

W145

FIELD BOOK

381A

CITY OF
SAN DIEGO - CALIFORNIA
ADDITIONAL WATER SUPPLY
OLD MISSION DAM TO CABRILLO CANYON
CONDUIT LINE

4

KEUFFEL & ESSER CO.

DRAWING MATERIALS

AND

SURVEYING INSTRUMENTS.

NEW YORK.

CHICAGO. ST. LOUIS. SAN FRANCISCO. MONTREAL.

Tables for Excavations and Embankments.

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

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

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

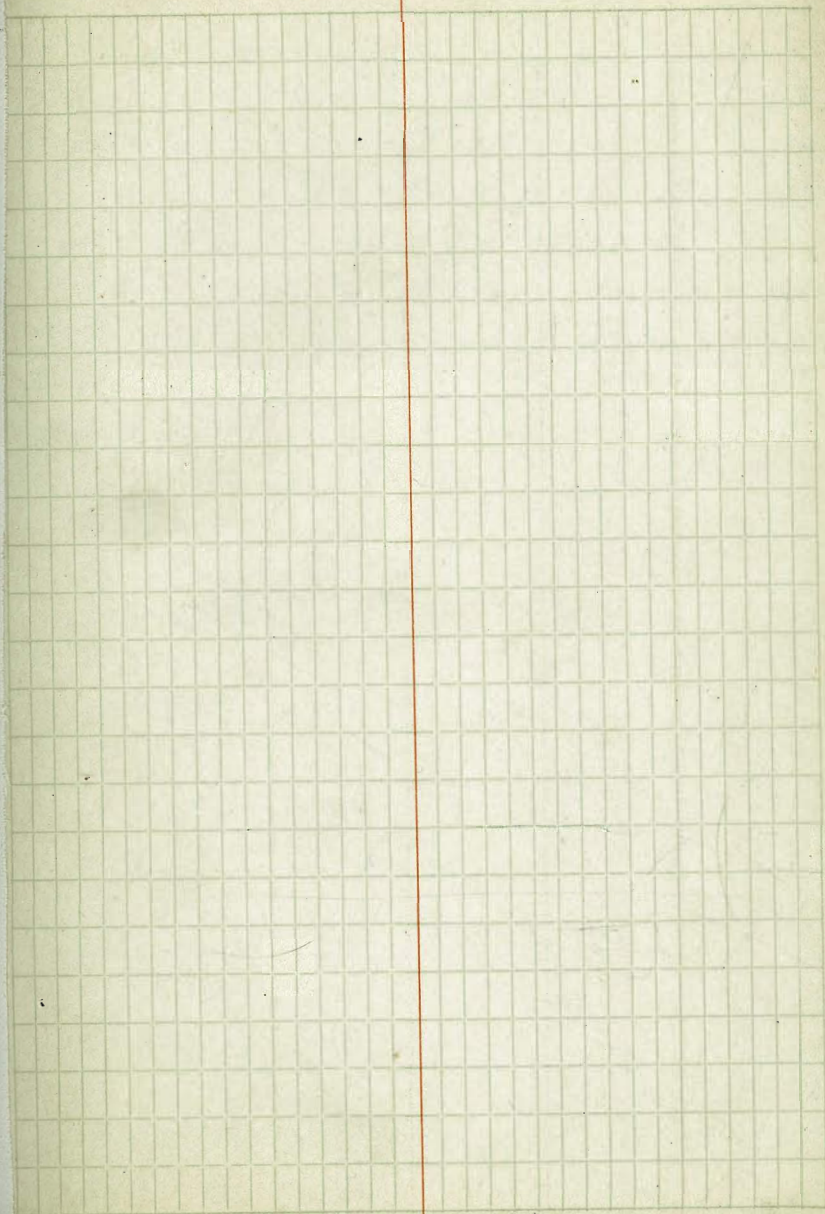
FOR KEITH'S RAILROAD CURVE TABLES SEE END OF BOOK.

Bk #4
E. Williams
706
12 ST.

7500
5741
1655

3476
1789
1686

No 1135



Index

"P" Line Continued - - - -	3
Tie at Grantrille - - - -	19
Low Dam Stadia Profile - - -	21
Cross Section 32 nd St. From N.	
Line Greeley to N. Line Main - - -	30
Profile for sewer - end of Curlew - -	56

BS. H.I. F.S. D.I. El.

Hayler Loc
Franklin T
Williams Road

"IP" Cont from Bl #3 " 3

Sta	Az	Rod	H. Dist	Vert L	D.I.	El.
π@260+46			4.85	231.18		226.33
to 266+27	204-41	5.80 ✓	581	-0°4'	5.58	225.60
π@266+27			489	230.49		
267+85	195-30	1.57	158		4.8	225.7
268+48	"	2.20	221		1.09	219.6
to 270+88	195°-30'-30"	4.60 ✓	461	-0°-24'	7.95	222.54
π@270+88			470	227.24		
269+67	15-30	1.30	121	-16-20	-35.4	187.1
to 273+23	209°-09'	2.34 ✓	235	+0-01	4.50	222.74
π@273-23			517	227.91		
to 277+49	198-24	4.25 ✓	426	+0°-16'	3.19	224.72
π@277+49			503	229.75		
279+00	197°-40'	1.50	151	-2-30	-6.5	218.2
280+61	"	3.12	312	-3-30	-19.0	205.7
282+10	"	4.60	461	-2-48	-30.4	194.3
283+29	"	5.80	580	-2-57	-29.9	194.8
to 284+66	197°-40'	7.16	717	-2-10	-27.10	197.62

Fin Oct 7/21

266+27	
4.61	
270+88	
2	35
273+23	
4	26
277+49	
7	17
284+66	

Back line shot Bot. at gulch

Sta	Az	Rod	H. Dist	Vert. L	Diff	EI
X@284+66			4.32	201.94		197.62
286+33	188-13	2.05	167	-25-52	-80.8	116.8
286+80	"	2.52	214	-23-0	-91.0	106.6
287+62	"	3.45	296	-22-25	-122.2	75.4
287+95	"	3.75	329	-20-26	-123.4	74.2
292+99	"	8.50	833	-8-12	-120.2	77.4
293+42	"	8.90	876	-7-35	-116.8	81.0
*100-18		3.44	345	+0-10		
*237-12		1.45	127	-16-08		

+294+61	188-13	10.02	994.83	-5°-11	-90.28	107.34
X@294+61						
296+22	"	1.73	500 161	112.34 +4-55	+14.9	122.2
298+70	"	4.10	409	+4-26	+31.8	139.1
+301+00	"	6.51	639.3	+8°-02	+90.25	197.59

X@301+00			440			
+302+49	228°-26	1.52	149.08	+9°-14	+24.25	222.50
X@302+49			1.30	226.80		
303+14	275°-21	0.64	65		110	215.8
304+40	"	1.90	191		10.7	216.4
304+90	"	2.40	241		12.6	214.2

@ Top of ridge N side Anaxado Canyon

toe steep slope @ break

on flatter " below "

" " " "

Bot of Valley

Q wash

Toe slope up to S side valley

fence Cor N + S + W.

" " " " E + W to Old Mission

P.O.T. in valley top at rise to S

On slope S side valley

" " " " "

(369 ✓
198.25 Shot from 284+66)

On hillside

284+66

10 93

294+69

Sta	Az	Rod	H Dist	Vert	L	Diff	E1
π @302+49			226.80				
305+38	275-21	2.88	289		44	222.4	
to 306+29	275-21	3.79	380	+0-33'	0.15	226.65	
π @306+29		4.48	231.13				
to 308+44	264-17	2.14	215	-0-20'	5.56	225.57	
π @308+44		4.35	229.92				
to 310+04	248-07	1.59	160	-0-01'	4.54	225.58	
π @310+04		4.75	230.33				
310+45	255-05	0.40	41		122	218.1	
310+69	"	0.72	65	-19-0'	-22.0	203.6	
311+44	"	1.41	140	-6-42	-16.4	209.2	
311+95	"	1.90	191		96	220.7	
312+50	"	2.45	246		46	225.7	
to 313+25	255-05	3.20	321	+0-16'	3.20	227.13	
π @313+25		4.28	231.41				
	241-52	0.33	34	0			
to 314+95	241-52	1.69	170	+0-27'	2.91	228.50	

302+49	
3	80
306+29	
2	15
308+44	
1	60
310+04	
3	21
313+25	
1	70
314+95	

Fence E184

Sta	Az	Rod	H. Dist	Vert	∠	D/H	EJ
X@314+55		4.37	232.87				228.50
to 316172	243°-20'	1.78	177'	-6°-21'	-19.67		208.93
X@316+72		4.40	213.23				"
to 318+06	237°-52'	1.35	134'	-7°-25'	-17.41		191.42
X@318+06		4.42	195.84				"
to 319+57	239°-47'	1.58	151'	-12°-45'	-34.23		157.19
X@319+57		4.52	161.71				"
320+01	235°-01'	0.51	44'	-24°-10'	-19.7		137.5
320+92	"	1.68	135'	-26°-54'	-68.3		88.9
321+14	"	1.90	157'	-25°-13'	-73.7		83.5
322+31	"	2.93	274'	-15°-32'	-76.0		81.2
324+91	"	5.37	534'	-7°-57'	-13.7		83.5
325+96	"	6.40	639'	-2°-55'	-32.5		124.7
to 327+50	235°-01'	7.92	793'	0°-01'	4.00		157.71
X@327+50		4.66	162.37				"
329+26	259°-31'	1.75	176'		4.6		157.6
to 330+61	259°-31'	3.10	311'	+2°-17'	+12.38 +8.4		170.09 166.11

314+95
1.79
316+74

319+57
7.73
327+50
3.11
√ 330+61

On Cor of hill @ break into valley leading S. to East San Diego (E side of valley)

Thence W across above Valley

On E Hillside

W edge graded road toe of E hillside

Valley Bottom

E Wash

Valley Bot toe W hill slope

On W hill slope

On Cor Hill W of E S.D. Valley

Sat 10/5/27

On Hillside So Side S.D. River Valley

85. H. 1. 155
E

Sta	Az	Pod	H. Dist	Vert	L	Diff	Elev
$\pi @ 330+61$			472	170	83		170.09 166.11
$+2334+07$	<u>258-18</u>	3.45	346	10-42'	+4.22		174.31 170.33
$\Delta @ 334+07$			490				179.21 175.23 174.31 170.33
335+01	275-23	0.95	94	-9-0'	-14.9		159.4
335+88	"	1.80	181	-2-33	-8.0		166.3
336+86	"	2.78	279	-2-10	-10.3		164.0
338+18	"	4.10	411	-2-20	-16.7		157.6
$+2339+20$	<u>275-23</u>	5.12	513	-1-22'	-12.22		162.09 158.11
$\pi @ 339+20$			462				166.71 162.73
339+73	274-55	0.52	53		10.1		156.6
341+15	"	1.95	195	-4-20'	-14.8		147.3
342+39	"	3.18	319		12.4		154.3
$+2346+83$	<u>274-55</u>	7.62	763	-1-10'	-15.57		146.52 142.54
$\Delta @ 346+83$			484				151.36 147.38
343+47	94-55	3.35	336		8.1		143.0
345+53	"	1.30	130	-3-54	-8.9		137.6
348+68	269-48	1.85	185	-5-06	-16.5		130.0
351+13	"	4.30	430	-2-28	-18.5		128.0
354+34	"	7.50	751	-0-40	-8.7		137.8

330+61
3.46
334+07
5.13
339+20
7.63
346+83

Back Shots on line

" " "

