

1480

COMPUTATIONS
for a new addition to the

DANVILLE
SOUTH CEMETERY

in the E¹/₂ NE¹/₄ Sec. 9-15-1W
(File 0951WC; Disk 6)

**** COORDINATE FILE SYSTEM ****

FILE CREATED:

COORDINATE FILE:0951WC LENGTH= 104 POINTS; TIME ON FILE: 0 00 00.00
DANVILLE SOUTH CEMETERY ***** JOB #1993

COORDINATE FILE:0951WC LENGTH = 104 POINTS; TIME ON FILE: 0 00 00.00
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				3	500.00000	500.00000
3	TRAV NA	0 00 00.00	0.00000	0	500.00000	500.00000
START				3	500.00000	500.00000
3	S.S. NA	10 00 00.00	24.00000	1	523.63539	504.16756
3	TRAV NA	270 00 00.00	24.00000	1	500.00000	476.00000
1	TRAV NA	180 00 00.00	112.00000	2	388.00000	476.00000
2	TRAV NA	90 00 00.00	24.00000	4	388.00000	500.00000
4	TRAV NA	90 00 00.00	294.00000	6	388.00000	794.00000
6	TRAV NA	0 00 00.00	112.00000	5	500.00000	794.00000
5	INV NA	270 00 00.00	294.00000	3	500.00000	500.00000
3	TRAV NA	90 00 00.00	30.00000	0	500.00000	530.00000
0	TRAV NA	0 00 00.00	24.00000	7	524.00000	530.00000
7	TRAV NA	90 00 00.00	90.00000	8	524.00000	620.00000
8	S.S. NA	0 00 00.00	64.00000	13	588.00000	620.00000
8	TRAV NA	90 00 00.00	84.00000	9	524.00000	704.00000
9	TRAV NA	90 00 00.00	90.00000	10	524.00000	794.00000
10	S.S. NA	180 00 00.00	24.00000	5	500.00000	794.00000
10	TRAV NA	0 00 00.00	64.00000	11	588.00000	794.00000
11	TRAV NA	270 00 00.00	90.00000	12	588.00000	704.00000
12	INV NA	270 00 00.00	84.00000	13	588.00000	620.00000
13	TRAV NA	270 00 00.00	30.00000	14	588.00000	590.00000
14	TRAV NA	180 00 00.00	16.00000	0	572.00000	590.00000
0	TRAV NA	270 00 00.00	48.20000	15	572.00000	541.80000
15	TRAV NA	90 00 00.00	12.20000	0	572.00000	554.00000
0	TRAV NA	180 00 00.00	32.00000	0	540.00000	554.00000
0	TRAV NA	270 00 00.00	23.05000	16	540.00000	530.95000
16	INV NA	183 23 52.61	16.02818	7	524.00000	530.00000
START				3	500.00000	500.00000
3	S.S. NA	90 00 00.00	294.00000	5	500.00000	794.00000
3	S.S. NA	110 51 16.05	314.61087	6	388.00000	794.00000
3	S.S. NA	180 00 00.00	112.00000	4	388.00000	500.00000
3	S.S. NA	192 05 41.13	114.54257	2	388.00000	476.00000
3	S.S. NA	270 00 00.00	24.00000	1	500.00000	476.00000
3	S.S. NA	51 20 24.69	38.41875	7	524.00000	530.00000
3	S.S. NA	78 41 24.24	122.37647	8	524.00000	620.00000
3	S.S. NA	83 17 24.59	205.40691	9	524.00000	704.00000
3	S.S. NA	85 19 59.31	294.97797	10	524.00000	794.00000
3	S.S. NA	73 20 11.48	306.88760	11	588.00000	794.00000
3	S.S. NA	66 39 57.45	222.17111	12	588.00000	704.00000
3	S.S. NA	53 44 46.18	148.80860	13	588.00000	620.00000
3	S.S. NA	45 38 37.48	125.87295	14	588.00000	590.00000
3	S.S. NA	30 08 15.17	83.25407	15	572.00000	541.80000

3 S.S. NA 37 43 51.28 50.57571 16 540.00000 530.95000

LIST

1	500.00000	476.00000
2	388.00000	476.00000
3	500.00000	500.00000
4	388.00000	500.00000
5	500.00000	794.00000
6	388.00000	794.00000
7	524.00000	530.00000
8	524.00000	620.00000
9	524.00000	704.00000
10	524.00000	794.00000
11	588.00000	794.00000
12	588.00000	704.00000
13	588.00000	620.00000
14	588.00000	590.00000
15	572.00000	541.80000
16	540.00000	530.95000

*

TIME FOR THIS RUN: 0 13 20.70; TOTAL TIME ON FILE: 0 13 20.70
COORDINATES STORED

** Temporary coordinates for staking old 1948 block.*

1	10688.81509	9868.11119
2	10648.82980	9810.11119
3	10680.96172	9868.11119
4	10640.97643	9810.11119
5	10680.96172	9868.11119
6	10640.97643	9810.11119

*** COORDINATE FILE SYSTEM ***
 FILE CREATED:
 COORDINATE FILE: 02510G LENGTH= 104 POINTS TIME ON FILE: 0 00 00.00
 DANVILLE SOUTH CEMETERY *** JOB #1993 ***

COORDINATE FILE: 02510G LENGTH= 104 POINTS TIME ON FILE: 0 00 04.00
 DANVILLE SOUTH CEMETERY *** JOB #1993 ***

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			1	500.00000	500.00000
TRAV NA	0 00 00.00	0.00000	2	500.00000	500.00000
START			3	500.00000	500.00000
TRAV NA	10 00 00.00	24.00000	4	500.00000	504.75238
TRAV NA	70 00 00.00	24.00000	5	500.00000	504.75238
TRAV NA	180 00 00.00	112.00000	6	388.00000	504.75238
TRAV NA	90 00 00.00	24.00000	7	388.00000	504.75238
TRAV NA	30 00 00.00	24.00000	8	388.00000	504.75238
TRAV NA	0 00 00.00	112.00000	9	500.00000	504.75238
TRAV NA	10 00 00.00	112.00000	10	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	11	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	12	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	13	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	14	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	15	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	16	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	17	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	18	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	19	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	20	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	21	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	22	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	23	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	24	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	25	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	26	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	27	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	28	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	29	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	30	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	31	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	32	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	33	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	34	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	35	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	36	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	37	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	38	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	39	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	40	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	41	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	42	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	43	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	44	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	45	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	46	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	47	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	48	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	49	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	50	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	51	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	52	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	53	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	54	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	55	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	56	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	57	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	58	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	59	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	60	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	61	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	62	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	63	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	64	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	65	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	66	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	67	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	68	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	69	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	70	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	71	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	72	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	73	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	74	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	75	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	76	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	77	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	78	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	79	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	80	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	81	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	82	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	83	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	84	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	85	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	86	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	87	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	88	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	89	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	90	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	91	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	92	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	93	500.00000	500.00000
TRAV NA	10 00 00.00	112.00000	94	500.00000	500.00000
TRAV NA	70 00 00.00	24.00000	95	500.00000	500.00000
TRAV NA	90 00 00.00	24.00000	96	500.00000	500.00000
TRAV NA	180 00 00.00	112.00000	97	388.00000	500.00000
TRAV NA	90 00 00.00	24.00000	98	388.00000	500.00000
TRAV NA	30 00 00.00	24.00000	99	388.00000	500.00000
TRAV NA	0 00 00.00	112.00000	100	500.00000	500.00000

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00000.000 00000.000 01 17272.02 85.12 24 27 AM 2.3 5
00000.000 00000.000 1
00000.000 00000.000 2
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00000.000 00000.000 4
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00000.000 00000.000 14
00000.000 00000.000 15
00000.000 00000.000 16
00000.000 00000.000 17
00000.000 00000.000 18

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TIME FOR THIS RUN: 0 13 20.70 TOTAL TIME ON FILE: 0 13 20.70
 COORDINATES STORED

#DSC.DAT - Adjustment of control traverse for a new addition to the Danville #South Cemetery. Given coordinates are taken from the Comer survey:

C	2	10638.81500	9968.11100	!	!
C	3	10643.62900	9993.07100	!	!
C	5	11189.96900	9645.60200	!	!
C	4	10663	9688		
D	4-5		510.920		
M	4-5-2	103-26-44	282.405		
M	4-5-3	101-51-46	306.430		
SS	4-5-6	206-22-29	21.142		
SS	4-5-7	237-41-30	354.048		

STAR*NET Adjustment Program
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 Serial Number 10270

STAR*NET V4.065
 Run Date : Tue May 25 18:16:08 1993
 Number of Observations = 5
 Number of Unknowns = 2
 Degrees of Freedom = 3

Data Type	Count	Weighted Residuals	Error Factor
Distances	3	22.14	3.51
Angles	2	4.39	1.91
Directions	0	0.00	0.00
Az/Bearings	0	0.00	0.00
Stations	4	0.00	0.00
Total	9	26.53	2.97

Adjustment fails the Chi Square test at 5% level

Adjusted Angle Observations

At	From	To	Adj Angle	Residual	StdErr	StdRes
4	5	2	103-26-47.04	0-00-03.04	5.70	0.5
4	5	3	101-51-35.00	-0-00-11.00	5.43	2.0

Adjusted Distance Observations [US Feet]

At	To	Adj Dist	Residual	StdErr	StdRes
4	5	510.8569	-0.0631	0.017	3.7*
4	2	282.3554	-0.0496	0.017	2.9
4	3	306.4350	0.0050	0.017	0.3

Adjusted Bearings and Horizontal Distances

From	To	Bearing	Distance
4	5	N04-51-50.13W	510.8569
4	2	S81-25-03.09E	282.3554
4	3	S83-00-15.14E	306.4350

Sideshot Coordinates Computed After Adjustment

Station	N	E	Description
6	10661.282	9681.165	
7	10467.031	9406.804	

Elapsed time = 00:00:00

ADJUSTED COORDINATES:

2	10638.81500	9968.11100
3	10643.62900	9993.07100
4	10680.95172	9688.91735
5	11189.96900	9645.60200
6	10661.28229	9681.16507
7	10467.03118	9406.80392

COORDINATE FILE:0951WC LENGTH = 104 POINTS; TIME ON FILE: 0 13 20.70
 DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
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PTS 1 THRU 16 CLEARED
 ENTER & ASSIGN

1	10,000.00000	10,000.00000
2	10,638.81500	9,968.11100
3	10,643.62900	9,993.07100
4	10,680.95172	9,688.91735
5	11,189.96900	9,645.60200
6	10,661.28229	9,681.16507
7	10,467.03118	9,406.80392
7	10,467.03118	9,406.80392
7 S.S. SW	0 05 16.87	11.99000
7 S.S. SE	0 32 50.13	23.87000
7 S.S. SE	45 05 59.13	50.30000
7 S.S. NW	2 41 37.13	20.59000
7 S.S. NW	1 22 25.13	44.40000
7 S.S. NW	1 06 22.13	50.48000
7 S.S. NW	0 56 27.13	74.63000
7 S.S. NW	0 16 16.13	258.68000
7 S.S. NE	3 52 14.87	319.78000
7 S.S. NE	8 19 38.87	322.09000
7 S.S. NW	0 23 13.13	343.29500
7 S.S. NE	6 55 09.87	381.38500
7 S.S. NE	6 26 27.87	405.04000
7 S.S. NE	6 04 07.87	434.73500
7 S.S. NW	12 41 51.13	380.11000
7 S.S. NW	12 46 33.13	379.90000
7 S.S. NW	17 56 41.13	382.38000
7 S.S. NW	75 28 32.13	85.52500
7 S.S. SW	80 08 47.87	119.25500

START OFFSETS FROM A LINE
 25 10,488.48020 9,324.01222

PT	BASE BRG	DIST	OFFSET
1	-490.83715	674.27834	
26	-41.73540	-34.85008	
23	349.04776	0.00000	
22	349.36552	0.46156	
24	342.44990	-33.82423	
9	-45.60748	82.86097	
18	321.55525	81.59614	
15	236.94188	82.39520	
14	52.88584	81.75136	
13	28.73577	81.91801	
12	22.65276	81.80690	
11	-1.16742	81.82048	
7	-21.73792	82.71631	
8	-33.72777	82.65604	
9	-45.60748	82.86097	
10	-57.36758	118.22149	

TIME FOR THIS RUN: 0 15 26.21; TOTAL TIME ON FILE: 0 28 46.92

ADJUSTED COORDINATES
 10638.81500
 10643.62900
 11189.96900
 10661.28229
 10467.03118

ADJUSTED COORDINATES
 10638.81500
 10643.62900
 11189.96900
 10661.28229
 10467.03118

10638.81500
 10643.62900
 11189.96900
 10661.28229
 10467.03118

ADJUSTED COORDINATES
 10638.81500
 10643.62900
 11189.96900
 10661.28229
 10467.03118

COORDINATE FILE: 0931WC.LENGTH = 104 POINTS; TIME ON FILE: 0 13 20.70
DANVILLE SOUTH CEMETERY ***** JOB #1993 *****

FROM TYPE	BEARING	DISTANCE	NORTHING	EASTING
1			10.000.0000	10.000.0000
2			10.000.0000	10.000.0000
3			10.000.0000	10.000.0000
4			10.000.0000	10.000.0000
5			10.000.0000	10.000.0000
6			10.000.0000	10.000.0000
7			10.000.0000	10.000.0000
8			10.000.0000	10.000.0000
9			10.000.0000	10.000.0000
10			10.000.0000	10.000.0000
11			10.000.0000	10.000.0000
12			10.000.0000	10.000.0000
13			10.000.0000	10.000.0000
14			10.000.0000	10.000.0000
15			10.000.0000	10.000.0000
16			10.000.0000	10.000.0000
17			10.000.0000	10.000.0000
18			10.000.0000	10.000.0000
19			10.000.0000	10.000.0000
20			10.000.0000	10.000.0000
21			10.000.0000	10.000.0000
22			10.000.0000	10.000.0000
23			10.000.0000	10.000.0000
24			10.000.0000	10.000.0000
25			10.000.0000	10.000.0000
26			10.000.0000	10.000.0000
27			10.000.0000	10.000.0000
28			10.000.0000	10.000.0000
29			10.000.0000	10.000.0000
30			10.000.0000	10.000.0000
31			10.000.0000	10.000.0000
32			10.000.0000	10.000.0000
33			10.000.0000	10.000.0000
34			10.000.0000	10.000.0000
35			10.000.0000	10.000.0000
36			10.000.0000	10.000.0000
37			10.000.0000	10.000.0000
38			10.000.0000	10.000.0000
39			10.000.0000	10.000.0000
40			10.000.0000	10.000.0000
41			10.000.0000	10.000.0000
42			10.000.0000	10.000.0000
43			10.000.0000	10.000.0000
44			10.000.0000	10.000.0000
45			10.000.0000	10.000.0000
46			10.000.0000	10.000.0000
47			10.000.0000	10.000.0000
48			10.000.0000	10.000.0000
49			10.000.0000	10.000.0000
50			10.000.0000	10.000.0000
51			10.000.0000	10.000.0000
52			10.000.0000	10.000.0000
53			10.000.0000	10.000.0000
54			10.000.0000	10.000.0000
55			10.000.0000	10.000.0000
56			10.000.0000	10.000.0000
57			10.000.0000	10.000.0000
58			10.000.0000	10.000.0000
59			10.000.0000	10.000.0000
60			10.000.0000	10.000.0000

TIME FOR THIS RUN: 0 12 28.31; TOTAL TIME ON FILE: 0 28 48.95

New addition to Danville South Cemetery

DATE: 5/28/1993 INPUT FILE = CEM.DAT
TIME: 02:12 TRANSACTION LOG = CEM.LOG

ANALYSIS & SOLUTION FOR 2 DIMENSIONAL TRANSFORMATION FROM SYSTEM ONE TO SYSTEM TWO BY LEAST SQUARES

Processing point pairs in file CEM.PRS

Input coordinates of corresponding points
System One System Two (fixed)

PT#	NORTH	EAST	PT#	NORTH	EAST	WEIGHT
107	124.000	100.000	7	10467.031	9406.804	1.00
108	112.000	100.000	8	10455.041	9406.786	1.00
109	100.000	100.000	9	10443.162	9407.032	1.00
111	145.000	100.000	11	10487.598	9405.836	1.00
112	168.000	100.000	12	10511.418	9405.740	1.00
113	174.000	100.000	13	10517.502	9405.829	1.00
114	198.000	100.000	14	10541.651	9405.578	1.00
115	382.000	100.000	15	10725.708	9405.580	1.00
116	442.000	124.000	16	10786.082	9428.391	1.00
117	442.000	148.000	17	10785.725	9453.452	1.00
118	466.000	100.000	18	10810.318	9404.485	1.00
119	502.000	148.000	19	10845.638	9452.751	1.00
120	526.000	148.000	20	10869.514	9452.242	1.00
121	556.000	148.000	21	10899.330	9452.766	1.00

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) --> PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
107 7	-.168	+.447	110 .48	1.00
108 8	-.145	+.374	111 .40	1.00
109 9	-.010	+.565	90 .56	1.00
111 11	-.625	-.424	214 .75	1.00
112 12	+.169	-.415	292 .45	1.00
113 13	+.246	-.297	309 .39	1.00
114 14	+.368	-.438	310 .57	1.00
115 15	+.218	+.410	62 .46	1.00
116 16	+.413	-.530	307 .67	1.00
117 17	-.054	+.504	96 .51	1.00
118 18	+.733	-.298	337 .79	1.00
119 19	-.209	+.079	159 .22	1.00
120 20	-.360	-.320	221 .48	1.00
121 21	-.578	+.342	149 .67	1.00

90% Error of the latitudes and departures = .65
Scale Factor = 1.00113989 +/- .00108111
Rotation = - 0 Deg 15 Min 47.8 Sec +/- 0 Deg 03 Min 42 Sec

-->>>> Change scale to 1.00000000 and adjust the solution

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated

(transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) --> PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
107 7	-.380	+.431	131 .57	1.00
108 8	-.370	+.357	136 .51	1.00
109 9	-.249	+.548	114 .60	1.00
111 11	-.812	-.440	208 .92	1.00
112 12	+.008	-.431	271 .43	1.00
113 13	+.091	-.314	286 .33	1.00
114 14	+.241	-.455	297 .51	1.00
115 15	+.300	+.392	52 .49	1.00
116 16	+.564	-.521	317 .77	1.00
117 17	+.097	+.541	79 .55	1.00
118 18	+.911	-.316	340 .96	1.00
119 19	+.011	+.115	84 .12	1.00
120 20	-.113	-.284	248 .31	1.00
121 21	-.297	+.378	128 .48	1.00

90% Error of the latitudes and departures = .69
Scale Factor = 1.00000000 +/- .00114726
Rotation = - 0 Deg 15 Min 47.8 Sec +/- 0 Deg 03 Min 56 Sec

Processing point pairs in file CEM.PRS

Input coordinates of corresponding points
System One System Two (fixed)

PT#	NORTH	EAST	PT#	NORTH	EAST	WEIGHT
7	10467.031	9406.804	107	124.000	100.000	1.00
8	10455.041	9406.786	108	112.000	100.000	1.00
9	10443.162	9407.032	109	100.000	100.000	1.00
11	10487.598	9405.836	111	145.000	100.000	1.00
12	10511.418	9405.740	112	168.000	100.000	1.00
13	10517.502	9405.829	113	174.000	100.000	1.00
14	10541.651	9405.578	114	198.000	100.000	1.00
15	10725.708	9405.580	115	382.000	100.000	1.00
16	10786.082	9428.391	116	442.000	124.000	1.00
17	10785.725	9453.452	117	442.000	148.000	1.00
18	10810.318	9404.485	118	466.000	100.000	1.00
19	10845.638	9452.751	119	502.000	148.000	1.00
20	10869.514	9452.242	120	526.000	148.000	1.00
21	10899.330	9452.766	121	556.000	148.000	1.00

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) --> PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
7 107	+.168	-.446	290 .48	1.00
8 108	+.144	-.373	291 .40	1.00
9 109	+.010	-.564	271 .56	1.00
11 111	+.620	+.426	34 .75	1.00

12	112	-.173	+.413	112	.45	1.00
13	113	-.249	+.296	130	.39	1.00
14	114	-.371	+.435	130	.57	1.00
15	115	-.215	-.411	242	.46	1.00
16	116	-.414	+.527	128	.67	1.00
17	117	+.058	-.503	276	.51	1.00
18	118	-.732	+.294	158	.79	1.00
19	119	+.211	-.077	339	.22	1.00
20	120	+.360	+.321	41	.48	1.00
21	121	+.582	-.339	329	.67	1.00

90% Error of the latitudes and departures = .65
 Scale Factor = .99885114 +/- .00107864
 Rotation = + 0 Deg 15 Min 47.8 Sec +/- 0 Deg 03 Min 42 Sec

----->>>> Change scale to 1.00000000 and adjust the solution

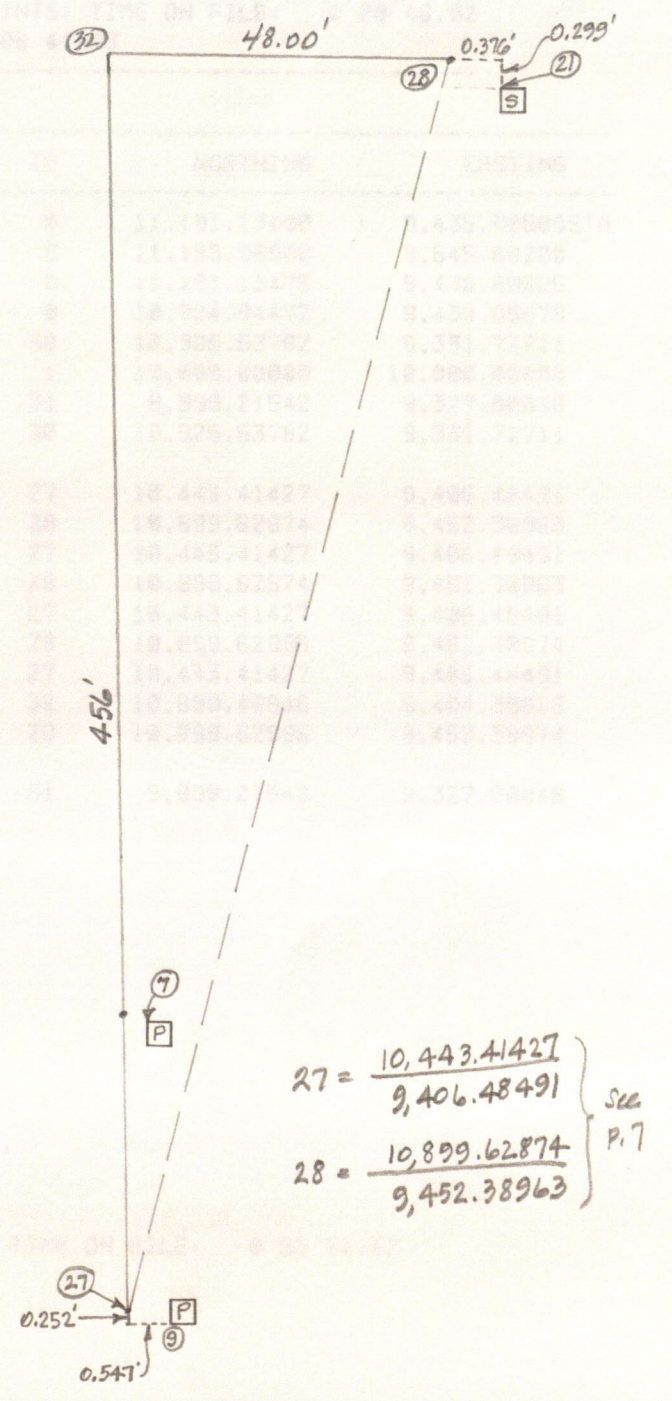
TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) --> PT#(2)	LAT	DEP	AZMUTH/DIST	WEIGHT
7 107	+.382	-.429	311 .57	1.00
8 108	+.372	-.355	316 .51	1.00
9 109	+.252	-.547	294 .60	1.00
11 111	+.810	+.444	28 .92	1.00
12 112	-.010	+.431	91 .43	1.00
13 113	-.093	+.314	106 .33	1.00
14 114	-.243	+.454	118 .51	1.00
15 115	-.298	-.393	232 .49	1.00
16 116	-.566	+.518	137 .77	1.00
17 117	-.094	-.541	260 .55	1.00
18 118	-.912	+.312	161 .96	1.00
19 119	-.010	-.115	264 .12	1.00
20 120	+.112	+.284	68 .31	1.00
21 121	+.299	-.376	308 .48	1.00

use

90% Error of the latitudes and departures = .69
 Scale Factor = 1.00000000 +/- .00114594
 Rotation = + 0 Deg 15 Min 47.8 Sec +/- 0 Deg 03 Min 56 Sec



