

Transit Notes
NAME _____
Level 1/4 X-Section
Class _____ Course _____ Party _____
of Road Crossing
on top of old County Road
Lower Otay Dam
near
Upper Otay Dam June 13-15
28
P.O.G.

57

FIELD NOTES

No. 403P

ESPECIALLY ADAPTED

TO THE USE OF

ENGINEERING STUDENTS

W257

EUGENE DIETZGEN Co.

MANUFACTURERS

DRAWING MATERIALS

MATHEMATICAL AND SURVEYING INSTRUMENTS

MEASURING TAPES

CHICAGO SAN FRANCISCO NEW YORK
NEW ORLEANS PITTSBURGH

MICROFILMED

JUN 11 1965

Transit.-Level $\frac{3}{4}$ Cross-section
notes

of
Final location of Road-crossing
Otay Lake below Upper Otay Dam

Relocation of Road & Bridge
across North end of Lower Otay
Lake

5+49 52 B.C.

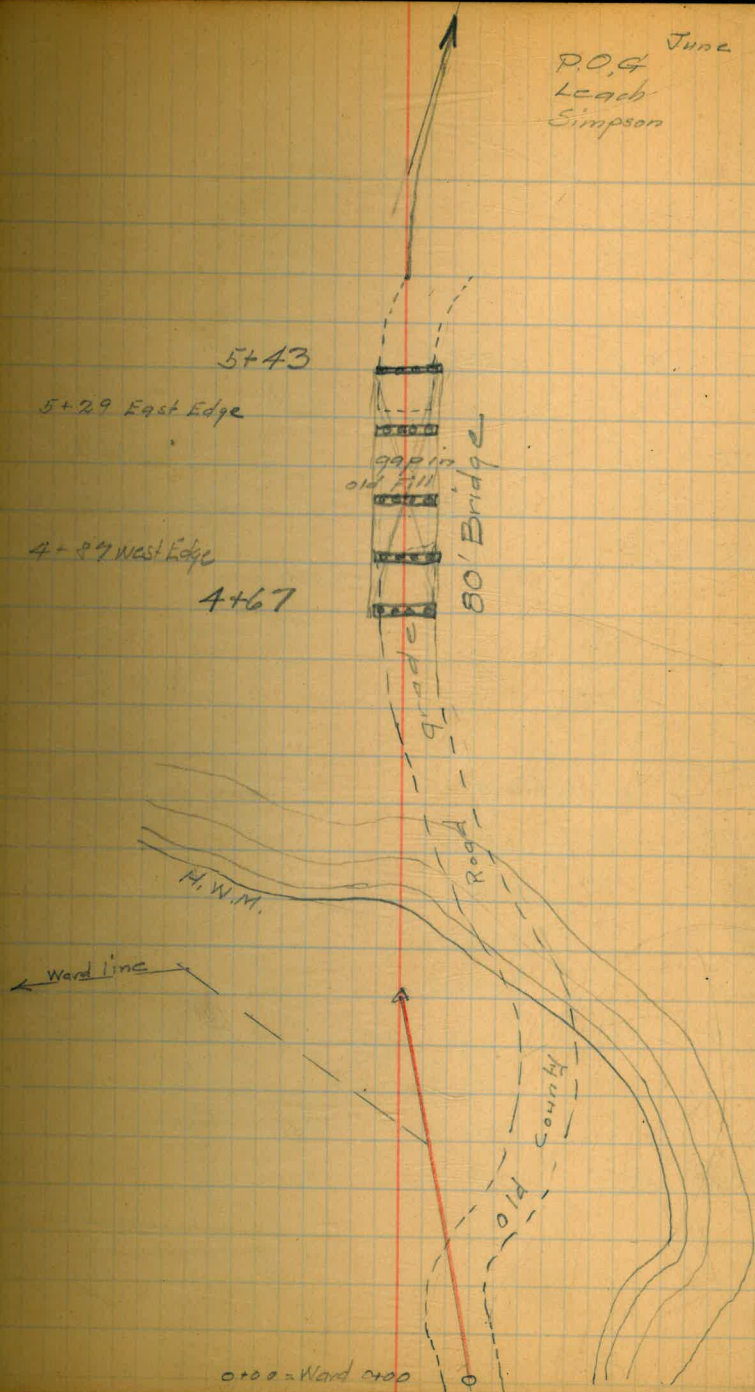
259.32

3+25 = H.W.M.

2+90.20 P.I. No curve x $\Delta = 13^\circ 24' 11''$

0+00 = Ward's C' line 0+00 = County Highway 49
491+75

P.O.G. June .1
Leach
Simpson



8+ = H.W.M.

