1

City Park Contours

Return to City Engineers Office
City Hall, San Diego, Cal.

155

400

LEVEL

F.B. 155

155

Table showing the difference of latitude and departure in running 80 chains at any course from 1 to 60 minutes.

Minutes	Lks.	Minutes	Lks.	Minutes	Lks.
1	2⅓	21	49	41	95⅔
2	4⅔	22	51⅓	42	98
3	7	23	53⅔	43	100⅓
4	9⅓	24	56	44	102⅔
5	11⅔	25	58⅓	45	105
6	14	26	60⅔	46	107⅓
7	16⅓	27	63	47	109⅔
8	18⅔	28	65⅓	48	112
9	21	29	67⅔	49	114⅓
10	23⅓	30	70	50	116⅔
11	25⅔	31	72⅓	51	119
12	28	32	74⅔	52	121⅓
13	30⅓	33	77	53	123⅔
14	32⅔	34	79⅓	54	126
15	35	35	81⅔	55	128⅓
16	37⅓	36	84	56	130⅓
17	39⅔	37	86⅓	57	133
18	42	38	88⅔	58	135⅓
19	44⅓	39	91	59	137⅔
20	46⅔	40	93⅓	60	140

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TABLE FOR RUNNING ON SLOPES.

In the following table the first column shows the angle, the second the number of links to be added to a chain on the slopes to make one chain, horizontal measurement.

MICROFILMED
1984

Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links	Angle	Cor. in Links
°		°		°		°	
4	0.24	11	1.88	18	5.14	25	10.54
5	0.38	12	2.24	19	5.76	26	11.26
6	0.55	13	2.63	20	6.42	27	12.24
7	0.76	14	3.06	21	7.11	28	13.37
8	0.98	15	3.53	22	7.85	29	14.34
9	1.24	16	4.02	23	8.64	30	15.47
10	1.55	17	4.56	24	9.47	35	22.07

155 No. 1
Return to City Engineers Office
City Hall, San Diego, Cal.

Contour Survey City Park

Contour Survey City Park

1/22/039 Alverson
Anguisola
Frary
Luce.

△ pt. on W. range line of 6th. street,
300' No. of So. line of Park.

→ pt. on W. range line of 6th st. at int. of
So. line of Park.

Vertical.	Horiz.	Rod.	
145 ft. Contour.			
2°30'	11°29'R	1.78	1.78
2°30'	5°00'R.	1.25	1.25
2°40'	9°44'L.	1.47	1.47
2°32'	24°15'L	1.77	1.77
2°28'	31°26'L	1.87	1.87
2°20'	28°35'L	2.22	2.22
2°00'	28°15'L	2.47	2.47
1°55'	24°00'L	2.53	2.53

Vert.	Horiz	Rod		
1°40'	29°00'L	4.87	4.87	
1°35'	31°45'L	3.27	3.27	✓

150 ft. Contour

0°58'	40°28'L	3.58	3.58	
1°00'	45°26'L	3.24	324	
1°02'	52°27'L	3.28	328	
0°52'	51°40'L	2.78	278	
0°56'	49°38'L	2.56	256	
0°50'	49°04'L	2.05	205	
1°07'	52°56'L	1.58	158	
0°06'	60°24'L	0.94	94	
1°20'	37°58'L	1.17	117	
1°26'	46°00'L	0.70	70	
1°37'	6°28'R	0.34	34	
1°35'	36°07'R	0.78	78	
1°50'	23°40'R	1.15	1.15	✓

150 ft Contour

1°50'	158°15'R	0.85	85
1°45'	159°05'R	1.24	124

1/23/03

Alverson
McLaren
Argentola
Luce

△ Pt on W. range line of 6th Street 300' N. of So line of Park

→ Pt on W. range line of 6th Street at int. of So. line of Park

155 ft Contour

0°15'	47°15'L	4.23	423
0°16'	50°55'L	4.10	410
0°15'	54°50'L	4.08	408
0°15'	58°50'L	3.96	396
0°16'	60°40'L	3.65	365
0°34'	65°20'L	3.46	346
0°40'	62°55'L	3.10	310

Deck.	Horiz	Rod	
0° 45′	70° 55′ L	2.60	260
0° 45′	80° 20′ L	2.16	2.16
0° 34′	79° 34′ L	1.74	174
0° 40′	105° 28′ L	1.28	128
0° 45′	126° 32′ L	1.14	114
0° 58′	138° 30′ L	0.84	84
0° 45′	165° 08′ L	1.12	112
0° 40′	172° 25′ L	1.52	152
0° 30′	175° 20′ L	1.00	100 ✓

160 ft. Contour ✓

2° 05′	144° 25′ L	1.93	193
2° 05′	130° 20′ L	1.83	183
2° 06′	120° 26′ L	1.78	178
2° 04′	102° 48′ L	1.92	192
1° 50′	88° 10′ L	1.23	123
1° 40′	83° 22′ L	1.50	150

1° 25′	71° 45′ L	3.08	308
1° 15′	69° 25′ L	3.28	328
1° 15′	69° 45′ L	3.57	357
1° 10′	65° 00′ L	3.88	388
0° 58′	56° 58′ L	4.96	496
0° 50′	53° 05′ L	4.80	480 ✓

165 ft Contour

1° 15′	57° 42′ L	5.45	545
2° 00′	74° 06′ L	3.30	330
2° 10′	84° 08′ L	2.73	273
2° 26′	94° 44′ L	2.48	248
2° 25′	106° 36′ L	2.47	247
2° 40′	117° 08′ L	2.43	243
2° 45′	126° 42′ L	2.37	237
2° 35′	135° 58′ L	2.43	243
2° 35′	150° 00′ L	2.38	238
2° 25′	156° 40′ L	2.72	272

Vert.	Horiz	Rod	
2°25'	161°35'L	3.00	300 ✓

170 ft. Contour

3°35'	151°40'L	2.74	274
3°40'	133°28'L	2.68	268
3°40'	125°05'L	2.68	268
3°50'	109°55'L	2.62	262
3°34'	96°02'L	2.77	277
3°32'	85°50'L	2.98	298
3°02'	80°56'L	3.30	330 ✓

△ Pt. on W. range line of 6th Street 300' N. of So. line of Park

→ pt. on W. range line of 6th Street prod. northerly.

160 ft. Contour

1°28'	9°35'R	2.75	275
1°28'	0°10'R	3.20	320
1°15'	2°20'R	3.85	385
1°15'	6°18'R	4.20	420 ✓

165 ft. Contour.

2°15'	15°08'R	3.25	325
1°58'	8°50'R	4.06	406
1°56'	6°50'R	5.06	506
1°30'	5°00'R	5.28	528
1°25'	2°45'R	5.62	562 ✓

Vert. Horiz. Rod.

170 ft. Contour

3°34′	26°30′R	2.90	290	
3°15′	23°30′R	3.25	325	
2°58′	18°00′R	3.73	373	
2°30′	10°42′R	4.28	428	
2°00′	6°58′R	5.28	528	
1°56′	3°50R	5.40	540	✓

175 ft. Contour

1°58′	5°40′R	5.80	580	
2°35′	9°35′R	4.86	486	
3°00′	16°30′R	4.25	425	
3°26′	21°35′R	3.83	383	
4°00′	29°50′R	3.04	304	✓

180 ft. Contour

2°38′	6°58′R	6.06	606	
3°10′	13°05′R	5.00	500	
3°28′	20°36′R	4.35	435	
4°50′	35°40′R	3.16	316	
4°50′	40°58′R	3.08	308	
5°10′	46°50′R	2.86	284	
5°05′	50°30′R	3.00	298	
5°04′	57°58′R	3.04	302	✓

185 ft. Contour

5°45′	44°00′R	3.18	316	
5°00′	35°05′R	3.63	361	
4°20	29°40′R	4.30	430	
3°50′	18°00′R	4.90	490	
3°10′	9°42′R	5.93	593	✓

190 ft. Contour

3°32'	12°20'R 5.86	586
3°45'	14°26'R 5.53	553
4°15'	22°18'R 4.95	495
4°28'	30°30'R 4.72	472
5°55'	43°08'R 3.60	358
5°32'	49°44'R 4.15	413

195 ft. Contour

5°25'	39°14'R 4.53	451
4°50'	29°48'R 5.07	507
4°45'	24°25'R 5.15	515
4°15'	16°48'R 5.76	576
4°20'	15°58'R 5.95	595

△ Pt on W. range line of 6th Street 818' No. of So. line of Park

→ pt on W range line of 6th St. at int. of So. line of Park.

By reason of an error made at bench mark at N.E. cor of Date & 5th whereby the rod was placed on top of stem of hydrant instead of on the nozzle all elevations herein before entered are 8 tenths of a foot higher than the elevation they purport to represent. In finishing map a correction of 8 tenths is to be made by graphical interpolation. From this on the contours are

actually where shown by the figures

160 ft. Contour.

0° 00'	6° 00' L	1.98	198
0° 00'	9° 24' L	1.67	167
0° 15'	21° 15' L	1.32	132
0° 52'	48° 25' L	0.58	58
0° 36'	80° 58' L	0.24	24

155 ft. Contour

0° 30'	24° 12' R	0.72	72
0° 58'	12° 40' R	0.55	55
1° 00'	73° 20' R	0.35	35
1° 05'	112° 06' R	0.11	11
1° 20'	160° 18' R	0.38	38

△ Pt. on W. range line of 6th St. 848 ft N. of So. line of Park

→ pt. on W. range line of 6th St produced northerly.

155 ft. Contour

0° 25'	22° 15' R	0.55	55
0° 30'	13° 30' R	1.54	154
0° 40'	12° 20' R	1.87	187
0° 35'	15° 45' R	2.13	213
0° 35'	6° 20' R	2.72	272
0° 35'	1° 00' R	3.40	340
0° 30'	4° 36' L	3.00	300
0° 30'	1° 24' L	2.38	238
0° 35'	12° 58' L	1.98	198

150 ft. Contour

4° 00'	22° 18' L	1.37	137
1° 55'	9° 35' L	1.72	172

Vert	Horiz	Rod	
1°50′	1°15′L	2.28	228
0°45′	4°30′L	2.85	285
0°40′	2°10′R	3.20	320
1°45′	1°40′R	2.82	282
1°00′	11°30′R	2.07	207
3°45′	4°45′R	1.67	167
5°18′	9°00′L	0.42	

160 ft Contour

0°10′	11°28′R	2.60	260
1°05′	15°28′R	1.95	195
1°10′	14°20′R	1.72	172
1°00′	18°58′R	1.18	118
0°15′	41°28′R	0.32	32

165 ft Contour

5°28′	70°56′R	0.32	32
5°32′	26°06′R	0.87	86
2°32′	18°00′R	1.72	172
2°15′	18°00′R	2.22	222
1°30′	12°30′R	3.02	302
1°25′	10°12′R	3.38	338
1°15′	0°10′L	3.92	392
1°15′	6°58′L	3.35	335
1°20′	10°35′L	242	242

170 ft Contour

2°05′	12°15′R	3.32	332
2°15′	15°40′R	2.82	282
3°30′	21°14′R	2.20	220
3°55′	22°20′R	1.60	160
6°00′	32°00′R	1.00	99
10°20	53°30′R	0.52	50

Alverson
McLaren
Angursola
Luce

1/24/03

△ Pt. B5+.25 Left

→ Pt. produced to B0.

Vert. Horiz Rod.

175 ft. Contour.

11°05'	110°36'L	0.24	23
3°50'	87°15'L	0.65	65
3°05'	84°05'L	1.02	102
1°34'	81°25'L	1.50	150
1°22'	85°00'L	2.00	200
1°20'	84°32'L	2.44	244
1°05'	87°06'L	2.82	282
0°40'	85°25'L	2.25	225
0°40'	86°28'L	3.60	360

180 ft. Contour

0°05'	83°50'L	2.72	272
0°03'	81°30'L	2.45	245
0°00'	81°40'L	2.08	208
0°00'	79°45'L	1.73	173
0°00'	77°10'L	1.47	147
0°00'	76°30'L	1.17	117
0°30'	71°45'L	0.63	63
0°45'	78°50'L	0.24	24

185 ft. Contour.

4°50'	36°55'L	0.50	50
1°20'	73°24'L	1.64	164
1°10'	76°55'L	2.48	248
1°04'	81°50'L	2.86	286

Vert.	Horiz.	Rod.	
190 ft. Contour			
1°40′	78°48′L	3.23	323
2°00′	71°38′L	2.60	260
3°00′	64°35′L	1.73	173
6°25′	31°50′L	0.77	77
195 ft. Contour			
8°55′	17°00′L	0.89	87
5°10′	48°30′L	1.53	152
1°05′	63°08′L	2.12	212
0°45′	64°45′L	2.56	256
2°20′	77°06′L	3.60	360
200 ft. Contour			
3°00′	74°25′L	3.72	372
3°10′	64°10′L	2.87	287
5°25′	55°60′L	2.04	202

8°02′	29°00′L	1.28	127
9°05′	6°22′L	1.14	112
7°50′	25°35′R	1.55	154

Δ Pt. on 8th St. rangeline produced northerly at C4 left.

→ to C6 left.

