

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0
1	1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	1
2	2.00	2.10	2.20	2.30	2.40	2.50	2.60	2.70	2.80	2.90	2
3	3.00	3.10	3.20	3.30	3.40	3.50	3.60	3.70	3.80	3.90	3
4	4.00	4.10	4.20	4.30	4.40	4.50	4.60	4.70	4.80	4.90	4
5	5.00	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80	5.90	5
6	6.00	6.10	6.20	6.30	6.40	6.50	6.60	6.70	6.80	6.90	6
7	7.00	7.10	7.20	7.30	7.40	7.50	7.60	7.70	7.80	7.90	7
8	8.00	8.10	8.20	8.30	8.40	8.50	8.60	8.70	8.80	8.90	8
9	9.00	9.10	9.20	9.30	9.40	9.50	9.60	9.70	9.80	9.90	9
10	10.00	10.10	10.20	10.30	10.40	10.50	10.60	10.70	10.80	10.90	10
11	11.00	11.10	11.20	11.30	11.40	11.50	11.60	11.70	11.80	11.90	11
12	12.00	12.10	12.20	12.30	12.40	12.50	12.60	12.70	12.80	12.90	12
13	13.00	13.10	13.20	13.30	13.40	13.50	13.60	13.70	13.80	13.90	13
14	14.00	14.10	14.20	14.30	14.40	14.50	14.60	14.70	14.80	14.90	14
15	15.00	15.10	15.20	15.30	15.40	15.50	15.60	15.70	15.80	15.90	15
16	16.00	16.10	16.20	16.30	16.40	16.50	16.60	16.70	16.80	16.90	16
17	17.00	17.10	17.20	17.30	17.40	17.50	17.60	17.70	17.80	17.90	17
18	18.00	18.10	18.20	18.30	18.40	18.50	18.60	18.70	18.80	18.90	18
19	19.00	19.10	19.20	19.30	19.40	19.50	19.60	19.70	19.80	19.90	19
20	20.00	20.10	20.20	20.30	20.40	20.50	20.60	20.70	20.80	20.90	20
21	21.00	21.10	21.20	21.30	21.40	21.50	21.60	21.70	21.80	21.90	21
22	22.00	22.10	22.20	22.30	22.40	22.50	22.60	22.70	22.80	22.90	22
23	23.00	23.10	23.20	23.30	23.40	23.50	23.60	23.70	23.80	23.90	23
24	24.00	24.10	24.20	24.30	24.40	24.50	24.60	24.70	24.80	24.90	24
25	25.00	25.10	25.20	25.30	25.40	25.50	25.60	25.70	25.80	25.90	25
26	26.00	26.10	26.20	26.30	26.40	26.50	26.60	26.70	26.80	26.90	26
27	27.00	27.10	27.20	27.30	27.40	27.50	27.60	27.70	27.80	27.90	27
28	28.00	28.10	28.20	28.30	28.40	28.50	28.60	28.70	28.80	28.90	28
29	29.00	29.10	29.20	29.30	29.40	29.50	29.60	29.70	29.80	29.90	29
30	30.00	30.10	30.20	30.30	30.40	30.50	30.60	30.70	30.80	30.90	30
31	31.00	31.10	31.20	31.30	31.40	31.50	31.60	31.70	31.80	31.90	31
32	32.00	32.10	32.20	32.30	32.40	32.50	32.60	32.70	32.80	32.90	32
33	33.00	33.10	33.20	33.30	33.40	33.50	33.60	33.70	33.80	33.90	33
34	34.00	34.10	34.20	34.30	34.40	34.50	34.60	34.70	34.80	34.90	34
35	35.00	35.10	35.20	35.30	35.40	35.50	35.60	35.70	35.80	35.90	35
36	36.00	36.10	36.20	36.30	36.40	36.50	36.60	36.70	36.80	36.90	36
37	37.00	37.10	37.20	37.30	37.40	37.50	37.60	37.70	37.80	37.90	37
38	38.00	38.10	38.20	38.30	38.40	38.50	38.60	38.70	38.80	38.90	38
39	39.00	39.10	39.20	39.30	39.40	39.50	39.60	39.70	39.80	39.90	39
40	40.00	40.10	40.20	40.30	40.40	40.50	40.60	40.70	40.80	40.90	40
41	41.00	41.10	41.20	41.30	41.40	41.50	41.60	41.70	41.80	41.90	41
42	42.00	42.10	42.20	42.30	42.40	42.50	42.60	42.70	42.80	42.90	42
43	43.00	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80	43.90	43
44	44.00	44.10	44.20	44.30	44.40	44.50	44.60	44.70	44.80	44.90	44
45	45.00	45.10	45.20	45.30	45.40	45.50	45.60	45.70	45.80	45.90	45
46	46.00	46.10	46.20	46.30	46.40	46.50	46.60	46.70	46.80	46.90	46
47	47.00	47.10	47.20	47.30	47.40	47.50	47.60	47.70	47.80	47.90	47
48	48.00	48.10	48.20	48.30	48.40	48.50	48.60	48.70	48.80	48.90	48
49	49.00	49.10	49.20	49.30	49.40	49.50	49.60	49.70	49.80	49.90	49
50	50.00	50.10	50.20	50.30	50.40	50.50	50.60	50.70	50.80	50.90	50

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE															
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°		
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46		
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.53	.58	.63	.68		
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90		
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14		
30°	.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39		
35°	.11	.22	.34	.47	.58	.69	.79	.89	.99	1.09	1.20	1.31	1.42	1.54		
40°	.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94		
45°	.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21		
50°	.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48		
55°	.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77		
60°	.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07		
65°	.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39		
70°	.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72		
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09		
80°	.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46		
85°	.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89		
90°	.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32		
95°	.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83		
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34		
110°	.51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60		
120°	.62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22		

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE															
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°		
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020		
15°	.003	.007	.010	.014	.018	.023	.027	.029	.032	.035	.039	.043	.047	.051		
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083		
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135		
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188		
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264		
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341		
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445		
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550		
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700		
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851		
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01		
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17		
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39		
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62		
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91		
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20		
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.58		
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96		
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96		
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32		

Locate Exist Drains #12-15 Harbor Dr 1-6-

Locate exist storm drains - 4th, 5th K ST
to Bulk Head -

NO# 32³61

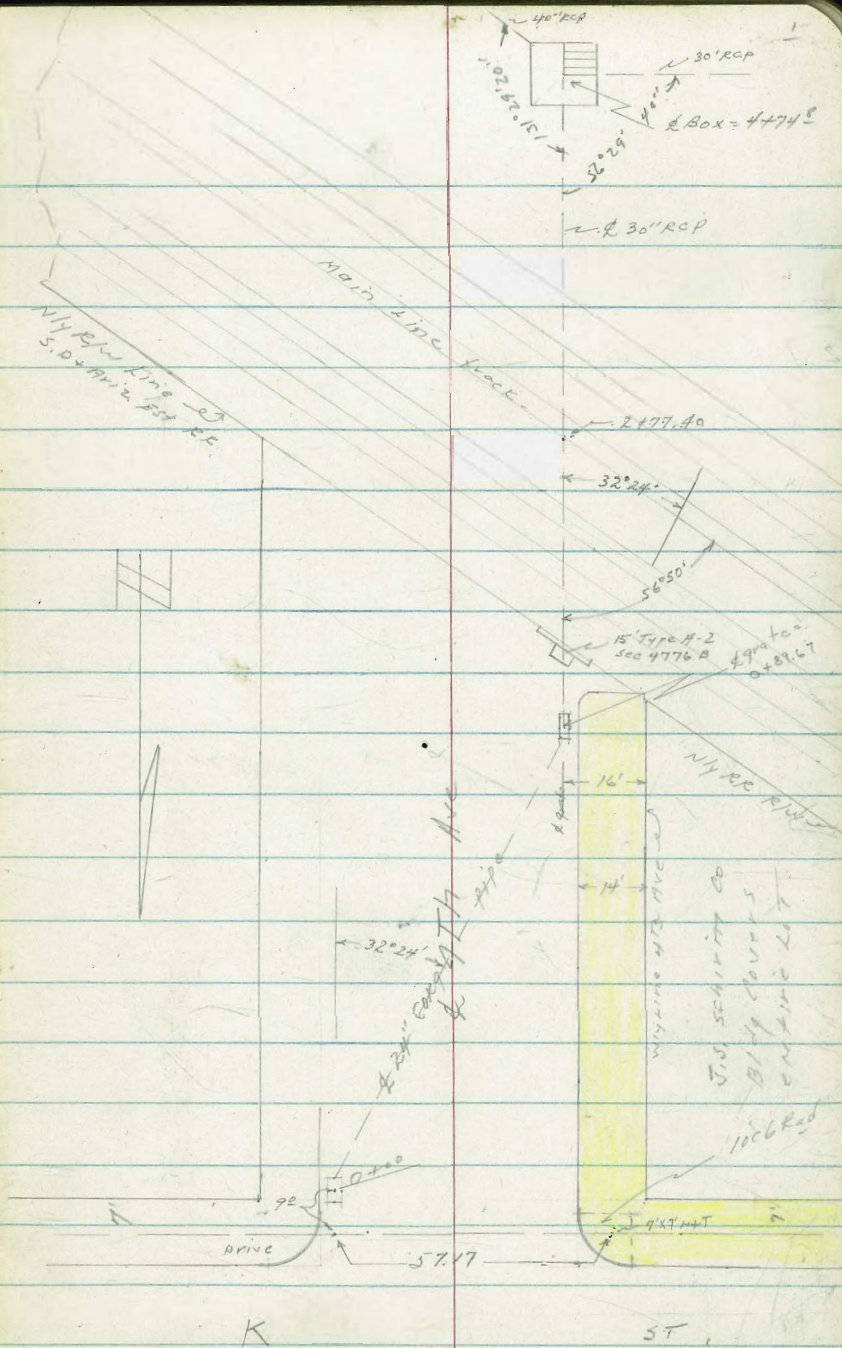
11/6/53 - C. Allen, Disisson C. Powell

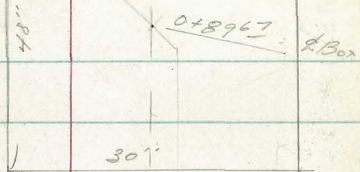
Ref- Dwg 22-L, TP 56, 6639-L

Harbor Dept Field Book #62 page 33

See page 4 for Levels

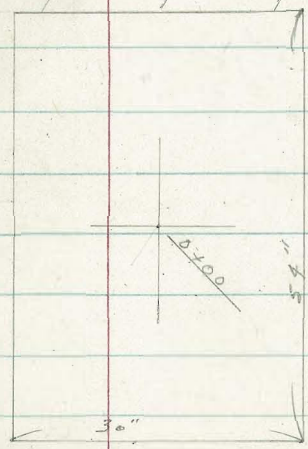
INDEXED
JER
NOV 9 1953





32' 24"

24" corr pipe

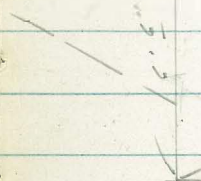


4th Ave

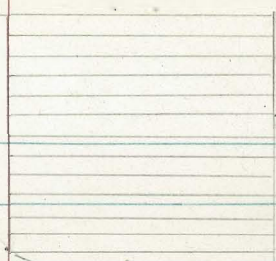
Levels page 4-

K ST

40" RCP to
FLY



5' 5"



4+748 = L Box

30" RCP from
WEST

30" RCP

16'

14'

0+8910

40" Grate

40"

30"

24" corr
From 0+000

Wye line 4th Ave

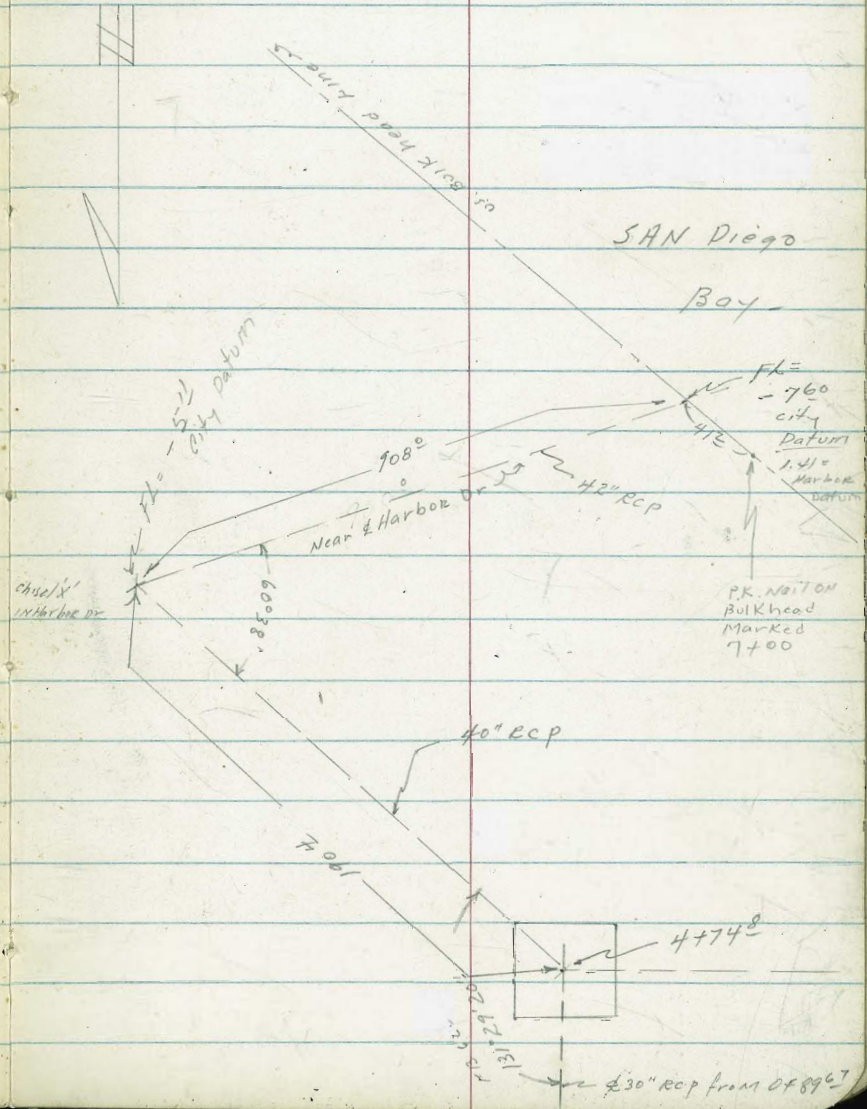
WYE LINE 4th Ave

Location of Drain's
Harbor st + Harbor st

See levels page 4.

6+65 = 'X' in Harbor Drive - assumed of clearance

4+74 = 2'5" x 6'6" Box in Navy Parking Area



Levels on EXISTING Drains
 4th, 5th - R ST. to Bulkhead Line
 See sketches pages 1, 2, 3.

See 4776-B

1436.2 - 2 15' type A-2 inlet parallel to RR R/W

1431 - 3° Rt = 2 8" anchor pole

1405 - 3° Rt = 2 16" power pole #26

2° Rt = face wly curb 4th ave

24" Corq iron pipe enters polyot box from avoc

0+89.67 } 2 30" x 48" box inlet 30" Rcp flows Sly

2° Lt = face Fly Curb 4th ave

0+00 - 2 inlet S.E. COR 4th + K ST.

Lt = Fly -

Rt = wly

0.2)	3.57	1.21
624	996	524
2° grate	2° Bottom Box	2° Topotcb over grate

0.54	3.26	3.26	0.49	1.10
591	971	971	596	535
2° grate	2° 15" Run Nly	2° 15" Run 30" Rcp Tosly	2° 28" Top cb	2° 28" Top cb

1.44	0.64	0.23	0.91	2.35
504	581	622	554	880
2° Topcb	2° gutter	Nly edge grate	Sly edge grate	2° 15" 24" Pipe to SW

6.45 1

5.06

6.45

1.39

SWBP 4th + K ST - City Datum

LT = ely.

2

RT = wly.

5

2+77.40 = Top Nly Rail - Main Line

205
4 23
Top Nly Rail
Main Line

TP, 3.00 6.27 3.18 3.27

6.27 X

2+59² Top Nly Rail Spur track

185
4 60
Top Rail

2+22⁸ Top Nly Rail Spur track

165
4 8
Top Rail

2+07⁴ Top Nly Rail Spur track

165
4 8
Top Rail

1+73⁶ Top Nly Rail Spur track

176
4 69

1+58² Top Nly Rail - West Nly Spur track

184
4 61
Top Rail

6.45 X

TP5 <start 13M 4.90 1.37 (1.39)
 TP4 3.48 6.27 4.24 2.79
 TP3 5.21 7.03 4.45 1.82

IE's all pipes level with Bottom Box LOT
 4+74⁸ 2 5'6" x 6'6" Box in Navy Parking

TP2 5.21 7.03 4.45 1.82

3498- 4⁰ LT = 2² x 2² CONC Box in lot

3+51⁵ Nly edge AC Paving - Navy Parking Lot

(around Navy Property -)
 3+41⁷ 2 Crosses 7' high chain link fence

} 28³ Rt. N.E. Cor Navy Gym.
 3+20- 28³ Rt. SE Cor Corg. Iron Bldg.

3+00 - 14² Rt = N.E. Cor Corg Iron Bldg - CONC Found.

2+94¹ Top Nly Rail Most sly spur track

LT = 214

2

Rt. wly 6

-5.55
 11.82
 BOTTOM
 Box
 -0.02
 6.29
 grate

1.32
 4 9¹
 Top Box.

2.03
 4 2⁴
 AC

0.97
 5³
 14 2
 ground
 4.96
 1³¹
 14 2
 Top Conc
 Foundation

1.96
 4 3¹
 Top rail

6, 2.7 π

SURVEY FOR BUSINESS AREA STORM DRAIN

W.O. 32361

CURB RETURNS @ 7-TH & C STS.

NOTE: Direct Elev. Rod Used

1.7' Dia. Base Lamp Post 4.5' Wly of P.L.
& 1.8' Back of curb face

T.A.S. (see Pg. 9)

NOTE: Raise All Elevations Shown in this

Intersection 0.30' as the Bench on 8th
15 found to be in Error by Check Levels

TOP F.H. N.E. COR 7TH & C
62.29
61.99

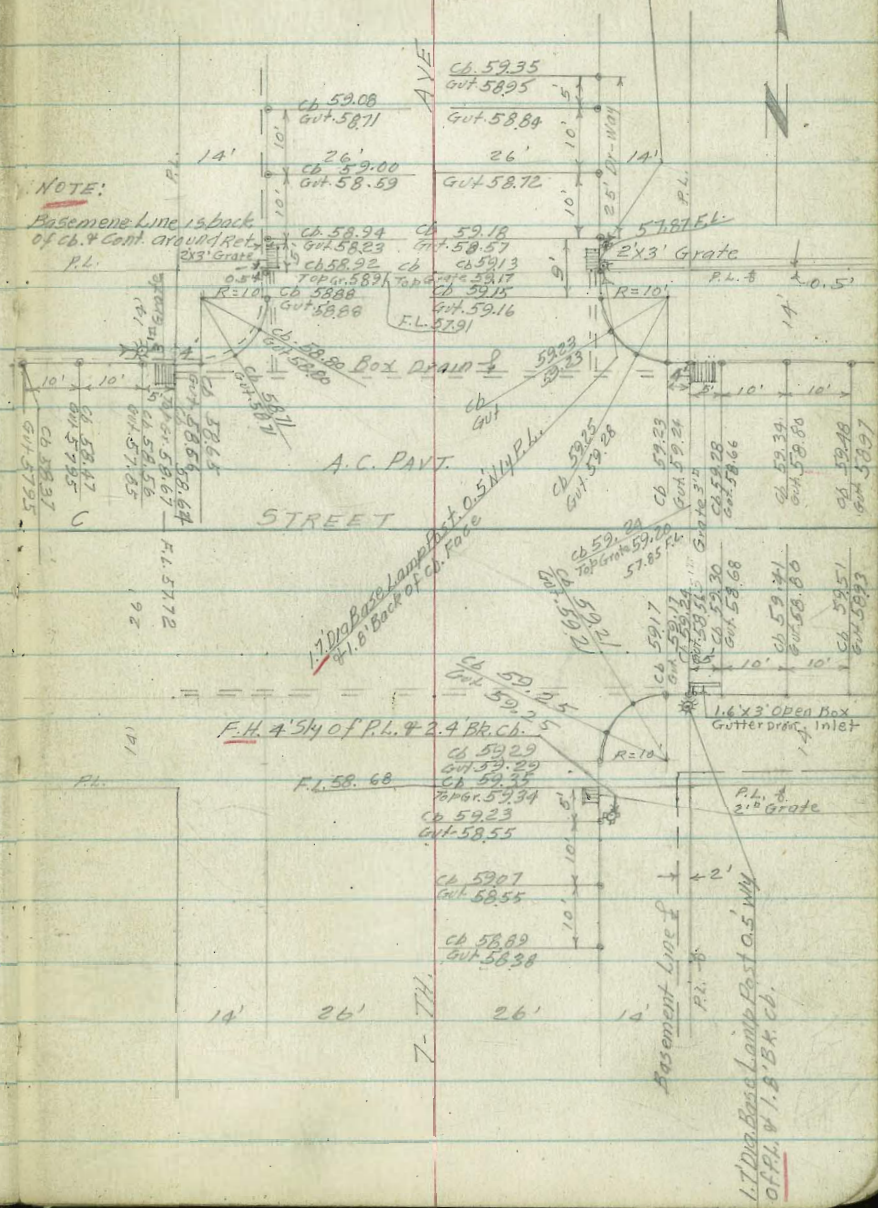
TP

B.M.

NW COR 8TH & C
76.0
61.46

12-3-53 F.H. 4' N1/4 of P.L. #18' Br. cb. face

Stampfer
Huffman
Nardahl
Sherry



NOTE:

Basement Line 1.5' back
of cb. & cont. around Ret.
2'x3' Grate
P.L.

F.H. 4' S1/4 of P.L. #2.4 Br. Ch. 5

1.7' Dia. Base Lamp Post 4.5' Wly
of P.L. & 1.8' Br. cb.

STORM DRAIN SURVEY CONTD

CURB RETURNS @ 6-TH & C. STS.

1.7' Dia. Base Lamp Post 1' Wly P.L. &
1.7' Bk. Ch. face

TOP N.E. FH 6TH & C.

59.00
59.32

N.W. BP 5-TH & C.

52.76

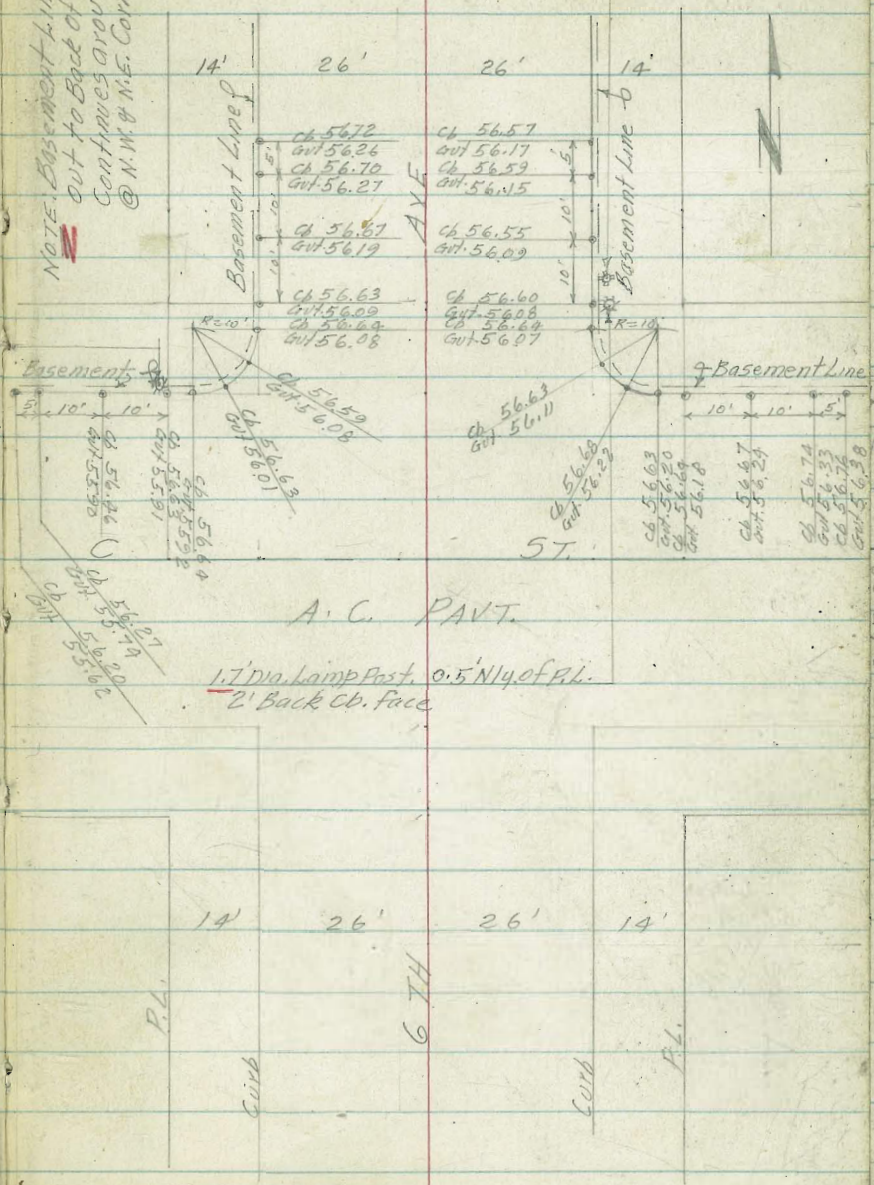
B.M.

B.M.

12-4-53

F.H. 4.7' Nly. of P.L. 1.9' Bk. Ch. face

NOTE: Basement Line Extends
out to Back of Curb &
Continues around Returns
@ N.W. & N.E. Corners



A.C. PAVT.

1.7' Dia. Lamp Post 0.5' Nly. of P.L.
2' Back Ch. face

P.L.

6 TH

P.L.

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 5-TH & C STS.

NWBP 8-TH & C.

76 O.K.

61.76

S.W.B.P. 4-TH & C.

35

47.25

48.17

47.27

35 O.K.

50.25

NWBP 5-TH & C.

52.76 O.K.

S.W.B.P. 9-TH & B.

66.95

N.W.B.P. 8-TH & C.

61.60

B.M.

B.M.

B.M.

B.M.

B.M.

B.M.

B.M.

NWBP 4-TH & C

OUT.

