

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1½ see inside of back cover.

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G-203

CITY ENGINEER

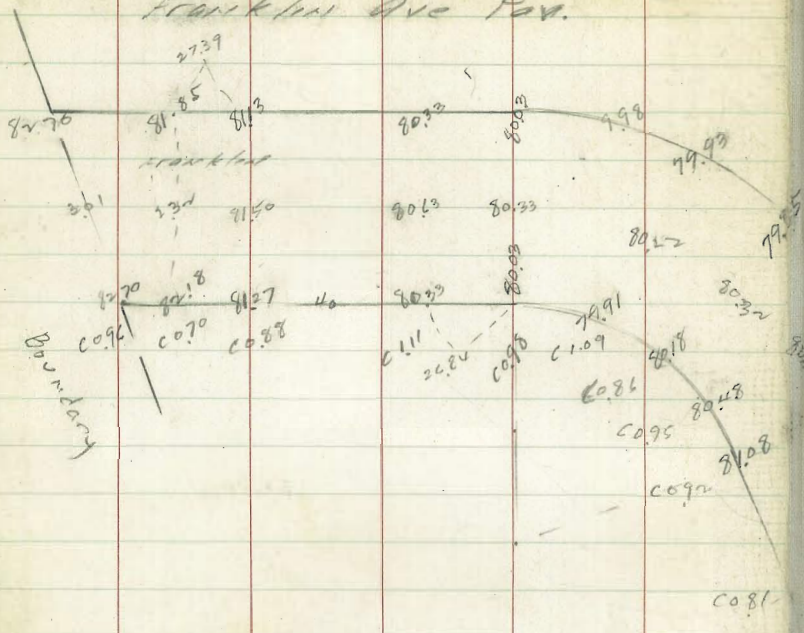
MICROFILMED

APR 12 1965

The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface. This book is sewed with Bing Special Enamel Waterproof Thread.

Made in U. S. A.

Gutter Grades
Franklin Ave Pav.

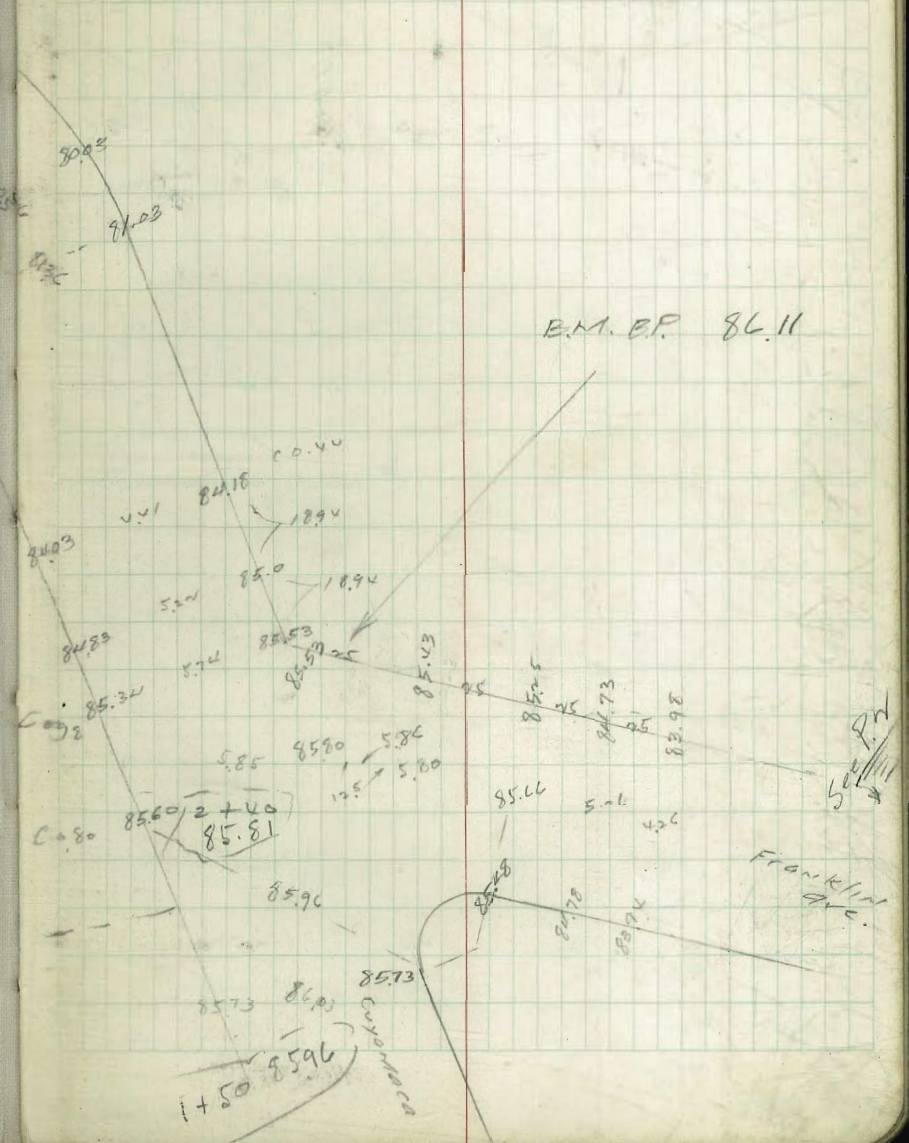


FB. 565-74
Patch 1+50 to 2+40

~~Indexed~~
P

Moore
Brand
SVELMOE
9-2-41

V. R. DENNIS Co



B.M. B.P. 86.11

Franklin Ave.

1+50 8596

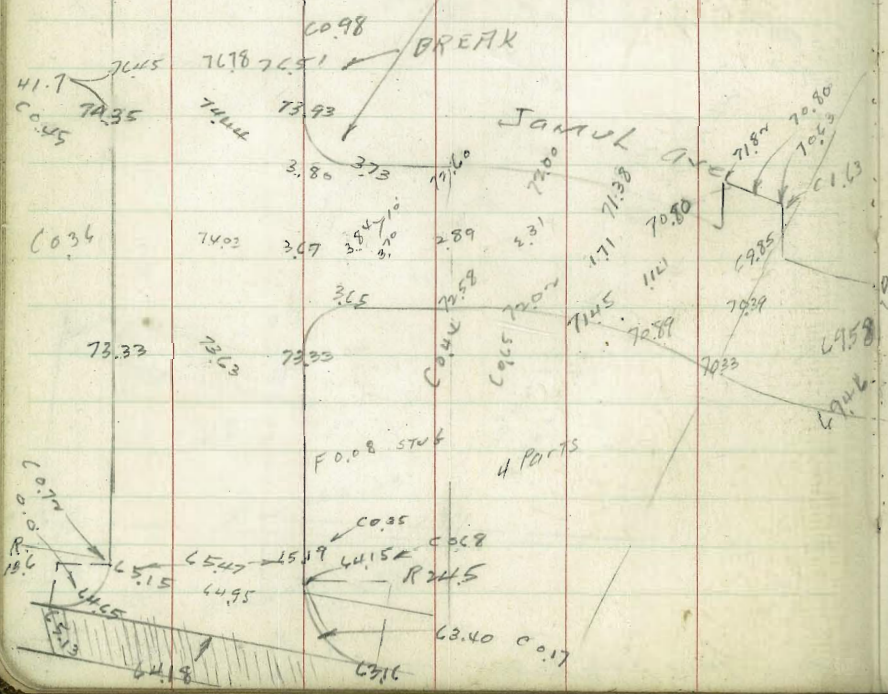
Cuyamaca Ave
Gutter grades

C 0.74	85.73	86.03	85.79
C 0.90			
C 0.67			
C 0.68 on curb			
C 0.75			
C 0.63	86.20	86.58	86.33
C 1.0	86.18	86.50	86.23
C 0.60	85.38	85.76	85.53
C 1.0 ^d	84.08	84.46	84.23
C 0.80	83.73	84.11	83.88

Franklin Ave

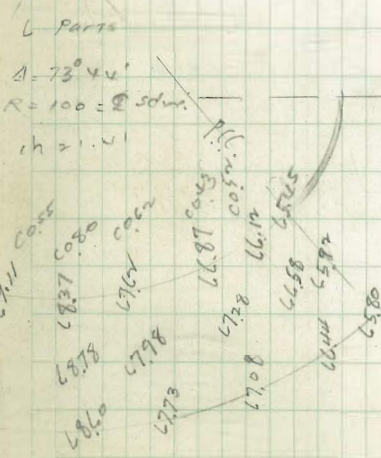
~~Indexed~~

B.M. Id. C.T. 74.60



JAMUL Gutter grades

~~Indexed~~

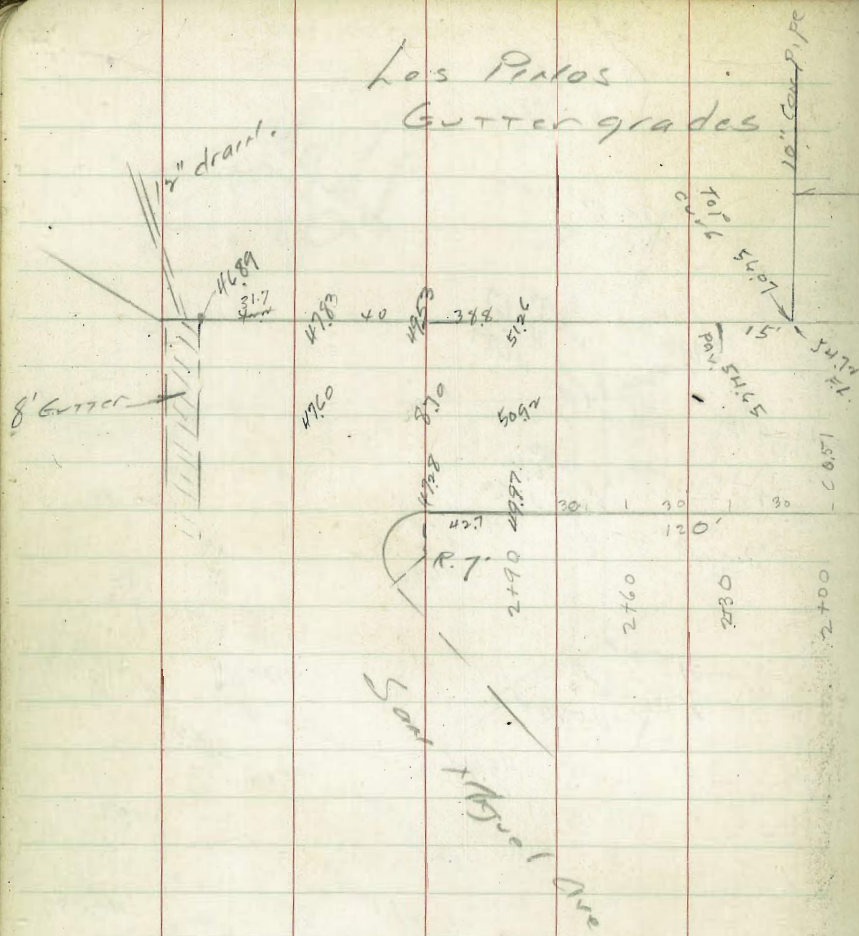


see p. d

- 2° 08' 40"
- 12° 17' 20"
- 18° 26'
- 24° 34' 40"
- 30° 43' 20"
- 36° 52'

chords = 21.41
on E of N sdw.

Los Pinos
Gutter grades

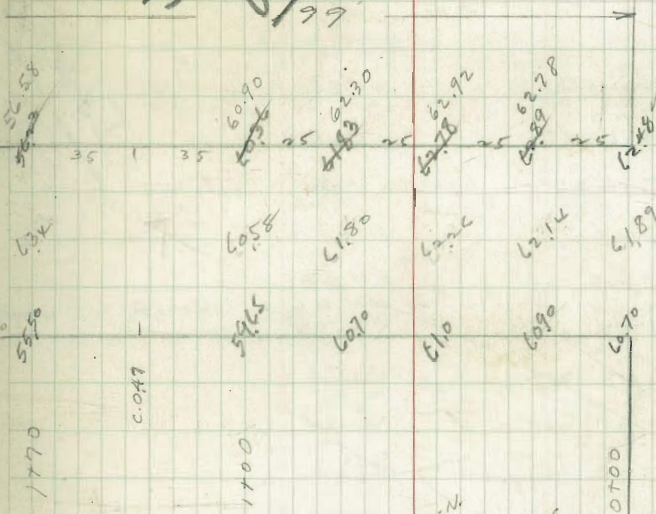


M

~~Indexed~~
88/99

45.82 - BM. P. 3
10.75
56.57 56.57
1.85 0.50
54.72 = FL. 54.07

6



47.83	49.53	51.26	55.50
8.72	7.02	5.29	1.05
			0.63
			C 0.42
45.82			
10.75			
56.57			
0.63			
65.92	170 ans		
9.40			
65.32			
	1.00	1.00	
	59.65	60.90	
	5.67	4.72	
	5.21	4.30	
	C 0.36	C 0.12	
			62.30
			3.02
			62.92
			2.40

62.78	62.48	60.70	60.90	61.00	60.70
2.54	2.84	4.62	4.42	4.32	4.62
1.70	2.51	4.26		3.97	
00.84	C 0.33	C 0.36		C 0.35	

SAN PASQUAL ST.

Curb grades on
San Miguel Ave

W.L. beg. at P.R.C. Sk. Franklin

Curb
grades

P.R.C.	Sk. Franklin Ave.	45.85
0	7° 36' 18"	45.44
0	15° 12' 36"	45.04
0	22° 48' 54"	44.61
0	30° 25' 12"	44.20
0	1° 24' 00"	44.06
0	2° 33' 48"	43.90
0	5° 07' 36"	43.45
0	7° 41' 24"	43.44
0	10° 15' 12" P.O.C.	43.20
0	12° 49' 00"	42.90
0	15° 22' 48"	42.75
0	17° 56' 36"	42.90
0	20° 30' 30"	43.00
W.L.	Ocean View	43.50

Indexed

10' curb inlet → 16° 13' 30" 42.77
17° 18' 30" 42.78

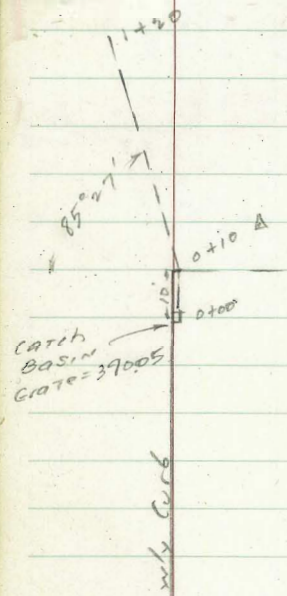
45.84 Naitin Pole NW Cor. Franklin
3.57 Jamul

49.39	45.85	45.44	45.04	44.61	44.20	44.06
2.54	3.95	4.37	4.78	5.19	5.33	
	3.25	4.04	4.48	4.85	4.40	
	0.50	0.33	0.30	0.94	0.93	
43.90	43.65	43.44	43.20	42.90	42.75	42.77
5.47	5.94	5.97	6.19	6.49	6.64	6.62
4.53	4.74	4.93	5.25	5.73	6.38	6.52
0.94	1.10	1.04	0.94	0.76	0.26	0.16
	42.78	42.80	43.00	43.50		
	6.41	6.59	6.39	5.89		
	6.50	6.54	6.63	5.62		
	0.11	0.05	0.24	0.21		

= Junction of West edge of 8' wide Cross Gutter
with outside edge of 4' Gutter

Pav. Grades on M
 PANAMA PL. Hazard Co.

Moore
 Road
 S.W. 1/4 Sec 12
 12-31-41.