165 ft. Contour

5°60′	51°32′L	3.05	303
7°05′	46°00′L	2.08	205
10°28′	25°25′L	1.47	142
17°15′	14°55′L	0.81	74
Intrav. 19°25′	40°00′R	0.63	56
19°20′	15°48′L	0.74	68
10°20′	36°10′L	1.33	129
8°45′	48°45′L	1.52	148

170 ft Contour

8°20'	52°45'L	1.40	137
10°00'	40°36'L	1.20	116
20°25'	21°10'L	0.58	51
22°25'	20°25'R	0.55	48
18°25'	54°20'R	0.68	63
16°32'	15°14'R	0.78	72
16°04'	7°50'L	0.90	83
8°00'	21°22'L	1.45	142
6°35'	41°55'L	1.90	188
4°15'	49°20'L	3.00	300

175 ft. Contour

3°30'	47°02'L	3.00	300
5°45'	36°47'L	1.93	191
5°40'	18°14'L	1.53	151
11°30'	5°20'R	0.90	86
11°15'	44°25'R	0.91	87

7°05'	67°45'R	1.53	151
5°10'	71°40'R	1.66	165
9°30'	66°02'R	1.26	123
16°55'	63°40'R	0.58	54
23°30'	1°20'L	0.38	32
8°24'	47°55'L	1.07	105

180 ft Contour

2°00'	49°12'L	3.45	345
2°00'	44°55'L	3.00	300
2°30'	41°45'L	2.46	246
2°50'	34°58'L	2.00	200
4°35'	15°15'L	1.62	162
7°10'	8°36'R	0.98	96
4°45'	54°22'R	1.45	145
4°45'	67°25'R	1.72	172
3°05'	70°45'R	2.16	216
3°00'	74°36'R	2.32	232

Vert.	Horiz. Rod		
2°45'	76°10'R	2.88	288
1°30'	79°30'R	2.32	232
3°30'	76°20'R	1.94	194
2°00'	79°23'R	1.64	164
6°30'	72°40'R	1.18	116
13°00'	75°00'R	0.60	57
21°45'	7°22'L	0.26	22
7°15'	54°38'L	1.00	98

185 ft. Contour

3°05'	62°12'L	1.00	100
6°30'	57°55'L	0.34	33
17°50'	57°30'R	0.22	20
5°20'	81°45'R	0.71	70
4°00'	78°40'R	1.13	113
1°50'	83°08'R	1.65	165
1°45'	80°45'R	1.98	198
1°32'	79°12'R	2.68	268
1°25'	79°40'R	3.33	333
1°26'	72°00'R	2.75	275
1°32'	70°50'R	2.40	240
1°35'	66°45'R	2.10	210
1°37'	61°10'R	1.73	173
3°00'	51°42'R	1.60	160
3°15'	34°25'R	1.03	103
3°06'	8°10'R	1.12	112
3°00'	6°36'L	1.52	152
2°55'	19°35'L	1.82	182
1°25'	32°45'L	2.00	200
1°16'	41°40'L	2.87	287

190 ft. Contour

0°55'	33°20'L	2.50	250
0°55'	27°25'L	2.00	200
1°00'	11°54'L	1.82	182

Vert	Horiz.	Rod	
1°07'	13°54'R	1.10	110
1°00'	46°16'R	1.67	167
1°10'	59°55'R	1.88	188
0°45'	63°25'R	2.17	217
0°35'	68°37'	2.50	250
0°32'	69°00'R	2.67	267
0°30'	76°10'R	3.24	324
0°30'	75°24'R	3.84	384
0°15'	83°04'R	3.48	348
0°20'	81°50'R	2.70	270
0°25'	84°10'R	2.30	230
0°30'	84°35'R	2.02	202
0°25'	87°12'R	1.56	156
0°25'	84°18'R	1.10	110
0°35'	95°06'R	0.55	55
0°30'	76°32'L	0.20	20
0°25'	69°10'L	0.91	91

195 ft Contour

1°30'	74°15'L	1.04	104
1°15'	80°05'L	0.51	51
0°45'	125°25'R	0.17	17
1°50'	101°00'R	0.68	68
1°56'	90°00'R	1.20	120
1°30'	89°00'R	1.83	183
0°40'	84°18'R	2.74	274
0°30'	81°46'R	3.70	370
0°30'	75°10'R	4.02	402
0°30'	73°04'R	4.17	417
0°30'	73°16'R	3.32	332
0°30'	69°10'R	2.90	290
0°35'	62°00'R	2.28	228
0°35'	59°08'R	2.04	204
0°35'	45°18'R	1.80	180
0°40'	34°54'R	1.40	140
0°45'	11°10'R	1.36	136

Vert	Horiz	Rod	
0°35′	8°38′L	1.87	187

200 ft Contour.

2°00′	2°16′L	2.14	214
2°00′	17°16′R	1.77	177
2°05′	47°27′R	1.97	197
2°05′	57°10′R	2.15	215
2°00′	63°35′R	2.55	255
1°50′	68°22′R	3.00	300
1°30′	70°54′R	3.37	337
1°00′	72°45′R	5.10	510
1°00′	73°46′R	4.70	470
1°00′	74°00′R	4.40	440
1°05′	78°45′R	4.15	415
1°10′	81°42′R	4.00	400
1°15′	85°10′R	3.66	366
1°10′	86°55′R	2.70	270
2°20′	93°10′	1.86	186
3°35′	94°44′R	1.18	118
5°05′	114°20′R	0.58	57
11°30′	129°00′R	0.32	31
8°06′	95°68′L	0.43	42
3°10′	79°20′L	1.00	100

205 ft Contour

7°45′	89°50′L	1.00	98
12°18′	108°05′L	0.46	44
16°20′	148°05′R	0.37	34
9°30′	109°50′R	0.87	85
5°40′	98°40′R	1.28	127
3°30′	93°00′R	2.17	217
3°30′	89°28′R	2.75	275
2°20′	86°20′R	4.77	477
3°20′	82°10′R	4.15	415
2°15′	79°50′R	4.32	432

281

Vert. Stadiz. Rod.

2°10'	75°22'R	4.56	456
1°55'	74°08'R	5.10	510
2°30'	69°15'R	3.35	335
2°35'	64°20'R	2.80	280
3°05'	58°42'R	2.47	247
3°20'	54°40'R	2.27	227
3°25'	45°58'R	2.22	222

△ Pt. on 8th St. range line produced northerly at C 3+35 left

→ to C 6 left

210 ft. Contour

2°20'	45°05'R	2.98	298
2°10'	50°00'R	3.06	306
2°05'	55°40'R	3.42	342
1°35'	58°38'R	3.64	364
1°15'	58°05'R	4.95	495
1°05'	60°08'R	5.23	523
1°00'	63°48'R	6.02	602
1°10'	68°36'R	5.25	525
1°10'	69°28'R	4.75	475
1°15'	73°34'R	4.45	445
1°25'	76°40'R	4.20	420
1°25'	78°45'R	3.90	390
1°45'	79°35'R	2.82	282
1°50'	78°58'R	2.20	220
2°00'	78°37'R	1.80	180
3°50'	73°50'R	1.27	127
4°00'	70°25'R	0.68	68
3°55'	63°10'R	0.50	50
4°50'	51°45'R	0.28	28
16°45'	31°23'L	0.31	28
8°05'	50°55'L	0.70	69
3°35'	73°58'L	1.83	183

Vert Horiz Rod

215 ft Contour

1°25'	89°15'L	1.92	192
1°30'	63°40'L	0.65	65
1°30'	51°52'L	0.23	23
1°45'	26°15'R	0.16	16
2°05'	79°04'R	0.50	50
2°05'	76°58'R	0.94	94
1°15'	81°10'R	1.58	158
0°30'	82°50'R	2.50	250
0°25'	84°30'R	3.00	300
0°00'	85°05'R	3.67	367
0°00'	83°10'R	4.16	416
0°45'	79°45'R	4.10	410
0°50'	76°15'R	4.47	447
0°50'	70°20'R	4.80	480
0°35'	69°00'R	5.50	550
0°35'	63°15'R	6.07	607

0°40'	61°15'R	5.80	580
0°35'	59°58'R	5.37	537

Im cannon to here

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△ Pt on 8th Street range line produced northerly at C3+35 left.
→ C0 on 8th Str. range line.

220 ft Contour.

0°20'	76°00'R	1.75	175
0°45'	98°55'R	0.47	47
0°50'	111°55'L	0.17	17
1°00'	89°10'L	0.48	48
1°10'	97°40'L	0.88	88
1°10'	96°54'L	1.44	144
0°15'	95°35'L	2.05	205
0°15'	93°05'L	2.97	297

Vert	Horiz	Rod	
0°10'	95°26'L	4.22	422
0°00'	100°00'L	4.32	432
0°00'	103°45'L	4.57	457
0°00'	109°12'L	4.93	493
0°00'	110°30'L	5.54	554
0°00'	113°00'L	6.40	640
0°00'	116°28'L	6.20	620
0°00'	119°35'L	5.70	570
0°00'	121°05'L	5.25	525
0°00'	124°40'L	4.80	480

225 ft. Contour

0°15'	120°45'L	5.78	578
0°15'	117°45'L	6.20	620
0°20'	116°25'L	6.32	632
0°15'	109°15'L	5.60	560
0°15'	109°57'L	4.86	486

0°15'	94°35'L	4.55	455
0°15'	90°15'L	3.55	355
0°15'	90°00'L	2.23	223
0°15'	86°55'L	1.45	145
0°00'	81°00'L	0.92	92
0°50'	46°12'L	0.54	54
0°55'	20°08'R	0.63	63
0°44'	44°10'R	1.08	108
0°45'	48°45'R	1.67	167

△ Pt. on 8th St. range line produced northerly at D4+87 left.

→ Do

230 ft. Contour

0°15'	59°00'R	4.10	410
0°20'	56°15'R	3.43	343
0°25'	51°12'R	2.85	285
0°30'	47°00'R	2.50	250

Vert.	Horiz	Rod	
0°35′	39°40′R	2.20	220
0°15′	35°32′R	1.90	190
0°25′	44°00′R	1.35	135
0°45′	47°15′R	0.83	83
0°45′	95°00′R	0.40	40
0°40′	110°25′L	0.17	17
0°40′	95°00′L	0.46	46
0°40′	97°55′L	0.94	94
0°25′	102°40′L	0.94	94
0°30′	109°50′L	1.00	100
0°25′	108°25′L	1.37	137
0°30′	113°05′L	1.66	166
0°00′	110°15′L	1.87	187
0°06′	115°35′L	2.02	202
0°10′	120°35′L	2.05	205
0°10′	128°45′L	1.70	170
0°20′	146°07′L	1.25	125
0°35′	160°30′L	1.02	102
0°35′	180°00′L	1.12	112

235 ft. Contour.

0°30′	119°22′L	2.13	213
0°25′	103°55′L	2.07	207
0°25′	108°50′L	1.90	190
0°30′	101°36′L	1.45	145
0°30′	82°30′L	1.38	138
0°30′	71°05′L	1.28	128
0°35′	64°52′L	1.47	147
0°30′	61°42′L	1.02	102
0°35′	27°20′L	0.87	87
0°35′	14°10′L	1.17	117
1°00′	3°00′L	1.24	124
0°50′	15°38′R	1.70	170
0°45′	20°00′R	2.10	210
0°40′	29°45′R	2.53	253

△ Pt on 8th St range line produced northerly at A0

→ A3 left

165 ft Contour

3°00'	19°16'L	2.10	210
3°25'	15°30'L	1.46	146
3°40'	40°33'L	1.20	120
3°40'	57°45'L	1.67	167
3°35'	70°15'L	1.75	175
3°35'	80°55'L	2.05	205
3°15'	81°00'L	2.90	290
3°15'	97°00'L	2.92	292
2°50'	109°15'L	2.62	262
2°50'	118°45'L	2.42	242
3°00'	127°45'L	2.52	252
2°50'	138°35'L	2.70	270
2°35'	146°50'L	3.12	312

170 ft Contour

1°15'	146°35'L	4.33	433
1°20'	158°40'L	3.43	343
1°15'	164°55'L	2.85	285
1°15'	170°30'L	2.35	235
1°20'	119°30'L	1.30	130
1°30'	98°55'L	0.98	98
1°45'	61°45'L	0.61	61
2°00'	28°45'L	0.64	64
2°10'	10°30'L	0.93	93
2°15'	4°30'R	1.47	147
2°05'	6°35'R	1.87	187
2°05'	2°00'R	2.45	245
1°50'	4°55'L	2.43	243
1°50'	12°05'L	2.40	240

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△ Pt. on 8th St. range line produced northerly at 4.00 ft from So. side of Cedar

→ A0

160 ft Contour

2°00'	89°45'R	2.35	235	
1°10'	86°15'R	2.92	292	
1°05'	84°28'R	3.45	345	
1°05'	86°38'R	4.96	496	
1°00'	85°06'R	4.57	457	
1°00'	90°25'R	4.37	437	
0°55'	90°50'R	3.77	377	
1°00'	90°10'R	3.30	330	

Check Shot

155 ft. Contour

2°15'	99°10'R	2.50	250	✓
2°00'	94°18'R	3.06	306	✓
1°40'	92°30'R	3.60	360	✓

1°30'	91°55'R	4.22	422	✓
1°10'	91°30'R	4.57	457	✓
1°10'	92°10'R	4.90	490	✓

△ Pt. on 8th St. range line produced northerly at A4 right

→ A0

170 ft Contour

2°45'	0°45'R	2.25	225	×
2°40'	14°50'R	2.57	257	✓
2°10'	23°18'R	2.97	297	✓
2°00'	31°15'R	3.17	317	✓
2°00'	34°38'R	2.80	280	✓
2°00'	43°10'R	2.57	257	✓
1°55'	58°05'R	2.37	237	✓
2°10'	73°32'R	2.38	238	✓
2°10'	82°30'R	2.88	288	×

165 ft. Contour,

1°15'	84°50'R	2.80	280	x
1°10'	80°25'R	2.32	232	✓
1°10'	69°20'R	2.05	205	✓
1°05'	55°40'R	2.17	217	✓
1°05'	45°45'R	2.40	240	✓
1°05'	32°28'R	2.64	264	✓
1°00'	29°54'R	2.83	283	✓
1°05'	24°20'R	2.47	247	✓
1°00'	20°20'R	1.95	195	✓
1°20'	12°10'R	1.47	147	✓
1°45'	3°24'R	0.95	95	✓
2°10'	2°36'L	0.55	55	✓
3°20'	88°05'L	0.28	28	✓
3°20'	12°22'L	0.57	57	✓
3°20'	12°30'L	0.88	88	x

160 ft. Contour.

3°05'	138°50'L	0.96	96	x
3°10'	149°10'L	0.72	72	✓
3°10'	155°55'L	0.46	46	✓
3°00'	128°15'L	0.22	22	✓
3°00'	17°10'L	0.30	30	✓
3°10'	5°25'R	0.54	54	✓
3°10'	14°20'R	0.96	96	✓
3°05'	21°22'R	1.36	136	✓
2°20'	25°06'R	1.80	180	✓
1°40'	31°03'R	2.40	240	✓
1°40'	37°45'R	2.30	230	✓
1°50'	50°55'R	2.00	200	✓
1°45'	70°15'R	1.86	186	✓
1°35'	83°20'R	2.05	205	✓
1°30'	84°52'R	2.32	232	✓
1°25'	88°38'R	2.70	270	x

△ Pt on 8th St range line produced northerly at A0

→ 8th St range line produced northerly.

175 ft Contour

0°10'	48°10'R	3.18	318	x
0°10'	55°22'R	3.80	380	✓
0°45'	48°40'R	4.30	430	✓
0°25'	40°15'R	2.75	275	✓
0°30'	25°45'R	2.53	253	✓
0°30'	21°30'R	1.88	188	✓
0°30'	27°50'R	1.30	130	✓
1°00'	19°30'R	0.68	68	✓
1°00'	37°04'L	0.51	51	✓
0°50'	57°25'L	1.04	104	✓
0°50'	56°50'L	1.63	163	✓
0°45'	54°00'L	2.10	210	✓
0°30'	56°00'L	2.33	233	✓
0°25'	67°50'L	2.62	262	✓
0°25'	76°25'L	2.70	270	✓
0°20'	86°00'L	2.90	290	x

180 ft Contour

0°40'	60°00'L	3.22	322	✗
0°40'	50°52'L	3.05	305	✓
0°50'	41°00'L	3.00	300	✓
1°00'	34°18'L	2.93	293	✓
1°00'	27°45'L	2.77	277	✓
1°05'	15°24'L	1.95	195	✓
1°15'	3°10'L	2.36	236	✓
1°10'	6°04'R	2.96	296	✓
1°00'	13°10'R	3.53	353	✓
1°05'	24°00'R	3.37	337	✓
1°05'	34°06'R	3.23	323	✓
1°00'	44°35'R	3.55	355	✓
0°45'	45°24'R	4.15	415	x

△ Pt. on 8th St rangeline produced northerly at B2 left

→ B.0

185 ft Contour

2°35'	25°20'R	5.05	505	x
* → 2°55'	(25°) 15°52'R	4.37	437	x
3°30'	31°35'R	3.57	357	x
3°55'	40°14'R	3.18	318	x
4°00'	47°14'R	3.15	315	x
4°00'	56°35'R	3.22	322	x
4°05'	64°34'R	3.30	330	x
4°10'	73°20'R	3.08	308	x
4°20'	83°05'R	2.80	280	x
3°50'	91°55'R	3.10	310	x
3°10'	99°00'R	3.72	372	x
2°55'	101°55'R	4.10	410	x

190 ft Contour

3°00'	99°24'R	3.05	305	x
3°30'	93°20'R	2.60	260	x
4°05'	82°00'R	2.27	227	x
4°00'	70°47'R	2.34	234	x
4°00'	59°25'R	2.50	250	x
4°05'	45°30'R	2.35	235	x
4°05'	37°32'R	2.50	250	x
3°55'	17°50'R	2.73	273	x

195 ft Contour

1°15'	48°38'L	5.35	535	x
1°30'	45°00'L	4.67	467	x
1°35'	46°00'L	3.93	393	x
2°00'	46°47'L	3.37	337	x
2°30'	44°26'L	2.77	277	x
3°00'	43°00'L	2.20	220	x
3°40'	36°08'L	1.77	177	x

Vert.	Horiz.	Rod		
5°30'	11°27'L	1.39	138	x
5°30'	14°40'R	1.52	151	x
5°25'	33°48'R	1.47	146	x
5°15'	60°55'R	1.57	156	x
4°55'	84°58'R	1.80	180	x
2°35'	104°10'R	2.78	278	x
1°40'	110°40'R	3.05	305	x

200 ft. Contour.