47.93

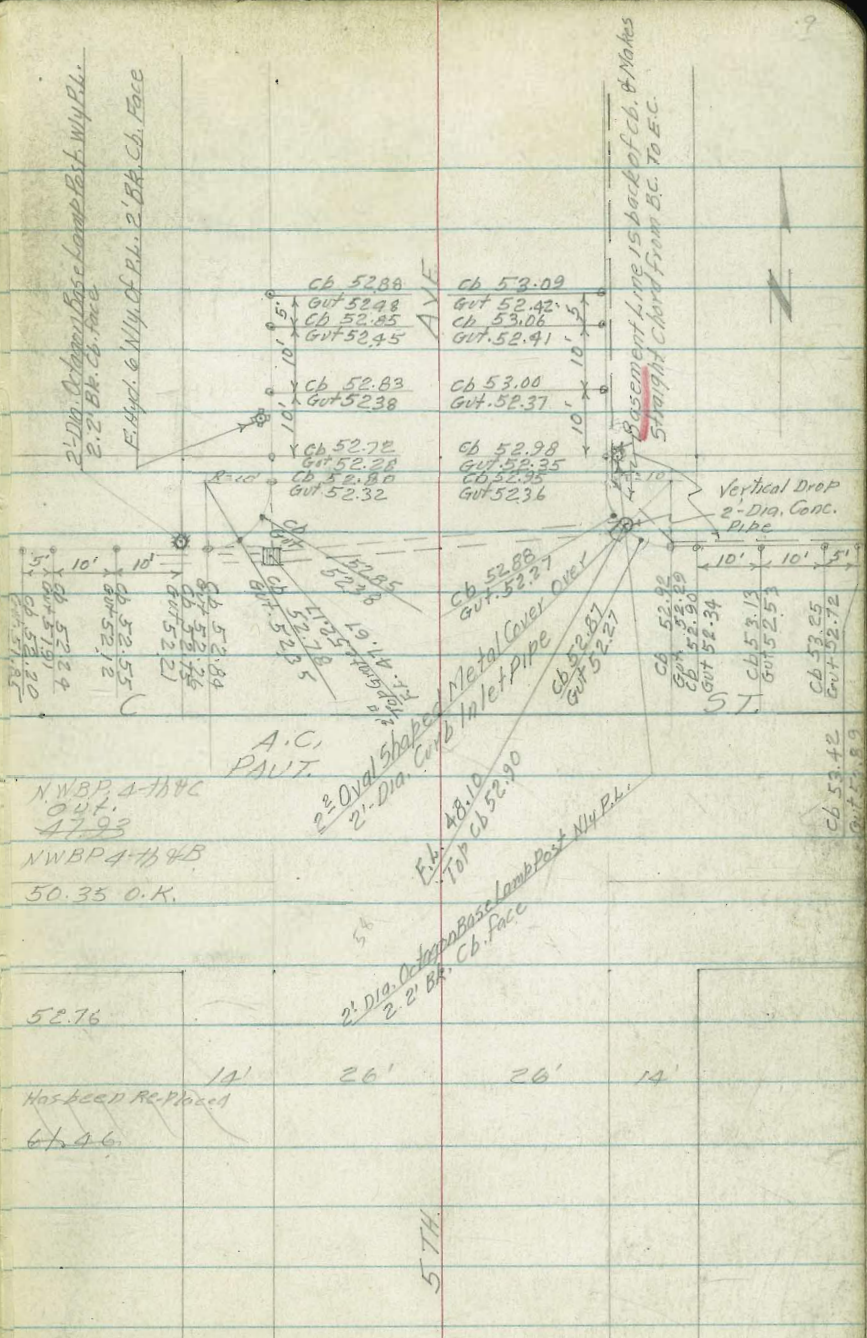
NWBP 4-TH & B

50.35 O.K.

52.76

Has been Replaced

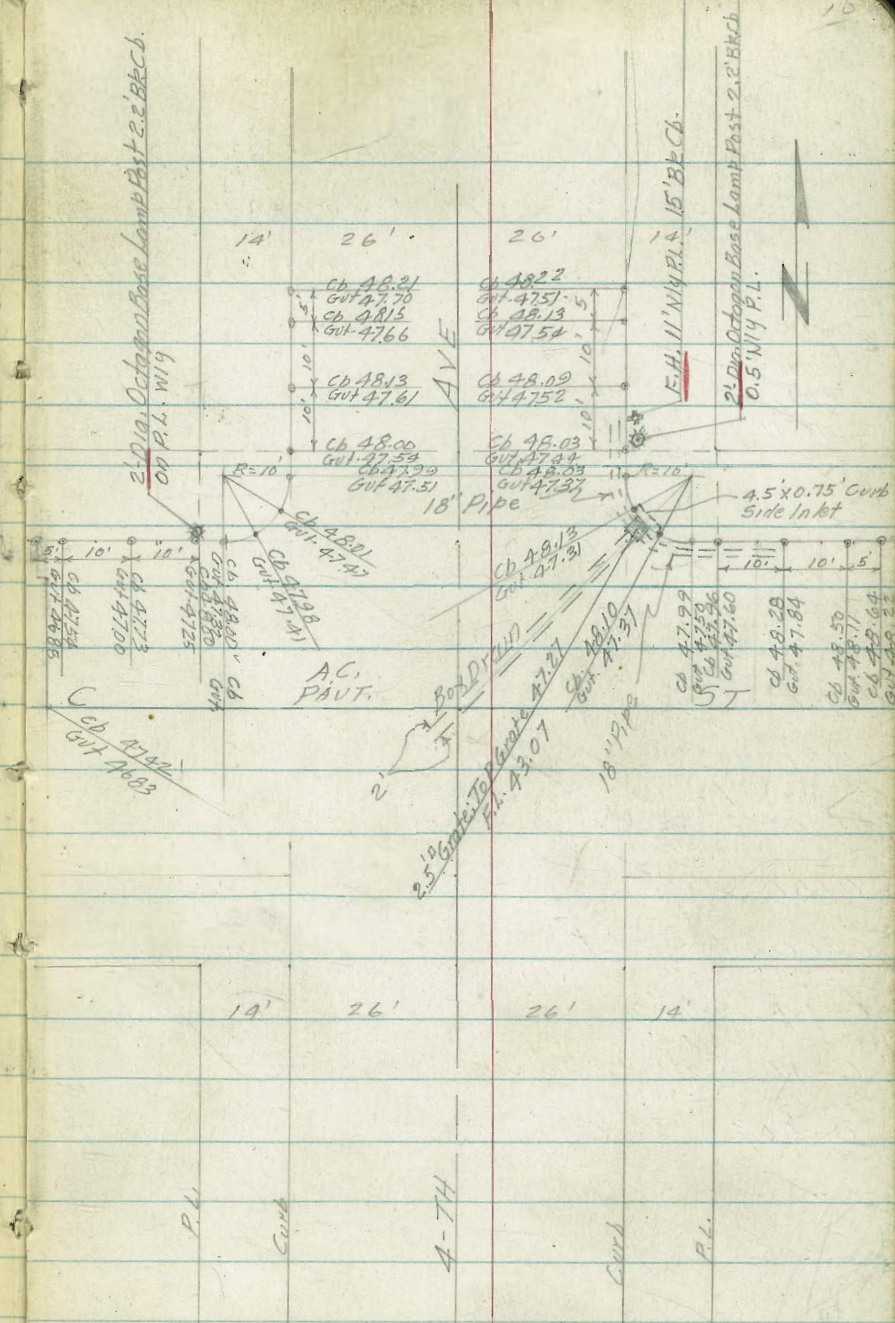
61.60



5-TH

STORM DRAIN SURVEY CONT'D.

CURB RETURNS A-TH & C STS.



B.M.

N.W. B.P. 5-76 & C

52.76

P.L.

Curb

A-TH

Curb

P.L.

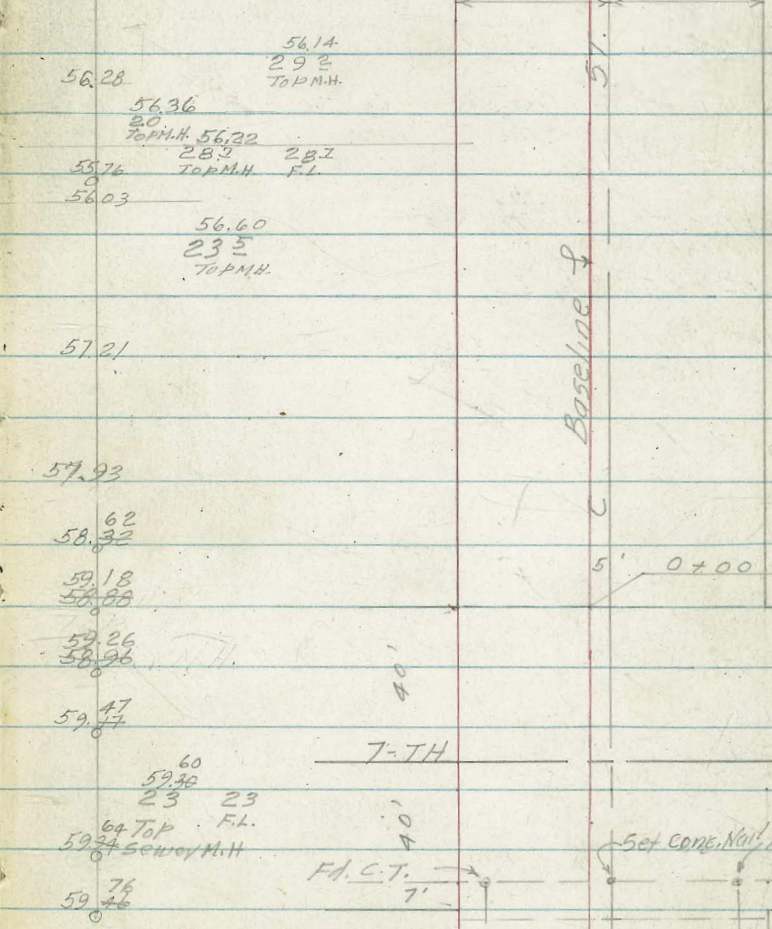
NOTE: Direct Elev.
Z Rod used

STORM DRAIN PROFILE FROM ELY
LINE OF 7-TH AVE; ALONG A LINE 5' SLY
OF & C ST. TO A POINT 17.15' ELY OF THE
WLY. LINE OF 4-TH AVE W.O. 32361

2+51.3
2+19.4 2' Dia. M.H. 29' RT.
2+40.41 & 6-TH AVE
2+35 24' RT & 3' Dia. Steam M.H.
2+24 28' RT & 2' Dia. Sewer M.H.
2+14 Gutter Line Ely
2+00.41 Ely Line 6-TH AVE
1+75 23' RT & 3' Dia. Tel. M.H.
1+61.5 & 3' Dia. Tel. M.H. 9' Lt.
1+50
1+04 & 2' 1/2" Elec. M.H. 13' Lt.
1+00
0+50
0+00 = Wly P.L. 7-TH AVE
0-22' & 3' 1/2" Elec. M.H. 13' Lt.
0-14' Gutter Line
0-40 & 7-TH AVE 45' Lt. & Sewer M.H.
0-56.3 23' RT & Sewer M.H.
0-66 Gutter Line Ely
0-82
B.M.

52.76

LT. & RT.



NW.B.P. 5-TH & C Streets

7-TH AVE

5' set conc. Wall Eq. CT.

F.A.C.T.

PROFILE WLY ALONG C STREET

Station	Description	Elev.	Notes
2+80.35	Wly Line 5th Ave	52.21	Fd.C.T. 10'
2+66.35	Wly Gutter	52.29	7'
2+65	10' Lt. & 3' Dia. SDR M.H.	52.24 10' TOP M.H.	35' 45'
2+58.7	13' Lt. & 3" Gas Co. M.H.	52.35 13' TOP M.H.	
2+40.35	5th Ave	52.55	
2+21.5	238' Rt. & 2 1/2' Dia. Sewer M.H. (Steam)	52.57 238' TOP M.H.	238' F.L.
2+16	19' Lt. & 3' Dia. M.H.	52.54 19' TOP M.H.	
2+14	Ely Gutter	52.44	
2+00.35	Ely Line 5th Ave	52.62	
+50		53.60	35' 45'
1+00		54.50	
0+99	13' Lt. & 2 1/2' Gas & Elec M.H.	54.16 13' F.L. TOP M.H.	
0+50		55.31	
0+00	Wly Line 6th Ave	55.78	
0-14	Wly Gutter	55.91	Fd.C.T. 7'
0-22.2	4' Dia. M.H. 16' Lt	55.91 16' TOP M.H.	40'
0-26.1	M.H. 5' Rt (Sewer)	56.14 5' TOP M.H.	
0-37.20	M.H. 5' Rt (Sewer)	56.32 5' TOP M.H.	
B.M.	N.W. B.P. 5th & C.	52.76	

5T

C

Baseline

set conc. nail & 2+00.35

set conc. Nail & Fd.C.T.

0+00 = 2+80.41

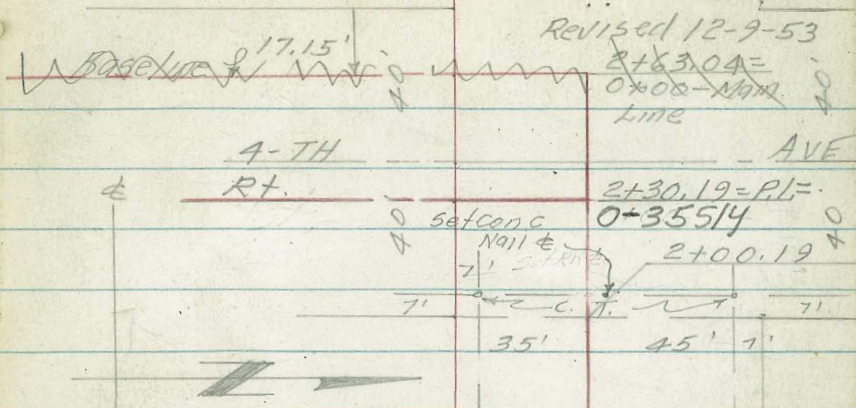
6TH

AVE

12-4-53

13

PROFILE WLY ALONG C STREET



2+56 11' Lt. ϕ 33" M.H. (Elec.) 47.90
 TOP M.H.
 2+63.04 = 0+00 Main Line Sly
 +40.19-18⁵ Lt. ϕ 2.5' Dia. M.H. 47.56
 18⁵
 TOP M.H.
 +38 15⁰ Rt. ϕ 2⁵ Dia. Sewer M.H. 47.70
 2+30.19 = P.I.
 +24 23² Rt. ϕ 2⁵ Dia Sewer M.H. 47.88
 23²
 TOP M.H.
 +16⁰ 19⁵ Rt. ϕ 3' Dia. Storm M.H. 47.82
 19⁵
 TOP M.H.
 +14 = Ely Gutter 47.63
 2+00.19 = Ely Line 4-th Ave 47.75
 +50 48.97
 +139 13⁵ Lt. ϕ 2⁵ Gas M.H. 49.58
 13⁵
 TOP M.H.
 1+00 50.21
 +50 51.40
 0+00 = Wly Line 5-th Ave. 52.21

47.42
 47.72
 47.91
 15.8
 TOP M.H.
 47.82
 19.6
 TOP M.H.
 48.97
 50.21
 51.40
 52.21

Revised 12-9-53

2+30.04 =
 0+00 - MAIN
 LINE

2+30.19 = P.I.
 0+35514

2+00.19

5-TH

C

Baseline

0+00 =
 2+80.35

5-TH

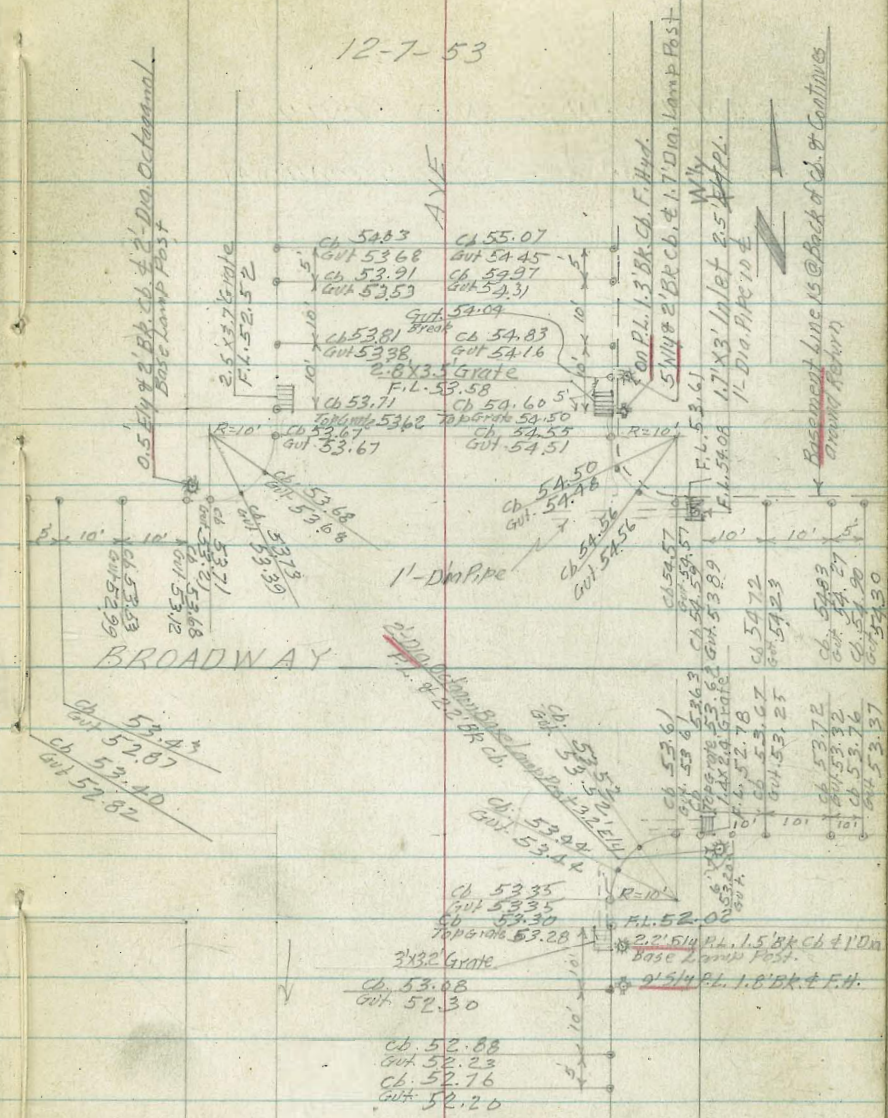
AVE

40' 40'

12-7-53

STORM DRAIN SURVEY CONT'D

CURB RETURNS @ 7-TH & BROADWAY



3
6
8
3.
48

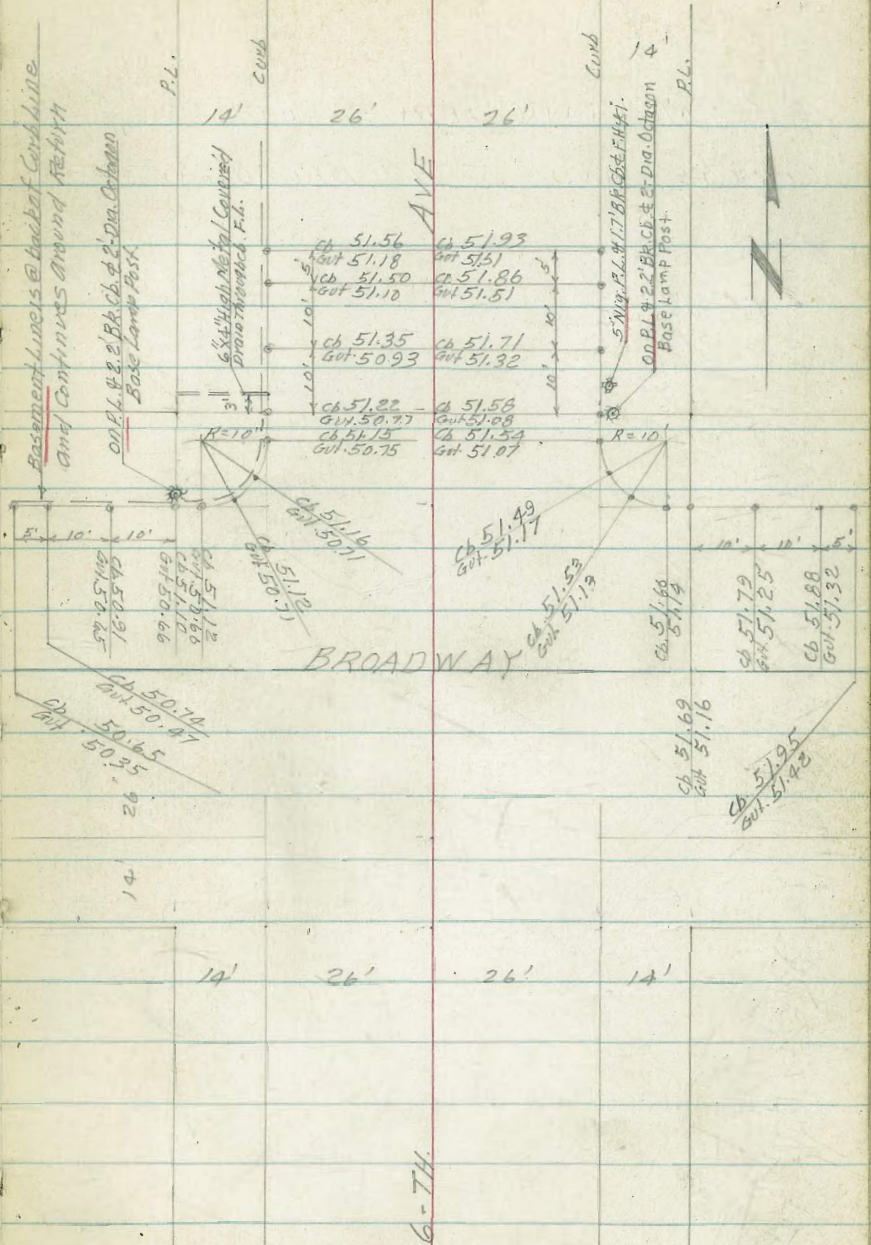
T.P.
B.M.

56.21
62.29

Top F.H. at N.E. Cor 7-TH
& C

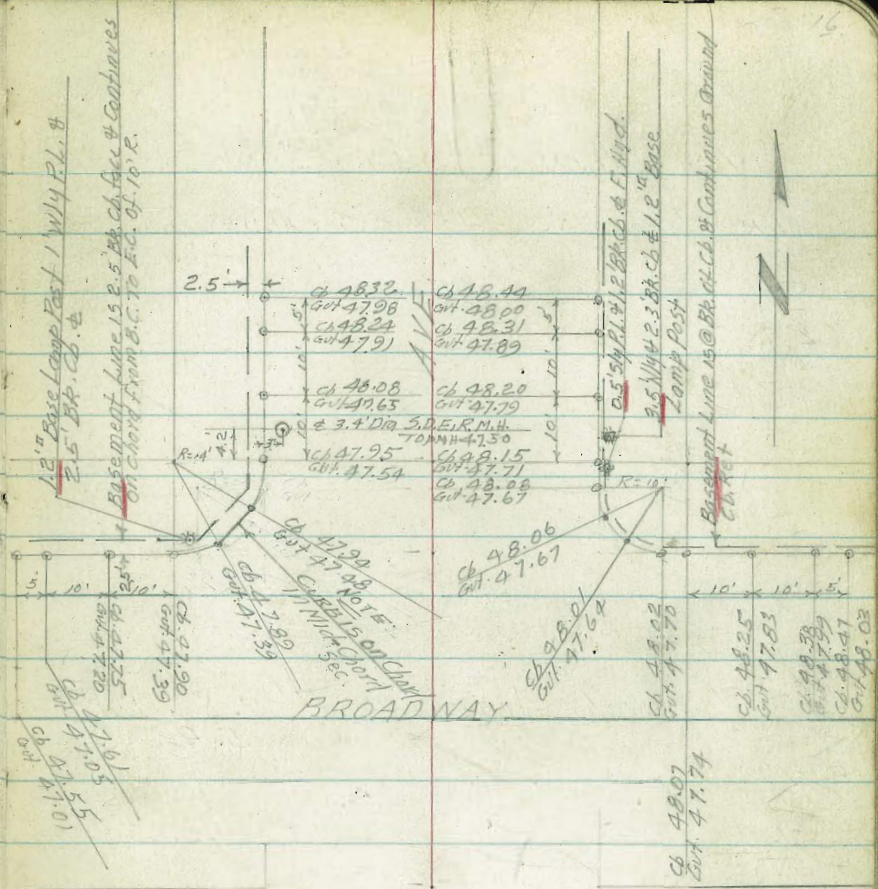
STORM DRAIN SURVEY CONTD.

CURB RETURNS @ 6-TH & BROADWAY



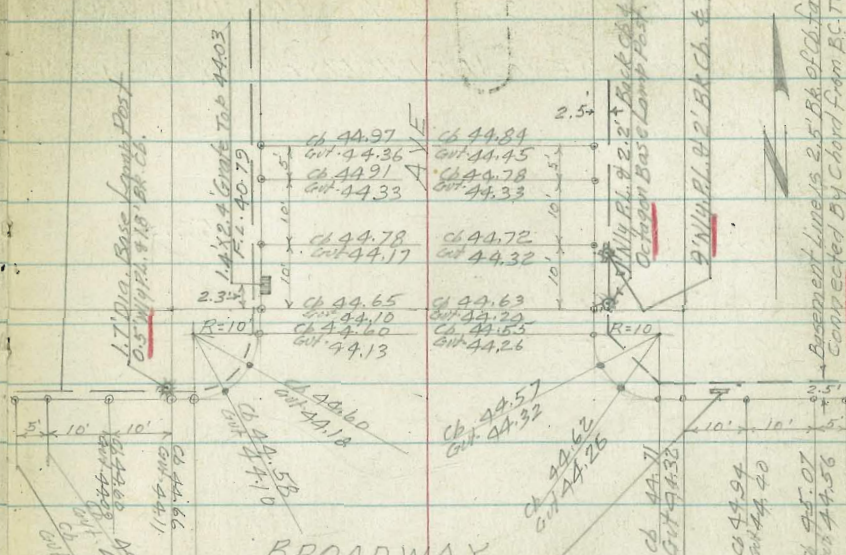
STORM DRAIN SURVEY CONTD.

CURB RETURNS @ 5-TH. & BROADWAY



STORM-DRAIN SURVEY CONTD.

