

36
GRADES

WEST

LEVEL BOOK

No. 380 F

INDEXED

entire Book

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.
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THE FREDERICK POST CO.

ENGINEERING and DRAFTING SUPPLIES

IRVING PARK STATION

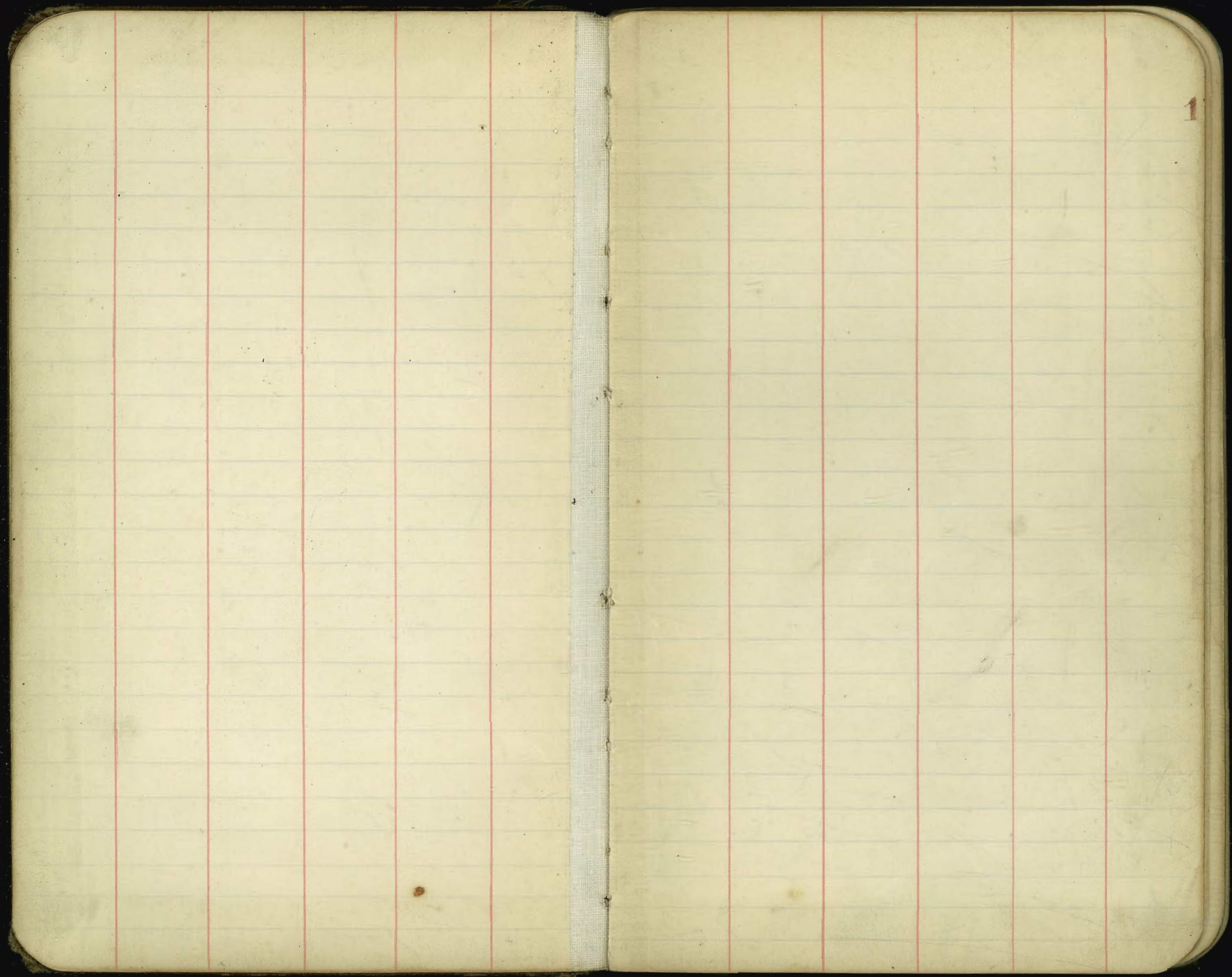
CHICAGO, ILL.

MICROFILMED

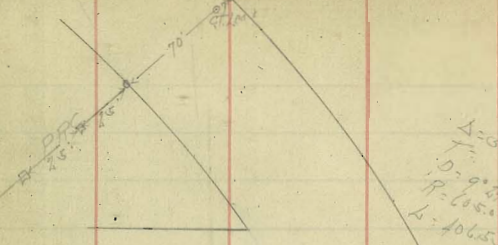
APR 8 1965

3.42
251

27-32-18
13.46.00



Catalina Blvd

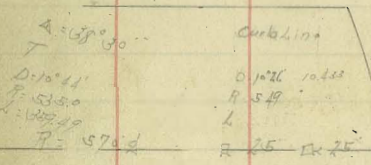


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T = 9.47
R = 6.54
L = 40.650

Chokulini
D = 9.89
R = 5.91
L = 39.14

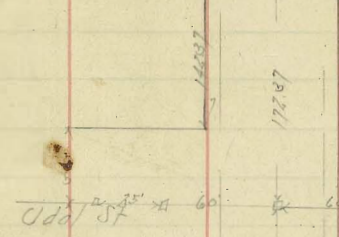
344.2157

Tennison St



A = 39° 30'
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D = 53.50
R = 10.24
L = 57.4

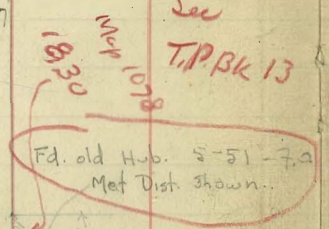
Carolina
D = 10.26
R = 5.49
L = 25



See Tie Point Book 13, page 40
VOID - DO NOT USE !!

VOID !!

See
T.P.BK 13
page 40

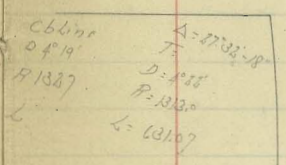


Fd. old Hub. 5-51-7.2
Met Dist. Shown.

Lt + ct. Not on
Prop. Cor.

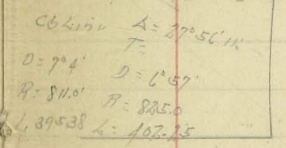
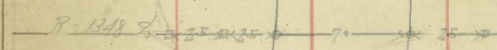
VOID
SEE Tie Point Book 13 page 40

Alascadero Dr.



Chokulini
D = 9.19
R = 13.67
L = 10.107

A = 17° 38' 10"
T = 1.88
D = 1283.0
R = 136.90
L = 14.73

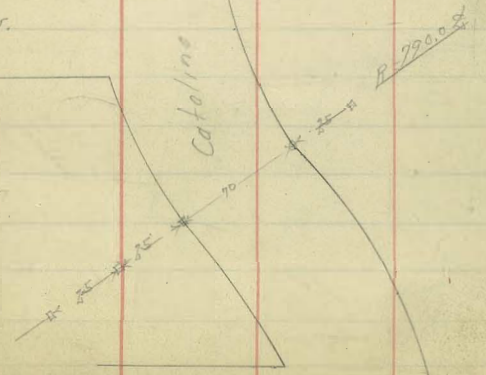


Chokulini
D = 7.4
R = 8.10
L = 39.53

Alicia Dr.

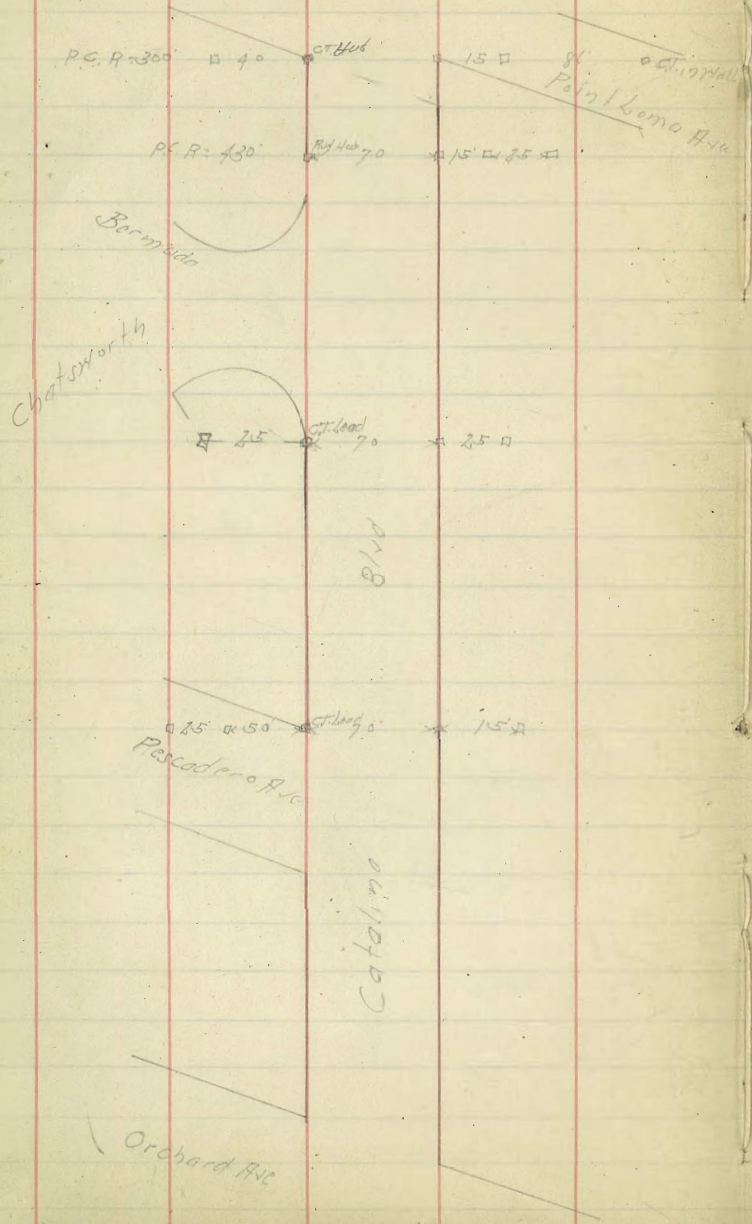
Chokulini
D = 7.27
R = 7.69
L = 37.41

A = 27° 50' 11"
T = 1.36
D = 7.55
R = 7.55
L = 3.68 1/2



Tennison St

Catalina Blvd Tris



Gladina Blvd Grades
Voltaire to

Station	Elevation	Station	Elevation	Notes
SL Voltaire 000		61.64	42.96	BM 3006
1635 S - SL Voltaire 005	63.14	63.22	40.23	
5635 V	63.57	63.64	37.69	
9635 V	65.00	65.06	35.11	
13635 V	66.43	66.48	32.43	
17635 V	67.85	67.89	29.75	
21635 V	69.28	69.31	27.07	
25635 V	70.71	70.73	24.39	
29635 V - H.L. Jdal	72.14	72.14	21.71	
52 Jdal	74.14	74.14	19.03	
47.65	76.84	76.14	16.35	
94.925	78.34	78.14	13.67	
112.875 - BC 0-10' 44'	80.44	80.14	11.00	
155.25 V	82.39	81.94	8.32	
228.175	84.34	83.74	5.64	
271.01 S - H.L. Teonyapp	86.29	85.54	2.96	
338.90 S - J.L. " 10' 10"	87.14	87.34	0.20	
375.72	91.04	89.14	-1.90	
417.55	92.94	91.26	-1.68	
459.37	94.84	93.39	-1.45	
501.20 - P.S.P.C.	96.74	95.51	-1.23	
		97.64	1.13	

BM 6377 SE Spl
Voltaire & Gladina
BM 6380 SN Top Hd.

5-10-35
10-10-35
10-10-35

Station	Elevation	Station	Elevation	Notes
E 62.14	63.57	65.00	66.43	
67.85	69.28	70.71	72.14	
X 61.64	63.22	63.64	65.06	
66.43	66.48	67.89	69.31	
70.73	72.14	74.14	76.84	
78.34	80.44	81.94	83.74	
85.54	87.34	89.14	91.04	
91.26	93.39	95.51	97.64	

10-10-35
8-10-35
BM 6363
87.65

BM 8865
86.10

107.31

Catalina Blvd Grades

Sta	E	Sta	W
PRC Soft Canyon 3875#853 7741'S	96.74 99.51 100.29	PRC 8.400 46.01	97.14 99.43
111.19'S	102.06	92.03	101.22
154.91'S - N. Alicia Dr. 1.444	103.84	138.04	103.01
221.35'S - N. Alicia Dr. 1.4520	106.64	184.06	104.79
366.58'S	108.11	230.07	106.58
311.81'S	109.59	276.09	108.39
357.04'S	111.06	322.10	110.16
402.26'S - PRC N of Harcadere	112.54	368.12	111.94
350.55'S of PRC	113.77	414.85	114.40
701.05	114.60	460.85	115.64
105.15'S - N. Harcadere 1.4561	115.64	506.85	116.14
167.76'S - N. Harcadere 1.5029	117.55	552.85	117.49
218.15'S	118.47	598.85	118.34
269.52'S	119.38	644.85	119.19
319.32'S	120.30	690.85	120.04
369.71'S	121.22	736.85	120.89
420.09'S - N. Bernice Dr. 1.098	122.14	782.85	121.74
471.07'S - PRC	123.06	828.85	122.59
		874.85	123.44
		920.85	124.29
		966.85	125.14
		1012.85	125.99

10831/41
10832/42
10833/43
10834/44
10835/45
10836/46
10837/47
10838/48
10839/49
10840/50

F	98.51	100.59	102.06	103.84	106.14	107.11	109.59	111.06	112.54
	2.8	2.0	1.3	2.5	1.7	1.5	2.0	1.5	1.6
	2.7	1.9	1.2	2.4	1.6	1.4	1.9	1.4	1.5
	2.1	1.7	1.1	2.3	1.5	1.3	1.8	1.3	1.4

X	99.43	101.22	103.01	104.79	106.58	108.37	110.16	111.94
	2.9	2.1	1.4	2.6	1.8	1.6	2.1	1.6
	2.8	2.0	1.3	2.5	1.7	1.5	2.0	1.5
	2.2	1.8	1.2	2.4	1.6	1.4	1.9	1.4

119.09
119.54
119.4
371

F	113.57	114.60	115.14	116.64	117.55	118.47	119.38	120.30	121.22
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0

X	113.17	114.10	115.11	116.14	116.64	117.59	118.47	119.38	120.30
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0

F	121.14	122.14	123.14	124.14	125.14
	1.0	1.0	1.0	1.0	1.0
	1.0	1.0	1.0	1.0	1.0
	1.0	1.0	1.0	1.0	1.0

X	120.87	121.87	122.87	123.87	124.87	125.87
	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.0	1.0	1.0	1.0	1.0
	1.0	1.0	1.0	1.0	1.0	1.0

Catalina Blvd Grades

	E		W	
P.R.C. San Bernice 5-42-17	125.14	P.R.C.	125.14	130.55
48.12'S	3.54	38.27'S	4.35	127.65
81.24'S		76.48'S	9.8	127.51
126.36'S		114.71'S	13.4	128.74
169.48'S		152.95'S	18.5	129.94
210.20'S = N.L. Catalina Pt 127.97	130.24	191.12'S = 20 8-27-17	20	131.14
338.57 = 61.6 S.L. Catalina 7-10-11	134.34	238.25'S	17.5	132.89
377.28'S	135.88	332.40'S		136.37
419.97'S	137.22	379.47'S		138.14
460.90'S	138.97	436.55'S		139.89
501.41'S	140.51	473.62'S		141.64
542.12'S	142.05	520.69'S		143.39
582.83	143.59	567.77'S		145.14
623.54 = opp. N.L. Catalina N 102° 20'	145.14			
41.06'S	146.24			