7+91.35 E.C. 14°30'

7+75 9°48.87 0.62

7+66.60 P.I. $\Delta 29°00' R^+$

7+50 2°39.16 0.945 R=100

7+40.74 B.C. 0°00' S.T.=25.86

L.A.=50.61

50.92

6+90.02 } equation

6+87.79 E.C. 19°09'

6+75 17°58.12

6+50 14°23.56

6+25 10°48.7

6+18.38 P.I.

6+00 7°13.8

5+75 3°38.92

5+49.52 B.C. 0°00'

144.78

7+66.60

6+98.69

93.91

69.16

153.07

$\Delta 38°09' R^+$

R=200

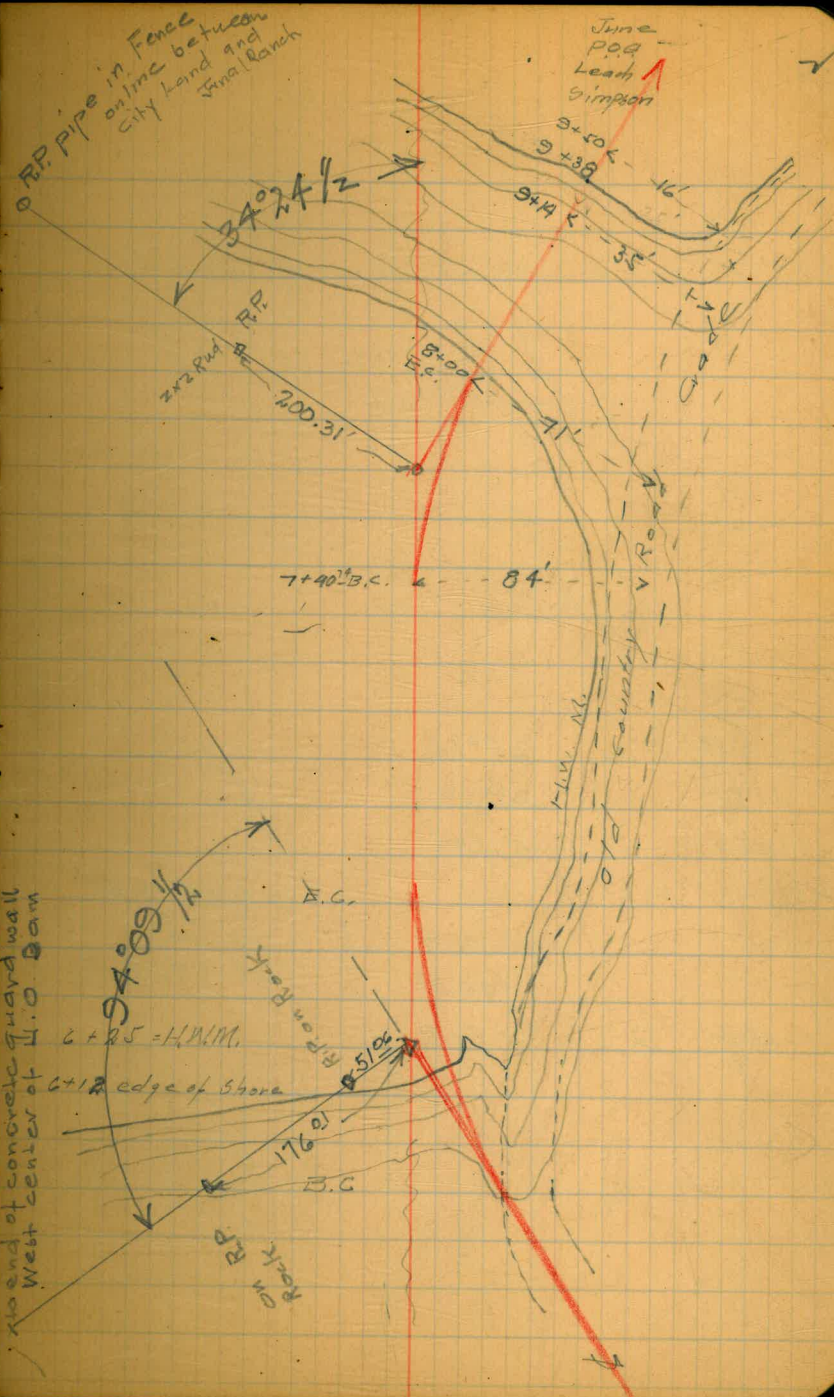
S.T.=69.16

L.A.=133.17