CURB RETURNS @ 4-TH & BROADWAY



Check Levels Accepting Elev. N.W.B.P. @ 5-th. & C

B.M.	43.85	43.83
TP	47.23	
B.M.	52.76	52.76
B.M.	43.83	43.71

S.W.B.P. 4-TH & Broadway
 N.W. B.P. 5-TH & C.
 S.W.B.P. 4-TH & Broadway
 14' 26' 26' 14'

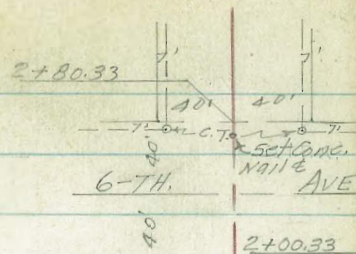
4-TH. 5.4' ELY FL. @ 1.2' BR. CH. & 1/4' 1.5' Signal Lite Control Box

Ch 44.56 Gut 44.65

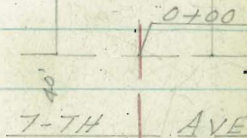
STORM DRAIN PROFILE ALONG & BROADWAY FROM
ELY LINE 7-TH AVE TO APT. 175' ELY. OF WLY. LINE 4-TH AVE

2+14.33 Ely Gutter Line		51.00	RT.
2+00.33 Ely Line 6-th Ave		51.14	
T.P. 1+50	52.53	51.75	
1+42.5 21" LT & 3.5' Dia. M.H.	51.25 21" TOP M.H.		
1+09.5 21" RT & 2.3' Dia. M.H.		52.04 21" TOP M.H.	
1+00-18" LT & 2.5" M.H.		51.85 18" TOP M.H.	
0+50		52.94	
0+00 = Wly Line 7-th Ave		53.50	
0-14 Gutter Line		53.64	
0-21" 15.4 LT & 3" M.H.		53.59 15.4 TOP M.H.	
0-24" 20' LT & 3' Dia M.H.	53.47 20 TOP M.H.		
0-40 & 7th Ave 53' LT & 1.7' Dia Sewer M.H.		53.06 53.88 53 TOP M.H.	
0-59-123 RT & 3' Dia. M.H. Gas & Elec		54.12 123 TOP M.H.	
0-64 & 22' x 2.5' M.H. 11" LT	53.88 11 TOP M.H.		
0-66 Ely Gutter Line		54.10	
0-82		54.31	
B.M.	62.29		

Top F.H. N.E. Cor. 7th & C



BROADWAY

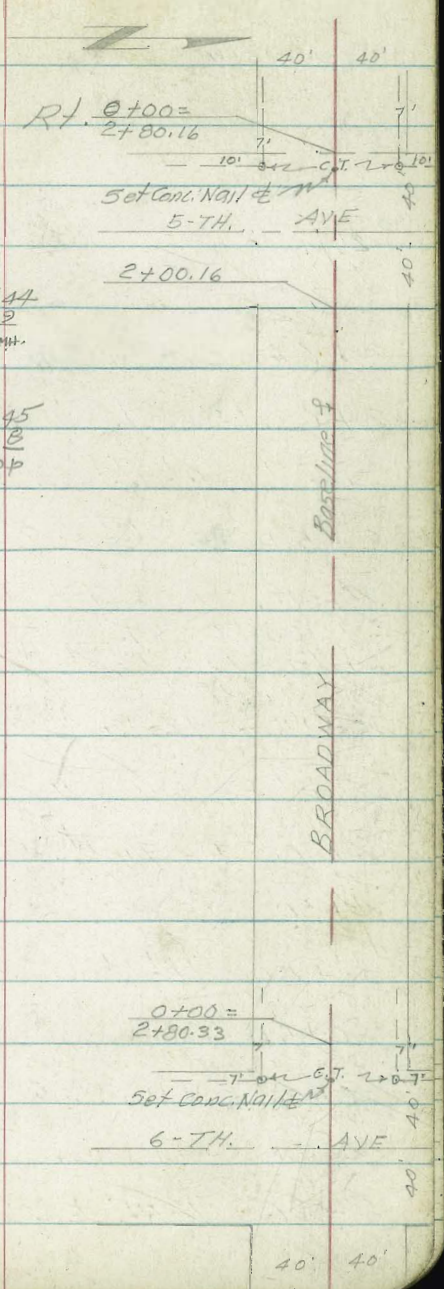


Set Conc. Wall

STORM DRAIN PROFILE ALONG BROADWAY CONTD.

2+40.16 to 5-th Ave
 2+27° 22° RT 2.5' Dia. M.H.
 2+24° 14° to 2.5' Dia. M.H.
 2+19.8 19.8 to 2.5' Dia. M.H.
 2+19 gutter
 2+11.5 11.5 RT. to 3.0' Dia. M.H. Steam
 2+10.5 18° LT. 2.5" M.H.
 2+00.16 = Ely Line 5-th Ave
 T.P.
 1+50 49.30
 1+00 17' LT. to 2.5" M.H.
 0+50
 0+00 = Wly Line 6-th Ave
 0-14 25± LT. to 3.2' S.D.E.R. M.H. 50.28
 25.4
 TOP
 0-22.8 18.7' LT. to 2' x 3' M.H.
 0-26.4 16± RT. to 2' Dia. M.H.
 0-40 to 5th - 6th Ave 42' LT. to 2' Dia. Sewer M.H.
 0-54 18± RT. to M.H. 2.5' Dia.
 0-61 18' RT. to 2.5' Dia M.H.

47.17
 47.44
 22.2
 TOP M.H.
 47.39
 14.2
 TOP
 47.45
 19.8
 TOP
 47.17
 47.35
 11.5
 TOP
 46.81
 18.2
 TOP M.H.
 47.23
 47.85
 48.48 48.80
 17.1
 TOP
 49.63
 50.39
 47.85
 50.52
 50.60
 18.1
 TOP
 50.70
 16.4
 TOP
 50.67 50.78
 42
 TOP M.H.
 50.94
 18.8
 TOP
 50.99
 18
 TOP



STORM DRAIN PROFILE ALONG 4th BROADWAY CONT'D

12-9-53
Revised
2+63.12 = P.L. 5th

B.M.

43.85

SWBP. 4th + Broadway

2+00.27

2+66 = Wly Gutter

44.08

2+63.12 = P.L. 5th Main

44.07

2+57 20" Lt. & 3" Dig. G. + E. M.H.

43.84
204
TOP
M.H.

2+54 23" Rt. & 2" Dig. M.H.

44.06
23"
TOP
M.H.

2+40.27 & 4th Ave

44.04

2+30.27 = P.L.

44.04

2+19 19" Rt. & 2" Top M.H.

44.03
19"
TOP M.H.

2+15 12" Rt. & 2" M.H. Gas Co

44.11
12"
TOP M.H.

2+14 = Fly Gutter

44.03

2+00.27 = Fly P.L. 4th Ave

44.08

TP
1+50

45.55

44.75

1+00 18" Lt. & 2.5" M.H.

45.04
18"
TOP

45.55

0+50

46.30

0+00 = Wly P.L. 5th Ave

46.90

0-14 = Wly Gutter

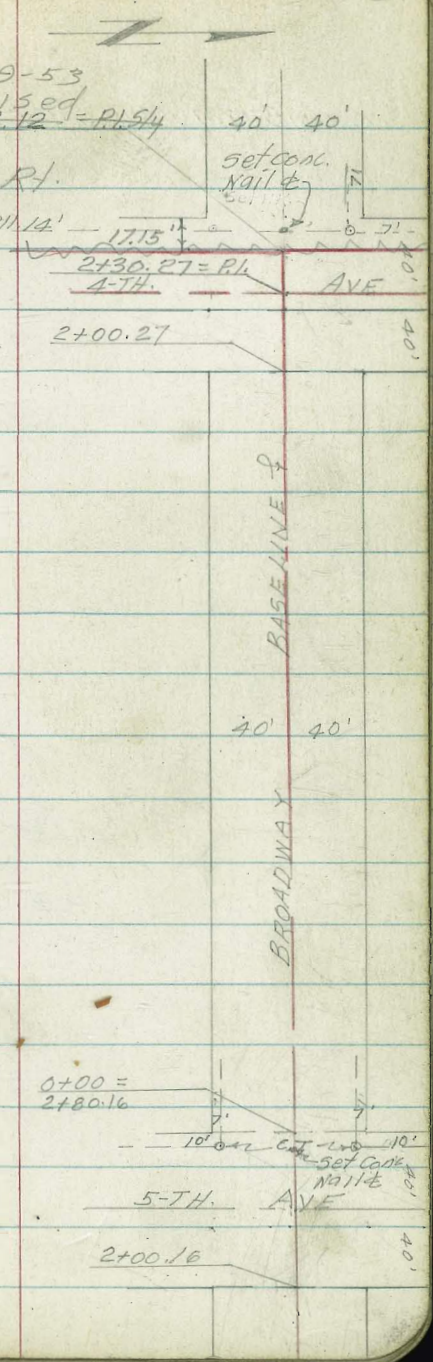
47.03

0-26 17" Rt. & 2" Dig. M.H.

47.29
17"
TOP M.H.

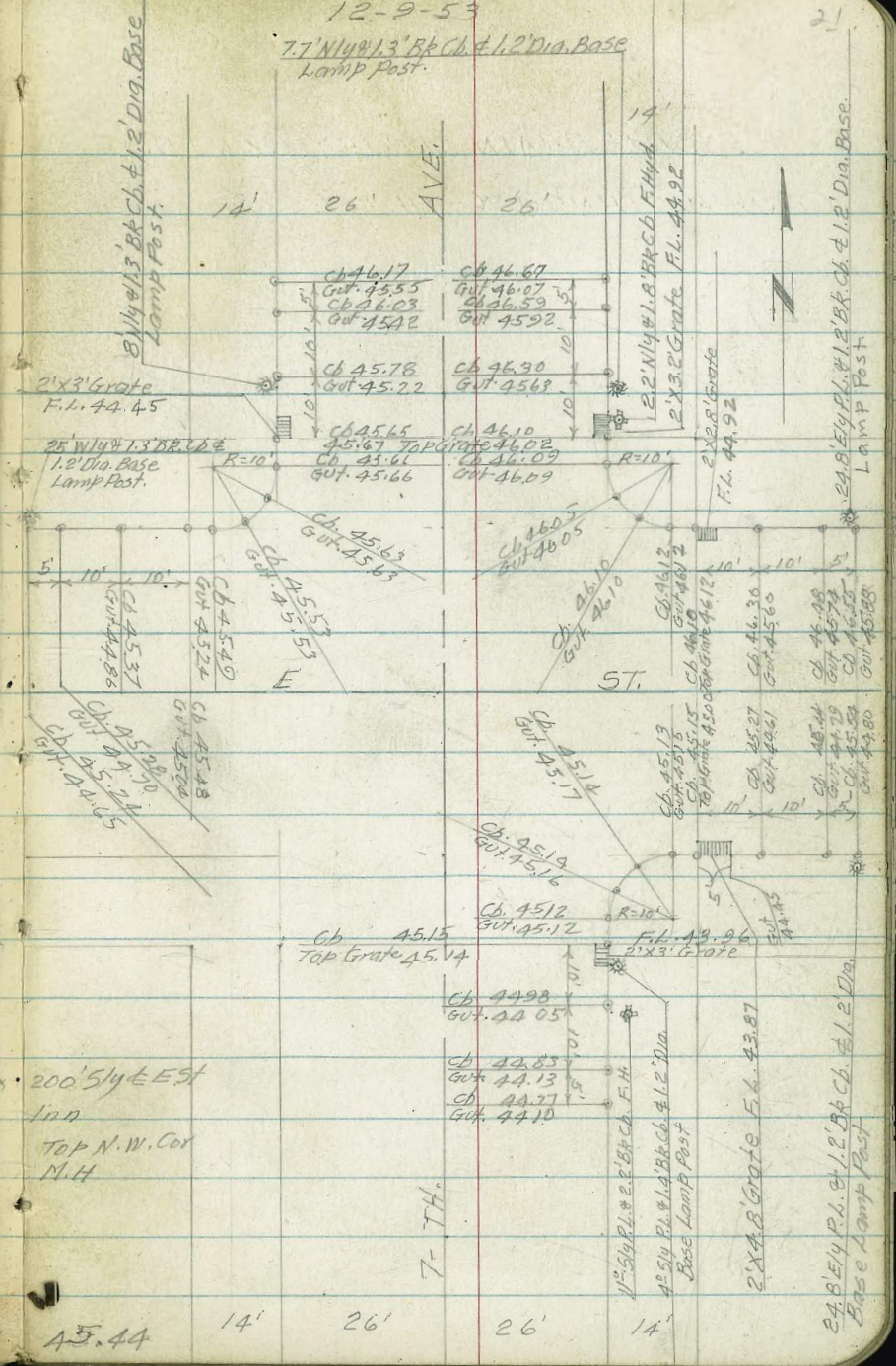
0+00 =
2+80.16

2+00.16



STORM DRAIN SURVEY CONT'D
CURB RETURNS @ 7-TH & E

12-9-53
7.7' W/4 1.3' Bk Ch. #1.2 Dia. Base
Lamp Post.



Ely Side 7-th Approx 200' S/4 E EST
10' front of Tumble Inn

T.B.M. 43.15

N.W. C.P. 7-TH & E

45.64 checked

A5.44

T.B.M.

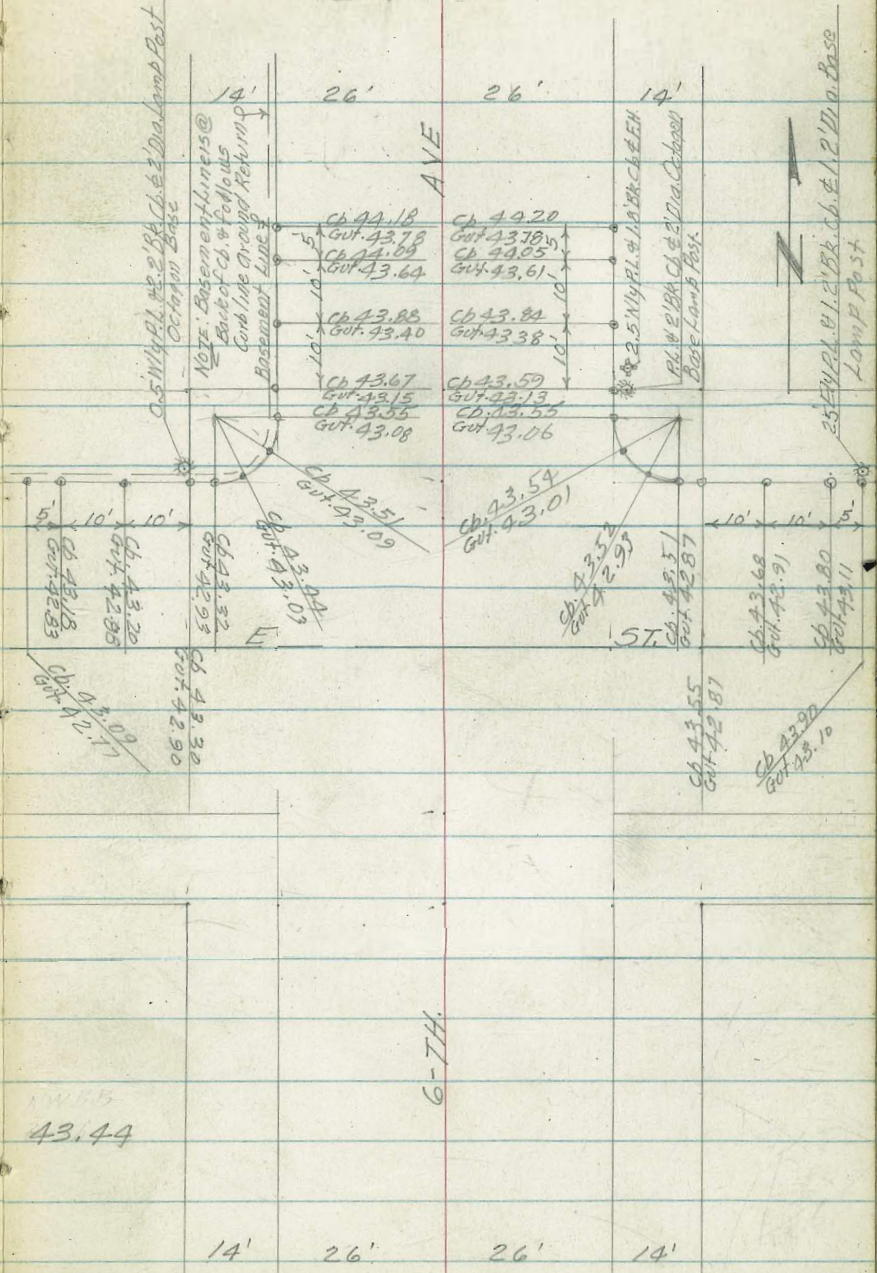
B.M.

14' 26' 26' 14'

12-9-53

22

STORM DRAIN SURVEY CONT'D.
CURB RETURNS @ 6-TH. & E



N.W.B.P. 6-TH & E

43.56

43.44

6-TH.

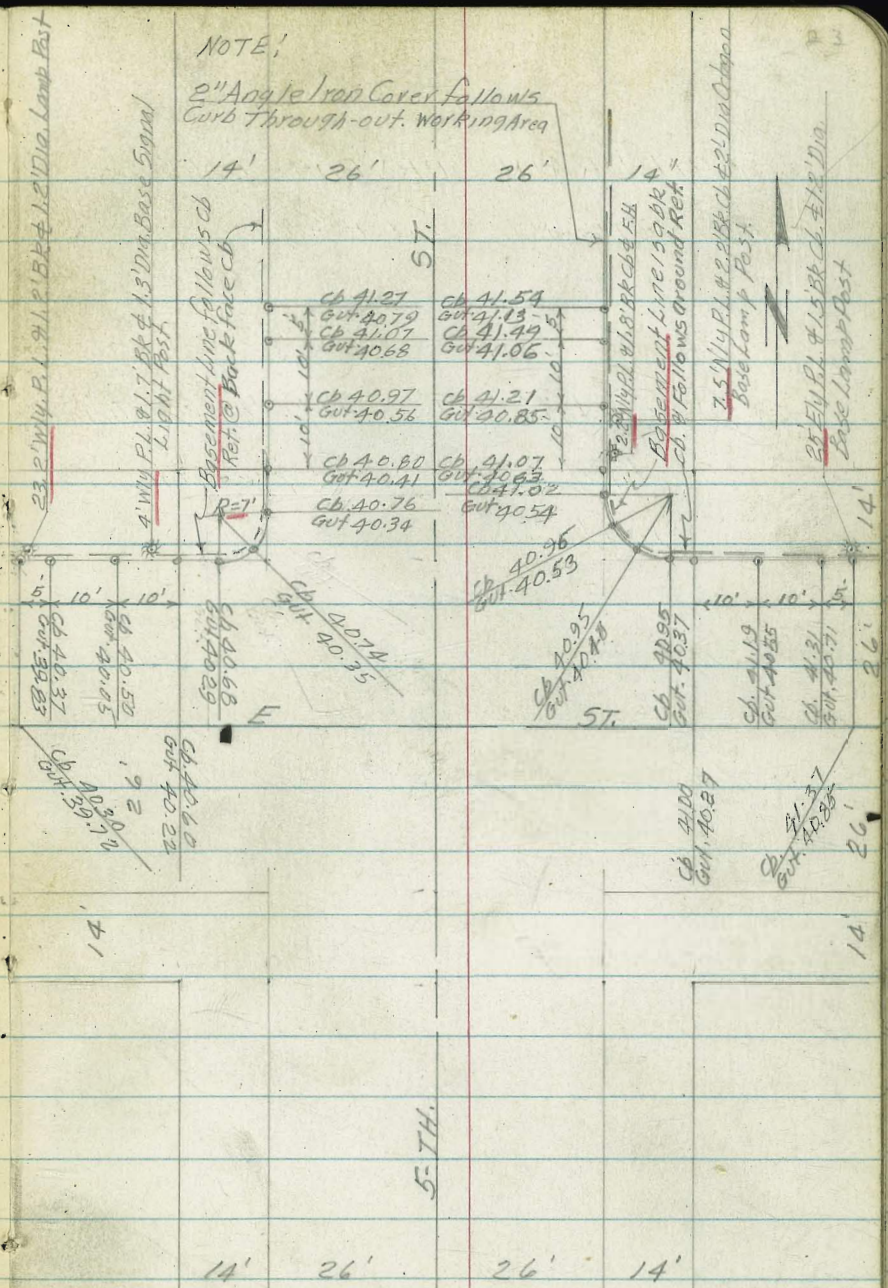
B.M.

14' 26' 26' 14'

STORM DRAIN SURVEY CONT'D.

CURB RETURNS 5-TH & F

NOTE:
 2" Angle Iron Cover follows
 Curb Through-out Working Area



Top F.H. NE Cor. 4-TH & F

T.B.M.

33.15

NE COR. 4TH & F

37.54

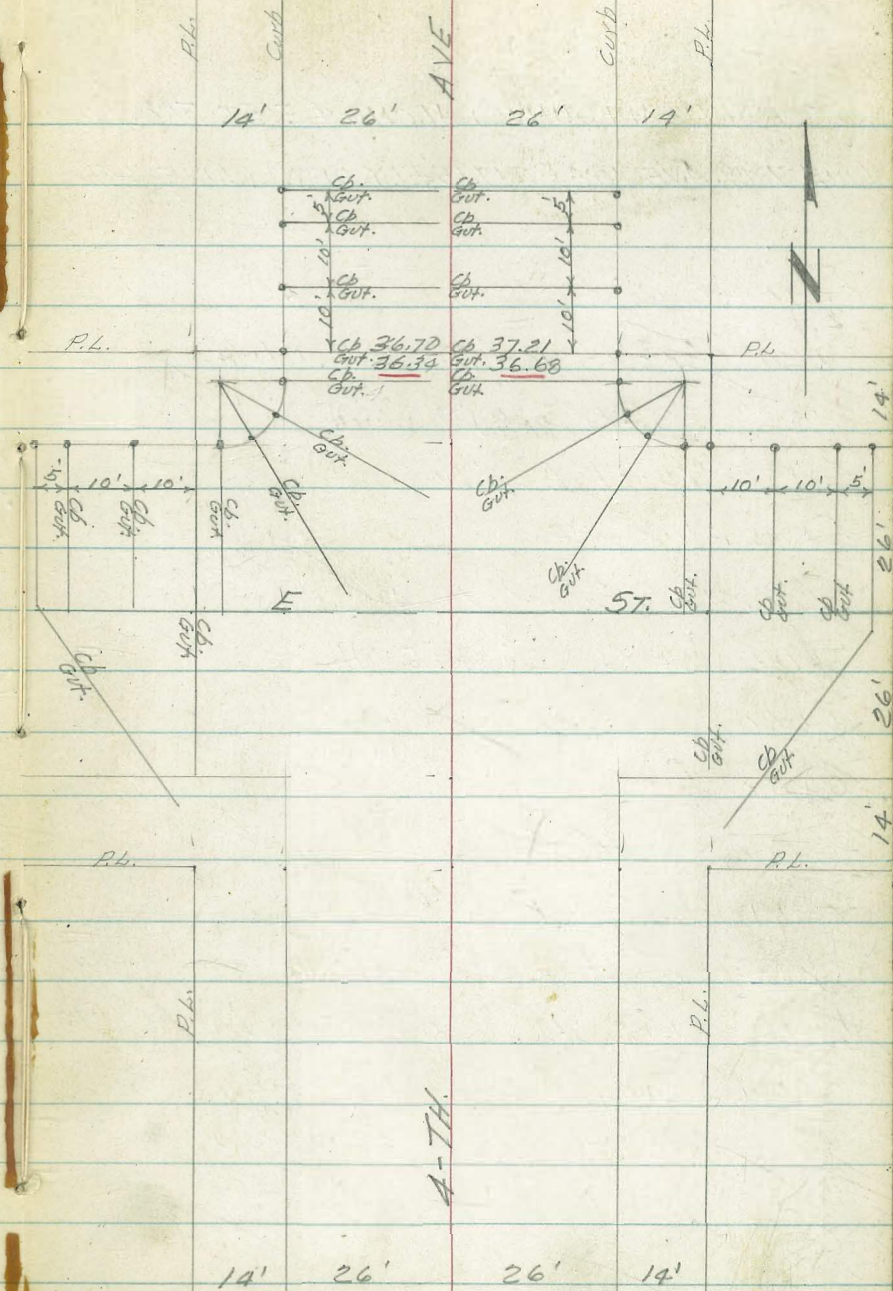
TP

5-TH

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 4-TH. & E

NOTE: For details of Elev's This Intersection
 See hard Copy of Work done for
 Signal Lights
 See Eckenrode
 Compare Elev's Shown here With
 These Shown & adjust to agree
 With this Net. of levels for Cb. Inlets



12-9-53

STORM DRAIN SURVEY ALONG E. ST. FROM ELY
LINE 7-TH. AVE TO APT. 17.15' ELY. OF WLY. LINE 4-TH. AVE
LT.

0+00 =
2+80.31

35' 45'

6-TH

AVE

2+00.31

40'

2+40 - 5' Rt. & 2' Dia Sewer M.H.

42.83 42.85

2+24² 23³ Lt. & 24' Dia M.H. Tel M.H.

42.35 42.85
232 TOP M.H.

2+23³ 23⁶ Rt. & 24' Dia. M.H.

42.99
236 TOP M.H.

2+20³ 15² Lt. & 2.3' Dia. M.H.

42.35 42.99
152 TOP M.H.

2+14 Ely Gutter

42.38

T.P.
2+00.31 Ely Line 6-th Ave

43.70

42.54

1+50

43.61

1+05 13³ Lt. & 2³/₄ G+E M.H.

43.78
132 TOP M.H.

1+00

44.19

0+50

44.66

0+00 = Wly Line 7-TH Ave

45.09

0-14 Wly Gutter

45.18

0-23² 18³ Lt. & 22¹/₂ G+E M.H.

45.17

183 TOP M.H.

0-40 - 44⁵ Lt. & 2³/₄ Dia Sewer M.H.

44.88 45.47

443 TOP M.H.

0-58⁷ 24² Rt. & 3¹/₂ Dia. M.H.

45.06

248 TOP M.H.

0-66 Ely Gutter Line

45.58

0-82

45.74

B.M.

64
45.77

N.W. B.P. 7-TH. & E

35' 45'

E. Baseline & ST.

0+00

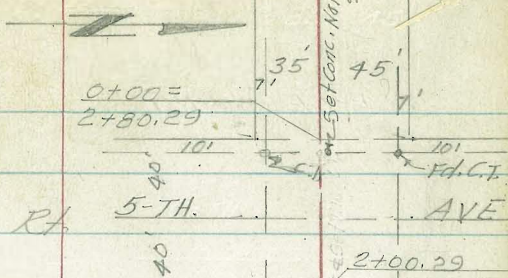
7-TH

AVE

40'

12-9-53

PROFILE ALONG E. ST. CONTD.



2+66 = Wly Gutter 5-th Ave

39.75

2+57.5 13[±] H. & 22' Dia M.H. SDG+E

39.73
13[±]
Top M.H.

2+54 - 5' RT & 2' Dia. M.H.

40.05
5[±]
Top M.H.

2+40.29 & 5-th Ave

40.06

2+29 - 28[±] RT & 2.5' Dia. M.H.

40.45

2+21[±] 23[±] RT & 2' Dia. M.H.

28[±] 40.24
Top M.H. 23[±]
Top M.H.

2+18[±] 16[±] RT & 22' Dia. M.H.

40.04
16[±]
Top M.H.

2+14 Ely Gutter Line

39.50

T.P.

41.18

2+00.29 = Ely Line 5-th Ave

39.78

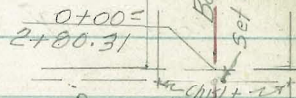
1+50

40.63

1+20 13[±] H. & 2⁵/₈ Dia. Elec M.H.

40.65
13[±] 40.73
Top M.H. 41.26

1+00



0+50

41.92

0+00 = Wly Line 6-th Ave

42.37

0-14 Wly Gutter

42.28

0-22[±] 13[±] H. & 22' Dia. Elec M.H.

42.42
13[±]
Top M.H.

35' 45'

0-26[±] 1[±] RT & 2⁵/₈ Dia. Sewer M.H.

42.64
1[±]
Top M.H.

PROFILE ALONG E ST. CONT'D.

12-9-53

12-9-53
Revised
2+63.23 P.I.



