Webb  
 Clavert

34°05' W  
 31°05' W  
 31°05' W  
 34°05' W  
 38°30' W

105.8

73.7

79.4

64.22

222.5

Cooland Misting

Slope D = 13°  
 V. Angle = 40°00' Δ 9.96 12° Δ

Slope D = 11°  
 V. Angle = 41°55' Δ 8.19 12° Δ

Slope D = 12°  
 V. Angle = 31°30' Δ 10.23 12° Δ

872+72  
 Slope D = 11°  
 V. Angle = 31°41' Δ 9.36 V Δ 12° Δ  
 Culvert 12" Concrete

Slope D = 12°  
 V. Angle = 31°35' Δ 10.22 V Δ 12° Δ

Slope D = 6°  
 V. Angle = 18°15' Δ 5.79 V Δ 11° Δ

Slope D = 11°  
 V. Angle = 23°28' Δ 10.37 V Δ 110°14' Δ 15° Δ

Shingle nail in road.

Slope D = 5°  
 V. Angle = 25°20' Δ 4.98 V Δ 15° Δ

Nail in rock wall.

31.43  
70.6  
70.203

S10°11'W

S10°12'W S9°50'E

880+39<sup>74</sup> E.C.

E=1.5 ✓  
T=16.12  
R=84.26  
D=68°  
L=31.86

△  
880+24° 21°40' R

880+07<sup>88</sup> B.C.

S11°39'E

S11°28'E S12°00'E

128.6

878+79<sup>34</sup> E.C.

E=1.5 ✓  
T=21.64  
R=150.78  
D=38°  
L=42.98

△  
878+58° 16°20' L

878+36<sup>35</sup> B.C.

S4°51'W

S4°52'W

50.3

877+86<sup>02</sup> E.C.

E=2.1 ✓  
T=31.43  
R=238.73  
D=24°  
L=62.50

△  
877+55° 15°00' L

877+23<sup>57</sup> B.C.

S19°51'W

S19°52'W S19°00'W

70.6

△  
876+53° 3°10' R

875+34<sup>79</sup> E.C.

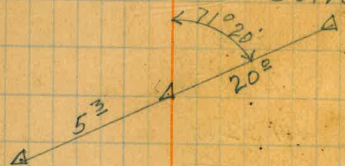
S16°41'W

S16°42'W

118.21

△ 13° 17° △

△ 8° 16° △  
878+93 Culvert 12" Concrete



△ 17° 13° △

Slope D=11°  
∠ Angle=25°17' △ 9° 13° △

Slope D=11°  
∠ Angle=13°24' △ 10° 21° △

△ 8° 14° △

May 1, 26 CW Converse - Chief of Party  
 Leach - Inst.  
 Duermit - Hd. Chain  
 Webb - Rr. Chain  
 Clavert - Axe

Cool and Cloudy

18

539°11'W Mag.  
 S39°21'W S38°15'W

888+58<sup>24</sup> E.C

Δ  
 888+37° 21°30' R

E=2.0  
 T=21.76  
 R=114.59  
 D=50°  
 L=43.00

888+15<sup>24</sup> B.C

517°31'W

S17°32'W

887+82<sup>24</sup> E.C.

May 1  
 887+61° 21°30' R

E=2.0  
 T=21.76  
 R=114.59  
 D=50°  
 L=43.00

887+39<sup>24</sup> B.C

S30°09'E

S3°58'E

885+84<sup>80</sup> E.C

Δ  
 885+17° 19°10' L

E 5.8  
 T=69.10  
 R=409.26  
 D=14°  
 L=136.90

884+47<sup>20</sup> B.C

S15°11'W

S15°12'W S14°35'W

881+59° 5°00' R

880+39<sup>74</sup>

S10°11'W

S10°12'W

888+91

Slope D=23°  
 V. Angle=26°50' Δ

20<sup>54</sup>

Culvert 12" Concrete

15° Δ

Slope Dist=125

Slope Ang 32°25' Δ

10<sup>53</sup>

14° Δ

33.0

Δ 16<sup>2</sup>

13° Δ

Slope D=15°

V. Angle=15°27' Δ

14<sup>46</sup>

12° Δ

Slope D=13°

V. Angle=29°07' Δ

11<sup>36</sup>

13° Δ

154.44

Slope D=11°

V. Angle=36°50' Δ

8<sup>80</sup>

14° Δ

883+70

Culvert 15" C.M.P.

Δ 9<sup>2</sup>

13° Δ

288.9

119.3

894+10.96 B.C.

S22°01'W

May 4

S22°02' S21°05'W

893+91.69 E.C

E = 2.6 ✓  
T = 2436  
R = 114.59  
D = 50°  
L = 48.0

Slope Dist = 10°

V. Ang = 32°05' Δ 8.97

15° Δ

Δ  
893+68 24°00' R

893+43.64 B.C

S1°19'E

S1°58'E S2°55'E

Slope Dist = 12°

V. Ang = 26°15' Δ 10.76

14° Δ

892+47.53 E.C

E = 1.5 ✓  
T = 25.76  
R = 220.37  
D = 26°  
L = 51.28

Slope Dist = 12°

V. Angle = 48°25' Δ 8.02

Δ 13° Δ  
Shingle nail

Δ  
892+22° 13°20' L

891+96.22 B.C

S11°21'W

S11°22'W

Δ 20°

10° Δ

891+84 ————— Culvert 15" C.M.P.

890+98 ————— Culvert 12" Concrete

890+44.87 E.C.

151.3 ✓  
151.37

Slope Dist = 12°

V. Angle = 34°18' Δ 9.91

13° Δ

May 3

890+05° 27°40' L

E = 5.0 ✓  
T = 41.50  
R = 168.52  
D = 34°  
L = 81.37

Slope Dist = 17°

V. Angle = 39°15' Δ 13.16

12° Δ

889+63.50 B.C.

S39°01'W

S39°02'W S38°15'W

105.3 ✓  
105.26

888+58.24 E.C.

$S18^{\circ}59'W$   
 ~~$S19^{\circ}00'W$~~   
 $\Delta$  899+59<sup>2</sup> 2°30' L  
 $S21^{\circ}29'W$   
 $S21^{\circ}30'W$   $S20^{\circ}30'W$  153.0  
 $\Delta$  898+06<sup>2</sup> 3°00' R  
 $S18^{\circ}29'W$   
 ~~$S18^{\circ}30'W$~~  86.0  
 $\Delta$  897+20<sup>2</sup> 3°20' R  
 $S15^{\circ}09'W$   
 ~~$S15^{\circ}10'W$~~  44.8  
 $\Delta$  896+75<sup>2</sup> E.C.  
 $\Delta$  896+40<sup>2</sup> 16°40' L  
 $E=2.5$   
 $T=34.97$   
 $R=238.73$   
 $D=24^{\circ}$   
 $L=69.44$   
 $\Delta$  896+05<sup>2</sup> B.C.  $S31^{\circ}49'W$   
 $S31^{\circ}50'W$   $S30^{\circ}35'W$  96.80  
 $\Delta$  895+09<sup>2</sup> 2°48' R  
 $S29^{\circ}01'W$   
 ~~$S29^{\circ}02'W$~~  28.0  
 $\Delta$  894+80<sup>2</sup> E.C.  
 $\Delta$  894+46<sup>2</sup> 7°00' R  
 $E=1.1$   
 $T=35.04$   
 $R=572.96$   
 $D=10^{\circ}$   
 $L=70.00$   
 $\Delta$  894+10<sup>2</sup> B.C.  $S22^{\circ}01'W$   
 ~~$S22^{\circ}02'W$~~  19.4  
 $\Delta$  893+91<sup>2</sup> E.C.

900+20  $\equiv$  Culvert 18" C.M.P.  
 Slope Dist = 12<sup>2</sup>  
 Angle = 9°18'  $\Delta$  11.84  
 21°  $\Delta$   
 $\Delta$   $\Delta$  9° 13°  $\Delta$   
 P.P. OK.  
 897+33  $\equiv$  Culvert 12" Concrete  
 $\Delta$  12° 10°  $\Delta$   
 $\Delta$  10° 14°  $\Delta$   
 $\Delta$  895+63  $\equiv$  Culvert 15" C.M.P.  
 Slope Dist = 9<sup>2</sup>  
 Angle = 29°4'  $\Delta$  7.85  
 15°  $\Delta$   
 $\Delta$  12° 12°  $\Delta$   
 $\Delta$  12° 12°  $\Delta$

May 5,

Converse  
Leach  
Duermitt  
Webb  
Clarent.

~~S74°56'W~~  
S74°55'W

903+02<sup>52</sup> E.C.

May 5,

902+82<sup>48</sup> 72°20'R

E=9.0  
T=27.55  
R=37.69  
D=152°  
L=47.59

902+54<sup>93</sup> B.C. S 2°35'W

~~S2°36'W~~

61.73

901+93<sup>22</sup> F.C.

E=4.5  
T=33.90  
R=124.56  
D=46°  
L=66.20

901+60<sup>2</sup> 30°27'L

901+27<sup>2</sup> B.C. S83°02'W

~~S33°03'W~~

38.05

900+88<sup>25</sup> E.C.

E=2.2  
T=35.30  
R=286.48  
D=20°  
L=70.25

900+54<sup>2</sup> 1403'R

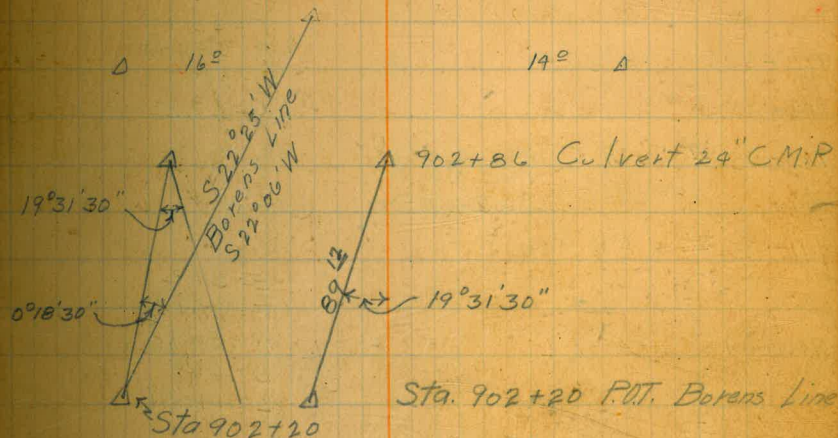
900+18<sup>70</sup> B.C. S18°59'W

~~S19°00'W~~

59.70

21

27  
88.95  
3 8.05



Δ 11° 15° Δ

Δ 8° 22° Δ

Slope Dist = 92  
VL = 21°41'Δ 8.36 -14° Δ

Δ 12° 18°

900+58 Culvert 12" Concrete

Δ 13° 11° Δ



See Page #33. This Book.

May 6, 1926

S18°54'E S19°35'E

913+60<sup>51</sup> E.C

E=2.0  
T=33.91  
R=286.48  
D=20°  
L=67.5

913+27° 13°30'R

~~Abandoned~~

912+93<sup>57</sup> B.C

S32°25'E

179.7

S22°24'E

911+13<sup>43</sup> E.C

E=39.2  
T=91.48  
R=86.48  
D=66°  
L=140.91

910+64° 93°00'L

909+72<sup>52</sup> B.C

S60°35'W

33.6

S60°36'W

909+38<sup>94</sup> E.C

E=2.1  
T=30.32  
R=220.37  
D=26°  
L=60.26

909+09° 15°46'L

908+78<sup>68</sup> B.C

S76°15'W

236.7

S71°16'W

906+42° 4°00'L

S80°15'W

100.0

S80°16'W

905+42° 20°20'R

S79°55'W

76.0

S79°56'W

904+66° 5°00'R

S74°55'W

163.5

S74°56'W

903+02<sup>52</sup>

20°

14°

11°

19°

912+83

Culvert 12" Concrete

12°

18°

County Sta. #45

P.I. 101+45<sup>50</sup>

58°55'15"

11°

21°

8°

13°

10°

12°

907+59

Culvert 12" Concrete

53°00'

Slope Dist=15°

V. Angle=1422'

14.53

15°

17°

8°

12°

Cool and Cloudy

Converse  
Leach  
Duermitt  
Webb  
Clarent

May 6

S17°05'W Mag  
S17°06'W S16°05'W

917+69<sup>73</sup> E.C

917+52° 36°00'R

917+33<sup>00</sup> B.C

913+60<sup>59</sup>

S18°55'E  
S18°54'E

E=3.0  
T=19.00  
R=58.41  
D=98°  
L=36.73

372.4

922+22

Δ 10°

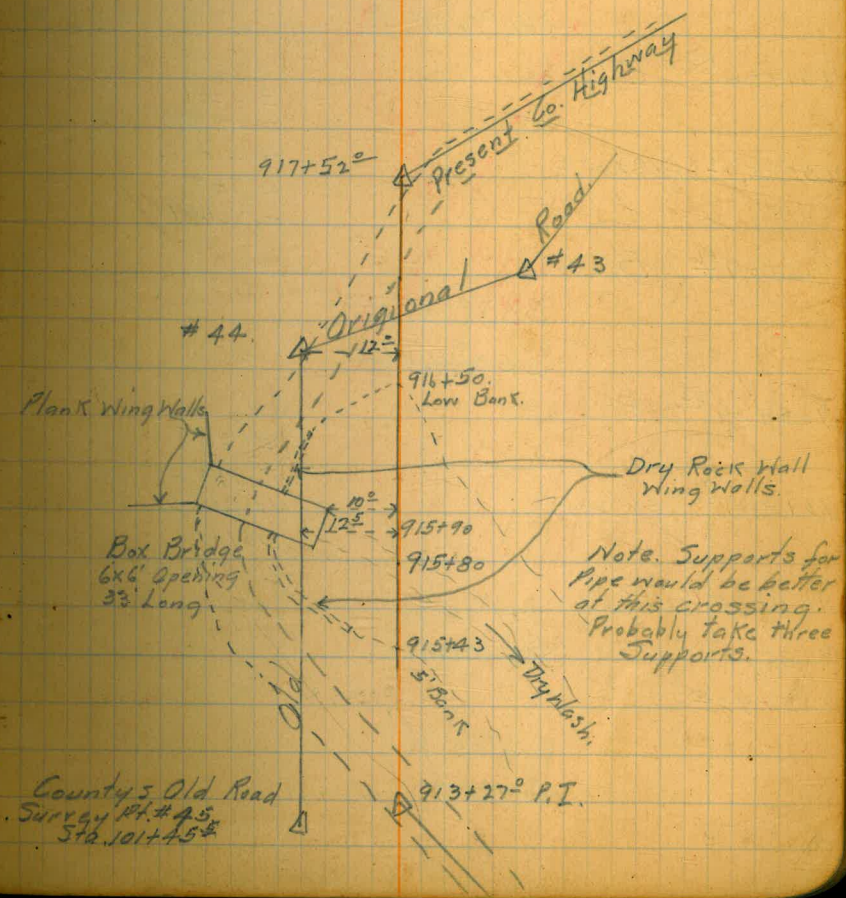
Culvert 12" Concrete

25° Δ

Δ 10°

27° Δ

*Abandoned  
See Page #33.  
This Book.*



913+60<sup>52</sup>

N65°49'W  
N65°48'W

936+96<sup>86</sup> E.C.

15.3  
E=16.0  
T=50.47  
R=204.63  
D=28°  
L=153.33

Max 7,

936+24<sup>2</sup> 42°56' R

935+43<sup>53</sup> B.C.

P.O.T.  
935+32<sup>2</sup>

~~S71°15'W~~  
~~S71°16'W~~

931+06<sup>13</sup> E.C.

E=3.9  
T=49.94  
R=318.31  
D=18°  
L=99.07

930+57<sup>2</sup> 17°50' R

930+07<sup>06</sup> B.C.

~~S53°25'W~~  
~~S53°26'W~~

928+09<sup>23</sup> E.C.

E=21.5  
T=134.29  
R=409.26  
D=14°  
L=259.52

927+64<sup>2</sup> 36°20' R

926+29<sup>21</sup> B.C.

~~S17°05'W~~  
~~S17°06'W~~

P.O.T.  
925+92<sup>2</sup>

~~S17°05'W~~  
~~S17°06'W~~ S16°05'W

Δ 13°

25°

222°56'  
41891.43'30"

Δ 11°

28°

11.5

934+28

Culvert 12" Conc.

425.9

Pt on rock So. end Culvert

Δ 23

Δ 26°

931+06

Culvert 12" Con.

Δ 14°

27°

117.9

Δ 10°

24°

Δ 15°

23°

37.7

822.3

May 7, 1926

Converse  
Leach  
Duermitt  
Webb  
Clarett

Cold and Cloudy

25

S48° 02' W

S48° 03' W

945+39<sup>20</sup> 2° 44' L ← Note: This angle read 2° 44' 30"

S50° 46' W

S50° 47' W

149.1

943+90<sup>82</sup> E.C.

E=8.4

T=98.45

R=572.96

D=10°

L=195.0

942+94<sup>27</sup> 19° 30' L

941+95<sup>82</sup> B.C. S71° 16' W

S70° 17' W

150.2

940+45<sup>63</sup> E.C.

E=9.3

T=73.42

R=286.48

D=20°

L=143.75

939+75<sup>30</sup> 28° 45' L

939+01<sup>88</sup> B.C.

N80° 59' W

N80° 58' W

19.3

938+82<sup>56</sup> E.C.

E=5.1

T=76.28

R=572.96

D=10°

L=151.67

938+07<sup>17</sup> 15° 10' L

937+30<sup>89</sup> B.C. N65° 49' W

N65° 48' W

34.03

936+96<sup>86</sup>

#37 Δ 25° Δ ← 27° Δ

P.I. 66+00<sup>70</sup> Old Rd. Survey

Δ 20° Δ 18° Δ

#38 Δ  
P.I. 68+48<sup>20</sup> Old Rd. Survey.

Δ 26° Δ 25° Δ

Δ 25° Δ 24° Δ

940+14 Center of 10' Dry Wash  
Syphon under this wash.  
High water Mark at 940+02  
and 940+27.

RR  
Δ 30° Δ 20° Δ

RR  
Δ 25° Δ  
39.81 - RR  
Slope Dist=40°  
V. Angle=5° 53'

73+39<sup>02</sup> P.O.T. Rd. Survey=  
938+82<sup>56</sup> P.I. Pipe Line  
Survey.

Δ 19° Δ 25°  
RR Δ 936+24° Δ 76+04<sup>6</sup> P.I. #40 Old Rd.  
Survey.  
937+78 Clarett 12' Conc. 3 Ft.

S 81° 15' E

15° 10'

May 8.

~~S8°48'E~~

~~S8°47'E~~

965+32<sup>81</sup> E.C.

May 10, ✓

964+21<sup>70</sup> 47° 20' L

E=26.3 ✓  
T=125.56  
R=286.48  
D=20°  
L=236.67

962+96<sup>14</sup> B.C. ~~S38°32'W~~

~~S38°33'W~~

517.2

957+78<sup>23</sup> 5°00' R

~~S33°32'W~~

380.6

953+98<sup>33</sup> E.C.

~~S33°35'W~~

E=4.6 ✓  
T=72.89  
R=572.96  
D=10°  
L=145.00

953+26<sup>22</sup> 14°30' L

Note: This angle read 14°30'30"

952+53<sup>33</sup> B.C.

~~S48°02'W~~

560.2

May 8,

~~S48°03'W~~

P.O.T. ✓  
946+93<sup>08</sup>

~~S48°02'W~~

66.0

P.O.T. ✓  
946+27<sup>06</sup>

~~S48°03'W~~

~~S48°02'W~~

87.2

945+39<sup>90</sup>

~~S48°03'W~~

Leach  
Duermit  
Webb  
Clarent  
Osborne

Note. From Sta. 955 to Sta. 972 Scattered Dabbaropping of rock.