125.45
5-42-17
8/125.48
S.F. Hall
Catalina Blvd
125.47
Service

5-29-17
3

	E		W					
	126.16	127.18	128.20	129.22	130.24			
	8.6	7.6	6.6	5.5	4.5			
	10.1	9.2	8.2	7.2	6.2			
	-1.5	-0.6	4.0	7.2	4.1			
	126.34	127.54	128.74	129.94	131.14			
	8.2	3.0	1.8	7.6	6.5			
	6.2	4.2	2.2	1.2	0.2			
	-3.2	-1.2	-0.2	-0.2	-0.2			
	132.66	133.66	134.66	135.66	136.66			
	8.2	7.2	6.2	5.2	4.2			
	10.2	9.2	8.2	7.2	6.2			
	-1.2	-0.2	0.2	1.2	2.2			
	136.34	135.88	137.42	138.97	140.51	142.05	143.59	145.14
	8.2	1.4	8.2	8.3	7.8	6.3	3.7	2.7
	-0.7	-0.9	-1.5	-2.0	-2.5	-3.4	-4.1	-4.6
	132.89	134.14	135.39	136.64	137.89	139.14	140.39	141.64
	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2
	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2	-1.2
	146.24	147.30	148.36	149.42	150.48	151.54	152.60	153.66
	12.5	12.5	12.5	12.5	12.5	12.5	12.5	12.5
	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5
	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5

147.30
148.36
149.42
150.48
151.54
152.60
153.66
S.F. Hall
Catalina Blvd
Niagara

Catalina Blvd Grade

	F		N	
SL Niagara Ave 6-498	14734	1522 Niagara 6-4283	14734	HI 15074 677
42985	14854	17035	14852	15879 462
85965	14974	84065	14970	16350
128945	15094	12609	15089	
171925	15214	16812	15207	
21496	15334	21015	15325	
257985 - FC Niagara point	15454	25218 BN Niagara	15444	

	F		N	
SL Niagara Ave 6-498	15614	SL Niagara 6-4123	15614	
41985	15657	41335	15657	
83965	15700	82465	15700	
125945	15744	123695	15744	
167925	15787	164985	15787	
209965	15830	206155	15830	
251985 - FC N of Delphi	15874	247395 - FC	15874	

	F		N								
	14754	14854	14974	15094	15214	15334	15454				End of 577
	16.4	11.2	16.0	8.1	2.1	6.2	5.7				
	18.7	12.5	2.7	7.6	2.5	3.3	3.7				
	21.9	22.5	22.7	21.6	27.5	22.6	22.2				
	14734	14852	14970	15089	15207	15325	15444				
	18.1	11.2	19.0	8.1	2.6	6.5	5.7				
	21.5	12.5	2.5	7.6	2.6	3.3	3.7				
	25.9	22.9	22.5	21.6	23.9	25.3	25.0				
	16350	15737									

	F		N								
	15614	15657	15700	15744	15787	15830	15874				16549
	3.5	3.2	3.8	6.1	5.4	5.8	6.7				
	22.2	22.8	21.9	22.5	21.7	22.2	20.3				
	15614	15657	15700	15744	15787	15830	15874				
	7.1	6.8	6.5	6.1	5.6	5.8	6.7				
	23.1	22.3	22.0	23.1	22.2	22.2	21.0				

BM
15737
NE of
Catalina Blvd
Hwy 92
15950

End of 577

	E		M	
P.C. No. 100d Monte 14552	158.74	P.C.	158.74	BM 157.87 158.06 158.23 158.39 158.54 158.68 158.80
4553 S - 90° E 3-31 P.C. Monte 80.38 S	159.29	5486 - M.L. 1-8213 Dell Monte	159.82	5381 159.09 159.26 159.40
11524 S	160.13	13699 S - S.A. 1-8213 Dell Monte	160.14	1597 158.30 158.40
150.10 S - P.P.C. 2-442	160.54	19896 - P.P.C. 2-4476	160.84	2000
194.50 S	161.01	21522 S	161.29	217
23896 S	161.48	29249 S - K 2-3897	161.74	1614
28835 S - P.C. 4-3897	161.94	33144 S	162.22	
32227 S	162.36	37043 S	162.69	167.46 168.12
36184 S	162.79	40940 S - M	163.17	BM 163.74 163.96 163.97
40021 S	163.21	44836 S - M.L. San Antonio	163.64	
43918 S - M.L. Santa Gas	163.64			

	E	M	E	M	E	M	E	M
as Catalina part of road	159.29	159.71	160.13	160.54	161.01	161.48	161.94	162.36
	1.2 -1.3	5.2 -1.6	5.3 -1.5	2.2 -1.5	2.4 -1.6	2.5 -1.4	2.8 -1.3	3.1 -1.2
	159.34	160.14	160.49	160.84	161.29	161.74	162.22	162.69
	6.6 -1.7	5.2 -1.5	4.7 -1.7	4.1 -0.5	4.1 -1.5	3.7 -1.4	3.4 -1.5	3.7 -1.4
	162.79	163.21	163.64					
	2.6 -1.2	2.2 -1.1	1.8 -0.6					
	163.17	163.64						
	2.9 -0.5	2.7 -0.9						
as Catalina part of road	163.74	163.96	163.97					
	168.30 168.38 168.44							
	BM 167.44	5-M.B.P. NE of Catalina + Santa Gas						

Catalina Blvd Grades

	F	H	
SL Orchard apr		196.60	BM 19777 ^{SMBP} Catalina
30.575 - SL Orchard	196.60	196.79	20597 ^{SL Orchard}
72.685	197.07	197.28	
134.785	197.54	197.77	BM 19777 ^{SMBP} Catalina
176.89	198.01	198.25	20620 ^{SL Orchard}
229.00	198.47	198.74	20650
281.00	198.94	199.23	20744
333.315 - NLP Pasadena	199.40	199.73	218.09
374.895	out	200.41	210.18
416.585 - SL Pasadena	200.20	200.50	210.13
459.15	200.57	200.90	238.19
501.76	200.95	201.30	250.17 ^{SMBP} Catalina
544.29	201.32	201.70	250.17 ^{Verina}
586.845 - PC ML Chatsworth	201.70	202.10	350.17
633.66	202.12 out	202.54	
680.40	202.54 out	202.98	
727.20	202.96 out	203.45	
774.00	203.38 out	203.86	
820.80 - FVC	203.80	204.30	
860.80	204.40	204.90	
900.80	205.70	206.20	
940.80	207.50	208.10	
980.80 - FVC	210.00	980.80 FVC 210.60	
1021.13	212.93	1021.13	213.40
1061.46	215.86	1061.46	216.20
1111.79 - NLP Home	218.80	1117.70	219.40

69-207

20832
4.27
BM 19755

NE Road Hub
Catalina +
Chatsworth

F	1966	19707	19754	19801	19847	19894	19940
	7.4	8.2	8.4	8.8	7.5	7.6	6.6
	13.0	13.3	13.2	12.5	12.2	10.5	7.0
H	19650	19679	19728	19787	19845	19904	19963
	7.7	8.8	8.8	8.2	7.7	6.6	6.3
	8.78-0.23	11.1	13.7	16.0	11.3	12.9	13.3
F	200.20	200.57	200.95	201.32	201.70	202.12	
	5.8	5.1	5.0	4.7	4.3	4.2	
	-2.8	-0.9	-0.6	-0.3	-0.1		
H	200.50	200.90	201.30	201.70	202.10	202.54	202.98
	5.2	5.8	5.2	5.0	4.1	5.8	4.9
	13.1	13.3	13.2	13.0	12.0	11.9	13.9
F	203.80	204.40	205.70	207.50	210.00	212.93	215.86
	14.3	13.9	17.2	10.6	8.1	5.1	3.6
	14.1	13.1	13.6	10.2	8.8	5.8	3.2
	10.8	10.6	-0.4	70.2	7.1	-0.7	-0.4
H	203.86	204.30	204.90	206.20	208.10	210.60	213.40
	14.6	13.8	13.2	11.5	7.9	6.8	7.8
	13.7	14.6	14.7	13.2	12.1	11.3	12.4

226.20
201
BM 225.19

SW Top Rd
Catalina +
Pasadena

SL Udal	70.14	1973	81 89.25	8.0	218.15	113.55	14.88
77.46	72.24		12.13	0.32		114.97	15.12
94.92	74.34	15.52	88.87	0.15	268.54		15.12
142.37	76.44	12.72	87.27	13.15	318.93	115.38	15.12
185.25	78.39	12.51	13.12	10.27	369.32	116.30	15.12
228.47	80.34	12.4	12.4	6.02	419.71	117.22	15.12
271.01	82.29	12.4	8.5	12.19	470.09	118.14	15.12
333.90	85.14	12.4	8.5	12.19			
375.72	87.04	12.4	8.5	12.19			
417.55	88.94	12.4	8.5	12.19			
459.37	90.84	12.4	8.5	12.19			
501.20 - P.R.	92.74	12.4	8.5	12.19			
587.34	94.51	12.4	8.5	12.19			
72.46	96.29	12.4	8.5	12.19			
116.18	98.06	12.4	8.5	12.19			
154.91 - NL Bernice	99.84	12.4	8.5	12.19			
221.35 - SL Alicia	102.61	12.4	8.5	12.19			
266.68	104.11	12.4	8.5	12.19			
311.81	105.59	12.4	8.5	12.19			
357.04	107.06	12.4	8.5	12.19			
402.26 - P.R. N. of Ft. Ascadero	108.54	12.4	8.5	12.19			
350.5	109.57	12.4	8.5	12.19			
70.1	110.60	12.4	8.5	12.19			
105.15 - NL Ft. Ascadero	111.64	12.4	8.5	12.19			
167.76 - SL	112.64	12.4	8.5	12.19			

Catalina Sewer Grades Between Mn. Hole
11. N Side of 1109000 to Mn. Hole # 5

BM N.W. Nail
in Pole
near 1109000

165	197.10	195.95	
D 100 Mn. Hole # 11	07.59	140.9	146.2
Elv. Grade 159.00	136.59	139.88	131.92
rod 2.93	10.96	12.82	15.16
C.S. 17	105.03	7.85	10.87
	C 5.43	C 4.97	C 4.31
D 200 Mn. Hole # 10	07.39.5	07.59.5	12.9.50 Mn. Hole # 9
129.55	128.20	126.23	129.26
	12.60	14.60	16.63
	7.58	8.63	9.76
	C 5.11	C 4.03	C 6.87
Mn. Hole # 9 = 00	07.50	14.00	17.50
129.26	162.29	120.32	118.35
	11.81	13.78	15.75
Mn. Hole # 8	17.07	6.08	8.00
17.03	C 7.66	C 7.70	C 7.76
9.25	07.50	14.00	17.50
C 7.78	116.91	115.76	115.11
	10.91	11.06	11.72
	3.68	4.39	4.89
	C 6.73	C 6.67	C 6.73
21.00	21.21.5 Mn. Hole # 7	Mn. Hole # 7 = 00	07.50
119.95	114.17	118.17	113.38
12.37	12.65	12.65	11.23
5.73	6.09	6.09	9.63
C 6.64	C 6.56	C 6.56	C 6.59
14.00	14.50	14.50 Mn. Hole # 6 = 00	
112.59	111.80	111.19	
12.01	12.50	13.94	
5.63	6.21	6.70	
C 6.38	C 6.59	C 6.71	
07.50	14.00	14.50	Mn. Hole # 5 = 00
116.16	109.14	108.11	107.53
14.44	15.47	16.49	17.07
7.95	8.79	9.60	10.11
C 6.49	C 6.68	C 6.89	C 6.96
17.56 #1	14.00	14.50	17.2 Mn. Hole # 5
07.50	105.48	104.46	104.00
106.51	12.07	13.10	13.56
11.05	6.14	7.85	8.56
7.92	C 5.93	C 5.25	C 5.00
C 6.63			

195.95 on NW Sewer Lateral Grades Catalina Blvd 12

195.95	# 26	# 25	# 24
147.10	137.90	136.20	132.90
12.32	5.12	10.70	14.70
139.46.77	5.91	5.12	10.82
6.61	62.79	65.56	63.58
140.39			
9.5	# 23	# 22	# 21
131.47.77	131.00	129.00	122.90
2.14	9.89	11.89	13.93
134.10	52.0	1.09	6.47
9.25	C 4.69	4.80	C 7.46
129.85			
11.05 +			
135.93.77	# 20	# 19	# 18
13.01	119.00	125.5	123.8
122.92	16.93	10.43	13.13
3.90 +	12.38	6.52	10.22
126.82	C 4.56	C 3.91	C 2.91
1.39			
125.43 on NW			
120.73 Mn. Hole # 7	# 17	# 16	# 15
3.82 +	120.70	119.80	118.40
114.60	15.23	7.42	8.92
10.4	13.01	4.89	5.47
114.49	C 2.22	C 2.53	C 2.48
3.07			
117.56			

Catalina Sewer Grades from Mn. Hole #5

117.56 H.I.

Mn. Hole #5 = 00
 109.00
 13.56
 8.56
 65.00

0750
 101.95
 15.61
 10.09
 65.52

1400
 99.89
 17.60
 12.23
 65.73

1450
 97.84
 8.56
 3.07
 65.49

106.90 H.I.

14762 = Mn. Hole # 400
 96.72
 9.68
 4.21
 65.07

0750
 94.67
 11.33
 6.50
 65.23

1400
 92.61
 13.78
 9.15
 64.64

1450
 90.56
 15.34
 11.59
 64.25

2700 66 Mn. Hole #3 = 00

88.88
 17.92
 12.63
 65.29

H.I. 95.96
 0739
 87.12
 8.34
 3.61
 64.73

0789
 85.35
 10.12
 5.54
 64.54

1439
 83.58
 11.90
 3.15
 63.72
 84.13 H.I.

1489 Mn. Hole #2 = 00

81.78
 13.68
 9.52
 64.76

0719.31
 81.09
 14.37
 10.51
 63.86

0769.31
 79.32
 16.14
 13.06
 63.08

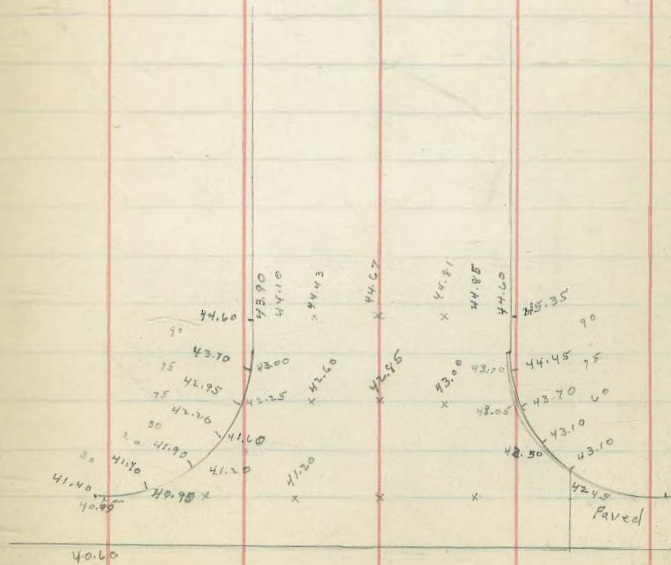
1419.3
 77.55
 6.58
 3.97
 62.61

1469 31 Mn. Hole #1

75.78
 8.35
 6.37
 61.98

0735. Laterd. E. of Mn. Hole
 75.70
 8.45
 3.92
 64.53

117.56 H.I.
 14.23
 105.33 TP
 1.02
 106.90 H.I.
 12.63
 93.77 TP
 1.67
 95.46 - 5.97 Check on BM = 89.99
 13.06
 82.90 TP
 1.73
 84.13



4433

Brown 119 curk 512k.

