1397

Balboa Park

ROADS

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

CHICAGO, ILL.

X POWDER HOUSE CANYON ROAD Oct 29-30 By Louden.

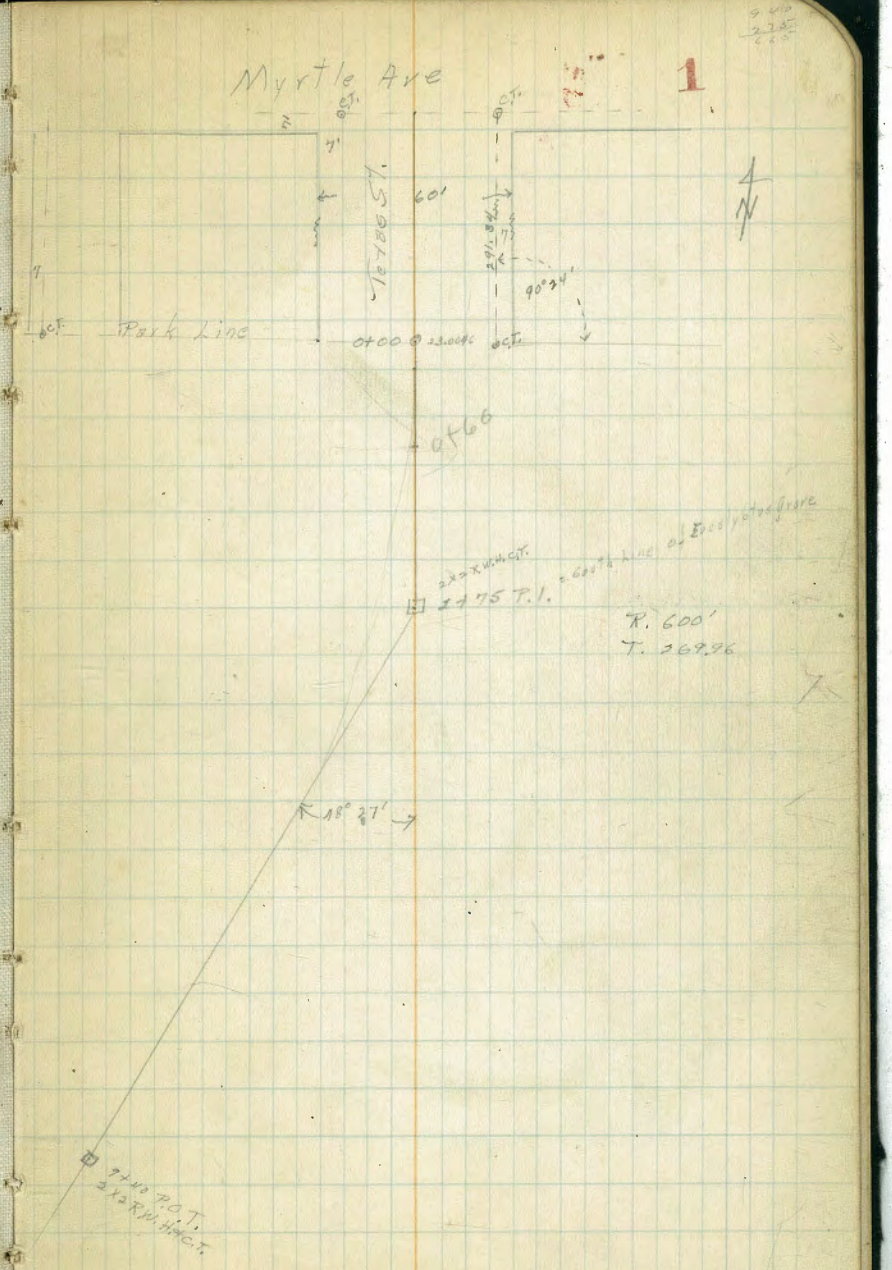
FROM - Florida St. to Pershing Drive 1 to 31

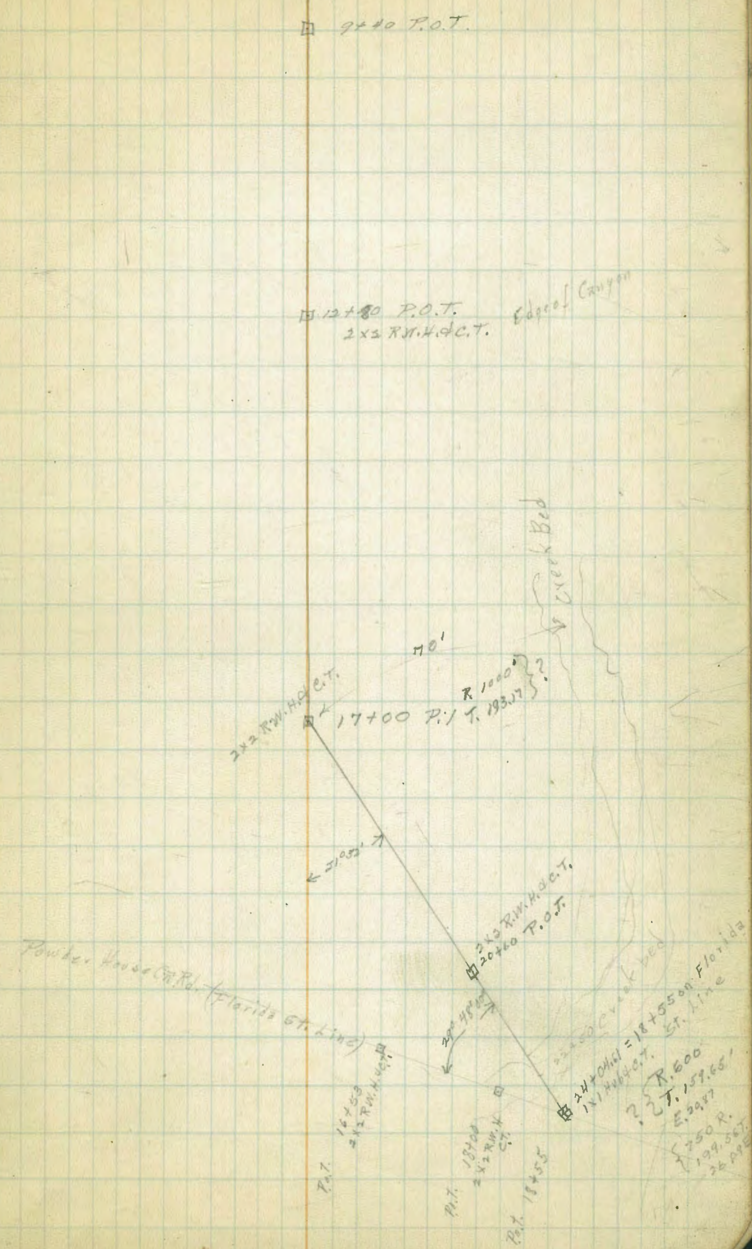
PERSHING DRIVE along pavement. 50 to 63

5/16/30
Flood.
Reinec.
Kaumer.

Powder House Canon Road

Texas St. Line, From P.I. of North Line of Balboa Park to Junction with Powder House Canon Rd, Florida St. Line @ Sta. 18+55. Length, 24+04.61




9+80 P.O.T.
12+80 P.O.T.
2x2 R.W.H.&C.T.
Edge of Canyon
Creek Bed
70'
2x2 R.W.H.&C.T.
17+00 P.I
R 1000'
T. 193.17
?
21°03'
2x2 R.W.H.&C.T.
20+60 P.O.T.
Powder House Cn. Rd. (Florida St. Line)
29°48'
Creek bed
24+04.61 = 18+55 on Florida St. Line
1x1 Hub & C.T.
R. 600
T. 159.65'
E. 20.87
750 R.
199.56 T.
P.T. 16+53
2x2 R.W.H.&C.T.
P.T. 18+00
2x2 R.W.H. C.T.
P.T. 18+55

X Sec. Powder House Canyon Road.
Alignment - "B" Line Book 1355 P 69 (Sisson)
10/29/30 Loudon.

B.M	2.55	200.56	198.01	Florida & Myrtle B.P.S.W.
0-140				
Ecb		4.81	195.75	
gut		5.71	194.85	
℄		5.96	194.60	
Wgut		5.64	194.92	
Wcb		4.82	195.74	
0-40 = NL Upas				
Wcb-2½ top cb		5.81		
gut		6.67	193.89	
℄		6.98	193.58	
Ecb+2½ gut		6.55	194.01	
" top cb		5.70	194.86	
0-20 = ℄ Upas				
EL		5.65	194.91	
cb		6.32	194.24	
℄		7.06	193.50	
cb		7.40	193.16	
WL		7.60	193.96	
0+00 = SL Upas				
WL		7.18	193.38	
cb		6.80	193.76	
℄		6.52	194.04	
cb		6.43	194.13	
+2½ gut		6.39	193.17	
+2½ top cb		5.58	194.98	

Intersection Upas & Florida. N.E - N.W & S.E returns in. 60' wide 10' curbs 40' Roadway. } Note.

4

		200.56		
✓ TP	4.25	203.45	1.36	199.20
0+50				
50 L			0.3	203.2
30 L			4.0	199.5
15 L			5.5	198.0
℄			8.1	195.4
15 R			10.2	193.3
23 R			11.0	192.5
50 R			10.3	193.2
1+00				
50 R			9.7	193.8
24 R			11.1	192.4
15 R			9.6	193.9
℄			7.6	195.9
15 L			5.8	197.7
50 L			1.1	202.4
1+50				
50 L			2.2	201.3
15 L			6.6	196.9
℄			8.0	195.5
15 R			9.0	194.5
50 R			10.9	192.6

Powder House Canyon.

2+00	203.45		
50R		10.9	192.6
15R		10.1	193.4
℄		9.2	193.3
15L		7.8	195.7
50L		3.5	200.0
2+50			
50L		5.6	197.9
15L		9.3	194.2
℄		10.0	193.5
15R		11.3	192.2
45R		15.1	188.4
50R		14.4	189.1
3+00			
50R		15.5	188.0
25R		16.2	187.3
15R		13.6	189.9
℄		11.5	192.0
15L		10.2	193.3
50L		7.0	196.5
T.P. 494	198.70	9.69	193.76

3+50	198.70		
50L		3.4	195.3
20L		5.4	193.3
15L		6.8	191.9
℄		11.8	186.9
15R		12.1	186.6
50R		11.8	186.9
4+00			
50R		12.3	186.4
20R		13.3	185.4
15R		12.8	185.9
℄		12.8	185.9
15L		13.0	185.7
25L		11.4	187.3
50L		3.7	195.0
4+50			
50L		5.4	193.3
35L		12.9	185.8
15L		13.4	185.3
℄		13.2	185.5
15R		14.1	184.6
30R		14.5	184.2
50R		13.9	184.8

Powder House Canyon.

5+00	198.70		
50 R		15.3	183.4
15 R		14.4	184.3
℄		13.6	185.1
15 L		12.2	186.5
35 L		11.7	187.0
50 L		5.5	193.2
5+50			
50 L		7.1	191.6
30 L		10.2	188.5
15 L		11.3	187.4
℄		12.5	186.2
15 R		14.2	184.5
40 R		16.7	182.0
50 R		15.5	183.2
6+00			
50 R channel		18.2	180.5
45 R		16.3	182.4
35 R		16.6	182.1
32 R		18.3	180.4
30 R		17.0	179.7
15 R		15.9	182.8
℄		14.2	184.5
15 L		10.3	188.4
50 L		1.1	197.6
T.P. 5 61	197.90	6.41	192.29

6+50	197.90		
50 L		0.1	197.8
28 L		7.1	190.8
15 L		14.3	183.6
℄		15.7	182.2
15 R		16.6	181.3
30 R		17.4	180.5
50 R		15.8	182.1
6+90			
50 R		19.2	178.7
43 R		17.9	180.0
28 R		19.1	178.8
15 R		16.9	181.0
℄		16.1	181.8
15 L		12.6	185.3
50 L		2.3	195.6
7+15			
50 L		2.2	195.7
15 L		8.0	189.9
℄		10.3	187.6
15 R		12.2	185.7
27 R		15.1	182.8
39 R		19.5	178.4
45 R		18.0	179.9
50 R		19.0	178.9

	7+50	197.90		
50R			18.6	179.3
40R			14.9	183.0
15R			11.1	186.8
℄			9.7	188.2
15L			8.3	189.6
40L			6.8	191.1
43L			8.0	189.9
50L			4.7	193.2
	7+75			
50L			3.7	194.2
15L			9.7	188.2
℄			13.0	184.9
15R			13.6	184.3
35R			14.6	183.3
50R			17.9	180.0
	8+00			
50R			17.5	180.4
15R			13.1	184.8
℄			12.1	185.8
15L			11.1	186.8
50L			5.6	192.3
T.P	6.15	191.53	12.52	185.38

		191.53		
8+50				
50L			2.0	189.5
15L			7.9	183.6
℄			9.2	182.3
15R			10.9	180.6
30R			13.4	178.1
50R			13.5	178.0
	9+00			
50R			14.0	177.5
15R			11.9	179.6
℄			10.8	180.7
15L			9.0	182.5
50L			3.2	188.3
	9+50			
50L			2.2	189.3
20L			8.5	183.0
15L			10.5	181.0
℄			12.5	179.0
15R			14.0	177.5
50R			15.2	176.3
T.P	6.66	190.25	7.94	183.59

10+00	190.25			
50R			16.9	173.4
15R			14.3	176.0
℄			12.5	177.8
15L			10.4	179.9
50L			0.6	189.7
10+50				
50L			4.6	185.7
15L			13.1	177.2
℄			15.3	175.0
15R			16.9	173.4
50R			16.6	173.7
TP	3.70	181.12	12.83	177.42
11+00				
50R	channel		11.0	170.1
44R			8.2	172.9
15R			8.8	172.3
℄			8.8	172.3
15L			8.9	172.2
50L			6.6	174.5

11+50	181.12		
50L		9.8	171.3
15L		10.6	170.5
℄		9.0	172.1
10R		9.3	171.9
15R	channel	12.0	169.1
23R	"	12.0	169.1
25R		10.0	171.1
50R		9.5	171.6
11+75			
40R		6.2	174.9
34R		9.2	171.9
25R		10.1	171.0
15R		9.5	171.6
6R		10.6	170.5
4R	channel	12.5	168.6
℄	"	12.3	168.8
4L	"	11.6	169.5
6L	"	10.2	170.9
15L		9.7	171.4
50L		10.6	170.5

Powder House Canyon.