no end of concrete guard wall
West center of H.O. Dam

RR pipe in Fence
on line between
city Land and
Junal Ranch

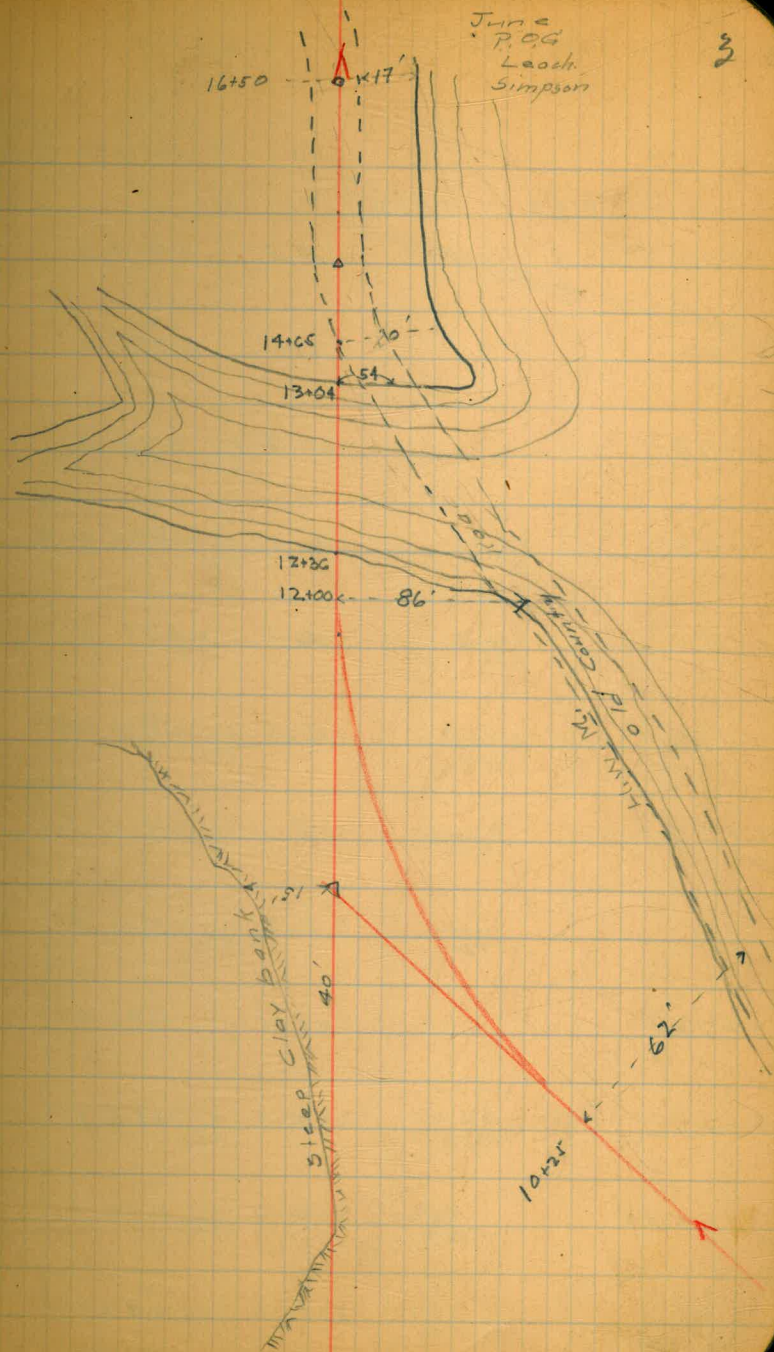
June
209
Leah
Simpson



16+50 End of line in county Road

11+67.56	E.C.	28°26'
11+50		23°24.12'
11+25		16°14.40'
11+22.15	P.I.	
11+00		9°04.69'
10+75		1°54.98'
10+83.1	B.C.	0°00'

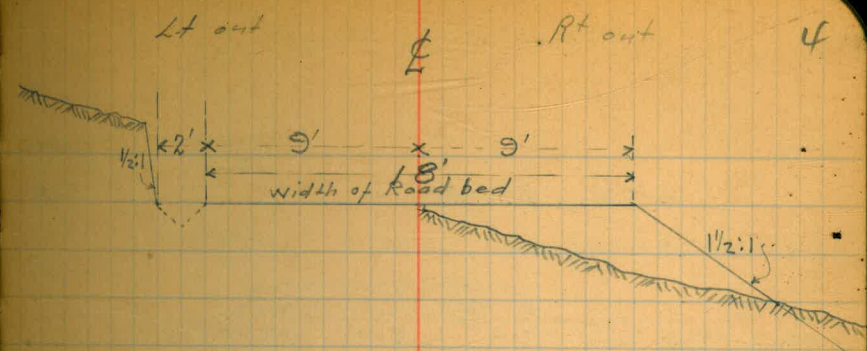
x $\Delta = 56^{\circ}52' R$
 $R = 100$
 $ST = 51.14$
 $LA = 99.25$