1°45'	108°00'R	2.37	237	x
2°00'	101°53'R	1.58	158	x
4°30'	79°10'R	0.95	95	x
4°30'	46°16'R	0.77	77	x
4°10'	18°07'R	0.85	85	x
5°00'	19°00'L	1.00	199	x
3°30'	43°12'L	1.38	138	x
2°15'	47°00'L	2.10	210	x

1°05'	55°00'L	2.97	292	x
1°00'	56°30'L	3.76	376	x
0°50'	58°55'L	4.30	430	x
0°40'	58°47'L	5.50	550	x

205 ft. Contour.

0°20'	61°38'L	2.85	285	x
0°20'	60°00'L	2.22	222	x
0°25'	56°40'L	1.71	171	x
0°15'	53°28'L	1.14	114	x
1°00'	36°00'L	0.60	60	x
1°00'	11°55'L	0.26	26	x
1°00'	114°00'R	0.32	32	x
1°05'	121°25'R	0.96	96	x
1°00'	122°50'R	1.40	140	x

210 ft Contour

0°00'	176°40'R	0.66	66	x
0°30'	119°55'L	0.40	40	x
0°55'	93°25'L	0.62	62	x
1°00'	75°10'L	0.97	97	x
0°55'	65°35'L	1.50	150	x
1°00'	65°40'L	2.18	218	x
1°00'	66°50'L	2.65	265	x

215 ft Contour.

1°30'	73°30'L	2.95	295	x
1°30'	74°45'L	2.17	217	x
1°30'	77°10'L	1.80	180	x
2°30'	91°35'L	1.42	142	x
2°30'	115°15'L	1.28	128	x
2°30'	118°45'L	2.05	205	x
2°25'	115°00'L	2.55	255	x
2°25'	113°45'L	2.95	295	x

220 ft Contour

2°40'	97°08'L	2.30	230	x

△ From 8th St. range line produced northerly at C 2 left.

→ C 0

210 ft Contour.

3°20'	69°10'R	3.14	314	✓
3°55'	69°20'R	2.57	257	✓
5°00'	51°00'R	1.88	187	✓
6°00'	38°26'R	1.63	162	✓
6°45'	8°15'L	1.35	134	✓
8°00'	15°00'L	1.24	122	✓
6°10'	43°30'L	1.68	167	✓
4°30'	53°00'L	2.37	237	✓
4°05'	51°30'L	2.88	288	✓
3°15'	46°04'L	3.57	357	✓
2°30'	48°00'L	4.55	455	✓

Vert.	Horiz	Rod		
2°30'	39°40' L	4.50	450	✓
2°30'	39°15' L	4.60	460	✓
2°15'	25°40' L	4.85	485	✓

205 ft Contour

3°00'	51°25' L	4.77	477	✓
3°20'	25°25' L	4.25	425	✓
3°20'	33°42' L	4.22	422	✓
3°25'	40°30' L	4.28	428	✓
3°05'	45°45' L	4.30	430	✓
3°40'	43°45' L	3.65	365	✓
4°00'	42°43' L	3.23	323	✓
4°50'	43°25' L	2.75	275	✓
5°50'	43°00' L	2.38	236	✓
5°50'	21°40' L	2.18	216	✓
7°35'	6° 40' L	1.84	182	✓
7°10'	9°25' R	2.04	202	✓

5°50'	26°20' R	2.30	228	✓
5°50'	44°05' R	2.40	238	✓
4°50'	55°00' R	2.92	292	✓
4°30'	61°05' R	3.26	326	✓

215 ft Contour

4°05'	69°00' R	2.00	200	✓
5°10'	54°38' R	1.46	145	✓
6°40'	34°05' R	1.17	116	✓
7°00'	1°45' L	0.97	96	✓
7°10'	37°24' L	1.10	108	✓
4°30'	55°06' L	1.57	157	✓
3°55'	63°12' L	2.05	205	✓
5°30'	64°00' L	2.56	254	✓
2°30'	59°35' L	3.20	320	✓
2°20'	56°25' L	3.80	380	✓
1°40'	54°45' L	4.30	430	✓
1°30'	56°00' L	5.10	510	✓

Vert. Trig. Rod.

1°30'	48°30'L	5.10	510	✓
1°25'	47°35'L	5.48	548	✓

220 ft. Contour.

0°30'	57°00'L	6.18	618	✓
0°45'	61°02'L	5.80	580	✓
0°45'	63°30'L	5.08	508	✓
0°40'	62°02'L	4.68	468	✓
0°45'	66°30'L	4.18	418	✓
0°45'	66°00'L	3.50	350	✓
1°40'	66°55'L	3.00	300	✓
1°50'	71°10'L	2.63	263	✓
2°00'	69°30'L	2.07	207	✓
2°10'	66°25'L	1.56	156	✓
4°30'	58°30'L	1.02	102	✓
4°20'	26°45'L	0.72	72	✓
4°20'	18°45'R	0.72	72	✓

4°05'	53°25'R	1.00	100	✓
4°05'	69°10'R	1.28	128	✓

225 ft. Contour.

2°30'	104°20'R	1.00	100	✓
2°30'	68°40'R	0.47	47	✓
2°25'	7°20'L	0.36	36	✓
2°10'	75°35'L	0.65	65	✓
2°00'	78°25'L	1.48	148	✓
1°00'	77°30'L	2.12	212	✓
1°00'	74°50'L	2.80	280	✓
0°45'	70°55'L	3.20	320	✓
0°30'	71°25'L	3.87	387	✓
0°20'	70°40'L	4.90	490	✓
0°00'	69°00'L	5.40	540	✓
0°00'	68°40'L	5.90	590	✓
0°00'	64°15'L	6.40	640	✓

230 ft. Contour.

0°20'	70°10'L	6.85	685	✓
0°25'	73°45'L	6.55	655	✓
0°20'	73°16'L	5.87	587	✓
0°20'	73°15'L	5.27	527	✓
0°20'	74°00'L	4.87	487	✓
0°30'	75°55'L	4.57	457	✓
0°30'	75°30'L	4.08	408	✓
0°30'	74°48'L	3.62	362	✓
0°30'	78°12'L	3.15	315	✓
0°25'	81°00'L	2.87	287	✓
0°30'	83°37'L	2.42	242	✓
0°20'	98°30'L	1.92	192	

235 ft Contour

0°45'	96°00'L	4.35	435	✓
0°50'	87°50'L	3.87	387	✓
1°00'	82°18'L	3.93	393	✓

1/29/03 Alverson
McLaren
Arginsola
Luce

Δ Pt. on 8th St range line produced northerly at C o
→ C line produced easterly.

200 ft Contour.

1°00'	50°42'R	1.30	130	✓
1°05'	45°50'R	0.85	85	✓
5°30'	44°20'R	0.41	41	✓
1°05'	74°50'L	0.19	19	✓
4°05'	79°39'L	0.65	65	✓
4°15'	71°05'L	0.87	87	✓
2°10'	80°42'L	1.20	120	✓
1°35'	90°05'L	1.62	162	✓
1°35'	78°50'L	1.93	193	✓
1°30'	74°55'L	2.32	232	✓
1°20'	72°46'L	2.70	270	✓
1°05'	71°45'L	3.04	304	✓

Vert. Horiz. Rod.

1°10'	65°22'L	2.90	290	✓
1°10'	56°22'L	2.67	267	✓
1°10'	49°20'L	2.50	250	✓
1°00'	35°50'L	2.53	253	✓
1°00'	30°08'L	2.86	286	✓
0°50'	30°28'L	3.14	314	✓

195 ft. Contour

1°20'	28°15'L	3.25	325	✓
1°30'	26°46'L	2.84	284	✓
2°00'	30°35'L	2.53	253	✓
2°00'	43°05'L	2.32	232	✓
1°55'	51°55'L	2.40	240	✓
1°55'	61°45'L	2.67	267	✓
1°50'	69°04'L	2.87	287	✓
1°55'	71°45'L	2.44	244	✓
2°30'	75°47'L	1.88	188	✓
2°10'	81°30'L	1.70	170	✓
2°15'	80°25'L	1.40	140	✓
2°30'	70°28'L	1.11	111	✓
4°55'	60°30'L	0.91	91	✓
10°25'	56°25'L	0.57	55	✓
10°25'	24°20'L	0.28	27	✓
10°30'	21°05'R	0.53	51	✓
3°48'	35°50'R	1.12	1.12	✓
2°30'	48°12'R	1.45	1.45	✓
2°45'	46°20'R	2.90	290	✓
2°05'	49°34'R	2.33	2.33	✓

190 ft. Contour

3°50'	41°56'R	2.30	230	✓
3°55'	40°34'R	1.78	178	✓
6°05'	30°45'R	1.27	126	✓
9°40'	18°04'R	0.81	79	✓
17°30'	7°16'L	0.44	40	✓

Vert. Horiz. Rods.

14°55'	43°55'L	0.55	51	✓
9°20'	51°25'L	0.93	91	✓
3°30'	70°45'L	2.10	210	✓
3°25'	67°10'L	2.70	270	✓
3°30'	56°42'L	2.45	245	✓
6°05'	43°53'L	2.23	221	✓
3°25'	28°07'L	2.48	248	✓
3°20'	23°58'L	2.75	275	✓

185 ft. Contour.

3°50'	20°40'L	2.83	283	✓
4°10'	23°45'L	2.46	246	✓
4°50'	36°20'L	2.18	218	✓
4°50'	50°26'L	2.17	217	✓
4°30'	61°25'L	2.44	244	✓
4°20'	66°45'L	2.50	250	✓
3°55'	67°35'L	2.05	205	✓
4°00'	72°08'L	1.85	185	
10°35'	49°05'L	1.08	105	✓
14°25'	36°25'L	0.73	71	✓
18°15'	15°04'L	0.58	53	✓
11°15'	26°15'R	0.98	95	
6°35'	30°30'R	1.50	148	✓
5°00'	46°48'R	2.03	201	
3°50'	40°35'R	2.63	263	

180 ft. Contour.

3°50'	37°30'R	2.78	278	✓
4°05'	33°05'R	2.44	244	✓
5°10'	32°20'R	1.96	194	✓
3°25'	27°10'R	1.60	160	✓
11°30'	11°45'R	1.08	104	✓
17°00'	15°26'L	0.73	67	✓
11°45'	41°42'L	1.02	98	✓
6°00'	67°03'L	1.30	128	

Vertical Horiz Rod.

5°00'	64°35'L	1.96	194	✓
5°05'	62°22'L	2.27	225	✓
1°05'	49°12'L	2.08	208	✓
5°15'	35°18'L	2.10	208	✓
5°15'	23°25'L	2.33	231	✓
4°45'	12°48'L	2.96	296	✓

△ Pt on 8th St range line produced northerly 158.6 ft from D0

→ D0

235 ft Contour

0°10'	19°20'R	2.77	277	✓
0°00'	24°25'R	1.85	185	✓
0°00'	33°00'R	1.10	110	✓
0°00'	90°00'R	0.62	62	✓

230 ft Contour.

0°50'	33°55'L	1.42	142	✓
1°00'	61°40'L	1.30	130	✓
1°00'	79°40'L	1.28	128	✓
1°10'	99°35'L	1.08	108	

△ Pt on 8th St range line produced northerly 158.6 ft from D0

→ E0

230 ft Contour

2°20'	46°52'R	0.67	67	✓
2°35'	12°08'L	0.78	78	✓
1°30'	24°30'L	1.58	158	✓
1°25'	21°30'L	2.18	218	✓
1°15'	15°40'L	2.66	266	✓
0°40'	10°35'L	3.20	320	✓
0°40'	5°25'L	3.74	374	✓
0°40'	1°42'L	4.33	433	

Vertical	Horiz.	Rod	
0°30′	0°36′L	5.00	500 ✓

735 ft Contour.