12+00		181.12		
50 L			10.4	170.7
38 L			10.1	171.0
34 L	channel		12.4	168.7
15 L	"		11.7	169.4
℄			9.6	171.5
15 R			9.5	171.6
20 R			7.3	173.8
50 R			4.0	177.1
T.P.	055	178.38	3.29	177.83
12+50				
50 R			1.9	176.5
15 R			3.7	174.7
℄			5.1	173.3
10 L			5.8	172.6
15 L			8.2	170.2
50 L			8.5	169.9
13+00				
50 L			9.8	168.6
30 L			8.8	169.6
15 L			6.8	171.6
℄			5.7	172.7
15 R			4.7	173.7
20 R			5.4	173.0
30 R			4.0	174.4
50 R			3.4	175.0

13+50		178.38		
50 R			5.7	172.7
30 R			5.9	172.5
20 R			7.3	171.1
15 R			6.5	171.9
7 R			7.0	171.4
3 R			8.1	170.3
℄			8.1	170.3
3 L			7.7	170.7
15 L			9.2	169.2
21 L			10.1	168.3
45 L			10.0	168.4
50 L			13.4	165.0
14+00				
50 L			11.8	166.6
47 L			12.2	166.2
36 L			14.3	164.1
33 L			14.4	164.0
31 L			12.2	162.2
15 L			10.1	168.3
℄			9.5	168.9
15 R			9.4	169.0
23 R			9.4	169.0
33 R			8.0	170.4
50 R			7.9	170.5

14+50	178.38		
50R		9.6	168.8
32R		10.0	168.4
23R		11.1	167.3
15R		11.7	166.7
10R		10.7	167.7
℄		11.2	167.2
15L		12.1	166.3
25L		13.0	165.4
32L		12.8	165.6
37L		12.0	166.4
40L		13.4	165.0
50L		14.9	163.5
15+00			
50L		11.7	166.7
41L		13.6	164.8
28L		14.0	164.4
23L	Channel	16.7	161.7
19L	"	16.7	161.7
15L		14.1	164.3
℄		12.6	165.8
15R		12.0	166.4
50R		11.3	167.1
T.P	8.04	173.52	12.90	165.48

15+25	173.52		
50R		7.2	166.3
15R		7.8	165.7
℄		9.4	164.1
9L		12.4	161.1
15L		12.0	161.5
20L		9.9	163.6
44L		8.0	165.5
50L		6.6	166.9
15+50			
50L		4.2	169.3
33L		9.7	163.8
30L		8.9	164.6
15L		9.2	164.3
6L		9.3	164.2
3L		12.7	160.8
℄		12.9	160.6
1R		12.9	160.6
4R		10.7	162.8
10R		8.5	165.0
15R		8.2	165.3
50R		7.7	165.8

15+75	173.52		
50R		8.3	165.2
15R		9.8	165.7
10R		11.3	162.2
9R		13.5	160.0
4R		12.7	160.8
℄		10.8	162.7
15L		9.1	164.4
33L		9.2	164.3
50L		2.1	171.4
16+00			
50L		0.8	172.7
37L		7.6	165.9
23L		9.5	164.10
15L		8.6	164.9
℄		10.1	163.4
8R		11.1	162.4
11R	channel	13.9	159.6
15R	"	13.7	159.6
20R		10.3	163.2
50R		8.5	165.0

16+50	173.52		
50R		9.8	163.7
40R		10.7	162.8
37R	channel	14.7	158.8
29R	"	14.1	159.4
25R		11.4	162.1
15R		10.7	162.8
℄		9.6	163.9
15L		9.0	164.5
33L		8.8	164.7
50L		1.6	171.9
17+00			
50L		6.7	166.8
18L		9.0	164.5
15L		9.8	163.7
10L		10.2	163.3
7L		8.7	164.8
℄		9.6	163.9
15R		10.2	163.3
39R		11.5	162.0
45R		14.3	159.2
50R		14.3	159.2
T.P.	3.73	167.17	10.08	163.44

17+33.19 B.C. 167.17		
50R	6.1	161.1
15R	3.9	163.3
℄	3.1	164.1
7L	4.2	163.0
15L	4.2	163.0
23L	5.4	161.8
28L	3.0	164.2
50L	0.7	166.5
17+50		
50L	1.1	166.1
35L	2.6	164.6
15L	3.7	163.5
5L	5.2	162.0
℄	5.0	162.2
2R	3.8	163.4
15R	3.5	164.7
50R	5.7	161.5
18+00		
50R	6.8	160.4
25R	4.9	162.3
23R	6.1	161.1
15R	6.5	160.7
8R	5.9	161.3
5R	5.0	162.2
℄	4.7	162.5

18+00 16717		
6L	5.3	161.9
15L	5.0	162.2
40L	2.5	164.7
50L	2.8	164.4
18+50		
50L	2.1	165.1
40L	3.2	159.0
35L	4.3	162.9
15L	4.6	162.6
℄	5.0	162.2
10R	5.8	161.4
15R	7.2	160.0
17R	8.2	159.0
21R	8.0	159.2
23R	6.6	160.6
35R	7.0	160.2
50R	9.5	157.7
18+66.71 E.C.		
50R	9.3	157.9
40R	10.0	157.2
35R	7.7	159.5
15R	5.9	161.3
℄	5.36	161.81
15L	5.5	161.7
30L	3.8	163.4
50	0.6	166.6

19+00	167.17		
50 L		+0.3	167.5
30 L		3.3	163.9
15 L		5.5	161.7
10 L		6.5	160.7
℄		6.9	160.3
15 R		6.7	160.5
29 R		8.1	158.1
33 R		10.0	157.2
39 R		10.2	157.0
44 R		8.6	158.6
50 R		8.0	159.2
19+50			
50 R		8.2	159.0
39 R		9.7	157.5
26 R		10.2	157.0
22 R		8.3	158.9
15 R		7.8	159.4
℄		7.7	159.5
15 L		5.7	161.3
50 L		1.1	166.1

20+00	167.17		
50 L		2.7	164.5
15 L		7.2	160.0
℄		8.0	159.2
15 R		8.3	158.9
35 R		8.9	158.3
45 R		11.6	155.6
50 R		11.3	155.9
20+50			
50 R		10.7	156.5
40 R		11.6	155.6
15 R		9.5	157.7
℄		8.9	158.3
TP 5 24	164.50	7.91	159.26
15 L		5.4	159.1
25 L		4.7	159.8
50 L		2.8	161.7
21+00			
50 L		2.4	162.1
36 L		4.5	160.0
15 L		5.8	158.7
℄		6.6	157.9
15 R		7.7	156.8
23 R		9.0	155.5
32 R		11.4	153.1
37 R		9.9	154.6
50 R		8.7	155.8

21+50	164.50		
50R		9.6	154.9
22R		10.2	154.3
15R		11.4	153.1
10R ch1.		11.8	152.7
℄		9.8	154.7
4L		8.1	156.4
15L		6.6	157.9
35L		5.1	159.4
45L		4.9	159.6
50L		3.9	160.6
22+00			
50L		3.0	161.5
35L		3.9	160.6
27L		6.0	158.5
15L		9.3	155.2
10L		10.7	153.8
℄		11.2	153.3
15R		11.8	152.7
20R		13.2	151.3
30R		10.8	153.7
40R		10.4	154.1
50R		10.3	154.2

22+50	164.50		
50R		11.6	152.9
40R		12.3	152.2
35R		14.0	150.5
30R		13.4	151.1
25R		11.7	152.8
15R		11.4	153.1
℄		9.6	154.9
15L		4.0	160.5
28L		2.1	162.4
24L		1.8	162.7
40L		0.3	164.2
50L		+1.3	165.8
23+00			
50L		1.0	163.5
35L		3.6	160.9
25L		3.6	160.9
15L		4.9	159.6
℄		6.5	158.0
15R		9.6	154.9
30R		12.1	152.4
45R		12.6	151.9
50R		11.8	152.7
T.P. 6.44	168.60	2.34	162.16

23+50	168.60		
50R		15.2	153.4
30R		14.6	154.0
15R		13.6	155.6
℄		13.2	155.4
4L		13.0	155.6
15L		11.0	157.6
27L		9.4	159.2
38L		9.2	159.4
50L		6.8	161.8
24+00			
50L		5.2	163.4
35L		8.2	160.4
32L		9.5	159.1
23L		9.5	159.1
15L		11.1	157.5
℄		13.2	155.4
15R		14.3	154.3
32R		16.3	152.3
50R		16.7	151.9

24+50	168.60		
50R		17.9	150.7
15R		15.1	153.5
℄		13.2	155.4
15L		11.9	156.7
23L		11.3	157.3
32L		9.0	159.6
50L		5.9	162.7
25+00			
50L		6.6	162.0
27L		10.6	158.0
15L		12.6	156.0
℄		15.2	153.4
T.P. 198	159.31	11.27	157.33
℄		5.98	153.33
15R		6.6	152.7
50R		10.0	149.3
℄ 406	12.08	165.41	153.33
25+50			
50R		17.1	148.3
24R		16.5	148.9
15R		14.3	151.1
℄		12.2	153.2
15L		9.8	155.6
50L		2.9	162.5

26+00	165.41		
50 L		+2.1	167.5
15 L		6.5	158.9
℄		9.3	156.1
15 R		14.9	150.5
40 R		18.9	146.5
50 R		19.0	146.4
26+50			
50 R		19.7	145.7
28 R		16.1	149.3
15 R		9.4	156.0
11 R		8.2	157.2
℄		6.3	159.1
15 L		4.4	161.0
50 L		+1.8	167.2
T.P	10.36	7.61	157.80
27+00			
50 L		0.2	168.0
15 L		7.9	160.3
℄		10.4	157.8
15 R		12.6	156.6
25 R		13.9	154.3
38 R		23.0	145.2
50 R		23.8	144.4

168.16

27+50		
50 R	24.6	143.6
33 R	17.4	150.8
15 R	14.1	154.1
℄	10.0	158.2
15 L	6.8	161.4
33 L	3.5	164.7
50 L	2.5	165.7
28+00		
50 L	10.7	157.5
15 L	13.5	154.7
℄	15.6	153.6
15 R	17.0	151.2
25 R	19.3	148.9
40 R	20.9	147.3
50 R	20.0	148.2
28+50		
50 R	18.2	150.0
15 R	14.7	153.5
℄	12.6	155.6
15 L	8.1	160.1
25 L	4.9	163.3
50 L	+1.8	170.0

29+00		168.16		
50L			+4.0	172.2
15L			6.2	162.0
℄			11.3	156.9
15R			15.1	153.1
50R		✓	19.4	148.8
T.P.	12.17	170.99	9.34	158.82
29+50				
50R			23.8	147.2
15R			17.7	153.3
℄			14.7	156.3
15L			11.6	159.4
50L			0.8	170.2
30+00				
50L			5.5	165.5
15L			14.2	156.8
℄			16.2	154.8
15R			18.3	152.7
50R			23.1	147.9
30+50				
50R			24.6	146.4
30R			21.6	149.4
15R			20.0	151.0
℄			18.7	152.3
15L			17.0	154.0
50L			11.7	159.3
T.P.	5.35	163.61	12.73	158.26

31+00	163.61		
50L		7.0	156.6
15L		12.1	151.5
℄		13.7	149.9
15R		15.1	148.5
40R		18.0	145.6
50R		19.5	144.1
31+50			
50R		23.5	140.1
15R		20.2	143.4
℄		17.7	145.9
15L		15.8	147.8
50L		10.3	153.3
32+00			
50L		11.0	152.6
T.P. 0.99	151.55	13.05	150.56
15L		8.3	143.3
℄		10.5	141.1
15R		11.5	140.1
50R		13.6	138.0
32+50			
50R		15.8	136.8
30R		14.1	137.5
15R		13.3	138.3
℄		12.6	139.0
15L		10.1	141.5
35L		4.7	146.9
50L		1.2	150.4

33+00	151.55		
50 L		3.2	148.4
25 L		11.0	140.6
15 L		12.2	139.4
℄		13.8	137.8
15 R		14.9	136.7
31 R		16.4	134.2
50 R		16.8	134.8
33+50			
50 R		16.6	135.0
30 R		17.2	134.4
15 R		16.0	135.6
℄		15.6	136.0
15 L		14.0	137.6
38 L		9.9	141.7
50 L		5.7	145.9
34+00			
50 L		7.9	143.7
40 L		11.2	139.6
15 L		14.1	137.5
℄		15.2	136.4
15 R		16.6	135.0
30 R		18.4	133.2
35 R		17.6	134.0
50 R		17.7	133.9

34+50	151.55		
50 R		19.2	132.4
30 R		18.5	133.1
25 R		19.5	132.1
15 R		17.9	133.7
℄		17.1	134.5
15 L		15.8	135.8
30 L		13.9	137.7
50 L		8.4	143.2
T.P. 5.77	144.66	12.66	138.89
35+00			
50 L		3.1	141.6
33 L		8.2	136.5
15 L		10.4	134.3
℄		11.9	132.8
15 R		12.9	131.8
23 R		12.4	132.3
50 R		13.3	131.4
35+50			
50 R		14.0	130.7
15 R		13.1	131.6
℄		12.8	131.9
15 L		12.0	132.7
25 L		10.5	134.2
50 L		2.9	141.8

36+00	144.66		
50L		2.2	142.5
15L		10.3	134.4
℄		11.8	132.9
15R		13.9	130.8
50R		14.1	130.6
36+50			
50R		15.2	129.5
35R		15.3	129.4
27R		13.2	131.5
15R		11.9	132.8
℄		9.9	134.8
15L		7.8	136.9
50L		3.4	141.3
37+00			
50L		4.5	140.2
15L		7.3	137.4
℄		9.0	135.7
15R		10.7	134.0
35R		12.6	132.1
50R		15.4	129.3

37+50	144.66		
50R		14.2	130.5
30R		11.8	132.9
15R		10.2	134.5
℄		9.1	135.6
15L		8.0	136.7
50L		5.6	139.1
38+00			
50L		6.6	138.1
15L		9.0	135.7
℄		9.89	134.77
15R		10.9	133.8
35R		13.0	131.7
50R		15.4	129.3
38+50			
50R		16.6	128.1
30R		14.0	130.7
15R		11.5	133.2
℄		10.6	134.1
15L		9.9	134.8
50L		8.5	136.2
39+00			
50L		12.9	131.8
35L		10.3	134.4
15L		10.8	133.9
℄		11.6	133.1

39+00	144.66			
15 R			13.0	131.7
40 R			16.7	128.0
50 R			18.0	126.7
T.P.	3.70	136.67	11.69	132.97
39+50				
50 R			10.2	126.5
30 R			6.7	130.0
15 R			5.6	131.1
℄			4.5	132.2
15 L			4.0	132.7
30 L			4.2	132.5
43 L			9.5	127.2
50 L			8.4	128.3
40+00				
50 L			9.2	127.5
45 L			11.3	125.4
30 L			10.6	126.1
26 L			9.1	127.6
15 L			9.2	127.5
℄			7.6	129.1
15 R			11.1	125.6
50 R			12.2	124.5

40+50	136.67			
50 R			11.8	124.9
40 R			10.5	126.2
15 R			10.9	125.8
℄			11.1	125.6
12 L			12.0	124.7
15 L			10.3	126.4
50 L			8.4	128.3
40+75				
50 L			6.6	130.1
25 L			9.7	127.0
15 L			10.3	126.4
℄			11.1	125.6
7 R			12.3	124.4
15 R			12.4	124.3
50 R			13.6	123.1
41+00				
50 R			12.2	124.5
15 R			10.2	126.5
℄			9.7	127.0
15 L			8.6	128.1
50 L			3.8	132.9
T.P.	6.94	141.97	1.64	135.03

41+50	141.97		
50L		3.4	138.6
15L		8.6	133.4
℄		10.5	131.5
15R		12.0	130.0
43R		14.9	127.1
50R		16.2	125.8
42+00			
50R		17.2	124.8
26R		13.8	128.2
15R		12.2	129.8
℄		10.6	131.4
15L		9.4	132.6
30L		6.9	135.1
50L		4.3	137.7
42+50			
50L		5.6	136.4
15L		10.6	131.4
℄		12.8	129.2
15R		14.4	127.6
50R		18.1	123.9

43+00	141.97		
50R		18.2	123.8
35R		17.3	124.7
15R		15.1	126.9
℄		13.4	128.6
15L		11.9	130.1
50L		6.5	135.5
43+50			
50L		7.7	134.3
15L		11.9	130.1
℄		14.3	127.7
15R		15.8	126.2
30R		16.4	125.6
50R		19.7	122.3
44+00			
50R		24.6	117.4
45R		24.6	117.4
40R		19.5	122.5
15R		17.6	124.4
℄		15.9	126.1
10L		13.4	128.6
15L		12.4	129.6
32L		10.2	131.8
33L		14.0	128.0
41L		13.7	128.3
45L		8.3	133.7
50L		7.4	134.6

44+15	141.97		
50L		8.1	133.9
25L		11.6	130.4
20L		16.4	125.6
15L		16.8	125.2
℄		19.2	122.8
15R		19.3	222.7
26R		21.6	120.4
50R		24.5	117.5
44+20			
50R		23.9	118.1
26R		19.0	122.0
15R		17.8	124.2
℄		16.0	126.0
15L		13.2	128.8
50L		8.1	133.9
44+50			
50L		10.0	132.0
15L		14.4	127.6
℄		14.3	125.7
15R		18.7	123.3
30R		20.4	121.6
50R		21.6	120.4

45+00	141.97		
50R		22.3	119.7
35R		20.7	121.3
15R		19.0	123.0
℄		17.2	124.8
15L		15.6	126.4
50L		10.4	131.6
T.P. 563	135.45	12.15	129.82
45+50			
50L		3.4	132.1
15L		8.2	127.3
℄		10.6	124.9
15R		12.2	123.3
50R		15.6	119.9
46+00			
50R		16.5	119.0
25R		13.4	122.1
15R		12.5	123.0
℄		10.7	124.8
15L		9.0	126.5
50L		4.4	131.1

46+50	135.45	
50 L	4.8	130.7
15 L	9.1	126.4
℄	10.8	124.7
15 R	12.8	122.7
50 R	17.3	118.2
47+00		
50 R	19.0	116.5
35 R	15.7	119.8
15 R	13.3	122.2
℄	11.6	123.9
15 L	9.9	125.6
50 L	6.0	129.5
47+50		
50 L	6.5	129.0
15 L	10.9	124.6
℄	12.5	123.0
10 R	13.2	122.3
15 R	14.0	121.5
35 R	17.7	117.8
50 R	21.6	113.9