COORDINATES STORED

COORDINATE FILE: 0951WC LENGTH = 104 POINTS; TIME ON FILE: 0 28 46.92
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				0	11,191.13400	9,436.60500
START				5	11,189.96900	9,645.60200
5	TRAV NA	270 19 10.50	209.00000	0	11,191.13475	9,436.60525
0	TRAV NA	179 41 13.70	266.19400	0	10,924.94472	9,438.05878
0	TRAV NA	270 19 10.50	106.33333	30	10,925.53782	9,331.72711
START				1	10,000.00000	10,000.00000
1	TRAV NA	269 55 59.54	673.00000	31	9,999.21542	9,327.00046
31	INV NA	0 17 32.48	926.33446	30	10,925.53782	9,331.72711
ENTER & ASSIGN						
				27	10,443.41427	9,406.48491
				28	10,899.62874	9,452.38963
START				27	10,443.41427	9,406.48491
27	INV NA	5 44 44.93	458.51814	28	10,899.62874	9,452.38963
START				27	10,443.41427	9,406.48491
27	TRAV NE	5 44 44.93	458.51936	28	10,899.62995	9,452.38974
START				27	10,443.41427	9,406.48491
27	TRAV NW	0 15 47.49	456.00000	32	10,899.40946	9,404.39025
32	INV NE	89 44 12.49	48.00000	28	10,899.62995	9,452.38974
OFFSETS FROM A LINE						
				31	9,999.21542	9,327.00046
BASE BRG NE 0 17 32.48						
PT	BASE	DIST	OFFSET			
10	432.89364		113.22543			
27	444.59864		77.21688			
29	489.24173		-5.76468			
26	447.20982		-39.97482			
23	838.27803		-8.48424			
24	831.38974		-42.25052			
22	838.59975		-8.02542			
32	900.57720		72.79552			
30	926.33446		0.00000			
5	1192.36375		312.52154			
33	1796.86461		97.13725			

TIME FOR THIS RUN: 0 27 04.51; TOTAL TIME ON FILE: 0 55 51.43
COORDINATES STORED

ADJUSTED COORDINATES - Adjustment of the enlarged control traverse for a new addition to the Danville South Cemetery. Given coordinates are taken from the corner.

Station	North	East	Station	North	East
1	10870	10681	35	10870	10681
2	10870	10681	36	10870	10681
3	10870	10681	37	10870	10681
4	10870	10681	38	10870	10681
5	10870	10681	39	10870	10681
6	10870	10681	40	10870	10681
7	10870	10681	41	10870	10681
8	10870	10681	42	10870	10681
9	10870	10681	43	10870	10681
10	10870	10681	44	10870	10681
11	10870	10681	45	10870	10681
12	10870	10681	46	10870	10681
13	10870	10681	47	10870	10681
14	10870	10681	48	10870	10681
15	10870	10681	49	10870	10681
16	10870	10681	50	10870	10681
17	10870	10681	51	10870	10681
18	10870	10681	52	10870	10681
19	10870	10681	53	10870	10681
20	10870	10681	54	10870	10681
21	10870	10681	55	10870	10681
22	10870	10681	56	10870	10681
23	10870	10681	57	10870	10681
24	10870	10681	58	10870	10681
25	10870	10681	59	10870	10681
26	10870	10681	60	10870	10681
27	10870	10681	61	10870	10681
28	10870	10681	62	10870	10681
29	10870	10681	63	10870	10681
30	10870	10681	64	10870	10681
31	10870	10681	65	10870	10681
32	10870	10681	66	10870	10681
33	10870	10681	67	10870	10681
34	10870	10681	68	10870	10681
35	10870	10681	69	10870	10681
36	10870	10681	70	10870	10681
37	10870	10681	71	10870	10681
38	10870	10681	72	10870	10681
39	10870	10681	73	10870	10681
40	10870	10681	74	10870	10681
41	10870	10681	75	10870	10681
42	10870	10681	76	10870	10681
43	10870	10681	77	10870	10681
44	10870	10681	78	10870	10681
45	10870	10681	79	10870	10681
46	10870	10681	80	10870	10681
47	10870	10681	81	10870	10681
48	10870	10681	82	10870	10681
49	10870	10681	83	10870	10681
50	10870	10681	84	10870	10681
51	10870	10681	85	10870	10681
52	10870	10681	86	10870	10681
53	10870	10681	87	10870	10681
54	10870	10681	88	10870	10681
55	10870	10681	89	10870	10681
56	10870	10681	90	10870	10681
57	10870	10681	91	10870	10681
58	10870	10681	92	10870	10681
59	10870	10681	93	10870	10681
60	10870	10681	94	10870	10681
61	10870	10681	95	10870	10681
62	10870	10681	96	10870	10681
63	10870	10681	97	10870	10681
64	10870	10681	98	10870	10681
65	10870	10681	99	10870	10681
66	10870	10681	100	10870	10681

ADJUSTED COORDINATES

Station	North	East
2	10638.81500	9968.11100
3	10643.62900	9993.07100
4	10680.96107	9688.90531
5	11189.96900	9645.60200
6	10661.29182	9681.15260
7	10467.04680	9406.78089
9	10443.18768	9407.00484
34	11032.66398	9713.03964
35	10666.54642	9685.32559
37	10443.03652	9478.38186
38	10419.14308	9478.59889
39	10403.48909	9515.67472
40	10359.43285	9569.96587
41	10267.99868	9683.09607
42	10292.10582	9977.10125
44	10518.03134	9541.58231
45	10518.09554	9493.58235
46	10517.96714	9589.58227
47	10359.25215	9515.82236
48	10346.59322	9479.55195
49	10339.79872	9493.65407
50	10340.01945	9517.39615

Station	North	East
1	10870	10681
2	10870	10681
3	10870	10681
4	10870	10681
5	10870	10681
6	10870	10681
7	10870	10681
8	10870	10681
9	10870	10681
10	10870	10681
11	10870	10681
12	10870	10681
13	10870	10681
14	10870	10681
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20	10870	10681
21	10870	10681
22	10870	10681
23	10870	10681
24	10870	10681
25	10870	10681
26	10870	10681
27	10870	10681
28	10870	10681
29	10870	10681
30	10870	10681
31	10870	10681
32	10870	10681
33	10870	10681
34	10870	10681
35	10870	10681
36	10870	10681
37	10870	10681
38	10870	10681
39	10870	10681
40	10870	10681
41	10870	10681
42	10870	10681
43	10870	10681
44	10870	10681
45	10870	10681
46	10870	10681
47	10870	10681
48	10870	10681
49	10870	10681
50	10870	10681
51	10870	10681
52	10870	10681
53	10870	10681
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64	10870	10681
65	10870	10681
66	10870	10681
67	10870	10681
68	10870	10681
69	10870	10681
70	10870	10681
71	10870	10681
72	10870	10681
73	10870	10681
74	10870	10681
75	10870	10681
76	10870	10681
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81	10870	10681
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83	10870	10681
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85	10870	10681
86	10870	10681
87	10870	10681
88	10870	10681
89	10870	10681
90	10870	10681
91	10870	10681
92	10870	10681
93	10870	10681
94	10870	10681
95	10870	10681
96	10870	10681
97	10870	10681
98	10870	10681
99	10870	10681
100	10870	10681

COORDINATE FILE: 0951WC LENGTH = 104 POINTS; TIME ON FILE: 0 55 51.43
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
ENTER & ASSIGN			4	10,680.96107	9,688.90531
			6	10,661.29182	9,681.15260
			7	10,467.04680	9,406.78089
			9	10,443.18768	9,407.00484
			34	11,032.66398	9,713.03964
			35	10,666.54642	9,685.32559
			37	10,443.03652	9,478.38186
			38	10,419.14308	9,478.59889
			39	10,403.48909	9,515.67472
			40	10,359.43285	9,569.96587
			41	10,267.99868	9,683.09607
			42	10,292.10582	9,977.10125
			44	10,518.03134	9,541.58231
			45	10,518.09554	9,493.58235
			46	10,517.96714	9,589.58227
			47	10,359.25215	9,515.82236
			48	10,346.59322	9,479.55195
			49	10,339.79872	9,493.65407
			50	10,340.01945	9,517.39615

ENTER & ASSIGN

~~36 10,823.41200 9,991.03900~~

COORDS. OF 36 FROM COMER SURVEY.

ENTER & ASSIGN

43 10,823.41200 9,991.03900

COORDS. OF 43 FROM COMER SURVEY.

START

39	INV SE	0 11 28.40	44.23719	47	10,359.25215	9,515.82236
47	INV NE	89 48 31.61	54.14381	40	10,359.43285	9,569.96587
40	B-B NW	0 11 28.39	44.23719	36	10,403.66979	9,569.81823
36	B-B SW	89 48 31.61	54.14381	39	10,403.48909	9,515.67472

LINE TANGENT TO CIRCLES

41 10,267.99868 9,683.09607

RADIUS = 0.000

42 10,292.10582 9,977.10125

RADIUS = 24.000

TANGENT PTS (2nd,1st)

51 10,268.10582 9,977.11000

41 10,267.99868 9,683.09607

51 10,268.10582 9,977.11000

OFFSETS FROM A LINE

41 10,267.99868 9,683.09607

BASE BRG SW 89 58 44.84

PT	BASE DIST	OFFSET
42	-294.01395	24.00000
40	113.09687	91.47539
47	167.24045	91.31442
48	203.51547	78.66871
49	189.41582	71.86907
50	165.67366	72.08115

COORDINATE FILE: WASHINGTON LENGTH = 104 POINTS; TIME ON FILE: 0 22 51.43
 WASHINGTON SOUTH CEMETERY ***** JOB #1993

POINT TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
4				10,880.888	10,880.888
8				10,881.788	10,881.788
7				10,887.088	10,887.088
9				10,442.188	10,442.188
34				11,032.888	11,032.888
32				10,888.888	10,888.888
37				10,442.088	10,442.088
36				10,418.188	10,418.188
38				10,402.488	10,402.488
40				10,328.488	10,328.488
41				10,287.888	10,287.888
42				10,282.188	10,282.188
44				10,218.888	10,218.888
45				10,218.888	10,218.888
46				10,217.888	10,217.888
47				10,228.288	10,228.288
48				10,248.888	10,248.888
49				10,228.288	10,228.288
50				10,248.888	10,248.888
51				10,248.888	10,248.888
52				10,248.888	10,248.888
53				10,248.888	10,248.888
54				10,248.888	10,248.888
55				10,248.888	10,248.888
56				10,248.888	10,248.888
57				10,248.888	10,248.888
58				10,248.888	10,248.888
59				10,248.888	10,248.888
60				10,248.888	10,248.888
61				10,248.888	10,248.888
62				10,248.888	10,248.888
63				10,248.888	10,248.888
64				10,248.888	10,248.888
65				10,248.888	10,248.888
66				10,248.888	10,248.888
67				10,248.888	10,248.888
68				10,248.888	10,248.888
69				10,248.888	10,248.888
70				10,248.888	10,248.888
71				10,248.888	10,248.888
72				10,248.888	10,248.888
73				10,248.888	10,248.888
74				10,248.888	10,248.888
75				10,248.888	10,248.888
76				10,248.888	10,248.888
77				10,248.888	10,248.888
78				10,248.888	10,248.888
79				10,248.888	10,248.888
80				10,248.888	10,248.888
81				10,248.888	10,248.888
82				10,248.888	10,248.888
83				10,248.888	10,248.888
84				10,248.888	10,248.888
85				10,248.888	10,248.888
86				10,248.888	10,248.888
87				10,248.888	10,248.888
88				10,248.888	10,248.888
89				10,248.888	10,248.888
90				10,248.888	10,248.888
91				10,248.888	10,248.888
92				10,248.888	10,248.888
93				10,248.888	10,248.888
94				10,248.888	10,248.888
95				10,248.888	10,248.888
96				10,248.888	10,248.888
97				10,248.888	10,248.888
98				10,248.888	10,248.888
99				10,248.888	10,248.888
100				10,248.888	10,248.888

38	204.44209	151.21891
37	204.65041	175.11243
10	240.60320	163.61470
27	276.54722	175.51638
9	276.02737	175.28960
3	-310.11179	375.51734
6	1.80015	393.29382
44	141.42264	250.08421
45	189.42257	250.16590
46	93.42270	250.00252

OFFSETS FROM A LINE

27 10,443.41427 9,406.48491

BASE BRG NW 0 15 47.49

PT	BASE DIST	OFFSET	PLAT
48	-97.15567	72.62152	
38	-24.60219	72.00173	
37	-0.70801	71.89446	
47	-84.66348	108.94969	
39	-40.42633	109.00526	
10	-12.05359	35.89336	
49	-104.01487	86.69228	
50	-103.90321	110.43512	
45	74.28040	87.43957	28.00
44	73.99571	135.43873	136.00
46	73.71102	183.43789	184.00
41	-176.68437	275.80246	
6	216.61355	275.66562	276.00
34	587.83532	309.25824	308.00
3	197.51811	587.49960	588.00
43	377.30854	586.29346	588.00

OFFSETS FROM A LINE

45 10,518.09554 9,493.58235

BASE BRG SE 89 55 24.12

PT	BASE DIST	OFFSET	PLAT
13	-87.75206	0.71114	0.00
12	-87.83379	6.79460	6.00
11	-87.70520	30.61444	29.00
7	-86.73310	51.16479	50.00
8	-86.71244	63.17038	62.00
9	-86.47724	75.02359	74.00
27	-86.99748	74.79770	74.00
15	-88.28021	-207.49485	208.00
37	-15.10008	75.07928	74.00
38	-14.85110	98.97241	98.00
48	-13.80100	171.52093	170.00
39	22.24564	114.57680	
36	76.38886	114.32368	
44	48.00000	0.00000	
46	96.00001	0.00000	
6	187.37856	-143.44703	
3	499.32030	-126.20141	
41	189.84806	249.84316	
51	483.86157	249.34278	

TIME FOR THIS RUN: 0 41 54.98; TOTAL TIME ON FILE: 1 37 46.41
 COORDINATES STORED

BASE BRG	SE	89	55	24.12
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COORDINATE FILE: 0951WC LENGTH = 104 POINTS; TIME ON FILE: 1 37 46.41
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
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ENTER & ASSIGN			52	12,003.77100	9,637.11900
			53	11,615.99200	9,674.10500
OFFSETS FROM A LINE			5	11,189.96900	9,645.60200

BASE BRG SE 0 35 50.01

PT	BASE DIST	OFFSET	PLAT
52	-813.84621	0.00000	0.00
53	-425.70276	-32.94204	33.00
34	157.99940	-65.79433	
6	529.01902	-30.03808	
21	288.61347	195.85533	
20	318.42166	196.68986	
19	342.30174	196.43004	
18	377.11678	245.06084	
16	401.60129	221.40882	
17	402.21898	196.35276	
15	461.73366	244.84837	
14	645.78081	246.76815	
13	669.93146	246.76891	
12	676.01355	246.92219	
11	699.83325	247.07375	
7	720.39361	246.34340	
8	732.39861	246.46393	
9	744.25377	246.36816	
46	671.38144	63.02119	
44	670.81692	111.01788	
45	670.25241	159.01456	
37	745.14891	174.99659	
38	769.04331	175.02862	
48	841.59917	174.83183	
43	370.13770	-341.59748	
3	549.93211	-341.75543	
1	1193.59837	-341.97529	

33.00000
32.94204
0.05796

shot taken on center of marker. Use
-65.56433 for W. edge of marker.

TIME FOR THIS RUN: 0 07 09.14; TOTAL TIME ON FILE: 1 44 55.55
COORDINATES STORED

181.51881 204.44288
172.11243 204.82041
183.81470 240.80320
178.81828 278.84722
178.82880 278.85727
-310.11728 278.81728
303.25282 1.00000
141.45284 141.45284
189.45284 189.45284
220.00282 220.00282

BASE BRG NW 0 12 47.48
PT BASE DIST OFFSET
48 -87.18887 72.81882
38 -24.80218 72.80173
37 -0.70801 71.80448
47 -84.88348 108.84882
30 -40.42823 108.80228
16 -12.02228 32.80338
48 -104.01487 88.80328
20 -102.80221 110.43212
48 74.28040 87.43887
41 73.28271 132.43873
46 73.21102 182.43788
14 -128.88437 278.80248
8 218.81282 278.80282
31 287.83232 288.28824
43 187.21811 287.48880
43 277.20824 288.28348

BASE BRG SE 88 22 24.12
PT BASE DIST OFFSET
13 -87.72208 0.71114
12 -87.83378 8.28480
11 -87.70220 30.81444
7 -88.72310 21.18478
6 -88.71244 83.17038
8 -88.47224 72.02288
37 -88.93748 74.78720
18 -88.28021 -207.48488
37 -12.16008 28.07028
38 -14.82110 88.87241
40 -13.80100 171.22093
38 22.24284 114.27880
38 78.38888 114.32288
44 48.00000 0.00000
46 92.00001 0.00000
8 187.37282 -142.44202
3 188.20202 -128.20411
41 188.84888 248.84218
21 483.88127 248.24278

10,443.41251 27

10,518.02224 42

TIME FOR THIS RUN: 0 41 24.89; TOTAL TIME ON FILE: 1 37 46.41
COORDINATES STORED

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 1 37 48.41
DANVILLE SOUTH CEMETERY ***** JOB #1993

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 1 46 08.82
DANVILLE SOUTH CEMETERY ***** JOB #1993

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			35	10,666.54642	9,685.32559
35 TRAV SE	86 34 37.06	446.27000	60	10,639.90064	10,130.79940
60 S.S. SE	59 39 18.06	94.01600	61	10,592.40325	10,211.93513
60 S.S. SE	36 41 37.06	88.18400	62	10,569.19099	10,183.49251
60 TRAV SE	46 53 12.06	104.68600	63	10,568.35368	10,207.22054
START			60	10,639.90064	10,130.79940
60 S.S. SE	48 01 13.06	71.04500	64	10,592.38096	10,183.61296
60 S.S. SE	56 16 57.06	63.57600	65	10,604.60971	10,183.68095
60 S.S. SE	18 02 24.06	74.97800	66	10,568.60852	10,154.01867
60 S.S. SE	22 27 52.06	48.28500	67	10,595.27966	10,149.24960
60 S.S. SW	3 36 27.94	45.99100	68	10,594.00078	10,127.90538
60 S.S. SW	5 38 07.94	25.45500	69	10,614.56867	10,128.29971
60 S.S. SW	39 17 05.94	90.64400	70	10,569.74162	10,073.40561
60 S.S. NE	50 34 11.94	95.20800	71	10,700.37060	10,204.33815
60 S.S. NE	42 52 46.94	108.67600	72	10,719.53667	10,204.74922
60 S.S. NE	32 57 37.94	100.65300	73	10,724.35308	10,185.56080
60 S.S. NE	41 58 06.94	81.55100	74	10,700.53474	10,185.33444
60 S.S. NW	4 53 49.06	111.11300	75	10,750.60806	10,121.31434
60 S.S. NW	20 34 44.06	120.75600	76	10,752.95108	10,088.35403
60 S.S. NW	16 57 02.06	143.49000	77	10,777.15695	10,088.96538
60 S.S. NW	14 23 53.06	165.72400	78	10,800.41950	10,089.59092
60 S.S. NW	25 33 42.06	153.19300	79	10,778.09930	10,064.69929
60 S.S. NW	28 37 51.06	158.11000	80	10,778.67775	10,055.03870
60 TRAV NW	50 42 45.06	263.50400	81	10,806.75448	9,926.85295
START			35	10,666.54642	9,685.32559
35 S.S. SE	84 40 01.06	242.87400	82	10,643.97256	9,927.14825
35 S.S. SE	84 06 43.06	211.32900	83	10,644.86726	9,895.53967
35 S.S. SE	83 28 50.06	187.29100	84	10,645.28138	9,871.40546
35 S.S. SE	78 56 10.06	104.60000	85	10,646.47335	9,787.98148
35 S.S. SE	84 44 44.06	93.58100	86	10,657.97641	9,778.51335
35 S.S. SE	82 18 16.06	51.51000	87	10,659.64877	9,736.37167
35 S.S. SE	76 48 32.06	27.79300	88	10,660.20407	9,712.38525
35 S.S. SE	11 57 11.06	254.39000	89	10,417.67222	9,738.01242
35 S.S. SE	13 51 34.06	220.49000	90	10,452.47572	9,738.14202
35 S.S. SE	15 23 39.06	197.43500	91	10,476.19492	9,737.73634
35 S.S. SE	13 50 39.06	117.67100	92	10,552.29376	9,713.48217
35 S.S. SE	17 10 02.06	94.75800	93	10,576.01015	9,713.29453
35 S.S. SE	37 34 28.06	115.93400	94	10,574.66159	9,756.02121
35 S.S. SE	32 09 19.06	108.77900	95	10,574.45317	9,743.21950
35 S.S. SE	41 00 29.06	88.92500	96	10,599.44209	9,743.67509
35 S.S. SE	46 32 03.06	98.01800	97	10,599.11771	9,756.46558
35 S.S. SE	22 32 45.06	71.63200	98	10,600.38904	9,712.79092
35 S.S. SE	32 32 22.06	50.44700	99	10,624.01853	9,712.46004
35 S.S. SW	16 41 33.94	111.17600	100	10,560.05551	9,653.39145
35 S.S. SW	15 07 01.94	122.12000	101	10,548.65246	9,653.47738
35 S.S. SW	12 05 41.94	151.63400	102	10,518.27845	9,653.55327
35 S.S. SW	10 35 14.94	169.43000	103	10,500.00088	9,654.19510
35 S.S. SW	20 41 38.94	190.56800	104	10,488.27384	9,617.98280
35 S.S. SW	24 11 15.94	136.45000	105	10,542.07568	9,629.41818
35 S.S. SW	20 30 33.94	158.39100	106	10,518.19510	9,629.83148

