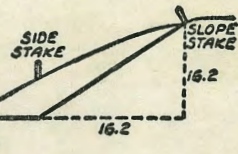


2097

1877

MICROFILMED

DEC 31 1964



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.

2097

INDEXED

Completely

except pages # 48, 54, 55, 74, 75

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	.81	.92	1.04	1.29	1.42	1.54	1.66		
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	.711	.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		

Ford Page 1

Storm Drain S.W. 1/4 170 64

" " Federal Blvd 31+45.83 EC 65

" " 11 10 66

Wabash Blvd Storm Drain 164+12 Extra 69

Wabash Blvd Channel Change 126+0 to 137+50 70-73

Lexington Ave & Extra 16 Park Senter Grader 76-77

Habash Blvd. Sec H Sewer Grades	2-8
Accepts Road Storm Drain 104+50	8
" " Federal Blvd. Interchange Culverts	9
Habash Canyon Creek Channel Change 104+11-25+29	
Storm Drain HW 6C 11+04	12
" " SW 1L 4+94.75	13
" " HW 1L 1+97	14
Sewer Grades Alley North of Market St	15
" " Broadway East of 34th St	16
Chollar Creek Channel Change #150	17-18-58-59
Storm Drain SW 1L 3+50	
Storm Drain Federal Blvd 34+49	19
Storm Drain Market St + Federal Blvd	20-21
Storm Drain Habash Blvd 110+50	22
" " " " 98+0	23
" " " " 106+50	24
Storm Drain Habash Blvd 115+50	20
" " " " 120+50	21
" " " " 125+50	22
" " " " 131+0	23
" " " " 133+50	24
" " " " 138+50	25

Storm Drain Habash Blvd	145+71	36
Storm Drain Habash Blvd	151+0	37
" " "	158+ <del>50</del> <sup>55</sup>	38
" " "	162+58	39
" " "	165+76	40
" " "	169+50	41
" " "	174+18	42
" " "	176+35	43
" " "	183+10	44
" " "	184+50	45
" " " Rt Lane	189+50	46
" " "	195+83	47-48
" " "	200+25	49
" " "	204+50	50
" " "	209+28	51
" " "	210+0	52
" " "	216+76	53-55
Storm Drain Federal Blvd	41+4686 RC	60
" " " "	46+50	61
" " HW 1L	5+69	62
" " HW 1L	1+0	63

Cont Page 0

Wabash Blvd. Section F  
 Survey #1 Sta 133

Sheet 24  
 Shoulder  
 Grade 36  
 offset 5 ft + Grade

Feb. 28-50  
 H. Sisson  
 Smith  
 Chavez  
 Clark

Rod Ground Elev Invert  
 Grade

INDEXED  
 W.K.  
 MAR 9 1950

+34.48 = End <sup>54</sup> 100.6 98.67 <sup>7.87</sup>  
<sub>5.14</sub>  
<sub>c 2.231</sub>

+00.86 67 99.3 98.50 <sup>7.54</sup>  
<sub>5.92</sub>  
<sub>c 1.621</sub>

+67.24 61 99.9 <sup>7.70</sup>  
<sub>0.05</sub> 98.34 <sub>6.62</sub>  
<sub>c 1.087</sub>

+33.62 5.0 101.0 98.17 <sup>7.87</sup>  
<sub>4.72</sub>  
<sub>c 3.157</sub>

0 + 0 = Existing M.H. <sup>3.0</sup> 103.0 98.00 <sup>8.04</sup>  
<sub>1.62</sub>  
<sub>c 6.420</sub>  
 20" MH  
 Rim

B.M. 1.62 106.04 104.42 <sup>x 0.75 MH</sup>  
<sub>Rim 60</sub>  
<sub>1.70</sub>  
<sub>1.32 + 1.50</sub>

133 + 39.50

Shoulder  
 109.87

98.57  
 102.88

134.98

Existing  
 Man Hole  
 Elev 98.00

152.10

132 + 63

127.00

Wabash Blvd.

Wabash Blvd. Section 7  
 Sewer Grades Station 145+60

Sheet 24

Sept 6-51 3

Rod Ground Elev Invert  
 Grade

Rod	Ground Elev	Invert Grade
170		121.30 $\begin{matrix} 12.88 \\ 5.02 \\ 9.06 \\ 10.00 \end{matrix}$
+80.50		121.41 $\begin{matrix} 12.87 \\ 2.20 \\ 10.37 \end{matrix}$
+60 : <del>Z</del> Wabash		120.91 $\begin{matrix} 12.77 \\ 1.77 \\ 11.00 \end{matrix}$
+38.33		120.69 $\begin{matrix} 12.99 \\ 5.93 \\ 9.66 \end{matrix}$
+17.67		120.98 $\begin{matrix} 13.20 \\ 6.38 \\ 6.82 \end{matrix}$
070		120.90 $\begin{matrix} 13.88 \\ 11.20 \\ 6.78 \end{matrix}$
B.M. 379	133.68	130.89 $\begin{matrix} \text{on RP 10.6} \\ \text{Drop 1/4 ft} \\ \text{Page 86} \end{matrix}$

120.30 60

145+60 P.O.C.  
 70 | 131.30

Wabash Blvd

Wabash Blvd Sec. H  
 Juniper St. Sewer Grades  
 Sta. 1537 to 16

	Ground	Invert	Grade	
2+0 = Existing M.H.	169.8	165.00	5.99	5.97
+64.14 = M.H. #1	163.1	139.54	31.45	22.57
TP	170.99	158.49	21.91	12.50
1+31.31	158.5	138.16	20.34	20.33
+98.49	156.8	136.79	20.01	19.94
+65.66	154.1	135.41	18.66	19.76
+32.83	145.5	134.03	11.04	13.51
TP	160.07	147.08	12.99	14.82
0+0 = Exist. M.H.	132.99	132.65	0.34	0.34
B.M.	147.47	136.20	11.27	11.27

Station off  
 Set 10 South  
 of 1/2 Ditch  
 Sheet 17

	Ground	Invert	Grade	
2+00			8.68	8.97
+64.14 = M.H. #1	144.17	139.54	4.63	5.71
TP	144.17	139.54	4.63	4.63
1+31.31	144.17	139.54	4.63	4.63
+98.49	144.17	139.54	4.63	4.63
+65.66	144.17	139.54	4.63	4.63
+32.83	144.17	139.54	4.63	4.63
TP	144.17	139.54	4.63	4.63
0+0 = Exist. M.H.	132.05	132.65	0.60	0.60
B.M. #2	148.23	136.20	12.03	12.03

Feb 28-50  
 H. S. Irwin  
 D. Smith  
 F. Chavez  
 J. Clark

#2 Re Stake  
 May 11-50  
 H. S. Irwin  
 Existing Sewer  
 Man Hole

Wabash Blvd

156' x 33' 6" Pipe

8" Sewer

1.05 #2  
 2.97  
 10.50  
 144.17 Top M.H.

139.54 Invert  
 10 R.P.

x on M.H. #2  
 Set from  
 Wabash

Yabach Blvd Sec H  
 Sewer Grader 183+0 Rt Lane

Stakes offset 10' South  
 Street 24' Plan + Grader  
 " 20' Shoulder Grader

March 1, 50  
 Re Stake H. S. Jirou  
 May 8, 50 D. Smith  
 H. S. Jirou E. Chavez  
 D. Smith  
 E. Chavez  
 C. A.

	Red	Green	Profile Ground	Invert	
1+64	8.5	197.0	186.60	18.85 2.41 c 17.44	
1+31.2	11.0	194.4	184.68	20.77 8.04 c 12.73	
TP	8.37	205.45	182	197.08	
+98.4	11.3	187.0	182.76	15.55 6.21 c 8.74	
+65.6	9.1	189.2	180.84	17.47 11.22 c 6.54	
TP	10.70	198.31	187.61	0.79	
+53	5.0	183.4	187.61		
+32.8	8.2	180.2	178.92	9.48 8.49 c 0.99	
0+0 = Exit Sewer	7.8	180.6	177.00	11.40 7.85 c 5.55 10.54	
BM	8.41	188.40	179.99	x 0.21 H.R.M. 12.67 191.45	

196.01 566  
 1+64  
 17.76  
 5.00  
 c 12.76  
 Right Lane  
 Left Lane  
 TP 1212 202.49 0.81 189.32  
 9.70  
 6.37  
 c 6.80  
 11.31  
 9.85  
 c 1.36  
 0+0  
 Exit Sewer  
 13.13  
 10.34  
 c 2.79  
 10' South of  
 Sewer  
 BM 10.14 190.13  
 Re Stake  
 x 0.21 H.R.M.  
 180.21  
 181.45

183+0 Rt Lane  
 Yabach Blvd 2



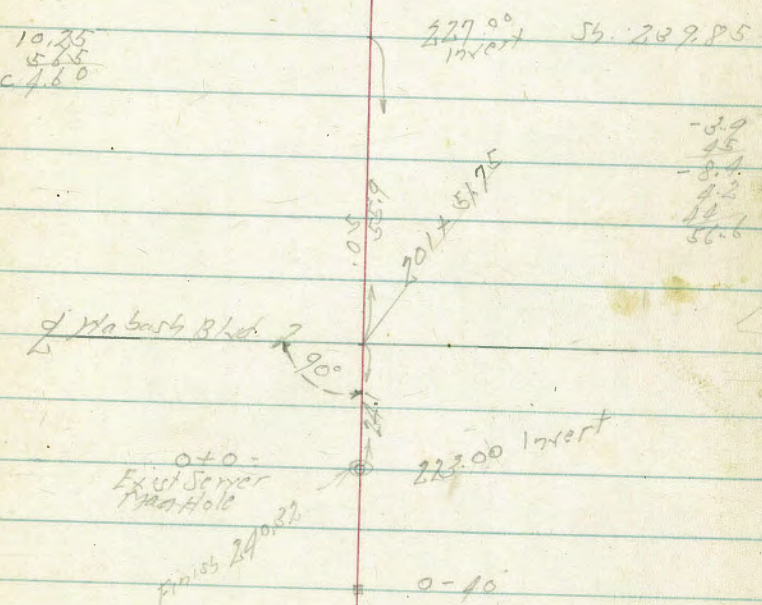
Wabash Blvd. Sec. "H"  
 Server Grader 201+51.75

Rod | Ground | Invert  
 Grade

+80	4.5	231.4	227.00	8.91 4.01 C490
+52.34	51	230.8	225.66	10.25 5.25 C490
+26.67	77	228.2	224.33	11.58 2.41 C490 10' Rt.
+08"	92	226.7		
0+0 - First M.H.	6.3	229.6	223.00	12.91 4.92 C8.49 0.08 Rm
0+40 = R.P.				Max Top M.H. - 4.41 6.42 F2.84
TP	2.40	235.91	232.51	
BM	0.37	247.89	244.53	x M.H. Rm 12.41 0.12 30.54 80

Sheet 24 Plan & Profile  
 " 22 Shoulder Gr.  
 Stakes offset 10' SWLY  
 10' RT of L on Plus Grade

8.91  
4.25  
C490  
10.25  
5.25  
C490

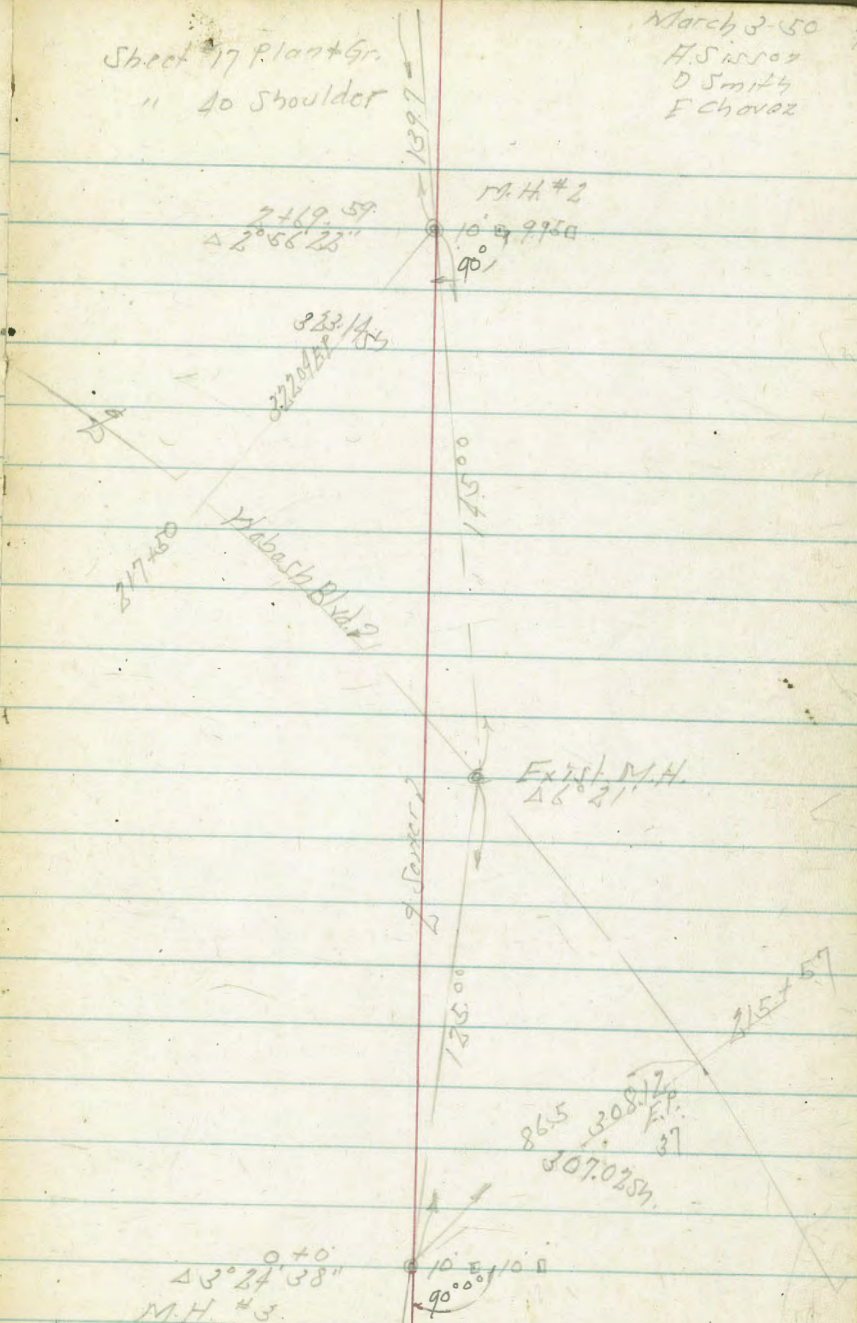


Wabash Blvd. Sec A  
 Section Grader 40th St South of Landis

		Ground	Invert Grade	
+25	42	278.4	275.25	$\begin{matrix} 7.39 \\ 1.36 \\ \hline 6.73 \end{matrix}$
1+0	38	278.8	273.88	$\begin{matrix} 8.71 \\ 3.95 \\ \hline 4.76 \end{matrix}$
+75	53	277.3	272.50	$\begin{matrix} 10.13 \\ 6.25 \\ \hline 9.88 \end{matrix}$
+50	59	276.7	271.13	$\begin{matrix} 11.50 \\ 5.22 \\ \hline 6.28 \end{matrix}$
+25	64	276.2	269.76	$\begin{matrix} 12.87 \\ 5.85 \\ \hline 7.02 \end{matrix}$
0+00 = M.H. #2	9.0	273.6	268.39	$\begin{matrix} 14.24 \\ 7.62 \\ \hline 6.62 \end{matrix}$
0.58		282.63	282.10	
0+00 = M.H. #1	0.18	294.83	294.65	
	0.49	307.78	307.29	
	1.23	319.42	318.19	
B.M.	100	332.33	330.33	$\begin{matrix} N.M. B.P. \\ Landis \\ 10th \end{matrix}$

Sheet #7 Plant Gr.  
 " 40 Shoulder

March 3-50  
 H. Sisson  
 D. Smith  
 F. Chavez









Channel Change  
Alignment of Page 9+10

Sketch 9-10

Lt. E

Cont Page 25

Rt. West

R.P.

8.4	8.4	8.4	1.9
5.8	4.8	4.8	1.9
63.4	65.57	63.5	0.0
18.4	20.0	18.5	23.5

INDEXED

JUN 7 1950

1+0

7.5	7.5	7.5	4.0
4.7	4.7	4.0	4.2
62.8	62.8	62.5	-0.2
19.8	0.0	18.0	23.5

118.17.

200.22.

98.07.

+50

6.3	6.3	6.3	4.0
4.7	4.7	4.0	4.0
67.6	67.34	67.3	0.0
16.6	0.0	17.3	23.5

16.54.

152.42.

1+0

5.7	5.7	5.7	3.0
4.7	4.0	4.0	4.2
67.0	68.23	68.7	-0.2
16.0	2.0	17.7	22.7

56.40.

113.83.

+50

4.9	4.9	4.9	2.9
4.6	4.6	4.0	2.9
60.8	69.11	62.0	+0.3
15.8	0.0	17.0	22.0

45.60.

94.44.

0+0 : opp.  
113+0 1/2 hrs. 4

4.0	4.0	4.0	2.7
3.8	3.8	3.0	2.7
60.2	70.00	64.8	10.2
75.2	0.0	76.3	31.3

23.85.

64.31.

RM

4.00

73.96

69.96

X 257 + 111 Rm  
75-11 109+  
#2071-8

March 23. 50 11

Areas

Cubic Yds.

Excavation

Excav.

233.58.

