

Journal of Maryland and
Virginia

F.B.
962

F.B. 962

KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. SAN FRANCISCO. ST. LOUIS.

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 18 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

962

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

962

16750 Madison

Garfield

New Hampshire

Massachusetts

Buchanan

Mission Grade Road

SEE PAGE 32 ALSO PAGE 14

Single
Sheet
Book

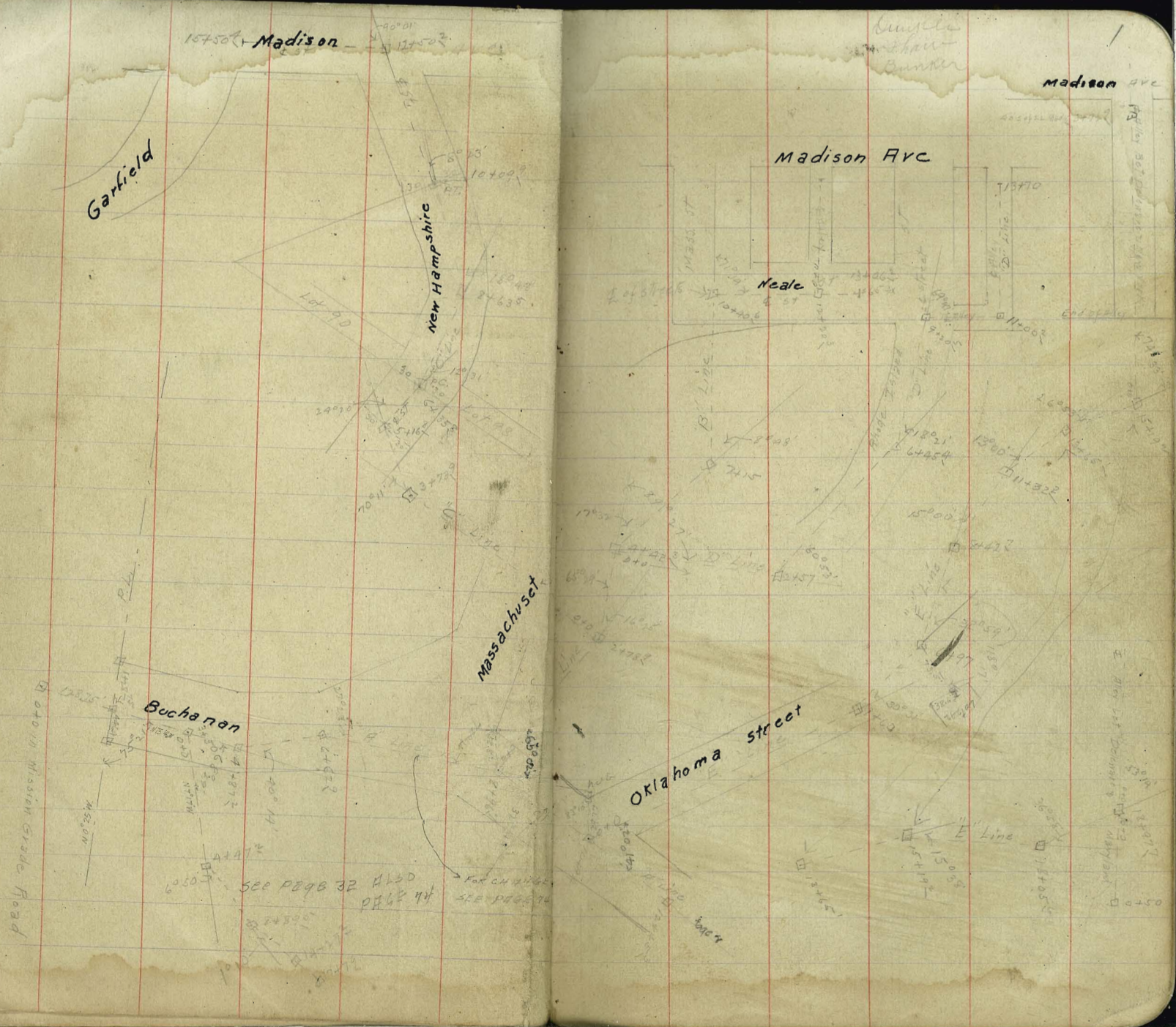
Madison Ave

Madison Ave

Neale

Oklahoma Street

E Line



Levels for Proposed Sewer "A" Line Page 1

Station	B.M.	2.14	96.19	Page 1	540	97.62	5.6	92.0	
B.M.	2.14	96.19	89.05	540			5.6	92.0	
0+0			5.5	80.7	6		0.6	97.0	
+50			3.8	82.4	T.P.	10.83	0.49	97.13	
+80			9.5	76.7	+50		8.8	99.2	
1			8.0	78.2	+62.2		8.3	99.7	
+09			6.4	79.8	7		7.3	100.7	
+18			6.3	79.9	+50		5.4	102.6	
+18			16.3	69.9	8		3.8	104.2	
+25			16.3	69.9	+50		2.2	105.8	
+25			6.3	79.9	+96.7	11.05	118.76	0.25	107.71
+28 ²⁵			6.3	79.9	9		11.0	107.8	
+50			6.5	79.7	+50		9.4	109.4	
2			7.1	79.1	10		7.4	111.4	
150			6.4	79.8	+50		4.9	113.9	
3			4.4	81.8	+94	10.99	127.43	2.32	116.44
+50			2.9	83.3	11		10.7	116.7	
T.P.	11.60	97.62	1.1	85.1	+50		7.7	119.7	
4			0.17	86.02	12		4.6	122.8	
+50			10.7	86.9	+45.3		2.2	125.2	
+89 ²			8.4	89.2	+50		1.9	125.5	
			6.1	91.5	T.P.	10.14	137.46	0.11	127.31

Sheet 1

		137.46		
13+0			9.0	128.5
+50			5.6	131.9
14			2.1	135.4
T.P.	11.60	148.98	0.08	137.38
+50			10.4	138.6
15			6.6	142.4
+0.98	cut 10 acct branch line		6.03	142.95
+50			3.9	145.1
16			0.7	148.3
T.P.	12.55	161.12	0.41	148.57
+50			7.8	151.3
17			7.4	153.7
+4.9			4.8	156.3
18			2.4	158.7
	12.29	173.94	0.07	161.05
+50			12.8	161.1
19			10.1	163.8
+50			6.8	167.1
20			3.6	170.3
+50			1.0	172.9
T.P.	12.69	186.53	0.10	173.84
+80			12.4	174.1
21			11.4	175.1
+50			8.8	177.7

		186.53		
22+0			6.9	179.6
+50			4.6	181.9
23			1.5	185.0
T.P.	11.77	197.73	0.57	185.96
+50			9.6	188.1
+74.2	cut 9 acct branch line		8.16	189.57
24			6.9	190.8
+25			11.0	186.7
+50			7.1	190.6
+75			4.7	193.0
+8.7			6.4	191.3
25+0			3.8	193.9
T.P.	8.89	206.52	0.10	197.63
+25			13.5	193.0
+50			13.0	193.5
+70			11.1	195.4
+73			9.0	197.5
+79.5			7.8	198.7
26+0			5.7	200.8
+50			3.0	203.5
T.P.	12.21	217.09	2.24	204.28
+65			13.4	203.7
+68			14.3	202.8
+75			12.6	204.5
27+0			10.7	206.4

		217.09		
27+30			9.4	207.7
+40			10.3	206.8
+50			8.4	208.7
28			4.8	212.3
T.P.	11.92	228.14	0.87	216.22
+50			11.7	216.4
+57			11.9	216.7
+59			12.8	215.3
+63			11.3	216.8
29			9.1	219.0
+50			7.6	220.5
+52			6.3	221.8
+77.7			4.2	223.9
30+0			2.8	225.3
T.P.	10.37	237.95	0.56	227.58
+50			11.6	226.4
+70			10.4	227.6
+78			8.5	229.5
31+0			8.0	230.0
+10			5.2	232.8
+50			2.6	234.4
T.P.	12.29	250.20	0.04	237.91
32			11.6	238.6
+50			9.2	241.0
33+0			5.8	244.4
+15.3			3.9	246.3
+50			0.7	249.5
T.P.	12.88	263.02	0.06	250.14

		263.02		
33+75			7.7	255.3
34			0.8	262.2
T.P.	14.95	274.96	0.01	263.01
+25			6.7	268.3
T.P.	12.60	287.26	0.30	274.66
+50			12.1	275.7
+75			2.7	284.6
T.P.	11.50	295.50	0.26	297.00
+99.7	8.04	301.46	5.08	293.42
-35.52 ²			7.3	294.2

Levels for spur line from sta 6+97 "E" line
in southerly direction for 73.5 to rear of lot 242

See page 1

B.M.	10.50	182.60		172.10
0+0 = Sta 6+97 "E" line			10.5	172.1
+15			5.2	177.4
T.P.	4.93	186.63	0.90	181.70
+50			4.0	182.6
+73.5			1.3	185.3

Sheet 1

Levels for Line "B" page 1

B.M.	11.05	118.76		107.71
0+0=Sta 21967 "A" Line			11.05	107.7
+25			10.1	108.7
+50			6.5	112.3
T.P.	12.90	131.53	0.13	118.63
1			13.1	118.4
+50			9.6	121.9
+65			5.6	125.9
T.P.	12.33	143.55	0.31	131.22
2			12.0	131.6
+20			12.9	130.7
+25			10.4	133.2
+50			7.2	136.4
+70			5.7	137.9
+78.9			3.50	140.05
T.P.	12.36	155.65	0.26	143.29
3			11.1	144.6
+20			11.1	144.6
+50			7.4	148.3
+80			5.4	150.3
T.P.	11.98	167.33	0.30	155.35
4			12.4	154.9

Sheet 2

		167.33		
+408			10.3	157.0
+13			13.6	153.7
+33			8.3	159.0
+42.3			6.80	160.53
+50			5.6	161.7
+60			4.2	163.1
+75			5.5	161.8
5			0.9	166.4
T.P.	12.75	179.59	0.49	166.84
+10			10.4	169.2
+50			6.5	173.1
T.P.	12.27	191.56	0.30	179.29
6			14.1	177.5
+50			5.8	185.8
T.P.	10.10	201.49	0.17	191.39
+58			14.6	186.9
+75			9.7	191.8
+90			15.7	185.8
7			9.8	191.7
+15 arch			4.8	196.7

		201.49			
7+25			2.7	198.8	
T.P.	11.82	212.94	0.37	201.12	
+50			9.1	203.8	
+75			2.8	210.1	
T.P.	11.57	224.18	0.33	212.61	
8			7.3	216.9	
T.P.	10.71	234.85	0.04	224.14	
+25			10.9	224.0	
+50			4.1	230.8	
T.P.	12.45	246.91	0.39	234.46	✓
+75			8.9	238.0	
T.P.	13.11	259.83	0.19	246.72	
9			13.3	246.5	
+25			4.1	255.7	
T.P.	12.73	271.77	0.79	259.04	
+50			5.2	266.6	
T.P.	12.50	284.00	0.27	271.50	
+75			8.8	275.2	
T.P.	12.64	296.49	0.15	283.85	
10+0			11.5	285.0	
T.P.	11.88	308.00	0.37	296.12	

		308.00			
+25			10.2	297.8	
+40 ⁶ = E Neale	12.18	318.53	2.15	305.85	
+50			10.2	308.2	
+70 ²			2.2	316.2	
T.P.	11.64	327.99	0.18	318.35	
11			11.3	316.7	
+50			9.1	318.9	
12			7.6	320.4	
+23			6.93	321.06	
+50			6.3	321.7	
13			4.5	323.2	
+26 ³			4.5	323.5	
Levels for Sewer Alley bet Mass to Rhode Island Sts from E Neale St north for 235'					
B.M.	6.78	327.99		321.06	
over 22 ³ B line			6.9	321.1	
+50			4.7	323.3	
			2.0	326.0	
	11.77	337.90	1.38	326.11	
+50			7.1	330.8	
2			4.0	333.9	
+35			3.8	334.1	

Sheet 1

Levels for Line "C" Page 1

B.M.				140.05
	11.56	151.71		
0+0=2+78	"B" Line		11.56	140.15
+05			12.0	139.7
+25			5.4	146.3
T.P.	12.08	163.54	0.25	151.46
150			7.5	156.0
T.P.	12.35	175.59	0.30	163.24
+75			12.0	163.6
1			0.6	175.0
T.P.	12.43	187.96	0.06	175.53
+25			2.2	185.8
T.P.	12.41	199.89	0.48	187.48
+50			4.6	196.3
T.P.	12.00	211.52	0.37	199.52
+75			4.3	207.2
T.P.	12.47	223.53	0.16	211.36
2			0.5	223.3
T.P.	12.11	235.78	0.16	235.67
T.P.	11.14	246.53	0.39	235.39
+25			9.4	237.1
T.P.	12.37	258.52	0.38	246.215