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			35	10,666.54642	9,685.32559
35 TRAV SE	86 34 37.06	446.27000	60	10,639.90064	10,130.79940
60 S.S. SE	59 39 18.06	94.01600	61	10,592.40325	10,211.93513
60 S.S. SE	36 41 37.06	88.18400	62	10,569.19099	10,183.49251
60 TRAV SE	46 53 12.06	104.68600	63	10,568.35368	10,207.22054
START			60	10,639.90064	10,130.79940
60 S.S. SE	48 01 13.06	71.04500	64	10,592.38096	10,183.61296
60 S.S. SE	56 16 57.06	63.57600	65	10,604.60971	10,183.68095
60 S.S. SE	18 02 24.06	74.97800	66	10,568.60852	10,154.01867
60 S.S. SE	22 27 52.06	48.28500	67	10,595.27966	10,149.24960
60 S.S. SW	3 36 27.94	45.99100	68	10,594.00078	10,127.90538
60 S.S. SW	5 38 07.94	25.45500	69	10,614.56867	10,128.29971
60 S.S. SW	39 17 05.94	90.64400	70	10,569.74162	10,073.40561
60 S.S. NE	50 34 11.94	95.20800	71	10,700.37060	10,204.33815
60 S.S. NE	42 52 46.94	108.67600	72	10,719.53667	10,204.74922
60 S.S. NE	32 57 37.94	100.65300	73	10,724.35308	10,185.56080
60 S.S. NE	41 58 06.94	81.55100	74	10,700.53474	10,185.33444
60 S.S. NW	4 53 49.06	111.11300	75	10,750.60806	10,121.31434
60 S.S. NW	20 34 44.06	120.75600	76	10,752.95108	10,088.35403
60 S.S. NW	16 57 02.06	143.49000	77	10,777.15695	10,088.96538
60 S.S. NW	14 23 53.06	165.72400	78	10,800.41950	10,089.59092
60 S.S. NW	25 33 42.06	153.19300	79	10,778.09930	10,064.69929
60 S.S. NW	28 37 51.06	158.11000	80	10,778.67775	10,055.03870
60 TRAV NW	50 42 45.06	263.50400	81	10,806.75448	9,926.85295
START			35	10,666.54642	9,685.32559
35 S.S. SE	84 40 01.06	242.87400	82	10,643.97256	9,927.14825
35 S.S. SE	84 06 43.06	211.32900	83	10,644.86726	9,895.53967
35 S.S. SE	83 28 50.06	187.29100	84	10,645.28138	9,871.40546
35 S.S. SE	78 56 10.06	104.60000	85	10,646.47335	9,787.98148
35 S.S. SE	84 44 44.06	93.58100	86	10,657.97641	9,778.51335
35 S.S. SE	82 18 16.06	51.51000	87	10,659.64877	9,736.37167
35 S.S. SE	76 48 32.06	27.79300	88	10,660.20407	9,712.38525
35 S.S. SE	11 57 11.06	254.39000	89	10,417.67222	9,738.01242
35 S.S. SE	13 51 34.06	220.49000	90	10,452.47572	9,738.14202
35 S.S. SE	15 23 39.06	197.43500	91	10,476.19492	9,737.73634
35 S.S. SE	13 50 39.06	117.67100	92	10,552.29376	9,713.48217
35 S.S. SE	17 10 02.06	94.75800	93	10,576.01015	9,713.29453
35 S.S. SE	37 34 28.06	115.93400	94	10,574.66159	9,756.02121
35 S.S. SE	32 09 19.06	108.77900	95	10,574.45317	9,743.21950
35 S.S. SE	41 00 29.06	88.92500	96	10,599.44209	9,743.67509
35 S.S. SE	46 32 03.06	98.01800	97	10,599.11771	9,756.46558
35 S.S. SE	22 32 45.06	71.63200	98	10,600.38904	9,712.79092
35 S.S. SE	32 32 22.06	50.44700	99	10,624.01853	9,712.46004
35 S.S. SW	16 41 33.94	111.17600	100	10,560.05551	9,653.39145
35 S.S. SW	15 07 01.94	122.12000	101	10,548.65246	9,653.47738
35 S.S. SW	12 05 41.94	151.63400	102	10,518.27845	9,653.55327
35 S.S. SW	10 35 14.94	169.43000	103	10,500.00088	9,654.19510
35 S.S. SW	20 41 38.94	190.56800	104	10,488.27384	9,617.98280
35 S.S. SW	24 11 15.94	136.45000	105	10,542.07568	9,629.41818
35 S.S. SW	20 30 33.94	158.39100	106	10,518.19510	9,629.83148

***** COGO *****

***** COGO *****

WILLIE SOUTH CEMETERY ***** COORD *****
NORTH POINT FILE BEARING LENGTH = 524 POINTS TIME ON FILE 1 48 08 85

PT	BEARING	DISTANCE	NORTHING	EASTING
108	138.45000	108	10,818.1818	9,629.8181
109	138.45000	109	10,818.1818	9,629.8181
110	138.45000	110	10,818.1818	9,629.8181
111	138.45000	111	10,818.1818	9,629.8181
112	138.45000	112	10,818.1818	9,629.8181
113	138.45000	113	10,818.1818	9,629.8181
114	138.45000	114	10,818.1818	9,629.8181
115	138.45000	115	10,818.1818	9,629.8181
116	138.45000	116	10,818.1818	9,629.8181
117	138.45000	117	10,818.1818	9,629.8181
118	138.45000	118	10,818.1818	9,629.8181
119	138.45000	119	10,818.1818	9,629.8181
120	138.45000	120	10,818.1818	9,629.8181
121	138.45000	121	10,818.1818	9,629.8181
122	138.45000	122	10,818.1818	9,629.8181
123	138.45000	123	10,818.1818	9,629.8181
124	138.45000	124	10,818.1818	9,629.8181
125	138.45000	125	10,818.1818	9,629.8181
126	138.45000	126	10,818.1818	9,629.8181
127	138.45000	127	10,818.1818	9,629.8181
128	138.45000	128	10,818.1818	9,629.8181
129	138.45000	129	10,818.1818	9,629.8181
130	138.45000	130	10,818.1818	9,629.8181
131	138.45000	131	10,818.1818	9,629.8181
132	138.45000	132	10,818.1818	9,629.8181
133	138.45000	133	10,818.1818	9,629.8181
134	138.45000	134	10,818.1818	9,629.8181

35	S.S. SW	25	10	58.94	130.67500	107	10,548.29168	9,629.72189
35	S.S. NW	53	38	02.06	69.84900	108	10,707.96286	9,629.08004
35	S.S. NW	62	52	18.06	90.40900	109	10,707.77155	9,604.86270
35	S.S. NW	56	25	39.06	96.51600	110	10,719.91894	9,604.90972
35	S.S. NW	46	34	16.06	77.70500	111	10,719.96500	9,628.89402
35	S.S. NW	10	23	53.06	182.31500	112	10,845.86736	9,652.42027
35	S.S. NW	9	11	27.06	206.52500	113	10,870.42001	9,652.33868
35	S.S. NW	7	01	19.06	273.99500	114	10,938.48628	9,651.82976
35	S.S. NW	9	24	24.06	276.71900	115	10,939.54441	9,640.09835
35	S.S. NW	11	55	04.06	278.73500	116	10,939.27326	9,627.76456
35	S.S. NW	6	26	27.06	298.51000	117	10,963.17228	9,651.83950
35	S.S. NW	5	58	10.06	322.51600	118	10,987.31357	9,651.78445
35	S.S. NE	3	01	56.94	345.46400	119	11,011.52667	9,703.60136
35	S.S. NE	9	49	58.94	346.71500	120	11,008.16803	9,744.53678
35	S.S. NE	3	30	01.94	297.86200	121	10,963.85268	9,703.51242
35	S.S. NE	3	39	18.94	285.77600	122	10,951.74107	9,703.54469
35	S.S. NW	1	06	29.06	297.62900	123	10,964.11976	9,679.56995
35	S.S. NW	1	08	04.06	285.56900	124	10,952.05944	9,679.67167
35	S.S. NE	6	28	40.94	241.34800	125	10,906.35345	9,712.55504
35	S.S. NE	12	02	41.94	244.66000	126	10,905.82000	9,736.38113
35	S.S. NE	6	48	08.94	228.96800	127	10,893.90257	9,712.44616
35	S.S. NE	4	57	59.94	218.24900	128	10,883.97595	9,704.22069
35	S.S. NW	1	24	35.06	217.92400	129	10,884.40446	9,679.96420
35	S.S. NE	5	36	05.94	193.83100	130	10,859.45180	9,704.24574
35	S.S. NE	16	57	51.94	175.49200	131	10,834.40208	9,736.53028
35	S.S. NE	10	31	21.94	146.93500	132	10,811.01033	9,712.15976
35	S.S. NE	11	06	20.94	139.60000	133	10,803.53215	9,712.21556
35	S.S. NE	8	00	21.94	138.59600	134	10,803.79156	9,704.62902
35	S.S. NE	9	33	43.94	114.68900	135	10,779.64191	9,704.37753
35	S.S. NE	45	53	02.94	126.36400	136	10,754.50985	9,776.04657
35	S.S. NE	54	25	47.94	111.35400	137	10,731.32075	9,775.90152
35	S.S. NE	10	36	17.94	103.25800	138	10,768.04071	9,704.32887
35	S.S. NE	11	54	16.94	91.34500	139	10,755.92678	9,704.16865
35	S.S. NW	2	46	59.06	101.54400	140	10,767.97065	9,680.39515
35	S.S. NW	3	15	14.06	89.60900	141	10,756.01095	9,680.23931
35	S.S. NE	16	31	23.94	68.10100	142	10,731.83513	9,704.69389
35	S.S. NE	25	15	22.94	45.30500	143	10,707.52061	9,704.65584
35	S.S. NE	48	32	12.94	26.01000	144	10,683.76861	9,704.81703
35	S.S. NE	56	31	48.94	32.36500	145	10,684.39560	9,712.32374
35	TRAV NE	71	10	49.94	53.94500	146	10,683.94839	9,736.38668

OFFSETS FROM A LINE 5 11,189.96900 9,645.60200

BASE	BRG	SE	0	35	50.01	PT	BASE DIST	OFFSET
119						119	179.03719	-56.13625
120						120	182.82232	-97.03443
121						121	226.70766	-55.55039
122						122	238.81895	-55.45641
123						123	226.19103	-31.61200
124						124	238.25175	-31.58800
125						125	284.29801	-63.99318
126						126	285.07978	-87.81242
127						127	296.74709	-63.75453
128						128	306.58743	-55.42603
129						129	305.90611	-31.17533
130						130	331.11051	-55.19545
131						131	356.49538	-87.21714
132						132	379.63184	-62.60412
133						133	387.11020	-62.58198
134						134	386.77172	-54.99855

10,853.41500	11,782.28100	33	11,782.28100
10,853.41500	11,782.28100	32	11,782.28100
10,853.41500	11,782.28100	31	11,782.28100
10,853.41500	11,782.28100	30	11,782.28100
10,853.41500	11,782.28100	29	11,782.28100
10,853.41500	11,782.28100	28	11,782.28100
10,853.41500	11,782.28100	27	11,782.28100
10,853.41500	11,782.28100	26	11,782.28100
10,853.41500	11,782.28100	25	11,782.28100
10,853.41500	11,782.28100	24	11,782.28100
10,853.41500	11,782.28100	23	11,782.28100
10,853.41500	11,782.28100	22	11,782.28100
10,853.41500	11,782.28100	21	11,782.28100
10,853.41500	11,782.28100	20	11,782.28100
10,853.41500	11,782.28100	19	11,782.28100
10,853.41500	11,782.28100	18	11,782.28100
10,853.41500	11,782.28100	17	11,782.28100
10,853.41500	11,782.28100	16	11,782.28100
10,853.41500	11,782.28100	15	11,782.28100
10,853.41500	11,782.28100	14	11,782.28100
10,853.41500	11,782.28100	13	11,782.28100
10,853.41500	11,782.28100	12	11,782.28100
10,853.41500	11,782.28100	11	11,782.28100
10,853.41500	11,782.28100	10	11,782.28100
10,853.41500	11,782.28100	9	11,782.28100
10,853.41500	11,782.28100	8	11,782.28100
10,853.41500	11,782.28100	7	11,782.28100
10,853.41500	11,782.28100	6	11,782.28100
10,853.41500	11,782.28100	5	11,782.28100
10,853.41500	11,782.28100	4	11,782.28100
10,853.41500	11,782.28100	3	11,782.28100
10,853.41500	11,782.28100	2	11,782.28100
10,853.41500	11,782.28100	1	11,782.28100

1 37 50.97: TOTAL TIME ON FILE: 3 53 58.83

FOR THIS RUN: COORDINATES STORED

point	weight		
34	158.00	-5.56	2 0.5
119	178.04	-4.14	2 0.5
120	182.82	-5.03	0.5
118	202.71	-4.07	1
117	226.85	-3.87	1
123	226.19	-3.61	1
121	226.71	-3.55	1
122	238.82	-3.46	1
124	238.25	-3.59	1
114	251.53	-3.61	1
115	250.35	-3.89	1
116	250.50	-3.55	1
125	284.30	-3.99	1
126	285.08	-3.81	1
21	288.61	-4.14	1
127	296.75	-3.75	1
128	306.59	-3.43	1
129	305.91	-3.18	1
20	318.42	-3.31	1
113	319.60	-3.41	1
130	331.11	-3.20	1
19	342.30	-3.57	1
112	344.15	-3.23	1
131	356.50	-3.22	1
18	377.12	-2.94	1
132	379.63	-2.60	1
133	387.11	-2.58	1
134	386.77	-3.00	1
16	401.60	-2.59	1
17	402.22	-3.65	1
135	410.92	-2.50	1
138	422.52	-2.33	2

40	422.24	-2.39	2
39	434.63	-2.04	2
41	434.30	-2.11	2
36	436.80	-1.90	1
37	459.98	-1.51	1
42	458.72	-2.31	1
15	461.73	-3.15	1
10	469.60	-2.41	1
11	469.80	-2.39	1
43	483.04	-2.02	1
08	481.81	-2.45	1
09	481.75	-2.24	1
144	506.79	-1.94	1
145	506.24	-1.45	1
146	506.94	-1.51	1
6	529.02	-2.04	0.5
88	530.43	-1.26	1
87	531.24	-1.24	1
86	533.35	-3.36	(rejected)
85	544.95	-0.71	1
84	547.01	-0.11	0.5
83	547.68	-0.24	0.5
82	548.90	+0.16	0.5
3	549.93	-1.76	0.5
99	566.62	-0.96	1
96	591.52	+0.09	1
97	591.97	-0.70	1
98	590.25	-1.04	1
93	614.63	-1.29	1
94	616.42	0.00	1
95	616.50	+0.80	1
100	629.96	-1.22	1
92	638.35	-1.23	1

01	641.36	-1.19	1
05	647.69	-1.06	1
07	641.48	-1.43	1
14	645.78	-1.23	1
13	669.93	-1.23	1
44	670.82	-0.98	4
45	670.25	-0.99	4
46	671.38	-0.98	4
02	671.74	-0.95	1
06	671.57	-1.23	1
12	676.01	-1.08	1
03	690.02	-1.40	1
04	701.37	-1.07	1
11	699.83	-0.93	1
7	720.39	-1.66	1
21	714.70	-0.69	1
8	732.40	-1.54	1
20	738.42	-0.85	1
9	744.25	-1.63	1
39	773.22	-0.36	1
37	745.15	-1.00	1
38	769.04	-0.97	1

001	451.00	000	005	451.00	-1.00	1.00
002	500.000	000	005	500.000	-1.00	1.00
003	570.000	000	005	570.000	-1.00	1.00
004	620.000	000	005	620.000	-1.00	1.00
005	670.000	000	005	670.000	-1.00	1.00
006	720.000	000	005	720.000	-1.00	1.00
007	770.000	000	005	770.000	-1.00	1.00
008	820.000	000	005	820.000	-1.00	1.00
009	870.000	000	005	870.000	-1.00	1.00
010	920.000	000	005	920.000	-1.00	1.00
011	970.000	000	005	970.000	-1.00	1.00
012	1000.000	000	005	1000.000	-1.00	1.00
013	1000.000	000	005	1000.000	-1.00	1.00
014	1000.000	000	005	1000.000	-1.00	1.00
015	1000.000	000	005	1000.000	-1.00	1.00
016	1000.000	000	005	1000.000	-1.00	1.00
017	1000.000	000	005	1000.000	-1.00	1.00
018	1000.000	000	005	1000.000	-1.00	1.00
019	1000.000	000	005	1000.000	-1.00	1.00
020	1000.000	000	005	1000.000	-1.00	1.00

TRANSFORMATION SOLUTION

Transformation Solution: The points in the fixed points in System One. The coordinates are displayed both in the form of latitude/longitude and Universal Transverse Mercator. To obtain System One coordinates from the given coordinates, use Main Menu Option 4. All operations are performed in 8.3.3 use this solution.

PRID - TTCD LAT DEP ALMUTUMBER WAVE

01	451	-1.00	-1.00	000	1.01	00
02	500	-1.00	-1.00	000	1.01	00
03	570	-1.00	-1.00	000	1.01	00
04	620	-1.00	-1.00	000	1.01	00
05	670	-1.00	-1.00	000	1.01	00
06	720	-1.00	-1.00	000	1.01	00
07	770	-1.00	-1.00	000	1.01	00
08	820	-1.00	-1.00	000	1.01	00
09	870	-1.00	-1.00	000	1.01	00
10	920	-1.00	-1.00	000	1.01	00
11	970	-1.00	-1.00	000	1.01	00
12	1000	-1.00	-1.00	000	1.01	00
13	1000	-1.00	-1.00	000	1.01	00
14	1000	-1.00	-1.00	000	1.01	00
15	1000	-1.00	-1.00	000	1.01	00
16	1000	-1.00	-1.00	000	1.01	00
17	1000	-1.00	-1.00	000	1.01	00
18	1000	-1.00	-1.00	000	1.01	00
19	1000	-1.00	-1.00	000	1.01	00
20	1000	-1.00	-1.00	000	1.01	00
21	1000	-1.00	-1.00	000	1.01	00
22	1000	-1.00	-1.00	000	1.01	00
23	1000	-1.00	-1.00	000	1.01	00
24	1000	-1.00	-1.00	000	1.01	00
25	1000	-1.00	-1.00	000	1.01	00
26	1000	-1.00	-1.00	000	1.01	00
27	1000	-1.00	-1.00	000	1.01	00
28	1000	-1.00	-1.00	000	1.01	00
29	1000	-1.00	-1.00	000	1.01	00
30	1000	-1.00	-1.00	000	1.01	00

Determine direction of north-south lot lines.