1.14
45.47
71.84

37.63
10.06

47.69
0.23

47.46
12.61

60.07
0.33

59.24
12.18

71.92
0.45

71.47
12.23

83.70
1.27

82.43
1.33

12.64
1.23

75.07
0.65

94.42
13.05

107.43
9.56

103.48
12.65

116.13
103.38

12.75
116.13

0.45
115.95

13.05
129.00

d.Rc		Pc		B.Rc					
S	34.50	34.95	35.70	36.70	38.00	39.30	41.67	44.85	51.00
	13.19	12.74	12.00	11.00	9.69	8.39	6.02	4.84	9.07
		12.85	11.89	10.35	9.08	7.79	5.63	4.23	8.73
		-0.11	+0.11	+0.65	+0.61	+0.62	+0.39	+0.61	+0.64

N		Pc		B.Rc					
	37.50	37.40	37.60	38.20	39.45	40.70	43.00	44.80	52.00
	10.19	10.24	10.09	9.49	8.24	7.28	4.69	12.02	8.07
	10.06	10.32	10.24	9.28	8.38	7.28	4.65	11.00	7.81
		+0.13	-0.03	-0.17	+0.23	-0.34	-0.28	+0.05	+0.07

S		Pc		S.Hm		S.Hm			
	58.12	64.06	67.02	68.51	70.00	71.50			
	1.95	7.86	4.89	3.81	1.92	0.42			
	8.49	7.30	4.74	3.35	2.13	0.85			
		+0.46	+0.56	+0.11	+0.06	-0.24	-0.43		

N		Pc		S.Hm		S.Hm			
	58.74	64.37	67.18	68.59	70.00	71.50			
	1.33	7.55	4.74	3.33	1.92	0.42			
	1.23	6.93	4.56	3.25	1.83	0.45			
		+0.10	+0.62	+0.18	+0.09	-0.03			

LOBUST

S		Pc		Pc		Pc		Pc	
	72.50	74.00	75.33	76.67	81.00	87.33	92.67	98.00	103.33
	11.20	9.70	8.07	7.03	1.70	7.74	2.40	9.43	4.10
	9.56	9.17	8.06	6.90	1.27	7.63	2.31	9.33	3.95
		+1.64	+0.53	+0.31	+0.13	+0.11	+0.08	+0.10	+0.15

N		Pc		Pc		Pc		Pc	
	72.50	74.00	75.33	76.67	82.00	87.33	92.67	98.00	103.33
	11.20	9.70	8.07	7.03	1.70	7.74	2.40	9.43	4.10
	116.13	9.28	8.24	7.44	1.80	7.71	2.27	8.83	4.05
		3.33	+0.72	+0.13	-0.41	-0.10	+0.03	+0.13	+0.60

S		S.Hm		S.Hm		S.Hm		S.Hm	
	104.67	106.00	107.50						
	11.46	10.13	8.63						
	11.67	10.13	9.03						
		-0.21	-0.40						

N		S.Hm		S.Hm		S.Hm		S.Hm	
	104.67	106.00	107.50						
	11.46	10.13	8.63						
	11.82	10.56	9.20						
		-0.36	-0.43	-0.57					

Evergreen.

S		Pc		Pc		Pc		Pc	
	105.50	9.50	10.45	11.40	12.82	14.35	19.77	23.20	24.60
	7.63	6.63	5.68	4.73	3.21	12.65	9.28	5.80	4.40
	7.02	6.24	5.64	4.28	3.00	12.95	8.91	5.77	4.57
		+0.61	+0.39	+0.04	+0.71	+0.10	+0.32	+0.03	-0.11

N		Pc		Pc		Pc		Pc	
	105.50	9.50	10.45	11.40	12.92	14.35	19.77	23.20	24.60
	7.63	6.63	5.68	4.73	3.21	12.65	9.28	5.80	4.40
	6.33	6.13	5.68	4.27	2.86	12.46	9.08	5.77	4.37
		+1.30	+0.50	0.0	+0.44	+0.35	+0.19	+0.15	+0.03

S		Pc		Pc		Pc		Pc	
	25.80	26.40	27.60	28.12	28.56	29.00			
	3.20	2.20	1.40	0.84	0.40	0.0			
	3.17	1.97	1.80	0.52	4.24	21.44			
		+0.03	+0.23	-0.40	+0.66	+0.12			

N		Pc		Pc		Pc		Pc	
	25.80	26.40	27.60	28.12	28.56	29.00			
	3.20	2.20	1.40	0.84	0.44	0.0			
	3.20	2.00	1.19	0.76	0.45	0.0			
		0.0	+0.70	+0.71	+0.17	0.27			

145
66

100.4
6.8
4.5
3.3

17

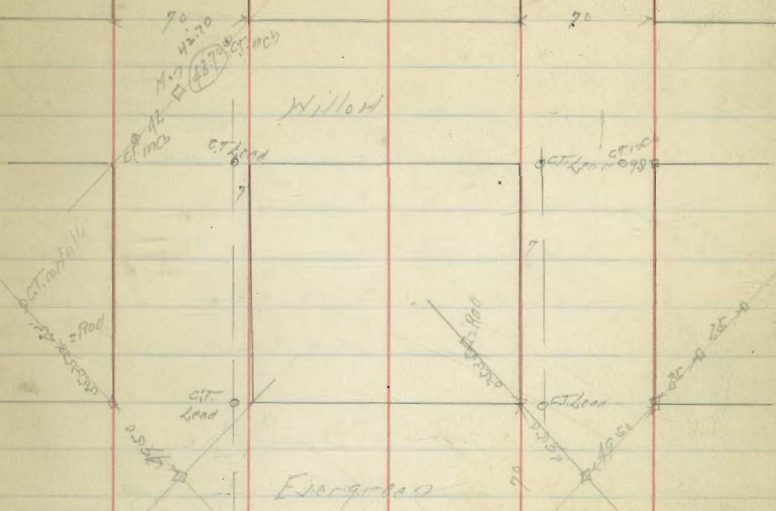
Tennyson - Udal St.

Ties



Start

19



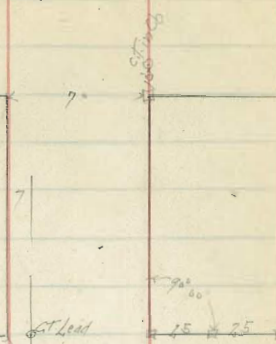
Tennyson

Locust

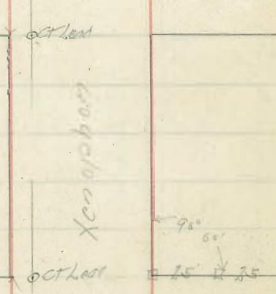
Moist

Xenophon-Browning-Curtis
Tias

Willow



Evergreen

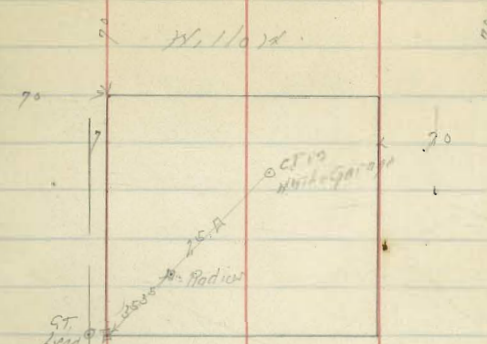


Locust

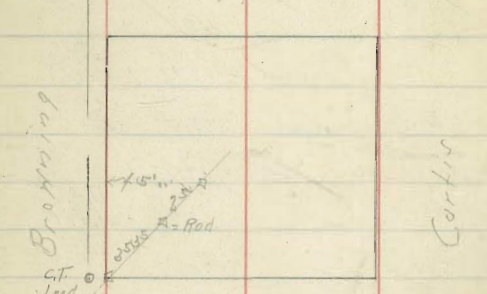
Rosecrans



Willow

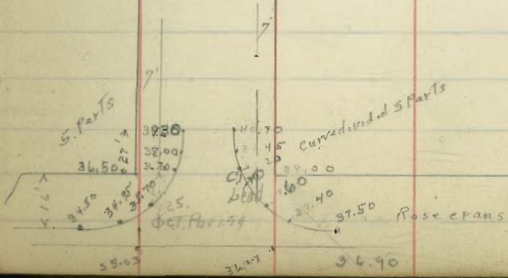


Evergreen



Locust

Curtis



Willow St Sewer Construction
Sterne to Quimby

5-23-28

MH N° 4	167.00	122.27	56.66
45' S of MH	164.84	162.4	15.62
90'S	162.68	11.85	13.23
135'S	160.52	14.01	11.01
180'S	158.36	7.01	17.34
225'S	156.20	16.12	17.01
270'S - MH N° 3	154.04	16.12	18.16
45'S of MH N° 3	152.08	14.54	13.23
90'S	158.00	14.24	15.76
135'S	159.98	12.35	16.23
180'S	161.96	8.40	16.47
225'S	163.94	7.03	16.71
270'S - MH N° 3	165.92	6.22	16.95
48.33'S of MH N° 3	167.32	13.84	16.35
96.66'S	168.72	12.44	15.69
145.0'S = O.E.	170.12	6.58	15.66

Russell & Willow

65' E of MH N° 3	155.12	17.25	15.98
35' E - MH N° 3	154.04		
35' E of MH N° 3	151.03	2.13	15.88

6-2-28

MH N° 1	143.55	13.58	15.81
48.33' N	149.20	14.23	16.13
96.66' N	154.85	15.13	16.47
145.6' N = O.E.	160.51	7.66	16.72
35' E of MH	142.33	7.00	15.98
Willow + Carlie		18.18	17.130.23
MH N° 15	112.30	12.30	15.88
MH of MH 10			16.88
Lateral N° 22	114.20		16.31

Xenophon St. Sewer Construction
 Miller to Parsons

Existing MH & Willow	147.00	12.56 12.56 15.64	3M 154.20 154.20 157.56
50' of MH	146.12		13.09 142.97
100'	145.25	12.37 +9.58	142.97 142.97
150'	144.38		13.88 131.70
200' - MH N° 5	143.50	14.06 +7.51	131.70 137.84
250'	139.90		137.84 131.70
300'	136.34	31.26 13.07 +19.17	131.70 106.79
350'	132.70		106.79 101.58
400' - MH N° 9	129.10	11.28 +5.97	101.58 90.30
138.75	128.95		90.30 87.33
177.5'	118.79	13.13 7.83 +11.80	87.33 81.25
216.25'	112.64		81.25 80.02
255.0' - MH N° 10	108.48	13.09 6.04 +6.03	80.02 67.93
293.75'	99.28		67.93 55.32
332.50'	91.28	15.00 5.70 +9.60	55.32 40.62
371.25'	82.68		40.62 29.36
410.0' - MH N° 11	74.07	12.88 9.04 +10.04	29.36 19.32
448.75'	70.56		19.32 14.05
487.5'	67.05	14.51 10.57 +3.59	14.05 10.46
526.25'	59.79		10.46 10.46
565.0'	48.53	2.06 2.90 +1.70	10.46 8.76
603.75'	39.27		8.76 4.578
642.5' - MH N° 12	30.00	13.08 6.73 +6.32	4.578 17.56
681.25'	25.54		17.56 11.23
720.0'	21.04	9.08 2.00 +5.58	11.23 6.65

1054.75'	16.56	13.56 9.51 +5.62	3M 178.10 178.10 181.66
1093.50' - MH N° 14	12.07		181.66 177.88
1132.25'	12.50		177.88 16.08
1171.0'	11.58	17.12 6.64 +19.90	16.08 17.12
1209.75'		18.39 6.84 +6.85	17.12 19.90
1248.5'			19.90 18.96
1287.25'			18.96 2.77

93.95
 5.40
 88.55
 1st 400' MH
 Xenophon
 Sec 14

3.32
 11.94
 3M 178.10
 18.01

Tennison St Sewer Construction
 Millard to Evergreen

7-16-88

D. E. 40' E of E.H. Miller	191.00	291	193.90	SW 8th
7.4643	189.04	25.2	3.87	Millard
46.43 E	181.71	+38.85	9.63	Tennison
93.86 E	187.34		1.22	
	186.43	113.5	17.03	
139.39 E	185.66	10.77	184.67	
	184.15	19.30	121	
185.72 E	183.90		185.94	
232.15 E	181.56	14.78		
	180.49	17.61		
278.58 E	179.57	27.88	14.90	
	177.76		11.77	
322.50 E - MH #7	176.75	7.19	14.63	
= SW 1/4 E.L.F. Evergreen	175.00	16.79	8.90	
	177.04		5.12	
			15.08	

Udal St Sewer Construction
 Millard to Evergreen

7-11-88
 23
 Tennison
 Millard
 Evergreen

Franking M.H. Miller	180.00	110.2	81140.52	Top of
Udal		+5.71	153.55	End of
50' E	178.17		153.54	
100' E	176.33	14.91	13.13	
		6.00	165.47	
150' E	174.49	+6.21	2.29	
		14.25	165.38	
200' E - MH #6	172.65	28.27	13.25	
		15.97	179.07	
250' E	170.24	8.88	179.07	
		19.81	189.24	
300' E	167.83	27.42	2.02	187.52
		6.32	187.52	187.52
350' E	165.41	+7.22		
		10.15	187.14	
400' E - MH #7	163.00	22.00	2.24	
4.4515 Evergreen		+6.00	189.58	
445.15 E	154.50		17.66	
		14.77	179.05	
490.30 E	146.00	+6.61	179.05	
		15.55	179.05	
535.45 E	137.50	47.62	179.05	
			14.95	
580.60 E - Conc Plug	129.01	17.84	179.05	
		24.56	179.05	
		16.06	179.05	
		29.98	179.05	

W		F	
N° 2	49.50 15.80 11.25 4.55	N° 1	50.70 14.70 9.53 5.17
N° 4	62.70 15.21 13.25 18.73	N° 3	63.90 14.28 8.25 26.67
N° 6	72.50 8.64 7.25 2.91	N° 5	72.60 8.54 7.31 26.18
N° 8	69.50 11.66 10.20 5.70	N° 7	68.00 13.14 7.27 15.80
N° 10	68.20 11.41 8.26 18.96	N° 9	62.70 7.81 6.65 4.37
N° 12	57.80 12.81 13.25 14.70	N° 11	57.80 12.81 2.25 15.57
N° 14	56.90 13.26 12.07	N° 13	56.90 13.26 9.25 14.87
N° 16	62.90 7.71 7.25 13.74	N° 15	63.30 7.81 5.25 21.96
N° 17	69.50 11.66 10.20 18.73		

SN
N. Hill
6.65
+ 1.00
17.44
15.13
16.51
0.09
16.52

177.79
3.50
151.14
12.76
108.38
2.23
90.21
1.22
169.39
7.60
176.99

Willow + Oliphant
Culvert No 1

6-6-28

N End Culvert	1479°	8.04 8.54 8.74	BM 15281 3.13 17.47 18.02	N. side Willow Twp.
E. S	138.45		14.58 15.06 15.58 16.09 16.55 17.26	
50 S - S End Culvert	129.00	7.11 6.78 3.37	13.52 13.65 13.66 13.67	
Top of Carb Inlet	151.40	N End 7.44 7.07	E End 4.52 6.15 -0.61	

Willow + Russell Culvert No 2

East End of Culvert	151.00	12.79 12.06 12.55	BM 10133 3.12 12.79	SW 80 Willow Twp.
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Willow + Young

Culvert No 3

Inlet No 6	136.00	132.00	6.39 3.15 4.2	BM 13535 3.15 3.15 12.26 12.23 12.72 12.77	SW 80 Willow Twp.
17 let No 4	135.00	130.00	8.39 8.13 4.87		
Inlet No 5	134.00	127.00	12.37 12.10		
15 East of Inlet No 5	132.00		13.92 13.87		

Willow + Alcott
Culvert No 4

6-18-28

15

17 let No 8	112.00	Tap Ch. 3.94 8.46 4.88	BM 11321 2.25 11.57 12.25	SW 80 Willow Twp.
Flow Line	104.00		11.92 11.50 +3.50	
50 S - E End 18" Carb Pipe	82.40	11.81 11.57 2.88	103.15 103.27 18.27 79.27 75.21	

Culvert No 6

18 S of E.L. of Evergreen

7-10-28

Carb Inlet No 10		S 3.44 3.97 -0.47	N 2.11 2.72 -1.86	BM 11653 14.42	Triplan Evergreen
Top Ch.	138.00				
Flow Line Inlet of Culvert	135.00		6.46 12.52		
29 S E	130.75		10.10 2.72		
59 E - End of Culvert	126.50	14.91 11.08 11.27			

Culvert No 5 H. Evergreen + Stern

7-10-28

Carb Inlet No 9 N End Top Ch	169.98	3.75 4.0	BM 11954 0.11	SW 80 Triplan Evergreen
So. End of Inlet - Top Ch N.E. of Stern	169.50	4.17 4.0	18.59 17.55	
Flow Line	167.50	6.17 12.00	17.30 17.67 17.80	
25 S E - Outlet of 18" Pipe	162.80	9.87 10.00 -0.13	17.37 17.70 18.54 18.53	