	LT.	±	RT.		
				4-TH. 22.85'	2+30.38 AVE
				30'	40'
				7'	5'
				35'	45'
					2+40.38
					Set Conc Nail ±
B.M.	43.85	~	43.85		
T.P.	42.03				
2+66.	Wly Gutter 4th Ave				
2+63.23	P.I. 5/4				
2+58	13 1/2'	±	22' Dia Gas Co. M.H.	36.00	
				13 1/2'	
				TOP M.H.	
2+40 ±	5'	RT. ±	2' Dia Sewer M.H.	36.43	
2+30.38	P.I.				
2+21 1/2	22 1/2'	RT. ±	2' Dia Tel M.H.	36.27	5' TOP M.H.
2+14 =	Ely Gutter line				
T.P.				36.42	2 1/2' TOP M.H.
2+00.38 =	Ely Line 4th Ave				
				36.00	
1+50				36.10	
1+00	23 1/2'	RT. ±	22' Dia M.H.	37.06	
1+00	13 1/2'	±	22' Dia Gas Co. M.H.	38.50	
				23 1/2'	
				TOP M.H.	
0+50				37.68	38.02
				13 1/2'	
				TOP M.H.	
0+00 =	Wly Line 5th Ave				
				38.89	
				39.71	
					2+00.29
					5-TH. AVE
					40'
					40' 10'
					35' 45'

Baseline & E

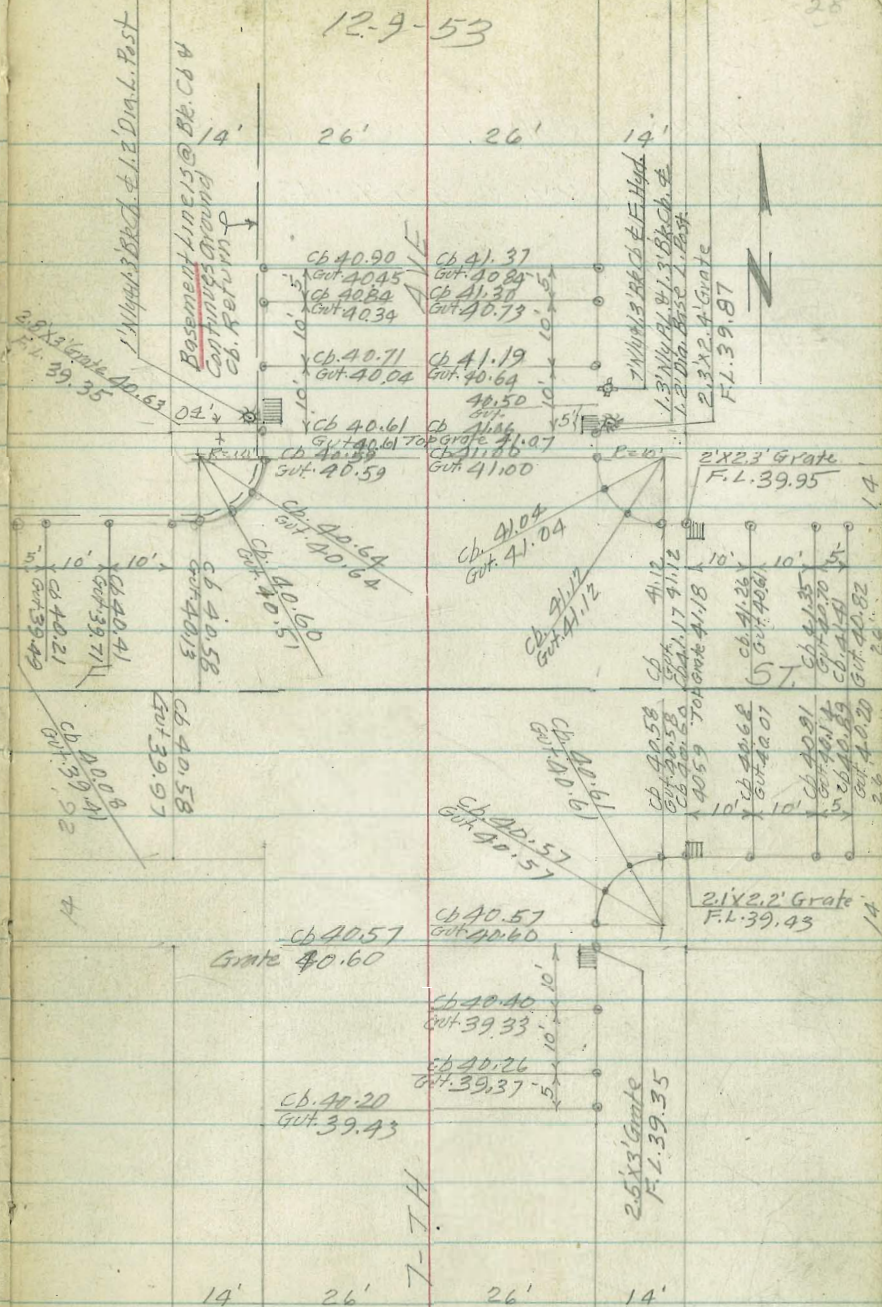
Used 1" C.T. on N.E. Cor. Brumby & 40'

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 7-T.H. & F

12-9-53

28



T.B.M.

43.15

(See Pg. 21)

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 6-TH. & F

NOTE: See hard copy for Signal Lights
for details This Intersection

See Eckenrode

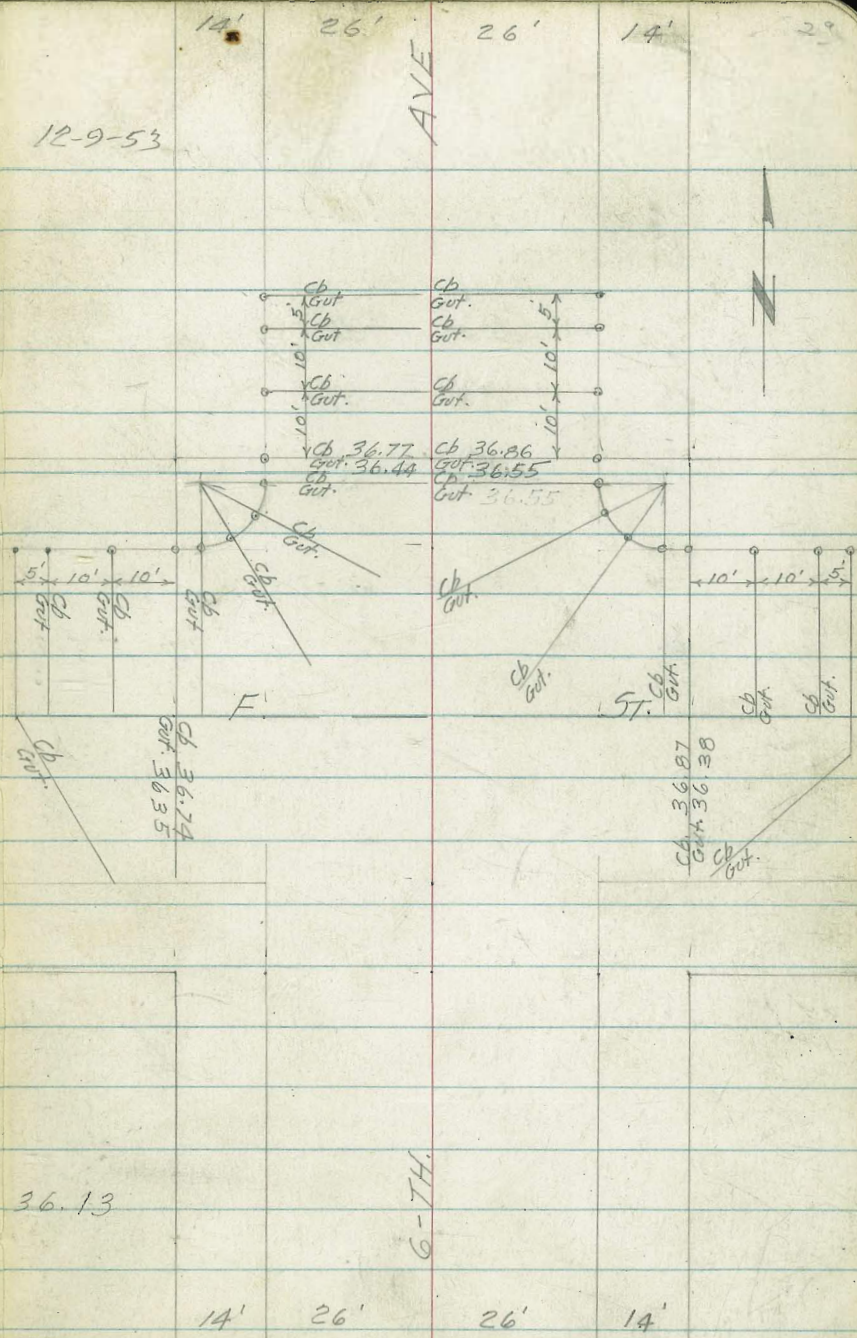
Compare Elev's Shown on hard Copy
With the ones Shown here and adjust
them to this Net for Ch. Inlets

B.M.

5 W.B.P. 6-TH & F

36.22 ~

12-9-53



STORM DRAIN SURVEY CONT'D

CURB RETURNS @ 5-TH. & F.

12-9-53

14'

26'

26'

14'

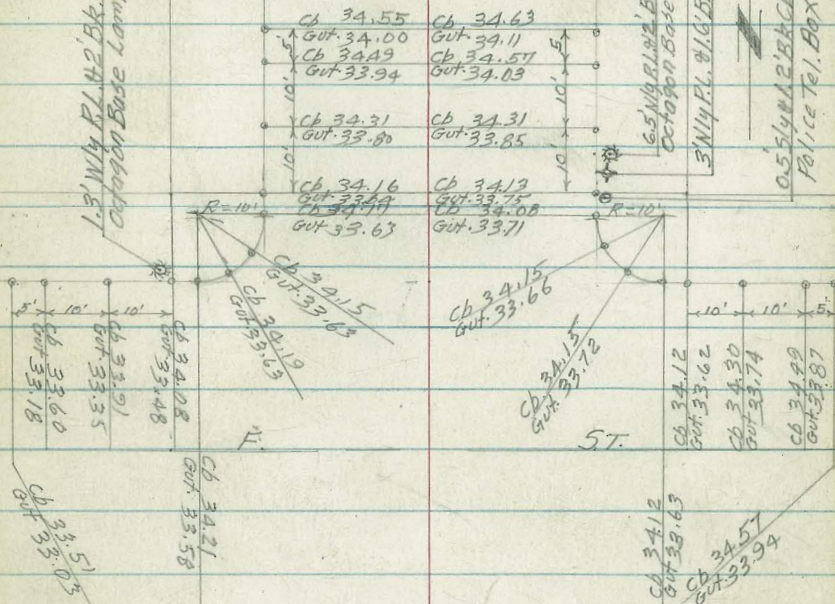
10

1.5" W/4 R. 1.42' Bk. Cb. & 2' Dia.
Octagon Base Lamp Post.

AVE.

6.5" W/4 R. 1.42' Bk. Cb. & 2' Dia.
Octagon Base L. Post.

0.5" W/4 R. 1.42' Bk. Cb. & 1.5" Dia. Base
Police Tel. Box



5-TH.

14'

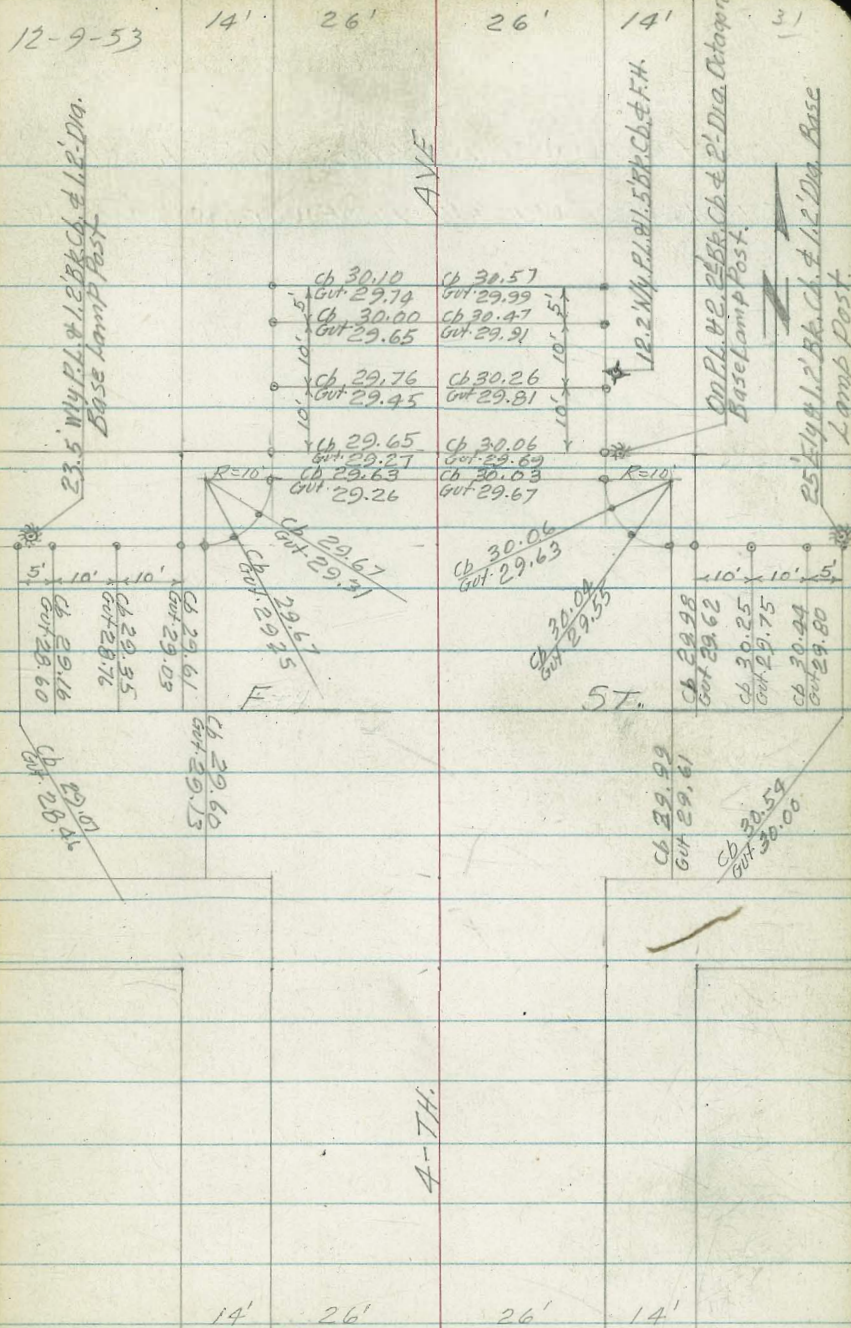
26'

26'

14'

STORM DRAIN SURVEY CONT'D

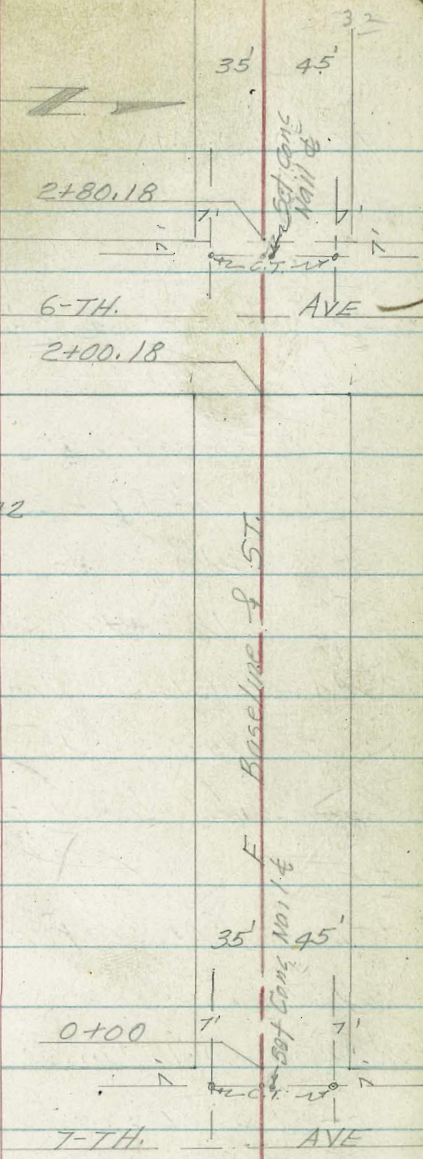
CURB RETURNS @ 4-TH. & F.



12-9-53

STORM DRAIN SURVEY ALONG F ST. FROM ELY
LINE 7-TH AVE TO A PT. 17.15' ELY. OF WLY. LINE 4-TH AVE.

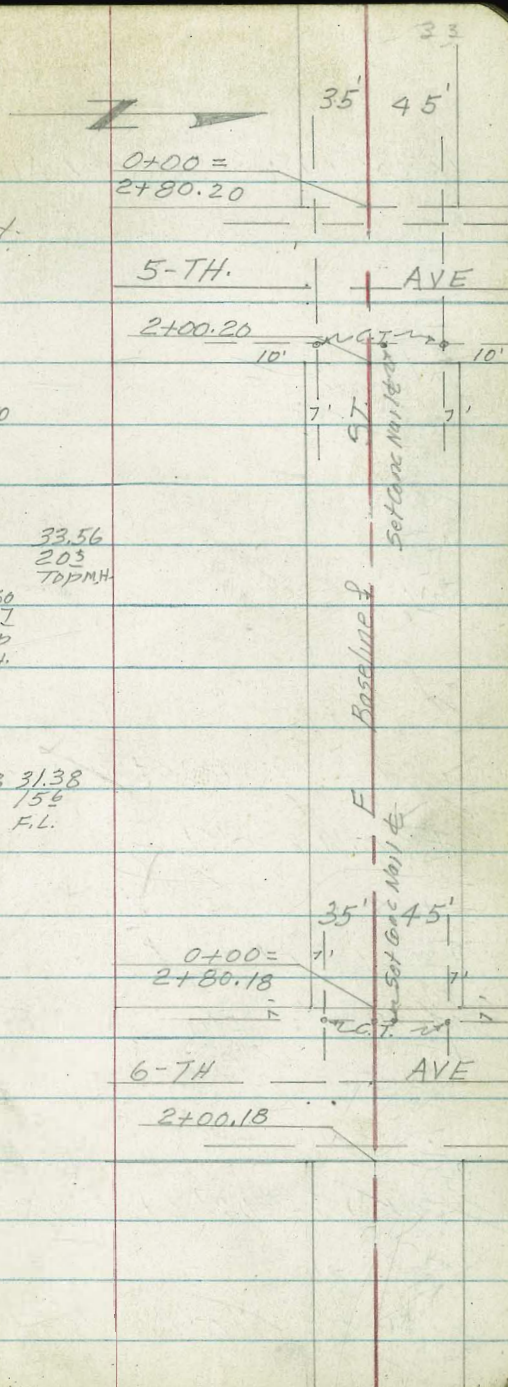
Station	Description	Station	RT.	Notes
2+41	44' RT. & 3' Dia. Sewer M.H.	36.82		
2+40	& 6-th	44'		
		36.37	TOP M.H.	
2+24	- 19 ^e RT. 2.4' Dig M.H.	36.50		
		19 ^e		
		36.42	TOP M.H.	
2+20 ^s	24 ^e RT. 2.4' Dig M.H.	24 ^e		
		36.42	TOP M.H.	
2+18	- 16 ^e RT. & 3' Dia. Storm	16 ^e		
		36.32	TOP M.H.	
2+14	Ely Gutter			
2+00.18	= Ely Line 6-th Ave	36.44		
T.P.				
1+50		37.01		
1+00	- 14 ^s LT & 22' Dia. G+E M.H.	37.24	38.31	
		14 ^s		
		39.33	TOP M.H.	
0+50				
0+00	= Wly Line 7-th Ave	40.43		
0-14	Wly Gutter	40.64		
0-22 ^e	14 ^s LT & 22' Dia Gas Co	40.94		
		14 ^s		
		40.97	TOP M.H.	
0-40	- 45' LT. & 2' Dia Sewer H.M.	45		
		41.02	TOP M.H.	
0-66	= Ely Gutter Line			
0-80	- 12 ^e LT. & 2' Dia. M.H. (Water)	40.87		
		12 ^e		
		41.11	TOP M.H.	
0-82				
T.B.M.		43.15		Top N.W. Cor. M.H. (See Pg. 21)



12-9-53

STORM DRAIN PROFILE ALONG E ST. CONTD.

Station	Description	LT	CL	RT	Notes
0+00 =	Wly Line 5-th Ave				2+80.20
2+66 ^e	Wly Gutter 5-th Ave		33.31		5-TH AVE
2+57	14 ² Lt. & 22' M.H. Gas Co.		33.14 14 ² TOP M.H.		2+00.20
2+54	6 ⁵ Rt. & 2' Dia. Sewer M.H.			33.50 6.5 TOP M.H.	10' 7' 10'
2+40 ²⁰	5 ²⁰ & 5-th Ave		33.40		Set Gas M.H. 7'
2+23 ⁵	20 ⁵ Rt & 24 Dia M.H.			33.56 20 ⁵ TOP M.H.	Baseline & Set Gas M.H. 7'
2+20	24 ⁷ Rt & 24 Dia M.H.			33.60 24.7 TOP M.H.	
2+18 ⁵	18' Rt & 3' Dia M.H.			33.62 18 ⁵ TOP M.H.	
2+14	Ely Gutterline		33.33		
2+05 ⁵	15 ⁶ Pt. & 15x25 ⁵ Grate			33.48 15 ⁶ TOP Grate	31.38 15 ⁶ F.L.
T.P. 2+00.20	Ely line 5-th Ave	33.10	33.39		
1+50			34.02		
1+00-13 ⁵	Lt. & 22'x24' M.H. Gas Co.		34.44 13 ⁵ TOP M.H.	34.78	0+00 = 2+80.18
0+50			35.52		Set Gas M.H. 7'
0+00 =	Wly Line 5-th Ave		36.19		6-TH AVE
0-00 ⁵	10 ² Lt. & 2' Dia. Water M.H.		36.10 10 ² TOP M.H.		2+00.18
0-14	Wly Gutter Line 6-th Ave		36.28		
0-24 ⁰	11' Lt. & 22 ⁰ M.H.		36.30 11 ⁰ TOP M.H.		
0-26	5 ⁵ Rt. & 2' Dia. M.H.			36.42 5 ⁵ TOP M.H.	



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STORM DRAIN SURVEY ALONG E. ST. CONT'D.

12-9-53

2+30.43 = P.I.
4-TH AVE 50'

2+00.43 30'

35' 45' Profile Line F
Set Conc. Manhole

35' 45' F
Set Conc. Manhole

0+00 =
2+80.20

5-TH AVE

2+00.20

Lt. & Rt.

See Pg. 23

B.M. 33.14 ~ 33.15

2+352 5' RT. & 2' DIA Sewer M.H. 29.48
5" TAP M.H.

2+30.43 = P.I. 29.31

2+14.4 Ely Gutter Line 4th Ave 29.39

2+01 15" Lt. & Dia M.H. TOP PIPE 28.83
SE Cor 4th & F. 15" TAP M.H.

T.P. 2+00.43 = Ely Line - 4th Ave 29.33 29.51

1+50 30.35

1+00 31.33

0+98 - 132" Lt. & 25" M.H. Gas Co. 30.78
13" TAP M.H.

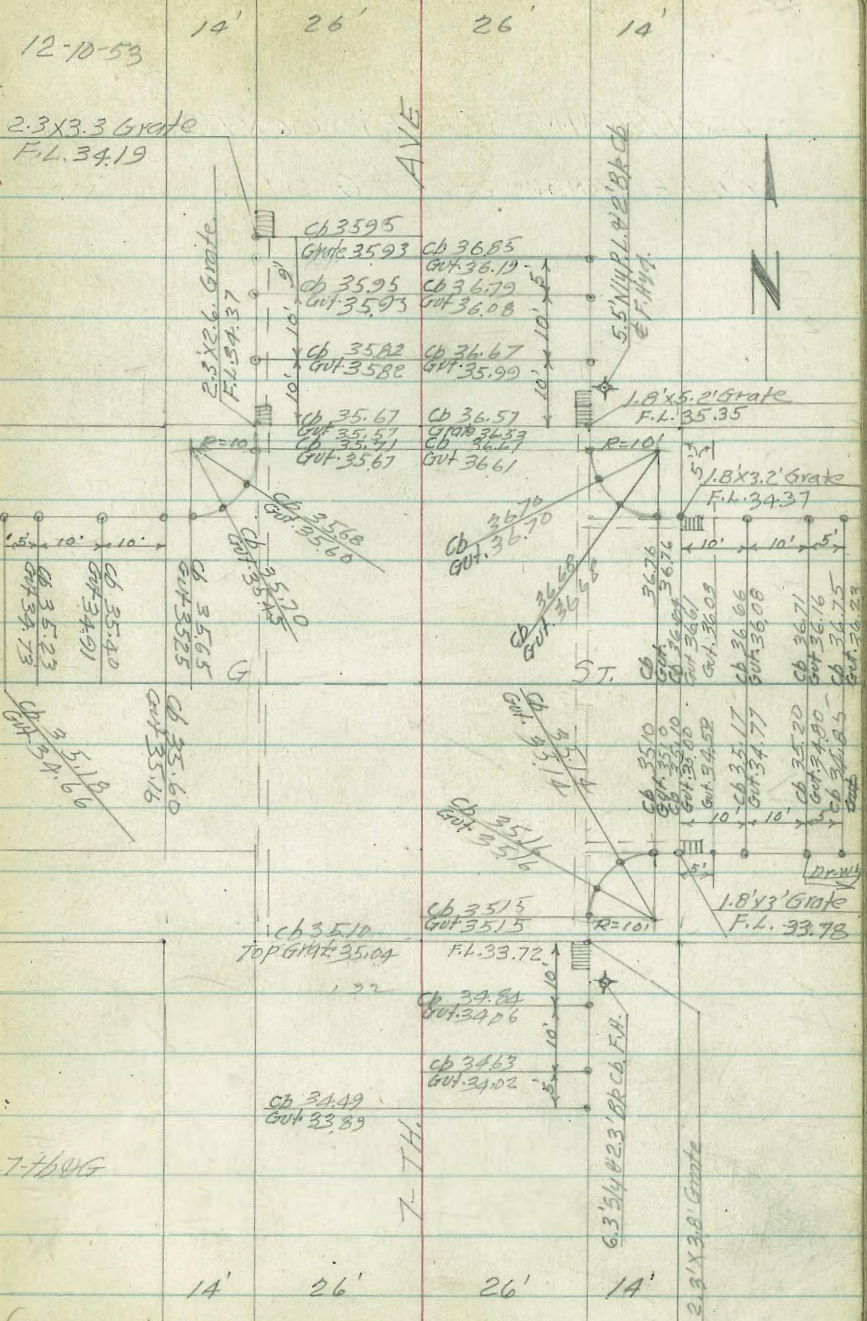
0+50 32.33

0+00 = Wly Line 5-TH Ave 33.20

CT. A

STORM DRAIN SURVEY CONTD.

CURB RETURNS @ 7-TH. & G-ST'S.



12-10-53

2.3x3.3 Grate
F.L. 34.19

AVE

31

14' 26' 26' 14'

Top FH S.E. Coy

7-TH & G

7-TH

6.3x4.23 Grate
F.H.

2.3x3.8 Grate

T.B.M.

37.58

T.B.M.