Sta	Az	Rod	H. Dist	Vert	∠	Diff	E
π@346+83	464			151.36 147.38		146.52	
to 355+29	269°-48'	8.45	846	-0°-40'	-9.81	136.71 132.73	
π@355+29		484		141.55 137.57			
355+80	268-50	0.50	51		97	131.9	
356+72	"	1.58	143	-18-32	-48.0	88.7	
357+66	"	2.45	237	-11-32	-48.2	88.5	
358+23	"	3.00	294	-8-33	-44.3	92.4	
359+08	"	3.80	379	-4°-06'	-26.9	109.8	
to 359+95	268°50'	4.65	466	0	486	136.69 132.71	
π@359+95		470		141.39 137.41			
362+61	266-53	2.65	266		372	138.2	
365+26	"	5.30	531		69	139.5	
366+91	"	6.95	696		15	139.9	
to 367+74	266°-53'	7.78	779	+0-19'	+429	140.98 137.00	
π@367+74		492		145.90 141.92			
368+48	324°29	0.74	74	-6-08	-8.0	133.0	
369+34	"	1.60	160	-4-48	-13.5	127.5	
370+33	"	2.60	259	-5-06	-23.1	117.9	
to 373+74	324°-29'	6.03	600'	-4-25	-46.39	94.59 90.61	

on Cor @ break Santa

∅ Valley Bottom Ward Canyon

∅ Highway (Ward Canyon Grade)

On Cor W side Ward "

" " " " " "

to County Road

346+83
846
355 29
4 66
359+95
7 77
367+74
6+04
✓ 373+78

Sta	Az	Rod	H Dist	Vert L	Diff	El
373+74 X		4.99		99.58 95.60		94.59 90.4
	235-48	0.69				
	244-05	0.92				
	250-45	2.30				
378+85	257-33	5.10	511	-1°-37'	-14.4	80.2
to 382+58	257°-33'	8.83	884'	-0°-33'	-8.49	86.10 82.12
382+58 X		4.95		91.05 87.07		
	230-08	0.95				
384+79	231-06	2.20	221		6.3	84.7
387+29	"	4.70	471		6.7	84.3
390+79	"	8.20	821		"	84.3
to 393+34	231°-06'	10.75	1076	+0°-17'	+0.35	91.43 87.45
393+34 X		4.96		96.39 92.41		
396+20	227-11	2.85	286		3.2	87.2
397+95	"	4.60	461		7.4	89.0
to 401+37	227°-11'	8.02	803	-0°-14'	8.05	98.34 84.36
401+37 X		4.98		93.32 89.34		
to 404+73	205°-21'	3.35	336	-2°-14'	-13.07	75.27 71.29

373+74
8 84
382+58
10 76
393 34
8 03
401+37
3 36
404+73

Fence S + across Road N
in fence So Side Road
fence " " "
" " " "

In Road on forward Line (N side road)
" near N fence line

Approx fence L So side of Road
On forward line in Road So side
" " "
" " "

Δ is 10' N of So side fence line L N Gibsons

On forward line 10' off So fence line
" " "

On Fence line between Lots 31 + 32

Sta	Az	Rod	H. Dist	Vert	∠	Dist	EL
404+73	κ		4.89	^{89.16} 76.18			^{75.27} 71.97
	132-55						
406+84	231-21	2.10	211		7.1	73.1	
to 409+38	▲ 231-21	4.64	465	+0-6	³⁸⁰	76.36	^{72.38}
409+38	κ		5.02	^{81.38} 77.40			
	226-41	0.96					
411+58	244-45	2.20	220	-3-38	-140	62.4	
413+57	"	4.18	419	-1-58	-144	62.0	
415+19	"	5.80	581	-1-24	-142	62.2	
to 416+29	▲ 244-45	6.90	691	-10-07	-122	^{64.12} 60.14	
416+29	κ		5.13	^{69.25} 65.27			
to 420+07	▲ 229-21	3.77	378	+2-26	+16.02	^{80.14} 76.16	
420+07	κ		5.22	^{85.36} 81.38			
420+63	238-31	0.55	56		66	78.8	
	140-08	0.12					
422+28	238-31	2.21	221	-2-53	-11.5	68.6	
424+43	"	4.35	436	-1-55	-146	65.5	
425+78	"	5.70	571	-1-29	-148	65.3	
to 426+03	▲ 238-31	5.95	596	-1-09	-119	^{68.15} 64.17	

Approx Az fence line So of road 409+38
On forward line in roadway

On S side of road grade

Fence Cur So side road along road + S E.
On forward line in roadway

" " " " " "
" " " " " "

On N side of road grade

On forward line So. edge road

Hub with triangular R.W. old State New path also Δ #3
On fence line

So of road on hillside toe steep bank

404+73
4 65
409+38
6 71
416+29
3 78
420+07
5 96
✓ 426+03

Sta	Az	Rod	H. Dist	Vert L	Dist	P1
447+70	X	496	45.00 41.02			40.04 37.76
to 451+05	253°07'	3.34	335	+0-23	2.45	42.55 38.57
451+05	X	492	47.47 43.47			
to 455+70	280°46'	4.64	465	+0-13	2.74	44.73 40.75
455+70	X					
T-1	175-18					
T-1 67						
16+86	1°59'	4.33	208.01			203.68
to 19+52	37° 60' 50" RT	2.72	269.5	-6°-30'	-30.71	172.97
19+52	X					
to 19+52		2.68				
19+52	X	4.88	177.85			11
	18°-20' L	3.08	305	-6-40	-35.6	137.4
to 26+35	06° 348° 30'	6.75	669.01	-5°-51'	-68.55	104.42
26+35	X					
to 26+35		4.98	109.40			
	6°-48' R	1.45	145	-5-37	-14.3	90.1
	"	3.50	347	-5-53	-36.4	68.0
to 455+70 (P)	355°18'	6.65	660.95	-5°-0'	57.82	46.60
to 33+07	6-48' R	6.65				
32+67		6.55				

447+70	
335	
451+05	
465	
455+70	

So side road

No side road

To T-1 Sta 26+35

Tie T-1 to P

B.S on 11+68

A side grade

on E side grade

(44.73)

10/10/21

16+86	
273	
19+52	
676	
26+35	
666	
33+01	

Sta	Az	Rad	H. Dist	Vert	∠	DA	FL
455+70 X			173	^{49.46} 45.48			^{44.73} 44.74
	41-15	0.39				8.5	
457+56	253-0	1.85	186			60	43.55
459+81	"	4.10	411			33	46.2
to 460+64	253°-0	4.93	404	-0°-2		4.99	^{44.47} 40.44
							^{49.49} 45.51
460+64 X		5.02					
462+65	252-38	2.00	201			113	38.2
to 464+43	252°-38	3.78	379	-1°-03		-6.95	^{37.57} 33.56
							^{42.06} 38.10
464+43 X		4.54					
467+79	252-37	3.35	336			59	36.2
to 470+35	252°-37	5.21	592	-0°-3'		3.75	^{38.31} 34.35
							^{43.41} 44.55
470+35 X		5.10					39.45
to 472+93	245°-09	2.57	258	-0°40		9.33	^{35.08} 36.22
							^{40.20} 41.34
472+93 X		5.12					
		2.62					^{6.2} 5.49
to 478+25	228°-51	5.31	532	-0°-02			^{34.71} 35.85
							^{39.73} 40.87
478+25 X		5.02					
to 483+91	250°-14	5.65	566	-0°-17		7.58	^{32.15} 33.29

Mon 10/10/21

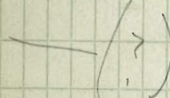
1/2" gas pipe N side road probably E road North
on forward line to side road

to So Side road

Forward Line

to side road E Oil Well

to side R of Oil Well



455+70	4.94
460+64	3.79
464+43	5.42
470	3.5
472	5.8
478+25	5.32
483	5.1

B.S. H.I. - P.S.

14

Sta	Az	Rod	H. Dist	Vert L	Dist	Elev
483+91			520	37.35 38.49		32.15 33.29
to 489+77	252°-40'	5.85 ✓	520	-0°-07'	6.69	30.66 31.80
489+77			514	35.80 36.94		
	178-0					
to 495+56	252°-58'	5.78 ✓	579	-0°-06'	6.26	29.54 30.68
495+56			510	34.64 35.78		
to 501+06	252°-45'	5.49 ✓	550	-0°-3'	5.73	29.21 30.35
501+06			516	34.27 35.51		
to 505+12	252°-41'	4.05	406	-0°-07'	6.10	28.27 29.11
505+12			501	33.28 34.42		
to 507+68	235°-27'	4.55	456	0	5.13	28.15 29.29
507+68			507	33.22 34.36		
to 517+25	252°-37'	7.56 ✓	757.1	-0-8'	6.60	26.62 27.76

Cont p 16

	483+91	
	5 86	
	489+77	
	5 79	
	495+56	
	5 50	
	501+06	
	4-06	
	505+12	
	4+56	
	507+68	
	7 57	
	517+25	

So side road

Fence lines up from 489+77 ^{from} So side road fence

So side road

P'Line

B.S. H. I. F.S.

Sta	Az	Rod	H	Dist	Vert	Cor	El
"P" 505+12	228-20	0.43		33.58	0		28.27
P' 508+33	160-20	3.20	321			16	31.7
P' 509+60	"	4.50	448	+4°-56'		+38.7	67.0
P'							
to 511+54	160-20	6.51	642.45	+6°-57'		+78.3	106.57 107.71
		4.53	112.24				
511+54	109-09	0.92		+13-20			
	187-37	0.76		-1°-34'			
513+39	154°-26'	1.90	185	+10°-02'		+32.8	139.4
to 515+35	154-26	4.13	380.63	+16°-30'		+112.74	219.31 220.45
		4.79	225.24				
515+35	222-20	1.50	128	-23-09		-54.6	164.7
	225-20	2.01	191	-13-33		-46.2	173.1
	227-15	1.56	155	-7-20		-20.0	199.3
	162-45	1.51	148	-9-28		-24.7	194.6
	186-22	2.78	259	+15-35		+72.5	291.8
to T 68+32	144-11	4.71	436.38	+15-57'		+124.73	344.04 345.18
T 520+31 P'							
to 55+24	207-40	5.23	495.62	+13-28'		+118.69	338.00 339.14
		4.94	4.19				
to 55+24	260-25	4.94		-0-40'		-6.93	337.11 338.24

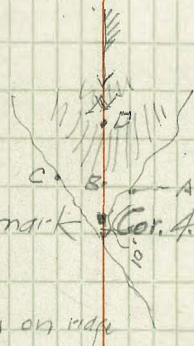
Tie "P" to T

511+54

fence leaves so side road fence S. Fly
formed line

S. End above fence goes hence vly

3x3" white post made in top 10' S of vly fence
On hillside forward line



3x3 white post mark Cor. A between gulches @ junct

@ A in vly gulch

@ B between gulches on ridge

@ C in fly gulch

@ D on hill between gulches

-(346.83)

-(339.54)

Sta	Az	Rod	H. Dist	Vert	Diff	EI
545+24 T	502			40.43 11.59		35.43 96.57
	269-31	0.58			0	
550+195 A	129°-09'	5.70	571	59.30 60.44	+10-53	+18.75 54.18 55.32
550+295 T				5.12		
556+45 A	139°-41'	5.49	550		+1°-55	+18.37 72.55 73.69
556+45 T		4.83		77.38 78.52		"
558+15		1.70	170		+3-10	+9.4 82.0
559+84		3.40	339		+3°-03	+18.1 90.7
561+56 A	139°-25'	5.10	511		+3-04	+27.29 99.94 100.48
561+56 T		5.13		104.97 106.11		
563+57	156-26	2.00	201		76	92.2
564+37	"	2.80	281		29	96.9
564+77	"	3.20	321		+2°-57	+16.5 116.3
T 28+70						
566+85 A	156°-26'	5.28			+2°-58	+27.34 127.18 128.32
566+85 T		5.13		133.45		
566+85 T						
571+24 T	167°-17'	6.75	676		+2°-58	

