

1187

1187  
LEVEL BOOK

380

1187

MICROFILMED  
DEC 22 1964

*MS*

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29	Univ. and Ray St.
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41	Cedar & Calif.
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49	Van Buren & Maryland
50	Surr. DIC 193 - Univ. Highmen - 33 <sup>rd</sup> - Wash -

Bayside Lane Levels

+	H.I.	-	E.I.	
				San Diego am - B.M. -12
8.85	7.65			
8.62			-0.77	= -0.8
		47	+ 3.1	SE cor BK 2
		56	+ 2.2	OK 3
		7.7	+ .1	✓ 6
		8.9	- 1.1	✓ 10
	T.P. 7.25		+ 0.60	✓ 16
7.60	+ 8.20 ✓			
		6.1	+ 2.1	✓ 19
		4.7	+ 3.5	✓ 24
		6.6	+ 1.6	✓ 27
		8.0	+ 0.2	✓ 32
	T.P. 8.20		0.01	✓ 35
5.00	+ 5.00 ✓			
		5.0	0.0	✓ 40
		5.0	0.0	✓ 43
		5.3	- 0.3	✓ 48
		5.8	- 0.8	✓ 51
		6.1	- 1.1	✓ 56
	T.P. 6.30		- 1.30	✓ 59
5.48	+ 4.18 ✓			

+	H.I.	-	E.I.	
	+ 4.18	4.57	- 0.33	curb - S.E. cor = 0°
		4.15	+ 0.03	Mis. B & S, Fernando -
				S. M. cor. Mis. Blvd 30
				& Prado - = - 0 -
3.50	+ 3.54		- 0.36	on file - supposed to be finished -
		5.2	- 2.1	S. M. cor. M. Blvd -
		4.68	- 1.54	Ventura - = - 1.50
			- 1.50	
4.92 ✓	+ 3.42	4.4	- 1.0	Alley Pk 97
		7.8	+ 0.6	✓ 99
		4.2	- 0.8	✓ 104
		5.6	- 2.2	✓ 107
		3.32 ✓	+ 0.10	S. M. cor. alley at PK 108
				#4 M. Blvd = 0.0
			0.0	
3.88	3.88			
		5.2	- 1.3	✓ 112
		6.4	- 2.5	✓ 115
		5.7	- 1.8	✓ 120
		5.7	- 1.8	✓ 123
		5.72 ✓	- 1.84	T.P.
5.90	+ 4.06			
		6.1	- 2.0	128

84 C + G. S. = - 0.6 City Datum

+	H.I.	-	E.I.		
	+4.06	5.8	- 1.7	Alley PK	131
		5.26	-1.20	TP	✓ 136
7.22	+6.07				
		7.4	- 1.4	✓	139
		7.7	- 1.7	✓	144
		3.92	+2.10	S. Main - alley - #13	✓ +2.00
2.35	4.35				
		6.1	-2.2	✓	147
		6.4	-2.0	✓	152
		6.60	-2.25	TP	✓ 155
6.05	+3.80				
		5.5	-1.7	✓	160
		5.2	-1.4	✓	163
		4.5	-0.7	✓	168
		4.35	-0.55	TP	✓ 171
+4.50	+3.95	5.2	- 1.2	✓	176
		5.3	- 1.3	✓	179
		3.86	+ 0.09	S. Main - alley	180 = 0.0

+	H.I.	-	E.I.		
	+3.86	5.0	-1.1	Alley PK	184
		4.8	-1.0	✓	187
		5.0	-1.0	✓	192
		5.18	-1.22	TP	✓ 195
5.10	+3.88				
		5.2	-1.3	✓	200
		5.1	-1.2	✓	203
		5.3	-1.4	✓	208
		4.7	-0.8	✓	211
		4.8	-0.9	✓	216
		5.10	-1.22	TP	✓ 219
4.90	+3.68				
		4.4	-0.7		224
		3.39	+0.29	S. Main - Sun Refuel Pt	+ M. Bldg = 0.0
		4.8	-1.4	✓	229
		5.1	-1.7		232
		4.8	-1.4		234

## Strand-way-

+	H.I.	-	E.I.		
10.64	10.64	B.M. - 0.0		S.M. San Rafael Pl. & Mis. Blvd 0.0	
	6.8	+3.8	N.M. cor	248	
	7.0	+3.6	Alley BX	245	
	6.8	+3.8	✓	244	
	6.8	+3.8	✓	241	
	6.9	+3.7	✓	238	
	6.5	+4.1	✓	235	
	5.8	+4.8	✓	231	
	5.1	+5.5	✓	228	
	4.5	+6.1	✓	S. of S.R.	
	4.9	+5.7	✓	220	
	4.73	+5.91 TP	✓	215	
5.28	+11.19		✓	212	
	5.1	+6.1		212	
	5.4	+5.8		207	
	5.2	+6.0		204	
	5.0	+6.2		199	
4.89	12.08	+7.19 TP		196	

+	H.I.	-	E.I.		
	412.08				
	4.7	+7.4	Alley BX	191	
	5.0	7.1	✓	188	
	4.8	7.3	✓	188	
	12.15	<del>-0.07</del>	B.M. S.M. 1st + Mis. Blvd = 0.0		
11.50	+11.43				
	3.9	+7.5	✓	180	
	3.46	+7.47 TP	✓	175	
3.00	10.47				
	3.8	+6.7	✓	172	
	5.3	+5.2	✓	167	
	5.2	+5.3	✓	164	
	4.52	+5.95 TP	✓	159	
4.16	10.11				
	4.7	+5.4	✓	156	
	5.2	+4.9	✓	151	
	10.14	-0.03 B.M.	S.M. cor. 1st - Mis. Blvd - 0.0		
	5.1	+5.0		148	
	5.36	+4.75 TP		143	
5.12	9.88				

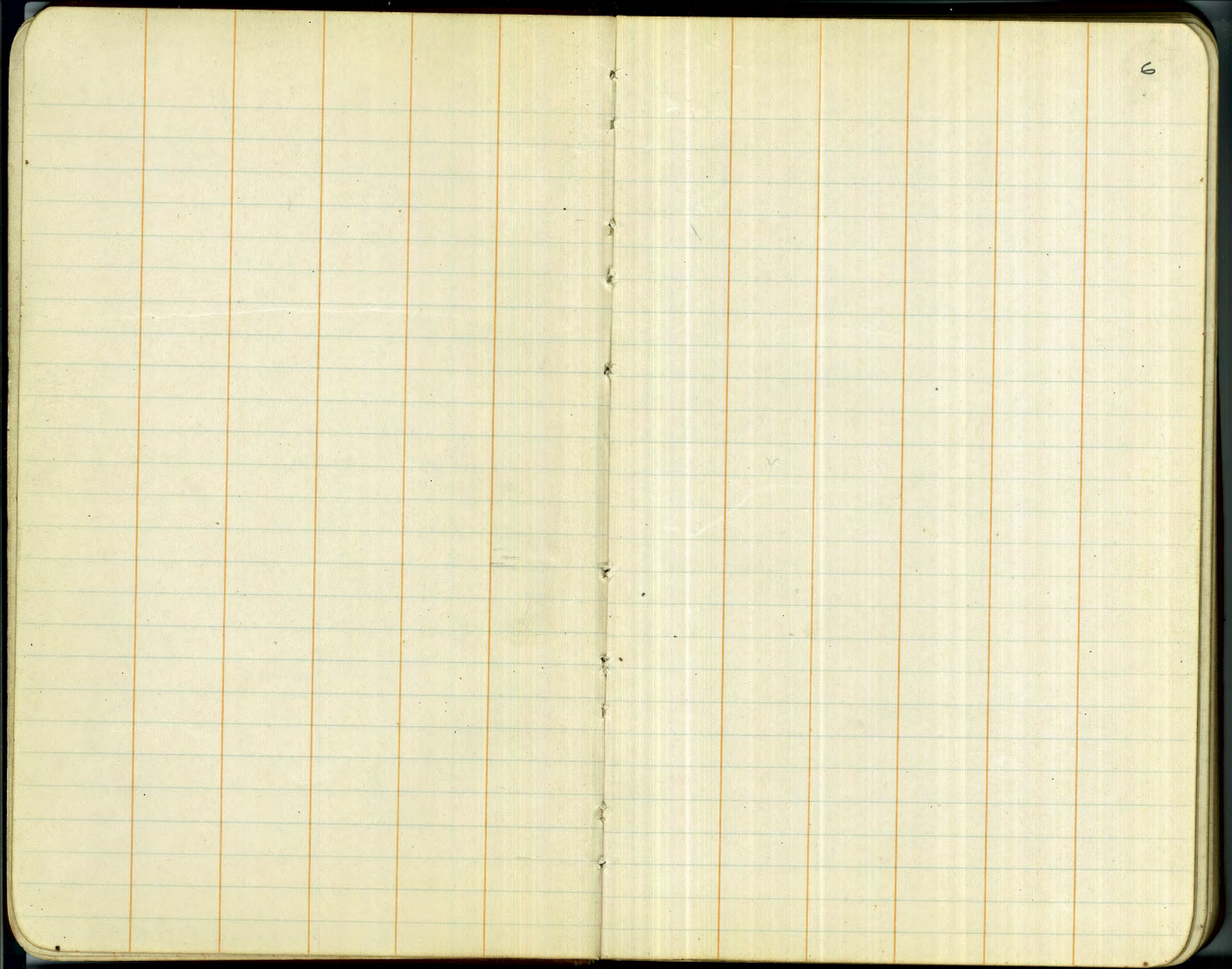
+ J+1,	-	E1.			
+9.88	5.4	+4.5	May 190	120	
	5.1	+4.8	-	135	
	5.2	+4.2	-	132	
	4.80	+5.08 TP	✓	127	
5.48	10.56				
	5.4	+5.2	-	121	
	11.73	-1.17	S. Mar. 1917 - Miss Blod - B.M. = -12		
	5.2	+5.4	✓	119	
	4.8	+5.8	✓	116	
	4.59	+5.99 TP	✓	111	
5.59	11.58				
	5.2	+6.4	✓	108	
	5.3	+6.3	✓	103	
	5.16	+6.42 TP	✓	100	
2.41	+8.83	3.5	+5.3	✓	96
	4.4	+4.4	S. Mar - Ventura		
	4.27	+4.56	On Fr. Mack on plank + Ventura -		
	10.70	-1.87	S. Mar - Ventura - Miss Blod - -1.5		

					E1.
					-1.87
	4.80	+2.93	4.08	-1.15	T.P.
	5.07	+3.92	4.61	-0.69	S. Mar. 1907 Miss Blod - -0.36
	5.00	+4.31	5.68	-1.37	T.P.
	5.62	+4.25	5.28	-1.03	S. E. cor. 52 - Miss Blod - -0.5
			5.75	-1.50	S. E. cor. 43 - M. B. - -1.5
	5.54	+4.04			
			4.68	-0.64	S. E. 32 + Miss Blod <sup>02</sup>
	3.46	+2.82	5.08	-2.26	S. E. 24 + M. B. - -22
			4.60	-1.78	TP
	5.77	+3.99	4.10	-0.11	TP
	4.93	+4.82	6.25	-1.43	M. E. cor. Miss Blod S. D. are - -12
			4.67	+0.15	Quacapa Ct. +0 <sup>5</sup>
			5.05	-0.23	TP

			E1.	
+	JH.1.	-	-0.23	T.P.
7.73	+7.50			
		2.05	+5.45	Top of Rail - N. End - P.M. 1/2 -
		1.65	(5.85)	T.P.
6.16	+12.01	5.12	+6.89	T.P. Top Rail -
0.60	+7.49	4.91	+2.58	Top of Rail S.E. P.M. 1/2 -
		1.48	(+6.01)	T.P. Cor. Boomi near Sep. Tank -
7.18	13.19			{ Top of Sep. Tank - { Harvey Bacon St.
		4.45	+8.74	N.W. Bear - Voltaire
		4.45	8.74	S.W. ✓ ✓
		3.95	+9.24	N.E. ✓ ✓ City B.M.
			= +9.52	+9.52
			<u>Low 02</u>	

273  
 537  
 -----  
 326.7





6

Levels on Beach - 13 ft West of Board Walk - Pac. Side

D.L. Bissell 6/24/26  
McCarthy

H.M.

Mission Beach -

10.47

10.47

0.0

B.M. ←

10.10

0.37

T.P.

4.77

5.14

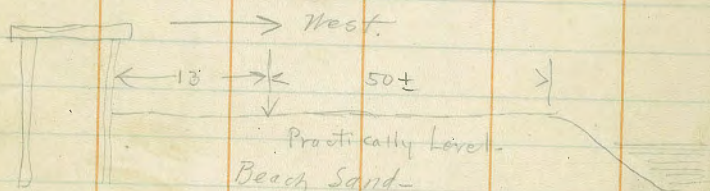
3.47

1.77

T.P.

3.36

5.08



0+00	M.L. G. Key -	-4.8	Et.	+0.3
1+11.9	♀ Zanzibar	-4.8		+0.3
2+37.6	♀ York	-4.3		+0.8
3+63.3	♀ Yarmouth	-4.6		+0.5
4+89.0	♀ Mindimere	-4.8		+0.3
6+15.6	♀ Whiting	-4.3		+0.8
7+41.6	♀ Verona	-4.7		+0.4
8+67.6	♀ Venice	-5.1		+0.0
10+00.6	♀ San Rafael x	-4.8		+0.3
11+33.6	♀ Vanitie	-4.7		+0.4
12+59.6	♀ Toulon	-4.6		+0.5
13+85.6	♀ Tangier	-4.7		+0.9
15+11.6	♀ Sunox	-4.5		+0.6
16+37.6	♀ Seagirt (S)	-4.4		+0.7
17+63.6	♀ Salem -	-4.5		+0.7
18+96.6	♀ San Jose	-4.6		+0.5

→ S. Picor - Miss Bld  
H.M. (S) San Rafael Pt.

0<sup>00</sup> B.M.

7

H.I.			
	5.08		
	4.95	+0.63	TP
4.94	5.07		
	5.07	0.0	TP
5.10	5.10		

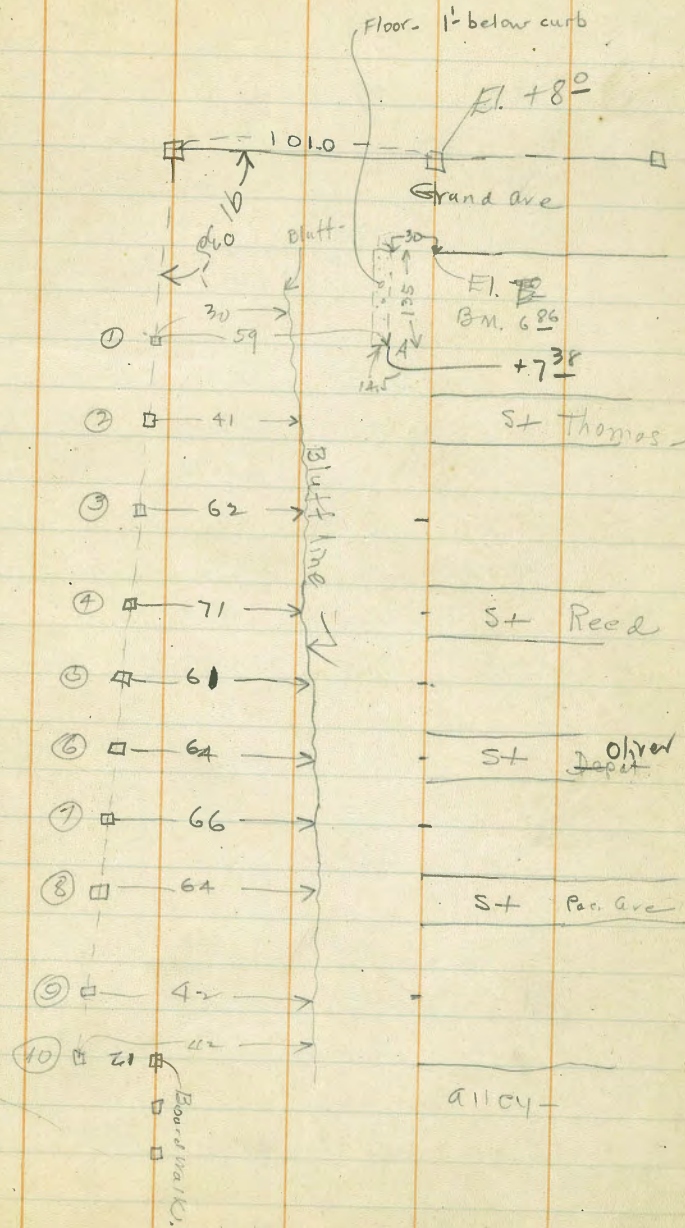
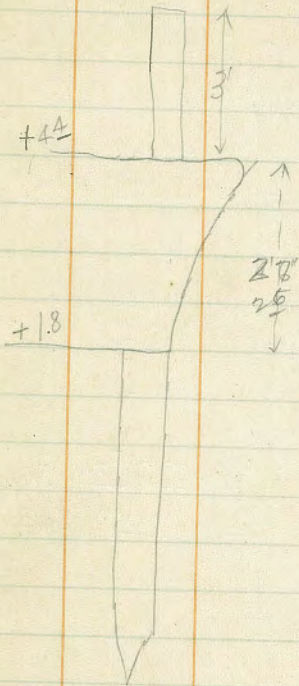
H.I.			Fl.
20+29.6	♀ Rockaway	-4.6	+0.5
21+56.7	♀ Redondo	-5.0	+0.1
22+82.0	♀ Queenst.	-5.1	0.0
24+08.0	♀ Pismo-	-4.4	+0.2
25+34.0	♀ Portsmouth	-4.8	+0.3
26+97.0	♀ Sta Clara	-4.9	+0.2
28+89.5	♀ Ostend	-5.1	+0.0
30+74.9	♀ Ormond	-4.7	+0.4
32+60.3	♀ Newport	-5.1	0.0
34+52.0	♀ San Juan	-5.1	0.0
36+45.0	♀ Mantoloking	-5.1	0.0
38+31.0	♀ Nahant	-4.4	+0.2
40+17.0	♀ Monterey	-4.9	+0.2

	H <sub>1</sub>			
	5.10			
3.90	4.60	4.20	+ 0.70	TP
		4.00	+ 0.60	TP
4.55	5.15			

(51)

42+10.0	¢ El Carmel Pl.	-50	+0.1
44+10.7	¢ Manhattan	-5.1	0.0
45+87.5	¢ Liverpool	-5.1	0.0
47+73.5	¢ Lido (46)	-4.5	+0.1
49+66.5	¢ San Luis Obispo Pl.	-4.4	+0.2 ✓
51+59.5	¢ Kingston	-4.4	+0.2 ✓
53+45.5	¢ Kennebeck	-4.3	+0.3 ✓
55+31.5	¢ Jersey - (51)	-4.2	+0.2 ✓
57+24.5	¢ Sta Barbara Pl.	-5.0	+0.1
59+17.5	¢ Jamaica	-4.9	+0.2 ✓
61+03.5	¢ Isthmus -	-4.9	+0.2 ✓
62+89.5	¢ Island	-5.0	+0.1
64+70.5	M.L. Ventura - Top. of Mall	- <sup>.80</sup> 4.39	+ 4.39 - City Datum
			= 13 <sup>40</sup> C+G. do

Wall at Ventura Pl.