Storm Drain Hort West Outer Com  
11+04

Sketch page 9

#11 Sections taken  
on line of Culvert  
or on Diagonal

INDEXED  
MK.  
JUN 7 1950

02.4	02.9	03.5	04.1	04.6	62
60.4	60.4	61.5	62.1	62.6	DA 416
+81.2	69	69	52	47	56.58.0
	40.0	21.0	21.0	40	

02.1	03.5	03.8			10'
60.3	60.7	61.5			DA 224
+70.4 = inlet	70	58			56.58.0
	21.0	21.0			TA 58.2
					DA = 43

05.0	05.5	06.0	06.0	06.4	07.0	07.7
62.7	62.2	60.7	60.7	62.3	61.7	60.4
+38.6 = 2	21.0	21.0	21.0	21.0	21.0	21.0
	85	42				

05.4	06.5	06.6	07.6	07.1	DA 314
62.9	63.8	63.9	61.9	61.4	TA 57.3
+10.6 = outlet	14	3.5	3.4	5.4	59 DA 411
	21.0	21.0	21.0	21.0	33'

07.0	07.5	07.4	07.2	06.4	
51.6	62.6	62.5	64.3	65.5	DA 561
36	47	3.8	3.0	3.8	56.58.1
	21.0		21.0	21.0	44'

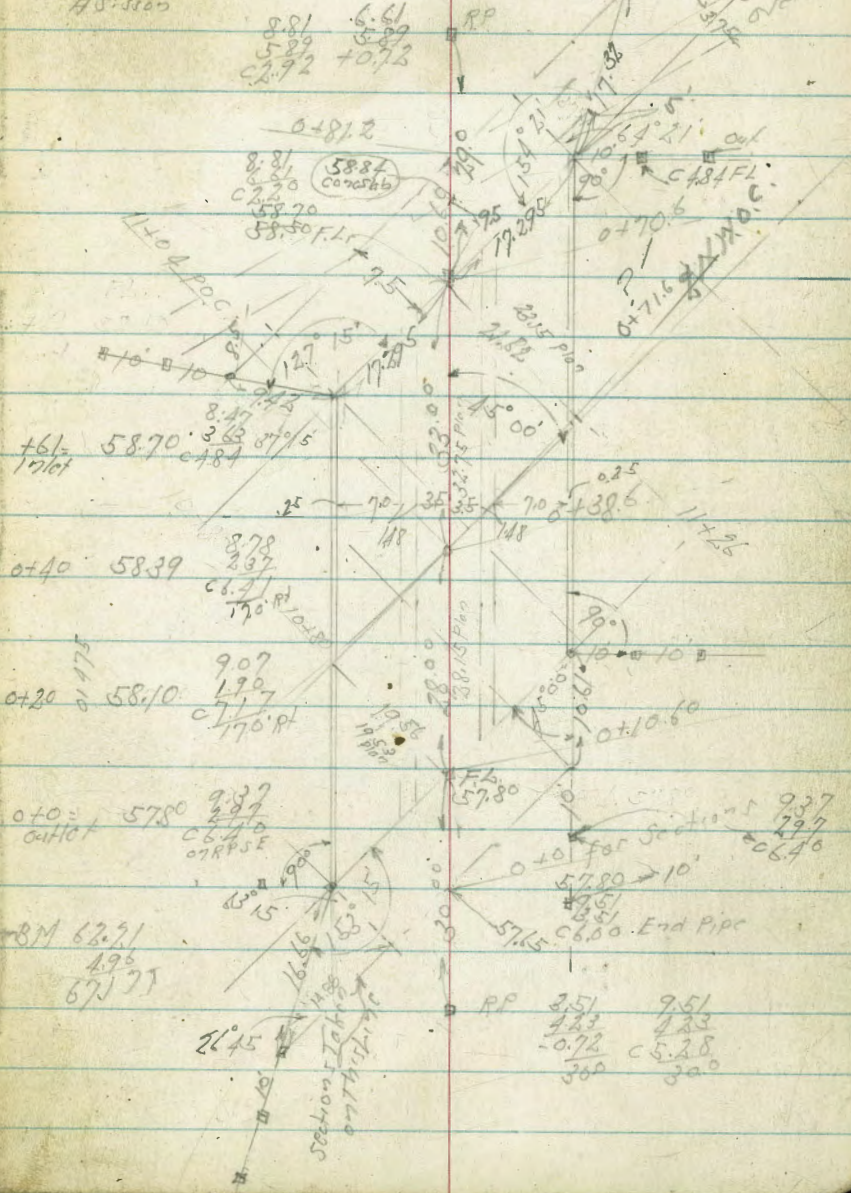
TP	725	67.31	8.88	60.06	07 RP No 6
BM	673	68.91	62.21		50.24
					84.28 29.7
					2072-40

Sheet 27 Location  
47 Grader

March 23-30 12  
X in lat 34.59  
outlet 33.90  
Indicator  
1" x 1" stub set

60 stated  
72" - 68 RCP  
Past April 12-50  
75:55.00

8.81  
5.29  
5.92  
6.61  
5.22  
+0.72



+61.7  
inlet

0+40 58.39

0+20 58.10

0+0 = outlet 57.80

BM 62.31  
49.0  
67.77

for sections 937  
797  
664

57.80  
57.61  
C6.0.0 End Pipe

RP 3.51 9.51  
4.23 2.23  
-0.72 C5.2.8  
3.68 3.00







Federal Blvd. Sewer Grader  
 1/2 Alley North of Market St.

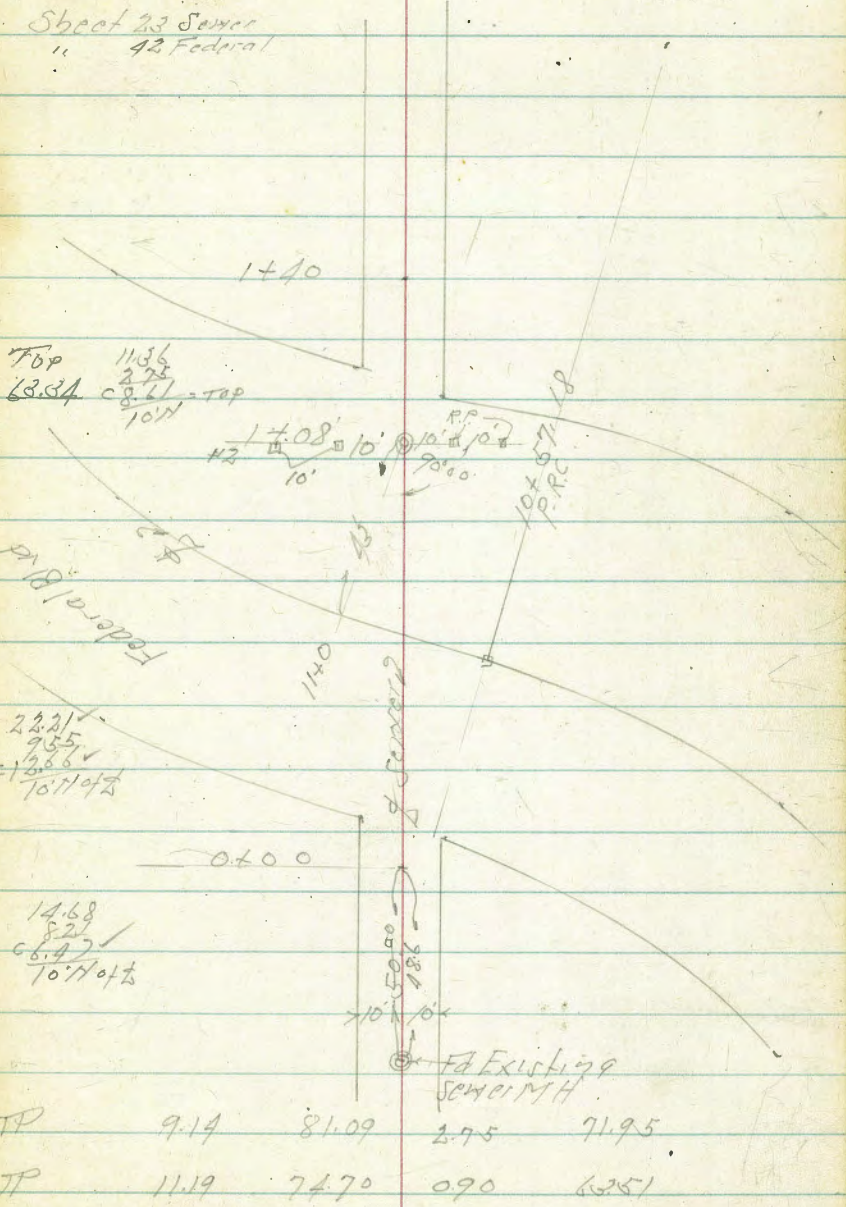
**INDEXED**

W.K.  
**MAR 9 1950**

Staker offset #1 - #2 10' North  
 10' Rt on + Grade  
 = South of 28 ditch

March - 7 - 50 15  
 H. Simon  
 O. Smith  
 Rorer  
 Chavez

	Ground.	Invert Grade		
+40 Connect	4.5	76.8	72.00	9.32 9.09 1.23 1.24 c 6.32 c 4.06 10' H
+23 = Brk	4.1	77.2	70.40	10.94 10.19 3.61 1.34 c 7.10 c 6.33 10' H
1+08 = M.H.	4.2	77.1	58.00	28.04 16.70 7.18 2.75 c 17.18 c 13.95 10' H
+82	4.8	76.5		
+72	7.1	74.2	55.25	26.09 19.15 8.21 3.03 c 19.87 c 13.82 10' H
TP	10.16	81.24	1.23	71.18
TP	11.69	72.41	0.43	60.72
+36	2.6	58.5	52.49	6.11 c 4.33 10' H
0+00	5.0	56.1	49.73	11.42 5.72 5.72 c 5.72 Chisel R Top Hly Conc Culvert
BM		6.55	54.60	
TP	2.08	61.15	11.86	59.07
TP	1.23	70.93	13.15	19.70
B.M.	13.8	82.85	81.47	520 BP Market + 32nd St + 0.2



Restake 64.41 From Page 31

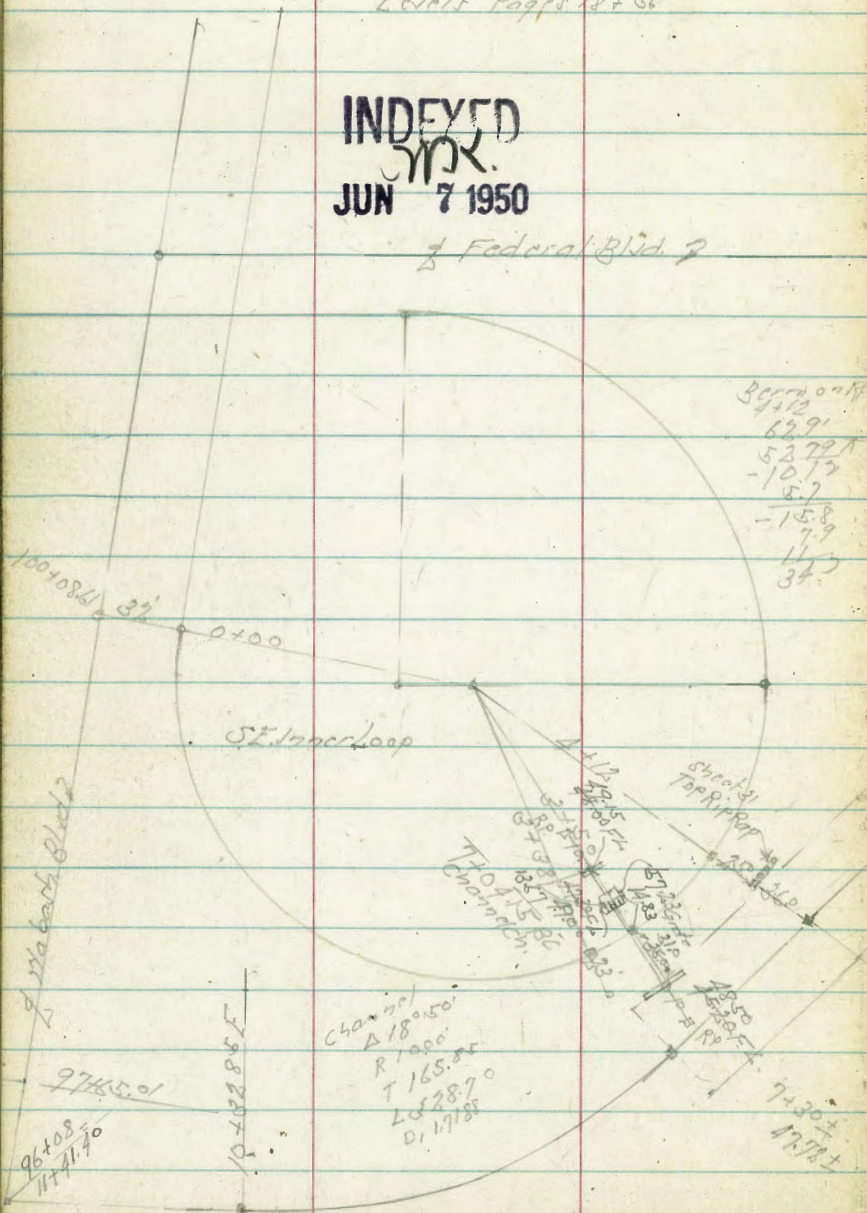


Wabash Blvd. + Federal Blvd. Interchange  
 South East Inner Loop And Cholles Creek  
 Channel Change

Levels Page 18 + 56

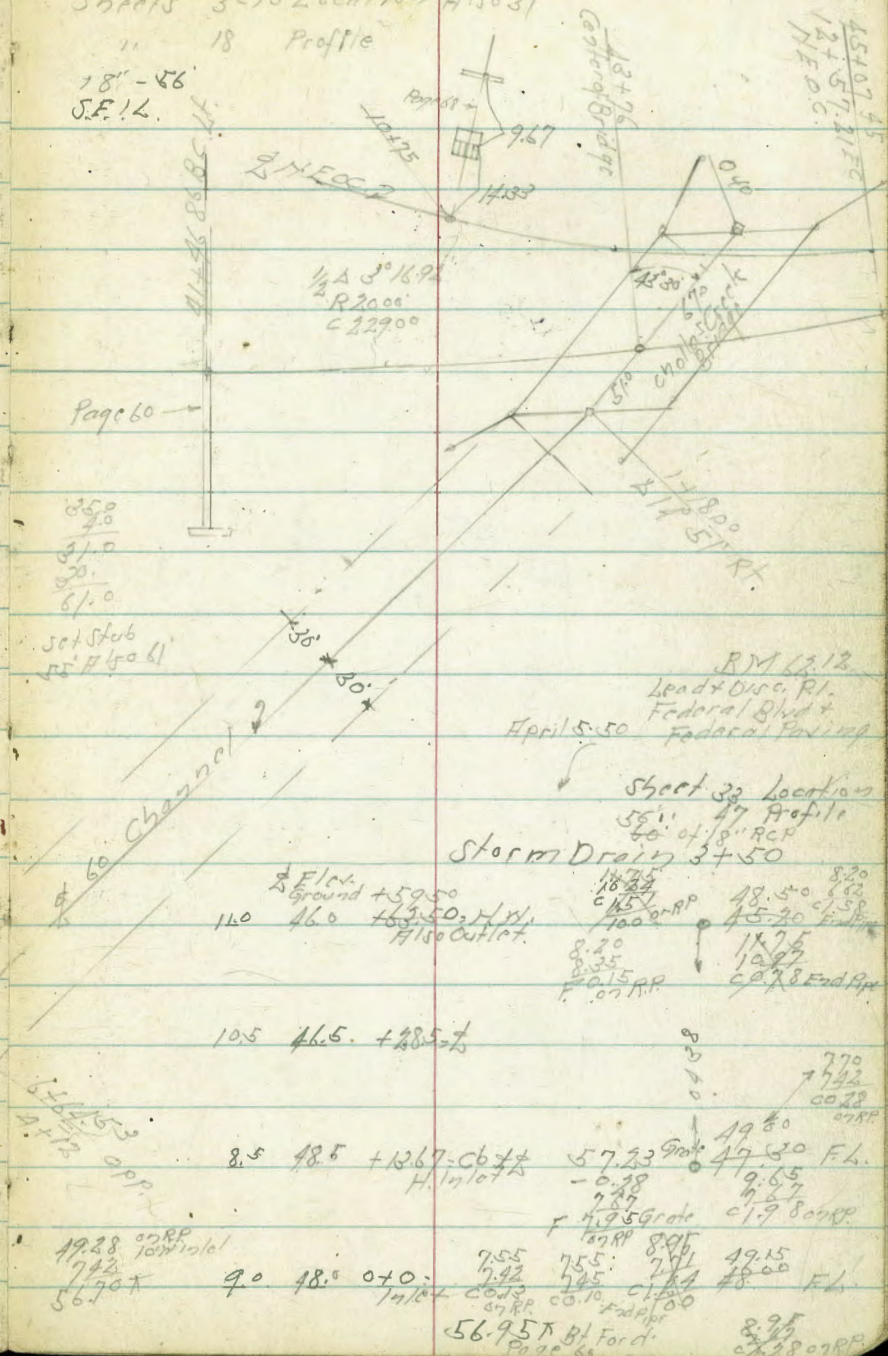
**INDEXED**  
 JUN 7 1950

Federal Blvd



Sheets 3-10 Location Also 31  
 18 Profile

18'-56  
 S.F.L.



17  
 45107.45  
 1257.120  
 N.E.C.

Page 60  
 250  
 31.0  
 30.0  
 51.0  
 Set Stub  
 55' x 50' 61'

Berry 0.014  
 4112  
 62.9  
 52.72  
 -10.17  
 5.7  
 -15.89  
 11.7  
 34.

Flow  
 Ground +59.50  
 140 46.0 +59.50 H.W.  
 Also Outlet.

Sheet 32 Location  
 55' of 18\"/>

10.5 46.5 +28.5

8.5 48.5 +1367-C677  
 H. Inlet

9.0 48.5 070  
 742  
 745  
 56.7

14.75  
 16.25  
 14.5  
 100' RP  
 8.20  
 8.35  
 8.15 RP  
 8.07 RP

57.23  
 -6.28  
 7.28  
 7.87  
 7.95  
 7.95  
 7.92  
 7.95  
 56.95

8.95  
 8.28

RM 1212  
 Lead + Disc. Pl.  
 Federal Blvd +  
 Federal Parking  
 April 5.50

18.50  
 15.20  
 14.75  
 12.25  
 8.20  
 8.35  
 8.15 RP  
 8.07 RP

770  
 7742  
 00.28  
 07RP

49.80  
 47.80  
 49.65  
 49.27  
 49.15  
 48.00

49.15  
 48.00  
 8.95  
 8.28

Chollar Creek Grader

Channel Change

Lt: F

L

Rt: W

Sketch Page 17

Cont Page 56

March 27-50/8

#S: 5000

#S: 5000

Racer

Chavez

Cota

Area

C.Yds.