135.45		
48+00		
50 R	26.9	108.6
42 R	26.3	109.2
35 R	18.6	116.9
15 R	15.0	120.5
℄	12.5	123.0
15 L	10.7	124.8
30 L	7.7	127.8
50 L	4.9	130.6
48+50		
50 L	5.0	130.5
30 L	8.7	126.8
22 L	9.1	126.4
15 L	10.5	125.0
℄	12.5	123.0
15 R	15.2	120.3
30 R	18.3	117.2
42 R	25.4	110.1
50 R	27.3	108.2

49+00	135.45			
50R			29.0	106.5
45R			29.0	106.5
42R			26.4	109.1
30R			24.5	111.0
15R			20.9	114.6
℄			16.0	119.5
15L			11.9	123.6
32L			8.3	127.2
41L			6.7	128.8
50L			4.8	130.7
49+50				
50L			4.6	130.9
15L			12.6	122.9
TP	10.35	133.21	12.59	122.86
℄			13.8	117.4
15R			19.9	113.3
25R			21.7	111.5
43R			23.0	110.2
50R			26.3	106.9
50+00				
50R			23.2	110.0
47R			23.2	110.0
30R			17.6	115.6
15R			15.7	117.5
℄			14.1	119.1
15L		133.21	11.8	121.4
31L			9.5	123.7
50L			6.1	127.1
TP	7.19	137.92	2.48	130.73
50+50				
50L			9.9	128.0
35L			12.4	125.5
15L			16.0	121.9
℄			20.3	117.6
15R			20.7	117.2
31R			22.9	115.0
50R			25.4	112.5
51+00				
50R			26.8	111.1
15R			24.5	113.4
℄			20.6	117.3
15L			15.8	122.1
45L			7.1	130.8
50L			6.8	131.1
51+24.01 B.C.				
50L			3.2	134.7
45L			5.8	132.1
37L			6.1	131.8
15L			12.9	125.0
℄			17.6	120.3
10R			20.8	117.1
15R			23.1	114.8

51+29.01	137.92		
29 R		28.2	109.7
50 R		28.8	109.1
51+50			
50 R		29.7	108.2
35 R		29.3	108.6
15 R		22.0	115.9
℄		15.0	122.9
15 L		10.2	127.7
35 L		5.1	132.8
43 L		4.7	133.2
50 L		0.4	137.5
52+00			
50 L		4.7	133.2
47 L		6.0	131.9
40 L		6.3	131.6
22 L		10.0	127.9
15 L		11.7	126.2
℄		16.9	121.0
15 R		24.6	113.3
32 R		30.0	107.9
50 R		31.6	106.5

52+50	137.92		
50 R		31.4	106.5
15 R		31.1	106.8
8 R		29.8	108.1
℄		26.8	111.1
15 L		18.8	119.1
22 L		15.1	122.8
50 L		6.9	131.0
52+75.85 E.C.			
T.P. 1.43	131.23	8.12	129.80
50 L		3.3	127.9
40 L		4.9	126.3
15 L		17.2	113.0
℄		23.8	107.4
15 R		25.6	105.6
50 R		25.7	105.5
53+00			
50 R		26.0	105.2
15 R		26.0	105.2
℄		25.3	105.9
15 L		19.9	111.3
43 L		5.8	125.4
50 L		4.8	126.4

53+50	131.23		
50 L		7.6	123.6
22 L		12.1	119.1
15 L		16.2	115.0
℄		23.8	107.4
15 R		26.5	104.7
50 R		26.3	104.9
54+00			
50 R		28.3	102.9
40 R		28.9	102.3
32 R		24.0	107.2
15 R		20.5	110.7
℄		17.3	113.9
15 L		15.0	116.2
50 L		9.4	121.8
54+50			
50 L		12.5	118.7
T.P.	3.57 121.70	13.10	118.13
15 L		8.0	113.7
℄		10.5	111.2
15 R		12.7	109.0
22 R		13.2	108.5
30 R		13.9	107.8
35 R		19.8	101.9
41 R		21.7	100.0
50 R		20.0	101.7

55+00	121.70		
50 R		16.0	105.7
15 R		13.2	108.5
℄		11.4	110.3
15 L		9.4	112.3
50 L		4.7	117.0
55+50			
50 L		6.0	115.7
15 L		9.7	112.0
℄		11.5	110.2
15 R		13.4	108.3
50 R		16.4	105.3
56+00			
50 R		15.3	106.4
15 R		13.4	108.3
℄		12.5	109.2
15 L		11.4	110.3
50 L		8.4	113.3
56+50			
T.P.	3.34 118.38	6.66	115.04
50 L		5.2	113.2
37 L		7.6	110.8
30 L		7.5	111.9
15 L		9.2	109.2
℄		11.2	107.2
15 R		12.2	106.2

56+50	118.38		
50R		14.5	103.9
57+00			
50R		15.2	103.2
25R		14.1	104.3
15R		13.5	104.9
℄		12.5	105.9
15L		9.6	108.8
50L		6.1	112.3
57+50			
50L		5.9	112.5
30L		7.9	110.5
15L		10.3	108.1
℄		12.46	105.92
15R		13.9	104.5
50R		16.8	102.1
58+00			
50R		17.6	100.8
15R		15.2	103.2
℄		13.4	105.0
15L		11.5	106.9
50L		5.8	112.6

58+50	118.38		
50L		5.6	112.8
38L		7.5	110.9
25L		11.5	106.9
15L		13.3	105.1
℄		15.4	103.0
15R		16.3	102.1
50R		18.5	99.9
59+00			
50R		18.7	99.7
25R		17.0	101.4
15R		15.3	103.1
℄		13.8	104.6
15L		11.7	106.7
50L		7.4	111.0
T.P. 3.90	109.28	13.00	105.38
59+50			
50L		+2.2	111.5
15L		3.1	106.2
℄		4.9	104.4
15R		6.4	102.9
50R		10.7	98.6

60+00	109.28		
50R		12.9	96.4
24R		11.1	98.2
15R		8 8	100.5
℄		6.5	102.8
15L		3 2	106.1
50L		+4.7	114.0
60+50			
50L		+6.0	115.3
15L		3.5	105.8
℄		8 62	100.66
15R		11.7	97.6
50R		14.2	95.1
61+00			
50R		15 3	94.0
15R		13.6	95.7
℄		11.5	97.8
15L		7.9	101.4
30L		2.5	106.8
50L		+4.0	113.3

61+50	109.28		
50L		0.4	108.9
30L		7.0	102.3
15L		9.5	99.8
℄		12 3	97.0
15R		14.1	95.2
50R		17 2	92.1
T.P. 5.10	102.89	11 49	97.77
62+00			
50R		11 2	91.7
40R		11.0	91.9
36R		10.1	92.8
15R		8 3	94.6
℄		7.1	95.8
15L		5.4	97.5
45L toe Porch Dr.		2.4	100.5
62+50			
40L toe Porch Dr		1.7	101.2
15L		6.6	96.3
℄		8.4	94.5
15R		9.6	93.3
50R		11.6	91 3

63+00	102.89	
50R	12.3	90.6
15R	11.1	91.8
℄	9.4	93.5
15L	7.1	95.8
40L toe Persh. Dr.	1.2	101.7
63+50		
40L	1.5	101.4
15L	8.0	93.9
℄	10.3	92.6
15R	11.1	91.8
50R	13.1	89.8
64+00		
50R	13.4	89.5
15R	12.5	90.4
℄	11.4	91.5
15L	9.1	93.8
40L	5.3	97.6
64+50		
50L	5.8	97.1
40L	8.4	94.5
15L	10.9	92.0
℄	12.3	90.6
15R	13.4	89.5
50R	14.2	88.7

65+00	102.89	
50R	14.2	88.7
15R	13.2	89.7
℄	12.1	90.8
15L	10.9	92.0
50L	8.1	94.8
65+50		
50L	10.2	92.7
15L	14.0	88.9
℄	13.6	89.3
15R	15.0	87.9
50R	14.5	88.4
T.P. 0.42 Nail Power Pole.	93.35	92.93
65+88 B.C.	9.96	
50R	5.8	87.6
30R	5.4	88.0
15R	5.8	87.6
℄	5.6	87.8
15L	5.1	88.3
47L toe Persh. Dr.	2.0	91.4

66+00	93.35		
45 L		2.4	91.0
15 L		5.3	88.1
℄		5.9	87.5
15 R		5.6	87.8
30 R		5.4	88.0
50 R		5.8	87.6
66+50			
50 R		7.0	86.4
26 R		6.0	87.4
15 R		6.1	87.3
10 R		5.6	87.8
℄		6.0	87.4
15 L		5.1	88.3
29 L		4.0	89.4
40 L		1.9	91.5
67+00			
50 L		3.1	90.3
30 L		4.0	89.4
15 L		4.4	89.0
℄		5.6	87.8
3 R		5.9	87.5
15 R		6.1	87.3
40 R		7.7	85.7
50 R		7.4	86.0

67+50	93.35		
50 R		8.9	84.5
30 R		8.0	85.4
15 R		6.4	87.0
12 R		5.7	87.7
℄		5.8	87.6
15 L		5.7	87.7
39 5/8 L N Pan Persh Dr.		4.81	88.554
68+00			
16 8/8 L N Pan		5.94	87.41
10 L		6.0	87.4
℄		6.6	86.8
15 R		6.6	86.8
22 R		6.3	87.1
30 R		8.6	84.8
50 R		9.0	84.4
68+55 ℄ Meets N Pan Persh Dr.			
50 R		10.2	83.2
38 R		9.7	83.7
32 R		7.7	85.7
15 R		6.6	86.8
7 R		6.5	86.9
℄		6.74	86.61

68+89 73 E.C 93.35

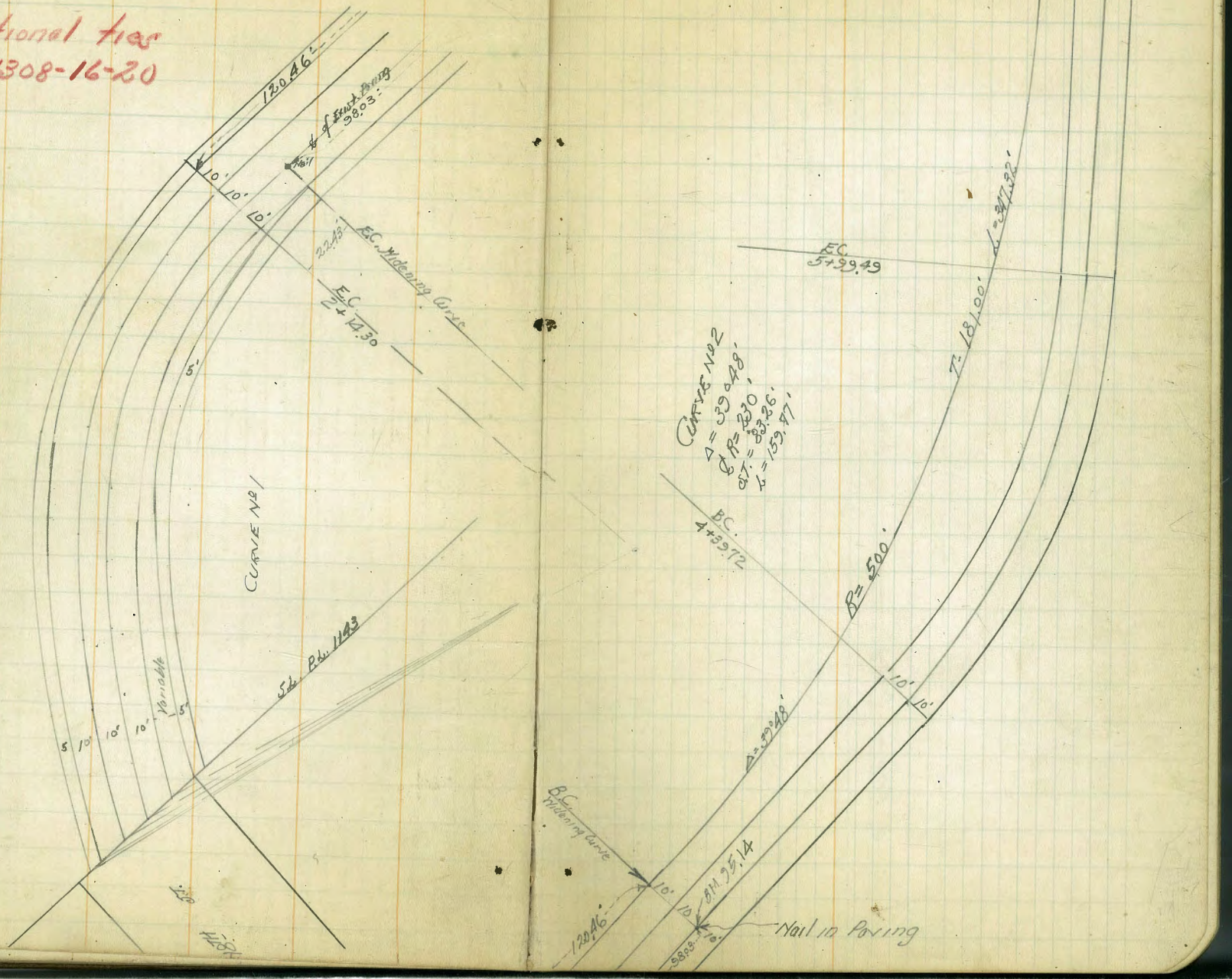
℄	6.88	86.47
6a R	6.91	86.44
15 R	6.8	86.6
26a	7.1	86.3
69+52 73		
15 R Ridge Pin	7.07	86.28
B.M	5.54	87.81