43.15

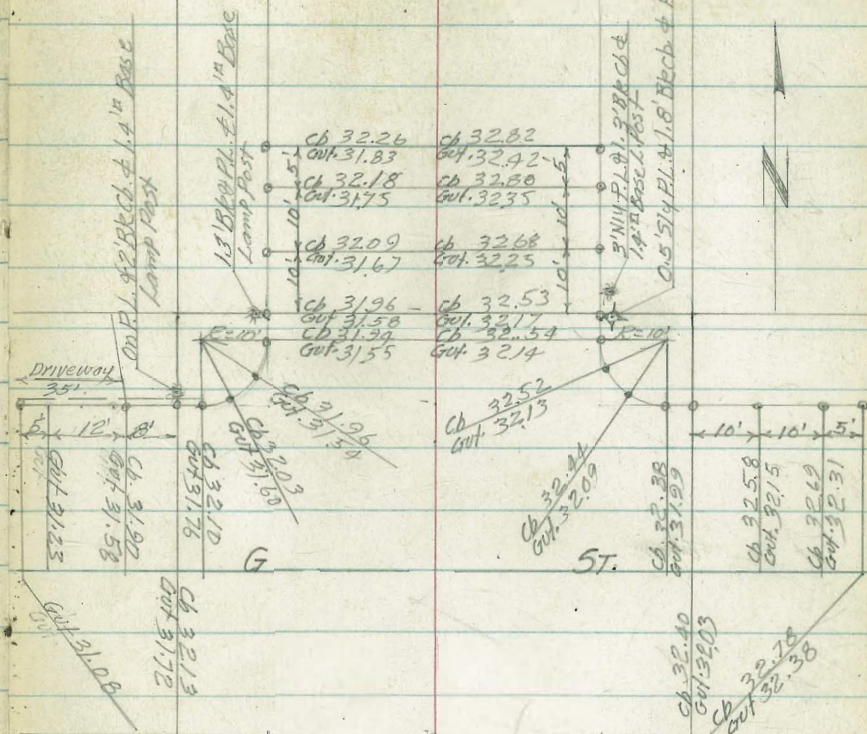
(See Pg. 21)

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 6-TH. & G-ST.

12-10-53

AVE



14

26'

26

14

6-TH.

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 5-TH. & G-STS.

NOTE: For details & Elev's This Intersection
See Hard Copy for Signal Lights
Compare Elev's Shown here With
Those Shown on hard Copy & Adjust
hard Elev's to agree With This Net
for Curb Inlets

B.M.

SEBP 5761G

26.36

12-10-53

14' 26' 26' 14'

AVE



cb 27.34 Gt. 26.90 cb 27.32 Gt. 26.77

cb 27.38
Gt. 26.82

G

ST.

cb 27.43
Gt. 26.88

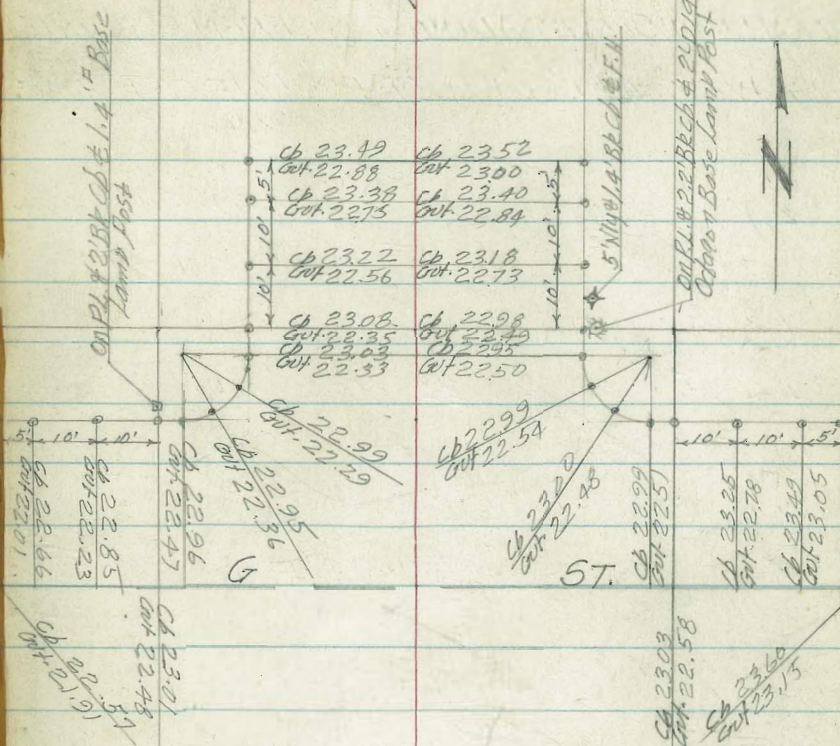
5-TH.

14' 26' 26' 14'

STORM DRAIN SURVEY CONT'D
CURB RETURNS @ 4-TH & G-ST'S.

TBM.

12-10-53



24.84

4-TH

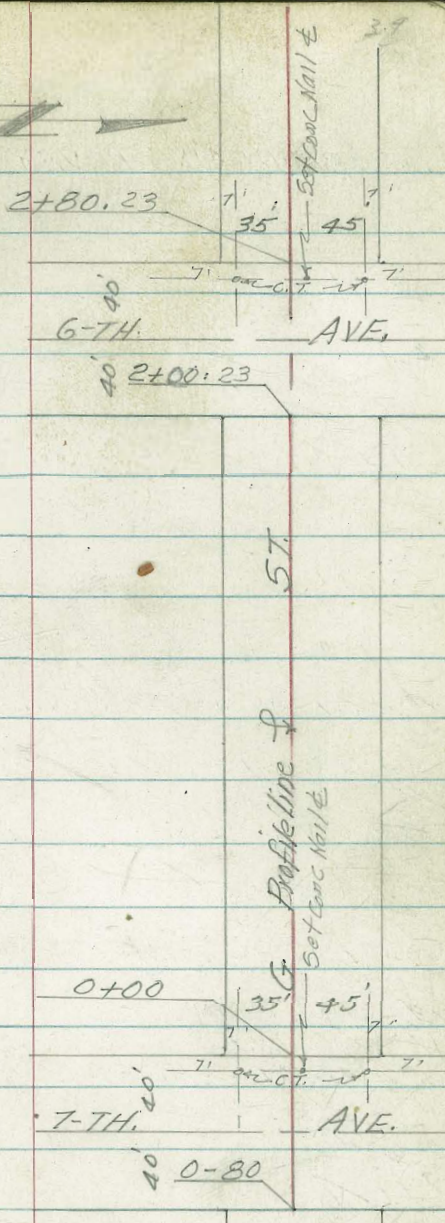
100

12-10-53

STORM DRAIN SURVEY ALONG G-ST. FROM ELY LINE
7-TH. AVE TO A PT. 30' WLY. OF ELY. LINE OF 4-TH. AVE.



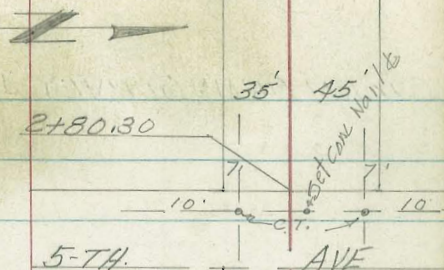
T.B.M.	Top F.H. SE. Cor 6th + G		
	34.27		
2+66 ²³ = Wly Gutter		30.97	
2+57.5 - 13 ⁵ ft & 2 ² Dia Gas Co M.H.		31.10 13 ⁵ Top M.H.	31.69
2+40 ²³ 6-th Ave			
2+24 - 20 [±] ft & 2 ³ Dia M.H.		31.95 20 [±] Top M.H.	31.95
2+20 - 25 [±] ft & 2 [±] Dia M.H.		31.55	31.95 25 [±] Top M.H.
+14 Ely Gutter		31.80	
2+00.23 Ely Line 6-th Ave			
1+50		32.85	
1+00		33.64	
0+50		34.34	
0+00 Wly Line 7-th Ave		35.06	
0-14 Wly Gutter Line		35.03	
0-40 - 35' Lt & 2 ³ Dia Sewer M.H.	34.97 35 Top M.H.	35.61	
0-56 - 20 [±] ft & 2' Dia M.H.			36.02 20 [±] Top M.H.
0-66 Ely Gutter		35.59	
0-82		35.74	
B.M.	43.15		(See Pg. 21)



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STORM DRAIN SURVEY ALONG G-ST. CONTD.

	LL	RT	2+80.30
B.M.	SWBP. 4th + F 28.75		
	TOP NE. FH. 4th + F.		5-TH. AVE
	33.13	33.15	2+00.30
T.P.	26.87		
	SWCT. 5th + G		
T.B.M.	26.58		
2+66 ³	Wly Gutter Line 5th Ave	26.37	
2+58	- 13' LL & 29' DIA Gas Co M.H.	26.28 13 TOP M.H.	
2+54 ⁵	- 5' RT & 2' DIA Sewer M.H.	26.58 5' TOP M.H.	
2+40 ³⁰	Ely 5th Ave	26.65	
2+20	20' RT & 23' DIA M.H.	26.60 20' TOP M.H.	0+00 = 2+80.23
2+18 ³⁰	Ely Gutter	26.11	
2+00.30	Ely Line 5th Ave	26.39	6-TH. AVE
1+50		27.82	2+00.23
1+00		29.11	
0+50		30.25	
0+00 =	Wly Line 6th Ave	31.27	



Profile Line & 5th St. Set Conc Nail &

12-10-53

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STORM DRAIN SURVEY ALONG G-ST. CONT'D.

Lt.

+

Rt.

2+30.30 P.I.
4-TH. AVE 50'

2+00.30 35' 45'

TOP S.F.H. 4TH AVE

T.B.M.

24.84

2+30.30 = P.I.

22.16

2+23.20 = Rt & 2.3 Dia MH.

22.37
20.3
TOP M.H.

2+14 = Ely Gutter

21.91

2+00.30 = Ely Line 4-th Ave

22.17

1+50

23.76

1+00

24.90

0+50

25.79

0+00 = Wly Line 5-th Ave

26.38

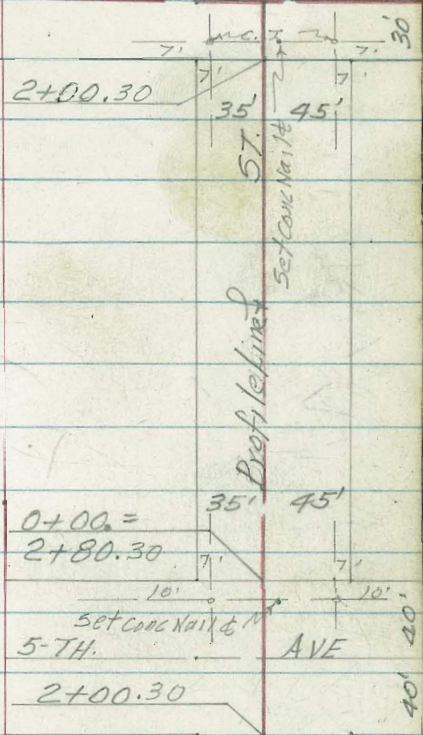
0+00 =
2+80.30

5-TH. AVE 40' 40'

2+00.30

Profile Line

G

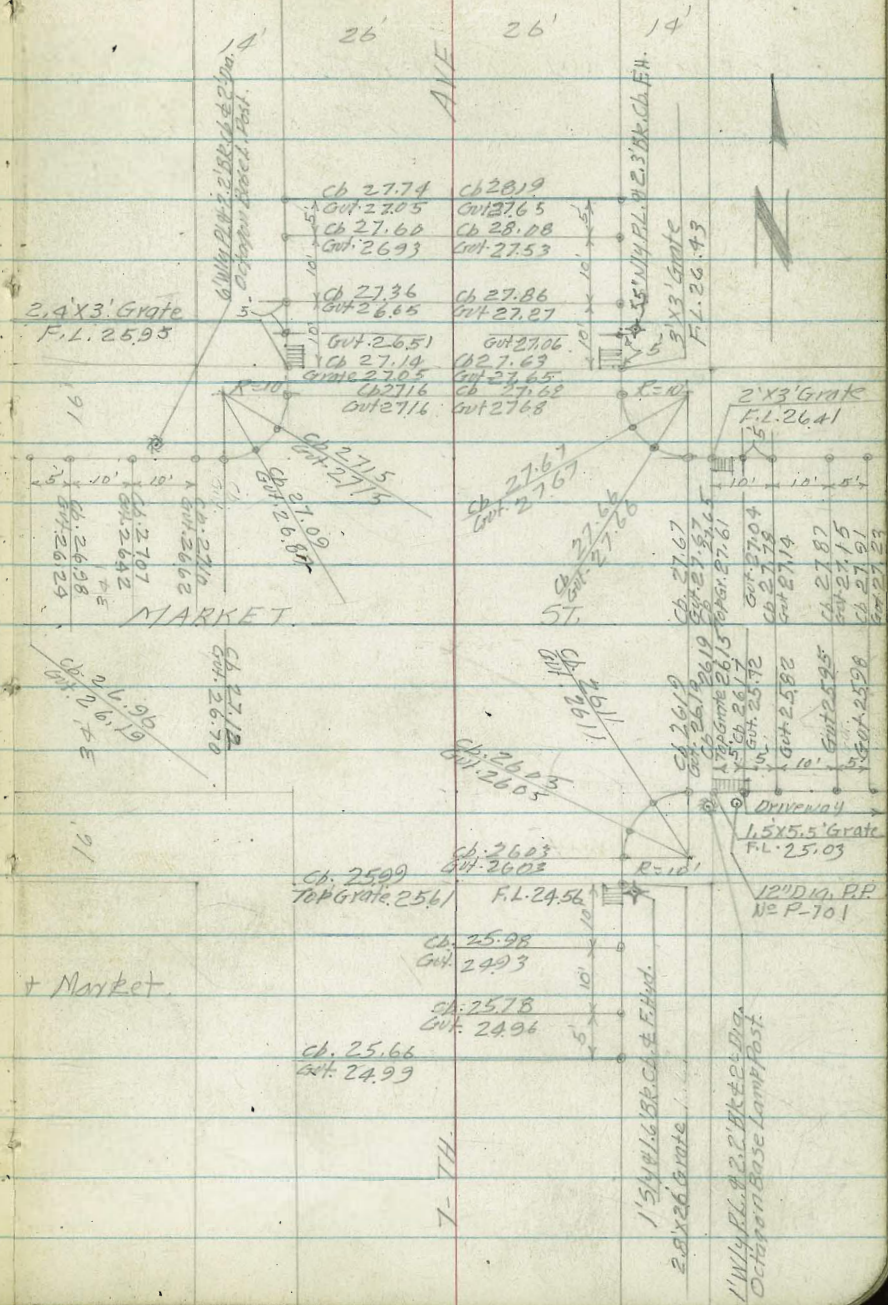


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42

STORM DRAIN SURVEY CONT'D

CURB RETURNS @ 7-TH. & MARKET



TOP F.H. N.E. COR 7th + Market

30.38

TOP F.H. S.E. COR 7th + G

37.58

T.B.M.

T.B.M.

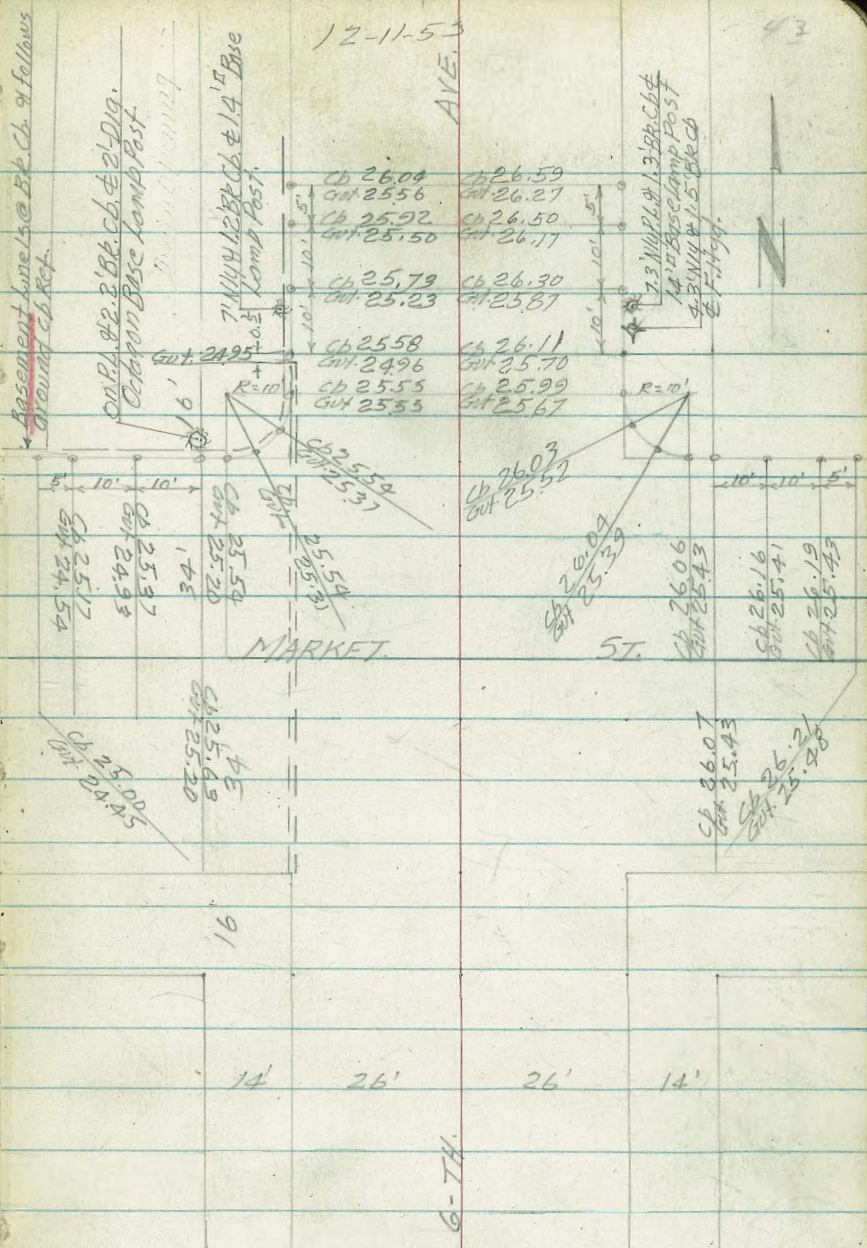
7-TH.

1' 5\"/>

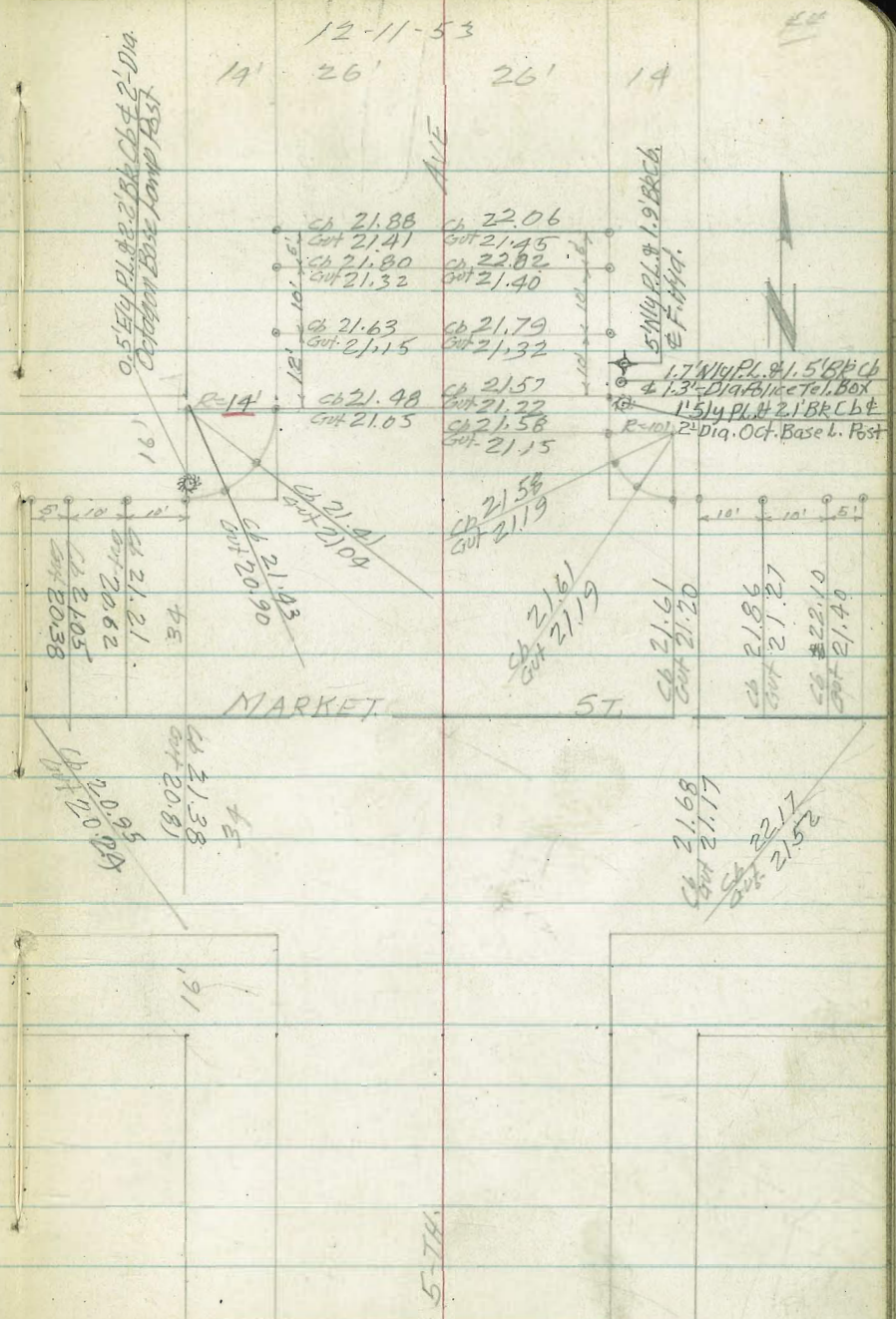
1' WLY FL. & 2' 2\"/>

STORM DRAIN SURVEY CONT'D.

CURB RETURNS @ 6-TH & MARKET



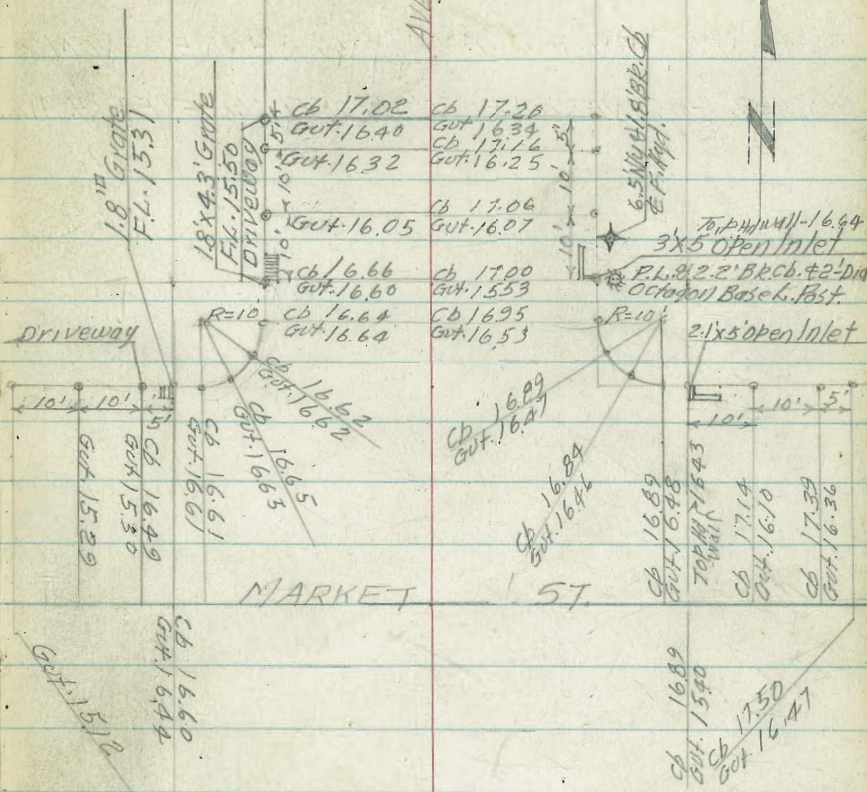
STORM DRAIN SURVEY CONT'D.
CURB RETURNS @ 5-TH & MARKET



12-11-53

45

STORM DRAIN SURVEY CONTD.
CURB RETURNS @ 4-TH. & MARKET.



TOP NE. C.H. 4th + Market

19.93

TBM.

4-TH

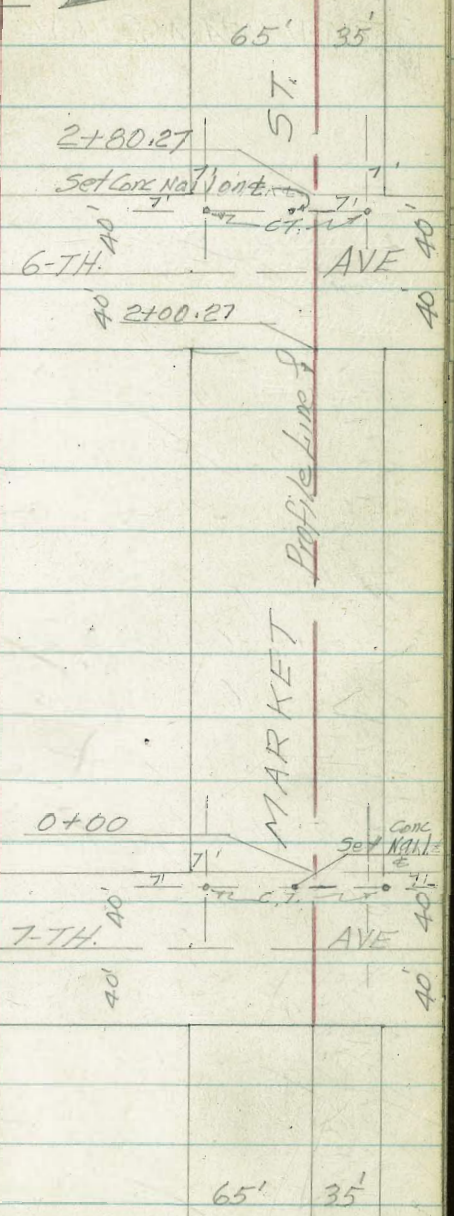
12-11-53

46

STORM DRAIN SURVEY ALONG MARKET FROM
ELY LINE 7-TH AVE TO A PT. 30' WLY OF ELY LINE OF 4-TH AVE



	Lt.	±	Rt.
2+66 = Wly Gutter 15' Lt. & 2' DIA M.H. 23 Cleanout		2491	25.04
2+58 41' Lt. & 2' DIA Gas Co M.H.		15 TOP M.H. 2473	41' TOP M.H.
2+50 10' Lt & 2' DIA M.H. 22		10 TOP M.H. 2499	10 TOP M.H.
2+40.3 70' Lt. & 2' Dia. Sewer M.H.		70 TOP M.H. 2444	25.20
2+24 7' Rt. & 2' DIA M.H.			25.39
2+20 13' Rt & 2' DIA M.H.			TOP M.H. 2548
2+14 = Ely Gutter 6-th Ave			25.37 13'
2+00.27 = Ely Line 6-th Ave			25.54 TOP M.H.
T.P. TOP NEFH 6TH + Market		17.50	29.02
1+00 20' Lt. & 2' x 2.4' Gas Co M.H.			26.50
0+50		40' TOP M.H.	26.73
0+00 = Wly RL 7-th Ave			26.92
0-14 = Wly Gutter			27.05
0-40 & 7-TH AVE Lt. 80' & 17' DIA Sewer M.H.		80' TOP M.H. 2567	27.26
0-65 11' Rt. & 2' DIA M.H.		TOP M.H.	27.43
0-66 Ely Gutter			TOP M.H. 27.47
0-82			27.62
B.M.		30.38	Top F.H. NE Cor 7-th + Market



12-11-53

STORM DRAIN SURVEY ALONG MARKET ST.