X-section of Road

			Ward B.M. #1 501.01	Grade
	2.49	503.50 ✓		495.00
0+00		5.8	497.7 ✓	
0+50		6.5	497.0 ✓	
0+98		8.5	495.0 ✓	
1+00		8.5	495.0 ✓	
1+30		6.0	497.5 ✓	
1+50		4.6	498.9 ✓	
2+00		5.0	498.5 ✓	
2+50		7.2	496.3 ✓	
2+70±		8.5	495.0 ✓	
3+00		10.8	492.7 ✓	
3+06±		11.4	492.1 ✓	
3+25		13.2	489.7 ✓	
		12.08	491.42 ✓	

Level grade



C1.2	0.0	
11.2		
C1.6	0.0	F0.6
10.8		11.9
C3.8	C2.5	Grade
12.9		32.2
C5.0	C3.9	Grade
13.50		45.6
C5.6	C3.5	Grade
13.8		33.9
C2.7	C1.3	Grade
12.25		12.5V
	0.0	
F1.2	F2.3	F4.3
10.9		15.45
F1.2	F2.9	F4.3
10.90		15.45
F4.4	F5.3	F6.5
15.6		18.75

X-section of Road

Sta.		Elev.	Grade
0.56	491.98 ✓	491.92	495.00
3+50	on edge of Rock	5.0	487.0 ✓
3+75		8.4	483.6 ✓
4+00		8.2	483.8 ✓
4+25		9.5	482.5 ✓
4+50		8.0	484.0 ✓
4+67	First Bent	8.1	483.9 ✓
4+86	Second "	8.3	483.7 ✓
4+87	West edge of break	8.2	483.8 ✓
5+05	3 rd Bent	11.5	475.5
5+24	4 th "		478.6
5+29	East edge		
5+31		11.0	484.0
5+43	5 th / last Bent		483.8

60' Bridge

V
V
V
V

LL \$ Rt 14.5-28.5
70.4
Leach
Simpson

Station	Grade	Notes
F7.5	20.25	
F8.0		
F9.0	22.5	2' north of old grade
H.I. 495.00		
F9.8	23.7	14.5-28.5 484 W.S.
F11.4		
F10.7	11.5	
F10.5	20.1	
F12.7	24.2	
F16.8	40.0	
F16.0	40.0	
F15.2	20.0	
F14.2	10.0	
F11.3		
F10.6	5.3	
F10.9	16.0	
F13.6	20.0	
F16.0	21.5	
F18.5	40.0	
F24.2	40.0	
F22.0	20.0	
F17.6	10.0	
F12.5		
F10.8	3.5	
F10.9	14.0	
F16.0	21.0	
F19.0	40.0	
F25.2	40.0	
F22.5	20.0	
F19.0	10.0	
F11.0		
F11.4	10.0	
F16.5	13.6	
F16.8	26.5	
F23.2	40.00	
F26.0	40.0	
F22.2	20.0	
F16.8	10.0	
F11.4	21.5	
F11.1		
F11.3	8.3	
F13.4	9.0	
F16.3	13.0	
F17.5	14.5	
F17.7	24.0	
F25.5	40.0	
F26.0	40.0	
F24.7	25.0	
F19.0	13.0	
F14.2	7.5	
F11.7	4.0	
F11.3		
F11.4	5.5	
F13.4	6.5	
F15.9	9.0	
F19.0	14.0	
F17.0	25.0	
F25.5	40.0	
F24.0	40.0	
F20.3	20.0	
F17.5	10.0	
F18.5		
F18.0	10.0	
F19.8	2.0	
F25.5	50.0	
F23.3	40.0	
F22.4	20.0	
F15.0	10.0	
F11.4		
F16.0	10.0	
F25.3	20.0	
F27.5	50.0	
F22.5	50.0	
F20.9	30.0	
F20.7	20.0	
F15.8	11.5	
F11.1	5.0	
F11.0		
F11.0	2.2	
F12.5	6.0	
F18.2	11.0	
F17.5	20.0	
F25.2	50.0	
F22.0	50.0	
F23.0	30.0	
F20.5	20.0	
F18.2	10.0	
F11.3	7.0	
F11.2		
F11.8	5.3	
F18.7	9.3	
F20.0	15.2	
F17.3	25.0	
F22.4	50.0	

X-Section of Road

Sta.		Grade
	491.98	495.00
5+57.50	R.C.	483.5
5+75		478.0
6+00		476.0
6+12		480.8
6+14		
	16.00	500.00 ✓
6+13		12.6 487.4 ✓
6+25		9.1 490.9 ✓
6+50		3.6 496.4 ✓
6+61		1.1 498.9 ✓
6+75		2.1 497.9 ✓
	0.7	
7+00		0.2 499.8 ✓
7+10		10.7 500.7 ✓

