

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

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

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

1974

<u>Date</u>	<u>Inches</u>	
Dec. 7-8	0.50	on wet ground
11	0.25	
12	0.01	
15-16	0.40	
18-19	0.25	
20-21	0.18	
22-24	0.38	
28-31	<u>0.79</u>	
	2.76	

1975

<u>Date</u>	<u>Inches</u>	
Jan. 2-3	0.28	
6-9	0.92	
9-11	1.39	
16-18	0.34	
19	0.22	
26-28	0.70	
30-31	0.86	
Feb. 5-11	0.42	
11-12	0.48	
15-16	0.37	
22-23	2.20	at 7 AM, on the 23rd, at which time the gauge was emptied. Bottom lands flooded. New end post in back woods half under water. 8.18 in. of rain to date in 1975.
23-24	0.45	

1975

Date Inches

Mar. 9-11 1.30

" 13-14 0.17

" 17-19 0.50

" 20 0.08

" 27-28 2.28

streams up, but no major flooding
12.96" of rain to date in 1975.

Apr. 2 0.05

" 18-19 0.83

" 23-24 1.92

" 25 0.06

" 28 0.08

" 30 0.05

May 11 0.07

" 19 0.11

" 25 0.30

" 27 0.10

" 30-31 0.73

1975

Date Inches

June 1-2 1.70

" 5 0.62

" 10 0.36

" 11 0.54

" 14 0.20

" 20 0.35

" 24 0.04

" 26 0.20

July 7 0.27

" 13 0.45

" 18-19 1.07

Aug. 2-3 1.09

13 0.81

14 0.08

25 0.77

29-30 1.63

Sept. 21 0.18

11 0.73

<u>Date</u>	<u>Inches</u>
Sept. 18	0.03
" 20±	0.06
Oct. 14±	0.90
" 17-18-19	1.03
" 23±	0.29
Nov. 6±	0.66
" 12±	0.23
" 21±	0.46
" 26	0.32
" 30	1.75
Dec. 2±	0.07
" 6±	0.53
" to 31st	2.60

37.28 total for 1975

<u>Date</u>	<u>Inches</u>
To Jan. 23	0.94
Jan. 23 to Feb. 10	2.20
Feb. 10 to Feb. 18	0.89
to Mar. 6	2.02
to Mar. 20	0.78
to Mar. 28	0.40
to Apr. 10	0.82
to Apr. 20	0.45
to Apr. 27	0.38
may 6-7	1.17
may 14	0.68
may 28-29	0.53
" 30	0.50
June 15±	0.52
" 18	0.39
" 22-24	1.90
" 28	1.27
" 29	0.79

July 9 0.18 in
 " 12 0.32 in
 " 15 1.25
 " 26 0.90
 " 30 1.11
 Aug. 6 0.80
 " 12 1.10
 " 13 0.86
 " 15 0.10
 " 25 0.92
 Sept. 1 0.21
 " 10 0.97
 " 19 0.55
 Sept. 30-Oct. 1 1.20
 Oct. 18 0.45
 " 25± 0.98
 Nov. - 0.75
 Dec. 1 1.02

30.30 total for 1976

Feb. 14 1.36 in
 " 23 0.65
 " 27 2.60
 Mar. 5 1.50
 Apr. 4 3.69
 May. 1 1.28
 " 8 2.80
 June 5 0.73 *badly needed*
 June 8 0.60
 " 25 1.00
 " 28 1.97
 July 7 0.83
 Aug. 6 0.91
 " 7 0.36
 " 9 0.12
 " 10 0.35
 " 17 2.15
 " 21 1.25
 " 24 0.29

Aug. 30	0.85 in.
Sept. 13	0.78
" 20	0.95
" 26	0.53
Oct. 1	1.91
" 6	0.13
" 15	0.91
" 30	0.85
Nov. 5	0.10
" 7	0.83
" 19	1.78
" 23	0.30
Dec. 16	4.04
" 20	0.14
" 30	0.19
	<u>38.73</u> total for 1977