Sta	Desc	Elev	Notes
2+80.13	Set conc. nail on		5-T
2+80.13	5-T.H.		40
2+00.13	5-T.H.		40
2+66	Wly Gutter Line 5th Ave	20.85	
2+57	38" Lt & 29' Dia. Gas Co. M.H.	20.45 38" Top M.H.	65' 35"
2+54	9" RT & 18" Dia. M.H. (Sewer)	21.09 9" Top M.H.	
2+40	13" Lt 5th Ave Lt. 96" & 17" Dia. Sewer M.H.	19.94 21.09 96" Top M.H.	
2+24	5" 6" RT & 21" Dia. M.H.	21.20 6" Top M.H.	
2+23	12" RT & 25" Dia. M.H.	21.26 12" Top M.H.	
2+14	Ely Gutter Line	21.20	
2+08	14" RT & 1.5' x 24" Grate Inlet	20.92 18.9 14" Top Grate Fl.	
2+00.13	Ely Line 5th Ave.	21.18	6-T.H. AVE 40
1+50		22.03	2+00.27
1+01	38" Lt & 2.4' Gas Co. M.H.	22.63 38" Top M.H.	
1+00		22.96	
0+50		23.98	65' 35"
0+00	Wly Line 6th Ave	24.90	

Set Conc. Nail
MARKET
Profile Line S

0+00 =
2+80.27

6-T.H. AVE 40

2+00.27

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STORM DRAIN SURVEY ALONG MARKET ST. CONT'D.

LT C RT

T.B.M.	24.85	24.84 TOP S.E. F.H. 4TH
T.P.	20.44	
T.P.	16.90	

4-TH

2+00.50

AVE 50

Set Cont Nail E 5 T.

C.T.N
Profile Line

65' 35'

2+58 42² Lt. & 2.2' Gas Co M.H.

16.09
42²
TOP
MH 16.78
15
TOP
MH 16.76

2+36 - 15' Lt. & 2' Dia Sewer M.H.

2+30.5 = P.I. 5/4

2+16 48⁵ Lt. & 12' Drain Cleanout

14.39 15.64
48⁵ 4.85
FL TOP
C.O.

2+16 - 18' Pt. & 12' Drain Cleanout

16.59 15.19
18 18
TOP C.O. FL.

2+16 - 15' Lt. & 12' Drain Cleanout

14.80 16.90
15 15
FL TOP
C.O. 16.77

2+14⁵ = Fly Gutter 4th

2+00.50 = Fly Line 4-th Ave

16.80

0+00 =

2+80.13

Set Cont Nail

MARKET

5-TH

2+00.13

AVE 40

1+50

17.44

1+00

18.51

0+98-38² Lt. & 2.2' x 2.4' Gas Co M.H.

18.08
38²
TOP MH 19.67

0+50

0+00 = Wly Line 5-th Ave

20.57

65' 35'

12-13-53

Stamped
Pope
Taylor
Sherry

49

STORMDRAIN SURVEY ALONG 4-TH. AVE FROM A PT.
35' NLY. OF SLY LINE OF C-5T. THENCE SLY.

Lt.	±	Rt.
3+75 ⁴⁸ Gutter Line Wly	43.23	
3+66 ⁴⁸ Gutter Line Ely	43.46	
3+40.48± Broadway = Lateral P.I. Ely	44.04	
3+17-23' Rt. ± 2 ⁵ ' Dia M.H.		44.06
TP 3+14 = Nly Gutter Line Broadway	44.26	23 TOP M.H.
3+00.48 = Nly Line Broadway	44.29	
2+59 26 ³ ' Rt. ± 2 ² ' x 2 ⁴ ' Gas Com. H.		45.05 263 TOP M.H.
2+50	45.19	
2+00	45.73	
1+50	46.18	
1+32 27 ⁵ ' Rt. ± 2 ² ' x 2 ⁴ ' Gas Com. H.		46.18 273 TOP M.H.
1+00	46.60	
0+50	47.07	
0+00	47.33	
0-14 = Sly Gutter Line	47.46	
0-17 ± Sewer M.H. 10' Rt.	47.55	
TP 0-35 = Lateral P.I. Ely	48.14	10 TOP M.H.
B.M.	50.35	5.5727 4-15± N.W. BP 4-TH. + B

3+80.48

30' 50'

BROADWAY 3+40.48

3+00.48

Set Conc. Nail ±

7' 7'

4-TH. AVE

Right of Way

30' 50'

0+00

C 35' 0-35±

5T.

45'

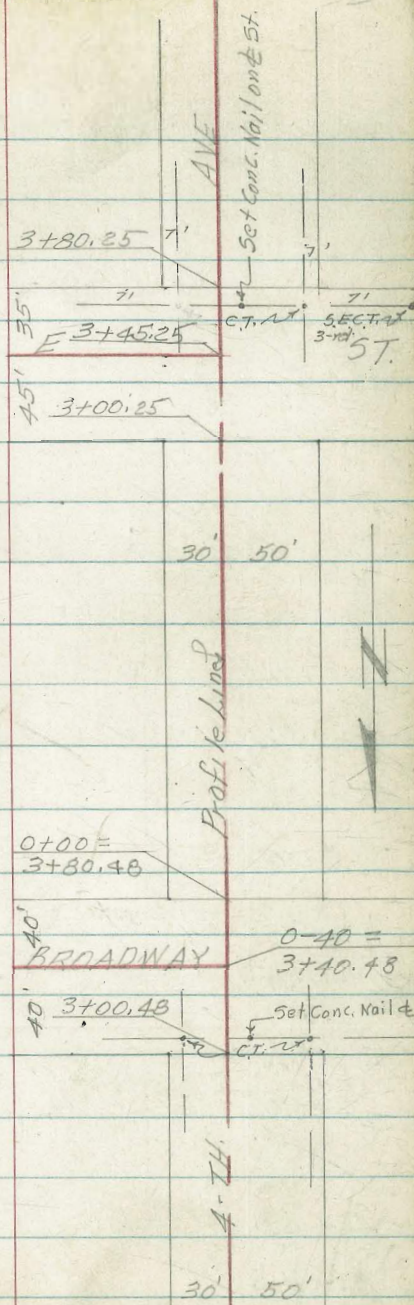
2+30.19 = Station E

12-13-53

STORM DRAIN SURVEY SLY ALONG 4TH AVE

Lt. C Rt.

3+66.25 = Sly Gutter Line E-St	35.96
3+45.25 = Lateral P.I. Ely	36.27
3+40.25 C E St.	36.34
3+14.25 Nly Gutter Line E-St.	36.68
3+00.25 = Nly Line E-St.	36.87
2+55 27" Rt. C 3' Dia. Gas Co M.H.	37.77
TP	27.3
2+50 39.16	37.90
2+00	39.09
1+50	40.17
1+40 - 26' Rt. C 2" x 2" M.H. Gas Co.	40.41
1+29 30' Rt. C 3" Dia. Gas Co M.H.	40.61
1+00	41.23
0+50	42.36
0+00	43.15



30' 50'

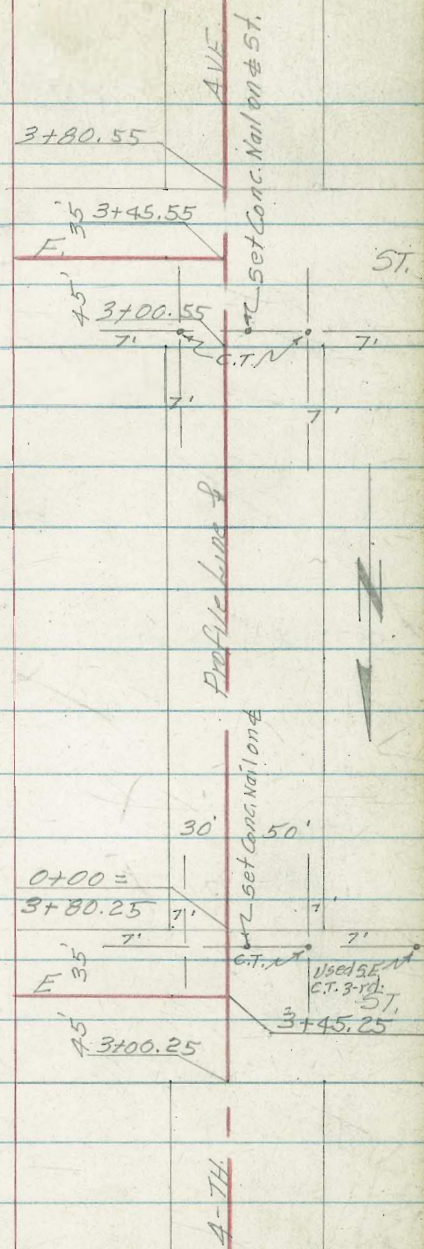
12-13-53

STORM DRAIN SURVEY SLY ALONG 4-TH. AVE

H. E RT.

TBM	33.14	33.15 (see Pg. 31)
3+66.55 = Sly Gutter line		28.89
3+45.55 = Lateral P.I. Ely		29.31
3+40.55 = E F-St.		29.48
3+14.55 = Nly Gutter line		29.55
3+00.55 = Nly Line F-St.		29.66
2+50		30.60
2+00		31.66
1+98 ⁵ 26 ⁵ Ft. ϕ 2 ³ x 2 ⁴ Gas Co MH.		31.58
T.P.		26 ⁵
1+50	32.69	32.67 TOP M.H.
1+00		33.76
0+98 ⁵ 26 ⁵ Ft. ϕ 2 ³ x 2 ⁴ Gas Co MH.		33.68
		26 ⁵
0+50		34.76 TOP M.H.
0+00 = Sly Line E.St		35.76
0-35		36.27

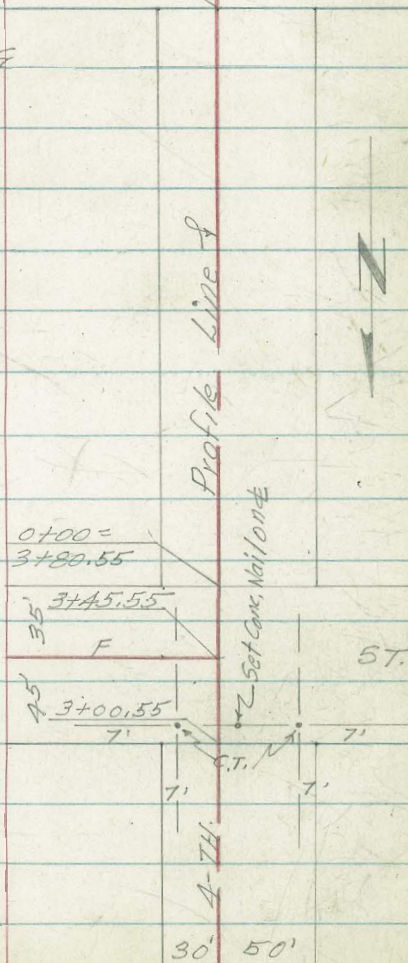
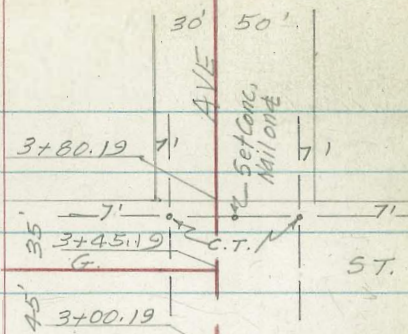
TOP NE F.H. #111 F



12-13-53

STORM DRAIN SURVEY SLY ALONG 4-TH. AVE

LT.	±	RT.
TBM	24.84	24.84
		(see p. 41) TOP SET H. 4 TH + G
3+66.19 = Sly Gutter Line - G-St.		21.92
3+45.19 = Lateral P.I. Fly		22.16
3+40.19 = ± G-St.		22.25
3+19.19 = Nly Gutter		22.66
3+00.19 = Nly Line G-St.		22.93
2+50		23.99
2+00 T.P.	25.19	25.01
1+95 26' Rt. ± 2" x 24" Gas Co. M.H.		24.97
1+50		26.04
1+00		27.00
0+83 27' Rt. ± 2" x 24" Gas Co. M.H.		27.20
0+50		27.96
0+00		28.77
0-35		29.31



12-13-53

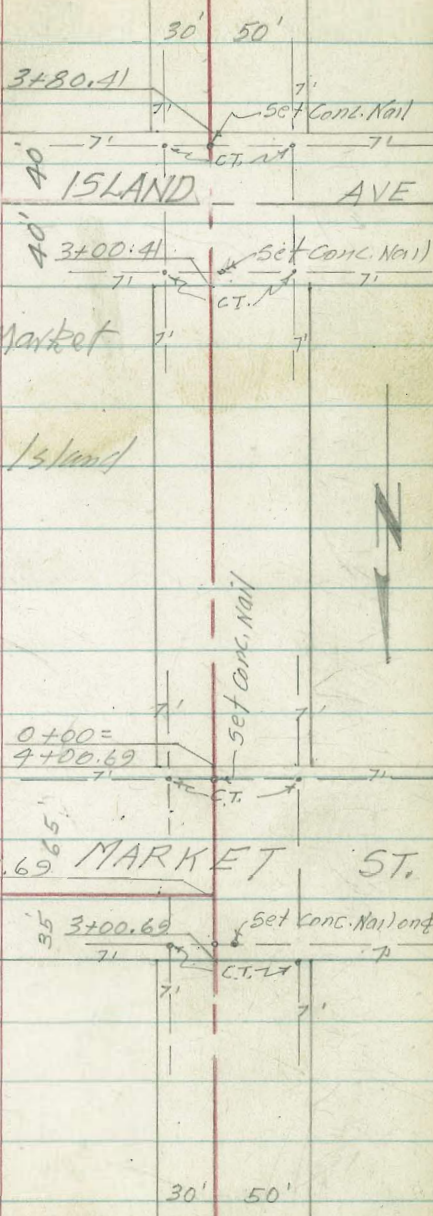
STORM DRAIN SURVEY SLY ALONG 4-TH. AVE

	Lt.	±	Rt.	
				30' 50'
				AVE
				4+00.69
				65' 3+35.69
T.P.	18.36		TOP S.E.F.H. 4-TH + Market	MARKET ST.
				35' 3+00.69
				Set Conc. MH ±
T.B.M.	19.92	19.93	TOP N.E.F.H. 4-TH + Market	
3+84.69	= Sly Gutter Line Market St.		15.82	
3+50.69	± Market St.		16.80	
3+35.69	= Lateral P.I. Ely		16.76	
3+16.69	Nly Gutter Line		16.56	
3+00.69	= Nly Line Market St		16.60	
2+50			17.47	
2+00			18.23	
1+50 T.P.	19.09		19.16	
1+00	26°	Rt. ± 2' x 2' G.P.C. MH.	20.14	20.12
0+50			21.06	26 TOP MH
0+00			21.68	
0-35			22.16	
				Profile Line ±
				Set Conc. MH ±
				0+00 = 7'
				3+80.19
				7' 7'
				45' 35' G
				3+00.19
				3+45.19
				ST
				4-TH. AVE
				30' .50'

Sunday
12-13-53

STORM DRAIN SURVEY SLY ALONG 4-TH AVE

	Lt.	±	Rt.	
TP	5.88			3+80.41
TP	11.10	NW 7' C.T. Island + 4th		ISLAND AVE
T.B.M.	19.90	check back from K-st. (see p. 56) 19.93 TOP N.E. FH 4th + Market		3+00.41
T.B.M.	18.34	18.36 TOP S.E. FH 4th + Market		
T.B.M.	10.11	TOP S.E. 7' C.T. 4th + Island		
3+66.41 =	Sly Gutter Line Island Ave		9.96	
3+40.41 =	± Island Ave		10.31	
3+21.9	8 ⁵	±	2 ²	10.38 8 ⁵ TOP M.H. 1072
3+14.41 =	Nly Gutter Line			0+00 = 4+00.69
3+00.41 =	Nly Line Island Ave		10.97	MARKET ST.
2+50			11.84	3+35.69
2+00			12.50	3+00.69
1+50			13.31	
1+00			14.07	
0+50			14.86	
0+00			15.62	

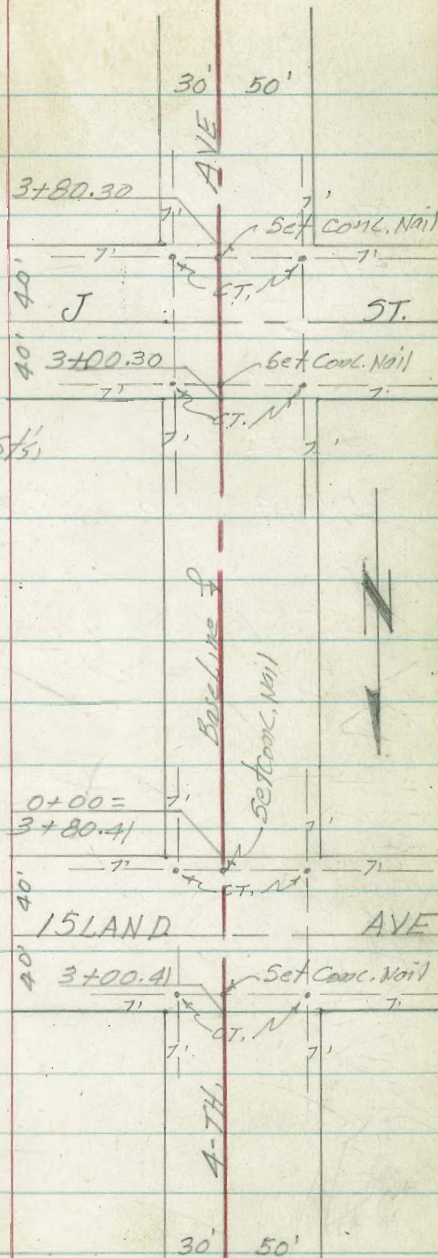


12-13-53

STORM DRAIN SURVEY SLY ALONG 4TH. AVE.

	Lt.	Ct.	Rt.
T.B.M.	5.07	S.E. 7' Ct 4-th + J-St	

3+66.30 = Sly Gutter Line J-St.	4.74
3+40.30 = Ct J-St.	5.05
3+14.30 = Nly Gutter Line	5.34
3+00.30 = Nly Line J-St.	5.57
2+50	6.38
2+00	7.00
1+50	7.69
1+00	8.43
0+50	9.12
0+00	9.76



12-13-53

STORM DRAIN SURVEY SLY. ALONG 4TH AVE

T.B.M. Top N.E. F.H. 4th + K. 4.76 Lt.

± Rt. 4 = 90°15'
R = 20.5'
L = 32.99"
T = 20.59

NOTE: See Pg. 54 for levels checked to Market St.

3+47.06 = B.C. Rt.
3+42.4 6" Rt. ± 2' Dia M.H. (sewer??)
3+40.44 = ± K-St.

0.91 ✓
0.99 $\frac{1.10}{6.5}$
TOP M.H.

3+29.5 29' Rt. ± 22" Gas Co M.H.

1.24
29
TOP M.H.

3+23.5 Top S. Rail Spur line RR.

0.87 TOP RAIL

3+18.8 - Top N. Rail Spur line RR.

0.95 TOP RAIL

3+14.44 = Nly Gutter K-St

1.12

3+00.44 = Nly Line K-St

1.07 1.10 1.45
1235 763
Top E. Rail W. Rail
Top Top 2.18

2+50

2+00

2.64

0+34
Begin R.R. Siding

1+50

3.18

0+00 =

1+13.5 10" Rt. ± 2' Dia. M.H.

3.62

1+00

3.66

10" E
TOP
M.H.

~~2+50~~

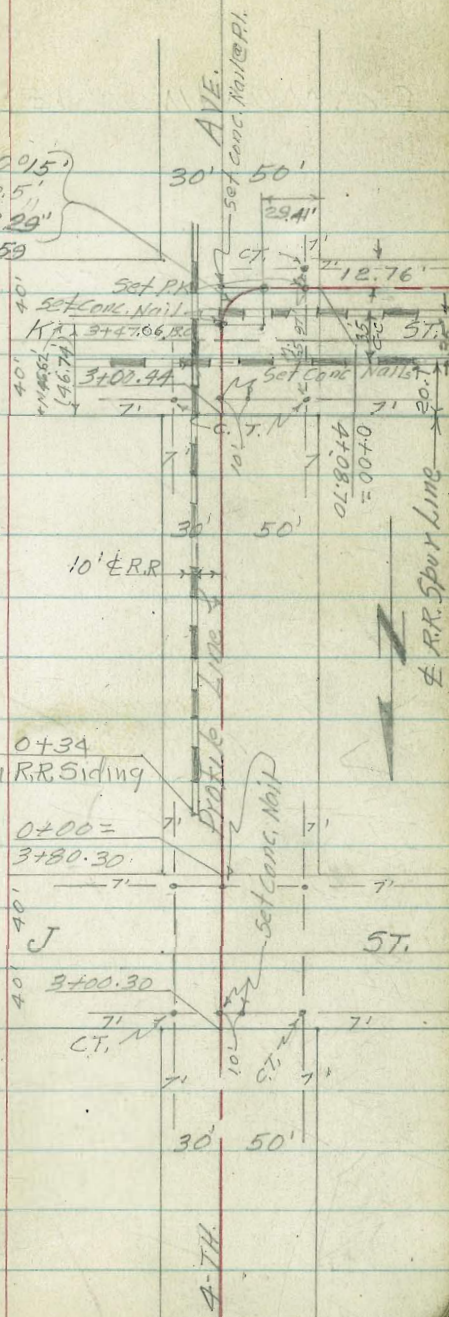
0+34 Begin R.R. Siding 10' H. ± 47' Gauge Rails

3.95 4.02
1235 763
E Rail W. Rail
TOP MD 4.17

0+50

4.62

0+00 = Sly Line J-St.



Note: See Pg 65 for Proposed Re-alignment from
4-th to 3-rd Along K-St.

STORM DRAIN SURVEY WLY 4-TH TO 3RD AVE

Sta.	℄	RT.
2+15.13		
2+15.13 = ℄ 2.5x3.4 Grate		
2+11 - 35' RT. ℄ 0.6" RR X-ing Fast.		
2+00.45 = Ely Line 3-rd Ave		
1+55 - 15' Lt. Deadman		
1+50 Approx. B.C. RT. RR Spur Line		
1+45 = 2 ³ 1/4" ℄ 20" P.P. N ^o 313		
1+16 = 14' Lt. End Bldg.		
1+00		
0+50		
4+08.70 = Wly Line K. St. = 0+00		
4+00 = Top Curb		
3+96 = Gutter		
E.C. 3+79.35		
P.O.C. 3+68.53		
P.O.C. 3+59.52 = 5/4 Rail Spur Line		
P.O.C. 3+54.20 = Nly Rail Spur Line		

T.B.M.

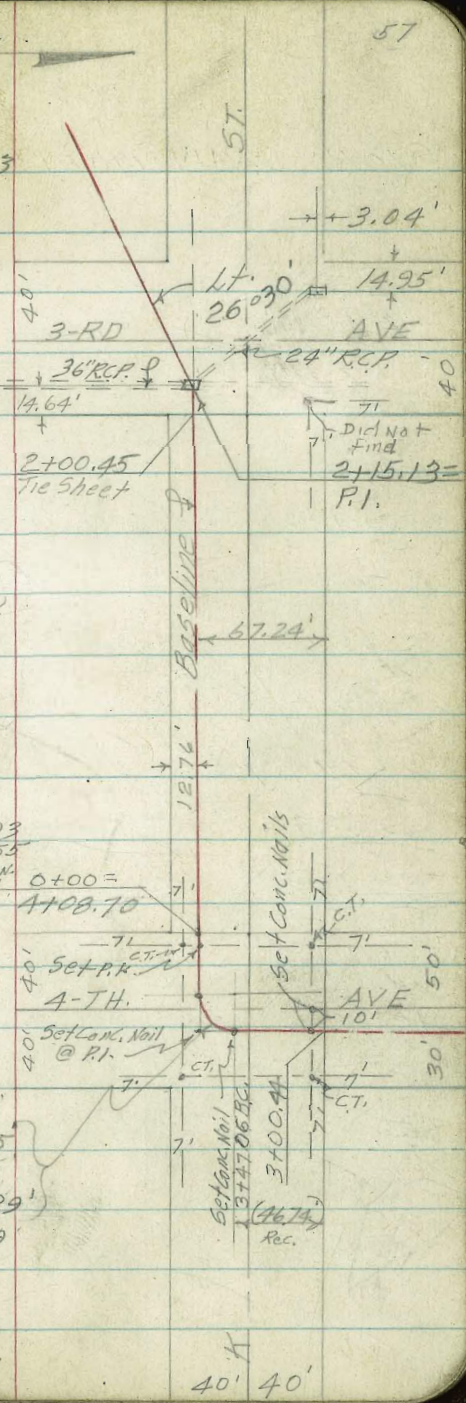
4.76

NOTE: See Pg. 60 for
RR. Ties

12-14-53

Sta.	℄	RT.
-3.58	-3.58	-3.58
1.7' Floor	1.7'	1.7'
F.L. 36"	0.72	F.L. 24"
TOP Grate		
1.33		
1.50	1.27	1.30
	8.85	13.55
	TOP S. Rail	TOP N. Rail
1.83	1.68	
@ Bldg 14		
1.85	1.67	
14		
1.65	1.36	0.94
14		8.85
@ Bldg		13.55
		TOP S. Rail
		TOP N. Rail
1.36		
0.86		
0.95		
0.92		
0.79		
0.72		

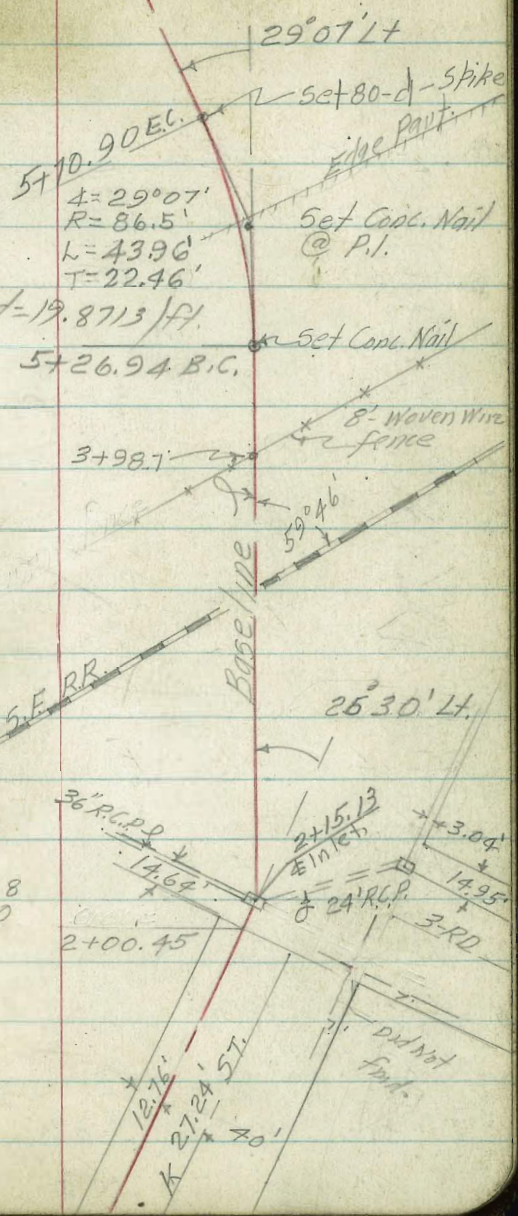
TOP N.E. F.H. 4-TH + K



12-15-53

STORM DRAIN SURVEY SWLY FROM 3-RD. AVE

		Lt.	±	Rt.
3+59.4	Top Rail		1.94	
3+53.2	Top Rail		1.94	
3+50		1.8 50	1.2 25	1.39 1.5 1.3 25 50
3+43.2	Top Rail Main Track		2.09	
3+37.1	Top Rail Main Track		2.10	
3+26.2	Top Rail		1.75	
3+20.4	Top Rail		1.72	
3+00		1.1 50	0.9 25	1.10 1.3 1.1 25 50
2+96.3	Top Rail		1.50	
2+90.8	Top Rail		1.53	
2+75.2	Top Rail		1.51	
2+69.8	Top Rail		1.52	
2+50		1.2 50	1.1 25	1.17 1.6 1.8 25 50
2+42.6	Top Rail		1.83	
2+37.2 T.R.	Top Rail	1.57	1.80	
2+27.6	Top Rail		1.84	
2+22.2	Top Rail		1.87	