26

Δ 21° 25°

#34 ✓  
P.I. 47+18<sup>40</sup> Old Rd Survey

Δ 26° 27° Δ

961+90 Dry Wash (Pipe under this Wash)

Δ 21° 19° Δ

#35 ✓  
P.I. 53+61<sup>20</sup> Old Rd Survey

955+40 Center of wash (dry)  
Support if necessary.  
Sandstone ledge exposed.

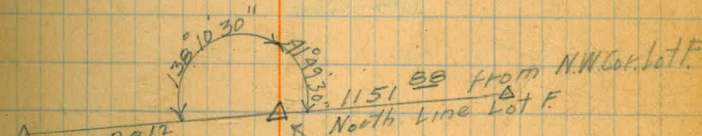
#36 ✓  
P.I. 58+14<sup>20</sup> Old Rd Survey

Δ 22° 17° Δ

Δ 28° 23° Δ

Pipe under this wash with very little more trenching.

949+52 Center of wash dry



P.O.T. 64+47<sup>06</sup> Old Rd Survey

Δ 32° 30° Δ

May 11

Converse  
Leach  
Duermitt  
Webb  
Clarett

Clear and Warm

533°11'W

~~533°14'W~~

987+17<sup>05</sup> 5°00' R

981+17<sup>05</sup> 5°00' R

980+35<sup>25</sup> 48°+36' 5

528°11'W

~~528°14'W~~ 527°15'W

980+35<sup>25</sup> E.C.

979+13<sup>28</sup> 24°41' R

977+88<sup>42</sup> B.C.

May 11  
P.O.T.

974+66<sup>91</sup>

53°30'W

~~53°33'W~~

968+15<sup>63</sup> E.C.

967+85<sup>00</sup> 12°18' R

Note: This angle  
reads 12°17'38"

967+54<sup>13</sup> B.C.

58°48'E

~~58°47'E~~

965+32<sup>81</sup>

E=13.6  
T=125.36  
R=572.96  
D=10°  
L=246.83

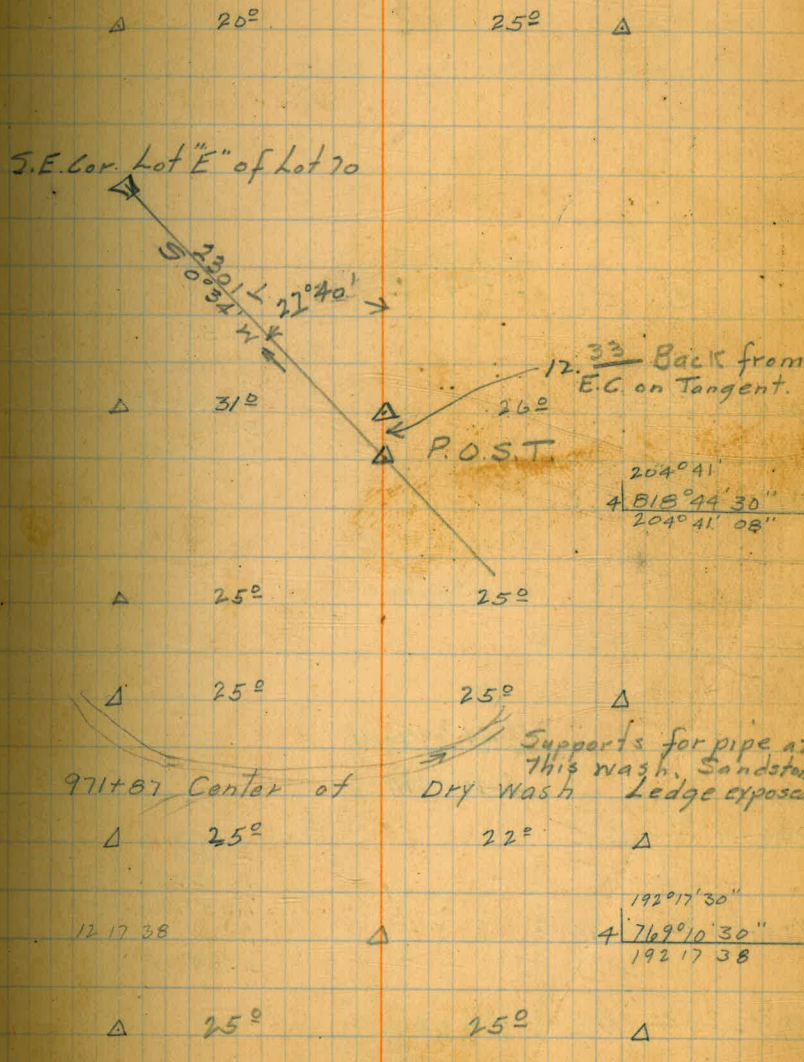
681.8

321.5

651.3

E=1.7  
T=30.87  
R=286.48  
D=20°  
L=61.50

221.3



Finished 11:00 A.M. May 12.

Leach  
Duermitt  
Webb  
Clovert.

Note - See next Page for Diagram  
of Intersection and Equasion.

= S 8°03' E =  
~~S 7°42' E~~  
S 7°45' E

1001+87<sup>92</sup> E.C.

E=35.1 ✓  
T=146.07  
R=286.48  
D=20°  
L=270.17

1000+63<sup>87</sup> 54°02' L

999+17<sup>82</sup> B.C.

S 46°17' W

~~S 46°20' W~~

998+46<sup>32</sup> 4°40' R

71.5 ✓

Slope Dist = 25°  
V. Ang. = 9°10' Δ

997+97

Wash (dry)

Slope D = 26°  
Δ V. Ang. = 22°18'

S 41°37' W

~~S 41°40' W~~

994+41<sup>39</sup> E.C.

404.9 ✓

Slope D = 25°  
= 7°39' Δ

24<sup>28</sup>

21<sup>58</sup>

Slope D = 25°  
Δ V = 30°19'

993+99<sup>32</sup> B°26' R

E=1.6 ✓  
T=42.24  
R=572.96  
D=10°  
L=84.33

993+57<sup>26</sup> B.C.

S 33°11' W

~~S 33°14' W~~

987+17<sup>25</sup> P.I.

640.1 ✓

Slope D = 25°  
V = 12°23' Δ

24<sup>45</sup>

991+70

Dry wash

94 Slope D = 25°  
22<sup>94</sup> V Δ = 23°25'

1007+36.3 Δ P.I.

29

Contd. in Book #6.  
Page #9.

McCartys Line Ahead. 998+05.02 ✓  
Leachs Line Back 1001+87.92  
Δ E.C.

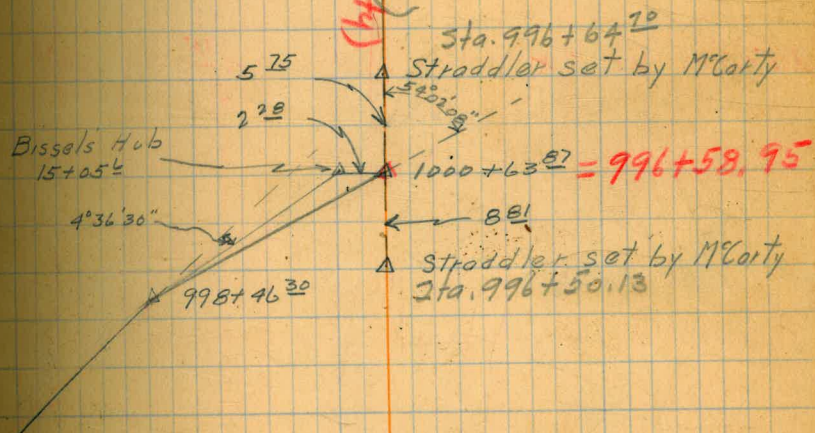
146.07

∠ 54°02'

McCartys Line Ahead. 996+58.95  
Leach's Line Back. 1000+63.87 Δ P.I.

B.C. Δ

Δ P.I. 998+46.30





Relocation of Line from  
Sta. 801+02.1 P.O.T. to Equation  
= Sta. 811+67.75 E.C. Back =  
= Sta. 810+07.49 E.C. Ahead =  
Keeping within County Highway  
Right-of-Way.

G.W. Converse.

May 26. 1926.

810+07<sup>99</sup> E.C. =  
811+67<sup>75</sup> E.C. =

N.35°47'W 35.38

P.I.  
810+98<sup>82</sup> 28°09' L.

E=8.9  
T=71.82  
R=286.48  
D=20°  
L=140.75

810+27<sup>00</sup> B.C.

N.7°38'W 391.6

806+35<sup>40</sup> E.C.

P.I.  
805+80<sup>2</sup> 73°07' R.

E=25.06  
T=75.87  
R=102.31  
D=56°  
L=130.57

805+04<sup>83</sup> B.C.

N.80°45'W 402.73

801+02<sup>1</sup> P.O.T.

N.80°45'W 1167.3

789+34<sup>8</sup> P.I.

71.82  
35.38  
107.20

31

Δ 33° Δ 31° Δ



56  
25) 1406  
125  
156

May 26, 1926,  
Converse Inst.  
Duermitt-Hd. Ch.  
Anderson, R. Ch.  
Clavert - Sta 105

Δ 40° Δ 28° Δ

805+58 4<sup>2</sup> 30" Cottonwood Tree

805+36

18" Concrete Pipe

1167.3  
402.7  
1570.0

175.83

539.29

164.59

68.63  
 35.38  
 104.01

81  
 81

81

81

N. 86° 59' W

80 811+70<sup>87</sup> E.C.

80 P.I.  
 811+11<sup>50</sup> 51° 12' L.

E=15.6  
 T=68.63  
 R=143.24  
 D=40°  
 L=128.00

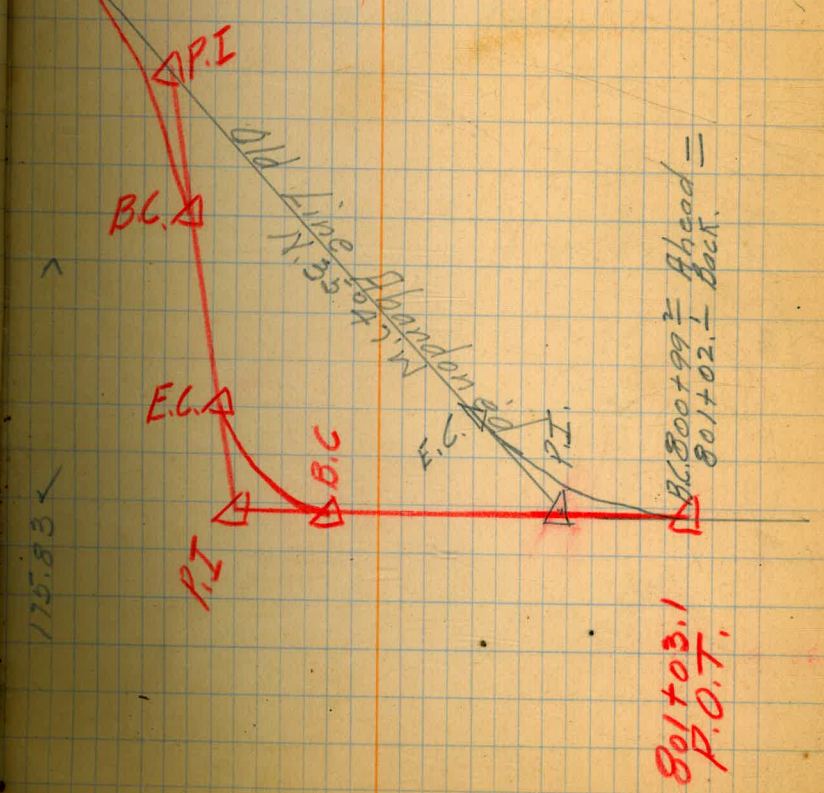
80 810+42<sup>87</sup> B.C.

N. 35° 47' W 35.38

810+07<sup>49</sup> E.C. =  
 811+67<sup>75</sup> E.C. =

N. 35°

810+07<sup>49</sup> P.O.T. Old Line.  
 811+67<sup>75</sup> E.C. New Line.



175.83

801+03.1  
 P.O.T.

Relocation of Line from  
Sta. 911+13<sup>43</sup> to Equation  
- Sta. 918+86<sup>63</sup> E.C. Back. -  
- Sta. 918+84<sup>29</sup> Ahead -  
Keeping within Present County  
Highway Right-of-Way.  
G.W. Converse.  
May. 26, 1926.

Contd. on Page #24.

925+92° P.O.T.

5.17°05'W. 707.71

918+84<sup>29</sup> E.C.  
918+86<sup>63</sup> E.C.

P.I.  
916+55.71 49°30'R

E=57.95  
T=264.14  
R=572.96  
D=10°  
L=495.0

913+91<sup>63</sup> B.C.

5.32°25'E 64.63

913+27° P.O.T.

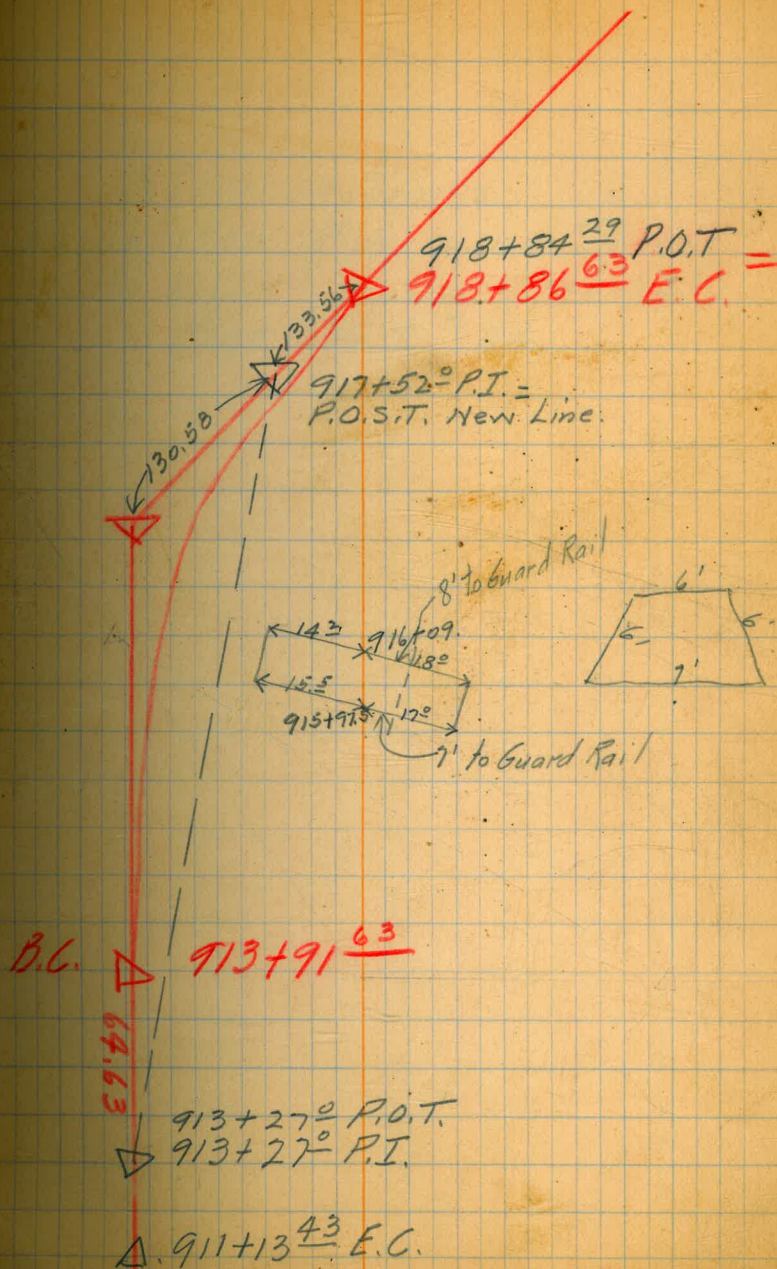
5.32°25'E 213.57

911+13<sup>43</sup> E.C.

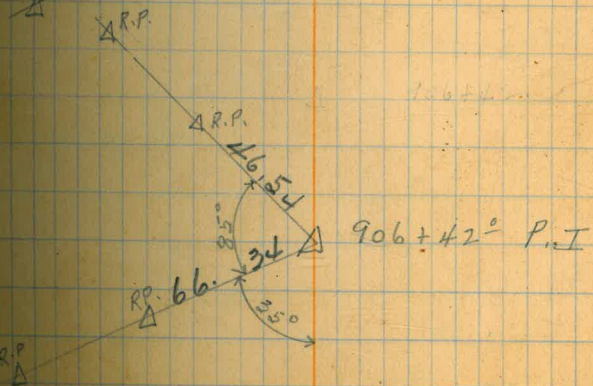
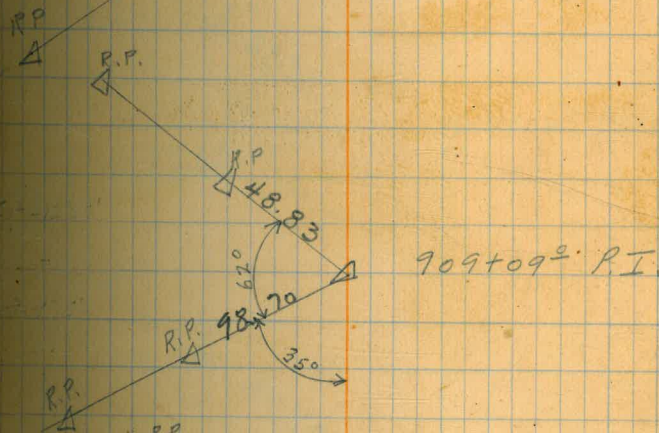
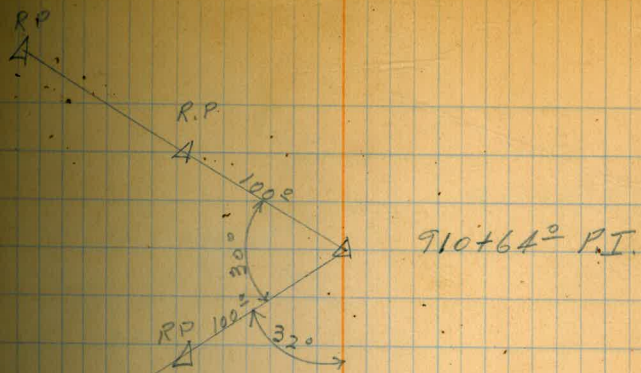
T=91.48

910+64° P.I.

Contd. from Page #22.



Reference Points.  
El Capitan Pipe Line Survey.  
Sta. 811+11<sup>±</sup> to Sta. 939+75<sup>±</sup>  
Page #35 to #54.