258.52

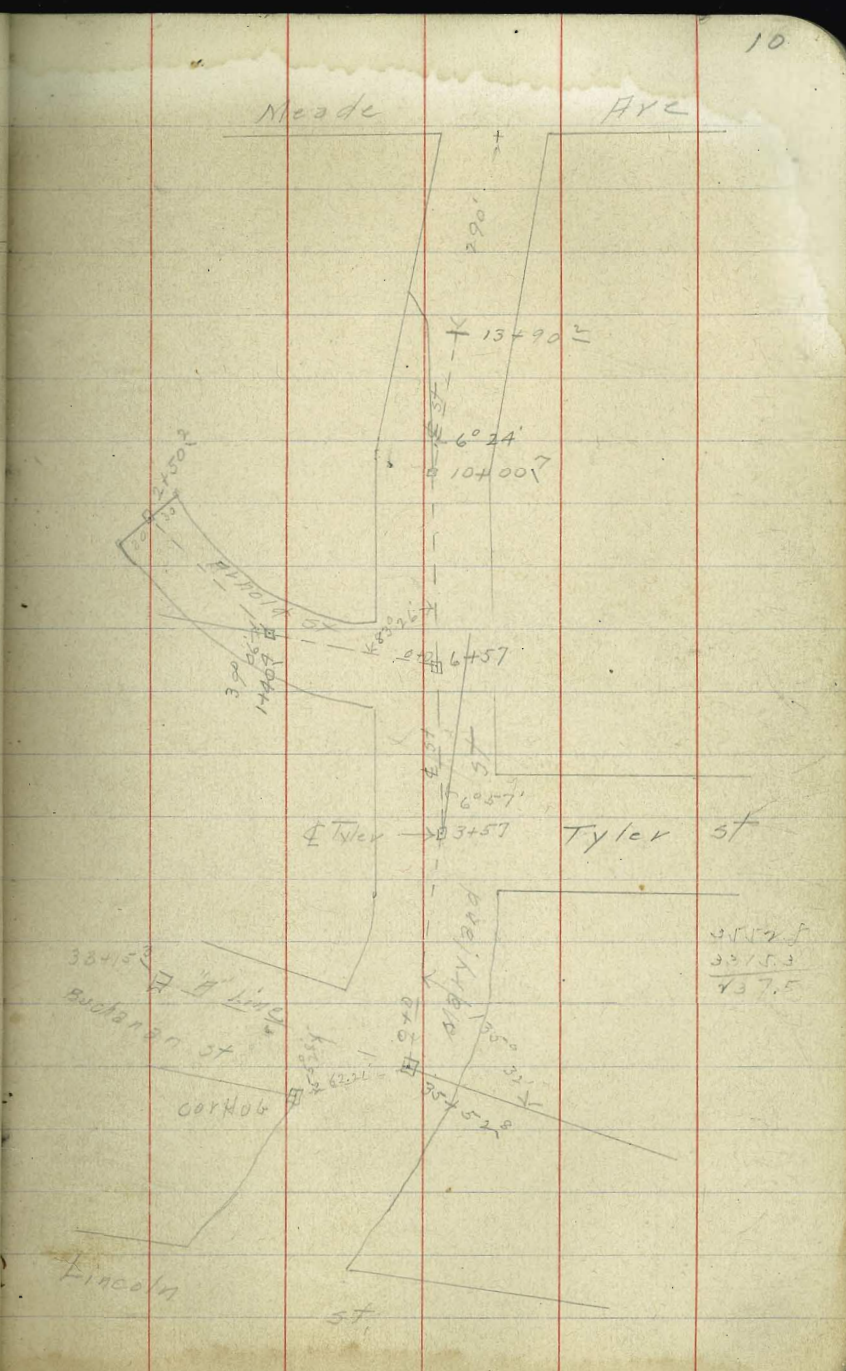
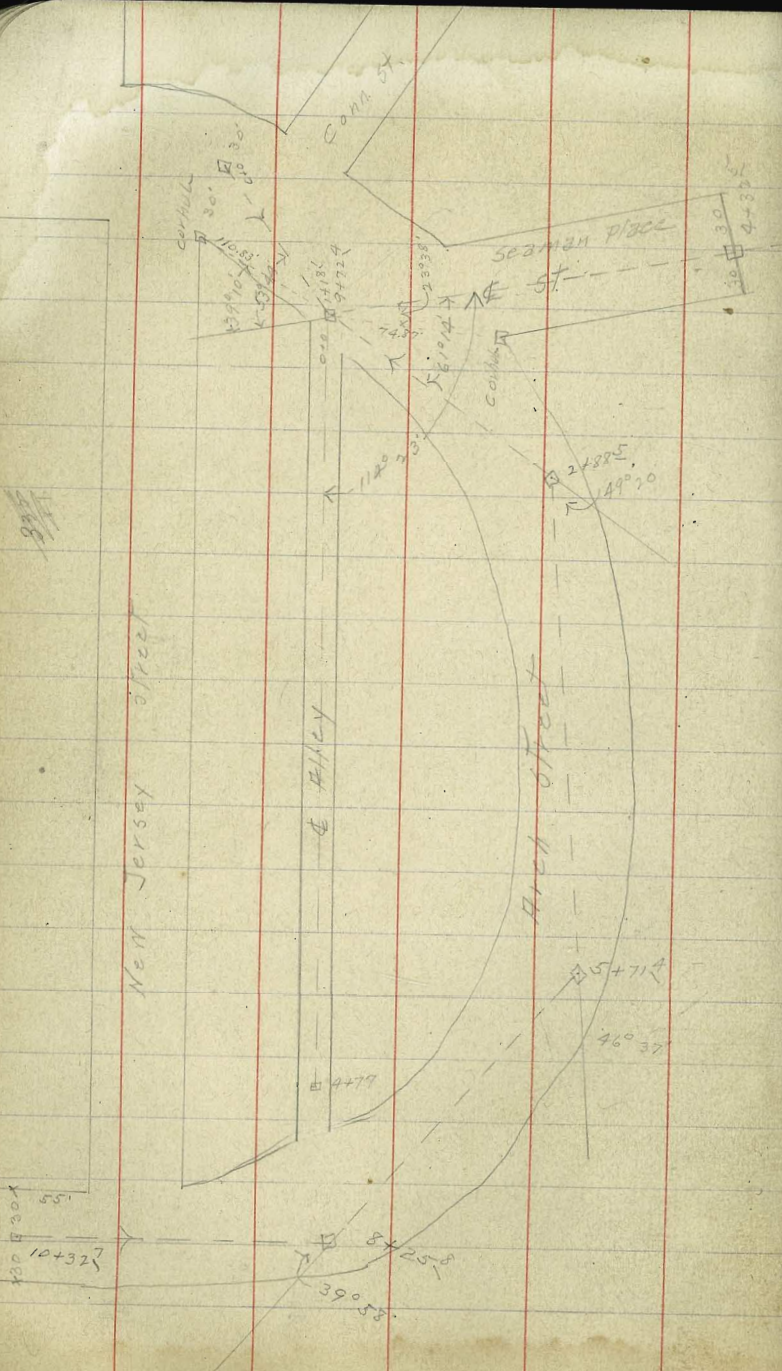
2+50			2.9	255.6
T.P.	11.23	269.54	0.21	258.31
T.P.	11.79	280.97	0.36	269.18
+75			6.2	274.8
T.P.	12.67	293.58	0.06	280.91
785			12.8	280.8
3			5.2	288.4
117			2.2	291.4
T.P.	12.35	301.74	0.19	293.39
+30			8.5	293.2
+50			10.9	290.8
+73.9			16.1	285.6
4			17.5	284.2
+35			19.2	282.5
+50			17.7	284.0
5			13.7	288.0
+16.8			11.7	290.0
+50			6.7	295.0
+70			4.2	297.5
6			2.9	298.8
+35.8			1.1	300.6

Sheet 2

Copy 13 pages from 1st sheet

		301.74		
6+50			0.6	301.1
T.P.	10.97	312.99	0.21	301.57
7			10.1	302.4
+50			9.3	303.2
8			9.2	303.3
+50			9.2	303.3
+63 ⁵			9.0	303.5
9			8.3	304.2
+50			5.4	307.1
10			1.7	310.8
+09.9			1.1	311.4
T.P.	11.74	324.18	0.05	312.99
+50			10.4	313.8
11			8.0	316.2
+50			5.9	318.3
12			3.7	320.5
+25			3.5	320.7
+50			2.0	322.2
13			3.2	321.0
+50			4.5	319.7
14			5.9	318.3

14+50			7.3	316.9
15			8.9	315.3
+50 ⁴			10.8	313.4



5572.5
 3375.3
 437.5

Levels for "D" Line Page 1

B.M.	11.85	172.38		160.53	+25	280.39	7.3	273.1	
0+0 = 5/2 4242 B' Line			11.9	160.5	T.P.	12.55	292.83	0.11	280.28
+15			13.5	158.9	+50		1.7	291.1	
+25			7.9	164.5	T.P.	11.96	304.43	0.36	292.47
T.P.	12.31	184.52	0.17	172.21	+57		10.4	294.0	
+50			10.7	173.8	3		7.2	297.2	
T.P.	11.97	196.38	0.11	184.41	+50		5.7	298.7	
+75			10.9	185.5	4		4.9	299.5	
T.P.	12.62	208.58	0.42	195.96	+50		4.0	300.4	
1			11.9	196.7	5		2.4	302.0	
T.P.	12.95	221.17	0.36	208.22	+50		0.7	303.7	
+25			11.3	209.9	T.P.	12.06	316.10	0.39	304.04
T.P.	12.06	233.14	0.09	221.08	6		10.5	305.6	
+50			5.9	224.2	+45		8.0	308.1	
T.P.	13.10	245.86	0.38	232.76	+50		7.8	308.3	
+75			5.9	240.0	7		5.0	311.1	
T.P.	11.92	257.60	0.18	245.68	+50		1.2	314.9	
2			1.7	255.9	T.P.	12.61	328.18	0.53	315.57
T.P.	11.87	269.26	0.21	257.39	8		9.3	318.9	
T.P.	11.66	280.39	0.53	268.73	+50		6.1	322.1	
					9		3.2	325.0	

Sheet 3

328.18

9720 ⁵			1.9	326.3
+ 34			2.9	325.3
+ 50			1.3	326.9
T.P.	12.45	340.05	0.58	327.60
10			11.5	328.6
+ 50			9.8	330.3
11100 ²			9.4	330.7
+ 50			6.5	333.6
12			3.0	337.1
+ 50			1.1	339.0
T.P.	5.40	344.65	0.80	339.25
13			4.7	340.0
+ 50			4.0	340.7
+ 70			3.5	341.2

Levels for sewer beginning at E of Neale & Mass. St. Thence North on Mass St to Golden Gate Drive Thence East see sketches pages 20821

341.82 13

B.M.	5.46	331.18	325.74
0+0 = 3/2 10+40' B' Line		25.3	305.9
+21		12.7	318.5
+50		11.6	319.6
1		8.1	323.1
+50		5.7	325.5
2		2.7	328.5
T.P.	929	340.06	0.41
+50		9.1	331.0
+65 L 36° 03'		8.2	331.9
3		8.8	331.3
+50		7.6	332.5
+83 = N.L. Madison R 36° 12'		7.1	333.0
B.M. Madison R 1893		7.03	
4		6.0	334.1
+50		4.8	335.3
5		4.2	335.9
+50		3.8	336.3
6		3.9	336.2
+50		4.5	335.6
+87.9	7.17	341.82	5.41

Sheet 4

7+0	7.2	334.6
+30	6.6	335.2
+31	6.0	335.8
+50	5.7	336.1
8	4.7	337.1
+10	4.7	337.1
+11	5.4	336.4
+50	5.0	336.0
+77 = 4# 1/2	5.10	336.72
9	6.3	335.5
+50	7.0	334.8
+70	5.8	336.0
10	7.3	334.5
+50	6.0	335.8
11	5.4	336.4
+50	4.0	337.8
+75 = 3	5.02	336.80
12	8.6	336.7
+50	8.2	337.1
13	7.4	337.9

8.49 345.29

345.29

352.42

14

13+05 ⁷ Alley		7.30	337.99
+50		7.9	337.4
+85		7.5	337.8
14		8.7	336.6
+50		9.3	336.0
+70		8.1	337.2
15		8.0	337.3
+21		7.7	337.6
+50		7.5	337.8
16		5.6	339.7
+50		3.9	341.4
17		3.0	342.3
+12 ⁹ Alley		2.75	342.54
+50		2.8	342.5
18		2.0	343.3
+50		1.2	344.1
+90		1.8	343.5
19		1.5	343.8
+52 ⁶	7.96	0.83	344.46
20		7.0	345.4

20+22 ⁶		6.3	346.1
+50		6.6	345.8
21		5.8	346.6
150		5.7	346.7
+70		4.2	348.2
24		4.3	348.1
20			
+50		4.4	348.0
+52		5.6	346.8
+67 cut		5.8	346.6
+67		6.6	345.8
+93 = 4 Maryland		5.8	346.6
23		5.9	346.5
+19		6.5	345.9
+50		5.1	347.3
24		4.9	347.5
+50		4.7	347.7
25		4.3	348.1
+50		4.2	348.2
+93 ⁶		4.3	348.1

Levels for "E" Line

B.M.	11.95	128.39		116.44
0402572 10+94.7" Line			11.9	116.5
+29			10.4	118.0
+40			13.6	114.8
+50			13.7	114.7
1			7.3	121.1
+13			4.4	124.0
+15			6.8	121.6
+43			5.1	123.3
+50			1.7	126.7
+60			7.1	127.3
T.P.	11.93	139.24	1.02	127.31
+83			13.1	126.1
✓			9.4	129.8
+27			8.7	130.5
150			5.6	133.6
+68			5.2	134.0
T.P.	12.48	151.60	0.12	139.12
+90			14.1	137.5
+96			16.0	135.6
300			14.7	136.9

Sheet 5

15160

15

3+34			11.4	140.2
3+37			13.2	138.4
+50			9.6	142.0
+82			5.6	146.0
+95			7.5	144.1
4			6.7	144.9
+07			4.7	146.9
+19			5.1	146.5
+26			3.2	148.4
T.P.	12.37	163.63	0.34	151.26
+50			11.7	151.9
+61			11.5	152.1
5			6.9	156.7
+11			7.3	156.3
+50			3.1	160.5
+70			2.6	161.0
T.P.	12.66	175.87	0.42	163.21
+95			11.3	164.6
6			12.8	163.1
+42			9.0	166.9

		175.87		
6+50			8.9	167.0
+61			6.8	169.1
+97			3.8	172.1
7			3.7	172.2
+07			5.3	170.6
+10			3.4	172.5
T.P.	11.70	187.01	0.56	175.31
+10			11.1	175.9
+56			12.0	175.0
+58			10.1	176.9
840			4.9	182.1
+23			3.5	183.5
+32			6.2	180.8
T.P.	11.76	198.62	0.15	186.86
3+42.7			11.5	187.1
+48			10.5	188.1
+50			13.2	185.4
+62			11.3	187.3
+77			8.7	189.9
+85			4.2	189.4

		198.62		
9+0			6.8	191.8
+04			7.3	191.3
+42			0.1	198.5
+50			1.0	197.6
+53			1.9	196.7
T.P.	13.05	210.82	0.85	197.77
10			8.6	202.2
+50			4.2	206.6
+76			2.8	208.0
+82			1.0	209.8
T.P.	12.93	223.71	0.04	210.78
11			12.5	211.2
+08			12.4	211.3
+13			9.0	212.7
+32.2			9.7	214.6
+50			7.3	216.4
+20			4.2	219.5
+10			4.5	219.2
+14			3.1	220.6
T.P.	12.51	235.40	0.82	222.89

235.40

256.68

17

12150			10.9	224.5
+57			10.4	225.0
+64			12.2	223.2
13			7.3	228.1
+50			0.4	235.0
T.P.	11.23	246.31	0.32	235.08
+65			9.6	236.7
+70			10.1	236.2
+75			12.9	233.4
14			9.2	237.1
+80			7.0	239.3
+80			5.5	240.8
+95			3.5	242.8
15			2.2	244.1
T.P.	11.20	256.68	0.83	245.48
+19 ³ = Alley bet New York & Delaware			10.38	246.30
+22			10.8	246.9
+34			7.6	249.1
+58			7.0	249.7
+75			4.6	252.1

+85			0.6	256.1
T.P.	12.68	269.24	0.12	256.56
16			12.0	257.2
+50			11.7	257.5
+80			7.0	262.2
+95			2.6	266.6
17			3.8	265.4
+86			4.6	264.6
T.P.	12.81	281.76	0.29	282.95
+50			6.6	275.2
+88			4.9	276.9
+96			2.7	274.1
18			7.2	274.6
+85			5.3	276.5
T.P.	9.65	290.81	0.60	281.16
+22			11.6	279.2
+85			13.8	277.0
+50			8.7	282.1
+55			8.6	282.2
+77			4.6	286.2
+97 = Alley bet Delaware & Maryland			4.37	286.44

Levels for Sewer Line N for 372.9 to 405.4 of Madison
 from Sta 15+19.2' E B.M.

331.71

18

	12.85	259.15		246.30	+10		10.3	321.4	
0+0 = Sta 15+19.2			12.9	246.3	+12		8.7	323.0	
+10			10.6	248.6	+13		6.9	324.8	
+11			3.0	251.2	+17		6.5	325.2	
+25			3.2	256.0	+18		3.8	327.9	
T.P.	12.46	271.29	0.32	258.33	+25		2.8	328.7	
+50			4.4	266.9	+26		0.6	331.1	
T.P.	12.59	283.87	0.01	271.28	T.P.	12.59	343.89	0.41	331.30
+75			4.0	279.9	+50		5.4	338.5	
T.P.	11.24	295.05	0.06	283.81	3		3.1	340.8	
+10			2.3	292.5	+50		2.3	341.6	
T.P.	13.01	307.50	0.56	294.49	+92 ⁹ = 90° of Madison		1.8	342.1	
+25			4.7	302.8					
+50			1.9	305.6					
T.P.	12.98	317.93	0.55	306.45					
+75			10.0	309.9					
+90			5.8	314.1					
+91			3.6	316.3					
2			2.0	317.9					
T.P.	12.36	331.71	0.58	319.35					

Sheet 3

Levels for sewer & Alley bet Delaware & Maryland
 South for 50 from Sta 18+97.2 E Line & North from 18+97.1
 for 419 to & Madison

350.90

19

B.M. 12.36 298.80 286.44

South Line

0+0 12.4 286.4

+25
T.P. 11.16 309.40 2.2 296.6
0.56 298.24

+50 7.1 302.3

North Line

12.36 298.80 286.44
0+0 12.4 286.4

+07
T.P. 11.16 309.40 6.7 292.1
0.56 298.24

+25 7.5 301.9

T.P. 12.16 321.39 -0.17 309.23

+50 6.5 314.9
T.P. 12.36 333.33 0.142 330.97

+75 6.0 327.3

T.P. 12.34 345.17 0.50 332.23

+92 9.8 335.4

1 8.0 337.2

+50 3.9 341.3

2 1.3 343.9

T.P. 7.20 350.90 1.27 343.90

+50 6.0 344.9

Sheet 3

3+0 5.7 345.2

+50 5.1 345.8

+92 5.3 345.6

+95 6.0 344.9

4 5.9 345.0

+19 & Madison 7.9 346.0

Levels & Madison ~~West~~ ^{East} & ~~West~~ ^{West} from & Alley
 between Delaware & Maryland.