5.4 6m area

	+	H.I.	-	
	218	9.04 ✓	6.86	B.M. 2
①			1.66	End of Cmc. curb. ④
			7.38 ✓	
			8.4	0.6 ✓
		W.E.	7.5	1.5 ✓
		B.I.	2.7	6.3 ✓
②			8.5	-0.5 ✓
		35'E	7.3	1.7 ✓
		B.I.	2.2	6.6 ✓
			8.21	0.73 ✓ T.P.
③	8.25	8.98 ✓		
			8.3	0.7 ✓
		70'E	5.8	3.2 ✓
		B.I.	1.3	7.7 ✓
④			8.5	0.5 ✓
		60'E	6.9	2.1 ✓
		B.I.	2.9	6.1 ✓
⑤			8.2	0.8 ✓
		60'E	6.3	2.7 ✓
		B.I.	2.5	6.5 ✓

⑥		H.I.	8.98	
			8.2	0.8 ✓
		60'E	6.0	3.0 ✓
		B.I.		9.5
			7.74	1.24 ✓ T.P.
	7.85	9.09 ✓		
⑦			8.4	0.7 ✓
		60'E	6.3	2.8 ✓
		B.I.	1.1	8.0 ✓
⑧			8.3	0.8 ✓
		60'E	6.5	2.6 ✓
		B.I.	4.5	4.6 ✓
⑨			8.2	0.9 ✓
		45'E	7.2	1.9 ✓
		B.I.	4.6	4.5 ✓
⑩			8.3	0.8 ✓
		Top of Bldg.	4.75	4.34 ✓

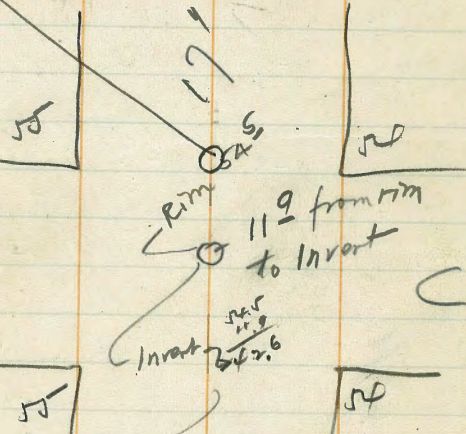
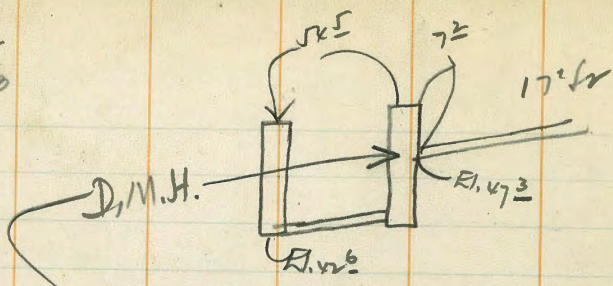
	H <sub>1</sub>			
5.60	10.00	4.40	Sea wall -	
		5.20	4.77	T.P.
5.05	9.82			
		5.16	4.62	T.P.
5.15	9.77			
		4.97	48.0	T.P.
5.22	10.03			

← Bone Mark → 25.2 → Sep. Tank

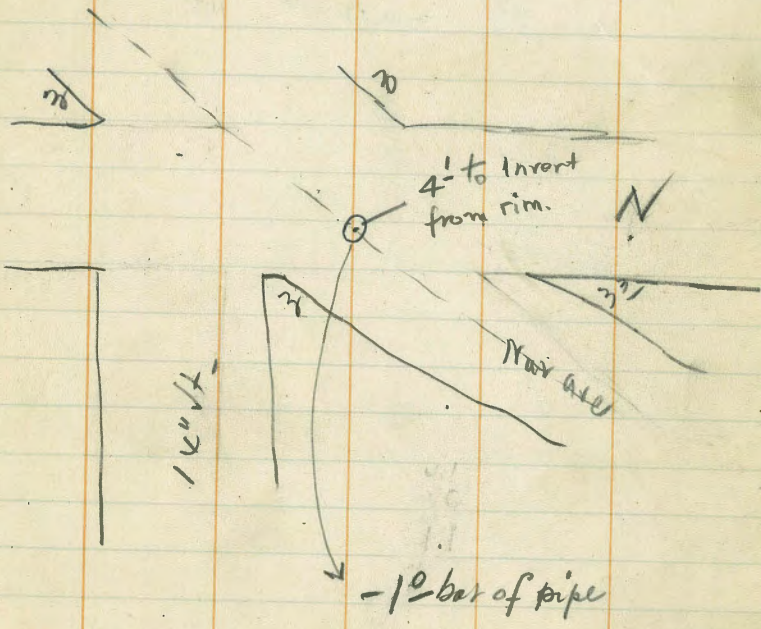
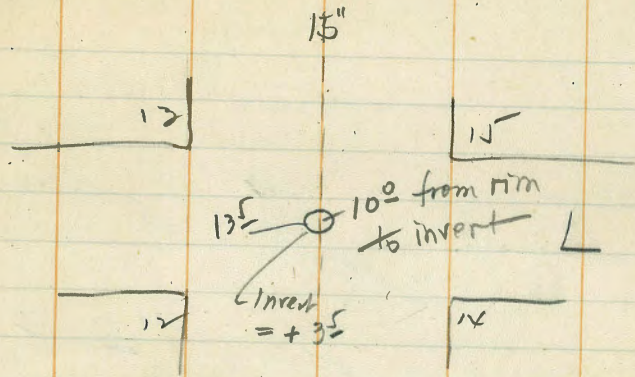
	Beach	12' Nat. of B. Mark	Stirring - Pared.
San Felipe Pt. (10.0)	7.2 / +2.7	5.5 / +4.5	6.3 / +3.7
Ensenada (9.8)	6.6 / +3.4	5.3 / +4.7	6.1 / +3.9
Dorax	6.3 / +3.5	5.0 / +4.8	5.9 / +3.9
Doron	5.8 / +4.0	5.1 / +4.7	5.7 / +4.1
San Gabriel	5.7 / +4.1	5.2 / +4.6	5.7 / +4.1
Deal	5.4 / 3.9	5.16 / +4.6	5.8 / +4.0
Coronado (9.8)	6.6 / +3.2	5.1 / +4.7	5.8 / +4.0
Catalina	6.3 / +3.5	5.0 / +4.8	5.9 / +3.9
Capistrano (9.8)	6.5 / +3.3	5.0 / +4.8	6.0 / +4.0
Brighton (10.0)	7.0 / +3.0	5.2 / +4.8	6.6 / +3.4
Esboza	7.2 / +2.8	5.3 / +4.7	6.8 / +3.2

Septic Tank 5.9 / +3.9

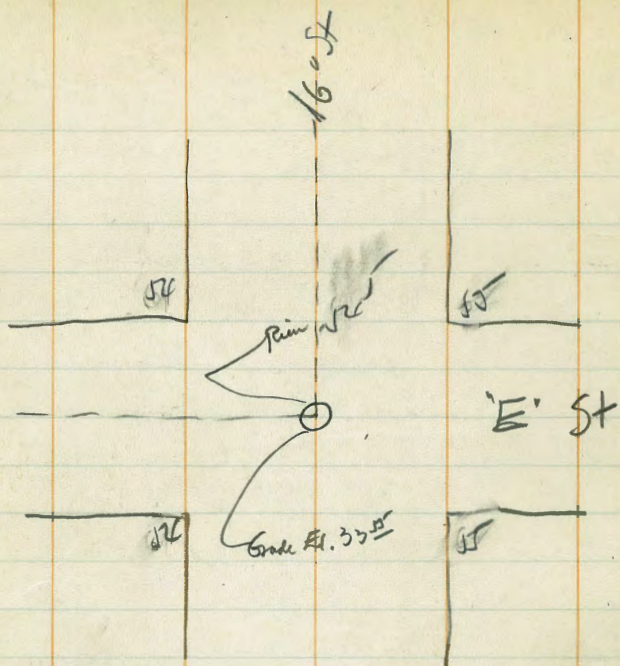
$\frac{56.5}{72}$   
 $\frac{57.3}{72}$



Prof. Shans - 46°

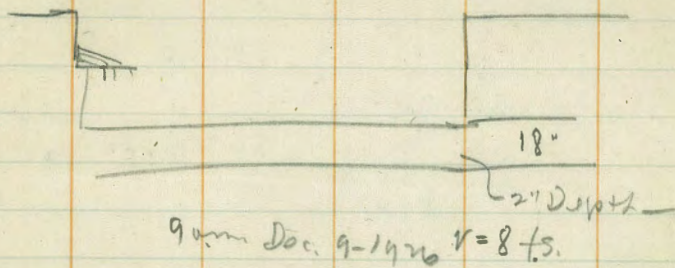




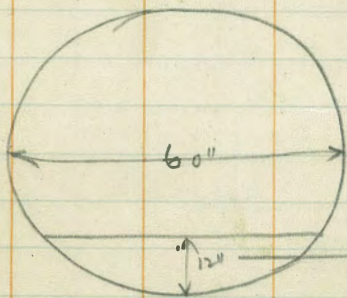


$$\begin{array}{r} 34.5 \\ 7.3 \\ \hline 33.2 \end{array} \quad \begin{array}{r} 17.4 \\ 3.9 \\ \hline 21.3 \end{array}$$

Orizma ft -



10 am 12/4/26 - Switzer Conduit  
 flowing - 1 ft deep - Drizzling.



$$S = 1\frac{1}{2}\% = .015$$

$$C = 120$$

$$r = 120 \times .015 \times .7 = 7.6$$

$$Q = 7.6 \times 2.7 = 19.6 \text{ f.s.}$$

$$\begin{array}{l} A = 270' \\ P = 4.7 \\ r = .57 \\ = .7 \end{array}$$

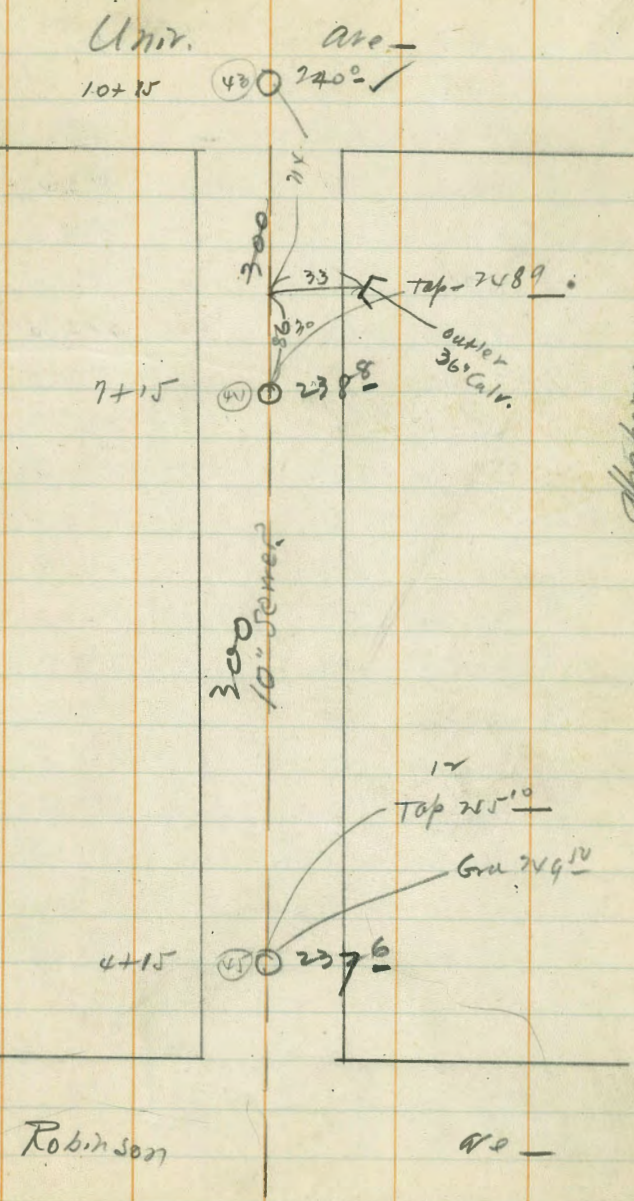
+	17.6	-	El.
1.05	256.55		255.50
		10.25	265.10
8.68	253.78		248.93
		4.85	

S.E. Flat  
Mightman  
Top. M.H.  
G.W.S. Univ.  
ingley bar  
Fla & Ala

M.H. Top  
G.W.S. Univ.

Florida

812  
47



Robinson

Ala

0400 #40 220

Alabama  
Top 2489  
Gru 24912  
36° Calv.

H. 253.8

Inst. M.H.

71  
300 S. of Univ.

208.9 Top of M.H.

H. 253.8

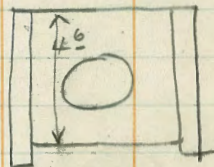
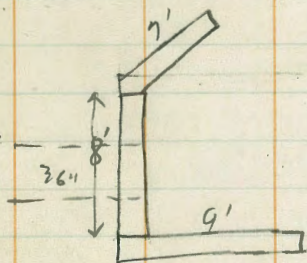
16

Az	Dist	-	El.	chr.
200-30	95	10.0	243.8	Top Cuts
		14.5	239.3	Fl. L. 20
217-	97	10.2	243.6	Bank F.
245-30	90	14.4	239.4	Ch
217-30	82	10.8	243.0	Bank W.
250-	62	11.5	242.3	- E
253-30	60	8.9	244.9	Conc. Wall E
✓	✓	14.6	239.2	Ch-
209-	50	9.-	244.8	BK W.
247-30	70	12.7	241.1	BK E
201-30	66	15.7	238.1	Ch.
206-	60	10.4	244.9	BK W
212-30	108	14.2	239.5	- E
216-	106	15.7	238.1	Ch
219-30	107	12.5	241.3	BK W.
216-30	190	16.5	237.3	BK E
229-30	190	14.0	234.8	Ch

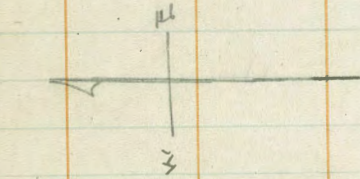
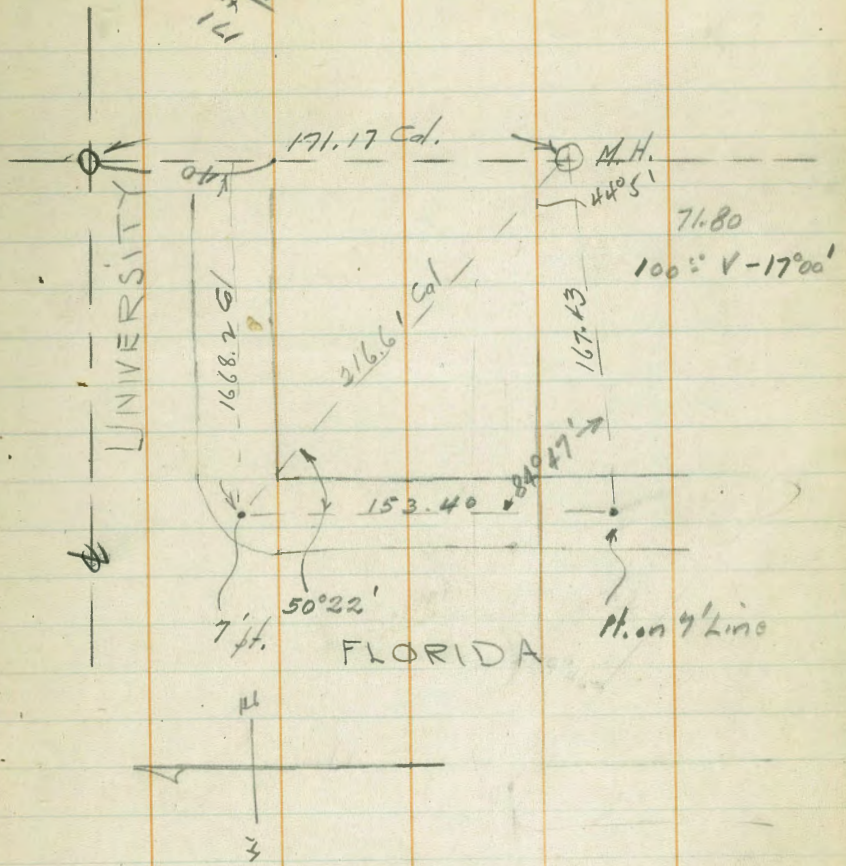
13  
5 X  
Ch

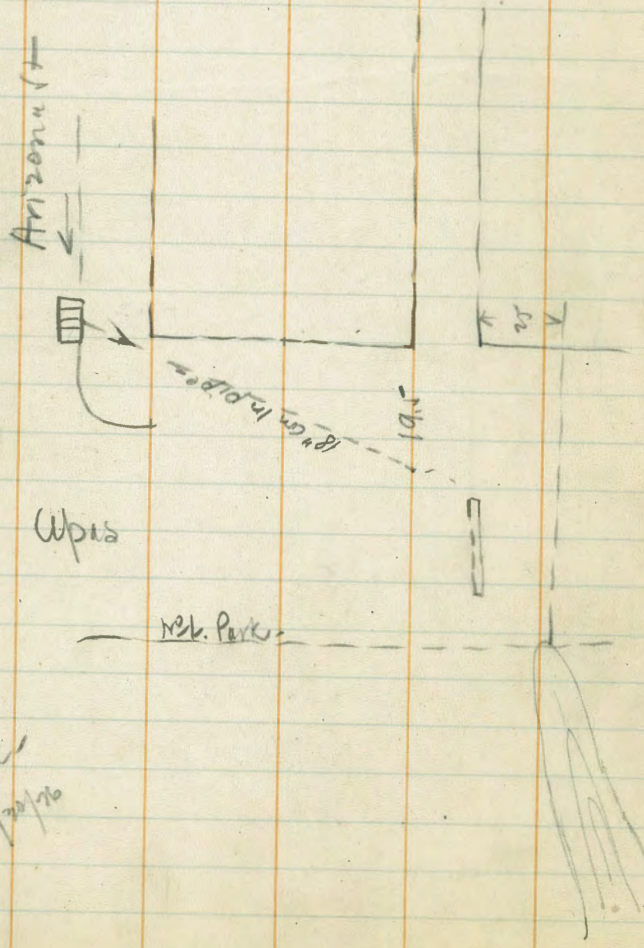
707, 2538

Az	Dist	-	EI	
330-30	185	13.8	$\sqrt{10.0}$	BK. W-
360-	147	8.6	$\sqrt{5.2}$	91101
✓	100	7.6	$\sqrt{6.2}$	✓
180-	90	2.5	$\sqrt{1.3}$	✓
240-	92	13.0	$\sqrt{10.8}$	Fog. F.
270-	85	11.5	$\sqrt{7.3}$	✓
209-	100	11.7	$\sqrt{7.5}$	
229-	140	8.6	$\sqrt{5.2}$	

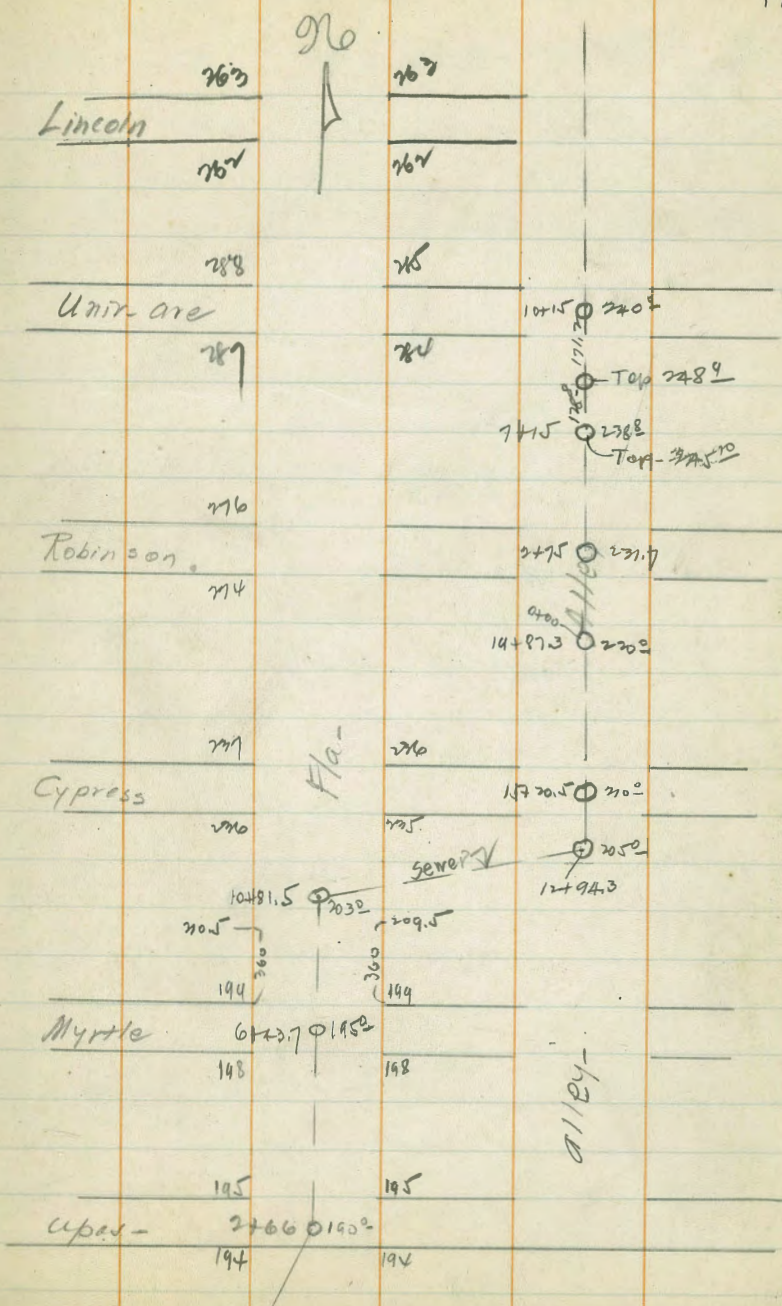


11/21/61





1001  
1001  
1001



Lincoln  
263  
262  
288  
289  
276  
274  
271  
270  
269  
268  
267  
266  
265  
264  
263  
262  
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198  
197  
196  
195  
194

240  
Top 289  
288  
Top 325.70  
711.5

271.7  
200  
202  
14+873

200  
205  
200  
12+94.3

203.2  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
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226  
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233  
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236  
237  
238  
239  
240

Myrtle  
198  
195  
246  
194

Alley

Ala. Burma

Surrey - Pike - So. of Univ - bet -

72a & 91a -

1/5/27

20

Sta - Dist az - P.A. + Ht.