DATE: 3/24/1994 INPUT FILE = DSC2.DAT
TIME: 14:44 TRANSACTION LOG = DSC2.LOG

ANALYSIS & SOLUTION FOR 2 DIMENSIONAL TRANSFORMATION
FROM
SYSTEM ONE TO SYSTEM TWO BY LEAST SQUARES

Processing point pairs in file DSC2.PRS

Input coordinates of corresponding points

PT#	System One		System Two (fixed)		WEIGHT
	NORTH	EAST	PT#	NORTH	
34	158.000	.000	434	158.000	-5.560 .50
119	179.040	.000	519	179.040	-4.140 .50
120	182.820	.000	520	182.820	-5.080 .50
118	202.710	.000	518	202.710	-4.070 1.00
117	226.850	.000	517	226.850	-3.870 1.00
123	226.190	.000	523	226.190	-3.610 1.00
121	226.710	.000	521	226.710	-3.550 1.00
122	238.820	.000	522	238.820	-3.460 1.00
124	238.250	.000	524	238.250	-3.590 1.00
114	251.530	.000	514	251.530	-3.610 1.00
115	250.350	.000	515	250.350	-3.890 1.00
116	250.500	.000	516	250.500	-3.550 1.00
125	284.300	.000	525	284.300	-3.990 1.00
126	285.080	.000	526	285.080	-3.810 1.00
21	288.610	.000	421	288.610	-4.140 1.00
127	296.750	.000	527	296.750	-3.750 1.00
128	306.590	.000	528	306.590	-3.430 1.00
129	305.910	.000	529	305.910	-3.180 1.00
20	318.420	.000	420	318.420	-3.310 1.00
113	319.600	.000	513	319.600	-3.410 1.00
130	331.110	.000	530	331.110	-3.200 1.00
19	342.300	.000	419	342.300	-3.570 1.00
112	344.150	.000	512	344.150	-3.230 1.00
131	356.500	.000	531	356.500	-3.220 1.00
18	377.120	.000	418	377.120	-2.940 1.00
132	379.630	.000	532	379.630	-2.600 1.00
133	387.110	.000	533	387.110	-2.580 1.00
134	386.770	.000	534	386.770	-3.000 1.00
16	401.600	.000	416	401.600	-2.590 1.00
17	402.220	.000	417	402.220	-3.650 1.00
135	410.920	.000	535	410.920	-2.500 1.00
138	422.520	.000	538	422.520	-2.330 1.00
140	422.340	.000	540	422.340	-2.390 2.00
139	434.630	.000	539	434.630	-2.040 2.00
141	434.300	.000	541	434.300	-2.110 2.00
136	436.800	.000	536	436.800	-1.900 1.00
137	459.980	.000	537	459.980	-1.510 1.00
142	458.720	.000	542	458.720	-2.310 1.00
15	461.730	.000	415	461.730	-3.150 1.00
110	469.600	.000	510	469.600	-2.410 1.00
111	469.800	.000	511	469.800	-2.390 1.00
143	483.040	.000	543	483.040	-2.020 1.00
108	481.810	.000	508	481.810	-2.450 1.00
109	481.750	.000	509	481.750	-2.240 1.00
144	506.790	.000	544	506.790	-1.940 1.00
145	506.240	.000	545	506.240	-1.450 1.00
146	506.940	.000	546	506.940	-1.510 1.00
6	529.020	.000	406	529.020	-2.040 .50
88	530.430	.000	488	530.430	-1.260 1.00
87	531.240	.000	487	531.240	-1.240 1.00
85	544.950	.000	485	544.950	-.710 1.00
84	547.010	.000	484	547.010	-.110 .50
83	547.680	.000	483	547.680	-.240 .50
82	548.900	.000	482	548.900	.160 .50
3	549.980	.000	403	549.980	-1.760 .50
99	566.620	.000	499	566.620	-.960 1.00
96	591.520	.000	496	591.520	.090 1.00
97	591.970	.000	497	591.970	-.700 1.00
98	590.250	.000	498	590.250	-1.040 1.00
93	614.630	.000	493	614.630	-1.290 1.00
94	616.420	.000	494	616.420	.000 1.00
95	616.500	.000	495	616.500	.800 1.00
100	629.960	.000	500	629.960	-1.220 1.00
92	638.350	.000	492	638.350	-1.230 1.00
101	641.360	.000	501	641.360	-1.190 1.00
105	647.690	.000	505	647.690	-1.060 1.00

107	641.480	.000	507	641.480	-1.430 1.00
14	645.780	.000	414	645.780	-1.230 1.00
13	669.980	.000	413	669.980	-1.230 1.00
44	670.820	.000	444	670.820	-.980 4.00
45	670.250	.000	445	670.250	-.990 4.00
46	671.380	.000	446	671.380	-.980 4.00
102	671.740	.000	502	671.740	-.950 1.00
106	671.570	.000	506	671.570	-1.230 1.00
12	676.010	.000	412	676.010	-1.080 1.00
103	690.020	.000	503	690.020	-1.400 1.00
104	701.370	.000	504	701.370	-1.070 1.00
11	699.830	.000	411	699.830	-.980 1.00
7	720.390	.000	407	720.390	-1.660 1.00
91	714.700	.000	491	714.700	-.690 1.00
8	732.400	.000	408	732.400	-1.540 1.00
90	738.420	.000	490	738.420	-.850 1.00
9	744.250	.000	409	744.250	-1.630 1.00
89	773.220	.000	489	773.220	-.360 1.00
37	745.150	.000	487	745.150	-1.000 1.00
38	769.040	.000	438	769.040	-.970 1.00

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) ->	PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
34	434	+0.00	-1.409	270 1.41	.50
119	519	+0.00	-.120	270 .12	.50
120	520	+0.00	-1.084	270 1.08	.50
118	518	+0.00	-.198	270 .20	1.00
117	517	+0.00	-.148	270 .15	1.00
123	523	+0.00	+0.116	89 .12	1.00
121	521	+0.00	+0.172	89 .17	1.00
122	522	+0.00	+0.187	89 .19	1.00
124	524	+0.00	+0.061	89 .06	1.00
114	514	+0.00	-.042	270 .04	1.00
115	515	+0.00	-.315	270 .31	1.00
116	516	+0.00	+0.024	89 .02	1.00
125	525	+0.00	-.626	270 .63	1.00
126	526	+0.00	-.451	270 .45	1.00
21	421	+0.00	-.808	270 .80	1.00
127	527	+0.00	-.464	270 .46	1.00
128	528	+0.00	-.205	270 .21	1.00
129	529	+0.00	+0.049	89 .05	1.00
20	420	+0.00	-.159	270 .16	1.00
113	513	+0.00	-.266	270 .27	1.00
130	530	+0.00	-.123	270 .13	1.00
19	419	+0.00	-.563	270 .57	1.00
112	512	+0.00	-.240	270 .24	1.00
131	531	+0.00	-.306	270 .31	1.00
18	418	+0.00	-.155	270 .15	1.00

001	000.1	000.00	000.00	000.00	000.00
002	000.2	000.00	000.00	000.00	000.00
003	000.3	000.00	000.00	000.00	000.00
004	000.4	000.00	000.00	000.00	000.00
005	000.5	000.00	000.00	000.00	000.00
006	000.6	000.00	000.00	000.00	000.00
007	000.7	000.00	000.00	000.00	000.00
008	000.8	000.00	000.00	000.00	000.00
009	000.9	000.00	000.00	000.00	000.00
010	001.0	000.00	000.00	000.00	000.00

TRANSFORMATION SOLUTION

90% Error of the latitudes and departures = .73

Scale Factor = 1.00001942 +/- .00036535

Rotation = + 0 Deg 21 Min 25.6 Sec +/- 0 Deg 01 Min 15 Sec

----->>>> Change scale to 1.00000000 and adjust the solution

011	001.1	000.00	000.00	000.00	000.00
012	001.2	000.00	000.00	000.00	000.00
013	001.3	000.00	000.00	000.00	000.00
014	001.4	000.00	000.00	000.00	000.00
015	001.5	000.00	000.00	000.00	000.00
016	001.6	000.00	000.00	000.00	000.00
017	001.7	000.00	000.00	000.00	000.00
018	001.8	000.00	000.00	000.00	000.00
019	001.9	000.00	000.00	000.00	000.00
020	002.0	000.00	000.00	000.00	000.00

021	002.1	000.00	000.00	000.00	000.00
022	002.2	000.00	000.00	000.00	000.00
023	002.3	000.00	000.00	000.00	000.00
024	002.4	000.00	000.00	000.00	000.00
025	002.5	000.00	000.00	000.00	000.00
026	002.6	000.00	000.00	000.00	000.00
027	002.7	000.00	000.00	000.00	000.00
028	002.8	000.00	000.00	000.00	000.00
029	002.9	000.00	000.00	000.00	000.00
030	003.0	000.00	000.00	000.00	000.00

132	532	+0.00	+1.69	89	.17	1.00
133	533	+0.00	+1.43	89	.14	1.00
134	534	+0.00	-.275	270	.28	1.00
16	416	+0.00	+0.42	89	.04	1.00
17	417	+0.00	-1.021	270	1.02	1.00
185	585	+0.00	+0.74	89	.07	1.00
188	588	+0.00	+1.72	89	.17	1.00
140	540	+0.00	+1.13	89	.11	2.00
189	589	+0.00	+2.87	89	.39	2.00
141	541	+0.00	+2.19	89	.32	2.00
186	586	+0.00	+5.13	89	.51	1.00
137	537	+0.00	+7.59	89	.76	1.00
142	542	+0.00	-.084	270	.08	1.00
15	415	+0.00	-.892	270	.89	1.00
110	510	+0.00	-.201	270	.20	1.00
111	511	+0.00	-.183	270	.18	1.00
143	543	+0.00	+1.05	89	.10	1.00
108	508	+0.00	-.317	270	.32	1.00
109	509	+0.00	-.107	270	.11	1.00
144	544	+0.00	+0.37	89	.04	1.00
145	545	+0.00	+5.30	89	.53	1.00
146	546	+0.00	+4.66	89	.47	1.00
6	406	+0.00	-.202	270	.20	.50
88	488	+0.00	+5.69	89	.57	1.00
87	487	+0.00	+5.84	89	.58	1.00
85	485	+0.00	+1.029	89	1.03	1.00
84	484	+0.00	+1.616	89	1.62	.50
83	483	+0.00	+1.482	89	1.48	.50
82	482	+0.00	+1.874	90	1.87	.50
3	403	+0.00	-.052	270	.05	.50
99	499	+0.00	+6.44	90	.64	1.00
96	496	+0.00	+1.539	90	1.54	1.00
97	497	+0.00	+7.46	90	.75	1.00
98	498	+0.00	+4.17	90	.42	1.00
98	498	+0.00	+0.15	90	.01	1.00
94	494	+0.00	+1.294	90	1.29	1.00
95	495	+0.00	+2.098	90	2.09	1.00
100	500	+0.00	-.011	270	.01	1.00
92	492	+0.00	-.073	270	.07	1.00
101	501	+0.00	-.052	270	.05	1.00
105	505	+0.00	+0.39	90	.04	1.00

107	507	+0.00	-.293	270	.29	1.00
14	414	+0.00	-.119	270	.12	1.00
13	413	+0.00	-.270	270	.27	1.00
44	444	+0.00	-.026	270	.03	4.00
45	445	+0.00	-.082	270	.08	4.00
46	446	+0.00	-.029	270	.03	4.00
102	502	+0.00	-.001	270	.00	1.00
106	506	+0.00	-.280	270	.28	1.00
12	412	+0.00	-.158	270	.16	1.00
103	503	+0.00	-.565	270	.57	1.00
104	504	+0.00	-.306	270	.31	1.00
11	411	+0.00	-.156	270	.16	1.00
7	407	+0.00	-1.014	269	1.01	1.00
91	491	+0.00	-.009	270	.01	1.00
8	408	+0.00	-.969	269	.97	1.00
90	490	+0.00	-.317	269	.32	1.00
9	409	+0.00	-1.133	269	1.13	1.00
89	489	+0.00	-.044	269	.04	1.00
37	437	+0.00	-.509	269	.51	1.00
38	438	+0.00	-.628	269	.63	1.00

90% Error of the latitudes and departures = .73

Scale Factor = 1.00001942 +/- .00036535

Rotation = + 0 Deg 21 Min 25.6 Sec +/- 0 Deg 01 Min 15 Sec

----->>>> Change scale to 1.00000000 and adjust the solution

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) ->	PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
34	434	-.008	-1.409	269 1.41	.50
119	519	-.007	-.120	266 .12	.50
120	520	-.007	-1.034	269 1.03	.50
118	518	-.007	-.198	268 .20	1.00
117	517	-.006	-.148	267 .15	1.00
123	523	-.006	+1.116	98 .12	1.00
121	521	-.006	+1.72	92 .17	1.00
122	522	-.006	+1.87	91 .19	1.00
124	524	-.006	+0.60	95 .06	1.00
114	514	-.006	-.042	262 .04	1.00
115	515	-.006	-.315	268 .31	1.00
116	516	-.006	+0.24	103 .02	1.00
125	525	-.005	-.627	269 .63	1.00

126	526	-0.05	-0.451	269	.45	1.00
21	421	-0.05	-0.803	269	.80	1.00
127	527	-0.05	-0.464	269	.46	1.00
128	528	-0.05	-0.205	268	.21	1.00
129	529	-0.05	+0.049	95	.05	1.00
20	420	-0.04	-0.159	268	.16	1.00
118	518	-0.04	-0.267	269	.27	1.00
180	580	-0.04	-0.128	268	.13	1.00
19	419	-0.04	-0.568	269	.57	1.00
112	512	-0.04	-0.240	269	.24	1.00
181	581	-0.04	-0.306	269	.31	1.00
18	418	-0.03	-0.155	268	.16	1.00
182	582	-0.03	+0.169	91	.17	1.00
183	583	-0.03	+0.143	91	.14	1.00
184	584	-0.03	-0.275	269	.28	1.00
16	416	-0.03	+0.042	98	.04	1.00
17	417	-0.03	-1.021	269	1.02	1.00
185	585	-0.03	+0.074	92	.07	1.00
188	588	-0.02	+0.172	90	.17	1.00
140	540	-0.02	+0.113	91	.11	2.00
189	589	-0.02	+0.387	90	.39	2.00
141	541	-0.02	+0.319	90	.32	2.00
186	586	-0.02	+0.513	90	.51	1.00
187	587	-0.02	+0.759	90	.76	1.00
142	542	-0.02	-0.084	267	.08	1.00
15	415	-0.02	-0.892	269	.89	1.00
110	510	-0.02	-0.201	269	.20	1.00
111	511	-0.02	-0.183	269	.18	1.00
143	543	-0.01	+0.105	90	.10	1.00
108	508	-0.01	-0.317	269	.32	1.00
109	509	-0.01	-0.107	269	.11	1.00
144	544	-0.01	+0.087	91	.04	1.00
145	545	-0.01	+0.530	90	.53	1.00
146	546	-0.01	+0.466	90	.47	1.00
6	406	+0.00	-0.202	269	.20	.50
88	488	+0.00	+0.569	90	.57	1.00
87	487	+0.00	+0.584	90	.58	1.00
85	485	+0.00	+1.029	90	1.03	1.00
84	484	+0.00	+1.616	90	1.62	.50
88	488	+0.00	+1.482	89	1.48	.50
82	482	+0.00	+1.874	89	1.87	.50

3	403	+0.00	-0.052	270	.05	.50
99	499	+0.00	+0.644	89	.64	1.00
96	496	+0.01	+1.539	89	1.54	1.00
97	497	+0.01	+0.746	89	.75	1.00
98	498	+0.01	+0.417	89	.42	1.00
98	498	+0.01	+0.015	84	.01	1.00
94	494	+0.01	+1.294	89	1.29	1.00
95	495	+0.01	+2.093	89	2.09	1.00
100	500	+0.02	-0.011	278	.01	1.00
92	492	+0.02	-0.073	271	.07	1.00
101	501	+0.02	-0.052	272	.05	1.00
105	505	+0.02	+0.039	87	.04	1.00
107	507	+0.02	-0.293	270	.29	1.00
14	414	+0.02	-0.119	270	.12	1.00
13	413	+0.02	-0.270	270	.27	1.00
44	444	+0.02	-0.025	275	.03	4.00
45	445	+0.02	-0.032	274	.03	4.00
46	446	+0.02	-0.029	274	.03	4.00
102	502	+0.02	-0.001	383	.00	1.00
106	506	+0.02	-0.280	270	.28	1.00
12	412	+0.03	-0.158	270	.16	1.00
103	503	+0.03	-0.565	270	.57	1.00
104	504	+0.03	-0.306	270	.31	1.00
11	411	+0.03	-0.156	271	.16	1.00
7	407	+0.03	-1.014	270	1.01	1.00
91	491	+0.03	-0.009	289	.01	1.00
8	408	+0.04	-0.969	270	.97	1.00
90	490	+0.04	-0.317	270	.32	1.00
9	409	+0.04	-1.133	270	1.13	1.00
89	489	+0.04	-0.044	275	.04	1.00
37	437	+0.04	-0.509	270	.51	1.00
38	438	+0.04	-0.623	270	.63	1.00

90% Error of the latitudes and departures = .73
 Scale Factor = 1.00000000 +/- .00036536
 Rotation = + 0 Deg 21 Min 25.6 Sec +/- 0 Deg 01 Min 15 Sec

TRANSFORM NEW POINTS

Transform coordinates from System One into System Two based on the present solution & store in file DSC2PTS

System One point number + 0 = System Two point number

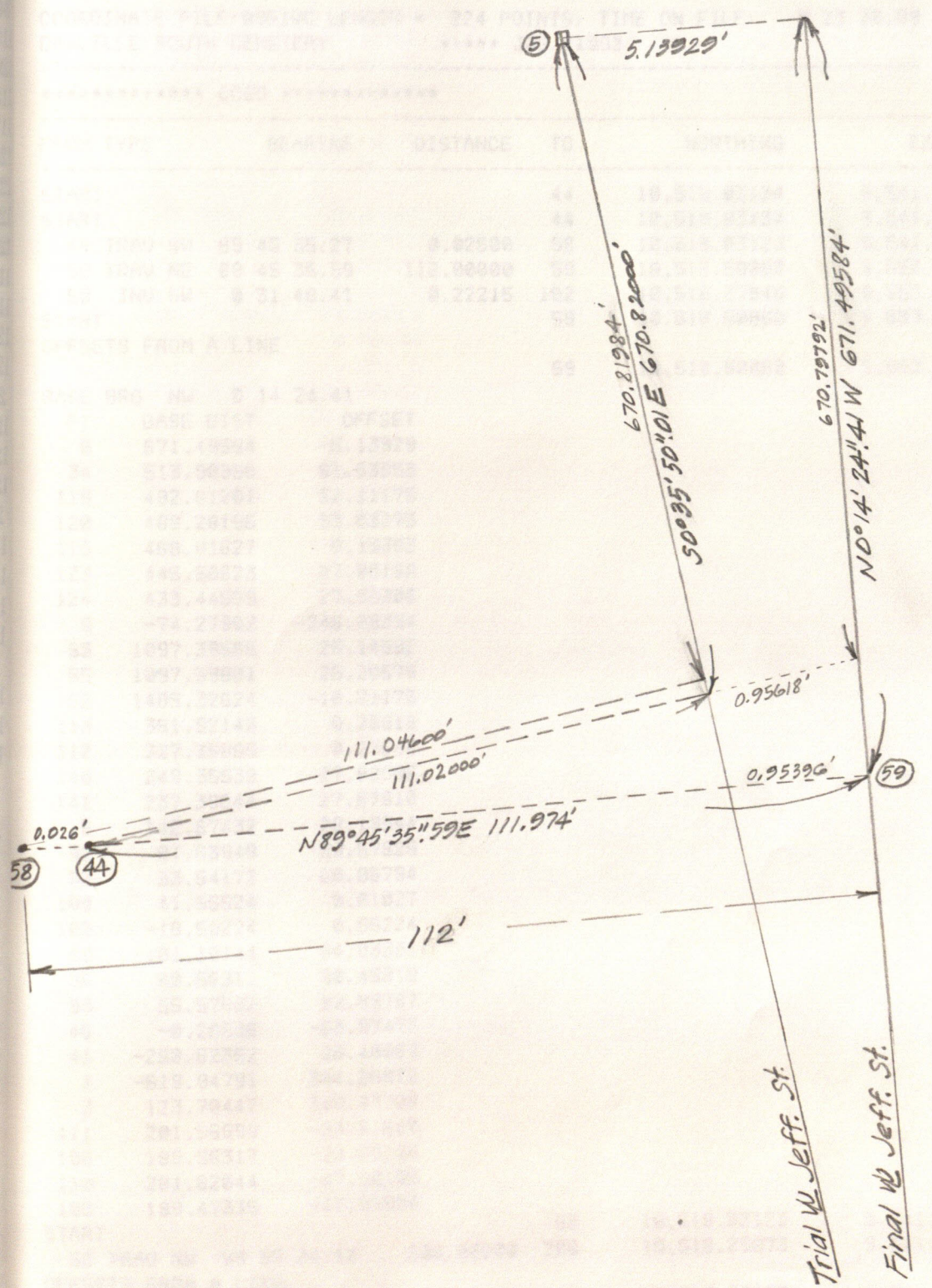
COORDINATES
 System One (input) System Two (output) RADIUS OF
 PT#(1) NORTH(1) EAST(1) PT#(2) NORTH(2) EAST(2) 90% ERROR

001	158.000	.000	158.008	-4.151	.204
119	179.040	.000	179.047	-4.020	.195
120	182.820	.000	182.827	-3.996	.198
118	202.710	.000	202.717	-3.872	.184
117	226.850	.000	226.856	-3.722	.174
123	226.190	.000	226.196	-3.726	.174
121	226.710	.000	226.716	-3.722	.174
122	238.820	.000	238.826	-3.647	.169
124	238.250	.000	238.256	-3.650	.169
114	251.530	.000	251.536	-3.568	.163
116	250.500	.000	250.506	-3.574	.163
125	284.300	.000	284.305	-3.363	.149
126	285.080	.000	285.085	-3.359	.149
21	288.610	.000	288.615	-3.337	.147
127	296.750	.000	296.755	-3.286	.144
128	306.590	.000	306.595	-3.225	.140
129	305.910	.000	305.915	-3.229	.140
20	318.420	.000	318.424	-3.151	.135
113	319.600	.000	319.604	-3.143	.135
130	331.110	.000	331.114	-3.072	.130
112	344.150	.000	344.154	-2.990	.125
131	356.500	.000	356.504	-2.914	.120
18	377.120	.000	377.123	-2.785	.113
132	379.630	.000	379.633	-2.769	.112
133	387.110	.000	387.113	-2.723	.109
134	386.770	.000	386.773	-2.725	.109
16	401.600	.000	401.603	-2.632	.104
17	402.220	.000	402.223	-2.629	.104
135	410.920	.000	410.923	-2.574	.101
138	422.520	.000	422.522	-2.502	.098
139	434.630	.000	434.632	-2.427	.094
141	434.300	.000	434.302	-2.429	.094
136	436.800	.000	436.802	-2.413	.093
137	459.980	.000	459.982	-2.269	.087
142	458.720	.000	458.722	-2.276	.088
15	461.730	.000	461.732	-2.258	.087
110	469.600	.000	469.602	-2.209	.085
111	469.800	.000	469.802	-2.207	.085
143	483.040	.000	483.041	-2.125	.083
108	481.810	.000	481.811	-2.133	.083
144	506.790	.000	506.791	-1.977	.079

145	506.240	.000	506.241	-1.980	.079
146	506.940	.000	506.941	-1.976	.079
6	529.020	.000	529.020	-1.888	.077
88	530.430	.000	530.430	-1.829	.077
87	531.240	.000	531.240	-1.824	.077
85	544.950	.000	544.950	-1.789	.076
84	547.010	.000	547.010	-1.726	.076
83	547.680	.000	547.680	-1.722	.076
82	548.900	.000	548.900	-1.714	.076
3	549.930	.000	549.930	-1.708	.076
99	566.620	.000	566.620	-1.604	.077
96	591.520	.000	591.519	-1.449	.079
97	591.970	.000	591.969	-1.446	.079
98	590.250	.000	590.249	-1.457	.079
98	614.630	.000	614.629	-1.305	.083
94	616.420	.000	616.419	-1.294	.084
95	616.500	.000	616.499	-1.293	.084
100	629.960	.000	629.958	-1.209	.086
92	638.350	.000	638.348	-1.157	.088
105	647.690	.000	647.688	-1.099	.091
107	641.480	.000	641.478	-1.137	.089
14	645.780	.000	645.778	-1.111	.090
13	669.930	.000	669.928	-.960	.097
44	670.820	.000	670.818	-.965	.097
45	670.250	.000	670.248	-.958	.097
46	671.380	.000	671.378	-.951	.097
102	671.740	.000	671.738	-.949	.098
106	671.570	.000	671.568	-.950	.098
12	676.010	.000	676.007	-.922	.099
104	701.370	.000	701.367	-.764	.107
11	699.830	.000	699.827	-.774	.107
7	720.390	.000	720.387	-.646	.114
91	714.700	.000	714.697	-.681	.112
8	732.400	.000	732.396	-.571	.118
90	738.420	.000	738.416	-.533	.121
9	744.250	.000	744.246	-.497	.123
89	773.220	.000	773.216	-.316	.134
37	745.150	.000	745.146	-.491	.123
38	769.040	.000	769.036	-.342	.132