Feb. 9	1.30	} Too low because snow blew out of gage
Mar. 9	0.65	
" 19	1.75	
" 23	0.25	
" 27	1.20	
" 15	0.31	
Apr. 25	1.37	
May 5	1.00	
" 9	0.41	
" 16	1.29	
" 25	1.51	
June 3	0.11	
" 6	0.98	
" 19	0.33	
" 25	1.00	
July 1	1.34	
" 5	0.25	
" 7	1.14	
" 9	0.40	
" 12	1.00	

July 23924	1.72
" 28±	0.57
Aug. 142	1.44
" 5	0.61
" 9	0.84
" 15	0.25
" 27	1.51
" 29	0.98
Sept. 13	0.64
" 16+17	1.89
" 30	0.53
Oct. 11	0.92
" 13	1.08
" 18	0.06
" 23	0.11
Nov. 6	0.19
" 15	1.80
" 30	0.14
Dec. 3-10	2.00

Dec. 27

0.78
35.65

total for 1978

Jan. 1	1.72
" 20	0.53
Feb. 22	2.80
Mar. 1	0.60
" 4	0.74
Apr. 3	2.13
" 11	1.08
" 13	1.26
" 27	0.31
" 28	0.21
" 30	0.11
May 5	0.35
" 11	0.11
" 12	0.43
" 19	0.09
" 23	0.22
" 24	0.08
" 26	0.76
June 7	1.37

June 10	0.39	
" 12	0.34	
" 20	1.22	
" 29-30	1.65	
July 9	0.61	
" 12-13	5.96	(in 20-hr. period)
" 14	0.44	
" 22-27	1.71	
" 27-28	2.49	
Aug. 31	1.86	
Aug. 10	0.62	
" 20	2.17	
" 21	1.80	
" 22	0.81	
" 25	0.90	
" 26	0.38	
Oct. 1	1.05	
" 10	0.30	
" 12	0.08	
" 16	0.44	

Oct. 24	0.98
" 27	0.11
Oct. 31	1.10
Nov. 7	0.77
" 23	1.49
" 26	1.70
Dec. 24	2.09

Jan. 11	0.98
Feb. 1	0.50
" 23	1.08
Mar. 15	1.20
" 21	1.27
Apr. 1	1.79
" 6	0.23
" 10	0.67
" 16	0.80
" 26	0.22

May 11+12 1.05

" 16,17,18 0.91

" 22 0.20

" 26 0.11

June 1-3 1.84

" 6 0.64

" 10 0.36

" 15 0.41

" 20 0.97

" 24 0.29

" 28 1.02

July 1 0.44

" 21 2.42 end of drought

" 27 1.34

Aug. 2 0.19

" 6 1.12

" 7 0.08

" 9 1.68

" 14-17 2.45

Aug. 18 1.15

Sept. 1 1.44

" 9 0.90

Sept. 16 1.65

" 22 0.30

Oct. 2 0.10

" 17 1.00

" 27 1.03

Dec. 4 1.22

" 10 0.45

18.

19

Ralls' Minor Plat in E²NE⁴10-15-206
 Bench levels from B.M. U72
 RESET 1968 at N. Winchester,
 elev. 947.508'. Backsight reading
 with rod held on conc. step
 above B.M. at elev. 947.893'
 3-17-83 Shartle &
 Loudermilk

3-wire leveling:

<u>B.S.</u>	<u>F.S.</u>
6.845'	4.528'
5.815	3.055
4.785	1.585
7.88	5.20
5.34	2.62
2.79	0.05
6.07	8.74
3.57	6.25
1.07	3.75

8.64	5.63	} on Ward N curb of culvert
6.07	2.84	
3.49	0.07	
11.65	2.501	
9.63	1.665	
7.60	0.826	
11.29	7.82	
10.16	4.30	
9.03	0.77	
8.49	5.75	
5.80	3.56	
3.10	1.36	
2.963	7.61	
1.722	5.15	
0.480	2.67	

6.32	7.74
4.10	5.69
1.89	3.65

4.26	11.68
2.25	9.74
0.24	7.79

2.180	9.73
1.135	8.27
0.095	6.80

2.674	8.70
1.622	7.735
0.562	6.770

3.745	6.835
2.562	6.020
1.380	5.203

NW cor W
conc. header
of culv.
(B.M.#1)

9.130	1.446
8.155	0.750
7.180	0.055

9.770
8.185
6.605

8.715	side slot on point 14
7.311	
5.910	

7.800	NW cor. W
6.035	conc. header culv. in front of house (B.M.#2)
4.270	

7.485	4.860
5.885	2.98
4.285	1.10

8.930
7.595
6.265

2.667	point 1
1.337	(pipe Cen S. NE 1/4 - 15-240)
0.007	(B.M.#3)

Description of Bench Marks

B.M. # 1 - Elev. 940.76' on NW cor.
of W. headwall of conc. culv.
about 320' N. of NW cor. of
minor plat.