4x4 white post defines L in road

On line ahead in road

" " " "

off road in bottom

top "

top slope road

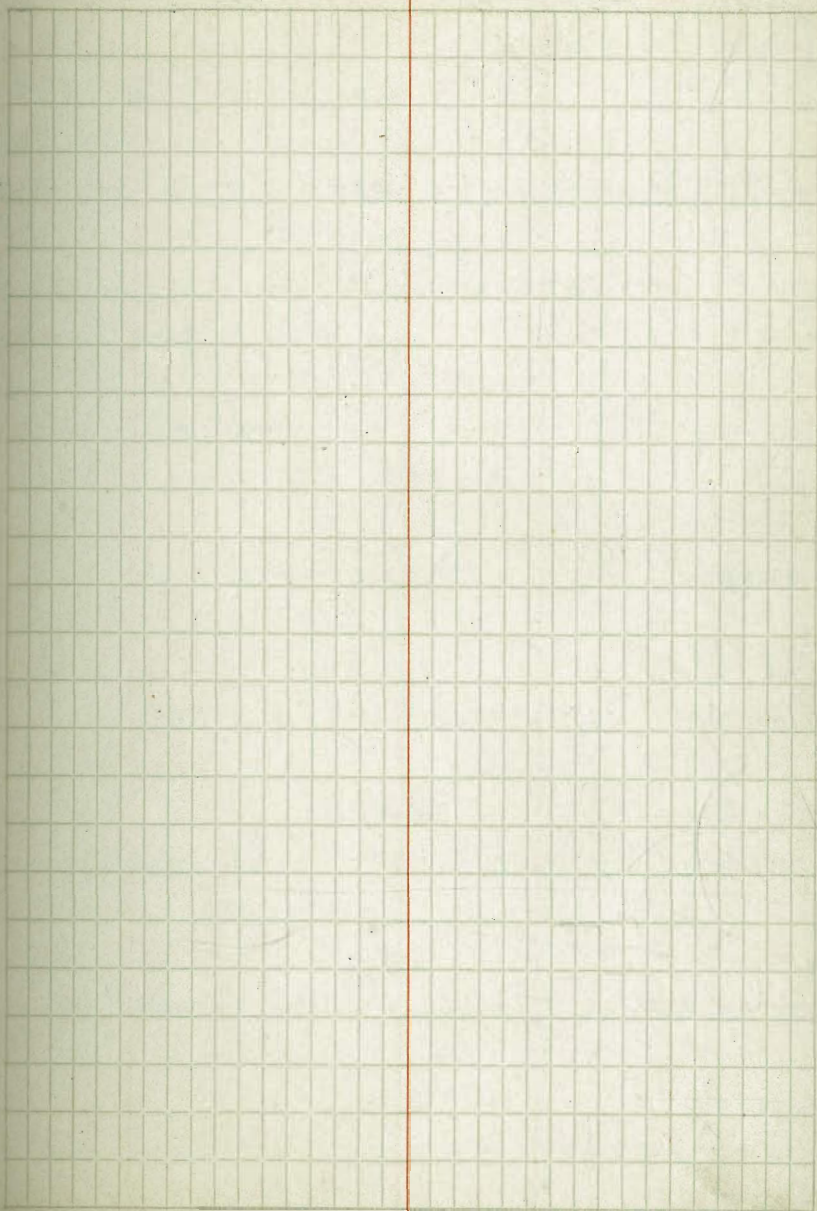
on edge road (129.97)

545+24	5 71
550+95	5 50
556+45	5 11
561+56	5 29
566+85	

B.S. H.I. F.S.

18

Sta Az Rod H. Dist Vert L Diff El



+ H.I. -

Tie @ Grantville P Line

19

Sta	Az	Rod	Vert L	E
BS 316 + 06	239-47	1.58		
P = 319 + 57 0 + 00			+ to 161 59	15719
to 3 + 77	314-50	3.86	377 -9-11	
π@ 3 + 77	177-40-30		2015 ft	
	80-07			
to 6 + 97	0357-40-30	3.19	-2-45	
		4.8		
π@ 6 + 97				
to 8 + 28	"	1.32	131.4 -6-13	
π@ 8 + 28		4.5		
to 15 + 35	357-40-30	7.06	+ 0-11	
π@ 15 + 35		4.33		
to 20 + 84	0357-40-30	5.48	+ 0-03	
π@ 20 + 84		4.25		
to 26 + 30	357-40-30	5.45	+ 0-03	
π@ 26 + 30		4.75		
to 30 + 77	87-38	4.46	+ 0-05	

SS	Dist	Rod
870	8.15	8.14
1109	239	2.70
7015	906	9.15

+ 1-32
+ 20-10
+ 5.58

0 + 00 = 319-57

3.82
to Flagged Corner { White 4x4 Post
Marked Gov #3 Lot 23 }
fence line E

3177
320
6 + 97
8 28
7 07
15 + 35
5 42
20 + 84
5 46
26 + 30
4 47
30 + 77

Brushy on S.

In Alfalfa field

(71 No of)
So side Hancock St in Grantville
fence of)

5.48

So side

Sta	Az	Rod	l	Vert L	Et
π@30+77			4.45		
to 34+76	86-59	3.98		+ 0-52	
π@34+76			5.08		
	358-01	0.345			
to 37+27	86-56	2.50		+ 5-27	
π@37+27			4.75		
to 41+06	86-56	3.78		+ 3-20	
π@41+06			5.05		
	178-25	0.17			
to 46+92	86-56	5.85		+ 3-14	
π@46+92			4.75		
	86-56	2.49			
to P277+49	62-50	5.69	561	+ 7-16	
			4.92		
page #3 this bk					
to P273-23	18-25	4.32		- 0-15	
flag					
to P284+66	197-41				

4.46	30+77
On W. Line of Hubbels St	3.92
15' No of So fence line Hancock St	34+76
3.97	2.51
	37+27
fence Cor N & S Cor Hancock + Hubbels Sts	3.79
In field 15' No. of fence	41+06
2.51	5.86
	46+92

17' No of fence Cor N & S

3.77
fence South
On hills open field

5.87
fence N & S Xing Back line produced

198-24 Az 5.71 - 0-15

197-40

Hwy Loc. Franklin X Low Dam Stadia Profile 21
 Williamy Rod
 @ Old Mission Dam S. D. River. Nov 22/21

Sta	Az	Rod	Vert L	EI
= 0 + 00 to 68 Δ	4.2		364.27	360
to 67 Δ	261-29		4.27	"
to 7+32	352-13	7.31	2-51	323.67
- 0+55.5	172-13-30	0.57	+12-05	+11.9 371.9
to 69	80-39	7.57		
to -1+66	172-13-30	1.80	166.2	+16-38 +49.65 409.65
1+71	352-13-30	1.80	170.9	-13-41 -41.6 318.4
2+62	352-13	2.75	262.2	-12-55 -40.1 299.9
2+83	"	2.95	282.9	-12-09 -60.9 299.1
3+61	"	3.78	360.9	-12-38 -80.9 279.1
4+10.5	"	4.28	410.5	-12-00 -87.3 272.7
5+13.6	"	5.28	573.6	-9-50 -89.0 271.0
6+20.8	"	6.33	620.8	-8-19 -90.7 269.3
6+61.9	"	6.70	661.9	-6-42 -77.8 282.2
6+80	"	6.82	679.9	-3-54 -46.4 313.6
π@ 7+32		4.90	328.57	323.67
to 224	A 14-29	10.50	+2°	≠
to 8+0.8	"	0.75	6.4	322.2
to 9+13	"	1.80	-2-11	-69.0 316.8

68 Δ = 0+00 for Axis
 Compass (Var. 14-30) Az used No Notes at hand

Hub on Axis No. side of S. D. R. No. of Old Dam

Axis

Axis @ So side

Axis

On Axis

So side Highway

No " " "

Toe Mt So side

So edge S. D. R. bed

N edge " " " "

On top of No end Old Dam

" " " "

@ L in Axis

Old 360' Contour A Rod not clear too far



+ H. 1. -

Sta	Az	Rod	Vert	L	El	
π@7+32		4.90	328.57		323.67	
10+36	14-29	3.03		1.6	327.0	
11+15	"	3.82		1.1	327.5	
12+20	"	4.87		4.8	323.8	
13+85	"	6.52	+0-48	+9.14	332.8	
to 15+45	14-29	8.12	+1-53	+26.70	350.37	
π@15+45		4.83	355.20		"	
15+96	"	0.50		3.8	351.4	
16+74	"	1.28		6.6	348.6	
to 224 Δ	"	2.45	+2-36	+11.14	361.51	
18+59		3.13	+3-56	+21.47	371.8	
to 19+30	14-29	3.86	385.	+4-03	+27.27	377.64
π@224 Δ		4.21				
to 223 Δ	103-02	0.795		4.16		
to 225 Δ	236-52	1.75		4.21		

TIC

336-54 ? Hayler

@ L 17 Axis
On Axis

7+32
8 13
15+45
3 85
19 30

8.12 -1-51

BS on 7+32

323.67
+26.70
350.37

Hub on Axis on knoll No of 224 Δ

246 - 2°-34

Old 360 Contour Δ is on Axis BS 15+45

"

"

"

Sta	Az	Rod	Vert L	E'
π@19+300		4.80	382.44	377.64
19+85	14+29	0.54	4.8	377.6
22+34	"	3.03	-0.44	393 373.7
23+57	"	4.26	-1.04	395 369.7
1/2 23+54	14-29	4.23	-1-02	376.4 370.00

π@23+54		4.87	374.87	
24+12	14-29	0.57	103	364.6
25+01	"	1.46	-3-20	385.3 361.5
25+80	"	2.25	-1-26	386.6 364.3

1/2 27+66 @ 14-29 4.11 + 1-15 389.9 378.99

π@23+54 321-25 2.82 59 369.0

Stadia Profile of Low Dam @ SBR (Old Mission Dam)

B.S. 15+45	3.85	-4-0	
"			19+30
"			4 24
"			23+54
"			4 12
"	4.23	+1-05	27+66

So edge Saddle

Φ " "

No " "

Hub North of Saddle on main ridge

low cut EI in Saddle

Sta	Az	Rod	H.L.	Vert	L	B
			3.35			
To Xing Axis + Fence from Post @ X		9.5C	955.5	+ 1.22		
K 68	4.28			364.33		
to 67	261-29	2.53			4.33	360
to } B 0+00	261-29	1.53	154		4.14	360.19
K 0+00		4.94	365.13			360.13
to FS Axis	333-10					
B-1+25	153-10	1.45	124.85	+ 22-21	+51.38	411.57
-0+61	153-10	0.68	61.2	+ 19-42	+21.9	382.1
	230-14	1.46	143.2	+ 9-20	+23.5	383.7
	231-35	2.20	217.1	+ 7-36	+29.0	389.2
	210-04	2.04	190.5	+ 15-26	+52.6	412.8
4x4 Stake	267-16	3.13	312.4	- 4-06	-22.4	337.8
	268-24	2.18	217.4	- 4-52	-18.5	341.7
	301-31	1.24	120.2	- 11-18	-24.0	336.2
Axis 1+08	333-10	1.15	108	- 15-12	-29.4	330.8
" 1+72	"	1.80	171.9	- 13-0	-39.7	320.5
" 2+64	"	2.73	264.2	- 10-55	-50.9	309.3
	317-54	2.85	278.3	- 9-26	-46.2	314.0
	286-06	3.49	345.2	- 6-43	-40.7	319.5

Lory Dam Stadia Profile B 24
Below Old Mission Dam 150 yards #

125' SSE of County District 1-3 Sign Post
4x4 post 50.125' off road @ Old Mission Dam 600' # SW of
K @ Car post mark on rd Lot 13 Cor 9 on E Cor 8

On 360 Contour Line

" " " " FS same Az as page 21

On line between 68 Δ + 67 Δ of 360 Cont. line

1.53

On Axis So side

" " " "

On Mt

Old 4x4 stake top this page

333

182

153

On Mt

" "

So edge road

" " "