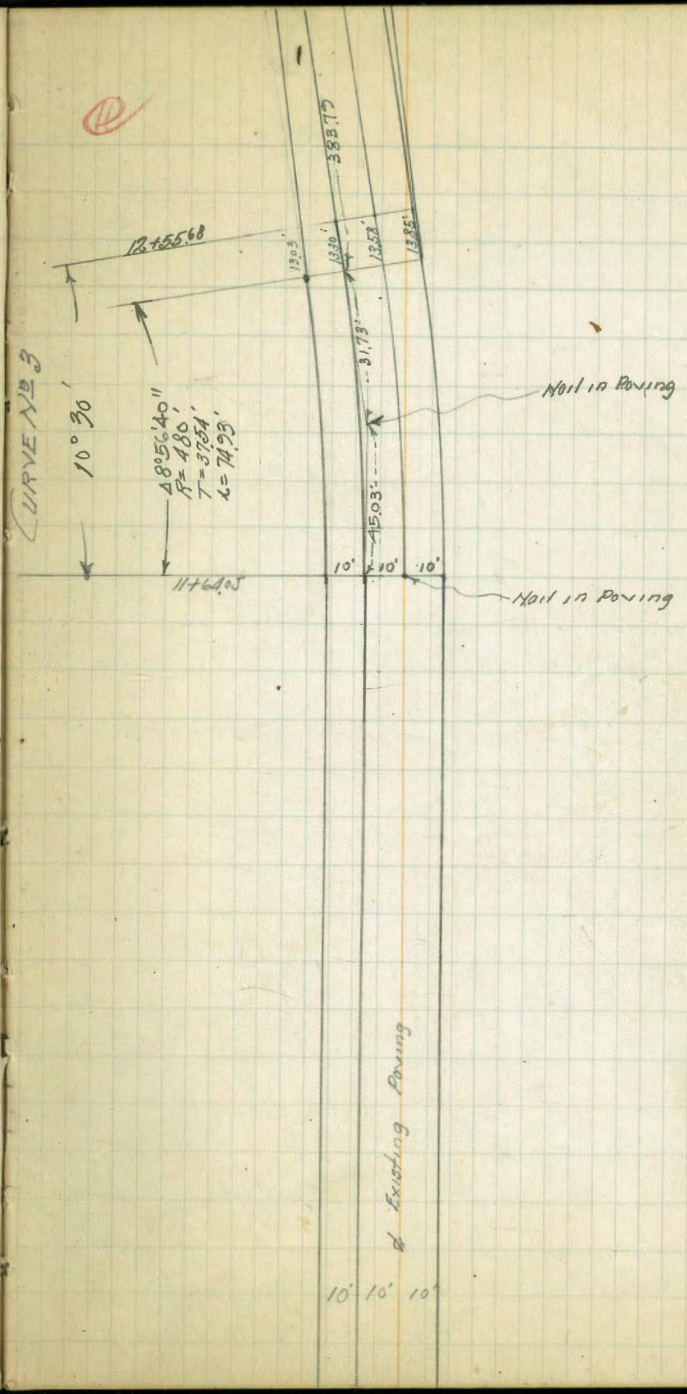
Hub 65-68a-15A' 87.78 Sisson

Volker
Bliss
Diebert
12-22-30

Alignment and Construction Notes
PERSHING — DRIVE

Additional ties
Book 1308-16-20



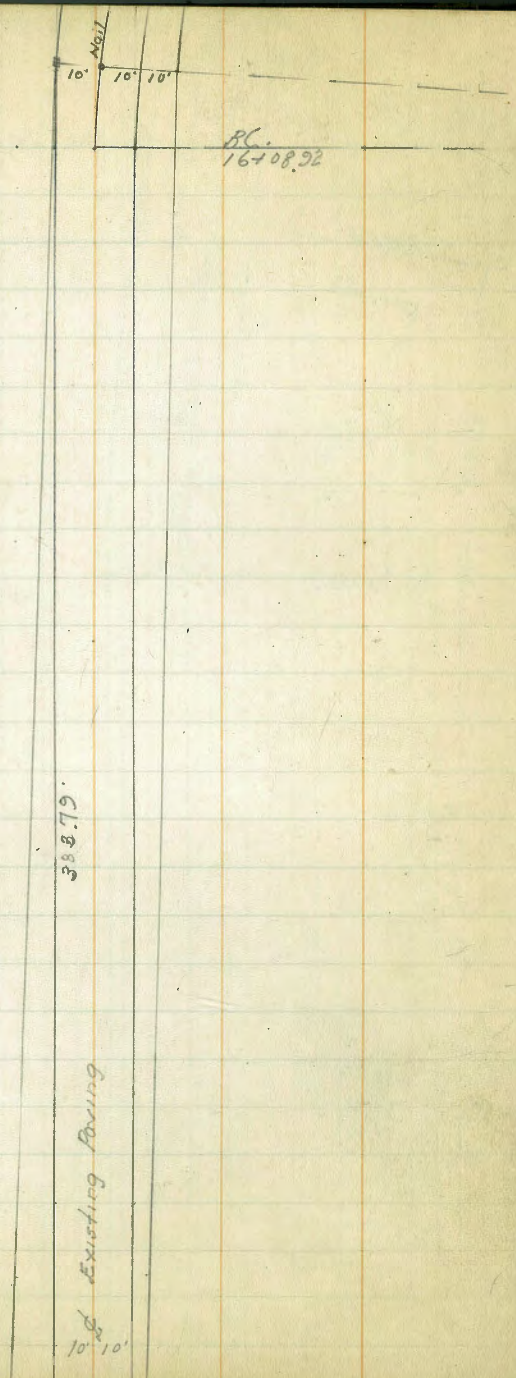


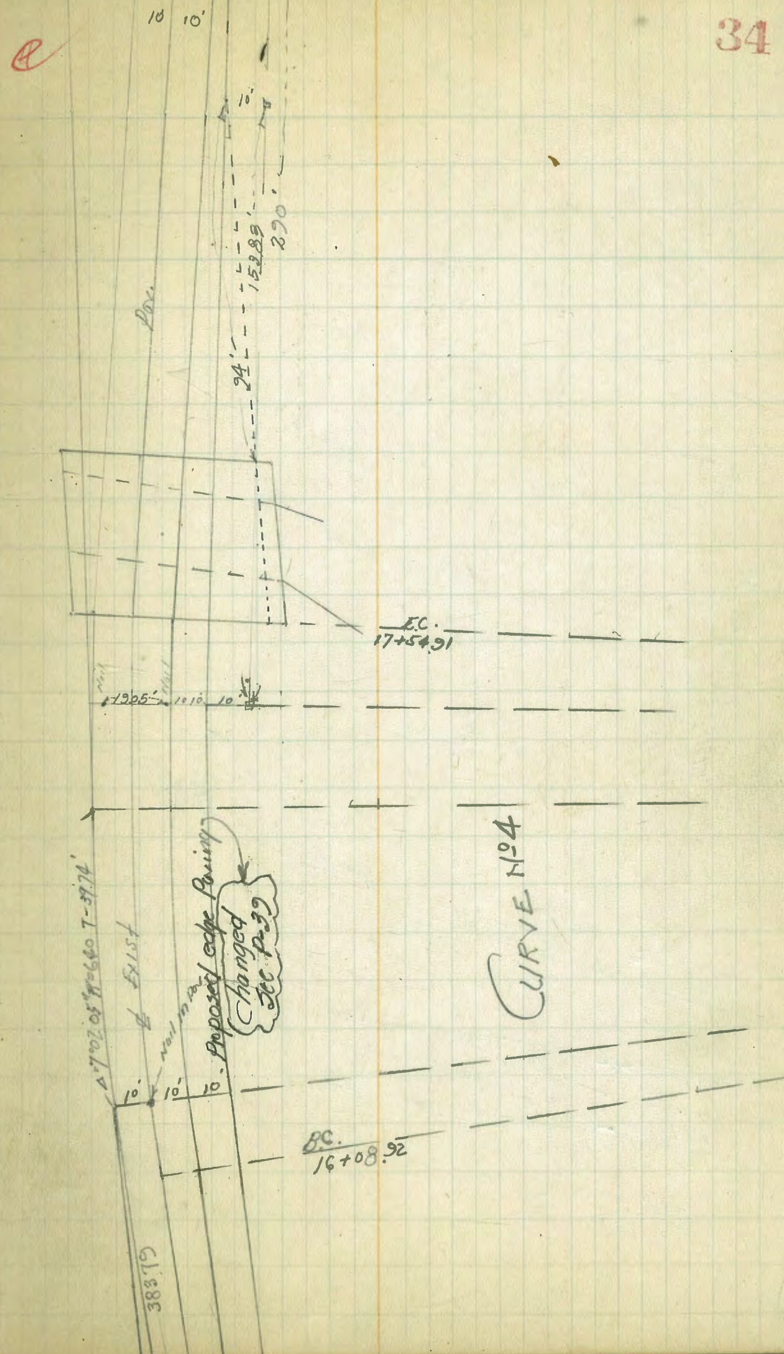
10' 20'

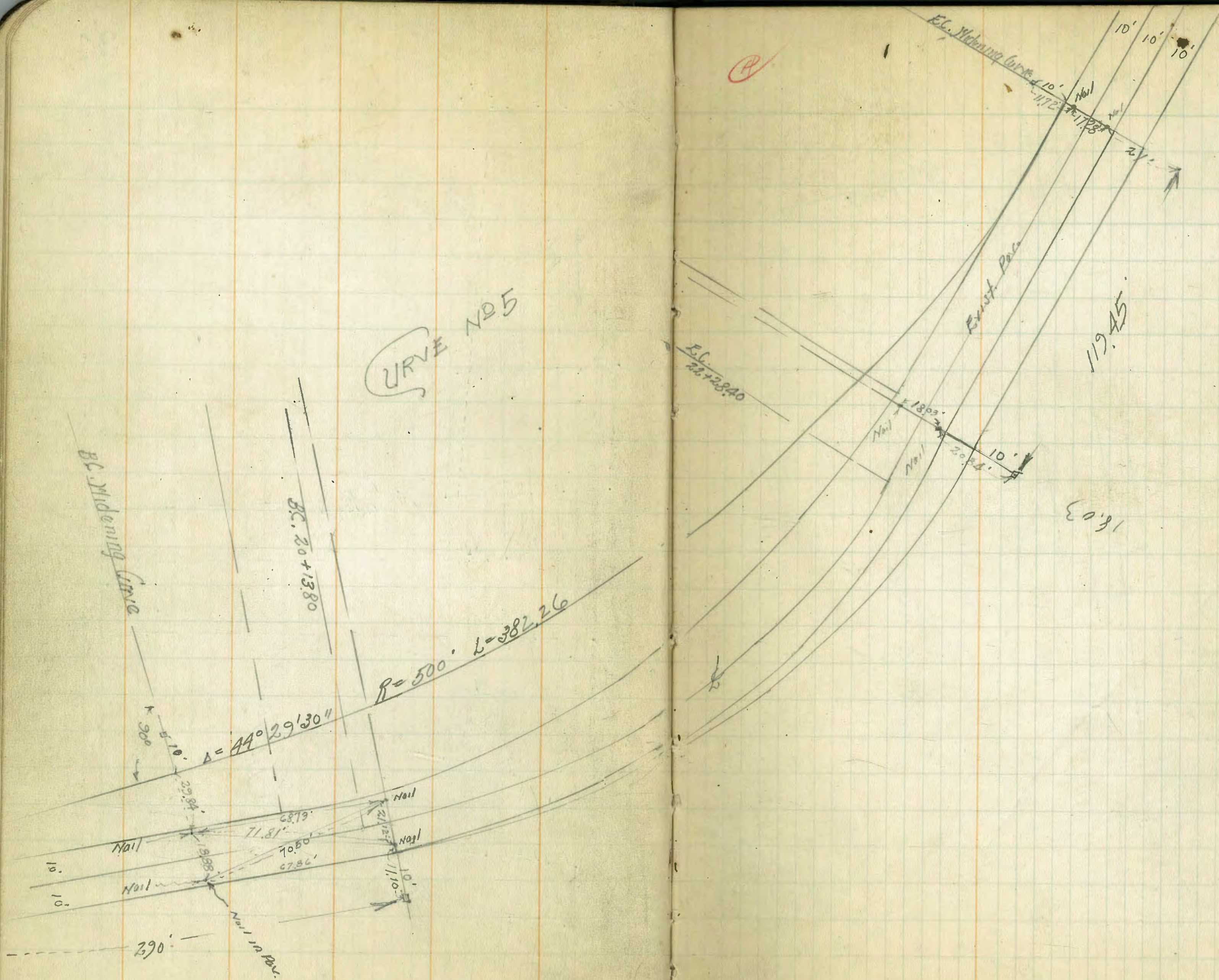
℄ Existing Paving

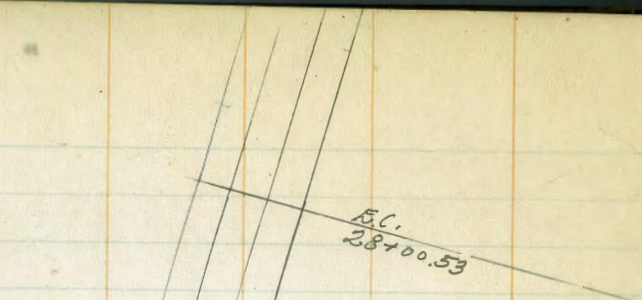
10' 10' 10'

10' 20'


Nail
10'
10' 10'
B.C.
16+08.92
383.79
Existing Paving
10' 10'

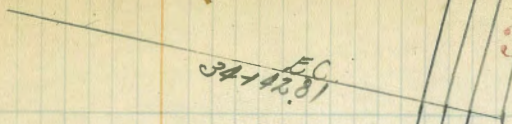

10 10'
Pav.
24'
152.89'
290'
E.C.
17+54.91
Exist
Proposed edge Paving
Changed
See P.39
CURVE No 4
10' 10' 10
B.C.
16+08.92
383.79

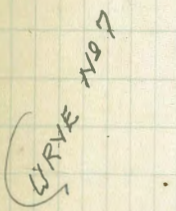

Curve No 5
B.C. Widening Curve
B.C. 20+13.80
Δ=44°29'30"
R=500'
L=382.26
90°
10'
29.84'
68.79'
71.81'
70.50'
67.86'
Nail
Nail
Nail
Nail
11.10'
10'
Nail in Pav.
290'
E.C. Widening Curve
10'
10'
10'
11.72'
Nail
Nail
21'
E.C. 22+28.40
18.09'
Nail
Nail
20.84'
10'
Exist. Pav.
119.45

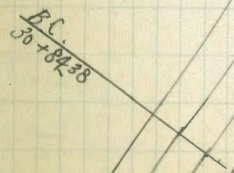

B.C.
28+00.53

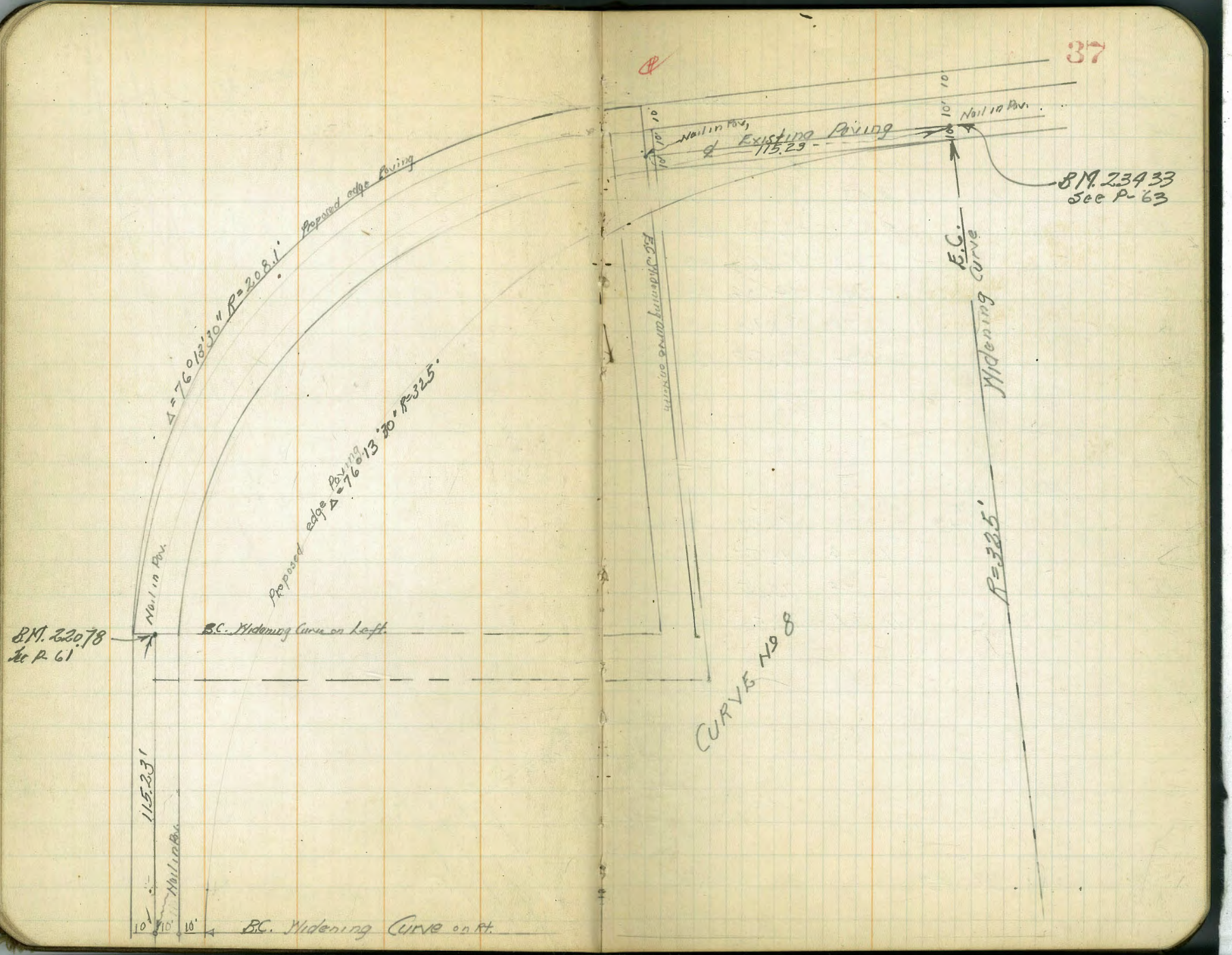
CURVE No 6

B.C.
25+09.50


E.C.
34+43.81


CURVE No 7


B.C.
30+84.38


Δ=76°10'30" R=208.1'
Proposed edge Paving
Proposed edge Paving Δ=76°13'30" R=325'
Nail in Pav.
B.M. 22078
See P-61
B.C. Widening Curve on Left
115.23'
Nail in Pav.
10'
10'
10'
B.C. Widening Curve on Rt.
10'
10'
Nail in Pav.
℄ Existing Paving
115.29
10'
10'
Nail in Pav.
B.M. 23433
See P-63
E.C. Widening Curve on Rt.
E.C. Widening Curve
R=325'
CURVE No 8