0°00′	3°05′L	5.28	528 ✓
0°10′	6°15′L	4.74	474 ✓
0°10′	10°07′L	2.18	218
0°10′	15°12′L	3.73	373 ✓
0°10′	20°00′L	3.22	322 ✓
0°00′	24°30′L	2.78	278 ✓
0°00′	31°10′L	2.44	244 ✓
0°00′	36°06′L	2.05	205 ✓
0°15′	38°36′L	1.58	158 ✓
0°20′	46°30′L	1.11	111 ✓
0°15′	69°16′L	0.74	74 ✓

740 ft Contour

1°30′	~~124~~°25′L	2.05	205
1°50′	100°40′L	1.54	154 ✓
1°40′	81°25′L	1.26	126 ✓
1°50′	65°15′L	1.38	138 ✓
2°00′	52°10′L	1.72	172 ✓
1°55′	45°56′L	2.17	217 ✓
1°20′	38°56′L	2.60	260 ✓
1°15′	29°30′L	3.00	300 ✓
1°05′	22°38′L	3.45	345 ✓
0°50′	18°42′L	4.08	408 ✓
0°50′	14°12′L	4.44	444 ✓
0°40′	8°52′L	4.80	480 ✓

745 ft Contour

1°10′	11°38′L	4.96	496 ✓
1°15′	18°15′L	4.55	455 ✓
1°25′	23°25′L	4.06	406 ✓

Vert.	Horiz.	Rod	
1°40'	30°05'L	3.47	347 ✓
1°50'	38°05'L	3.10	310 ✓
1°55'	44°25'L	2.87	287 ✓
2°15'	59°25'L	2.26	226 ✓

235 ft Contour

0°00'	26°50'R	5.56	556 ✓
0°00'	32°18'R	5.30	530 ✓
0°00'	37°55'R	5.20	520 ✓

230 ft Contour

0°35'	47°30'R	5.34	534 ✓
0°35'	44°00'R	5.02	502 ✓
0°35'	38°10'R	5.00	500 ✓
0°35'	31°24'R	5.20	520 ✓
0°30'	25°15'R	5.40	540 ✓
0°40'	20°27'R	5.65	565 ✓

△ Pt on 8th St range line produced northerly at E O

→ D O

225 ft Contour

0°20'	28°15'L	5.50	550 ✓
0°20'	25°52'L	4.80	480 ✓
0°30'	23°00'L	4.18	418 ✓
0°30'	17°38'L	3.67	367 ✓
0°35'	6°55'L	3.28	328 ✓
0°30'	1°20'L	3.12	312 ✓
0°30'	4°35'R	2.74	274 ✓
0°40'	4°15'R	2.18	218 ✓
0°50'	0°50'L	1.55	155 ✓
0°45'	13°50'L	1.12	112 ✓
0°30'	28°42'L	0.62	62 ✓
0°40'	42°15'L	0.10	10 ✓
0°50'	154°08'L	0.23	23 ✓
0°45'	165°15'L	0.54	54 ✓

Vert.	Horiz. Rot.		
0°45'	184°05'L	0.97	97
0°00'	187°45'L	1.48	148
0°30'	179°08'L	1.74	174
0°30'	175°30'L	2.34	234
0°40'	165°50'L	2.77	277
0°50'	161°05'L	3.02	302
1°00'	156°10'L	2.28	228
1°00'	145°00'L	2.10	210
1°00'	129°00'L	2.07	207
1°00'	116°55'L	2.07	207
1°00'	104°50'L	2.12	212
1°00'	93°35'L	2.48	248
0°50'	83°15'L	2.83	283
0°45'	76°40'L	3.27	327
0°40'	74°30'L	3.80	380

720 ft. Contour

1°20'	75°35'L	3.94	394
1°20'	73°50'L	3.44	344
1°30'	76°45'L	3.07	307
1°50'	81°00'L	2.78	278
1°50'	85°32'L	2.63	263
2°00'	95°00'L	2.28	228
2°05'	105°10'L	2.00	200
2°15'	117°45'L	1.93	193
2°15'	132°00'L	1.97	197
2°15'	146°25'L	2.00	200
2°10'	159°00'L	2.30	230
2°15'	169°55'L	2.70	270
2°20'	170°55'L	2.38	238

715 ft. Contour

2°05'	171°20'L	1.70	170
2°00'	167°30'L	2.57	257

Vert.	Horiz.	Rod		
2°20'	159°28'L	2.14	214	✓
2°15'	148°40'L	1.92	192	✓
2°20'	146°00'L	1.88	188	✓
2°20'	117°40'L	1.86	186	✓
2°20'	103°00'L	1.98	198	✓
2°05'	91°15'L	2.33	233	✓
2°45'	81°25'L	2.67	267	✓
3°00'	76°55'L	2.94	294	✓
2°30'	71°40'L	3.40	340	✓
2°00'	69°30'L	3.90	396	✓
1°10'	77°15'L	4.55	455	✓

710 ft Contour

0°25'	67°55'L	4.30	430	x
2°45'	68°07'L	3.72	372	x
3°20'	70°00'L	3.33	333	x
2°20'	71°55'L	3.13	313	x
3°35'	74°55'L	2.90	290	x
3°50'	79°55'L	2.60	260	x
4°25'	85°15'L	2.44	244	x
4°30'	90°47'L	2.27	227	x
6°00'	99°45'L	1.98	196	x
6°05'	111°30'L	1.77	175	x
6°00'	127°05'L	1.80	178	x
5°55'	143°05'L	1.80	178	x
6°45'	157°15'L	1.93	191	x
3°15'	163°40'L	2.15	215	x
3°25'	167°05'L	2.20	220	x

705 ft Contour

7°15'	159°45'L	2.88	183	x
7°30'	144°35'L	1.70	167	x
7°30'	131°20'L	1.70	167	x
7°35'	120°25'L	1.70	167	x
7°30'	107°50'L	1.72	170	x

Vert.	Horiz.	Rod		
7°30'	97°30'L	1.94	191	x
6°10'	89°05'L	2.24	221	x
6°05'	82°20'L	2.50	247	x
5°40'	77°15'L	2.66	264	x
4°30'	71°22'L	3.00	300	x
4°20'	68°55'L	3.24	324	x
3°55'	66°20'L	3.67	367	x
3°05'	65°58'L	4.25	425	x

200 ft Contour

3°40'	64°00'L	4.23	423	x
4°00'	63°32'L	3.90	390	x
4°30'	64°15'L	3.60	360	x
5°05'	66°00'L	3.33	337	x
5°15'	69°30'L	3.00	298	x
6°10'	73°42'L	2.70	268	x
6°30'	79°50'L	2.45	243	x
7°00'	84°30'L	2.26	224	x
8°55'	90°48'L	2.06	203	x
9°15'	98°15'L	1.78	175	x
11°20'	109°42'L	1.63	159	x
11°00'	131°15'L	1.63	159	x
11°00'	142°50'L	1.53	150	x

195 ft. Contour.

14°00'	137°30'L	1.35	129	x
13°45'	129°12'L	1.48	141	x
13°40'	115°55'L	1.48	141	x
12°15'	97°40'L	1.72	168	x
10°30'	88°45'L	2.03	196	x
8°30'	79°55'L	2.34	230	x
7°25'	71°40'L	2.70	267	x
7°00'	69°06'L	2.90	286	x
6°00'	65°45'L	3.23	320	x
5°30'	62°03'L	3.56	353	x

Vert.	Horiz	Rod		
5°00'	62°05'L	3.93	391	x
4°05'	63°00'L	4.40	440	x

190 ft. Contour

6°00'	60°40'L	3.93	390	x
6°10'	60°25'L	3.58	355	x
7°15'	64°55'L	3.20	316	x
7°30'	67°00'L	2.96	292	x
8°00'	68°45'L	2.75	271	x
9°00'	72°20'L	2.60	258	x
10°05'	78°08'L	2.33	227	x
10°00'	83°20'L	2.17	211	x
12°30'	89°35'L	1.90	182	x
14°00'	101°00'L	1.58	152	x
14°35'	118°14'L	1.30	124	x

185 ft. Contour.

7°30'	112°20'L	1.25	110	x
16°30'	96°20'L	1.60	148	x
14°00'	87°55'L	1.88	178	x
12°40'	80°45'L	2.20	210	x
11°00'	75°35'L	2.34	226	x
9°50'	70°00'L	2.60	253	x
9°00'	66°20'L	2.90	285	x
8°50'	63°30'L	3.18	312	x
7°30'	60°20'L	3.43	337	x
6°45'	59°10'L	3.72	368	x
6°10'	59°30'L	4.08	404	x

180 ft. Contour.

7°50'	52°50'L	x see 3.67	356	x
8°20'	60°35'L	3.30	324	x
9°00'	62°50'L	3.10	305	x
10°00'	64°05'L	2.96	290	x

Vertical	Horiz.	Rod		
10°30'	67°20' L	2.66	259	x
11°30'	70°50' L	2.50	241	x
12°50'	73°45' L	2.30	219	x
13°50'	79°55' L	2.07	197	x
17°30'	88°10' L	1.71	160	x
19°50'	95°15' L	1.47	136	x

175 ft Contour

20°00'	89°30' L	1.50	133	x
18°00'	80°35' L	1.90	172	x
14°50'	74°05' L	2.18	204	x
13°00'	68°30' L	2.57	244	x
10°45'	64°37' L	2.72	260	x
10°00'	61°45' L	3.00	291	x

△ Pt. on 8th St. range line produced northerly at E O

→ F O

230 ft Contour

2°35'	86°30' L	0.12	12	✓
2°30'	13°50' L	0.40	40	✓
1°00'	7°56' L	0.78	78	✓
1°50'	12°13' L	1.28	128	✓
2°15'	11°45' L	1.48	148	✓
0°00'	2°50' L	1.77	177	✓
0°15'	2°05' R	2.40	240	✓
0°20'	9°55' R	2.96	296	✓
0°15'	16°25' R	3.10	310	✓
0°20'	18°30' R	3.62	362	✓
0°15'	23°10' R	3.22	322	✓
0°15'	25°55' R	2.77	277	✓
0°20'	28°05' R	2.37	237	✓
0°20'	38°45' R	2.22	222	✓

235 ft Contour.

1°15'	27°15' R	3.06	306 ✓
1°00'	21°55' R	3.57	357 ✓
1°00'	18°40' R	4.05	405 ✓
1°00'	15°00' R	3.47	347 ✓
1°00'	7°37' R	3.10	310 ✓
1°15'	0°10' L	2.47	247 ✓
1°30'	5°52' L	1.83	183 ✓
3°00'	15°30' L	1.54	154 ✓
3°00'	16°45' L	1.08	108 ✓
6°25'	46°30' L	0.57	56

1/30/03 Alverson
McLaren
Anginsola
Luce

△ Pt. on 8th St. range line produced northerly at E.O.

→ F.O.

240 ft Contour.

1°40'	10°40' R.	4.00	400 ✓
1°50'	5°45' R	3.55	355 ✓
2°15'	1°35' R	2.90	290 ✓
2°20'	3°40' L	2.40	240 ✓
3°15'	13°46' L	1.80	180 ✓
4°00'	21°15' L	1.55	155 ✓
5.30	32°35' L	1.02	101 ✓
7.10	71°40' L	0.84	83
7.00	97°25' L	1.03	101
4.00	126°08' L	1.63	163

245 ft Contour.

3°30'	139°42' L	3.06	306
3°40'	131°10' L	2.36	236
4°35'	119°05' L	1.87	187
6°00'	104°28' L	1.62	160
6°10'	89°15' L	1.40	138

Vert. Stadia Rod

7.30'	73°30'L	1.12	110
7.30'	50°55'L	1.13	111
6.30'	31°42'L	1.58	156 ✓
4°50'	25°10'L	2.00	200 ✓
4°00'	15°00'L	2.42	242 ✓
3°10'	9°25'L	2.80	280 ✓
2°55'	3°05'L	3.50	350 ✓
2°50'	2°40'L	4.12	412 ✓

△ Pt. on 8th St range line produced northerly at E. 4+35 right

→ E produced easterly.

235 ft. Contour.

1°55'	123°05'L	2.87	287 ✓
1°30'	113°48'L	3.25	325 ✓
1°30'	104°40'L	3.40	340 ✓
1°30'	98°35'L	3.50	350 ✓
1°30'	91°15'L	3.65	365 ✓
1°30'	85°45'L	3.62	362 ✓
1°30'	76°55'L	3.57	357 ✓
1°30'	73°43'L	3.85	385 ✓

230 ft. Contour

0°25'	68°55'L	3.82	382 ✓
0°30'	69°08'L	3.42	342 ✓
0°30'	71°45'L	3.26	326 ✓
0°30'	79°35'L	3.23	323 ✓
0°30'	89°30'L	3.22	322 ✓
0°30'	99°25'L	3.12	312 ✓
0°35'	106°25'L	2.90	290 ✓
0°35'	115°30'L	2.73	273 ✓
0°35'	116°22'L	2.26	226 ✓
0°50'	116°55'L	1.75	175 ✓
1°00'	120°06'L	1.36	136 ✓
1°15'	120°55'L	0.86	86 ✓

Vertical Horiz Rod

3°00'	130°00'L	0.54	.54	✓
4°35'	176°10'L	0.20	20	✓
4°35'	105°15'R	0.38	38	✓
3°45'	99°05'R	0.77	77	✓

225 ft Contour.

0°40'	84°15'R	0.88	88	×
0°45'	75°18'R	0.58	58	×
0°00'	68°20'R	0.34	34	×
0°00'	93°00'L	0.18	18	×
0°00'	103°35'L	0.56	56	×
0°05'	108°40'L	1.00	100	×
0°15'	109°05'L	1.52	152	×
0°25'	105°25'L	1.98	198	×
0°30'	108°25'L	2.38	238	×
0°30'	102°55'L	2.67	267	×
0°30'	95°20'L	2.87	287	×
0°35'	85°52'L	2.97	297	×
0°30'	78°45'L	3.00	300	×
0°35'	71°45'L	3.00	300	×
0°35'	66°20'L	3.12	312	×
0°45'	65°55'L	3.75	375	×

220 ft Contour

1°00'	61°00'L	3.30	330	×
1°00'	62°50'L	2.90	290	×
1°00'	70°55'L	2.73	273	×
1°00'	79°00'L	2.72	272	×
1°00'	87°55'L	2.70	270	×
1°10'	95°30'L	2.55	255	×
1°15'	100°30'L	2.33	233	×
1°20'	102°15'L	1.96	196	×
1°30'	103°40'L	1.70	170	×
1°00'	100°20'L	1.28	128	×
4°00'	96°40'L	0.90	90	×

Vertical Horiz. Rod

6°30'	87°30'L	0.35	34	×
15°00'	52°00'L	0.22	22	×
12°15'	44°50'R	0.38	36	×
6°15'	59°00'R	0.74	73	×
2°35'	67°50'R	1.04	104	×

215 ft. Contour.

5°30'	59°55'R	1.23	122	✓
7°35'	50°55'R	0.96	96	✓
8°00'	41°55'R	0.60	58	✓
8°00'	26°10'R	0.42	41	✓
8°30'	26°05'L	0.32	31	✓
8°30'	68°30'L	0.42	41	✓
9°30'	81°22'L	0.80	79	✓
5°50'	91°10'L	1.22	121	✓
4°15'	94°25'L	1.60	160	✓
3°00'	95°35'L	2.03	203	✓
3°00'	88°12'L	2.33	233	✓
3°00'	81°25'L	2.40	240	✓
3°00'	72°05'L	2.45	245	✓
2°30'	66°20'L	2.57	257	✓
2°30'	57°55'L	2.80	280	✓

210 ft. Contour

3°30'	50°25'L	2.70	270	✓
3°35'	55°30'L	2.46	246	✓
4°30'	68°30'L	2.27	227	✓
4°30'	76°38'L	2.17	217	✓
4°35'	84°10'L	2.15	215	✓
4°35'	87°30'L	1.90	190	✓
6°30'	84°12'L	1.52	150	✓
9°00'	77°30'L	1.17	114	✓
12°10'	68°20'L	0.89	83	✓
20°50'	41°00'L	0.56	49	✓
16°10'	54°0'L	0.51	47	✓

Vertical Horiz Rod.

11°15'	30°10'R	0.76	73 ✓
8°15'	46°25'R	1.16	114 ✓
6°35'	52°30'R	1.33	131 ✓

205 ft Contour

6°30'	51°55'R	1.58	156 ✓
9°35'	41°10'R	1.30	127 ✓
10°00'	28°50'R	0.98	95 ✓
14°35'	8°50'R	0.70	65 ✓
15°10'	25°45'L	0.67	62 ✓
13°30'	49°08'L	0.80	75 ✓
13°20'	63°20'L	1.00	95 ✓
7°00'	77°15'L	1.38	135 ✓
6°30'	80°40'L	1.88	186 ✓
6°20'	71°30'L	2.04	202 ✓
5°45'	58°50'L	2.20	218 ✓
4°50'	44°50'L	2.53	253 ✓
4°15'	45°10'L	2.87	287 ✓

Δ Pt. on 8th St. range line produced northerly at E 3+10 R

→ E.0

220 ft Contour.