Excav

Excav.

2 + 0	1/1 1/1 38.2	1/1 1/1 38.0	52.17	1/1 1/1 0.0	1/1 1/1 8.0	1/1 1/1 30.3	1/1 1/1 35.3
-------	--------------------	--------------------	-------	-------------------	-------------------	--------------------	--------------------

192.48

+50	10.7 10.7 38.4	10.7 10.7 33.0	52.57	10.7 10.7 0.0	10.7 10.7 0.0	10.7 10.7 30.9	9.8 9.8 35.9
-----	----------------------	----------------------	-------	---------------------	---------------------	----------------------	--------------------

254.49

413.86

1 + 18	1.9 1.9 13.6	10.5 10.5 38.6	52.81	10.5 10.5 0.0	10.5 10.5 31.1	9.4 9.4 36.7	9.4 9.4 36.7
--------	--------------------	----------------------	-------	---------------------	----------------------	--------------------	--------------------

319.32

340.03

+78.66	4.3 4.3 10.9	10.7 10.7 35.9	53.14	10.7 10.7 0.0	10.7 10.7 0.0	9.2 9.2 31.0	9.2 9.2 36.0
--------	--------------------	----------------------	-------	---------------------	---------------------	--------------------	--------------------

98.87

+59.53	8.8 8.8 36.0	9.8 9.8 31.0	53.47	9.8 9.8 0.0	9.8 9.8 0.0	9.2 9.2 36.6	9.2 9.2 36.6
--------	--------------------	--------------------	-------	-------------------	-------------------	--------------------	--------------------

57.88

0 + 0	8.8 8.8 44.3	9.5 9.5 44.3	53.80	9.5 9.5 0.0	9.5 9.5 6	9.1 9.1 44.0	9.1 9.1 49.0
-------	--------------------	--------------------	-------	-------------------	-----------------	--------------------	--------------------

204.26

B.M. 1.12 63.30

63.18

240 S.M.  
Federal  
First Pay  
Federal  
(68.12)

Storm Drain Federal Blvd. 171 Nabors

34-43

H

Sketch Page 9

Lt=H

Rt=E

64.0	038	026	024	056
33	301	301	51.7	54.9
1+75.12	6.8	7.0	8.0	8.4
	24.0	14.0	14.0	24.0
	03.0	034	030	
1+67.56 = inlet	7.6	8.2	7.6	DA 160
	14.0	14	14	TG 49.5
	03.4	033	034	DA 154
1+88.56	7.8	7.9	7.6	DA 180
	14.0	14	14	TG 48.9
	02.1	024	029	DA 140
+89.56 = Federal	9.1	9.4	8.9	TG 48.3
	14.0	14.0	14.0	
	02.7	030	028	DA 132
+18.56	9.8	9.5	9.7	TG 47.6
	14.0	14.0	14.0	
	02.0	023	021	DA 128
+07.56 = outlet	11.1	10.8	11.0	TG 46.8
	14.0	14.0	14.0	DA 135
	02.2	027	023	DA 151
0+0	11.1	10.6	11.0	TG 46.8
	14.0	14	14	
468	60.10	2.35	55.4%	

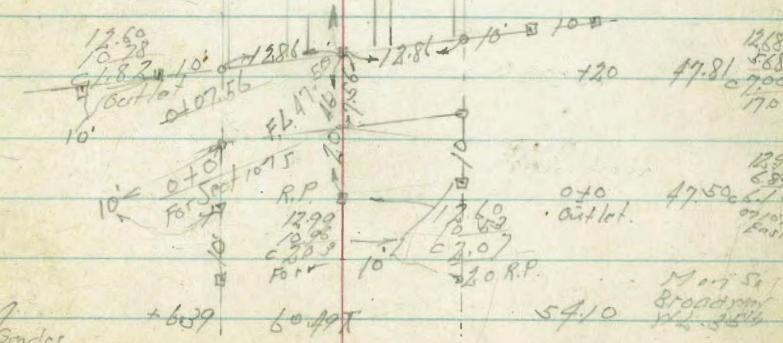
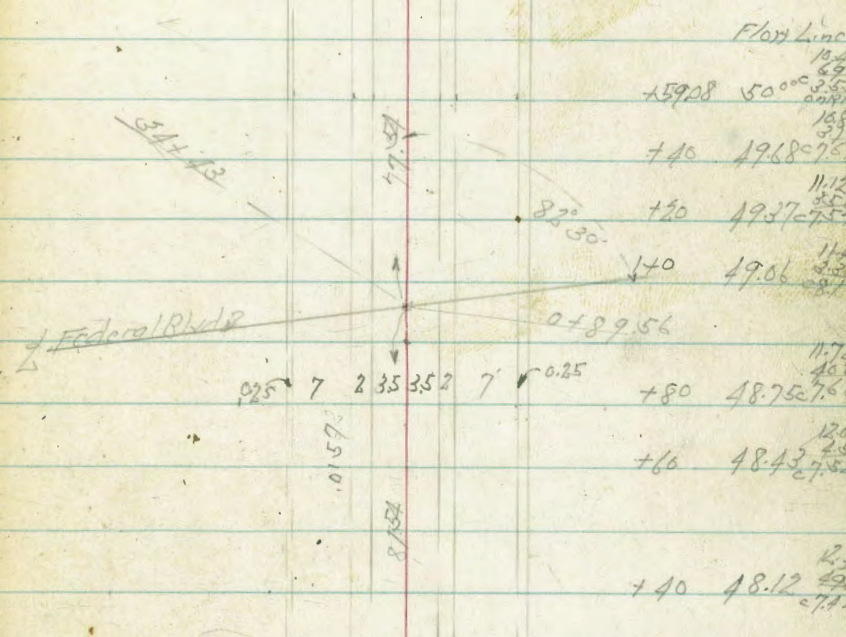
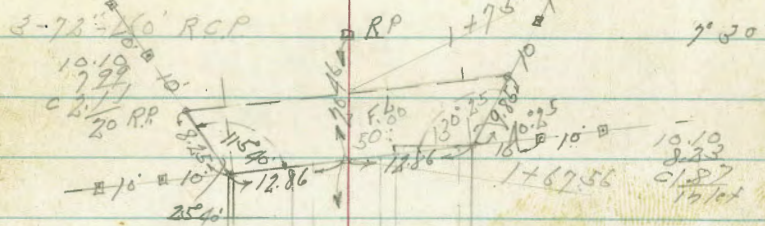
BM 100 57.77 51.77 Federal 133 15.04

Headst. 29 Staked April 11-50

Sheet 29 & 32 Location

" 47 Grades

Staker off pt March 23-50  
17' offset  
F. Sisson  
D. Smith  
Rogers  
Coto  
Civros



BM For Grades +639 60.49X 54.10

Market St. + Federal Blvd.  
Storm Drains

45" Storm Drain

**INDEXED**  
**JUN 7 1950**

464

+32 = Inlet

14.16  
11.34  
c2.82  
End Pipe

51.40

14.16  
11.34  
c2.04  
10' H. W. R. I.

R.P.  
→ 30'

+17

10.1

+0 = Exist 45"

55.56 Page 21

50.50

15.06  
18.17 on EL

24  
+0 = Exist 45"

Changed  
46.18

4.33

+0 = Outlet

6.53  
3.83  
c2.70  
0720 R.P.

46.80  
45.98 = EL

11.90  
10.65  
0715 R.P.  
Head R.P.

11.93  
12.15  
c0.22  
0715 R.P. South

□ 56' 46"

RM #3

1.74

52.03  
57.867 8' + Ford  
2072-73

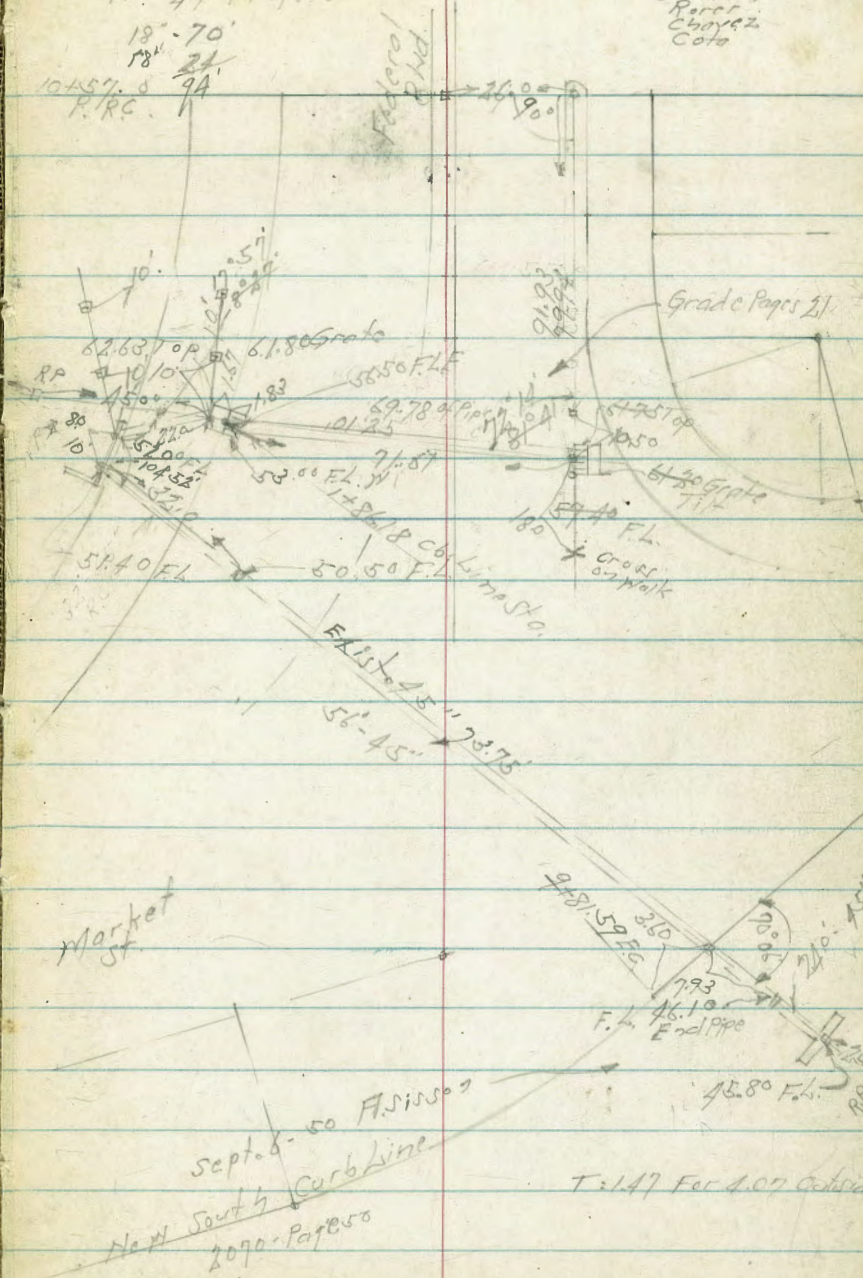
50.29

Sheet 13 Location  
" 47 Profile

May 4-50  
H.S. 5500  
O.S. Smith  
R. Perez  
Chavez  
Coto

20

18'-70'  
18" 21'  
10' 57" 8  
R.P.C. 9A



Market St

Sept. 6-50 H. S. 5500  
New South 4 Curb Line  
2070-73 Papers

T: 147 Feb 4.07 Curb

Market St. Intersection  
 Skewed Storm Drains 18"

Sketch Page 20

									Sept. 7-50 F. Sisson Garber Rorer D. Sisson	May 4-50 F. Sisson Smith Rorer Chevez
									62.08 61.75 Top 2.33 4.91 F. 2.58 10.50 North	out 61.20 Grate 7.14
									+95.98 - 1/4" Inside H. Inlet	57.23 El. 6.88. 4.21 C. 1.77 10.50 H
+92.57	= 1/4" Inside Box H. Inlet	9.1	56.5	+72.02						57.02 2.98 C. 3.74
+60		5.0	60.6	+48.76						56.91 7.50 3.22 C. 3.74
+35		11.9	53.7	+25.5 = El. Box	12.63 Top 1.78 3.22 F. 1.71	62.61 Top 2.33 11.06 F. 8.43				4.85 out 62.00 Grate C. 3.74 11.06 F. 1.83
+22		10.4	55.2	+22 = H. Inlet	9.04 11.76 F. 2.20 67	56.50 F. El. 7.76 3.22 C. 3.74 10.50 H	52.00 F. In 11.41 3.22 C. 3.74 10.50 H			12.06 12.00 35.87
+11		10.4	55.2							
0+0 = outlet		12.1	53.5	0+0 = outlet 18"						
BM	10.98	65.56	54.58	TP	266	64.41	0.97	61.76		12.06 12.00 C. 3.74 End Pipe
				BM	12.43	62.72		50.29	11.54 Top 15.44 Culv 1888-16	

Check H  
 NY EX 184  
 18" Culv  
 2072-76



Storm Drain Nabash Blvd.  
110 + 50 Also Page 10

Sheet 27 Location  
" 43 Profile  
" 18" 148"

Aug. 31-50 Restake 22  
" 23  
March 6-51  
Garber  
Rorer  
Shepard  
Garber  
Rorer  
Bertolucci

1+54.55 73.92 70.92  $\frac{8.38}{4.80}$   
5.38  
1.88  
c0.58

1+25.05 70.79  $\frac{8.57}{4.38}$

BM 2.13 79.31 77.18  $\frac{5.08}{4.10}$

0+95.55 - 75.85  $\frac{3.46}{3.93}$   $\frac{3.61}{3.40}$  70.65  $\frac{8.41}{3.40}$   $\frac{8.66}{3.93}$   
3.46 3.61  
3.93 3.40  
F0.17 F0.19 c0.61 c 4.73

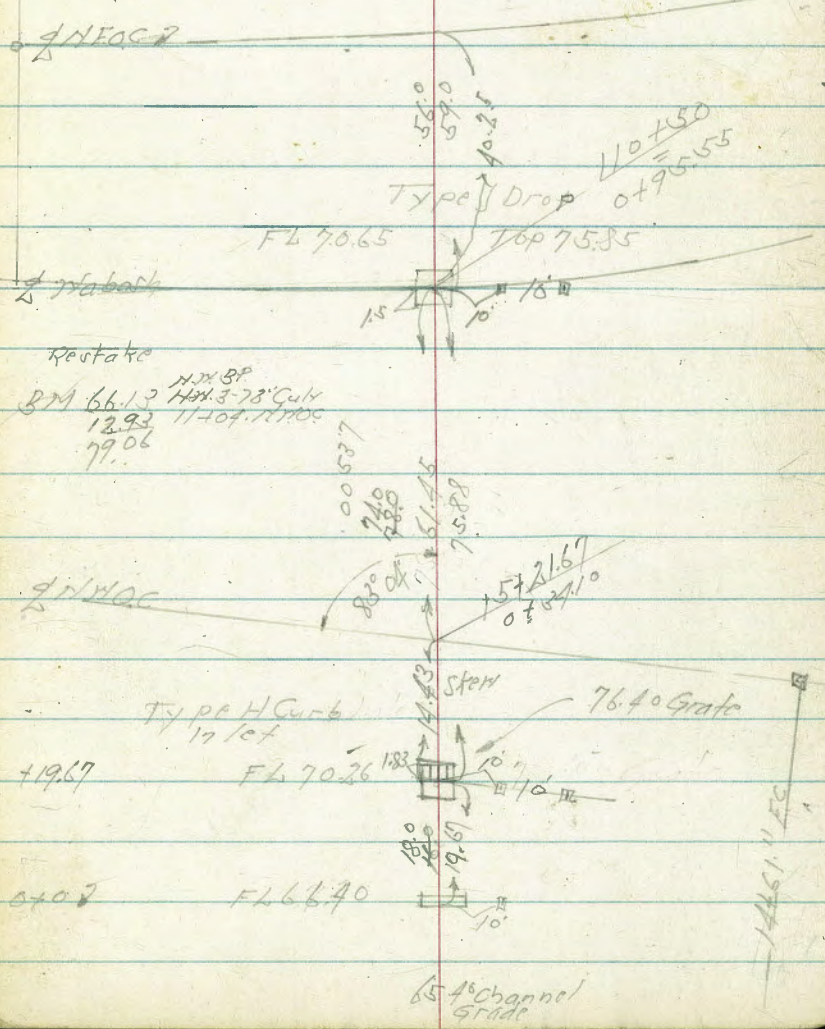
26.05 8.79 70.57  $\frac{6.31}{7.73}$   
8.58 8.51  $\frac{7.73}{4.42}$   
c 5.27  $\frac{7.32}{5.22}$

24 70.59  $\frac{5.41}{8.67}$   $\frac{5.41}{8.67}$

25.83 70.26  $\frac{8.80}{1.88}$   $\frac{8.80}{1.88}$   
Grote 76.40 70.26  $\frac{8.80}{1.88}$   $\frac{8.80}{1.88}$   
2.66 76.40 70.26  $\frac{8.80}{1.88}$   $\frac{8.80}{1.88}$   
1.88 0.43  
c0.78 0.43  
105.0 0.43  
F0.17 F0.17

0+0 76.88 12.00 70.47  $\frac{12.11}{9.89}$   $\frac{12.11}{9.89}$   
12.11 12.11  
9.89 9.89  
c0.79 0.79  
105.0 0.79

8.M 1.83 83.67 8. P.C.B.H  
BM 6.24 85.50 79.26 100% 116.40



Storm Drain 98+0 Nabash Blvd.

Sheet 53 Location  
" 43 Profile

April 5-60

23

H. Simon  
J. Smith  
R. Ror  
C. Chavez  
Coto

R.C.P 18" - 48"

#2 stakes off section

BM

3.98

54.14

W/00  
W/4 55.14  
So. Station  
54.10

+53

W/ Nabash

11.2

45.4

+30

11.7

44.9

+11.67

11.9

44.7

0+0 = out/cd

11.7

44.9

IP

7.38

56.62

7.71

19.24

56.95X  
Brit Ford P29 60

BM

3.57

57.67

#2  
53.77  
3.70  
54.10  
F1.50

53.77 Top

2.85

11.19

F8.34

W/ Nabash

J Drop

1.50 0+0 F4.98

50.41 F.L.

50.41 #2

6.21

11.19

F4.98

7.28

54.0

21.85

0.337  
11.05  
1.38

+20 49.74

7.83

5.03

0.337

10'H

49.13

#2 8.59

4.71

0.337

10'H

49.13 F.L. East 10'H

7.46

12.60

F5.11 on R.P.