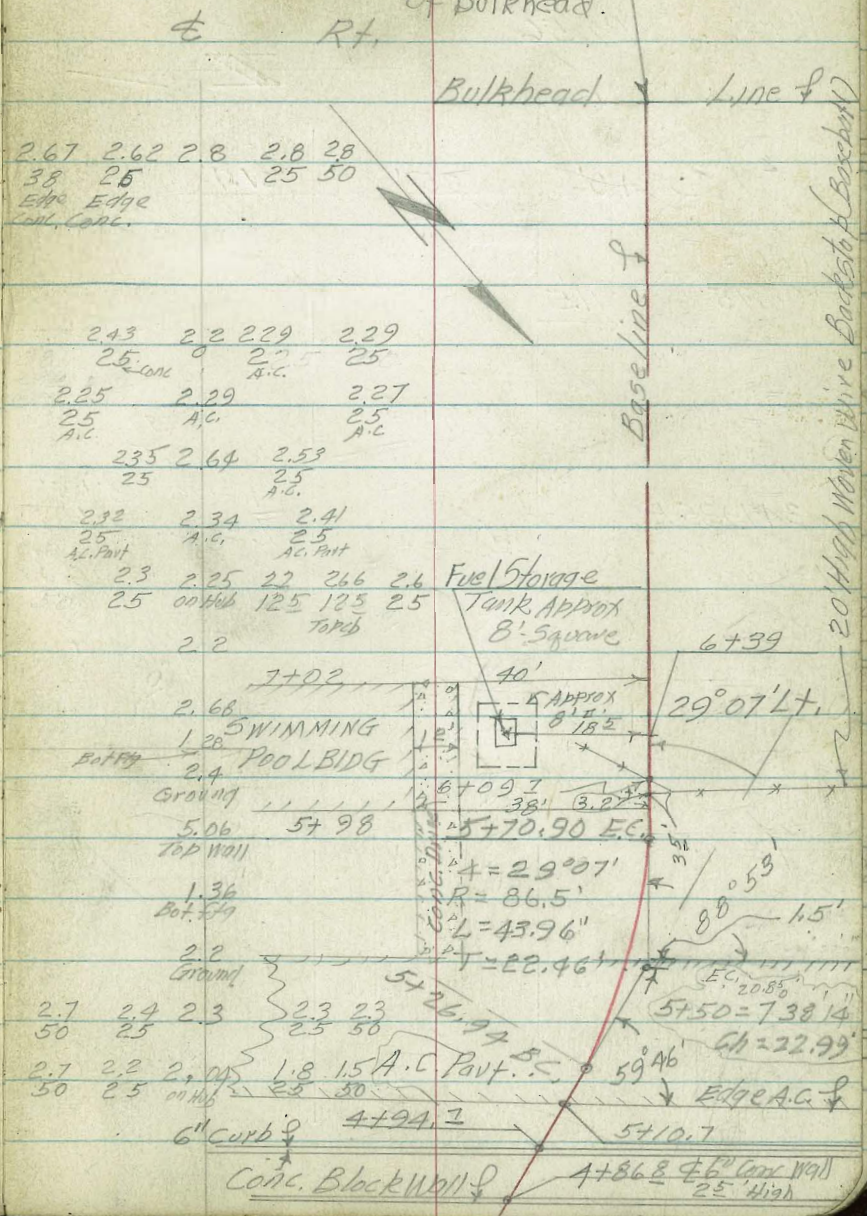
Contd on Pg. 61

12-16-53

STORM DRAIN SURVEY SWLY TO BULKHEAD LINE

12+47.95 = face of Bulkhead

5+73 - 11⁵ RT Deadman
 5+70.90 E.C.
 5+69 - 14' RT Deadman
 5+59 18⁶ RT & Guy Pole
 5+50 P.O.C. Radially
 5+49⁵ Wly Edge A.C. Part Sec Along Part. Edge
 5+26.94 B.C. 1/4 APPROX & Rd Sec. Radially
 5+10² = Ely Edge A.C. Part. Sec Along E. Part
 5+00
 4+94⁷ Gutter DIRT
 4+94⁷ Top Ch.
 4+94⁷ Bot Ftg.
 4+94⁷ = Ely Face 6" Curb (Ground)
 4+86⁸
 4+86⁸
 4+86⁸ & 6" Conc Blk. Wall
 T.B.M. Set P.K. PP APPROX 50' Lt N^o 10.470
 4+50 Sta 4+50
 T.P.
 4+00
 3+98.7 & 8' Woven Wire fence
 3+95 4⁵ RT & 18" P.P. N^o 117



2.67 2.62 2.8 2.8 28
 38 25 25 50
 Edge Edge
 Full Conc.

2.43 2.2 2.29 2.29
 25^{con} 25
 2.25 2.29 2.27
 25 A.C. 25 A.C.

2.35 2.64 2.53
 25 25 A.C.

2.32 2.34 2.41
 25 A.C. 25 A.C. Part

2.3 2.25 2.2 2.66 2.6
 25 00.466 125 125 25
 2.2 Tank

7+02
 2.68
 1.28 SWIMMING
 2.4 POOL BIDG
 5.06 57.98
 1.36
 2.2
 2.7 2.4 2.3 2.3 2.3
 50 25 25 50

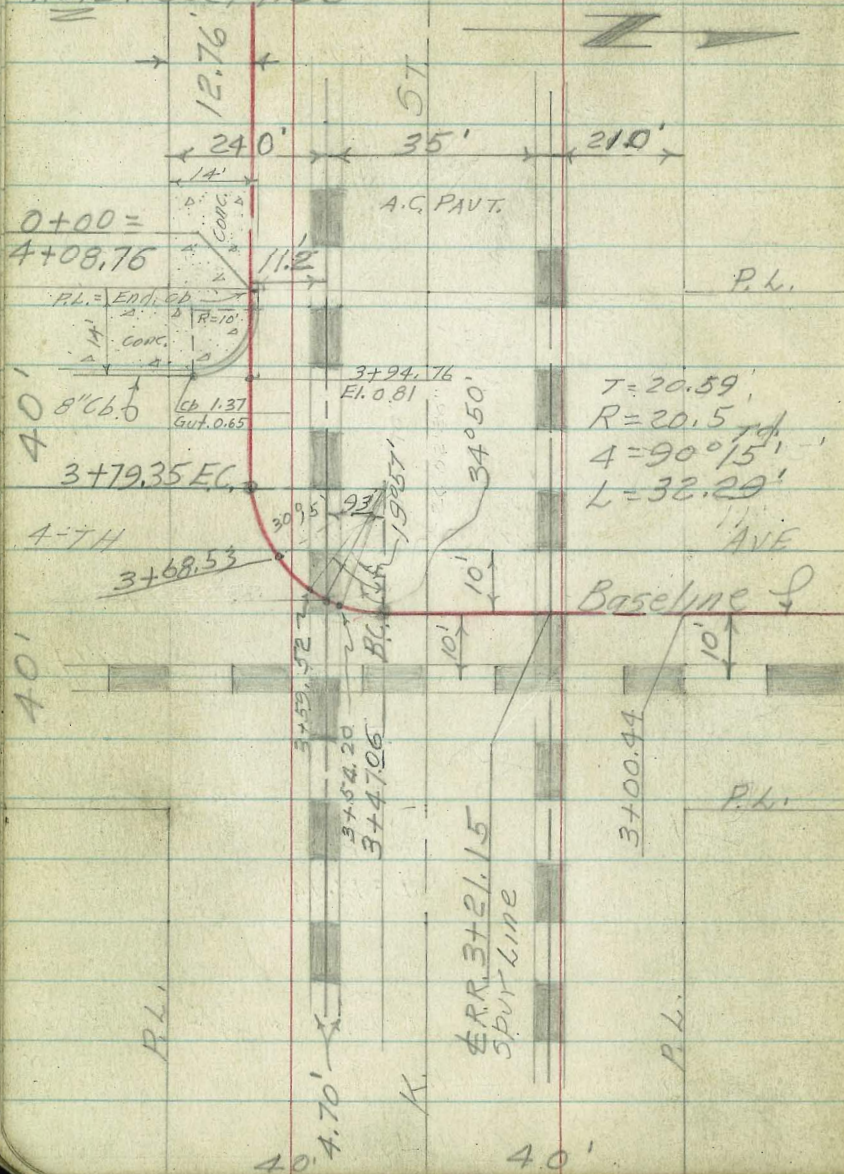
2.7 2.2 2.05 1.8 1.5 A.C. Part. S.S.
 50 25 11.46 25 50

6" Curb
 4+94.7
 Conc. Block Wall

Fuel Storage Tank Approx 8' Square
 6+39
 40'
 5 APPROX 8' 18.2
 29° 07' Lt.
 6+09.7 38' 3.2
 5+70.90 E.C.
 A = 29° 07'
 R = 86.5'
 L = 43.96"
 AT = 22.46'
 5+26.94
 57.50 = 7.38 14
 CH = 22.99
 59' Ab
 Edge A.C.
 5+10.7
 4+86.8 & 6" Conc Wall
 25' High

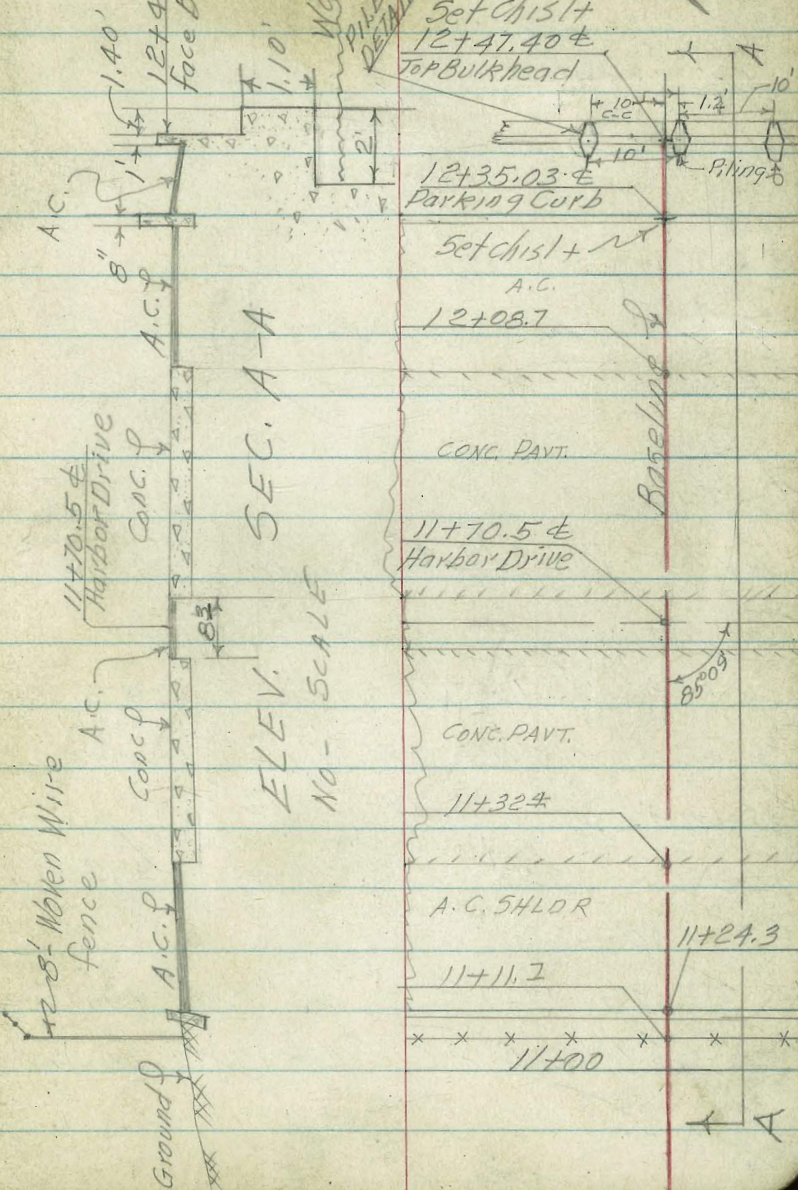
TIES TO SPUR LINES @ 4-TH & K.

NOTE: See pg. 56



BULK-HEAD DETAILS

12-15-53
T. Stamber



12-16-53

±

Rt

Lt.

STORM DRAIN SURVEY SWLY TO BULK HEADLINE

10+50

2.4
50 2.4
25 2.6 2.4
25 2.4
50

10+00

2.8
50 2.8
25 2.78
on stab 2.8
25 2.8
50

9+50

2.9
50 3.0
25 3.2
25 3.1
25 3.2
50

9+00

3.2
50 3.2
25 3.17
on stab 3.4
25 3.4
50

8+50

3.7
50 3.7
25 3.8 3.6
25 3.7
50

8+00

3.7
50 3.7
25 3.74
on stab 3.8
25 3.8
50

7+50

3.5
50 3.5
25 3.6 3.5
25 3.5
50

7+00

3.32

3.19
40 3.08
28 3.3
2.5 3.4
50 3.5
50

6+59-13⁵

Lt. End 20'-High Woven Wire Backstop fence

Conc. @ Bulk Top Conc.

6+50

3.14 3.05 3.2 3.3 3.4
38 2.6 2.5 50
Conc @ Bulk E. Conc.

6+39-18⁵ Lt. ± 18" Dia. Fuel Tank M.H.

3.17 3.0 18⁵ 18⁵

6+23⁵ 13'-Lt. L.P. Woven Wire fence 20'-High (Backstop)

Top NH. Lim. Ground

6+09⁷ ± Woven Wire Backstop (See sketch) Woven wire Backstop 20'-High

6+06⁵ 35 Rt. ± Pt. Thenc. N14 39² Pt. To E.M.

6+00

3.08 3.04 2.94 2.8 2.7
38 2.6 on stab 2.5 50
Conc @ Bulk E. Conc.

5+93 12⁶ Rt. ± 40" Dia. Palm Tree

Conc @ Bulk

5+87¹ ± 5' A.C. Sidewalk Sec Along ± Walk

2.86 3.03 2.84
2.5 2.5
± Walk ± Walk ± Walk

12-16-53

STORM DRAIN SURVEY S.WLY TO BULKHEADLINE

Lt

Rt

12+47.95 Top Cap	-1.65 50	-1.68 25	-1.58	-1.58 25	-1.57 50
12+47.95 = Top Bulkhead @ Wly face	0.90 50	0.87 25	0.89	0.84 25	0.82 50
12+46.9 = Gutter @ Bulkhead	0.30 50	0.35 25	0.26	0.27 25	0.23 50
12+35 ³¹ = Wly. Gutter @ Ch	0.83 50	0.79 25	0.89	0.88 25	0.82 50
12+34 ⁷ Top Curb	1.67 50	1.66 25	1.66 1.66	1.64 25	1.67 50
12+34 ⁷ = Ely Gutter @ Ch.	1.03 50	1.05 25	1.09	1.01 25	1.06 50
12+08 ⁷ = Wly Edge Conc. Harbor Drive	1.75 50	1.66 25	1.55	1.50 25	1.52 50
11+74 ⁶ = Ely Edge Wly Lane Conc. Part.	1.69 50	1.70 25	1.73	1.74 25	1.79 50
11+70 ⁵ & Harbor Drive	1.67 50	1.68 25	1.76	1.75 25	1.76 50
11+66 ³ = Wly Edge Ely Lane Conc. Part.	1.66 50	1.68 25	1.74	1.78 25	1.79 50
11+32 ⁹ = Ely Edge Conc Part Harbor Dr.	1.32 50	1.37 25	1.40	1.43 25	1.48 50
11+24 ⁷ Ely Gutter	0.98 50	1.04 25	1.05	1.04 25	1.04 50
11+24 ³ Ely Curb Harbor Drive	1.63 50	1.66 25	1.70	1.73 25	1.76 50
11+11 ⁷ & 8'-High Woven Wire fence					
11+07 ⁵ 8'-Ht. & 30" Dia. Palm tree					
11+03 ⁵ 8' Lt. & 12" Dia. Floodlight Pole					
11+00 T.P.	1.92				
	1.8 50	1.9 25	1.92 on stub	2.0 25	2.1 50

12-16-53

STORM DRAIN SURVEY SWLY TO BULKHEAD LINE

Lt. & Pt.

T.B.M. 4.75 ~

4.76 (See Pg. 56)

T.P. 1.60

T.B.M. 3.09 ~

3.10 (See Pg. 59)

T.P. 3.58

12+50 Ground

-120

12+49.35 Bottom Cap

-2.65 -2.68 -2.58 -2.58 -2.57
50 23 25 50

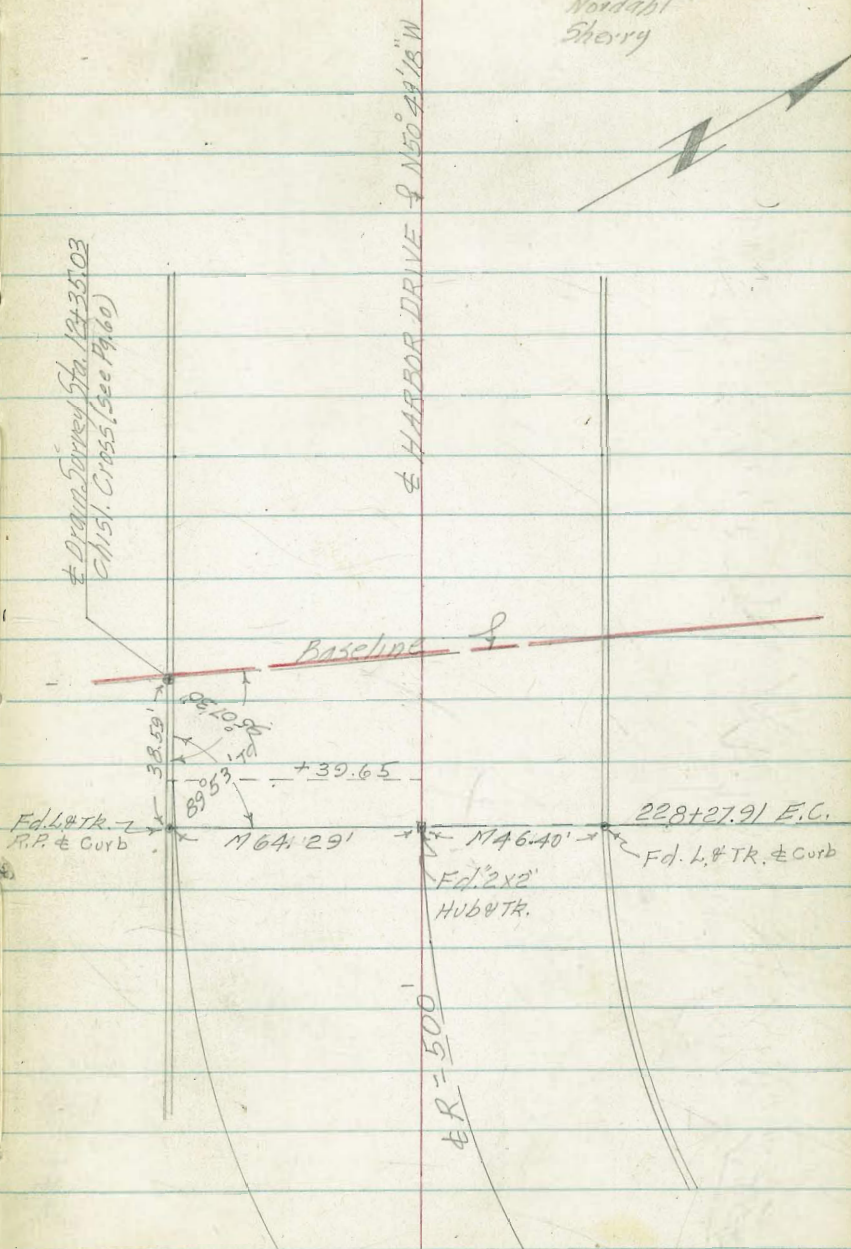
1-15-54

Stamped
Huffman
Nordahl
Sherry

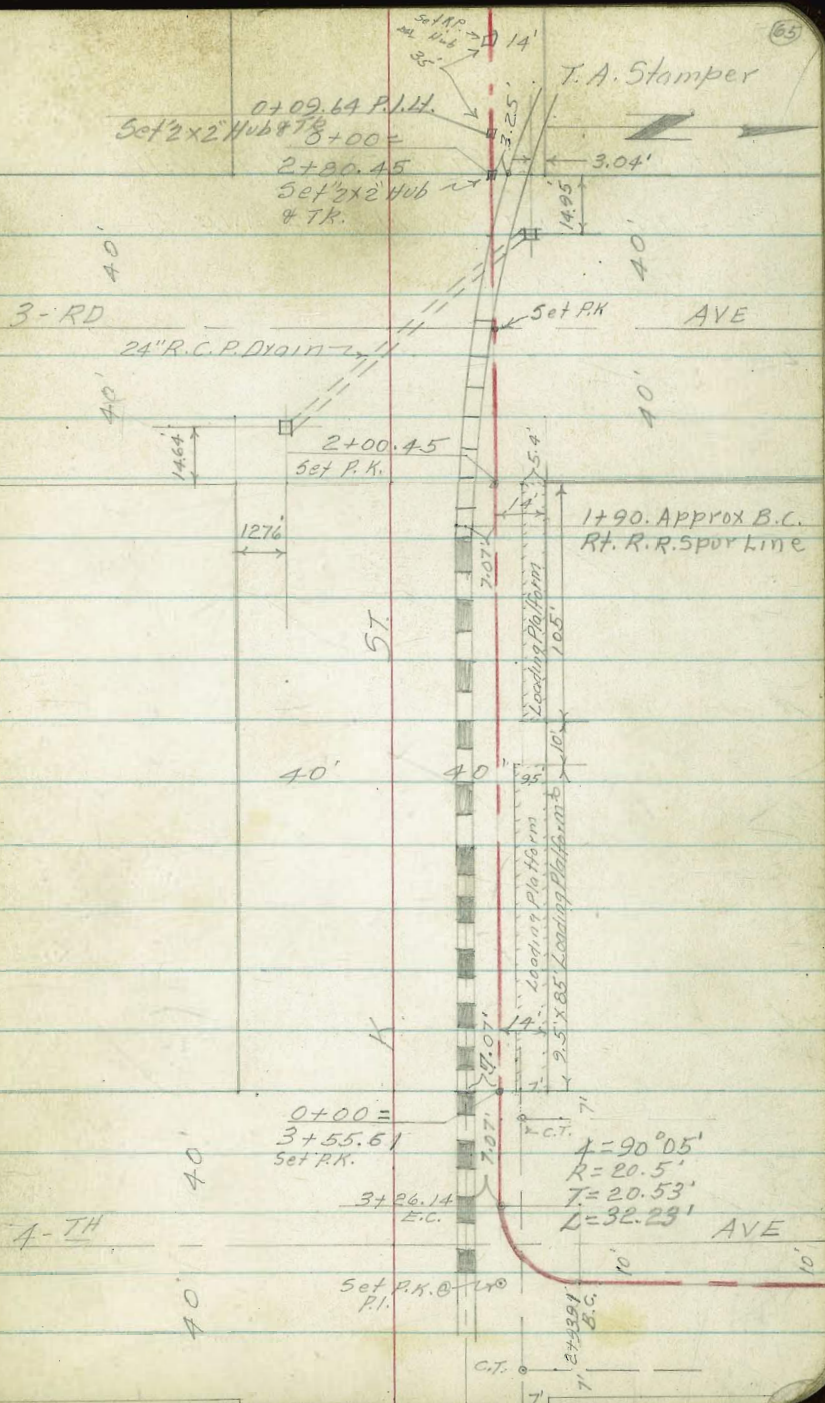
(69)

TIE OF STORM DRAIN SURVEY TO HARBOR DRIVE W.O. 32361

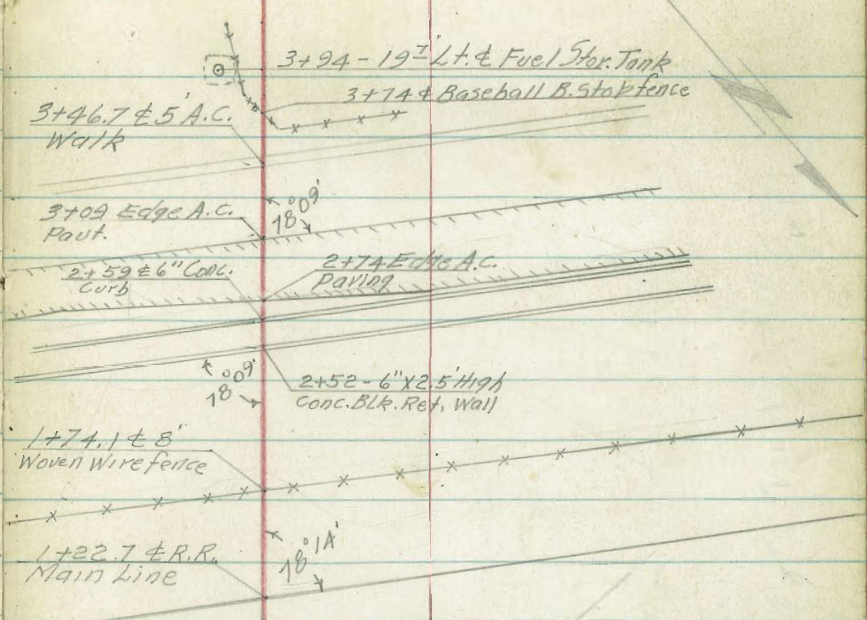
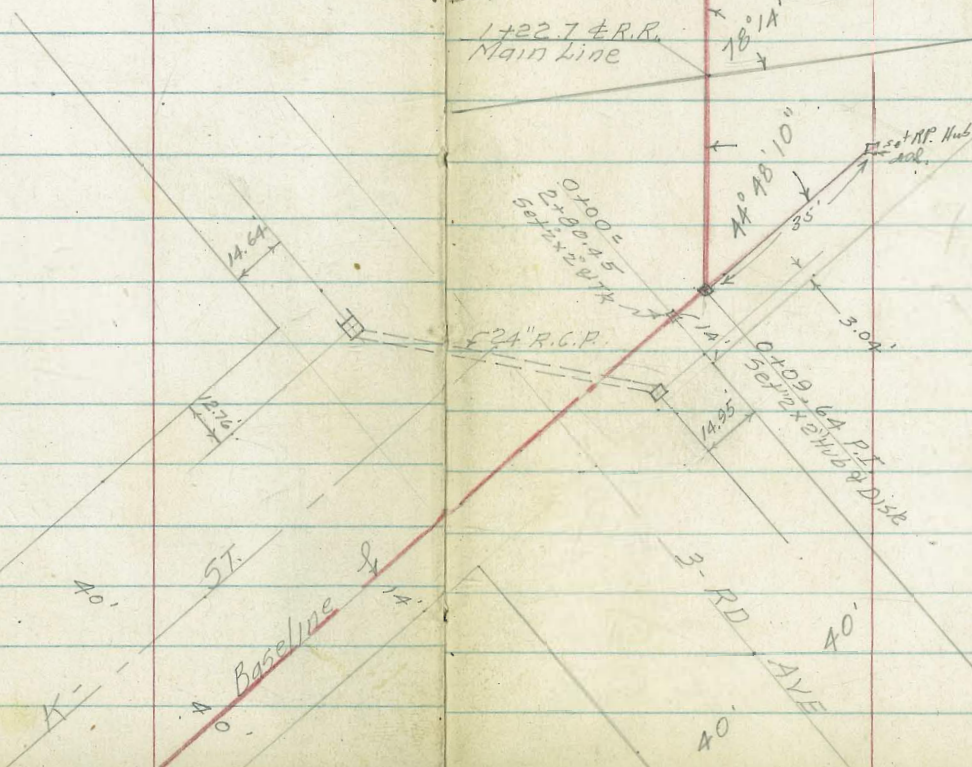
Ref. Plans State Hi-way
for Harbor Drive
Between Roosevelt St. in Nat. City
9 1/2" St. in San Diego