- FL

F.L. Saver - 1892

1st. End of Curb - Upas - V.E. Fla & Upas -

1.77 199.77

$\frac{46}{100.1}$  198.00

47. - ctr. ch -

5.9 193.9

M.H. found Fla

5.65 192.12

top - curb - at wall -

(2.70) 191.0

top 36" pipe - FL

$\frac{191.4}{33} = 188.1$

8.29 206.29

198.00

194.1

$\frac{7.3}{194.1}$

196.3 = 1d. 1b

$\frac{7}{196.3}$

189.3 - 50' down ch -

11.08 216.27

$\frac{7.5}{189.3}$

188.8 - 75' ✓ ✓

7.6 198.7

E.P.L. Fla to Myrtle - 0+0

3.7 202.6

0+50 on Myrtle -

1.10 205.19

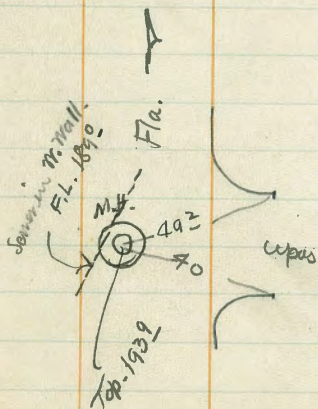
T.P.

7.0 209.3

1+

0.0 216.2

at alley - & Myrtle



Sta	Dist	az	PA	+	H <sub>1</sub>	-	EL
					220.2		Instr. S.E. cor - Fla & Cypress
(A)	190	332-45	- 8-15	Ground	(235)	- 27.0	208. - channel
	189	297-35	- 7-15			- 23.7	211.3 do
	204	270-35	- 6-			- 21.2	213.8 do
	192	299-25	- 6-			- 20.0	215.0 do

NE E. of 1112 cor -

230  
21  

---

257

769 W N. of Cypress - on E.P.L. Fla -

257

(B)	769	359-45	- 4-30				
	208	289-45	- 9-			- 27	225.0 channel
	154	271-45	- 12-10			- 31.6	225.4 do
	170	233-	- 11-			- 31.8	225.2 do
	244	277-15	- 7-05			- 30.0	227.0 do
	340	277-45	- 4-30			- 26.5	230.5 do
	635	207-30	- 2-			- 24	235.0 do

To N.E. cor Fla & Cypress El. 226. -

← 364 P. ab. from St.

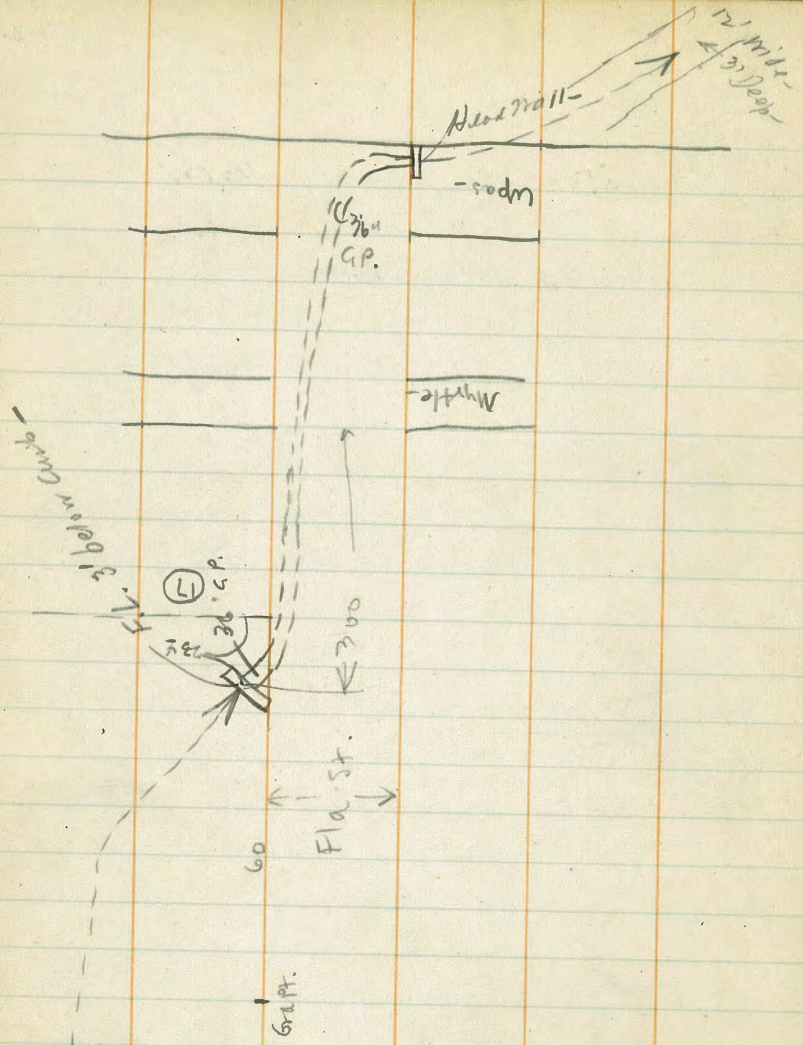
also channel from East

220  
25  

---

245





288	267.17	264.29	B.M.
		5.18	261.99
		10.97	256.20
			Fl. line - M.H. or Fla. & Line.

Fl.

+	↑	-	El.	
8.50	206.50		198.00	B.M.
		8.00	198.50	Top M.H.
		3.70	195.30	FL Sensor
		0.22	206.28	T.P.

10.70 216.98

0.0 216.98 T.P.

7.15 224.13

0.70 @ Myrt 2 alley -

7.50 226.6

+50

6.2 219.9

1+

1.5 222.6

1.45 222.68 T.P.

9.53 232.21

6.6 225.6

5.74 226.47

- 2.50

Fl. 30" Culv. 223.97

1+50

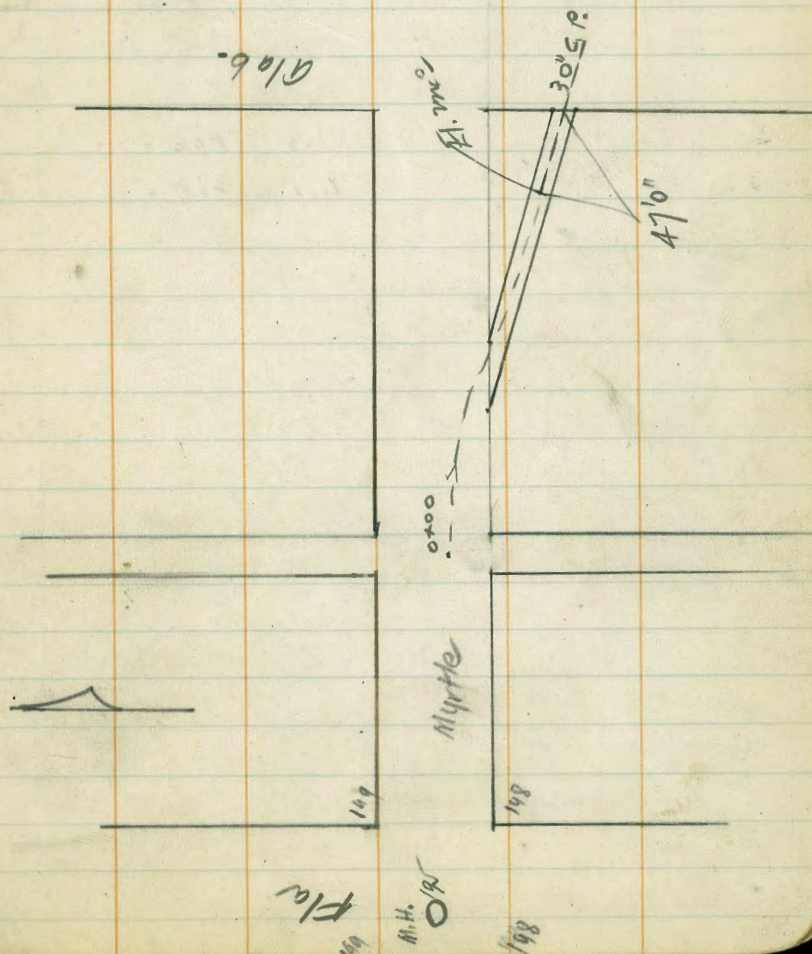
5.69 203.69

198-

4.66 199.03

5.2 198.59 MHTWB

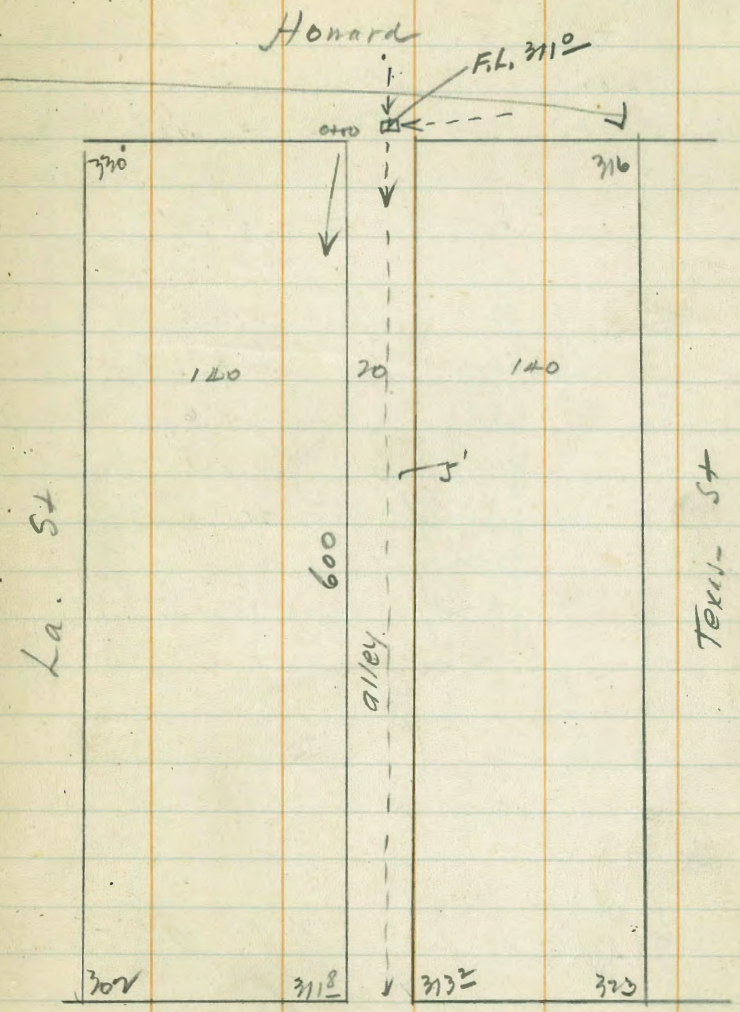
3.18  
105.31



	+	⌈	-	
	6x10	322.10		316.0
			11.06	311.04 F.L. alt.
0+0	S.P.L. Howard		5.1	317.0 ✓
1+			9.-	313.1 ✓ up 3" Pipe
2			11.4	310.7 ✓
3			12.7	309.4 ✓
4			12.5	309.6 ✓
5			11.8	310.8 ✓
6	N.P.L. POIK		11.1	311.0 ✓

11.2  
15  
127

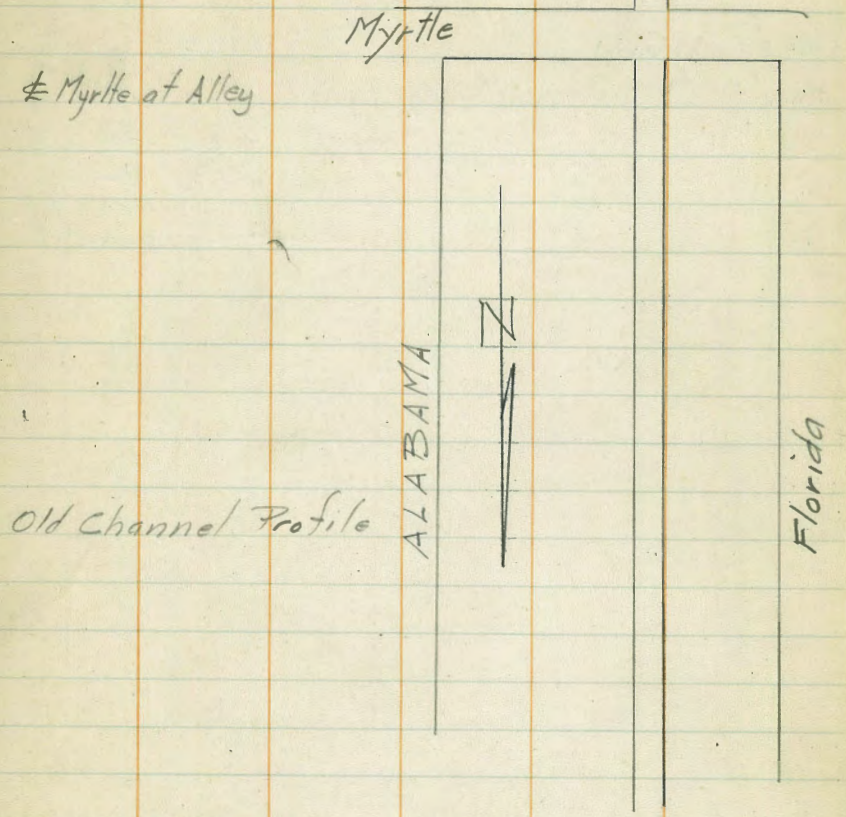
Got. El. Plowline - 24  
Howard + end -



Poik-

Sta	+	-	$\bar{A}$	B.M.
	8.24		206.24	198.00
	12.02	.78	217.48	205.46
	10.30	.35	227.43	217.13
0+00		7.50		218.9
+50		4.1		223.3
1+00		3.9		223.5
+75		4.8		222.6
+50		8.5		218.9
2		8.8		218.6
3		10.5		216.9
+50		8.4		219.0
5+00		12.2		215.2
5+10		17.2		210.2

Levels from  $\pm$  Myrtle  $\pm$  Alley Bot Florida 25  
 and Alabam Sta going North in Alley  
 Keeler  
 McCorty



Depth of Markhole at Landis & Rex 4501

+     $\bar{\Delta}$     -    El.

SW Cor Dwt & Arnold

280    279.80

277.0

11.6    268.2

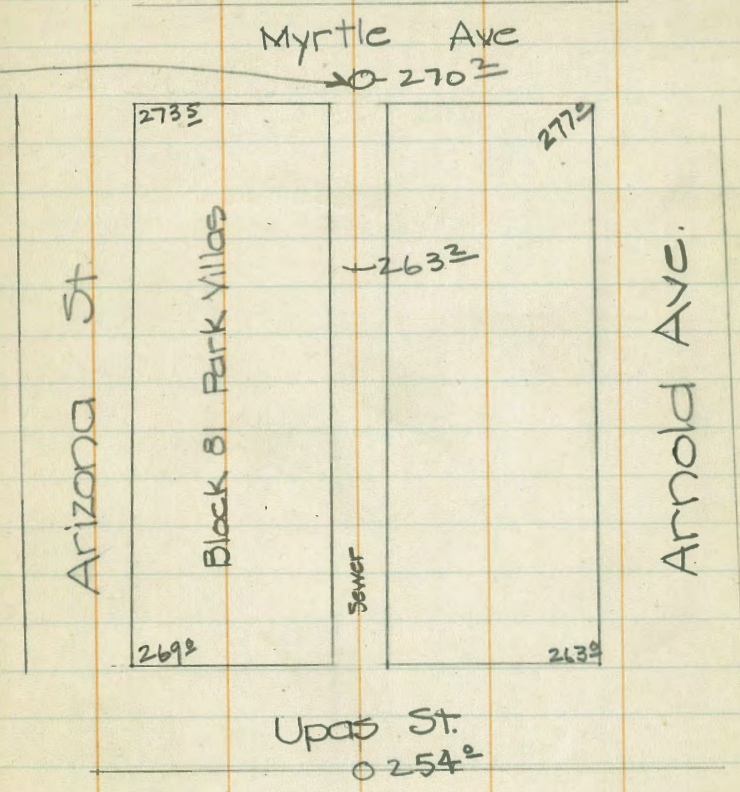
9.8    270.0

But. M.H.

Flanking of

Spr. M to M.H.

T. N. E. W.



1.50

26.50

283,-

4.3

280.2

$$\frac{3.9}{26.5} = 14$$

$$\begin{array}{r} 28 \\ \times 1.75 \\ \hline 282.95 \end{array}$$

Dwight St.

280

2812

283

2852

2772

2738

Arizona St.

Arnold St.

2742

2782

Myrtle

2702

Ave

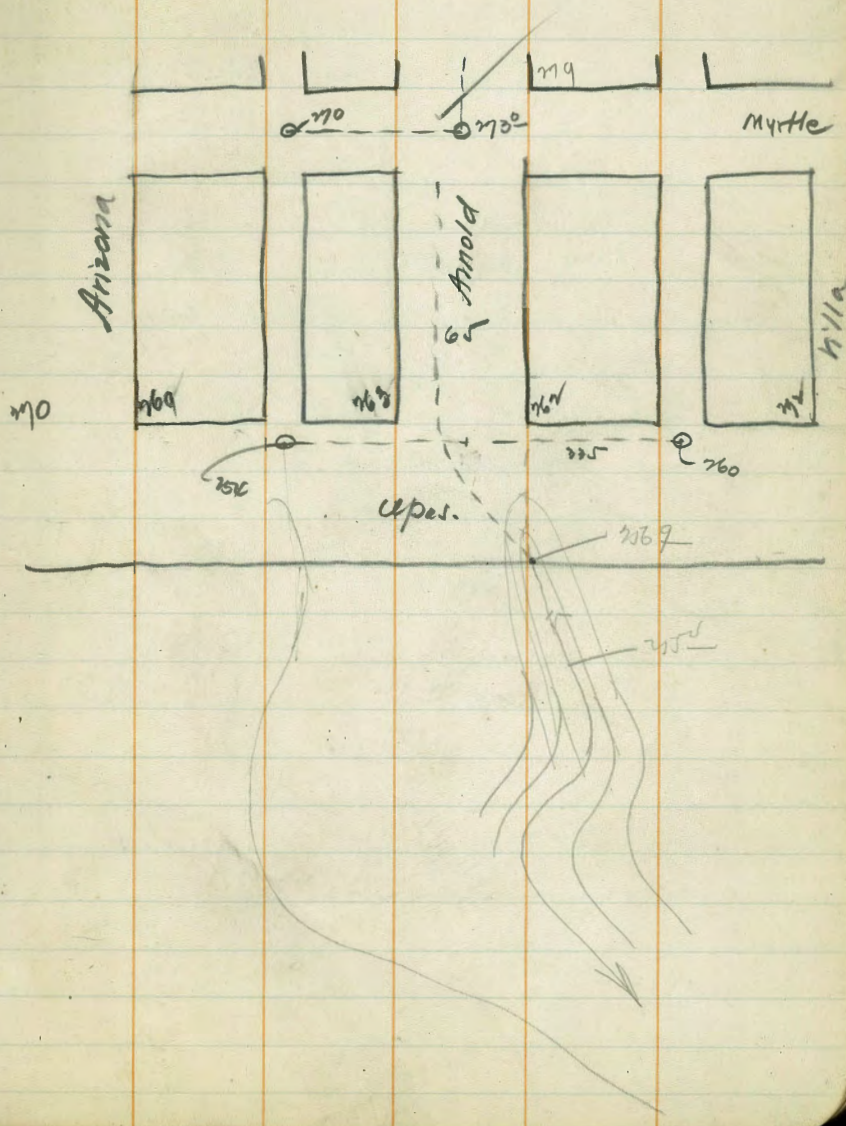
2732

2772

F.H.  
Bohm.H.