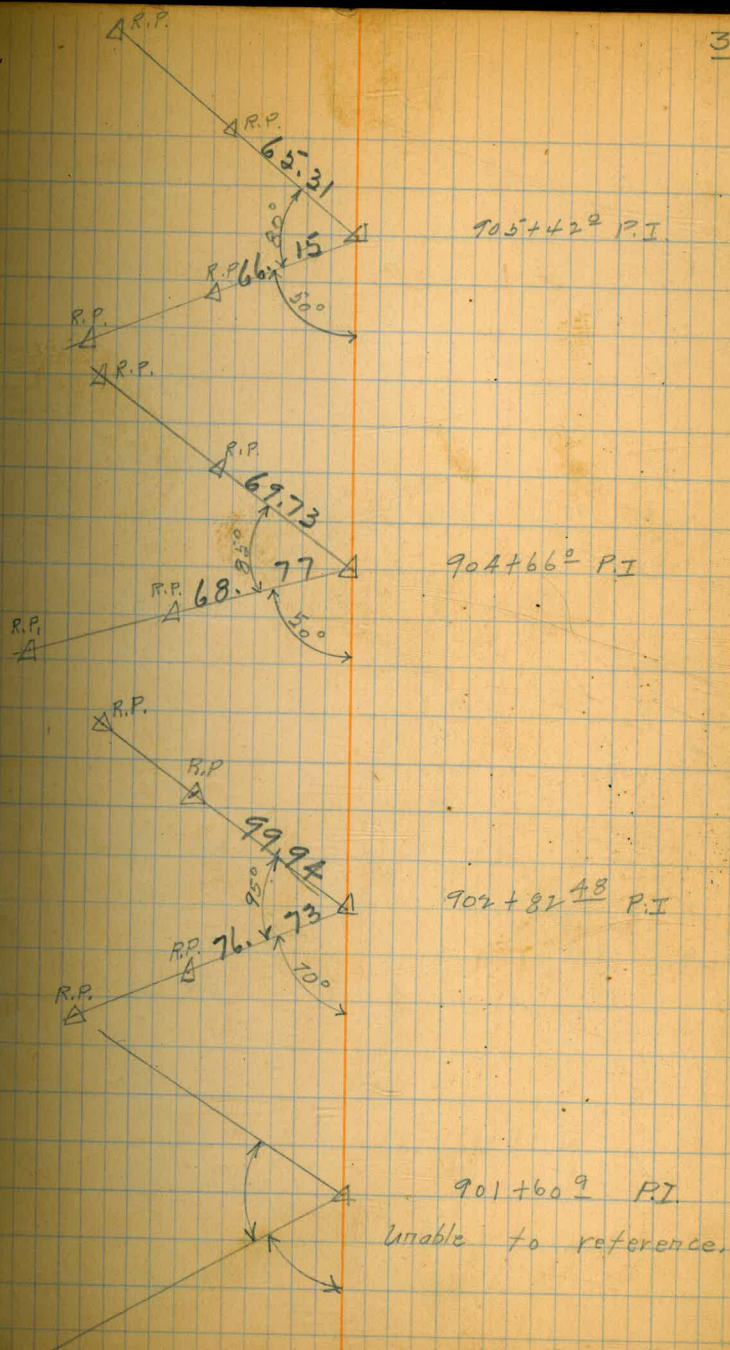
$\Delta 905+42 P.I.$

$$50^\circ - 12^\circ 25'$$

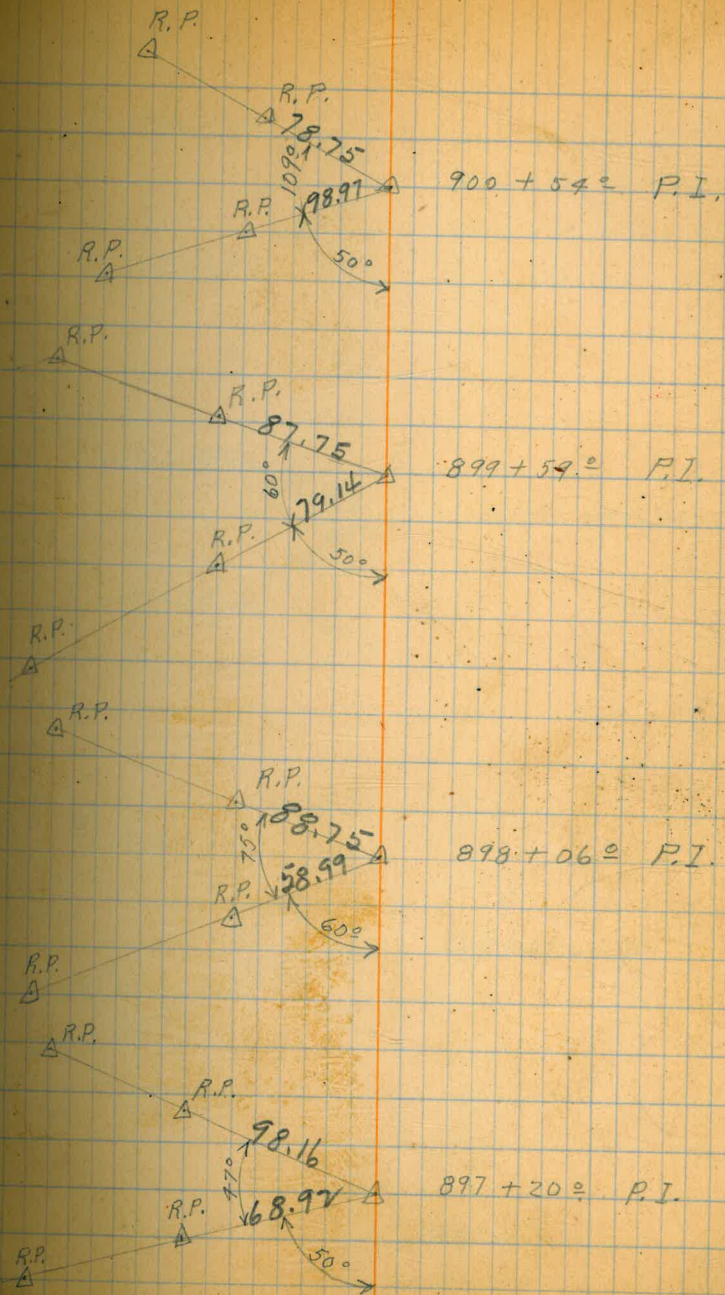
$$100^\circ - 9^\circ 15'$$

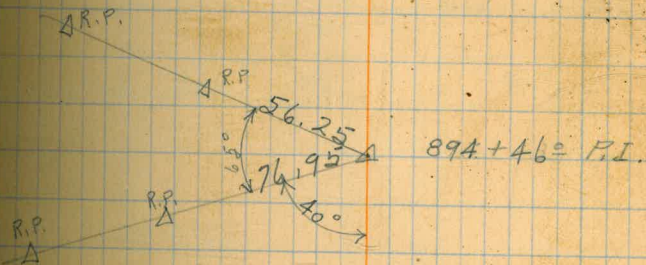
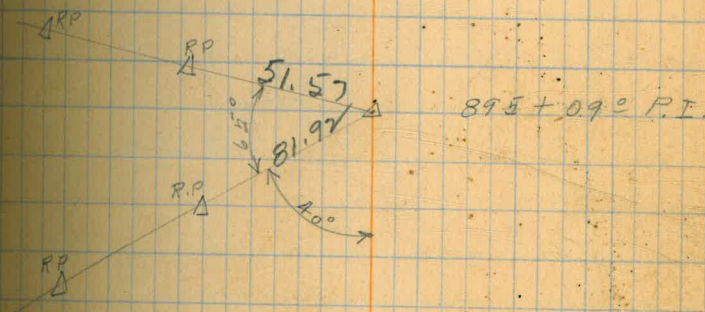
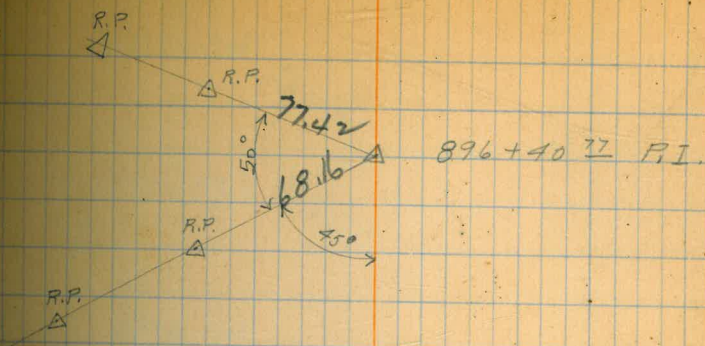
$$50^\circ - 21^\circ 26'$$

$$70^\circ - 18^\circ 36'$$

$70^{\circ} - 21^{\circ} 05'$  $70^{\circ} - 19^{\circ} 05'$  $75^{\circ} - 21^{\circ} 37'$  $70^{\circ} - 10^{\circ} 45'$  $100^{\circ} - 2^{\circ} 00'$  $80^{\circ} - 16^{\circ} 27'$ 



$80^{\circ} - 10^{\circ} 09'$  $100^{\circ} - 8^{\circ} 15'$  $90^{\circ} - 12^{\circ} 51'$  $80^{\circ} - 8^{\circ} 25'$  $90^{\circ} - 9^{\circ} 33'$  $60^{\circ} - 10^{\circ} 33'$  $100^{\circ} - 11^{\circ} 01'$  $70^{\circ} - 10^{\circ} 08'$ 

$80^{\circ} - 14^{\circ} 35'$ 
 $70^{\circ} - 13^{\circ} 10'$ 
 $55^{\circ} - 2^{\circ} 20'$ 
 $85^{\circ} - 15^{\circ} 28'$ 
 $60^{\circ} - 20^{\circ} 22'$ 
 $80^{\circ} - 15^{\circ} 53'$ 

 $\Delta 893 + 68^{\circ}$

110  
32  
78

129  
65  
74

60° - 19° 33'

65° - 22° 16'

30° - 27° 40'

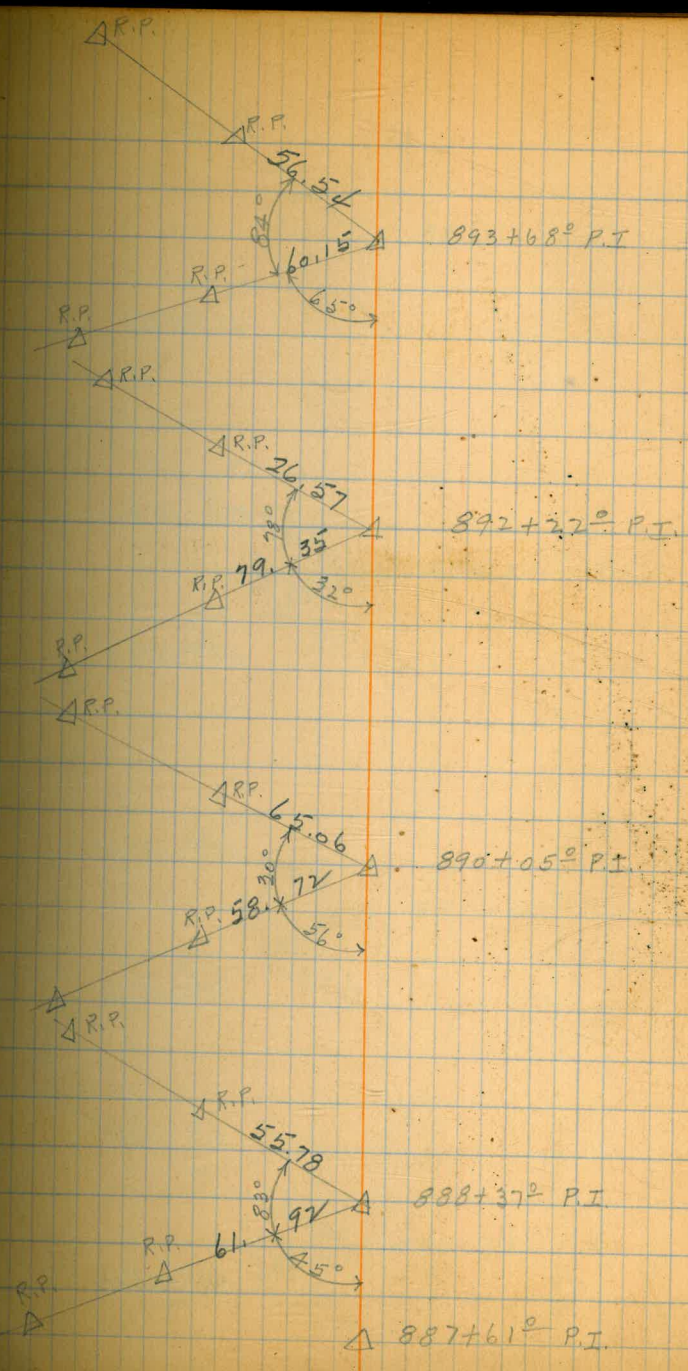
80° - 7° 20'

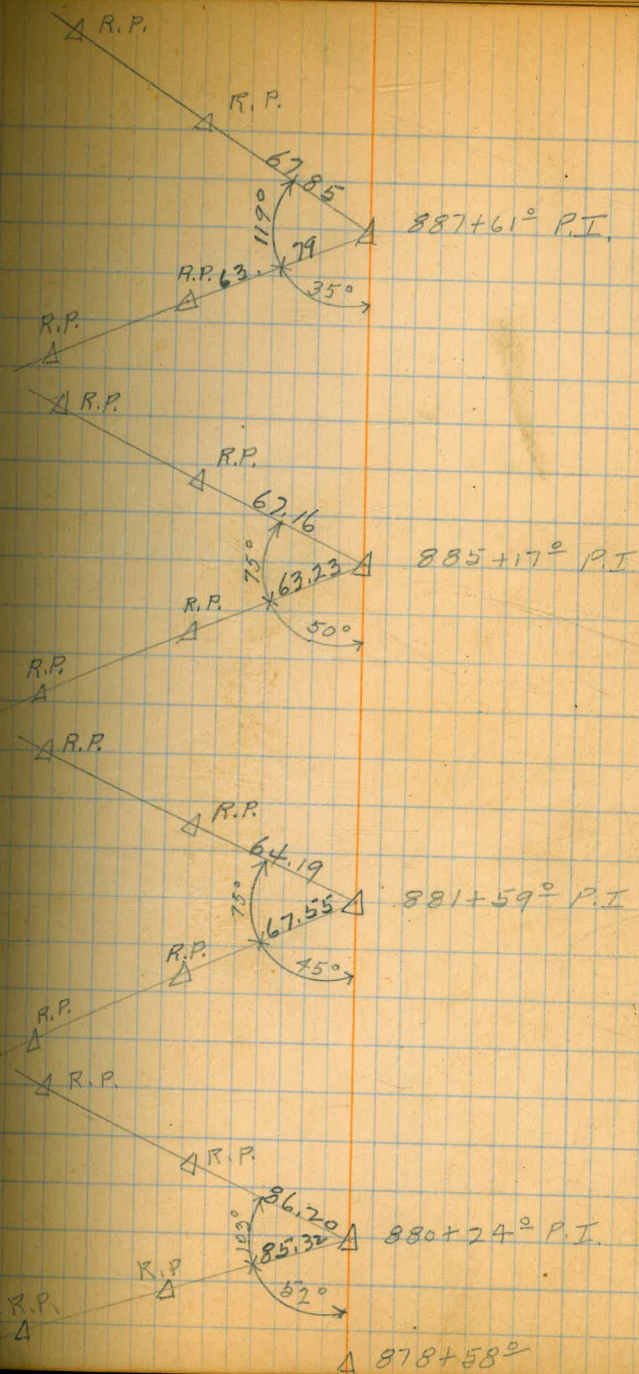
70° - 21° 39'

55° - 25° 23'

65° - 30° 53'

70° - 27° 48'



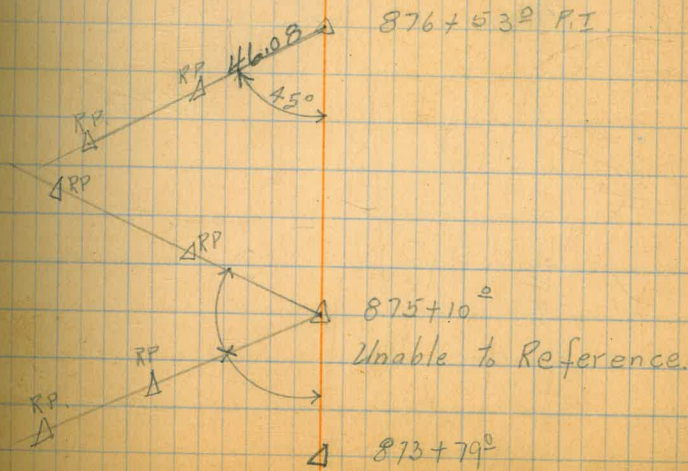
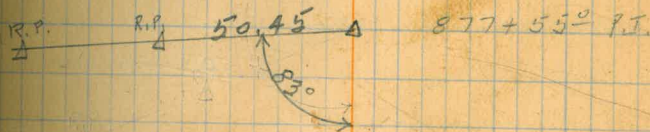
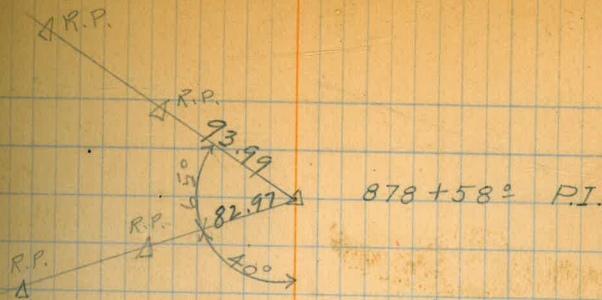
$75^{\circ}-25^{\circ}13'$ 
 $70^{\circ}-24^{\circ}19'$ 
 $70^{\circ}-16^{\circ}22'$ 
 $65^{\circ}-13^{\circ}23'$ 
 $68^{\circ}-19^{\circ}16'$ 
 $70^{\circ}-15^{\circ}12'$ 
 $90^{\circ}-16^{\circ}42'$ 
 $90^{\circ}-18^{\circ}33'$ 


100° - 19° 58'

87° - 17° 31'

55° - 23° 28'

50° - 22° 51'



104  
37  
67

141  
62.57  
66

100° - 23° 58'

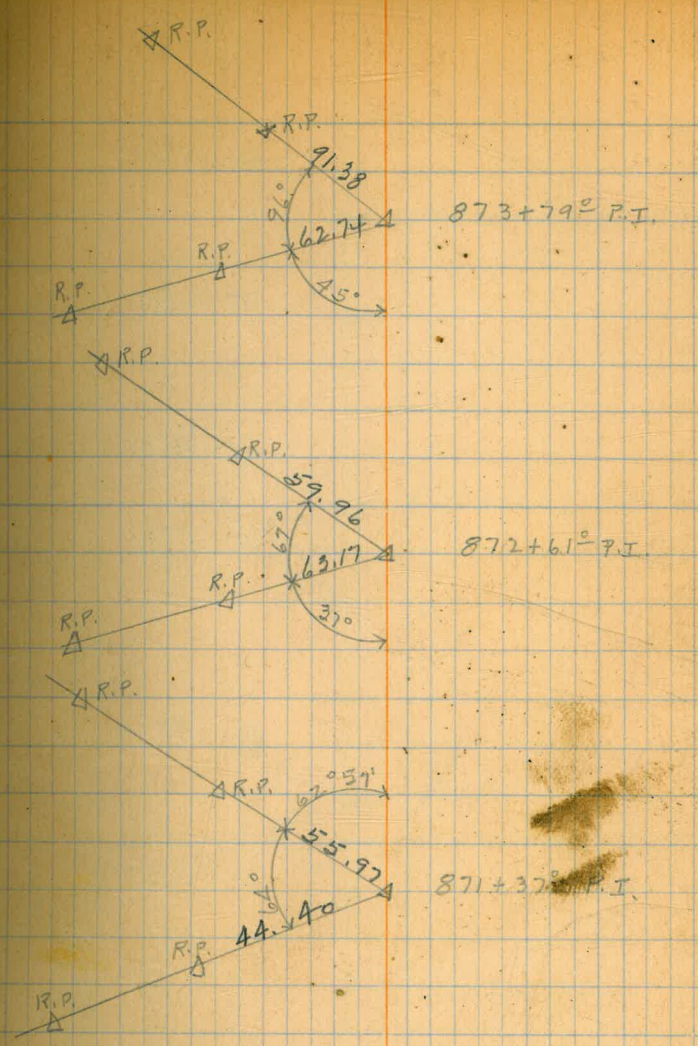
70° - 26° 20'

75° - 36° 55'

70° - 25° 31'

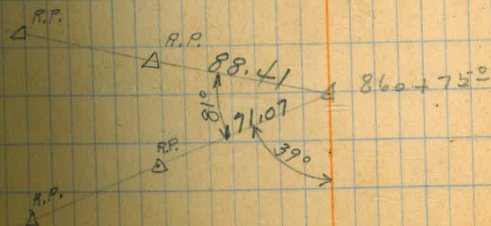
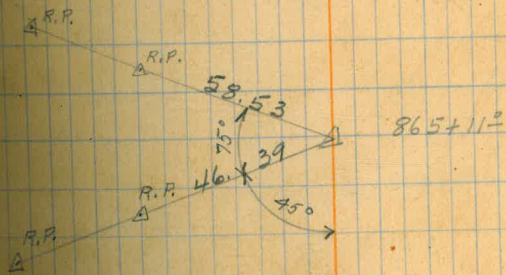
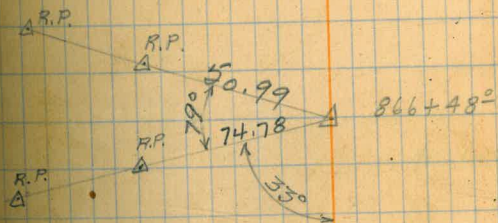
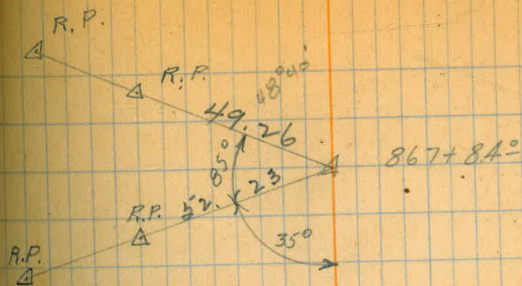
71° - 37° 58'

55° - 36° 10'



△ 870+54° P.I.  
 Unable to Reference.