L+out

⌘

RENT

14-5-28
P.O.#
Leath
Simpson

6

H.I. 495.00

F22.7 F22.8 F22.0 F178 F14.5 F11.5 F11.6 F15.5 F19.2 F16.5 F21.7
50 30 20 20 10 6.0 9.0 11.4 16.5 25.0 50

F22.1 F22.2 F22.0 F170 F11.0 F11.0 F12.6 F17.8 F16.6 F17.7
50 30 10.0 7.4 14.0 16.5 22.0 30.0 50

F16.0 F18.2 F17.7 F18.5 F19.0 F11.0 F10.2 F10.2 F16.2 F16.1
50 30.0 20 8.0 20.5 22.0 30.5 37 50

F6.3 F11.0 F14.2 F8.5 F6.7 F16.7 F15.5 F12.2 F12.2 F14.5 F17.0
32.0 8.0 9.9 12.6 15.3 20.3 25 33.0 37.5 46

F10.0 F10.0 F18 F16.7 F16.7 F10.2 F10.2
24.0 6.0 12.8 15 26.3 34.3

0.0 F2.6 F4.1 F12.0 F14.6 F11.2
37.6 12.9 15.0 20.8 25.8
6+43.8 0.0

6.58 C1.6 0.0
13.9 5.1

C6.5 C3.9 0.0
14.25 9.6

C6.6 C2.9 0.0
14.3 12.9

C8.7 C4.9 0.0
15.35 19.7

C10.2 C5.7 0.0
16.1 23.8

X-section of Road

Sta	500.00	Grade
7+50	+ 0.8	500.8 ✓
7+75	1.3	498.7 ✓
8+00	7.0	493.0 ✓
8+23	12.3	487.7 ✓
8+33.5	16.0	484.0 ✓
8+54.5		476.0 ✓
8+73.5		476.3 ✓
8+92.5		477.4 ✓
9+13.5	16.0	484.0 ✓
9+34	9.3	490.7 ✓
9+50	8.4	491.6 ✓
10+00	8.3	491.7 ✓
10+50	7.2	492.8 ✓

Lt out

±

Rt out

14-5-28

P.O.G.

Leach

Simpson

7

	C 9.8 15.55	C 5.8	0.0 26.6
7+91.5	C 6.6 19.30	C 3.7	0.0 18.1
	0.0 25.8	F 2.0	F 3.3 13.95
	F 6.0 18.0	F 7.3	F 10.6 24.9
	F 18.2 36.3	F 18.7 10.0	F 19.0 37.5
	F 18.4 10.0	F 18.7	F 19.1 10.0
	F 17.0 34.5	F 16.6 10	F 17.3 10.
	F 18.2 36.2		
	F 4.0 15.0	F 4.3	F 5.3 16.45
	F 3.2 13.8	F 3.4	F 2.2 12.3
	F 3.9 14.85	F 3.3	F 3.9 14.85
	0.0 10.0	0.0 4.4	F 2.2 12.3

X-Section of Road

Stn	500.00		Grade
10+55	4.6	495.4	495.0
10+75	2.5	497.5	
10+00	1.1	498.9	
11+25	2.0	498.0	
11+50	2.9	497.1	
11+90	7.0	493.0	
12+20	13.0	487.0	
12+36.5	W.S.	484.0	
12+51		480.9	
12+70		475.3	
12+89		475.0	
12+03.5	W.S.	484.0	
13+07	1.4	485.6	

495.00
494.88

change grade Sta 13+00 to -1.65%

Lt out	Grade	Rt out
10+53.6		June 14-28 P.O.G Leach Simpson
C.5.0 13.5	C.25	0.0 14.1
C.5.8 13.9	C.3.9	0.0 20.0
C.5.0 13.5	C.3.0	0.0 28.8
C.3.8 12.7	C.2.1	0.0 22.6
11+72.6	0.0	
B.0 23.1	F.20	F.4.0 15.0
F.6.9 19.35	F.8.0	F.10.3 24.45
F.12.8 28.2	F.13.1 10.0	F.14.1 F.14.0 10.0
F.17.3 10.0	F.19.7	F.20.2 10.0
F.18.9 37.35	F.19.2 10.0	F.20.0 10.0
F.10.6 24.9	F.9.3	F.9.7 23.55

X-section Road

Sta	500.00		Grade
13+38		12.9	487.1 ✓ 494.34
13+50		8.9	491.1 ✓ 494.198
14+00		5.7	494.3 0% 493.257
14+50		6.8	493.2 ✓ 492.885
14+65	} on old Road	8.3	491.7 ✓ 492.3
4.75			492.12 ✓
15+00		7.8	492.2 ✓ 492.2
15+50		7.3	492.7 ✓
16+00		6.8	493.2 ✓
16+50	} End of line	5.8	494.2 ✓ 1.00%