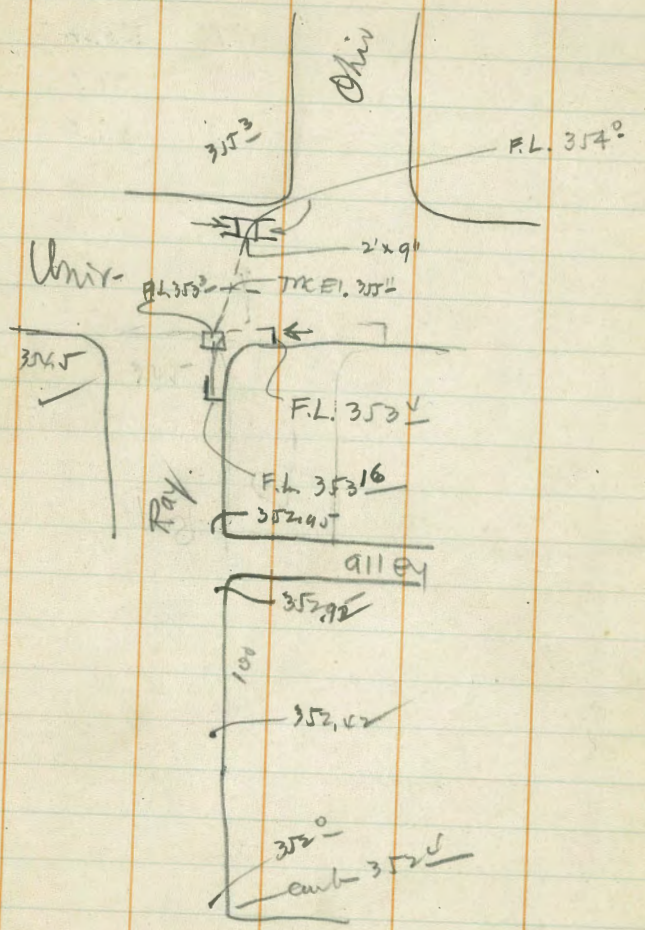
4.70	263.70	279.0
	5.5	278.2
	—	5.1
Fl. line sewer	—	273.1

9	262.9	262.0
	6.0	269
	7.5	255.4



5.34	360.64	755.30	
6.6		354.0	
7.2		353.4	
7.55		353.10	
6.1		354.5	Curb
7.75		353.30	
5.52		355.11	TRAIL

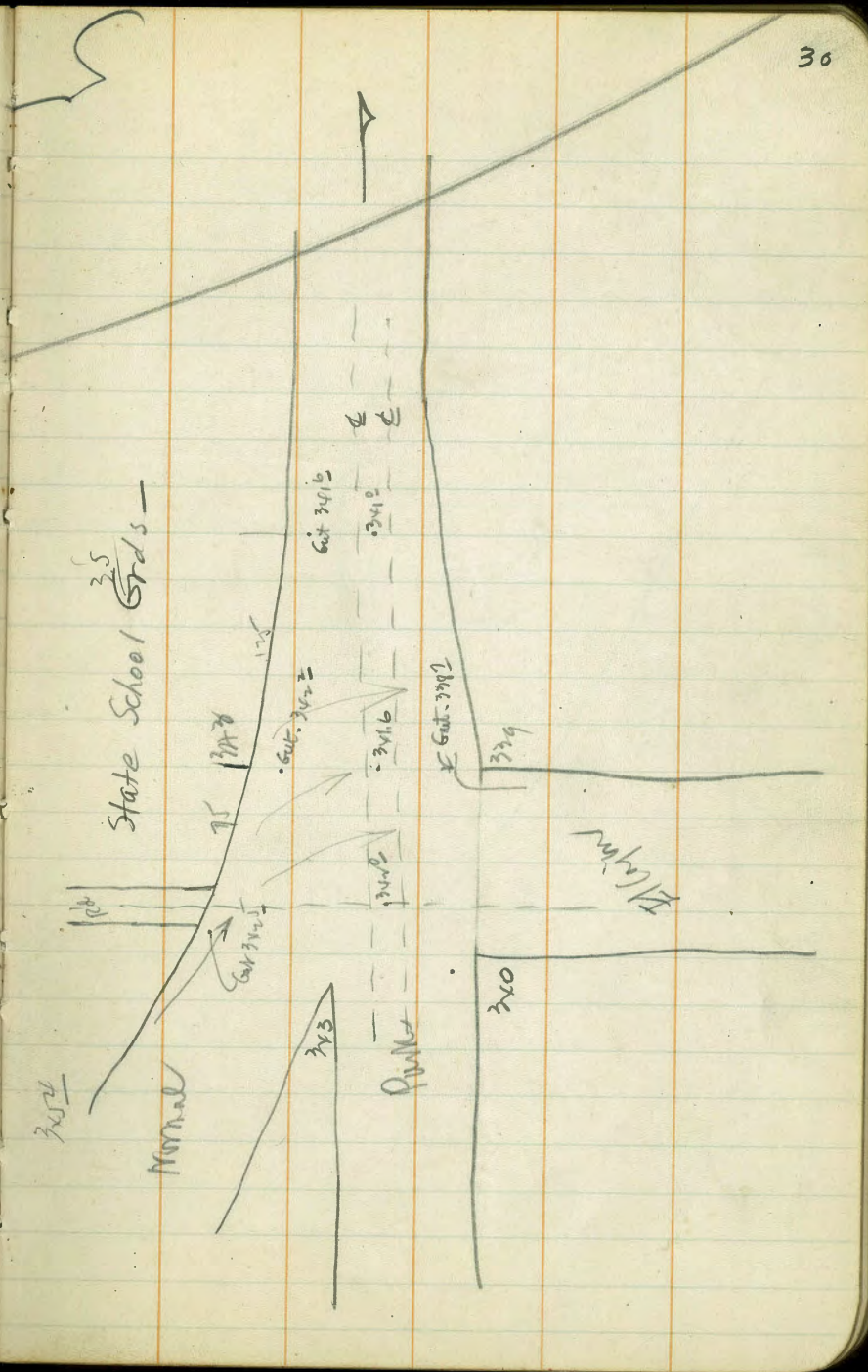
3.47	358.77	755.30	
5.82		352.95	
5.82			
6.35		352.42	
6.40		351.97	Curb
6.4		352.4	
5.61		353.16	

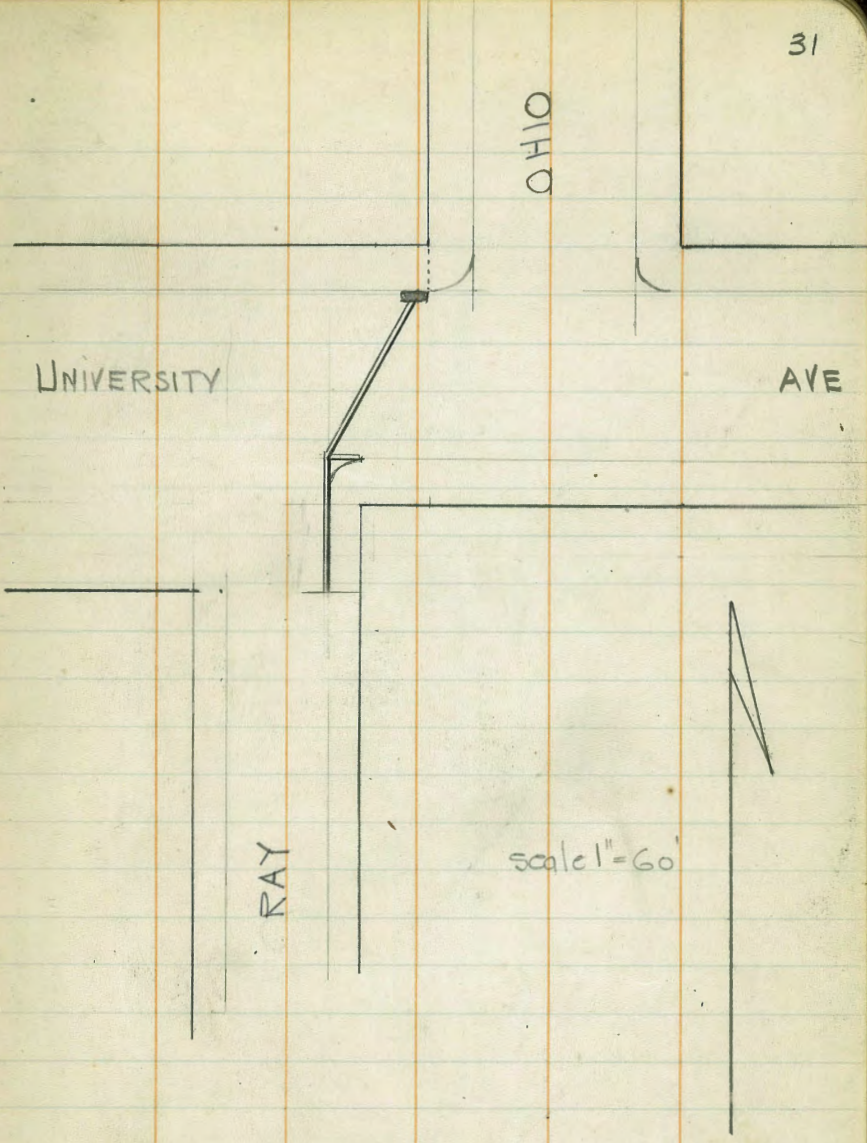
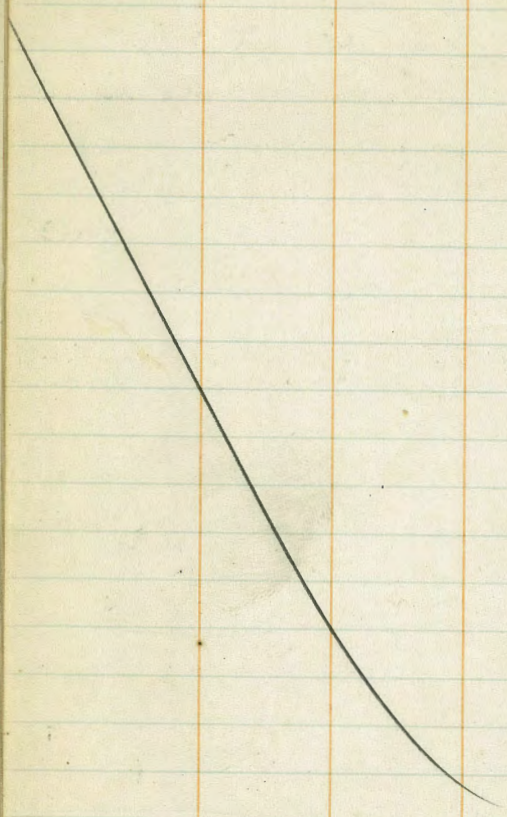




+  
5m 344.27

-	339-	
516	338.7	Guth
27	341.6	2 S.
27	342.2	Guth
27	341.6	
33	341.0	
33		
475	340.02	✓
160	342.5	
13	342.0	





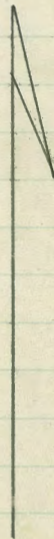
UNIVERSITY

OHIO

AVE

RAY

scale 1" = 60'



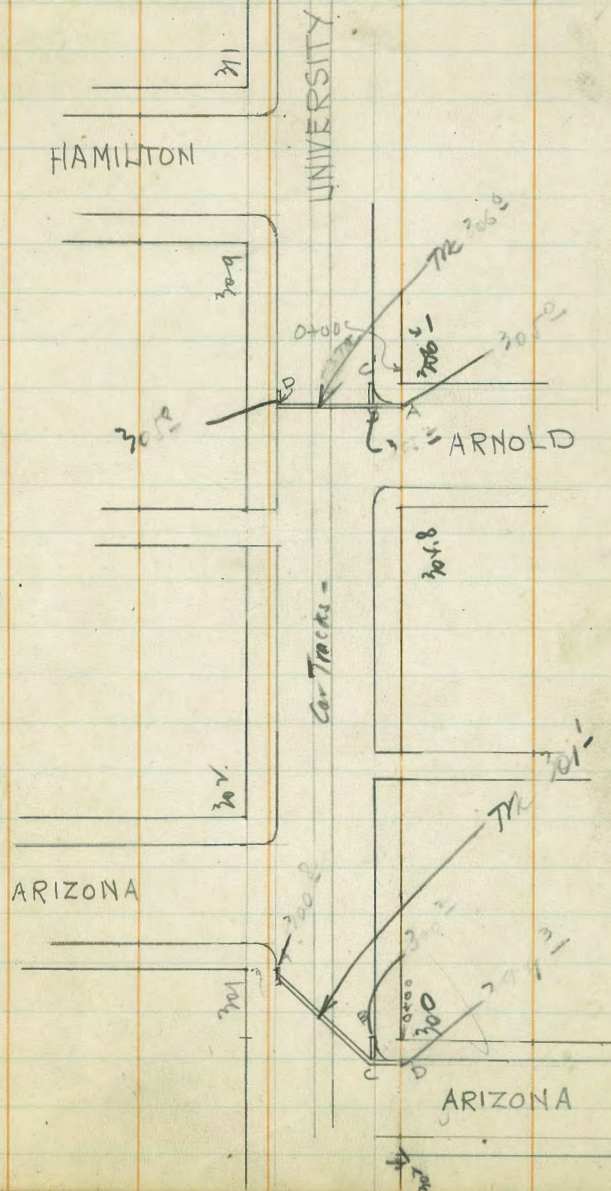
Arizona

Sta	+	-	K	Elv.	B.M.
	5.95		306.95		301.0
Ent to Calv. NW Cor = A	7.5		299.5		
" " " NE Cor	8.1		298.9	on Univ Ave = B	
" " " NE Cor	9.0		298.0	on Ariz - D = 0+00	
C = M.H. □	8.3		298.7		
I + 00	12.1		294.9		

Arnold

	+	-	K	Elv.	B.M.
	5.30		311.70		306.4
A = 0+00	6.7		305.0		
C =	6.4		305.3		
D =	5.9		305.8		
B =	6.5		305.2		
I + 00	9.45		302.3		

Scale 1" = 100

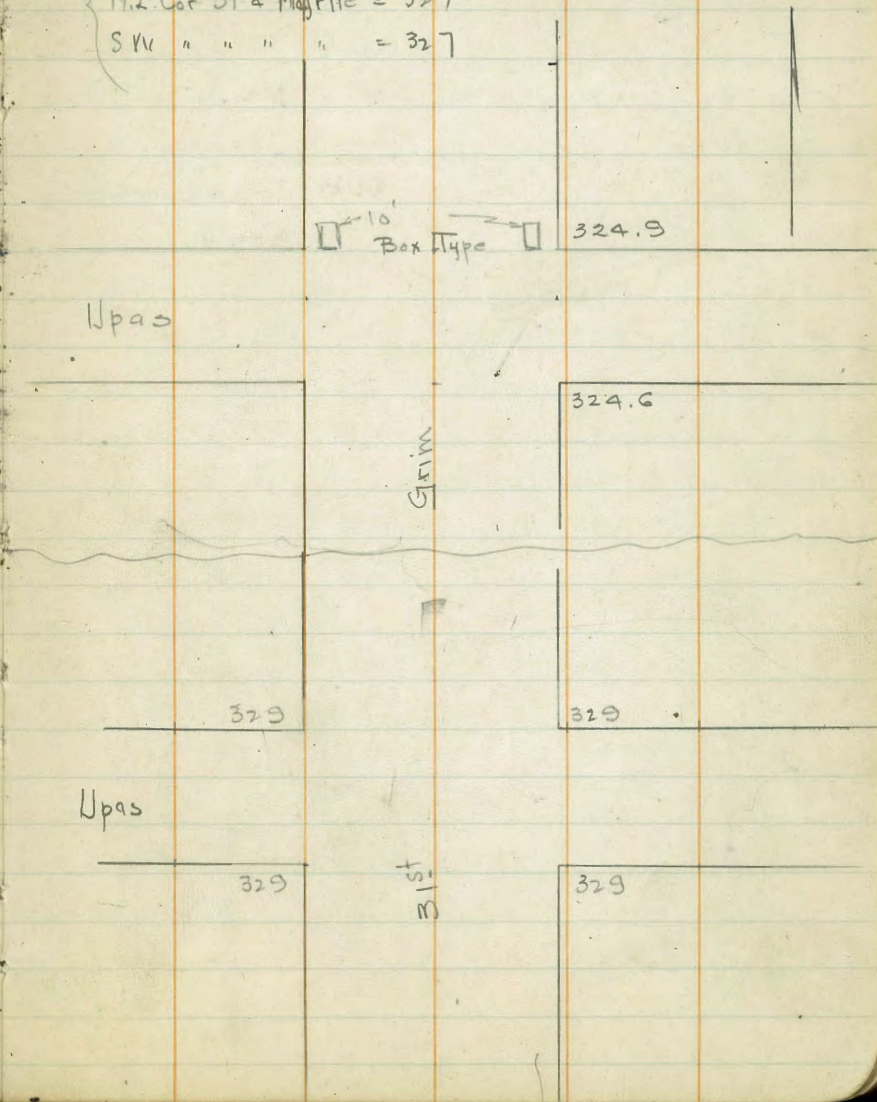
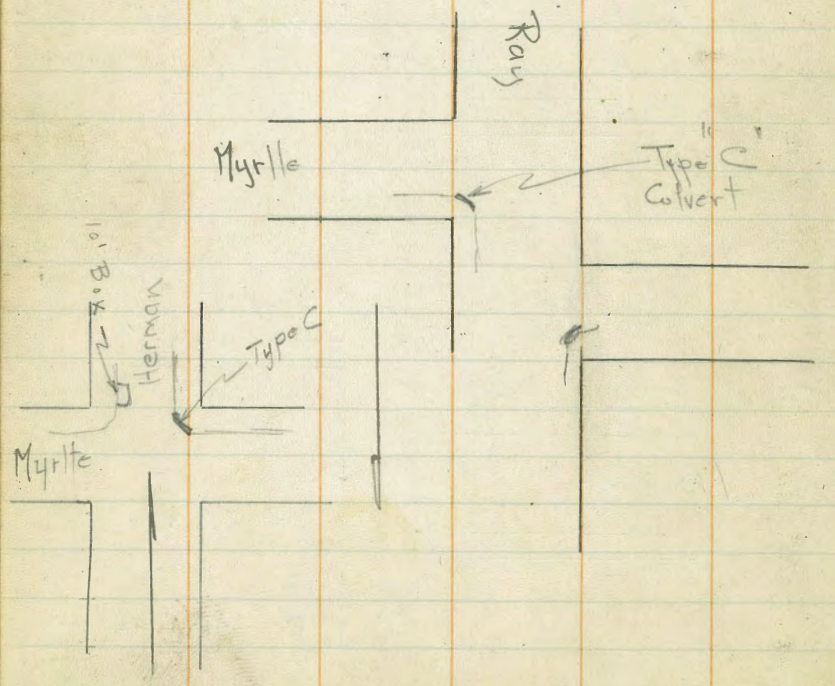


Sewer MH in Alley Bet Ray & Grimm on Myrtle

	+	-	⌘	Elev
	5.11			327-
			332.11	
Top M.H.		3.75		
Bottom M.H.		10.35		321.76
Top M.H. at Alley Bet 31st & Herman	5.42			
Bottom M.H.		11.92		320.19
M.H. at Myrtle & Ray				324.09
	5.47		334.47	N.E. Cor Myrtle & Ray
Bottom M.H.		11.52		327.95

- ✓ Sewer on Alley Bet Ray & Grimm on Myrtle
- ✓ Upas & Grimm or 31st
- ✓ M.H. at Myrtle & Ray (see Catch Basins)
- ✓ M.H. at Alley on Myrtle Bet 31st & Herman
- N.E. Cor 31 & Myrtle = 327
- SW " " " " = 327

542  
65  
11.72



302 SE Univ Tunnel  
306.40

5.47	306.47	301.-
		<del>490</del> 301.59
		4.40 302.07
		4.22 302.25 302.25
		6.14 300.03 cut
		8.17 298.00 outlier

.95	300.95	300.-
		4.8 296.1
		5.35 295.60
		3.- 297.95
		1.8 299.1
		3.0 297.9
		2.5 298.8
		2.5 298.3

100' So of S. Univ.  
Center of Culv-

Grim & Thorn  
Tracks at Arnold & Ariz  
Arizona & Univ.