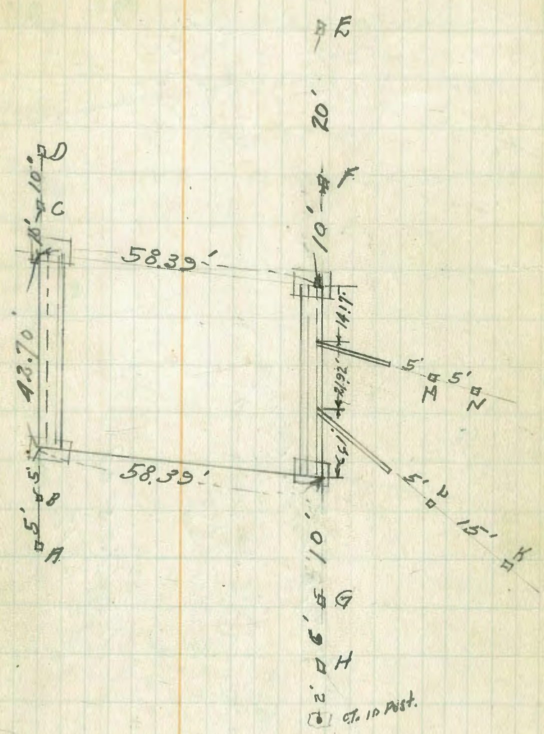
Walker
Bliss
Diebert
Emmerman
12-29-50

PERSHING DRIVE BRIDGE

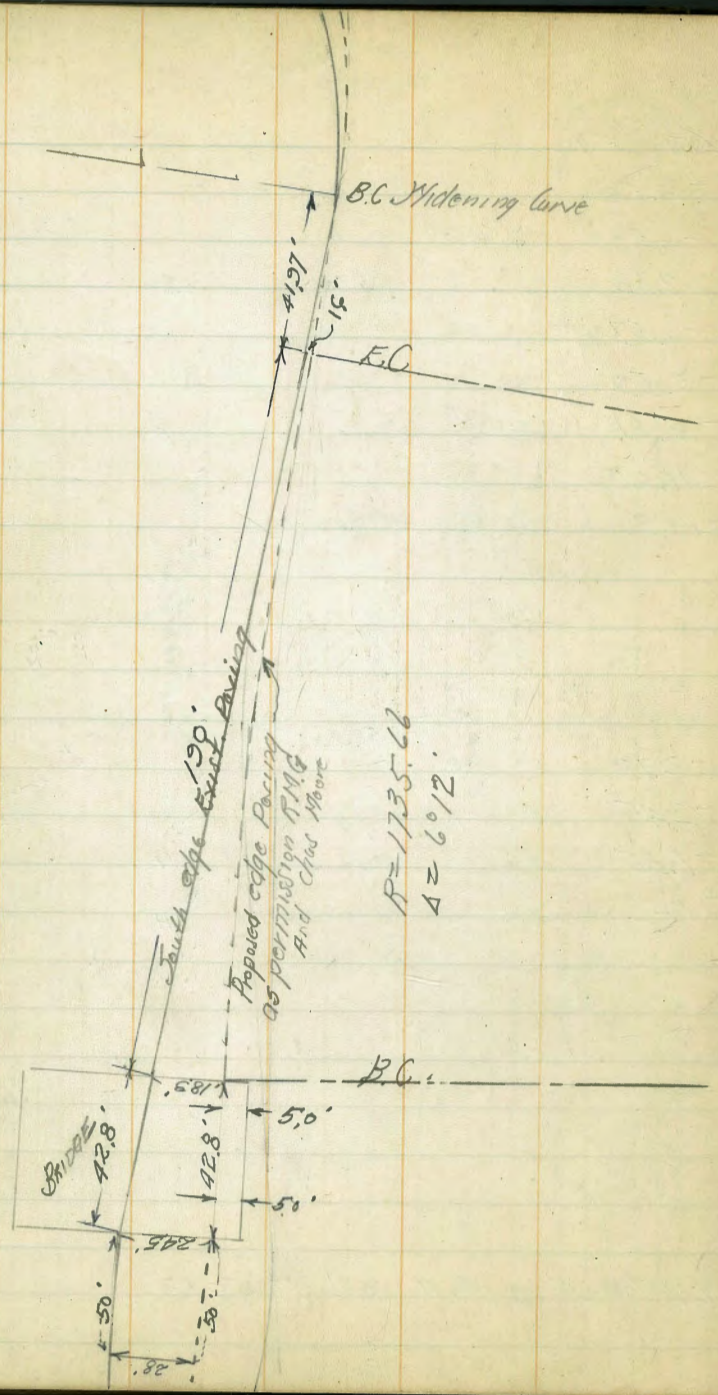
TIES And GRADES

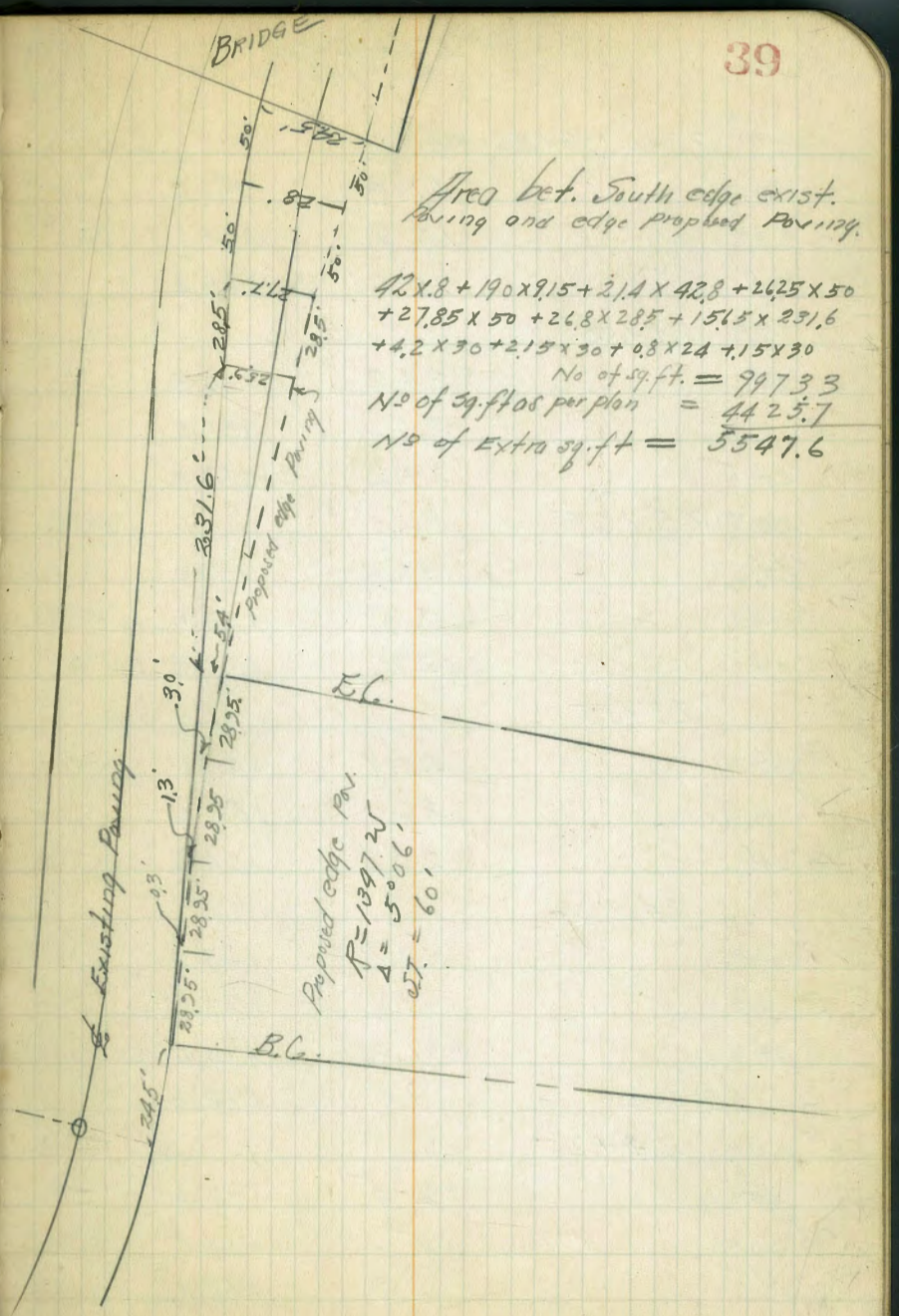
Station				GRADES are to the top of Co Pilaster	Cuts And Fills.
A	91.49	5.22	86.27	89.85	-3.58
B		5.22	86.27	89.85	-3.58
C		4.52	86.97	89.85	-2.88
D		4.21	87.28	89.85	-2.57
E		5.23	86.26	89.85	-3.59
F		7.45	84.04	89.85	-5.81
G		12.71	78.78	89.85	-11.07
H		11.94	79.55	89.85	-10.30

Wing Walls				top of Wing Walls	
K	91.49	13.22	78.27	81.00	-2.73
L		12.94	78.55	81.00	-2.45
M		12.34	79.15	81.00	-1.85
N		11.91	79.58	81.00	-1.42
O				81.00	
				81.00	



9.21	91.49	82.28	B.M.	N.W. top Wing Wall Book 1405-13





Area bet. South edge exist. Paving and edge proposed Paving.

42 X 8 + 190 X 9.15 + 21.4 X 42.8 + 26.25 X 50
+ 27.85 X 50 + 26.8 X 28.5 + 151.5 X 231.6
+ 4.2 X 30 + 2.15 X 30 + 0.8 X 24 + 15 X 30

No of sq. ft. = 99733
No of sq. ft as per plan = 44257
No of Extra sq. ft = 5547.6

LAUREL St. Ext.
Cont. from P-78

23+27.34=BC. Rt.		
10' Lt.	19.3	161.7
℄	16.9	164.1
10' Rt.	15.6	165.4
23+50		
10' Rt.	24.2	156.8
℄	26.0	155.0
10' Lt.	27.2	153.8
23+65		
10' Lt.	31.0	150.0
℄	28.9	152.1
10' Rt.	27.2	153.8
23+75		
10' Rt.	25.9	155.1
℄	26.0	155.0
10' Lt.	26.8	154.2
24+00		
10' Lt.	17.1	163.9
℄	13.7	167.3
10' Rt.	11.0	170.0
24+85 on ℄	9.0	172.0
24+25		
10' Rt.	2.0	179.0
℄	5.2	175.8
10' Lt.	8.9	172.1
24+50		

10' Lt.	8.1	172.9
℄	3.5	177.5
10' Rt.	+1.2	182.2
24+75		
10' Rt.	+2.7	183.7
℄	1.9	179.1
10' Lt.	5.9	175.1
25+00		
10' Lt.	3.6	177.4
℄	+1.2	182.2
10' Rt.	+5.4	186.4
T.P. 12.74	192.29 1.46	179.55
25+25		
10' Rt.	3.4	188.9
℄	8.2	184.1
10' Lt.	12.8	179.5
25+50		
10' Lt.	11.5	180.8
℄	8.1	184.2
10' Rt.	3.5	188.8
25+75		
10' Rt.	2.8	189.5
℄	7.7	184.6
10' Lt.	11.4	180.9
26+00		
10' Lt.	11.0	181.3

192.29

℄		7.2	185.0
10' Rt.		2.9	189.4
	26+25		
10' Rt.		0.0	192.3
℄		5.0	187.3
10' Lt.		8.8	183.5
	26+50		
10' Lt.		7.7	184.6
℄		3.3	189.0
10' Rt.		+0.9	193.2
T.P	12.56 201.83	3.02	189.27
	26+75		
10' Rt.		13.0	188.8
℄		16.6	185.2
10' Lt.		19.4	182.4
	27+00		
10' Lt.		23.9	177.9
℄		22.1	179.7
10' Rt.		20.3	180.5
	27+15 - Bottom draw		
10' Rt.		26.3	175.5
℄		27.8	174.0
10' Lt.		30.9	170.9
	27+25		
10' Lt.		29.2	172.6
℄		23.6	178.2

on 20th 0.5' Rt. Sta. 26+49

201.83

10' Rt.		24.6	177.2
	27+37.49 = E.C.		
10' Rt.		18.6	183.2
℄		17.6	183.2
10' Lt.		19.2	182.6
	27+70		
10' Lt.		5.7	196.1
℄		4.0	197.8
10 Rt.		3.8	198.0
	27+80 = B.C. Lt.		
10' Rt.		+1.7	203.5
℄ on Hub		0.23	201.5
10' Lt.		3.7	198.1
T.P 1315	214.75	0.23	201.60
	28+00		
10' Lt.		15.1	199.6
℄		10.7	203.0
10' Rt.		5.1	209.6
	28+25		
10' Rt.		1.3	213.4
℄		6.9	207.8
10' Lt.		11.8	203.0
	28+50		
10' Lt.		9.1	205.7
℄		4.2	210.5
10 Rt.		+0.7	215.4

214.75

	28+75		
10' Rt.		+1.0	215.8
℄		4.1	210.6
10' Lt.		9.2	205.5
	29+00		
10' Lt.		8.3	206.4
℄		4.5	210.2
10' Rt.		+1.0	215.8
	29+25		
10' Rt.		0.0	214.8
℄		4.7	210.1
10' Lt.		8.7	206.0
	29+50		
10' Lt.		7.6	207.2
℄		3.3	211.4
10' Rt.		+1.7	216.5
	29+75		
10' Rt.		+4.5	219.3
℄		−0.5	214.2
10' Lt.		4.8	210.0
T.P.	11.22 224.77	1.20	213.55
	30+00		
10' Lt.		13.3	211.5
℄		8.7	216.1
10' Rt.		4.1	220.7
	30+25		

224.77

30+25		
10' Rt.	4.0	220.8
℄	7.9	216.9
10' Lt.	12.6	211.2
30+50		
10' Lt.	12.1	212.7
℄	8.0	216.8
10' Rt.	3.9	220.9
30+75		
10' Rt.	5.0	219.8
℄	10.8	214.0
10' Lt.	13.7	211.1
31+00		
10' Lt.	16.3	208.5
℄	12.0	212.8
10' Rt.	7.4	217.4
31+25		
10' Rt.	9.7	215.1
℄	14.4	210.4
10' Lt.	18.8	206.0
31+35		
10' Lt.	21.3	202.5
℄	17.4	207.4
10' Rt.	14.0	210.8
31+48		
10' Rt.	21.7	203.1
℄	25.3	199.5

224.77

10' Lt.	29.6	195.2
31+75		
10' Lt.	18.1	206.7
℄	15.1	209.7
10' Rt.	10.7	213.1
31+88		
10' Rt.	6.3	218.5
℄	10.7	214.1
10' Lt.	14.1	210.7
32+00		
10' Lt.	15.1	209.7
℄	10.4	214.4
10' Rt.	5.8	218.0
32+50		
10' Rt.	5.1	219.7
℄	10.3	214.5
10' Lt.	14.7	210.1
33+00		
10' Lt.	12.8	212.0
℄	9.0	215.8
10' Rt	4.0	220.8
33+21.24 = B.C. Rt.		
10' Rt.	2.7	222.1
℄ on Hub	6.97	218.8
10' Lt.	11.1	213.7
33+50		

224.77

10' Lt.	7.1		217.7
℄	2.8		222.0
10' Rt.	1.3		226.1
T.P. 13.00	237.11	0.66	224.11
33+75			
10' Rt.	7.5		229.6
℄	9.8		227.3
10' Lt.	12.7		224.4
34+00			
10' Lt.	6.5		230.6
℄	5.5		231.6
10' Rt.	4.1		223.0
34+25			
10' Rt.	2.0		235.1
℄	2.8		234.3
10' Lt.	3.7		233.4
T.P. 6.51	241.65	1.97	235.14
34+50			
10' Lt.	6.2		2354
℄	6.0		235.6
10' Rt.	5.7		235.9
34+75			
10' Rt.	5.4		2362
℄	5.5		236.1
10' Lt.	5.6		236.0

24165

35+00

10' Lt.			5.5	236.1
℄			5.4	236.2
10' Rt.			5.4	236.2
35+12.39 = E.C.				
10' Rt.			5.2	236.4
℄ on Hub			5.30	236.3
10' Lt.			5.2	236.4
35+62.90 = North edge exist. paving.				
150' Rt. on Paving.			3.70	237.95
125' " " "			4.62	237.03
100' " " "			5.48	236.17
75' " " "			6.10	235.55
50' " " "			6.39	235.26
25' " " "			6.66	234.99
℄ " " "			6.64	235.01
25' Left " "			6.38	235.27
50' " " "			5.83	235.82
75' " " "			5.40	236.25
100' " " "			4.82	236.83
125' " " "			4.26	237.39
150' " " "			3.56	238.09
T.P.	9.77	251.22	0.20	241.45
T.P.	1.00	248.17	4.05	247.17
Cbk. on B.M. Page 37			13.81	234.36
				234.33 = B.M.
				0.03 = Error.