△ 867+84°

$52^{\circ} 18' 40''$ 
 $54^{\circ} 14' 42''$ 
 $60^{\circ} 31' 48''$ 
 $80^{\circ} 20' 49''$ 
 $70^{\circ} 33' 16''$ 
 $82^{\circ} 26' 52''$ 
 $101^{\circ} 28' 55''$ 
 $80^{\circ} 27' 20''$ 

 $\Delta 859+45^{\circ}$

155  
33  
123

72°

101° - 21° 56'

81° - 23° 58'

95° - 22° 13'

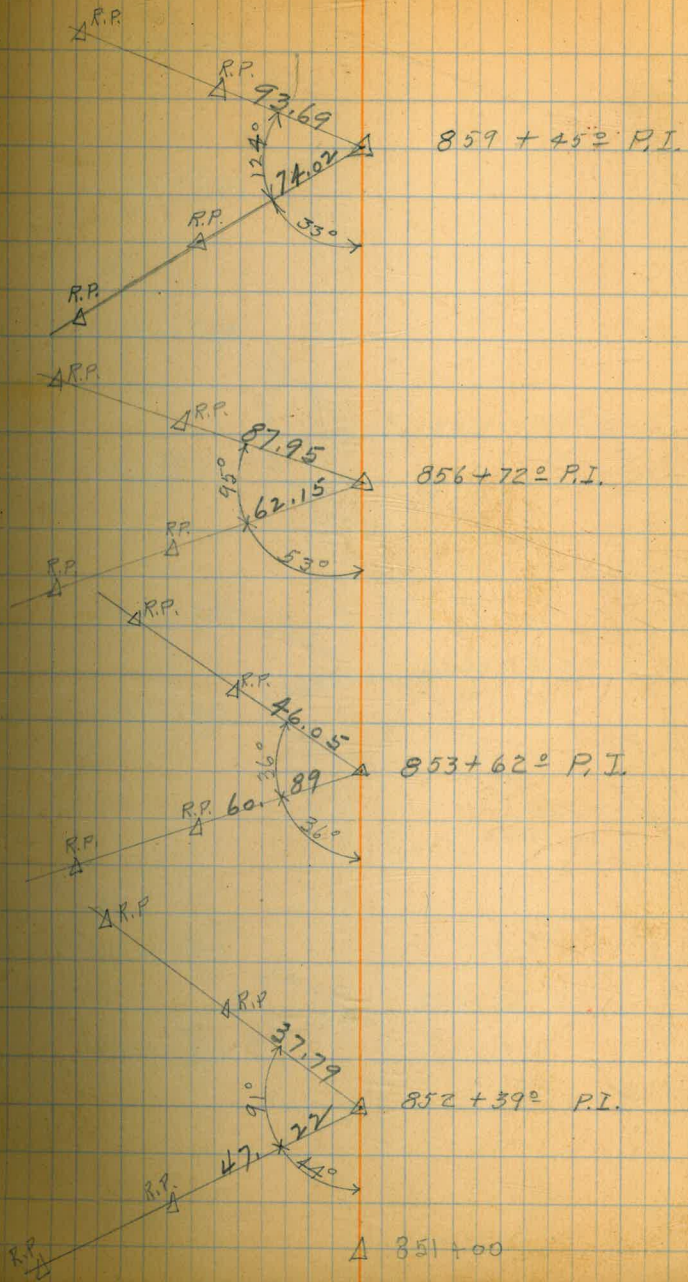
70° - 27° 24'

62° - 42° 02'

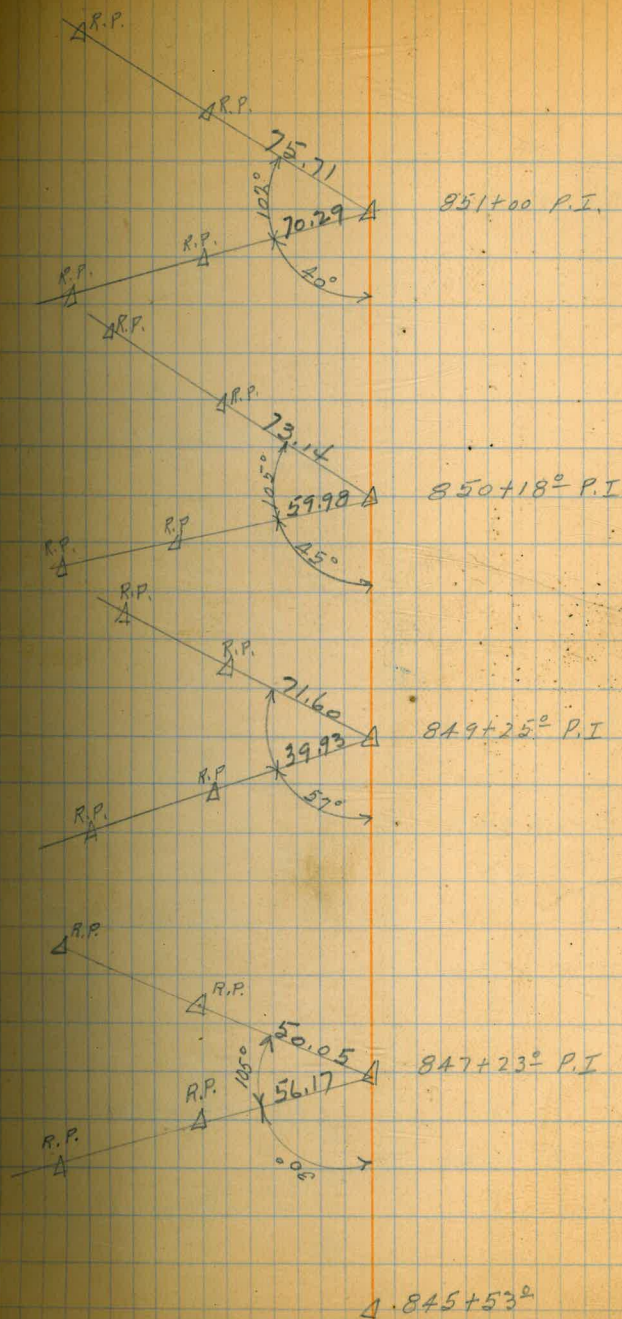
70° - 29° 43'

48° - 38° 04'

57° - 34° 04'





$91^{\circ} - 33^{\circ} 42'$ 
 $83^{\circ} - 32^{\circ} 03'$ 
 $86^{\circ} - 31^{\circ} 44'$ 
 $73^{\circ} - 34^{\circ} 45'$ 
 $82^{\circ} - 29^{\circ} 10'$ 
 $50^{\circ} - 37^{\circ} 01'$ 
 $57^{\circ} 28^{\circ} 35'$ 
 $61^{\circ} 22^{\circ} 57'$ 


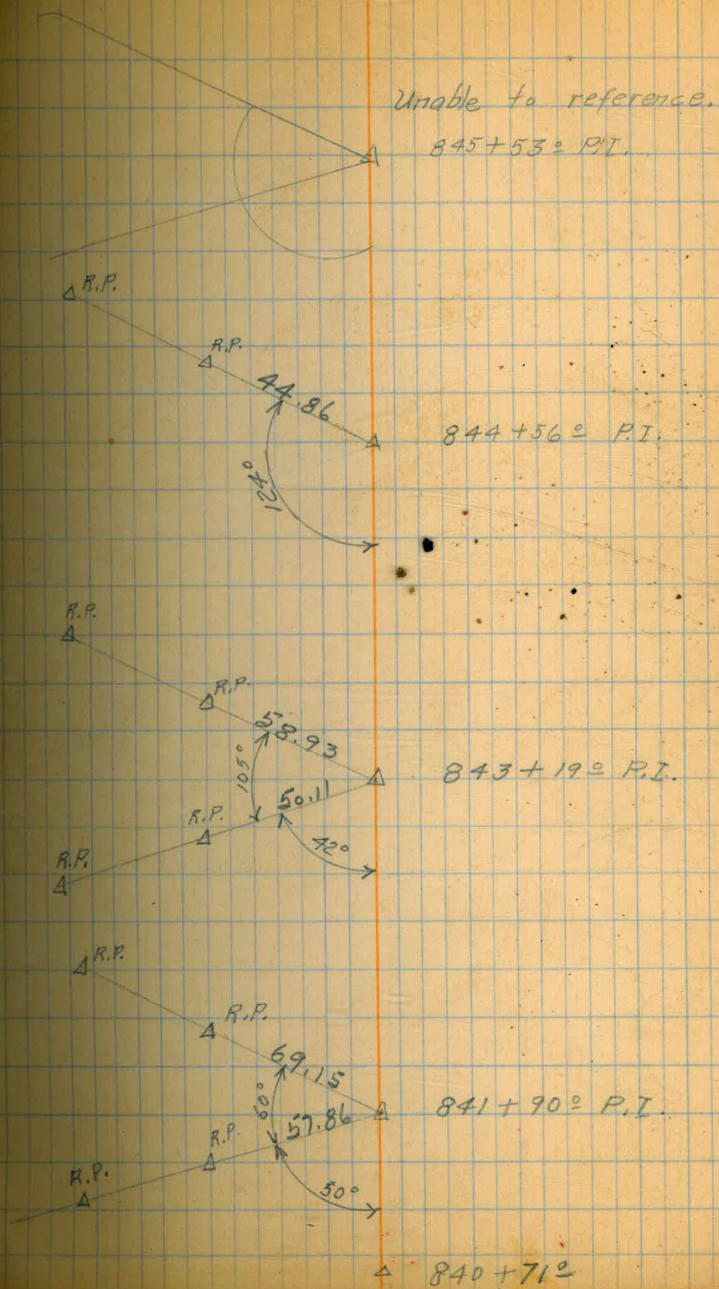
$53^{\circ} 32' 11''$

$65^{\circ} 24' 58''$

$57^{\circ} 28' 28''$

$75^{\circ} 22' 47''$

$65^{\circ} 27' 06''$



56° 23' 08"

58° 21' 32"

45° 19' 41"

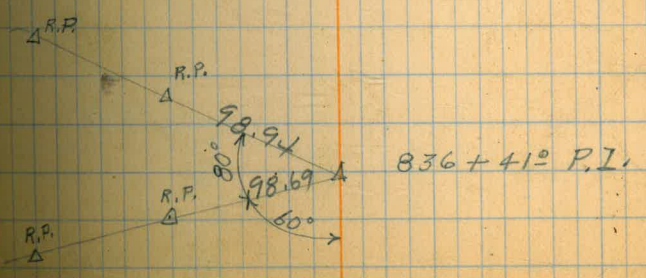
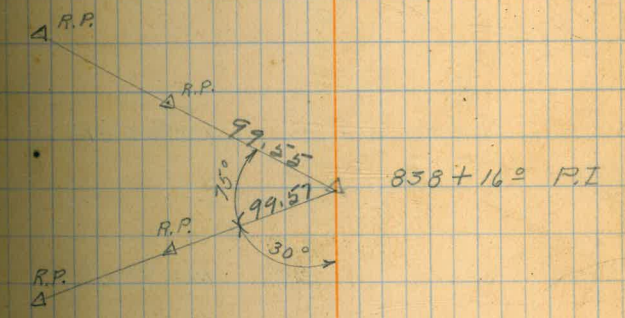
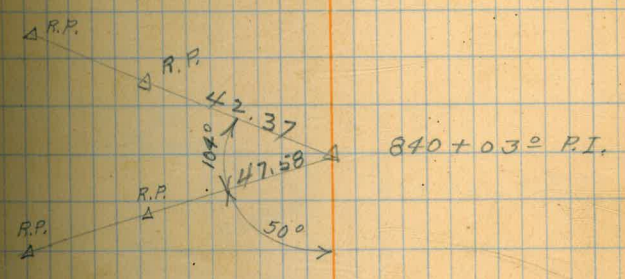
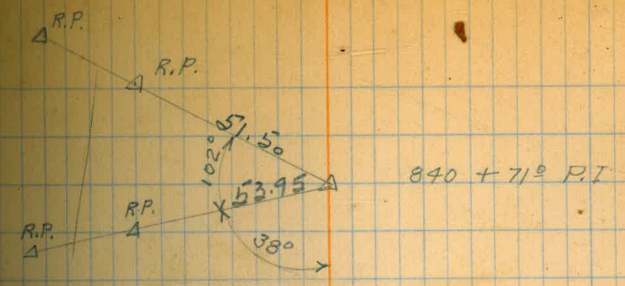
50° 17' 53"

100° 5' 27"

100° 5' 20"

100° 8' 20"

100° 9' 18"



835 + 12° P.I.

100° 6' 36"

100° 4' 32"

100° 6' 56"

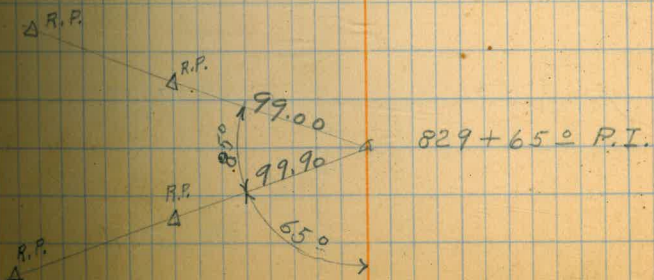
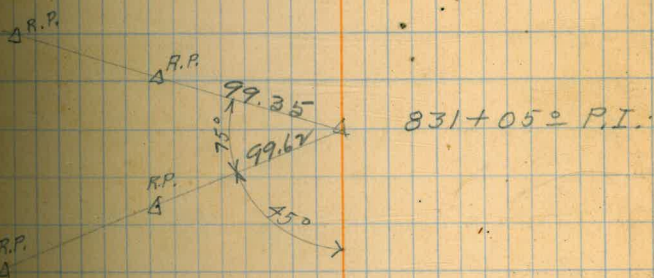
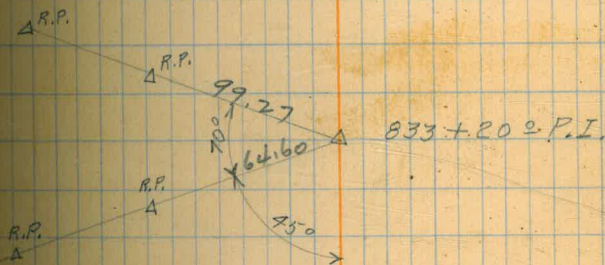
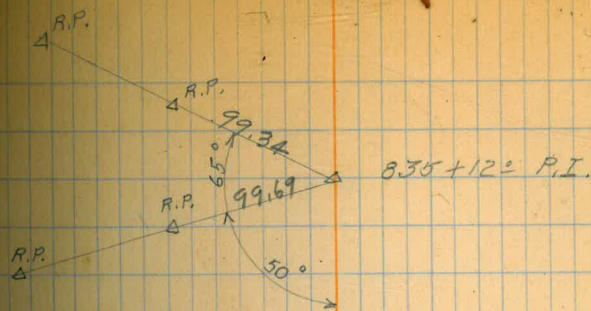
65° 6' 22"

100° 6' 31"

100° 5' 01"

100° 8' 07"

100° 2' 31"



826+81° P.I.

80° 7' 04"

60° 7' 37"

70° 9' 11"

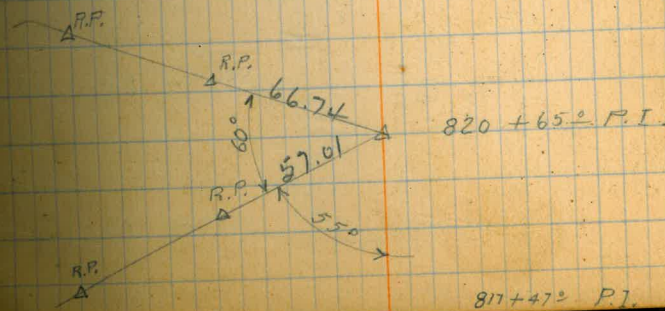
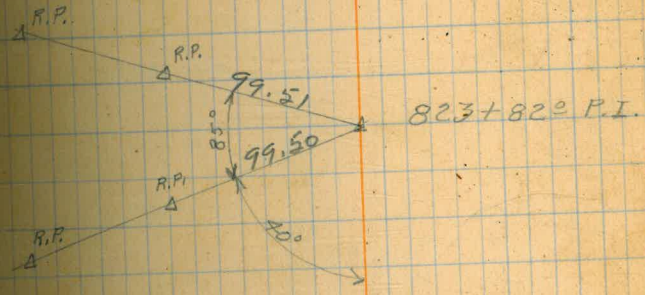
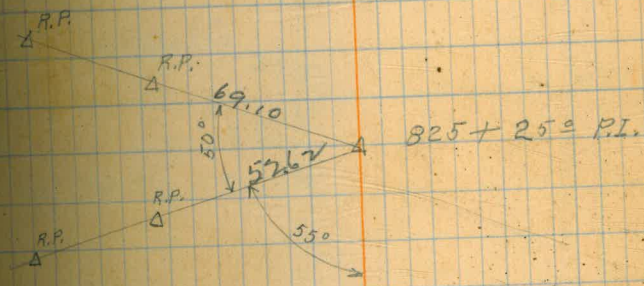
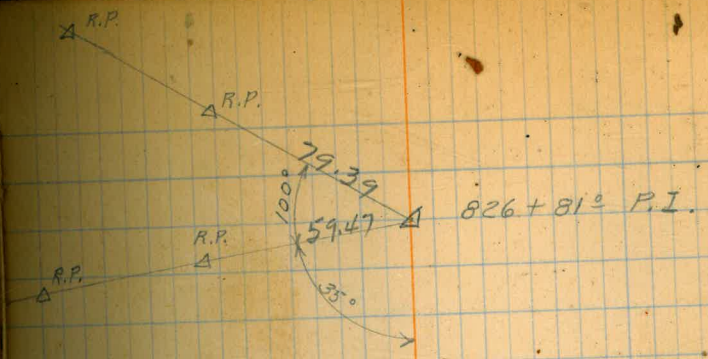
53° 6' 53"

100° 5' 39"

100° 5' 44"

70° 17' 33"

60° 18' 09"



817+47° P.I.