#2  
52.55 Grate

5.16

4.21

0.337

10'H

52.55 Grate

2.07

12.60

F8.63

on R.P.

H. Drop

45.34 F.L. West

#2 45.34

11.28

12.60

F1.32 on R.P.

13.33

4.21

0.337

10'

45.00 F.L.

#2 45.00

11.62

11.78

F0.75

F on R.P.

12.67

13.69

F1.02

Channel opp.

44.30

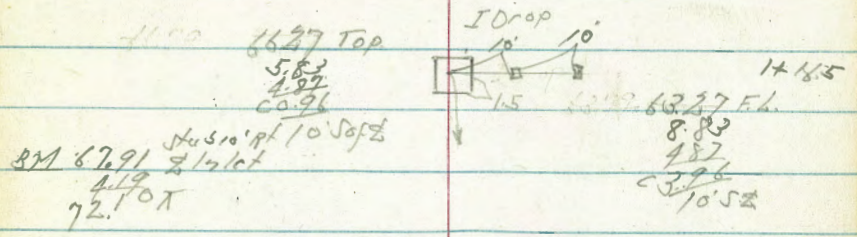
54.10

Mon

Storm Drain Habash Blvd.  
 106+50 #150 P999  
 108775

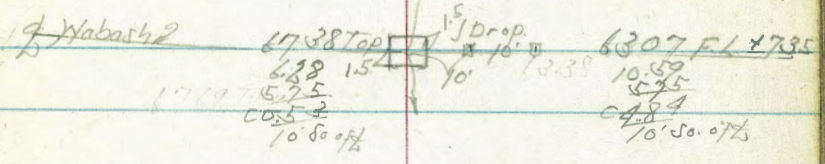
Sheet 27 Location  
 " 43 Profile  
 112-18" RCP

March 6-51  
 H. Sirson  
 Garter  
 Roger  
 Bertolucci



1005  
 44 48  
 4500

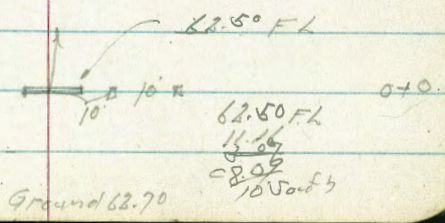
63.17 495.0  
 9.73  
 5.21  
 63.72  
 10.50 ft



079  
 72  
 7350

63.88 748  
 10.78  
 5.42  
 65.35

62.69 734  
 10.97  
 7.66  
 64.7



B.M. 753 72.66 66.13  
 N.H. & P. H.B.  
 2-72" C.W.  
 14-704 H.W.C.

Wabash Canyon Creek  
Channel Change

95+0 to 113+0 Wabash

Channel Change		Areas				Cubic Yds.	Remarks
St.	±	rt	rt	rt	Excavation	-Excav	
+50	9.3 5.5 C38 78.8	60.26	9.3 4.7 C46 0.0	9.3 4.1 C52 20.2	4.1 3.6 14.5 25.2	157.20.	
5+0	8.4 3.1 C53 20.3	61.15	8.4 3.3 C53 0.0	8.4 3.1 C53 20.3	3.1 2.8 10.3 25.3	185.06.	316.90.
+50	7.5 3.1 C74 19.4	62.03	7.5 2.7 C48 8.0	7.5 2.7 C57 20.7	1.8 1.6 10.2 25.7	171.99.	330.60.
TP	1.60	69.52	6.04	67.92			321.25.
4+0	11.0 1.6 C50 20.0	62.92	11.0 6.2 C48 0.0	11.0 5.6 C57 20.4	5.6 5.3 10.3 25.4	174.96.	
+50	10.2 2.2 C36 18.6	62.80	10.2 4.4 C44 0.0	10.2 4.2 C58 20.8	4.4 4.2 5.0 25.8	157.18.	307.54.
+13.76 BCRT	9.9 4.9 C60 20.0	64.05	9.9 5.4 C45 0.0	9.9 5.6 C43 19.3	5.6 5.3 -0.5 24.3	158.17.	241.63.
2+0	9.3 5.3 C73 19.3	64.69	9.3 5.2 C39 0.0	9.3 5.6 C37 18.7	5.6 5.9 -0.3 23.7	134.10.	74.47.

0.179

Channel Change Habas Canyon Creek

	Lt.	L	RT	Area	Cubic Yds.
				Excavation	Excav.
+38.22	Δ 1° 48' Rt. outlet 3-72" NW 90° N.M.L.	56.70 56.50	10.20 4.99 5.21 0.0	10.00 4.99 5.01	
8+0		56.92	9.8 4.2 5.6 0.0	9.8 4.3 5.5 20.5	4.3 4.3 20.7 25.5
+50		57.46	9.2 3.3 5.9 0.0	9.2 4.7 4.5 19.8 = Full Vac	
7+18.56	outlet 3-72" NW 90° Δ 11° 25' Rt.	57.80			
6+58.56	1 1/2" outlet 3-72" Conn Pipe N.M.L.				
IP		6.04	66.70	8.86	60.66
+50		58.60	11.0 8.1 2.9 0.0	11.0 8.5 2.5 0.0	8.8 8.8 0.2 22.2
104.22	Δ 43° 52' Lt.				
6+0		59.38	10.1 7.6 2.5 0.0	10.1 7.1 3.0 18.0	7.1 7.0 10.7 23.0
		69.52			
					226. 18.

Channel Change Habash Canyon Creek  
95+0 to 113+0

Station	Inlet	Outlet	Area	Area	Area	Area
+10	Inlet 3-72" Page 19		50.00	50.00		
11+0	$\frac{12.1}{11.2}$ +0.2 219	$\frac{14.0}{12.1}$ C 1.9 K9	50.25	$\frac{14.0}{12.4}$ C 1.6 0.0	$\frac{14.0}{11.6}$ C 2.4 174	$\frac{11.6}{11.3}$ +0.3 234
+50	$\frac{12.8}{12.3}$ -0.5 20.0	$\frac{12.8}{12.0}$ 0.8 150	51.47	$\frac{12.8}{11.7}$ C 1.1 80	$\frac{12.8}{9.8}$ C 3.0 180	$\frac{9.8}{9.2}$ +0.6 106
10+0	$\frac{10.6}{10.7}$ -0.1	$\frac{11.6}{10.6}$ C 1.0 180	52.69	$\frac{11.6}{9.0}$ C 2.6 80	$\frac{11.6}{10.7}$ C 0.9 159	$\frac{10.7}{10.1}$ +0.6 209
+50	$\frac{7.1}{6.2}$ +0.9 233	$\frac{10.4}{7.1}$ C 3.3 183	53.91	$\frac{10.4}{6.8}$ C 3.6 80	$\frac{10.4}{6.1}$ C 4.3 173	$\frac{6.1}{6.2}$ -0.1 243
9+0	$\frac{5.4}{3.4}$ +2.0 25.7	$\frac{9.1}{3.4}$ C 5.7 20.7	55.13	$\frac{9.1}{4.9}$ C 4.2 80	$\frac{9.1}{2.9}$ C 6.2 180	$\frac{6.1}{6.0}$ +0.1 230
8+74 23	Outlet 3-72 RCP $\Delta 3^{\circ} 28'$		55.75	55.75		
BM	2.06	64.27	62.21	62.21	62.21	62.21

Areas  
Excavation

Cubic yds.  
EXCAV.

59.69.
92.91.
40.65.
89.73.
55.72.
167.04.
124.68.
163.66.
160.07.

on R.P. Hub  
50.11  
8+28.59  
RCP  
2071-40

Channel Change

95+0 to 113+0

Lt. F

April 450  
H.S. Jones  
Rt. W. Smith  
Rorer  
Cofa  
Cbaroz

15+61.02 = outlet

15+21.02 = inlet  
3-72"

45.00

TP 396 53.55 6.38 19.59

15+00  

$$\begin{array}{r} 10.7 \\ 1.16 \\ \hline 11.86 \\ +0.3 \\ \hline 12.16 \\ -15.5 \\ \hline \end{array}$$

$$\begin{array}{r} 10.7 \\ 10.7 \\ \hline 21.4 \\ +0.0 \\ \hline 21.4 \\ -8.0 \\ \hline \end{array}$$
 45.21  

$$\begin{array}{r} 10.7 \\ 9.2 \\ \hline 19.9 \\ +1.5 \\ \hline 21.4 \\ -0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 10.7 \\ 8.5 \\ \hline 19.2 \\ +0.7 \\ \hline 19.9 \\ -0.2 \\ \hline 19.7 \\ +2.2 \\ \hline \end{array}$$
 35.40

14+50  

$$\begin{array}{r} 10.0 \\ 9.7 \\ \hline 19.7 \\ +0.3 \\ \hline 20.0 \\ -20.2 \\ \hline \end{array}$$

$$\begin{array}{r} 10.2 \\ 10.0 \\ \hline 20.2 \\ +0.2 \\ \hline 20.4 \\ -15.2 \\ \hline \end{array}$$
 45.70  

$$\begin{array}{r} 10.2 \\ 10.2 \\ \hline 20.4 \\ +0.0 \\ \hline 20.4 \\ -0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 10.2 \\ 9.7 \\ \hline 19.9 \\ +0.5 \\ \hline 20.4 \\ -15.5 \\ \hline \end{array}$$

$$\begin{array}{r} 9.7 \\ 9.1 \\ \hline 18.8 \\ +0.6 \\ \hline 19.4 \\ -20.5 \\ \hline \end{array}$$
 5.25

14+00  

$$\begin{array}{r} 9.1 \\ 9.1 \\ \hline 18.2 \\ +0.0 \\ \hline 18.2 \\ -20.6 \\ \hline \end{array}$$

$$\begin{array}{r} 9.7 \\ 9.7 \\ \hline 19.4 \\ +0.6 \\ \hline 20.0 \\ -13.6 \\ \hline \end{array}$$
 46.20  

$$\begin{array}{r} 9.7 \\ 8.9 \\ \hline 18.6 \\ +0.8 \\ \hline 19.4 \\ -0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 9.7 \\ 8.4 \\ \hline 18.1 \\ +0.7 \\ \hline 18.8 \\ -16.2 \\ \hline \end{array}$$

$$\begin{array}{r} 8.4 \\ 8.2 \\ \hline 16.6 \\ +0.7 \\ \hline 17.3 \\ -21.3 \\ \hline \end{array}$$
 27.01

13+50  

$$\begin{array}{r} 9.2 \\ 5.1 \\ \hline 14.3 \\ +4.1 \\ \hline 18.4 \\ -19.1 \\ \hline \end{array}$$
 46.70  

$$\begin{array}{r} 9.2 \\ 6.4 \\ \hline 15.6 \\ +2.8 \\ \hline 18.4 \\ -0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 9.2 \\ 8.9 \\ \hline 18.1 \\ +2.3 \\ \hline 20.4 \\ -17.3 \\ \hline \end{array}$$
 98.96

12+00  

$$\begin{array}{r} 8.7 \\ 8.0 \\ \hline 16.7 \\ +3.7 \\ \hline 20.4 \\ -18.7 \\ \hline \end{array}$$
 47.20  

$$\begin{array}{r} 8.7 \\ 8.7 \\ \hline 17.4 \\ +3.0 \\ \hline 20.4 \\ -0.0 \\ \hline \end{array}$$

$$\begin{array}{r} 8.7 \\ 8.7 \\ \hline 17.4 \\ +3.0 \\ \hline 20.4 \\ -17.4 \\ \hline \end{array}$$
 117.95

12+70  
outlet 3-72"

47.50

RM 177

55.87

54.10

Hogarty  
28th St.  
Broadway

Area

Ex ca

Cubic Yds

Ex ca

27.83

29.93

116.64

200.84

Wabash Canyon Creek  
Channel Change 95+0 to 113+0

Station	Area	Perimeter	Area	Perimeter	Area	Perimeter
261		43.00				
+43 - Nly Bridge		43.08	10.5 18.5 0.0			
18+0	Mud 10.3 9.9 0.4 15.4	43.30	10.3 9.9 0.4 0.0	10.3 9.6 0.7 15.7	96 92 6.0 207	
+50	Mud 10.0 8.8 0.2 16.4	43.55	10.0 8.8 0.2 0.0	10.0 8.7 1.3 16.3	8.7 6.7 11.8 21.4	
17+0	Mud 9.8 8.7 0.9 15.9	43.80	9.8 8.7 0.1 0.0	9.8 8.2 0.5 17.5	7.3 5.5 1.8 22.5	
+50	Mud 9.5 8.8 0.7 18.0	44.05	9.5 8.8 0.7 0.0	9.5 8.0 1.5 16.0	9.5 6.8 0.7 23.7	
16+0	Mud 9.3 8.3 1.0 18.0	44.30	9.3 8.2 1.1 0.0	9.3 8.4 0.9 20.9	8.4 6.3 1.0 25.9	
15+78	Mud 9.1 8.1 1.0 18.5	44.41	9.1 8.6 0.5 0.0	9.1 8.0 1.1 10.0	8.0 6.7 0.7 22.1	

Area	Cubic Yds
Area	Area
0.00	
14.47	11.52
	50.31
39.87	
	75.99
12.20	
	189.56
162.53	
	318.69
181.66	
	110.74
90.16	



Storm Drain Habasb Blvd.  
115+50

Sheet 28 Location  
" 43 Profile  
24" RCP 1020'

30  
June 19.50  
Denoter F. J. ...  
H. Stueb Set DRP. Porter  
Chavez

1+08.50

0+98.83

82.95 Grate

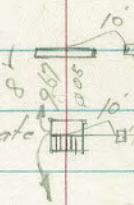
3.13  
8.08  
F4.95

77.20 F.L.

8.78  
8.50  
6.88

77.16 F.L.

8.82  
8.08  
80.74



Edge Pav.

0+67.5

84.18 Top

1.80  
7.34  
F5.54

26.26 F.L.

9.02  
7.34  
C1.68  
10.0' 10'

0+28.75

10' 76.82

9.16  
7.88  
C1.28

0+0

76.68 F.L.

9.30  
7.78  
C1.52  
10.0 South

B.M.

672

8598

79.26

X on M.H.  
Rim  
100' bt 11640

Storm Drain

120+50

Sheet 55 Location

" AB Profile

18" - 92

Denotes

▣ R.P. Stub ▣

31

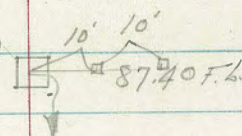
June 19-50

H.S. Mason

Robert

Chavez

90.49 Top  
3.01  
2.37  
0.64  
10.0 South



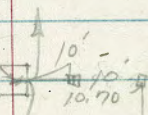
6.01  
2.37  
0.64  
10.0 So.

90.00  
90.00  
90.00

42

91.51 Top

1.90  
3.52  
F.L. 92  
10.05



87.20 F.L.  
6.21  
3.52  
0.64  
10'

MH 91.68  
1.73  
4.73  
F.L. 92.50 at Top Ring

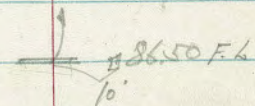
+26.75

0135  
57.01  
53.50



86.85  
6.56  
3.92  
0.64  
10'

010



6.91  
7.61  
F.L. 92  
10.0 South

TP 857 9341 1.14 8484

8598 St Ford  
Pool 30

Storm Drain

125+50

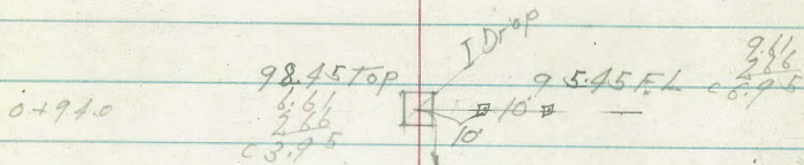
Sheet 35 Location

" 44 Profile

18" - 86.0

Sept 7-50  
H.S. 8807  
S.P. 607  
R.P. 607  
D.S. 8807

35



0+72.5

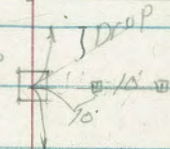
0.006  
10.0  
45.0

95.35  
9.71  
2.20  
c7.51

0+51.00 2d

98.84 Top

6.22  
5.53  
c0.71



95.25 F.L.  
9.81  
5.81  
c4.30

+3 0.34

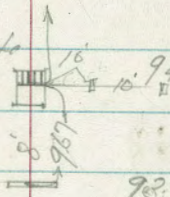
0.018  
38.0  
41.33

95.02  
12.05  
c7.59

0+9.67

98.23 Grate

6.83  
6.63  
c0.67



94.80 F.L. 10.36  
6.78  
c4.10

0+0

92.00 F.L.  
12.06  
2.68  
c7.38

B.M. 1254 105.06

X 00 MH  
92.52 200' Lt 124+0

Storm Drain

131+0

No profile fill partly made

Sheet 36 Location:

" 44. Profile

18"-94'

June 16-50

33

H. Sierra

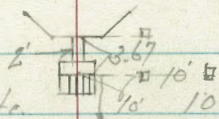
Chavez

Rogers

Denoter Sta 6 Set R.P.E

106.29 Grate

-0.08  
5.18  
F 5.26  
10.5



100.00 F.L.

3.27

5.05

F 1.84

10.00

102.96 F.L.

3.25

5.18

F 1.93

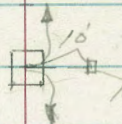
10.5

0053  
58.0  
4133

42

106.90 Top

-0.69  
4.76  
F 4.07  
10.5



102.76 F.L.

3.15

4.72

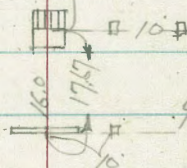
F 1.87

10.5

0068  
58.0  
4133

106.29 Grate

-0.08  
4.84  
F 4.76  
10.5



F 100.50 W F 102.50 E

7.71

4.84

F 1.13

10.5

98.50 F.L.

7.71

8.10

F 0.39

10.5

111258  
104.41  
106.29

B.M.