Sta	Az	Req	H.I.	Vert L	E/		
K@0+00		4.94			360.19		
	280-47	3.72	368.4	-6-22	-41.1	329.1	So edge road
	281-44	3.94	389.95	-6-30	-44.4	315.8	Ho edge road
	296-48	3.53	347.7	-7-39	-46.7	313.5	" " "
	319-26	3.22	311.6	-9-52	-54.5	305.7	" " "
to L+89	0333-10	2.99	289	-11-04	-56.53	303.66	on Axis @ No edge Co. Road
K@2+89		4.86	308.52				
	281-51	1.75	171.6	-9-08	-27.6	276.1	So edge R bed
	278-57	2.40	237.1	-7-20	-30.5	273.2	" " " "
	279-44	3.04	300.1	-7-15	-38.4	265.5	In SDR "
	283-57	3.68	366.1	-5-06	-32.7	271.0	Bed rock roof in SDR bed
	287-0	4.82	480.4	-4-14	-35.6	268.1	No edge SDR bed
	287-12	5.10	509.2	-3-23	-30.1	273.6	Top bank " "
	287-57	5.35	536	-1-51	-17.3	286.4	bot of Cliff
	294-57	5.11	514	-1-42	-15.2	288.5	" " "
	295-38	4.80	480	-3-03	-25.6	278.1	Toe of Mt
	318-23	4.50	450	-2-15	-17.7	286.0	" " "
	327-20	4.10	410	-2-41	-19.2	284.5	" " "
Axis 6+71	333-10	3.82	382	-2-35	-17.2	286.5	" " "
	347-15	3.93	393	-2-43	-18.7	285.0	" " "
	350-12	3.16	313.3	-6-14	-34.2	269.5	No edge R bed
Axis 6+20	333-10	3.33	330.5	-5-55	-34.2	269.5	" " " " on Axis
" 5+39	"	2.55	280.4	-8-31	-37.5	266.2	In R bed

Sta	Az	Rod	Vert	L	E
T@2+89		4.86			303.66
Axis 4+56	333-10	1.72	166.8	-10-58	-32.3 271.4
" 3+90	"	1.10	101.2	-17-22	-31.6 272.1
" 3+33	"	0.52	44.4	-23-50	-19.6 284.1
" 7+47	"	4.57	458	+0-29	+3.9 307.6
	327-50	4.90	491	+1-08	+9.7 313.4
	322-45	5.73	573	+3-39	+36.5 340.2
	317-0	5.20	521	+1-47	+16.2 319.9
	303-35	5.53	554	+1-37	+15.6 319.3
	296-46	5.40	541	+1-36	+15.1 318.8
	292-03	5.30	531	+1-07	+10.4 314.1
	288-42	5.48	549	+0-13	+2.1 305.8
	292-33	5.57	557	+2-05	+20.3 324.0
	303-07	5.90	590	+2-51	+29.3 333.0
	313-59	6.18	614.5	+4-53	+52.5 356.2

to 9+22 \triangle 333-10 6.35 633 +3-51 +42.60 346.26

T@9+22	Az	Rod	Vert	L	E
		4.92	351.18		
	54-04	0.58	57.5	-9-12	-9.3 337.0
	101-53	1.43	136.7	-13-0	-31.6 314.7
	122-30	1.72	165.2	-12-18	-36.0 310.3
	114-39	3.32	320.1	-11-22	-64.3 282.0
	114-40	3.50	336.7	-11-38	-69.3 277.0
	104-11	3.65	352.4	-11-08	-69.4 276.9

In E SDR on reef

" "

On So edge SDR bed Axis

On Mt + Axis No side

On "

" "

" "

" "

" "

Top Clift No side

On " " "

Top of hog back above cliff faces

" " " " last shot same hog back

On Mt

On Mt

" "

" "

" "

Toe in gullies

" " "

2+89
6 33
9+22

+ H.I. -

Sta	Az	Rod	Vert L	E
K@9+22		492	351.18	346.26
80-38	3.51	339.1	-11-02	-66.1 280.2
81-45	2.89	280.2	-10-36	-52.4 293.9
94-10	2.75	267.7	-9-58	-47.1 299.2
68-08	2.12	206	-10-28	-38.0 308.3
54-10	2.89	283	-8-56	-44.5 301.3
193-16	0.28	29	0	346.3
26-0	2.68	268	-2-45	-12.9 333.4
25-25	0.80	80	-3-39	-5.1 341.2
7-02	2.90	291	+1-27	+7.4 353.7
Tie	13-36	164	165	2.6 348.6

to 230 Δ 358.32 2.65 265 +3-20 +15.43 361.69

to 11+97 Δ 350.78 2.76 274.8 +5-06 +24.53 370.79

to 10+450 333.70 1.235 122.6 +7-06^(7°05') +15.25 361.51

K@10+45 492 366.43

to 231 Δ 191-56 1.40 4.78 361.65

170-25 9.56 955.5 -1°22

210-52 1.68 168 +2-27 +7.2 354.3

to 11+910 300-41 1.51 145.6 +11-51 +30.54 392.05

fence line E in bottom

On Mt

" "

" "

" "

fence cor N + E

On Mt

" "

" "

On 360 Contour line

On Axis Branch to E

On line of Ex Mission and El Cajon Rancho 1.235 -7-04 F.S. 24

On 360 Contour line

Az to 4x4 post on p 24

On Mt

On Axis Branch to W

392.05

K@11791		4.90	396.95			
Axis 13+75	300-41	1.83 ⁸³ 1.83	184		0.9	396.0
" 13+99	"	2.09	207.5	+ 6-17	+22.9	415.0
" 14+89	"	3.03	298.1	+ 7-59	+41.8	433.8
	171-29	1.54	154	- 4-27	-12.0	380.0
	192-13	1.52	152	- 4-32	-12.0	380.0
	214-17	1.30	129.5	- 6-11	-14.0	376.0
	251-19	2.31	231	+ 4-52	+19.6	411.6
	282-24	2.42	241	+ 6-20	+26.5	418.5
	264-38	0.77	78		5.9	391.0
	323-24	3.55	354	+ 6-06	+37.6	429.6
	339-19	4.36	435	+ 5-04	+38.5	430.5
	354-30	3.14	315	+ 1-27	+8.0	400.0
	347-11	2.30	231		3.3	393.7
	320-13	1.43	143	+ 3-33	+8.90	401.0
	328-12	0.84	85		2.5	394.5
	01-26	1.11	112		9.5	387.5
	27-51	0.70	71		7.5	389.5
	74-40	0.81	80.4	- 7-58	-11.25	380.8

W/ Branch Axis

1.53

-11-47

On Axis

On Mt

Mission Dam Site #2 Location of Core Holes and Test Pits.

G.R. Hayler, Inst.
Lawrence Burk, Rod.

(See Bk. 3 p 49)

29.

Station	Azimuth	Rod	Horizontal Distance	Vertical Angle	Diff. in Eler.	Eler
Inst. @ P' 30+90				5.1		260.59
F.S. on P' 36+31	237° 29'	5.40		990		255.8
Hole # 3	236° 09'	3.48 ✓	348	90		256.7
Hole # 1	263° 42'	3.70 ✓	370	-2° 48'	-19.0	247.6
Hole # 4	249° 46'	1.27 ✓	128	-2° 34'	-5.7	254.9
Hole # 5	327° 07'	0.75 ✓	75	-6° 02'	-7.95	252.6
Hole # 6	323° 12'	1.71 ✓	171	-4° 44'	-14.14	246.4
Hole # 7	296° 55'	2.22 ✓	222	-4° 18' 30"	-16.71	243.9
Hole # 8	282° 34'	1.52 ✓	153	-3° 02'	-8.09	252.5
Hole # 2	249° 51'	3.60 ✓	361	-0° 56'	-5.87	254.7
Test Pit # 8	320° 41'	4.04 ✓	394	+9° 36'	+6.59	327.2
" " # 7	322° 17'	4.75 ✓	454	+12° 23'	+9.71	360.3
" " # 1	298° 01'	6.35 ✓	600	+14° 03'	+14.79	410.4
" " # 2	289° 27'	5.65 ✓	548	+10° 16'	+9.28	359.9
" " # 3	284° 11'	5.00 ✓	493	+7° 08'	+6.73	322.3
Σ @ # 55						360.00
F.S. on # 56	55° 04'	1.05				
Test Pit # 9	260° 37'	1.15	105	0.2 -17° 45'	-33.69	326.3
" " # 10	57° 46'	1.10	111	0.2		364.6
Σ @ # 54				4.95		360.0
F.S. on 55	52° 27'	1.52				
Test Pit # 6	195° 39'	0.97	80	+25° 20'	+37.94	397.9
" " # 5	225° 37'	0.50	51	2.3		362.7
" " # 4	274° 33'	1.02	85	-25° 10'	-39.69	320.3

9-29-22

H.I.	
5.1	265.69
Shot 7.1 on rod (4' above grade)	
Shot 14.1 on rod (9' above grade)	
7'	to Rock - disintegrated - fair Say 10'
4'	" Hard rock - fractured (9' upstream from Sta 5+80 of Axis) Say 10'
6'	" " " somewhat disintegrated + seamed Say 10'
4'	" " " fractured (14' upstream from Sta 238 Δ) Say 8'
6'	" " " " " Say 8'
4.75	364.75
9.0' to Hard Rock (fractured) Say 12'	
7.0' " " " seamed Say 10'	
4.95	364.95
6.5'	deep Solid rock fractured - Good
6.0'	" " " Good
6.0'	" " Hard rock (disintegrated) Fairly good

Cross Section 32nd St.
From N. line Greely to N. line Main
60' wide 10' Cbs, 10' Gts

T.P.	#80	3886	38.9	36.0	Spt in Fence Post
		140'S = N. Greely			
EL			1.7	37.7 ✓	
CB			2.6	36.7 ✓	
1/4			3.0	33.9 ✓	
+01			3.4	35.5 ✓	
+04			3.2	35.7 ✓	
2			2.9	36.0 ✓	
+04			2.8	36.1 ✓	
1/4			3.0	35.9 ✓	
+07			3.6	35.3 ✓	
CB			3.3	35.6 ✓	
+03			3.0	35.9 ✓	
1/4			3.0	35.9 ✓	
		154'S			
1/4			3.9	35.0 ✓	
+8			3.8	35.1 ✓	
CB			4.1	34.8 ✓	
+2			4.6	34.3 ✓	
1/4			3.5	35.1 ✓	
2			3.7	35.2 ✓	
+07			4.5	34.2 ✓	
1/4			3.8	35.1 ✓	
CB			2.8	36.1 ✓	
EL			2.3	36.6 ✓	

3886

38.9

8-10-25 30
5:30
Gibbs
Northern

T.P.	117'S	3886	38.9	36.0	Spt in Fence Post
EL			2.8	36.1 ✓	
CB			3.5	35.4 ✓	
1/4			4.6	34.3 ✓	
+3			5.0	33.9 ✓	
2			4.3	34.6 ✓	
1/4			4.6	34.3 ✓	
+6			5.2	33.7 ✓	
CB			4.9	34.0 ✓	
+4			5.2	33.7 ✓	
+8			4.5	34.4 ✓	
1/4			4.7	34.2 ✓	
		180'S			
1/4			5.2	33.7 ✓	
+2			5.1	33.8 ✓	
+5			6.0	34.9 ✓	
CB			5.7	33.2 ✓	
+5			5.8	33.1 ✓	
1/4			5.2	33.7 ✓	
2			5.1	33.8 ✓	
+06			5.4	33.5 ✓	
1/4			5.0	33.9 ✓	
CB			4.1	34.8 ✓	
EL			3.5	35.5 ✓	
		192'S			
EL			4.8	34.2 ✓	

38.86

60' wide
38.9

CB	5.0	339 ✓
1/4	5.4	335 ✓
+3	6.3	326 ✓
2	6.0	329 ✓
1/4	6.0	329 ✓
+5	6.7	322 ✓
+6	6.4	325 ✓
CB	6.5	324 ✓
+5	6.7	322 ✓
+6	6.2	327 ✓
1/2	6.4	325 ✓

2065

1/2	7.0	319 ✓
+3	6.8	321 ✓
+6	7.5	314 ✓
CB	7.3	316 ✓
+6	7.2	317 ✓
1/2	6.9	320 ✓
2	6.8	321 ✓
+8	7.3	316 ✓
1/4	6.4	325 ✓
CB	6.0	329 ✓
EL	5.9	332 ✓

2205 = Slide Greedy

EL	6.7	322 ✓
----	-----	-------

38.9

38.86

CB	7.2	312 ✓
1/4	7.7	314 ✓
+2	8.4	305 ✓
2	8.0	309 ✓
1/4	8.2	307 ✓
1/2	9.0	299 ✓
CB	9.0	299 ✓
+4	8.9	300 ✓
+7	8.5	304 ✓
1/2	9.0	292 ✓
+10	12.1	268 ✓

2505

-15	17.3	216 ✓
1/2	14.5	244 ✓
+8	12.4	265 ✓
CB	12.3	266 ✓
+6	12.4	265 ✓
1/4	11.8	272 ✓
+3	11.7	274 ✓
2	11.6	273 ✓
+8	12.0	269 ✓
1/4	11.4	275 ✓
+6	11.1	278 ✓
CB	12.4	285 ✓
+4	9.9	290 ✓
EL	9.6	293 ✓

5800 St. Cont.

60 wide 10' cbs 10' qts.