4°15'	31°35'L	2.23	223 ✓
3°30'	31°55'L	2.73	273 ✓
3°00'	35°45'L	3.36	336 ✓
2°30'	41°35'L	3.83	383 ✓
2°35'	49°22'L	3.93	393 ✓
2°30'	55°30'L	3.75	375 ✓
2°35'	64°15'L	3.70	370 ✓
2°35'	70°15'L	3.74	374 ✓
2°30'	72°05'L	3.83	383 ✓
2°30'	79°00'L	4.00	400 ✓
2°25'	83°05'L	4.30	430 ✓
2°15'	88°20'L	4.55	455 ✓

86

Vert.	Horiz Rod.		
1°55'	9°22'L	4.90	490 ✓
1°50'	9°30'L	5.16	516 ✓

715 ft. Contour

2°15'	94°00'L	4.80	480 ✓
2°45'	90°10'L	4.48	448 ✓
2°45'	85°00'L	4.20	420 ✓
2°15'	77°48'L	3.74	374 ✓
2°15'	69°25'L	3.60	360 ✓
3°30'	63°25'L	3.50	350 ✓
3°25'	56°45'L	3.56	356 ✓
3°25'	49°10'L	3.77	377 ✓
3°20'	44°00'L	3.75	375 ✓
3°25'	38°10'L	3.37	337 ✓
4°15'	35°25'L	3.00	300 ✓
5°50'	36°55'L	2.22	220 ✓
6°00'	29°55'L	1.98	196 ✓

6°05'	18°45'L	2.03	201 ✓
5°45'	11°40'L	2.24	222 ✓
5°00'	6°50'L	2.50	248 ✓
5°00'	3°00'R	2.53	251 ✓
5°00'	11°10'R	2.52	250 ✓
4°20'	19°40'R	2.87	287 ✓
4°00'	24°55'R	3.10	310 ✓
4°00'	33°10'R	3.10	310 ✓
4°00'	41°15'R	3.32	332

710 ft. Contour

4°50'	40°45'R	3.20	320 ✓
4°50'	34°18'R	3.04	304 ✓
4°45'	28°05'R	3.07	307 ✓
5°15'	22°00'R	2.87	286 ✓
6°00'	15°20'R	2.58	256 ✓
6°05'	10°50'R	2.43	241 ✓
6°00'	0°25'R	2.40	238 ✓

Vert.	Horiz	Rod	
6°00'	7°25'L	2.36	234 ✓
7°55'	16°30'L	1.96	193 ✓
7°55'	26°30'L	1.90	187 ✓
7°45'	38°42'L	1.98	195 ✓
7°45'	40°25'L	2.25	223 ✓
5°30'	37°50'L	2.77	275 ✓
4°30'	39°52'L	3.25	325 ✓
4°00'	43°25'L	3.55	355 ✓
4°10'	48°45'L	3.60	360 ✓
4°10'	55°30'L	3.46	346 ✓
4°20'	63°30'L	3.42	342 ✓
4°20'	70°35'L	3.47	347 ✓
4°30'	77°25'L	3.60	360 ✓
4°00'	83°12'L	3.93	393 ✓
3°50'	86°45'L	4.15	415 ✓
3°30'	93°00'L	4.36	436 ✓
3°10'	95°40'L	4.55	455 ✓
3°05'	97°35'L	4.84	484 ✓

205 ft. Contour.

3°10'	98°55'L	4.95	495 ✓
3°15'	98°30'L	4.55	455 ✓
3°30'	95°55'L	4.30	430 ✓
3°35'	89°25'L	4.15	415 ✓
3°45'	85°37'L	3.93	393 ✓
5°00'	80°30'L	3.52	350 ✓
5°00'	74°50'L	3.33	331 ✓
5°00'	69°25'L	3.34	332 ✓
5°00'	68°10'L	3.27	325 ✓
5°15'	53°20'L	3.35	333 ✓
5°15'	47°40'L	3.43	341 ✓
5°15'	43°15'L	3.27	325 ✓
5°20'	41°05'L	2.96	294 ✓
5°30	42°10'L	2.57	255 ✓
8°00'	43°35'L	2.02	198 ✓

Vert.	Horiz Rod.		
8°00'	33°00' L	1.80	176 ✓
7°55'	19°25' L	1.83	180 ✓
8°00'	10°35' L	2.00	196 ✓
7°10'	5°00' L	2.30	227 ✓
7°15'	4°00' R	2.34	231 ✓
7°15'	12°55' R	2.38	235 ✓
7°05'	20°50' R	2.74	271 ✓
5°45'	27°10' R	2.90	288 ✓
5°45'	34°32' R	2.92	290 ✓

200 ft. Contour.

7°30'	33°10' R	2.80	277 ✓
7°25'	25°25' R	2.77	274 ✓
7°50'	20°15' R	2.66	263 ✓
9°30'	11°40' R	2.35	231 ✓
9°30'	3°45' R	2.30	226 ✓
9°15'	4°50' L	2.20	216 ✓

11°50'	15°25' L	1.83	176 ✓
12°00'	27°32' L	1.80	173 ✓
11°30'	38°52' L	1.85	178 ✓
10°40'	47°30' L	2.07	200 ✓
7°50'	45°00' L	2.60	255 ✓
6°45'	44°30' L	3.12	309 ✓
6°30'	50°25' L	3.30	327 ✓
6°30'	57°28' L	3.22	319 ✓
6°30'	64°00' L	3.20	317 ✓
6°30'	73°00' L	3.26	323 ✓
6°00'	80°45' L	3.40	337 ✓
5°35'	84°28' L	3.65	363 ✓
5°30'	88°15' L	4.00	397 ✓
5°05'	96°15' L	4.16	413 ✓
4°10'	100°54' L	4.58	458 ✓
3°35'	100°25' L	5.07	507 ✓

195 ft. Contour

4°25'	102°10'L	5.15	515	✓
5°20'	102°05'L	4.55	451	✓
6°10'	99°25'L	4.24	420	✓
6°45'	93°25'L	4.02	399	✓
6°40'	88°55'L	3.87	384	✓
7°20'	85°30'L	3.50	344	✓
8°00'	77°55'L	3.23	317	✓
8°10'	67°25'L	3.15	309	✓
8°05'	56°32'L	3.13	307	✓
8°05'	49°30'L	3.16	310	✓
9°45'	47°45'L	2.56	250	✓
12°30'	51°45'L	2.12	201	✓
13°45'	45°05'L	1.95	183	✓
14°40'	35°35'L	1.76	169	✓
14°35'	16°45'L	1.78	170	✓
13°20'	8°55'L	1.90	181	✓
11°45'	3°15'L	2.18	210	✓
11°40'	5°10'R	2.25	217	✓
11°30'	12°50'R	2.25	217	✓
9°20'	25°40'R	2.70	263	✓

190 ft. Contour

11°35'	22°35'R	2.48	238	✓
13°00'	16°25'R	2.25	213	✓
18°15'	8°55'R	2.18	197	✓
13°00'	1°35'L	2.10	200	✓
16°30'	11°32'L	1.77	163	✓
16°40'	26°13'L	1.67	153	✓
15°10'	46°04'L	1.90	177	✓
14°00'	55°00'L	2.07	195	✓
11°30'	50°40'L	2.52	243	✓
9°30'	52°24'L	2.97	290	✓
9°30'	59°53'L	3.04	295	✓
9°35'	67°00'L	3.10	302	✓
9°15'	76°15'L	3.08	300	✓

Vertical	Horiz	Rod.		
8°45'	83°35'L	3.30	324	✓
7°45'	87°55'L	3.60	353	✓
7°30'	90°32'L	3.87	382	✓
7°20'	97°05'L	4.03	396	✓
7°00'	101°37'L	4.27	421	✓
6°00'	104°20'L	4.80	475	
185 ft Contour				
6°30'	105°45'L	4.86	481	✓
7°15'	104°00'L	4.40	434	✓
7°50'	100°45'L	4.10	403	✓
8°10'	96°20'L	3.90	382	✓
8°30'	91°05'L	3.80	372	✓
9°15'	87°30'L	3.50	342	✓
10°10'	83°18'L	3.15	306	✓
10°40'	74°05'L	3.03	293	✓
10°40'	63°20'L	2.98	288	✓
10°40'	56°00'L	2.88	280	✓
12°15'	55°50'L	2.60	249	✓
15°25'	51°50'L	2.07	193	
18°00'	46°00'L	1.82	165	✓
18°45'	38°20'L	1.68	152	✓
20°00'	22°15'L	1.70	150	✓
18°25'	9°55'L	1.78	160	✓
15°15'	0°30'R	2.04	190	✓
15°00'	13°45'R	2.17	204	✓
13°30'	20°30'R	2.27	216	✓
180 ft Contour				
17°00'	8°55'R	2.05	188	✓
18°55'	2°00'L	1.88	168	✓
20°50'	11°32'L	1.70	149	✓
22°20'	30°00'L	1.67	143	✓
20°20'	44°35'L	1.76	155	✓
17°50'	56°55'L	1.96	178	✓

Vertical	Horiz	Rod		
15°25'	61°00'L	2.22	205	✓
13°00'	59°00'L	2.63	251	✓
12°00'	62°00'L	2.86	275	✓
12°00'	69°35'L	2.96	284	✓
11°50'	78°50'L	3.00	289	✓
11°20'	81°45'L	3.05	294	✓
10°30'	85°50'L	3.25	314	✓
9°30'	90°25'L	3.63	353	✓
9°18'	96°25'L	3.87	377	✓
8°30'	102°35'L	4.13	405	✓
7°45'	106°12'L	4.50	442	✓
7°50'	107°15'L	4.85	476	✓

175 ft = bottom

7°00'	109°05'L	4.96	490	✓
8°30'	109°40'L	4.53	445	✓
9°20'	104°30'L	4.17	407	✓
10°00'	99°53'L	3.90	379	✓
10°25'	95°00'L	3.70	359	✓
10°40'	91°35'L	3.60	348	✓
11°15'	89°04'L	3.38	326	✓
12°10'	85°00'L	3.10	297	✓
12°30'	81°00'L	2.90	277	✓
12°50'	71°25'L	2.90	276	✓
13°30'	63°05'L	2.80	265	✓
16°15'	63°30'L	2.30	214	✓
18°25'	62°25'L	2.13	193	✓
21°35'	50°37'L	1.86	161	✓
24°40'	28°35'L	1.60	132	✓
23°15'	10°15'L	1.67	141	

△ Pt. on 8th St. range line produced northerly at E.4 left

→ E.0

240 ft. Contour

1°20'	✓	83°55'R	4.47	447 ✓
1°30'	✓	93°20'R	3.90	390 ✓
1°35'	✓	106°08'R	4.07	407 ✓
1°35'	✓	113°00'R	3.67	367 ✓
0°55'		119°40'R	3.70	370

245 ft. Contour

1°05'	✓	60°50'R	3.20	320 ✓
1°00'	✓	60°55'R	2.45	245 ✓
1°05'	✓	76°05'R	2.04	204 ✓
1°05'	✓	94°00'R	1.90	190 ✓
1°05'	✓	110°00'R	2.04	204 ✓
1°25'	✓	125°20'R	1.65	165 ✓
1°25'	✓	146°45'R	2.42	242 ✓

250 ft. Contour

0°00'	✓	162°00'L	2.22	222 ✓
0°00'	✓	164°10'L	1.74	174 ✓
0°15'	✓	107°10'L	2.12	212
0°00'	✓	93°50'L	2.25	225
0°10'	✓	84°12'L	2.23	223 ✓
0°15'	✓	73°15'L	2.14	214 ✓
0°15'	✓	62°52'L	2.30	230 ✓
0°15'	✓	51°07'L	2.10	210 ✓
0°15'	✓	23°35'L	1.92	192 ✓
0°15'		11°40'L	2.17	217 ✓

2/3/03 Alverson
McLaren
Anginsola
Luce

△ Pt. on 8th St. range line produced northerly at F.2 left.

→ F.0

255 ft. Contour.

0°30'	174°50'R	2.34	234 ✓
0°45'	164°40'R	1.80	180 ✓
1°10'	139°55'R	1.34	134 ✓
1°15'	112°25'R	1.37	137 ✓
1°15'	91°45'R	1.54	154 ✓
1°00'	79°55'R	1.63	163

250 ft. Contour.

2°05'	57°55'R	2.42	242 ✓
2°15'	44°35'R	1.78	178 ✓
4°20'	23°25'R	1.24	124 ✓

4°25'	1°08'R	1.05	105 ✓
3°30'	31°35'L	1.53	153 ✓
2°35'	45°00'L	2.00	200 ✓
2°20'	54°05'L	2.40	240 ✓
1°45'	59°40'L	3.05	305 ✓
1°20'	61°40'L	3.57	357 ✓
1°05'	66°15'L	3.90	390 ✓
1°00'	66°36'L	4.36	436 ✓

245 ft. Contour

1°00'	42°35'L	6.40	640 ✓
1°10'	45°10'L	5.90	590 ✓
1°05'	46°30'L	5.34	534 ✓
1°10'	49°25'L	4.85	485 ✓
1°30'	51°40'L	4.35	435 ✓
1°30'	47°55'L	3.87	387 ✓
1°45'	42°08'L	3.34	334 ✓
1°45'	33°45'L	3.34	334 ✓

Vert. Horiz. Rod

2°10′	29°50′L	3.03	303 ✓
2°10′	22°18′L	3.10	310 ✓
2°30′	9°05′L	2.57	257 ✓
3°10′	1°35′R	2.13	213 ✓
3°00′	15°10′R	2.12	212 ✓
3°05′	29°48′R	2.20	220 ✓
2°00′	40°05′R	2.43	243 ✓

240 ft. Contour.

2°00′	26°15′R	4.20	420 ✓
1°40′	20°05′R	5.60	560 ✓
1°35′	16°47′R	6.13	613 ✓
1°25′	15°05′R	6.70	670 ✓
1°15′	9°15′R	6.96	696 ✓
1°30′	6°15′R	6.25	625 ✓
1°35′	4°35′R	5.72	572 ✓
1°50′	5°15′R	5.15	515 ✓

2°05′	5°05′R	4.76	476 ✓
2°25′	4°48′R	4.30	430 ✓
2°20′	1°55′R	4.10	410 ✓
2°15′	6°35′L	4.15	415 ✓
1°50′	14°25′L	4.55	455 ✓
1°55′	21°05′L	4.46	446 ✓
2°00′	25°54′L	4.27	427 ✓
3°15′	32°55′L	4.12	412 ✓
2°25′	35°10′L	4.17	417 ✓
2°25′	45°30′L	4.43	443 ✓
2°00′	41°35′L	5.20	520 ✓
2°00′	40°15′L	5.78	578 ✓
1°30′	39°35′L	6.46	646 ✓

△ Pt. on 8th St. range line produced northerly at 2+85 left on F 5+50 north

→ 0 F 5+50 north.

260 ft. Contour

1°20	55°00 R	2.12	212	✓
1°30'	49°45' R	1.48	148	✓
1°45	52°28' R	1.01	101	✓
2°10'	34°15' R	0.67	67	✓
2°30'	10°15' L	0.38	38	✓
2°55'	55°36' L	0.72	72	✓
3°15'	71°22' L	1.30	130	✓
1°35'	75°40' L	1.78	178	✓
1°00'	80°45' L	2.38	238	✓
1°00'	81°20' L	2.96	296	✓
0°45'	81°50' L	3.54	354	✓
0°40'	81°32' L	4.26	426	✓
0°20'	80°00' L	4.95	495	✓

255 ft. Contour.