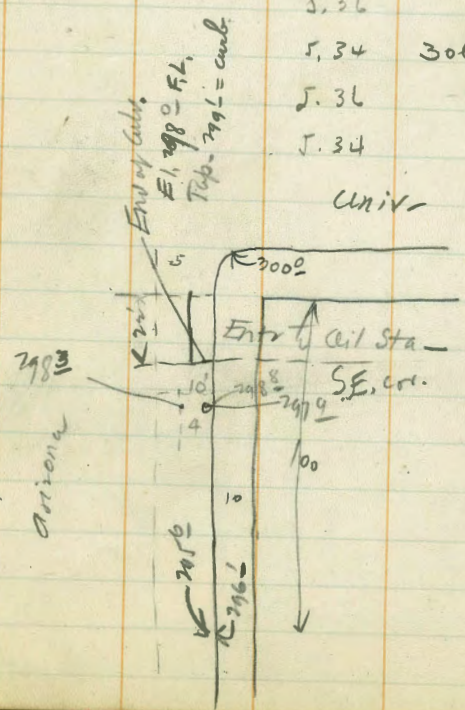
5.66	306.66	301.0	BM
		5.69	N. Rail } Track
		5.60	S. " } Track
		5.57	N. " } Track
		5.44	S. " } Track

NW. Cor Ariz = 301.0

Arnold & Univ.

5.54	311.94	306.4	BM
		5.36	N. Rail } Track
		5.34	S. " } Track
		5.36	N. " } Track
		5.34	S. " } Track

Univ-



368.6  
28  
365.8

363.6

474

375.74

	371.00	N.W. cor
5.32	370.42	SW ✓
6.96	369.48	Carb S.E. Alley
7.00	368.7	Grating
8.5	367.2	F.L. Intake
6.6	369.1	Grating
8.1	367.6	F.L. ✓
5.70	370.04	Cut N.E. Alley
5.18	369.86	M.H. ENT
5.9	369.82	M.H.

378.94 Monroe + 30th  
0.21 JEBP

379.16  
8.19

370.97  
2.6

375.59  
4.98  
370.61

SE. of CONTACT  
UTAH  
Monroe

65' F.L. very stagnant flow 363.4  
Drain from m. - 5' F.L. 364.4

-4.0 Outlet. 365.8

Grating at Monroe

300' S. of Monroe w gutter

250' " " "

T.P. 3.8' 373.4

CURB ON NW

N/E UTAH  
Heads on paving

70' 368.58

675 368.84

692 368.67

598 369.61

565 367.77

6.0 367.41

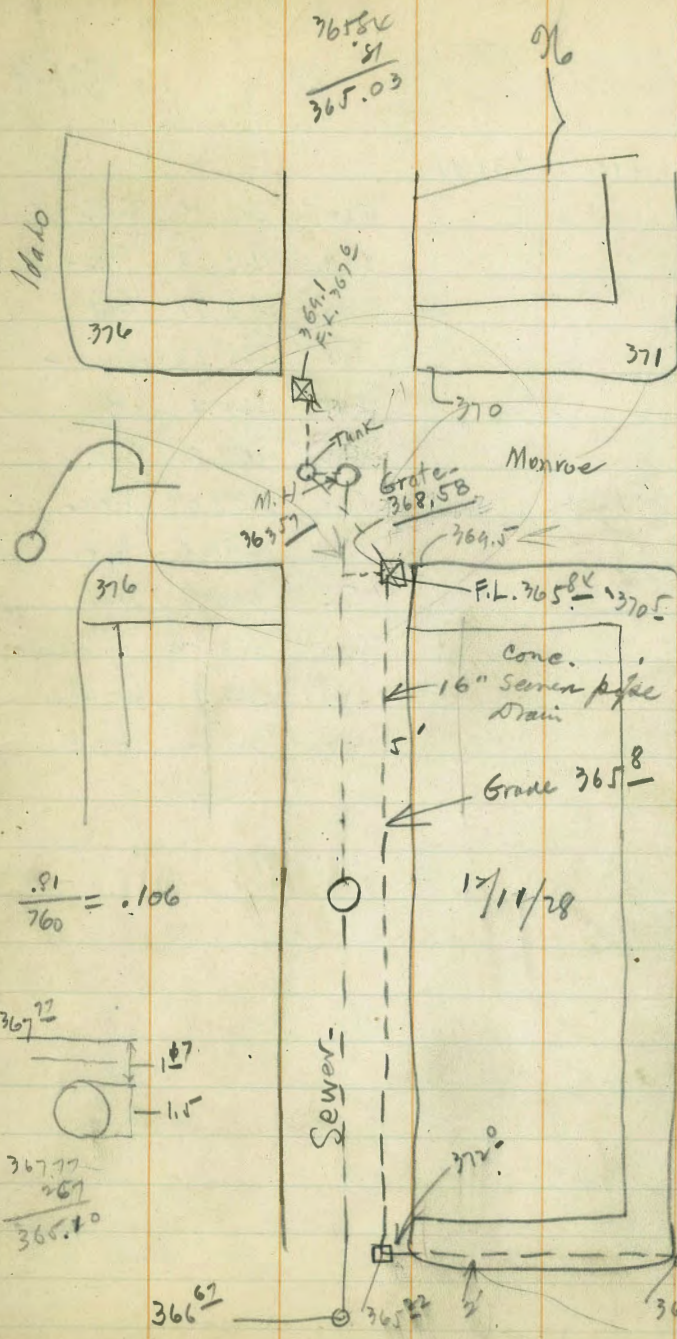
See pg (51)

368.84  
51  
365.03

35

7/1/27

26.84  
.76  
365.08



$\frac{.91}{760} = .106$

Utah

368.58  
367.77  
.81

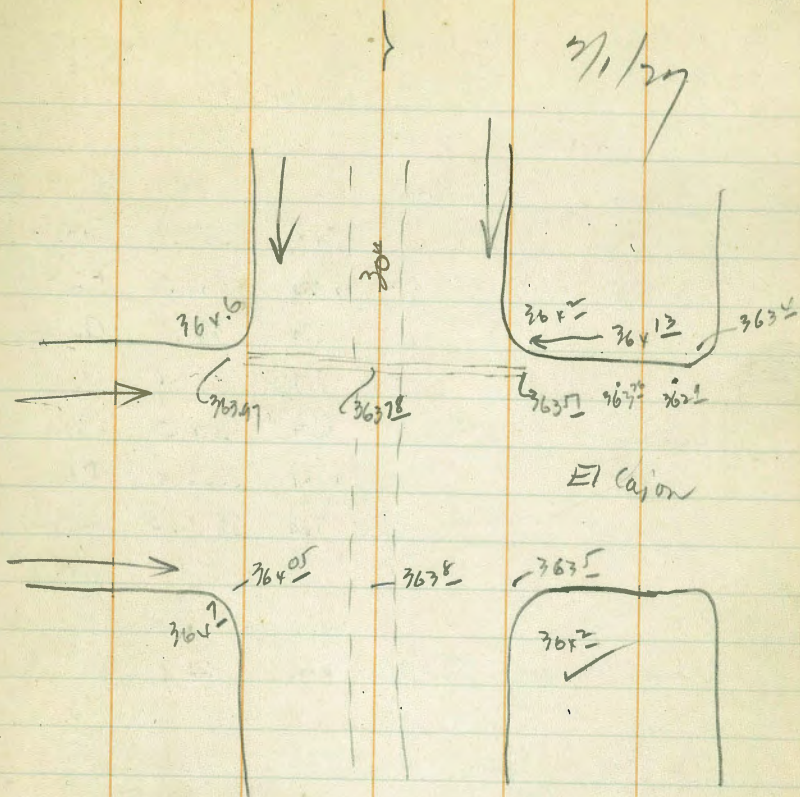
600  
140  
18  
759  
605  
140  
18  
759  
760

+      7

5.11      639.71

364.60

5.22	363.97	Gut.
5.13	363.78	TKO-
6.20	363.51	Gut-
5.58	364.13	Out-
5.50	364.2	✓
6.20	363.5	Gut
5.41	363.80	TKO-
5.66	364.05	Gut-
5.1	364.7	Out-
6.15	363.26	Gut- 100 E-20°
6.50	362.9	Ext. chis
6.30	363.4	Out ✓



432

377.02

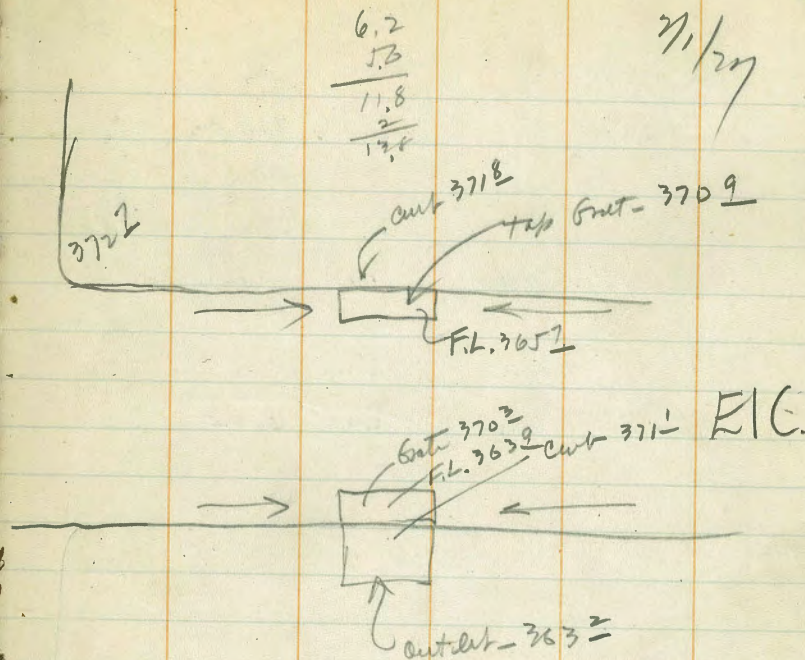
372.70

6.1	370.9	Grate
11.3	365.7	F.L. 4" P.
5.2	371.8	Out
5.93	371.1	Out
6.75	370.3	Grate
13.1	363.9	F.L.
13.8	363.2	outlet

Across Orange - 352-310 - 2' in 80 - 25%

to carry 310 c.f.s. 54" pipe = 150'

5" fr O.D.



365.7  
363.0

1.8 in 80 ft = 25% 24" pipe - 30 c.f.s.

363.9

32  
7 in 25 =

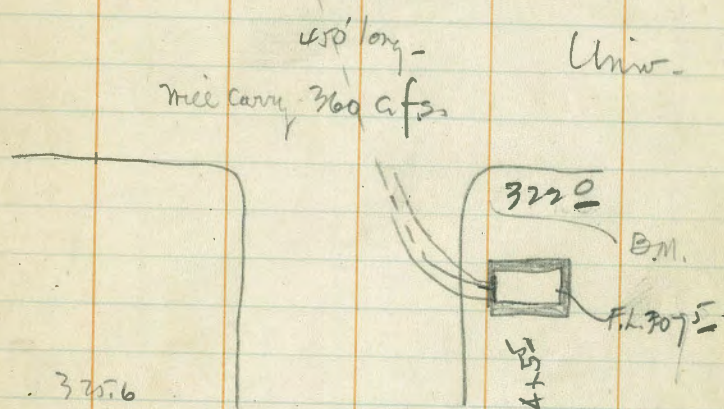
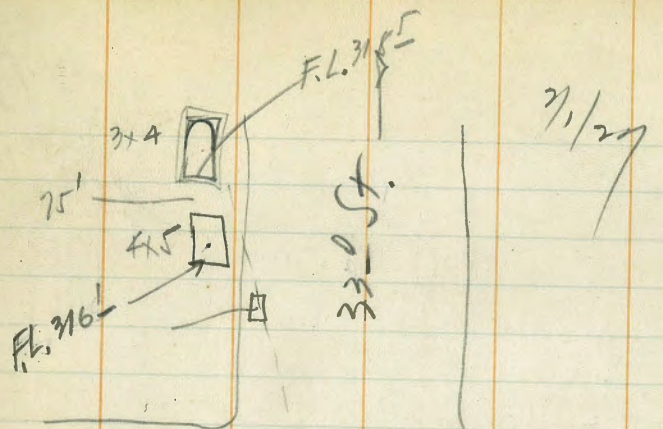
120 c.f.s. for 4

600 10' sec = 12%

At Orange - 36" pipe on 3% Grd will  
Carry - 130 c.f.s.

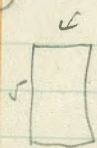


	<del>327</del>	
+	327.15	322.0
5.17	336.97	321.50 S.E. Cr.
Top drain	5.50	318.5
F.L.	29.00	328.00
	0.9	316.1
Gmt. 322 ft. 30' N. Univ.	F.L. 11.4	325.6
	5.6	311.4
	F.L. 16.1	320.9
	Typ. 13.8	
4 x 5.5	F.L. 20.0	309.5
		319.0



$$\frac{320.6}{317} = 1.9\% \text{ Grade}$$

$$\frac{8.6}{4.5} = 1.9 \text{ in } 53$$



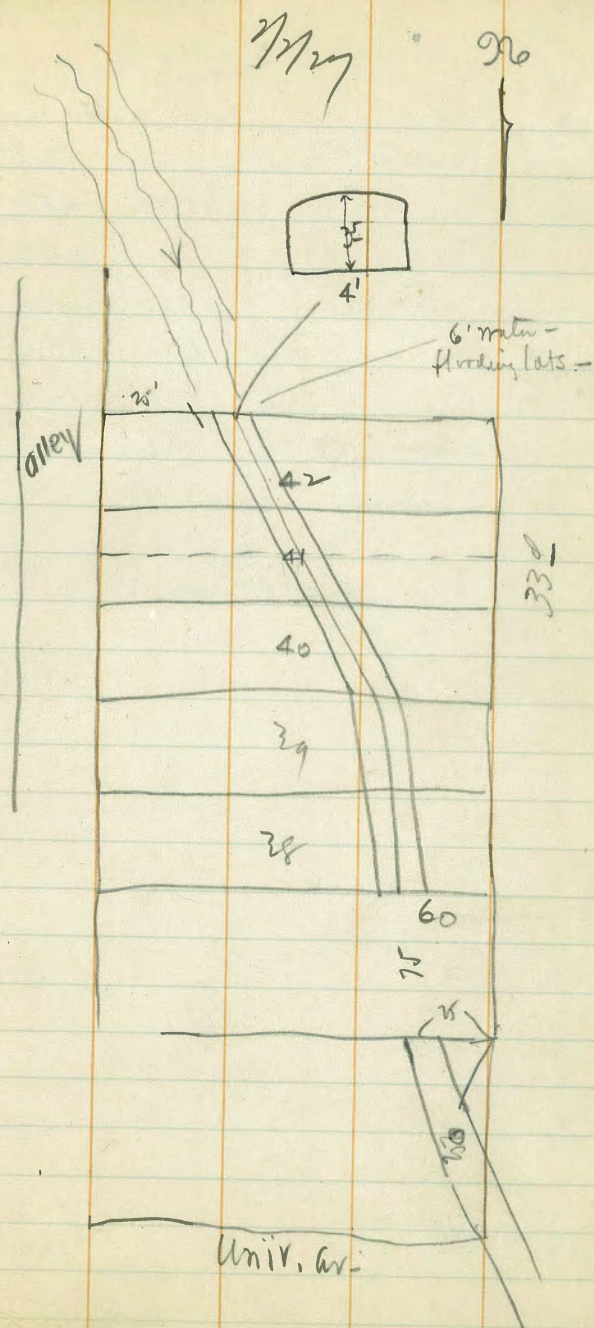
$$A = 20 \quad r = \frac{20}{14} = 1.43 = 1.2$$

$$P = 14$$

$$S = 0.25$$

$$V = 120 \times 125 \times 1.2 = 18$$

$$18 \times 20 = 360 \text{ cfs}$$



7/17/27  
D.W.  
M.C.

0.20

16.65

N.W. Kett & Ann  
16.15

1.2

15.4

S.W.

5.2

11.4

SE Cor.

& Calif.

Ash & Calif.

4.6

12.0

N.E. Cor.

& Calif.

6.2

10.4

N.W.

6.7

10.0

S.W.

ctr Pan - Fish. Atl.

12.3

4.3

N.W. Kett + Clean B.P. 2573

7/27/27

40

S. M. Kett & Calif

10.00

1.30

11.30

7.0

4.30

4.00 Low pt.

6.76

4.54

Tap M.H.

to Fish.

7.20

Fish. Sewer -

2.66

M.H. atl -  $\phi$  ash.

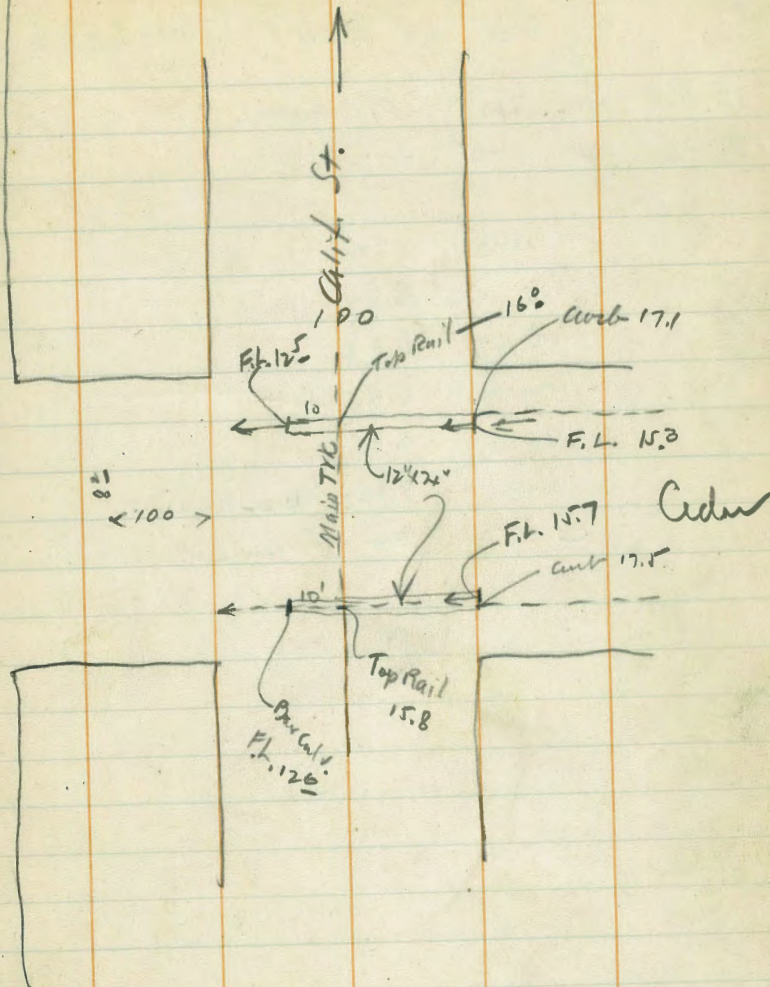
N.W. Kett. Cedar  
 0.32 26.05 25.73

8.6 17.5  
 10.3 15.7  
 10.7 15.8  
 13.4 12.6  
 8.9 17.1  
 10.0 16.0  
 12.2 13.8  
     13  
     125  
 10.55 15.50 T.P.