	38.86		
T.P.	0.83	21.84	26.01
		275.5	<u>26.8</u>
EL.		1.0	258 ✓
C.B.		1.8	250 ✓
1/4		2.9	239 ✓
2		2.9	239 ✓
1/4		3.3	235 ✓
+3		3.2	236 ✓
C.B.		4.6	222 ✓
H.L.		6.8	200 ✓
+15		9.3	175 ✓
	300 S. H.C. Grady		
-25		12.5	143 ✓
H.L.		11.0	158 ✓
C.B.		9.0	178 ✓
1/4		5.9	209 ✓
2		5.5	213 ✓
1/4		5.5	213 ✓
+5		5.9	209 ✓
C.B.		5.6	214 ✓
E.L.		5.2	216 ✓
	314 S. H.C. Grady		
-10		7.0	198 ✓
EL.		7.4	192 ✓
C.B.		7.5	193 ✓

32

	26.84	<u>26.8</u>	
+5		7.7	191 ✓
1/4		6.8	200 ✓
2		6.8	200 ✓
+7		7.0	198 ✓
1/4		8.1	187 ✓
+7		11.4	152 ✓
C.B.		11.8	150 ✓
H.L.		12.6	142 ✓
+20		13.0	138 ✓
	327 S		
-20		12.6	144 ✓
H.L.		13.0	138 ✓
+5		12.7	141 ✓
C.B.		12.0	148 ✓
+7		10.6	164 ✓
1/4		9.7	171 ✓
+3		8.1	187 ✓
2		7.4	194 ✓
+8		7.5	193 ✓
1/4		8.2	186 ✓
C.B.		9.9	172 ✓
E.L.		8.8	180 ✓
+10		8.1	187 ✓
	340 S		
-15		10.9	161 ✓

26.84

60' Aids

~~26~~

FL	11.0	158	✓
CB	11.1	157	✓
+8	10.3	165	✓
1/4	9.3	175	✓
+4	8.1	187	✓
2	8.0	188	✓
+7	8.5	183	✓
1/4	9.2	171	✓
15	11.9	149	✓
CB	12.3	145	✓
N.L.	13.2	136	✓
+25	12.7	141	✓
350 S			
-10	13.2	136	✓
N.L.	13.3	135	✓
CB	12.7	141	✓
1/4	10.3	165	✓
+05	9.0	178	✓
2	8.8	180	✓
+7	8.7	181	✓
1/4	10.0	168	✓
+4	12.0	148	✓
CB	12.0	148	✓
E.L.	12.3	145	✓
+20	13.0	138	✓

26.84

366.5

~~26~~

-20	11.7	155	✓
FL	13.0	138	✓
CB	12.1	144	✓
+5	12.0	148	✓
1/4	10.1	162	✓
+4	9.0	178	✓
2	9.3	175	✓
+7	9.4	175	✓
1/4	10.5	160	✓
CB	13.7	131	✓
N.L.	13.4	134	✓
+10	12.5	145	✓
369 S M. End 17.00			
P Cocaine			
Flor. Lin.			
T.P.	11.09	25.09	12.84
380 S = 52			
Greedy = 07.00 Ahead			
-10	10.5	146	✓
N.L.	10.5	146	✓
CB	10.1	150	✓
1/4	7.7	174	✓
2	7.4	177	✓
+5	7.5	176	✓
1/4	9.4	157	✓
CB	11.0	141	✓
E.L.	11.9	132	✓
+20	12.6	125	✓

H. 1.3538

35.4

50.88 Wide 10' Chs 77294

1/4		8.6	268	✓
1/2		12.5	279	✓
+4.5		13.3	281	✓
2		12.9	275	✓
1/4		13.1	273	✓
CB		13.2	274	✓
XL		13.2	272	✓
+10		13.1	273	✓
	75.5			
-10		11.4	260	✓
-5		9.8	256	✓
-1		12.0	272	✓
1/4		13.0	272	✓
CB		10.3	251	✓
1/4		10.4	250	✓
2		10.3	251	✓
1/4		10.4	250	✓
+5		0.0	254	✓
T.P.	678	41.50	0.60	3478
CB			41.5	359
			5.6	
E.L.			4.5	370
	90.5			
E.L.		2.3	374	✓
+3		3.4	381	✓
+6		3.6	379	✓
CB		2.5	340	✓

2150

41.5

+5		14.1	274	✓
1/4		13.1	279	✓
2		13.2	280	✓
1/4		13.0	285	✓
CB		12.9	286	✓
+4		12.0	245	✓
+6		12.1	292	✓
1/4		12.1	292	✓
+10		14.4	272	✓
	105.5			
-10		12.3	292	✓
-5		12.2	287	✓
1/4		10.9	306	✓
+7		13.5	280	✓
CB		12.0	295	✓
+3		11.8	297	✓
1/4		11.8	297	✓
5		11.7	298	✓
1/4		11.7	298	✓
1/4		11.8	292	✓
+5		11.5	303	✓
CB		8.6	322	✓
+4		5.9	356	✓
+7		1.8	392	✓
E.L.		1.9	398	✓

41.50

41.5

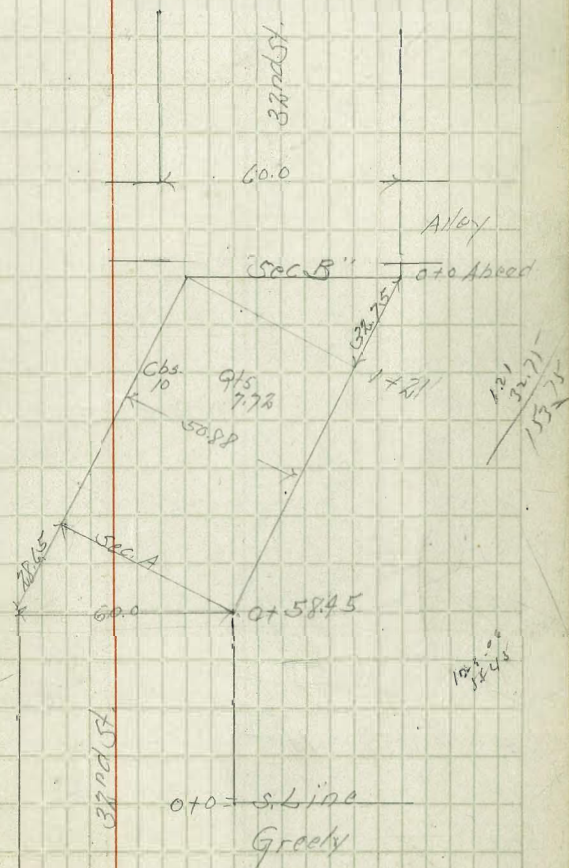
50.88 Wide 10' Obs 7.7% 915

121.5

200.5

EL	3.8	352 ✓	
+05	5.8	352 ✓	
+07	8.7	378 ✓	
CB	8.3	332 ✓	
11	8.3	332 ✓	
2	8.6	329 ✓	
4	9.3	322 ✓	
+4	10.1	314 ✓	
CB	7.9	336 ✓	
15	7.6	339 ✓	
WL	8.8	347 ✓	
710	12.3	192 ✓	
T.P.	5.46	360.4	Spk Post 3106

36



60' Wide 10' Cbs. 10' Cts.

46.0

46.00 From Page 34

0700 = Sec B

Started			
E.L.	8.5	375	✓
+5	10.1	359	✓
+6	12.2	338	✓
CB	11.9	341	✓
1/4	11.2	348	✓
2	10.8	352	✓
+6	11.6	354	✓
+8	10.6	352	✓
1/4	10.2	352	✓
CB	10.1	359	✓
1/4	11.4	346	✓
+10	12.3	337	✓
	7'S		
+10	11.4	346	✓
1/4	10.6	352	✓
+5	10.2	352	✓
CB	9.2	368	✓
1/4	9.6	364	✓
+1	10.2	352	✓
2	9.9	361	✓
1/4	10.2	358	✓
CB	10.8	352	✓
+3	10.7	353	✓
+7	4.5	415	✓
E.L.	4.4	416	✓

46.00

25.5

46.0

E.L.	29	431	✓
+9	29	441	✓
CB	7.1	389	✓
1/4	7.5	385	✓
2	7.5	385	✓
1/4	8.1	379	✓
+3	7.7	383	✓
CB	8.3	377	✓
1/4	9.2	368	✓
+10	10.2	358	✓
	50'S		
+20	9.8	362	✓
1/4	8.1	379	✓
+4	6.4	396	✓
CB	5.8	402	✓
+8	6.2	392	✓
1/4	6.2	392	✓
+5	5.3	407	✓
2	5.1	409	✓
1/4	5.4	406	✓
+5	5.3	407	✓
+8	2.2	438	✓
CB	2.2	438	✓
E.L.	1.5	445	✓

	4600	4600	60' wide	
	75.5	460		
EL		0.0	460	✓
CB		0.4	456	✓
+5		1.8	447	✓
+6		3.4	426	✓
1/4		3.7	416	✓
2		3.1	429	✓
1/4		3.7	413	✓
+3		4.0	418	✓
C.B.		3.9	422	✓
MLL		5.2	408	✓
+15		6.0	398	✓
T.P.	10.08	55.42	45.34	
		1005	554	
MLL		11.2	442	✓
CB		10.8	446	✓
+7		10.9	445	✓
+8		11.3	442	✓
1/4		10.8	446	✓
2		10.2	452	✓
1/4		10.4	450	✓
+5		10.3	451	✓
+6		9.1	463	✓
CB		8.1	473	✓
+2		7.8	476	✓
EL		7.4	480	✓

	125.5		
EL	5.1	498	✓
+3	6.0	494	✓
CB	6.6	489	✓
+3	7.0	484	✓
+4	7.8	476	✓
1/4	7.9	475	✓
2	7.8	476	✓
1/4	8.4	470	✓
+7	7.8	476	✓
CB	7.3	481	✓
MLL	7.8	484	✓
	1505		
MLL	4.7	502	✓
CB	4.6	508	✓
+5	5.7	497	✓
1/4	6.0	494	✓
2	6.0	494	✓
1/4	6.0	494	✓
+5	6.3	494	✓
+7	5.2	502	✓
CB	5.1	503	✓
EL	4.6	508	✓
	1620.5 = 1620.920		
EL	4.5	509	✓
CB	4.8	507	✓

55.42

~~50~~

73	4.9	455 ✓
75	5.3	451 ✓
74	5.0	454 ✓
77	4.8	456 ✓
8	5.1	453 ✓
74	5.4	450 ✓
CB	4.7	457 ✓
74.2	4.2	46 ✓
3M	4.25	51.17
	12.11	6318
		51.07