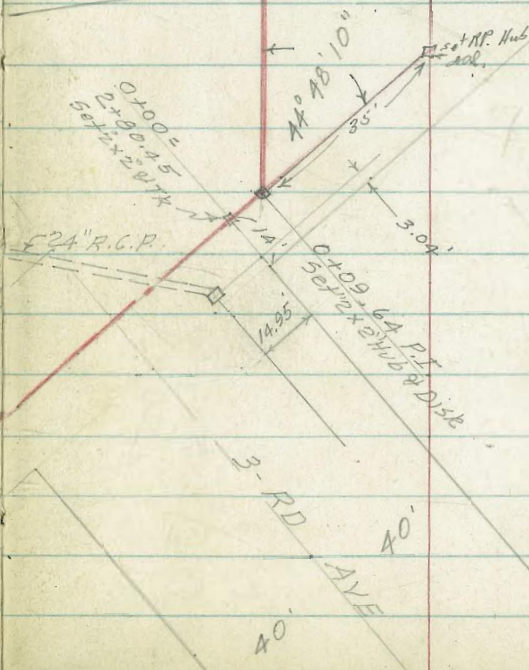
ADDITIONAL NOTES ON BUSINESS DIST.
DRAINAGE ALIGNMENT & TOPO FEATURES
K-5T; 4-TH AVE TO 3-RD AVE
PROPOSED RE-ALIGNMENT. (See Pg. 51)

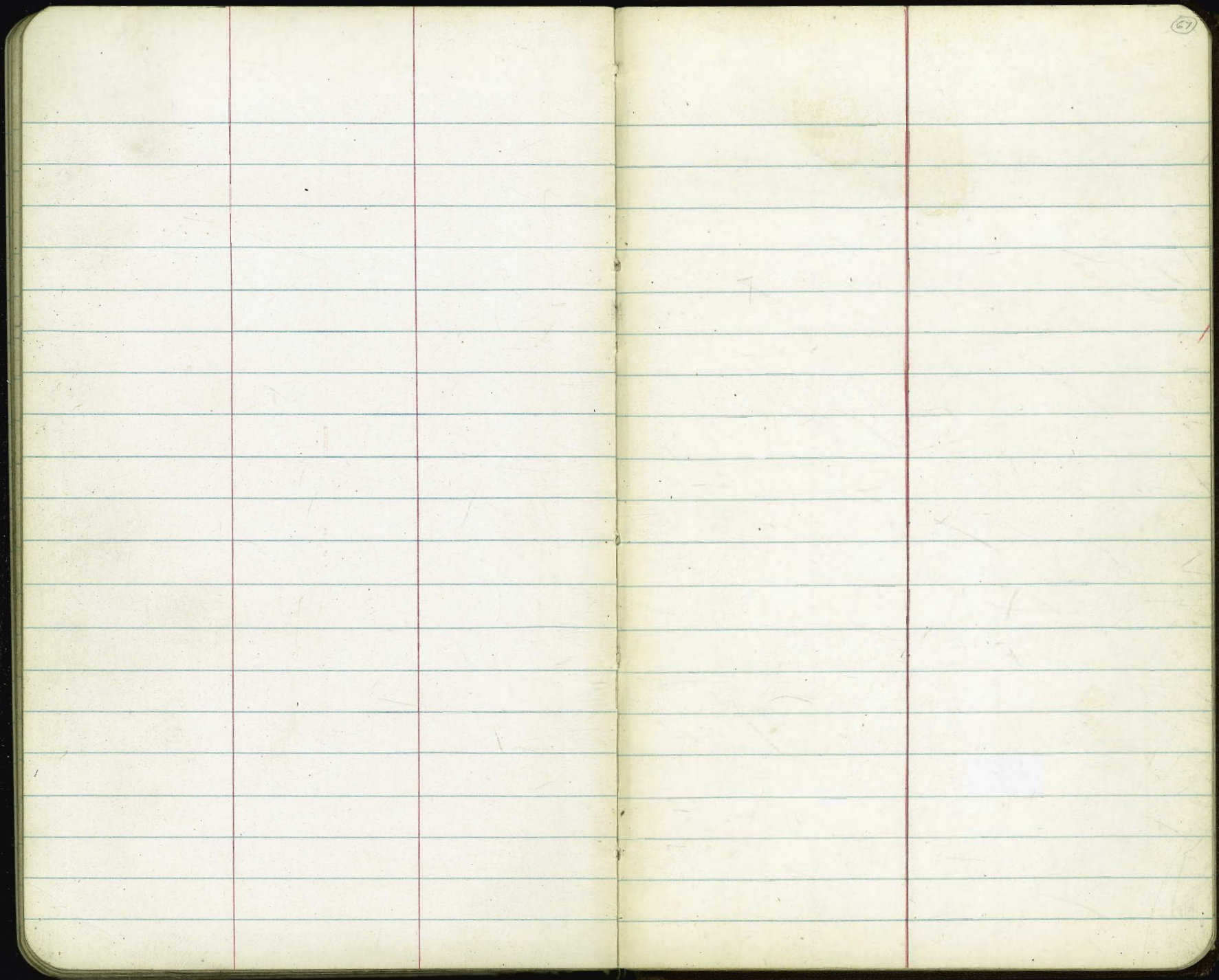


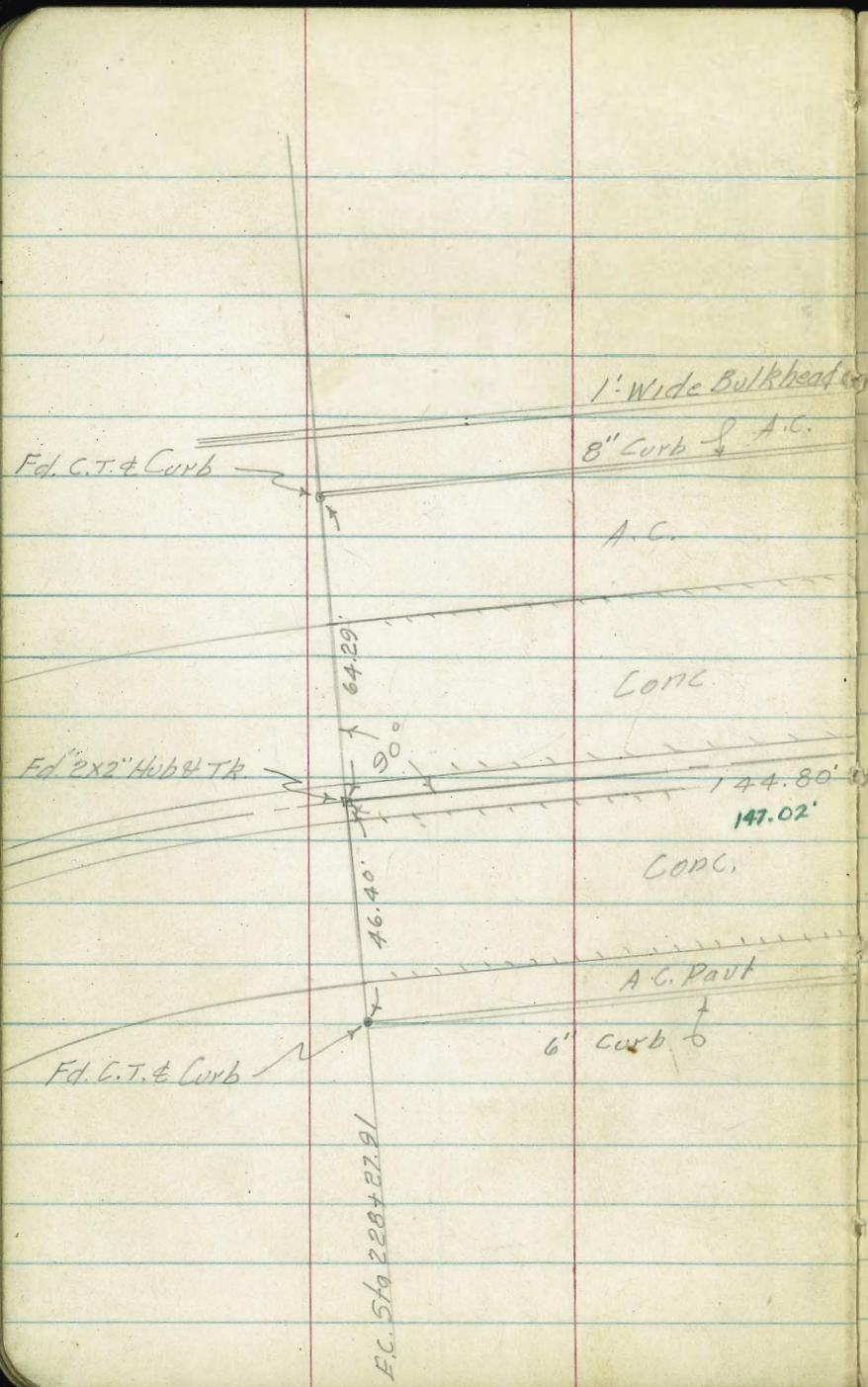
STORM DRAIN SURVEY PROPOSED
 RE-ALIGNMENT FROM 4-TH AVE TO
 BULKHEAD LINE



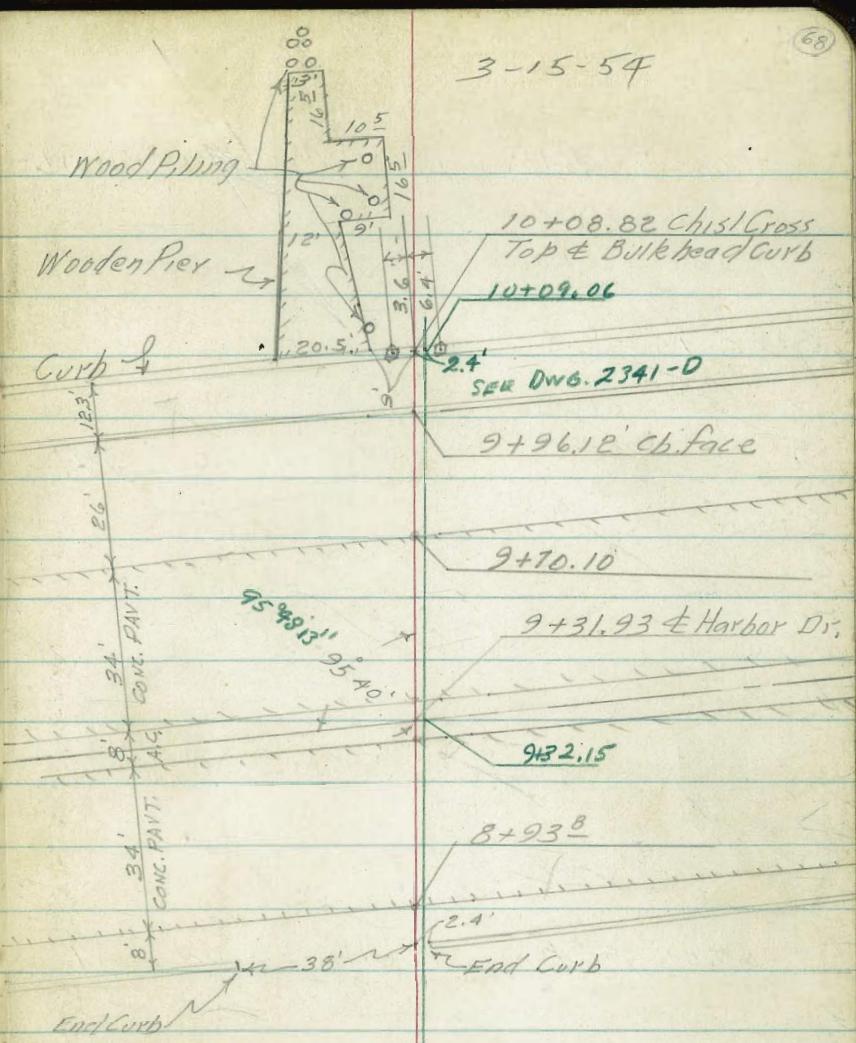
NOTE:
 sketch cont'd
 Pg 68







Ec. Sta 228+27.91



3-15-54

(68)

NOTE: For further Details Bulkhead
 (See Pg. 60)

STORM DRAIN SURVEY - ADDITIONAL DATA

Lt. E Rt.

3-12-54

NOTE:

Direct Elev. Rod used

Stamper
Huffman
Nordahl
Sherry

⊠
⊠
⊠
⊠

2+00.45 = Fly Line 3-rd Ave

1.42 1.34 1.42 1.71
8.62 3.92 0 8.6
Top Rail Top Rail Edge Platform

1+90 - 7.07' Lt. & RR Spur Approx B.C.Pt.

1.41 1.30 1.38 1.70
9.42 4.72 0 8.6
T. Rail T. Rail Edge Platform

1+50

1.33 1.30 1.39 1.72
9.42 4.72 0 8.6
T. Rail T. Rail Edge Platform

1+00

1.39 1.36 1.54 1.72
9.42 4.72 0 8.6
T. Rail T. Rail Edge Platform

0+50

1.38 1.38 1.50 1.71
9.42 4.72 0 4.5
T. Rail T. Rail Edge Platform

3+55.51 = Wly Line 4-th Ave = 0+00 Ahead

1.05 1.05 1.39 1.65
9.42 4.72 0 4.5
T. Rail T. Rail Edge Platform

3+26.14 = E.C.

1.11 1.08 1.21 1.30
9.42 4.72 0 4.5
Top Rail Top Rail Edge Platform

3+10.02 = P.O.C. 4 = 45° 02' 30"

2+93.91 B.C. Pt Δ = 90° 05' R = 20.5'
L = 32.23' T = 20.53'

B.M.

4.76

Top N.E. F.H. 4-th & K. See Pg. 56

Note. Direct Elev. Rod. Used.

Lt

±

Rt.

(70)

3-12-54

0+31⁷ Top Rail $\begin{array}{r} 1.89 \\ 0 \\ \text{T. Rail} \end{array}$ 0+23⁵ Top Rail - Siding $\begin{array}{r} 1.85 \\ 0 \\ \text{T. Rail} \end{array}$ 0+20⁵ Top Rail - Spur Line $\begin{array}{r} 1.86 \\ 0 \\ \text{T. Rail} \end{array}$ 0+18⁵ Top Rail - To Siding $\begin{array}{r} 1.88 \\ 0 \\ \text{T. Rail} \end{array}$ 0+15⁵ Top Rail Spur Line $\begin{array}{r} 1.90 \\ 0 \\ \text{T. Rail} \end{array}$ T.P. on Hub \downarrow

1.83

0+09.64 = P.I. 14° 48' 10" Lt. Sec on Split L

 $\begin{array}{r} 1.5 \\ 25 \end{array} \quad \begin{array}{r} 1.9 \\ 0 \end{array} \quad \begin{array}{r} 1.3 \\ 25 \end{array}$

225 Rt. Begin 6' Woven Wire fence

2+80.45 = Wly Line 3-rd Ave = 0+00 Ahead

 $\begin{array}{r} 1.5 \\ 25 \end{array} \quad \begin{array}{r} 1.9 \\ 0 \end{array} \quad \begin{array}{r} 1.86 \\ 3.75 \\ \text{Top Rail} \end{array} \quad \begin{array}{r} 1.76 \\ 8.00 \\ \text{Top Rail} \end{array} \quad \begin{array}{r} 1.4 \\ 25 \end{array}$

2+66.4 - Intersec. S. Rail Spur Line

 $\begin{array}{r} 1.77 \\ 0 \\ \text{Top Rail} \end{array}$

2+40 ± 3-rd Ave @ Intersec. N. Rail Spur Line

 $\begin{array}{r} 1.58 \\ \text{Top Rail} \end{array} \quad \begin{array}{r} 1.47 \\ 0 \\ \text{Top Rail} \end{array} \quad \begin{array}{r} 1.51 \\ 25 \end{array}$

Lt

C

Rt

(71)

3-12-54

1+09³ - Top Rail1.75
0
T. Rail

1+05 - Top Rail

1.76
0
T. Rail

1+00

1.2
251.0
01.2
250+83¹ Top Rail1.64
0
T. Rail0+78² Top Rail1.60
0
T. Rail0+65¹ Top Rail1.58
0
T. Rail0+60³ Top Rail1.59
0
T. Rail

0+50

1.2
251.1
01.3
250+36⁵ Top Rail1.88
0
T. Rail

2+52

NOTE: for fig This Wall See Pg. 56

2+52 @ 6" x 2' High Conc. Block Wall

2+50

2+00

1+70¹ @ 8' High Woven Wire fence

T.P. on stub sta 1+73 1.55

1+50

1+39² - Top Rail

1+34⁵ - Top Rail

1+25¹ - Top Rail

1+20³ - Top Rail

Lt.

@

Rt.

(78)

3-12-54

5.04

0
Top Wall

2.3

2.3

0
Ground

2.3

2.3

2.2

2.5

0

2.5

2.3

2.3

2.2

2.5

0

2.5

1.8

1.7

1.5

2.5

0

2.5

1.97

0
T. Rail

1.97

0
T. Rail

2.08

0
T. Rail

2.08

0
T. Rail

0
T. Rail

Lt-

C

Rt.

(74)

3-12-54

7+50

 $\frac{2.9}{25}$ $\frac{2.9}{0}$ $\frac{3.0}{25}$

7+23.27 P.O.T. T.B.M on Hub

3.07

7+00

 $\frac{3.1}{25}$ $\frac{3.1}{0}$ $\frac{3.1}{25}$

6+50

 $\frac{3.4}{25}$ $\frac{3.4}{0}$ $\frac{3.5}{25}$

T.P. on stub sta. 6+00

3.66

6+00

 $\frac{3.6}{25}$ $\frac{3.7}{0}$ $\frac{3.8}{25}$

5+50

 $\frac{3.7}{25}$ $\frac{3.7}{0}$ $\frac{3.7}{25}$

5+00

 $\frac{3.5}{25}$ $\frac{3.5}{0}$ $\frac{3.6}{25}$

4+50

 $\frac{3.2}{25}$ $\frac{3.4}{0}$ $\frac{3.4}{25}$ 4+18-13⁵ Lt. End baseball backstop fence

4+00

 $\frac{3.1}{25}$ $\frac{3.2}{0}$ $\frac{3.1}{25}$

Lt.

±

Pt.

(73)

3-12-54

9+27⁹³ S/E Edge of Nly Lane Cont. Pavt.

1.83	1.84	1.87
25	0	25
Cont.	Cont.	Cont.

Nly Edge Nly Lane
8+93⁸ Sec. Along Edge Cont. Pavt Harbor Dr

1.46	1.51	1.52
25	0	25
Cont.	Cont.	Cont.

Sec. Along Harbor Drive
8+85⁸ = face Curb - 2³ Rt along Harbor Dr.

1.76	1.07	1.22	1.19	1.82	1.16	1.84
38 ²	38 ²	0	2 ⁴	2 ⁴	25	25
cb	G	Gut.	G	cb	G	cb

8+73-± 8'-High Cyclone Wirefence

8+73-5² Rt. ± Tel. Pole8+70.5-9[±] Rt. ± 30" Palm Tree8+66-20³ Lt. ± 24" Palm TreeT.B.M. on chsl "X" sta 12+35.03 (old line) 1.66 ~ 1.66
see pg. 628+64⁵ 3[±] Rt. ± P.P. (for flood lights)

8+50

2.1	2.4	2.4
25	0	25

8+00

2.5	2.7	2.7
25	0	25

10.3.

L. E Rt

76

3-15-54

9+96.0 Sec Along back of Curb

0.78	0.74	0.72
25	0	25
A.C.	A.C.	A.C.

9+96.12 Top of Curb Sec

1.66	1.60	1.56
25	0	25
cb	cb	cb

9+96.12 Sec Along Sly Curb Harbor Drive

0.98	1.02	0.98
25	0	25
A.C.	A.C.	A.C.

Sec Along Harbor Drive
9+70.10 Sly Edge of Sly Lane Conc Pavt

1.52	1.52	1.52
25	0	25
CONC.	CONC.	CONC.

Sec Along Harbor Dr
9+35.93 Sec on Nly Edge of Sly Lane Conc Pavt

1.80	1.84	1.89
25	0	25
CONC.	CONC.	CONC.

9+31.93 - E Harbor Drive Sec Along Harbor Dr

1.80	1.83	1.88
25	0	25
A.C.	A.C.	A.C.

lt. ± rt.

3-15-54

(77)

NOTE: For Notes Market St. 7-th to 10-th
2
Ave's See F.B. 2323

T.B.M.

3?
1.66 =

3?
1.66 (see p. 74)

1+10

- 11.8

Ground

10+09.72 = Face of Bulkhead Sec.

-1.54
25

-1.52
0

-1.55
25

10+08.42 Top of Bulkhead Sec.

0.92
25

0.91
0

0.92
25

10+08.42 Gutter line @ Bulkhead

0.22
25

0.17
0

0.18
25

A-G.

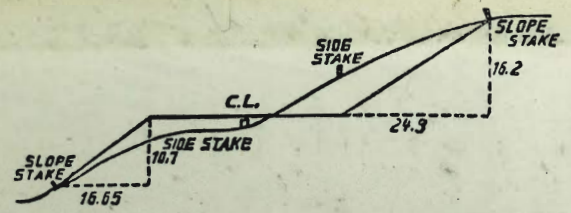
A-G.

A-G.

4th
30' W 1/4 E P.L.

89-55-

10408.82



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.
SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.00	0.15	0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	0
1	1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	1
2	3.00	3.15	3.30	3.45	3.60	3.75	3.90	4.05	4.20	4.35	2
3	4.50	4.65	4.80	4.95	5.10	5.25	5.40	5.55	5.70	5.85	3
4	6.00	6.15	6.30	6.45	6.60	6.75	6.90	7.05	7.20	7.35	4
5	7.50	7.65	7.80	7.95	8.10	8.25	8.40	8.55	8.70	8.85	5
6	9.00	9.15	9.30	9.45	9.60	9.75	9.90	10.05	10.20	10.35	6
7	10.50	10.65	10.80	10.95	11.10	11.25	11.40	11.55	11.70	11.85	7
8	12.00	12.15	12.30	12.45	12.60	12.75	12.90	13.05	13.20	13.35	8
9	13.50	13.65	13.80	13.95	14.10	14.25	14.40	14.55	14.70	14.85	9
10	15.00	15.15	15.30	15.45	15.60	15.75	15.90	16.05	16.20	16.35	10
11	16.50	16.65	16.80	16.95	17.10	17.25	17.40	17.55	17.70	17.85	11
12	18.00	18.15	18.30	18.45	18.60	18.75	18.90	19.05	19.20	19.35	12
13	19.50	19.65	19.80	19.95	20.10	20.25	20.40	20.55	20.70	20.85	13
14	21.00	21.15	21.30	21.45	21.60	21.75	21.90	22.05	22.20	22.35	14
15	22.50	22.65	22.80	22.95	23.10	23.25	23.40	23.55	23.70	23.85	15
16	24.00	24.15	24.30	24.45	24.60	24.75	24.90	25.05	25.20	25.35	16
17	25.50	25.65	25.80	25.95	26.10	26.25	26.40	26.55	26.70	26.85	17
18	27.00	27.15	27.30	27.45	27.60	27.75	27.90	28.05	28.20	28.35	18
19	28.50	28.65	28.80	28.95	29.10	29.25	29.40	29.55	29.70	29.85	19
20	30.00	30.15	30.30	30.45	30.60	30.75	30.90	31.05	31.20	31.35	20
21	31.50	31.65	31.80	31.95	32.10	32.25	32.40	32.55	32.70	32.85	21
22	33.00	33.15	33.30	33.45	33.60	33.75	33.90	34.05	34.20	34.35	22
23	34.50	34.65	34.80	34.95	35.10	35.25	35.40	35.55	35.70	35.85	23
24	36.00	36.15	36.30	36.45	36.60	36.75	36.90	37.05	37.20	37.35	24
25	37.50	37.65	37.80	37.95	38.10	38.25	38.40	38.55	38.70	38.85	25
26	39.00	39.15	39.30	39.45	39.60	39.75	39.90	40.05	40.20	40.35	26
27	40.50	40.65	40.80	40.95	41.10	41.25	41.40	41.55	41.70	41.85	27
28	42.00	42.15	42.30	42.45	42.60	42.75	42.90	43.05	43.20	43.35	28
29	43.50	43.65	43.80	43.95	44.10	44.25	44.40	44.55	44.70	44.85	29
30	45.00	45.15	45.30	45.45	45.60	45.75	45.90	46.05	46.20	46.35	30
31	46.50	46.65	46.80	46.95	47.10	47.25	47.40	47.55	47.70	47.85	31
32	48.00	48.15	48.30	48.45	48.60	48.75	48.90	49.05	49.20	49.35	32
33	49.50	49.65	49.80	49.95	50.10	50.25	50.40	50.55	50.70	50.85	33
34	51.00	51.15	51.30	51.45	51.60	51.75	51.90	52.05	52.20	52.35	34
35	52.50	52.65	52.80	52.95	53.10	53.25	53.40	53.55	53.70	53.85	35
36	54.00	54.15	54.30	54.45	54.60	54.75	54.90	55.05	55.20	55.35	36
37	55.50	55.65	55.80	55.95	56.10	56.25	56.40	56.55	56.70	56.85	37
38	57.00	57.15	57.30	57.45	57.60	57.75	57.90	58.05	58.20	58.35	38
39	58.50	58.65	58.80	58.95	59.10	59.25	59.40	59.55	59.70	59.85	39
40	60.00	60.15	60.30	60.45	60.60	60.75	60.90	61.05	61.20	61.35	40
41	61.50	61.65	61.80	61.95	62.10	62.25	62.40	62.55	62.70	62.85	41
42	63.00	63.15	63.30	63.45	63.60	63.75	63.90	64.05	64.20	64.35	42
43	64.50	64.65	64.80	64.95	65.10	65.25	65.40	65.55	65.70	65.85	43
44	66.00	66.15	66.30	66.45	66.60	66.75	66.90	67.05	67.20	67.35	44
45	67.50	67.65	67.80	67.95	68.10	68.25	68.40	68.55	68.70	68.85	45
46	69.00	69.15	69.30	69.45	69.60	69.75	69.90	70.05	70.20	70.35	46
47	70.50	70.65	70.80	70.95	71.10	71.20	71.40	71.55	71.70	71.85	47
48	72.00	72.15	72.30	72.45	72.60	72.75	72.90	73.05	73.20	73.35	48
49	73.50	73.65	73.80	73.95	74.10	74.25	74.40	74.55	74.70	74.85	49
50	75.00	75.15	75.30	75.45	75.60	75.75	75.90	76.05	76.20	76.35	50

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