35° 34' 10"

50° 22' 23"

44° 28' 04"

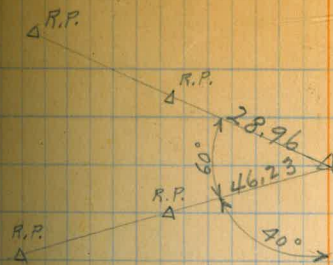
35° 33' 24"

53° 23' 06"

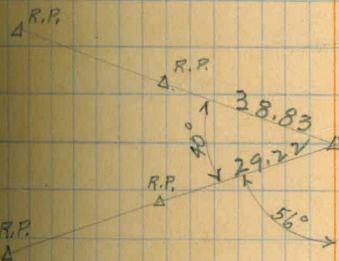
62° 15' 12"

57° 11' 08"

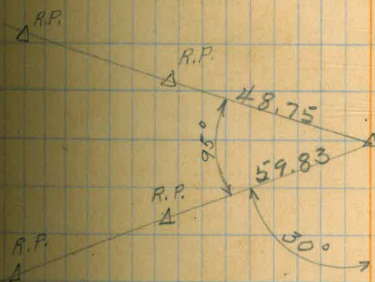
45° 8' 27"



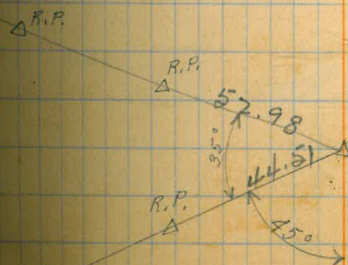
817 + 47° P.I.



816 + 00 P.I.



815 + 00 P.I.



811 + 11°



810 + 98.92 P.I.

100° - 3° 50'

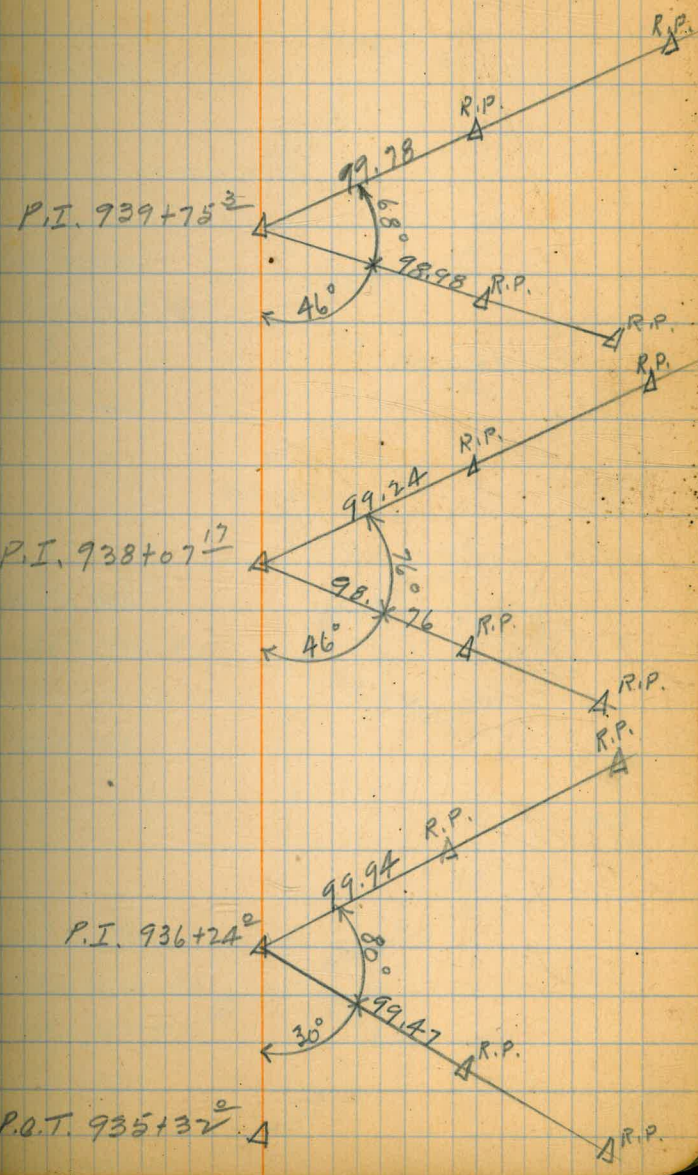
100° - 8° 11'

100° - 7° 04'

100° - 9° 02'

100° - 2° 04'

100° - 5° 53'



P.O.T. 935+32

100° 2' 14"

80° 6' 45"

100° 3' 37"

100° 5' 26"

100° 6' 38"

100° 2' 33"

87° 5' 52"

100° 1' 25"

930+57° P.I.

927+64° P.I.

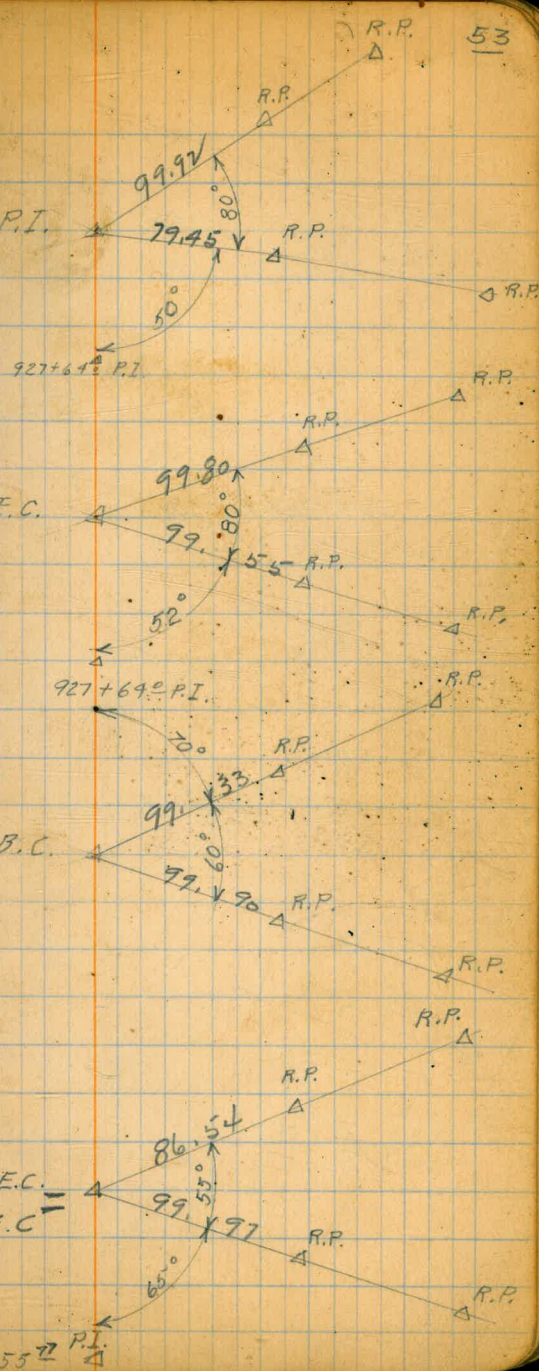
928+89° E.C.

927+64° P.I.

926+29° B.C.

918+86° E.C.  
= 918+84° E.C.

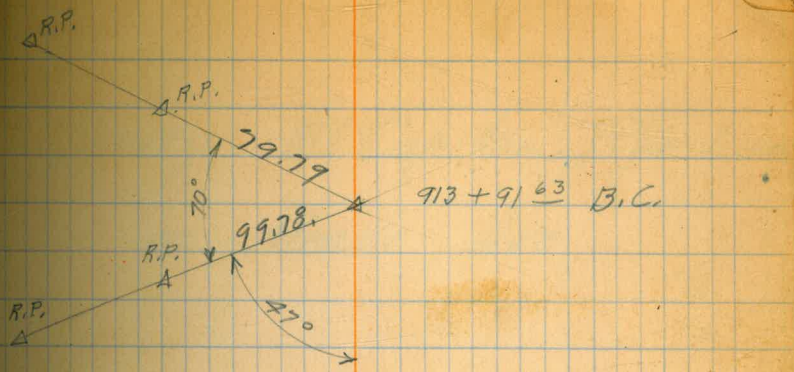
916+55° P.I.





$80^{\circ} 4' 10''$

$100^{\circ} 3' 41''$



$\Delta 910 + 64^{\circ}$  P.I.

$810 + 98.82$  P.I.

$100^{\circ}$

R.P.  $\Delta$

$100^{\circ}$

R.P.  $\Delta$

$75^{\circ}$

$\Delta 810 + 98.82$

R.P.  $\Delta$

$100^{\circ}$

$\Delta 803 + 80^{\circ}$  P.I.

R.P.  $\Delta$

Survey El Capitan Pipe Line  
on Meade Ave

(Notes Copied from loose pages  
fastened to back of page 56)

Sta. Def. L.

1315+61<sup>40</sup>

1314+14<sup>27</sup> P. & T

1308+09<sup>23</sup> E.C.

1307+95<sup>2</sup> 89°56' L P.I.

1307+70<sup>23</sup> B.C. (see opposite page →)

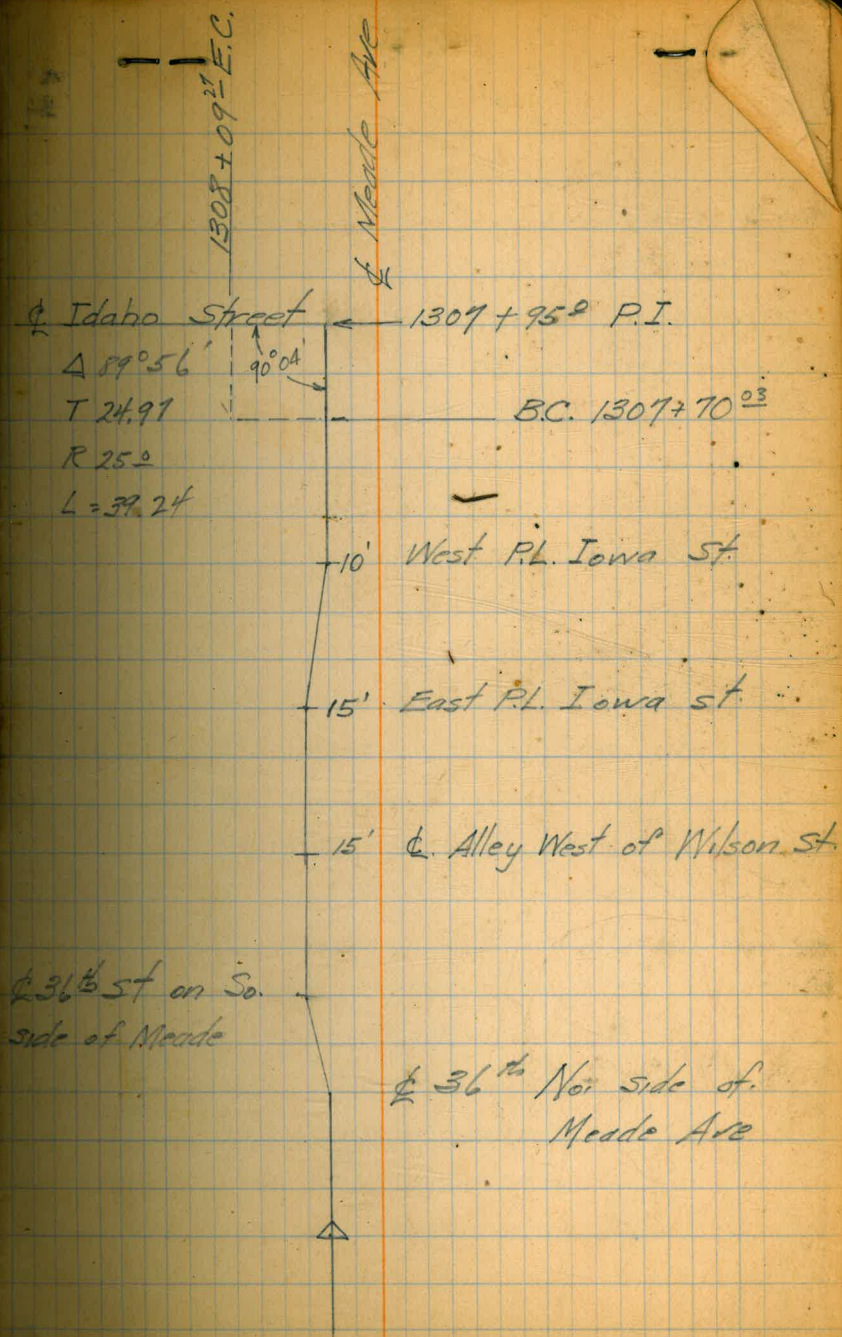
1285+55<sup>61</sup> 17°06' L

1284+72<sup>2</sup> 16°22' R

1257+04<sup>92</sup>

1252+15<sup>2</sup>  
~~1252+5~~ 1°48' R

1250+54<sup>84</sup> 1°48' L



(Notes Copied from loose pages  
fastened to back of page 56)

Sta. Defl. L.

1315+64<sup>40</sup>

1314+14<sup>27</sup> P.I.

1308+09<sup>27</sup> E.C.

1307+95<sup>2</sup> 89°56' L P.I.

1307+70<sup>23</sup> B.C. (see opposite page →)

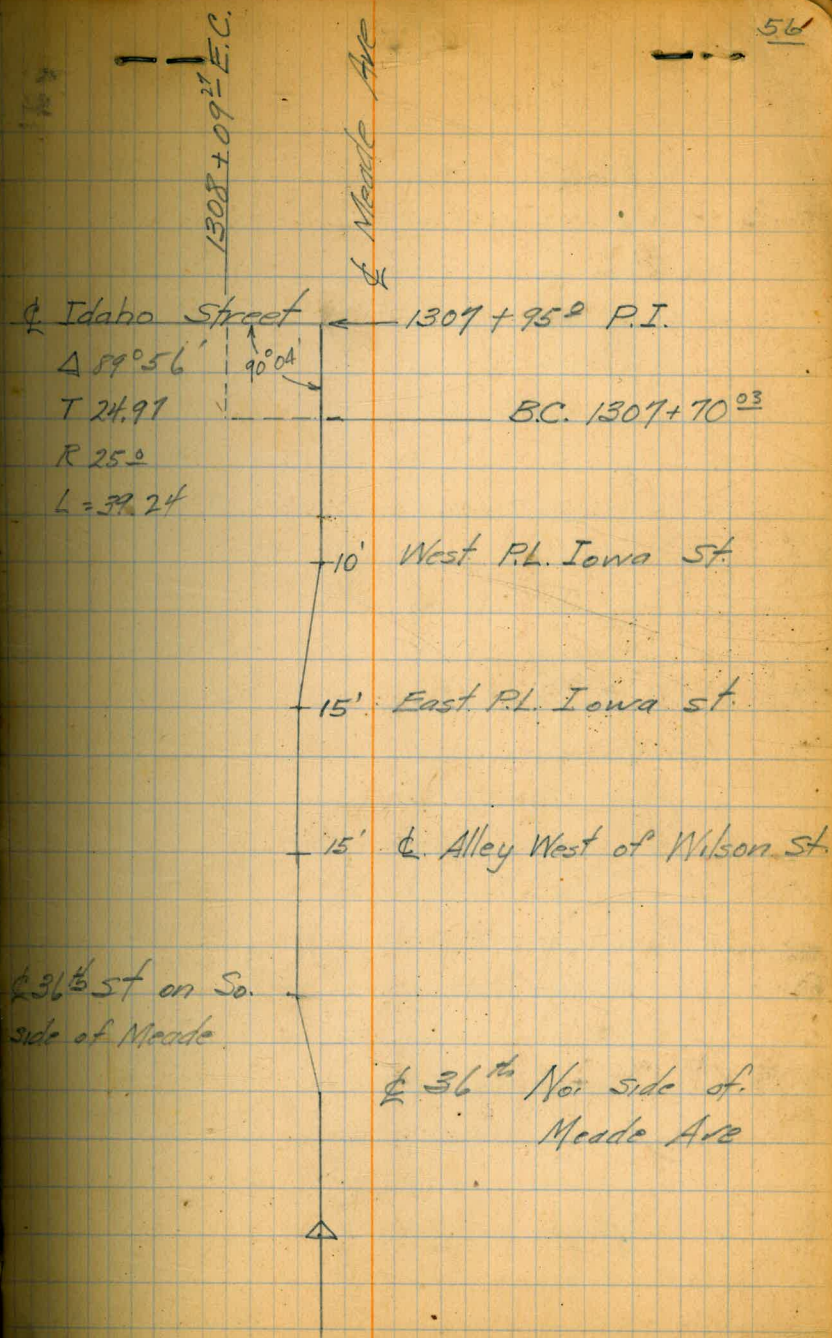
1285+55<sup>61</sup> 17°06' L.

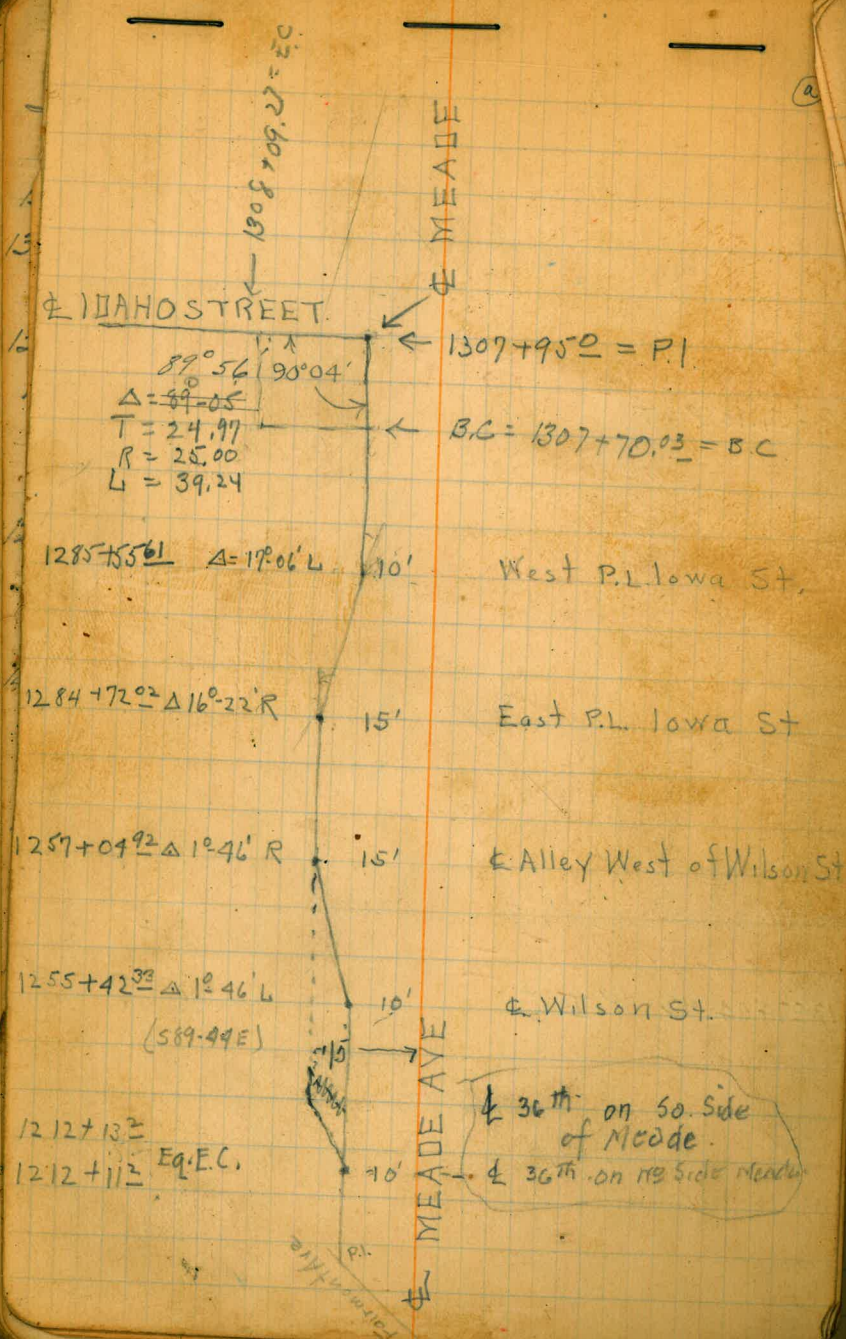
1284+72<sup>27</sup> 16°22' R.