176.85 NE

~~63~~

74.4 Top Carb	12.15	51.05
CB	12.70	505 ✓
74	13.0	502 ✓
8	12.7	505 ✓
74	12.7	505 ✓
CB	12.6	506 ✓
EL	12.4	508 ✓
	12.85 NE	
EL	12.2	510 ✓
CB	12.3	509 ✓
74	12.4	508 ✓
8	12.5	507 ✓
74	12.5	507 ✓
CB	12.6	506 ✓
74.2	12.4	508 ✓

63.18

~~63~~

39

74	12.1	511 ✓
CB	12.3	509 ✓
74	12.2	510 ✓
8	12.2	510 ✓
74	12.2	510 ✓
CB	12.1	511 ✓
EL	12.1	511 ✓
	5/2 Log 900	
EL	11.7	515 ✓
CB	11.7	515 ✓
74	11.7	515 ✓
8	11.7	515 ✓
74	11.8	514 ✓
CB	11.8	514 ✓
74	12.1	511 ✓
	5 CB	
74.2. Feb	11.9	513 ✓
CB	12.0	512 ✓
74	11.7	515 ✓
8	11.8	510 ✓
74	11.1	511 ✓
CB	11.4	518 ✓
EL	10.9	515 ✓
	0.70 5 Line Log 900	
EL	8.9	513 ✓

60' xido 10' Cbs 18' 9' 15

6318	632		
+5	9.8	534	✓
CB	9.7	535	✓
+2	10.8	534	✓
1/4	10.6	536	✓
2	10.4	538	✓
1/4	11.4	519	✓
+5	10.8	534	✓
CB	10.7	535	✓
HL	10.8	530	✓
50			
HL	8.0	552	✓
CB	8.0	554	✓
+5	9.5	537	✓
1/4	10.8	534	✓
+3	10.9	535	✓
2	10.0	534	✓
1/4	9.9	530	✓
+3	9.7	535	✓
+8	10.8	530	✓
CB	9.0	541	✓
+5	9.1	541	✓
EL	7.8	554	✓
250			
EL	6.4	568	✓
+3	7.1	561	✓
CB	7.5	557	✓

6318	632		
+2	8.6	546	✓
+8	7.9	553	✓
1/4	8.0	551	✓
2	8.4	548	✓
1/4	9.2	540	✓
+2	9.4	538	✓
CB	6.9	563	✓
HL	7.1	561	✓
50'5			
HL	4.9	583	✓
CB	4.9	583	✓
+3	4.9	583	✓
+7	6.8	564	✓
1/4	6.4	568	✓
2	6.4	568	✓
1/4	5.9	573	✓
+4	5.8	574	✓
+8	6.8	570	✓
+9	5.5	577	✓
CB	5.5	577	✓
+3	6.0	572	✓
EL	5.3	572	✓
75'5			
EL	3.4	598	✓
CB	3.4	598	✓

63.18

63.2

+1	3.9	598	✓
+3	4.2	590	✓
1/4	3.7	595	✓
2	3.8	594	✓
+5	3.8	594	✓
1/4	4.3	589	✓
+3	4.4	588	✓
+4	3.4	598	✓
+7	2.6	606	✓
C.B.	2.6	606	✓
N.L.	2.3	609	✓
	100'S		
N.L.	1.7	615	✓
C.B.	2.0	612	✓
+1	2.0	612	✓
+7	3.1	601	✓
1/4	2.8	602	✓
+4	2.4	609	✓
2	2.4	608	✓
1/4	2.4	608	✓
+6	2.9	602	✓
+8	2.2	610	✓
C.B.	2.0	612	✓
E.L.	2.0	612	✓
	125'S		
E.L.	1.7	615	✓

63.18

63.2

C.B.	1.5	617	✓
+3	1.4	618	✓
+4	2.2	610	✓
1/4	1.2	614	✓
2	1.6	616	✓
1/4	1.5	617	✓
+4	1.9	615	✓
+7	1.1	621	✓
C.B.	1.1	621	✓
N.L.	1.0	622	✓
	150'S & Alley		
N.L.	0.3	622	✓
+9	0.5	622	✓
C.B.	0.6	626	✓
+5	1.8	620	✓
1/4	0.9	623	✓
2	0.9	623	✓
1/4	1.1	621	✓
+6	1.5	627	✓
C.B.	1.0	622	✓
E.L.	0.9	623	✓
	175		
E.L.	0.6	626	✓
C.B.	0.7	622	✓
+2	0.7	625	✓

63.2

+4			1.2	620	✓
14			0.8	625	✓
2			0.5	627	✓
14			0.7	625	✓
+5			0.8	624	✓
+8			0.0	632	✓
ML			0.0	632	✓
T.P.	2.45	64.89	0.74	6344	
		200.5	<u>649</u>		
ML			1.2	632	✓
+7			2.1	625	✓
CB			2.2	627	✓
+12			2.2	627	✓
+13			2.8	621	✓
14			2.8	622	✓
2			2.6	623	✓
14			2.8	621	✓
+6			3.0	619	✓
+7			2.0	625	✓
CB			2.4	625	✓
EL			2.4	625	✓
		22.53			
EL			2.5	626	✓
CB			2.4	625	✓
+3			2.1	618	✓

64.89

61.9

14			3.0	619	✓
2			3.0	619	✓
14			3.4	615	✓
+6			3.7	614	✓
CB			3.3	616	✓
ML			1.3	636	✓
		250.5			
ML			1.5	634	✓
CB			3.8	611	✓
+3			4.2	607	✓
14			3.8	611	✓
2			3.4	615	✓
14			3.4	615	✓
+2			3.4	615	✓
15			3.8	611	✓
17			3.4	615	✓
CB			3.1	618	✓
ML			2.6	623	✓
		275.3			
EL			2.6	622	✓
CB			3.0	612	✓
+2			3.4	615	✓
+4			4.3	606	✓
+7			3.8	612	✓
14			3.8	611	✓

Cross Section 32nd St.

18' cbs 10' qts

60' wide

64.89

~~64.9~~

Z	3.8	611	/
1/4	4.1	608	/
+7	4.4	605	/
C.B.	3.7	612	/
+5	3.6	613	/
N.L.	1.7	637	/
	296.5		
N.L.	2.0	619	/
+5	3.7	612	/
C.B.	3.9	610	/
+5	4.7	602	/
1/4	4.4	605	/
Z	4.2	607	/
1/4	4.6	603	/
+7	4.8	601	/
C.B.	3.7	612	/
E.L.	3.5	614	/
	301.5 - N Side National		
E.L.	4.4	605	/
C.B. Top	4.84	6005	/
+3	5.0	599	/
1/4	4.8	601	/
Z	4.3	606	/
1/4	4.4	605	/
+6	4.7	602	/

64.89

~~64.9~~

C.B.	4.0	609	✓
+5	3.8	611	✓
N.L.	3.1	618	✓
B.M.	3.84	61.05	S.N. National 61.015 + 32
	010 = S.L. National		
N.L.	4.5	602	✓
C.B. Top	4.86	6003	✓
+6	5.7	592	✓
1/4	5.6	593	✓
Z	5.6	593	✓
+3 Top Rail	5.39	593.50	✓
+6	5.5	594	✓
1/4	6.0	589	✓
C.B. Top	5.89	59.00	✓
E.L.	5.8	594	✓
	50.5		
E.L.	6.4	585	✓
C.B.	6.6	583	✓
1/4	6.5	584	✓
+2 Top Rail	6.21	5868	✓
Z	6.2	587	✓
+7 Top Rail	6.05	588.4	✓
1/4	6.1	588	✓
C.B.	5.4	595	✓
N.L.	4.9	600	✓
	100.5		

6.189

~~6.19~~

HL	5.0	599	✓
CB	6.3	586	✓
1/4	6.7	591	✓
2	6.9	580	✓
1/4	7.0	579	✓
CB	6.9	580	✓
EL	6.9	580	✓

1755

EL	7.3	576	✓
CB	7.1	578	✓
1/4	7.3	576	✓
2	7.2	572	✓
1/4	6.9	580	✓
CB	5.8	591	✓
HL	4.9	600	✓

1505 B. Alley

HL	5.1	598	✓
CB	5.2	597	✓
1/4	7.2	577	✓
13	7.5	574	✓
2	7.6	573	✓
17	7.8	571	✓
1/4	7.5	574	✓
CB	4.7	581	✓
EL	6.9	580	✓

T.P.

257

6073

6.23

5816

6073

.602

1755

EL	2.2	591	✓
CB	2.1	586	✓
1/4	3.5	572	✓
2	4.0	567	✓
1/4	3.7	570	✓
19	0.8	599	✓
HL	0.8	605	✓

2000

HL	0.7	600	✓
CB	1.1	596	✓
13	1.3	594	✓
1/4	3.9	568	✓
2	4.3	564	✓
17	4.2	564	✓
1/4	4.0	562	✓
CB	2.8	579	✓
EL	3.1	576	✓

2755

EL	4.1	566	✓
CB	3.7	570	✓
17	3.7	570	✓
1/4	4.9	563	✓
13	4.7	560	✓
2	4.6	561	✓
1/4	4.1	562	✓

44
8-21-25

60.73

602

+7	1.8	589	✓
XL	1.8	591	✓
250.5			
XL	1.9	588	✓
+5	2.6	581	✓
CB	2.2	583	✓
+2	2.3	584	✓
1/4	4.5	564	✓
+2	4.8	559	✓
2	5.0	557	✓
+7	5.1	556	✓
1/4	4.9	558	✓
CB	4.6	566	✓
EA	5.2	555	✓
275.5			
EA	6.1	566	✓
CB	5.7	550	✓
+7	5.3	554	✓
1/4	5.6	551	✓
2	5.5	552	✓
CB	5.3	554	✓
+2	5.1	556	✓
+8	3.1	576	✓
CB	3.8	537	✓
XL	2.6	586	✓

275.5

60.73

602

45

XL	3.8	569	✓
CB	3.7	570	✓
+2	4.1	566	✓
+7	5.7	550	✓
1/4	5.8	569	✓
2	6.0	547	✓
1/4	6.2	545	✓
+7	6.4	543	✓
CB	6.7	560	✓
EA	7.1	556	✓
299.5 1/2 Newton			
EA	7.5	534	✓
CB	6.8	539	✓
1/4	6.5	542	✓
12.5 TAPER 1/4	6.83	545.50	✓
2	6.8	545	✓
+7.5 " 1/4	6.85	548	✓
1/4	6.0	542	✓
+5	6.0	542	✓
CB	5.0	552	✓
EA	4.7	560	✓
313.5			
EA Top CB	5.37	5536	✓
CB	6.0	547	✓
1/4	6.2	545	✓
2	6.3	544	✓

6073

~~607~~

1/4	6.6	541 ✓
CB	7.0	532 ✓
EL	7.6	531 ✓

326.5'S

EL	7.4	532 ✓
CB	7.0	532 ✓
1/4	6.8	534 ✓
2	6.6	542 ✓
1/4	6.4	543 ✓
+3	6.1	546 ✓
CB	6.0	547 ✓
1/4	6.0	547 ✓

339.5'S

1/4	6.3	544 ✓
CB	6.4	543 ✓
1/4	6.6	541 ✓
2	6.8	532 ✓
1/4	6.9	532 ✓
CB	7.2	535 ✓
EL	7.4	533 ✓

352.5'S

EL	8.1	526 ✓
CB	7.6	531 ✓
+4	7.0	532 ✓
1/4	7.1	536 ✓
2	7.0	527 ✓

6073

~~607~~

46

1/4	6.8	534 ✓
CB	7.0	532 ✓
1/4	6.7	540 ✓

3653.5

1/4 Top Curve	7.32	534 ✓
CB	7.7	532 ✓
+7	7.8	534 ✓
1/4	7.4	533 ✓
175 Top Rail W	7.18	535 ✓
2	7.4	533 ✓
175 Top Rail E	7.38	533 ✓
1/4	7.6	531 ✓
CB	8.6	541 ✓
EL	9.0	512 ✓