Lt out

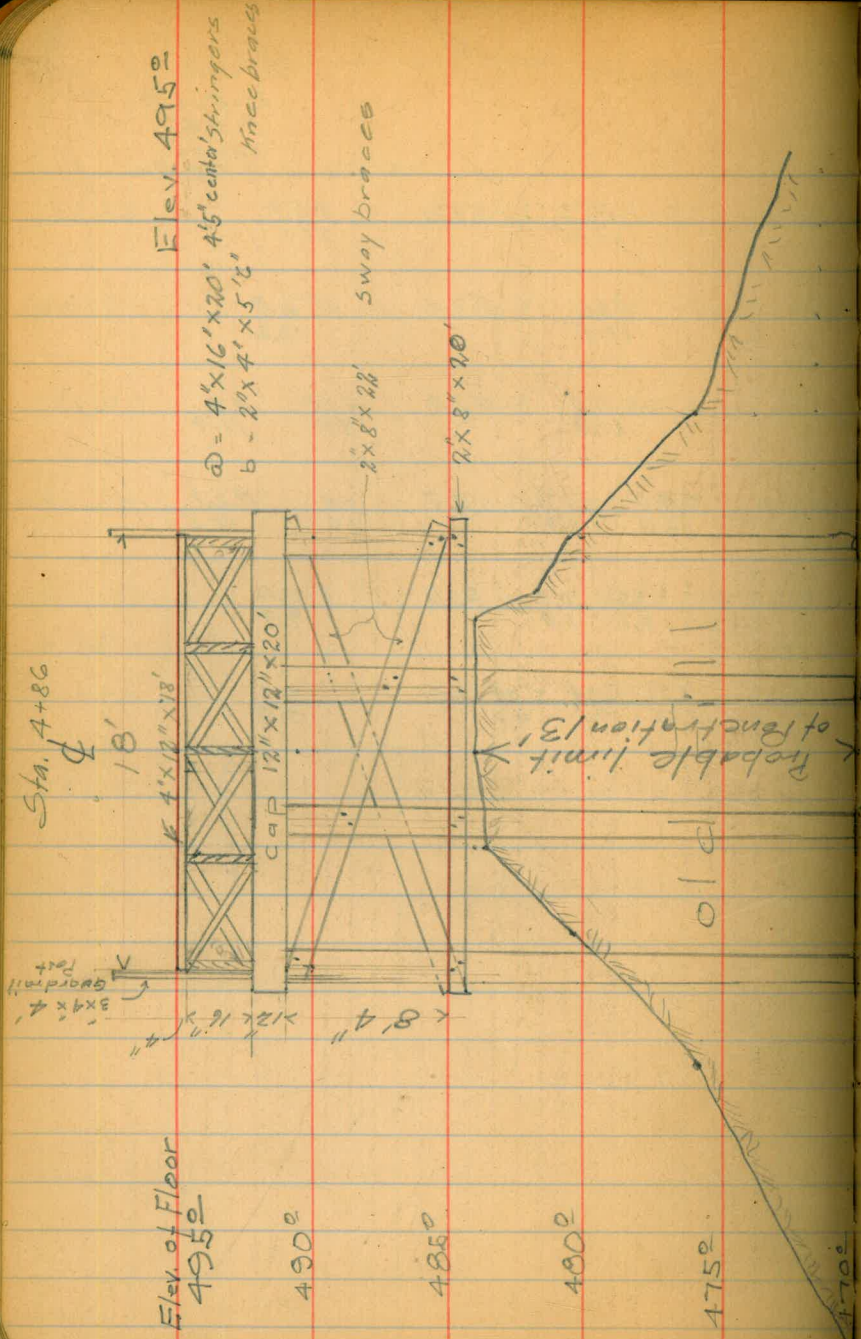
±

Rt out

15-5-28
P.O.G.
Leach
Simpson

9

F6.3 18.45	F7.2	F5.4 17.1	
F5.6 17.4	F3.0	F2.8 13.2	
C1.10 11.5	C1.0	C1.4 9.4	0.0 11.0
C4.0 13.0	C1.3 1.0	C0.8	0.0 1.6
C4.5 13.25	C2.6 4.1	0.0 1.0	F0.6 9.9
C3.1 12.55	C2.4 7.8	C0.4 4.6	0.0 9.0