3.20 18.70

13.1 5.6 & Cedar  
 11.65 7.05 & H.L.  
 10.15 8.2

Atlantic M.H. Top - 705



Ask J+ Ext. cc. Tide Land -

E.P.L. A.H. 7+75 3.57 Guttero

M.P.L. ✓ 6+75 4.07

1750 5.17

5 6.17

4+50 6.63

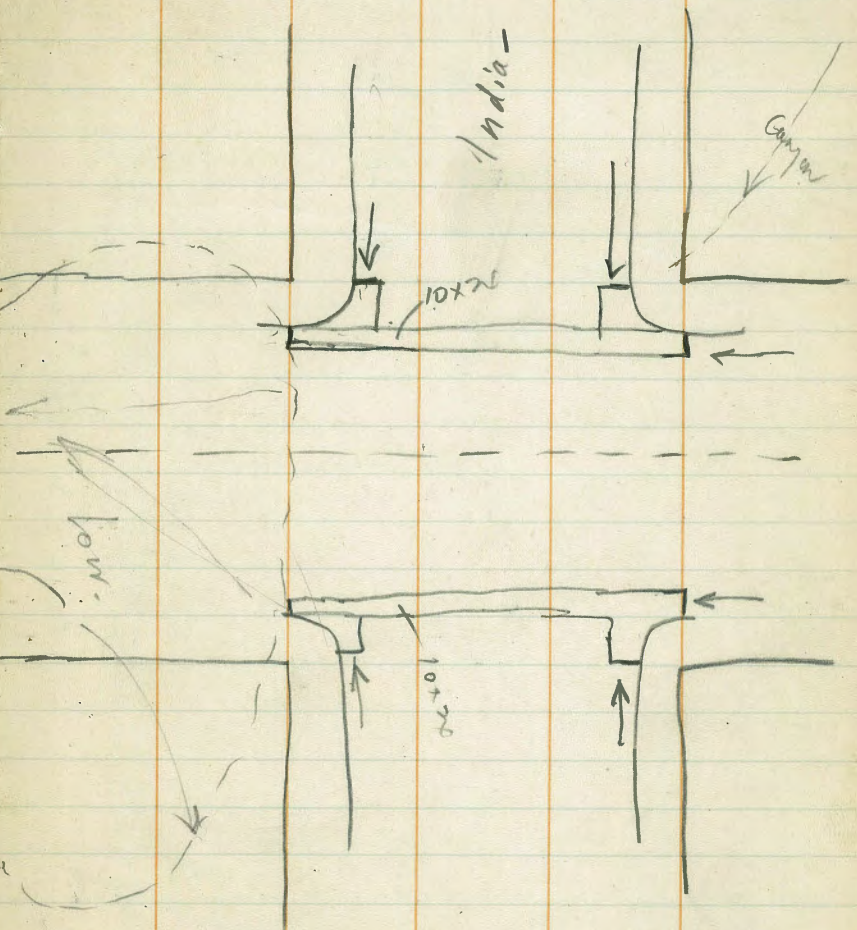
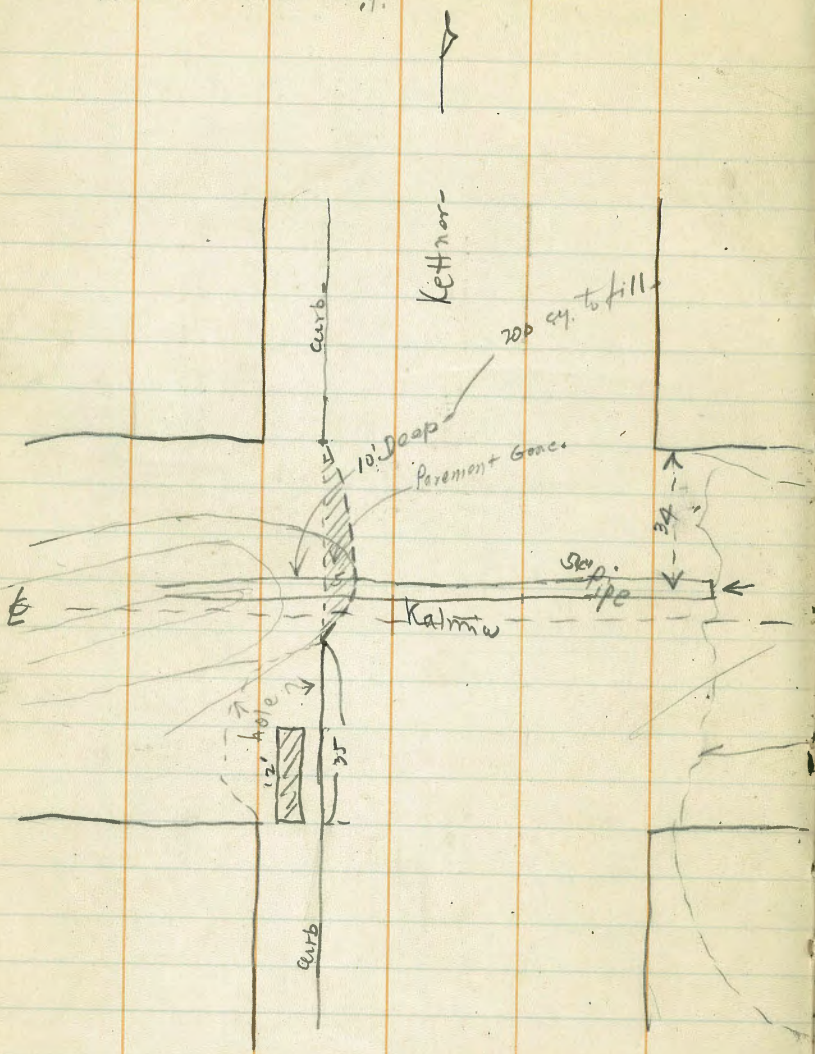
2+50 6.92

1+50 6.30

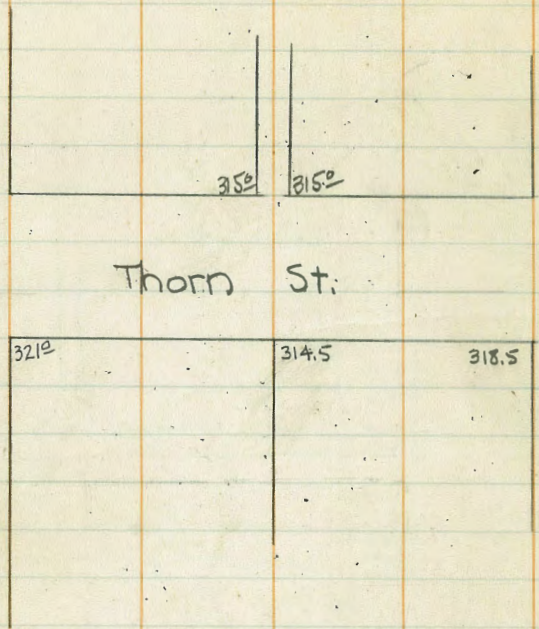
0+50 4.30 BK. of B. head -

- 25 4.- Face of ✓

200 x 70 = 14000 150 cy.



Grim Ave.



Thorn St.

31st St.

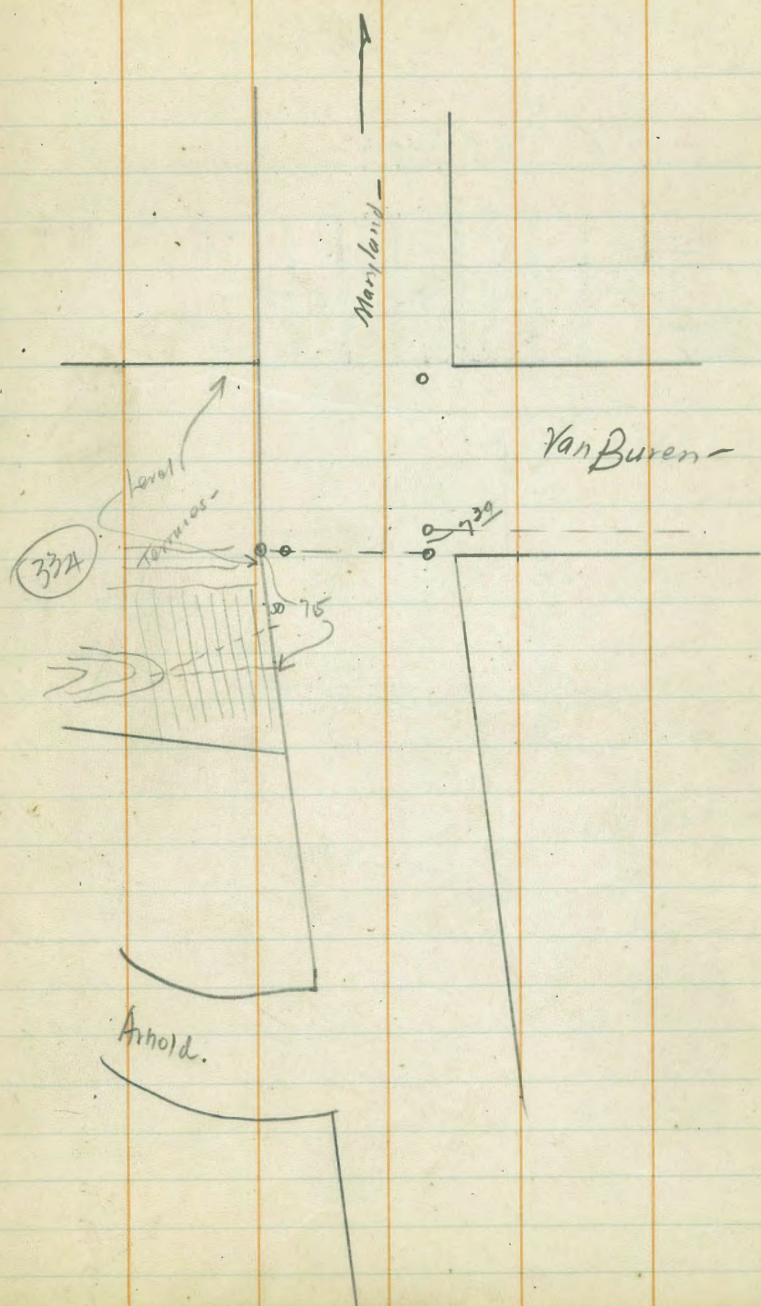
321e

314.5

318.5

350

3150



Maryland

Van Buren

332A

level

Thomas

75

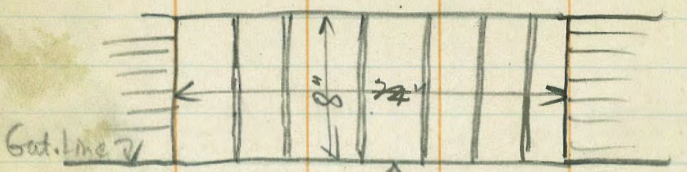
729

Arnold.

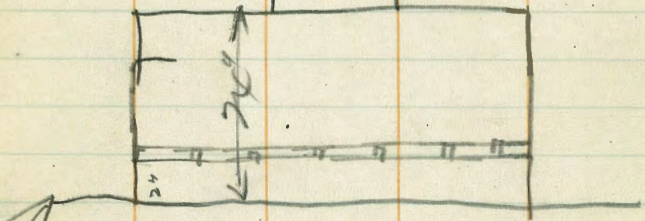
3/1/27

Cur. S.L. J. St. bet 25" & 26"

Top of curb -



Pipe

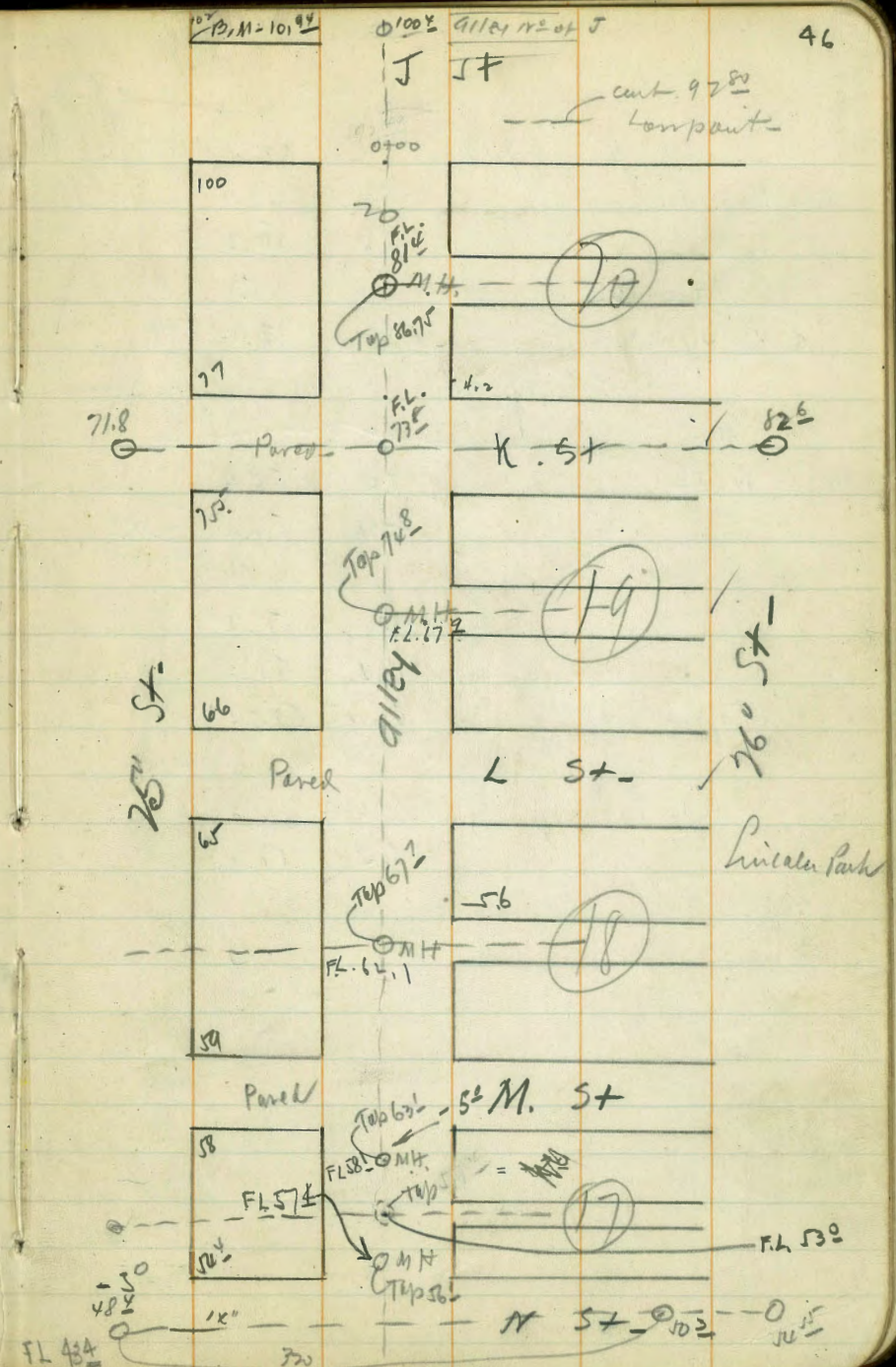


Face of curb

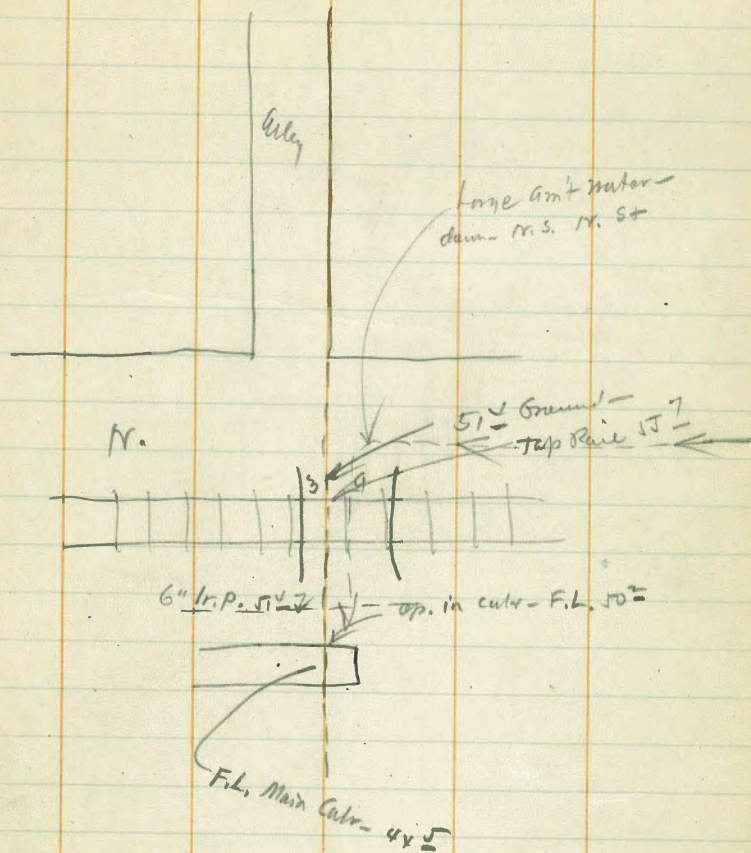
Gutter - conc -

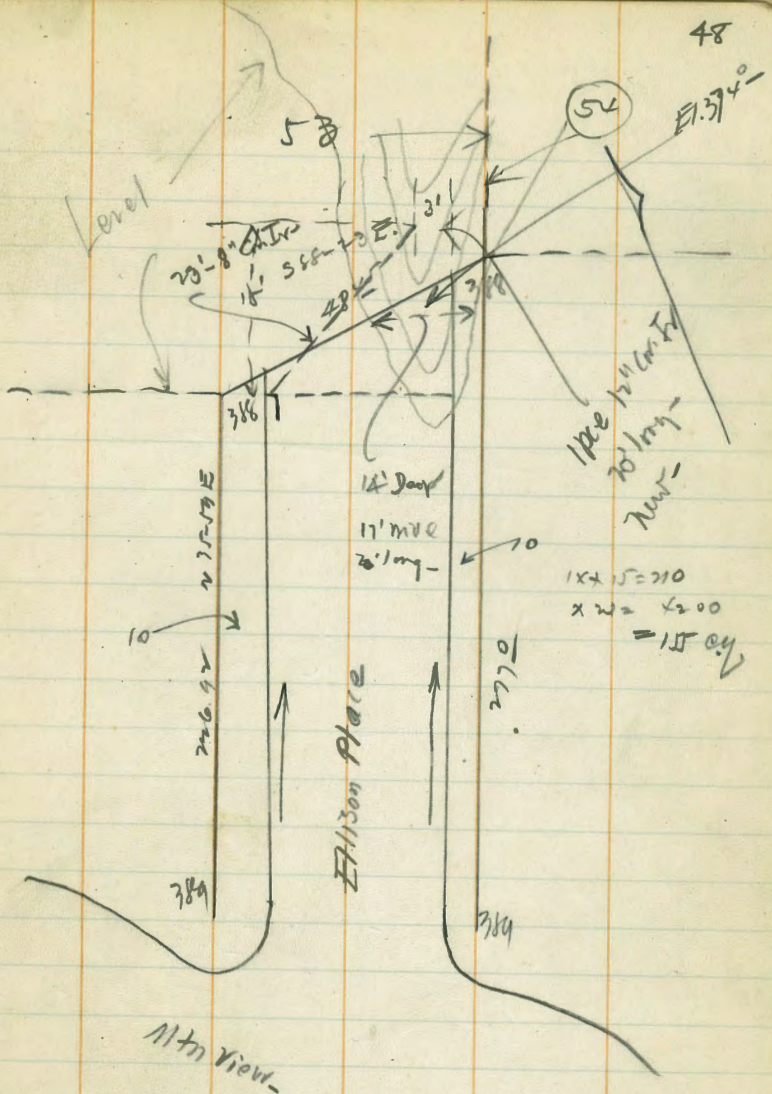


+	H.S.	-		
			102.00	
0.32	102.32			
		9.52	92.80	
4.22	97.03			
0400 S.L. J. St		3.-	94.-	
alley-		10.38	86.75	T.P. M.H.
	86.98			
M.L. K St		8.0	78.6	
S.L. ✓		9.9	77.1	
+30		9.1	77.9	
+50		9.5	77.5	
+100		10.5	76.5	
		11.60	75.38	T.P.
0.29	75.67			
alley in M.H.		0.9	74.8	
M.L. L St		7.5	68.2	
S.L. ✓		8.6	67.0	
+50		7.1	68.6	
alley M.H.		7.97	67.70	T.P.