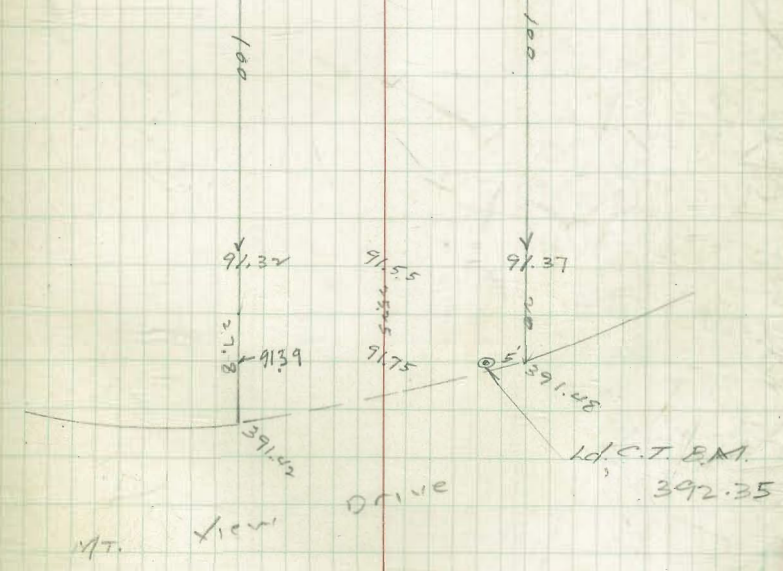
SWBP 33d
 392.38 + Mt. View
 4.23
 396.61
 4.28
 392.33 = C.T. = B.M.
 4.30 (Corrected)
 396.63 to check
 12.01 (Gutters)
 384.62 (392.35)
 0.60
 385.22
 12.04
 373.20
 0.92
 374.12

12" drain E.L. Grades

Bot. Box	0+0	0+10	0+51.5	Break 0+93	1+20 outlet
	386.0	385.73	384.62	383.51	381.37
	10.63	10.90	12.01	13.12	12.75
	5.42	5.55	6.19	10.64	10.65
	C 5.21	C 5.35	C 5.82	C 4.88	C 4.10
	290.05 = gate				
	6.58				
	8.52				
	5.42				
	C 1.16				

Indexed
 98

90.95	90.75	90.75
90.05	90.45	90.75
90.06	90.40	90.52
90.64	90.45	90.52
90.70	90.79	90.58
90.70	90.79	90.74
90.82	90.96	90.90
	91.06	



8-18-43 Curb CONST. S Ely Cor. 514 La Jolla
 La Jolla Ave + San Diego

ST. DEPT.
 ARISTO
 514 La Jolla
 01/25/48
 5.00
 40.50

B.C. Return

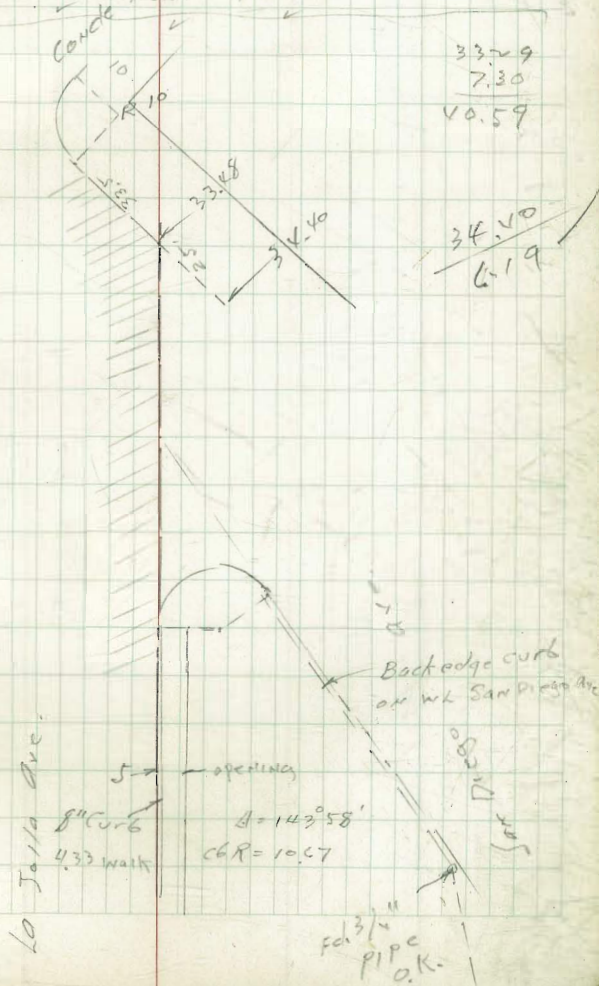
PT #1	28° 47' 36"	D = 143° 58'	33.37	33.29
#2	57° 35' 14"	CBR = 10.67	33.57	7.18
#3	81° 22' 48"	T = 32.8	33.85	40.47 X
#4	115° 10' 24"		34.20	
#5 = E.C.	143° 58'		34.65	
ES. + 10.13			35.44	
" + 20.27			36.15	
" + 30.4			36.80	
" + 40.54			37.34	

Prop. line
 meas.

Indexed

33.29	33.37	33.57	33.85	34.20	34.65
7.23	7.10	6.90	6.64	6.27	5.82
7.18	7.17	7.24	6.87	6.43	6.15
0.05	EO.07	EO.34	EO.25	EO.16	EO.33

35.44	36.15	36.80	37.34
5.03	4.32	3.67	3.13
5.33	4.59	3.98	3.25
EO.30	EO.27	EO.31	EO.17



Moore
9-29-43

5' offset
CUT STAKES

Twiggs St.
San Diego to Calhoun

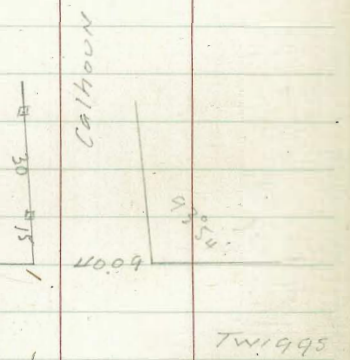
Nly c6 grades Sly curb

0+0	Ely San Diego	30.50	30.80
0+50		32.20	32.44
1+00		33.90	34.07
1+31		34.95	35.08
1+62	Wly Calhoun	36.0	36.10
2+02.9	Ely "	36.9	37.40

San Diego

50

102



Wly 7' c.T. chiseled B.M.
San Diego + Twiggs

28.80						
11.77						
40.57	Nly	30.50	32.20	33.90	34.95	36.0
		10.07	8.37	6.67	5.62	4.57
			7.87	5.97	5.27	4.68
			60.50	60.70	60.35	60.11
						60.41

Indexed
B

30.80	32.44	34.07	35.08	36.10	37.40
9.77	8.13	6.50	5.49	4.47	3.77
9.76	5.99	3.98	3.47	2.23	1.93
0.01	6.14	6.52	6.02	6.24	6.14

Bayside Lane
Sewer LAT:

M

Moore
Rand
Svelkoe
H-19-41

B.M. - 0.48
4.30
3.82
5.27
- 1.45
4.72
3.77
4.61
- 1.34 C.T.

(1) - 7.04 $\begin{array}{r} 10.31 \\ 5.18 \\ \hline C 5.13 \end{array}$

(2) - 6.59 $\begin{array}{r} 9.86 \\ 4.72 \\ \hline C 5.14 \end{array}$

(3) - 6.43 $\begin{array}{r} 9.70 \\ 4.31 \\ \hline C 5.39 \end{array}$

(4) and (5) OUT

B.M. - 0.48
3.62
3.14
4.25
- 1.11
3.77
2.66
1.79

(6) - 6.08 $\begin{array}{r} 9.22 \\ 4.27 \\ \hline C 4.95 \end{array}$

(7) - 6.48 $\begin{array}{r} 9.62 \\ 4.44 \\ \hline C 5.18 \end{array}$

(8) - 6.95 $\begin{array}{r} 9.61 \\ 4.44 \\ \hline C 5.17 \end{array}$

(9) - 6.47 $\begin{array}{r} 9.13 \\ 4.61 \\ \hline C 4.54 \end{array}$

(10) - 6.29 $\begin{array}{r} 9.01 \\ 4.70 \\ \hline C 4.31 \end{array}$

V.R. DENNIS Co.

14

(11) INDEXED
W.K.
OCT 22 1948

- 6.14 $\begin{array}{r} 8.86 \\ 4.43 \\ \hline C 4.43 \end{array}$

(12) - 6.03 $\begin{array}{r} 8.75 \\ 4.88 \\ \hline C 3.87 \end{array}$

(13) - 5.82 $\begin{array}{r} 8.54 \\ 4.31 \\ \hline C 4.23 \end{array}$

(14) - 5.40 $\begin{array}{r} 8.62 \\ 4.60 \\ \hline C 4.02 \end{array}$

(15) - 5.17 $\begin{array}{r} 8.39 \\ 4.71 \\ \hline C 3.68 \end{array}$

(16) - 5.11 $\begin{array}{r} 8.33 \\ 5.14 \\ \hline C 3.19 \end{array}$

(17) - 4.87 $\begin{array}{r} 7.78 \\ 5.07 \\ \hline C 2.71 \end{array}$

(18) - 4.77 $\begin{array}{r} 7.68 \\ 4.92 \\ \hline C 2.76 \end{array}$

(19) - 4.76 $\begin{array}{r} 7.67 \\ 4.80 \\ \hline C 2.87 \end{array}$

Bayside Lane Sewer Lat.

(20)	-4.62	7.53 4.98 C 2.55	2.91 5.18 -2.27 5.18 2.91 4.35 -1.44 5.02 C 2.02
(21)	-4.28	7.19 5.17 C 2.02	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82
(22)	-6.97	9.88 4.37 C 5.51	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82
(23)	-6.79	10.41 5.10 C 5.31	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82
(24) OUT			
(25)	-5.67	9.47 4.95 C 4.52	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82
(26)	-4.04	7.77 4.77 C 3.00	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82
(27)	-4.14	7.87 4.77 C 3.10	2.91 4.35 -1.44 5.02 3.62 4.41 -0.79 4.59 3.80 4.62 -0.82

Bayside B.M. Lane

15

1st B.M. West R.P. Ldi. C.T.	-1.34
Santa Barbara Pl. S.W. C.T. R.P. curb	-0.48
San Louis obispo nail top stucco wall 7' S of S.E. Cor.	+0.87
Monterey Ct. R.P. spike S.E. Tel. pole	-0.57
San Juan Pl. Tel. spike S.E. Power Pole	+0.99
Santa Clara Pl. N.E. B.P. in Con. Pav.	-0.82
San Jose Pl. " " " "	-1.27
San Rafael Pl. + Mission Blvd N.E. P. 66	-0.26
E.W. Mission Blvd & Whiting Ct. (Ldi. Ct.)	-1.30
" " " " B.M. in Pav. (out)	
R.P.C.T. 40.30 West = El. +0.23	
Curb	
NOTE	
alley So. of San Jose Pl. Grate is 0.19 High	
" " " San Rafael " " 0.06 High	

Bayside Lane Pav. Grades

BM. -1.30
4.93
3.57
5.35
-1.76
5.21
3.45

(W.H. STG.)

West

East

nk Ventura

-0.40

-0.40

0 + 40

-0.95

-0.95

0 + 80 - Slalley

-1.50

-1.50

E. & W. alley

0 + 96 - nk "

-1.70

-1.70

1 + 36

-1.97

-1.97

1 + 76 Sl. Island

-2.25

-2.25

0 + 0 (B.C.N.H.)

-2.25

-2.25

dell.

0 + 40.4

-2.15

3°08.4

-2.05

0 + 80.8 Sl. alley

-2.05

6°16.4

-1.95

to West

0 + 97 nk "

-2.03

7°32.0

-1.93

1 + 39.9

-1.93

10°51.8

-1.83

1 + 87.8 - Isobanus

-1.82

14°11.0

-1.72

W -0.40 -0.95 -1.50 -1.70 -1.97
3.99 4.54 5.09 5.29 5.56
3.85 4.50 4.13 4.67 5.07
C 0.14 C 0.04 C 0.96 C 0.60 C 0.54

E -0.40 -0.95 -1.50 -1.70 -1.97
3.99 4.54 5.09 5.29 5.51
3.86 4.18 4.80 4.88 5.06
C 0.13 C 0.36 C 0.29 C 0.41 C 0.45

W -2.25 -2.25 -2.15 -2.05 -2.03
5.84 5.84 5.74 5.64 5.64
5.13 4.83 5.66 5.34 5.35
C 0.71 C 1.01 C 0.08 C 0.37 C 0.27

E -2.15 -2.15 -2.05 -1.95 -1.93
5.74 5.74 5.64 5.54 5.38
5.24 5.37 5.81 4.78 4.94
C 0.54 C 0.37 F 0.17 C 0.76 C 0.46

W -1.93 -1.82
5.38 5.27
5.04 4.77
C 0.36 C 0.50

E -1.83 -1.72
5.28 5.17
4.64 4.74
C 0.66 C 0.45

I.P.

W.L. STA.

West

East

H.I. Fwd 24.5

2 + 28.1

- 1.71

17° 42.7

- 1.61

4.32

- 0.87

4.71

2 + 73.5 SL alley

- 1.60

21° 14.4

- 1.50

3.84

- 0.48 B.M.

4.12

3.64

2 + 86.4

E.C. 1=0+00

22° 05.0

0 + 06 NL alley

- 1.57

- 1.47

0 + 50.6

- 1.46

- 1.36

1 + 01.3

JAMAICA
CT.

- 1.35

- 1.25

1 + 49

- 1.24

- 1.14

1 + 96.7 SL alley

- 1.14

- 1.04

2 + 14.7 NL alley

- 1.10

- 1.0

2 + 59.3

- 1.00

- 0.90

3 + 04

SL

SANTA BARBARA

- 0.90

- 0.80

3 + 30.7

NL "

- 0.90

- 0.80

3 + 80.7

- 1.01

- 0.91

17

W	- 1.71	- 1.60	- 1.57	- 1.46	- 1.35	- 1.24
	5.16	5.05	5.02	4.91	4.80	5.08
	4.41	4.45	4.46	4.39	4.38	4.96
	0.75	0.60	0.56	0.54	0.44	0.12

E	- 1.61	- 1.50	- 1.47	- 1.36	- 1.25	- 1.14
	5.06	4.95	4.94	4.81	5.09	4.98
	4.76	3.56	4.41	4.39	4.81	4.89
	0.36	1.39	0.51	0.39	0.28	0.09

W	- 1.14	- 1.10	- 1.00	- 0.90	- 0.90	- 1.01
	4.98	4.94	4.84	4.74	4.54	4.65
	4.76	4.74	4.46	4.33	4.44	3.65
	0.24	0.20	0.38	0.41	0.10	0.10

E	- 1.04	- 1.00	- 0.90	- 0.80	- 0.80	- 0.91
	4.88	4.84	4.74	4.64	4.44	4.55
	4.31	4.34	4.38	4.47	3.44	4.37
	0.57	0.50	0.36	0.05	0.10	0.12

W.L. STA.	West	East
4 + 30.7	-1.17	-1.07
4 + 80.7	-1.23	-1.13
5 + 49.7 = Jersey Ct.	-1.33	-1.23
5 + 85.3 = B.C. RT.	-1.45	-1.35
0 + 0.0	—	defl.
0 + 5.0	-1.57	0°34.4 -1.47
1	-1.49	1°08.9 -1.59
1 + 50 = Kennebeck	-1.81	1°43.3 -1.71
1 + 97.4	-1.91	2°15.8 -1.81
2 + 44.4 Sh 9/12y	-2.01	2°48.3 -1.91
2 + 61 Nk "	-2.05	2°59.8 -1.95
3 + 05.5	-2.15	3°30.5 -2.05
3 + 50 = Kingston	-2.25	4°01.1 -2.15

W	-1.17	-1.23	-1.33	-1.45	
	4.76	4.87	4.97	5.09	
	4.36	4.44	4.51	4.69	
	0.40	0.43	0.46	0.10	
E	-1.07	-1.13	-1.23	-1.35	
	4.66	4.77	4.87	4.96	
	4.76	4.73	2.87	4.55	
	0.10	0.04	0.10	0.21	
W	-1.57	-1.69	-1.81	-1.91	-2.01
	5.19	5.31	5.43	5.53	5.63
	4.93	5.00	4.74	5.04	4.63
	0.26	0.31	0.69	0.49	0.10
E	-1.47	-1.59	-1.71	-1.81	-1.91
	5.09	5.21	5.33	5.43	5.53
	4.83	4.21	4.63	5.19	5.15
	0.26	0.10	0.70	0.24	0.38
W	-2.05	-2.15	-2.25		
	4.97	5.07	5.17		
	4.78	4.60	4.22		
	0.19	0.47	0.95		
E	-1.95	-2.05	-2.15		
	4.87	4.97	5.07		
	3.87	4.63	4.07		
	0.10	0.34	0.10		

Checked Headers
to Kennebeck Ct. 4-9-41

W.L. STA.