0°45'	80°08' L	4.98	498	✓
0°50'	79°42' L	4.41	441	✓
1°00'	78°55' L	3.85	385	✓
1°15	79°25' L	3.27	327	✓
1°15'	76°24' L	2.85	285	✓
1°20'	69°20' L	2.38	238	✓
1°20'	62°54' L	1.74	174	✓
1°20'	50°35' L	1.23	123	✓
1°30'	11°55' L	0.88	88	✓
1°40'	17°00' R	1.08	108	✓
1°55'	33°05' R	1.73	173	✓
1°50'	41°40' R	2.40	240	✓
1°30'	52°25' R	3.00	300	✓

250 ft. Contour

1°40'	42°12' R	3.47	347	?
1°45'	35°55' R	4.53	453	?

Vertical Horiz. Rod.

1°50'	36°43'R	3.03	303	✓
2°00'	25°10'R	2.46	246	✓
2°20'	14°34'R	1.88	188	✓
4°50'	1°35'L	1.47	147	✓
4°40'	24°25'L	1.37	137	✓
4°40'	48°42'L	1.72	172	✓
3°20'	59°25'L	2.32	232	✓
3°20'	62°42'L	2.67	267	✓
205	72°55'L	2.83	283	✓

260 ft. Contour.

0°55'	157°45'R	3.33	333	✓
0°40'	168°55'R	3.23	323	✓
0°55'	140°50'R	1.88	188	✓
0°45'	166°15'R	1.80	180	✓
1°05'	176°50'L	1.96	196	✓
0°50'	158°55'L	2.32	232	✓
0°10'	148°45'L	2.80	280	✓
0°00'	139°30'L	3.42	342	✓
0°50'	92°25'R	2.83	2.83	✓
0°55'	90°32'R	1.95	195	✓
1°00'	95°45'R	2.25	225	✓

265 ft. Contour.

0°10'	93°25'L	2.65	265	✓
0°10'	105°28'L	2.85	285	✓
0°00'	114°45'L	2.93	293	✓
0°00'	125°50'L	2.92	292	✓
0°00'	129°40'L	3.14	314	✓
0°00'	132°15'L	4.60	460	✓
0°10'	121°30'L	4.90	490	✓

△ Pt. on 8th St. range line produced northerly at 2+30 right on F 5+50 north
→ 0 F 5+50 north.

245 ft. bottom

1°15'	114°35'L	1.07	107	✓
1°30'	127°20'L	0.48	48	✓
1°20'	152°45'L	0.18	18	✓
1°30'	111°30'R	0.38	38	✓
1°25'	86°05'R	0.75	75	✓
1°15'	63°15'R	1.06	106	✓
1°00'	36°54'R	1.38	138	✓
0°30'	22°55'R	1.78	178	✓
0°30'	11°00'R	1.92	192	✓

240 ft. bottom

0°30'	3°58'R	2.25	225	✓
0°35'	14°32'R	2.07	207	✓
0°30'	23°20'R	1.90	190	✓
0°25'	35°35'R	1.62	162	✓
0°30'	50°28'R	1.40	140	✓
0°35'	67°45'R	1.22	122	✓
1°00'	88°22'R	1.13	113	✓
1°10'	106°15'R	0.78	78	✓
2°00'	126°12'R	0.53	53	✓
2°00'	176°00'R	0.37	37	✓
2°00'	135°50'L	0.80	80	✓
2°00'	125°00'L	1.32	132	✓

△ Pt. on 8th St. range line prod. northerly at 0 F 5+50 north.
→ 8th St. range line prod. northerly

245 ft. bottom

2°10'	48°53'R	0.50	50	✓
2°00'	61°00'R	0.22	22	✓
2°05'	108°55'L	0.19	19	✓
2°05'	82°57'L	0.50	50	✓

Vertical	Horiz.	Rod		
2°00'	77°25'L	0.88	88	✓
1°45'	73°10'L	1.28	128	✓
1°20'	65°30'L	1.58	158	✓
1°20'	57°05'L	1.87	187	✓
0°55'	47°05'L	2.14	214	✓
0°55'	41°05'L	2.28	228	✓
1°00'	37°08'L	2.60	260	✓
0°45'	30°15'L	2.83	283	✓
0°45'	34°20'L	3.08	308	✓
0°20'	34°32'L	3.60	360	✓
0°10'	31°00'L	3.97	397	✓
0°15'	26°52'L	4.27	427	✓
0°15'	24°10'L	4.56	456	✓
0°15'	22°55'L	4.93	493	✓
0°15'	20°00'L	5.22	522	✓
0°15'	18°42'L	5.52	552	✓
0°15'	18°15'L	5.84	584	✓
0°10'	15°55'L	6.13	613	✓
0°10'	13°30'L	6.43	643	✓
0°10'	9°40'L	6.64	664	✓
0°10'	7°12'L	6.70	670	✓
0°10'	6°00'L	6.37	637	✓
0°10'	4°32'L	5.93	593	✓
0°10'	1°10'L	5.50	550	✓
0°05'	5°05'R	5.28	528	✓
0°05'	5°50'R	5.33	533	✓
0°05'	7°22'R	5.45	545	✓

240 ft Contour.

0°10'	7°45'R	5.30	530	✓
0°15'	5°45'R	5.10	510	✓
0°20'	1°15'L	5.37	537	✓
0°20'	5°30'L	5.80	580	✓
0°20'	6°55'L	6.27	627	✓
0°20'	7°37'L	6.50	650	✓

Vertical	Horiz.	Rod	
0°20'	11°27'L	6.42	642 ✓
0°20'	14°55'L	6.05	605 ✓
0°25'	16°45'L	5.70	570 ✓
0°30'	17°15'L	5.23	523 ✓
0°30'	21°12'L	5.00	500 ✓
0°30'	22°15'L	4.48	448 ✓
0°30'	27°24'L	4.07	407 ✓
0°00'	32°00'L	3.80	380 ✓
0°05'	30°45'L	3.07	307 ✓
0°05'	25°15'L	2.75	275 ✓
0°15'	34°15'L	2.60	260 ✓
0°15'	39°30'L	2.15	215 ✓
2°30'	51°25'L	1.90	190 ✓
2°30'	61°37'L	1.57	157 ✓
2°35'	69°10'L	1.20	120 ✓
3°00'	69°22'L	0.79	79 ✓
3°00'	62°08'L	0.35	35 ✓
3°00'	34°00'R	0.29	29 ✓
3°00'	29°00'R	0.64	64 ✓

7/4/03 1 P.M.
Alverson
McLaren
Anginsola
Luce

△ Pt on 8th St range line produced northerly at 0 F 5+50 north.
→ 8th St range line produced northerly
235 ft Contour

11°10'	23°05'R	0.67	64 ✓
16°05'	10°25'R	0.34	31 ✓
15°55'	51°03'L	0.50	47 ✓
9°30'	59°20'L	0.80	78 ✓
5°35'	64°10'L	1.14	113 ✓
4°45'	55°07'L	1.65	165 ✓
4°20'	42°25'L	1.95	195 ✓
3°50'	36°18'L	2.09	209 ✓

Vertical Horiz. Rod.

3°10′	33°40′L	2.43	243 ✓
2°45′	21°50′L	2.70	270 ✓
1°30′	26°04′L	2.98	298 ✓
1°15′	29°35′L	3.96	396 ✓
1°30′	20°45′L	4.37	437 ✓
1°10′	21°30′L	4.77	477 —
1°05′	16°25′L	5.22	522 ✓
1°00′	15°22′L	5.67	567 ✓
1°00′	13°00′L	6.18	618 ✓
1°00′	8°30′L	6.38	638 ✓
1°00′	7°00′L	5.87	587 ✓
1°00′	6°30′L	5.80	580 ✓
1°00′	2°58′L	5.40	540 ✓
1°00′	3°00′R	5.00	500 —
1°00′	8°05′R	5.13	513 ✓

230 ft Contour.

1°55′	8°25′R	5.00	500 ✓
2°00′	2°50′R	5.90	590
2°00′	1°15′L	5.10	510 ✓
8°35′	19°15′R	0.71	69 ✓
13°10′	3°15′R	0.47	44 ✓
13°35′	39°20′L	0.49	46 ✓
13°10′	59°40′L	0.78	74 ✓
11°05′	58°00′L	1.10	106 ✓
6°45′	56°00′L	1.40	138 ✓
5°20′	49°45′L	1.65	164 ✓
5°15′	36°15′L	1.93	192 ✓
3°50′	32°30′L	2.36	236 ✓
3°20′	20°12′L	2.63	263 ✓
1°55′	24°05′L	4.05	405 ✓
1°55′	19°08′L	4.40	440 ✓
1°55′	18°55′L	4.85	485 ✓
1°55′	15°30′L	5.15	515 ✓

Vertical Horiz Rod				
1°35'	13°55' L	5.75	575	✓
1°25'	9°40' L	6.20	620	✓
1°30'	6°55' L	5.67	567	✓
1°35'	3.35 L	5.30	530	✓

7/5/03 Alverson
McLaren
Ayfinsota
Luce

△ Pt. on 8th St. range line produced northerly at OF 5+50 north.
→ 8th St. range line produced north.
225 ft Contour.

15°45'	10°38' R	0.76	71	✓
21°55'	15°40' L	0.57	50	✓
15°25'	46°15' L	0.88	82	✓
10°00'	51°55' L	1.28	124	✓
7°15'	43°52' L	1.65	162	✓
7°05'	32°15' L	1.96	193	✓
5°20'	29°38' L	2.30	228	✓
5°20'	16°15' L	2.58	256	✓
4°10'	18°00' L	2.90	290	✓
3°15'	19°48' L	4.13	413	✓
2°50'	17°37' L	4.34	434	✓
2°30'	18°15' L	4.77	477	✓
2°20'	14°25' L	5.17	517	✓
2°15'	12°55' L	5.73	573	✓
2°00'	9°24' L	6.10	610	✓
2°15'	7°38' L	5.57	557	✓
2°15'	4°00' L	5.20	520	✓
2°35'	0°08' L	4.90	490	✓
2°35'	4°30' R	4.77	477	✓
2°30'	10°03' R	4.97	497	✓

220 ft. Contour.

3°15'	11°10'R	4.96	496	✓
3°20'	6°04'R	4.67	467	✓
3°25'	2°02'R	4.63	463	✓
3°10'	3°16'L	4.96	496	✓
2°55'	6°24'L	5.28	528	✓
2°50'	8°48'L	5.57	557	✓
2°40'	10°28'L	5.90	590	✓
2°50'	12°45'L	5.48	548	✓
3°05'	14°00'L	4.96	496	✓
3°15'	16°24'L	4.77	477	✓
3°45'	16°50'L	4.17	417	✓
3°45'	19°18'L	3.96	396	✓
5°25'	14°24'L	2.90	288	✓
6°25'	12°23'L	2.63	260	✓
7°05'	21°38'L	2.26	223	✓
7°10'	25°52'L	2.20	217	✓
9°30'	28°45'L	1.87	184	✓
10°30'	42°10'L	1.42	137	✓
14°00'	38°40'L	1.02	97	✓
18°30'	21°37'L	0.78	71	✓
18°15'	7°25'R	0.90	81	✓

215 ft. Contour

16°40'	7°16'R	1.08	100	✓
20°05'	20°18'L	0.94	93	✓
15°00'	36°10'L	1.29	113	✓
12°35'	32°35'L	1.53	146	✓
10°20'	25°00'L	1.84	178	✓
8°50'	16°05'L	2.24	219	✓
7°18'	11°00'L	2.54	249	✓
6°30'	11°18'L	2.80	277	✓

△ Pt. on 8th St. range line produced northerly at H0'

→ G0

250 ft Contour ✓

0°05'	31°42'R	4.05	405	✓
0°05'	35°08'R	3.68	368	✓
0°10'	37°30'R	3.20	320	✓
0°10'	40°36'R	2.98	298	✓
0°10'	44°35'R	2.87	287	✓
0°15'	45°58'R	2.77	277	✓
0°15'	48°30'R	2.67	267	✓
0°18'	51°52'R	2.34	234	✓
0°30'	61°00'R	2.17	217	✓
0°30'	67°48'R	1.97	197	✓
0°35'	80°05'R	1.67	167	✓
0°50'	90°00'R	1.38	138	✓
1°00'	93°36'R	1.15	115	✓
1°50'	99°00'R	0.92	92	✓
0°50'	106°50'R	0.84	84	✓
0°50'	81°22'R	0.56	56	✓
1°10'	37°28'R	0.60	60	✓
1°25'	1°00'R	0.88	88	✓
1°25'	18°45'L	1.08	108	✓
1°18'	31°15'L	0.94	94	✓
1°30'	41°20'L	0.83	83	✓
1°35'	72°20'L	0.57	57	✓
1°35'	115°56'L	0.52	52	✓
1°40'	138°10'L	0.77	77	✓
1°35'	157°15'L	1.20	120	✓
1°25'	158°07'L	1.57	157	✓
1°25'	159°00'L	1.82	182	✓
1°35'	153°10'L	2.06	206	✓
1°20'	149°45'L	2.38	238	✓
1°20'	146°27'L	2.82	282	✓

255 ft Contour ✓

0°45′	148°20′L	3.80	380	✓
0°45′	151°10′L	2.53	253	✓
0°50′	154°42′L	2.32	232	✓
0°50′	160°40′L	2.05	205	✓
0°50′	166°45′L	1.83	183	✓
0°45′	167°30′L	1.57	157	✓
1°00′	170°15′L	1.21	121	✓
1°00′	163°00′L	0.86	86	✓
0°55′	159°55′L	0.50	50	✓
0°50′	134°07′L	0.21	21	✓
0°55′	91°05′L	0.13	13	✓
0°40′	40°12′L	0.11	11	✓
0°45′	35°48′R	0.18	18	✓
0°35′	89°20′R	0.34	34	✓
0°45′	110°55′R	0.47	47	✓
0°55′	116°15′R	0.88	88	✓
1°05′	106°55′R	1.03	103	✓
1°05′	97°05′R	1.25	125	✓
1°05′	88°15′R	1.61	161	✓
1°00′	83°05′R	1.88	188	✓
0°40′	75°59′R	2.08	208	✓
0°40′	67°08′R	2.19	219	✓
0°35′	59°58′R	2.30	230	✓
0°30′	52°18′R	2.50	250	✓
0°35′	49°30′R	2.73	273	✓
0°35′	46°30′R	2.85	285	✓
0°40′	42°15′R	3.04	304	✓
0°45′	39°20′R	3.26	326	✓
0°12′	37°20′R	3.50	350	✓
0°15′	35°15′R	3.90	390	✓
0°20′	31°12′R	4.22	422	✓
0°25′	28°35′R	4.43	443	✓

260 ft. Contour

105'	32°00'R	4.60	460	✓
110'	34°15'R	4.30	430	✓
110'	37°12'R	3.94	394	✓
110'	39°50'R	3.53	353	✓
110'	43°13'R	3.23	323	✓
110'	46°20'R	3.04	304	✓
110'	48°40'R	2.93	293	✓
115'	53°15'R	2.73	273	✓
115'	57°45'R	2.57	257	✓
110'	66°38'R	2.38	238	✓
115'	74°52'R	2.25	225	✓
115'	81°25'R	2.16	216	✓
125'	88°45'R	2.00	200	✓
125'	96°40'R	1.83	183	✓
115'	106°25'R	1.58	158	✓
115'	118°00'R	1.48	148	✓
120'	134°55'R	1.30	130	✓