B.M. # 2 - Elev. 950.32' on NW cor.
of W. headwall of conc. culv.
about 680' S. of NW cor. of
minor plat.

B.M. # 3 - Elev. 959.48' on pipe
at SW cor. of minor plat.

Delbert Hobson's baseline, 9-2-83

ZA - Slope

Horiz.

90°37'09" 685.86 .86 .86 .86

685.820'

FARM BUREAU COOP
11.76 Ac. in NE cor. 10-15-4W

Startle
Loudermilk

1-25-84

U.S.C.+G.S.

Sta.	B.S.	H.I.	F.S.	EL.
B.M.#1	6.71	959.87		953.161
A1			5.05	954.82
A2			4.77	955.10
A3			4.36	955.51
A4			3.94	955.93
AW1			3.57	956.30
B2			4.80	955.07
B3			4.42	955.45
B4			4.00	955.87
B½			3.64	956.23
1EP			5.26	954.61
2EP			4.97	954.90

	F.S.	EL.
3EP	4.59	955.28
4EP	4.12	955.75
½EP	3.69	956.18
1 SHOULDER	5.51	954.36
2 SH	5.38	954.49
3 SH	5.20	954.67
4 SH	4.52	955.35
½ SH	4.12	955.75
1 DITCH	5.77	954.10
2 "	7.14	952.73
3 "	6.60	953.27
4 "	5.65	954.22
½ "	4.44	955.43
1 28'S	6.09	953.78
2 "	6.60	953.27
3 "	6.50	953.37
4 "	5.30	954.57
½ "	4.31	955.56
C1	7.70	952.17

make 953.68 for
smooth vert. curve

	F.S.	EL.
C1+14'		
C1+20'	7.72	952.15
C1+25	8.3	951.57
C2	8.05	951.82
C3	6.35	953.52
C4	4.8	955.07
C $\frac{1}{2}$	3.7	956.17
D1	9.08	950.79
D1+14'	9.60	950.27
D1+20	9.05	950.82
D1+25	9.6	950.27
D2	9.0	950.87
D3	6.9	952.97
D4	4.7	955.17
D $\frac{1}{2}$	2.7	957.17
1 30's 1A	6.35	953.52
2 " "	7.25	952.62
3 " "	6.70	953.17

	F.S.	EL.	
4 30's 1A	5.43	954.44	
W " "	4.63	955.24	
Sta.	B.S. H.I.	F.S. EL.	
B.M. #1	5.89	959.05	953.161'
E1		8.72	950.33
E1+14'		9.84	949.21
E1+20		8.74	950.31
E1+25		8.88	950.17
E2		7.51	951.54
E3		5.71	953.34
E4		4.02	955.03
E $\frac{1}{2}$		2.80	956.25
F1		8.97	950.08
F1+14		10.09	948.96
+20		8.86	950.19
+25		9.25	949.80
F2		8.50	950.55
F3		7.03	952.02
F4		5.34	953.71

	F.S	EL.
F5	4.15	954.90
F Ψ -8'	3.50	955.55
F Ψ	3.15	955.90
G1	9.17	949.88
G1+14'	9.75	949.30
+20	8.77	950.28
+25	9.29	949.76
G2	8.42	950.63
G3	6.86	952.19
G4	5.13	953.92
G5	4.12	954.93
G Ψ -8	3.56	955.49
G Ψ	3.02	956.03
E and 60' line	3.37	955.68
W " " "	2.05	957.00
H Ψ	1.63	957.42
H Ψ -8	2.76	956.29
H5	3.70	955.35
H4	4.89	954.16