Cross Sections
Under S.D.E.R.R. Bridge
For Const. of Retaining Wall for East And West Road from Park Blvd. to Pershing Drive

	3.36	266.97		263.61
T.P.	3.45	257.66	12.76	254.21

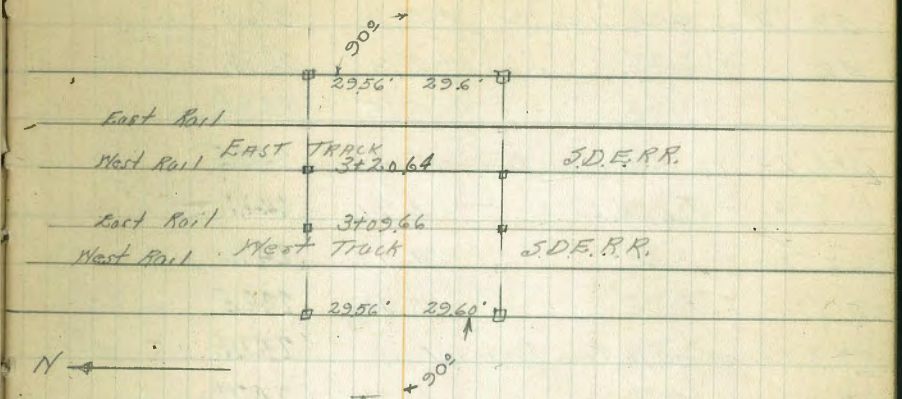
Veler. Conc. Block T.P. on Page 8 Book 1447

2+90

℄ = Nat. Ground	7.9 — 249.8
5' Lt. on Fill	9.0 — 248.7
10' Lt. " "	10.1 — 247.6
16' Lt. " "	9.1 — 248.6
23' Lt.	11.2 — 246.5
29.6 Lt. " "	9.8 — 247.9
31' Lt. on Nat. Ground	9.3 — 248.4
36' Lt. " " "	6.4 — 251.3
37' Lt. " " "	4.7 — 253.0
41' Lt. " " "	2.0 — 255.7
56' Lt. " " "	+4.8 — 262.5

3+00

57' Lt. on Natural Ground	+0.9 — 258.6
51' Lt. " " "	1.9 — 255.8
41' Lt. " " "	6.8 — 250.9
36' Lt. " " "	11.7 — 246.0
32' Lt. on Fill	14.0 — 243.7
29.6' Lt. on Conc. Pier	12.54 — 245.2
28' Lt. on Fill	14.9 — 242.8
23' Lt. " "	16.2 — 241.5
20' Lt. on North edge Con. Drain	17.2 — 240.5
17.4 " " Flow Line " "	20.0 — 237.7



3+00 Cont.

14.8' Lt. on top South edge Con. Drain		17.0	240.7
9' " on Fill		15.2	242.5
T.P. 0.94	247.93	10.67	246.99

on ℄ Hub 3+02.54

3+05

℄ on Nat. Ground	0.3 — 247.63
7' Lt. on Fill	5.3 — 242.63
15.3' Lt. on Con. Drain	8.2 — 239.7
18.4 Lt. " ℄ Flow Con. Drain	11.0 — 236.9
21.2' " " top " "	8.8 — 239.1
25.5' Lt. on Fill	7.2 — 240.7
29.6' on "	6.9 — 241.0
33' Lt. on Nat. Ground	6.2 — 241.7
40' Lt. " " "	0.3 — 247.6
50' Lt. " " "	+3.8 — 251.7
57' Lt. " " "	+5.3 — 253.2

3+10

58' Lt. on Natural Ground	+5.9	242.0
48' Lt. " " "	+2.3	245.6
38' Lt. " " "	2.5	245.4
31.6' Lt. " Fill at Con Pier	7.4	240.5
31.6 " " Con. Pier	6.76	241.1
28.6 " " " "	6.76	241.1
28' Lt. " Fill	8.4	239.5
22.3' Lt. on edge Con. Drain	10.0	237.9
19.7 " " ℄ " "	12.7	235.2
17.1 " " edge " "	9.8	238.1
9' Lt. on Fill	6.1	241.8
℄ " Nat. Ground.	0.2	247.7

3+15

℄ on Fill	0.7	247.7
3' Lt. " "	2.2	245.7
11' Lt. " "	7.1	240.8
14' Lt. on Bottom of Test Hole		234.3
18' Lt " "	10.2	237.7
23' Lt. " Con Drain	11.4	236.5
29.6' Lt. " Fill	10.5	237.4
33' Lt. on Nat. Ground	10.1	237.8
42' " " " "	8.1	239.8
48' Lt. " " "	5.9	242.0
56' Lt. " " "	4.0	243.9

3+20

59' Lt. on Nat. Ground.	6.7	241.2

50' Lt. on Nat. Ground	8.4	239.5
38' Lt. " " "	11.7	36.2
31.6 Lt. on Fill at Pier	14.3	33.6
31.6 " " top. "	10.81	37.1
28.6 " " " "	10.81	37.1
28' Lt. on Fill at Pier.	12.4	35.5
24.3' Lt. on top Con. Drain	12.8	35.1
21.7 Lt. on	15.4	32.5
18.9' Lt. on	12.5	35.4
15' Lt. on Fill	10.7	37.2
13' Lt. " "	8.8	39.1
6' Lt. " "	5.9	42.0
℄	0.8	47.1

3+25

℄ on Fill	1.0	47.9
3' Lt on Fill	3.5	44.4
13' Lt. " "	10.1	37.8
20.2' Lt. on Con. Drain	13.9	34.0
22.9 " " ℄ "	17.0	30.9
25.6 " " top " "	14.2	33.7
29.6 Lt. on Fill	13.1	34.8
38' Lt. on Nat. Ground	12.4	35.5
45' Lt. " " "	9.6	38.3
48' Lt. " " "	8.2	39.7
60' Lt. " " "	7.6	40.3

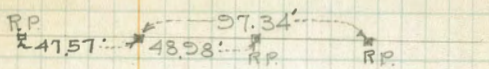
Book 1447-10

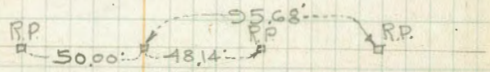
	3+33.18 = East edge Con pier			Section A-A
58' Lt.	on Fill		10.6	237.3
54' Lt.	on Natural Ground		12.5	35.4
48' Lt.	" " "		13.0	34.9
T.P.	1.94	237.12	12.75	235.18
45' Lt.	on Nat. Ground.		3.2	33.9
31.6' Lt.	at Con. Pier.		4.9	32.2
31.6 Lt.	on Con "		3.98	33.1
28.6 "	" " "		3.98	33.1
28' Lt.	on Fill at Pier		5.3	31.8
27.4 Lt.	on top Con Drain		5.3	31.8
24.7 "	" Floor " "		7.8	29.3
22' Lt	on top " "		5.0	32.1
17' Lt.	on Fill		2.6	34.5
17' Lt.	on ℄ Test Hole		5.2	31.9
			Nat. Ground.	
10' Lt.	on Nat Ground.		+4.0	41.1
5' "	" " "		+7.1	44.2
℄	" " "		+9.6	46.7
	3+44.5 = End of open Con. Drain			
℄	on Natural Ground		+7.6	29.5
3' Lt.	on " "		+5.5	31.6
10' Lt.	" " "		+2.4	34.7
16' Lt.	" " "		2.6	34.5
24.5' Lt.	on top of Con. Drain		8.1	29.0
27.2 "	" Floor " " "		10.9	28.2
30' Lt.	on top " " "		8.2	28.9

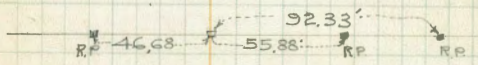
40' Lt.	Nat. Ground	9.1	28.0
50' Lt.	" "	10.2	26.9
62' Lt.	" "	6.0	31.1

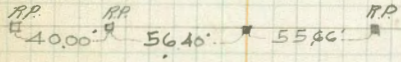
"Change Alignment"
Continued from Page 75

Station Align.	Defln. Δ	True Bearing	Curve Data
= 11 + 06.64 } EC. equation			
10 + 84.07 = EC.	3° 00.00'		
+75	2° 46.75'		Δ = 6° 00'
+50	2° 11.00'		℄ R = 1200'
+25	1° 35.25'		℄ L = 125.66'
10 + 00	0° 59.50'		℄ S.T. = 62.89
+75	0° 23.75'		
9 + 58.41 = B.C. Rt.			
115.58'			
8 + 42.83 = EC.	3° 00.00'		
+25	2° 34.50'		Δ = 6° 00'
8 + 00	1° 58.68'		℄ R = 1200'
+75	1° 22.86'		℄ L = 125.66'
+50	0° 47.04'		℄ S.T. = 62.89'
+25	0° 11.22'		
+17.17 = B.C. Lt.			
7 + 00			
6 + 00			









Walker
Bliss
Diebert
Sommermeyer
12-24-90

GRADES Hod Curve Data

Pershing Drive

Note these stations are along the edge of Paving to be Constructed

CURVE Nº 1

LEFT Station	Left. Deflin. Δ	Left. Grades	RIGHT Station	RIGHT Deflin. Δ	RIGHT Grades
			Beginning of Improvement. This curve in 10 Pts	0°00'00"	
			①	3°32'35"	
			②	7°05'10"	
			③	10°37'45"	
			④	14°10'20"	
			⑤	17°42'55"	
			⑥	21°15'30"	
			⑦	24°48'05"	
			⑧	28°20'40"	
			⑨	31°53'15"	
				35°25'50"	
			⑩ = E.C. Widening Curve		

CURVE Nº 5

B.C. Widening Curve Curve in 10 Parts	Left Deflin. Δ	Left Grades	B.C. Widening Curve This Curve in 10 Parts	Deflin. Δ
①	2°13'28"		①	2°21'57"
②	4°26'56"		②	4°43'54"
③	6°40'24"		③	7°05'51"
④	8°53'52"		④	9°27'48"
⑤	11°07'20"		⑤	11°49'45"
⑥	13°20'48"		⑥	14°11'42"
⑦	15°34'16"		⑦	16°33'39"
⑧	17°47'44"		⑧	18°55'36"
⑨	20°01'12"		⑨	21°17'33"
E.C. Widening Curve = ⑩	22°14'45"		E.C. Widening Curve = ⑩	23°39'30"

CURVE Nº 2

Left. Station B.C. Widening Curve = 0+00	Left Deflin Δ	Left Grades
= 0+20	1°08'45"	
+40	2°17'30"	
+60	3°26'18"	
+80	4°35'02"	
1+00	5°43'48"	
1+20	6°52'33"	
+40	8°01'19"	
+60	9°10'05"	
+80	10°18'50"	
2+00	11°27'42"	
+20	12°36'21"	
+40	13°45'07"	
+60	14°53'54"	
+80	16°02'36"	
3+00	17°11'24"	
+20	18°20'07"	
+40	19°28'55"	
+47.32 = E.C.	19°54'	

CURVE No 8

LEFT Station BC. Widening Curve = ⓪	Left Defln. Δ	LEFT Grades	RIGHT Station BC. Widening Curve = ⓪	Rt. Defln. Δ	Rt. Grades
①	3°48'20"		①	2°32'27"	
②	7°27'20"		②	5°09'54"	
③	11°26'00"		③	7°37'21"	
④	15°14'40"		④	10°09'48"	
⑤	19°03'20"		⑤	12°42'15"	
⑥	22°52'00"		⑥	15°14'42"	
⑦	26°40'40"		⑦	17°47'09"	
⑧	30°29'20"		⑧	20°19'36"	
⑨	34°18'00"		⑨	22°52'03"	
Widening Curve EC. = ⑩	38°06'45"		⑩	25°24'30"	
			⑪	27°56'57"	
			⑫	30°29'24"	
			⑬	33°01'51"	
			⑭	35°34'18"	
			Widening Curve EC. = ⑮	38°06'45"	

LEVELS ON Exist. Paving IN Curve NO 2 to determine Grade For edge Paving in Widening Curve

	12.37	80.44		68.07	N.E. BM B- 18+0 Sts.
T.P.	12.89	93.08	0.25	80.19	
T.P.	6.71	99.71	0.08	93.00	
T.P.	6.01	101.01	4.71	95.00	on Rock
	TEC on E.C. Widening Curve NO 1				
N			7.09	93.92	
S			7.53	93.48	
	B.C. Widening Curve NO 2				Distances from Exist. Pav. to Proposed Pv.
N			5.93	95.08	10' Elev. in circle = Proposed Paving on North
S			5.89	95.12	(95.08)
	PART 1 = 0+20				
N			5.68	95.33	10.5'
S			5.68	95.38	(95.33)
	Part 2 = 0+40				
N			5.28	95.73	11.6
S			5.26	95.75	(95.73)
	Part 3 = 0+60				
N			5.28	95.73	13.6
S			4.87	96.14	(95.47)
	Part 4 = 0+80				
N			5.15	95.86	16.6'
S			4.51	96.50	(95.33)
	Part 5 = 1+00				
N			5.04	95.97	20.5
S			4.18	96.83	(95.09)

101.01

				Dist. from Exist. paving to Proposed Pav.
	Part 6 = 1+20			
N		5.04	95.97	24.2'
S		4.20	96.81	(94.95)
	Part 7 = 1+40			
N		5.17	95.84	26.6'
S		4.37	96.64	(94.78)
	Part 8 = 1+60			
N		5.56	95.45	28.1'
S		4.77	96.24	(94.33)
	Part 9 = 1+80			
N		5.98	95.03	28.3'
S		5.16	95.85	(93.87)
	2+00			
N		6.33	94.68	27.3
S		5.57	95.44	(93.56)
	+20			
N		6.68	94.33	25.2
S		5.87	95.14	(93.31)
	2+40			
N		6.97	94.04	21.3
S		6.10	94.91	(93.11)
	2+60			
N		7.13	93.88	17.5
S		6.40	94.61	(93.24)
	2+80			
N		7.16	93.85	14.6
S		6.63	94.38	(93.46)

10101

				Dist. from Exist. Paving to Proposed Paving.
	3+00			
N		7.20	93.81	12.3
S		6.89	94.12	(93.62)
	+20	~~6.89~~		
N		7.29	93.72	10.8
S		7.15	93.86	(93.64)
	3+47.12 = EC.			
N		7.48	93.53	10.1
S		7.37	93.64	(93.43)

Slope And Grade Stakes
CURVE No 2

LEFT GRADE
edge Proposed Paving

Station			
+20		93.30 / 13.16	13.2 / 5.4 / +7.8 / 15.6' Back of Berm.
2+00		93.53 / 11.93	12.9 / 3.9 / 7.90 / 17.1' Back Berm.
+80		93.87 / 11.59	12.6 / 4.0 / +8.6 / 16.8' Back Berm.
+60		94.35 / 11.1	12.1 / 3.9 / +8.2 / 16.7' Back Berm.
+40		94.73 / 11.73	11.7 / 4.0 / +7.7 / 14.2' Back Berm.
1+20		95.04 / 11.42	11.4 / 4.0 / +7.4 / 16.1' Back Berm.
1+00		95.27 / 11.19	11.2 / 4.3 / +6.9 / 15.4' Back Berm.
+80		95.41 / 11.05	11.0 / 5' to toe slope / +6.0
+60		95.46 / 11.00 / 10.1 / +0.9	10' Back Paving
+40		95.38 / 11.08 / 11.59 / -0.77	10' Back "
+20		95.22 / 11.24 / 11.58 / -0.2	10' Back "
0+00 = B.C. Widening Curve	11.46 / 106.46 / ⊼	95.08 / 11.38 / 11.45 / -0.97	10' Back "
		95.00	

100.02 = ⊼
4.88
95.14 = B.M. on Nail
B.C. Widening Curve No 2

106.46 ⊼

Finish Stakes

94.41 = Elev. 0+00 10' Back
5.61 +
100.02 = ⊼

95.08	95.22	95.38	95.46	95.41	95.27	95.04	94.73	94.35	93.87	93.53	93.30
4.94	4.80	4.64	4.56	4.61	4.75	4.98	5.29	5.67	6.15	6.49	6.72
4.83	5.00	4.99	4.78	4.36	3.73	3.23	2.90	4.33	4.83	5.33	5.41
+0.11	-0.20	-0.35	-0.22	+0.25	+1.02	+1.75	+1.29	+1.39	+1.32	+1.16	+1.31

Elev. Grating Near E.C. Curve No 1

100.02 ⊼
94.07 = Proposed top Paving
5
93.57 = " Grating
6.45 = Rod.
6.95
+0.50 = Cut

14732 = E.C.