Tennyson St Grader
Willow to Firgreen

26
C. W. ...
S. W. ...

	N	S
FL Willow	195.00	195.00
30E	195.85	195.85
60E - P10	196.70	196.70
100E	197.30	197.30
140	196.40	196.40
180	194.20	194.20
220E - EVC	191.00	191.00
247.5	188.15	188.15
275E - P2	195.50	195.50
300E - W. Firgreen	183.20	183.20

	N	S	N	S
195.00	195.85	196.70	197.30	196.40
195.85	196.70	197.30	196.40	195.00
196.70	197.30	196.40	195.00	195.85
197.30	196.40	195.00	195.85	196.70
196.40	195.00	195.85	196.70	197.30
195.00	195.85	196.70	197.30	196.40
85.50	83.70	82.7		
187.50	183			
169	159			
150	129			
132	8.0			
85.50	83.70			
187.50	183			
169	159			
150	129			
132	8.0			

	S	N	S	N	S	N
180.00	80.00	81.50	82.50	83.50	84.40	85.30
12.80	11.70	10.60	9.50	8.40	7.30	6.20
192.80	11.43	10.74	9.14	7.54	6.74	5.94
1.57	+0.27	-0.16	+0.36	-0.16	+0.84	+0.23
191.23						
9.32						
200.55						
95.50	96.40	96.90	97.20	97.10	96.70	95.77
5.05	4.15	3.65	3.35	3.45	3.85	5.25
5.28	4.39	3.51	3.15	3.05	4.01	5.39
-0.23	-0.24	+0.14	+0.20	+0.40	-0.16	95.50
						5.25
						5.39
						+0.11
95.50	96.40	96.90	97.20	97.10	96.70	95.77
5.05	4.15	3.65	3.35	3.45	3.85	5.25
4.80	4.25	3.59	3.28	3.52	3.88	5.39
+0.25	-0.10	+0.11	+0.07	-0.07	-0.03	+0.07
						95.50
						5.25
						5.39
						4.96
						50.09

Evergreen St. Grades
Udal to Sterne

	F	W	
S.L. Udal	169.40 = 180.00	172.30 = 173.30	
25 S - FC.	172.00	173.00	H 187.12 Ford
75 S	174.50	175.50	4.58
145 S	177.00	178.00	177.59
7 75 S - P.C.	179.50	180.50	9.41
200 S - N.L. Sterne	180.50 = 180.50	183.00 = 183.00	187.00

S.L. Tennyson	180.50 = 180.50	182.00 = 183.00	
25 S - FC.	179.00	180.00	
75 S	176.33	177.33	
125 S	173.66	174.66	
175 S - P.C.	171.00	172.00	
200 S - N.L. Sterne	165.50	171.40	

187.00
179.22
3M 185.00
S.M. Red Hat
Udal + Evergreen

6-19-33

28

E	168.00 = 169.40	172.00 = 174.50	172.00	172.50	180.50 = 180.50
	15.00	17.50	10.00	7.50	2.50
	15.80	18.40	10.10	8.70	2.60
	-0.80	0.90	-0.10	-1.20	-1.10

W	172.30 = 172.30	173.00 = 175.50	172.00	180.50	182.00 = 183.00
	1.70	2.50	13.20	10.70	9.20
	3.10	3.80	13.20	10.70	9.20
	+1.00	+1.00	+1.00	+1.00	+1.00

E	180.50 = 180.50	180.00 = 176.33	173.66	171.00	169.50
	6.50	3.67	2.66	2.66	1.50
	8.00	7.33	2.66	2.66	1.50
	-3.00	-1.00	-3.00	-1.00	-5.50

W	183.00 = 182.00	180.00 = 177.33	174.66	172.00	171.40
	8.20	2.67	2.66	2.66	1.98
	10.00	13.00	2.66	2.66	1.98
	47.00	47.00	+1.98	+1.98	4.97

191.37
5-54
3M 185.00
S.M. Red Hat
Evergreen + Sterne

W	71.40	71.40	71.00	74.66	77.33	80.00
	10.64	10.64	10.04	7.38	4.71	2.04
	18.53	18.53	10.04	7.34	4.68	1.78
	10.96	+0.12	-0.02	+0.04	+0.03	+0.26
	174.74					
	7.30					
E	69.50	71.00	73.66	76.33	79.00	79.75 80.50 80.50
	12.54	11.04	8.88	5.71	3.04	2.29 1.84 1.39
	12.44	11.10	8.81	5.53	2.71	1.70 1.23 2.04
	3.07	-0.06	+0.07	+0.18	+0.33	+0.59 +0.21 -0.50
	183.07	24.4 + C.B.				

W	80.50	78.00	75.50	73.00
	2.57	5.07	7.57	10.07
	2.34	4.94	7.30	9.62
	+0.23	+0.18	+0.27	+0.45

E	80.50	80.50	80.00	79.50	77.00	74.50	72.00
	2.37	2.57	3.07	3.87	6.07	8.57	11.07
	3.83	2.55	2.70	2.80	6.05	8.51	10.86
	-0.46	+0.02	+0.37	+0.07	+0.02	+0.06	+0.21

Xenophon St. Grades

	S	N	
W L Rosecrans	18.00	20.00	BY 15.420 3.99 15.819 13.12 14.501 15.14 15.1 13.01 13.335 12.63 11.722 11.255 11.297 10.633 10.664 10.744 10.114 9.689 9.569 12.156 8.862 8.356
40 N	22.00	24.33	16.193 17.063 17.864 18.636 19.366 20.054 20.701 21.307 21.874 22.401 22.888 23.335 23.742 24.109 24.436 24.724 24.973 25.184 25.356 25.489 25.574 25.661 25.750 25.841 25.934 26.030 26.128 26.228 26.330 26.434 26.540 26.648 26.758 26.870 26.984 27.100 27.218 27.338 27.460 27.584 27.710 27.838 27.968 28.100 28.234 28.370 28.508 28.648 28.790 28.934 29.080 29.228 29.378 29.530 29.684 29.840 30.000
80 N	28.00	28.66	18.01 12.36 30.37
120 N Brk	33.00	33.00	
165 N	43.37	43.12	
210 N	53.25	53.25	
255 N	63.12	63.37	
300 N F.L. Locust	74.50 = 77.00	73.50 = 76.00	96.89 95.69 12.156 8.862 8.356 16.193 17.063 17.864 18.636 19.366 20.054 20.701 21.307 21.874 22.401 22.888 23.335 23.742 24.109 24.436 24.724 24.973 25.184 25.356 25.489 25.574 25.661 25.750 25.841 25.934 26.030 26.128 26.228 26.330 26.434 26.540 26.648 26.758 26.870 26.984 27.100 27.218 27.338 27.460 27.584 27.710 27.838 27.968 28.100 28.234 28.370 28.508 28.648 28.790 28.934 29.080 29.228 29.378 29.530 29.684 29.840 30.000
W L Locust	81.00 = 79.00	80.00 = 78.00	
50 N	92.33	91.33	
100 N	103.66	102.66	
150 N = Brk	115.00	114.00	
200 N	121.66	120.67	
250 N	128.33	127.34	
300 N F.L. Locust	135.00 = 137.00	134.00 = 135.50	
W L Rosecrans	138.00 = 137.00	137.00 = 136.50	
50 N	142.28	141.28	
100 N = P.V.C.	144.57	145.57	
140 N	149.33	148.33	
180 N = F.V.C.	150.75	149.75	
220 N	151.50	150.50	
260 N	152.25	151.25	
300 N F.L. Willow	153.00	152.00	

	S	N	
			18.01 5.01 23.02
			20.3 2.72 2.1 10.0
W L Rosecrans	18.00	20.00	BY 15.420 3.99 15.819 13.12 14.501 15.14 15.1 13.01 13.335 12.63 11.722 11.255 11.297 10.633 10.664 10.744 10.114 9.689 9.569 12.156 8.862 8.356
40 N	22.00	24.33	16.193 17.063 17.864 18.636 19.366 20.054 20.701 21.307 21.874 22.401 22.888 23.335 23.742 24.109 24.436 24.724 24.973 25.184 25.356 25.489 25.574 25.661 25.750 25.841 25.934 26.030 26.128 26.228 26.330 26.434 26.540 26.648 26.758 26.870 26.984 27.100 27.218 27.338 27.460 27.584 27.710 27.838 27.968 28.100 28.234 28.370 28.508 28.648 28.790 28.934 29.080 29.228 29.378 29.530 29.684 29.840 30.000
80 N	28.00	28.66	18.01 12.36 30.37
120 N Brk	33.00	33.00	
165 N	43.37	43.12	
210 N	53.25	53.25	
255 N	63.12	63.37	
300 N F.L. Locust	74.50 = 77.00	73.50 = 76.00	96.89 95.69 12.156 8.862 8.356 16.193 17.063 17.864 18.636 19.366 20.054 20.701 21.307 21.874 22.401 22.888 23.335 23.742 24.109 24.436 24.724 24.973 25.184 25.356 25.489 25.574 25.661 25.750 25.841 25.934 26.030 26.128 26.228 26.330 26.434 26.540 26.648 26.758 26.870 26.984 27.100 27.218 27.338 27.460 27.584 27.710 27.838 27.968 28.100 28.234 28.370 28.508 28.648 28.790 28.934 29.080 29.228 29.378 29.530 29.684 29.840 30.000
W L Locust	81.00 = 79.00	80.00 = 78.00	
50 N	92.33	91.33	
100 N	103.66	102.66	
150 N = Brk	115.00	114.00	
200 N	121.66	120.67	
250 N	128.33	127.34	
300 N F.L. Locust	135.00 = 137.00	134.00 = 135.50	
W L Rosecrans	138.00 = 137.00	137.00 = 136.50	
50 N	142.28	141.28	
100 N = P.V.C.	144.57	145.57	
140 N	149.33	148.33	
180 N = F.V.C.	150.75	149.75	
220 N	151.50	150.50	
260 N	152.25	151.25	
300 N F.L. Willow	153.00	152.00	

Branding St Grades
Rosecrans to Willow

St Grade	Value	Value	Notes
HL Rosecrans	36.50	38.00	5x GP 11.33 Rosecrans 11.36 56.79 6.93
500W	41.67	43.00	55.76 13.21
1000W	46.85	48.00	18.97 0.35 8.62
1400W - 8th	51.00	52.00	13.90 51.52 0.86
1500W	52.19	53.12	9.26
2000W	58.18	58.74	13.00 91.26 0.16
2500W	64.06	64.37	94.10 12.77
3000W - E.L. Locust	70.00 = 71.50	70.00 = 71.50	104.87 0.83 106.54 13.11 119.65 10.37
HL Locust	74.00 = 72.50	74.00 = 72.50	119.88 13.24
500W	79.33	79.33	138.52 2.66
1000W	84.66	84.66	127.86 4.11 129.97
1500W	90.00	90.00	
2000W	95.33	95.33	
2500W	100.66	100.66	
3000W - E.L. Evergreen	106.00 = 107.50	106.00 = 107.50	
HL Evergreen	109.50 = 108.50	109.50 = 108.50	
15W	112.92	112.92	
90W	116.35	116.35	
135W	119.77	119.77	
180W	123.20	123.20	
220W	125.80	125.80	
260W	127.60	127.60	
300W - E.L. Willow	129.00	129.00	

N	38.00	43.00	48.00	52.00	53.12	58.24	64.37	70.00	71.50
	18.6	+7.1	+6.9	0.0	+5.5	+4.7	+2.4	11.5	11.0
	16.7							19.3	10.3
	41.5							41.2	20.3

S	36.50	41.67	46.85	51.00	52.19	58.18	64.06	70.00	71.50
	19.69	+1.4	+1.8	0.0	+1.1	+1.3	+1.2	11.5	10.0
								11.9	11.7
								-0.2	-1.7

N	76.50	72.00	79.33	84.66	90.00	95.33	100.66	106.00	107.50
	9.0	7.5	14.8	9.1	4.3	11.5	6.6	13.6	12.1
	3.0	8.0	11.8	7.2	8.9	10.4	4.8	7.9	7.9
	+6.0	+4.5	+3.3	+3.4	+1.4	+1.1	+2.8	+6.7	+4.8

S	72.50	74.00	79.33	84.66	90.00	95.33	100.66	106.00	107.50
	9.0	7.5	14.9	9.6	4.3	11.5	6.2	13.5	12.1
	4.5	11.5	11.8	6.4	4.2	8.4	3.5	13.7	13.7
	+4.5	+3.0	+3.1	+3.2	+3.1	+3.1	+2.7	-0.1	-1.6

N	108.50	109.50	113.92	116.35	119.77	123.20	125.80	127.60	129.00
	11.1	10.1	6.7	3.3	7.8	10.3	6.7	2.9	3.52
	8.7	8.7	5.5	2.2	10.9	15	6.2	1.1	3.15
	+3.4	+1.4	+1.2	+1.1	+1.7	+2.3	+3.4	+3.8	

S	108.50	109.50	113.92	116.35	119.77	123.20	125.80	127.60	129.00
	11.1	10.1	6.7	3.3	7.8	10.3	6.7	2.9	3.52
	10.3	10.3	7.7	3.7	12.6	18.4	6.6	3.8	3.52
	+0.8	-0.2	-1.0	-0.4	+0.2	+0.9	+1.5	+2.1	

Vista Del Mar Paving Marine to Sea Lane,

33

3308
3205

32.66
31.50

3403

33.92

3500

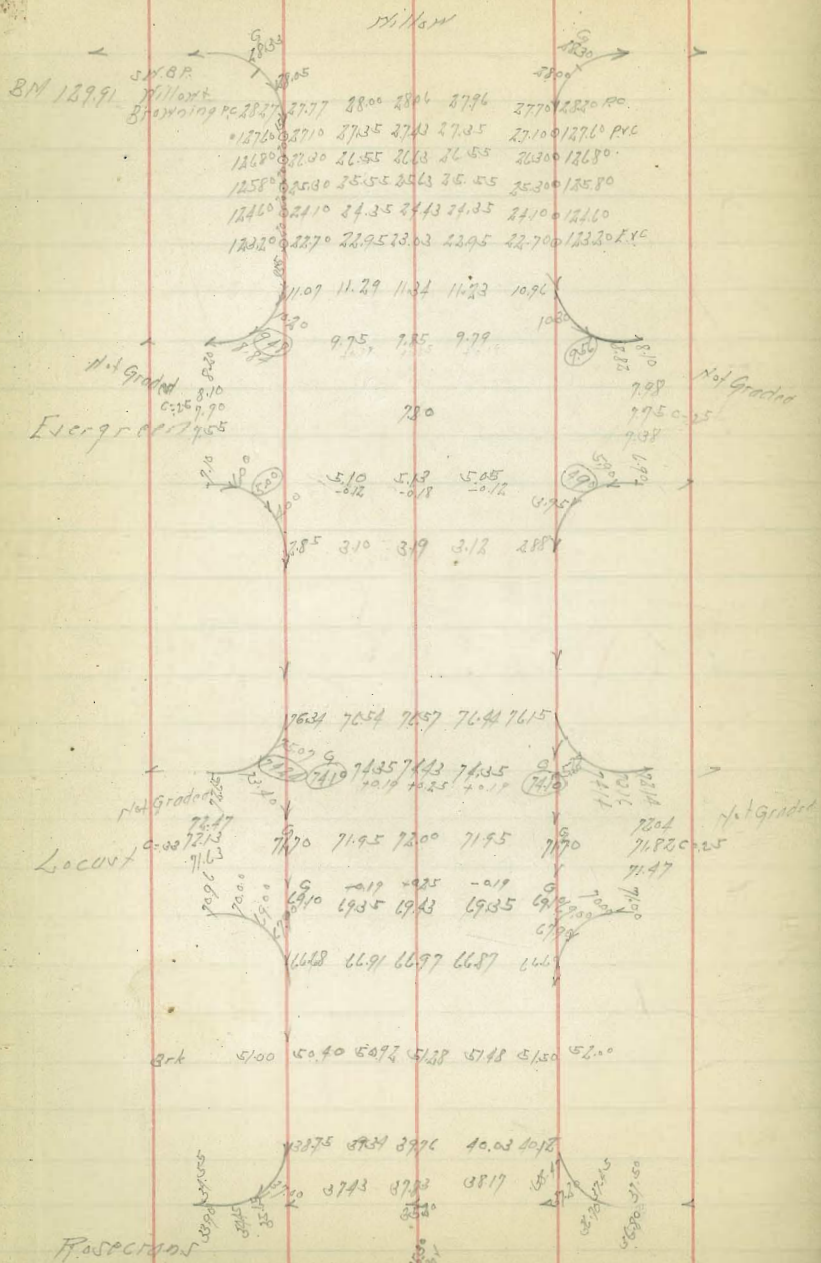
3552
3551

3575 34.25

BK
3250 3200

319 32.29

Branninst Paving
 Rosecrans to Willow



SMBP
 8M 15420
 Willow
 1527 5220 5220 5207 5170 5150 5170
 15675 0 5025 5025 5008 4975 4925 0 4975
 15021 0 4972 4972 4955 4932 4872 0 4922
 14933 0 4872 4872 4856 4833 4783 0 4833
 14811 0 4760 4760 4743 4710 4660 0 4711
 14657 0 4607 4607 4590 4557 4507 0 4557