West Line
350.90

+0+25 to 419 4.9 346.0

+50 5.3 345.6

1 5.8 345.1

+10 5.9 345.0

East Line

+0+25 to 7+19 4.9 346.0

+50 4.4 346.5

1 3.8 347.1

+10 3.9 347.0

Sheet 3

Levels of Alley bet Mass. & Rhode Island from sta 8477E
south for 2672 to 40' N of Madison

B.M.	6.36	343.08	336.72
0+0		6.4	336.7
+50	✓	5.4	337.7
1		4.5	338.6
+50		4.5	338.6
2		4.3	338.8
+50		4.3	338.8
+67?		4.6	338.5

Sheet 4

Levels of Alley bet Rhode Island & New York from
sta 13405² south for 1234 to 40' N of Madison

		345.29	
0+0 = sta 13405?		7.3	338.0
+50	✓	6.4	338.9
1		5.6	339.7
+43+		5.6	339.7

Sheet 4

22

Levels of Alley bet New York & Delaware from
sta 17412⁹ south for 110.5 to 40' N of Madison

		345.29	
0+0	✓	2.7	342.6
+50		2.4	342.9
1		2.2	343.1
+10 ⁵		2.4	342.9

Sheet 4

Levels for sewer @ Harvey Road from @ Golden Gate Drive North for 206'

352.42

0+0-station 326

6.3 346.1

150

7.0 345.4

1

6.9 345.5

150

7.1 345.3

2

7.6 344.8

106

7.6 344.8

Sheet 4

Levels for sewer @ Maryland St from @ Golden Gate Drive to @ Vogt place

252.12

0+0-station 193

5.8 346.6

150

6.2 346.2

1

6.5 345.9

150

6.7 345.7

2

7.3 345.1

135' @ Vogt place

7.4 345.0

Sheet 4

23

Levels for sewer @ Vogt place from @ Maryland East for 145'

352.42

0+0-station 353

7.4 345.0

126

8.1 344.3

150

7.4 345.0

170

7.8 344.6

1

7.2 345.2

145' any cut will do

8.7 343.7

9.3 343.1

Sheet 4

Levels for Line Seaman Place from Sta 154098
 7" Line to

B.M.	5.76	148.71	142.95
0+0=154098			5.2 142.9
+0.6			5.6 143.1
+1.7			11.6 137.1
+2.5			13.0 135.7
+3.5			10.0 138.7
+5.0			8.4 140.3
+7.5			2.1 146.6
T.P.	12.40	161.04	0.07 148.64
+1.0			2.5 158.5
T.P.	12.47	173.29	0.22 160.82
T.P.	12.65	185.67	0.27 173.02
+2.5			11.7 174.0
T.P.	12.94	198.02	0.09 185.58
+5.0			9.6 188.4
T.P.	12.93	210.60	0.34 197.68
+7.5			8.8 201.8
T.P.	12.32	222.36	0.56 210.04
+1.0			8.2 214.2
T.P.	12.13	234.49	0.00 222.36

Sheet 6

		234.49		
+2.5			7.1	227.4
T.P.	12.54	246.75	0.28	234.21
+5.0			6.1	240.7
T.P.	12.45	258.88	0.32	246.43
+7.5			4.2	254.7
T.P.	11.92	270.48	0.32	258.56
3			1.7	268.8
T.P.	12.65	282.82	0.31	270.17
+2.5			1.0	281.8
T.P.	12.40	295.01	0.21	282.61
+5.0			2.2	292.8
+5.4	3.25	302.69	1.17	293.84
4			6.4	296.5
+3.5			6.4	296.3
+5.0			6.3	296.4
5			6.3	296.4
+5.0			6.0	296.7
6			5.8	296.9
+5.0			5.3	297.4
7			4.9	297.8

300.69

7450

3.6

299.1

8

2.5

300.2

750

1.0

301.7

T.P.

2.90

311.40

0.19

302.50

9

8.5

302.9

750

6.8

304.6

772⁴

6.7

304.7

Levels for Line Procter Place from sta 23+74.9
 "H" Line to sta 28+81.7 = 5' N of lot line bet 2868257

B.M.	7.36	196.93	189.57
0+0.52			7.4 189.5
+13			7.0 189.9
+25			11.3 185.6
+31			13.7 183.2
+40			8.2 188.7
+50			5.6 191.3
+55			5.6 191.3
T.P.	12.21	208.54	0.60 196.33
+75			8.2 200.3
T.P.	12.51	220.52	0.53 208.01
+70			4.6 215.9
T.P.	12.32	232.27	0.57 219.95
+25			3.1 229.2
T.P.	12.28	243.65	0.90 231.37
+50			2.6 241.1
T.P.	13.04	256.42	0.27 243.38
+75			0.0 256.4
T.P.	12.86	269.21	0.07 256.35
+70			0.3 268.9
T.P.	12.19	281.31	0.09 269.14
T.P.	12.14	293.04	0.41 280.90

Sheet 5

		293.04			
2125			11.4	281.6	
+50			5.4	287.6	
T.P.	12.15	303.30	1.89	291.15	
+72.3			4.89	298.41	
3+0			4.3	299.0	
+26.5			4.6	298.7	
+50			4.6	298.7	
4			4.4	298.9	
+50			3.9	299.4	
5 cut 6			3.2	300.1	
+50			2.9	300.4	
6			2.5	300.8	
+50			1.9	301.4	
7 cut 6			1.5	301.8	
T.P.	7.68	309.87	1.11	302.19	
+50			7.3	302.6	
8			6.4	303.5	
+50			4.3	305.6	
+81.7			2.90	307.0	

Levels New Jersey st from start of 2 proctor place
south for 166' to N Jersey

309.87

0102 31817

2.9 307.0

+50

3.8 306.1

1

6.0 303.9

+16

6.9 303.0

+66 cut 3'

12.4 297.5

Sheet 5

27

Levels Arch st from sta 0+0 bet Connecticut &
New Jersey to sta 10+30 see Page 10

		311.40		
0+0			4.1	307.3
+50			5.4	306.0
1			6.4	305.0
+18'			6.7	304.7
+50			7.1	304.3
2			6.4	305.0
+50			6.5	304.9
+88'			7.3	304.1
3			6.5	304.9
T.P.	12.26	318.59	5.07	306.33
+50			12.3	306.3
4			11.5	307.1
+50			10.0	308.6
5 cut 8'			6.8	311.8
+50			4.6	314.0
+71'			4.4	314.2
6			1.7	316.9
T.P.	12.38	330.75	0.22	315.37
+50			10.4	320.4
7			7.5	323.3
+50			4.4	326.4

Sheet 6

330.75

28

8			2.1	328.7
+25'			1.3	329.5
T.P.	10.50	341.19	0.06	330.69
+50			9.6	331.6
9			6.4	334.8
+50			4.9	336.3
10			4.2	337.0
+32'			3.7	337.5

Lerds & Alley bet New Jersey & Arch from 572
9472^a see page 10 north for 477'

311.40

0+0	✓		6.7	304.7
+50			3.1	308.3
1			0.1	311.3
T.P.	12.53	323.83	0.10	311.30
+50			10.0	313.8
2			7.3	316.5
+50			3.6	320.2
T.P.	9.54	332.96	0.41	323.42
3			8.9	324.1
+50			6.2	326.8
4			4.4	328.6
+50			2.9	330.1
+77			1.9	331.1

Sheet 6

29

Levels for Senior Maryland St from st 35+52 "A" Line
 North for 1390.2 See Page 10

B.M.	8.04	301.46	293.14
0+0		7.3	294.2
+50		8.2	293.3
1		9.4	292.1
+50		10.4	291.1
2		9.1	292.4
+50		7.8	293.7
3		6.3	295.2
+50		5.1	296.4
+57.4 Tyler		5.0	296.5
4		4.5	297.0
+50		4.7	296.8
5		5.0	296.5
+50		5.2	296.3
6		5.5	296.0
+50		5.8	295.7
+57		5.72	295.74
7		5.6	295.9
+50		4.8	296.7
8		3.8	297.7

Sheet 6

			301.46				
+50				3.3			298.2
9				2.1			299.4
+50				1.3			300.2
10+00 ⁸	9.86	311.28		0.04			301.42
+50				8.6			302.7
11				7.2			304.1
+50				5.2			306.1
12				3.4			307.9
+50				1.7			309.6
T.P.	8.09	317.62		1.75			309.53
13				6.3			311.3
+50				4.6			313.0
+9.0 ³				3.2			314.4

Levels for Survey Arnold St see Page 10

B.M. 6.34 302.08 295.74

0+0 ↓ 6.3 295.8

+50 6.9 295.2

1 5.9 296.2

+40⁴ 4.5 297.6

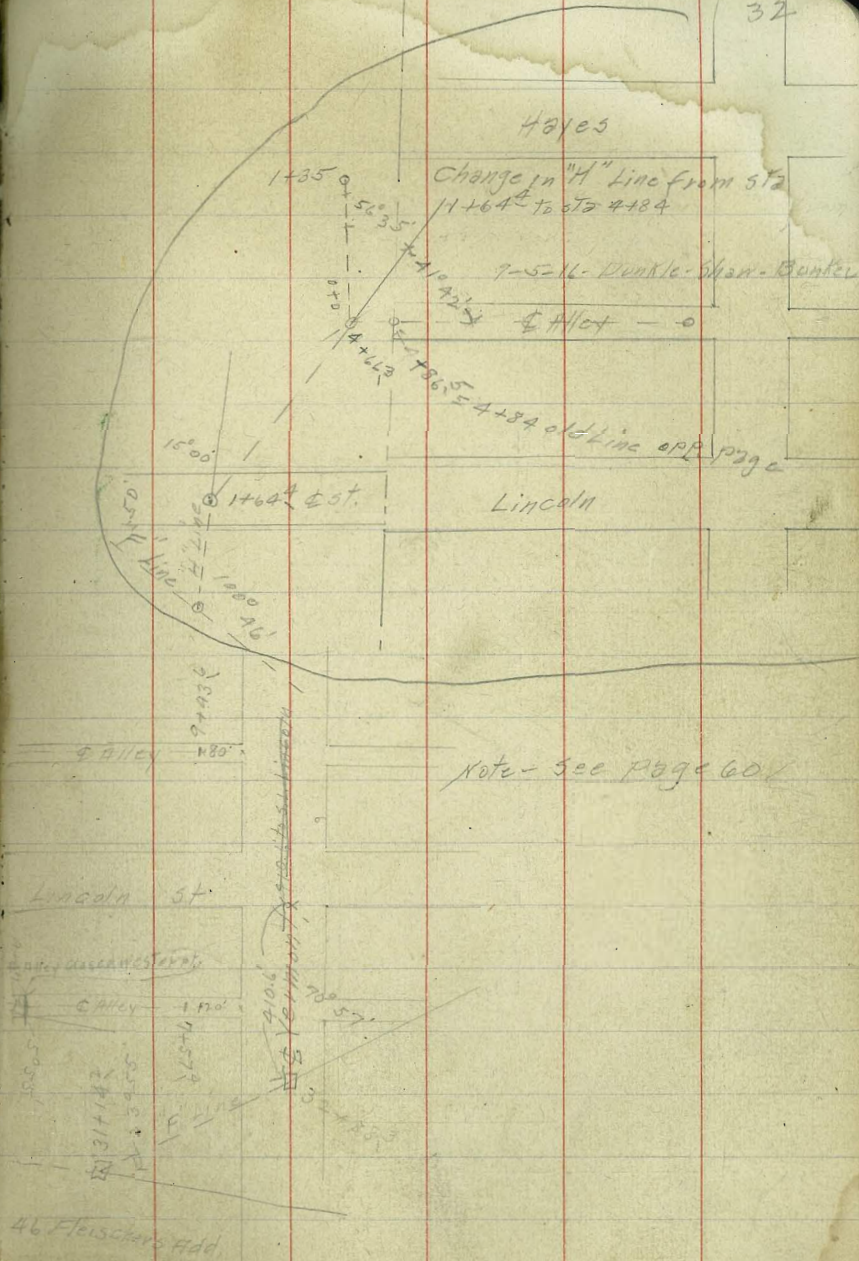
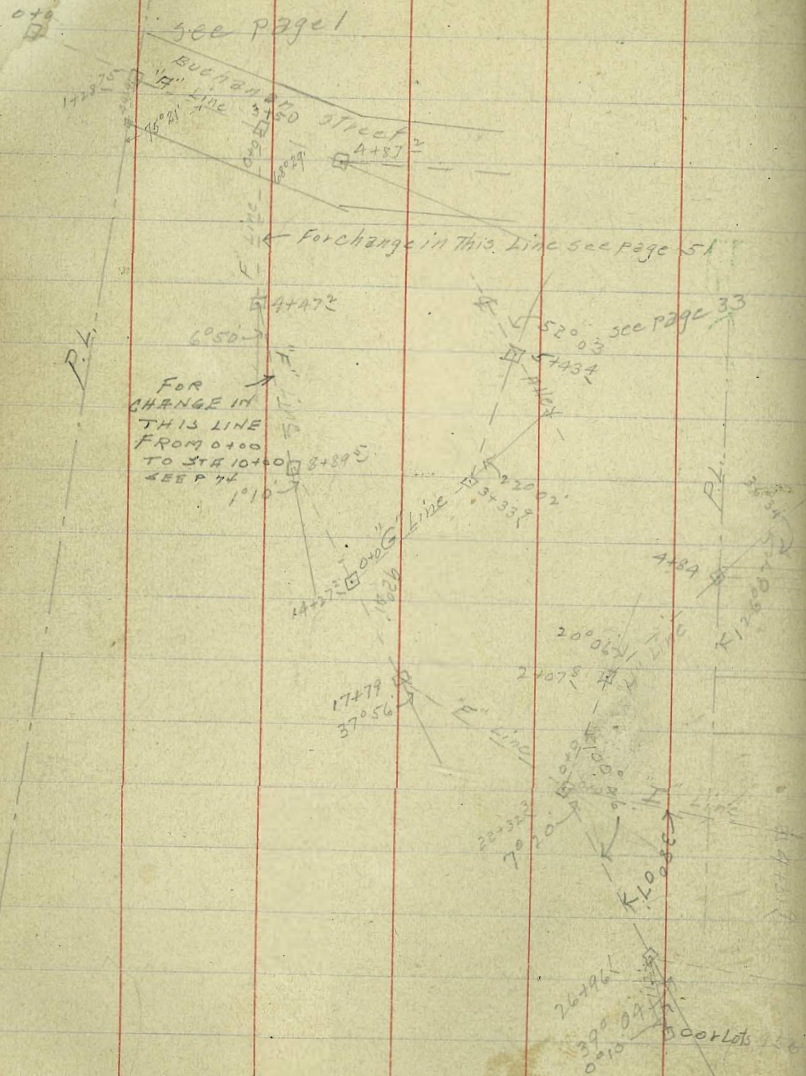
+50 4.6 297.5

2 4.4 297.7

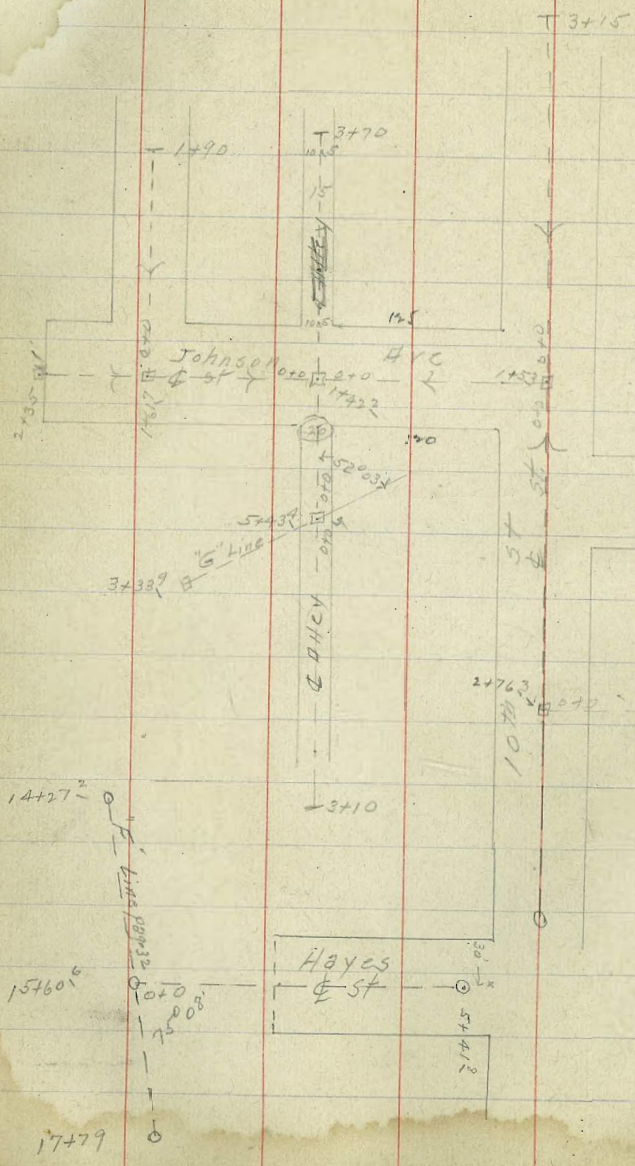
+50² 4.6 297.5

Sheet 6

17/6/14 Dun No - Sham - Bunker



46 Fleischers Add



Johnson Ave

H Line

Vermont St.