W

defl.

E

W.L. STA.	W	defl.	E	
2+96	-2.35	4°32.7	-2.25	$\begin{array}{r} 2.92 \\ 2.04 \\ + 0.88 \\ \hline \end{array}$
4+44 Shalley	-2.45	5°04.4	-2.35	$\begin{array}{r} + 0.87 \\ 2.04 \\ \hline 2.91 \end{array}$
4+58.4 NL "	-2.45	5°15.8	-2.35	$\begin{array}{r} + 0.87 \\ 2.03 \\ \hline 2.90 \end{array}$
5+00.4	-2.35	5°44.5	-2.25	
5+41.8 - SL ^{San Louis} Obispo	-2.26	6°13.1	-2.16	
5+54.10 ^{San Louis} POC	-2.43	6°21.5	-2.33	
5+66.5 NL Obispo	-2.21	6°30.0	-2.11	
6+08	-2.17	6°58.7	-2.07	
6+49.5 - SL Shalley	-2.03	7°27.4	-1.93	
6+65.7 - NL "	-1.98	7°38.4	-1.88	
7+07.7	-1.88	8°07.3	-1.78	
7+49.7 Lido Ct.	-1.79	8°36.4	-1.69	
7+93.4	-1.69	9°06.1	-1.59	

19

W	-2.35	-2.45	-2.45	-2.35
	5.17	5.37	5.37	5.26
	4.45	4.51	4.74	3.59
	0.07	0.06	0.03	0.07
E	-2.25	-2.35	-2.35	-2.25
	5.27	5.27	5.27	5.16
	4.55	4.64	4.76	4.16
	0.07	0.03	0.05	0.10
W	-2.26	-2.21	-2.17	-2.03
	5.17	5.11	5.07	4.93
	4.66	5.15	4.54	4.99
	0.51	0.04	0.48	0.06
E	-2.16	-2.11	-2.07	-1.93
	5.07	5.01	4.97	4.83
	4.07	4.71	4.75	4.43
	0.10	0.30	0.17	0.40
W	-1.88	-1.79	-1.69	
	4.78	4.69	4.59	
	4.54	4.34	4.59	
	0.24	0.35	0.0	
E	-1.78	-1.69	-1.59	
	4.68	4.59	4.49	
	4.73	4.35	4.68	
F	0.05	0.24	0.19	

				2.90
				4.47
8 + 36.7	SLalley	-1.60	9°36.1	-1.50
				-1.57
				4.86
				3.29
				3.95
8 + 53	NL "	-1.60	9°47.3	-1.50
				-0.66
				4.15
				3.49
				4.07
8 + 95.5		-1.88	10°16.6	-1.83
				-0.58
<u>Here NY Headers Level</u>				
9 + 38.0	Liverpool	-2.16	10°45.8	-2.16
				-0.57 BM
				3.42
				2.85
9 + 81.8		-2.04	11°16.0	-2.04
10 + 25.6	SLalley	-1.91	11°46.4	-1.91
10 + 41.6	NL "	-1.87	11°57.4	-1.87
10 + 83.4		-1.75	12°26.0	-1.75
11 + 25.4	Manhattan	-1.63	12°55.0	-1.63
			60 = BS	
11 + 67.9		-1.50	7°04.6	-1.50
12 + 10.6	SLalley	-1.38	7°32.0	-1.38
12 + 26.6	NL "	-1.34	7°43.0	-1.34
12 + 66.3		-1.43	8°10.3	-1.43

W	-1.60	-1.60	-1.88	-2.16	-2.04
	4.50	4.89	5.17	5.48	5.33
	4.47	4.35	5.01	4.67	4.33
	Co.03	Co.54	Co.10	Co.78	Co.10
E	-1.50	-1.50	-1.83	-2.16	-2.04
	4.79	4.79	5.12	5.48	5.33
	4.79	5.14	5.31	4.71	5.02
	0.0	Co.35	Co.19	Co.74	Co.31
W	-1.91	-1.87	-1.75	-1.63	-1.50
	5.20	5.16	5.04	4.92	4.79
	4.72	4.16	3.27	4.66	3.38
	Co.48	Co.10	Co.77	Co.26	Co.41
E	-1.91	-1.87	-1.75	-1.63	-1.50
	5.20	5.16	5.04	4.92	4.79
	4.55	4.28	4.04	4.29	4.77
	Co.65	Co.68	Co.10	Co.23	Co.02
W	-1.38	-1.34	-1.23		
	4.87	4.83	4.72		
	4.22	4.64	4.27		
	Co.05	Co.21	Co.45		
E	-1.38	-1.34	-1.23		
	4.87	4.83	4.72		
	3.87	4.50	4.76		
	Co.10	Co.33	Co.24		

W.L. STA.	W		E	
				2.85 3.42 -0.57 3.39 -1.82
13+06 SL Canal	-1.11	8°27.7	-1.11	
13+18 E "	-	8°46.0	-	
13+30 NL "	-1.16	8°54.2	-1.16	
13+70.1	-1.35	9°21.8	-1.35	
14+10.4 SHOLEY	-1.54	9°49.4	-1.54	
14+26.7 NL "	-1.62	10°00.4	-1.62	
14+68.5	-1.81	10°29.5	-1.81	
15+10.8 Monterey	-2.00	10°58.7	-2.00	
15+53.6	-1.90	11°28.1	-1.90	
15+96.4 SHOLEY	-1.80	11°57.6	-1.80	
16+12.6 NL "	-1.77	12°08.8	-1.77	
16+55.9	-1.66	12°38.3	-1.66	
16+99.7 NABONT	-1.80	13°08.0	-1.80	

W	-1.11	-1.16	-1.35	-1.54	-1.62	-1.81
	3.96	4.01	4.20	4.39	4.47	4.66
	4.31	4.40	4.30	4.46	4.65	4.89
	F 0.35	F 0.34	F 0.10	F 0.07	F 0.18	F 0.23
E	-1.11	-1.16	-1.35	-1.54	-1.62	-1.81
	3.96	4.01	4.20	4.39	4.47	4.66
	3.72	4.34	4.45	4.32	4.66	4.69
	C 0.24	F 0.33	F 0.05	C 0.07	F 0.19	F 0.03
W	-2.00	-1.90	-1.80	-1.77	-1.66	-1.80
	4.85	4.72	4.62	4.59	4.48	4.62
	4.30	4.54	4.60	4.59	3.28	4.45
	C 0.55	C 0.18	C 0.02	Alley 0.0	C 1.0	C 0.17
				2 003 High		
E	-2.00	-1.90	-1.80	-1.77	-1.66	-1.80
	4.85	4.72	4.62	4.59	4.48	4.62
	4.32	5.00	4.47	4.54	4.58	4.48
	C 0.53	F 0.28	C 0.15	C 0.05	F 0.10	C 0.15

check headers to this pt. -19.42

End W.L. STA.

W

PLAN
WINDING

E

17+07.4 E.C. 0+00	-1.87	13+5.0	-1.87	282 x +0.99 R.M. 1.97 2.91
Big. & STA. 0+39.3	-1.87		-1.87	20.99 1.75 2.74 1.75 +0.99 2.17 3.16
0+78.6 Shalley	-1.97		-1.97	
0+94.8 Nk alley	-2.00		-2.00	
1+39	-2.10		-2.10	
1+83.2 Nantasket	-2.20		-2.20	checked headers to alley
2+26.3	-2.11		-2.11	
2+69.4 Sh. alley	-2.03		-2.03	
2+85.7 Nk "	-1.99		-1.99	
3+26	-1.91		-1.91	
3+66.3 Sh. place SAN JUAN	-1.82		-1.82	
3+90.9 Nk "	-1.77		-1.77	
4+31	-1.58		-1.58	

22

W	-1.77	-1.87	-1.97	-2.00	-2.10
	4.59 3.99 C 0.20	4.78 4.51 C 0.27	4.88 4.85 C 0.03	4.91 4.90 C 0.01	5.01 4.79 C 0.22
E	-1.77	-1.87	-1.97	-2.00	-2.10
	4.59 4.39 C 0.20	4.78 5.15 F 0.37	4.88 5.08 F 0.20	4.91 4.95 F 0.04	5.01 5.10 F 0.09
W	-2.20	-2.11	-2.03	-1.99	-1.91
	5.11 4.94 C 0.17	4.85 3.85 C 1.0	4.77 3.77 C 1.50	4.73 4.30 C 0.53	4.45 3.65 C 1.0
E	-2.20	-2.11	-2.03	-1.99	-1.91
	5.11 4.91 C 0.20	4.85 4.65 C 0.20	4.77 4.67 C 0.10	4.73 4.30 C 0.37	4.45 4.43 C 0.22
W	-1.87	-1.77	-1.68		
	4.98 5.04 F 0.06	4.93 5.48 F 0.55	4.84 4.73 C 0.11		
E	-1.87	-1.77	-1.68		
	4.98 4.78 C 0.20	4.93 4.73 C 0.20	4.84 4.84 C 1.0		

Sta.	W	E
9+46.7	-1.09	3°48.7 -1.09
9+94.4 Ostend	-0.93	4°21.5 -0.93 P.O.C.
10+40.6	-0.83	4°53.2 -0.83
		3.46 x 4.59 -1.13 4.87 3.74
10+86.8 SLalley	-0.73	5°25.0 -0.73
11+03.4 NK "	-0.70	5°36.4 -0.70
11+43.4 Break	-0.62	6°03.9 -0.62
11+73.1	-0.68	6°24.3 -0.68
12+02.8 ^{S.L.} Santa Clara	-0.75	6°44.7 -0.75
12+27 NK "	-0.79	7°01.3 -0.79
12+67.7	-0.87	7°29.3 -0.87
13+08.4 SLalley	-0.95	7°57.3 -0.95
13+24.36 NK "	-0.98	8°08.2 -0.98 (P.O.C.)
0+00		beg. of
9.25		angle
		line

W	-1.09	-0.93	-0.83	-0.73	-0.70
	4.55	4.39	4.57	4.47	4.44
	4.56	4.36	3.57	4.83	4.95
	F0.01	C0.03	C1.0	F0.36	F0.51
		T.P.			
E	-1.09	-0.93	-0.83	-0.73	-0.70
	4.55	4.39	4.57	4.47	4.44
	3.55	4.01	5.18	3.47	4.88
	C1.0	C0.18	F0.61	C1.0	F0.44
W	-0.62	-0.68	-0.75	-0.79	-0.87
Break	4.36	4.42	4.49	4.53	4.61
	4.60	4.89	4.54	4.50	3.61
	F0.24	F0.47	F0.05 Pav.	Pav.	C1.0
E	-0.62	-0.68	-0.75	-0.79	-0.87
	4.36	4.42	4.49	4.53	4.61
	3.36	3.75	4.49	4.56	4.99
	C1.0	C0.67	2.0 Pav.	F0.03 Pav.	F0.38
W	-0.95	-0.98			
	4.69				
	5.10				
	F0.41				
		Next			
		Page			
E	-0.95	-0.98			
	4.69				
	5.05				
	F0.36				

Sta.	W	E	
0+0 = N. Alley	-0.98	-0.98	P.O.C. BM. -0.84 4.43
0+27.58	-1.03	-1.03	3.61 4.48 -0.87 4.72
0+55.17 E. Port MOUTH CT.	-1.09	-1.09	3.85 4.58 -0.73 4.68
0+84.66	-1.14	-1.14	3.95
1+10.15 S. Alley	-1.20	-1.20	
1+26.15 N. Alley	-1.20	-1.20	
1+53.65	-1.15	-1.15	
1+81.15 PISMO	-1.10	-1.10	
2+08.65	-1.05	-1.05	
2+36.15 S. Alley	-0.99	-0.99	
2+52.15 N. Alley	-0.96	-0.96	
2+79.73	-0.91	-0.91	
3+07.31 Queens TOWER	-0.86	-0.86	

W	E	W	E	W	E
-0.98 4.59 5.05 F 0.16	-1.03 4.64 4.79 F 0.15	-1.09 4.70 4.83 C 0.67	-1.14 4.75 4.18 C 0.57	-1.20 5.05 4.38 C 0.67	-1.20 5.05 4.67 C 0.55
-0.98 4.59 5.09 F 0.50	-1.03 4.64 4.85 F 0.21	-1.09 4.70 4.17 C 0.53	-1.14 4.75 4.88 F 0.13	-1.20 5.05 4.74 C 0.31	-1.20 5.05 4.74 C 0.31
-1.20 5.05 4.38 C 0.67	-1.15 5.10 4.29 C 0.81	-1.10 5.05 4.67 C 0.42	-1.05 5.00 4.74 C 0.26	-0.99 4.94 5.05 F 0.11	-0.96 4.91 4.67 C 0.24
-1.20 5.05 4.53 C 0.54	-1.15 5.10 4.61 C 0.49	-1.10 5.05 4.67 C 0.38	-1.05 5.00 4.87 C 0.13	-0.99 4.94 4.89 C 0.05	-0.96 4.91 5.09 F 0.18
-0.91 4.86 4.96 F 0.10	-0.86 4.81 4.78 C 0.63				
-0.91 4.86 4.79 C 0.07	-0.86 4.81 4.81 0.0				

STA.	W	E
3+34.96	-0.78	-0.78
3+62.61 S.L. alley	-0.70	-0.70
3+78.74 N.H. "	-0.70	-0.70
4+06.54	-0.79	-0.79
4+34.34 Redondo	-0.88	-0.88
4+62.20	-0.98	-0.98
4+90.08 S.H. alley	-1.07	-1.07
5+06.34 N.H. "	-1.13	-1.13
5+34.22	-1.22	-1.22
5+62.14 Rockaway	-1.31	-1.31
5+90.14	-1.40	-1.40
6+18.14 S.L. alley	-1.50	-1.50
6+34.4 N.H. "	-1.50	-1.50

W	-0.78	-0.70	-0.70	-0.79	-0.88
	4.73	4.65	4.65	4.74	4.83
	4.77	4.78	4.85	4.98	4.64
F	0.04	0.13	0.20	0.24	0.19
					0.021
E	-0.78	-0.70	-0.70	-0.79	-0.88
	4.73	4.65	4.65	4.74	4.83
	4.81	4.72	4.99	4.79	4.74
F	0.08	0.07	0.34	0.05	0.09
W	-0.98	-1.07	-1.13	-1.22	-1.31
	4.93	4.96	5.02	5.11	5.20
	3.93	5.17	5.34	4.80	4.69
C	1.0	0.71	0.30	0.31	0.51
E	-0.98	-1.07	-1.13	-1.22	-1.31
	4.93	5.02	5.02	5.11	5.20
	3.93	4.02	4.65	4.81	4.74
C	1.0	1.0	0.37	0.30	0.46
W	-1.40	-1.50	-1.50	None!	
	5.37	4.88	4.88	STA. 4+34.34 to	
	4.63	4.49	4.31	6+18.14 lowered	
C	0.74	0.59	0.87	cuts 0.02	
E	-1.40	-1.50	-1.50	acct. of error	
	5.37	5.47	4.88	in levels	
	4.75	4.47	4.06		
C	0.64	1.0	0.84		
Grate = -1.75			Grate is 0.19 High		