	1.43	69.13	67.70	T.P.
M.L. Imp. Ave		8.9	68.2	
S.L. ✓		9.8	59.3	
+30 M.H.		60	63.1	
& Alley		9.70	59.43	T.P.
0.76	59.79 ✓		53.0	- F.L. Sewer -
M.H.		3.7	56.1	
M.L. N St		5.2	54.6	
		5.76	54.43	(= 54.4)
		8.4	57.4	
		4.1	55.7	
Top. of Culv.		6.04	53.75	
			50.2	F.L.
			44.5	
		6.4	51.4	





$1 \times 2 = 210$   
 $\times 2 = 4200$   
 $= 15 \text{ cu}$

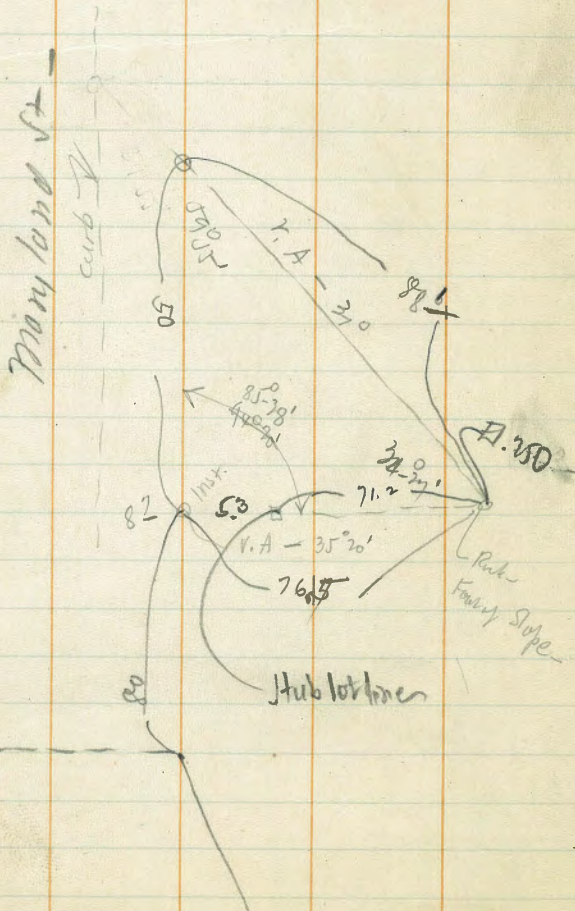
Alt View

DHB  
 HCH  
 2/7/20

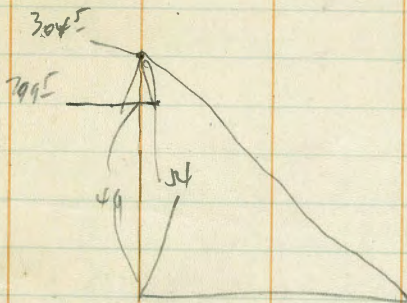
92  
 94 mic -  
 3/7/76



29.9.5  
 49  
 250.1



Knickerbocker

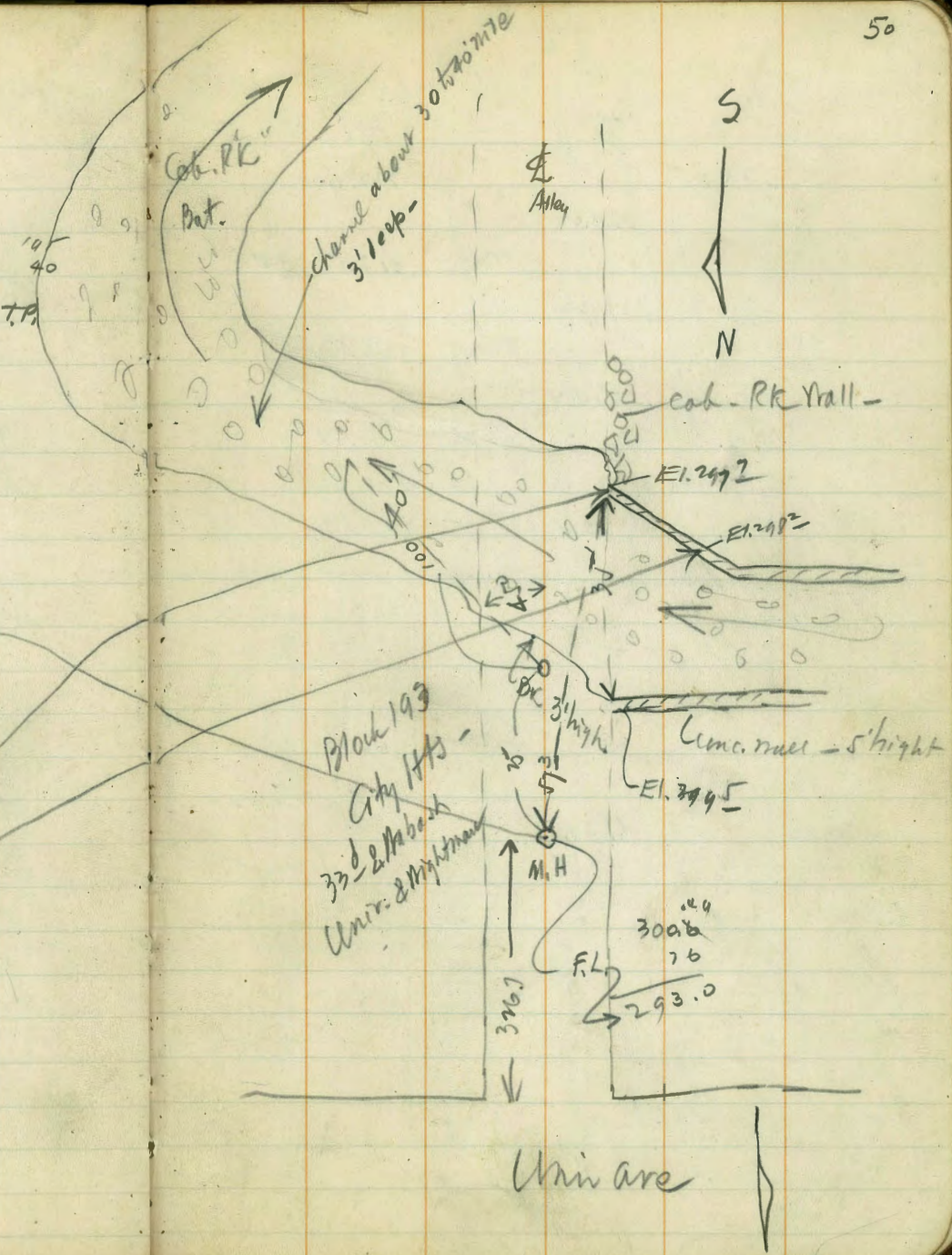


	+	∓	-	El.
S. E. Cor - 732 + Univ -				322.00
7.75				329.35
0+0 S.E. Univ - Alley E. of 332			3.1	326.2
7+35			11.15	318.20

2435 ∓ ptg slg down 2/1/84 -  
 76 to FL.  
 313.00 - 0.10 318.10

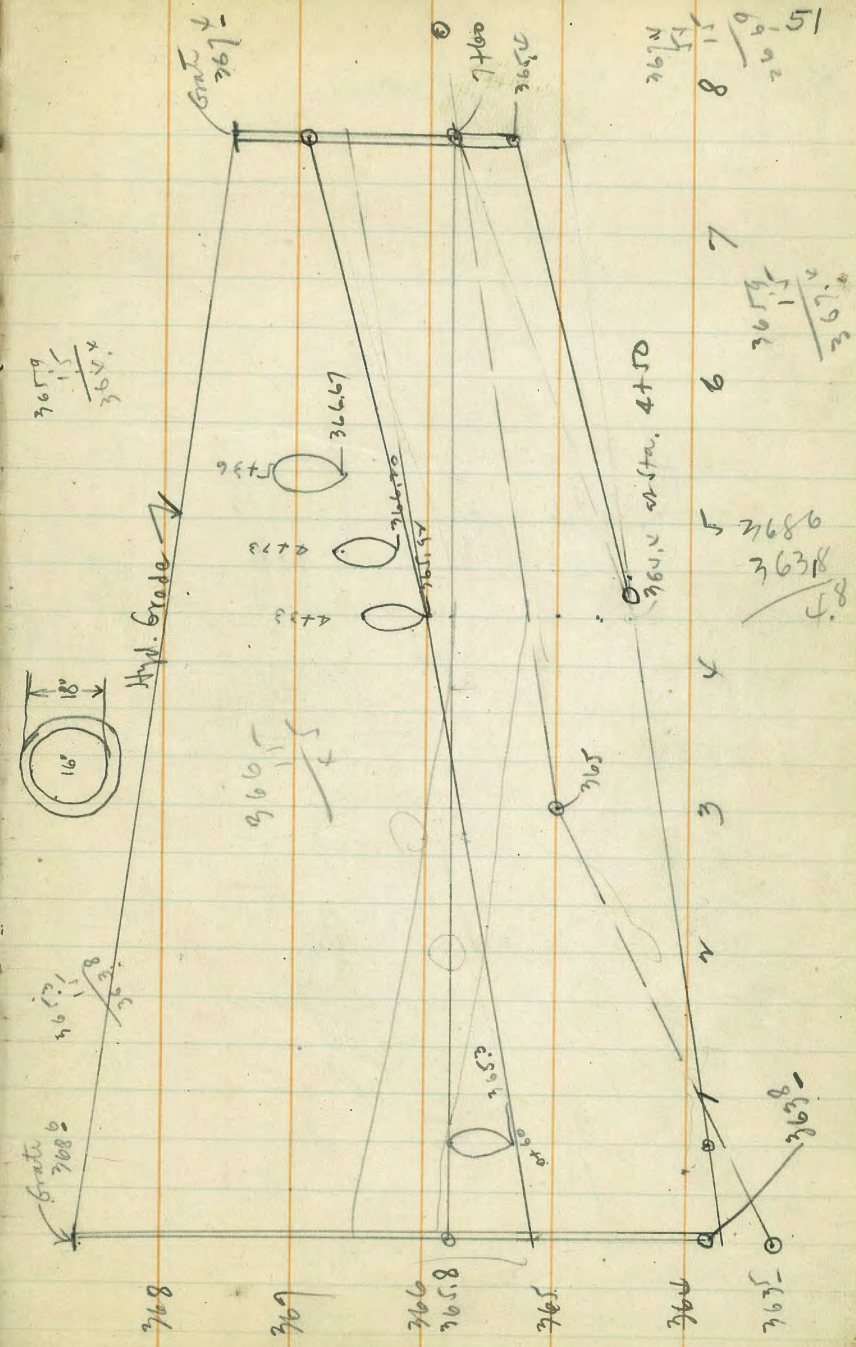
az	Dist	∓ A.		El.
S. 3407	67	-9-45	-11.2	301.8
S 3425	M.H. 90	-8-	-12.4	300.6
S 3440	125	-7-30	-16.2	296.8
S 3465	130	-9-	Bot. -20.1	292.9
S 3485	160	-6-30	-18.2	295.0
S. 4410	175	-5-	-15.2	297.8
2-30	145	-6-	-15.0	298.0
8-45	140	-6-05	✓ -14.8	298.2
359-	150	-7-30	-14.2	293.6
7-	110	-6-05	upl -12.6	300.4

ASB 3/11/27  
 M.C.



+	π	-	EL	
7.01			322.00	
	329.01			
		11.04	317.57	TP
0.67	318.24			
		11.67	306.59	
0.47	307.04			
M.H.		6.55	300.49	
Top of base on N.S. ch.		7.53	299.51	
✓ ✓ ✓ ✓ S.S. ✓		9.75	297.69	

370.61					
371.58					
- 370.01	0+60 = 863+ Top		365.85	Top of Sew lat.	
+ 615			365.30	Bot.	
376.16 H.I.	4+73	9.04	366.47	Top - 65.92	
	4+73	9.41	366.75	Top - 66.70	
	5+76	9.84	366.67	F.L.	
<hr/>					
0+00 S.L. Minn	Ft. Hub.	Grade	Cut		
0+10	369.92	363.80	6.08✓		
1+	9.35	.93	5.41✓		
1+50	9.84	364.00	5.30✓		
2+	9.66	.06	5.60✓		
2+50	370.05	.13	5.94✓		
3	0.79	.19	6.60✓		
3+10	1.04	.25	6.99✓		
4	1.24	.32	6.90✓		
4+10	1.44	364.40	7.04✓		
5	1.85	.62	7.48✓		
5+10	2.28	.84	7.41✓		
6	1.90	365.06	6.84✓		
6+65	0.51	.27	5.94✓		
7+18	369.26	.37	3.60✓		
7+10					
7+70	368.36	365.80	2.56✓		

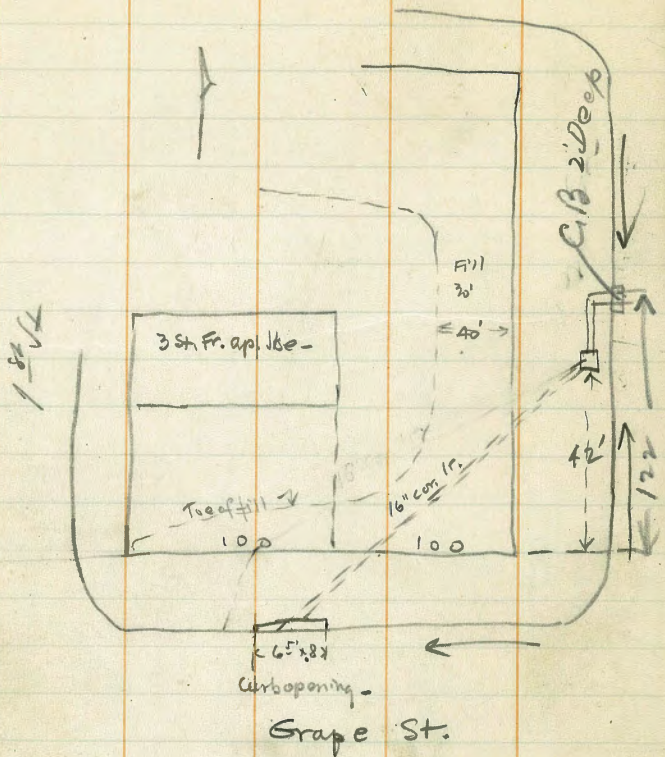


367.51	
8.11	
365.51	
2.67	
363.84	
4.8	
363.84	
4.8	
368.64	
363.84	
4.8	

768  
769  
766  
759.6  
765  
764  
767

DW  
3/1/27

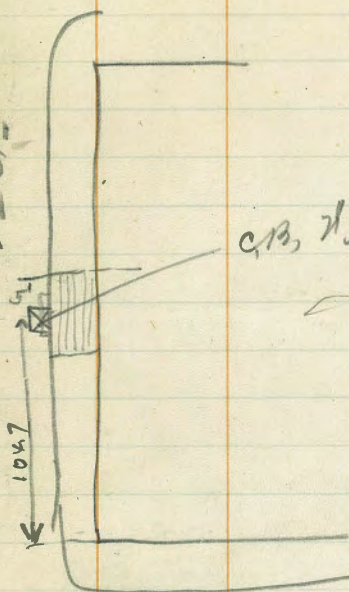
Hawthorne



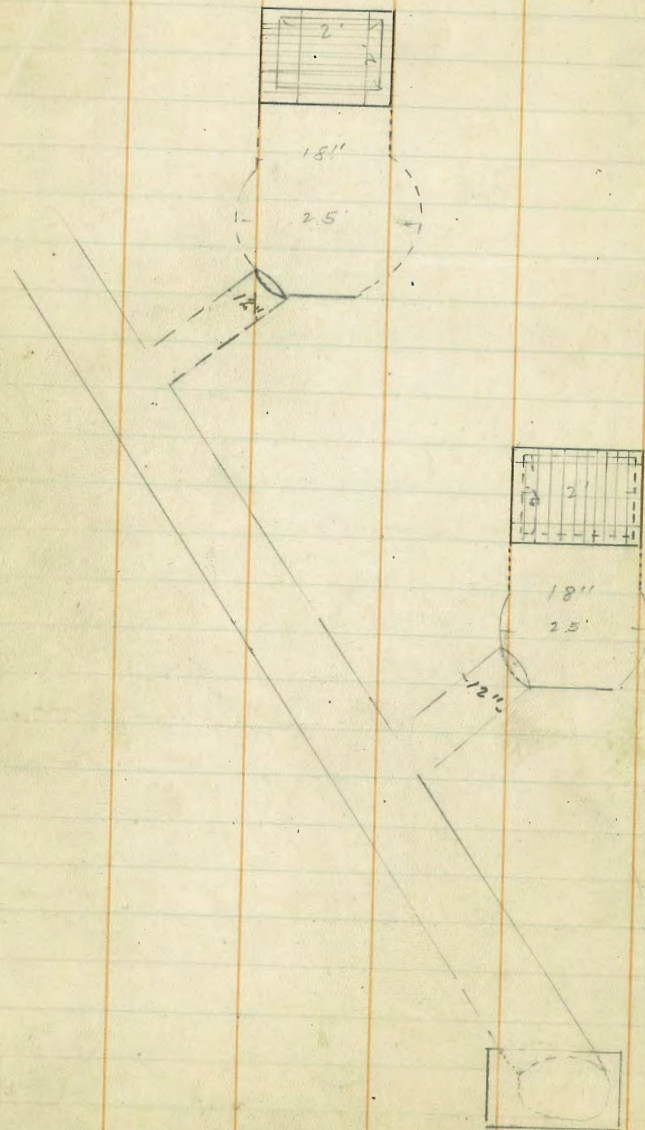
52

2' St.

C.B. 2' Deep

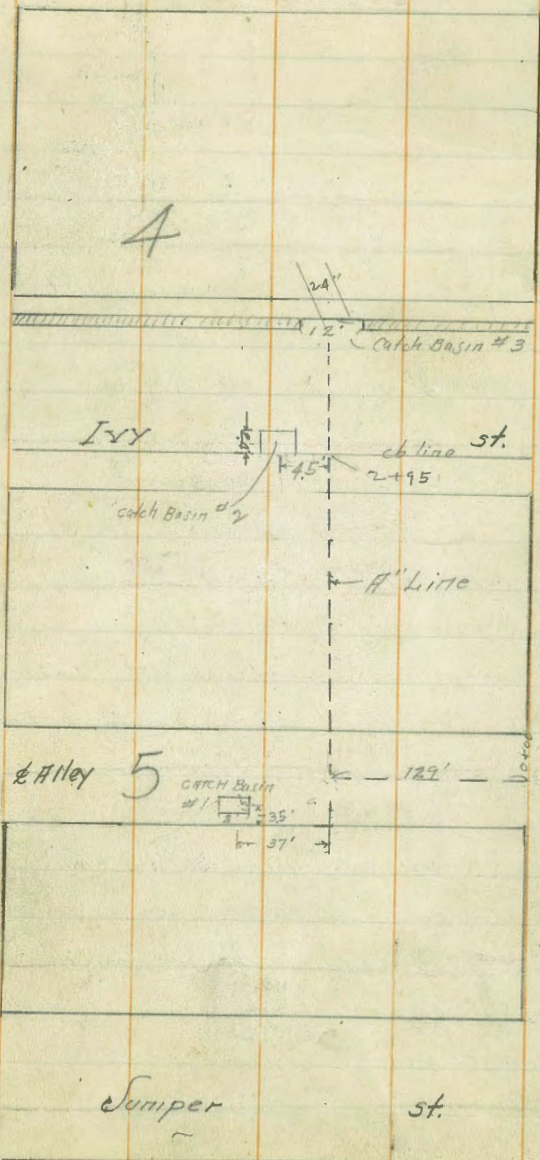


HAYTHORNE



st.

st.



st.