	F.S.	EL.
H3	6.61	952.44
H2	8.50	950.55
H1+25'	9.55	949.50
+20	9.16	949.89
+14	10.20	948.85
H1	9.34	949.71

Sta.	B.S.	H.I.	F.S	EL
B.M.#1	5.43	958.59		953.161'
B.M.#2			12.68	945.91
I1			9.73	948.86
I1+14'			10.50	948.09
I1+20			8.36	950.23
I1+25'			8.74	949.85
I2			7.50	951.09
I3			5.89	952.70
I4			4.05	954.54
I5			2.92	955.67
I Ψ -8'			2.73	955.86

nail in
pole

	F.S.	
IW	2.23	956.86
JW	6.14	952.45
JW-8	6.57	952.02
J5	5.13	953.46
J4	3.60	954.99
J3	5.13	953.46
J2	8.20	950.39
J1+25	11.67	946.92
+20	10.33	948.26
+14	11.94	946.65
J1	11.37	947.22
K1	12.36	946.23
K1+14	13.50	945.09
K1+20	13.64	944.95
K1+25	14.39	944.20
K2	12.16	946.43
K3	8.45	950.14
K4	6.48	952.11
K5	8.73	949.86

	F.S.			
KW-8	12.32	946.27		
KW	12.50	946.09		
Invert N. 12" C.S.P.	10.52	948.07		
on top S " " " "	14.03	944.56		
LW	16.16	942.43		
LW-8	16.29	942.30		
LS	15.24	943.35		
L4	14.23	944.36		
L3	12.96	945.63		
L2	14.90	943.69		
L1+25	14.96	943.63		
L1+20	14.40	944.19		
L1+14	12.95	945.64		
L1	12.50	946.09		
Sta.	B.S.	H.I.	F.S.	EL.
B.M.#2	4.93	950.84		945.91'
M1			4.20	946.64
SE con. prep.			3.50	947.34

	FS	
M1 +14	4.57	946.27
" +20	6.61	944.23
" +25	6.80	944.04
M2	9.28	941.56
£2	9.65	941.19
M3	10.25	940.59
£3	12.90	937.94
M4	10.95	939.89
£4	12.50	938.34
M5	11.12	939.72
47' S of M5	12.50	938.34
£5	11.99	938.85
MW	11.06	939.78
36' N of SW cor	12.30	938.54
SW cor. prop.	4.02	946.82
28' N of SW cor	11.25	939.59
17' " " "	4.95	945.89

32' W of SE cor is 4' lower than road

40 Clark's Creek Rd. Survey
for town of Plainfield 5-13-86

	B.S.	H.I.	F.S.	EL.
B.M.#6	5.82	765.87		760.05
	7.42	772.04	1.25	764.62
B.M.#5	4.82	771.64	5.22	766.82
	0.93	766.07	6.50	765.14
	1.82	760.64	7.25	758.82
B.M.#4	5.61	761.44	4.81	755.83
	4.82	765.94	0.32	761.12
	3.28	764.10	5.12	760.82
	2.40	760.17	6.33	757.77
B.M.#2	0.22	752.09	8.30	751.87
	3.10	752.29	2.90	749.19
B.M.#1	2.03	753. ²² 21	1.10	751. ¹⁹ 18
	4.58	752. ²⁰ 19	5.60+	747. ⁶² 61
	4.57-			
B.M.#2	8.06+	759. ⁹³ 91	0. ³³ 34	751. ⁸⁷ 85
	5.58	763. ⁰¹ 99	2.50	759. ⁴³ 41
	5.83	765. ⁴⁸ 46	3.36	759. ⁶⁵ 63
B.M.#3	1.85-	765. ⁴⁰ 38	1.93-	763. ⁵⁵ 53
	2.81-	760. ³³ 32	7.88	757. ⁵² 50

	B.S.	H.I.	F.S.	
B.M.#4	5.48-	761. ³¹ 30	4.50	755. ⁸³ 82
	7.13	767. ¹³ 12	1.11	760. ²⁰ 19
	9.14-			
	4.39+	771. ⁴⁵ 43	0.29	F.H. 767. ⁰⁴ 02
B.M.#5	3.17	769.99	4.61-	766.82
	3.16+			
	3.89	765.74	8.14+	761.85
B.M.#6			5.69	760.05