34	158.00756	-4.15065	85	544.95004	-1.73899
119	179.04715	-4.01952	84	547.01000	-1.72615
120	182.82708	-3.99596	83	547.67999	-1.72197
118	202.71669	-3.87200	82	548.89997	-1.71437
117	226.85622	-3.72154	3	549.92995	-1.70795
123	226.19623	-3.72566	99	566.61962	-1.60393
121	226.71622	-3.72242	96	591.51914	-1.44874
122	238.82599	-3.64694	97	591.96913	-1.44593
124	238.25600	-3.65049	98	590.24916	-1.45665
114	251.53574	-3.56773	93	614.62869	-1.30471
116	250.50576	-3.57415	94	616.41865	-1.29355
125	284.30510	-3.36349	95	616.49865	-1.29305
126	285.08509	-3.35863	100	629.95839	-1.20916
21	288.61502	-3.33662	92	638.34823	-1.15687
127	296.75486	-3.28589	105	647.68805	-1.09866
128	306.59467	-3.22456	107	641.47817	-1.13736
129	305.91468	-3.22880	14	645.77808	-1.11056
20	318.42444	-3.15083	13	669.92761	-.96005
113	319.60442	-3.14348	44	670.81760	-.95450
130	331.11420	-3.07174	45	670.24761	-.95805
112	344.15394	-2.99047	46	671.37759	-.95101
131	356.50370	-2.91350	102	671.73758	-.94877
18	377.12330	-2.78499	106	671.56758	-.94983
132	379.63325	-2.76934	12	676.00750	-.92216
133	387.11311	-2.72272	104	701.36700	-.76410
134	386.77311	-2.72484	11	699.82703	-.77370
16	401.60283	-2.63241	7	720.38663	-.64556
17	402.22281	-2.62855	91	714.69675	-.68102
135	410.92265	-2.57433	8	732.39640	-.57071
138	422.52242	-2.50203	90	738.41628	-.53319
139	434.63218	-2.42656	9	744.24617	-.49685
141	434.30219	-2.42861	89	773.21561	-.31629
136	436.80214	-2.41303	37	745.14615	-.49124
137	459.98169	-2.26856	38	769.03569	-.34235
142	458.72172	-2.27641			
15	461.73166	-2.25766			
110	469.60151	-2.20861			
111	469.80150	-2.20736			
143	483.04124	-2.12484			
108	481.81127	-2.13251			
144	506.79078	-1.97682			
145	506.24079	-1.98025			
146	506.94078	-1.97588			
6	529.02035	-1.83827			
88	530.43032	-1.82948			
87	531.24031	-1.82443			

1.73890	541.95004	85	4.18085	128.00750
1.73815	547.01000	84	4.10152	129.04175
1.73747	548.80987	83	3.99598	130.73708
1.73685	549.92392	82	3.87300	132.71699
1.73628	550.61982	81	3.73184	134.80622
1.73574	551.51914	80	3.57268	136.90628
1.73523	551.99913	79	3.39212	139.01622
1.73474	552.24916	78	3.19894	141.13629
1.73428	552.24916	77	2.99219	143.26629
1.73385	551.91825	76	2.77178	145.40629
1.73345	551.28889	75	2.53819	147.55629
1.73308	550.38422	74	2.29283	149.71629
1.73274	549.14781	73	2.03682	151.88629
1.73242	547.61817	72	1.77028	154.06629
1.73212	545.74808	71	1.49328	156.25629
1.73184	543.58271	70	1.20580	158.45629
1.73158	541.17800	69	0.90883	160.66629
1.73134	538.58181	68	0.60214	162.88629
1.73111	535.84758	67	0.28584	165.11629
1.73090	533.02188	66	0.00000	167.35629
1.73070	530.15000	65		169.60629
1.73051	527.18758	64		171.86629
1.73033	524.18000	63		174.13629
1.73016	521.07500	62		176.41629
1.73000	517.92000	61		178.70629
1.72985	514.66000	60		181.00629
1.72970	511.35000	59		183.31629
1.72956	508.04000	58		185.63629
1.72942	504.78000	57		187.96629
1.72929	501.52000	56		190.30629
1.72916	498.21000	55		192.65629
1.72904	494.90000	54		195.01629
1.72892	491.54000	53		197.38629
1.72881	488.18000	52		199.76629
1.72870	484.87000	51		202.15629
1.72860	481.56000	50		204.55629
1.72850	478.21000	49		206.96629
1.72840	474.87000	48		209.38629
1.72830	471.48000	47		211.81629
1.72820	468.08000	46		214.25629
1.72810	464.68000	45		216.70629
1.72800	461.28000	44		219.16629
1.72790	457.88000	43		221.63629
1.72780	454.48000	42		224.11629
1.72770	451.08000	41		226.60629
1.72760	447.68000	40		229.11629
1.72750	444.28000	39		231.63629
1.72740	440.88000	38		234.16629
1.72730	437.48000	37		236.70629
1.72720	434.08000	36		239.25629
1.72710	430.68000	35		241.81629
1.72700	427.28000	34		244.38629
1.72690	423.88000	33		246.96629
1.72680	420.48000	32		249.55629
1.72670	417.08000	31		252.15629
1.72660	413.68000	30		254.76629
1.72650	410.28000	29		257.38629
1.72640	406.88000	28		260.01629
1.72630	403.48000	27		262.65629
1.72620	400.08000	26		265.30629
1.72610	396.68000	25		267.96629
1.72600	393.28000	24		270.63629
1.72590	389.88000	23		273.31629
1.72580	386.48000	22		276.00629
1.72570	383.08000	21		278.70629
1.72560	379.68000	20		281.41629
1.72550	376.28000	19		284.13629
1.72540	372.88000	18		286.86629
1.72530	369.48000	17		289.61629
1.72520	366.08000	16		292.37629
1.72510	362.68000	15		295.14629
1.72500	359.28000	14		297.92629
1.72490	355.88000	13		300.71629
1.72480	352.48000	12		303.51629
1.72470	349.08000	11		306.32629
1.72460	345.68000	10		309.14629
1.72450	342.28000	9		311.97629
1.72440	338.88000	8		314.81629
1.72430	335.48000	7		317.66629
1.72420	332.08000	6		320.52629
1.72410	328.68000	5		323.39629
1.72400	325.28000	4		326.27629
1.72390	321.88000	3		329.16629
1.72380	318.48000	2		332.06629
1.72370	315.08000	1		334.97629



COORDINATE FILE:0951WC LENGTH = 224 POINTS; TIME ON FILE: 3 23 28.89
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				44	10,518.03134	9,541.58231
START				44	10,518.03134	9,541.58231
44	TRAV SW	89 45 35.27	0.02600	58	10,518.03123	9,541.55631
58	TRAV NE	89 45 35.59	112.00000	59	10,518.50060	9,653.55533
59	INV SW	0 31 48.41	0.22215	102	10,518.27845	9,653.55327
START				59	10,518.50060	9,653.55533
OFFSETS FROM A LINE				59	10,518.50060	9,653.55533
BASE BRG NW 0 14 24.41						
PT	BASE DIST	OFFSET				
5	671.49584	-5.13929				
34	513.90958	61.63853				
119	492.81201	52.11175				
120	489.28185	93.03273				
118	468.81627	0.19383				
123	445.50623	27.88188				
124	433.44559	27.93306				
9	-74.27902	-246.86394				
53	1097.39565	25.14882				
55	1097.39601	25.20678				
52	1485.32624	-10.21176				
113	351.92142	0.25818				
112	327.36865	0.23688				
140	249.35538	27.88506				
141	237.39644	27.67910				
6	142.67432	28.19544				
98	81.63948	59.57825				
92	33.54172	60.06794				
100	41.55524	0.01027				
103	-18.50224	0.56224				
89	-101.18144	84.03381				
96	80.56311	90.45818				
95	55.57632	89.89787				
46	-0.26536	-63.97473				
41	-250.62352	28.49069				
1	-519.94791	344.26872				
3	123.70447	340.03708				
111	201.56598	-23.81680				
108	189.56317	-23.68108				
110	201.62044	-47.80108				
109	189.47335	-47.89900				
START				58	10,518.03123	9,541.55631
58	TRAV NW	89 55 24.12	200.00000	200	10,518.29873	9,341.55649
OFFSETS FROM A LINE				200	10,518.29873	9,341.55649
BASE BRG SE 89 55 24.12						
PT	BASE DIST	OFFSET				
9	65.54875	75.02345				
8	65.31356	63.17024				
7	65.29289	51.16465				

ESTIMATE FILE BEARING LENGTH = 524 POINTS TIME ON FILE: 3 53 28.88
***** 108 41923 *****

TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
TRAV NW	89 42 22.57	0.05200	28	10 218.03134	0 241.28231
TRAV NE	89 42 22.59	115.00000	28	10 218.03134	0 241.28231
TRAV SW	0 21 48.41	0.25212	28	10 218.03134	0 241.28231
TRAV SE	0 21 48.41	0.25212	28	10 218.03134	0 241.28231

***** COGO *****

TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
TRAV NW	0 14 24.41	0.05200	28	10 218.03134	0 241.28231
TRAV NE	0 14 24.41	0.05200	28	10 218.03134	0 241.28231
TRAV SW	0 14 24.41	0.05200	28	10 218.03134	0 241.28231
TRAV SE	0 14 24.41	0.05200	28	10 218.03134	0 241.28231

***** COGO *****

TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
TRAV NW	89 22 24.12	500.00000	200	10 218.28813	0 241.28231
TRAV NE	89 22 24.12	500.00000	200	10 218.28813	0 241.28231
TRAV SW	89 22 24.12	500.00000	200	10 218.28813	0 241.28231
TRAV SE	89 22 24.12	500.00000	200	10 218.28813	0 241.28231

11	64.32079	30.61430
12	64.19220	6.79446
13	64.27394	0.71099
14	63.99067	-23.43799
15	63.74578	-207.49500
18	62.53817	-292.10352
16	86.47651	-267.89887
17	111.53810	-267.57591
19	110.75615	-327.48810
20	110.21550	-351.36346
21	110.69941	-381.17941
37	136.92591	75.07914
38	137.17490	98.97227
48	138.22499	171.52079
45	152.02600	-0.00014
44	200.02600	-0.00014
58	200.00000	0.00000
46	248.02600	-0.00014
109	263.05256	-189.82482
110	263.08333	-201.97227
104	276.46622	29.65514
107	288.12502	-30.37834
105	287.82963	-24.16195
106	288.27487	-0.28194
108	287.26962	-190.04852
111	287.06754	-202.05040
116	285.64476	-421.35695
103	312.66280	17.87968
102	311.99653	-0.39702
101	311.88001	-30.77090
115	297.97817	-421.64460
100	311.77883	-42.17382
112	310.42538	-327.98412
113	310.31095	-352.53663
114	309.71099	-420.60217
117	309.68772	-445.28816
118	309.60038	-469.42935

TIME FOR THIS RUN: 0 25 49.78; TOTAL TIME ON FILE: 3 49 18.67
COORDINATES STORED

04.32070 07070.48
 84.18250 05081.48
 84.27381 18081.48
 83.88087 70087.48
 83.74278 83.74278
 82.28817 82.28817
 88.43881 88.43881
 111.82810 111.82810
 110.28810 110.28810
 110.28280 110.28280
 110.88811 110.88811
 138.82811 138.82811
 137.12880 137.12880
 138.25489 138.25489
 125.02800 125.02800
 200.02800 200.02800
 200.00000 200.00000
 248.02800 248.02800
 283.02800 283.02800
 283.08333 283.08333
 278.48822 278.48822
 288.12802 288.12802
 287.82803 287.82803
 288.37487 288.37487
 287.28882 287.28882
 287.08284 287.08284
 288.84478 288.84478
 312.88280 312.88280
 311.88823 311.88823
 311.88001 311.88001
 297.87817 297.87817
 311.72883 311.72883
 310.42838 310.42838
 310.21088 310.21088
 308.71088 308.71088
 308.88772 308.88772
 308.80828 308.80828

0 58 48.78; TOTAL TIME ON FILE: 3 48 18.87
 COORDINATES STORED FOR THIS RUN:

115	297.98	+0.26	1
100	311.78	-0.17	2
112	310.43	+0.02	2
113	310.31	-0.54	2
114	309.71	+1.40	1
117	309.69	+0.71	1
118	309.60	+0.57	1
14	297.98	+0.26	1
15	297.98	+0.26	1
16	297.98	+0.26	1
17	297.98	+0.26	1
18	297.98	+0.26	1
19	297.98	+0.26	1
20	297.98	+0.26	1
21	297.98	+0.26	1
22	297.98	+0.26	1
23	297.98	+0.26	1
24	297.98	+0.26	1
25	297.98	+0.26	1
26	297.98	+0.26	1
27	297.98	+0.26	1
28	297.98	+0.26	1
29	297.98	+0.26	1
30	297.98	+0.26	1
31	297.98	+0.26	1
32	297.98	+0.26	1
33	297.98	+0.26	1
34	297.98	+0.26	1
35	297.98	+0.26	1
36	297.98	+0.26	1
37	297.98	+0.26	1
38	297.98	+0.26	1
39	297.98	+0.26	1
40	297.98	+0.26	1
41	297.98	+0.26	1
42	297.98	+0.26	1
43	297.98	+0.26	1
44	297.98	+0.26	1
45	297.98	+0.26	1
46	297.98	+0.26	1
47	297.98	+0.26	1
48	297.98	+0.26	1
49	297.98	+0.26	1
50	297.98	+0.26	1

1 48.0+ 89.798
 2 71.0- 87.118
 3 89.0+ 84.018
 4 72.0- 16.818
 1 04.1+ 17.108
 1 15.0+ 21.908
 1 23.0+ 26.808

			wt.
9	65.55'	+1.02	1
8	65.31	+1.17	1
7	65.29	+1.16	1
11	64.32	+0.61	1
12	64.19	+0.79	1
13	64.27	+0.71	1
14	63.99	+0.56	1
15	63.75	+0.50	1.5
18	62.54	-0.10	1.5
16	86.48	+0.10	1.5
17	111.54	+0.42	1.5
19	110.76	+0.51	1.5
20	110.22	+0.64	1.5
21	110.70	+0.82	1.5
37	136.93	+1.08	0.5
38	137.17	+0.97	0.5
48	138.22	+1.52	0.5
45	152.03	0.00	4
44	200.03	0.00	4
46	248.03	0.00	4
109	263.05	+0.18	2
110	263.08	+0.03	2
104	276.47	-0.34	1.5
107	288.13	-0.38	2
105	287.83	-0.16	2
106	288.27	-0.28	2
108	287.27	-0.05	2
111	287.07	-0.05	2
116	285.64	+0.64	1
103	312.66	-0.12	1.5
102	312.00	-0.40	2
101	311.88	+0.77	2

22	100	-0.00	-0.00	90	90	1.00
23	100	-0.00	-0.00	90	90	1.00
24	100	-0.00	-0.00	90	90	1.00
25	100	-0.00	-0.00	90	90	1.00
26	100	-0.00	-0.00	90	90	1.00
27	100	-0.00	-0.00	90	90	1.00
28	100	-0.00	-0.00	90	90	1.00
29	100	-0.00	-0.00	90	90	1.00
30	100	-0.00	-0.00	90	90	1.00
31	100	-0.00	-0.00	90	90	1.00
32	100	-0.00	-0.00	90	90	1.00
33	100	-0.00	-0.00	90	90	1.00
34	100	-0.00	-0.00	90	90	1.00
35	100	-0.00	-0.00	90	90	1.00
36	100	-0.00	-0.00	90	90	1.00
39	100	-0.00	-0.00	90	90	1.00
40	100	-0.00	-0.00	90	90	1.00
41	100	-0.00	-0.00	90	90	1.00
42	100	-0.00	-0.00	90	90	1.00
43	100	-0.00	-0.00	90	90	1.00
47	100	-0.00	-0.00	90	90	1.00
50	100	-0.00	-0.00	90	90	1.00
51	100	-0.00	-0.00	90	90	1.00
52	100	-0.00	-0.00	90	90	1.00
53	100	-0.00	-0.00	90	90	1.00
54	100	-0.00	-0.00	90	90	1.00
55	100	-0.00	-0.00	90	90	1.00
56	100	-0.00	-0.00	90	90	1.00
57	100	-0.00	-0.00	90	90	1.00
58	100	-0.00	-0.00	90	90	1.00
59	100	-0.00	-0.00	90	90	1.00
60	100	-0.00	-0.00	90	90	1.00
61	100	-0.00	-0.00	90	90	1.00
62	100	-0.00	-0.00	90	90	1.00
63	100	-0.00	-0.00	90	90	1.00
64	100	-0.00	-0.00	90	90	1.00
65	100	-0.00	-0.00	90	90	1.00
66	100	-0.00	-0.00	90	90	1.00
67	100	-0.00	-0.00	90	90	1.00
68	100	-0.00	-0.00	90	90	1.00
69	100	-0.00	-0.00	90	90	1.00
70	100	-0.00	-0.00	90	90	1.00
71	100	-0.00	-0.00	90	90	1.00
72	100	-0.00	-0.00	90	90	1.00
73	100	-0.00	-0.00	90	90	1.00
74	100	-0.00	-0.00	90	90	1.00
75	100	-0.00	-0.00	90	90	1.00
76	100	-0.00	-0.00	90	90	1.00
77	100	-0.00	-0.00	90	90	1.00
78	100	-0.00	-0.00	90	90	1.00
79	100	-0.00	-0.00	90	90	1.00
80	100	-0.00	-0.00	90	90	1.00
81	100	-0.00	-0.00	90	90	1.00
82	100	-0.00	-0.00	90	90	1.00
83	100	-0.00	-0.00	90	90	1.00
84	100	-0.00	-0.00	90	90	1.00
85	100	-0.00	-0.00	90	90	1.00
86	100	-0.00	-0.00	90	90	1.00
87	100	-0.00	-0.00	90	90	1.00
88	100	-0.00	-0.00	90	90	1.00
89	100	-0.00	-0.00	90	90	1.00
90	100	-0.00	-0.00	90	90	1.00

Scale Factor = 1.00001085 / m - 0.00000001
 Slope = 0 Deg 00 Min 45.5 Sec +/- 0 Deg 00 Min 30 Sec

Change scale to 1.00000000 and adjust the station

The columns indicate the difference and direction from the reference
 coordinate system. The points to the right of the '+' sign are
 positive and displayed with a '+' sign. The points to the left of the '-' sign
 are negative and displayed with a '-' sign. To obtain Station One coordinates
 relative to the coordinate system, use Main Menu Option 3. Alternatively,
 if Options 3, 4 & 5 use this station.

STATION	TYPE	LAT	DEP	AZIMUTH	WGT	
1	48	-0.00	-0.00	90	90	1.00

Determine direction of E-W lot lines lying west of Jeff. St.

DATE: 3/25/1994 INPUT FILE = DSC3.DAT
 TIME: 07:56 TRANSACTION LOG = DSC3.LOG

ANALYSIS & SOLUTION FOR 2 DIMENSIONAL TRANSFORMATION
 FROM SYSTEM ONE TO SYSTEM TWO BY LEAST SQUARES

Input coordinates of corresponding points

System One		System Two (fixed)		WEIGHT		
PT#	NORTH EAST	PT#	NORTH EAST			
9	65.550	.000	409	65.550	1.020	1.00
8	65.310	.000	408	65.310	1.170	1.00
7	65.290	.000	407	65.290	1.160	1.00
11	64.320	.000	411	64.320	.610	1.00
12	64.190	.000	412	64.190	.790	1.00
13	64.270	.000	412	64.190	.790	1.00
14	63.990	.000	414	63.990	.560	1.00
15	63.750	.000	415	63.750	.500	1.50
18	62.540	.000	418	62.540	-.100	1.50
16	86.480	.000	416	86.480	.100	1.50
17	111.540	.000	417	111.540	.420	1.50
19	110.760	.000	419	110.760	.510	1.50
20	110.220	.000	420	110.220	.640	1.50
21	110.700	.000	421	110.700	.820	1.50
37	136.980	.000	437	136.980	1.080	.50
38	137.170	.000	438	137.170	.970	.50
48	138.220	.000	448	138.220	1.520	.50
45	152.080	.000	445	152.080	.000	4.00
44	200.080	.000	444	200.080	.000	4.00
46	248.080	.000	446	248.080	.000	4.00
109	263.050	.000	509	263.050	.180	2.00
110	263.080	.000	510	263.080	.030	2.00
104	276.470	.000	504	276.470	-.340	1.50
107	288.130	.000	507	288.130	-.380	2.00
105	287.830	.000	505	287.830	-.160	2.00
106	288.270	.000	506	288.270	-.280	2.00
108	287.270	.000	508	287.270	-.050	2.00
111	287.070	.000	511	287.070	-.050	2.00
116	285.640	.000	516	285.640	.640	1.00
103	312.660	.000	503	312.660	-.120	1.50
102	312.000	.000	502	312.000	-.400	2.00
101	311.880	.000	501	311.880	-.770	2.00
115	297.980	.000	515	297.980	.360	1.00
100	311.780	.000	500	311.780	-.170	2.00
112	310.430	.000	512	310.430	.020	2.00
113	310.310	.000	513	310.310	-.540	2.00
114	309.710	.000	514	309.710	1.400	1.00
117	309.690	.000	517	309.690	.710	1.00
118	309.600	.000	518	309.600	.570	1.00

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) ->	PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
9	409	+.003	+.532	89 .53	1.00
8	408	+.003	+.682	89 .68	1.00
7	407	+.003	+.671	89 .67	1.00
11	411	+.003	+.119	88 .12	1.00
12	412	+.003	+.298	89 .30	1.00
13	412	-.077	+.299	104 .31	1.00
14	414	+.003	+.068	87 .07	1.00
15	415	+.003	+.007	67 .01	1.50
18	418	+.003	-.596	270 .60	1.50

16	416	+.003	-.328	270 .33	1.50
17	417	+.002	+.063	87 .06	1.50
19	419	+.002	+.151	89 .15	1.50
20	420	+.002	+.279	89 .28	1.50
21	421	+.002	+.460	89 .46	1.50
37	437	+.002	+.795	89 .79	.50
38	438	+.002	+.686	89 .69	.50
48	448	+.002	+1.239	89 1.24	.50
45	445	+.002	-.242	270 .24	4.00
44	444	+.001	-.106	270 .11	4.00
46	446	+.000	+.080	89 .08	4.00
109	509	+.000	+.253	89 .25	2.00
110	510	+.000	+.108	89 .10	2.00
104	504	+.000	-.229	269 .23	1.50
107	507	+.000	-.236	269 .24	2.00
105	505	+.000	-.017	268 .02	2.00
106	506	+.000	-.135	269 .14	2.00
108	508	+.000	+.092	90 .09	2.00
111	511	+.000	+.091	90 .09	2.00
116	516	+.000	+.777	90 .78	1.00
103	503	-.001	+.094	90 .09	1.50
102	502	-.001	-.188	269 .19	2.00
101	501	-.001	-.558	269 .56	2.00
115	515	-.001	+.532	90 .53	1.00
100	500	-.001	+.041	90 .04	2.00
112	512	-.001	+.227	90 .23	2.00
113	513	-.001	-.333	269 .33	2.00
114	514	-.001	+1.605	90 1.61	1.00
117	517	-.001	+.915	90 .92	1.00
118	518	-.001	+.775	90 .78	1.00

90% Error of the latitudes and departures = .61
 Scale Factor = 1.00001866 +/- .00075291
 Rotation = - 0 Deg 09 Min 45.6 Sec +/- 0 Deg 02 Min 35 Sec

----->>>> Change scale to 1.00000000 and adjust the solution

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) ->	PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
9	409	+.000	+.532	90 .53	1.00