1.79

106.21

104.41

Storm Drain

133+50

No profile Fill Partly made

Sheet 36 Location

" 44 Profile

24" - <sup>108</sup>~~107~~

June 16-80

W.S. 1000  
Chavez  
Racer

34

1708

11003  
Shdr.

10700 FL

106.00

4.51

4.87

F 0.36

10' South of 48 Ditch

0+72

104.66

5.85

5.11

00.74

10' South

0+36

103.23

7.18

5.26

01.92

10' 50"

0+0

10200 FL

8.51

6.82

01.97

10' 50"

BM

6.09

110.51

104.43

X 57 MH

60 ft

133+50

110.51

Storm Drain

138+50

Sheet 36 Location

" 44 Profile

21" - 87.0  
86.0

July 28-50 35

H.S. 0007

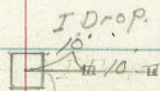
Garbet

Robert

Chavez

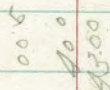
-351

0+94.00 117.51 Top  
4.62  
4.35  
00.27  
10.0



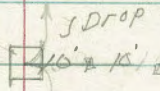
114.00 F.L.  
8.13  
4.35  
03.78  
10.0 South

0+72.50



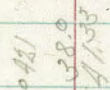
113.90  
8.23  
2.47  
05.76  
10.0 South

0+57.00 117.90 Top  
4.23  
3.43  
08.86  
10.0 So.



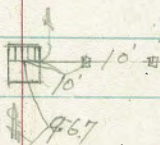
113.80 F.L.  
8.03  
3.43  
07.96

0+30.34



113.00  
9.13  
1.23  
05.94  
10.0 So.

0+09.67 117.39 Grate  
4.84  
4.76  
00.74  
10.0 South



112.20 F.L. 9.93  
4.70  
05.53  
10.0 South

0+0.7

112.00 F.L.  
10.13  
9.73  
06.40  
10.0 South

TP 841 122.12 2.50 112.72

B.M. 1480 116.22 104.42

X 007 MH  
Rim 60.21  
122+30

Storm Drain  
145471

Sheet 37 Location

" 44 Profile

18" -  $\frac{96.0}{96.0}$

Aug. 23-50 36  
H.S. Olson  
Garber  
Rorer

1+02  $\frac{130.00 \text{ Top}}{8.10}$   
 $\frac{2.71}{0.39}$   
 $\frac{10.5}{10.5}$

Drop 10' 10'

127.00 FL  $\frac{6.10}{2.71}$   
c3.39  
10' South

0+80.50

$\frac{40.0}{40.0}$

125.60  
 $\frac{7.50}{1.20}$   
c5.90

0+59  $\frac{128.47 \text{ Top}}{4.63}$   
 $\frac{1.08}{0.35}$   
 $\frac{10.5}{10.5}$

Drop 10' 10'

124.40 FL  $\frac{8.90}{4.07}$   
c7.83  
10' South

0+38.39

$\frac{88.0}{40.0}$   
41.32

122.80  
 $\frac{10.30}{5.38}$   
c4.92  
10.5

0+1767  $\frac{127.14 \text{ Grate}}{5.26}$   
 $\frac{5.77}{0.19}$   
 $\frac{10.50}{10.50}$

Grate 10' 10'

121.40 FL  $\frac{11.70}{5.74}$   
c5.96  
10' South

0+0

$\frac{15.0}{17.54}$

121.00 F.L.  
 $\frac{12.10}{4.44}$   
c7.66  
10' South

BM 12.00 132.10

120.10  $\frac{207.14}{206.61}$   
147.40

Storm Drain

151±0

Sheet 37 Location

" 44 Profile

18" - 120.0'

Aug. 22-50

W. Simon

Garber

Rorer

Shepard

37

138.02 Top

1+275

6.41  
1.88  
c4.53

I Drop

134.50 F.L.

9.23  
1.88  
c8.35  
10' South

1+06

.0403  
10.0  
430

132.69

10.74  
1.28  
c8.96

0+84.56

136.49 Top

7.94  
5.24  
c2.70

10' I Drop

132.89 F.L.

11.54  
5.24  
c6.30

0+63.0

.0128  
10.0  
430

132.63

11.80  
4.91  
c6.89

0+41.50

135.38 Top

9.05  
4.62  
c4.43  
10' So.

I Drop 10'

132.38 F.L.

12.05  
4.62  
c7.43  
10.50

0+20.75

.0345  
10.0  
41.5

132.19

12.24  
4.74  
c7.50  
10' South

0+0.0

132.00 F.L.

12.43  
8.88  
c3.55  
10' South

TP 429

144.43

5.02

140.14

x on MH

B.M. 896

145.16

136.20

Wabash

Juniper



Storm Drain

158+50  
65

changed to 15 North

Sbert 38 Location

" 44 Profile

18'-94

July 25-50. 38.

H. Simpson  
Garber  
R. C. Chavez

150.45 Top

150.70

1.26

1.35

F.O. 0.09

10' South

0.75

I Drop

147.00 F.L.

147.25

1.26

1.35

c3.36

10' 50

-3.45

0+80.5

10.00  
10.00

146.41

5.55

1.28

c4.37

10' 50

0.459

148.72 Top

149.17

2.79

1.24

c0.85

10' 50

I Drop

145.32 F.L.

145.67

1.39

1.24

c4.75

10' 50

-3.60

0+38.34

38.00  
41.34

144.99

8.97

3.36

c3.27

10' 50

147.59 Grate

0+17.67

147.84

1.12

0.52

c0.59

10' 50

H Curb

144.11 F.L.

144.41

7.65

0.52

c4.02

10

-3.43

16.00  
17.67

TP 6.14

151.96

0.78

145.82

0+0 = outlet

140.50 F.L.

BM 1040

146.60

136.20

X 0.7 MH  
Rim  
10' 6" x 4"  
Sump

11.46

3.72

c2.74

Storm Drain  
162+58

Location Changed From 162+58  
to 162+0

Sheet 38 Location  
" 44 Profile

#1"-98'  
18"

8.69  
7.20  
01.49  
10 F.R.P.

May 16-50 39  
H. Simon  
D. Smith  
Rorer  
Chavez  
Coto

148.00 F.L. #2  
9.11  
8.85  
0.25  
0.85  
0.85  
End P.P. Ex. St. P.P.

0.10  
0.52  
58.50

154.75 Top  
#2 2.36 1.94  
7.98 8.43  
F 5.62 F 6.49  
07/10 South

J Drop

147.48 F.L.  
9.21 #2 9.63  
8.43 7.78  
0.78 0.65  
10 Soft Top P.P.

#2 3.69  
6.43  
F 2.74 to Grade  
10 South

#2 3.69 153.42 Grade  
8.30 3.27  
F 4.61 Grade 9.21  
on Top P.P. F 5.94  
07/10 So.

H. Curb

149.10 F.L.  
9.59 10.01  
9.21 8.30  
0.38 0.71  
10 Soft Top P.P.

025+46 62+50 078'

7.49 149.20 149.1

152.84  
81

B.M. #2 3.26 157.11 153.85

TP 8.51 156.69 1317 148.18

B.M. #1 7.50 161.25 153.85 L & T M.H.  
70' N of  
140+55

0+0

RP

9.69  
9.37  
0.32 on End P.P.  
0.33 on RP

147.00 F.L.

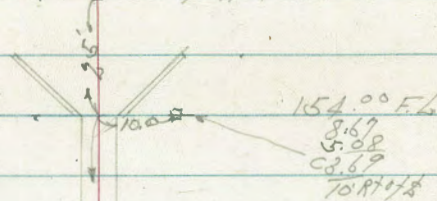
Storm Drain  
 65+76

Sheet 38 Location  
 " 44 Profile  
 66"-76'

May 11-50  
 H. S. Siroz  
 D. Smith  
 R. Roca  
 Chaves  
 Cota

40

RP. King Type HW



48.50

10.02 29

B.M.

152.89

9.78  
 5.27  
 4.57  
 10' RT 1/2

96.0

97.50

10'

151.80 F.L.

19.87  
 13.86  
 4.91  
 10' RT 1/2

RP.

J Type HW.

B.M. 8.83

162.67

153.85

4+TMH  
 70' Lt  
 164+65

Storm Drain

169+50

July 24.50  
Nitesh  
Garber  
Rover  
Chavez

Station 15 Location

45 Profile

18"-124' 126

158+50  
151+07  
133+50  
138+50

172.41 Top  
2.13  
3.07  
10.94  
10.50

1 Drop  
10'

168.98 FL  
5.56  
3.87  
10.50

Nitesh, R. Khan

0904

166.45  
3.09  
3.53  
4.56

170.98 Top  
3.56  
4.82  
11.26  
10.50

163.92 FL  
10.82  
4.82  
6.58  
10.50

1 Drop  
10'

161.52  
13.03  
5.22  
6.30  
10.50

169.14 Grate  
5.40  
6.73  
11.03

159.13 FL  
15.40  
6.73  
8.68

1 Drop  
10'

157.00 FL  
9.71  
9.51  
6.20  
10.50

TP	790	174.54	007	166.64	2+17M41
BM	1286	166.71	153	85	70' 11' 0" 1/2
					164-66

Storm Drain  
174+18

Sheet 16 Location

" 45 Profile

18" 120' R.C.P.

24" 136

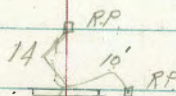
States of set  
10' south of 1/2

April 18.50 42

H. Sisson  
O. Smith  
Rorer  
Chavez  
Coto

171.00  
8.16 R post at  
179.16 1+50  
8.67  
181.83 T.

8 Ground



171.00  
175.50 F.L.

+150 = R.P.

3.17  
0.07  
C 2.66  
C 8.16

8.17  
0.07  
C 8.16 For Hwy  
Inlet

+136 Hwy Inlet

10.83  
5.87  
C 5.22 171.00  
End R.P.

+130 = inlet

1.9 177.3 170.73 3.17  
175.50 175.50  
C 6.52

+97.5

5.2 174.0 169.30 6.30  
172.87

+65.0

9.1 170.1 167.86 8.97  
170.25 175.50  
C 1.25  
C 8.16

+42

10.1 169.1 166.43 11.53  
167.62

+32.5

12.3 166.9

+22.5

0+0 = outlet

14.7 164.5 165.00 14.17  
14.75  
F 0.58

C 1.0

165.00

0-10 = R.P.

14.17  
15.32  
F 1.15

BM

9.53

179.17

169.64 20' MH  
100' Lt 176+0

R.P.

57.0

80.0

73.0

174+18

165.00 F.L.

Storm Drain  
176+35

Sheet 16 Location  
" 45 Profile  
18"-114 R.C.P.

April 18-50 43

Dec. 13. 50  
H.S. J.M.  
Paper  
Rimner

BM #3 8.11 200.52

192.41  
NW Cor  
N 70° W  
Bridg  
2079.58

Aug. 15, 50 9.65 179.29

169.64  
x on N.H. Rim  
100' Lt. 176+00

+79 2 Habars 2.3 174.2

+60 4.8 168.7

+35.67 3.3 170.2

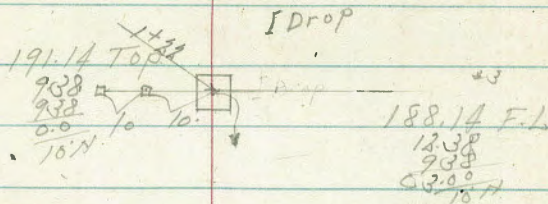
+25 4.1 169.4

oto = outlet 5.2 168.3

BM 3.83 170.77

169.64  
x on N.H. Rim  
100' Lt. 176+00

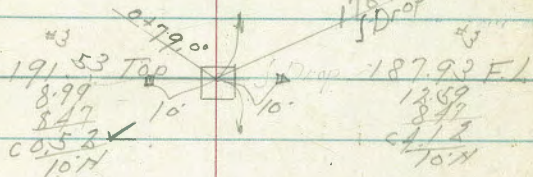
Drop



191.53  
179.29  
12.24  
4.39  
F-16.63

188.00  
12.49 187.93  
8.81 179.29  
8.64  
4.39  
10' F-13.03  
C-3.59

1/2



187.71  
12.81  
8.96  
3.85  
10'H

11.4 Ft.  
187.71  
179.29  
+8.42  
4.37  
F-12.71  
187.50  
179.29  
+8.21  
3.12  
F-13.33

190.92  
179.29  
+11.63  
5.12  
F-16.75 Grate

190.92 Grate  
-17.45  
5.09  
F-22.51  
07RP 10'x10'

187.50 F.L. Fant  
-14.03  
13.09  
F-19.12  
07RP 10'x10'  
172.60 F.L. Fant  
7.69  
5.12  
C-2.57  
F-3.22  
07RP 10'x10'

4.47 oto  
5.21  
F-0.77-End

169.00 F.L.  
11.47  
5.09  
C-0.53  
F-0.63-07RP 10'



Storm Drain Left Lane.

183+50 H/50 184+50

May 23-50  
R. Sisson  
D. Smith  
Rorer  
Chavez  
Cota

Street 30 Location  
45 Profile  
24" - 160'

1.40  
3.25  
00.55  
07 RP.

45  
Restore  
Lynch 1.50  
M/S 11.7  
Chavez  
Bunch  
Port 10 RP  
or 5th

Lower Gate

1+60 = Inlet

3.9

184.6

184.10  
8.87  
5.86  
3.87  
10.52

1+28

183.78  
9.10  
8.17  
4.2

1+20

6.2

182.2

183.46  
9.51  
5.49  
4.07

+96

+80

6.1

182.4

183.14  
9.83  
6.15  
4.68

+64

+40

6.4

182.1

182.82  
10.15  
4.83  
5.62

+32

0+0 = Outlet

6.5

182.0

182.50  
10.47  
7.14  
2.73  
6.27  
10.5F

For Grade 1298

192.97

179.99

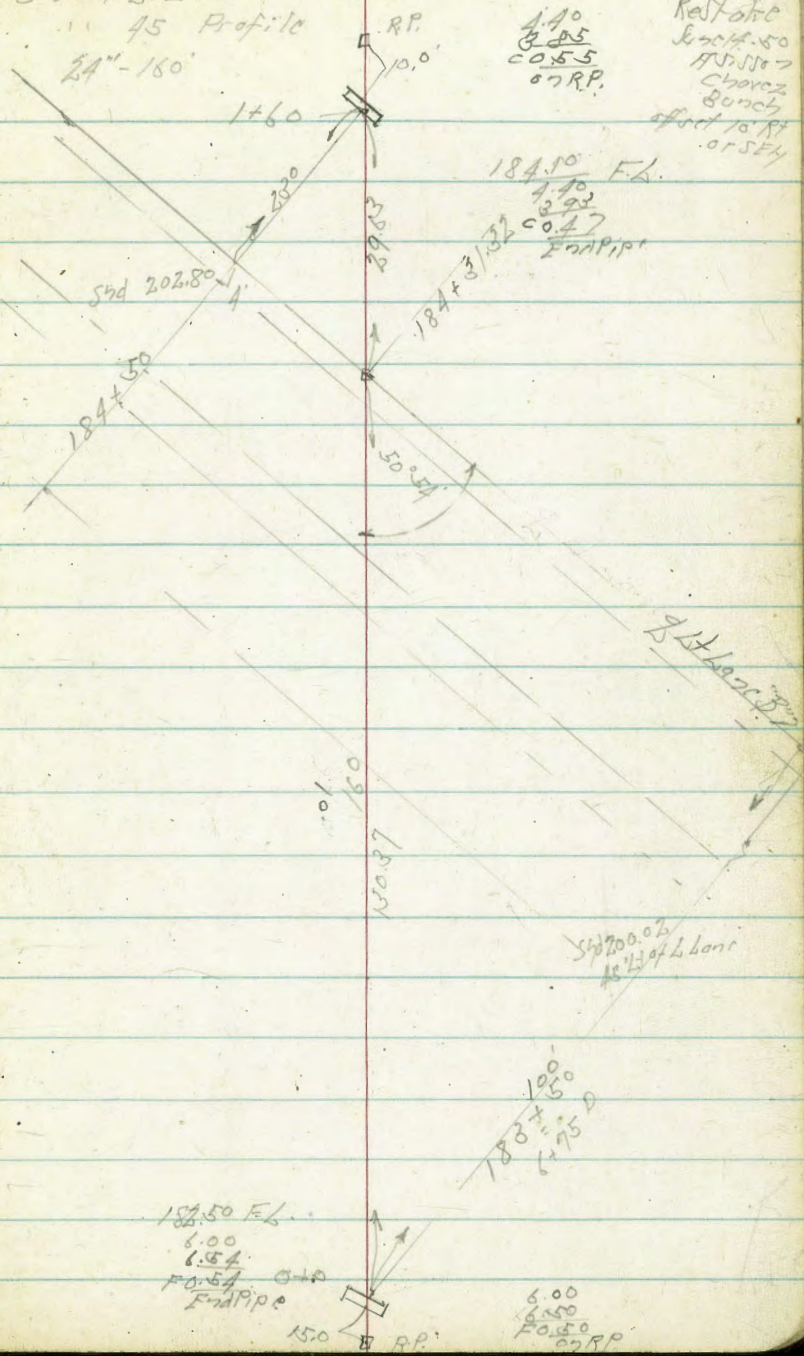
8.51

188.50

179.99

For Profile

120.45  
181+50



184.10 F.L.  
1.10  
3.23  
0.47  
End Pipe

5.70 200.02  
45' 1/2 of 4 Lane

1.00  
1.50  
1.75 D  
183.15

182.50 F.L.  
6.00  
6.54  
For 54" End Pipe

6.00  
6.50  
For 54" End Pipe

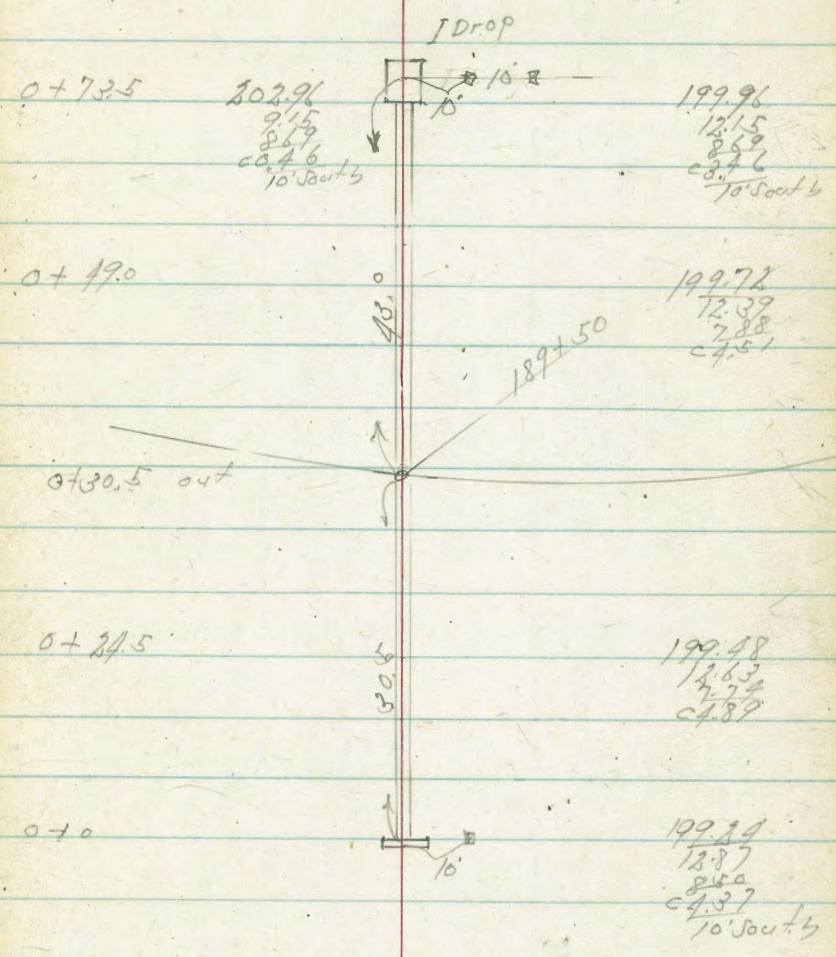


Storm Drain  
1.89+50 Rt Lane

Sheet 21 Location  
45 Profile

18"-72"

Aug. 25-50  
H. J. J. J.  
Garber  
Roror  
Shepard



BM 11.71 212.11

300.40  
L. D. D. H.

Storm Drain

195+83 Rt. Lane 196+83 Lt. Lane

42  
409-8.50

Sheet 23 Location

46 Profile

RR Top Cut Slip

47  
May 25-50  
H. J. ...  
R. ...  
C. ...  
C. ...

18" - 124  
128 R.C.P.