7+00.7

7+50

8+00

8+50

S ml pipe
N " "7.30
8.62

9+00

9+50

10+00

①

5.04 754.99 4.17 749.95

11+00

B.M.#1 2.93 H.I.
754.12 751.19 $\frac{1.86}{20}$ $\frac{1.70}{0}$ $\frac{1.66}{20}$ $\frac{3.4}{30}$ $\frac{3.3}{20}$ $\frac{3.10}{9.9}$ $\frac{2.69}{0}$ $\frac{2.98}{9.5}$ $\frac{3.4}{20}$ $\frac{6.5}{28}$ $\frac{4.5}{15}$ $\frac{4.1}{10.2}$ $\frac{3.72}{0}$ $\frac{4.09}{10.7}$ $\frac{3.57}{20}$ $\frac{7.5}{26}$ $\frac{5.6}{14}$ $\frac{5.35}{11.5}$ $\frac{4.83}{0}$ $\frac{5.00}{10.9}$ $\frac{4.6}{20}$ $\frac{5.91}{20}$ $\frac{6.11}{10}$ $\frac{6.04}{0}$ $\frac{6.37}{8.6}$ $\frac{6.5}{20}$ $\frac{6.97}{20}$ $\frac{6.92}{10.8}$ $\frac{6.73}{0}$ $\frac{7.13}{9}$ $\frac{7.9}{20}$ $\frac{6.61}{20}$ $\frac{6.87}{10.4}$ $\frac{6.89}{0}$ $\frac{7.37}{10.6}$ $\frac{11.2}{ml\ pipe}$ $\frac{6.1}{20}$ $\frac{5.35}{20}$ $\frac{5.04}{0}$ $\frac{5.43}{20}$ $\frac{4.0}{15.8F}$ $\frac{4.3}{20}$

11+50

12+00

12+50

13+00

13+50

0

14+00

14+20+ Page

15+00

B.M.#2

4.54 752.08 745 747.54

$\frac{10.0}{195}$	$\frac{9.5}{179}$	$\frac{9.4}{168}$	$\frac{3.5}{154}$	$\frac{3.1}{128}$
	F			

8.18	760.05	0.23	751.85
			751.87
			0.02

L

R

$\frac{4.3}{20}$	$\frac{3.43}{20}$	$\frac{3.22}{0}$	$\frac{3.59}{20}$	$\frac{3.7}{20}$
------------------	-------------------	------------------	-------------------	------------------

$\frac{4.1}{20}$	$\frac{3.05}{20}$	$\frac{2.91}{0}$	$\frac{3.33}{20}$	$\frac{2.8}{20}$
------------------	-------------------	------------------	-------------------	------------------

$\frac{6.7}{20}$	$\frac{4.20}{20}$	$\frac{3.88}{0}$	$\frac{4.08}{20}$	$\frac{4.0}{12}$	$\frac{1.3}{16}$	$\frac{1.4}{20}$
					F	

$\frac{7.8}{22}$	$\frac{6.53}{20}$	$\frac{6.00}{0}$	$\frac{6.45}{20}$	$\frac{5.7}{12}$	$\frac{3.8}{16}$	$\frac{3.8}{20}$
					F	

$\frac{9.6}{25}$	$\frac{7.55}{20}$	$\frac{7.17}{0}$	$\frac{7.68}{20}$	$\frac{7.5}{13}$	$\frac{6.0}{17}$	$\frac{6.0}{20}$
------------------	-------------------	------------------	-------------------	------------------	------------------	------------------

$\frac{5.6}{20}$	$\frac{4.92}{8.7}$	$\frac{4.54}{0}$	$\frac{5.09}{8.5}$	$\frac{4.7}{15}$	$\frac{4.2}{16}$	$\frac{4.2}{20}$
------------------	--------------------	------------------	--------------------	------------------	------------------	------------------

$\frac{5.5}{107}$	$\frac{4.0}{100}$	$\frac{3.5}{93}$	$\frac{5.8}{81}$	$\frac{6.74}{FL}$	$\frac{6.63}{FL}$
-------------------	-------------------	------------------	------------------	-------------------	-------------------

$\frac{6.1}{20}$	$\frac{4.21}{8.4}$	$\frac{3.95}{0}$	$\frac{4.31}{8.7}$	$\frac{3.1}{20}$
------------------	--------------------	------------------	--------------------	------------------