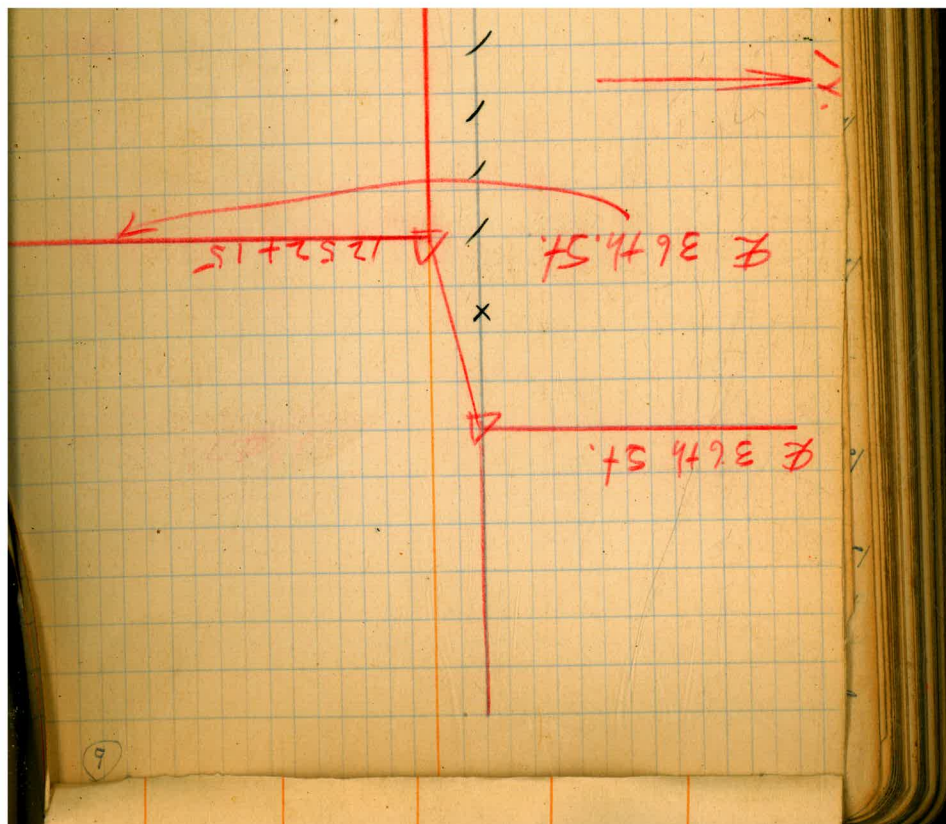
1259+04<sup>92</sup>

1252+15<sup>2</sup>  
~~1252+51~~ 1°48' R

1250+54<sup>84</sup> 1°48' L







9

1250+54.84 P.I. = 1°48' R.  
 1250+54.98 P.O.T.

1257+15° P.I. 1°48' L.

1257+04.92 P.O.T. =  
 1257+04.92 P.I.

1250+54.98 P.O.T.  
1250+54.84 P.I. = 1048 R.

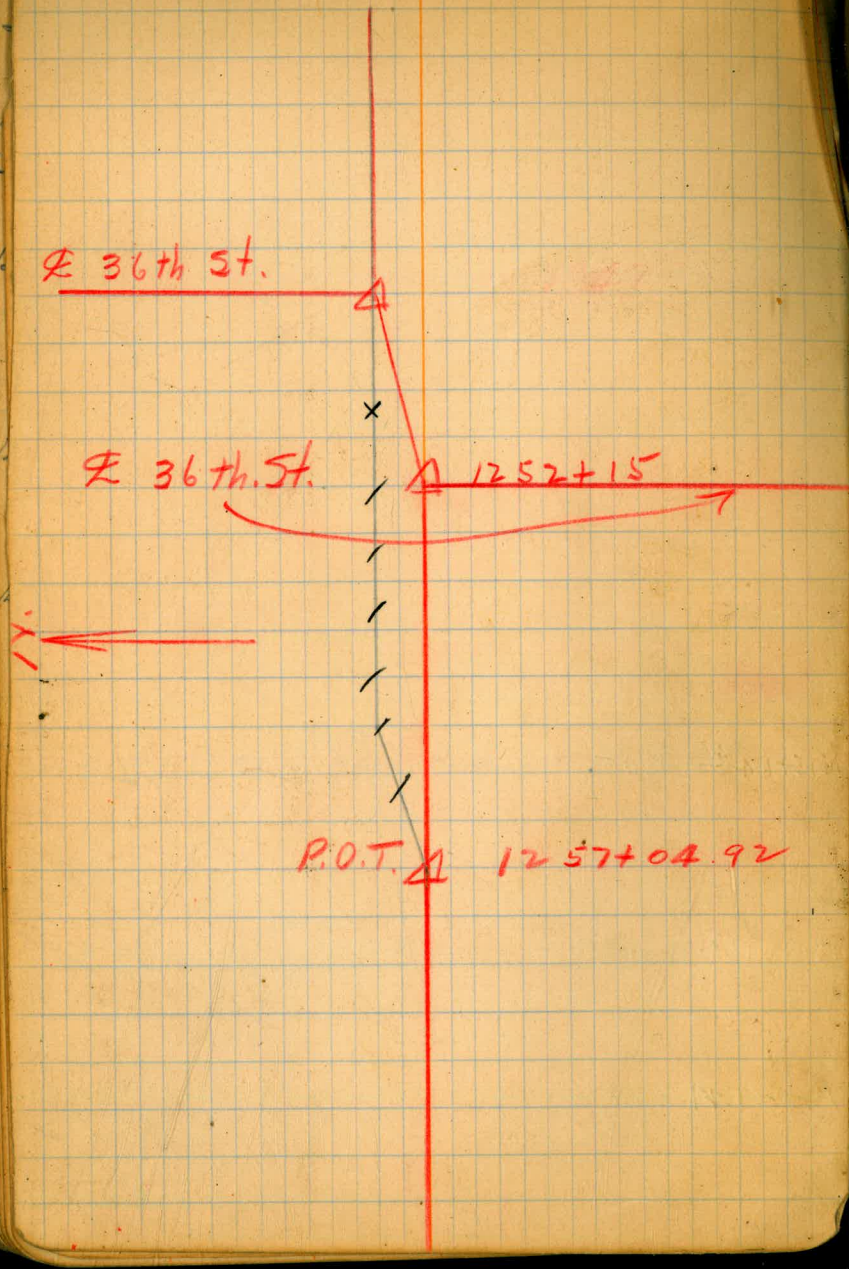
(b)

36th St.

36th St.

1252+15

P.O.T. 1257+04.92



128  
128  
7  
130  
131  
132

③

1315+64<sup>40</sup> P.O.T.

1314+14<sup>27</sup> P.O.T.

1308+09<sup>77</sup> E.C.

1



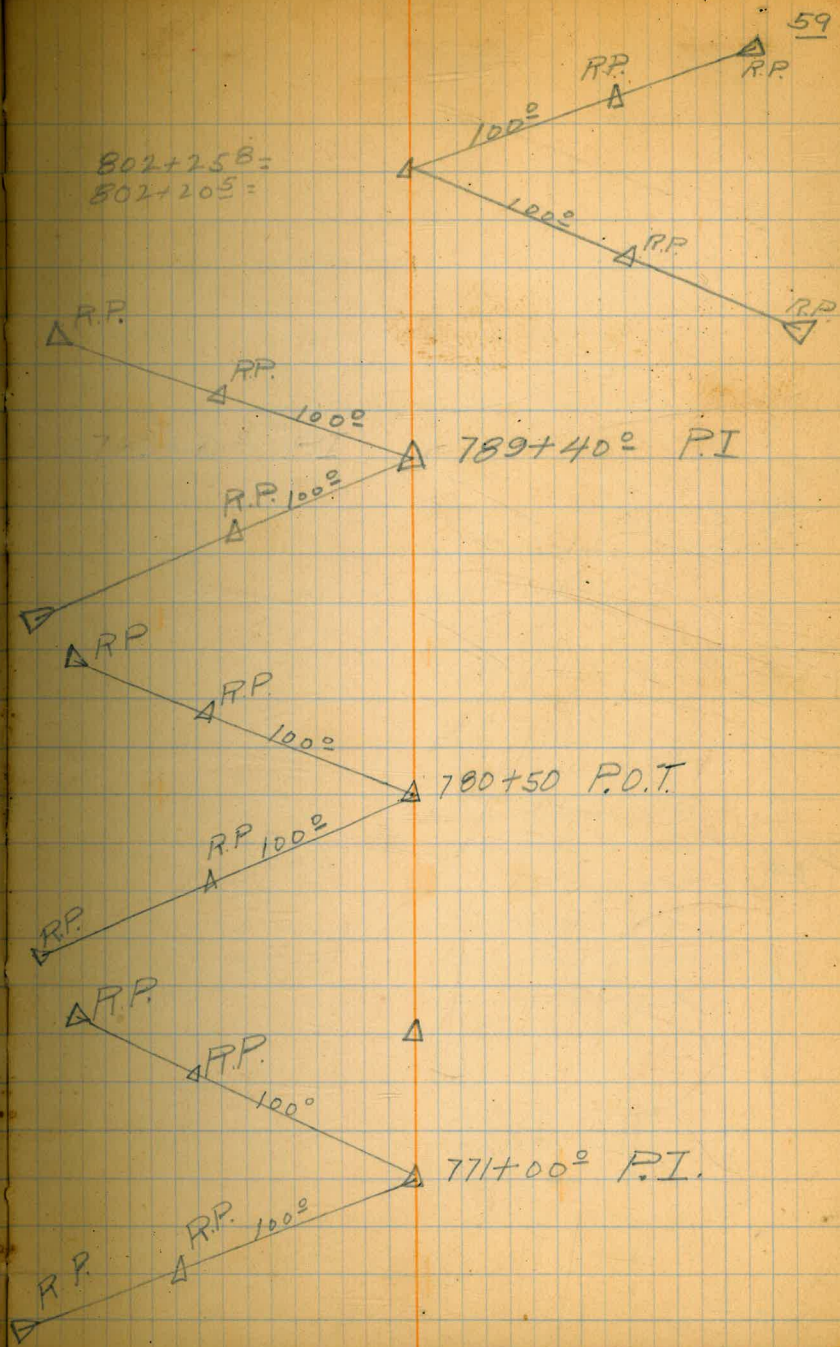
14  
13  
13  
12  
12  
12  
12  
12  
12

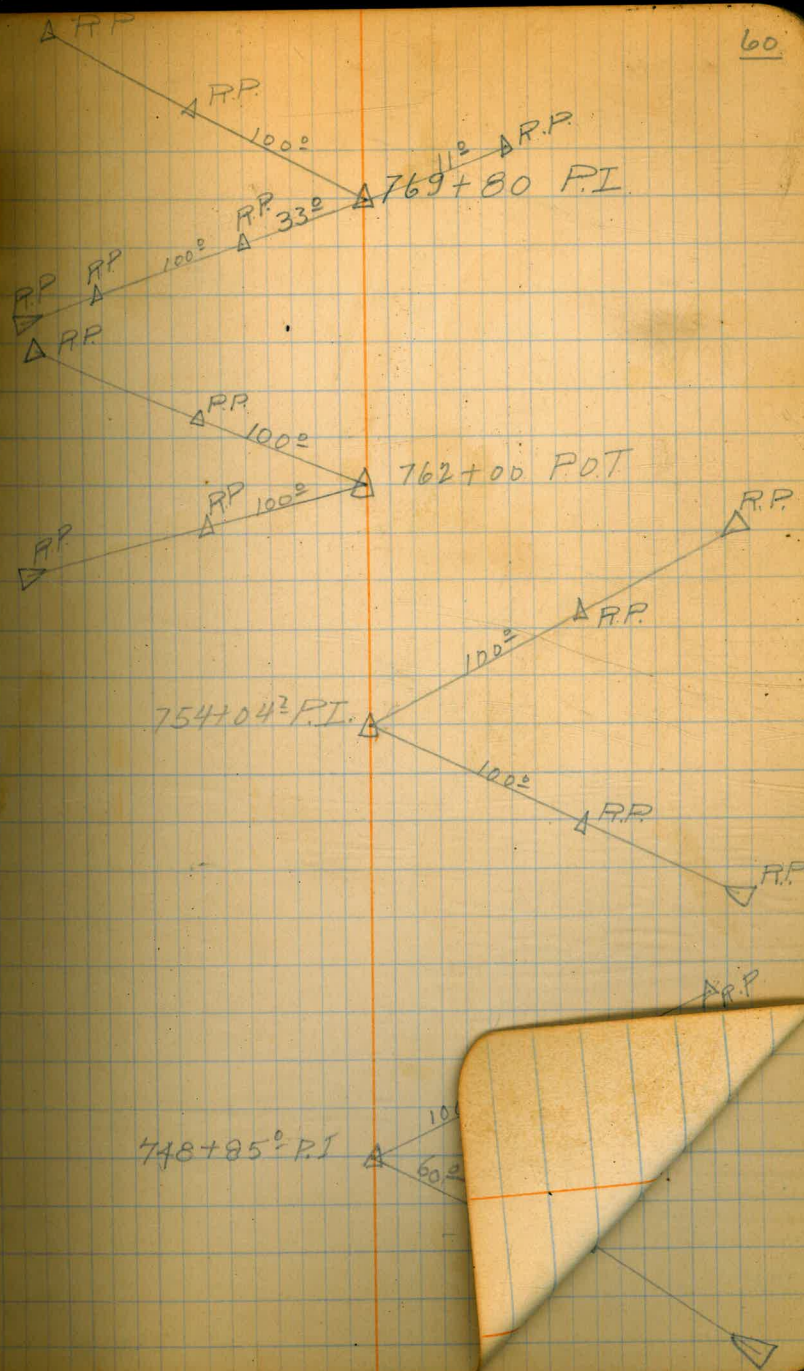
South  
E Idaho St. + Edge Pavement El Cajon

North  
E Idaho St. + Edge Pavement El Cajon

Reference Points From  
Sta. 802 + 25<sup>B</sup> Back.

802+258=  
502+205=



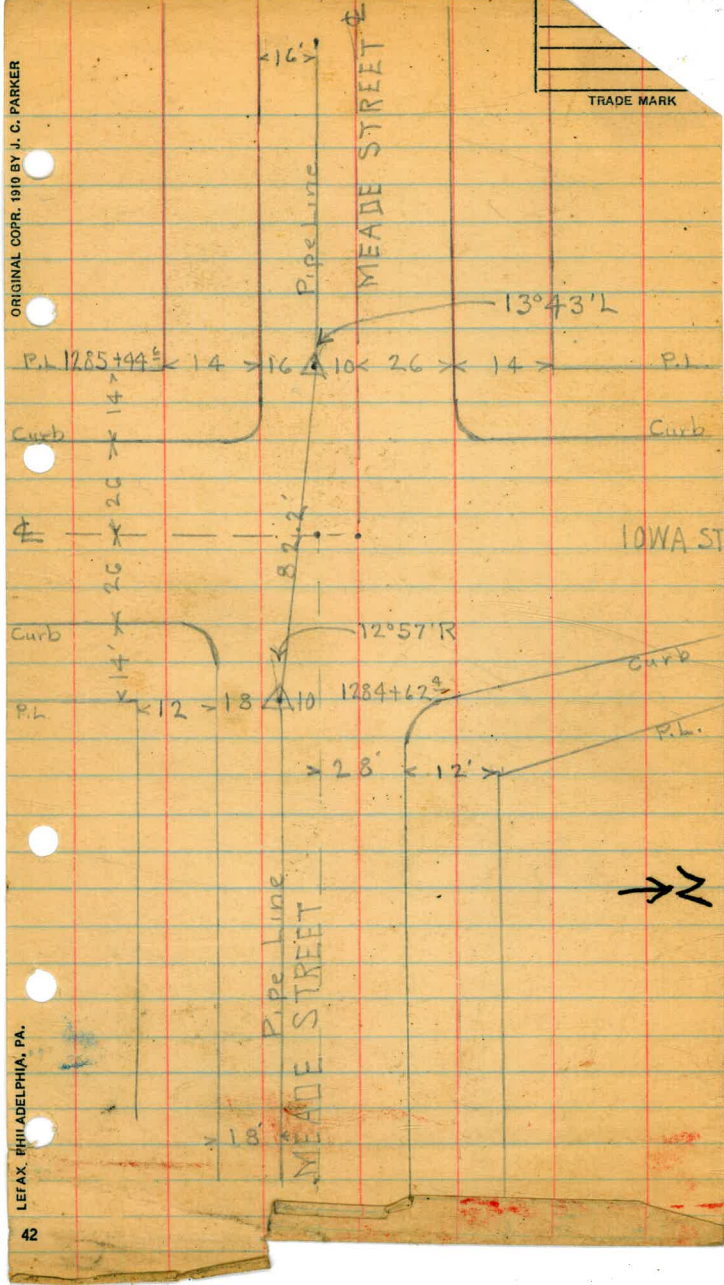




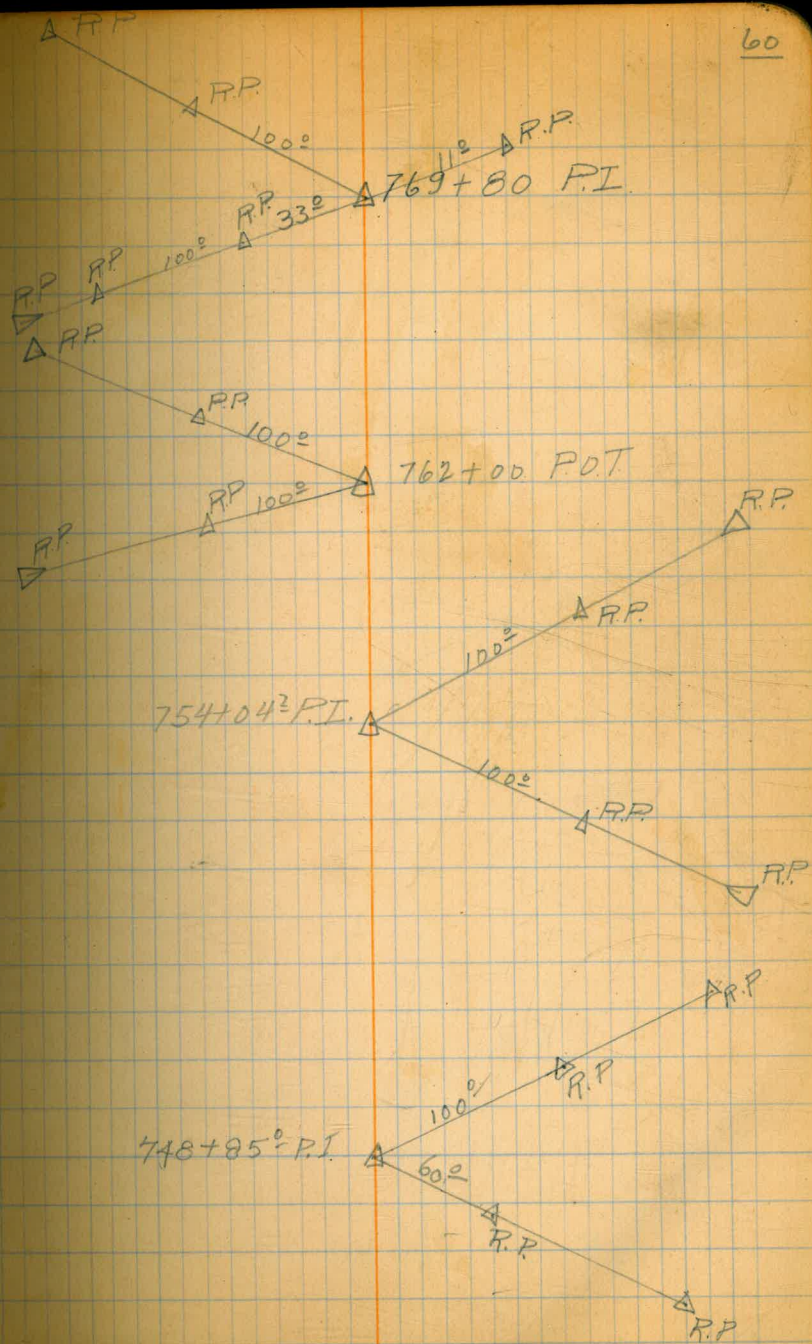
ORIGINAL COPR. 1910 BY J. C. PARKER

LEFAX, PHILADELPHIA, PA.