Gut 781  
781.97

FERN  
7825

7821

782A3  
Gut 782

106

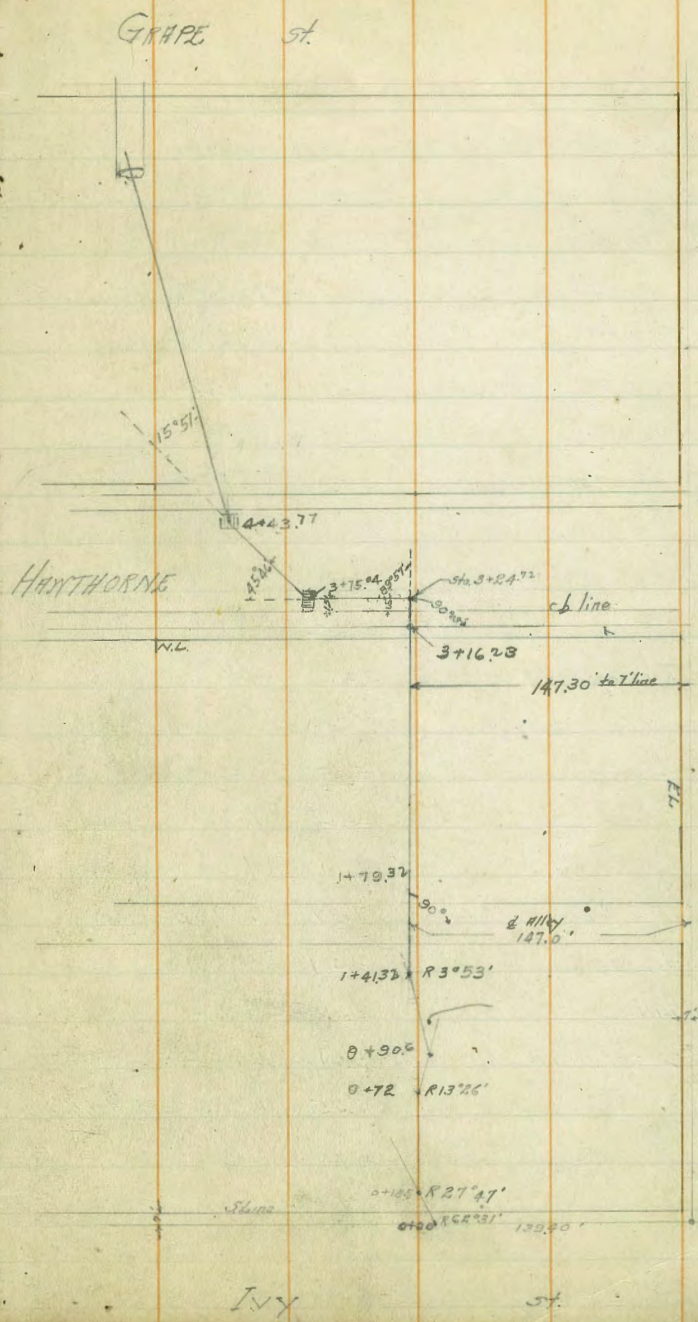
st.



Walker  
4-4-27

Location of Chieris bet. Ivy + Grape  
EAST of FERN ST.  
{ Levels on Page 55 }

- 7+47.27 = End of Existing 24" Culvert at Grape St.
- 4+43.77 = Δ R 15° 51'
- 3+75.02 = Δ R 45° 46' = N Catch Basin
- 3+24.77 = Δ L 89° 57'
- 3+16.23 = Intersection of Proposed drain with N 7' Line of Hawthorne St.
- 1+79.37 = South End of Proposed drain across Alley
- 1+41.32 = Δ R 3° 53' = End of Proposed drain across Alley {See Plans for Position of Alley}
- 0+90.4 = End of existing 54" Con. Pipe
- 0+78 = Δ R 19° 26'
- 0+18.5 = Δ R 27° 47'



747.2  
443.8  
303.4

377  
322.7  
50.3

447  
371  
68.8

FERN

141.3  
90.6  
50.7

72  
185  
51

Levels for Culverts on A" Line *See Location Page 53*

Levels for Culverts on B" Line  
Location Page 53

Station	Offset	281.43	289.71	Notes
SE. BR				
KW. NIA + 30th	0.50	290.21	289.71	
<i>See sketch Page 53</i>				
top of cb at A			7.28	284.93
Gutter at A on Paving			7.67	284.54 x
top of cb at C			8.24	281.97
Gut. at C on Paving			8.83	281.38 x
T.P.	3.76	286.40	7.57	282.64
Gut. at B on Paving			4.90	282.1
0+00 " " " E. Alley at E.W. Ferry			4.18	282.22
+50 " " "		5%	4.87	281.53
1+00 " " "		5%	5.24	281.16
+29 = D.P.		2%	5.40	281.0
<i>See sketch</i>				
Catch Basin #1 on top of Grating			5.46	280.94
" " " " Flow line			7.30	279.1
1+39 = Sedge Paving		5%	5.05	281.35
1+89		5%	6.5	279.9
2+39		5%	6.9	279.5
T.P.	2.40	281.43	7.37	279.03
2+95 on top of cb		5%	2.47	278.96
2+95 on gutter			3.31	278.14
Catch Basin #2 on Flow line			5.61	275.82
Sta. 2+13 #3 " " "			6.35	275.08

End of A" Line

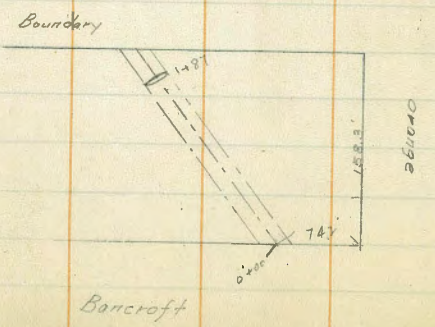
Station	Offset	281.43	267.48	Notes
0+90 <sup>6</sup> = End. ex. of 24" Con. Pipe	FL	14.19	267.48	
T.P.	1.59	271.07	11.95	269.48
1+20			4.4	266.67
1+41.32 = D.R. 3°53'			7.41	263.66 on stub
+50			3.2	267.87
+58			3.8	267.27
1+79.32			8.73	264.34 on stub
2+33			6.9	264.27
2+40			7.9	263.17
2+80			7.2	263.87
3+23.22 = top of cb at Hawthorne			7.40	263.67 Top of Curb
+24.72 = D.L. 89°51'			2.09	262.98 Gutter
T.P.	0.42	264.11	7.38	263.69
3+75.24 = D.R. 43°46'			2.72	261.4 on top of Grate
" " "			8.17	255.9 on Flow line
4+43.77 = D. 15°51'			9.50	254.61 on top of Grate
" " "			3.91	260.71 Flow line
4+45 = top of cb			3.16	260.95
4+58			3.0	261.1
+68			9.5	254.6
4+83			13.4	250.7
5+29			13.3	250.8
5+79			13.1	251.0
T.P.	1.15	252.41	12.85	251.26

Cont. on PAGE 60

Walter  
3-24-27

LEVELS For Proposed Drain  
Bet. Boundary + Bancroft S of ORANGE Ave.

SEBR	3.50	356.54	353.04
Polk + 92nd E Sta.			
0+00		2.8	353.7
+22		3.6	352.9
-25		6.3	
+47		7.3	
+48		6.0	350.5
+55		5.5	
+56		4.1	
+95		4.5	
1+00		6.9	349.6
+42		7.9	
+44		9.8	346.7
+60		9.1	
+67		7.9	
+78		9.7	
+82		11.4	
1+87 = First line of 36" Con. Pipe	12.20		344.3



Marker  
4-4-27

X. Section of 30' strip #1 end of Ellison Pl.  
North of Mountain View Dr.  
in Tract #1353

39313

57

W.H. Flow line  
on E. Mountain View  
Dr + Ellison Pl.  
West top cb. Mountain  
View + Ellison Pl.

{W.L. Stations}

10.33

39313

38280

N.E.  
East top cb at end  
of Ellison Pl.  
West top cb. at end of  
Ellison Pl.

0+00

S	4.7	88.4
L	4.5	88.6
N	4.7	88.4

0+27

N	4.4	88.7
L	4.4	88.7
S	5.7	87.4

0+28

S	5.7	87.4
+2	5.8	87.3
+3	12.2	80.9
+8	18.2	79.7
+13	7.5	85.6
L	4.4	88.7
N	4.5	88.6

0+34.2' = Δ = Sec A

N	4.2	88.9
+5	3.9	89.2
+8	7.5	83.6

+10

L

+5

+9

S

S

+8

+10

L

+2

+3

+9

+11

N

11.8

15.3

16.8

4.9

4.7

4.3

4.5

16.6

18.7

18.7

13.8

8.7

3.9

4.1

71.3

77.8

76.3

86.2

88.4

88.8

88.6

76.5

74.4

74.4

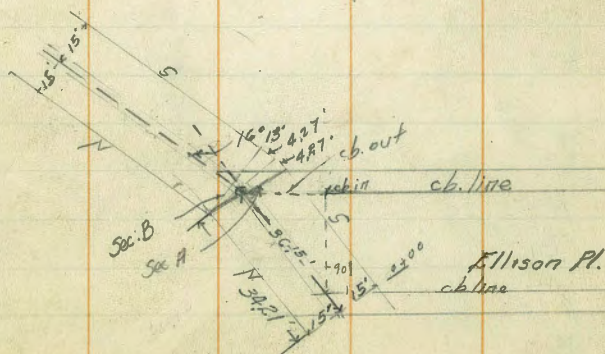
79.3

84.4

89.2

89.0

0+34.2' = Sec. B



393.13

0+45

N	5.4	87.7
+7	6.6	86.5
+10	16.1	77.0
Σ	20.3	72.8
+5	19.2	78.9
+12	5.7	87.4
S	5.7	87.4

T.P.	v.55	382.61	13.07	380.06
------	------	--------	-------	--------

0+57

-5	2.6	80.0
S	3.2	79.4
+4	4.0	78.6
+5	13.8	68.8
+12	16.5	66.1
Σ	12.4	70.2
+3	4.3	78.3
N	3.3	79.3
+5	2.5	80.1

0+59

-5	4.6	78.0
N	4.6	78.0
+9	5.6	77.0
+10	22.0	60.6
Σ	28.5	54.1
+14	26.8	55.8

382.61

58

S	4.6	78.0
+5	3.2	79.4
-10	9.7	72.9
-6	10.8	71.8
S	13.8	68.8
+2	25.3	57.3
Σ	27.7	54.9

0+66

+11	21.4	61.2
+12	12.1	70.5
N	12.4	70.2
+10	9.2	73.4

T.P.	1.68	371.25	13.04	369.57
------	------	--------	-------	--------

0+79

-10	6.6	64.6
-5	7.1	64.2
N	10.0	61.3
+2	11.1	60.2
-4	23.7	47.5
Σ	28.9	42.3
+5	31.2	40.0
+9	29.8	41.4
+10	25.0	46.2
+13	24.4	46.8
+14	14.5	56.7
S	14.5	56.7

37/25

+4	12.8	58.4
+7	8.6	62.6
+10	8.6	62.6

0+91

-10	17.4	53.8
-8	19.2	52.0
-1	22.3	49.0
5	23.0	48.2
+3	24.4	46.8
+4	29.8	41.4
<del>2</del>	32.4	38.8
+5	32.5	38.7
+7	29.0	42.2
+12	26.3	45.0
+14	18.9	52.3
N	18.6	52.6
+10	16.7	54.5

1+00

-10	23.2	48.0
N	24.2	47.0
+5	26.6	44.6
+6	28.2	43.0
+12	31.0	40.2
+13	34.2	37.0
<del>2</del>	34.4	36.8
+4	34.3	37.0

59

37/25

+5	28.0	43.3
S	24.6	46.6
+10	23.5	47.7

1+07

-10	26.3	45.0
S	28.3	43.0
+9	29.9	41.3
+10	34.8	36.4
<del>2</del>	35.8	35.4
+7	29.3	42.0
+10	29.3	42.0
N	27.5	43.7
+10	28.5	42.7

T.P. 12.87 383.91 0.21 371.04

T.P. 11.04 393.81 1.14 382.77

cb on NY cb End of Ellison Pl. 541 388.40

Cont. From Page 55

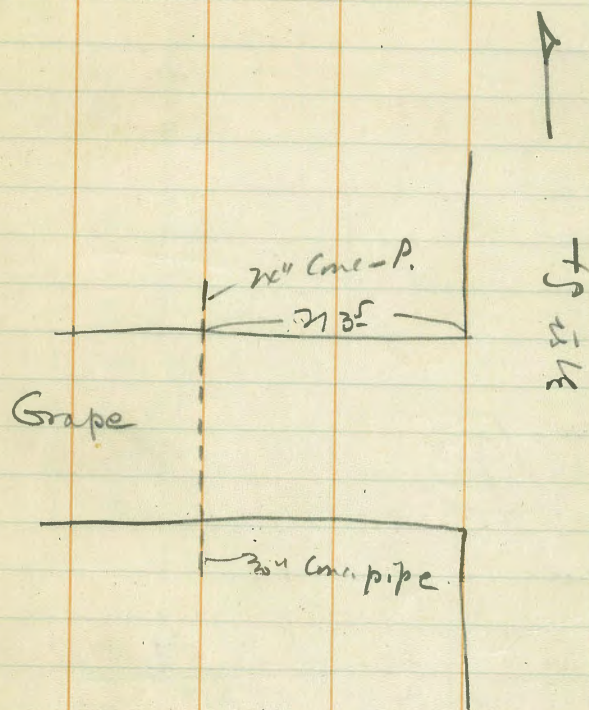
{ Culvert Levels }  
bet. Ivy + Grape st

25241

6+03		3.0	249.4	
+08		7.0	245.4	
+21		7.5	244.9	
+26		3.8	248.6	
+35		6.2	246.2	
+45		11.4	241.0	
+94		15.2	239.2	
T.P.	7.72	247.18	12.95	239.46
7+47.27	NE end 24" Culvert of Grape St.	13.66	238.54	on Flow line
T.P.	11.06	257.53	0.71	246.47
T.P.	13.14	269.78	0.89	256.66
chk. on SW. SF. Grape + Fern		0.37	269.41	
			269.47 = BM	
			+0.06 in Error.	

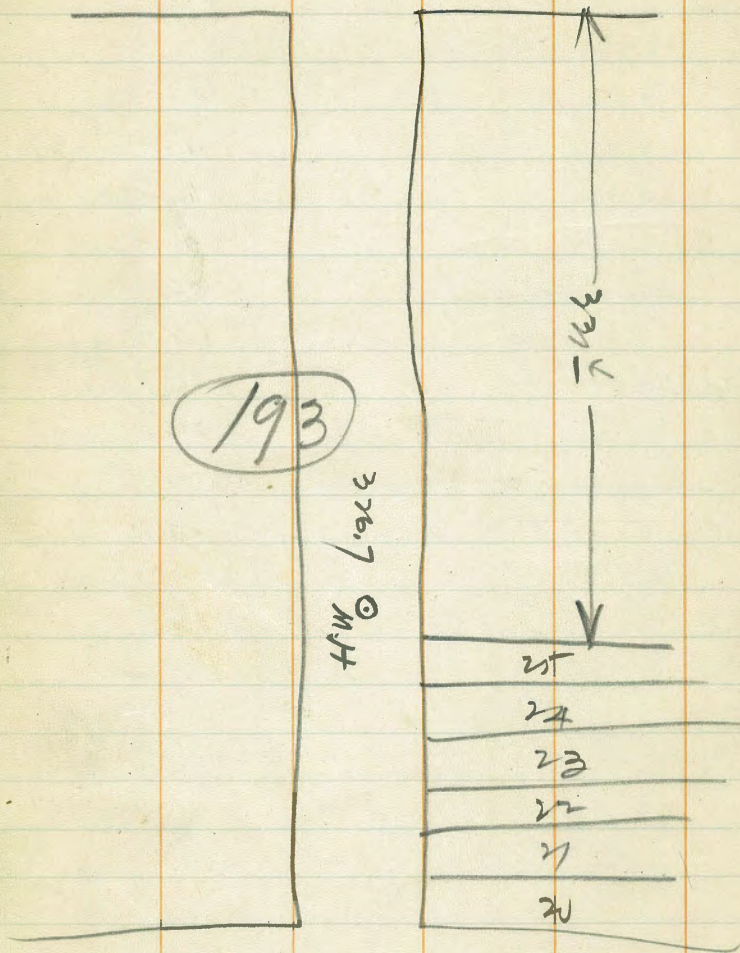
Elev. of South End of Culvert on Grape East of Fern St.

NE. BP				
Grape + 31st St	0.04	268.59		268.55
T.P.	0.27	256.12	12.74	255.85
T.P.	1.01	244.02	13.11	243.01
on Flow line of 30" Con. Pipe			19.19	242.82
T.P.	11.92	255.21	0.67	243.35
T.P.	13.63	268.73	0.17	255.10
chk. on <sup>above</sup> BM			0.18	268.55
				268.55 = BM.



Univ.

Ave -



Miss-Beach Sea Wall -  
July - 6 - 1927 -

4 Corp -	36 -
4 ✓ Keepers -	16 -
4 Labor -	16 -
1 Eng -	10 -
4 Rock Lays -	24
2 Sand ✓	12
3 Mason -	18
4 Steel Men -	36
1 Foreman	10

178<sup>00</sup>

Misc - Rent fuel

10  
158<sup>00</sup> 14

600 sq. per day = 327 sq.

Misc -  
Cost 6 hrs @ 400  
1 Rock - 2  
1/2 - 1/2

7.00  
10.27 sq. ft. = 529 per foot

.55 sq. per foot of wall -  
.55 x 8800 = 4800



205.46  
1200  
21748

B. Ms -

S.E. Fla & Monroe 320.35  
✓ ✓ Madison 329.09  
SW ✓ El Cajon 300.65  
N.E. Alab & ✓ 306.57

Flat + Lincoln S.W. Spike in pole 264.29

Univ & Anz: NW Cor RR Spike in pole 301.76

Univ & Arnold: SE Cor. Brass Plug - 306.40

B. Ms =

SE. Cor - Monroe & Idaho 375.94  
304 378.95  
Ohio 384.64  
Oregon 379. -

375.04  
68.73  
443.77

180  
53  
233

300.65  
7.15  
307.80

94.3  
65.46  
159.76

36.15  
1.22  
37.37  
34.21  
4.27  
38.48

50.72  
24.3  
75.02  
145.02  
38  
183.02

50.72  
94.9  
145.62  
38  
183.62

183.02  
145.02  
37  
328.02  
38  
366.02  
177

195  
52  
247

195  
48  
243

3035  
44377  
74722

450 = 6.2  
6  
17.2

15.4  
228  
243.4

36.15  
1.22  
37.37  
34.21  
4.27  
38.48

103  
128  
231  
094.3  
37  
131.3

90.6  
32  
122.6  
32472  
849  
31623  
549  
32172

1299  
345  
1644  
270  
1914

1250  
113  
1363

320  
31  
289

68  
221  
07  
214

15976  
943  
6546

145.02  
37  
182.02  
32 32472  
5032  
37504

32472  
849  
31623  
549  
48387