46

16+00

17+00

18+00

19+00

⊙

5.35 763.55

1.85 758.20

20+00

21+00

22+00

23+00

⊙

5.24 766.16

2.63 760.92

24+00

L

R

47

$\frac{10.8}{20}$	$\frac{9.90}{8.7}$	$\frac{9.34}{0}$	$\frac{10.05}{8.5}$	$\frac{9.0}{12}$	$\frac{6.8}{20}$
-------------------	--------------------	------------------	---------------------	------------------	------------------

$\frac{6.9}{20}$	$\frac{5.20}{8}$	$\frac{4.85}{0}$	$\frac{5.39}{9.4}$	$\frac{5.4}{20}$
------------------	------------------	------------------	--------------------	------------------

$\frac{3.36}{20}$	$\frac{3.56}{7.0}$	$\frac{3.38}{0}$	$\frac{3.80}{9.0}$	$\frac{3.5}{20}$
-------------------	--------------------	------------------	--------------------	------------------

$\frac{2.6}{20}$	$\frac{2.95}{7.5}$	$\frac{2.67}{0}$	$\frac{2.92}{9.7}$	$\frac{2.8}{20}$
------------------	--------------------	------------------	--------------------	------------------

$\frac{5.8}{20}$	$\frac{6.1}{11}$	$\frac{6.5}{10}$	$\frac{5.61}{7.0}$	$\frac{5.35}{0}$	$\frac{5.75}{10}$	$\frac{5.2}{20}$
------------------	------------------	------------------	--------------------	------------------	-------------------	------------------

$\frac{4.5}{20}$	$\frac{4.8}{12}$	$\frac{5.4}{10.8}$	$\frac{4.66}{7.8}$	$\frac{4.45}{0}$	$\frac{4.70}{9.9}$	$\frac{4.4}{20}$
------------------	------------------	--------------------	--------------------	------------------	--------------------	------------------

$\frac{4.4}{20}$	$\frac{4.8}{13.5}$	$\frac{4.5}{11}$	$\frac{3.9}{9.5}$	$\frac{3.95}{7.5}$	$\frac{3.70}{0}$	$\frac{4.92}{10}$	$\frac{4.8}{20}$
------------------	--------------------	------------------	-------------------	--------------------	------------------	-------------------	------------------

$\frac{3.7}{20}$	$\frac{3.5}{14}$	$\frac{4.0}{11.5}$	$\frac{3.26}{8}$	$\frac{3.06}{0}$	$\frac{3.41}{8.8}$	$\frac{3.0}{10}$	$\frac{3.0}{20}$
------------------	------------------	--------------------	------------------	------------------	--------------------	------------------	------------------

$\frac{5.8}{20}$	$\frac{5.6}{14}$	$\frac{6.1}{11.5}$	$\frac{5.4}{10}$	$\frac{5.45}{8.2}$	$\frac{5.24}{0}$	$\frac{5.69}{9.1}$	$\frac{5.4}{11}$	$\frac{5.4}{20}$
------------------	------------------	--------------------	------------------	--------------------	------------------	--------------------	------------------	------------------