Checked
2-25-44

Sta.	W	E	
			3,387
6+60.9	-1.44	-1.44	<u>1.27</u> <u>4.78</u>
6+87.4 SL San Jose	-1.37	-1.37	<u>3.51</u> <u>4.46</u> <u>0.95</u> <u>4.66</u> <u>3.71</u>
7+11.8 N.H. "	-1.33	-1.33	
7+37.45	-1.26	-1.26	
7+62.7 SL alley	-1.20	-1.20	
SUMMIT			
7+79.0 N.H. alley	-1.20	-1.20	
8+06	-1.27	-1.27	
8+33.0 Saler AG	-1.35	-1.35	
8+61.7	-1.42	-1.42	
8+90.4 SL alley	-1.50	-1.50	
9+06.7 N.H. alley	-1.50	-1.50	
9+34	-1.43	-1.43	
9+61.3 Seagirt	-1.37	-1.37	checked to fence 2-27-42

27

W	-1.44	-1.37	-1.33	-1.26	-1.20
	<u>4.84</u>	<u>4.88</u>	<u>4.84</u>	<u>4.77</u>	<u>4.71</u>
	<u>3.82</u>	<u>4.85</u>	<u>4.82</u>	<u>4.77</u>	<u>4.98</u>
	C 1.0	C 0.03	C 0.02	0.00	F 0.27
E	-1.44	-1.37	-1.33	-1.26	-1.20
	<u>4.84</u>	<u>4.88</u>	<u>4.84</u>	<u>4.77</u>	<u>4.71</u>
	<u>3.82</u>	<u>4.85</u>	<u>4.82</u>	<u>4.77</u>	<u>4.98</u>
	C 1.0	C 0.05	C 0.07	C 1.0	C 1.0
W	-1.20	-1.27	-1.35	-1.42	-1.50
	<u>4.71</u>	<u>4.78</u>	<u>4.86</u>	<u>4.93</u>	<u>5.01</u>
	<u>4.63</u>	<u>4.69</u>	<u>4.89</u>	<u>3.76</u>	<u>4.77</u>
	C 0.08	C 0.15	C 0.77	C 1.17	C 0.44
E	-1.20	-1.27	-1.35	-1.42	-1.50
	<u>4.71</u>	<u>4.78</u>	<u>4.86</u>	<u>4.93</u>	<u>5.01</u>
	<u>4.63</u>	<u>4.69</u>	<u>4.89</u>	<u>4.58</u>	<u>4.61</u>
	C 0.44	C 1.49	C 0.69	C 0.35	C 1.0
				C 1.0	note
W	-1.50	-1.43	-1.37		
	<u>5.11</u>	<u>5.14</u>	<u>5.08</u>		
	<u>4.60</u>	<u>4.70</u>	<u>4.51</u>		
	C 0.61	C 0.44	C 0.57		
E	-1.50	-1.43	-1.37		
	<u>5.11</u>	<u>5.14</u>	<u>5.08</u>		
	<u>4.65</u>	<u>4.18</u>	<u>4.47</u>		
	C 0.56	C 0.96	C 0.59		

gate 0.02 High

gate -1.75

Fence in alley 0.27

	W	E	
9+89.5	-1.29	-1.29	2.71 \bar{x} 4.93 <u>-1.29</u> 5.20 3.98
10+17.7 Skalley	-1.22	-1.22	
10+34 Nk alley	-1.18	-1.18	
10+64.2 Break	-1.10	-1.10	
4°08'30" RT North line			
10+94.4 SUNSET	-1.02	-1.02	
11+19.48 Break	-0.96	-0.96	
11+44.57 Sk. alley	-1.02	-1.02	
11+52.71 9 alley = Δ 4°06'30" LT	-1.22	-1.22	
11+60.85 Nk alley	-1.05	-1.05	
11+88.79	-1.11	-1.11	
12+16.73 Tangiers Court	-1.18	-1.18	
12+45.58	-1.24	-1.24	
12+74.43 Skalley	-1.30	-1.30	

	W	E			
	-1.29	-1.22	-1.18	-1.10	-1.02
	5.00	4.93	4.89	4.81	4.73
	4.99	4.60	4.64	4.65	4.38
	C 0.01	C 0.33	C 0.25	C 0.16	C 0.35
					T.P.
	-1.29	-1.22	-1.18	-1.10	-1.02
	5.00	4.93	4.89	4.81	5.00
	4.99	4.86	4.53	4.11	5.04
	C 0.28	C 0.07	C 0.34	C 0.70	F 0.04
	-0.96	-1.02	-1.22	-1.05	-1.11
	4.94	5.00	5.20	5.03	5.09
	2.82	4.99	5.09	5.06	4.99
	C 2.0	C 0.01	C 0.11	F 0.03	C 0.10
	-0.96	-1.02	-1.22	-1.05	-1.11
	4.94	5.00	5.20	5.03	5.09
	4.94	4.72	4.78	4.51	4.44
	0.0	C 0.48	C 0.44	C 0.57	C 0.27
	-1.18	-1.24	-1.30		
	5.16	5.22	5.28		
	4.84	4.22	4.28		
	C 0.32	C 1.0	C 1.0		
	-1.18	-1.24	-1.30		
	5.16	5.22	5.28		
	4.81	4.84	4.28		
	C 0.35	C 0.38	C 1.0 P. 1.		

T.P. 2.84
3.51

-0.67 = chisel cross w. side SUNSET C.T.

	W		E	
				3.987
14 + 90.71 N. Alley	-1.34		-1.34	B.M.
				-0.26
13 + 23.08 = B.C. RT.				3.46
0 + 100 W.L. STA.	-1.42		-1.42	3.20
1.4271 = 1'				4.10
				-0.90
0 + 23.18 Toulon Cr.	-1.46	0° 33.1	-1.46	4.03
				3.137
				4.03
0 + 51.23	-1.52	1° 13.1	-1.52	-0.90
				4.85
				3.95
0 + 79.28 S. Alley	-1.59	1° 53.1	-1.59	
0 + 95.28 N. Alley	-1.63	2° 16.0	-1.63	
1 + 22.78	-1.69	2° 55.2	-1.69	
1 + 50.10 Vanort Cr.	-1.75	3° 24.2	-1.75	
1 + 77.64	-1.81	4° 13.4	-1.81	
2 + 05.14 S. Alley	-1.88	4° 52.7	-1.88	
grate - 2.13				
2 + 21.14 N. Alley	-1.88	5° 15.5	-1.88	
4 + 46.20	-1.81	5° 51.3	-1.81	

Checked
to
B.C. RT.
2-15-22

AUTO
29

	W		E					
	-1.34		-1.42		-1.46		-1.52	-1.59
	5.32		4.55		4.59		4.65	4.72
	4.96		4.11		4.52		4.62	5.02
	C 0.36		C 0.44		C 0.07		C 0.03	F 0.30
	-1.34		-1.42		-1.46		-1.52	-1.59
	5.32		4.55		4.59		4.65	4.72
	4.80		3.88		4.50		4.28	4.66
	C 0.52		C 0.67		C 0.09		C 0.37	C 0.00
	-1.63		-1.69		-1.75		-1.81	-1.88
	4.76		4.82		4.88		4.94	5.01
	4.27		4.68		4.32		4.57	4.55
	C 0.09		C 0.14		C 0.54		C 0.37	C 0.46
	-1.63		-1.69		-1.75		-1.81	-1.88
	4.76		4.82		4.88		4.94	5.01
	4.23		4.27		4.32		4.23	4.16
	C 0.53		C 0.55		C 0.54		C 0.51	C 0.85
	-1.88		-1.81					
	5.01		5.76					
	4.54		5.29					
	C 0.47		C 0.47					
	-1.88		-1.81					
	5.01		5.76					
	4.48		5.24					
	C 0.53		C 0.54					

9.970 15 0.06 High

		W		E	
2 + 71.19	San Rafael	-1.74	6° 27.0	-1.74	
2 + 83.21	R	—	6° 44.2	—	POC
2 + 95.43	N. Rafael	-1.68	7° 01.3	-1.68	3.95 4.86 -0.91 4.14 3.23
3 + 20.32		-1.61	7° 37.1	-1.61	
3 + 45.41	Skalley	-1.54	8° 12.9	-1.54	
3 + 61.5	N. Skalley	-1.50	8° 35.9	-1.50	
3 + 89.28		-1.42	9° 15.5	-1.42	
4 + 17.06	Venice	-1.35	9° 55.2	-1.35	
4 + 44.96		-1.28	10° 35.0	-1.28	
4 + 72.86	Skalley	-1.20	11° 14.8	-1.20	
4 + 89.22	N. Skalley	-1.16	11° 38.1	-1.16	
5 + 17.6		-1.08	12° 18.6	-1.08	
5 + 45.98	Verona	-1.00	12° 59.1	-1.00	

30

W	-1.74	-1.68	-1.61	-1.54	-1.50
	5.69	5.63	5.56	5.49	5.45
	5.07	5.09	5.41	4.98	5.02
	C 0.64	C 0.54	C 0.15	C 0.51	C 0.41
E	-1.74	-1.68	-1.61	-1.54	-1.50
	5.69	5.63	5.56	5.49	5.45
	5.35	4.63	4.56	4.49	5.40
	C 0.34	C 1.0	C 1.0	C 1.0	C 0.25
W	-1.42	-1.35	-1.28	-1.20	-1.16
	5.37	5.30	5.23	4.43	4.39
	5.08	4.90	5.12	4.42	4.60
	C 0.29	C 0.40	C 0.11	C 0.01	F 0.21
E	-1.42	-1.35	-1.28	-1.20	-1.16
	5.37	5.30	4.51	4.43	4.39
	5.14	4.88	3.40	3.43	3.39
	C 0.25	C 0.42	C 1.11	C 1.0	C 1.0
W	-1.08	-1.00			
	4.31	4.23			
	4.06	4.29			
	F 0.15	F 0.06			
E	-1.08	-1.00			
	4.31	4.23			
	3.31	4.27			
	C 1.0	F 0.04			

	W		E
			3.23 T
S+76.52 E.C.	- 0.92	13° 42.75	- 0.92

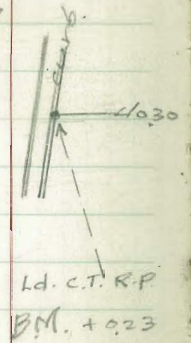
	W	E	
			3.23 T
Verona Ct.			3.23
			4.35
			- 1.12
Sidewalk	3.23	3.23	5.00
	4.26	4.27	3.88
	- 1.03	- 1.04	5.18
			- 1.30
			- 130 = CT. B.M.

W	- 0.92
	4.15
	4.32
F	0.17

E	- 0.92
	4.15
	3.87
C	0.28

S.W. STA.

	N	E	S
Mission		Top MH	
0+0 E.h. Blvd.	-1.70	-1.70	-1.00
			-0.51
			4.97
			4.46
0+16.64	-0.90	-1.08	-0.86
0+22.64	-0.64	-0.86	-0.90
0+36.64	-0.55	-0.80	-0.65
0+46.86 = B.C.	-0.66	-0.91	-0.76
0+93.51 = P.I.	-0.75		-0.85
			OUT
1+10.21	-0.75	-0.95	-0.75
			Id. C.T. W Auto Bumper
1+47.65	-0.56	-0.78	-0.62
1+85.16 = End	-0.37	-0.62	-0.47



N	-1.10	-0.90	-0.64	-0.55	-0.66	-0.75	-0.75
	5.08	4.88	4.60	4.53	4.64	4.73	5.21
	✓	3.88	3.60	5.00	3.64	4.98	4.21
		C 1.0	C 1.0	F 0.47	C 1.0	F 0.25	C 1.0
							T.P.

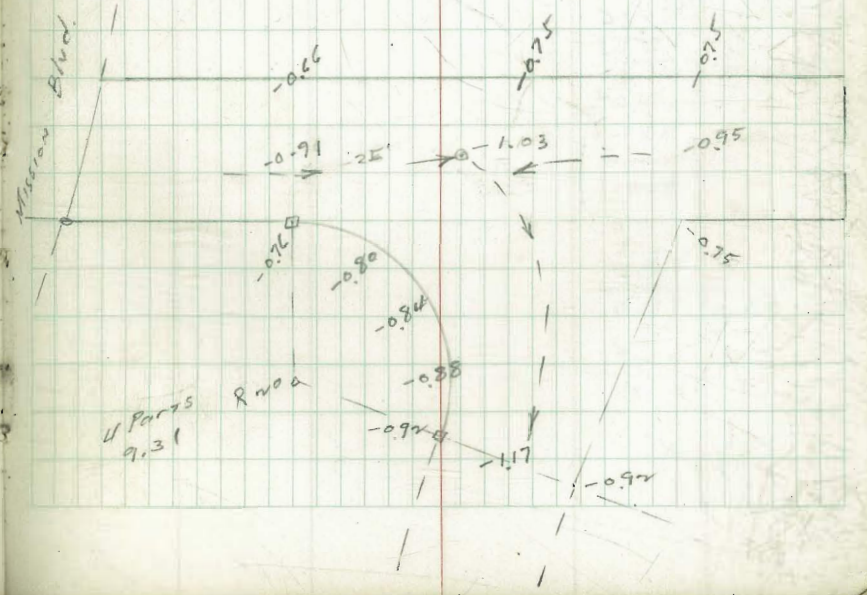
S	-1.0	-0.86	-0.70	-0.65	-0.76	-	-0.75
	4.98	4.84	4.68	4.63	4.74	-	5.21
		3.96	4.08	5.04	4.96	-	4.30
		C 0.88	0.0	F 0.41	F 0.24	-	C 0.91

N	-0.56	-0.37
	5.02	4.83
	4.02	4.91
	C 1.0	F 0.08

INDEXED
W.L.K.
OCT 22 1948

S	-0.64	-0.47
	5.08	4.93
	4.34	4.58
	C 0.74	C 0.35

	R=70			
S	-0.80	-0.84	-0.88	-0.92
	4.78	4.83	4.86	4.90
	5.26	5.17	5.27	5.07
	F 0.48	F 0.30	F 0.41	F 0.17



	N	E	S	
Σ STA.				7.19 2.15 9.34 2.37
0 + 0 E.H. Strandway	6.88	4.52	6.88	6.97 1.54
0 + 10	6.21	6.01	6.21	8.51 6.58
0 + 20	5.48	5.28	5.48	1.93 3.23
0 + 50	3.20	3.0	3.20	5.16
0 + 70	1.86	1.66	1.86	
0 + 90	0.89	0.69	0.89	
1 + 10	0.28	0.08	0.28	
1 + 30	0.04	-0.16	0.04	
1 + 65.26	-0.07	-0.27	-0.07	
1 + 84.8 W.H. M. Blvd	-0.13	-0.33	-0.13	
West Cutter		-0.59		

N	6.88	6.21	5.48	3.20	1.86	0.89	0.28
	1.63	2.30	3.03	5.31	3.30	4.27	4.88
	1.62	1.59	0.79	4.70	2.93	4.14	3.88
	0.01	0.71	0.24	0.61	0.37	0.13	0.10

S	6.88	6.21	5.48	3.20	1.86	0.89	0.28
	1.63	2.30	3.03	5.31	3.30	4.27	4.88
	1.51	1.57	2.19	4.31	2.62	4.07	3.88
	0.04	0.73	0.84	0.10	0.68	0.18	0.10

N	0.04	-0.07	-0.13				
	5.12	5.23	5.29				
	5.05	4.23	4.29				
	0.07	0.10	0.10			-0.59	5.75

S	0.04	-0.07	-0.13				
	5.12	5.23	5.29				
	5.22	4.23	4.29				
	0.10	0.10	0.10				

Sewer Lat. #1

1.16
7.35
1.71
5.64

5.16
5.05 S
0.11 Pav

0.11 = 1430-74

0.0

5.16
4.97

0.19 = N1 Pav.