543
462
721

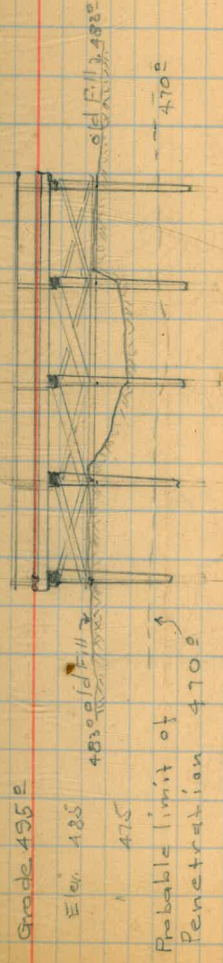
Sta. 4+27

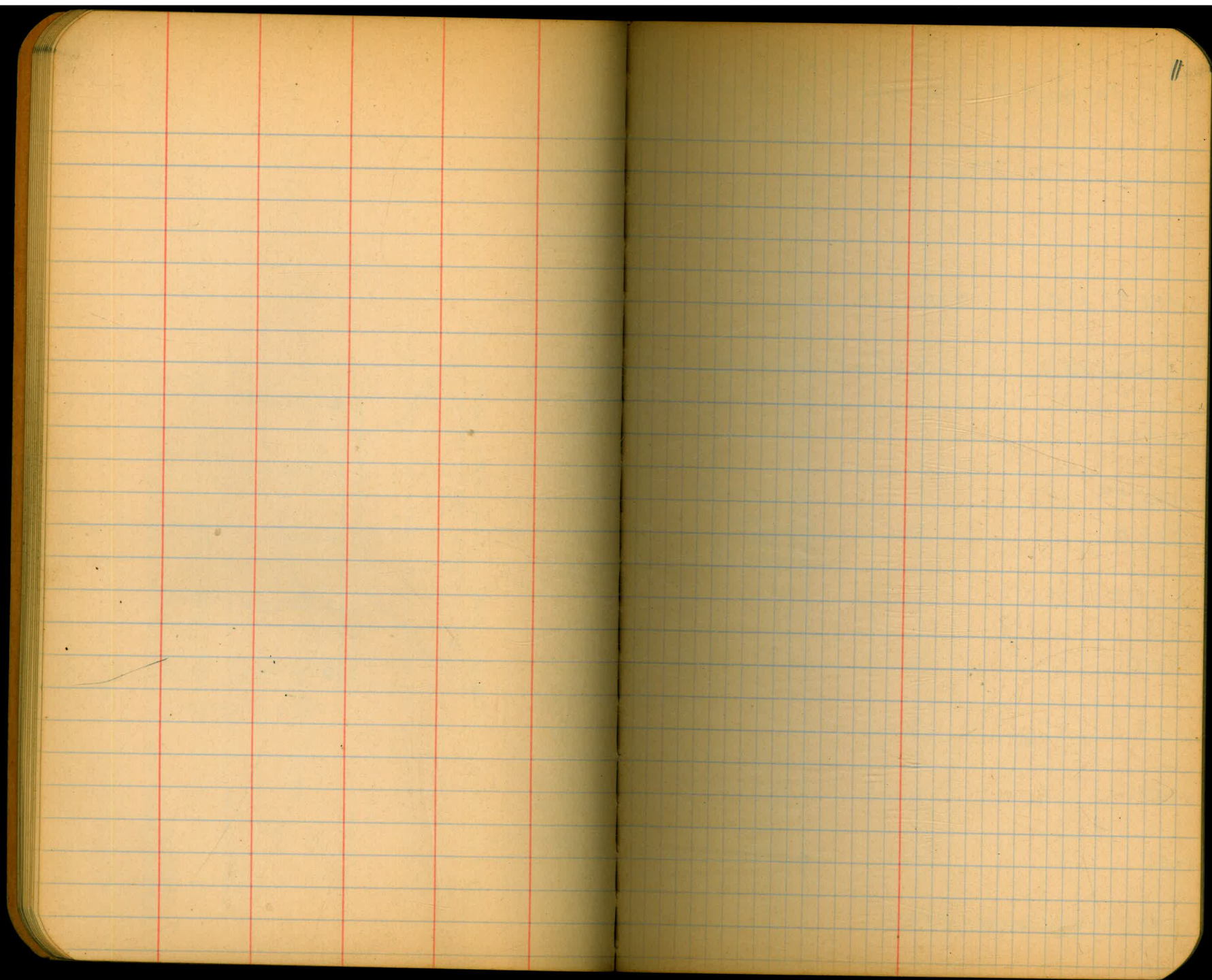
4+26

4+24

4+43

190' x 190' x 190' x 190' x





Relocation of Road
Route # 9 Sta. 484+75 to 486+51.45

490.7 H.W.M.

11.0 501.7

1+76 ⁴⁵ E.C.

H.I. 501.7

1+60

end of change

6.7

= Grade

1+54.8

1+45.20 P.I.

$\Delta = 37^{\circ}10'R^+$

1+33.2

$R = 100$

S.T. 33.62

L.A. = 64.87

100

1+11.58 B.C.

1+00

11.0

+80

1+78 

0+50

11.0

0+25 P.I.

$\Delta 19^{\circ}30'R^+$

10.7

0+00 = 484+75 County R# 9

6.7

= Grade

£

July 25-28

POG

Leach

Simpson

17

Elev. for cutoff Okay Bridge

July 25-28
P.O.G.