217.14 Top

J Drop

214.14 Fl.

1+89.73

BM 1.2

684

22895

222.11

x 0.7 MH  
75 24  
197+80

1+29.73 214.14

Top I Drop

217.44

11.5%  
9.45%  
c 2.06

1+00.23 213.99

17.00  
17.76  
c 1.07  
10.5

Plan 60' Pipe  
56' R.C.P.

40.5' Elev. of pipe

0+70.73 213.81

12.17  
8.52  
c 5.65  
10.05

H Inlet Grate

226.45

2.50  
5.00  
F 2.50  
10' H  
1/2 Box

0+44.20 213.67

12.24  
8.74  
c 5.50  
10.05

Top  
217.44

195+83 P.O.C.

0+70.73

213.81 Fl.

RR

0+17.67 213.50

12.51  
4.39  
c 5.12  
10.05

0+70.73

196+85.26

0+0 213.40

12.61  
8.20  
c 4.41  
10

+70.73 = 1/2 Inlet

49 218.6

+55

58 219.7

+32

9.2 214.3

+17.67

9.7 213.8

0+0 = outlet

10.1 213.40

BM

1.40

223.51

222.11

x 0.7 MH R.C.P.  
75 24 197+80  
207-52

226.45 Grate

0.14  
7.37  
F 7.23  
10.05

0+0

213.40 Fl.

BM 222.11  
75 24  
2.90 197+80  
226.01 X

Plan 80' Pipe  
60' P.O.C.

RR

20.0



Storm Drain  
200+35

Sheet 22 Location  
" 46 Profile  
24" - 90' R.C.P.

June 15. 50 49

H.S. 1007  
Chavez

Parer

Denoter Stub R.P. □

229.00 FL

3.76

2.15

0.16

10.5

233.62 Grate

-0.86

1.97

F 2.83

10.5

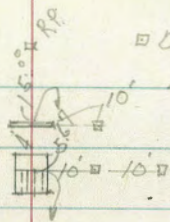
228.89 FL

3.87

1.92

0.19

10.5



38'  
41.33

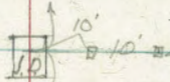
234.54 Top

-1.88

2.66

F 4.54

10.5



38'  
41.33

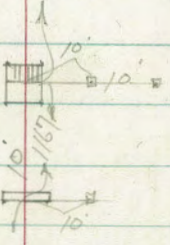
234.03 Grate

-1.27

3.11

F 4.38

10.5



227.82 FL

4.94

3.11

0.18

10.5

227.70 FL

5.06

4.79

0.27

10.5

B.M. 1065

232.76

222.11

X072/H  
784  
19918  
Rthani  
2071-52

Storm Drain  
204+50

Sheet 39 Location  
46 Profile  
18" - 100  
96

54.64  
54.39  
0.25  
1.20  
F0.95

254.39 Grate

250.96 F.I.  
54.64  
50.96  
3.68  
1.20  
C-2.78



380  
40  
41.53

250.86  
54.64  
50.86  
3.78  
1.32  
C-2.96

54.64  
55.00  
F0.36  
1.85  
F1.49

255.00 TOP

250.76 F.L.  
54.64  
50.76  
3.88  
1.85  
C-2.03



380  
40  
41.83

250.64  
54.64  
50.64  
4.00  
1.00  
C-3.00

250.50 F.L. Fall

54.64  
50.50  
4.14  
0.50  
C-3.64

C-3.64

238.90 F.L.W

54.64  
38.90  
15.74  
0.50  
C-15.24



20  
21.9  
37.00  
R.P.

238.50 F.L.  
254.64  
238.50  
16.14  
12.64  
C-3.50

10.12 254.64  
H.I.

B.M. 125 L  
144.52 205+80

Storm Drain

209+28

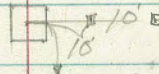
Sheet 39 Location Saturday Aug. 26. 50 51  
46 Profile  
18"-140  
F.S. Simpson  
Garber  
Rorer  
Shepard

I Drop

1+44.0

279.07 Top

7.05  
6.98  
6.57  
10' South



276.07 FL

18.05  
6.48  
23.57  
10' South

1+22.50

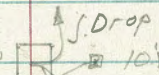


275.75

18.37  
3.26  
24.91

1+01 of Habers Blvd 279.07 Top

7.09  
4.25  
2.84  
10' South



275.43 FL

10.69  
4.35  
6.47  
10' South

BM

12.06

244.47

X on MH  
125' 5 ft  
205' 7 ft  
244.52

0+95.24



275.18

19.91  
3.24  
23.73

6.91

256.53

12.77

249.62

278.07 Grade

8.05  
9.21  
FL 86  
10' South



274.94 FL

11.18  
9.71  
0.127  
10' South

1.62

262.39

13.27

260.77

0+49.67

0.0

273.04

13.08

273.04

07 10' RP  
Foot 17 ft

0+24.67

TP

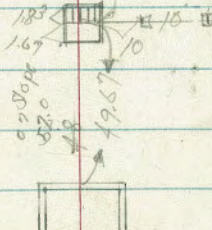
6.48

286.12

8.92

279.64

5.45



264.43  
2.77  
7.8  
2.03

4.26

288.56

13.21

284.80

0+0

253.00  
9.39  
7.03  
23.86

1.54

297.51

12.37

295.97

07 R.P. 14.5  
at BC  
Page 55

BM

2.16

308.34

306.18

Storm Drain  
214100

Sheet 39 Location  
" 46 Profile  
18"-112 RCP

54

1+74.50 305.67 Top IDrop 302.67 FL 6.68  
3.68  
3.50  
c0.78

0+96.50 300.76 8.59  
5.59  
c0.57

0+78.50 303.36 Grate 298.86 FL 10.49  
5.90 30' 15' 4.16  
4.16  
c1.83

0+60 297.79 11.56  
5.56  
c0.73

0+41.50 301.05 Top IDrop 296.72 FL 12.63  
8.20  
6.50  
c1.50  
10' South of 2

BM 217 306.18 on R.P. Hub 59' Lt 86 0+20.25 295.86 13.49  
2.63  
c10.76

2.00 309.35 13.08 307.35 0+10.2 295.00 FL 14.25  
12.82  
c1.50  
10' South of 2

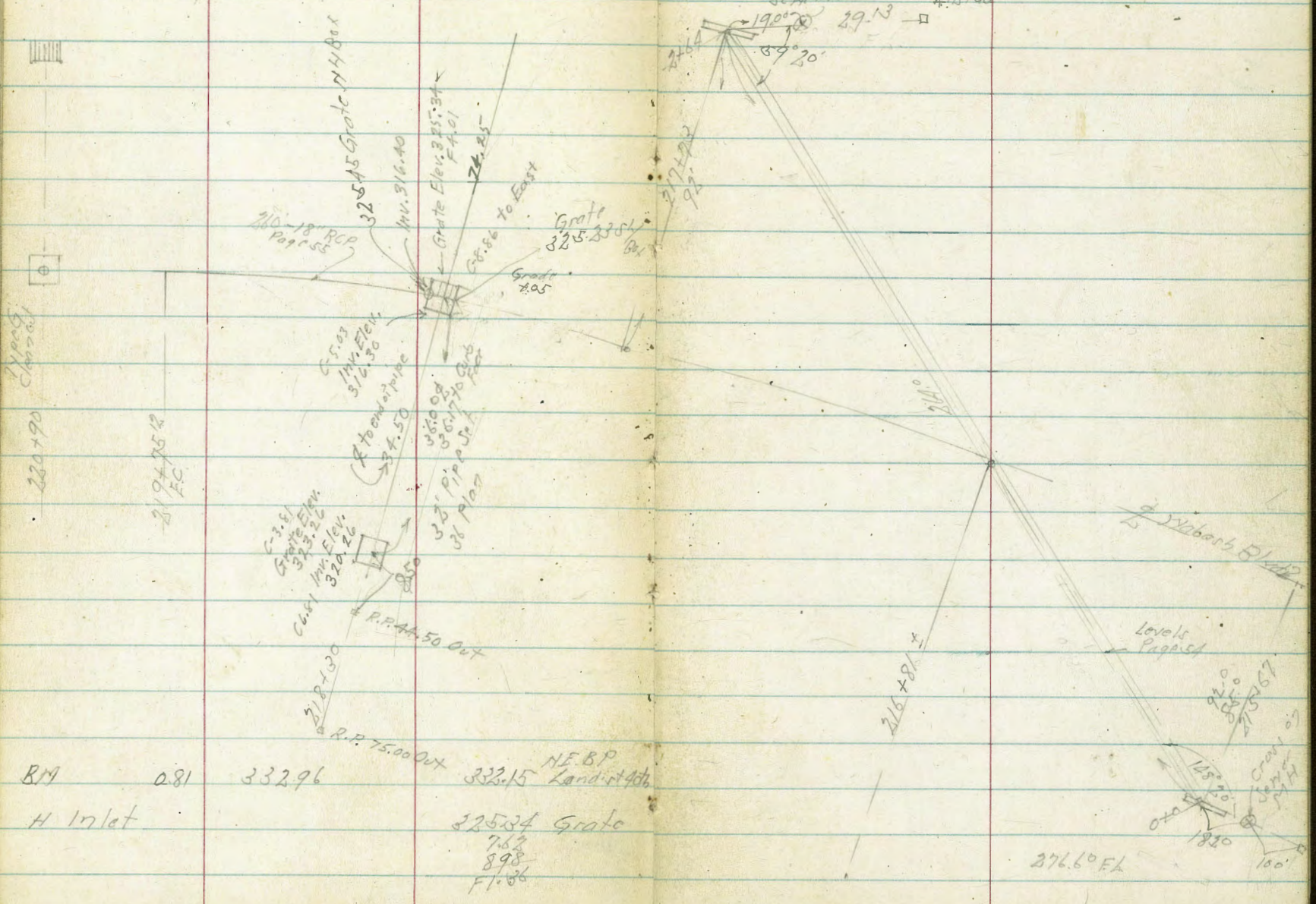
BM 219 322.34 322.15 NEBP Lond's 40' 2

Storm Drain  
 215+86 to 217+73

2" Curbed Profile Sheet 46

Sheet 40 Location  
 46 Profile  
 36" x 264 R.C.P.  
 Cross Section M7  
 R.P. Station

53



BM	0.81	332.96	332.15	NE BP Kandit 4th
H Inlet			325.24	Grate
			7.52	
			8.98	
			Fl. 86	

276.6° FL



Storm Drain

215+86 to 217+73 or 216+76

Sheet 40 Location

" 46 Profile

Stake offsets of 10' Sth

Grades

June 26. 50

F. J. Sisson

Perce E. Chavez

Profile

June 19. 50

F. J. Sisson

Chavez

54

Sketches

Ground

Invert

36" x 26" P.C.P.

Ground

Invert

+50			1.8	2818	282.48	7.52	13.45 5.87 10
TP	7.01	295.92	1.41	288.92			8.92 8.21 10
+25					281.40	7.52	10
1+0			10.0	2786	280.32	7.23	10.01 3.28 10

+75			11.02 2.02 7.05 10.51	279.24			8.53 7.37 10.51
-----	--	--	--------------------------------	--------	--	--	-----------------------

+50			13.17 3.17 7.50 10.51	278.16			10.36 1.72 10.51
-----	--	--	--------------------------------	--------	--	--	------------------------

+25			13.25 4.25 8.47 10.51	277.08			10.36 1.72 10.51
-----	--	--	--------------------------------	--------	--	--	------------------------

0+0 = Outlet			14.23 3.72 5.59	276.00			11.29 4.54 10.51
--------------	--	--	-----------------------	--------	--	--	------------------------

B.M.			11.01	277.53			12.87 5.28 7.59
------	--	--	-------	--------	--	--	-----------------------

" " Grades	12.80	290.33		277.53			
------------	-------	--------	--	--------	--	--	--

B.M. Profile	6.73	288.57		281.84			
--------------	------	--------	--	--------	--	--	--

+64 = Outlet			1.4	287.2	287.40	7.79	
--------------	--	--	-----	-------	--------	------	--

+50					286.80	7.70	
-----	--	--	--	--	--------	------	--

+25			2.8	286.8	285.72	7.05	
-----	--	--	-----	-------	--------	------	--

2+0			2.6	285.0	284.64	6.70	
-----	--	--	-----	-------	--------	------	--

1+75					282.56	7.27	
------	--	--	--	--	--------	------	--

295.93 Grades  
288.57 Profile

0.25 S.W.C.  
Stake  
1475 P.C.P.

Star in Drain  
218+30 to 220+90

Sketch 53

+25

220+0

+75.12 FC

+50

+25

219+0

+75

+50

218+30

Sheet 90-41 Location  
in 8 Profile

53

+90 G clean out

+75

220+50

Chollas Creek Channel Change

Sketch Page 17

2

Rt. 20

Areas  
Excavation

Cubic Yds.  
Excav.

5+0	110 119 091 391	140 130 080 300	110 85 025 110	4965	110 86 024 00	110 110 00 3000 per 0.125	
4+50	10.6 12 088 38.8	10.6 12 091 350	10.6 10.6 00 8	50.07	10.6 10.0 00 00	10.6 10.6 00 80	11.1 11.1 07 35.8
7P	7.73	60.67	10.36	52.94			
4+0	12.8 10 088 38.8	12.8 10 093 38.0	12.8 10 00 40	50.49	12.8 10 00 00	12.8 10 00 311	13.5 13.5 00 361
4+50	12.4 12 088 38.8	12.4 12 093 310	12.4 11.8 00 120	50.91	12.4 12 00 00	12.4 12 00 302	12.2 12.2 01 362
3+0	120 125 085 38.5	129 131 089 320	120 111 009 220	51.33	120 125 00 00	120 120 00 300	120 119 01 35.8
2+50	116 117 085 38.5	116 118 088 310	116 117 015 300	52.25	116 116 00 00	116 113 003 303	112 115 00 35.3

65.50 Brt. Ford. Page 18

280.42

199.10

300.40

125.34

283.74

181.10

260.43

100.16

166.19

79.33

170.58

104.90

275.35

Page 18



Chollas Creek Channel Change

4

+50	11.3 8.9 0.24 32.4	11.3 6.8 0.45 26.0	45.03	11.3 5.5 0.58 0.0	11.3 4.8 0.64 25.0	11.3 7.3 0.40 34.0	11.3 11.3 0.0
+32.85 EC	11.2 7.5 0.37 33.7	11.2 5.0 0.62 16.0	45.17	11.2 4.2 0.68 0.0	11.2 3.8 0.80 18.0	11.2 10.2 0.12 23.0	11.2 11.2 0.0
10+0	10.7 4.6 0.54 35.4	10.9 5.5 0.54 35.4	45.45	10.9 4.6 0.63 0.0	10.9 5.5 0.53 7.0	10.9 10.9 0.0 27.0	10.9 10.9 0.0
+50	10.5 2.7 0.80 35.3	10.5 3.7 0.71 13.0	45.87	10.5 6.5 0.70 0.0	10.5 10.5 0.0 18.0	10.5 12.3 F1.8 23.0	10.5 10.5 F0.6 30.9
TP	3.33	56.32	7.09	52.99			
9+0	13.8 7.0 0.68 38.8	13.8 5.7 0.81 31.0	46.29	13.8 10.7 0.37 0.0	13.8 10.8 0.0 7.0	13.8 15.7 F1.0 18.0	13.8 14.7 F0.9 31.4
8+50	13.4 5.9 0.75 37.5	13.4 11.6 0.82 29.0	46.71	13.4 14.4 F1.0 0.0	13.4 13.4 F2.0 8.0	13.4 18.4 0.86 0.28	13.4 13.4 Bottom Channel

Areas  
Excav.

Cubic Ydr.  
Excav.