3884 3981 3962 3926 3873
 3770 3768 3722
 3511 3497 3453
 3130 3130 3113 3080 3030
 149 149 149 149 149 149 149 149
 11500 1450 1407 1386 1362 1320 1140
 874 874 874 874 874 874 874 874

8M 8835

8639 8630 8625 8603 8565 8549 8560 874
 8155 8128 8155 8116 8260 8260 8260
 7827 7710 7707 7888 7857 7857 7857
 7740 7757 7740 7707 7650 7650 7650
 7633 7675 7666 7584 7584 7584 7584
 7225 7239 7235 7211 7180 7180 7180
 6854 6800 6809 6798 6772 6730 6733

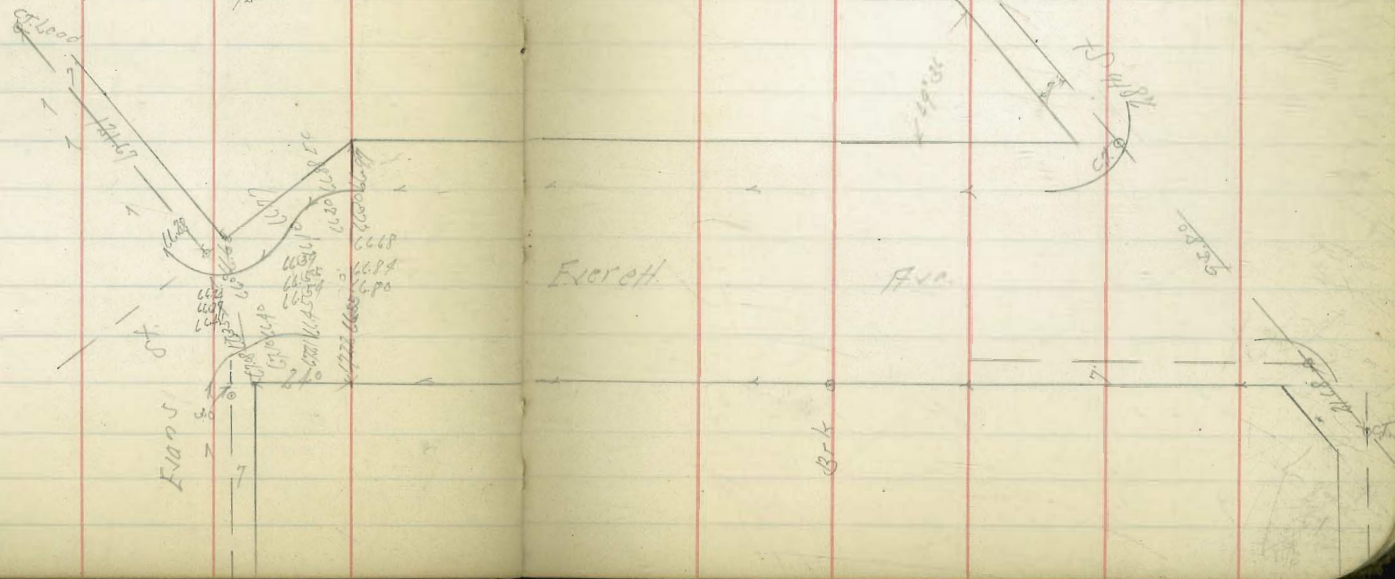
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 3280 3280 3214 3222 3222 3218
 3125 3156 3171 3149 3150
 2217 2276 2277 2241 2256

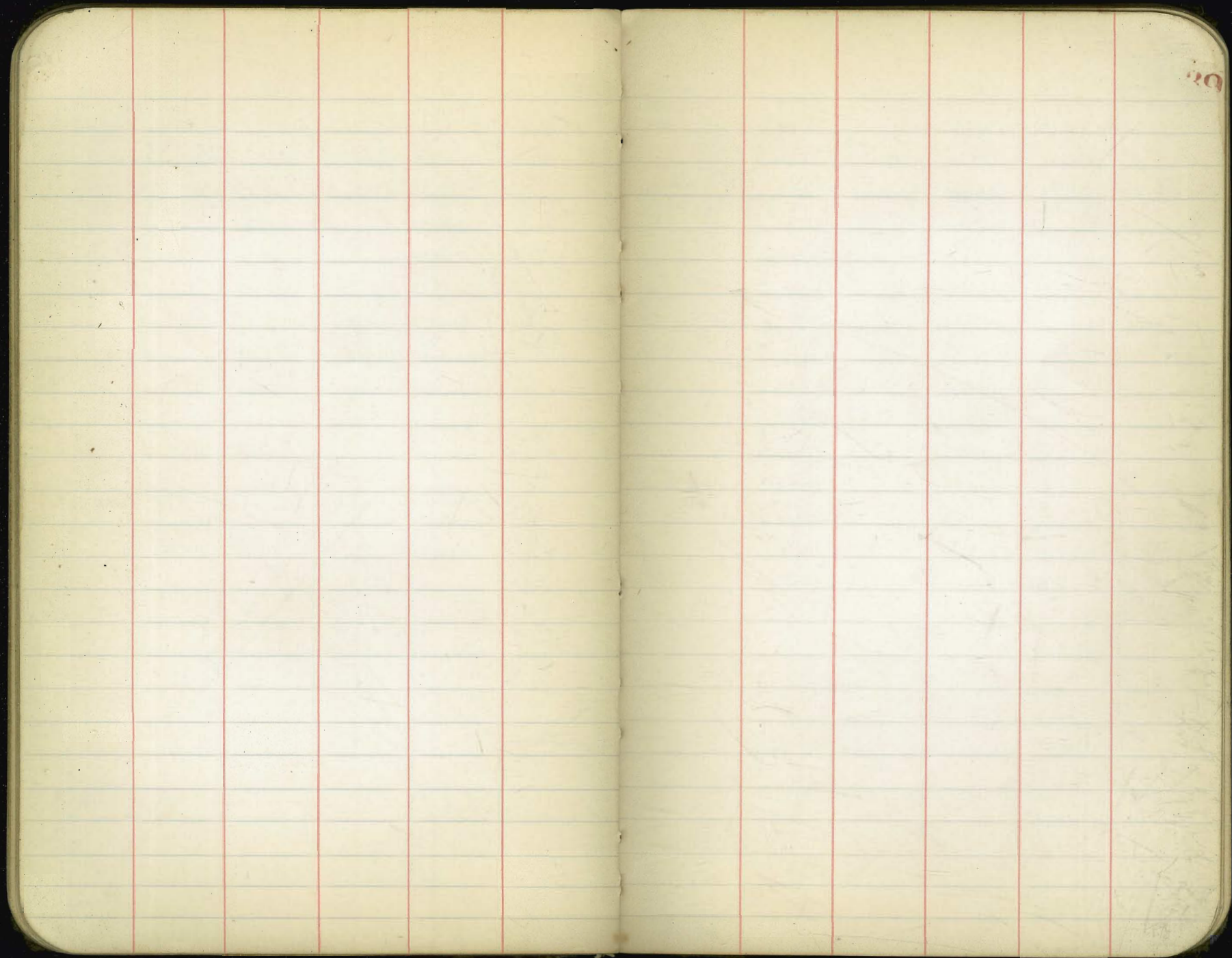
SMBP
 8M 1801
 1835 1830 1878 1780 1753 1900 3032
 205 204 204 204 204 204 204
 1740 1740 1740 1740 1740 1740 1740
 1740 1740 1740 1740 1740 1740 1740

Everett Ave
From to 28th St.

Station	North	South	Notes
106		566	811650, JERP, N 28th
FL Evans 1-34	66.50	6700	7238
24'E - A. on N 10-50	6700	6720	7235
74'E 0.35	6735	6768	7234
124'E	6770	6805	7229
174'E	6805	6847	7227
224'E	6840	6889	7227
274'E	6875	6931	7227
324'E	6910	6974	7227
374'E	6945	7016	7227
424'E	6980	7058	7227
474'E	7015	7100	7227
52850'E: yll 28th on N 2-3241	7050	7143	7227
556.71		7171	7227
589.92: N 28th on N		7200	7227

Station	North	South	Notes
11	66.50	6700	67.35
	6770	6805	6840
	6875	6910	6945
	6980	7015	7050
	7050	7100	7143
	7171	7200	





20

Bellevee Ave Grades
Midway St to Forward St.

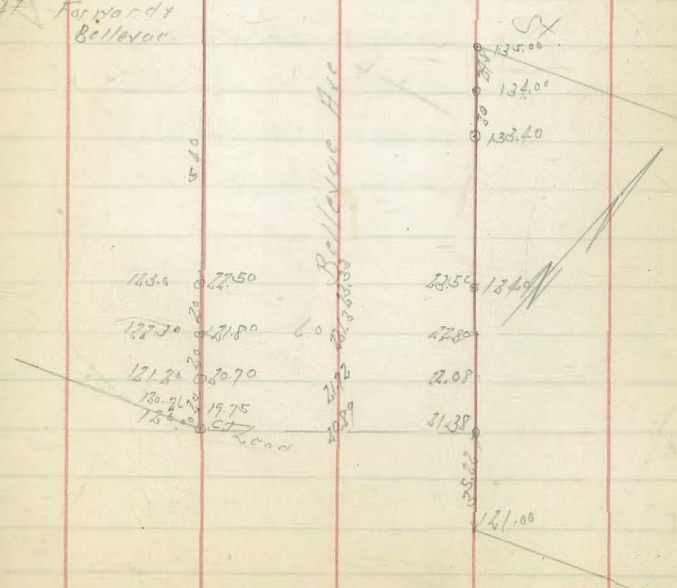
Station	Grade	Notes
NL Midway on E	121.00	
3522 H - NL Midway	122.10	120.00
6522 H	123.05	121.50
9522 H - Bck	124.00	123.00
14122 H	124.94	123.94
18722 H	125.88	124.87
23322 H	126.82	125.81
27922 H	127.76	126.75
32522 H	128.70	127.69
37122 H	129.64	128.62
41722 H	130.58	129.56
46322 H	131.52	130.50
50922 H	132.46	131.43
55522 H - Bck on F	133.40	132.37
600 H - SA Forward on F	134.00	133.29
63522 H - Bk		134.00

BM 120.80 NW BR Bellevee
Midway St

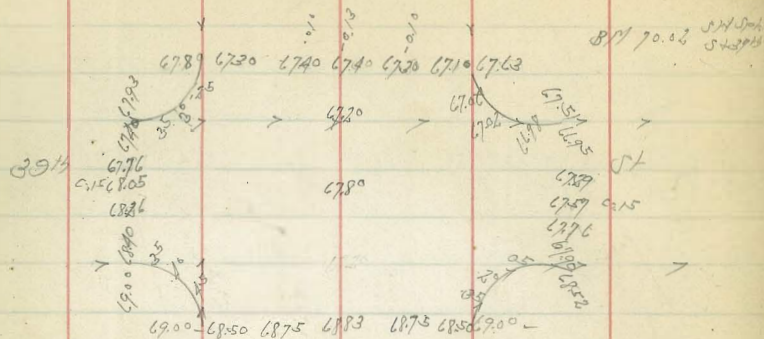
Station	Grade	Notes
E 121.00	122.10	122.05
H 120.00	121.50	122.00
F 128.70	129.64	130.58
H 127.69	128.62	129.56

830-28
McHugh
Road 40

Forward
12410 9 CT head
DE Top Hyd
Forward Bellevee



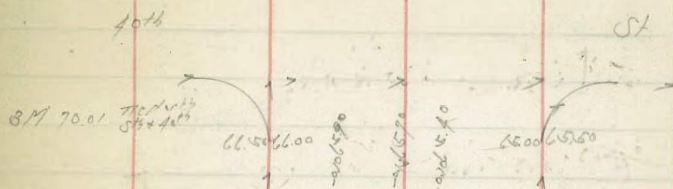
5 St Paving
38th to 40th



75.00 74.50 74.75 74.83 74.75 74.50 75.00
 76.40 75.90 76.15 76.33 76.15 75.90 76.40
 77.90 77.20 77.45 77.53 77.45 77.20 77.90
 78.90 78.20 78.65 78.73 78.65 78.40 78.90
 80.00 79.50 79.75 79.83 79.75 79.50 80.00
 81.00 80.50 80.75 80.83 80.75 80.50 81.00
 81.80 81.30 81.57 81.65 81.57 81.30 81.80
 82.50 82.00 82.25 82.33 82.25 82.00 82.50
 83.10 82.60 82.85 82.93 82.85 82.60 83.10

BM 89.90
3438

93.00 92.50 92.75 92.83 92.75 92.50 93.00



69.70 68.20 68.27 68.15 67.95 67.50 68.20
 69.10 68.10 68.67 68.55 68.22 67.90 68.40
 69.40 68.90 69.00 68.93 68.70 68.20 68.80
 69.70 69.20 69.30 69.33 69.00 68.60 69.10
 69.90 69.40 69.52 69.48 69.27 68.90 69.40
 70.00 69.50 69.62 69.58 69.38 69.00 69.50
 70.10 69.60 69.72 69.68 69.47 69.10 69.60
 70.10 69.55 69.71 69.70 69.54 69.20 69.70
 70.00 69.50 69.65 69.63 69.45 69.10 69.60