150'	150°05'R	1.13	113	✓
140'	167°15'R	1.32	132	✓
135'	173°22'R	1.58	158	✓
130'	178°22'L	1.95	195	✓
130'	171°35'L	2.26	226	✓
130'	166°00'L	2.44	244	✓
130'	159°25'L	2.67	267	✓
125'	153°38'L	2.97	297	✓

angles are ∠ BRG & ∠

△ Pt. on 8th Strange line produced northerly 300 ft. from Ho at ∠ left

→ Pt. 300 ft. northerly from Ho

265 ft. Contour

300'	150°R	2.15	215	✓
330'	124°45'R	1.88	188	✓
330'	79°25'R	1.74	174	✓
400'	50°20'R	1.58	158	✓
400'	63°08'R	1.67	167	✓

Vertical	Horiz.	Rod.		
3°30′	72°55′R	1.93	193	✓
3°10′	81°08′R	2.22	222	✓
2°35′	87°38′R	2.53	253	✓
2°05′	91°30′R	2.77	277	✓
1°35′	96°00′R	3.25	325	✓
1°35′	96°20′R	3.75	375	✓
1°25′	95°50′R	4.28	428	✓
1°10′	95°35′R	4.97	497	✓
0°55′	97°48′R	5.73	573	✓

27 ft Contour

0°55′	101°33′R	4.73	473	✓
0°50′	101°10′R	4.18	418	✓
0°55′	100°30′R	3.67	367	✓
1°00′	100°50′R	3.13	313	✓
1°05′	99°37′R	2.70	270	✓
1°18′	96°25′R	2.30	230	✓

1°25′	89°52′R	1.85	185	✓
2°50′	82°40′R	1.40	140	✓
2°45′	66°12′R	1.07	107	✓
2°40′	31°05′R	1.04	104	✓
2°45′	3°20′R	1.18	118	✓

27.5 ft. Contour

0°10′	93°00′L	2.44	244	✓
0°10′	101°22′L	2.16	216	✓
0°15′	112°10′L	1.83	183	✓
0°20′	118°35′L	1.60	160	✓
0°30′	122°05′L	1.30	130	✓
0°30′	122°12′L	0.83	83	✓
0°35′	93°22′L	0.38	38	✓
1°20′	36°25′L	0.33	33	✓
1°00′	24°38′R	0.27	27	✓
1°00′	82°50′R	0.51	51	✓
1°00′	120°40′R	0.77	77	✓

Vertical	Horiz.	Rod		
0°45'	129°25'R	1.43	143	✓
0°35'	139°00'R	1.78	178	✓
0°20'	155°25'R	3.95	395	✓
0°20'	162°05'R	3.44	344	✓
0°25'	170°52'R	3.23	323	✓
0°25'	180°00'R	3.05	305	✓
0°30'	170°35'L	2.87	287	✓
0°15'	161°04'L	2.70	270	✓
0°30'	151°32'L	2.55	255	✓
0°35'	138°37'L	2.53	253	✓
0°30'	126°14'L	2.77	277	✓
0°28'	119°50'L	3.00	300	✓
0°30'	126°28'L	2.23	223	✓
0°40'	137°07'L	1.75	175	✓
0°40'	152°25'L	1.68	168	✓
0°55'	170°10'L	1.42	142	✓
0°55'	173°10'R	1.27	127	✓

1°00'	158°25'R	1.20	120	✓

270 ft. Contour

0°42'	133°40'R	5.90	590	✓
0°40'	133°50'R	5.43	543	✓
0°35'	129°00'R	5.06	506	✓
0°40'	131°30'R	4.66	466	✓
0°35'	124°35'R	4.90	490	✓
0°35'	119°35'R	5.07	507	✓
0°37'	115°55'R	4.67	467	✓
0°40'	114°00'R	4.44	444	✓

△ Pt. on 8th St range line produced northerly at I 2 left.

→ I0

265 ft. Contour.

1°50'	53°18'R	3.67	367	✓
1°55'	55°45'R	3.28	328	✓

Vertical Horiz Rod

1°55'	60°35'R	3.04	304	✓
2°00'	67°30'R	2.80	280	✓
2°05'	72°40'R	2.35	235	✓
2°15'	78°08'R	2.05	205	✓
2°20'	80°12'R	1.67	167	✓
2°15'	73°28'R	1.32	132	✓
2°15'	56°35'R	1.11	111	✓
5°50'	26°40'R	0.83	82	✓
5°55'	0°30'R	0.92	91	✓
6°05'	24°50'L	1.00	98	✓
6°05'	49°30'L	0.96	95	✓
6°20'	68°30'L	1.10	108	✓
4°30'	80°10'L	1.43	143	✓
4°20'	84°20'L	1.77	177	✓
2°50'	82°00'L	2.37	237	✓
2°50'	75°53'L	2.84	284	✓
1°50'	70°08'L	3.24	324	✓
1°50'	65°22'L	3.50	350	✓
1°35'	59°18'L	3.87	387	✓
1°30'	53°25'L	4.32	432	✓
1°30'	50°53'L	4.84	484	✓
1°10'	49°07'L	5.25	525	✓
1°05'	50°45'L	5.60	560	✓

70 ft Contour

0°45'	60°52'L	4.76	476	✓
0°45'	61°05'L	4.40	440	✓
0°50'	65°22'L	3.96	396	✓
1°00'	69°38'L	3.75	375	✓
0°55'	74°56'L	3.38	338	✓
0°55'	73°33'L	3.10	310	✓
0°55'	84°00'L	2.86	286	✓
1°50'	88°05'L	2.53	253	✓
1°35'	91°35'L	2.20	220	✓
2°05'	95°07'L	1.88	188	✓

Vertical	Horiz Rot			
2°00'	94°30'L	1.53	153	✓
2°10'	88°45'L	1.14	114	✓
4°50'	69°50'L	0.80	80	✓
4°50'	40°50'L	0.57	57	✓
4°50'	4°30'R	0.47	47	✓
5°05'	49°12'R	0.63	62	✓
5°05'	67°25'R	0.86	85	✓
3°10'	79°08'R	1.02	102	✓
3°00'	91°00'R	1.26	126	✓
2°45'	95°10'R	1.64	164	✓
2°45'	92°00'R	1.86	186	✓
1°55'	83°50'R	2.13	213	✓
2°00'	77°40'R	2.37	237	✓
1°40'	73°14'R	2.70	270	✓
1°30'	69°20'R	3.04	304	✓

275 ft. Contour

1°25'	94°08'R	0.20	20	✓
1°20'	86°23'R	0.24	24	✓
1°20'	92°25'R	0.65	65	✓
1°20'	105°26'R	1.12	112	✓
1°05'	106°30'R	1.67	167	✓
0°50'	101°55'R	2.12	212	✓
0°45'	95°30'R	2.50	250	✓
0°30'	90°42'R	2.85	285	✓
0°20'	89°24'R	3.01	301	✓
0°25'	83°10'R	3.30	330	✓
0°20'	79°36'R	3.54	354	✓
0°20'	75°47'R	3.90	390	✓
0°20'	71°33'R	4.17	417	✓
0°15'	68°48'R	4.38	438	✓

△ Pt. on 8th St. range line produced northerly at I 2 left

→ I 2 produced westerly.

280 ft. Contour.

0°30′	22°15′L	3.90	390	✓
0°35′	24°55′L	3.40	340	✓
0°35′	21°00′L	3.08	308	✓
0°30′	14°00′L	2.77	277	✓
0°40′	3°15′L	2.50	250	✓
0°40′	5°25′R	2.37	237	✓
0°35′	13°35′R	2.28	228	✓
0°35′	27°28′R	2.47	247	✓
0°35′	38°00′R	2.70	270	✓
0°35′	46°50′R	3.04	304	✓
0°30′	55°38′R	3.46	346	✓
0°40′	61°45′R	3.70	370	✓

285 ft. Contour.

1°00′	58°10′R	4.85	485	✓
1°05′	52°20′R	4.93	493	✓
1°15′	49°22′R	5.60	560	✓

△ Pt. on 8th St. range line produced northerly at I 2 left.

→ I 0

260 ft. Contour.

2°15′	33°30′R	4.07	407	✓
2°25′	35°50′R	3.70	370	✓
3°00′	40°40′R	3.34	334	✓
3°00′	42°45′R	3.17	317	✓
3°30′	54°55′R	2.94	294	✓
3°30′	61°35′R	2.63	263	✓
4°15′	67°35′R	2.30	230	✓
5°00′	69°30′R	1.98	197	✓
5°05′	62°20′R	1.64	163	✓

Vert.	Horiz.	Rod		
6°50'	46°20'R	1.40	139	✓
6°40'	26°22'R	1.26	125	✓
4°20'	7°45'R	1.32	132	✓
6°40'	8°00'L	1.51	150	✓
6°25'	18°55'L	1.70	169	✓
7°05'	34°08'L	1.40	138	✓
7°10'	52°05'L	1.38	136	✓
6°30'	67°50'L	1.57	156	✓
5°30'	75°05'L	1.90	189	✓
4°30'	71°08'L	2.40	240	✓
3°30'	66°25'L	2.83	283	✓
3°20'	61°15'L	3.25	325	✓
3°00'	53°55'L	3.60	360	✓
2°30'	47°32'L	3.00	300	✓
2°00'	44°42'L	4.67	467	✓
2°00'	43°00'L	4.84	484	✓
				✓

2/6/03. Alverson
McLaren 1 P.M.
Angensola
Luke

△ Pt. on 8th St. range line produced northerly at I2 left → I0

255 ft. Contour.

2°55'	27°38'R	4.27	427	✓
3°00'	29°15'R	3.87	387	✓
3°00'	33°05'R	3.47	347	✓
3°00'	37°07'R	3.20	320	✓
4°10'	43°35'R	2.93	293	✓
4°15'	50°25'R	2.73	273	✓
5°15'	57°50'R	2.42	241	✓
5°15'	58°15'R	2.13	212	✓
5°20'	47°55'R	1.73	171	✓
7°50'	29°52'R	1.57	155	✓
8°00'	15°03'R	1.50	147	✓

Vertical Horiz Rod

7°40'	1°15'R	1.64	161	✓
6°35'	9°20'L	1.86	183	✓
6°35'	18°40'L	1.90	188	✓
6°30'	29°00'L	1.76	174	✓
6°30'	41°07'L	1.62	160	✓
6°35'	55°35'L	1.66	164	✓
6°30'	64°36'L	1.88	186	✓
5°40'	66°25'L	2.24	222	✓
4°40'	62°50'L	2.70	270	✓
3°30'	58°12'L	3.10	310	✓
3°25'	53°20'L	3.43	343	✓
3°30'	51°18'L	3.60	360	✓
3°25'	48°45'L	3.73	373	✓
3°20'	45°50'L	3.84	384	✓
3°00'	43°00'L	4.04	404	✓
3°00'	43°40'L	4.20	420	✓
2°45'	41°20'L	4.48	448	✓

2°45'	40°20'L	4.67	467	✓

250 ft Contour

3°25'	37°35'L	4.53	453	✓
3°30'	39°25'L	4.27	427	✓
3°50'	41°55'L	4.13	413	✓
3°50'	44°00'L	3.96	396	✓
3°50'	45°50'L	3.77	377	✓
4°20'	47°53'L	3.67	367	✓
4°25'	50°27'L	3.50	350	✓
5°05'	51°45'L	3.16	314	✓
5°20'	55°42'L	2.77	275	✓
6°45'	57°38'L	2.34	232	✓
7°00'	56°17'L	2.07	205	✓
7°45'	48°15'L	1.92	190	✓
7°55'	37°08'L	1.90	188	✓
7°00'	26°43'L	2.06	203	✓
6°30'	15°15'L	2.18	216	✓

Vertical Horiz Pole.

6°40'	8°38'L	2.13	211	✓
7°15'	0°05'R	1.96	193	✓
8°00'	9°25'R	1.78	174	✓
8°00'	21°25'R	1.75	172	✓
7°35'	34°15'R	1.84	181	✓
7°10'	46°50'R	2.10	207	✓
6°05'	48°00'R	2.44	241	✓
6°05'	41°22'R	2.75	272	✓
5°15'	35°37'R	2.96	293	✓
5°10'	32°30'R	3.23	320	✓
4°05'	28°30'R	3.57	357	✓
3°55'	25°00'R	3.93	393	✓
3°30'	24°30'R	4.42	442	✓

245 ft Contour

3°35'	22°50'R	4.47	447	✓
3°50'	22°45'R	4.10	410	✓

4°45'	24°00'R	3.77	377	✓
4°40'	26°30'R	3.48	348	✓
4°40'	29°55'R	3.16	316	✓
6°10'	33°50'R	2.85	282	✓
6°15'	37°25'R	2.58	255	✓
6°15'	37°42'R	2.30	227	✓
7°10'	34°37'R	2.10	207	✓
7°20'	27°35'R	1.98	195	✓
7°15'	17°25'R	1.95	192	✓
7°20'	8°05'R	1.96	193	✓
7°20'	0°20'R	2.12	208	✓
7°15'	4°43'L	2.23	219	✓
6°30'	6°55'L	2.33	230	✓
6°30'	12°41'L	2.30	227	✓
6°40'	38°00'L	2.17	214	✓
7°15'	37°40'L	2.10	206	✓
7°10'	45°38'L	2.12	208	✓
7°15'	49°25'L	2.25	221	✓

Vertical	Horiz	Rod.		
7°15'	50°30'L	2.64	261	/
5°50'	48°45'L	3.00	297	/
5°45'	49°55'L	3.22	319	/
5°30'	49°13'L	3.47	344	/
5°10'	47°22'L	3.58	355	/
5°00'	44°28'L	3.70	367	/
4°50'	42°26'L	3.86	386	/
4°25'	41°12'L	4.05	405	/
4°25'	38°25'L	4.15	415	/
4°20'	37°00'L	4.17	417	/
4°25'	35°33'L	4.24	424	/
4°00'	35°00'L	4.47	447	/

△ Pt. on 8th St. range line 400 ft northerly from I ⊙ at 250 left

→ ⊙ I + 400' northerly.

280 ft Contour.

0°10'	162°48'R	1.28	128	/
0°15'	178°30'R	1.20	120	/
0°35'	171°35'L	1.22	122	/
0°30'	157°05'L	1.24	124	/
0°30'	144°00'L	1.24	124	/
0°35'	132°50'L	1.35	135	/
0°25'	120°45'L	1.60	160	/
0°30'	110°37'L	1.55	155	/
0°30'	103°30'L	1.36	136	/
0°35'	110°00'L	1.03	103	/
0°30'	123°25'L	0.82	82	/
0°45'	137°10'L	0.57	57	/
0°50'	166°45'L	0.48	48	/
1°05'	163°15'R	0.48	48	/

Vert.	Horiz.	Rod		
1°05'	131°15'R	0.64	64	/
1°05'	108°15'R	0.87	87	/
1°20'	95°05'R	0.75	75	/
2°05'	64°25'R	0.52	52	/
2°05'	24°30'R	0.51	51	/
2°05'	5°08'R	0.70	70	/
2°00'	8°15'L	0.96	96	/
0°32'	18°37'L	1.21	121	/
0°00'	27°33'L	1.36	136	/

△ Pt. on 8th St range line 400 ft north of I

→ 400 ft north of I at 250 left.