5+60

10+01

3+10

Hayes St

2+14.75

3+33

Johnson Ave

3+70

1+90

3+15

1+4+27

15+60

17+79

B.M.			84.05	
B.M.	9.87	93.62		
0+0 = 5/2 3-50 ft line			8.5	85.1
+1.5			8.3	85.3
+3.0			10.7	82.9
+5.0			11.7	81.9
1			9.9	83.7
+5.0			8.1	85.5
2			7.7	85.9
+5.0			5.6	88.0
3			3.1	90.5
+5.0			1.8	91.8
T.P.	12.45	104.52	1.55	92.07
4			11.2	93.3
+4.7			8.9	95.6
5			7.9	96.6
+5.0			6.8	97.7
6			5.7	98.8
+5.0			2.6	101.9
T.P.	13.07	116.09	1.50	103.02
7			11.5	104.6

Sheet 7

7+50			9.5	106.6
8			8.1	108.0
+5.0			6.1	110.0
+8.95			4.4	111.7
9			4.2	111.9
+2.5			3.2	112.9
+4.0			5.2	110.9
+4.7			4.6	111.5
+5.0			2.3	113.5
T.P.	13.09	118.52	0.66	115.43
10+0			13.2	115.3
+5.0			11.4	117.1
11			9.4	119.1
+5.0			7.8	120.7
12			3.7	124.8
+2.5			2.3	126.2
+5.0			3.2	125.3
+2.5			3.4	125.1
13			1.3	127.2
T.P.	10.82	138.19	1.15	127.37

	138.19		9.5	128.7
13+50			8.5	129.7
14			7.56	130.63
+27 ³			6.8	131.4
+50			4.2	134.0
15			3.0	135.2
+50			0.3	137.9
16			0.87	137.32
T.P.	12.82	150.14	12.4	137.7
+30			10.4	139.7
+50			7.2	142.9
17			5.0	145.1
+20			5.6	144.5
+42			6.4	143.7
+50			4.7	145.2
+79			4.1	146.0
18			2.4	147.7
+50			0.91	149.23
T.P.	11.76	160.99	11.1	149.9
19			9.6	151.4
+25				

	160.99		7.5	153.5
19+42			8.8	152.2
+50			10.0	151.0
+60			8.3	152.7
+70			6.3	154.7
+80			4.4	156.6
+50			1.5	159.5
21			1.24	159.75
T.P.	10.00	169.75	8.2	161.6
+50			6.6	163.2
22			5.12	164.63
+32 ³			4.9	164.9
+50			6.0	163.8
+65			3.2	166.6
23			0.42	169.13
T.P.	11.62	180.75	14.7	166.1
+35			12.3	168.5
+50			9.8	171.0
+65			7.1	173.7
24			8.2	172.6
+34				

		180.75		
24.50			6.4	174.4
+75			3.6	177.2
25			4.2	176.6
+05				
T.P	12.91	193.28	5.0	175.8
+25			0.38	180.37
+50			11.8	181.5
+50			9.5	183.8
+75			8.4	184.9
26.6			9.6	183.7
+50			5.6	187.7
+96			3.8	189.5
27			3.5	189.8
+50			1.8	191.5
T.P	12.80	205.94	0.14	193.14
28			10.4	195.5
+35			8.8	197.1
+45			10.0	195.9
+50			8.3	197.6
29			5.0	200.9
+50			3.9	202.0
30			1.2	204.7
F.P	12.34	217.75	0.53	205.41

		217.75		
30+50			8.9	208.9
31			4.4	213.4
+14 ²			3.9	213.9
+45			4.4	213.4
+50			6.0	211.8
T.P	12.43	227.98	2.20	215.55
+73			8.5	219.5
32			6.7	221.3
+15			7.4	220.6
+20			10.3	217.7
+50			7.5	220.5
45 ³			5.3	222.7

B.M.	12.74	177.37		164.63
0+0 Sta	22+32.3	"F" line	12.7	164.7
+5.0			7.5	169.9
+1.0			0.4	177.0
T.P.	12.74	189.71	0.40	176.97
T.P.	12.99	202.34	0.36	189.95
+5.0			11.2	191.1
+6.5			7.1	195.2
+1.0			3.2	199.1
T.P.	11.90	213.85	0.39	201.95
+2.5			11.3	202.6
+3.0			8.3	205.6
+5.0			9.3	210.6
T.P.	12.95	226.58	0.22	213.63
+6.0			14.0	212.6
+7.5			7.3	219.3
3			1.0	225.6
T.P.	12.66	239.12	0.12	226.96
+2.5			5.5	233.6
T.P.	10.72	249.58	0.26	238.86

Sheet 7

3+40			9.6	240.0
+5.0			1.7	247.9
T.P.	12.02	261.14	0.46	249.12
+7.5			0.3	260.8
T.P.	11.83	272.92	0.05	261.09
T.P.	12.76	285.49	0.19	272.73
+9.0			8.5	277.0
4+01.9			7.4	278.1
+5.0			3.5	282.0
5			1.9	283.6
+2.8			2.6	282.9
7.1			18.6	266.9
+6.1			18.6	266.9
T.P.	12.32	292.43	1.38	284.11
+8.3			12.1	284.3
6			11.0	285.4
+5.0			9.7	286.7
7			8.5	287.9
+5.7.9			7.1	289.3

Levels for 'H' line see page 32

211.80

38

B.M.	12.27	176.92	164.63
0+0	sta 22132 ³	F line	12.3 164.6
+35			8.5 168.4
+50			9.3 167.6
+85			4.9 172.0
+88			3.2 173.7
+10			1.3 175.6
T.P.	11.94	188.14	0.72 176.20
+50			7.1 181.0
2			2.2 185.9
+07 ⁸	mt.		1.6 186.5
T.P.	11.52	199.44	0.22 187.92
+50			9.6 189.8
3			4.6 194.8
+35			0.0 199.4
+50			1.8 197.6
T.P.	12.70	211.86	0.28 199.16
+63			13.6 198.3
+79			8.2 203.7
4			5.2 206.7

Sheet 8

4+16			5.5 206.4
+28			7.2 204.7
+50			3.2 208.7
+63			2.6 209.3
+72			4.8 209.1
T.P.	12.60	223.71	0.75 211.11
+80			11.0 212.7
+84	mt.		9.7 214.0
5	cut 8'		6.3 217.4
+50			2.8 220.9
T.P.	12.53	235.69	0.55 223.16
6	cut 8'		10.8 224.9
+12			13.8 221.9
+25			8.0 227.7
T.P.	12.19	247.50	0.38 235.31
+50	cut 10'		9.7 237.8
T.P.	12.20	259.92	0.28 247.22
+75			11.9 247.5
7	cut 10'		3.0 256.4
T.P.	12.49	271.66	0.25 259.17

271.66

7425 cut 10' 10.4 261.3

+30 10.4 261.3

T.P. 12.41 283.86 0.21 271.95

450 10.8 273.1

+75 cut 10' 4.3 279.6

T.P. 12.44 296.07 0.43 283.43

8 11.7 284.4

+50 6.7 289.4

9 4.0 292.1

+436 3.7 292.4

Levels for "G" line see pages 32 & 33

B.M.	12.17	142.80		130.63
0+05.52	14+27.2	"F" Line	12.2	130.6
+06			13.6	129.2
+10			11.4	131.4
+50			2.8	140.0
T.P.	12.48	154.82	0.46	142.54
1+0			7.7	149.1
T.P.	11.46	166.12	0.16	154.66
+50			11.3	154.8
2			2.8	163.3
T.P.	13.12	177.38	1.86	164.26
+50			4.0	173.4
T.P.	12.28	189.34	0.32	177.06
3			8.8	180.5
+30			4.4	184.9
+33.9			2.5	186.8
+40			1.3	188.0
+50			1.9	187.4
T.P.	11.52	200.09	0.77	188.57
T.P.	12.89	212.42	0.56	199.53

Sheet 8

212.42

40

4			11.6	200.8
+13			10.9	201.5
+15			13.0	199.4
26			11.4	201.0
28			9.2	203.2
+50			5.1	207.3
T.P.	11.70	224.06	0.06	212.36
5			8.2	215.9
T.P.	12.26	235.94	0.38	233.68
+25			11.7	224.2
+34			6.6	229.3
+43 ⁴ & Alley West of 10 th St			4.98	230.96

Levels Alley West of 10th St from Sta 5+434 "G"
 Line South for 310'

B.M.	498	235.94		230.96
0+0			5.0	230.9
+25			0.3	235.6
T.P.	12.13	247.95	0.12	235.92
+50			2.7	245.3
T.P.	12.84	260.64	0.15	247.80
+75			12.5	248.1
1			7.6	253.0
+25			5.3	255.3
T.P.	12.42	272.94	0.32	260.32
+50			12.0	260.9
+75			5.5	267.4
T.P.	8.89	280.29	1.04	271.90
2			7.1	273.2
+25			5.0	275.3
+50			4.6	275.7
3			5.2	275.1
+10			5.3	275.0

Sheet 8

Levels Alley West of 10th St from Sta 5+437 North for 370' 41

B.M.	498	235.94		230.96
0+0			5.0	230.9
T.P.	12.13	247.95	0.12	235.82
T.P.	9.76	257.54	0.15	247.80
+25			6.7	250.9
T.P.	13.05	270.42	0.19	257.37
+50			9.7	260.7
+75			2.6	267.8
T.P.	12.52	282.65	0.35	270.07
1			8.2	274.5
+14			5.1	277.6
+42 ² E Johnson St			4.2	278.5
+50			3.9	278.8
+58			3.6	279.1
+68			1.9	280.8
2			0.9	281.8
+50			0.4	282.3
3			0.6	282.1
+50			1.3	281.4
+70			2.1	280.6

Sheet 8

Levels of Johnson St from Alley west of 10th St
west for 235'

282.65

0+0 = Sta 142 ² Alley Line	4.2	278.5
+50	5.4	277.3
1	7.7	275.0
+50	9.5	273.2
+61 ² of St west of 10th St	9.3	273.4
2	9.4	273.3
+20	9.4	273.3
+31	8.8	273.9
+35 ¹ cut 6'	8.8	273.9

Sheet 8

Levels of 1st St west of ~~10th~~ 10th St from Johnson North for 190'

282.65

0+0 = Sta 146 ¹ Johnson St	7.3	273.4
+50	9.8	272.9
1	9.7	273.0
+50	7.8	274.9
+90	9.4	273.3

Sheet 8

Levels of Johnson St from Alley west of 10th St 42
E to 10th St

282.65

0+0 = Sta 142 ² Alley Line	4.2	278.5
+50	2.5	280.2
1	0.6	282.1
T.P. 7.59	0.51	282.14
+53 = E 10th St	5.5	284.2

Sheet 8

Levels of 10th St from Johnson North for 315'

282.73

0+0 = Sta 145 ³ Johnson St Line	5.5	284.2
+50	5.5	284.2
1	6.2	283.5
+50	6.7	283.0
2	6.0	283.7
+50	5.5	284.2
3	5.4	284.3
+15	6.6	283.1

Sheet 5

Levels of 10th St from Johnson South to Alley
between Johnson & Hayes for 276.3

	289.73		
0+0 = 5th Johnson & Hayes Line	5.5	284.2	
+50	6.5	283.2	
1	7.9	281.8	
+50	6.8	282.9	
2	6.0	283.7	
+50	5.8	283.9	
+76 ³	5.6	284.1	

Sheet 8

Above Line produced for 135' or to
5th + 11³

B.M.	5.15	289.25	284.10
+76 ³	5.15	284.1	
3	4.9	284.1	
+50	5.7	283.6	
4	6.6	282.7	
+11 ³	7.1	282.2	

Levels of Alley between Johnson & Hayes
from 10th St East for 560.7

43

	289.73		
0+0 = 5th + 76 ³ 10th St Line	5.6	284.1	
+50	✓	4.0	285.7
1		2.7	287.0
+50		2.4	287.3
T.P.	12.70	300.29	2.14
2		12.3	288.0
+50		11.3	289.0
3		10.8	289.5
+50		10.1	290.2
4		9.2	291.1
+50		8.6	291.7
5		9.1	291.2
+50		8.2	292.1
+60 ⁷		7.8	292.5

Sheet 8

9/101 Dunkie
116 Shaw
Bunker

23+749 ← Sec page 2

11+95⁶⁰ = 25+79² Δ Rt 66°53'

8+27⁰⁰ Δ Rt 38°40'

6+02¹ Alt 45°03'30"

4+28⁸ P.O.T = Commence sewer here. See page 78 for extension

3+24³ Δ Rt 54°27' Nail driven in sidewalk on W 7' line of Maryland

00 = S.W 7' tack of Meade & Maryland

3+78² = Endline

1+64⁸ Δ Rt 24°59'

For levels See page 57

00 = 8+27⁰⁰ Δ Lt 64°56'