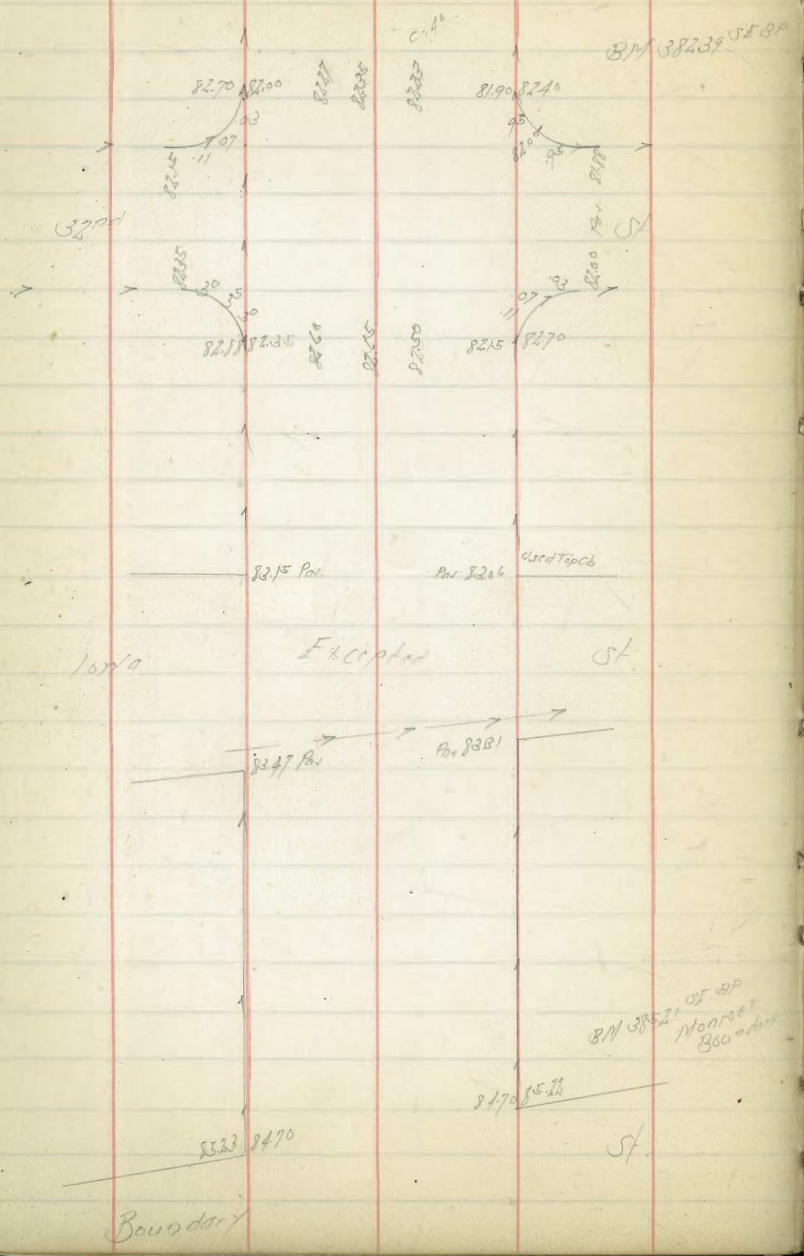
69.70 69.20

69.00 69.50

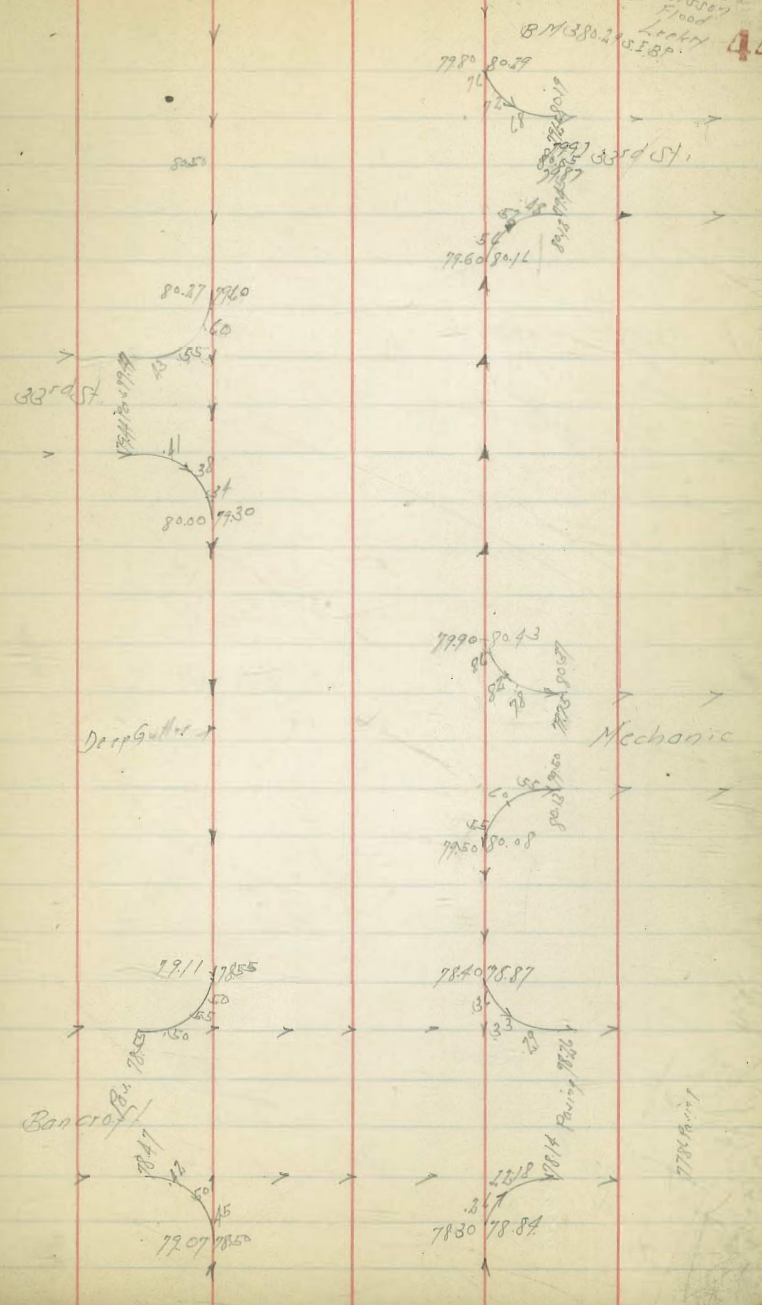
39th

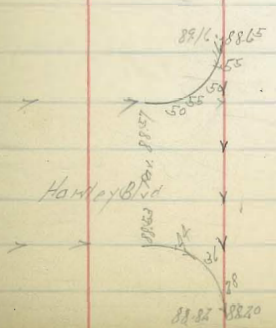
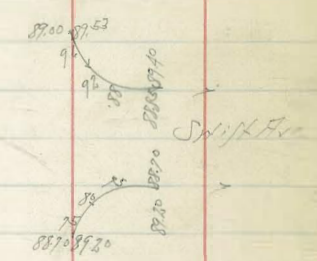
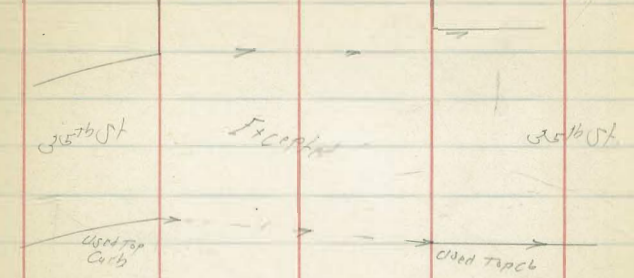
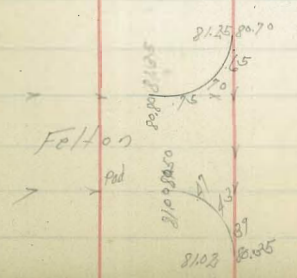
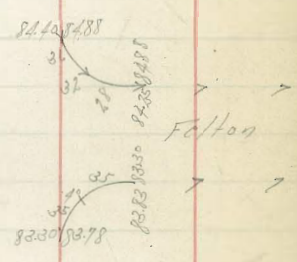
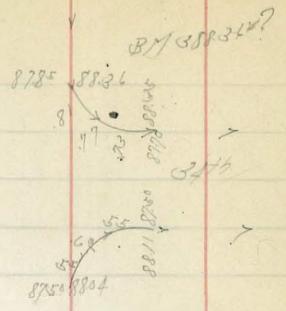
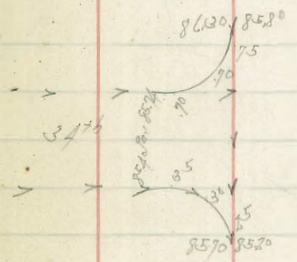
34

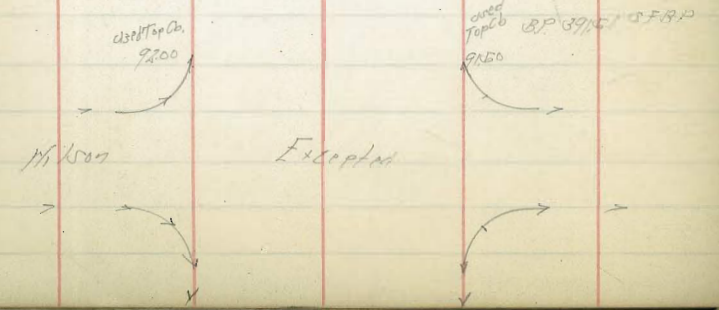
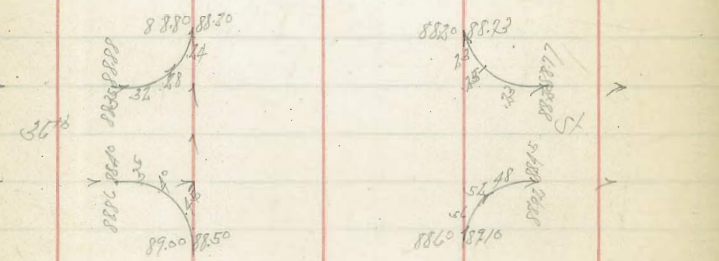
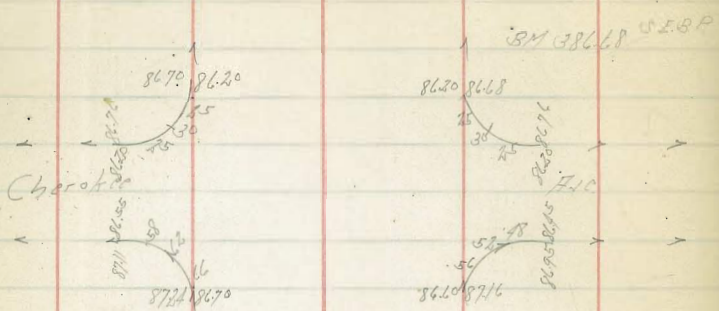
Monroe Air Paving



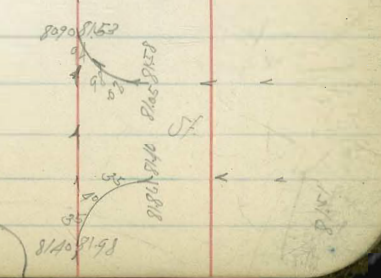
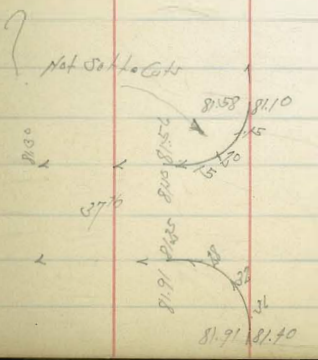
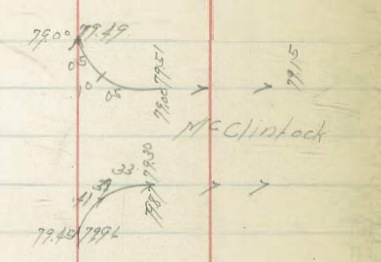
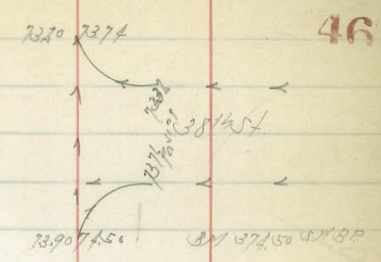
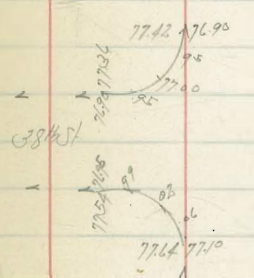
9-18-21
Surrey
Flood
Leaky
44







Brk 73.78 73.01
 Filey
 Brk 74.13 73.93



Excepted

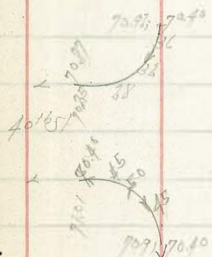
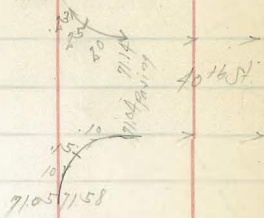
Monroe Hill Pass

47

70.30 69.70

70.10 71.17 East End of Imp.

71.20 71.74



68.60 69.22



67.50 68.77

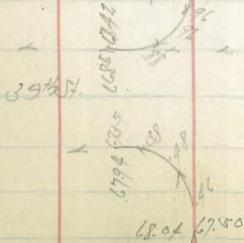
8700 ft

69.30 69.94

7110 ft

69.70 70.24

67.51 67.00



68.04 67.50

Dawson Grade Stakes
200 N of

10-11-38 48

BM	390	357.10		347.20	SW 8.0 E/Cap 07 497
TP	856	358.15	1.51	347.59	
TP	1183	367.91	2.07	356.08	SE Top Hyd
BM			8.60	359.31	E/Cap 07 497
TP	1196	379.61	0.26	367.65	
TP	1195	391.42	0.14	379.47	SE Top Hyd
BM			535	386.07	E/Cap 07 504
TP	414	390.73	48.5	386.57	
BM	396	388.58	6.11	384.62	SE Top Hyd Monroe
BM	676	393.12	2.22	386.36	SW 1/4 Monroe 4524 386.45

100 ft of 1/4 Monroe		388.40	4.78 4.28 +0.50	
140 ft		388.40	4.78 3.78 +1.00	
180 ft		388.20	4.63 4.13 +0.50	
200 ft		387.96	5.11 4.16 +0.95	

Tourmaline St
Water Grade

9-30-28

Existing Main	10710	1514 -354	1418 921	106.43	of Spk Landing Docks
FL Case	10810	1341 1032 +309	+2238	118.87 116.87	
50F	77 10887	1211 1032 +309	11734 494		
100F	10964	1187 846 +345	13268 1400		
150F	11041	11118	11118		of Spk Tourmaline + Case
200F	11118	1033 634 +399	1367		
250F	11195	879 840 +399	1367		
300F	11272	11349	1367		
350F	11349	11426	1367		
400F	11426	11503	1367		
450F	11503	11580	1367		
500F - FL Case	11580		1367		

12288
10320
11110
11100
+ 0.88

00 Sub for
W. J. E. Co.

Hark

st

26571		26570
		26719 26621
		26402 26691
P. f. 26726	26763	26710
		26880 26721
	26880	26830
	26940	26890
	26955	26935
	26991	26940
	26974	26944
	26924	26874
	26856	26801
	26557	26507
	26320	26210
	26200	26150
	26128	26078
	26096	26026
	26040	26000
	26000	25950
	25950	25900
	25900	25850
	25850	25800
	25800	25750
	25750	25700
	25700	25650
	25650	25600
	25600	25550
	25550	25500
	25500	25450
	25450	25400
	25400	25350
	25350	25300
	25300	25250
	25250	25200
	25200	25150
	25150	25100
	25100	25050
	25050	25000
	25000	24950
	24950	24900
	24900	24850
	24850	24800
	24800	24750
	24750	24700
	24700	24650
	24650	24600
	24600	24550
	24550	24500
	24500	24450
	24450	24400
	24400	24350
	24350	24300
	24300	24250
	24250	24200
	24200	24150
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	23350	23300
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	23200	23150
	23150	23100
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	6050	6000
	6000	5950
	5950	5900
	5900	5850
	5850	5800
	5800	5750
	5	

3716 St. Pauling

El Cajon Auto Madison Ave

8217 8146

8131 8181

Monroe

Hic

8213 8125

8132 8184

8280 8070

8135 8075

Meade

Hic

8206 8130

8010 8073

8057 7673 Pa

Pa 7477

7901
7802

7586

El Cajon

Hic

10-23-18

51

Madison

8096 8045

Hic

8005 8059

8142

8130

Monroe

Hic

Ingraham St. Water Grades
Diamond to Grand Ave

11-2-28

Fire Hyd. At Diamond Top Cb Grade
 BM 64 88.84 82.80
 Top Cb of Hyd. 82.87 5.7

Fire Hyd. At Emerald
 Top Cb of Hyd. 74.87 $\begin{matrix} 3.75 \\ 3.70 \\ 5.0 \end{matrix}$
 East Line 72.10 $\begin{matrix} 6.7 \\ 3.97 \\ 8.1 \end{matrix}$
 West Line 71.40 $\begin{matrix} 7.47 \\ 4.22 \\ 3.17 \end{matrix}$

Fire Hyd. At Feldspar
 Top Cb. At Hyd. 67.10 $\begin{matrix} 2.54 \\ 1.17 \\ +1.1 \end{matrix}$ $\begin{matrix} 61.254 \\ 7.16 \\ 70.14 \\ 7.92 \\ 69.22 \\ 8.65 \\ 78.57 \end{matrix}$
 West Line 64.10 $\begin{matrix} 6.54 \\ 3.06 \\ +3.48 \end{matrix}$

Fire Hyd. At Herculand
 Top Cb. of Hyd. 59.93 $\begin{matrix} 4.94 \\ 1.92 \\ 1.20 \end{matrix}$ $\begin{matrix} 54.585 \\ 7.00 \\ 61.585 \end{matrix}$
 East Line 57.00 $\begin{matrix} 2.93 \\ 8.11 \end{matrix}$
 West Line 57.00 $\begin{matrix} 7.87 \\ 3.97 \\ +3.90 \end{matrix}$