						527.09	
					359.60.		
						232.84	
					333.17.		
						371.89	
					278.16.		
						197.06	
					258.67.		
						482.32	
					262.24.		
						339.88	
					104.83.		
						184.62	

Chollar Creek Channel Change

	St.	L	Rt.	Area Excav.	Cubic Yds Excav.		
BM		7.20	51.82	51.82 +35 51.77			
TP	4.25	59.02	165	5467			
+50		43.35	13° out				
12+0	12.6 12.1 61.5 31.5	12.6 12.6 100 78.0	43.77	12.6 12.6 0.0	12.6 0.0 30.0	9.00.	
+50	12.1 8.7 63.3 33.2	12.1 8.7 62.4 30.0	44.19	12.1 9.2 62.9 0.6	12.1 0.0 3.0 30.0	107.19.	
						107.58	
11+0	11.7 11.7 60.6 30.6	11.7 10.6 61.7 19.0	44.61	11.7 6.2 65.0 0.0	11.7 7.0 64.7 17.0	11.7 11.7 62.8 30.0 38.0	293.38
						20.966.	
						56.32	

Storm Drain Federal Blvd

41 + 46.86 B.C. Lt.

Sketch Page 17

April 5-50

H.S. Cas  
D. Smith  
Rorrr  
Chavez  
Coto

Inlet Grade Aug 28-50

BM 6.74 68.86

62.12

L + Disc  
Rt. Federal  
+ Paving

TP 569 569.5 9.78 53.26

1 + 27.5 = Inlet 8.9 54

1 + 01.8 = Curb H Type Inlet 9.4 53.6

+ 67.5 = Federal 9.4 53.6

#30 9.5 53.5

0.20 = Outlet 9.3 53.7

BM 0.92 63.04 62.12

L + Disc  
Rt. Federal  
+ Paving

Sheet 30 Location

" 47 Profile

18' - 124.0

1284  
8.53  
8.25  
8.25  
8.15

Tried to Drain  
Low for  
Sump Chollas Channel

48.1

-5.03 68.07 Grate

8.76  
F 13.77

Hug 28 → 0.79

9.39  
F 8.60 = Grate

41 + 46.86  
B.C. Lt.

2 Federal Blvd

100.0

67.50

800.0

used  
57.26 F.L.

58.20

Ground

1284

8.76

8.25

8.25

8.15

10.0 HRP

H Type used

51.86 F.L.

58.00

1204

8.76

8.25

8.25

8.15

10.0 HRP

1284  
9.33  
8.51  
8.29

used  
57.26 F.L.

57.20

Ground

1284

9.33

8.51

8.29

10.0 R

Storm Drain Federal Blvd.

46+50 + 47+08

Sheet 31 Location

" 47 Profile

18" - 104.0'

Nov. 17-50

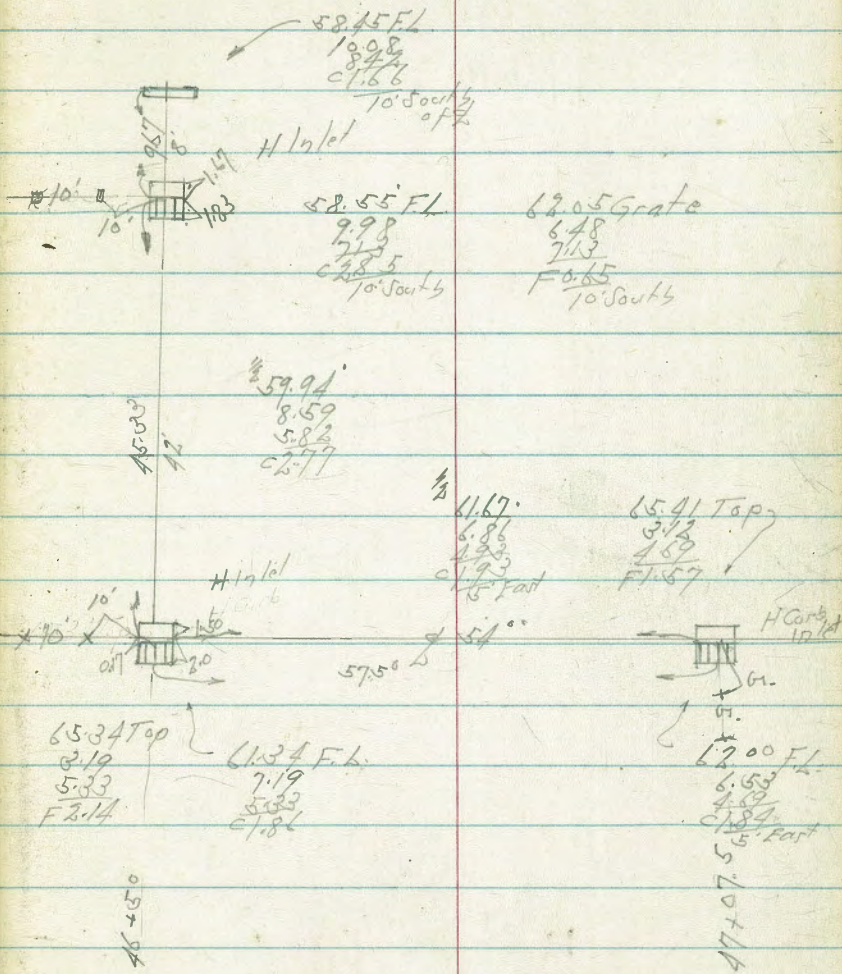
A. Sisson

Garber

Forster

Pullen

61



BM

6.41

68.53

12.12

Lt Disc  
Pl. Federal  
+ " Pav.



North West Inner Loop  
Storm Drain 5467

Also Page 9

Sheet 29 Location

" 47 Profile

18"-68" R.C.P.

Sat. April 8-50 62

Redlake  
H. J. Sisson  
H. J. Sisson  
Gardner  
Rorer  
Shepard

H. J. Sisson  
O. Smith  
Rorer  
Chavez  
Cota

INDEXED

JUN 7 1950

BM 66.13  
223  
7334

6.10  
3.2  
F 5.7

+71.50

For Profile

+71.50

6.8 584

-7.87  
7.37

F 15.11 73.04 Grate  
on RP

+71.83

+71.83 = 1761

7.6 526

-1.93  
6.34  
F 11.22  
10 South  
sestake

8 NW 11.2



57.60 F.L.  
10.51  
6.22  
10.5 Rottake  
7.57  
6.27  
C 0.80 End Pipe

7.57  
7.57  
0.00 on RP

+35.5 = 5467 NW 11.2

7.4 57.2

+31.91

120  
144

58.80 F.L.

58.20 Mid  
9.91  
9.17  
C 3.74  
10.4  
Rottake

0+0 = 1761

7.1 58.1

0+0 ?

9.61  
9.07  
C 0.54  
10.05 on  
Rottake

58.50 F.L. 6.67  
7.09  
F 0.42

TP 9.68 65.17 6.98 55.49

BM 8.87 62.47 5.4.10

Mon St  
Broadway  
NW 35

sestake 6.8.11 K. D. Ford  
Page 65

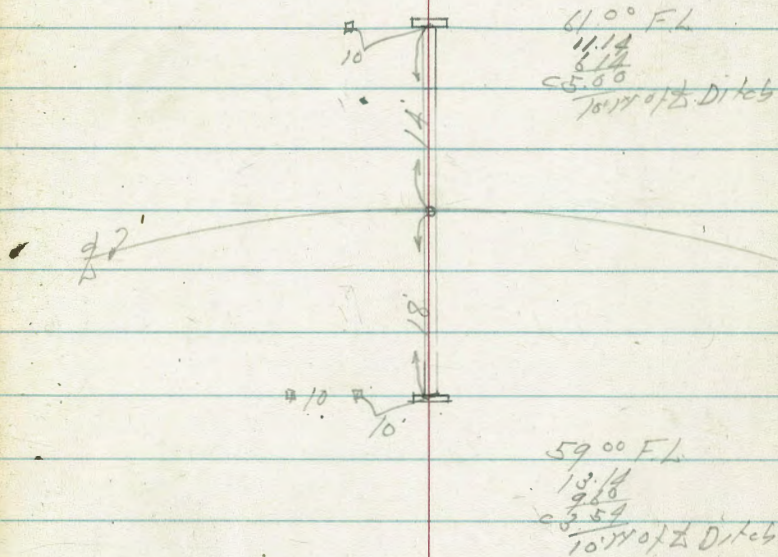
6.67  
7.33  
F 0.66

North West Inner Loop  
Storm Drain  
140

#40 Page 9

Sheet 29 Location  
.. 29 Profile  
18"-32

Jan. 12-51  
751507  
Garber  
Korer 63



B.M

60)

72.14

16.13

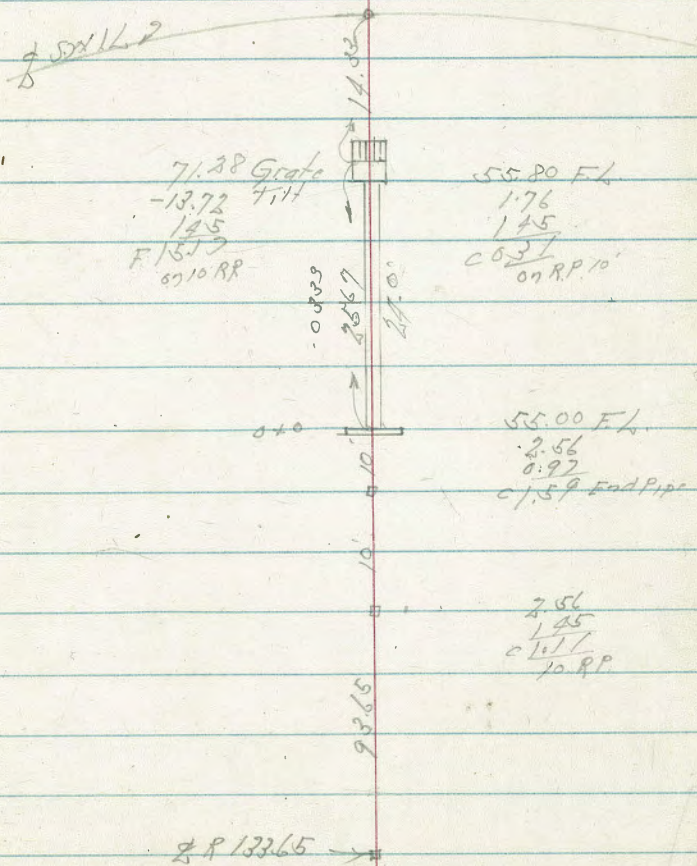
N.W. 8P  
Head Sta. Ch.  
573  
11702N Mac

South West Inner Loop  
Storm Drain  
140

Also Page 9

Sheet 32 Location  
" 47 Profile  
18'-24

May 3-50  
AS. S. S. O. 64



+25.67 = Inlet 4.8

0+0 = End Pipe 1.8

BM 546 57.56 54.10 Mon 12354 So. Section 2 R 133.65

Federal Blvd. Storm Drain

31+45.83 F.C.

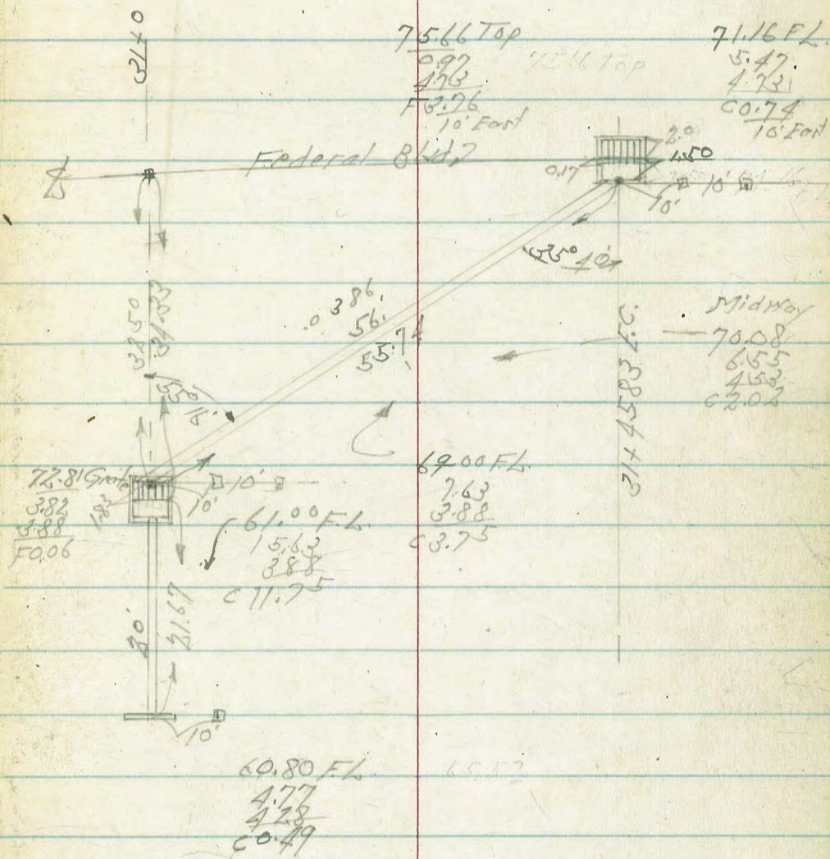
Also Page 9

Sheet 32 Location

47 Profile

18"-76' R.C.P.

65



TP	9.08	76.63	0.56	67.55
TP	2.37	68.41	0.83	64.74
BM	12.07	65.57	52.50	

B.P. N.Y. H.P.  
72' 0" N  
52' 1/2"

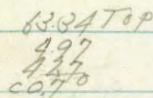
Federal Blvd. Storm Drain

11+0

Street 42 Location

18-76  
24-12  
63.84 Top

4.97  
4.25  
0.72



10 Drop

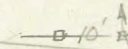
58.31 F.L.  
70.00  
11.69  
C5.73

8° 30'

58.05 1/2  
10.26  
4.73  
C6.88

Federal

3.10  
3.34  
0.24  
64.71 Top  
8.95  
3.85  
C8.10  
10' Horiz



57.80 F.L.  
10.54  
3.34  
C7.17

10' Horiz

57.75 F.L.  
10.56  
3.34  
C7.22  
10' Horiz

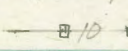
10.109  
32.0  
55.30

57.55 1/2  
10.76  
2.26  
C7.82  
10.91  
2.95  
C7.76

57.40 F.L. East

10 Drop

3.09  
1.99  
0.11  
64.78 Top  
3.52  
2.25  
C6.58



57.30 F.L. N  
11.01  
3.95  
C8.06  
10.57  
1.16  
C9.47  
10' N

10.24  
1.20  
13.50

57.00 F.L.

11.31  
11.54  
F0.23  
19.86  
F0.32  
15' Horiz

R-11+0  
R-10+0

BM 5.66 68.31 62.65

BM 0.67 62.69

BM 13.28 63.36 50.08

TP 4.05 71.66 0.26 67.61

BM 11.67 67.87 56.20

BP 7 1/2' 10' 1/2'  
N of Federal  
N of Market  
62.65

NE 7 1/2' 7'  
Market &  
3rd St Horiz

07 10' N  
0 40 S of 10' N  
1890 15

21 Sept 8-50  
17.8.18.07  
Garber  
Rorel

16  
Nov 17.50  
R.D. 10.00  
Garber  
Rorel  
Pellon

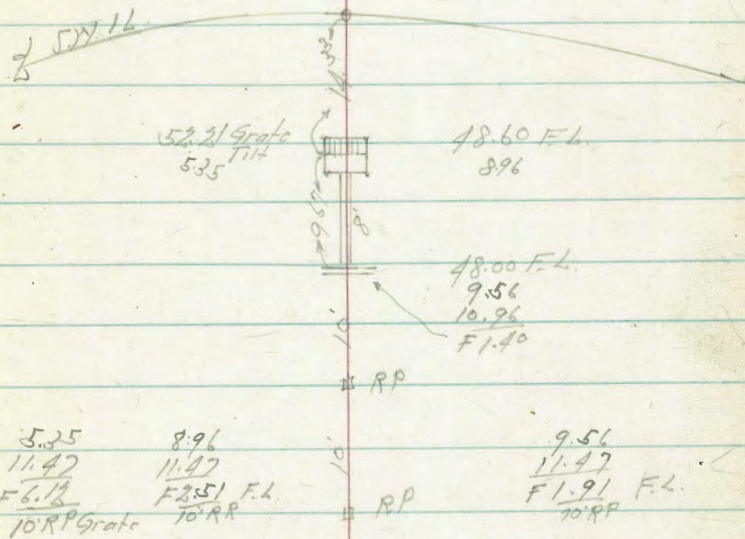
10 x 57 1/2  
P.R.C.

South West Inner Loop  
Storm Drain  
6+25

Sketch Page 9

Sheet 32 Location  
" 47 Profile  
18" 8' Long

May 3-50 67  
45,000



BM 246 57.56

Manhole  
So. Broadway  
57.10

North East Outer Connection

Storm Drain 10+75

Sheet & Location

" Profile

18"-8"

Sketch Page 17

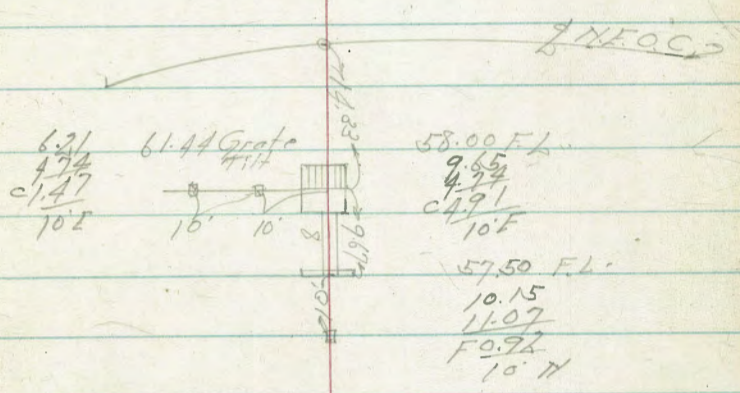
28

Doc 27-50

H.S. Max

Garber

Rorer



BM 5.53 67.65

62.12

L+Disc  
P. Federal  
+ Federal  
Paving

Wabash Blvd Storm Drain  
164+12 Extra motor plans

By letter May 11-50

1+04

3.1

+63

2.7

+53 = 2 Wabash

2.4

+10

1.2

0+0

0+08

8.4

BM

7.50

181.35

153.85

4+7 MH  
70' H  
64+65

24"-104

May 16-50

H500007

69

6.33  
2.52  
63.71  
70.5 on RP

155.13 FL

6.23  
2.63  
62.68  
End Pipe

5.03

0+53

153.59 FL

7.76  
8.82  
63.94  
70.5 on RP

5.00

0+0

152.00 FL

9.35  
8.43  
63.32  
End Pipe

9.35  
8.43  
60.92 on RP



Hobart Blvd. Channel Change April 27, 50

126+0 to 127+50

82' Left of S. Hobart Blvd. Bot Channel Cota

R.P.