0.19
0.0

3-12-42

DENNIS Co.

Pay. alley Blk 163 Mission Beach

		N	S	San Juan Bayside Lark Spite Tel. pole
0 + 0 E.L.	Mission Blvd.	-0.45	-0.65	-0.45
0 + 10	Break	-0.20	-0.40	-0.20
0 + 20	"	-0.20	-0.40	-0.20
0 + 30	"	-0.25	-0.45	-0.25
0 + 85		-0.90		-0.90
1 + 40	Break	-1.54	-1.74	-1.54
1 + 80		-1.64		-1.64
2 + 20		-1.74	-1.94	-1.74
2 + 38.46	n.w. Bayside	-1.86	-2.00	-1.90

sewer lat.

①

$$\begin{array}{r} -4.58 \\ 7.98 \\ \hline 5.18 \\ C 2.80 \end{array}$$

②

$$\begin{array}{r} -4.78 \\ 8.18 \\ \hline 4.95 \\ C 3.23 \end{array}$$

③

$$\begin{array}{r} -2.96 \\ 6.36 \\ \hline 4.46 \\ C 1.90 \end{array}$$

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Indexed
PH

	-0.45	-0.20	-0.20	-0.25	-0.90
	3.85	3.60	3.60	3.25	4.30
		3.47	3.27	3.31	4.17
		C 0.13	C 0.33	C 0.34	C 0.13
	-0.45	-0.20	-0.20	-0.25	-0.90
	3.85	3.60	3.60	3.25	4.30
		3.30	3.25	3.83	4.50
		C 0.30	C 0.35	F 0.18	F 0.20
N	-1.54	-1.64	-1.74	-1.86	
	4.94	5.04	5.14	5.26	
	5.05	4.74	4.61		
	F 0.11	C 0.20	C 0.53		
S	-1.54	-1.64	-1.74	-1.90	
	4.94	5.04	5.14	5.30	
	3.94	5.35	5.21		
	C 1.0	F 0.31	F 0.07		

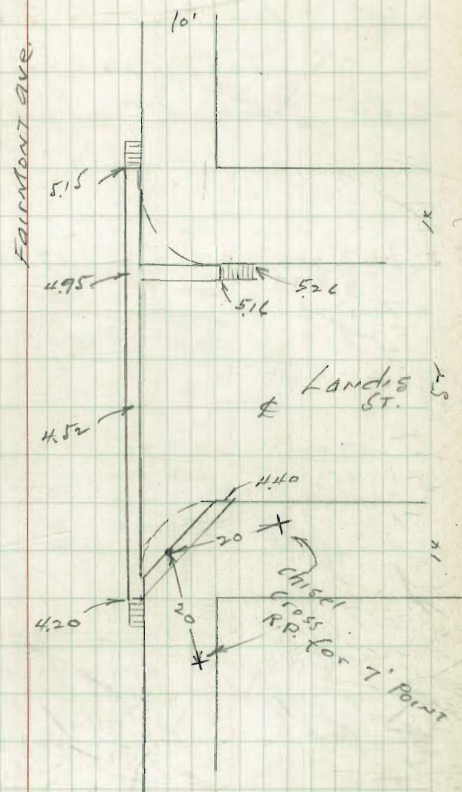
Grades for drain at
Fairmont & Landis for St. Dept.

Moore
Walker
Hazard
Reed

9.99 = assumed H.I.

6-18-47.

Indexed
Ⓟ



9-17-44. Pacific Beach School

TENNIS CTS

Lots 34 to 40 BIK 16-2 P.B.

70.37 B.M.
 1.55 P. 3 L
 71.92

67.4	67.7	68.0
4.52	4.22	3.92
4.14	3.69	3.10
0.38	0.53	0.82

67.1	67.4	67.7
4.82	4.52	4.22
4.80	4.52	4.10
0.04	0.0	0.12

66.8	67.1	67.4
5.12	4.82	4.52
6.00	5.28	4.22
0.88	0.46	0.50

Sub. grade 10-5-42

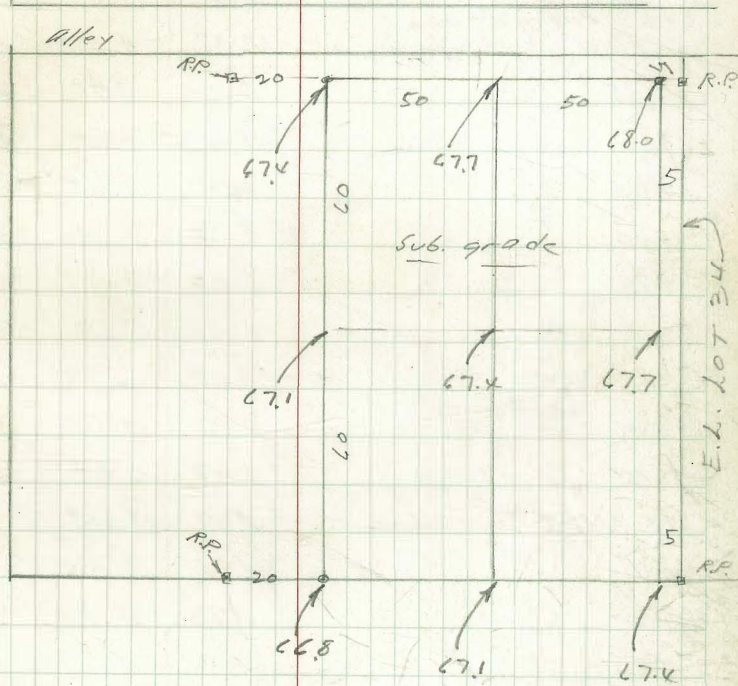
67.40	67.70	68.00	70.37 B.M.
4.31	4.01	3.71	1.34
			71.71

67.10	67.40	67.70
4.61	4.31	4.01

66.80	67.10	67.40
4.91	4.61	4.31

Indexed

Gresham



Emerald

E.L. LOT 34

Walker Hazard
Hazard
7-8-44

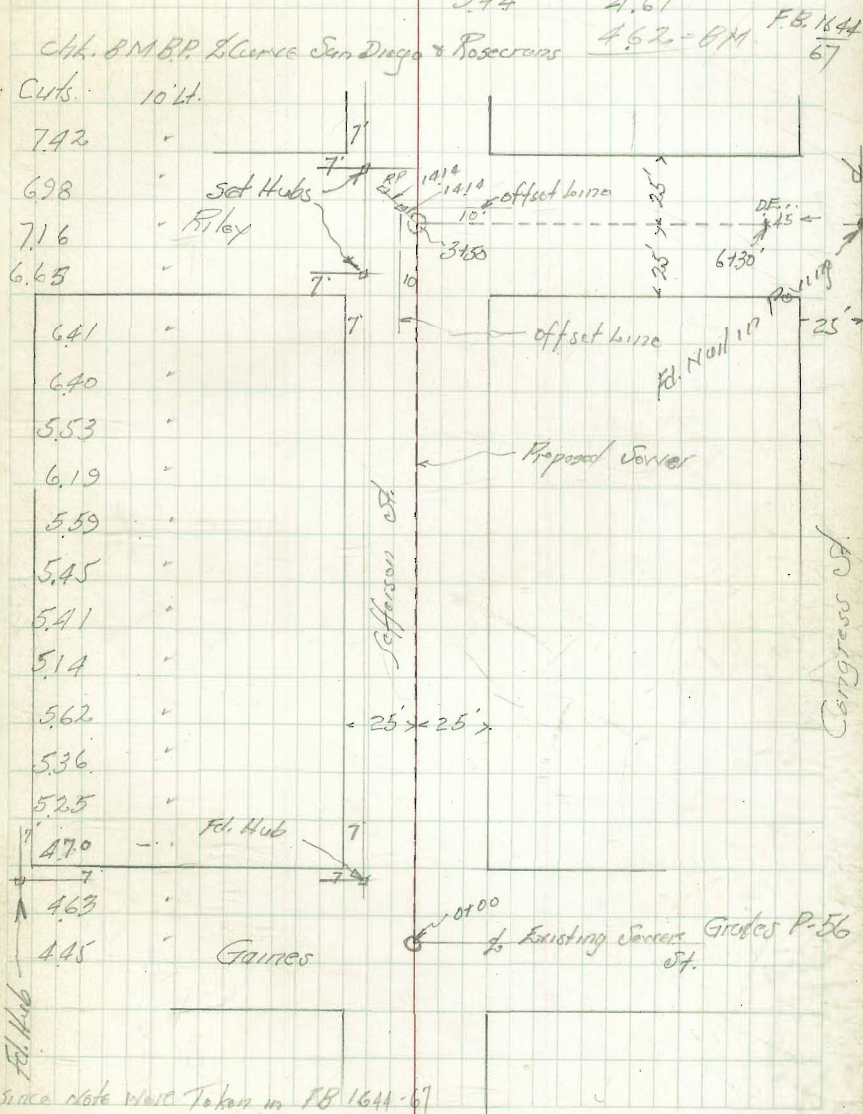
Grades Sewer in Jefferson St.
from Gaines to Riley and in Riley
from Jefferson to Congress

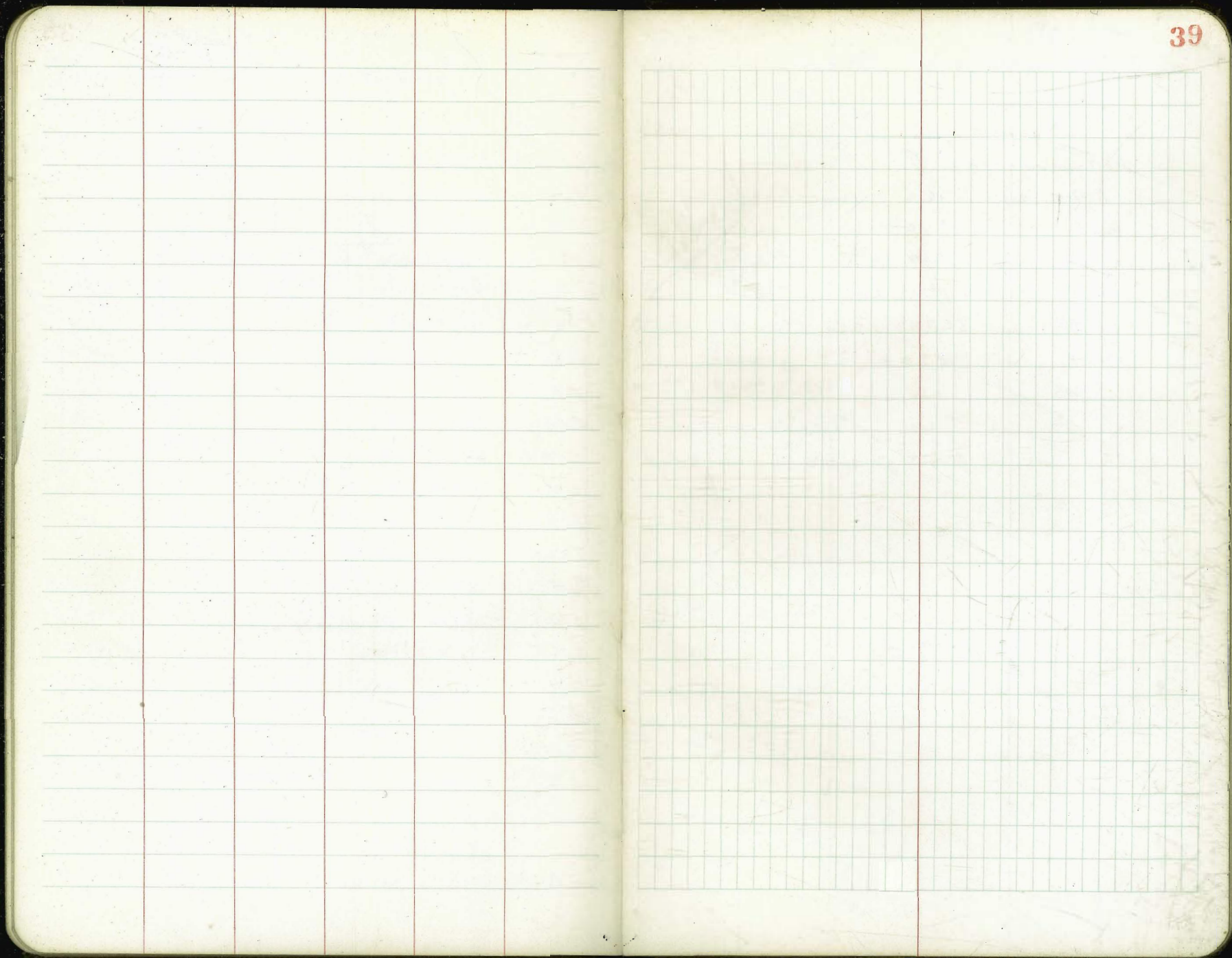
FB 1644 -67	3.67	7.91	4.24	3.77	3.77	SW. R.P. Spike Congress & Gaines Rim MH Gaines & Jefferson
TR 0+00 = Existing MH Gaines Flow	4.33	8.60	4.14	3.77	3.77	
+35			12.87	-4.27	-4.27	
+7.0			5.20	3.40	-4.02	
1705			5.40	3.20	-3.78	
140			4.27	3.63	-3.53	
175			5.24	3.36	-3.29	
2710			5.23	3.37	-3.04	
745			5.00	3.60	-2.80	
2780			5.62	2.98	-2.55	
3715			4.82	3.78	-2.31	
750 = MH of Riley & Jefferson			5.07	3.53	2.06	
+85			4.97	3.63	-1.82	
4720			4.76	3.84	-1.57	
+55			4.79	3.81	-1.33	
794			4.06	4.54	-1.08	
5725			4.05	4.55	-0.81	
760			3.94	4.66	-0.59	
795			4.24	4.36	-0.34	
6730 = End			4.07	4.53	-0.10	
TR	3.56	7.99	4.01	4.59	+0.14	2 Nail & Congress & Riley
chk. Sloping 8M			3.75	4.24		
" Rim MH of Gaines & Congress			4.71	3.28	MH. Raised	