280 ft. Contour

2°20'	37°25'R	1.72	172	/
2°35'	39°10'R	2.05	205	/
2°50'	39°50'R	2.37	237	/

1°55'	43°30'R	2.50	250	/
1°40'	49°55'R	2.93	293	/
1°30'	52°25'R	3.16	316	/
1°15'	62°50'R	3.34	334	/

275 ft. Contour.

0°30'	75°15'R	3.70	370	✓
0°20'	73°00'R	3.00	300	✓
0°20'	67°00'R	2.73	273	✓
0°30'	62°15'R	2.50	250	✓
0°25'	61°55'R	2.02	202	✓
0°25'	61°50'R	1.73	173	✓
0°25'	60°00'R	1.46	146	✓
0°30'	60°05'R	1.03	103	✓
0°25'	58°55'R	0.81	81	✓
0°25'	56°20'R	0.67	67	✓
0°25'	38°00'R	0.38	38	✓

△ Pt. on 8th St range line produced northerly at Jo

→ 8th St range line South

270 ft. Contour

0°10'	11°50'L	1.53	153	✓
0°10'	11°20'L	1.24	124	✓
0°20'	6°25'L	1.02	102	✓
0°20'	1°55'L	0.80	80	✓
0°20'	6°45'R	0.51	51	✓
0°20'	40°50'R	0.35	35	✓
0°20'	89°48'R	3.37	37	✓
0°25'	116°15'R	0.56	56	✓
0°40'	131°35'R	0.77	77	✓
0°30'	148°35'R	1.07	107	✓
0°15'	154°20'R	1.22	122	✓
0°00'	160°33'R	1.62	162	✓
0°00'	159°06'R	2.00	200	✓

265 ft Contour.

1°30'	171°28'R	1.87	187	✓
1°20'	175°20'R	1.58	158	✓
1°30'	172°50'R	1.17	117	✓
1°32'	168°25'R	0.84	84	✓
1°30'	167°45'R	0.53	53	✓
1°30'	172°25'L	0.32	32	✓
1°25'	116°00'L	0.34	34	✓
1°35'	87°15'L	0.45	45	✓
2°30'	58°15'L	0.58	58	✓
2°30'	38°12'L	0.72	72	✓
2°15'	30°08'L	1.00	100	✓
2°15'	31°45'L	1.28	128	✓
2°05'	35°45'L	1.62	162	✓
1°35'	40°45'L	1.95	195	✓
1°30'	42°20'L	2.08	208	✓

260 ft. Contour

2°25'	50°28'L	2.25	225	✓
2°30'	49°55'L	1.90	190	✓
2°35'	49°15'L	1.65	165	✓
2°35'	46°30'L	1.45	145	✓
4°30'	46°55'L	1.14	114	✓
4°30'	59°55'L	0.93	93	✓
6°50'	75°15'L	0.84	82	✓
6°35'	94°20'L	0.96	94	✓
5°00'	103°00'L	1.16	115	✓
4°20'	109°30'L	1.30	130	✓
4°10'	115°35'L	1.32	132	✓
4°00'	123°06'L	1.10	110	✓
4°00'	131°08'L	0.87	87	✓
7°50'	151°00'L	0.67	64	✓
7°40'	165°45'L	0.69	66	✓
6°05'	173°05'L	0.96	93	✓
4°35	174°35'L	1.25	125	✓

255 ft. Contour

6°05'	169°05'L	1.47	144	✓
6°15'	165°15'L	1.18	115	✓
6°15'	160°15'L	0.97	94	✓
8°00'	143°15'L	1.01	98	✓
7°00'	129°55'L	1.24	121	✓
5°00'	128°10'L	1.46	144	✓
3°30'	113°15'L	1.62	162	✓
5°30'	101°50'L	1.44	142	✓
5°35'	90°45'L	1.21	119	✓
7°30'	75°10'L	1.08	105	✓
7°00'	59°25'L	1.23	120	✓
5°10'	57°15'L	1.62	160	✓
4°00'	54°15'L	1.96	195	✓
3°40'	53°15'L	2.35	234	✓

4/7/03 Alverson
McLaren
Anginsola
Luce

△ Pt. on 8th St. range line 370 ft. northerly from Jo at 425 left.
→ Pt. on 8th St. range line 370 ft north of Jo.

285 ft Contour

0°15'	99°45' R	5.48	548	✓
0°00'	93°50' R	5.70	570	✓
0°10'	92°55' R	5.35	535	✓
0°05'	92°53' R	4.96	496	✓
0°00'	93°52' R	4.42	442	✓
0°00'	92°50' R	3.96	396	✓
0°00'	93°15' R	3.55	355	✓
0°00'	95°20' R	3.10	310	✓
0°05'	96°52' R	2.68	268	✓
0°00'	97°30' R	2.26	226	✓

0°00'	96°45' R	1.79	179	✓
0°00'	99°45' R	1.32	132	✓
0°00'	105°30' R	0.81	81	✓
0°00'	118°30' R	0.41	41	✓
0°10'	157°40' R	0.22	22	✓
0°30'	148°45' L	0.21	21	✓
0°30'	105°25' L	0.48	48	✓
0°40'	87°40' L	0.79	79	✓
0°35'	88°15' L	1.24	124	✓
0°45'	84°05' L	1.57	157	✓

280 ft. Contour.

0°30'	31°50' R	2.56	256	✓
0°30'	25°55' R	2.53	253	✓
1°30'	19°25' R	2.67	267	✓
1°15'	10°28' R	2.56	256	✓
1°20'	5°00' R	2.40	240	✓
1°05'	0°35' L	2.28	228	✓

Vertical Horiz. Rod

1°35'	5°47'L	2.22	✓
1°15'	13°43'L	2.08	✓

△ Pt on 8th St range line 370 ft north of J0 at 425 left.

→ J+370 produced westerly.

790 ft Contour.

0°25'	93°22'R	2.86	286	✓
0°30'	88°10'R	3.27	327	✓
0°30'	84°12'R	3.63	363	✓
0°40'	83°00'R	4.00	400	✓
0°40'	81°12'R	4.32	432	✓
0°40'	83°10'R	4.73	473	✓
0°40'	83°12'R	5.23	523	✓

△ Pt on 8th St range line produced 166.3 ft north of J0 at 155 left

→ J0+166.3 ft.

275 ft Contour

2°10'	31°01'R	0.79	79	✓
2°10'	21°47'R	0.50	50	✓
2°15'	7°22'L	0.28	28	✓
1°50'	78°50'L	0.24	24	✓
1°55'	97°20'L	0.44	44	✓
1°32'	95°20'L	0.67	67	✓
1°30'	91°15'L	0.80	80	✓
1°05'	82°38'L	0.93	93	✓
0°45'	72°50'L	1.35	135	✓
1°00'	77°15'L	1.53	153	✓
0°45'	85°55'L	1.72	172	✓
0°05'	92°13'L	1.95	195	✓
0°20'	95°25'L	2.20	220	✓
0°05'	94°22'L	2.42	242	✓

152

Vertical Horiz. Rod

0°10'	17°58'L	2.60	260	✓

210 ft Contour.

3°00'	66°12'L	1.82	182	✓
3°00'	63°50'L	1.65	165	✓
3°00'	69°25'L	1.40	140	✓
4°30'	71°53'L	1.18	118	✓
5°10'	73°45'L	1.05	104	✓
5°20'	78°35'L	0.96	95	✓
5°20'	83°10'L	0.85	84	✓
5°20'	89°05'L	0.72	71	✓
5°20'	84°55'L	0.86	85	✓
5°20'	79°20'L	0.43	42	✓
9°20'	54°45'L	0.49	47	✓
7°45'	35°48'L	0.73	71	✓
7°45'	17°25'L	0.78	76	✓
6°00'	2°45'R	0.93	92	✓
3°55'	24°07'R	1.13		✓

265 ft Contour

3°50'	8°30'R	1.45	145	✓
3°55'	3°22'L	1.33	133	✓
4°10'	11°15'L	1.13	113	✓
5°05'	17°45'L	1.08	107	✓
5°20'	29°52'L	1.07	106	✓
5°20'	35°30'L	0.93	92	✓
5°20'	42°15'L	0.74	73	✓
7°30'	61°25'L	0.50	49	✓
7°0'	78°10'L	0.67	66	✓
5°05'	78°55'L	0.80	79	✓
4°55'	74°53'L	0.92	92	✓
4°35'	70°45'L	1.07	107	✓
4°45'	67°55'L	1.22	122	✓
4°50'	65°35'L	1.45	145	✓
4°45'	61°40'L	1.63	163	✓

Vert	Horiz	Rod		
4°45'	6°22'L	1.77	177	✓
3°25'	56°25'L	1.95	195	✓
3°25'	51°25'L	2.09	209	✓
3°15'	47°10'L	2.35	235	✓

△ Pt on 8th St. range line produced 370 ft north of Jo.
→ 8th St range line south.
260 ft. Contour

2°45'	177°15'L	0.58	58	✓
6°30'	153°25'L	0.36	35	✓
6°30'	119°42'L	0.34	33	✓
7°00'	83°15'L	0.37	36	✓
7°10'	60°25'L	0.54	53	✓
7°05'	30°25'L	0.48	47	✓
4°45'	4°18'R	0.48	48	✓
1°55'	25°20'R	0.53	53	✓

2°00'	34°38'R	0.65	65	✓
0°30'	45°00'R	0.72	72	✓
0°30'	48°35'R	0.91	91	✓
0°35'	48°38'R	1.22	122	✓
0°55'	46°35'R	1.48	148	✓
0°55'	46°35'R	1.70	170	✓
1°20'	44°32'R	1.93	193	✓
1°10'	38°05'R	1.87	187	✓
1°05'	33°40'R	1.73	173	✓
0°55'	27°55'R	1.60	160	✓
1°00'	21°40'R	1.52	152	✓
1°05'	18°50'R	1.63	163	✓
1°15'	14°12'R	1.77	177	✓
1°15'	10°30'R	1.84	184	✓
1°30'	2°55'R	1.90	190	✓
1°30'	5°00'L	2.16	216	✓

755 ft. Contour.

8°30'	67°00'L	0.77	76	✓
8°20'	75°35'L	0.80	79	✓
8°20'	92°00'L	0.60	59	✓
8°50'	115°15'L	0.49	48	✓
9°15'	140°15'L	0.53	51	✓
9°20'	154°30'L	0.64	62	✓

160

Long Weir

67° 45' W 185 ft dist

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Degrees.

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155

Return to City Engineers Office
City Hall, San Diego, Cal.

TRAVERSE TABLE FOR TRANSIT BOOK.

From 1° to 90° for a distance of 100.

Return to City Engineers Office
City Hall, San Diego, Cal.

Degrees	DEGREES.		¼ DEGREE.		½ DEGREE.		¾ DEGREE.		Degrees.
	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	
0			100.00	0.44	100.00	0.87	99.99	1.31	89
1	99.98	1.75	99.98	2.18	99.97	2.62	99.95	3.05	88
2	99.94	3.49	99.92	3.93	99.91	4.36	99.88	4.80	87
3	99.86	5.23	99.84	5.67	99.81	6.10	99.79	6.54	86
4	99.76	6.98	99.73	7.41	99.69	7.85	99.66	8.28	85
5	99.62	8.72	99.58	9.15	99.54	9.58	99.50	10.02	84
6	99.45	10.45	99.41	10.89	99.36	11.32	99.31	11.75	83
7	99.25	12.19	99.20	12.62	99.14	13.05	99.09	13.49	82
8	99.03	13.92	98.97	14.35	98.90	14.78	98.84	15.21	81
9	98.77	15.64	98.70	16.07	98.63	16.50	98.56	16.93	80
10	98.48	17.36	98.40	17.79	98.33	18.22	98.25	18.65	79
11	98.16	19.08	98.08	19 51	97.99	19.94	97.90	20.36	78
12	97.81	20.79	97.72	21.22	97.63	21.64	97.53	22.07	77
13	97.44	22.50	97.34	22.92	97.24	23.34	97.13	23.77	76
14	97.03	24.19	96.92	24 62	96.81	25.04	96.70	25.46	75
15	96.59	25 88	96.48	26.30	96.36	26.72	96.25	27.14	74
16	96.13	27.56	96.00	27.98	95.88	28 40	95.76	28.82	73
17	95.63	29.24	95.50	29.65	95.37	30.07	95.24	30.49	72
18	95.11	30.90	94.97	31.32	94.83	31.73	94.69	32.14	71
19	94.55	32.56	94.41	32.97	94.26	33.38	94.12	33.79	70
20	93.97	34.20	93.82	34.61	93.67	35.02	93.51	35.43	69
21	93.36	35.84	93.20	36.24	93.04	36.65	92.88	37.06	68
22	92.72	37.46	92.55	37.86	92.39	38.27	92.22	38 67	67
23	92.05	39.07	91.88	39 47	91.71	39.87	91.53	40.27	66
24	91.35	40.67	91.18	41.07	91.00	41.47	90.81	41.87	65
25	90.63	42.26	90.45	42.66	90.26	43.05	90.07	43.44	64
26	89.88	43.84	89.69	44.23	89.49	44.62	89.20	45.01	63
27	89.10	45.40	88.90	45.79	88.70	46.17	88.50	46.56	62
28	88.29	46.95	88.09	47.33	87.88	47.72	87.67	48.10	61
29	87.46	48.48	87.25	48.86	87.04	49.24	86.82	49.62	60
30	86.60	50.00	86.38	50.38	86.16	50.75	85.94	51.13	59
31	85.72	51.50	85.49	51.88	85.26	52.25	85.04	52.62	58
32	84.80	52.99	84.57	53.36	84.34	53.73	84.10	54.10	57
33	83.87	54.46	83.63	54.83	83.39	55.19	83.15	55.56	56
34	82.90	55.92	82.66	56.28	82.41	56.64	82.16	57.00	55
35	81.92	57.36	81.66	57.71	81.41	58.07	81.16	58.42	54
36	80.90	58.78	80.64	59.13	80.39	59.48	80.13	59.83	53
37	79.86	60.18	79.60	60 53	79.34	60.88	79.07	61 22	52
38	78.80	61.57	78.53	61.91	78.26	62 25	77.99	62.59	51
39	77.71	62.93	77.44	63.27	77.16	63.61	76.88	63.94	50
40	76.60	64.28	76.32	64.61	76.04	64.94	75.76	65.28	49
41	75.47	65.61	75.18	65.93	74.90	66.26	74.61	66.59	48
42	74.31	66.91	74.02	67.24	73.73	67.56	73.43	67.88	47
43	73.14	68.20	72.84	68.52	72.54	68.84	72.24	69.15	46
44	71.93	69.47	71.63	69.78	71.33	70.09	71.02	70.40	45
45	70.71	70.71							
Degrees.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Dep.	Lat.	Degrees.
	DEGREES.		¾ DEGREE.		½ DEGREE.		¼ DEGREE.		

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