8	408	+000	+682	90	.68	1.00
7	407	+000	+672	90	.67	1.00
11	411	+000	+119	90	.12	1.00
12	412	+000	+298	90	.30	1.00
13	412	-.080	+299	105	.31	1.00
14	414	+000	+068	90	.07	1.00
15	415	+000	+007	90	.01	1.50
18	418	+000	-.596	269	.60	1.50
16	416	+000	-.328	270	.33	1.50
17	417	+000	+063	89	.06	1.50
19	419	+000	+151	89	.15	1.50
20	420	+000	+279	89	.28	1.50
21	421	+000	+460	89	.46	1.50
37	437	+000	+795	89	.79	.50
38	438	+000	+686	89	.69	.50
48	448	+000	+1.289	89	1.24	.50
45	445	+000	-.242	270	.24	4.00
44	444	+001	-.106	270	.11	4.00
46	446	+001	+080	88	.08	4.00
109	509	+001	+253	89	.25	2.00
110	510	+001	+108	89	.10	2.00
104	504	+001	-.229	270	.23	1.50
107	507	+001	-.236	270	.24	2.00
105	505	+001	-.017	273	.02	2.00
106	506	+001	-.135	270	.14	2.00
108	508	+001	+092	89	.09	2.00
111	511	+001	+091	89	.09	2.00
116	516	+001	+777	89	.78	1.00
103	503	+001	+094	89	.09	1.50
102	502	+001	-.188	270	.19	2.00
101	501	+001	-.558	270	.56	2.00
115	515	+001	+532	89	.53	1.00
100	500	+001	+041	88	.04	2.00
112	512	+001	+227	89	.23	2.00
113	513	+001	-.333	270	.33	2.00
114	514	+001	+1.605	89	1.61	1.00
117	517	+001	+915	89	.92	1.00
118	518	+001	+775	89	.78	1.00

90% Error of the latitudes and departures = .61
 Scale Factor = 1.00000000 +/- .00075292
 Rotation = - 0 Deg 09 Min 45.6 Sec +/- 0 Deg 02 Min 35 Sec

TRANSFORM NEW POINTS

Transform coordinates from System One into System Two based on the present solution & store in file DSC3.PTS

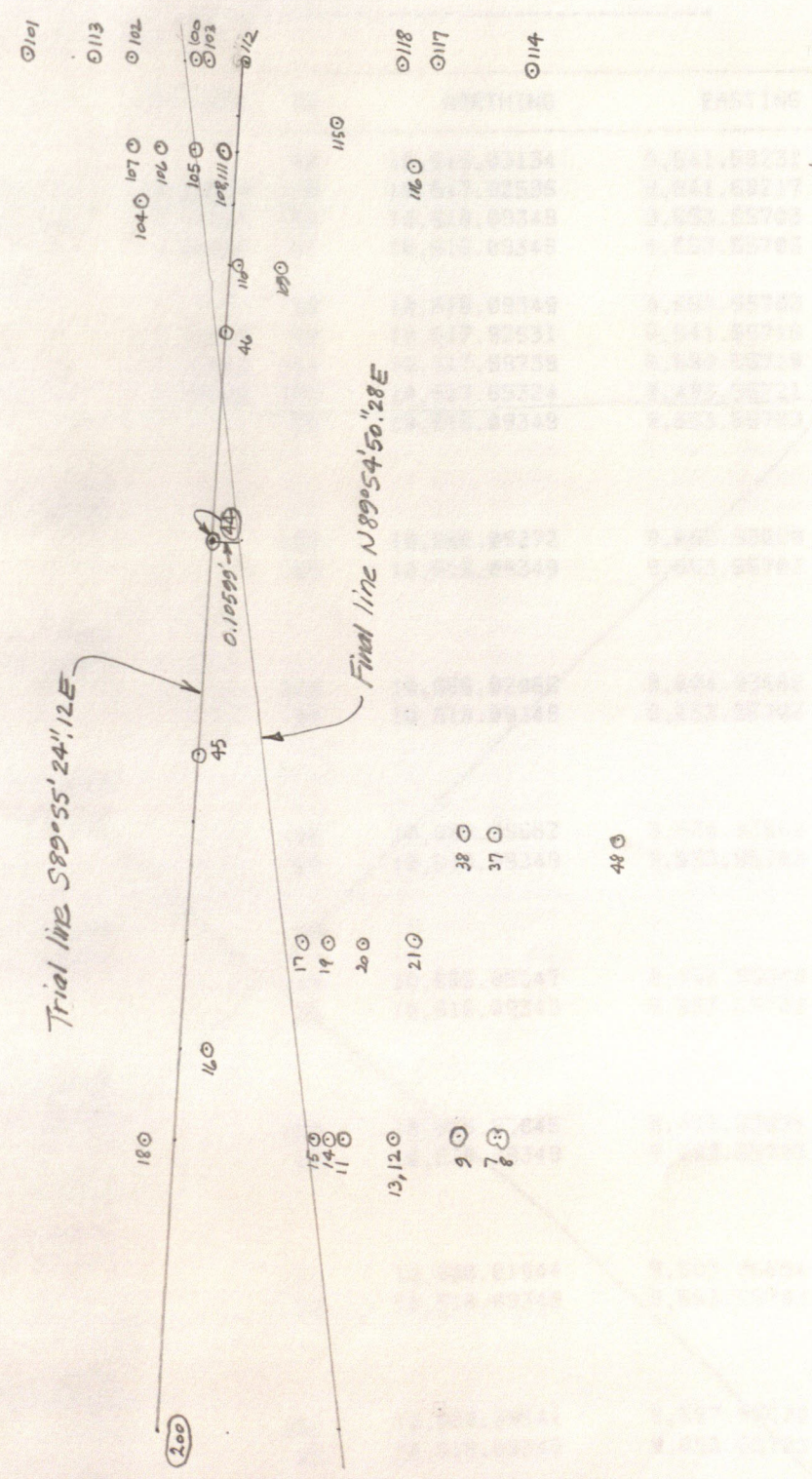
System One point number + 0 = System Two point number

System One (input)		System Two (output)		RADIUS OF	
PT#(1)	NORTH(1) EAST(1)	PT#(2)	NORTH(2) EAST(2)	90% ERROR	
9	65.550 .000	9	65.550 .488	.177	
8	65.310 .000	8	65.310 .488	.177	
7	65.290 .000	7	65.290 .488	.177	
11	64.320 .000	11	64.320 .491	.178	
12	64.190 .000	12	64.190 .492	.178	
13	64.270 .000	13	64.270 .491	.178	
14	63.990 .000	14	63.990 .492	.178	
15	63.750 .000	15	63.750 .493	.178	
18	62.540 .000	18	62.540 .496	.179	
16	86.480 .000	16	86.480 .428	.158	
19	110.760 .000	19	110.760 .359	.138	
20	110.220 .000	20	110.220 .361	.138	
21	110.700 .000	21	110.700 .360	.138	
37	136.930 .000	37	136.930 .285	.118	
38	137.170 .000	38	137.170 .284	.118	
48	138.220 .000	48	138.220 .281	.117	
45	152.030 .000	45	152.030 .242	.107	
44	200.030 .000	44	200.029 .106	.085	
46	248.030 .000	46	248.029 -.080	.066	
109	263.050 .000	109	263.049 -.073	.092	
104	276.470 .000	104	276.469 -.111	.099	
107	288.130 .000	107	288.129 -.144	.106	
105	287.830 .000	105	287.829 -.143	.106	
106	288.270 .000	106	288.269 -.145	.106	
108	287.270 .000	108	287.269 -.142	.105	
111	287.070 .000	111	287.069 -.141	.105	
116	285.640 .000	116	285.639 -.137	.104	
103	312.660 .000	103	312.659 -.214	.123	
102	312.000 .000	102	311.999 -.212	.122	
101	311.880 .000	101	311.879 -.212	.122	
100	311.780 .000	100	311.779 -.211	.122	
112	310.430 .000	112	310.429 -.207	.121	
113	310.310 .000	113	310.309 -.207	.121	
114	309.710 .000	114	309.709 -.205	.121	
117	309.690 .000	117	309.689 -.205	.121	

Dist. from trial line to
Final line at given point.
- is north; + is south.

118	309.600	.000	118	309.599	-.205	.121
409	65.550	1.020	409	65.553	1.508	.177
408	65.310	1.170	408	65.313	1.658	.177
407	65.290	1.160	407	65.293	1.648	.177
411	64.320	.610	411	64.322	1.101	.178
413	64.270	.710	413	64.272	1.201	.178
414	63.990	.560	414	63.992	1.052	.178
415	63.750	.500	415	63.751	.998	.178
418	62.540	-.100	418	62.540	.896	.179
416	86.480	.100	416	86.480	.528	.158
417	111.540	.420	417	111.541	.777	.187
419	110.760	.510	419	110.761	.869	.188
420	110.220	.640	420	110.222	1.001	.188
421	110.700	.820	421	110.702	1.180	.188
437	136.980	1.080	437	136.983	1.365	.118
448	138.220	1.520	448	138.224	1.801	.117
445	152.030	.000	445	152.030	.242	.107
444	200.030	.000	444	200.029	.106	.085
446	248.030	.000	446	248.029	-.030	.086
509	263.050	.180	509	263.050	.107	.092
510	263.080	.080	510	263.079	-.043	.092
504	276.470	-.340	504	276.468	-.451	.099
507	288.130	-.280	507	288.128	-.524	.106
505	287.830	-.160	505	287.829	-.303	.106
506	288.270	-.280	506	288.268	-.425	.106
511	287.070	-.050	511	287.069	-.191	.105
516	285.640	.640	516	285.641	.503	.104
503	312.660	-.120	503	312.659	-.334	.123
502	312.000	-.400	502	311.998	-.612	.122
501	311.880	-.770	501	311.877	-.982	.122
515	297.980	.360	515	297.980	.188	.112
500	311.780	-.170	500	311.779	-.381	.122
512	310.430	.020	512	310.429	-.187	.121
513	310.310	-.540	513	310.307	-.747	.121
514	309.710	1.400	514	309.713	1.195	.121
518	309.600	.570	518	309.601	.365	.121

9	65.55001	.48776
8	65.31001	.48844
7	65.29001	.48850
11	64.32001	.49125
12	64.19001	.49162
13	64.27001	.49139
14	63.99001	.49219
15	63.75001	.49287
18	62.54002	.49631
16	86.47992	.42834
19	110.75983	.35942
20	110.21983	.36095
21	110.69983	.35959
37	136.92972	.28512
38	137.16972	.28444
48	138.21971	.28146
45	152.02966	.24226
44	200.02947	.10599
46	248.02927	-.03027
109	263.04921	-.07291
104	276.46916	-.11101
107	288.12911	-.14411
105	287.82911	-.14326
106	288.26911	-.14451
108	287.26911	-.14167
111	287.06912	-.14110
116	285.63912	-.13704
103	312.65901	-.21375
102	311.99901	-.21188
101	311.87902	-.21154
100	311.77902	-.21125
112	310.42902	-.20742
113	310.30902	-.20708
114	309.70902	-.20537
117	309.63902	-.20532
118	309.59902	-.20506
409	65.55290	1.50776
408	65.31333	1.65844
407	65.29330	1.64849
411	64.32174	1.10125
413	64.27203	1.20139
414	63.99160	1.05219
415	63.75143	.99287
418	62.53974	.39631
416	86.48021	.52834
417	111.54101	.77720
419	110.76127	.86941
420	110.22164	1.00095
421	110.70215	1.17958
437	136.93279	1.36512
448	138.22403	1.80145
445	152.02966	.24226
444	200.02947	.10599
446	248.02927	-.03027
509	263.04972	.10709
510	263.07930	-.04300
504	276.46819	-.45101
507	288.12803	-.52411
505	287.82866	-.30326
506	288.26832	-.42451
511	287.06897	-.19110
516	285.64094	.50295
503	312.65867	-.33375
502	311.99788	-.61187
501	311.87683	-.98153
515	297.98009	.18792
500	311.77853	-.38125
512	310.42908	-.18742
513	310.30749	-.74708
514	309.71300	1.19462
518	309.60064	.36494



Hor. 1" = 40'
 Ver. 1" = 0.6'

COORDINATE FILE:0951WC LENGTH = 224 POINTS; TIME ON FILE: 3 49 18.67
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				44	10,518.03134	9,541.58231
44	TRAV SW	0 04 35.74	0.10599	0	10,517.92535	9,541.58217
0	B-B NE	89 54 50.28	111.97499	59	10,518.09349	9,653.55703
59	B-B NE	0 00 00.00	0.00000	59	10,518.09349	9,653.55703
PTS 200 THRU 200 CLEARED						
START				59	10,518.09349	9,653.55703
59	TRAV SW	89 54 50.28	112.00000	58	10,517.92531	9,541.55716
58	S.S. NE	89 54 50.28	48.00000	156	10,517.99739	9,589.55710
58	TRAV SW	89 54 50.28	48.00000	155	10,517.85324	9,493.55721
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	0.00000				
SW	89 54 50.28	148.00000				
				157	10,666.09272	9,652.93680
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-48.00000				
SW	89 54 50.28	148.00000				
				147	10,666.02065	9,604.93668
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-64.00000				
SW	89 54 50.28	148.00000				
				148	10,665.99662	9,588.93664
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-160.00000				
SW	89 54 50.28	148.00000				
				149	10,665.85247	9,492.93640
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-176.00000				
SW	89 54 50.28	148.00000				
				150	10,665.82845	9,476.93636
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-48.00000				
SW	89 54 50.28	382.00000				
				151	10,900.01944	9,603.95604
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-64.00000				
SW	89 54 50.28	382.00000				
				152	10,899.99541	9,587.95600
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-160.00000				
SW	89 54 50.28	382.00000				
				153	10,899.85126	9,491.95576
START				59	10,518.09349	9,653.55703
OFFSET INTERSECTION						
NW	0 14 24.41	-160.00000				
SW	89 54 50.28	382.00000				
				153	10,899.85126	9,491.95576
START				59	10,518.09349	9,653.55703

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 4 40 45.32
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			59	10,518.09349	9,653.55703
59 TRAV NW	0 14 24.41	148.00000	157	10,666.09219	9,652.93680
157 S.S. SW	89 54 50.28	48.00000	147	10,666.02011	9,604.93685
157 TRAV SW	89 54 50.28	64.00000	148	10,665.99609	9,588.93687
148 S.S. SW	89 54 50.28	96.00000	149	10,665.85194	9,492.93698
148 S.S. SW	89 54 50.28	112.00000	150	10,665.82791	9,476.93700
START			59	10,518.09349	9,653.55703
59 TRAV NW	0 14 24.41	382.00000	0	10,900.09013	9,651.95616
0 S.S. SW	89 54 50.28	48.00000	151	10,900.01806	9,603.95621
0 S.S. SW	89 54 50.28	64.00000	152	10,899.99403	9,587.95623
0 S.S. SW	89 54 50.28	160.00000	153	10,899.84988	9,491.95634
0 S.S. SW	89 54 50.28	176.00000	154	10,899.82586	9,475.95636
0 TRAV SW	89 54 50.28	248.00000	32	10,899.71775	9,403.95644
START			59	10,518.09349	9,653.55703
59 TRAV SW	89 54 50.28	248.00000	0	10,517.72110	9,405.55731
0 TRAV SE	0 14 24.41	74.00000	27	10,443.72175	9,405.86743
27 TRAV NE	89 54 50.28	76.00000	159	10,443.83587	9,481.86734
159 S.S. SE	0 14 24.41	96.00000	162	10,347.83671	9,482.26966
159 S.S. NE	89 54 50.28	98.00000	163	10,443.98302	9,579.86723
159 S.S. NE	89 54 50.28	122.00000	164	10,444.01906	9,603.86721
159 S.S. SW	89 54 50.28	4.00000	158	10,443.82986	9,477.86735
START			160	10,443.87164	9,505.86658
160 TRAV SE	0 14 24.41	96.00000	161	10,347.87248	9,506.26899
161 TRAV NE	89 54 50.28	74.00000	166	10,347.98360	9,580.26891
166 TRAV NE	89 54 50.28	24.00000	165	10,348.01963	9,604.26888
165 INV NW	0 14 23.04	96.00027	164	10,444.01906	9,603.86721
START			159	10,443.83587	9,481.86734
159 TRAV NE	89 54 50.28	24.00000	160	10,443.87191	9,505.86732
160 TRAV SE	0 14 24.41	96.00000	161	10,347.87275	9,506.26963
161 TRAV NE	89 54 50.28	74.00000	166	10,347.98386	9,580.26955
166 TRAV NE	89 54 50.28	24.00000	165	10,348.01990	9,604.26952
165 INV NW	0 14 24.41	96.00000	164	10,444.01906	9,603.86721
OFFSETS FROM A LINE			27	10,443.72175	9,405.86743
BASE BRG NW	0 14 24.41				
PT	BASE DIST	OFFSET			
49	-104.29001	87.35035			
48	-97.43647	73.27683			
38	-24.88325	72.62782			
37	-0.98911	72.51092			
158	-0.19362	71.99974			
10	-12.34919	36.51440			
9	-0.53883	1.13516			
8	11.31550	0.96550			
7	23.32102	1.01120			
11	43.87643	0.15273			
12	67.69661	0.15582			
13	73.77953	0.27118			
14	97.92972	0.12143			
15	281.98526	0.89405			

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 3 48 18.87
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			59	10,518.09349	9,653.55703
59 TRAV NW	0 14 24.41	148.00000	157	10,666.09219	9,652.93680
157 S.S. SW	89 54 50.28	48.00000	147	10,666.02011	9,604.93685
157 TRAV SW	89 54 50.28	64.00000	148	10,665.99609	9,588.93687
148 S.S. SW	89 54 50.28	96.00000	149	10,665.85194	9,492.93698
148 S.S. SW	89 54 50.28	112.00000	150	10,665.82791	9,476.93700
START			59	10,518.09349	9,653.55703
59 TRAV NW	0 14 24.41	382.00000	0	10,900.09013	9,651.95616
0 S.S. SW	89 54 50.28	48.00000	151	10,900.01806	9,603.95621
0 S.S. SW	89 54 50.28	64.00000	152	10,899.99403	9,587.95623
0 S.S. SW	89 54 50.28	160.00000	153	10,899.84988	9,491.95634
0 S.S. SW	89 54 50.28	176.00000	154	10,899.82586	9,475.95636
0 TRAV SW	89 54 50.28	248.00000	32	10,899.71775	9,403.95644
START			59	10,518.09349	9,653.55703
59 TRAV SW	89 54 50.28	248.00000	0	10,517.72110	9,405.55731
0 TRAV SE	0 14 24.41	74.00000	27	10,443.72175	9,405.86743
27 TRAV NE	89 54 50.28	76.00000	159	10,443.83587	9,481.86734
159 S.S. SE	0 14 24.41	96.00000	162	10,347.83671	9,482.26966
159 S.S. NE	89 54 50.28	98.00000	163	10,443.98302	9,579.86723
159 S.S. NE	89 54 50.28	122.00000	164	10,444.01906	9,603.86721
159 S.S. SW	89 54 50.28	4.00000	158	10,443.82986	9,477.86735
START			160	10,443.87164	9,505.86658
160 TRAV SE	0 14 24.41	96.00000	161	10,347.87248	9,506.26899
161 TRAV NE	89 54 50.28	74.00000	166	10,347.98360	9,580.26891
166 TRAV NE	89 54 50.28	24.00000	165	10,348.01963	9,604.26888
165 INV NW	0 14 23.04	96.00027	164	10,444.01906	9,603.86721
START			159	10,443.83587	9,481.86734
159 TRAV NE	89 54 50.28	24.00000	160	10,443.87191	9,505.86732
160 TRAV SE	0 14 24.41	96.00000	161	10,347.87275	9,506.26963
161 TRAV NE	89 54 50.28	74.00000	166	10,347.98386	9,580.26955
166 TRAV NE	89 54 50.28	24.00000	165	10,348.01990	9,604.26952
165 INV NW	0 14 24.41	96.00000	164	10,444.01906	9,603.86721
OFFSETS FROM A LINE			27	10,443.72175	9,405.86743
BASE BRG NW	0 14 24.41				
PT	BASE DIST	OFFSET			
49	-104.29001	87.35035			
48	-97.43647	73.27683			
38	-24.88325	72.62782			
37	-0.98911	72.51092			
158	-0.19362	71.99974			
10	-12.34919	36.51440			
9	-0.53883	1.13516			
8	11.31550	0.96550			
7	23.32102	1.01120			
11	43.87643	0.15273			
12	67.69661	0.15582			
13	73.77953	0.27118			
14	97.92972	0.12143			
15	281.98526	0.89405			

PROBATE FILE ORIGIN LENGTH = 234 POINTS TIME ON FILE: 4 40 42.33
MILLS SOUTH CEMETERY ***** COORD *****

Table with columns: EASTING, NORTHING, DISTANCE TO, BEARING, TYPE. Lists survey coordinates and bearings for various points.

BASE BRG NW 0 14 24.41
PT BASE DIST OFFSET
104.20032
73.27883
72.82782
72.21002
71.99874
70.21440
71.19318
68.82200
73.21120
43.92843
62.15882
61.17218
61.21143
61.88802

Table with columns: Line Number, Easting, Northing. Lists survey data for lines 16-18, 32, 39, 47, 40, 25, 22, 20, 21, 28, 39, 47, 36, 40, 25, 22, 28, 31, 27, 88, 54, 71, 72, 74, 73, 61, 65, 64, 62, 63, 66, 67, 68, 69, 70, 3, 82, 83, 84, 85, 86, 137, 136, 94, 97.

Summary table with columns: Line, Easting, Northing. Includes 'START' and 'OFFSETS FROM A LINE' for various line segments.

Summary table with columns: Line, Easting, Northing. Includes 'BASE BRG' and 'OFFSETS FROM A LINE' for line segments NW 89 06 22.31 and NW 0 14 24.41.