25+00

26+00

B.M. #3

1.84 765.39

$$\begin{array}{r} 2.62 \quad 763.54 \\ \underline{763.55} \\ 0.01 \end{array}$$

27+00

28+00

29+00

B.M. #4

4.64 760.47

$$\begin{array}{r} 9.58 \quad 755.81 \\ \underline{755.83} \\ 0.02 \end{array}$$

29+50

29+82

L

R

$$\begin{array}{r} 5.7 \\ \hline 20 \end{array} \quad \begin{array}{r} 5.2 \\ \hline 14 \end{array} \quad \begin{array}{r} 5.8 \\ \hline 12 \end{array} \quad \begin{array}{r} 5.28 \\ \hline 8 \end{array} \quad \begin{array}{r} 5.00 \\ \hline 0 \end{array} \quad \begin{array}{r} 5.37 \\ \hline 9.4 \end{array} \quad \begin{array}{r} 5.2 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 5.1 \\ \hline 20 \end{array} \quad \begin{array}{r} 4.71 \\ \hline 8 \end{array} \quad \begin{array}{r} 4.37 \\ \hline 0 \end{array} \quad \begin{array}{r} 4.72 \\ \hline 9.9 \end{array} \quad \begin{array}{r} 4.0 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 4.2 \\ \hline 20 \end{array} \quad \begin{array}{r} 3.75 \\ \hline 8.4 \end{array} \quad \begin{array}{r} 3.49 \\ \hline 0 \end{array} \quad \begin{array}{r} 3.74 \\ \hline 9.5 \end{array} \quad \begin{array}{r} 3.7 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 4.3 \\ \hline 20 \end{array} \quad \begin{array}{r} 5.18 \\ \hline 8 \end{array} \quad \begin{array}{r} 4.94 \\ \hline 0 \end{array} \quad \begin{array}{r} 5.27 \\ \hline 10 \end{array} \quad \begin{array}{r} 5.2 \\ \hline 13 \end{array} \quad \begin{array}{r} 4.4 \\ \hline 15 \end{array} \quad \begin{array}{r} 4.4 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 10.9 \\ \hline 30 \end{array} \quad \begin{array}{r} 9.3 \\ \hline 20 \end{array} \quad \begin{array}{r} 8.99 \\ \hline 7.7 \end{array} \quad \begin{array}{r} 8.79 \\ \hline 0 \end{array} \quad \begin{array}{r} 9.12 \\ \hline 11.5 \end{array} \quad \begin{array}{r} 8.7 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 6.9 \\ \hline 30 \end{array} \quad \begin{array}{r} 6.0 \\ \hline 20 \end{array} \quad \begin{array}{r} 5.15 \\ \hline 6.2 \end{array} \quad \begin{array}{r} 5.03 \\ \hline 0 \end{array} \quad \begin{array}{r} 5.31 \\ \hline 11.6 \end{array} \quad \begin{array}{r} 5.4 \\ \hline 15 \end{array} \quad \begin{array}{r} 6.5 \\ \hline 19 \end{array} \quad \begin{array}{r} 6.6 \\ \hline 30 \end{array}$$

$$\begin{array}{r} 11.6 \\ \hline 29 \end{array} \quad \begin{array}{r} 10.1 \\ \hline 28 \end{array} \quad \begin{array}{r} 5.8 \\ \hline 12 \end{array} \quad \begin{array}{r} 5.48 \\ \hline 7.3 \end{array} \quad \begin{array}{r} 5.34 \\ \hline 0 \end{array} \quad \begin{array}{r} 5.48 \\ \hline 11 \end{array} \quad \begin{array}{r} 5.5 \\ \hline 15 \end{array} \quad \begin{array}{r} 7.3 \\ \hline 19 \end{array} \quad \begin{array}{r} 6.8 \\ \hline 30 \end{array}$$

30+00

<u>8.5</u>	<u>9.4</u>	<u>11.6</u>
30	21	20.5

30+15

B.M. #4

6.34

762.17

4.64

755.83

$$\begin{array}{r} 755.83 \\ - 0.00 \\ \hline \end{array}$$

30+50

31+00

32+00

33+00

①

9.26

767.74

3.69

758.48

34+00

35+00

36+00

<u>11.4</u>	<u>4.47</u>	<u>4.47</u>	<u>5.44</u>	<u>5.42</u>	<u>5.45</u>	<u>5.44</u>	<u>5.61</u>	<u>4.63</u>	<u>4.63</u>	<u>11.45</u>	<u>10.2</u>	<u>9.3</u>
14.2	14.2	13.2	13.2	7.8	0	10.7	15	15	16	16	21	30
stream	curb		slab				slab		curb		stream	

<u>7.0</u>	<u>8.0</u>	<u>7.7</u>	<u>5.8</u>	<u>5.67</u>	<u>5.59</u>	<u>5.56</u>	<u>5.6</u>	<u>7.9</u>	<u>6.7</u>	<u>6.9</u>
30	27	22	15	7.0	0	11	15	20.5	23	30

<u>7.5</u>	<u>8.3</u>	<u>7.5</u>	<u>7.31</u>	<u>7.19</u>	<u>7.72</u>	<u>8.6</u>	<u>8.5</u>
30	24	16	8	0	11.5	19.5	30