379.5 S = 0:00 S Line Next to

EL	9.5	512 ✓
+8	9.6	511 ✓
CB	9.2	515 ✓
+9	8.0	542 ✓
1/4	8.0	547 ✓
2	7.8	549 ✓
1/4	7.9	548 ✓
CB	8.1	541 ✓
+5	7.9	528 ✓
1/4	7.8	535 ✓

353.5

	60.73	60.7		
XL		87	510	✓
78		85	518	✓
CB		94	513	✓
74		88	512	✓
8		88	519	✓
74		89	518	✓
71		89	518	✓
CB		100	507	✓
EL		105	505	✓
	50.5			
EL		11.0	497	✓
78		10.9	498	✓
CB		10.6	501	✓
78		10.0	507	✓
72		10.0	507	✓
8		9.8	509	✓
74		9.7	510	✓
73		9.7	510	✓
CB		10.4	503	✓
XL		10.6	501	✓
	75.5			
XL		11.4	491	✓
CB		11.6	491	✓
74		11.0	497	✓
74		10.6	501	✓
8		10.6	501	✓
74		10.8	499	✓

	60.73	60.7		
78		110	497	✓
CB		117	490	✓
EL		119	488	✓
T.P.	1.10	49.41 100.5	48.31 49.4	48.31
EL			47	✓
70			476	✓
CB			479	✓
74			49.1	✓
8			491	✓
74			490	✓
74			490	✓
CB			483	✓
XL			481	✓
	125.5			
XL			472	✓
CB			473	✓
75			480	✓
74			480	✓
8			481	✓
74			479	✓
78			479	✓
CB			468	✓
73			464	✓
EL			468	✓
	150.5			

49.41

	29.5	
EL	3.2	462 ✓
CB	3.5	459 ✓
7.3	3.4	460 ✓
1/4	2.4	470 ✓
2	2.2	472 ✓
1/4	2.1	473 ✓
CB	3.1	463 ✓
7.5	3.7	457 ✓
W.L.	3.6	458 ✓

175.5

W.L.	4.0	454 ✓
CB	4.0	452 ✓
7.6	3.3	461 ✓
1/4	3.3	461 ✓
2	3.3	461 ✓
1/4	3.4	460 ✓
CB	4.0	454 ✓
EL	3.5	459 ✓

200.5

EL	4.1	453 ✓
7.5	4.6	448 ✓
CB	4.5	449 ✓
4.4	4.6	448 ✓
1/4	4.4	450 ✓
2	4.2	452 ✓
1/4	4.0	454 ✓

49.41

49.5

48

CB	4.6	448 ✓
7.5	5.2	442 ✓
W.L.	4.7	442 ✓
	225.5	
W.L.	5.7	432 ✓
7.7	5.8	436 ✓
CB	5.6	438 ✓
7.5	5.1	443 ✓
1/4	5.1	443 ✓
2	5.2	442 ✓
7.7	5.5	439 ✓
1/4	5.3	441 ✓
CB	4.9	445 ✓
EL	4.8	446 ✓

250.5

EL	5.0	444 ✓
CB	4.8	446 ✓
1/4	5.7	437 ✓
7.4	6.4	430 ✓
2	6.4	430 ✓
1/4	6.1	438 ✓
7.5	5.8	436 ✓
CB	6.1	433 ✓
W.L.	6.5	444 ✓
	275.5	
W.L.	6.9	445 ✓
7.7	6.5	449 ✓

Cross Sections 32nd St.

From N Line Greely to N Line Main

60' wide 10' Cbs 10' Ot's

	49.41	49.4	
CB		46	428 ✓
1/4		70	424 ✓
2		71	423 ✓
+5		71	423 ✓
1/4		62	432 ✓
+8		53	441 ✓
CB		53	441 ✓
EL		51	443 ✓
	340'S	N.L. 305' 100'	
EL		57	437 ✓
CB		57	437 ✓
1/4		69	425 ✓
+6		78	416 ✓
+65 Top E Rail		77	416 ✓
2		77	417 ✓
1/4		77	417 ✓
+1 Top W Rail		77	417 ✓
CB		71	423 ✓
1/4		70	424 ✓
	314'S		
1/4		73	421 ✓
CB		74	420 ✓
1/4		80	414 ✓
2		80	414 ✓
+4		80	414 ✓
1/4		72	422 ✓

49.41

~~49.4~~

49

CB		60	431 ✓
EL		58	436 ✓
	387'S		
EL		65	429 ✓
CB		64	420 ✓
+3		66	428 ✓
1/4		77	417 ✓
+6		81	413 ✓
2		81	413 ✓
1/4		81	413 ✓
CB		74	420 ✓
1/4		72	422 ✓
	340'S		
1/4		75	419 ✓
CB		76	418 ✓
+8		82	412 ✓
1/4		82	412 ✓
2		83	412 ✓
1/4		79	415 ✓
+7		71	423 ✓
CB		70	424 ✓
EL		78	422 ✓
	353'S		
EL		82	412 ✓
CB		77	417 ✓
1/4		82	412 ✓
2		82	409 ✓

49.41

29.4

1/4	8.3	411	✓
2.5	8.1	413	✓
CB	7.8	416	✓
W.L.	7.7	417	✓

366' S

W.L.	8.3	411	✓
2.5	8.5	409	✓
CB	8.3	411	✓
1/4	8.4	410	✓
2.	8.6	408	✓
1/4	8.6	408	✓
CB	8.7	407	✓
E.L.	8.7	407	✓

390' S = 5 Line Bush

E.L.	9.4	400	✓
CB	8.9	405	✓
1/4	8.8	406	✓
2.5	8.70	407	✓
2.	8.7	407	✓
1/4	8.6	408	✓
2.5 Top W. Riv	8.54	408.7	
CB	8.5	409	✓
2.5	9.2	402	✓
W.L.	8.8	414	✓

040 Ahead 5 Line Bush

W.L.	7.6	419	✓
2.7	8.3	411	✓
CB	9.2	402	✓

49.41

29.4

50.

2.7	8.4	410	✓
1/4	8.5	409	✓
2.	8.7	402	✓
1/4	8.6	408	✓
CB	8.7	407	✓
E.L.	9.1	403	✓

15.5

E.L.	9.1	403	✓
CB	8.8	406	✓
1/4	8.6	408	✓
2.	8.8	406	✓
1/4	8.6	408	✓
2.3	8.4	410	✓
2.8	9.8	396	✓
CB	10.0	394	✓
2.3	9.8	396	✓
2.7	8.4	410	✓
W.L.	8.1	413	✓

25.5

W.L.	8.7	410	✓
2.4	8.8	406	✓
CB	10.5	389	✓
2.2	10.9	390	✓
2.7	8.5	409	✓
1/4	8.7	407	✓
2.	8.8	406	✓
1/2	8.8	406	✓

49.41

60' x 100'

~~49.4~~

T5	8.5	409	✓
CB	9.8	396	✓
T7	11.3	381	✓
EL	11.5	372	✓

55.5

EL	13.2	362	✓
T2	13.6	362	✓
T3	11.5	379	✓
T9	11.8	376	✓
CB	10.9	385	✓
T4	9.0	404	✓
1/4	9.1	403	✓
2	9.1	403	✓
1/4	9.0	404	✓
T3	9.0	404	✓
CB	11.8	376	✓
T4	11.6	378	✓
1/2	8.7	402	✓

75.5

1/2	8.1	413	✓
T5	10.6	388	✓
CB	10.6	388	✓
T8	9.0	404	✓
1/4	9.0	404	✓
2	9.3	401	✓
1/2	9.4	400	✓

49.41

~~49.4~~

51

39.8 ✓

346 ✓

T5		9.6		
CB		14.8		
T.P.	0.71	40.78	9.34	40.07
EL		40.8	11.0	✓ 49.8 ✓
T20			11.4	✓ 39.4 ✓

106.5

-20		12.8		✓ 49.0 ✓
-7		11.9		✓ 48.9 ✓
EL		7.6		✓ 33.1 ✓
CB		1.5		✓ 39.3 ✓
T5		0.8		✓ 40.2 ✓
1/4		0.6		✓ 40.1 ✓
2		0.4		✓ 40.1 ✓
1/4		0.8		✓ 40.1 ✓
T2		0.1		✓ 40.2 ✓
T5		0.9		✓ 39.9 ✓
CB		0.2		✓ 40.6 ✓
1/2		0.0		✓ 40.8 ✓

125.5

1/2		0.5		✓ 40.8 ✓
CB		0.8		✓ 40.0 ✓
T4		1.3		✓ 39.5 ✓
T8		0.1		✓ 40.1 ✓
1/4		0.5		✓ 40.3 ✓
2		0.7		✓ 40.1 ✓
1/4		0.7		✓ 40.1 ✓
T5		0.6		✓ 40.3 ✓

	4078	408	
CB		3.3	375 ✓
+6		6.7	371 ✓
EL		7.3	375 ✓
+80		10.8	306 ✓
	150's	2. Allen	
-10		6.3	345 ✓
EL		5.8	350 ✓
+5		5.3	352 ✓
CB		3.5	373 ✓
+6		6.6	402 ✓
1/4		0.7	401 ✓
+2.5 Top Rail		0.70	401 ✓
8		0.8	400 ✓
+7.5 Top Rail		0.53	402.5 ✓
1/4		0.5	403 ✓
+8		0.5	403 ✓
CB		1.9	389 ✓
1/2		1.0	398 ✓
	170's		
1/2		1.3	385 ✓
CB		3.0	378 ✓
+7		0.8	400 ✓
1/4		0.8	400 ✓
2		0.7	401 ✓
1/4		0.8	400 ✓
+3		0.6	402 ✓
CB		4.4	362 ✓

	4078	408	
+4		5.9	349 ✓
EL		6.3	345 ✓
+10		6.9	339 ✓
	200's		
-15		9.9	309 ✓
EL		8.8	325 ✓
CB		3.7	372 ✓
+0.5		1.0	398 ✓
1/4		1.0	398 ✓
2		0.9	392 ✓
1/4		0.8	400 ✓
+7		0.8	400 ✓
CB		5.8	356 ✓
+3		6.0	348 ✓
EL		5.4	352 ✓
+10		4.8	360 ✓
	225's		
-10		9.3	315 ✓
1/2		9.3	315 ✓
+5		8.6	322 ✓
CB		5.3	355 ✓
+8		0.8	400 ✓
1/4		0.8	400 ✓
2		1.1	397 ✓
1/4		1.1	397 ✓
+5		1.2	396 ✓
CB		4.1	367 ✓

4075

408

EL	10.7	301	✓
120	14.5	✓63	✓
250's			
-25	190	✓18	✓
-5	143	✓65	✓
EL	122	✓86	✓
C.B.	6.9	399	✓
1/4	10	398	✓
8	13	395	✓
1/4	1.2	396	✓
+4	11	392	✓
C.B.	5.8	350	✓
ML	11.5	✓93	✓
13	12.5	✓83	✓
120	13.1	✓92	✓
275's			
-20	13.4	✓76	✓ ENG. IN ML. 1.8 Comp/hrs
-6.5	12.6	✓74	✓ P. 13.1
ML	11.3	✓95	✓
C.B.	5.8	350	✓
+7	1.9	394	✓
1/4	1.4	394	✓
8	1.4	394	✓
1/4	1.4	394	✓
13	1.2	395	✓
C.B.	5.4	352	✓
EL	12.1	✓87	✓

4078

408

53

110	17.4	✓31	✓
125	19.7	✓11	✓
290's			
1.8 EL 1.8 Comp/hrs 13.20			
P. 10.8			
300's			
-25	19.6	✓11	✓
-13	18.6	✓22	✓
EL	12.5	✓82	✓
C.B.	5.9	✓89	✓
+8	1.7	391	✓
1/4	1.7	391	✓
8	1.6	392	✓
1/4	1.6	392	✓
13	1.6	393	✓
C.B.	6.8	346	✓
ML	12.0	✓88	✓
110	12.1	✓87	✓
115	11.9	✓95	✓
315's			
-10	8.8	342	✓
ML	10.7	301	✓
C.B.	5.8	350	✓
+7	1.4	394	✓
1/4	1.4	394	✓
8	1.6	392	✓
1/4	1.6	392	✓
13	1.4	394	✓
+7	1.4	394	✓