150	10,665.82791	9,476.93700
151	10,900.01806	9,603.95621
152	10,899.99403	9,587.95623
153	10,899.84988	9,491.95634
154	10,899.82586	9,475.95636
155	10,517.85324	9,493.55721
156	10,517.99739	9,589.55710
157	10,666.09219	9,652.93680
158	10,443.82986	9,477.86735
159	10,443.83587	9,481.86734
160	10,443.87191	9,505.86732
161	10,347.87275	9,506.26963
162	10,347.83671	9,482.26966
163	10,443.98302	9,579.86723
164	10,444.01906	9,603.86721
165	10,348.01990	9,604.26952
166	10,347.98386	9,580.26955

TIME FOR THIS RUN: 0 48 12.85; TOTAL TIME ON FILE: 5 28 58.17
 COORDINATES STORED

LIST	1	10,000.00000	10,000.00000
	2	10,638.81500	9,968.11100
	3	10,643.62900	9,993.07100
	4	10,680.96107	9,688.90531
	5	11,189.96900	9,645.60200
	6	10,661.29182	9,681.15260
	7	10,467.04680	9,406.78089
	8	10,455.04119	9,406.78550
	9	10,443.18768	9,407.00484
	10	10,431.52569	9,442.43326
	11	10,487.59843	9,405.83628
	12	10,511.41842	9,405.73955
	13	10,517.50177	9,405.82942

10000.00000	10000.00000
10638.81500	9968.11100
10643.62900	9993.07100
10680.96107	9688.90531
11189.96900	9645.60200
10661.29182	9681.15260
10467.04680	9406.78089
10455.04119	9406.78550
10443.18768	9407.00484
10431.52569	9442.43326
10487.59843	9405.83628
10511.41842	9405.73955
10517.50177	9405.82942

00150.000,0 00000.000,01

10000.000,0
 10638.815,0
 10643.629,01
 10680.961,01

10,882.8281 10,882.8281 10,882.8281
 10,883.8281 10,883.8281 10,883.8281
 10,884.8281 10,884.8281 10,884.8281
 10,885.8281 10,885.8281 10,885.8281
 10,886.8281 10,886.8281 10,886.8281
 10,887.8281 10,887.8281 10,887.8281
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 10,890.8281 10,890.8281 10,890.8281
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 10,892.8281 10,892.8281 10,892.8281
 10,893.8281 10,893.8281 10,893.8281
 10,894.8281 10,894.8281 10,894.8281
 10,895.8281 10,895.8281 10,895.8281
 10,896.8281 10,896.8281 10,896.8281
 10,897.8281 10,897.8281 10,897.8281
 10,898.8281 10,898.8281 10,898.8281
 10,899.8281 10,899.8281 10,899.8281
 10,900.8281 10,900.8281 10,900.8281

THE FOR THIS RUN... TOTAL TIME ON FILE: 2 28 28.17
 UNWANTED STORED

14 10,541.65112 9,405.57845
 15 10,725.70828 9,405.57974
 16 10,786.08170 9,428.39123
 17 10,785.72522 9,453.45237
 18 10,810.31835 9,404.48529
 19 10,845.63840 9,452.75056
 20 10,869.51447 9,452.24184
 21 10,899.32974 9,452.76563
 22 10,837.84521 9,323.25412
 23 10,837.52583 9,322.79367
 24 10,830.80993 9,288.99268
 25 10,488.48020 9,324.01222
 26 10,446.62339 9,289.30806
~~27 10,443.72148 9,405.86853~~ See p. 28
~~28 10,899.79120 9,451.95586~~ See p. 29
 29 10,488.48020 9,323.73222
 30 10,925.53782 9,331.72711
 31 9,999.21542 9,327.00046
 32 10,900.46390 9,899.95677
 33 11,795.56100 9,433.30500
 34 11,032.66398 9,713.03964
 35 10,666.54642 9,685.32559
 36 10,403.66979 9,569.81823
 37 10,443.03652 9,478.38186
 38 10,419.14308 9,478.59889
 39 10,403.48909 9,515.67472
 40 10,359.43285 9,569.96587
 41 10,267.99868 9,683.09607
 42 10,292.10582 9,977.10125
 43 10,823.41200 9,991.03900
 44 10,518.03134 9,541.58231
 45 10,518.09554 9,493.58235
 46 10,517.96714 9,589.58227
 47 10,359.25215 9,515.82236
 48 10,346.59322 9,479.55195
 49 10,339.79872 9,493.65407
 50 10,340.01945 9,517.39615
 51 10,268.10582 9,977.11000
 52 12,003.77100 9,637.11900
 53 11,615.99200 9,674.10500
 54 10,652.39595 10,212.87108
 55 11,615.99260 9,674.16296
 56 11,253.01232 9,677.94663
 57 11,075.21957 9,807.52185
 58 10,517.92531 9,541.55716
 59 10,518.09349 9,653.55703
 60 10,639.90064 10,130.79940
 61 10,592.40325 10,211.93513
 62 10,569.19099 10,183.49251
 63 10,568.35368 10,207.22054
 64 10,592.38096 10,183.61296
 65 10,604.60971 10,183.68095
 66 10,568.60852 10,154.01867
 67 10,595.27966 10,149.24960
 68 10,594.00078 10,127.90538
 69 10,614.56867 10,128.29971
 70 10,569.74162 10,073.40561
 71 10,700.37060 10,204.33815
 72 10,719.53667 10,204.74922
 73 10,724.35308 10,185.56080

10,752.95108	10,752.95108	17
10,777.15695	10,810.31932	18
10,800.41950	10,842.63840	19
10,778.09930	10,889.21447	20
10,778.67775	10,889.23274	21
10,806.75448	10,837.84251	22
10,643.97256	10,837.25883	23
10,644.86726	10,830.80883	24
10,645.28138	10,488.48020	25
10,646.47335	10,448.85338	26
10,657.97641	10,443.25148	27
10,659.64877	10,889.28120	28
10,660.20407	10,488.48020	29
10,417.67222	10,822.22787	30
10,452.47572	8,888.21242	31
10,476.19492	10,800.42330	32
10,552.29376	11,782.28100	33
10,576.01015	11,022.88388	34
10,574.66159	10,888.24842	35
10,574.45317	10,403.88378	36
10,599.44209	10,443.03822	37
10,599.11771	10,413.14208	38
10,600.38904	10,403.48808	39
10,624.01853	10,328.42382	40
10,560.05551	10,281.88888	41
10,548.65246	10,282.10282	42
10,518.27845	10,822.41200	43
10,500.00088	10,818.03124	44
10,488.27384	10,818.08884	45
10,542.07568	10,812.01874	46
10,518.19510	10,328.28218	47
10,548.29168	10,348.28222	48
10,707.96286	10,332.28222	49
10,707.77155	10,340.01842	50
10,719.91894	10,288.10882	51
10,719.96500	12,082.28100	52
10,845.86736	11,812.88200	53
10,870.42001	10,822.28222	54
10,938.48628	11,812.88200	55
10,939.54441	11,222.01222	56
10,939.27326	11,022.21822	57
10,963.17228	10,812.88200	58
10,987.31357	10,812.88200	59
11,011.52667	10,812.88200	60
11,008.16803	10,812.88200	61
10,963.85268	10,812.88200	62
10,951.74107	10,812.88200	63
10,964.11976	10,812.88200	64
10,952.05944	10,812.88200	65
10,906.35345	10,812.88200	66
10,905.82000	10,812.88200	67
10,893.90257	10,812.88200	68
10,883.97595	10,812.88200	69
10,884.40446	10,812.88200	70
10,859.45180	10,812.88200	71
10,834.40208	10,812.88200	72
10,811.01033	10,812.88200	73
10,803.53215	10,812.88200	74

74	10,700.53474	10,185.33444
75	10,750.60806	10,121.31434
76	10,752.95108	10,088.35403
77	10,777.15695	10,088.96538
78	10,800.41950	10,089.59092
79	10,778.09930	10,064.69929
80	10,778.67775	10,055.03870
81	10,806.75448	9,926.85295
82	10,643.97256	9,927.14825
83	10,644.86726	9,895.53967
84	10,645.28138	9,871.40546
85	10,646.47335	9,787.98148
86	10,657.97641	9,778.51335
87	10,659.64877	9,736.37167
88	10,660.20407	9,712.38525
89	10,417.67222	9,738.01242
90	10,452.47572	9,738.14202
91	10,476.19492	9,737.73634
92	10,552.29376	9,713.48217
93	10,576.01015	9,713.29453
94	10,574.66159	9,756.02121
95	10,574.45317	9,743.21950
96	10,599.44209	9,743.67509
97	10,599.11771	9,756.46558
98	10,600.38904	9,712.79092
99	10,624.01853	9,712.46004
100	10,560.05551	9,653.39145
101	10,548.65246	9,653.47738
102	10,518.27845	9,653.55327
103	10,500.00088	9,654.19510
104	10,488.27384	9,617.98280
105	10,542.07568	9,629.41818
106	10,518.19510	9,629.83148
107	10,548.29168	9,629.72189
108	10,707.96286	9,629.08004
109	10,707.77155	9,604.86270
110	10,719.91894	9,604.90972
111	10,719.96500	9,628.89402
112	10,845.86736	9,652.42027
113	10,870.42001	9,652.33868
114	10,938.48628	9,651.82976
115	10,939.54441	9,640.09835
116	10,939.27326	9,627.76456
117	10,963.17228	9,651.83950
118	10,987.31357	9,651.78445
119	11,011.52667	9,703.60136
120	11,008.16803	9,744.53678
121	10,963.85268	9,703.51242
122	10,951.74107	9,703.54469
123	10,964.11976	9,679.56995
124	10,952.05944	9,679.67167
125	10,906.35345	9,712.55504
126	10,905.82000	9,736.38113
127	10,893.90257	9,712.44616
128	10,883.97595	9,704.22069
129	10,884.40446	9,679.96420
130	10,859.45180	9,704.24574
131	10,834.40208	9,736.53028
132	10,811.01033	9,712.15976
133	10,803.53215	9,712.21556

10,182.3344	10,700.23474	74
10,151.31434	10,720.23808	75
10,088.22403	10,725.22108	76
10,088.22403	10,737.12822	77
10,088.22403	10,800.41220	78
10,064.22418	10,778.02220	79
10,022.22418	10,778.22222	80
9,922.22422	10,800.22448	81
9,927.14822	10,800.22422	82
9,922.22422	10,778.22422	83
9,871.40248	10,778.22422	84
9,787.22418	10,800.42222	85
9,778.22422	10,827.22422	86
9,738.22422	10,827.22422	87
9,712.22422	10,827.22422	88
9,712.22422	10,827.22422	89
9,712.22422	10,827.22422	90
9,712.22422	10,827.22422	91
9,712.22422	10,827.22422	92
9,712.22422	10,827.22422	93
9,712.22422	10,827.22422	94
9,712.22422	10,827.22422	95
9,712.22422	10,827.22422	96
9,712.22422	10,827.22422	97
9,712.22422	10,827.22422	98
9,712.22422	10,827.22422	99
9,712.22422	10,827.22422	100
9,712.22422	10,827.22422	101
9,712.22422	10,827.22422	102
9,712.22422	10,827.22422	103
9,712.22422	10,827.22422	104
9,712.22422	10,827.22422	105
9,712.22422	10,827.22422	106
9,712.22422	10,827.22422	107
9,712.22422	10,827.22422	108
9,712.22422	10,827.22422	109
9,712.22422	10,827.22422	110
9,712.22422	10,827.22422	111
9,712.22422	10,827.22422	112
9,712.22422	10,827.22422	113
9,712.22422	10,827.22422	114
9,712.22422	10,827.22422	115
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9,712.22422	10,827.22422	117
9,712.22422	10,827.22422	118
9,712.22422	10,827.22422	119
9,712.22422	10,827.22422	120
9,712.22422	10,827.22422	121
9,712.22422	10,827.22422	122
9,712.22422	10,827.22422	123
9,712.22422	10,827.22422	124
9,712.22422	10,827.22422	125
9,712.22422	10,827.22422	126
9,712.22422	10,827.22422	127
9,712.22422	10,827.22422	128
9,712.22422	10,827.22422	129
9,712.22422	10,827.22422	130
9,712.22422	10,827.22422	131
9,712.22422	10,827.22422	132
9,712.22422	10,827.22422	133
9,712.22422	10,827.22422	134
9,712.22422	10,827.22422	135
9,712.22422	10,827.22422	136
9,712.22422	10,827.22422	137
9,712.22422	10,827.22422	138
9,712.22422	10,827.22422	139
9,712.22422	10,827.22422	140
9,712.22422	10,827.22422	141
9,712.22422	10,827.22422	142
9,712.22422	10,827.22422	143
9,712.22422	10,827.22422	144
9,712.22422	10,827.22422	145
9,712.22422	10,827.22422	146
9,712.22422	10,827.22422	147
9,712.22422	10,827.22422	148
9,712.22422	10,827.22422	149
9,712.22422	10,827.22422	150
9,712.22422	10,827.22422	151
9,712.22422	10,827.22422	152
9,712.22422	10,827.22422	153
9,712.22422	10,827.22422	154
9,712.22422	10,827.22422	155
9,712.22422	10,827.22422	156
9,712.22422	10,827.22422	157
9,712.22422	10,827.22422	158
9,712.22422	10,827.22422	159
9,712.22422	10,827.22422	160
9,712.22422	10,827.22422	161
9,712.22422	10,827.22422	162
9,712.22422	10,827.22422	163
9,712.22422	10,827.22422	164
9,712.22422	10,827.22422	165
9,712.22422	10,827.22422	166

134	10,803.79156	9,704.62902
135	10,779.64191	9,704.37753
136	10,754.50985	9,776.04657
137	10,731.32075	9,775.90152
138	10,768.04071	9,704.32887
139	10,755.92678	9,704.16865
140	10,767.97065	9,680.39515
141	10,756.01095	9,680.23931
142	10,731.83513	9,704.69389
143	10,707.52061	9,704.65584
144	10,683.76861	9,704.81703
145	10,684.39560	9,712.32374
146	10,683.94839	9,736.38668
147	10,665.02065	9,504.93666
148	10,665.99662	9,588.93664
149	10,665.85247	9,492.93640
150	10,665.82845	9,476.93636
151	10,900.01944	9,603.95604
152	10,899.99541	9,587.95600
153	10,899.85126	9,491.95576
154	10,899.82724	9,475.95572
155	10,517.85324	9,493.55721
156	10,517.99739	9,589.55710
157	10,666.02272	9,652.93680
158	10,443.82959	9,477.86671
159	10,443.83560	9,481.86671
160	10,443.87164	9,505.86668
161	10,347.87248	9,506.26899
162	10,347.83644	9,482.26902
163	10,443.98275	9,579.86660
164	10,444.01879	9,603.86657
165	10,348.01963	9,604.26888
166	10,347.98360	9,580.26891

See pp. 40-41

TIME FOR THIS RUN: 0 51 26.65; TOTAL TIME ON FILE: 4 40 45.32
COORDINATES STORED

10,574.66159	9,756.02121
10,574.45317	9,743.21950
10,599.44209	9,743.67509
10,599.11771	9,756.46558
10,600.38904	9,712.79092
10,624.01853	9,712.46004
10,560.05551	9,653.39145
10,548.65246	9,653.47738
10,518.27845	9,653.55327
10,500.00088	9,654.19510
10,488.27384	9,617.98280
10,542.07568	9,629.41818
10,518.19510	9,629.83148
10,548.29168	9,629.72189
10,707.96286	9,629.08004
10,707.77155	9,604.86270
10,719.91894	9,604.90972
10,719.96500	9,628.89402
10,845.86736	9,652.42027
10,870.42001	9,652.33868
10,938.48628	9,651.82976
10,939.54441	9,640.09835
10,939.27326	9,627.76456
10,963.17228	9,651.83950
10,987.31357	9,651.78445
11,011.52667	9,703.60136
11,008.16803	9,744.53678
10,963.85268	9,703.51242
10,951.74107	9,703.54469
10,964.11976	9,679.56995
10,952.05944	9,679.67167
10,906.35345	9,712.55504
10,905.82000	9,736.38113
10,893.90257	9,712.44616
10,883.97595	9,704.22069
10,884.40446	9,679.96420
10,859.45180	9,704.24574
10,834.40208	9,736.53028
10,811.01033	9,712.15976
10,803.53215	9,712.21556
10,803.79156	9,704.62902
10,779.64191	9,704.37753
10,754.50985	9,776.04657
10,731.32075	9,775.90152
10,768.04071	9,704.32887
10,755.92678	9,704.16865
10,767.97065	9,680.39515
10,756.01095	9,680.23931
10,731.83513	9,704.69389
10,707.52061	9,704.65584
10,683.76861	9,704.81703
10,684.39560	9,712.32374
10,683.94839	9,736.38668
10,666.02011	9,604.93685
10,665.99609	9,588.93687
10,665.85194	9,492.93698
10,665.82791	9,476.93700
10,900.01806	9,603.95621
10,899.99403	9,587.95623
10,899.84988	9,491.95634

THE FINE PRINTING COMPANY
 12 27

94	10,574.66159	9,756.02121
95	10,574.45317	9,743.21950
96	10,599.44209	9,743.67509
97	10,599.11771	9,756.46558
98	10,600.38904	9,712.79092
99	10,624.01853	9,712.46004
100	10,560.05551	9,653.39145
101	10,548.65246	9,653.47738
102	10,518.27845	9,653.55327
103	10,500.00088	9,654.19510
104	10,488.27384	9,617.98280
105	10,542.07568	9,629.41818
106	10,518.19510	9,629.83148
107	10,548.29168	9,629.72189
108	10,707.96286	9,629.08004
109	10,707.77155	9,604.86270
110	10,719.91894	9,604.90972
111	10,719.96500	9,628.89402
112	10,845.86736	9,652.42027
113	10,870.42001	9,652.33868
114	10,938.48628	9,651.82976
115	10,939.54441	9,640.09835
116	10,939.27326	9,627.76456
117	10,963.17228	9,651.83950
118	10,987.31357	9,651.78445
119	11,011.52667	9,703.60136
120	11,008.16803	9,744.53678
121	10,963.85268	9,703.51242
122	10,951.74107	9,703.54469
123	10,964.11976	9,679.56995
124	10,952.05944	9,679.67167
125	10,906.35345	9,712.55504
126	10,905.82000	9,736.38113
127	10,893.90257	9,712.44616
128	10,883.97595	9,704.22069
129	10,884.40446	9,679.96420
130	10,859.45180	9,704.24574
131	10,834.40208	9,736.53028
132	10,811.01033	9,712.15976
133	10,803.53215	9,712.21556
134	10,803.79156	9,704.62902
135	10,779.64191	9,704.37753
136	10,754.50985	9,776.04657
137	10,731.32075	9,775.90152
138	10,768.04071	9,704.32887
139	10,755.92678	9,704.16865
140	10,767.97065	9,680.39515
141	10,756.01095	9,680.23931
142	10,731.83513	9,704.69389
143	10,707.52061	9,704.65584
144	10,683.76861	9,704.81703
145	10,684.39560	9,712.32374
146	10,683.94839	9,736.38668
147	10,666.02011	9,604.93685
148	10,665.99609	9,588.93687
149	10,665.85194	9,492.93698
150	10,665.82791	9,476.93700
151	10,900.01806	9,603.95621
152	10,899.99403	9,587.95623
153	10,899.84988	9,491.95634

10,899.82586 9,475.95636
 10,517.85324 9,493.55721
 10,517.99739 9,589.55710
 10,666.09219 9,652.93680
 10,443.82986 9,477.86735
 10,443.83587 9,481.86734
 10,443.87191 9,505.86732
 10,347.87275 9,506.26963
 10,347.83671 9,482.26966
 10,443.98302 9,579.86723
 10,444.01906 9,603.86721
 10,348.01990 9,604.26952
 10,347.98386 9,580.26955
 10,666.00209 9,592.93687
 10,780.00109 9,592.45912
 10,900.00004 9,591.95623
 10,665.84593 9,488.93698
 10,779.84493 9,488.45924
 10,899.84388 9,487.95635
 10,780.01911 9,604.45911
 10,779.82691 9,476.45925

TIME FOR THIS RUN: 0 12 37.50; TOTAL TIME ON FILE: 5 41 35.67
 COORDINATES STORED

154 10,899.82586 9,475.95636
 155 10,517.85324 9,493.55721
 156 10,517.99739 9,589.55710
 157 10,666.09219 9,652.93680
 158 10,443.82986 9,477.86735
 159 10,443.83587 9,481.86734
 160 10,443.87191 9,505.86732
 161 10,347.87275 9,506.26963
 162 10,347.83671 9,482.26966
 163 10,443.98302 9,579.86723
 164 10,444.01906 9,603.86721
 165 10,348.01990 9,604.26952
 166 10,347.98386 9,580.26955
 167 10,666.00209 9,592.93687
 168 10,780.00109 9,592.45912
 169 10,900.00004 9,591.95623
 170 10,665.84593 9,488.93698
 171 10,779.84493 9,488.45924
 172 10,899.84388 9,487.95635
 173 10,780.01911 9,604.45911
 174 10,779.82691 9,476.45925

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 5 41 35.67
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				58	10,517.92531	9,541.55716
58	S.S. SW	25 43 53.83	82.20506	160	10,443.87191	9,505.86732
58	INV SE	27 23 20.49	83.27739	163	10,443.98302	9,579.86723
START				154	10,899.82586	9,475.95636
154	TRAV SW	89 54 50.28	72.00000	0	10,899.71775	9,403.95644
0	TRAV SE	0 14 24.41	60.00000	0	10,839.71827	9,404.20789
0	S.S. SE	0 32 26.16	29.40123	18	10,810.31835	9,404.48529
0	S.S. SE	0 41 21.82	114.01824	15	10,725.70828	9,405.57974
0	TRAV SW	89 54 50.28	36.00000	186	10,839.66422	9,368.20793
186	S.S. SW	89 54 50.28	12.00000	175	10,839.64620	9,356.20794
186	S.S. SW	89 54 50.28	24.00000	176	10,839.62818	9,344.20795
186	TRAV SE	0 14 24.41	12.00000	0	10,827.66432	9,368.25822
0	TRAV NE	89 54 50.28	12.00000	185	10,827.68234	9,380.25820
185	TRAV SE	0 14 24.41	196.00000	178	10,631.68406	9,381.07959
178	S.S. NE	89 54 50.28	24.00000	177	10,631.72010	9,405.07957
178	S.S. SW	89 54 50.28	24.00000	179	10,631.64802	9,357.07962
178	S.S. SW	89 54 50.28	36.00000	180	10,631.63001	9,345.07963
178	TRAV SE	0 14 24.41	172.00000	182	10,459.68557	9,381.80040
182	S.S. SW	89 54 50.28	24.00000	183	10,459.64953	9,357.80043
182	S.S. SW	89 54 50.28	36.00000	184	10,459.63152	9,345.80044
182	TRAV NE	89 54 50.28	24.00000	181	10,458.72161	9,405.80038
181	S.S. SE	0 14 24.41	16.00000	27	10,443.72175	9,405.86743
181	S.S. SE	4 09 59.48	16.57774	9	10,443.18768	9,407.00484
START				178	10,631.68406	9,381.07959
178	TRAV SE	0 14 24.41	176.00000	182	10,455.68561	9,381.81717
182	S.S. SW	89 54 50.28	24.00000	183	10,455.64957	9,357.81719
182	S.S. SW	89 54 50.28	36.00000	184	10,455.63155	9,345.81721
182	TRAV NE	89 54 50.28	24.00000	181	10,455.72164	9,405.81714
181	S.S. SE	0 14 24.41	12.00000	27	10,443.72175	9,405.86743
181	S.S. SE	5 24 47.16	12.59011	9	10,443.18768	9,407.00484
181	S.S. SE	54 54 17.86	1.18353	8	10,455.04119	9,406.78550
181	S.S. NE	4 51 50.57	11.36609	7	10,467.04680	9,406.78089
181	S.S. NE	0 02 03.84	31.87679	11	10,487.59843	9,405.83628
181	S.S. NW	0 04 47.36	55.69683	12	10,511.41842	9,405.73955
181	S.S. NE	0 00 40.99	61.78013	13	10,517.50177	9,405.82942
181	S.S. NW	0 09 32.94	85.92981	14	10,541.65112	9,405.57845
START				58	10,517.92531	9,541.55716
58	TRAV SW	89 54 50.28	36.00000	0	10,517.87126	9,505.55720
0	TRAV SE	0 14 24.41	30.00000	0	10,517.87152	9,505.68292
0	INV NE	50 02 42.96	46.79948	58	10,517.92531	9,541.55716
58	TRAV SW	89 54 50.28	24.00000	187	10,517.88928	9,517.55719
187	TRAV SE	0 14 24.41	24.00000	189	10,493.88949	9,517.65776
189	TRAV NE	89 54 50.28	48.00000	190	10,493.96156	9,565.65771
190	TRAV NW	0 14 24.41	24.00000	188	10,517.96135	9,565.55713
188	INV SW	89 54 50.28	24.00000	58	10,517.92531	9,541.55716
LIST				175	10,839.64620	9,356.20794
				176	10,839.62818	9,344.20795
				177	10,631.72010	9,405.07957
				178	10,631.68406	9,381.07959