42



TRADE MARK

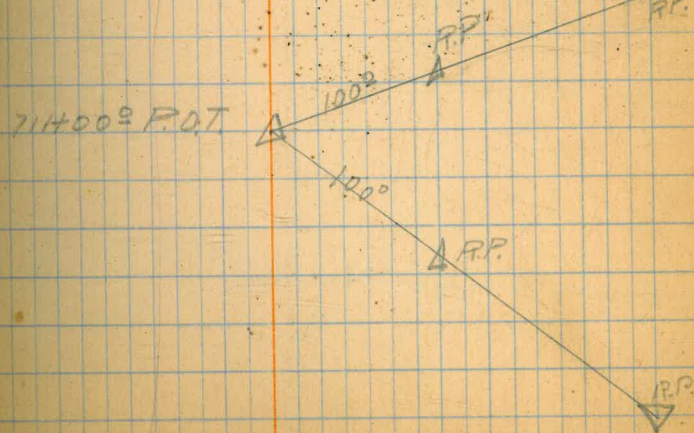
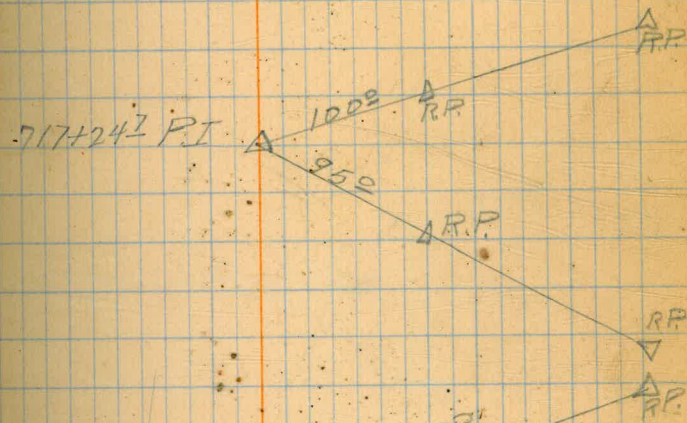
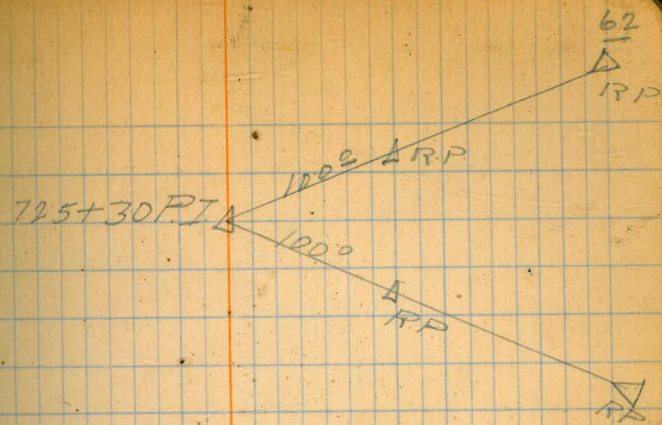


61  
R.P.

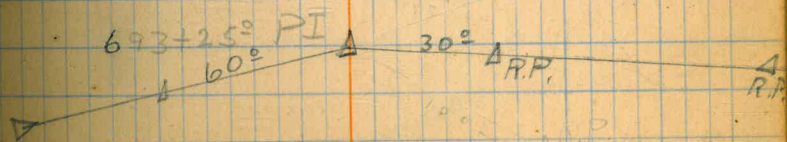
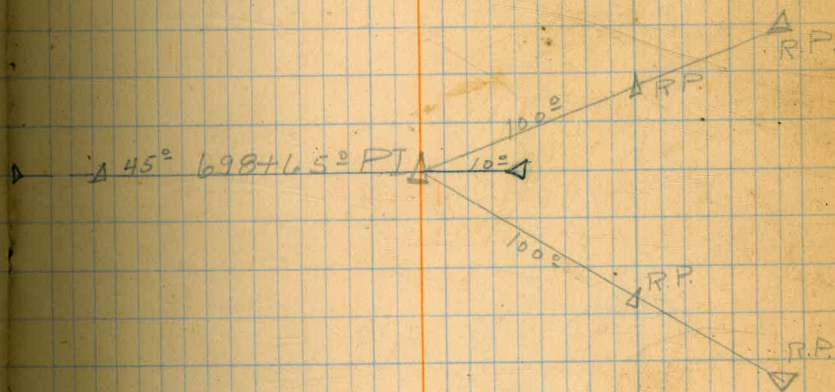
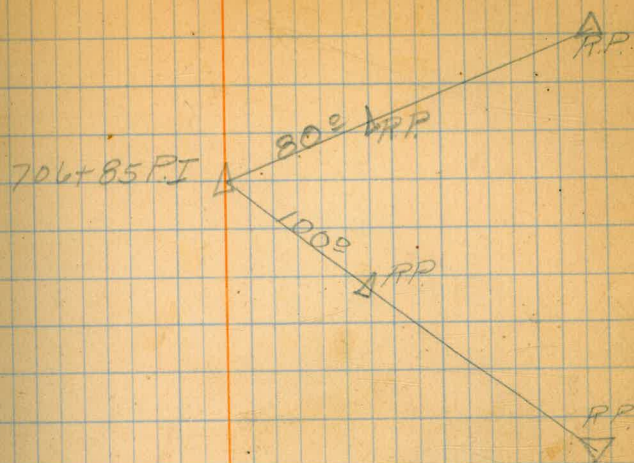
743+00 P.I.

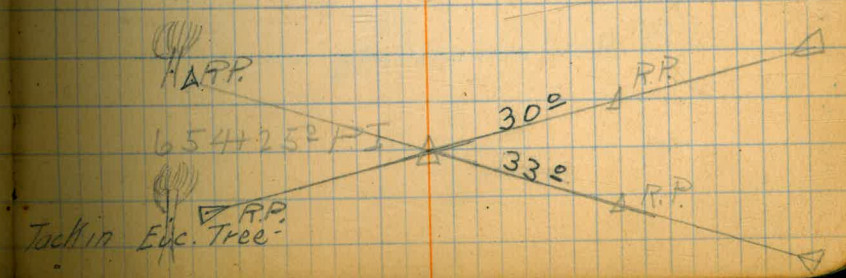
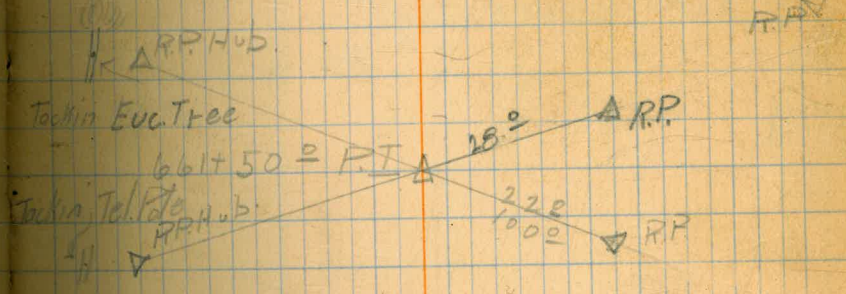
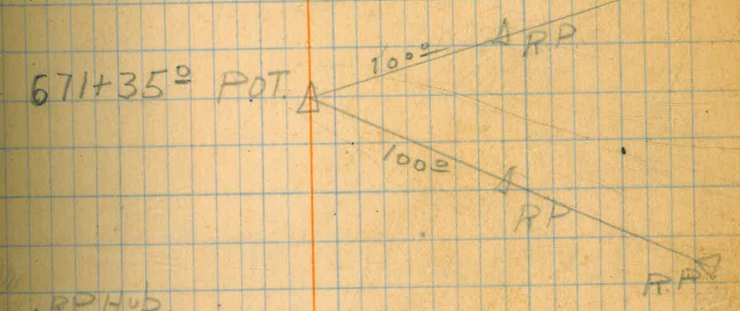
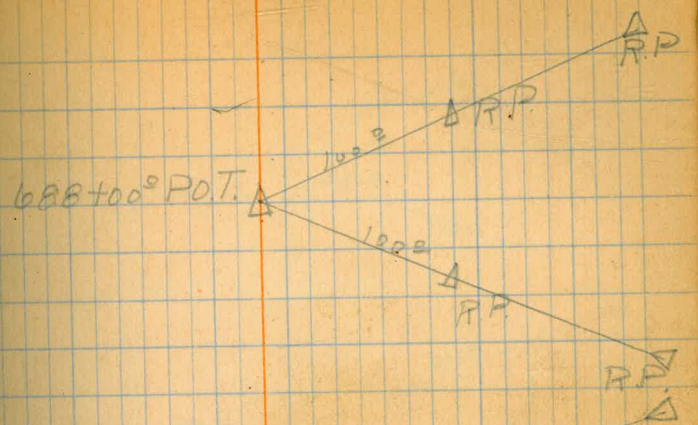
731+05 P.I.

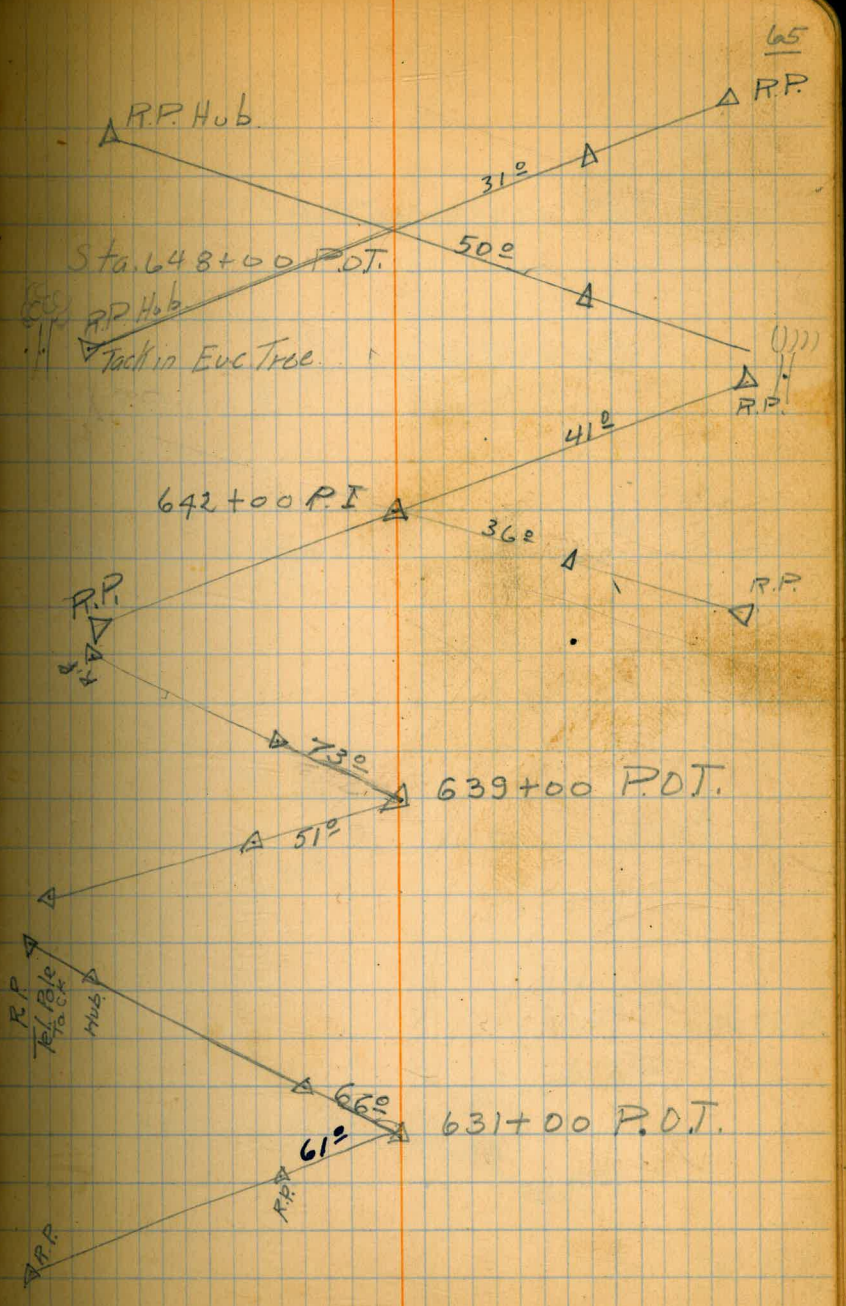
737+00 P.O.T.

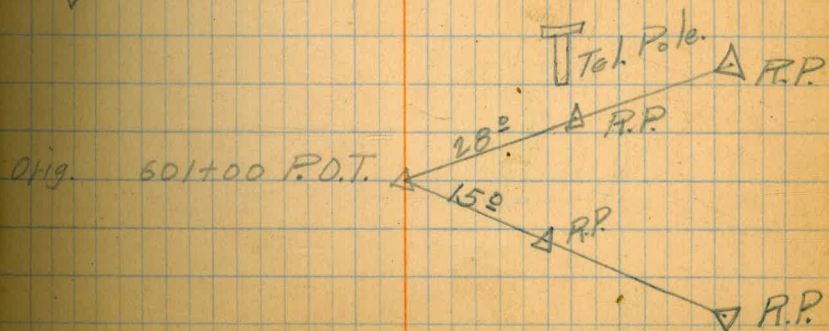
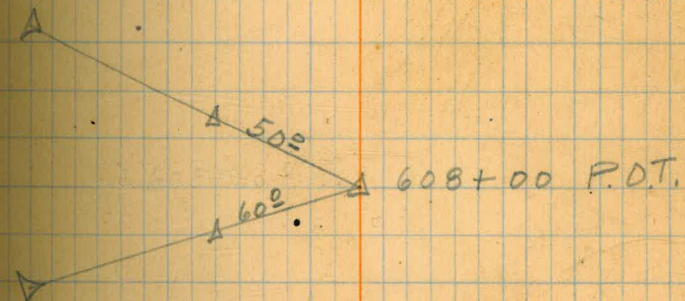
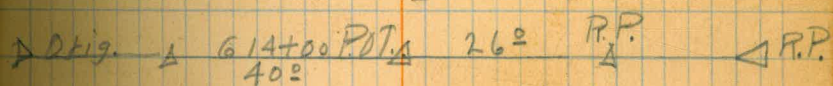
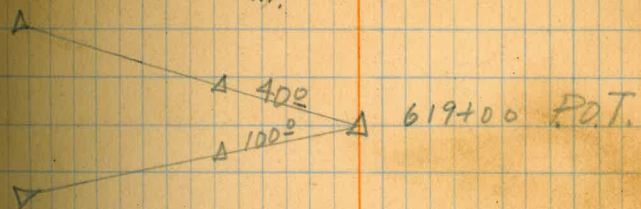
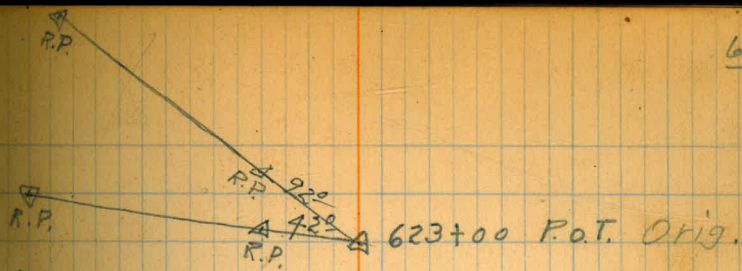














68









# No. Line Lot "F" Lot 70

April 22 -

Leach  
Dyermit  
Webb  
Claret  
Cosine

-45

72

Sta. Hor. Dist. Slope Dist. V. Angle

3579<sup>⊥</sup>

736<sup>⊥</sup> ←  
189<sup>⊥</sup>  
64<sup>⊥</sup>  
84<sup>⊥</sup>  
84<sup>⊥</sup>  
224<sup>⊥</sup>

204 <sup>⊥</sup>
74 <sup>⊥</sup>
9 <sup>⊥</sup>
19 <sup>⊥</sup>
44 <sup>⊥</sup>
50 <sup>⊥</sup>
44 <sup>⊥</sup>
44 <sup>⊥</sup>
59 <sup>⊥</sup>
90 <sup>⊥</sup>
99 <sup>⊥</sup>

2198<sup>⊥</sup>

296<sup>⊥</sup> 298<sup>⊥</sup> 6°26'

1902<sup>⊥</sup>

181<sup>⊥</sup> 181<sup>⊥</sup> 2°19'

1720<sup>⊥</sup>

107<sup>⊥</sup>  
115<sup>⊥</sup>

1498<sup>⊥</sup>

102<sup>⊥</sup> 103<sup>⊥</sup> 4°39'

1395<sup>⊥</sup>

47<sup>⊥</sup>  
49<sup>⊥</sup>  
40<sup>⊥</sup>  
30<sup>⊥</sup>  
224<sup>⊥</sup>

1005<sup>⊥</sup>

139<sup>⊥</sup>  
160<sup>⊥</sup>

706<sup>⊥</sup>

297<sup>⊥</sup> 298<sup>⊥</sup> 3°08'

409<sup>⊥</sup>

269<sup>⊥</sup> 269<sup>⊥</sup> 1°05'

140<sup>⊥</sup>

140<sup>⊥</sup>

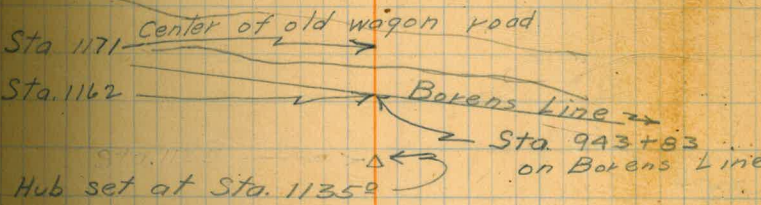
0+00

Hot and Hozy

Hub set at Sta. 2645<sup>⊥</sup> ft.