Copley Ave Servers

11-5-28
 50307
 McHues
 Keady
 Flood

Existing MH & Alley Bottle Co Bancroft & 3rd	386.00	1206 1590 +636	39391 415 39806	SE-8P M/V Copley
3417 N of NH	386.83	1173 523 +673		
1521 W	386.67	1139 1526 +623		
102.50 N of SE	387.00	1106 506 +577		
Laterals				
N° 102	389.20	886 283 +633		
N° 101	389.50	856 523 +602		
N° 100	390.00	806 250 +552		
N° 99	390.10	796 214 +577		
N° 98	387.90	1016 216 +700		
N° 97	387.50	1056 220 +830		
N° 96	387.00	1106 222 +882		

Seiver Laterals
Mountain View Drive

West	East
N° 1 384.2° ^{8.84} _{+3.58}	N° 2 383.2° ^{9.86} _{+4.86}
N° 44 383.9° ^{9.12} _{+4.18}	N° 3 384.9° ^{8.12} _{+4.6}
N° 45 384.0° ^{9.56} _{+4.3}	N° 58 385.0° ^{8.02} _{+5.06}
N° 46 384.1° ^{8.12} _{+3.8}	N° 57 by Cx 384.6°
N° 19 384.4° ^{9.52} _{+4.34} ^{5.34} _{+2.17}	N° 47 384.7° ^{9.82} _{+4.78}
N° 48 by Cx 385.0°	N° 5 385.3° ^{8.12} _{+4.5}
N° 49 by Cx 385.1°	N° 6 385.7° ^{8.66} _{+4.66}
N° 50 by Cx 385.3°	N° 55 by Cx 385.8°
N° 51 386.2° ^{8.76} _{+5.0}	N° 54 386.0° ^{8.86} _{+4.55}
N° 52 by Cx 386.5°	N° 67 386.1° ^{8.26} _{+4.9}
	N° 7 386.3° ^{8.06} _{+3.7}
	N° 8 386.5° ^{7.86} _{+3.57}
	N° 53 386.7° ^{8.06} _{+4.5}

West	East
N° 62 385.2° ^{12.15} _{+5.35}	N° 4 385.1° ^{7.97} _{+4.57}
N° 9 385.7° ^{9.15} _{+4.57}	N° 59 385.2° ^{7.82} _{+4.32}
N° 63 386.2° ^{9.15} _{+4.9}	N° 60 385.6° ^{7.82} _{+4.73}
N° 10 386.5° ^{8.15} _{+4.7}	N° 64 386.4° ^{10.36} _{+6.22}
N° 65 386.5° ^{8.15} _{+4.8}	N° 19 386.4° ^{12.36} _{+7.7}
N° 66 386.7° ^{10.06} _{+5.73}	N° 15 388.0° ^{8.76} _{+4.0}
N° 68 386.9° ^{9.86} _{+5.3}	N° 70 389.3° ^{8.11} _{+4.0}
N° 11 387.2° ^{9.56} _{+4.78}	N° 16 389.4° ^{8.36} _{+4.17}
N° 12 386.6° ^{10.16} _{+6.18}	N° 71 389.4° ^{8.36} _{+4.7}
N° 13 387.0° ^{9.86} _{+5.7}	N° 72 389.4° ^{8.36} _{+4.37}
N° 69 387.6° ^{10.86} _{+5.71}	N° 73 389.5° ^{8.10} _{+4.0}
N° 75 388.9° ^{10.68} _{+4.7}	N° 74 389.5° ^{9.06} _{+4.3}
N° 76 389.1° ^{9.80} _{+4.71}	

Mountain View Drive
Senter Lateral

11-7-28

	North		South
N° 21	389.60 ⁹²⁰ _{+1.30}	N° 19	389.70 ⁹²¹ _{+1.47}
N° 22	389.90 ⁹²⁶ _{+1.77}		
N° 23	390.20 ⁹³⁰ _{+1.85}		
N° 24	390.00 ⁹²⁵ _{+1.75}		
N° 25	390.20 ⁹²⁰ _{+1.30}	N° 28	390.00 ⁸⁹⁰ _{+1.50}
N° 26	390.80 ⁹²⁷ _{+1.28}		
N° 27	390.60 ⁹³⁴ _{+1.36}	N° 29	391.40 ⁹⁴⁶ _{+1.1}
N° 28	390.70 ⁹³² _{+1.26}		
N° 29	391.00 ⁹³⁷ _{+1.28}		
N° 30	390.80 ⁹²⁷ _{+1.33}	N° 30	391.10 ⁹²⁴ _{+1.31}
N° 31	390.80 ⁹²³ _{+1.18}	N° 31	390.40 ⁹¹² _{+1.16}
N° 32	390.70 ⁹¹⁶ _{+1.20}	N° 32	390.40 ⁹¹² _{+1.16}
		N° 33	389.00 ⁸⁵³ _{+1.1}

	North		South
N° 33	389.30 ⁸⁷³ _{+1.18}	N°	
N° 35	387.70 ⁸⁸³ _{+1.34}	N° 34	388.00 ⁸⁵⁷ _{+1.04}
N° 36	386.30 ⁹²³ _{+1.40}		
N° 38	386.30 ⁹²³ _{+1.53}	N° 37	386.40 ⁹¹³ _{+1.11}
N° 35	384.40 ⁹¹³ _{+1.25}	N° 34	385.90 ⁸⁵⁷ _{+1.26}
N° 36	383.50 ⁹⁰³ _{+1.10}	N° 39	385.60 ⁸⁹³ _{+1.10}
N° 40	383.40 ⁹¹³ _{+1.39}	N° 37	385.70 ⁸⁸³ _{+1.17}
N° 39	385.00	N° 38	386.10 ⁹¹² _{+1.36}
N° 92	385.60 ⁹⁵⁸ _{+1.14}	N° 41	386.00 ⁹³⁸ _{+1.31}
N° 43	385.30 ⁹⁵⁹ _{+1.20}	N° 90	386.50 ⁹³⁸ _{+1.30}
N° 93	386.00 ⁹⁶⁸ _{+1.33}	N° 43	387.00 ⁹⁶⁴ _{+1.24}
N° 94	386.00 ⁹⁶⁸ _{+1.33}	N° 91	387.20 ⁹²⁸ _{+1.03}
		N° 95	387.50 ⁹⁴⁸ _{+1.34}

offset is 1/2 of Colvert

Tip	Flow Line	923	1500
389.68	384.50	4.18	389.07
317.5	382.50	4.02	387.73
63.50	382.50	4.02	387.73
106.75	380.63	1.87	385.86
150.0	379.75	1.88	383.87
192.25	378.88	1.87	382.00
236.50	378.00	1.50	380.50

Tip	Flow Line	923	1500
387.90	387.90	0.00	387.90
377.85	377.85	0.05	377.80
387.79	387.79	0.00	387.79
389.73	389.73	0.00	389.73
387.62	387.62	0.00	387.62
387.57	387.57	0.00	387.57
387.50	387.50	0.00	387.50
387.35	387.35	0.00	387.35
387.20	387.20	0.00	387.20
387.05	387.05	0.00	387.05
386.90	386.90	0.00	386.90
386.75	386.75	0.00	386.75
386.70	386.70	0.00	386.70
386.53	386.53	0.00	386.53
386.27	386.27	0.00	386.27
386.06	386.06	0.00	386.06
385.90	385.90	0.00	385.90
385.00	385.00	0.00	385.00
385.13	385.13	0.00	385.13
385.26	385.26	0.00	385.26
385.39	385.39	0.00	385.39
385.53	385.53	0.00	385.53

Copley Ave. Drain Tile

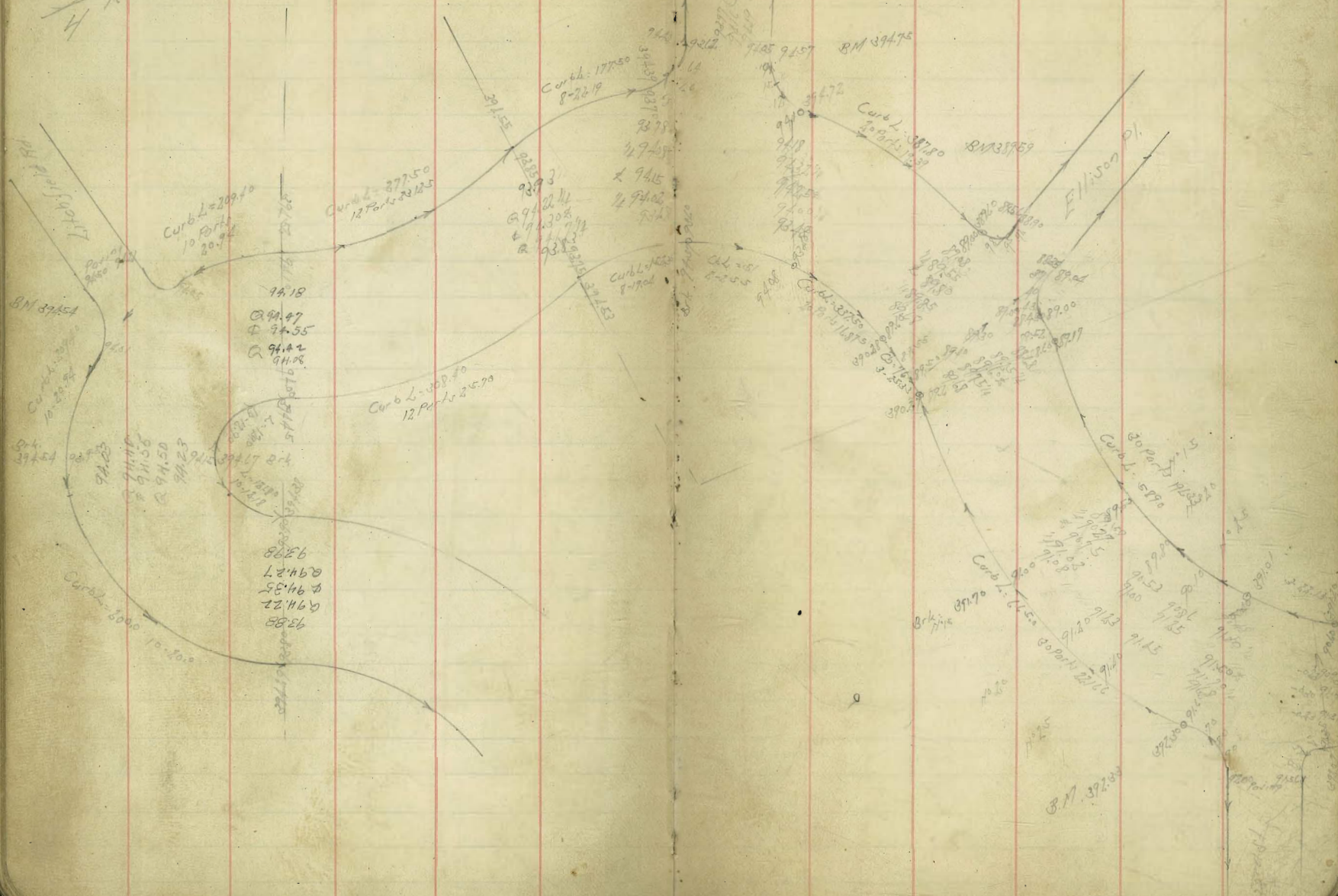
Marked on Top Curb

	S		81356.97 944 1297	SE Copley 145 15.110
FL 33rd St 7-14.15	388.00			
40.15 E	388.13	780 +3.80		
80.30 E	388.26	810 +3.97		
120.45 E	388.39	840 +3.50		
160.60 E	388.52	870 +3.53		
200.75 E	388.65	870 +3.50		
240.90 E	388.78	870 +3.53		
281.0 E - W.L. Felton	388.90	850 +3.57		
FL Felton 7-14.15	389.00	840 +3.97		
40.15 E	389.04	830 +3.71		
80.30 E	389.09	840 +3.50		
120.45 E	389.13	840 +3.36		
160.60 E	389.17	840 +3.70		
200.75 E	389.21	840 +3.70		
240.90 E	389.26	840 +3.87		
281.0 E - W.L. Felton	389.30	840 +3.60		

	N			S			3-1-29
FL 34th St 8-11.33	389.33	816 +3.85		388.83	766 +3.80	391.04 398.27	57 SE Copley 345
46.33 E	389.22	817 +3.70		388.72	767 +3.87		
92.67 E	389.11	818 +3.70		388.61	768 +3.80		
139.0 E - Brk	389.00	819 +3.97		388.50	769 +3.97		
172.0 E - Brk 3-11.33	389.60	820 +3.97		389.20	770 +3.97		
228.33 E	389.89	810 +3.12		389.41	771 +3.97		
234.66 E	390.02	817 +3.83		389.62	772 +3.97		
381.0 E - H.L. Hawley	390.23	816 +3.17		389.83	773 +3.97		
FL Hawley 3-11.17	390.53	796 +3.70		390.33	774 +3.97		
44.17 E	390.42	807 +3.28		390.19	775 +3.97		
88.34 E	390.31	818 +3.70		390.05	776 +3.97		
132.50 E - Brk 3-11.17	390.20	819 +3.92		389.90	777 +3.97		
176.67 E	390.64	785 +3.73		390.38	778 +3.97		
220.84 E	391.08	796 +3.28		390.84	779 +3.97		
265.0 E - W.L. Mansfield	391.53	696 +3.23		391.33	780 +3.97		
FL Mansfield 3-11.17	391.83	716 +3.92		391.83	781 +3.97	391.46 399.57	SE Copley 345
44.17 E	391.62	738 +3.79		391.59	782 +3.97		
88.34 E	391.42	759 +3.77		391.35	783 +3.97		
132.50 E - Brk 3-11.17	391.20	781 +3.20		391.10	784 +3.97		
176.67 E	391.27	774 +3.63		391.17	785 +3.97		
220.84 E	391.34	767 +3.80		391.24	786 +3.97		
265.0 E - W.L. Mansfield	391.40	766 +3.97		391.30	787 +3.97		