6+02¹ See main line above

44

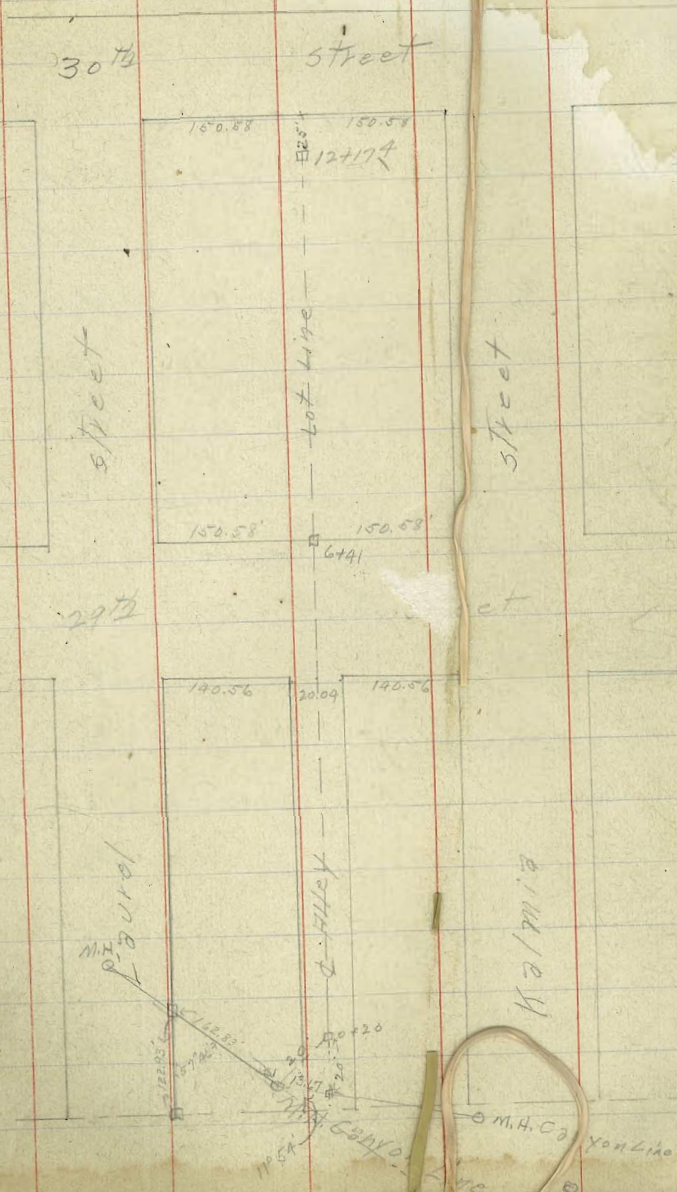
	+	π	-	
	11.93	201.50		189.57 = 23+74 ⁹ Sec P A
#	7.45	208.43	0.52	220.98
11+95 ⁶⁰ = 25+79 ²			9.75	Rock ✓ 198.68
11+80			10.0	198.4
+70	Bottom Wash		11.5	196.9
+58			8.1	200.3
+50			6.9	201.5
#	5.51	213.67	0.27	Rock ✓ 208.16
11			7.0	206.7
10+50			4.1	209.6
10+12			1.0	213.7
10+11			2.9	210.8
10+00			2.0	211.7
9+99			1.2	212.5
#	12.68	226.35	0.00	213.67
9+75			12.5	212.9
9+70	Bottom Wash		13.8	212.6
9+65			12.7	213.7
762			11.8	214.6
+50			10.2	216.2
+38			9.6	216.8
+37			11.3	215.1
+25			11.0	214.9

To 48

Levels for proposed sewer Alley bet Kalmia
 & Laurel from M.H. Canyon Line East for 12174 to
 25' W. of n. L. 80th St

B.M. Bottom M.H.				166.32
B.M. 16.96	133.28			
B+0 = M.H. Canyon Line	12.1	Top		171.2
at 13.67 S. of M.H. or location for narrow H. Alley	12.1			171.2
+13			16.5	171.8
+15			10.1	173.2
+20			9.2	174.1
+50			3.8	179.5
T.P.	12.58		195.57	0.29
			10.6	185.0
1			4.5	191.1
T.P.	13.04		208.42	0.19
+25			9.4	199.0
T.P.	12.88		220.93	0.37
+50			12.6	208.3
+75			1.6	219.3
T.P.	12.75		233.19	0.99
2			1.1	232.4
T.P.	12.34		245.43	0.18
+10			7.5	237.9
+25			5.6	239.8

2/21/15
 Double
 Shain
 Bunker



		245.43			
2+50			0.7	244.7	
T.P.	12.24	257.32	0.35	245.08	
+75			8.7	248.6	
3			3.1	254.2	
T.P.	12.10	268.94	0.48	256.84	
+25			9.3	259.6	
+50			4.3	264.6	
T.P.	12.18	280.71	0.41	268.53	
+75			11.7	269.0	
4			2.4	272.3	
+50			1.8	278.9	
T.P.	12.68	292.64	0.75	279.96	
5			9.8	284.8	
+50			5.8	286.8	
+61 W.L. 2914 St.					
6			3.7	288.9	
+41 E.L. 2914 St			1.9	290.7	
+50			1.8	290.8	
7			0.8	291.8	
+50			0.4	292.2	
T.P.	5.61	297.92	0.33	292.31	

		297.92			46
8					42
+50					4.9
9					4.9
+50					5.0
10					5.2
+50					5.3
11					6.6
+50					7.6
12					8.0
+174					8.1

293.1

293.0

293.0

294.9

292.7

294.6

291.3

290.3

289.9

289.8

Preliminary sewer on Center Girard
Sta. 16+50 about 315' north of center

Sta.	J.P.	H.I.	Rod	Elev.
0+00		2.43	106.40	103.97
+50				
1+00				
+50				
2+00				
+50				
3+00				
+50				
4+00	13.03	119.17		
+50				
5+00				
+50				
6+00				
+50				
7+00	12.98	131.95		
+50				
8+00				
+50				

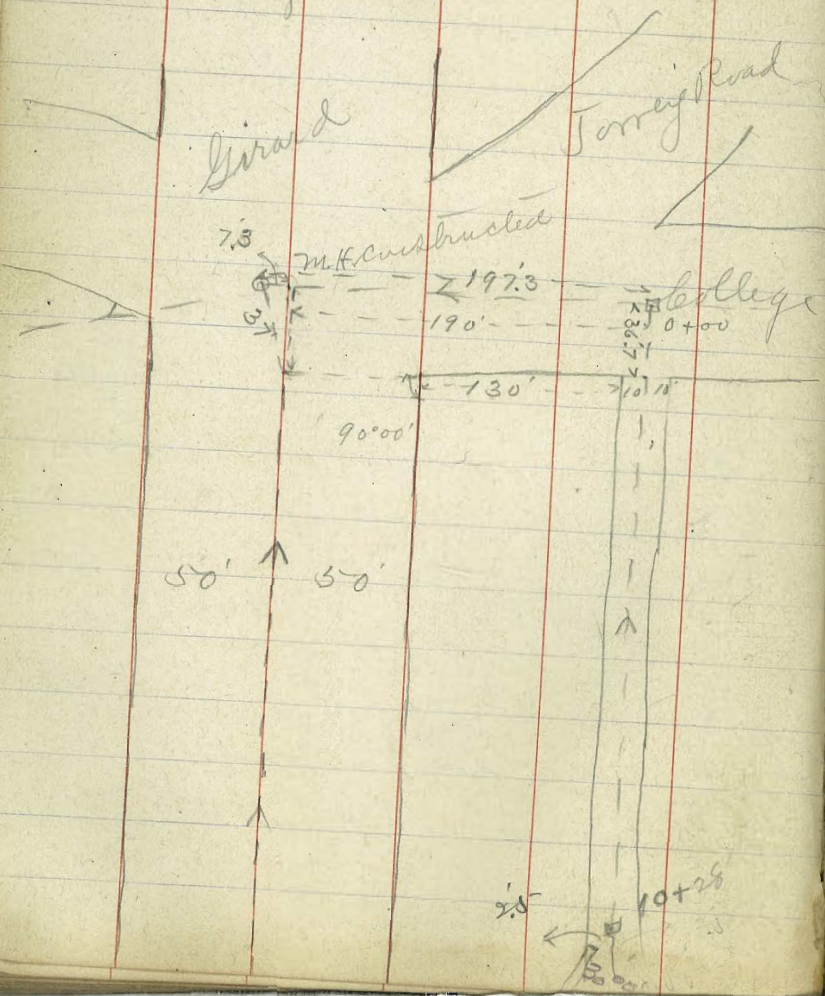
from M.H. at Girard & College to
Mar 31/15
47
Schields
Center
Run

Sta.	H.I.	Rod	Elev.
9+00	131.95	6.2	124.7
+50		4.1	127.8
10+00		2.1	129.8
+50		0.6	131.3
J.P.	12.93	144.42	0.46
11+00		10.4	134.0
+50		7.4	137.0
12+00		5.5	138.9
+08		5.8	138.6
+50		8.2	136.2
+50		8.0	136.4
13+00		7.4	137.0
J.P.	12.85	155.74	1.53
+35		13.5	142.89
+50		12.1	143.6
+62		13.7	147.0
14+00		13.6	147.1
+50		10.5	145.2
15+00		8.0	147.7
+50		6.3	149.4

Cont. from Page 47

Sta.	H.I.	Rod Elev.
16+00	153.74	
+34		4.3
S.P.		3.2
750	162.30	0.50
		5.30

7.06
hub. about 31.5
North of Center



	+	Σ	-	From 44	48
9+32		226.35	10.6		215.8
+20			8.9		217.5
9+00			6.6		219.8
8+85			6.0		220.4
+81			6.2		220.2
+77			5.1		221.3
+50			2.2		224.2
# 8+27 ² Δ	12.73	238.99	0.09	Hub	226.26
8+08			10.0		229.0
8+00			9.5		229.5
7+00			5.4		233.6
+35			1.8		237.2
#	12.69	251.38	0.30		238.69
7+00			10.4		241.0
6+70			7.1		244.3
+50			7.1		244.3
#				Hub	
6+02 ² Δ	12.72	262.71	4.39		249.99
6+00			12.7		250.0
5+00			6.0		256.7
					261.8
5+10			0.9	Rec'd	
#	13.01	275.54	0.18	264.53	Page 54

Pre-sewer alley East of Guard from
School house.

Sta.	H.I.	Rod	Elev.
J.P.	13.07	106.72	93.65
0+00	M.H. center alley 4' near center college	10.11	96.6
+50	see diagram page 45	8.0	98.7
1+00		6.1	100.6
+50		5.3	101.4
2+00		5.6	101.1
+50		2.9	103.8
3+00		2.2	104.5
+50		1.5	105.2
4+00		1.0	105.7
J.P.	12.46	118.94	106.48
+20		0.24	106.4
+50		12.5	106.4
		10.0	108.9
5+00		7.3	111.6
+50		5.0	113.9
6+00		3.3	115.6
+50		1.2	117.7
J.P.	12.22	130.96	118.74
7+00		0.20	118.74
+50		11.8	119.1
+50		10.1	120.8
8+00		8.6	122.3

center of college to
apr. 1/15

Helix 49
Kerr
Hatcher

Sta.	H.I.	Rod	Elev.
	130.96		
8+50		6.9	124.0
9+00		4.8	126.1
+50		3.0	127.9
10+00		2.1	128.8
+14.2			
728		0.94	130.02
			128.0 level bottom of pipe

center alley
about 5' deep

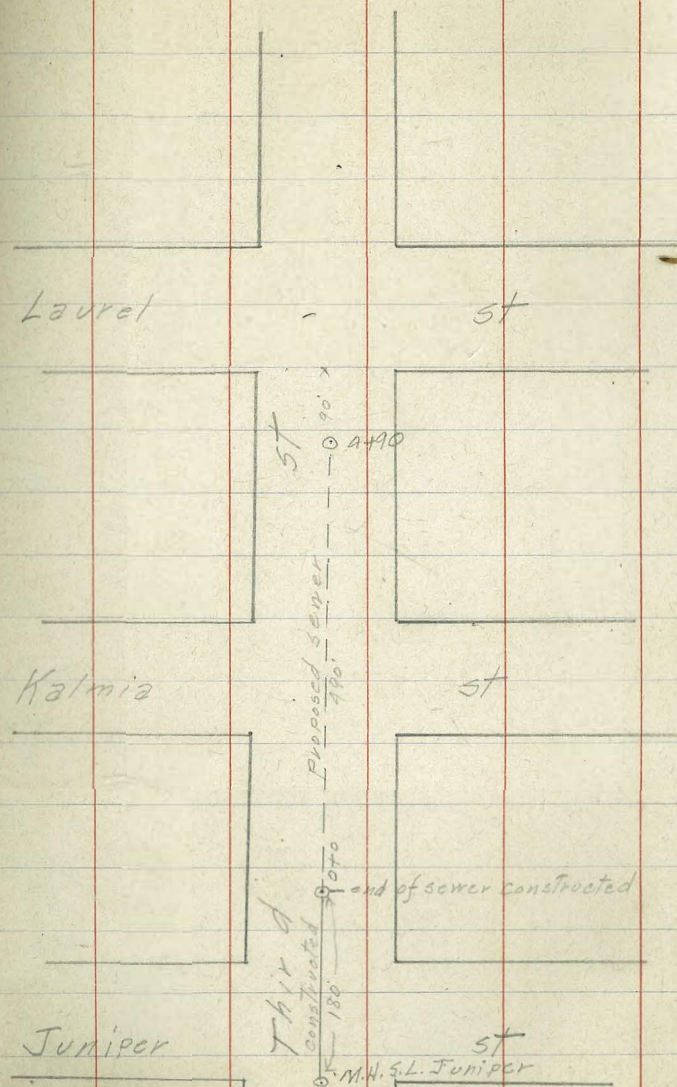
Levels for proposed sewer - see sketch opp. page

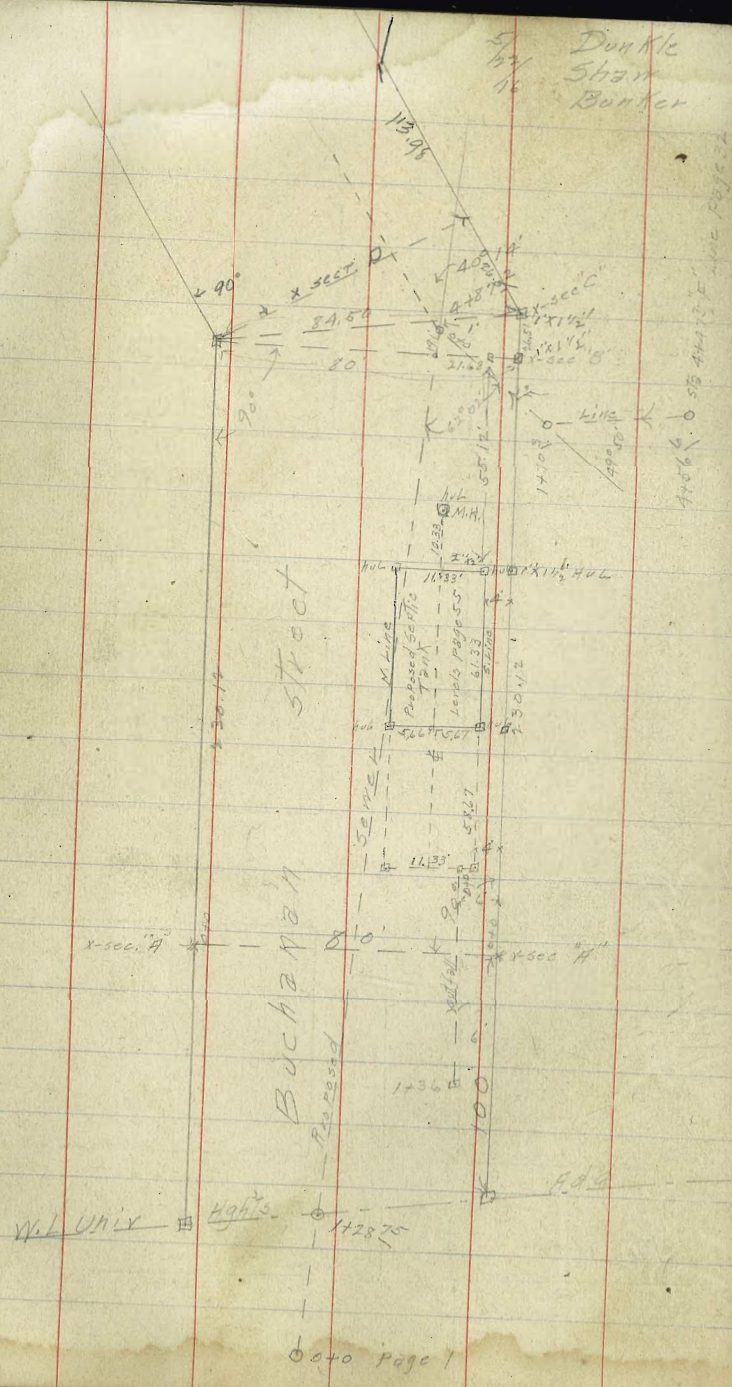
B.M. N.W. of 2 nd Juniper	7.95	216.90		208.95
0 to 130' N of S.L. Juniper		1.4		215.5
T.P.	12.55	229.12	0.33	216.57
+50			12.2	216.9
1			10.3	218.8
+50			8.5	220.6
2			7.2	221.9
+50			5.7	223.2
+80			5.1	224.0
3			4.4	224.7
+50			2.5	226.6
4			0.1	229.0
T.P.	10.31	239.26	0.17	228.95
+50			8.1	231.2
+90			6.7	232.6