Center

Bot Channel Cota

HS 1100  
D Smith  
Rocel  
Chavez

Sheet 35436 Location No RB in RT 70  
" 4 Profile Area Cubic Yds.

Bench  
Grade

Excavation

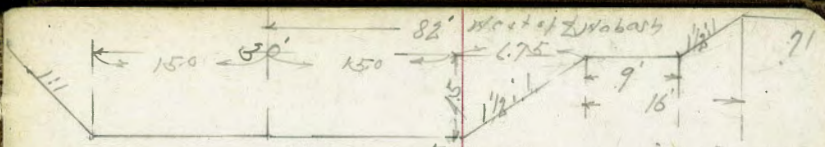
Excav.

+50	44 41 +0.3 22.2	66 44 C22 19.2	66 53 C18 0.0	92.70	66 41 C25 150	66 40 C26 189	98.20	61.06.	
128+0	5.3 4.1 -0.3 22.1	7.3 5.3 C21 19.1	7.3 4.8 C25 0.0	92.96	7.3 4.7 C26 150	7.3 4.2 C31 19.7	97.46	81.25.	131.77
+50	7.0 6.9 10.3 21.1	8.1 7.0 C11 16.1	8.1 5.9 C22 0.0	92.22	8.1 6.9 C24 150	8.1 6.0 C21 182	96.72	64.30.	134.78
127+0	7.1 7.6 0.5 21.7	8.8 7.1 C1.7 16.7	8.8 7.4 C1.4 0.0	91.48	8.8 7.9 C0.9 150	8.8 7.9 C0.9 164	95.98	42.32.	98.72
+50	8.4 8.6 0.2 21.1	9.5 8.4 C1.1 16.1	9.5 8.1 C1.4 0.0	90.74	9.5 8.1 C1.4 15.0	9.5 7.6 C1.9 18.0	95.21	42.62.	78.65
126+0	10.1 10.1 0.0 20.2	10.3 10.1 C0.2 15.2	10.3 10.1 C0.2 0.0	90.00	10.3 9.9 C0.4 15.0	10.3 9.9 C0.4 15.6	91.50	7.64.	16.54
	3.47	100.28	11.47	96.81					
B.M.	3.86	108.38		104.43	09 X 114 60 155 122+50				

Habash Blvd. Channel Change

126+0 to 127+80

	Center			Bottom of Channel	Grade	
+50	7.8 7.7 +0.1 2.4	9.2 7.8 0.4 16.4	9.2 8.2 1.0 0.0	98.15	9.2 8.0 0.2 15.0	9.2 8.1 0.1 76.7
131+0	8.8 8.7 +0.1 2.1	9.9 8.8 0.4 16.1	9.9 8.8 1.1 0.0	97.39	9.9 9.2 0.7 15.0	9.9 9.2 0.7 16.1
+50	8.9 7.9 +1.0 2.7	10.7 8.0 0.7 17.7	10.7 3.8 0.9 0.0	96.65	10.7 9.4 0.3 15.0	10.7 9.4 0.3 17.0
130+0	9.9 9.8 +0.1 2.3	11.4 9.1 0.5 16.5	11.4 9.1 2.3 0.0	95.91	11.4 9.2 0.2 15.0	11.4 9.2 2.2 15.0
TP	9.86	107.33	2.81	97.47	129.50	
+50	2.8 2.5 +0.3 2.3	5.1 3.8 0.2 17.3	5.1 2.4 2.7 0.0	95.17	5.1 2.1 0.3 15.0	5.1 2.2 2.9 19.4
129+0	3.5 3.7 -0.2 3.4	5.9 3.5 0.2 17.4	5.9 3.7 2.2 0.0	94.43	5.9 3.2 0.7 15.0	5.9 3.0 2.9 19.4
		100.28				



Bench Grade	Areas EXCS.	Cubic Yds EXCS.
102.63	36.22	
101.89	30.99	62.23
101.15	62.37	86.44
100.41	67.61	120.35
99.67	89.96	145.90
98.93	79.83	157.21
		130.48

Yabarb Blvd. Channel Change

126+0 to 137+50

				Areas		Cubic Yds		
				Exca		Exca		
						181.09		
+50	$\begin{array}{r} 7.4 \\ 7.5 \\ 10.1 \\ \hline 25.0 \end{array}$	$\begin{array}{r} 10.2 \\ 7.2 \\ \hline 17.8 \end{array}$	$\begin{array}{r} 10.2 \\ 7.2 \\ \hline 17.8 \end{array}$	102.56	$\begin{array}{r} 10.2 \\ 7.2 \\ 2.3 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 10.2 \\ 8.2 \\ 2.0 \\ \hline 18.0 \end{array}$	107.06	90.90.
134+0	$\begin{array}{r} 9.0 \\ 9.2 \\ 0.2 \\ \hline 18.0 \end{array}$	$\begin{array}{r} 11.0 \\ 9.0 \\ \hline 17.0 \end{array}$	$\begin{array}{r} 11.0 \\ 8.6 \\ \hline 17.0 \end{array}$	101.82	$\begin{array}{r} 11.0 \\ 3.4 \\ 2.7 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 11.0 \\ 8.0 \\ 2.0 \\ \hline 19.5 \end{array}$	106.32	78.75.
+50	$\begin{array}{r} 10.4 \\ 10.1 \\ 0.3 \\ \hline 21.3 \end{array}$	$\begin{array}{r} 11.7 \\ 11.2 \\ \hline 16.3 \end{array}$	$\begin{array}{r} 11.7 \\ 11.2 \\ \hline 16.3 \end{array}$	101.08	$\begin{array}{r} 11.7 \\ 8.2 \\ 2.9 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 11.7 \\ 8.2 \\ 2.9 \\ \hline 15.0 \end{array}$	105.58	77.00.
TP	835	112.77	2.91	104.42	$\begin{array}{r} 60.41 \\ 13.27 \\ \hline 104.42 \end{array}$			
133+0	$\begin{array}{r} 5.5 \\ 5.1 \\ 0.6 \\ \hline 11.5 \end{array}$	$\begin{array}{r} 7.0 \\ 5.5 \\ \hline 16.5 \end{array}$	$\begin{array}{r} 7.0 \\ 4.9 \\ \hline 16.0 \end{array}$	100.35	$\begin{array}{r} 7.0 \\ 4.1 \\ 2.9 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 7.0 \\ 4.2 \\ 2.8 \\ \hline 19.2 \end{array}$	104.85	72.17.
+50	$\begin{array}{r} 6.6 \\ 6.1 \\ 2.1 \\ \hline 14.8 \end{array}$	$\begin{array}{r} 7.7 \\ 6.1 \\ \hline 16.6 \end{array}$	$\begin{array}{r} 7.7 \\ 5.3 \\ \hline 16.0 \end{array}$	99.61	$\begin{array}{r} 7.7 \\ 5.2 \\ 2.1 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 7.7 \\ 5.8 \\ 1.9 \\ \hline 17.9 \end{array}$	104.11	68.72.
132+0	$\begin{array}{r} 8.0 \\ 8.0 \\ 0.0 \\ \hline 16.0 \end{array}$	$\begin{array}{r} 8.5 \\ 8.0 \\ \hline 15.5 \end{array}$	$\begin{array}{r} 8.5 \\ 7.8 \\ \hline 16.0 \end{array}$	98.87	$\begin{array}{r} 8.5 \\ 7.7 \\ 2.2 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 8.5 \\ 7.7 \\ 2.8 \\ \hline 16.2 \end{array}$	103.37	30.91.

10733

52.90

Hobash Blvd. Channel Change

12640 to 137450

Areas

Cubic Yds.

73

Excess

Excess

+50	$\begin{array}{r} 5.8 \\ 5.9 \\ -0.7 \\ \hline 20.0 \end{array}$	$\begin{array}{r} 5.8 \\ 5.8 \\ -0.8 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 5.8 \\ 5.6 \\ -0.2 \\ \hline 0.0 \end{array}$	107.00	$\begin{array}{r} 5.8 \\ 5.9 \\ -0.9 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 5.8 \\ 5.0 \\ -0.8 \\ \hline 16.2 \end{array}$	111.50	10.29	
13740	$\begin{array}{r} 5.0 \\ 4.9 \\ -0.1 \\ \hline 21.5 \end{array}$	$\begin{array}{r} 6.5 \\ 5.0 \\ -1.5 \\ \hline 16.5 \end{array}$	$\begin{array}{r} 6.5 \\ 5.0 \\ -1.5 \\ \hline 0.0 \end{array}$	106.26	$\begin{array}{r} 6.5 \\ 6.6 \\ -0.9 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 6.5 \\ 6.7 \\ -0.8 \\ \hline 16.2 \end{array}$	110.76	42.17	48.57
+50	$\begin{array}{r} 5.0 \\ 4.9 \\ -0.1 \\ \hline 22.3 \end{array}$	$\begin{array}{r} 7.3 \\ 5.0 \\ -2.3 \\ \hline 17.3 \end{array}$	$\begin{array}{r} 7.3 \\ 5.1 \\ -2.2 \\ \hline 0.0 \end{array}$	105.52	$\begin{array}{r} 7.3 \\ 5.1 \\ -2.2 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 7.3 \\ 5.1 \\ -2.2 \\ \hline 18.3 \end{array}$	110.02	72.91	106.55
13640	$\begin{array}{r} 5.0 \\ 5.0 \\ -2.0 \\ \hline 23.0 \end{array}$	$\begin{array}{r} 8.0 \\ 5.0 \\ -3.0 \\ \hline 18.0 \end{array}$	$\begin{array}{r} 8.0 \\ 5.5 \\ -2.5 \\ \hline 0.0 \end{array}$	104.78	$\begin{array}{r} 8.0 \\ 6.1 \\ -1.9 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 8.0 \\ 6.0 \\ -2.0 \\ \hline 18.0 \end{array}$	109.28	80.85	142.37
+50	$\begin{array}{r} 5.5 \\ 4.8 \\ -0.8 \\ \hline 25.2 \end{array}$	$\begin{array}{r} 8.7 \\ 5.7 \\ -3.0 \\ \hline 20.2 \end{array}$	$\begin{array}{r} 8.7 \\ 6.6 \\ -2.1 \\ \hline 0.0 \end{array}$	104.04	$\begin{array}{r} 8.7 \\ 6.7 \\ -2.0 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 8.7 \\ 6.7 \\ -2.0 \\ \hline 18.0 \end{array}$	108.54	96.90	164.58
13540	$\begin{array}{r} 6.3 \\ 7.1 \\ -0.8 \\ \hline 23.2 \end{array}$	$\begin{array}{r} 9.5 \\ 6.3 \\ -3.2 \\ \hline 18.2 \end{array}$	$\begin{array}{r} 9.5 \\ 5.7 \\ -3.8 \\ \hline 0.0 \end{array}$	103.30	$\begin{array}{r} 9.5 \\ 7.5 \\ -2.0 \\ \hline 15.0 \end{array}$	$\begin{array}{r} 9.5 \\ 7.8 \\ -1.7 \\ \hline 17.6 \end{array}$	107.80	104.68	186.65

112.77

Market St. + Federal Blvd.

Grades for Tel. Co.

Aug 4-50 74

BM

1306

67.64

54.58

Chgo/D  
144.15  
Curb  
2072-78

0+26.15

1.17  
36  
00.81

66.47  
65.11  
1.36

2.53  
0.36  
2.17

13' W of 20' Rad

63.55 Curb 1 plane  
4.09  
4.27  
F0.18

50' Cb Rad

59.95 Gutter  
7.69  
8.40  
F0.71





INDEXED  
mx  
JUN 7 1960

			+96.07 - Exist MH	155.79	
			+86.27 - MH #3 Δ 45° 00' RT	155.00	10.12 4.04 c5.98 80 ft.
4+32.54 = Exist MH		157.79			
TP			+55.225	153.75	11.37 4.22 c6.27
4+08.27 - Exist MH		155.61			
TP			+24.18	152.50	12.62 2.14 c6.78
+84 Δ 45° 10' Lt.	MH #2 8.76 1.92 c6.77	153.66			
		153.43			
			+93.135	151.25	13.89 7.92 c6.75
+52		152.88			
			+62.09	150.00	15.12 9.24 c5.78
3+20		152.34			
			+31.045	148.76	16.66 10.78 c5.58 80 ft.
2+88		151.80			
			0+0 = MH #1	147.51	
16237			BM 1127	165.12	153.85 L+T MH



Sewer Level 35th St. Broadway +  
Alley North of Broadway

INDEXED  
MK  
JUN 7 1950

M.H.  $\frac{1}{2}$  Broadway 15.02 47.45 FL  
6.53 55.94 Rim

35th St Alley North of Broadway

M.H. 21" +2.6 12.64 49.83 FL  
4.54 57.93 Rim

M.H. 16" Line 12.48 50.00 FL  
5.12 57.35 Rim

B.M. 8.37 62.47 54.10  
Monthly 35th St  
So. Broadway

Grades Sewer laterals  
Broadway East of 35th St

May 31-50 78  
F.S. No. 7  
Chavez  
Coto

Sketch Page 14

Sewer Lateral #2 offset 10' East

0+91.00 Connect to 4"  
Ct. Sewer Above 10.77  
0 76.50 8.42  
0 2.25

0+45.5 0238 75.46 11.81  
5.26  
0 6.65

0+0 =  $\frac{1}{2}$  Broadway 0 71.42 11.85  
out

TP 0.80 87.27 12.68 86.47

Sewer Lateral #1 offset 10' West

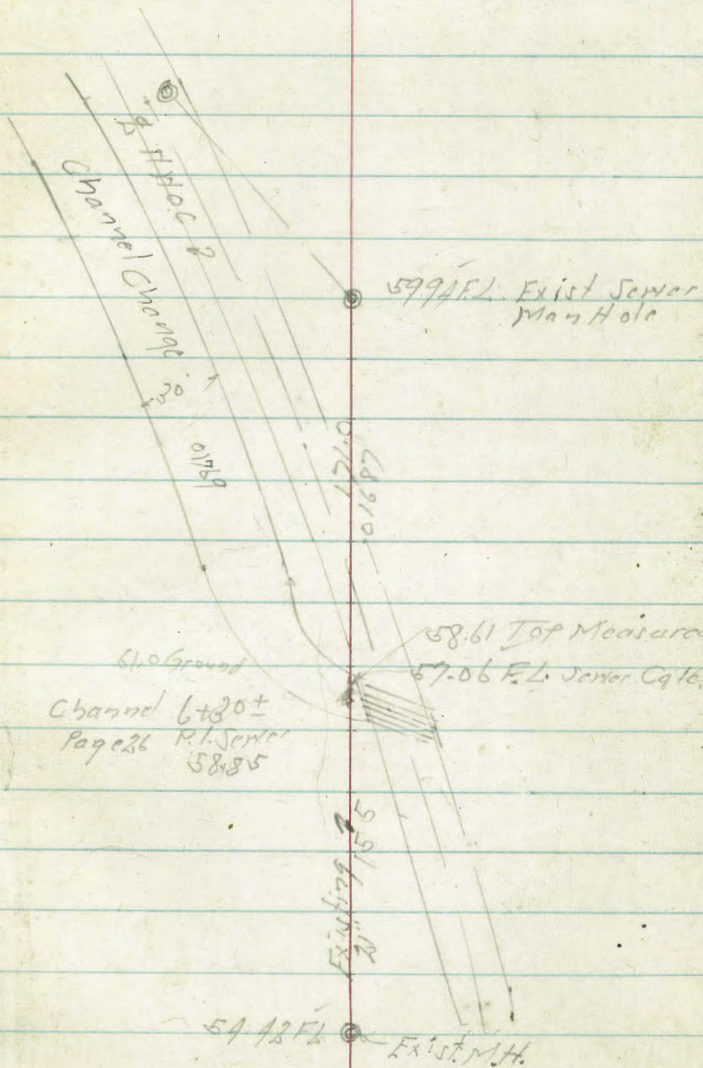
0748 = Connect to Ct. Above 83.50 FL 15.65  
2.35  
0 13.30

0+0 =  $\frac{1}{2}$  Broadway 0 77.78 FL out

B.M. 0.26 99.15 98.89  
N.E. No. 7  
Broadway  
+ 37th  
N.E.

Location & Level of 21" Sewer  
H.W.O.C. & Channel Change

April 5-50 79  
F.S. Smith  
D.S. Smith  
Rorer  
Cota  
Cobarez



Top Exist. Sewer 1263 58.61

B.M. 128 71.24 69.96

X 50' M.H.  
75' 41"  
109'

Slope & Culvert Station Set to March 24-1950

Nabash Blvd Slope Station 99+0 to 123+0

Federal " " 7+56 to 35+0

N.W. 00 " " 0+0 to 18+91

Access Road " " 0+0 to 11+07

N.E. 00 " " 0+0 to 4+50

N.W. 16 " " 0+0 to 6+96

Nabash Creek Channel Change 0+0 to 11+00

All Stations Except 145+60

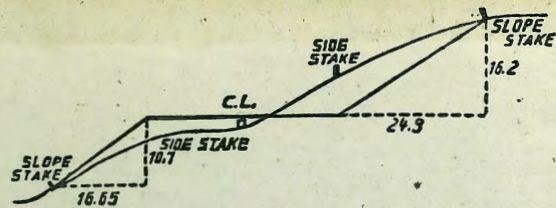
Culverts N.W. 00 3-72" 11+04

" N.W. 16 2-72" 1+97

" Federal Blvd 3-72" 34+43

Top

B.M.



**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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