Const 7/1944 799
623 Ben Smith 10.05 4.17

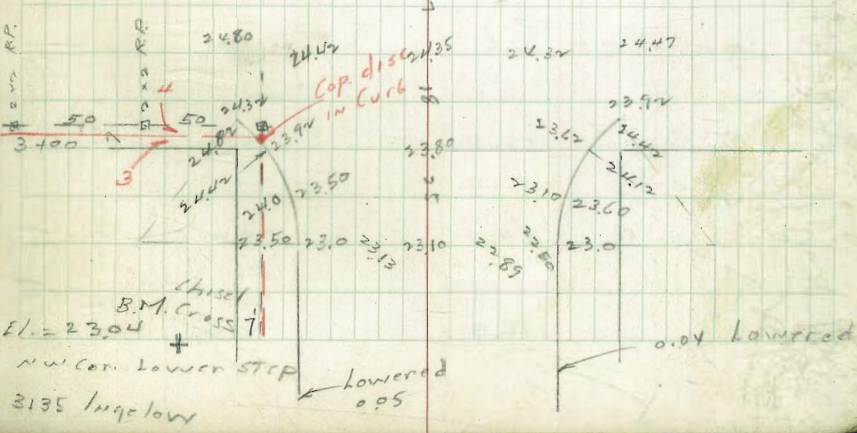
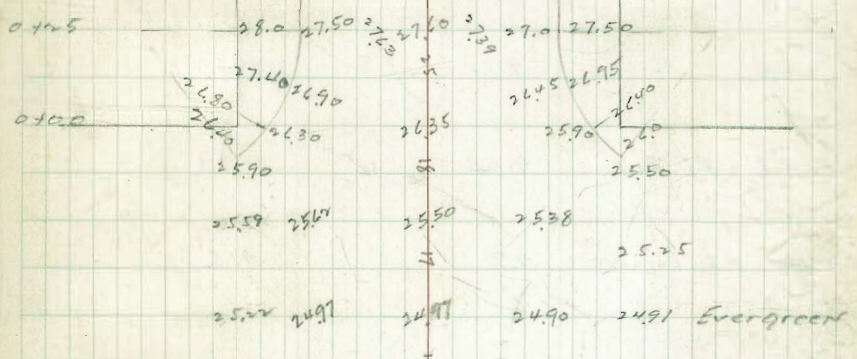
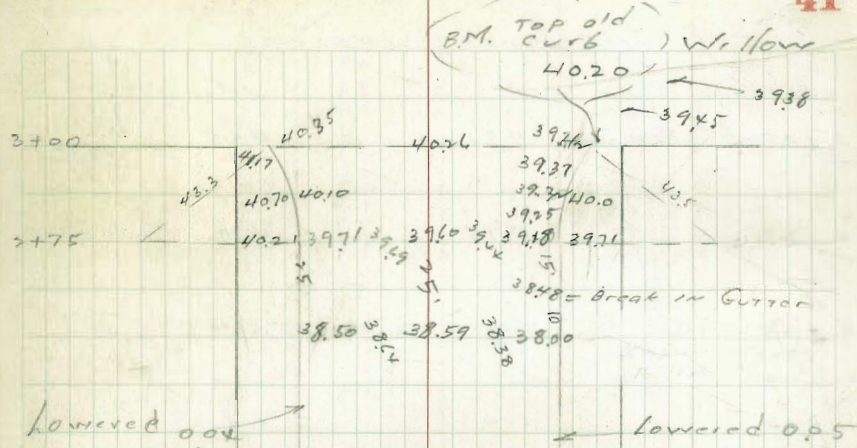
Indexed

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Ingelow St. Pav.



lowered 0.04
 lowered 0.95
 3135 Ingelow

Ingleton Grading		Rough Grades	
			2.34
			9.91
	5	N	13.25
			1.61
0 + 100 EC Rosecrans	4.31	4.27	11.64
			12.27
			23.91
0 + 23	4.75	4.70	
0 + 50	5.3	5.2	
1 + 00	6.2	6.1	
1 + 50	7.20	7.1	
2 + 00	8.10	8.0	
2 + 48 = P.C. Ret.	9.08	8.90	
2 + 73 EL Locust	9.7	9.5	
0 + 100 W/L Locust	11.6	11.0	
0 + 25 P.C. Ret.	12.5	12.0	
0 + 75	14.7	14.2	
1 + 25	15.9	16.4	

S	4.3	4.2	5.3	6.2	7.2	8.1	9.1
	9.0	8.5	8.0	7.1	6.1	5.2	4.2
C 0.3	8.7	9.0	8.8	7.4	6.3	4.8	3.6
		F 0.5	F 0.8	F 0.3	F 0.2	C 0.4	C 0.6
N	4.3	4.7	5.2	6.1	7.1	8.0	8.9
	9.0	8.6	8.1	7.4	6.2	5.3	4.4
C 0.4	8.6	8.9	8.5	7.1	6.2	4.9	3.8
		F 0.3	F 0.4	C 0.1	0.0	C 0.5	C 0.2
S	9.7	11.5	12.5	14.7	16.9		
	3.6	12.3	11.6	9.2	7.0		
	3.1	11.1	9.9	6.9	5.0		
C 0.5		C 1.2	C 1.5	C 2.3	C 2.0		
N	9.5	11.0	12.0	14.2	16.4		
	3.8	12.9	11.9	9.7	7.5		
	3.1	11.8	10.8	9.2	6.3		
C 0.7		C 1.1	C 1.1	C 0.5	C 1.2		

T.P. Chisel Grass
 Nut Con. Lower 23.91
 3135 / up low STEP 0.84
 N 23.07

1 + 75	19.1	18.6	33.80 9.72 43.52 3.31 40.21 40.20 0.01
2 + 25	21.3	20.8	40.21
2 + 75 P.C. Ret.	23.50	23.0	0.01
3 + 00 E.L. Evergreen	24.44	24.14	
0 + 00 W.L. Evergreen	26.80	26.40	
0 + 25 P.C. Ret.	28.0	27.50	
0 + 75	30.4	30.0	
1 + 25	32.9	32.4	
1 + 75	35.3	34.8	
2 + 25	37.8	37.3	
2 + 75 P.C. Ret.	40.21	39.71	
3 + 00 E.L. Willow		40.20	

S	19.1 4.8 3.4 C 1.4	21.3 2.6 1.3 C 1.3	23.5 10.7 9.4 C 1.3	24.4 9.8 8.7 C 1.1	26.8 7.4 5.8 C 1.6	28.0 6.2 4.8 C 1.4
N	18.6 5.3 3.7 C 1.6	20.8 3.1 1.5 C 1.6	23.0 11.2 10.0 C 1.2	24.1 10.1 9.1 C 1.0	26.4 7.8 6.1 C 1.7	27.5 6.7 5.0 C 1.7
S	30.4 3.8 2.0 C 1.8	32.9 10.6 9.0 C 1.6	35.3 8.2 6.5 C 1.7	37.8 5.7 4.2 C 1.5	40.2 3.3 2.3 C 1.0	41.1 2.4 2.0 C 0.4
N	30.0 4.2 2.0 C 1.2	32.4 1.8 0.4 C 1.4	34.8 8.7 7.3 C 1.4	37.3 6.2 5.5 C 0.7	39.7 3.8 3.7 C 0.1	40.20 3.20 3.0 C 0.1

Inglewood St. 6" WATER MAIN

Station	Material	Length	Cost	Total
Existing end Pipe	F.H.		3.30	
0 + 40	E.C. ROSECRANS	?	11.04	14.38
			0.03	14.35
0 + 93		1.80	12.27	26.62
			0.08	26.54
0 + 50		2.30	12.22	38.76
			0.45	38.31
1 + 00		3.30	5.21	43.52
1 + 50		4.20		
2 + 00		5.20		
2 + 48 = F.H. PC.		6.10		
2 + 73 EL LOCUST		6.50		
2 + 98 = 2" x 6" Cross		7.00	5.1	7.0
			7.5	
3 + 43 W.L. LOCUST		8.50	6.9	7.0
			3.2	3.5
3 + 68 PC. CURB		9.40	C3.7	C3.9
4 + 18		11.6		
4 + 68		13.8		
5 + 18		16.0		
5 + 68		18.2		
6 + 18 PC. CURB		20.40		
6 + 78 R. EVERGREEN		22.20		
7 + 18 PC. CURB		24.90		
7 + 88		27.3		
8 + 38		29.7		
8 + 88		32.2		
9 + 38		34.6		
9 + 88 = PC CURB		37.0		
10 + 13 EL WILLOW		?		

Indexed to

Cross 44

1.8	2.3	3.3	4.2	5.2	6.1	6.5	7.0	8.5
12.6	12.1	11.1	10.2	9.2	8.3	7.9	7.4	5.9
10.4	10.0	8.9	7.8	6.8	5.6	5.0	3.9	2.9
C2.7	C2.1	C2.2	C2.4	C2.4	C2.7	C2.9	C3.5	C3.0
9.4	11.6	13.8	16.0	18.2	20.4	22.2	24.9	
5.0	2.8	12.8	10.2	8.4	6.2	4.4	13.8	
2.7	0.0	9.6	7.8	5.8	3.8	1.4	10.8	
C2.8	C2.8	C3.2	C2.8	C2.6	C2.4	C3.0	C3.0	
27.3	29.7	32.2	34.6	37.0				
11.4	9.0	6.5	4.1	6.5				
8.7	6.5	4.1	1.6	4.0				
C2.7	C2.5	C2.4	C2.5	C2.5				

Senior Lat.

#1	17.70		
	8.92		
#2	3.18		
	C5.72		
#3		11.60	
		8.12	
#4		C8.88	4.16
			10.22
#5	3.98		5.29
	10.40		C4.93
	5.14		
#6	C5.26	3.05	
		11.33	
		6.42	
#7		C4.91	2.22
			12.16
#8	2.17		7.88
	12.26		C4.78
	7.68		
#9	C4.58	1.26	
		13.12	
		9.22	
		C3.90	0.08
			14.30
			9.97
			C4.23
	14.38		
	9.08		
	5.30		
	5.15		
	C0.15	06 at F.H.	

1-12-43. Grades Top Ret. Wall
2074 & B Shops

0 + 78 = SE Car. Shops	71.37	3.66 ✓
	71.57	3.46 ✓
+50	72.03	3.00 ✓
	72.49	2.54 ✓
+50	72.95	<u>2.08 ✓</u> T.P.
	73.41	2.39 ✓
+50	73.87	1.93 ✓
	74.33	1.47 ✓
+46.5 = NE Car. Shops	74.76	<u>1.04 ✓</u> T.P.
+ 98	75.23	7.91
		4.03
		3.88

+ 0.92%

SEBP north & B S.

70.23
 4.80
 75.03
 6.30
 68.73
 7.07
 75.80
 1.44
 74.36
 8.78
 83.14

Indexed
 JB

Normal St. Parking Curbs **M**
 Univ. to Park Blvd. Curb grades
 3-9-43.

307.17 BM
 Blaine

$\frac{5.38}{6.31}$
 $\frac{6.47}{-0.16}$

$\frac{5.57}{6.12}$
 $\frac{6.47}{-0.35}$

$\frac{5.50}{6.19}$
 $\frac{6.47}{-0.28}$

W cb

E cb

0 + 00 13'R

5.25 $\frac{6.44}{6.47}$
 $\frac{6.47}{-0.22}$

5.35 $\frac{6.34}{6.47}$
 $\frac{6.47}{-0.13}$

0 + 47.69

4.80 $\frac{6.89}{6.76}$
 $\frac{6.76}{+0.13}$

4.92 $\frac{6.77}{6.92}$
 $\frac{6.92}{-0.15}$

0 + 95.35

4.35 $\frac{7.34}{7.15}$
 $\frac{7.15}{+0.19}$

4.50 $\frac{7.19}{7.23}$
 $\frac{7.23}{-0.04}$

1 + 43.02

3.90 $\frac{7.79}{7.83}$
 $\frac{7.83}{-0.04}$

4.07 $\frac{7.62}{7.82}$
 $\frac{7.82}{-0.20}$

1 + 90.7 = R

3.45 $\frac{8.24}{8.15}$
 $\frac{8.15}{+0.09}$

3.65 $\frac{8.04}{8.15}$
 $\frac{8.15}{-0.11}$

$\frac{3.63}{8.06}$
 $\frac{8.15}{-0.09}$

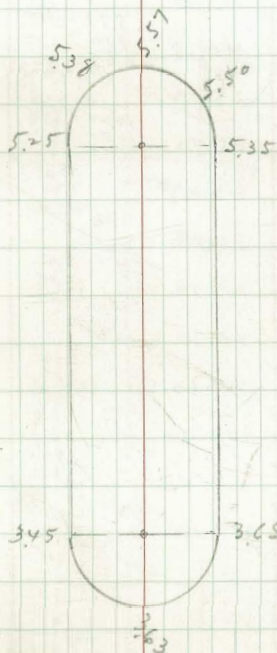
~~Indexed~~
 98

P. 50

47

311.69 π from P. 50

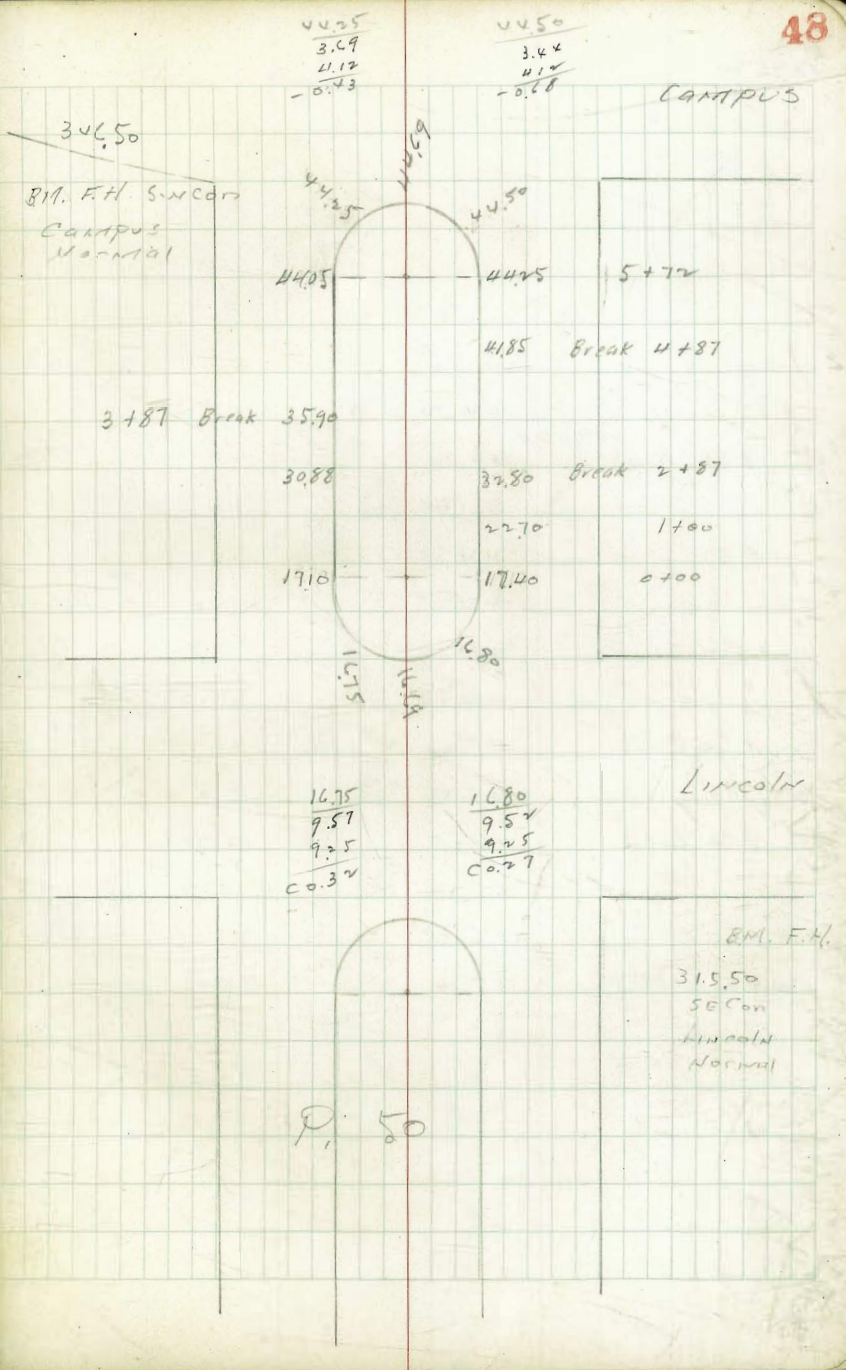
Blaine



307.7 BM EA
 SE Cor
 Blaine
 Normal

Univ. Ave

	W Curb		E Curb
315.50			
10.87			
326.37			
0.19			
326.13			
10.83			
336.96		44.69	
0.59		3.25	
336.37		4.12	
11.57		-0.87	
347.94			
5 + 72	44.85	3.89	3.69
		4.12	4.12
5 + 29.5	42.10	-0.23	5.84
			5.44
4 + 87	40.15	7.79	43.05
Break on East		+0.40	5.22
		7.10	6.09
4 + 37	38.02	9.02	41.85
		9.01	6.40
3 + 87	35.90	12.04	39.59
Break on West		-0.39	8.35
		11.57	8.77
		0.47	10.62
3 + 37	33.39	3.57	37.32
		3.33	10.90
2 + 87	30.88	6.08	35.06
Break on East & West		+0.24	1.90
		5.74	2.51
+ 50	29.90	7.86	32.80
		7.49	4.69
		+0.37	-0.53
2 + 00	26.70	10.26	30.80
		10.03	8.86
		+0.23	9.54
1 + 50	24.30	2.02	28.10
		1.82	0.66
		+0.18	0.92
1 + 00	21.90	4.44	25.40
		4.31	3.42
		+0.11	3.73
0 + 50	19.50	6.84	22.70
		6.81	-0.11
		+0.01	6.27
0 + 00 = R	317.10	9.22	20.05
		9.25	6.48
		0.03	-0.21
		16.69	8.92
		9.63	9.25
		9.25	-0.33
		+0.38	