Note - 5' cut O.K. except East side south of Kalmia - which will be impossible to get in from ground elev. at present

11/15
 1/5
 Bunker
 Shaw
 Bunker

50





x-sections to locate Septic Tank - see sketch opp page 51

B.M.	4.55	96.05	91.50
x-section "A" = 0+0			
N.L. Street	7.1	89.0	
+10	8.3	87.8	
+20	9.7	86.4	
+25	10.7	85.4	
+30	13.4	82.7	
+32	15.2	80.9	
+40	14.9	81.2	
+50	14.7	81.4	
+54	14.6	81.5	
+60	15.7	80.4	
+70	16.7	79.4	
S.L. Street	17.6	78.5	
0+25 East			
S.L.	16.1	80.0	
+10	14.8	81.3	
+16	13.6	82.5	
+20	13.2	82.3	
+30	13.8	82.3	
+40	14.2	81.9	
+44	14.0	82.1	
+46	11.3	84.8	
+50	10.1	86.0	
+53	8.4	87.7	
+60	7.1	89.0	
+70	5.5	90.6	
N.L.	3.5	92.6	

96.05

0450 East

N.L.		1.3	94.8
+10		3.3	92.8
+20		5.1	91.0
+30		6.9	89.2
+34		9.5	86.6
+38		10.8	85.3
+40		13.6	82.5
+50		13.3	82.8
+60		12.9	83.2
+66		12.8	83.3
+70		13.5	82.6
S.L.		16.3	79.8
	+75		
S.L.		14.8	81.3
+05		14.5	81.6
+10		13.0	83.1
+20		12.1	84.0
+30		12.1	84.0
+37		12.6	83.5
+40		9.5	86.6
+46		8.7	87.4
+48		7.2	88.9
+50		6.8	89.3
+60		4.6	91.5
+70		2.6	93.5
T.P.	10.36	2.23	93.22
N.L.	104.18	8.0	96.2

104.18

140 East

52

N.L.		3.9	100.3
+10		7.7	96.5
+20		11.0	93.2
+30		13.7	90.5
+40		15.3	88.9
+43		15.8	88.4
+46		19.0	85.2
+50		18.4	84.8
+60		18.3	85.4
+63		19.0	85.2
+70		20.4	83.8
S.L.		21.5	82.7
	+25		
S.L.		20.6	83.6
+10		19.2	85.0
+15		17.9	86.3
+20		18.1	86.1
+30		18.1	86.1
+34		14.6	89.6
+40		13.3	90.9
+50		10.9	93.3
+60		7.7	96.5
+70		4.6	99.6
N.L.		1.0	102.2

104.18

1+50 East

X			
N.L.		+0.5	104.7
+10		3.1	101.1
+20		6.3	97.9
+30		9.2	95.0
+40		11.6	92.6
+50		13.5	90.7
+52		17.0	87.2
+60		17.3	86.9
+67		17.1	87.1
+70		17.6	86.6
S.L.		19.3	84.9
	1+75		
S.L.		12.7	85.5
+10		16.2	88.0
+20		16.8	87.4
+25		16.3	87.4
+27		12.2	91.4
+30		12.2	92.0
+40		9.7	94.5
+50		7.5	96.7
+60		5.5	98.7
+70		2.6	101.6
N.L.		+0.9	105.1

104.18

2+0

53

N.L.		+1.0	105.2
+10		2.1	102.1
+20		4.7	99.5
+30		7.0	97.2
+40		9.1	95.1
+50		11.3	92.9
+53		12.1	92.1
+55		15.0	89.2
+60		15.6	88.6
+68		15.4	88.8
+70		15.8	88.4
S.L.		17.9	86.3
	2+30 ¹² = X-section "B"		
S.L.		15.5	88.7
+10		14.4	89.8
+14		13.9	90.3
+20		14.2	90.0
+29		14.2	90.0
+30		13.3	90.4
+32		10.0	94.3
+40		8.0	96.2
+50		5.5	98.7
+60		3.4	100.8
+70		0.8	103.4
N.L.		+1.3	105.5

104.18

X-section "C"

N.L.	+1.5	105.5
+10	0.8	103.4
+20	3.0	101.2
+30	4.7	99.5
+40	6.9	97.3
+47	8.8	95.4
+49	13.1	91.1
+50	13.2	91.0
+60	12.9	91.3
+70	13.5	90.7
+80	14.5	89.7
+84 ⁵ - S.L.	15.0	89.2

12.30

+

π
275.54

-

Sec 48

54

5+00			12.9	262.6
4+70			8.0	267.5
4+00			7.6	267.9
4+55			5.9	269.6
4+50			5.0	270.5
4+30			2.2	273.3
4+28 ² ROT. End of Sewer			2.42	273.12
#	12.40	287.22	0.02	275.54
4+00			6.7	281.7
3+75	Note from this point to the N.L. of Maryland st line goes angling up 1/2 to 1 slope		1.7	286.2
#	12.04	299.57	0.39	287.53
#	12.94	312.18	0.33	299.24
#	12.63	324.57	0.24	311.94
3+35			12.7	
3+24 ³ Δ On Walk			11.51	313.06
#	11.12	335.67	0.02	324.55
N.W. Cor Meade & Maryland Return			1.44	334.23 = 334.06 B.P.

Levels for proposed Septic Tank Page 51 $\frac{7}{14}$ / $\frac{11}{16}$ Dunkle
Shan
Bunker

91.79

55

6.67

91.79

85.12

4 Tank

South line of Tank

0+0 East end of Tank

9.0

87.8

0+0 East end of Tank

5.4

86.2

+10

9.8

87.0

+10 west

5.9

85.9

+20

5.2

86.6

+20

6.3

85.5

+30

5.4

86.4

+30

6.7

85.1

+40

6.7

85.6

+40

7.1

84.9

+50

7.1

84.7

+50

8.1

83.7

+61³³

7.8

84.0

+61³³

8.7

83.1

+70

8.3

83.5

+70

9.1

82.9

+80

8.9

82.9

+80

9.4

82.4

+90

9.0

82.8

+90

9.8

82.0

+10

9.1

82.7

+10

10.3

81.5

+20

9.3

82.5

+10

10.9

80.9

+20

9.8

82.0

+20

10.9

80.9

91.79
N.L. Tank

0+0 = East End of Tank	4.2	87.6
+10	4.5	87.3
+20	4.9	86.9
+30	5.1	86.7
+40	5.4	86.4
+50	5.8	86.0
+61 ³³	6.4	85.4
+70	7.2	84.6
+80	7.7	84.1
+90	8.2	83.6
+100	8.7	83.1
+110	8.0	83.8
+120	8.4	83.4

Levels for out fall serts Tank page 51

56

	2.38	83.28	82.90
0+0 = 120 W of East End of Tank	1.9	81.4	
+25	2.2	81.1	
+50	4.1	79.2	
+75	6.0	77.3	
1	7.0	76.3	
+25	8.3	75.0	
+35	9.3	74.0	
+36 bottom creek bed	12.6	70.7	

Levels for change in "F" Line See pages 320 51

	91.79			
0+0 = 445 ² F Line page 1	0.3	91.5		
+25	2.8	89.0		
+50	4.4	87.4		
+67	6.1	85.7		
+73	8.3	83.5		
+79	6.0	85.8		
1	4.5	87.3		
+50	5.7	85.9		
+70 ³ L 49° 50'	6.1	85.7		
2	5.8	86.0		
+25	5.0	86.8		
+50	4.2	87.6		
T.P.	10.55	98.46	3.88	87.91
3	8.3	90.2		
+25	7.4	91.1		
+50	6.6	91.9		
+81	6.0	92.5		
+83	6.9	91.6		
4	5.8	92.7		
+04	5.3	93.2		
+50	3.3	95.2		
+56 ⁶ = 378.4 + 47 ² page 32	2.9	95.6		

	+	7	-	Elev	57
00 = 8+27 ⁰⁵	12.87	239.13		226.26	See Page 48
0+25			10.6	228.5	
0+50			10.6	228.5	
1+00			5.5	233.6	
1+25			4.7	234.4	
#	10.24	248.93	0.44	238.69	Rock
1+50			10.0	238.9	
1+69 ⁸ Δ R1			Hub 8.18	240.75	
2+00			5.2	243.7	
2+20			2.2	246.7	
2+30			2.6	246.3	
2+43			1.2	247.7	
#	12.44	261.37	Rock 0.00	248.93	
2+50			11.3	250.1	
2+52			12.5	248.9	
2+60			11.7	249.7	
2+70			5.3	256.1	
2+78			6.8	254.6	
#	12.55	272.63	1.29	260.08	
3+00			8.0	264.6	
					See Page 67

Levels on Center Line of Vermont
 32+88³ (FLine) N to Sta 1495⁵ St from Sta

27948

58

BM 0+0	10.73	230.43	222.7	Hub Sta 32+88
0+5			9.1	224.3
+20			7.6	225.8
+25			5.6	227.8
+31			4.0	229.4
T.P.	11.57	244.74	0.26	233.17
+43			9.3	235.4
+50			10.5	234.2
+53			10.4	234.3
+55			11.5	233.2
+65			10.4	234.3
+75			5.7	239.0
+81			5.2	239.5
T.P.	12.96	257.26	0.44	244.30
+90			7.4	249.9
+93			5.5	251.8
T.P.	11.14	267.69	0.71	256.55
+125			6.7	261.0
T.P.	12.06	279.48	0.27	267.42
+142			10.0	269.5

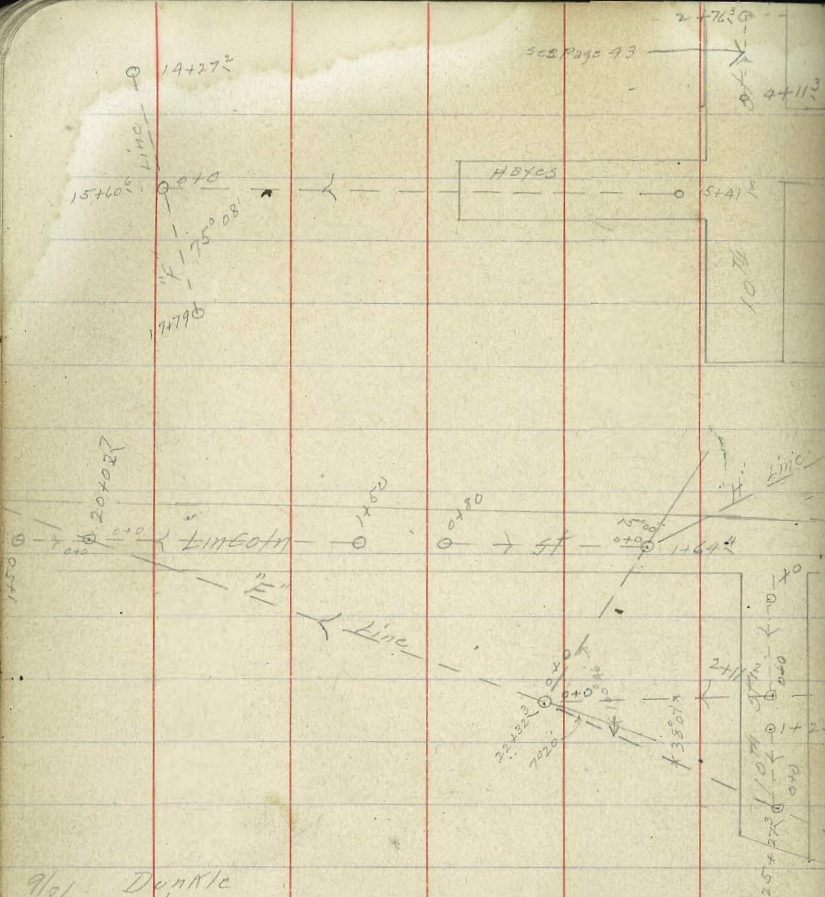
+50			6.2	273.3
+61			2.9	276.6
T.P.	11.30	290.63	0.15	279.33
+64			13.8	276.8
+65			11.8	278.8
+75			8.0	282.6
+80			6.8	283.8
+86			2.3	288.3
+95 ⁵	Ground		1.6	289.0
+95.5	Bottom Pipe		2.2	288.4
T.P.	6.67	297.10	0.20	290.43
			5.02	292.08

Spk in hole SW Cor
 Lincoln + Vermont Sts

Levels & Hayes St from Sta 15+60.2 (F Line)
 East to 30' w of W Line of 10th St. for 541.8' (F Line)
 B.M. 11.54 142.17 130.63 Sta 14+27.2

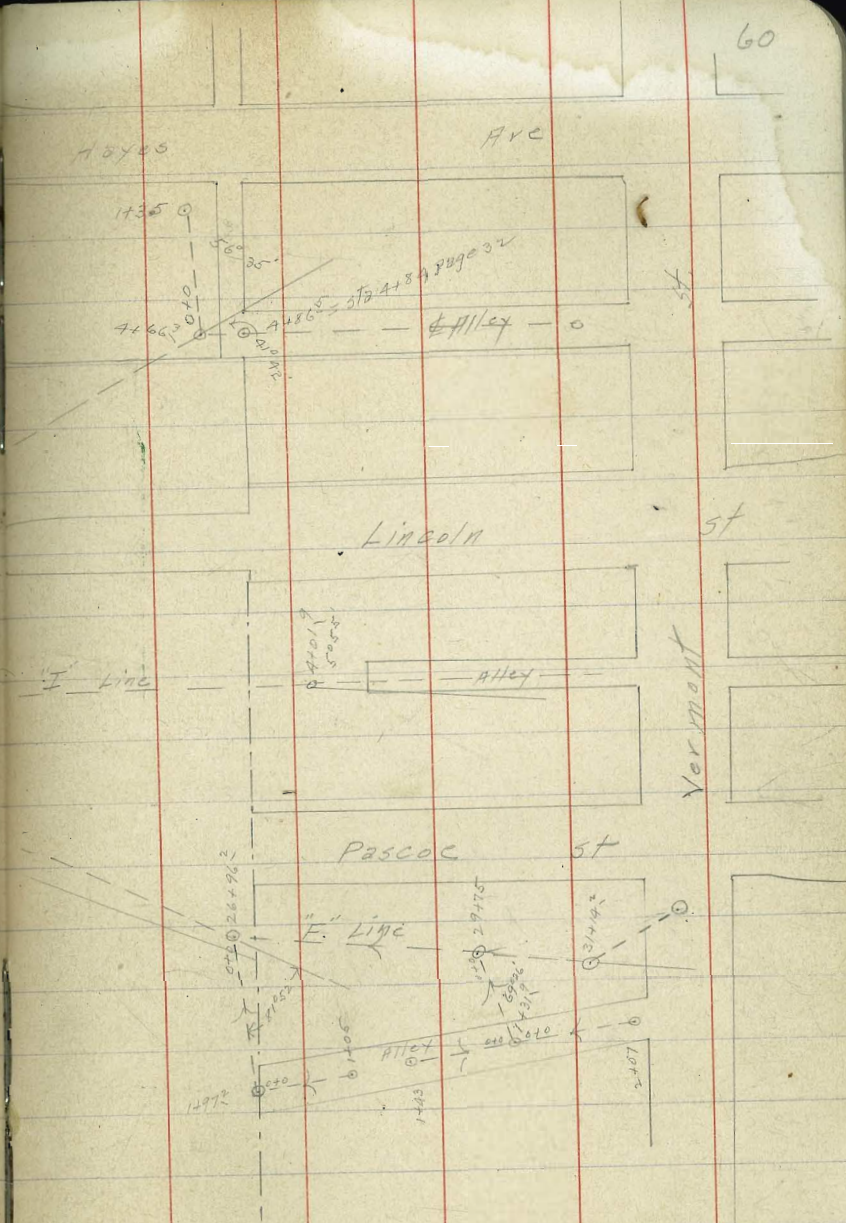
0+0 = 5 1/2' 15+60.2 F Line		6.32	135.8
+25		3.8	138.4
+40		0.2	142.0
T.P.	12.19	154.19	0.17 142.00
+50		7.2	147.0
T.P.	11.84	165.68	0.35 153.84
+75		2.4	163.3
T.P.	12.49	178.10	0.07 165.61
T.P.	12.76	190.48	0.38 177.72
1		11.0	179.5
T.P.	12.34	202.32	0.44 190.04
+25		5.5	196.9
T.P.	12.60	214.69	0.29 202.09
T.P.	12.38	226.74	0.33 214.36
+50		10.4	216.3
+59		2.9	223.8
T.P.	12.78	239.36	0.16 226.58
+75		2.4	237.0
T.P.	11.65	250.77	0.24 239.12