+20

3+00

+80

+60

2+40

93.43 / 13.03 — 13.03 / 13.29 / -0.2 — 5' Back. Berm

93.50 / 12.96 — 13.0 / 13 / -0.1 — 5' Back. Berm

93.50 / 12.96 — 13.0 ✓ — 5' Back. Berm

93.40 / 13.06 — 13.1 / 13.3 / +0.8 — 5' Back Berm.

93.25 / 13.21 — 13.2 / 7.0 / 7.60 / 13.2 Back Berm.

93.20 / 13.76 — 13.3 / 6.3 / 7.0 / 9.4 Back of Berm.

Fill to Station

93.43	93.50	93.50	93.40	93.25	93.20
6.59	6.50	6.50	6.62	6.77	6.82
7.21	7.30	7.31	7.38	7.47	7.57
-0.62 ✓	-0.80 ✓	-0.81 ✓	-0.76 ✓	-0.70 ✓	-0.75 ✓

126.46

LEVELS ON CURVE No 5
ON EXISTING PAVING TO DETERMINE
GRADE FOR EDGE PAVING OF WIDENING CURVE
ON NORTH SIDE

Elev. Stake D on P-38 = 87.38
10.13 +
97.41 - T

		Elev Prop Paving	
97.41			
BC Widening Curve			
S } 20 Note N on edge Pav. South 20' from N on to E.C.	9.62	87.79	
N }	10.08	87.33	Cuts + Fills
+19.3 = Proposed Pav		86.89	
on 10' offset	10.85	86.56	86.89 -0.33
Part 1			
S	8.80	88.61	
N	9.57	87.84	
+23 = Proposed Pav		86.95	
on 10' offset	10.24	87.11	86.95 +0.22
Part 2			
S	7.71	89.70	
N	8.60	88.81	
+ 27.6' = Proposed Pav.		87.55	
on 10' offset	9.31	88.10	87.55 +0.55
Part 3			
S	6.13	91.28	
N	7.06	90.35	
+31.2 = Proposed Paving		88.91	
on 10' offset	7.84	89.57	88.91 +0.66
Part 4			
S	3.44	93.97	
N	4.32	93.09	
+30' = Proposed Pav		91.60	
on 10' offset	6.51	90.90	91.60 -0.70

97.41

	Part 5			
S		0.16	97.25	Cuts & Fills.
N		1.20	96.20	
+26.4 - Proposed Pav.			94.82	
on 10' offset stake		4.07	93.34	94.82 -1.48
T.P.	12.79 109.99	0.21	97.20	
	Part 6			
S		9.80	100.19	
N		10.60	99.39	
+19.9' - Proposed Pav.			98.59	
on 10' offset stake		11.47	98.52	98.59 -0.07
	Part 7			
S		7.03	102.96	
N		7.62	102.37	
+12.3 - Proposed Pav			102.00	
on 10' offset		9.04	100.95	102.00 -1.05
	Part 8			
S		4.69	105.30	
N		4.96	105.03	
+5.8' to proposed pav.			104.94	
on 10' offset		6.03	103.96	104.94 -0.98
	Part 9			
S		2.49	107.50	
N		2.44	107.55	
+1.4' to proposed Pav.			107.55	
10' offset stake.		3.15	106.84	107.55 -0.71

9741

T.P	8.96	103.22	3.15	94.26
	Point 10			
		109.99		
T.P	8.96	115.80	3.15	106.84
	Point 10 = E.C. Widening Curve			
S			5.86	109.94
N			5.72	110.08
+ 0.0 on Point				110.08
10' offset.			5.91	102.89
Chk. on Grading on W Book 1405-16			6.03	109.77
				109.76
				0.03 = Error.

110.08 = -0.13

LEVELS for Widening Curve #24

90.61 ↑

0+00 = 50' East E.C. Page 39

- 4.7		
N	5.68	84.93
S	5.61	85.00
+10' Proposed edge Pav.		85.03
0+50		
- 3.4'		
N	5.53	85.08
S	5.56	85.05
+10.7' = Proposed edge Pav.		84.93
1+00 =		
- 2		
N	5.41	85.20
S	5.49	85.12
+19.0 = Proposed edge Pav		84.83
1+50		
N	5.17	85.44
S	5.42	85.19
+22.5 = Proposed edge Pav.		84.77
1+75		
N	5.14	85.57
S = End of Section on Flat Plane	5.40	85.31
+25.5 = Proposed edge Pav.		84.73
2+00		
N	4.83	85.78

Elev. Stake 8 on D-38

86.27
434
90.61 = π

0+00	0+50				2+00	2+11.75 SA	2+25
8503	8493	8483	8477	8473	8478	8482	8486
5.58	5.68	5.78	5.84	5.88	5.83	5.79	5.75
5.81	5.62	7.18	7.80	7.85	7.83	6.88	7.17
-8.90	+0.06	-1.40	-1.96	-1.97	-2.00	-1.09	-2.42
2+10	+75	2+00	2+16	2+36	2+59		
8492	8505	8528	8540	8586	8615	8620	8626
5.69	5.56	5.33	5.21	4.75	4.46	4.41	4.35
5.13	8.83	10.8				4.71	5.05
-3.44	-3.27 15' out	+0.75 5' out.				-0.30	-0.70

8637
4.24
50.17
-0.93

90.61 = π
0.76
89.83 = π NE. top Plaster Post. on Bridge

90.61

S		5.48	85.13
+27.6			84.78
	2+11.75 = Δ		
N		4.78	85.83
S		5.38	85.23
+28.4			84.82
	2+25		
N		4.76	85.85
S		5.36	85.25
+28.2			84.86
	2+50		
N		4.78	85.83
S		5.37	85.24
+28.4			84.92
	2+75		
N		4.69	85.92
S		5.34	85.27
+27.6			85.05
	3+00		
N		4.72	85.89
S		5.20	85.41
+25.7			85.28
	3+16		
N		4.69	85.92
S		5.14	85.47
+24.2			85.40

90.61

60

	3+36		
N		4.54	86.07
S		4.76	85.85
+			85.86
	359 = BC on Rt.		
N		4.36	86.25
S		4.36	86.25
+18'			86.15
	3845		
N		4.28	86.33
S		4.29	86.32
+14.5			86.20
	4+11		
N		4.22	86.39
S		4.22	86.39
+11.5			86.26
	4+375		
N		4.18	86.43
S		4.18	86.43
+8.5			86.37

Walker
Bros
Dwight
4-8-31

LEVELS for Curve No 8

to determine Grade on Rt. in Widening Curve { Curve in 15 Parts see P. 51

	5.40	231.20	225.80	B.M. Notch in North end Fence Post Book 1905-28
Left B.M. on No 1 B.C. Widening Curve on Lt.		1042	220.78	see P. 37
B.C. Widening Curve on Rt.				
Lt. on Pav.		14.13	217.07	
Rt. " "		14.14	217.06	
+ 10' = Proposed Pav			217.06	} - 0.02
on 10' offset stake		14.16	217.04	
Part 1				
Lt		13.16	218.04	
Rt.		13.29	217.91	
+ 11.4 ~~10~~ Proposed Pav.			217.77	} + 0.25
on 10' offset		13.18	218.02	
Part 2				
Lt.		12.23	218.97	
Rt.		12.59	218.61	
+ 15' to Proposed Pav.			218.30	} + 2.86
10' offset		10.04	221.16	
Part 3				
Lt.		11.12	220.08	
Rt.		11.84	219.36	
+ 21.10' to Proposed Pav.			218.60'	} + 3.59
10' offset.		9.01	222.19	
Part 4				
Lt.		9.70	221.50	
Rt.		10.85	220.35	

231.20

+30' to Proposed Pav.		218.94	+6.12
10' offset	6.14	225.06	
Part 5			
Lt.	8.67	222.53	
Rt.	9.87	221.33	
+ +36.6 to Proposed Pav.		219.47	+4.46
10' offset	7.27	223.93	
Part 6			
Lt.	7.68	223.52	
Rt.	8.84	222.36	
+40.4' to Proposed Pav.		220.12	+5.37
10' offset.	5.71	225.49	
Part 7			
Lt.	6.61	224.59	
Rt.	7.80	223.40	
+42.3' to proposed Pav.		220.94	+4.41
10' offset	5.85	225.35	
Part 8			
Lt.	5.42	225.78	
Rt.	6.62	224.58	
+40.4 to proposed Pav		222.20	+2.98
10' offset	6.02	225.18	
PART 9			
Lt.	4.15	227.05	
Rt.	5.28	225.92	
+35.5 to proposed Pav.		223.90	+2.02
10' offset	5.28	225.92	

231.20

Part 10

Lt.	2.99	228.21	
Rt.	4.00	227.20	
+28.5 to proposed Pav.		225.75	+1.81
10' offset	3.64	227.56	

PART 11

Lt.	1.72	229.48	
Rt.	2.59	228.61	
+19.6 = to proposed Pav.		227.77	+0.77
10' offset.	2.66	228.54	
T.P. 8.51 238.99	0.72	230.48	

Part 12

Lt.	8.41	230.58	
Rt.	8.94	230.05	
+11.1 to proposed Pav.		229.15	+0.90
10' offset	8.74	230.25	

Part 13

Lt.	7.28	231.71	
Rt.	7.53	231.46	
+5' to proposed Pav.		231.35	+0.81
10' offset	6.83	232.16	

Part 14

Lt.	6.18	232.81	
Rt.	6.11	232.88	
+1.2'		232.86	+0.91
10' offset.	5.22	233.77	

~~231.20~~
238.99

63

PART 15 = E.C.

Lt.	4.80	234.19	
Rt.	4.77	234.22	
+ 00		234.22	+0.74
10' offset.	4.03	234.96	
	4.66	234.33	See p.37

Left BM. EC. This Curve on Nail & Exact Pav.

Chk. Left edge Pav. 48 +233.46 Book 1405-30	4.62	234.37	
		234.36	
		0.01 = Error.	

"ALIGNMENT"
LAUREL STREET EXTENSION

See Book 1141-P-69
for final Align.

Walker
Brooks
Clovert
Nelson

3-21-32

"ALIGNMENT"

LAUREL STREET EXTENSION

Station	Align.	Deflin. Δ	True Bearing	Curve Data
+39.77 = E.C.				
5 +00				Δ = 58°30'
				R = 200'
				L = 204.20
4 +00				S.T. = 112.0'
+35.57 = B.C.		Rt.		
33.03'				
+02.54 = E.C.				
3 +00				R = 100'
				Δ = 81°30'
				L = 142.25'
				S.T. = 86.17'
2 +00				
+60.30 = B.C.		Rt.		
75.05'				
1 +00				
+85.25 = E.C.				R = 63'
				L = 85.25
				Δ = 77°32'
0 +00 = B.C.		Lt.		S.T. = 50.59'

Alignment Changed
See Page 75

Station	Align.	Defln.	Δ	True Bearing	Curve Data
11+00	486.04'				
+75	"	"			Δ = 6°
+69.96 = B.C.					R = 500'
+17.60 = B.C		Rt.			L = 52.36
10+00					S.T. 26.22'
	182.38'				
9+00					
8+35.22 = E.C.					
+25					Δ = 7°30'
8+00					R = 500'
+75					L = 65.45'
+69.77 = B.C.		Lt.			S.T. 32.77
7+00					
6+00					

Station	Align.	Deflin. Δ	True Bearing	Curve Data	chords 30' Lt.	℄	30' Rt.
+75		11° 21.84'		Δ = 52°30	22.49'	25.00'	27.51'
+50		8° 58.60'		℄ R = 300'	"	"	"
+25		6° 35.35'		L = 274.89'	"	"	"
16 +00		4° 12.11'		ST = 147.94'	"	"	"
+75		1° 48.87'			"	"	"
15 +56 = B.C.		Lt.			17.10'	19.00'	20.90'
+02 = P.O.T.							
15 +00							
14 +00							
13 +00							
12 +00							

32.00' 24' 25'

P.O.T.

Station	Align.	Deflin. Δ	True Bearing	Curve Data	
+21.36	=E.C.	18°30'			
22+00		16°27.74'			
+75		14°04.48'			
+50		11°41.22'			
+25		9°17.96'		Δ=37°00'	
21+00		6°54.70'		D=3°00'	
+75		4°31.44'		L=193.73'	19°06'
+50		2°08.18'		S.T. 100.38'	
+27.63	B.C.	Lt.			

— see Page 72 for align. ahead

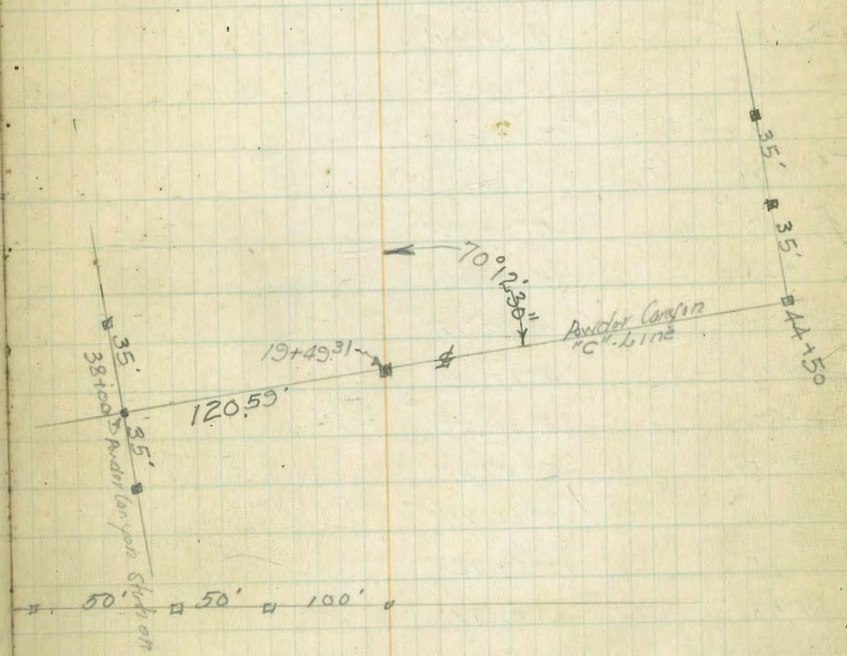
20+00

+85.11

+49.31 = Intersection Powder House Canyon "C"-Line B-1355-79

19+00

			Chords 30' Lt.	&	30' Rt.
+30.89	=E.C.	26°15'			
18+00		23°18.04'	27.78	30.87	33.96'
+75		20°54.80	22.49	25.00	27.51'
+50		18°31.56'	"	"	"
+25		16°08.32'	"	"	"
17+00		13°45.08'	"	"	"



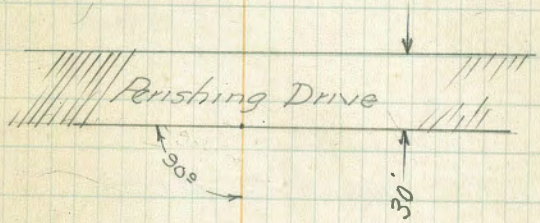
Station	Align.	Defln. Δ	True Bearing	Curve Data.	
27+80 = B.C.		Lt.			
	42.51				
+37.49 = E.C.		11°45'			
+25		11°23.52'			
27 +00		10°40.55'			
+75		9°57.58'			
+50		9°14.61'			
+25		8°31.64'			
26 +00		7°48.67'			
+75		7°05.70'			
+50		6°22.73'			
+25		5°39.76'			
25 +00		4°56.79'		Δ=23°30	
+75		4°13.82'		R=1000'	5°43.76
+50		3°30.85'		L=410.15'	
+25		2°47.88'		ST. 208.00'	
24 +00		2°04.91'			
+75		1°21.94'			
+50		0°38.97'			
+27.34 E.C.		Rt.			
23 +00					
	105.98				