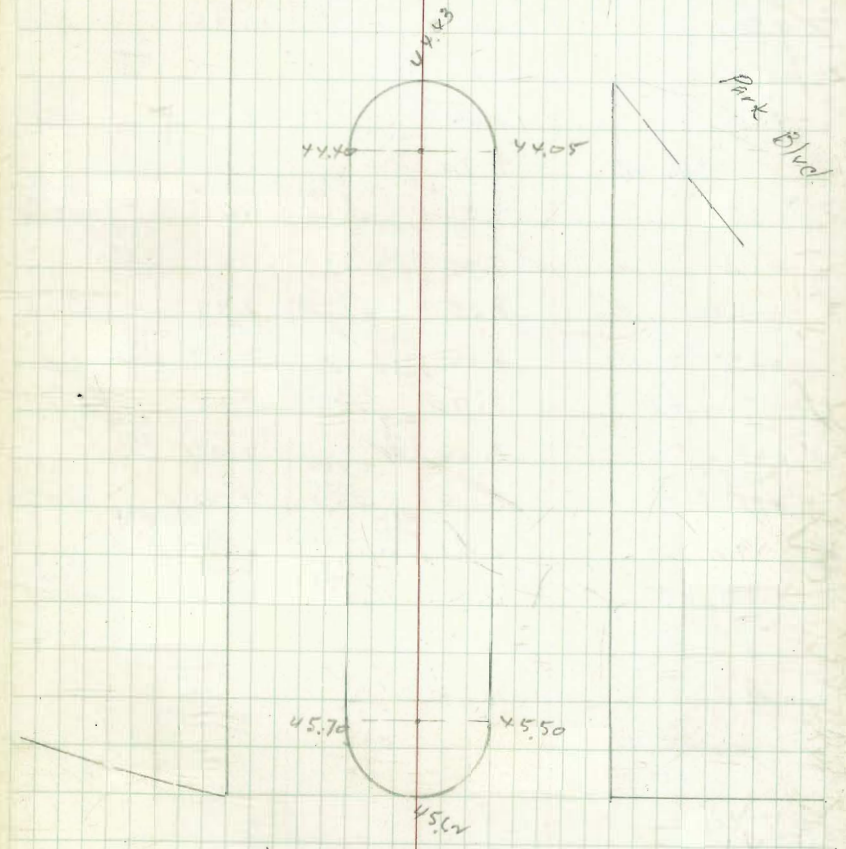


346.50
 3.57
 350.07
 5.56
 344.51
 4.77
 349.78

43.93 Par
 44.43
 4.85
 1.93
 -0.08

	W 26		F 26	
	44.40	4.88 4.93 -0.05	44.05	5.23 4.93 +0.30
6 + 06.2 = 13' R	44.30	4.98 4.95 +0.03	43.80	5.48 4.80 +0.68
5 + 50 Break	44.40	4.86 4.94 -0.08	43.93	5.35 4.61 +0.74
5	44.53	5.54 5.55 -0.01	44.06	6.01 5.64 +0.37
+ 50	44.65	5.42 5.00 +0.42	44.19	5.88 5.37 +0.51
4	44.77	5.30 4.97 +0.33	44.32	5.75 5.37 +0.38
+ 50	44.88	5.19 5.04 +0.15	44.46	5.61 5.14 +0.47
3	45.00	5.07 5.05 +0.02	44.59	5.48 5.01 +0.47
2 + 50 Break	45.13	4.92 4.98 -0.06	44.72	5.35 4.90 +0.45
2	45.25	4.82 5.13 -0.31	44.85	5.22 5.07 +0.15
1 + 50 Break	45.40	4.67 4.79 -0.12	45.07	5.00 5.07 -0.07
1	45.55	4.52 4.70 -0.18	45.28	4.79 5.20 -0.41
0 + 50	45.70	4.37 4.75 -0.38	45.50	4.57 4.75 -0.18
0 + 00 = 13' R				

45.62
 4.45
 4.75
 -0.30

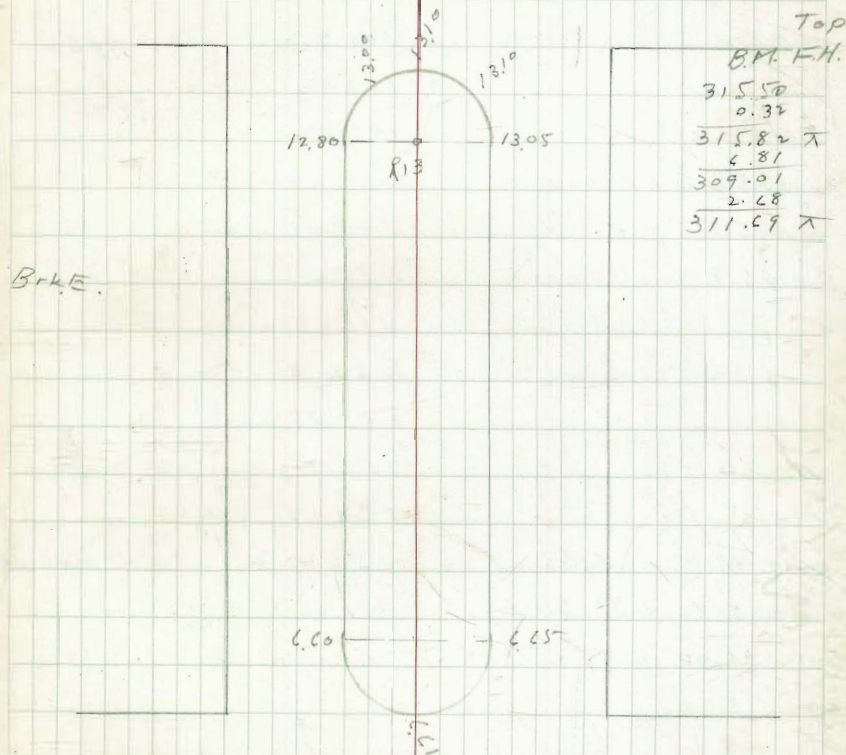


CAMPUS

	W c.b.		E c.b.	
0 + 100 = R	12.80	3.02 2.95 +0.07	13.05	2.77 2.95 -0.18
+ 50	12.07	3.75 3.68 +0.07	12.35	3.07 3.37 +0.10
1	11.35	4.47 4.45 +0.02	11.65	4.17 4.17 0.0
+ 50	10.64	5.20 5.15 +0.05	10.95	4.87 5.16 -0.29
W Bk. W.	9.90	5.92 5.90 +0.02	10.25	5.57 5.55 +0.02
+ 35	9.51	6.31 6.08 +0.23	9.75	6.07 6.20 -0.13
+ 76.25	9.06	6.76 6.63 +0.13	9.25	6.57 6.70 -0.13
3 + 17.50	8.61	7.16 7.16 +0.05	8.75	7.07 6.81 +0.26
+ 58.75	8.16	7.53 3.53 +0.10	8.25	7.44 3.24 +0.20
4 + 100 W + E	7.70	3.99 3.77 +0.22	7.75	3.94 3.76 +0.18
+ 43	7.42	4.27 3.79 +0.48	7.47	4.22 4.01 +0.21
+ 86	7.15	4.54 4.41 +0.13	7.20	4.49 4.44 +0.05
5 + 29	6.87	4.82 4.80 +0.02	6.94	4.77 4.43 +0.34
5 + 72 = R	6.60	5.09 5.08 +0.01	6.65	5.04 5.08 -0.04
		6.61		
		5.08		
		5.08		
		0.0		

13.00	13.10	13.10
2.82	2.72	2.72
2.95	2.95	2.95
-0.13	-0.23	-0.23

Lincoln



CONST. 6" WATER MAIN, CASS
Turquoise to Archer

Station	Description	Grade	St. Cass SE 1/2 R curb
0+00	N.L. Turquoise	133.9	134.85 12.71
+50		136.18	147.56 0.09
1		138.47	147.47 11.40
+50		140.76	158.87 0.38
2		143.06	158.49 9.15
+50		145.34	167.64
3	+05.8 S.L. Agate	147.9 ✓	
+35.8	= Cross	149.06	
3	+85.8 N.L. Agate	151.0	
4		151.48	
+50		153.18	
5		154.88	
+50		156.57	
6		158.27	
+40.94	= F.H.	159.47	163.05 = curb grade
6	+50.94 = S.L. Archer	160.0	
6	+75.94 = Cross	161.0	

Cass = 80' wide 14' cbs. Water line 10' E of E
 Agate = " " Cross 10' S of E
 Archer = 70' wide - 15' cbs Cross 10' S of
 " F.H. S.E. Cor. 10' S of S.b.

C Moore
Somerset
W. Moore
6-23-43 51

Turquoise	C Moore	Somerset	W. Moore	43.0	45.3	47.9
320.4	36.4	38.5	40.7	43.0	45.3	47.9
13.7	11.4	9.1	6.9	4.6	13.6	11.0
13.5	8.4	6.8	4.0	1.7	10.8	8.1
C 20.2	C 5.0	C 2.3	C 2.9	C 2.9	C 2.8	C 2.9
on p 109 END						
49.1	57.0	51.5	53.2	54.9	56.6	58.3
9.8	7.9	7.4	5.7	12.7	11.0	9.3
6.7	4.2	3.7	2.0	8.5	6.2	5.2
C 3.1	C 3.7	C 3.7	C 3.7	C 4.2	C 4.8	C 4.1
59.7	60.0	61.0				
Not Set	7.6	6.6				
	3.6	3.7				
	C 4.0	C 4.9				
163.05	cb. grade at F.H.					
4.59						
3.79						
C 0.80						

Work done by City Water Dept.

~~Indexed~~
9/5

7-21-03

Reset Sewer grades on Hancock bet.
Rosecrans & Gaines 15' offset SWly of L.

3+25	Bet. Rosecrans & Gaines Alley on Hancock	M.H.	-7.02
3+50			-6.94
3+75			-6.87
4			-6.80
4+25			-6.72
4+50			-6.65
4+75			-6.57
5+00	Hancock & Gaines	M.H.	-6.50

Stakes
offset
10' wly.

0+00	Nly Kresta & Alley	M.H.	-8.00	-8.14
3+25	M.H. A (above)		-7.02	-7.1
5+00	" " "		-6.50	
8+50	M.H. A & Gaines & Moore		-5.25	

Next page

450 B.M. Top RR Iron Can SE. Greenwood
5.25 Hancock

52

9.75	-7.02	-6.92	-6.87	-6.80	-6.72
4.79	13.73	13.65	13.58	13.51	13.43
4.96 (T.P.)	4.39	4.62	4.36	4.16	4.11
1.75					
6.71	C9.32	C9.03	C9.22	C9.35	C9.32

-6.65	-6.57	-6.50
13.36	13.28	13.21
4.27	4.38	4.43
C9.07	C8.90	C8.78

T.P. 4.96								
2.41	M.H.							
H.I. 7.37	-8.10	-8.07	-7.99	-7.91	-7.84	-7.76	-7.69	
4.85	14.51	14.44	14.36	14.28	15.21	15.13	15.06	
T.P. 4.54	2.96	3.96	2.20	3.86	4.65	5.12	4.88	
3.85	C11.55	C10.48	C12.10	C10.42	C10.56	C10.01	C10.18	
H.I. 6.37								
4.01								

2.36	-7.62	-7.54	-7.46	-7.39	-7.31	-7.24
4.72	14.99	14.91	14.83	14.76	14.68	14.61
7.08	4.81	4.72	4.70	4.63	3.75	3.30
2.13	C10.18	C10.19	C10.13	C10.53	C10.93	C9.31

4.95 T.P. above
4.57 -7.16 = Ex. M.H.
9.52 14.53 Levels backed up.
5.04
4.50 = B.M. 14.53
above 0.0

Line = 0+00 to M.H. 3+25 which was constructed
2' to far EAST.

also fd. FL of 7615 M.H. 0.14 low

So have lowered grade of M.H. at 0+00
0.14 9/50.

Reset Sewer grades from P. 54
15' offsets

5	+00	M.H. Hancock Gaines	- 6.50	4.96 2.94 7.90 - X 4.77 3.13 5.03 8.16 - X
	+25		- 6.44	
	+50		- 6.34	
	+75		- 6.27	
6			- 6.20	
	+25		- 6.12	
	+50		- 6.05	
	+75		- 5.97	
7			- 5.90	
	+25		- 5.82	
	+50		- 5.75	
	+75		- 5.67	
8			- 5.60	
	+25		- 5.52	
8	+50	M.H. Moore Gaines	- 5.45	
	+75		- 5.37	
9			- 5.30	
	+25		- 5.22	
	+50		- 5.15	
	+75		- 5.07	
10			- 5.00	
	+25		- 4.92	
	+50		- 4.85	
	+75		- 4.77	

OVER

	- 6.50	- 6.44	- 6.34	- 6.27	- 6.20	- 6.12	- 6.05
	14.37	14.24	14.17	14.10	14.02	13.95	13.95
	5.43	5.01	5.35	5.37	5.26	5.04	5.04
	C 8.89	C 9.23	C 8.82	C 8.73	C 8.76	C 8.91	C 8.91
	- 5.97	- 5.90	- 5.82	- 5.75	- 5.67	- 5.60	- 5.52
	13.87	13.80	13.72	13.65	13.57	13.50	13.42
	4.94	4.84	4.97	4.95	5.23	5.42	5.31
	C 8.93	C 8.96	C 8.75	C 8.70	C 8.34	C 8.09	C 8.11
M.H.	- 5.45	- 5.37	- 5.30	- 5.22	- 5.15	- 5.07	- 5.00
	13.35	13.27	13.20	13.12	13.04	12.96	12.88
	5.14	5.27	5.12	4.83	5.03	5.02	5.10
	C 8.21	C 8.00	C 8.08	C 8.29	T.P. C 8.48	C 8.21	C 8.00
	- 4.92	- 4.85	- 4.77				
	13.08	12.01	12.93				
	5.24	5.24	5.26				
	C 7.64	C 7.57	C 7.47				

816-7

11		- 4.70
+25		- 4.22
+50		- 4.55
+75		- 4.47
12+00	4 90° Rt. Jefferson M.H. 2 Gaines	- 4.40
+25		- 4.22
+50		- 4.05
+75		- 3.87
13+00		- 3.70
+25		- 3.52
+50		- 3.35
+75		- 3.17
14+00		- 3.00
+25		- 2.82
+50		- 2.65
+80	D.E.	- 2.44

816 X

✓ 4.42

3.74 El. Sub

13+50

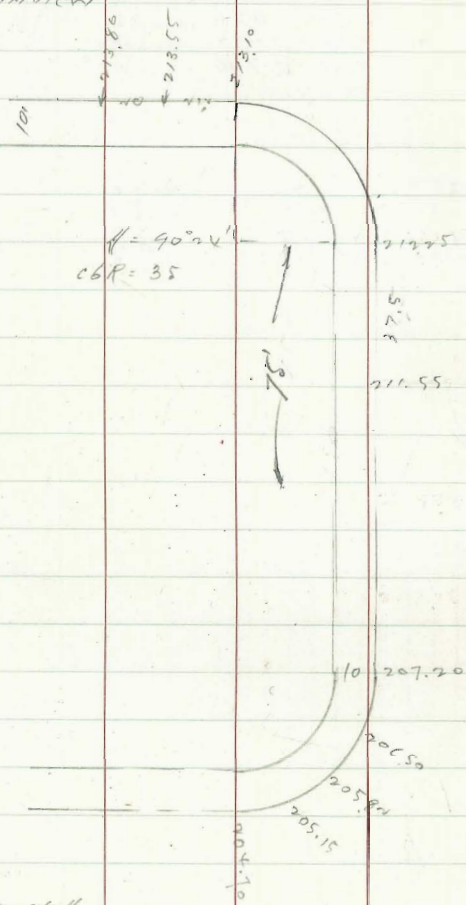
- 4.70	- 4.62	- 4.55	- 4.47	- 4.40	- 4.22
12.86	12.78	12.71	12.63	12.56	12.38
5.52	5.26	5.39	5.22	4.80	4.73
C 7.32	C 7.52	C 7.32	C 7.37	C 7.76	C 7.65

- 4.05	- 3.87	- 3.70	- 3.52	- 3.35	- 3.17
12.21	12.03	11.86	11.68	11.51	11.33
4.80	4.68	4.60	4.52	4.42	4.55
C 7.41	C 7.35	C 7.26	C 7.16	C 7.09	C 6.78 ✓

- 3.00	- 2.82	- 2.65	- 2.44
11.10	10.96	10.81	10.60
4.42	4.15	3.67	4.51
C 6.72	C 6.83	C 7.14	C 6.09

8-1-43. Plan view + Elevation, Overlook Hts.
 by con. curb grades
 for drainage.