		250.77	
+87		4.9	245.9
T.P.	12.15	262.70	0.22 250.55
+93		8.8	253.9
2		7.0	255.7
+19		2.9	259.8
+25		1.3	261.4
T.P.	11.33	273.93	0.10 262.60
+38		8.6	265.3
+50		6.5	267.4
3		5.1	268.8
+50		4.6	269.3
4		3.9	270.0
+25		2.6	271.3
+50		0.6	273.3
T.P.	11.16	284.62	0.47 273.46
+75		9.3	275.3
5		7.0	277.6
+418 = 30' w of 10th St		4.2	280.4
			275



9/3/16 Dunkle
Shaw
Booker

see page 32



Levels "H" Line from Sta 22+32.2 "F" Line in
North Easterly direction for 486.5'

B.M.	12.29	176.92		169.63
	L 100° 46'			
0+0 = 22+32.2 "F" Line			12.3	164.6
+35			8.5	168.4
+50			9.3	167.6
+85			4.9	172.0
+88			3.2	173.7
T.P.	"			
1			1.3	175.6
	11.94	182.14	0.72	176.20
+50			7.1	181.0
+64.9	R 15° 00'		6.13	182.01
T.P.	10.35	196.38	2.11	186.03
2+0			10.8	185.6
+50			5.9	190.5
T.P.	9.00	204.84	0.54	195.84
3			9.4	195.4
+25			7.3	197.5
+37			3.9	200.9
+50			5.1	199.7
+72			4.9	199.9
+85			1.11	203.7
T.P.	10.50	214.60	0.34	204.50

214.60

61

A+0	11.4	203.2
+50	7.8	206.8
+62	7.9	206.7
+66.3	R 41° 42'	5.34
+86.5 = Sta A+84 page 32	0.63	214.0

Levels for Line beginning at sta 4+66.3 "H" Line
thence in Northerly direction for 135' see Page 60

	225.08			
0+0 = Sta 4+66.3 "H" Line	15.8	209.3		
+25	9.1	216.0		
+45	7.9	218.2		
+50	5.8	219.3		
+57	2.4	222.7		
T.P.	11.74	236.14	0.68	224.40
+75	9.0	227.1		
T.P.	11.42	247.26	0.30	235.84
1	15.1	232.2		
+25	4.9	242.4		
+35	1.3	246.0		

Levels of Lincoln from sta 1+64.8 "H" Line
west for 80'

62

B.M.	10.12	192.13		182.01
0+0			10.12	182.0
+08			10.3	181.8
+25			4.1	188.0
T.P.	12.22	204.07	0.28	191.25
+50			3.9	200.2
T.P.	5.42	208.80	0.69	203.38
+75			1.1	207.7
+80			1.4	207.4

Levels of Lincoln from sta 20+02.7 "F" East for 150'

B.M.	6.63	161.26		154.63
0+0			6.63	154.7
+06			8.1	153.2
+13			5.2	156.1
+40			4.7	156.6
+50			1.3	160.0
T.P.	12.16	172.93	0.49	160.77
+75			5.2	167.7
T.P.	11.61	184.24	0.30	172.63
1			7.9	176.3
T.P.	9.91	194.01	0.14	184.10
+25			8.9	185.1
+50			3.28	190.7

Levels of Lincoln from sta 20+02^{15" Line} west for 150'

B.M.	12.10	166.73		154.63
0+0			12.10	154.6
0.32			13.9	152.8
+36			14.7	152.0
+39			13.8	152.9
+50			13.8	152.9
+75			10.5	156.2
1			3.5	163.2
T.P.	10.46	176.92	0.27	166.46
+25			6.2	170.1
+50			2.25	174.67

Levels of 10th St from sta 25+27^{3" F Line} north for 125'

63

B.M.	8.13	172.76		164.63
T.P.	10.30	182.25	0.21	172.55
T.P.	10.96	191.98	1.83	181.02
0+0			10.96	181.02
+25			6.8	185.2
+50			1.3	190.9
T.P.	10.92	202.72	0.18	191.80
+75			3.2	199.5
T.P.	11.80	214.33	0.19	202.53
+85			7.2	207.1
+90			4.4	209.9
T.P.	9.21	223.35	0.19	214.14
1			7.4	214.0
+18			4.6	218.8
+25			4.87	218.48

Levels beginning at sta 26+96.2 "F" Line thence in
Easterly direction for 1972' or Alley South of Pascoe
& P. L.

B.M.	12429	193.31		181.02
T.P.	11.71	201.15	3.87	189.44
0+0 = sta 26+96.2 "F" Line			11.71	189.5
+09			11.5	189.7
+13			9.6	191.6
+25			6.9	194.3
+50			5.1	196.1
+75			4.2	197.0
1			1.7	199.5
T.P.	12.56	212.26	1.45	199.70
+12			12.0	200.3
+23			8.8	203.5
+34			9.3	203.0
+50			7.4	204.9
+75			3.0	209.3
+83			3.5	208.8
+97.2			0.80	211.46

Levels of Alley South of Pascoe from sta 64
1497.2 (Pages 60864) East for 105'

B.M.	11.54	223.00		211.46
0+0				11.54
+05				6.8
+12				6.1
T.P.	12.34	235.77	0.07	222.93
+25				11.1
T.P.	12.44	248.03	0.18	235.59
+50				11.3
T.P.	12.25	260.12	0.16	247.87
+75				11.3
T.P.	12.25	272.30	0.07	260.05
+96				11.7
1				10.5
+05				9.6
6.98		278.66	0.62	271.68
			3.86	274.80

Levels beginning at sta 29+75 "F" line thence in southerly direction for 131.9' to $\frac{1}{2}$ Alley south of Pascoe

B.M.	12.28	201.72		189.44
T.P.	11.53	212.42	0.83	200.89
+00			8.61	203.8
+08			8.1	204.3
+25			5.1	207.3
+50			1.1	211.3
T.P.	11.48	223.31	0.59	211.83
+75			10.2	213.1
1			8.0	215.3
+24			5.1	218.2
+31.9 = $\frac{1}{2}$ Alley south of Pascoe			5.53	217.78

Levels $\frac{1}{2}$ Alley south of Pascoe from sta 14312 65 west for 143'

		223.31		
+00			57.53	217.8
+06			2.8	220.5
T.P.	12.20	233.55	1.96	221.35
+25			2.6	231.0
T.P.	11.10	243.95	0.70	232.85
+37			7.4	236.6
+50			3.2	240.8
T.P.	11.49	255.27	0.17	243.78
+62			9.9	245.1
+63			11.2	244.1
T.P.	11.13	266.21	0.19	255.08
+75			10.8	255.4
+80			6.7	259.5
1			1.6	264.6
T.P.	10.33	276.78	0.36	265.85
+12			8.9	267.3
+15			6.1	270.1
+25			4.8	271.4
+43			1.40	274.78

Levels & Alley South of Pascoe from sta 1+312
(Page 60) East for 207'

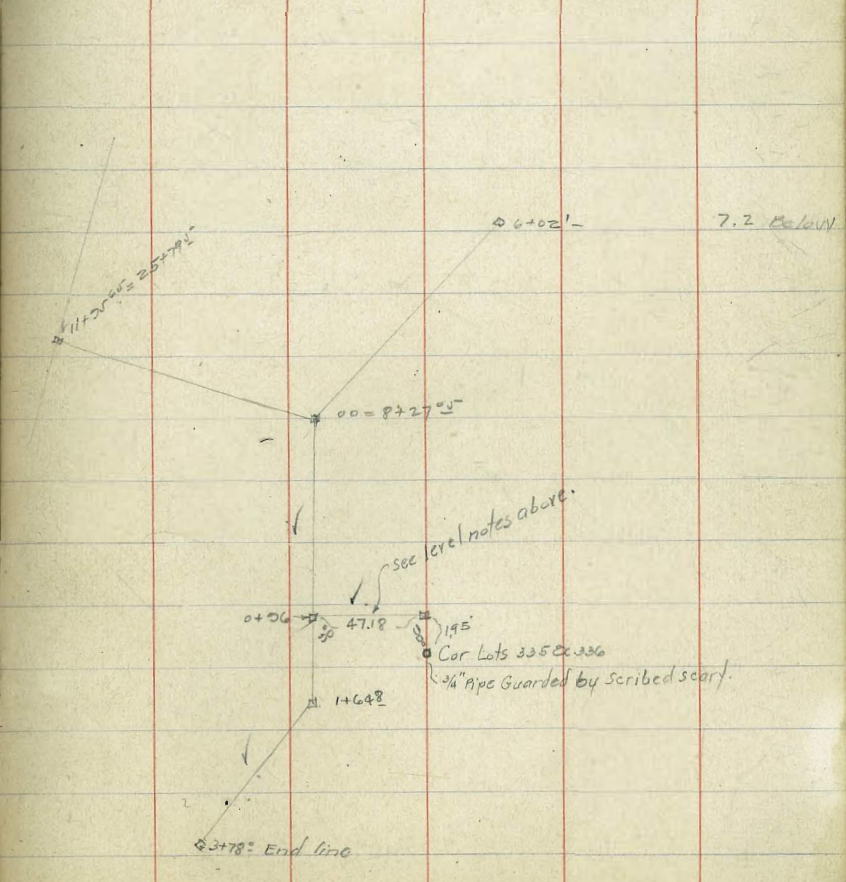
B.M.	11.04	228.82		217.78
0+0			11.04	217.8
+03			12.1	216.7
+25			2.1	226.7
T.P.	13.06	241.74	0.14	228.68
+50			1.2	240.5
T.P.	11.89	252.77	0.86	240.88
+75			2.1	250.7
T.P.	13.08	265.53	0.32	252.45
+90			7.2	258.3
1			6.1	259.4
+16			7.8	257.7
+25			7.0	258.5
+35			4.3	261.2
+50			5.7	259.8
+71			2.8	262.7
+75			0.6	264.9
T.P.	10.62	275.83	0.32	265.21
+82			8.4	267.4
+98			5.7	270.1
2			5.1	270.7
+07			4.40	271.4

Levels & 10th St from sta 2+112 "I" Line (pages 32 & 60) 66
North for 100'

B.M.	0.91	219.39		218.48
T.P.	6.6	214.18	11.37	208.02
0+0			14.1	200.1
T.P.	12.75	226.76	0.17	214.01
+25			11.6	215.2
T.P.	12.61	238.78	0.60	226.17
+50			9.8	229.0
T.P.	6.09	244.22	0.65	238.13
+68			5.6	238.6
+75			4.4	239.8
1			2.8	241.4

	+	π	-	
		27263		Sec Page 57
3+15			8.4	264.2
3+17			9.9	262.7
3+30			8.1	264.5
3+40			4.7	267.9
#	12.57	284.27	0.93	271.70
3+50			10.9	273.4
			Hub	
3+78° End line			6.19	278.08
#	12.99	296.59	0.17	284.10
			Rock	
#	9.22	305.30	0.51	296.08
#	10.12	315.42	0.00	305.30
			2.35	313.07 = 313.06 See Page 57

	+	π	-	
				67
	11.47	237.73		226.26 See Page 48
			Hub	
			4.47	233.26
			4.5	233.2
#	12.45	249.70	0.48	237.25
#	3.66	252.67	0.69	249.01
			1.02	251.65 ✓



2/17 Gregory Top stakes for sewer from I
 Moore 40' West of Maryland to
 Miller 40' East of Delaware.

B.M.	405	351.03	346.98	BP SW Market & Madison
	ROD	Ground	GRADE	CUT.
40' West of Maryland = D.E.	4.15	346.88	341.5	+ 5.38
95' ✓ - ✓	4.65	346.38	340.25	+ 6.13
150' ✓ - ✓ - M.H.	5.20	345.83	339.0	+ 6.83
55' ✓ ✓ M.H.	5.62	345.41	339.5	+ 5.91
110' ✓ - ✓ - ✓	6.23	344.80	340.	+ 4.80
40' 50' ✓ - ✓ - ✓	5.44	345.59	338.67	+ 6.92

5

1/16/20 Gregory Levels for Contours on Buchanan St
 Miller
 Shaw
 10.50 94.55 84.05
 for Septic Tank Location
 see sketch page 51
 Part 514
 Buchanan
 Mission Dr.

continuation of 1425 Section Page 52

S.L	11.4	83.2
28' S	11.5	83.0
31' S	10.2	82.4
36' S	11.5	83.0
60' S	11.5	83.0
100' S	11.4	83.1

continuation of 1450 Section Page 53

100' S	10.1	84.5
92' S	11.0	83.6
87' S	10.5	84.0
55' S	10.5	84.0
42' S	11.0	83.5
38' S	12.0	82.5
34' S	11.1	83.5
20' S	11.0	83.5
12' S	11.5	83.0
S.L Buchanan	9.8	84.7

continuation of 1475 Section page 53

St. Buchanan

10' S	12.0	82.5
13' S	9.8	84.7
39' S	11.20	83.3
44' S	10.2	84.3
75' S	9.2	85.3
100' S	8.5	86.0
125' S	7.5	87.0

continuation of 2400 Section Page 53

75' S	2.5	92.0
75' S	4.5	90.0
64' S	6.5	88.0
55' S	8.5	86.0
45' S	9.5	85.0
43' S	10.5	84.0
35' S	9.5	85.0
17' S	9.5	85.0
13' S	11.0	83.5
9' S	11.0	83.5
St. Buchanan	8.1	86.5

64 - 6.5

69

94.55

continuation of 3430.12 Section Page 53

3 L Buchanan	5.9	88.6
24' S	7.5	89.0
26' S	9.5	85.0
29' S	9.3	85.2
36' S	7.5	89.0
48' S	6.5	88.0
60' S	0.5	95.0
68' S	+5.0	99.5

continuation of Xsect C page 54

59' S	+5.0	99.5
54' S	+2.5	97.0
49' S	2.6	94.0
34' S	5.3	89.2
28' S	2.5	86.0
20' S	8.0	86.5
12' S	5.5	89.0
S. L. Buchanan	5.5	89.0

X Sect D

56' N. of SL	+6.5	101.0
33' N	+1.5	96.0

120
35110
10110
50

70

31' N. of SL

28	91.7	
11' S	92.2	
S. L. Buchanan	3.9	90.6
12' S	6.0	88.5
20' S	6.6	88.0
22' S	7.6	87.0
23' S	6.6	88.0
31' S	5.6	89.0
53' S	+1.4	96.0
60' S	+5.4	100.0

25' E of D

60' S	+5.8	100.4
47' S	0.2	94.4
38' S	4.4	90.2
25' S	3.2	91.4
11' S	6.6	88.0
5' S	4.5	89.8
S. L. Buchanan	2.2	92.4
9' N	0.6	94.0
29' N	0.7	93.9
32' N	+3.6	98.2
51' N	+7.6	102.2

54
74

74.55

50 E of "D"

44' N. of SL.	17.4	1020
35' N.	15.4	100.0
31' N	+0.4	950
12' N	+0.4	950
4' N	1.2	933
3.L Buchanan	5.2	89.3
2' S.	6.1	88.5
7' S	5.8	88.8
9' S	3.6	91.0
19' S	2.6	92.0
27' S	3.6	91.0
47' S	0.0	94.5
60' S	+6.0	100.5
13.16	94.21	84.05
11.23	107.90	0.54 96.67

45' E of "D"