40.78

~~40.8~~

CB	7.0	338 ✓
EL	12.6	382 ✓
7.13	17.4	334 ✓
+2.5	19.0	318 ✓
345's		
-20	16.5	343 ✓
-9	13.9	369 ✓
EL	6.5	343 ✓
CB	1.2	396 ✓
1/8	1.0	394 ✓
8	1.6	394 ✓
1/4	1.5	393 ✓
+5	1.2	395 ✓
CB	2.0	388 ✓
+5	5.1	357 ✓
XL	4.9	359 ✓
+10	4.2	366 ✓
365's		
-5	1.7	391 ✓
XL	1.3	395 ✓
CB	1.2	396 ✓
1/4	1.6	394 ✓
8	1.8	390 ✓
1/4	1.7	391 ✓
CB	1.5	393 ✓
EL	2.7	381 ✓
+5 TOP Dry Well	4.4	364 ✓ (Close End Dry Well)

40.78

~~40.8~~

54

7.6	10.3	306 ✓
11.5	11.5	393 ✓
390's		
-15	5.9	349 ✓
-5	2.2	386 ✓
EL	2.1	387 ✓
CB	2.0	388 ✓
1/4	1.9	389 ✓
8	1.9	389 ✓
1/8	1.9	389 ✓
CB	1.7	391 ✓
XL	1.6	392 ✓
421's		
XL	1.0	398 ✓
+9	1.1	397 ✓
CB	2.2	386 ✓
1/4	2.2	386 ✓
8	2.2	386 ✓
+27 TOP Dry Well	2.2	386 ✓
1/4	2.1	387 ✓
CB	2.1	387 ✓
EL	2.2	386 ✓
500's		
EL	3.2	376 ✓
CB	2.1	380 ✓
1/4	2.2	385 ✓

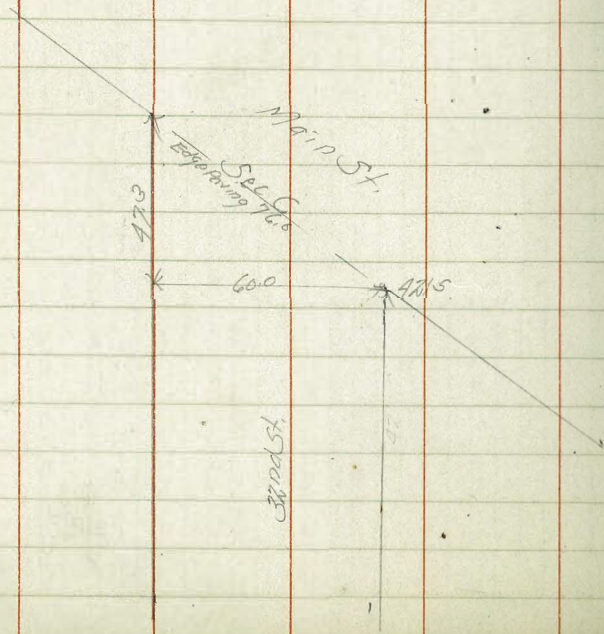
3rd St Cost

40.78

60' wide
40.8

55

2	2.3	385	✓
14	2.8	386	✓
Gutter	2.2	386	✓
Top Curb	1.49	3919	✓
X.L	1.0		



89
27
776

Profile for Sewer End of Curlew

3rd edge road

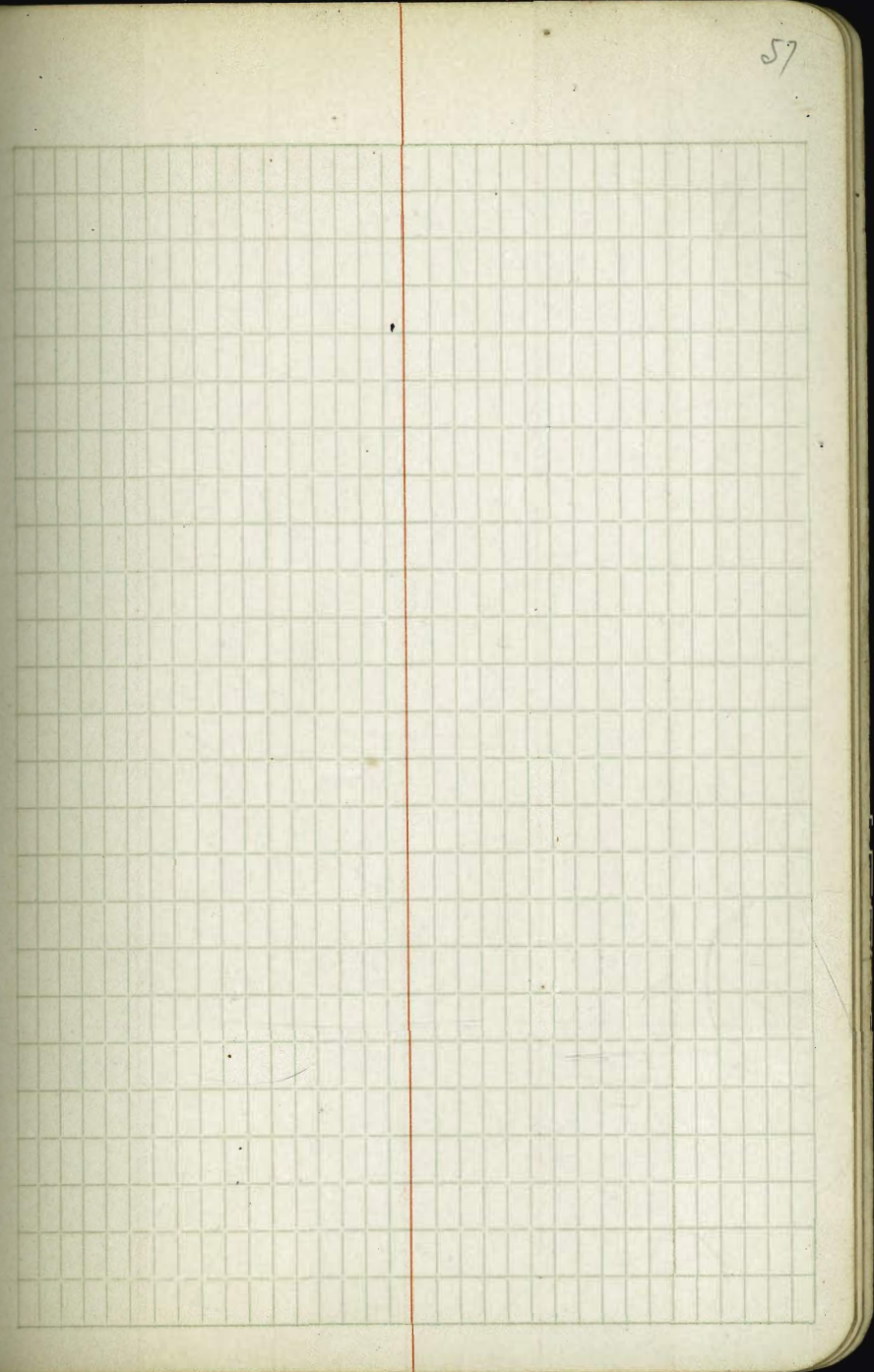
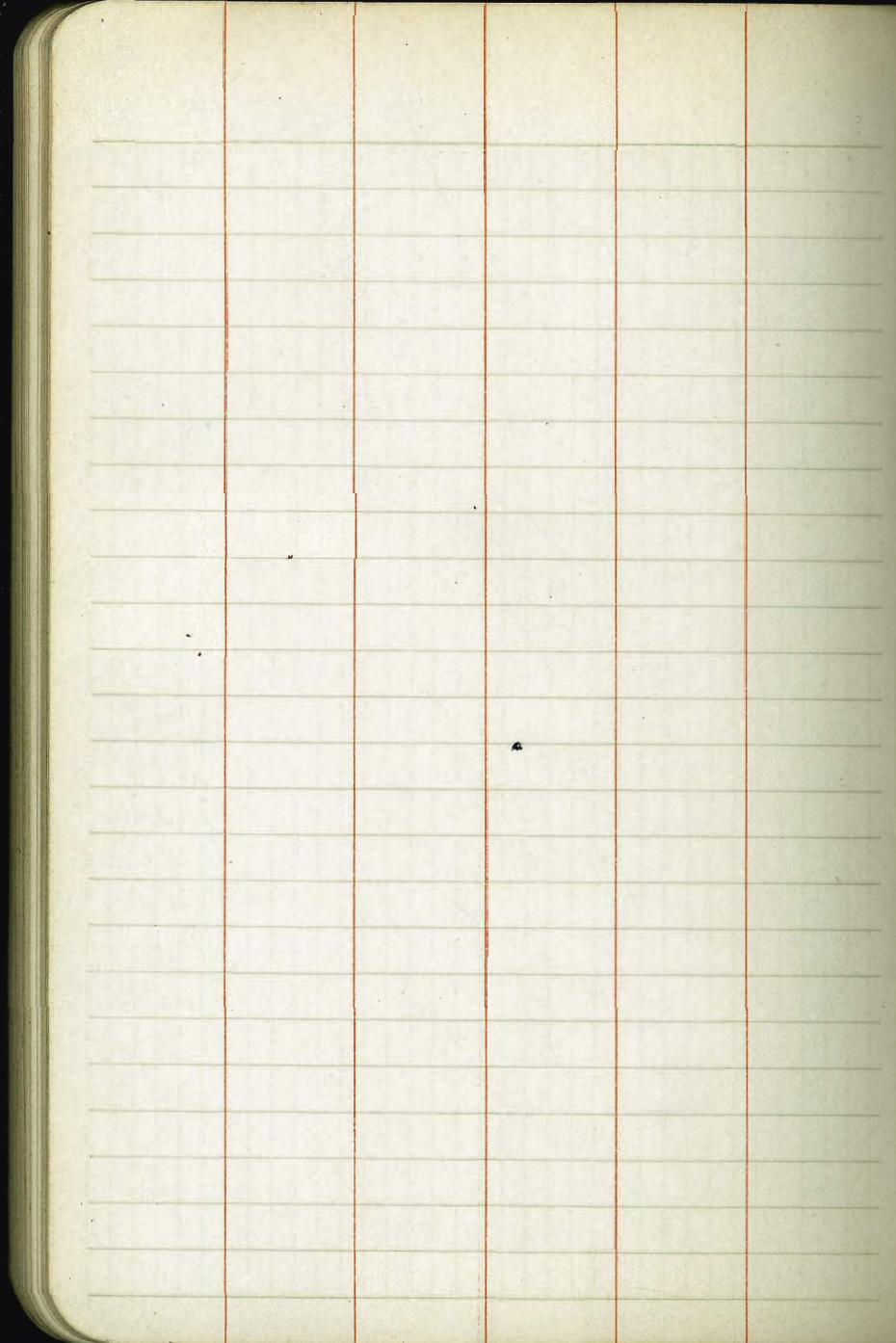
24 / 1.0 27 / 0.3 33 / 0.6 44 / 5.2 50 / 6.0

70 / 8.0 86 / 11.3 89 / 12.0 99 / 14.0 116 / 10.4

Sta	FS	HI	BS	Elev
00		6.0		6.0
24			1.0	5.0
27			0.3	5.7
33			0.6	5.4
44			5.2	0.8
50		0	6.0	0
70			8.0	-2.0
86			11.3	-5.3
89			12.0	-6.0
99			14.0	-8.0
116			10.4	-4.4

30 56

Sta	HI	Elev
0+00 = Q Road		137.5 ✓
0+24		138.5 ✓
0+27		137.8 ✓
0+33		138.1 ✓
0+44		137.3 ✓
0+50		131.5 ✓
0+70		129.5 ✓
0+86		126.2 ✓
0+89		125.5 ✓
0+99		123.5 ✓
1+16		127.1 ✓



DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

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

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