Plan view



Indexed

NEBP Elev. Rd. Brownell PC

207.31	13.80	13.55	13.10	12.96	12.84	12.68
10.87	3.64	3.89	4.34	4.88	4.57	4.76
213.13	3.66					
1.38	0.00					
211.75	on Curb					
5.69	end					
217.44						

12.54	12.40	EC	21.065
4.90	5.04	12.25	21.056
		5.19	0.009
			Est. cb. end.

217.44
 688
 210.56

210.56 Est. cb.

207.25 Est. cb. PC.

- 7° 32'
 - 15° 02'
 - 27° 36'
 - 30° 08'
 - 37° 40'
 - 45° 12'
- cb. ch. = 9.18

Brownell

8-17-43. Sewer grades on Gaines Jefferson and Congress

			TP 9.95
			4.96
			2.99
			7.95
			4.90
0 + 00	Ex. M.H. Jefferson	-4.38	TP 3.05
			4.61
+25		-4.30	7.66
			4.60
+50		-4.23	TP 3.06
			5.27
+75		-4.15	8.33 x
		-4.08	
+95		-4.00	
+125		-3.93	
+150		-3.85	
+175		-3.78	
+200		-3.70	
+250		-3.63	
+300		-3.55	
+350		-3.48	
+400		-3.40	
+50	M.H. & Congress	-3.33	

for Sewer Construction on Jefferson St
 from Gaines to Riley and on Riley
 from Jefferson to Congress
 see Page 38

~~Paraphrase~~

-4.38	-4.30	-4.23	-4.15	-4.08	-4.00
✓	12.13	12.56	12.48	12.41	12.33
	5.27	4.84	4.76	4.36	4.64
	C 7.36	C 7.72	C 7.72	C 8.05	C 7.69
-3.93	-3.85	-3.78	-3.70	-3.63	-3.55
12.26	12.18	12.11	12.03	11.96	11.88
4.74	4.97	4.94	5.23	5.49	5.38
C 7.54	C 7.21	C 7.17	C 6.80	C 6.67	C 6.50
-3.48	-3.40	-3.33			
11.81	11.73	11.66			
5.67	5.60	5.56			
C 6.14	C 6.13	C 6.10			

8-17-43

Sewer Grades
KURTZ AT Creechwood

M

B.M. Top RR Rail S.E. Cor	Creechwood HANCOCK	City 207.	4.50
			2.37
			<u>6.87 = X</u>

11 + 70 M.H. @ Kurtz & Greenwood	-13.03
	19.90
	5.25
	<u>14.65</u>

M.H. 78' Sky	-7.24
	14.31
	5.10
	<u>9.21</u>

	-13.07
	1.97
	19.94
	4.23
	<u>15.71</u>
	old cut 15.70

6.87 X

2.84

4.03 = El. RR spike

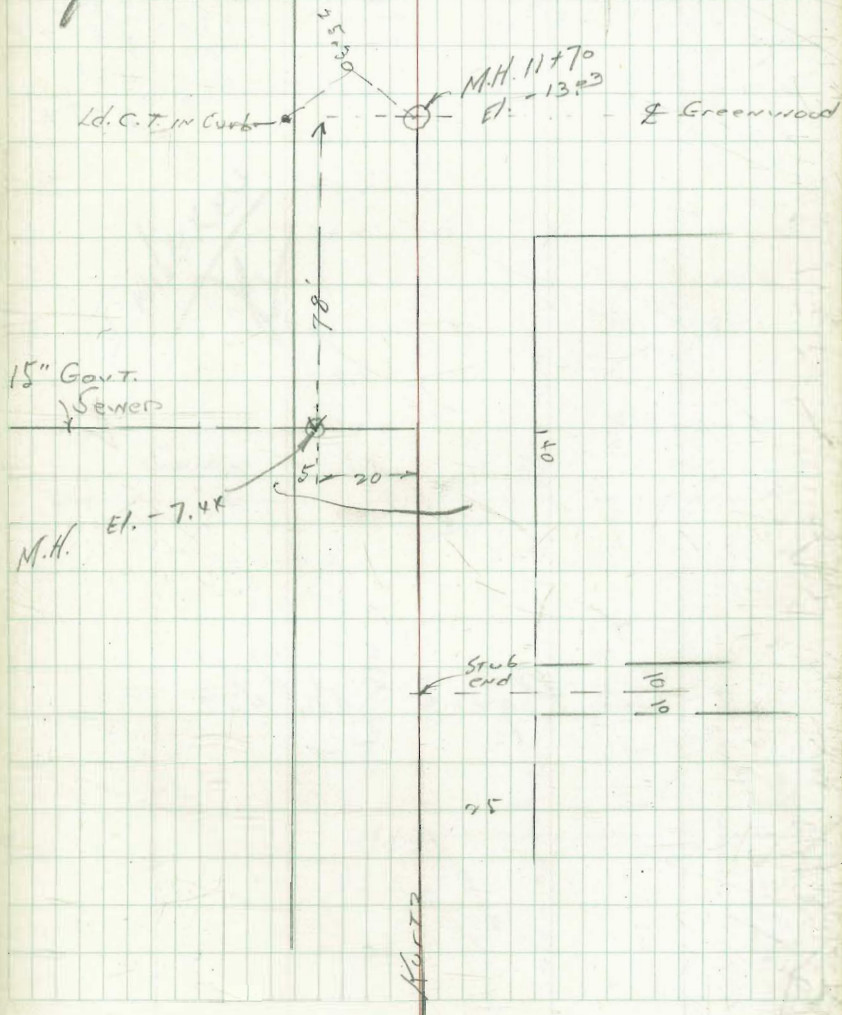
IN NW Cor Post KURTZ & Greenwood

this is Housing Project
Bench Mark

Fd. MK'd E. lev. 4.27

~~0.24 error~~

57

~~Indexed~~

Moore

8-21-43 Sewer Const. in alley
N of Jefferson between P. 54 &
Gaines + Roscerams

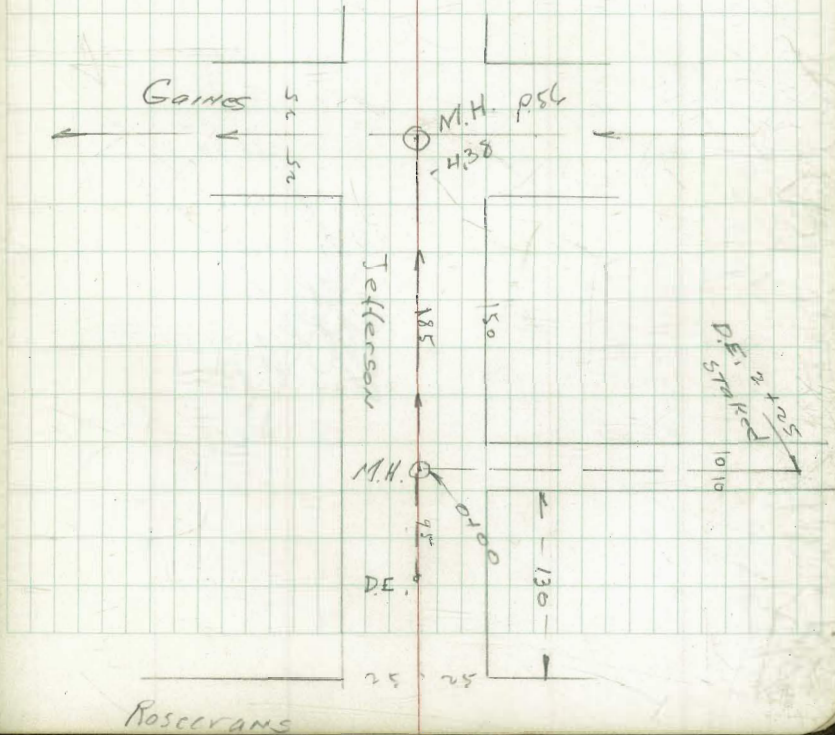
0+00 = M.H.	860 11.80 -3.22	-3.22	8.60 T 4.76
+25		-3.02	3.84 T.P.
+50		-2.87	4.53
+75		-2.69	8.37 T
+100		-2.52	
+125		-2.32	
+150		-2.17	
+175		-2.00	
+200		-1.82	
+225 = D.E.		-1.65	

E.O. Rogers Sub. ^{map-}#459

0+25	T.P.			
-3.02	-2.87	-2.69	-2.52	-2.32
11.64	11.47	11.06	10.89	10.71
4.59	4.52	4.63	4.45	4.56
C 7.05	C 6.95	C 6.43	C 6.64	C 6.15

-2.17	-2.00	-1.82	-1.65
10.54	10.37	10.19	10.02
4.95	4.45	4.33	4.05
C 5.59	C 5.92	C 5.86	C 5.97

~~Indexed~~



476 ST olive to		E gut grades Quince		476 + PALM	
NEBP	3.47	270.89	267.42		
5 L Palm		3.83	267.06	FINS ON SPIKE	
cl		3.87	267.02	F 0.15	
1/2		3.90	266.99	F 0.10	
c		3.93	266.96	F 0.06	
1/2		3.96	266.93	F 0.08	
cl		4.00	266.89	F 0.03	
5 L Palm 040		4.03	266.86		
+25		4.09	266.80		
+50		4.16	266.73		
+75		4.26	266.63		
1		4.30	266.59		
+25		4.38	266.51		
1 + 50 Break		4.45	266.44		
+75		4.62	266.25		
2		4.80	266.09		
+25		4.97	265.92		
+50		5.15	265.74		
+75		5.32	265.55		
2 1/2 olive 3700		5.55	265.34		

5.13	272.55	267.42	
5 L Quince 040		4.37	
+25		4.49	
+50		4.61	
1		4.74	
1 + 90 = drain		4.85	5.24 TOP INSIDE drain
+33 Break		5.39	H. PT on EXP. PAT.
+73 Break		5.41	cb. Low
Top cb. 5.24		5.43	
+25		5.45	
+36		5.48	5.48 ON PAT.
+67		5.48	✓
3			

~~Involved~~

SE. Return, 7th Market
Tie out S.E.C.T.

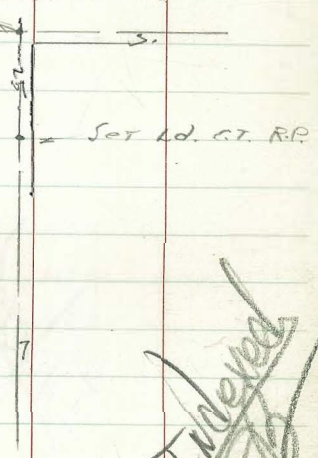
Moose-Hazard-Hoopes 6-12-VN
NW 8 P 5.03 119.96 11493 7th Market

S.L. old curb 6.18 11378
E.L. " " 5.86 114.10



Market

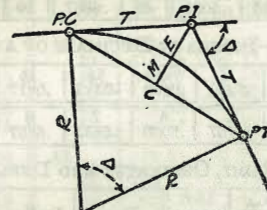
old C.T. NOT disturbed



~~Indexed~~

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

Copyright, 1914, by Eugene Dietzgen Co., New York City



CURVE FORMULAS

- Radius= $R = \frac{50}{\sin \frac{D}{2}}$ (1) Degree of Curve= D and $\sin \frac{D}{2} = \frac{50}{R}$ (2)
- Tangent= $T = R \tan \frac{\Delta}{2}$ (3) Length of Curve= $L = 100 \frac{\Delta}{D}$ (4)
- Middle ordinate= $M = R(1 - \cos \frac{\Delta}{2}) = R \text{vers} \frac{\Delta}{2}$ (5)
- External= $E = T \tan \frac{\Delta}{4} = R \div \cos \frac{\Delta}{2} - R$ (6) $= R \text{exsec} \frac{\Delta}{2}$ (9)
- Long Chord= $C = 2 R \sin \frac{\Delta}{2}$ (10) $\Delta =$ Central Angle

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.—Sta. 161+60.35 to find Sta. of P. C. and P. T. $\Delta = 62^\circ 10'$ $D = 8^\circ 20'$. From Table IV for 1° curve $T = 3454.1$ and $\div 8 \frac{1}{3} = 414.49$ ft. From Table V correction = 36 or $T = 414.85$ ft. P. C. = Sta. P. I. — $T = 157 + 45.50$. Also from (4) $L = 748.00$ and P. T. = Sta. P. C. + $L = 164 + 91.50$.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft. = 7.27 ft. Distance = 158 — Sta. P. C. = 54.50, hence offset = $7.27 (54.50 + 100)^2 = 2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26) = 2.16$ ft.

Deflections.—Deflection angle = $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft. = (in minutes) $.3 \times C \times D^\circ$ or = defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve = $.3 \times 54.5 \times 8 \frac{1}{3} = 136.2'$ or $2^\circ 16.2'$, or = $2.50 \times 54.5 = 136.2'$ from Table III. For Sta. 159 deflection angle = $2^\circ 16.2' + 8^\circ 20' \div 2 = 6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 91.37. For from Table IV for 1° curve $E = 960.6$ for $8^\circ 20' = 960.6 \div 8 \frac{1}{3} = 91.27$ and from Table V correction = 10 or $E = 91.37$ ft. Or suppose $\Delta = 32^\circ$ and E is measured and found to be 42 ft. What is D? From Table IV $E = 230.9$ and $\div 42 = 5.5$ $D = 5^\circ 30'$.

3610

143° 58' R.I.D.

B.M. 35.48

1122
165
17.97

W.O. 60318

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9 + (20 - 16) ÷ 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.