55' N of SL Buchanan	3.6	104.3
38' ✓	7.7	100.2
35' ✓	11.9	96.0

71

14' N	11.9	96.0
7' N	17.9	90.0
2' N	17.9	90.0
3.L Buchanan	15.9	92.0
9' S.	14.6	93.3
21' S	14.9	93.0
33' S	13.4	94.5
49' S	11.9	96.0
54' S	10.9	97.0
65' S	+0.1	108.0

100' E of D

70' So. of SL Buchanan	3.9	104.0
58' ✓	8.9	99.0
49' ✓	10.4	97.5
14' ✓	12.9	95.0
1' ✓	12.5	95.4
1' N.	13.9	94.0
9' N.	14.9	93.0
10' ✓	16.9	91.0
13' ✓	16.9	91.0

107.90

19' N	10.9	97.0
34' N	10.6	97.3
39' N	6.3	101.6
44' ✓	4.9	103.0

113.98 E. of D = L pt. This sect. taken at rt 1/2 to West Tang

40' N of S.L. of Buchanan	3.9	104.0
36' ✓	5.2	102.7
32' ✓	9.9	98.0
19' ✓	9.9	98.0
13' N	15.9	92.0
9' N	16.5	91.0
8' N	13.9	94.0
6' N	12.9	95.0
S.L. Buchanan	12.9	95.0
9' S	11.9	96.0
20' S	11.9	96.0
53' S	8.9	99.0
70' S	3.9	104.0

72

25' E of L pt at 1/2 to E Tang

47' S of S.L. Buchanan	8.9	99.0
44' ✓ - - -	10.6	97.3
13' ✓ - - -	10.3	97.6
1' ✓ - - -	10.9	97.0
5' N ✓ - - -	11.9	96.0
8' ✓ - - -	14.9	93.0
11' ✓ - - -	12.9	95.0
19' - - -	10.9	97.0
24' ✓ - - -	8.4	99.5
37' ✓ - - -	8.5	99.4
40.5' ✓ - - -	4.9	103.0

50' E of L pt

14' N. of S.L.	4.9	103.0
38' ✓ - - -	7.6	100.3
23' ✓ - - -	7.6	100.3
16' ✓ - - -	12.5	95.4
15' ✓ - - -	14.3	93.6
13' ✓ - - -	14.3	93.6
12' ✓ - - -	12.5	95.4

107.90

6' N. of SL	11.9	96.0
2' - - -	9.9	98.0
35' S - - -	8.9	99.0
51.5' - - -	5.9	102.0
55' - - -	4.9	103.0

75' E

44' So. of S.L.	4.9	103.0
40' - - -	7.9	100.0
33' - - -	8.5	99.4
15' - - -	8.4	99.5
S.L. - Buchanan	9.9	98.0
5' N	11.9	95.0
13' -	12.5	95.4
17' -	10.9	97.0
24' -	6.9	101.0
37' -	6.9	101.0
40' -	4.9	103.0

100' E

43' -	4.6	105.4
36' -	4.3	103.6

73

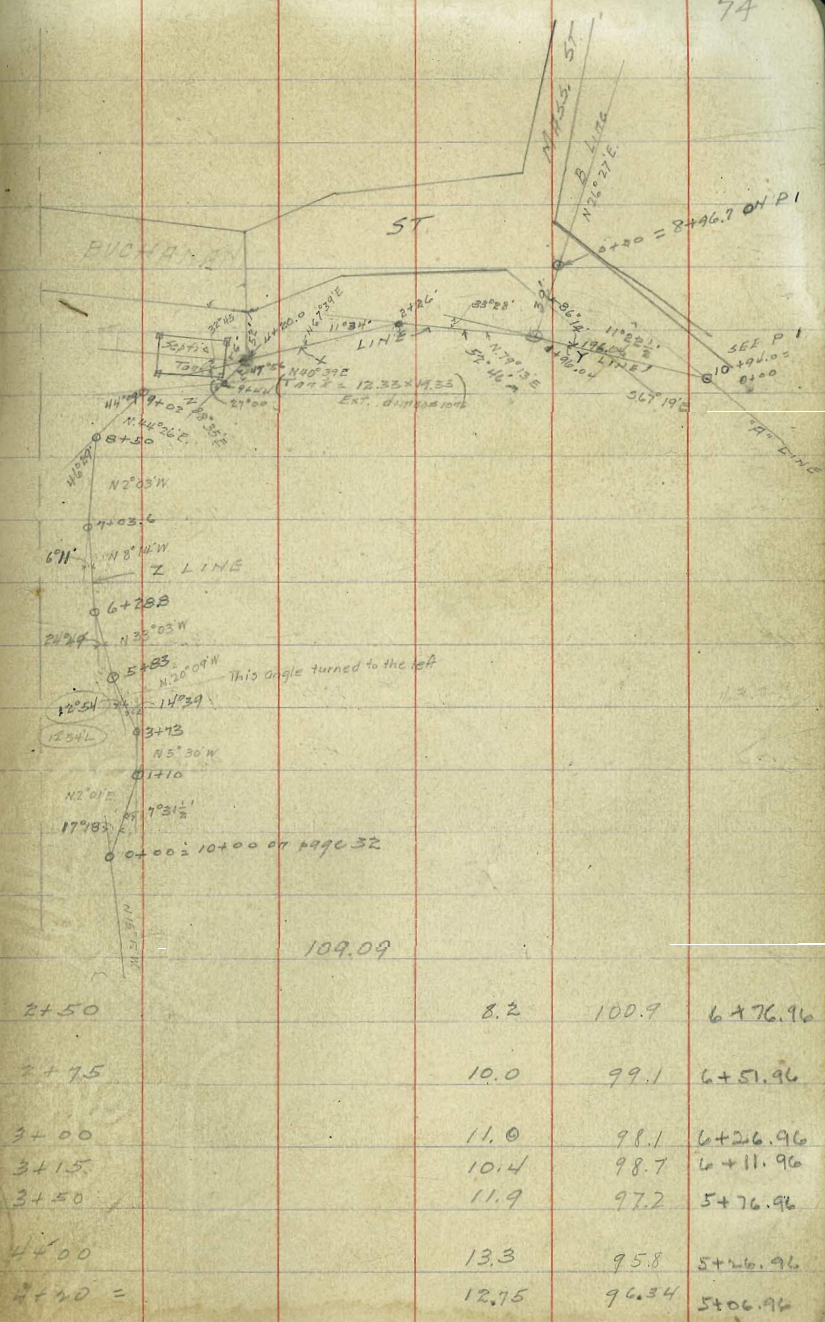
18' N	6.4	101.5
10' -	9.9	98.0
4' S. of SL Buchanan	10.9	97.0
9' - - -	8.4	99.5
21' - - -	7.9	100.0
31' - - -	7.4	100.5
33' - - -	6.9	101.0
37' - - -	4.9	103.0

2/25/30

Graph of Levels of Proposed Senior Moore Show
shown on opposite page
X LINE

	11.95	96.00	84.05	Mod	
T.P.	12.51	108.34	0.17	95.83	
	10.69	117.43	1.60	106.74	
0+00			9.6	107.8	
0+15			9.8	107.6	
0+28			13.8	103.6	street
0+35			11.7	105.7	
0+39 M.H.			12.58	104.35	8+97.96 07 41.9
0+50			13.00	104.4	8+86.96
T.P.	11.60	109.09	12.94	104.49	
0+79			5.7	103.4	8+57.96
0+90			7.5	101.6	8+46.96
0+95			8.4	100.7	8+41.96 street
1+00			5.6	103.5	8+36.96
1+37			4.7	104.4	7+99.96
1+50			5.5	103.6	7+86.96
1+75			5.8	103.3	7+61.96
2+00			7.7	101.4	7+36.96
2+26 M.H.			9.12	100.0	7+10.96 04 11.6

X line joins X line here



109.09

2+50	8.2	100.9	6+76.96
2+75	10.0	99.1	6+51.96
3+00	11.0	98.1	6+26.96
3+15	10.4	98.7	6+11.96
3+50	11.9	97.2	5+76.96
4+00	13.3	95.8	5+26.96
4+20 =	12.75	96.34	5+06.96

2/26/00

Gregory

CROSS SECTION OF TANK LOCATION P 74

102.32

NE cor TANK	10.4	91.9
C of E.L. of TANK	7.6	94.7
SE cor TANK	4.8	97.5
9.67' E. of East End		
S.L. of TANK	5.6	96.7
C L - ✓	8.7	93.6
N L - -	11.7	90.6
N.W. cor of TANK	13.0	89.3
C	10.5	91.8
SW cor of TANK	7.5	94.8

Levels of Z Line to Septic Tank 75

4.53

116.17

111.64

75

0+00 = 10+00 on F Line Sepage 1+32

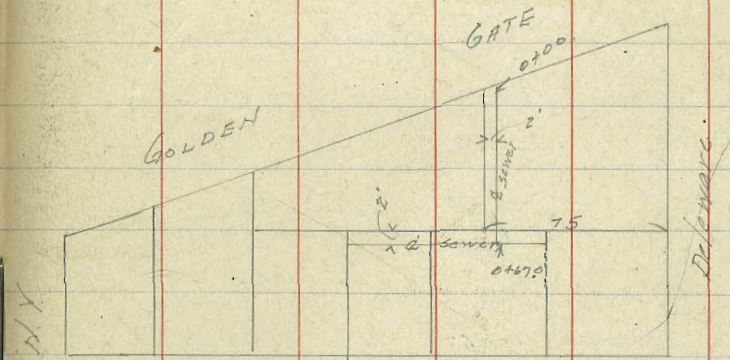
0+00	0.7	115.5
0+40	1.7	114.5
0+60	0.8	115.4
0+70	2.6	113.6
1	4.4	111.8
1+10 MH	4.4	111.8
1+50	6.4	109.8
1+85	7.5	108.7
2+00	8.3	107.9
2+25	8.6	107.6
2+50	7.8	108.4
2+60	9.3	106.9
3	11.3	104.9
3+50	12.3	103.9
4	11.52	104.65 on bus
4	3.6	4.9
4+50	2.4	106.1
4+70	2.7	105.8
5	5.2	103.3

continued on P 77

10.69	117.43	10.674 T.P. 11 P. 74
0+00 = 10+94 on "A" Line Ps	1.1	116.3
+50	3.6	113.8
1+00	5.5	111.9
1+50	9.6	107.8
1+96.04 = 0+39 on X line	12.58	104.8 on hub.

0+00	M.H. in Golden Gate Drive	343.0
+22.08	S.L. " " "	343.7
+57.08		344.2
+86.87	M.H.	344.3
1+20		344.2
+73.87	D.E.	343.3
0+86.87		344.3
0+99.87		344.7

on BM	5.77	349.21	343.44	SW. Delemore + Mad.
	5.95	347.20	5.06	344.15
0+00			5.5	343.7
+35			5.0	344.2
+67.1 Δ			4.9	344.3
13' E of 0+67			4.5	344.7
+00			5.0	344.2
1+50			5.9	343.3



This is the the property in this blk is sold off. Not a resubdivision

108.53

Z line continued from P 74

5+25			8.8	99.7	
5+50			9.5	99.0	
5+83 M.H			9.56	98.9	on bus
6+00			9.6	98.9	
+28.8 M.H			10.00	98.5	on bus
+50			8.3	100.2	
+75			6.8	101.7	
T.P.	1.13	103.04	6.62	101.91	
7+03.6 M.H			5.21	97.8	on bus
+25			4.6	98.4	
+40			7.0	96.0	
+80			5.4	97.6	
8			5.7	97.3	
8+25			3.7	99.3	
8+33			6.1	96.9	
8+50 M.H. 3.60		100.59	6.07	96.97	
8+68			1.5	99.1	
8+92			1.9	98.7	
9+02 M.H.			4.0	96.6	
9+13			2.3	98.3	

9+44

2.08

98.5

9+52.96

4.23

96.34

Sewer Levels in Arch St From M.H. at
 P.L. & Alley + Seaman Place 697.3N

B.M.	8.20	311.18	302.94	N.W. Arch St	185
M.H. & Alley & Seaman Place			6.2	305.0	1+97.3 DE
+50			6.4	304.8	
+100			6.4	304.8	
+135			6.5	304.7	
1+70.4 L 49-20' R			7.0	304.7	
+200			6.0	305.7	
+40			4.9	306.3	
+300			3.8	307.4	
+70			2.2	309.0	
T.P. 12.89	323.46	0.61	310.57		
+400			11.1	312.4	
+20			10.1	313.4	
4+53.3 L 46-37' R			9.6	313.9	
+400			5.3	318.2	
+25			3.6	319.9	
+50			2.5	321.0	
+80			0.4	323.1	
T.P. 9.05	332.24	0.27	323.19		
+400			8.3	323.9	
+40			5.8	326.4	

Plotted 4-21-25 CAT

Plotted 7-3-25
 G.R.H.

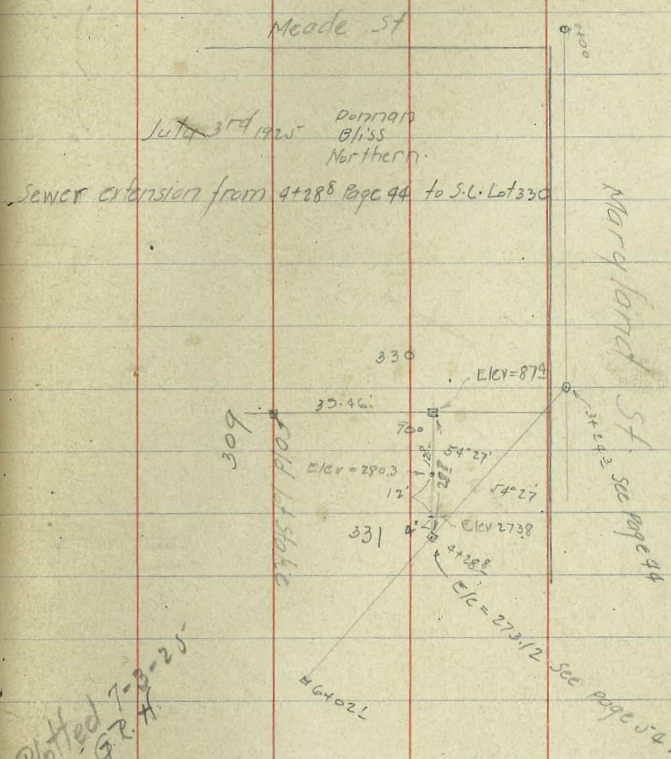
332.24

78

3.7 328.5

3.3 328.9

20+79.5
 23+74.7
 21.4



497
 480
 675
 1652
 30
 1682
 2763
 135.0
 1113
 65
 45
 90
 100
 100
 10
 11
 214.60
 0.63
 213.97
 10 0000 = 17 018 R
 110 7 31 L
 3143 11 39 L
 5183 12 58 R
 6288 = 24 49 R
 4036 = 6 11 R
 5450 = 46 29 R
 7402 = 44 09 R
 9444 = 49 56 L
 752765
 420.7
 225.08 M
 209.26
 15.82

271.70
 12.57
 284.27
 164.63
 167.31
 157.74
 3.52
 161.26
 6.63
 154.63
 1' 3"
 1.3
 1.0
 175
 0.75
 189.57
 11.93
 201.50
 188.14
 177.6
 182.01
 135.3
 6.13
 77.78
 185.99
 0.75
 185.24
 11.14
 176.38
 100.00
 11.13
 111.10 M
 109.25 = 3 30 L
 106.2 = 25 11 of 30

189.17
 9870
 9.13
 143
 153
 111.77
 111.77
 100.79
 87.4
 33.25
 24.46
 3 109
 6 9.75

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.
 ROADWAY 14 FEET WIDE. SIDE SLOPES 1/2 TO 1.
 FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0	
8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1	
10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2	
11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3	
13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4	
14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5	
16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6	
17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7	
19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8	
20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9	
22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10	
23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11	
25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12	
26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13	
28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14	
29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15	
31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16	
32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17	
34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18	
35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19	
37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20	
38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21	
40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22	
41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23	
43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24	
44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25	
46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26	
47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27	
49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28	
50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29	
52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30	
53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31	
55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32	
56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33	
58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34	
59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35	
61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36	

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.