△ 2645 Hub.

Hub set at Sta. 1180<sup>⊥</sup>



Hub

Hub

N.E. Cor. Lot "E" of lot 70

No. Line Lot "F" Lot 70.

April 23

Converse  
Loock  
Duermit  
Webb  
Clovert  
Cosine

Clear and Warm

73

Sta. Hor. Dist. Slope Dist. V. Angle

5290<sup>o</sup>

61<sup>l</sup>  
49<sup>o</sup>  
29<sup>o</sup>  
29<sup>o</sup>  
34<sup>o</sup>  
55<sup>o</sup>  
146<sup>l</sup>  
209<sup>o</sup>  
139<sup>o</sup>  
55<sup>o</sup>  
298<sup>o</sup>

Apr. 23  
4185<sup>o</sup>

75<sup>l</sup>  
40<sup>o</sup>

4070<sup>l</sup>

199<sup>l</sup> 204<sup>o</sup> 12°15' .97723

3870<sup>l</sup>

291<sup>o</sup> 298<sup>o</sup> 11°55' .97845

3579<sup>l</sup>

N.E. Cor. Lot "F"



East Line Lot "E" Lot 70.  
Continued from page 79 Apr. 20.

Leach T  
Duermit  
Webb  
Clovert.  
Cosine

Worm

74

Sta.	Hor. Dist	Slope Dist	V. Angle	Cosine
9814 <sup>2</sup>	146.2	154 <sup>0</sup>	18°22'	.94906
4668 <sup>5</sup>	102 <sup>5</sup>	109 <sup>0</sup>	9°47'	.98546
4566 <sup>0</sup>	297 <sup>9</sup>	298 <sup>0</sup>	1°35'	.99962
4268 <sup>1</sup>				
139 <sup>0</sup>				
69 <sup>0</sup>				
144 <sup>0</sup>				
298 <sup>0</sup>				
3618 <sup>1</sup>	186 <sup>4</sup>	186 <sup>4</sup>	1°17'	.99975
3431 <sup>2</sup>	130 <sup>9</sup>	131 <sup>0</sup>	2°31'	.99904
3300 <sup>0</sup>	47.4	48 <sup>65</sup>	12°54'	.97476
3253 <sup>1</sup>				
298 <sup>0</sup>				
2955 <sup>1</sup>				
P.O.T.	168.2	169 <sup>0</sup>	3°37'	.99801
2786 <sup>2</sup>				
145 <sup>1</sup>				
2641 <sup>6</sup>				
79 <sup>5</sup>				
149				
2413 <sup>1</sup>				
P.O.T.				

3862 Property Line → ← Borens Line  
Sta. 962+14 Borens Line

3822 Center of rd →

Hub set for chaining

Hub set for chaining

Hub set for chaining

N.E. Cor Bruce Waring's Property (Hub)

N. 0°07' W

East Line Lot "E." Lot 70.

Apr. 21.

01-02 75

Sta. Hor. Dist Slope D. V. Angle

5206<sup>2</sup>

81.1 91.9 28°07' 88199

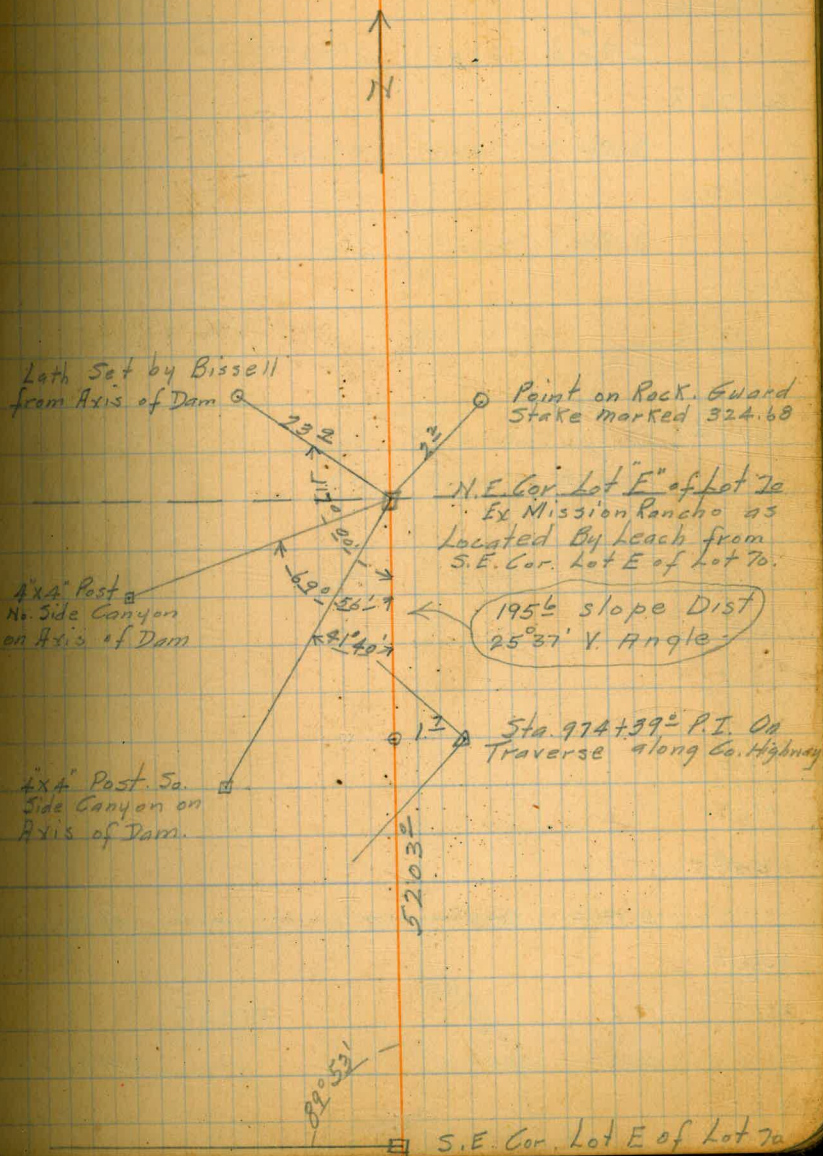
5125<sup>1</sup>  
1920

4931<sup>3</sup>

116.4 129<sup>e</sup> 25°31' 90246

9814<sup>2</sup>

N. 0°07' W



89°52'

# North Line Bruce Waring Property

Sta	Hor. Dist	Slope Dist	V. Angle	Cos 108
3429.0				
3123.6	297.9	298°	1° 12'	99978
2776.8	292.8	293°	2° 31'	99904
2482.6	294.2	298°	9° 08'	98732
2188.9	293.7	295°	5° 40'	99511
2109.9	281.5	298°	19° 07'	94485
1828.4	114.2	119°	15° 05'	96555
634.1	238.3	239°	9° 16'	99723
396.1	297.1	298°	4° 32'	99687

2188.9  
+30.9  
+20.2  
+29.2

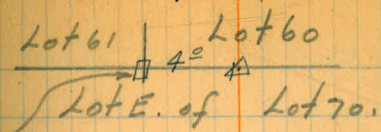
Center rd  
A Line  
+22  
+15

109.1  
75.2  
175.0  
95.2  
130.2  
165.2  
175.2  
185.2

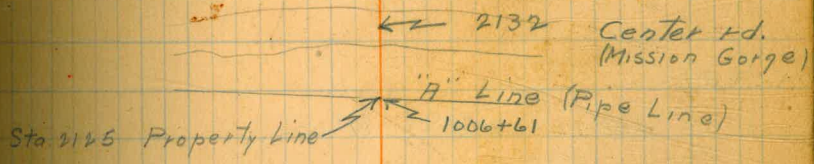
0700  
Apr. 21

nest

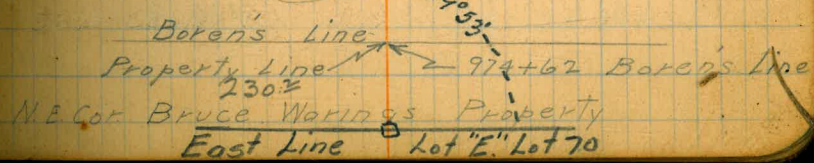
3426.62  
295 5/1000  
4° 32'  
974+62



N.E. Cor Lot 61.  
Ex Mission Rancho



589.2 Hub on Line  
532 Center of rd.



So. Line Lot "E" Lot 70

April 19.

Leach T.  
Duermit  
Webb  
Clavert  
Cos.

Warm and Cloudy

77

Sta.	Hor. Dist.	Slope Dist.	V. Angle	Bear.	Cos.
1641 <sup>47</sup>					
-45°					
1686 <sup>47</sup>	291.63	298°	11°52'		.97863
1394.84					
24 19					
1351.84					
28					
1323.84	288.72	298°	14°20'		.96887
1035.12					
1.2 P.O.T.					
10+33 <sup>22</sup>	144.31	149°	14°25'		.96851
144.31					
8+90 <sup>81</sup>					
298 29					
5+63 <sup>81</sup>	265.28	298°	27°06'		.89021
P.O.T.					
2+98 <sup>53</sup>	62.53	64°	12°18'		.97705
P.O.T.					
2+36 <sup>2</sup>					
236 <sup>2</sup>					
0+00					

nest.

Pt. on South Line Lot 70 3x4 Hub

W. Hub of Straddler Hubs across "A" Line  
Hub is 1033.22 from South East  
Corner Bruce Woking's property -

SE Cor. Lot E of Lot 70  
Pt. on South Line Lot 70 3x4 Hub

So. Line Lot "E" Lot 70.

78

Sta. Hor. Dist Slope Dist. V. Angle Mag. Cos.

2337.15				
151				
2186.78	↓			✓
	297.89	298°	1°33'	.99963
1888.89	↓			✓
	87.34	88°	10°45'	.98245
1801.55	↓			✓
	160.08	169°	19°23'	.99332
1641.47				

West

S.E. Cor. Lot 61.  
 Pt. on South Line lot 70 1/2 x 1/2 Hub



East Line Lot "E" Lot 70. Page - 74  
 Continued on

Leach  
 Dyermit  
 Webb  
 Clavert  
 Warm  
 April 20

79

Sta.	Hor. Dist.	Slope Dist.	V. Angle	Mag.	Cos.
117.75 2295 3					
1999 1	295 <sup>6</sup>	298 <sup>0</sup>	7° 12'		.99211
1817 5	182 <sup>2</sup>	186 <sup>0</sup>	11° 33'		.97975
-40° 5 1857.5 298 30 298					
12731 5					
10787 0 33 5	144 5	149	14° 11'		.96952
10753 5					
8739 1 April 20	218 <sup>0</sup>	219 <sup>0</sup>	2° 24'		.99912
59 7775 2					
5457 06	218 <sup>6</sup>	219 <sup>0</sup>	3° 11'		.99846
4779 01	78 <sup>05</sup>	81 <sup>2</sup>	16° 00'		.96126
1781 80 78	297 <sup>21</sup>	298 <sup>0</sup>	4° 11'		.99734
1774					
174 <sup>0</sup>					
0700					

N. 0° 07' W

S.E. Cor. Lot E of Lot 70.  
 Pt on South Line Lot 70 3x4 Hub.

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

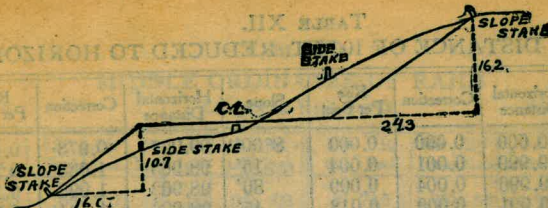
Distance of slope stake from side or shoulder stake for any width roadway, slope 1 1/2 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body

**IMPROVED TABLES**

AND

**INFORMATION**

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of correction. Degree of curve with a given  $L$  may be found by dividing tangent (or external), opposite  $L$  by given tangent (or external). The distance from a point on the tangent to the curve is very nearly the square of the tangent length divided by twice the radius.



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 1/4 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0 00	0 15	0 30	0 45	0 60	0 75	0 90	1 05	1 20	1 35	0
1	1 50	1 65	1 80	1 95	2 10	2 25	2 40	2 55	2 70	2 85	1
2	3 00	3 15	3 30	3 45	3 60	3 75	3 90	4 05	4 20	4 35	2
3	4 50	4 65	4 80	4 95	5 10	5 25	5 40	5 55	5 70	5 85	3
4	6 00	6 15	6 30	6 45	6 60	6 75	6 90	7 05	7 20	7 35	4
5	7 50	7 65	7 80	7 95	8 10	8 25	8 40	8 55	8 70	8 85	5
6	9 00	9 15	9 30	9 45	9 60	9 75	9 90	10 05	10 20	10 35	6
7	10 50	10 65	10 80	10 95	11 10	11 25	11 40	11 55	11 70	11 85	7
8	12 00	12 15	12 30	12 45	12 60	12 75	12 90	13 05	13 20	13 35	8
9	13 50	13 65	13 80	13 95	14 10	14 25	14 40	14 55	14 70	14 85	9
10	15 00	15 15	15 30	15 45	15 60	15 75	15 90	16 05	16 20	16 35	10
11	16 50	16 65	16 80	16 95	17 10	17 25	17 40	17 55	17 70	17 85	11
12	18 00	18 15	18 30	18 45	18 60	18 75	18 90	19 05	19 20	19 35	12
13	19 50	19 65	19 80	19 95	20 10	20 25	20 40	20 55	20 70	20 85	13
14	21 00	21 15	21 30	21 45	21 60	21 75	21 90	22 05	22 20	22 35	14
15	22 50	22 65	22 80	22 95	23 10	23 25	23 40	23 55	23 70	23 85	15
16	24 00	24 15	24 30	24 45	24 60	24 75	24 90	25 05	25 20	25 35	16
17	25 50	25 65	25 80	25 95	26 10	26 25	26 40	26 55	26 70	26 85	17
18	27 00	27 15	27 30	27 45	27 60	27 75	27 90	28 05	28 20	28 35	18
19	28 50	28 65	28 80	28 95	29 10	29 25	29 40	29 55	29 70	29 85	19
20	30 00	30 15	30 30	30 45	30 60	30 75	30 90	31 05	31 20	31 35	20
21	31 50	31 65	31 80	31 95	32 10	32 25	32 40	32 55	32 70	32 85	21
22	33 00	33 15	33 30	33 45	33 60	33 75	33 90	34 05	34 20	34 35	22
23	34 50	34 65	34 80	34 95	35 10	35 25	35 40	35 55	35 70	35 85	23
24	36 00	36 15	36 30	36 45	36 60	36 75	36 90	37 05	37 20	37 35	24
25	37 50	37 65	37 80	37 95	38 10	38 25	38 40	38 55	38 70	38 85	25
26	39 00	39 15	39 30	39 45	39 60	39 75	39 90	40 05	40 20	40 35	26
27	40 50	40 65	40 80	40 95	41 10	41 25	41 40	41 55	41 70	41 85	27
28	42 00	42 15	42 30	42 45	42 60	42 75	42 90	43 05	43 20	43 35	28
29	43 50	43 65	43 80	43 95	44 10	44 25	44 40	44 55	44 70	44 85	29
30	45 00	45 15	45 30	45 45	45 60	45 75	45 90	46 05	46 20	46 35	30
31	46 50	46 65	46 80	46 95	47 10	47 25	47 40	47 55	47 70	47 85	31
32	48 00	48 15	48 30	48 45	48 60	48 75	48 90	49 05	49 20	49 35	32
33	49 50	49 65	49 80	49 95	50 10	50 25	50 40	50 55	50 70	50 85	33
34	51 00	51 15	51 30	51 45	51 60	51 75	51 90	52 05	52 20	52 35	34
35	52 50	52 65	52 80	52 95	53 10	53 25	53 40	53 55	53 70	53 85	35
36	54 00	54 15	54 30	54 45	54 60	54 75	54 90	55 05	55 20	55 35	36
37	55 50	55 65	55 80	55 95	56 10	56 25	56 40	56 55	56 70	56 85	37
38	57 00	57 15	57 30	57 45	57 60	57 75	57 90	58 05	58 20	58 35	38
39	58 50	58 65	58 80	58 95	59 10	59 25	59 40	59 55	59 70	59 85	39
40	60 00	60 15	60 30	60 45	60 60	60 75	60 90	61 05	61 20	61 35	40
41	61 50	61 65	61 80	61 95	62 10	62 25	62 40	62 55	62 70	62 85	41
42	63 00	63 15	63 30	63 45	63 60	63 75	63 90	64 05	64 20	64 35	42
43	64 50	64 65	64 80	64 95	65 10	65 25	65 40	65 55	65 70	65 85	43
44	66 00	66 15	66 30	66 45	66 60	66 75	66 90	67 05	67 20	67 35	44
45	67 50	67 65	67 80	67 95	68 10	68 25	68 40	68 55	68 70	68 85	45
46	69 00	69 15	69 30	69 45	69 60	69 75	69 90	70 05	70 20	70 35	46
47	70 50	70 65	70 80	70 95	71 10	71 25	71 40	71 55	71 70	71 85	47
48	72 00	72 15	72 30	72 45	72 60	72 75	72 90	73 05	73 20	73 35	48
49	73 50	73 65	73 80	73 95	74 10	74 25	74 40	74 55	74 70	74 85	49
50	75 00	75 15	75 30	75 45	75 60	75 75	75 90	76 05	76 20	76 35	50

Computed by L. Leland Locke.

J. 30 33' W  
 24 41  
 28 14  
 27 40  
 50 34 W

$\Delta = 73^{\circ} 07' 36''$   
 $D = 56^{\circ}$   
 $R = 102.31$   
 $T = 75.87$   
 $L = 130.56$

805 + 80.70  
 75.87  
 805 + 04.83 B.C.  
 130.56  
 806 + 35.40 E.C.

74153  
 10231  
 74153  
 222459  
 148306  
 741530  
 758659343  
 130.56  
 73.11667  
 56  
 171  
 168  
 316  
 280  
 366  
 386  
 307

39° 49.3' Lat

Sta. 901 + 41<sup>2</sup> to Sta. 902 + 63<sup>2</sup>

5.2° 38' N

39 E  
100 T

2472  
23.78  
18.0 0997 + 96

15° 9' 45"

40° 36' 30"

4.5  
1.92  
6.07

237  
9.7  
11.2  
7.4  
53 62  
10 20  
7 42  
3) 283/9.4  
27  
13 01

8.7  
7.8  
7.0  
3) 23.5/7.8  
25

1000 + 67.8  
1000 + 12.8  
999 + 17.8  
999 + 17.8  
999 + 17.8  
999 + 17.8  
999 + 17.8

4.80

.72

4.08

120

30

40

67

150

4

5

11

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

120

30

40

67

150

4

5

11

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

10

742  
739 + 50

6) 529/85  
48

3) 295/98  
27

40  
192  
117

3) 229/16  
21

8) 734/92  
72  
14

3) 191/73  
21

- 1-15 ✓
- 2-30 ✓
- 3-45 ✓
- 5-00 ✓
- 6-15 ✓
- 7-30 ✓
- 8-45 ✓
- 9-00 ✓