Abandoned
See P. 72

Station	Align.	Defln. Δ	True Bearing	Curve Data
+25		0°44.47'		
+21.24=B.C.		N.		
33 +00				
	169.49'			
32 +00				
+51.75=E.C.		17°45'		
+50		17°39.83'		
+25		16°28.22'		
31 +00		15°16.61'		Δ=35°30'
+75		14°05.00'		R=600' 9°33'
+50		12°53.39'		L=371.55
+25		11°41.78'		S.T. 192.06
30 +00		10°30.17'		
+75		9°18.56'		
+50		8°06.95'		
+25		6°55.34'		
29 +00		5°43.73'		
+75		4°32.12'		
+50		3°20.51'		
+25		2°08.9'		
28 +00		0°57.29'		

Abandoned
See p. 72

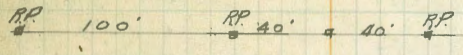
Station	Align. Defln.∠	True Bearing	Curve Data
			Abandoned see p. 72
+42.90 = North edge exist. Paving.			
	30.51'		
+12.39 = E.C.		37°46'	
35 +00		35°19.02'	Δ = 75°32'
+75		30° 22.67'	R = 145'
+50		25°26.32'	L = 191.15' 39°31'
+25		20°29.97'	S.T. = 112.34
34 +00		15°33.62'	
+75		10°37.27'	
+50		5°40.92'	

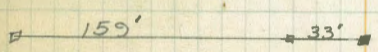


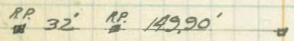
Walker
A-32

"Change in Alignment"
from Station 20+24.71 to 25+33.08

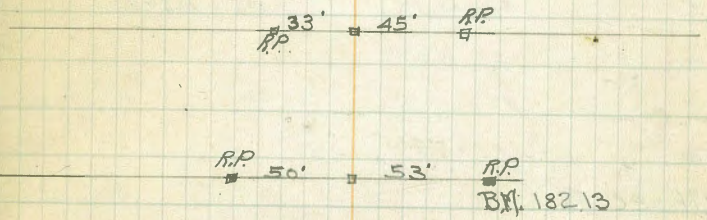
Station	Align	Defln. Δ	True Bearing	Curve Data	chords 30'	chords 30'
+50		0°26.6'			15.92' 15.46'	15.0'
23+34.54 = B.C.		Rt.				
	110.86'				chords 30'	chords 30'
+23.68 = E.C.		19°00'				
22+00		16°44.1'		Δ = 38°	21.30' 23.67'	26.03'
+75		14°20.9'		℄ R = 300'	22.49' 25.00'	27.41'
+50		11°57.7'		℄ L = 198.97'	" "	"
+25		9°34.5'		℄ S.T. = 102.30'	" "	"
21+00		7°11.3'			" "	"
+75		4°48.1'			" "	"
+50		2°24.9'			" "	"
20+24.71 = B.C.		Lt.			22.76' 25.29'	27.81'
19+49.31	P. Ho. Canyon - Sta. 19+49.31					
18+30.89 - E.C.						







Station	Align.	Defln. Δ	True Bearing	Curve Data	chords 30' Lt	℄	30' Rt.
+25		5°23.84'		Δ = 31°	2393'	2500'	2607'
29+00		4°22.46'		℄R = 700'	"	"	"
+75		3°21.08'		℄L = 378.74	"	"	"
+50		2°19.68'		S.T. = 194.12'	"	"	"
+25		1°18.30'			"	"	"
28+00		0°16.92'			2393'	2500'	2607'
27+93.11	=B.C.	Lt.			6.60'	6.90'	7.20'
+75							
+50	57.14'				30' Lt	℄	30' Rt.
+35.97	=E.C.	11°30'			11.29'	10.97	10.64'
+25		11°11.6'			25.75'	2500'	24.25'
27+00		10°28.6'			"	"	"
+75		9°45.6'			"	"	"
+50		9°02.6'			"	"	"
+25		8°19.6'			"	"	"
26+00		7°36.6'		Δ = 23°	"	"	"
+75		6°53.6'		℄R = 1000'	"	"	"
+50		6°10.6'		℄L = 401.43'	"	"	"
+25		5°27.6'		S.T. = 203.45'	"	"	"
25+00		4°44.6'			"	"	"
+75		4°01.6'			"	"	"
+50		3°18.6'			"	"	"
+25		2°35.6'			"	"	"
24+00		1°52.6'			"	"	"
23+75		1°09.60			"	"	"

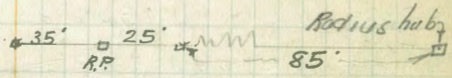


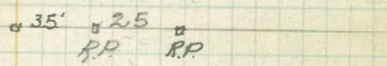
Stations Align. Defln Δ True Bearing Curve Data

35+33.08 = North edge Exist. Paving.

2.1.43

			Chords 30' Lt.	& Rt. 30'
+11.65 = E.C.	36°17.5'			
35+00	33°59.17'	Δ = 72°35'	1407'	1164' 978'
+75	29°02.82'	℄ R = 145'	3913'	2497' 1980'
+50	24°06.47'	℄ L = 183.69'	"	" "
+25	19°10.12'	T.T. = 106.48'	"	" "
34+00	14°13.87'		"	" "
+75	9°17.52'		"	" "
+50	4°21.17'		"	" "
33+27.96 = B.C. P.T.			2656'	2200' 1745'
33+00				
+75	156.11'			
+50				
+25				
32+00				
+71.85 = E.C.	15°30'		2098'	2185' 2286'
+50	14°36.3'		2393'	2508' 2607'
+25	13°34.8'		"	" "
31+00	12°33.5'		"	" "
+75	11°32.1'		"	" "
+50	10°30.8'		"	" "
+25	9°29.4'		"	" "
30+00	8°28'		"	" "
+75	7°26.60'		"	" "
29+50	6°25.22'		"	" "

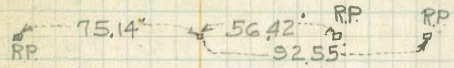


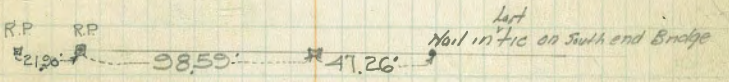


Walker
4-20-32

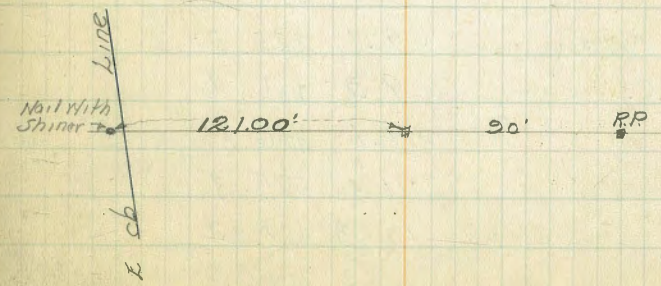
"Change Alignment"
Between Station 1+50.74
And 8+06.21

Station	Align.	Defln.	True Bearing	Curve Data	Chords 30' Lt.	℄	30' Rt.
		Continued Page 48					
		168.62'					
5+48.55 = E.C.		25°30.00'					
+25		22°48.67'		Δ = 51°00'	26.35'	23.54'	20.74'
5+00		19°57.87'		℄ R = 251.58'	28.00	24.99'	22.00
+75		17°07.07'		L = 223.94	"	"	"
+50 = P.O.C. ℄		14°16.27'	P.O.C. 60.24	℄ S.T. 120.00'	"	"	"
+25		11°25.47'			"	"	"
4+00 = P.O.C.		8°34.67'			"	"	"
+75		5°43.87'			"	"	"
+50		2°53.07'			"	"	"
3+24.61 = B.C. Rt.					28.34'	25.82'	22.30'
		21.15'					
					18' Lt.	℄	18' Rt.
3+03.46 = E.C.		43°45.0'			33.47'	28.37'	23.26'
+75		35°35.8'		Δ = 87°30'	29.42'	24.93'	20.44'
+50		28°26.1'		℄ R = 100'	"	"	"
+25		21°16.4'		℄ L = 152.72'	"	"	"
2+00		14°06.7'		℄ S.T. 95.75'	"	"	"
+75		6°57.00'			"	"	"
1+50.74 = B.C. Rt.					28.55'	24.20'	19.81'
0+85.25 = E.C.							





Cross on Steel span — 41.60' — 120' — Cross on top of Con. Pier



March 22-32
Walker.

℄ LEVELS
LAUREL St. Ext.

				BM.-P-79
	6.96	258.07		251.11
3+36.57=B.C. Rt. 58°30'			12.6	245.5
+50			11.8	246.3
+75			10.9	247.2
4+00			12.2	245.9
+25			10.2	247.9
+50			8.0	250.1
+68			3.1	255.0
5+00			9.0	249.1
+25			12.0	246.1
+39.77=E.C.			13.2	245.9
+50			12.6	245.5
T.P.	1.06	246.80	12.33	245.74
6+00			7.0	239.8
+50			11.3	235.5
T.P	1.62	235.87	12.55	234.25
7+00			2.2	233.7
+50			5.0	230.9
+69.77=B.C. Rt. 7°30'			7.1	228.8
8+35.22=E.C.			9.3	226.6
+50			9.1	226.8
9+00			11.4	224.5
T.P	3.05	226.29	12.63	223.24
+50			5.2	221.1
10+00			10.0	216.3

226.29

10+17.60 B.C. Rt		6°00'	12.2	214.1	
T.P.	4.29	218.00	12.58	213.71	
10+69.9 = E.C. on hub			7.11	210.9	
11+00			9.9	208.1	
T.P.	0.80	205.95	12.85	205.15	
11+50			5.0	200.9	
12+00			12.7	193.2	
+50			20.8	185.1	
+75			22.8	183.1	
(12+75) 40 Lt. of ℄			35.4	170.5	
13+00			21.3	184.6	
+35			15.6	190.3	
T.P.	0.67	194.05	12.57	193.38	
13+50			3.3	190.8	
14+00			7.0	187.1	
+13			7.6	186.4	
T.P.	0.12	182.16	12.01	182.04	
+50			3.1	179.2	
+75			5.6	176.6	
15+02 = P.O.T. on Hub			8.85	173.3	
+13			11.0	171.2	
T.P.	0.25	169.57	12.89	169.32	
T.P.	0.17	157.09	12.65	156.92	
15+50 = B.C. on Hub 49' Rt.			8.58	148.51	
15+75			8.4	148.7	edge ditch.
℄			13.9	143.1	
44' Rt.			10.6	146.5	edge Ditch.

157.09

0.50	144.93	12.66	144.43
16+00			
℄		4.1	140.8
28' Rt. = edge ditch		1.4	143.5
16+25			
℄		6.7	138.2
28' Rt. edge ditch.		3.5	141.4
16+37 ℄ edge Bridle path		6.4	138.5
+38 ℄ " " "		7.8	137.1
16+50		9.3	135.6
31' Rt. 16+50 = edge ditch		6.4	138.5
16+75		11.9	133.0
17+00		14.1	130.8
+25		15.5	129.4
+50		17.0	127.9
17+75		18.2	126.7
+80 = edge channel		18.2	126.7
+81 = Bottom "		20.5	124.4
18+00 " "		21.5	123.4
+01 top "		20.0	124.9
+25		17.9	127.0
+50		19.0	125.9
+61		20.6	124.4
19+00		17.2	127.7
+25		13.3	131.6
+50		11.3	133.6

144.93

19+82			12.0	132.9	
+90			16.1	128.8	
20+16	channel		18.0	126.9	
+25 =	top Bank of channel		15.5	129.4	
+50			13.9	131.0	
+75			11.3	133.6	
21+00			6.7	138.2	
+25			0.0		
T.P	12.02	156.06	0.89	144.04	on Rock.
21+50			2.2		Line change See Conf. below
T.P	13.09	168.51	0.64	155.42	
21+75			6.8		
22+00			2.5		
+09.73 = E.C. on hub.			2.06	166.45	
	0.03	144.07		144.04	Above T.P. on Rock.
on ℄ hub 38+00 B-1355-78			8.69	1354	
20+27.63 = B.C. Lt.			14.8	129.2	
+50			13.0	131.0	
+75			10.3	133.7	
21+00			5.8	138.2	
T.P	1.22	145.26	0.03	144.04	Above Rock.
	℄ Hub Station 39+50				
chk. on B.M. Book 1355-64			13.13	132.13	
	13.03	144.95		131.92 = corrected	
21+25			0.0	145.0	
T.P	13.13	156.86	1.22	143.73	

156.86

21+50

10' Lt.	5.6		151.2
℄	2.2		154.6
10' Rt.	+2.2		159.0
T.P. 12.50	168.63	9.73	156.13

21+75

10' Rt.	0.2		168.4
℄	5.0		163.6
10' Lt.	9.5		159.1

22+00

10' Lt.	4.7		163.9
T.P. 12.67	181.01	0.29	168.34
℄	11.7		169.3
10' Rt.	5.4		175.6

22+21.36 = E.C.

10' Rt.	6.0		175.0
℄ on Hub	11.12		169.9
10' Lt.	15.9		165.1

22+50

10' Lt.	14.6		166.4
℄	9.4		171.6
10' Rt.	3.6		177.4

23+00

10' Rt.	4.5		176.5
℄	8.3		172.7
10' Lt.	13.0		168.0

Cont. on P-40

Walker
3-21-32

"BENCH MARKS"
LAUREL St. Extension.

	2.52	295.94		293.42	BM. on top Fire Hyd. in front Canadian Legion
T.P.	2.92	287.78	11.08	284.86	
T.P.	2.12	277.24	12.66	275.12	
T.P.	0.85	265.15	12.94	264.30	
T.P.	0.94	253.44	12.65	252.50	
T.P.	0.07	251.18	2.33	251.11	on Pine Stake N Rt. 5+59.77
T.P.	1.12	239.42	12.88	238.30	
T.P.	4.60	233.40	10.62	228.80	on ℄ Hub 7+69.77=BC.
T.P.	0.57	221.38	12.79	220.61	
T.P.	8.29	218.00	11.67	209.71	on ℄ Hub 10+75 on S.T.
T.P.	0.80	205.95	12.85	205.15	

IMPROVED TABLES

AND

INFORMATION

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope 1½ 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 of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE No. 9.

To find Tangent and External for curve of any other degree, divide by degree of curve and add correction found in column of corrections.

Degree of curve with a given I may be found by dividing tangent, (or external), opposite I 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.

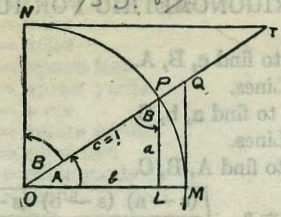


TABLE II

TRIGONOMETRIC FORMULÆ.

$\angle A = \angle MOP \quad \angle B = \angle PON = \angle OPL$

$R = OB = c = 1$

$$\sin A = \frac{a}{c} = \frac{a}{1} = a = \cos B = LP$$

$$\cos A = \frac{b}{c} = \frac{b}{1} = b = \sin B = OL$$

$$\tan A = \frac{a}{b} = \frac{MQ}{OM} = \frac{MQ}{1} = MQ = \cot B = MQ$$

$$\cot A = \frac{NT}{ON} = \frac{NT}{1} = NT = \tan B = NT$$

$$\sec A = \frac{OQ}{OM} = \frac{OQ}{1} = OQ = \csc B = OQ$$

$$\csc A = \frac{OT}{ON} = \frac{OT}{1} = OT = \sec B = OT$$

$$\text{vers } A = \frac{LM}{OP} = LM = \text{covers } B \#$$

$$\text{covers } A = \frac{OP - LP}{OP} = OP - LP = \text{vers } B$$

$$\text{exsec } A = PQ = \text{coexsec } B$$

$$\text{coexsec } A = PT = \text{exsec } B$$

$$\sin \tfrac{1}{2} A = \sqrt{\frac{1 - \text{Cos } A}{2}} \qquad \cos \tfrac{1}{2} A = \sqrt{\frac{1 + \text{Cos } A}{2}}$$

$$\sin 2A = 2 \sin A \cos A \qquad \cos 2A = \cos^2 A - \sin^2 A$$

$$\text{Law of Lines} \quad \frac{\sin A}{a} = \frac{\sin B}{B} = \frac{\sin C}{C}$$

$$\text{Law of Cosines} \quad c^2 = a^2 + b^2 - 2ab \cos C$$

$$\text{Law of Tangents} \quad \frac{a+b}{a-b} = \frac{\tan \tfrac{1}{2}(A+B)}{\tan \tfrac{1}{2}(A-B)}$$