10,478.42522
10,484.42522
10,488.42522
10,492.42522
10,496.42522
10,500.42522
10,504.42522
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COORDINATES STORED TIME FOR THIS RUN: 0 15 37.50: TOTAL TIME ON FILE: 5 41 35.67

COORDINATE FILE: 08210 LENGTH = 224 POINTS; TIME ON FILE: 2 41 32.87
DANVILLE SOUTH CEMETERY ***** JOB #1893

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			88	10,517.8231	9,241.8218
28 2.S. SW	28 43 23.82	82.20208	180	10,443.87181	9,205.86732
28 1NW SE	27 23 20.48	82.27238	183	10,443.88302	9,278.88223
START			184	10,899.82888	9,472.88238
184 TRAV SW	88 24 20.28	72.00000	0	10,899.71722	9,402.88244
0 TRAV SE	0 14 24.41	80.00000	0	10,899.71827	9,404.20789
0 2.S. SE	0 32 28.18	29.40123	18	10,810.31822	9,404.48229
0 2.S. SE	0 41 21.82	114.01824	12	10,728.70828	9,402.27874
0 TRAV SW	88 24 20.28	28.00000	188	10,828.88422	9,388.20782
188 2.S. SW	88 24 20.28	12.00000	172	10,828.88420	9,328.20781
188 2.S. SW	88 24 20.28	24.00000	178	10,828.88818	9,344.20782
188 TRAV SE	0 14 24.41	12.00000	0	10,827.88422	9,388.22822
0 TRAV NE	88 24 20.28	12.00000	182	10,827.88234	9,380.22820
182 TRAV SE	0 14 24.41	188.00000	178	10,831.88408	9,381.07829
178 2.S. NE	88 24 20.28	24.00000	177	10,831.72010	9,402.07827
178 2.S. SW	88 24 20.28	24.00000	179	10,831.84802	9,327.07822
178 2.S. SW	88 24 20.28	28.00000	180	10,831.82001	9,342.07823
178 TRAV SE	0 14 24.41	172.00000	182	10,428.88827	9,381.80040
182 2.S. SW	88 24 20.28	24.00000	183	10,428.84823	9,327.80043
182 2.S. SW	88 24 20.28	28.00000	184	10,428.83122	9,342.80044
182 TRAV NE	88 24 20.28	24.00000	181	10,428.72181	9,402.80038
181 2.S. SE	0 14 24.41	18.00000	27	10,443.72122	9,402.88243
181 2.S. SE	1 09 22.48	18.27274	9	10,443.18288	9,407.00484
START			178	10,831.88408	9,381.07829
178 TRAV SE	0 14 24.41	178.00000	182	10,428.88821	9,381.81717
182 2.S. SW	88 24 20.28	24.00000	183	10,428.84822	9,327.81718
182 2.S. SW	88 24 20.28	28.00000	184	10,428.83122	9,342.81721
182 TRAV NE	88 24 20.28	24.00000	181	10,428.72184	9,402.81714
181 2.S. SE	0 14 24.41	12.00000	27	10,443.72122	9,402.88243
181 2.S. SE	2 24 47.18	12.29011	8	10,443.18288	9,407.00484
181 2.S. NE	4 21 20.27	11.28808	7	10,427.04110	9,400.78820
181 2.S. NE	0 02 02.84	31.82829	11	10,407.88828	9,402.88238
181 2.S. NW	0 04 47.28	22.88823	12	10,411.41842	9,402.72828
181 2.S. NE	0 00 40.88	81.78012	13	10,217.88122	9,402.82842
181 2.S. NW	0 08 32.84	82.82821	14	10,241.88112	9,402.87842
START			88	10,517.8231	9,241.8218
28 TRAV SW	88 24 20.28	28.00000	0	10,517.8218	9,202.8220
0 TRAV SE	0 14 24.41	20.00000	0	10,487.82122	9,202.88232
0 1NW NE	20 02 42.88	48.78848	28	10,517.8231	9,241.8218
28 TRAV SW	88 24 20.28	24.00000	187	10,517.88238	9,217.8218
24.00000	0 14 24.41	188	189	10,493.88448	9,217.82278
48.00000	88 24 20.28	180	180	10,493.88122	9,282.82271
24.00000	0 14 24.41	188	188	10,517.88122	9,282.82273
24.00000	88 24 20.28	28	88	10,517.8231	9,241.8218
LIST			178	10,831.88408	9,381.07829
			178	10,838.82818	9,344.20782
			177	10,831.72010	9,402.07827
			178	10,831.84802	9,327.07822

179	10,631.64802	9,357.07962
180	10,631.63001	9,345.07963
181	10,455.72164	9,405.81714
182	10,455.68561	9,381.81717
183	10,455.64957	9,357.81719
184	10,455.63155	9,345.81721
185	10,827.68234	9,380.25820
186	10,839.66422	9,368.20793
187	10,517.88928	9,517.55719
188	10,517.96135	9,565.55713
189	10,493.88949	9,517.65776
190	10,493.96156	9,565.65771

See 22.51

TIME FOR THIS RUN: 2 14 00.03; TOTAL TIME ON FILE: 7 55 35.70
COORDINATES STORED

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START			187	10,517.88238	9,217.82278
187 TRAV SE	0 14 24.41	24.00000	0	10,493.88448	9,217.82271
188 TRAV NE	88 24 20.28	48.00000	180	10,493.88122	9,282.82271
188 TRAV NW	0 14 24.41	24.00000	188	10,517.88122	9,282.82273
188 TRAV SW	88 24 20.28	28.00000	88	10,517.8231	9,241.8218
LIST			178	10,831.88408	9,381.07829
			178	10,838.82818	9,344.20782
			177	10,831.72010	9,402.07827
			178	10,831.84802	9,327.07822

TIME FOR THIS RUN: 2 14 00.03; TOTAL TIME ON FILE: 7 55 35.70
COORDINATES STORED

COORDINATE FILE:0951WC LENGTH = 224 POINTS; TIME ON FILE: 7 55 35.70
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
START				58	10,517.92531	9,541.55716
58	TRAV SE	0 14 24.41	20.00000	0	10,497.92549	9,541.64097
0	TRAV SW	89 54 50.28	24.00000	187	10,497.88945	9,517.64100
187	S.S. NE	89 54 50.28	48.00000	188	10,497.96153	9,565.64095
187	TRAV SE	0 14 24.41	16.00000	189	10,481.88959	9,517.70805
189	TRAV NE	89 54 50.28	48.00000	190	10,481.96167	9,565.70800
190	INV NW	0 14 24.41	16.00000	188	10,497.96153	9,565.64095

OFFSETS FROM A LINE

BASE BRG	NE	89 54 50.28	PT	BASE DIST	OFFSET
			9	1.13661	0.53578
			37	72.51332	0.79411
			159	76.00000	-0.00000
			160	100.00000	0.00000
			189	111.89781	-37.99986
			190	159.89781	-37.99986
			163	174.00000	-0.00000
			164	198.00000	0.00000

OFFSETS FROM A LINE

BASE BRG	SE	0 14 24.41	PT	BASE DIST	OFFSET
			163	38.03765	-13.99995
			160	37.83865	59.99978
			36	78.30841	-3.78209
			40	122.54558	-3.74434

LIST

187	10,497.88945	9,517.64100
188	10,497.96153	9,565.64095
189	10,481.88959	9,517.70805
190	10,481.96167	9,565.70800

TIME FOR THIS RUN: 0 09 30.67; TOTAL TIME ON FILE: 8 05 06.37
COORDINATES STORED

10,497.92531	9,541.55716	188
10,497.92549	9,541.64097	187
10,497.88945	9,517.64100	189
10,497.96153	9,565.64095	188
10,481.88959	9,517.70805	189
10,481.96167	9,565.70800	190
10,497.96153	9,565.64095	188
10,517.92531	9,541.55716	58
10,497.92549	9,541.64097	0
10,497.88945	9,517.64100	187
10,497.96153	9,565.64095	188
10,481.88959	9,517.70805	189
10,481.96167	9,565.70800	190
10,497.96153	9,565.64095	188

TIME FOR THIS RUN: 0 14 00.03; TOTAL TIME ON FILE: 7 55 35.70
COORDINATES STORED

Matlock's Graveyard and Wilson's Sub. of Lot 12 in Wilson's Add.
South Cemetery survey point numbers used

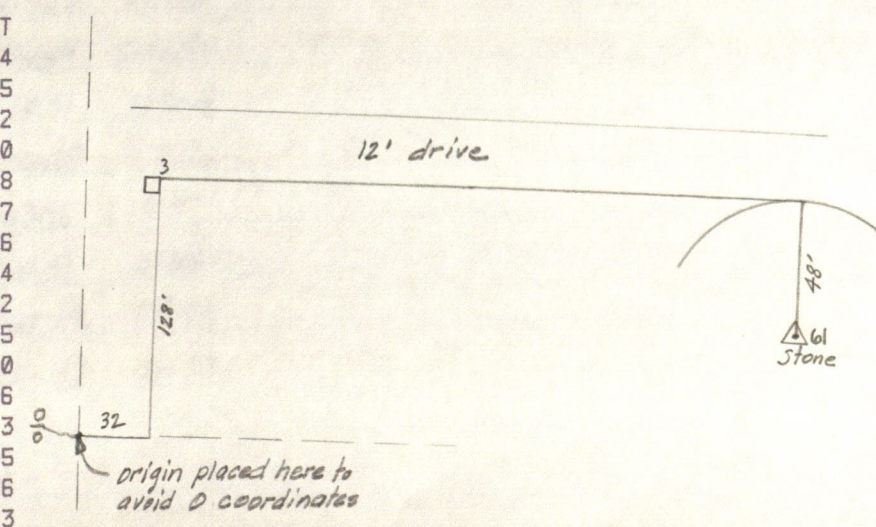
COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 8 28 11.09
DANVILLE SOUTH CEMETERY ***** JOB #1993

COORDINATE FILE: 0951WC LENGTH = 224 POINTS; TIME ON FILE: 8 28 11.09
DANVILLE SOUTH CEMETERY ***** JOB #1993

***** COGO *****

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
LINE TANGENT TO CIRCLES					
RADIUS =	0.000		3	10,643.62900	9,993.07100
RADIUS =	-48.000		61	10,592.40325	10,211.93513
TANGENT PTS (2nd,1st)			200	10,640.39806	10,212.64137
START			3	10,643.62900	9,993.07100
3 TRAV SW	0 50 34.93	128.00000	0	10,515.64286	9,991.18770
0 TRAV NW	89 09 25.07	32.00000	201	10,516.11368	9,959.19117
OFFSETS FROM A LINE			201	10,516.11368	9,959.19117
BASE BRG SW	0 50 34.93				
PT	BASE DIST	OFFSET			
OFFSETS FROM A LINE			201	10,516.11368	9,959.19117
BASE BRG NE	0 50 34.93				
PT	BASE DIST	OFFSET			
70	55.30260	113.41304			
66	55.35570	194.03405			
62	56.37177	223.49612			
63	55.88366	247.23390			
68	80.36100	167.54998			
67	81.95379	188.87307			
64	79.56100	223.27536			
61	80.00000	251.59414			
65	91.78942	223.16342			
69	100.93247	167.64165			
3	128.00000	32.00000			
74	187.72840	223.40536			
71	187.84388	242.40943			
73	211.54749	223.28125			
72	207.01392	242.53846			
76	238.71217	125.66423			
75	236.85435	158.65545			
80	263.94588	91.97398			
79	263.50963	101.64205			
77	262.92441	125.91937			
78	286.19365	126.20257			
43	307.73364	27.32303			

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING
LINE TANGENT TO CIRCLES					
RADIUS =	0.000		3	10,643.62900	9,993.07100
RADIUS =	-48.000		61	10,592.40325	10,211.93513
TANGENT PTS (2nd,1st)			200	10,640.39806	10,212.64137
START			3	10,643.62900	9,993.07100
3 TRAV SW	0 50 34.93	128.00000	0	10,515.64286	9,991.18770
0 TRAV NW	89 09 25.07	32.00000	201	10,516.11368	9,959.19117
OFFSETS FROM A LINE			201	10,516.11368	9,959.19117
BASE BRG SW	0 50 34.93				
PT	BASE DIST	OFFSET			
OFFSETS FROM A LINE			201	10,516.11368	9,959.19117
BASE BRG NE	0 50 34.93				
PT	BASE DIST	OFFSET			
70	55.30260	113.41304			
66	55.35570	194.03405			
62	56.37177	223.49612			
63	55.88366	247.23390			
68	80.36100	167.54998			
67	81.95379	188.87307			
64	79.56100	223.27536			
61	80.00000	251.59414			
65	91.78942	223.16342			
69	100.93247	167.64165			
3	128.00000	32.00000			
74	187.72840	223.40536			
71	187.84388	242.40943			
73	211.54749	223.28125			
72	207.01392	242.53846			
76	238.71217	125.66423			
75	236.85435	158.65545			
80	263.94588	91.97398			
79	263.50963	101.64205			
77	262.92441	125.91937			
78	286.19365	126.20257			
43	307.73364	27.32303			



TIME FOR THIS RUN: 0 08 08.28; TOTAL TIME ON FILE: 8 25 23.87
COORDINATES STORED

PTS 200 THRU 201 CLEARED
TIME FOR THIS RUN: 0 07 02.82; TOTAL TIME ON FILE: 8 35 13.90
COORDINATES STORED

DAVULLE SOUTH CEMETERY
 COORDINATE FILE: 00510 LENGTH = 524 POINTS TIME ON FILE: 8 28 11.00
 ***** COORD *****

FROM TYPE	BEARING	DISTANCE TO	NORTHING	EASTING
LINE TANGENT TO CIRCLES				
RADIUS = 0.000			10.843.82800	8.883.07100
RADIUS = -48.990			10.285.40358	10.511.82813
TANGENT PTS (2nd, 1st)				
START				
3 TRAV SW @ 20 34.93		128.00000	10.843.82800	8.883.07100
0 TRAV NW @ 99 25.97		32.00000	10.218.11388	8.883.18113
OFFSETS FROM A LINE				
BASE BRG SW @ 20 34.93			10.218.11388	8.883.18113
PT BASE DIST				
OFFSETS FROM A LINE				
BASE BRG NE @ 20 34.93			10.218.11388	8.883.18113
PT BASE DIST				
OFFSET				
70			113.41304	22.30250
71			104.03488	22.32270
72			22.37177	22.34815
73			247.23390	22.88388
74			80.28100	187.24988
75			81.82378	188.87307
76			22.28100	223.27288
77			221.88414	80.00000
78			223.18242	81.78942
79			100.82347	187.84188
80			32.00000	32.00000
81			187.22940	223.40238
82			187.64288	242.46843
83			211.84248	223.28122
84			207.01382	242.23848
85			228.71217	128.88423
86			228.88428	128.88428
87			81.84288	81.84288
88			283.84288	101.84288
89			282.82441	128.81937
90			288.18382	128.28227
91			207.23384	27.23384

COORDINATES STORED
 TIME FOR THIS RUN: 0 07 02.82; TOTAL TIME ON FILE: 8 32 13.80
 PTS 208 THRU 201 CLEARED

Calc. to determine if lots in Matlock's Graveyard are square;
 that is, laid out at right angles to the 12' drive

Point	Plot	Coords.	Man't.	Coords.	Wt
	N	E	N	E	
70	56	116	55.30	113.41	1
66	56	192	55.36	144.83	1
62	56	224	56.37	223.50	1
63	56	248.8	55.88	247.23	1
68	80	168	80.36	167.55	1
67	80	192	81.95	188.87	1
64	80	224	79.56	223.28	1
61	80	251	80.00	251.59	100
65	92	224	91.79	223.16	1
69	104	168	100.93	167.64	1
3	128	32	128.00	32.00	100
74	188	224	187.73	223.41	1
71	188	243	187.84	242.41	1
73	212	224	211.55	223.28	1
72	206	243	207.01	242.54	1
76	236	128	238.71	125.66	1
75	236	160	236.85	158.66	1
80	260	96	263.95	91.97	1
79	260	104	263.51	101.64	1
77	260	128	262.92	125.92	1
78	284	128	286.19	126.20	1

indicates the graveyard
 nearly square that it can be
 50. 18' and 81 are
 which causes a scale factor of
 the drive and always will not
 Therefore, east and
 lot lots measure 24.09 feet
 and the 19-foot lots measure
 only the 12-foot drive and no
 and south the 24-foot lot
 24.09 feet, practically, and from
 lot lots measure 1.00258818 times the
 dimensions.
 Linear regression of plot dimensions
 not increased for scale factor, plots
 of northernmost lots as follows:
 increasing with the west line of Lot
 173', 5.00', 17.81', 14.03', 2.89',
 21.15', 11.97', 1.24', 21.06', 17.33', 6.14', and
 The scale factor increases those
 dimensions to: 19.24', 5.75', 5.01', 17.88',
 21.12', 12.22', 12.00', 1.24', 21.11',
 17.33', 6.14', 21.06', 17.33', 6.14', and

Calc. to determine if lots in Matlock's Graveyard are square;
that is, laid out at right angles to the 'S' drive

Matlock's Graveyard

DATE: 3/15/1996 INPUT FILE = DSC4.DAT
TIME: 08:20 TRANSACTION LOG = DSC4.LOG

ANALYSIS & SOLUTION FOR 2 DIMENSIONAL TRANSFORMATION
FROM
SYSTEM ONE TO SYSTEM TWO BY LEAST SQUARES

Processing point pairs in file DSC4.PRS

Input coordinates of corresponding points
System One System Two (fixed)

PT#	NORTH	EAST	PT#	NORTH	EAST	WEIGHT
70	55.300	116.000	570	55.300	113.410	1.00
66	55.360	192.000	566	55.360	194.030	1.00
62	56.370	224.000	562	56.370	223.500	1.00
63	55.880	248.800	563	55.880	247.230	1.00
68	80.360	168.000	568	80.360	167.550	1.00
67	81.950	192.000	567	81.950	188.870	1.00
64	79.560	224.000	564	79.560	223.280	1.00
61	80.000	251.000	561	80.000	251.590	100.00
65	91.790	224.000	565	91.790	223.160	1.00
69	100.930	168.000	569	100.930	167.640	1.00
3	128.000	32.000	503	128.000	32.000	100.00
74	187.730	224.000	574	187.730	223.410	1.00
71	187.840	243.000	571	187.840	242.410	1.00
73	211.550	224.000	573	211.550	223.280	1.00
72	207.010	243.000	572	207.010	242.540	1.00
76	238.710	128.000	576	238.710	125.660	1.00
75	236.850	160.000	575	236.850	158.660	1.00
80	263.950	96.000	580	263.950	91.970	1.00
79	263.510	104.000	579	263.510	101.640	1.00
77	262.920	128.000	577	262.920	125.920	1.00
78	286.190	128.000	578	286.190	126.200	1.00

TRANSFORMATION SOLUTION

The residuals indicate the difference and direction from the calculated (transformed) System One points to the fixed points in System Two. The residuals are displayed both in the form of latitude-departure and azimuth-distance. To obtain System One coordinates transformed to the System Two coordinate system, use Main Menu Option 5. All subsequent use of Options 3, 5 & 6 use this solution.

PT#(1) ->	PT#(2)	LAT	DEP	AZIMUTH/DIST	WEIGHT
70	570	+1.40	-2.846	272 2.85	1.00
66	566	+0.96	+1.579	86 1.58	1.00
62	562	+0.75	-1.082	274 1.04	1.00
63	563	+0.62	-2.166	271 2.17	1.00
68	568	+0.46	-.825	273 .83	1.00
67	567	+0.28	-3.566	270 3.57	1.00
64	564	+0.16	-1.239	270 1.24	1.00
61	561	-.001	+0.002	117 .00	100.00
65	565	-.016	-1.352	269 1.35	1.00
69	569	-.007	-.723	269 .72	1.00
3	503	+0.001	+0.001	45 .00	100.00
74	574	-.262	-1.047	255 1.08	1.00
71	571	-.273	-1.096	256 1.13	1.00
73	573	-.323	-1.164	254 1.21	1.00
72	572	-.322	-.955	251 1.01	1.00
76	576	-.338	-2.522	262 2.54	1.00

75	575	-.351	-1.605	257 1.64	1.00
80	580	-.384	-4.115	264 4.13	1.00
79	579	-.388	-2.466	261 2.50	1.00
77	577	-.400	-2.248	259 2.28	1.00
78	578	-.460	-1.954	256 2.01	1.00

90% Error of the latitudes and departures = 2.31
Scale Factor = 1.00256618 +/- .00015130
Rotation = - 0 Deg 01 Min 57.8 Sec +/- 0 Deg 00 Min 31 Sec

This indicates the graveyard layout is so nearly square that it can be assumed to be so. Points 3 and 61 are held fixed which causes a scale factor of 1.00256618. The drive and alleys will not share the surplus. Therefore, east and west, the 24-foot lots measure 24.09 feet, practically, and the 19-foot lots measure 19.07 feet.

With only the 12-foot drive and no alleys, north and south the 24-foot lots measure 24.06 feet, practically, and fractional lots measure 1.00256618 times the plat dimensions.

Linear regression of plat dimensions, not increased for scale factor, puts dimensions of northernmost lots as follows (beginning with the west line of Lot 49): 19.91', 8.73', 5.00', 17.81', 14.08', 2.89', 23.16', 11.97', 1.24', 21.06', 17.33', 6.14', and 17.55'. The scale factor increases those dimensions to: 19.96', 8.75', 5.01', 17.86', 14.12', 2.90', 23.22', 12.00', 1.24', 21.11', 17.37', 6.16', and 17.60'.