13

525.47 BM#4

0.64 526.11

12.83 513.28

0.87 514.15

12.53 501.62

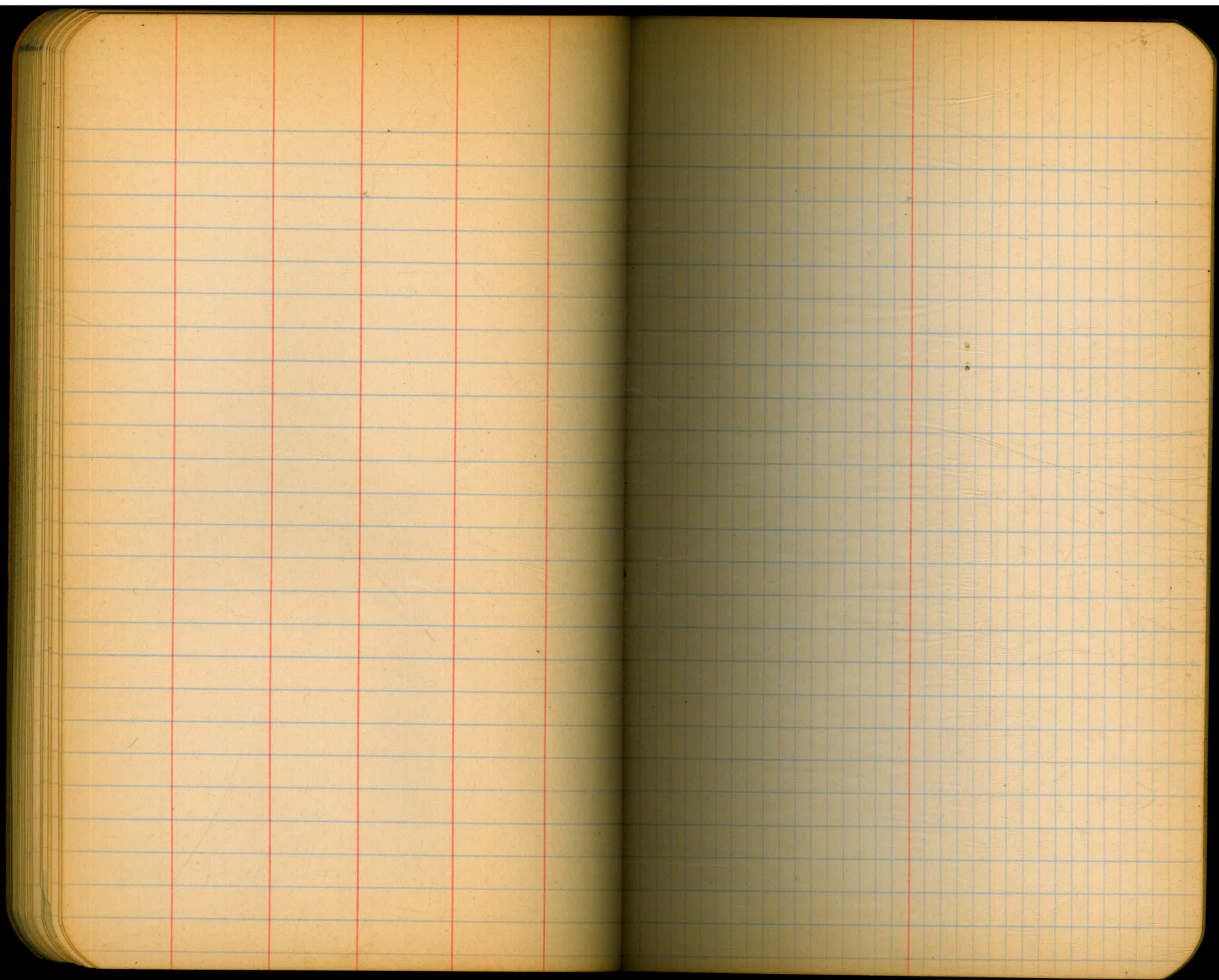
0.44 502.06

Floor of Bridge 495⁰⁰ 7.06 grade Rod

cutoff = $-32'' = 2.6999' = 2.70$

492.30 9.76 grade Rod

17



3+50 < 2.1 >

487.7
3.8
491.5
9.2
485.3
9.7

6.1878 0.00781 = 0°27'
3.50 37°42'
268.78.2100000 38°09'
128146 19.046 =
218530
128146
303840
26872

38.15
200
763.00
17483
2289
3815
3052
5341
763
133.16639

6.1878
69.16
949.62
133.17
6.82.79

7+40.74
5°0.72
6+90.02

7+52.37 correct P.I.

7+32.51 • B.G.

7+83.22 • E.G.

345745
691890