Mountain View Drive
Paving Adams to 33rd

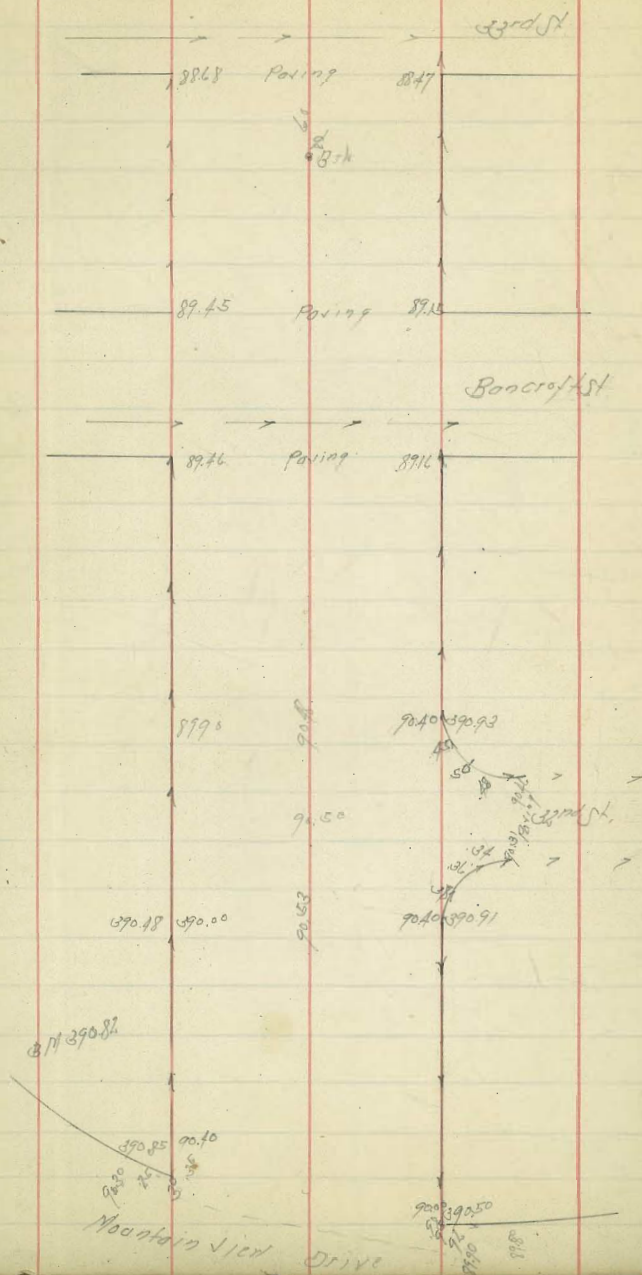
$$\frac{3}{4} \times 0.42 = .3150$$



Collier A/c Paving
Mountain View to 33rd St

11-18-38

63



Copley Ave Paving

11-19-38

55

View Drive

Mountain



926 891.15 891.03

74.50 Paving 28' Crown 744

892.24

Take out finish

892.50

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93.65

Paving 21' Crown

73.65

73.65

3' 1/2" 1/2" Paving

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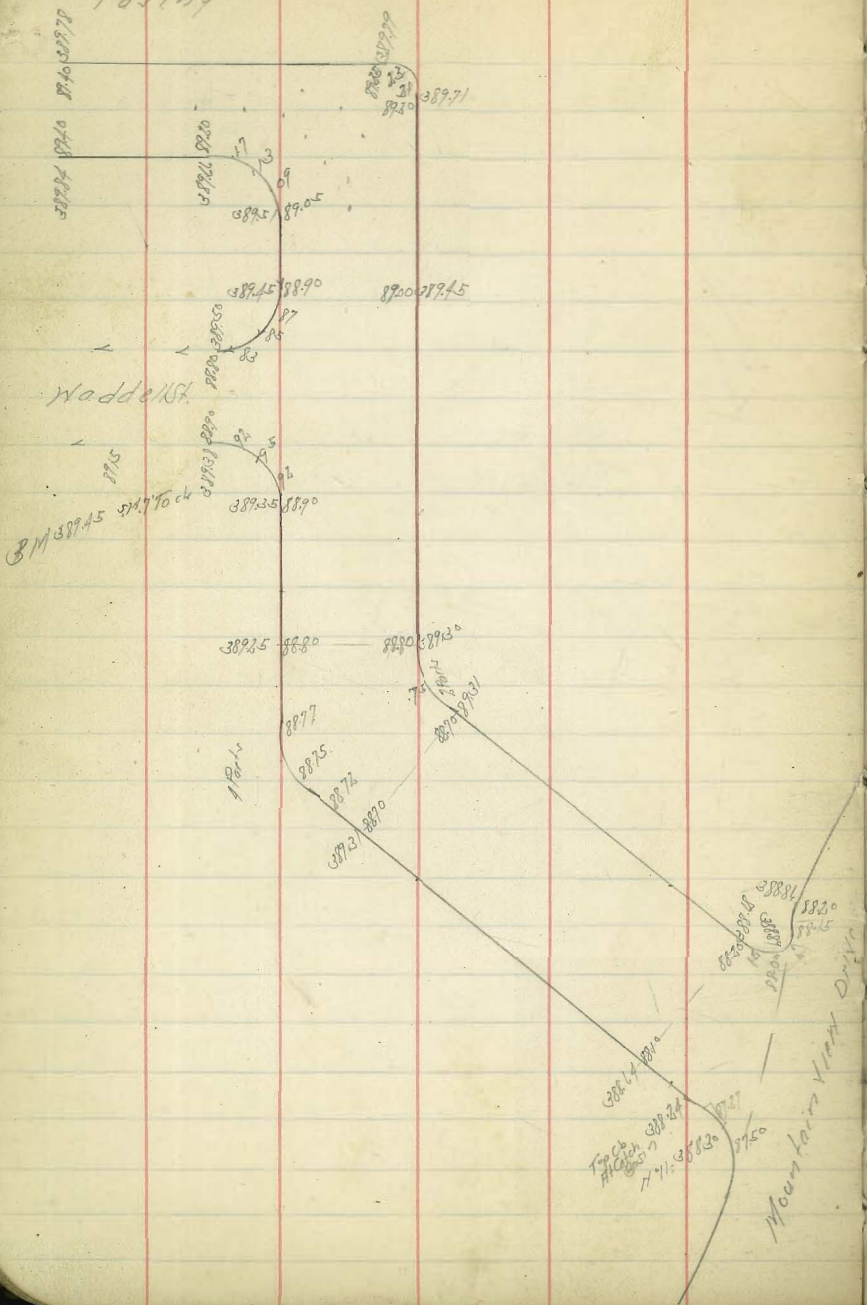
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Kenmore Terrace
Paving



Cliff Place Series

010 = Existing Series	387.00	¹⁰ 13.75 +4.75	389.475	^{1.50} 1.50 1.50
50H	387.20	¹⁰ 7.75 13.75	386.95	^{1.50} 1.50 1.50
100H = D.F.	387.40	¹⁰ 12.25 4.75	394.49	^{1.50} 1.50 1.50

390.15
1.50
1.50
394.94

Series Laterals

	West		East
N° 1	387.20	¹⁰ 13.75 4.75	
N° 2	387.40	¹⁰ 12.25 4.75	
N° 3	387.60	¹⁰ 10.75 4.75	N° 4
N° 5	387.80	¹⁰ 9.25 4.75	N° 7
N° 6	387.90	¹⁰ 7.75 4.75	N° 8

Cliff Place Culvert N° 1

010 =	Top of 012	Top of 6	Flow Line
1.50	4.50	389.90	383.90
38.95	4.00	90.33	383.35
25H			382.80
50H =			

offset 67

12-3-78

57

10.57
2.03
-16.57
11.69
13.28
-1.50

11712.00	390.15	8.22 4.22 +3.76	
11732.12	90.88	8.19 3.19 +3.21	
11752.25	90.91	8.17 3.17 +3.71	
11772.37	90.93	8.16 3.16 +3.47	
11792.50	90.96	8.16 3.16 +3.76	
12712.62	90.99	8.08 3.08 +3.15	
12732.75	91.01	8.06 3.06 +3.27	
12752.87	91.04	8.03	
12772.60	91.07	8.00	
12792.12	91.10	8.02 3.02 +3.95	
13712.25	91.12	8.05 3.05 +3.25	
13732.37 - 990	391.15	8.02 3.02 +3.80	
13752.37	91.18	7.89 2.89 +3.21	
13772.37	91.20	7.86 2.86 +3.22	
13792.37	91.23	7.81 2.81 +3.21	
13812.37	91.26	7.81 2.81 +3.20	
13832.37	91.28	7.78 2.78 +3.26	
14705.37	91.31	7.75 2.75 +3.27	
14717.37	91.34	7.73 2.73 +3.76	
14739.37	91.37	7.70 2.70 +3.01	
14751.37	91.39	7.67 2.67 +3.75	
14763.37	91.42	7.65 2.65 +3.27	
14775.37	91.45	7.62 2.62 +3.77	
14787.37	91.47	7.59 2.59 +3.71	
14799.37	91.50	7.57 2.57 +3.71	
15711.37	391.53	7.54 2.54 +3.71	

14712.00

N.L. Sta	S.L. Sta	N.L. Sta	S.L. Sta
0+0 Sly Brdg of Wall, Lint 391.63	0+0 391.53	5+80.78	5+66.22
+27.5 - PRC 91.58	+15 - PRC 91.50	6+00.17	5+83.09
1+51.12 91.54	+40.7 91.46	6+19.56	5+99.97
1+73.25 91.49	+66.4 91.42	6+38.95	6+16.84
1+96.37 91.45	92.1 91.37	6+58.34	6+33.72
1+119.50 91.41	1+178 91.33	6+77.73	6+50.60
1+143.62 91.36	1+195 91.28	6+97.12	6+67.47
1+165.75 91.32	1+192 91.24	7+16.51	6+84.34
1+188.87 91.28	1+949 91.20	7+35.90	7+01.22
2+12.0 91.24	2+206 91.15	7+55.29	7+18.10
2+35.14 91.19	2+463 91.11	7+74.68	7+34.97
2+58.25 91.15	2+720 91.06	7+94.07	7+51.84
2+81.37 91.11	2+977 91.02	8+13.46	7+68.72
3+04.50 - PRC 91.06	3+234 - PRC 90.98	8+32.85	7+85.60
3+26.69 91.02	3+491 90.94	8+52.24	8+02.47
3+48.88 90.98	3+648 90.91	8+71.63	8+19.34
3+71.07 90.94	3+805 90.87	8+91.02	8+36.22
3+93.20 90.90	3+962 90.84	9+10.41	8+53.10
4+15.45 90.85	4+1180 90.81	9+29.80	8+69.97
4+37.64 90.81	4+1337 90.77	9+49.19	8+86.83
4+59.83 90.77	4+1494 90.74	9+68.58	
4+82.0 - EL CLIFF 90.73	4+1651 90.70		
5+12.0 - " 90.67	5+104.09 90.65		
5+42.0 - EL CLIFF 90.60	5+132.47 90.60		
5+61.39 90.59	5+149.34 90.61		

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Ellison Place Draft

2-20-29

N L Sta	NH Grades	FL Grades	M. 394.48
NH. N. Side	822 32.5 316.20	Opp 385.90	651 33.0
25N	841 25.0 336.06	385.71	825 33.5
50N	855 22.5 385.93	385.61	886 33.5
75N	869 22.5 385.90	385.53	885 33.5
100N	881 22.5 385.61	385.41	907 33.5
125N	895 22.5 385.53	385.29	919 33.5
150N	907 22.5 385.40	385.17	935 33.5
175N	923 22.5 385.21	385.05	943 33.5
200N	933 22.5 385.13	384.90	953 33.5
225N = Catch Basin	944 22.5 385.00	384.80	958 33.5

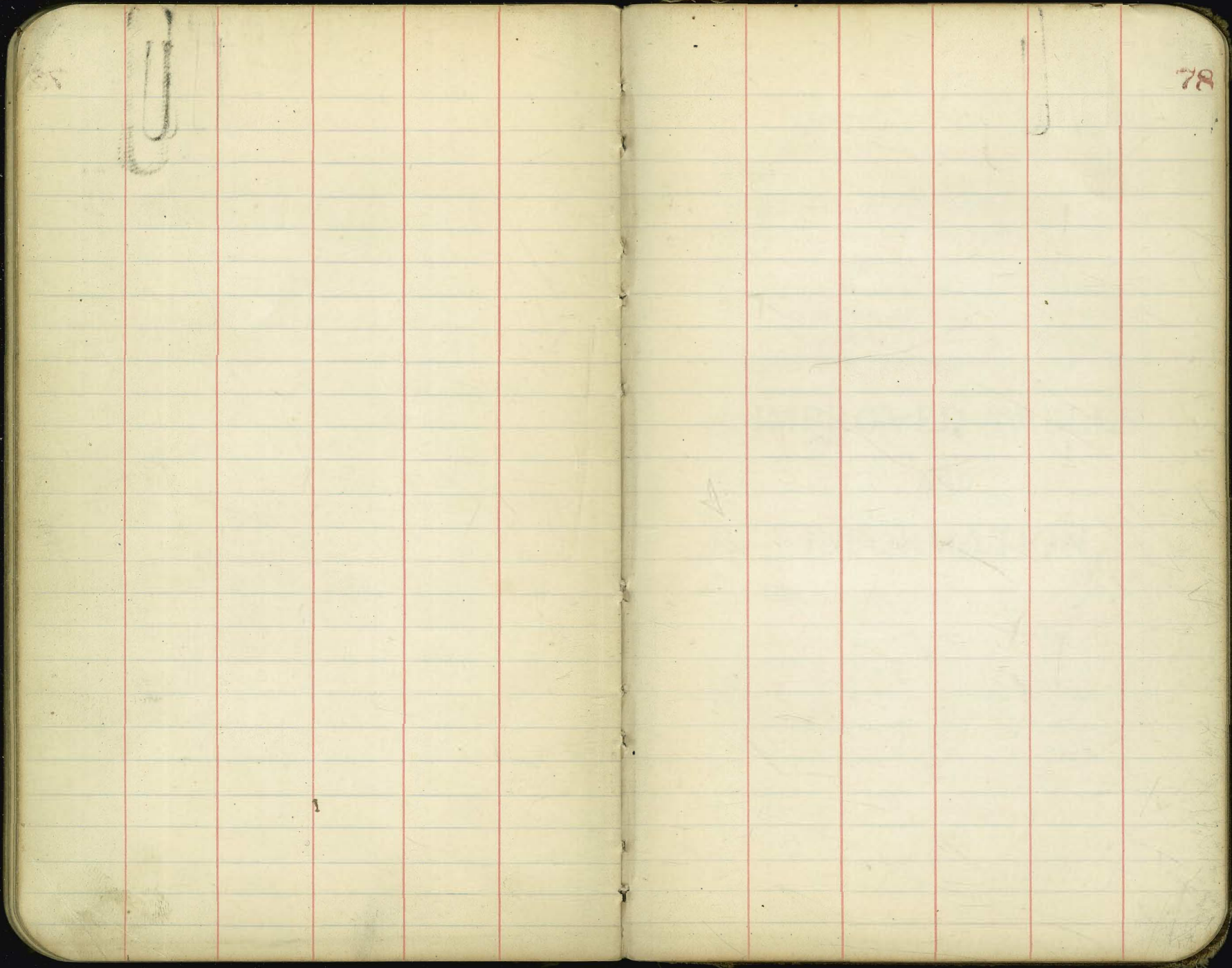
Levels Across Block 228 Morrison Sch, Her Sub
City School Warehouse Site

				NF.BP Solvent Grounds by
BM	1.90	11.80	4490	
TP	7.20	13.35	10.65	36.15
040 - Existing 9' x 9' Conc. Block Culvert Floor Line		16.53		26.82
Top of Head Wall		11.38		31.97
11.5E		62		37.2
5' NN		14.0		29.4
20' NN		88		34.6
		04.25		
30' NN		92		34.2
50' NN		121		31.0
7' NN		132		30.2
1/2 - Bottom of Channel		152		28.2
3.5E		13.5		29.9
20.5E		11.9		31.5
35.5E		42		39.2
		04.50		
55.5E		31		40.3
34.5E		12.0		31.4
1/2		12.5		30.9
5' NN		123		30.1
7' NN - Bottom of Channel		148		28.6
25' NN		85		34.9
16' NN		84		35.0
		01.75		
31' NN		75		35.9
11' NN - Bottom of Channel		148		28.6

13.35

12.14.18
75

5' NN	12.1	31.2
1/2	12.1	31.2
30.5E	11.0	32.4
35.5E	9.8	33.6
50.5E - Edge of House	19.2	34.2
	14.0	
15.5E	9.2	34.1
10.5E	10.4	33.0
8.5E	11.6	31.8
1/2	12.1	31.0
10' NN	12.1	31.0
13' NN - Bottom Channel	13.2	29.5
35' NN	6.6	36.8
51' NN - Edge of Bldg	5.7	38.3
	14.25	
13' NN - Edge of Bldg	3.8	39.9
18' NN	5.6	37.8
20' NN - Bottom Channel	12.9	30.5
1/2	10.5	32.9
10.5E - Edge of Conc. Wall	9.6	34.2
	14.58.25 - Existing 9' x 9' Conc. Box Culvert	
13.5E - Edge of Conc. Wall	2.6	34.8
1/2 Top Head Wall	8.13	34.72
Floor Line	14.69	28.72
15' NN	8.0	35.4
25' NN	3.0	40.4



78

DIRECTIONS FOR USE OF TABLES

TABLE No. 1.

Distance of slope stake from side or shoulder stake for any width roadway, slope $1\frac{1}{2}$ 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

of table in same row and column gives distance from side stake to slope stake. If ground is not

level, the distance is found by the double entry method in the side stake and slope stake, where target by this

amount if cut, always 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.

necessary.

TABLE No. 2.

To find Tangent and External for curve of any other degree, divide by degree of curve and

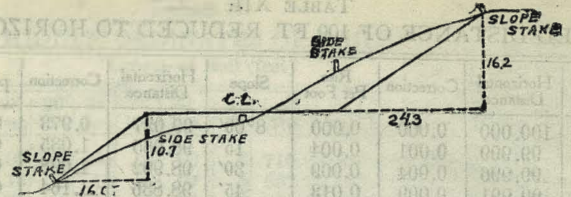
add correction found in column of corrections. Degree of curve with a given L may be found

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.

TABLE XI
DISTANCES FROM SIDE STAKES TO HORIZONTAL



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.

SLOPE 1 1/2 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.

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