<u>7.2</u>	<u>6.4</u>	<u>7.4</u>	<u>6.90</u>	<u>6.70</u>	<u>7.28</u>	<u>7.9</u>	<u>7.2</u>
30	30	24	7.1	0	10.9	19	30

<u>6.0</u>	<u>5.45</u>	<u>5.15</u>	<u>5.30</u>	<u>5.30</u>	<u>5.92</u>	<u>5.8</u>	<u>4.3</u>
21	12.5	12.3	6.4	0	11	16	22

<u>2.2</u>	<u>2.9</u>	<u>2.59</u>	<u>2.25</u>	<u>2.63</u>	<u>1.8</u>
20	16	6.5	0	11	20

<u>7.1</u>	<u>7.24</u>	<u>7.03</u>	<u>7.39</u>	<u>8.0</u>	<u>6.8</u>
20	6.5	0	10.6	16	20

<u>5.3</u>	<u>5.90</u>	<u>5.72</u>	<u>6.19</u>	<u>6.7</u>	<u>6.1</u>
20	7	0	11.5	15	20

<u>2.0</u>	<u>4.37</u>	<u>4.16</u>	<u>4.36</u>	<u>4.42</u>
2.0	6	0	12	20

① 6.73 770.19 4.28 763.46

37+00

$\frac{5.24}{20}$	$\frac{5.73}{7}$	$\frac{5.67}{0}$	$\frac{6.02}{11.5}$	$\frac{6.0}{13.5}$	$\frac{6.8}{16}$	$\frac{6.3}{20}$
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38+00

$\frac{4.6}{20}$	$\frac{4.99}{7}$	$\frac{4.84}{0}$	$\frac{4.89}{10.8}$	$\frac{5.1}{20}$
------------------	------------------	------------------	---------------------	------------------

39+00

$\frac{4.2}{20}$	$\frac{4.10}{6.8}$	$\frac{3.85}{0}$	$\frac{4.05}{10.8}$	$\frac{3.8}{20}$
------------------	--------------------	------------------	---------------------	------------------

40+00

$\frac{3.1}{20}$	$\frac{3.10}{6.8}$	$\frac{2.95}{0}$	$\frac{3.14}{11.8}$	$\frac{3.1}{20}$
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① 4.68 771.37 3.50 766.69

41+00

$\frac{3.78}{20}$	$\frac{3.84}{5.5}$	$\frac{3.75}{0}$	$\frac{3.91}{12}$	$\frac{3.4}{20}$
-------------------	--------------------	------------------	-------------------	------------------

42+00

$\frac{4.9}{20}$	$\frac{5.35}{6.8}$	$\frac{5.03}{0}$	$\frac{5.45}{11.9}$	$\frac{5.5}{20}$
------------------	--------------------	------------------	---------------------	------------------

43+00

$\frac{7.8}{20}$	$\frac{8.07}{8}$	$\frac{7.61}{0}$	$\frac{7.72}{11}$	$\frac{7.60}{13.5}$	$\frac{6.95}{13.5}$	$\frac{6.7}{20}$
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on curb

43+50

$\frac{8.13}{20}$	$\frac{7.65}{0}$	$\frac{7.69}{20}$
-------------------	------------------	-------------------

44+00

$\frac{6.87}{0}$

	B.S.	I.I.	F.S.	
N inlet			10.30	
S "			9.41	
①	5.75	770.46	6.66	764.71
B.M.# 5			3.63	766.83
				<u>766.82</u>
				0.01

B.M.# 2	0.76			
① ② 5	4.37		5.07	
0+25			5.95	
0+40			6.68	
1+09			6.33	
1+53			6.06	
2+07			9.03	
2+14.5 (pinnacle)			9.11	
2+30			10.07	

56

57

COUNTRY CREEK ESTATES

C. A. Parsons
S. M. Shartle
Sept. 19, 1986

LINE "A"

Sta.	B.S.	H.I.	F.S.	EL.
B.M. #1	4.743	807.434		802.691'
⊙	2.115	805.820	3.729	
⊙	4.344	804.997	5.170	
B.M. #2			4.211	800.783 800.784*
⊙	6.49	808.01	3.475	
Inv. N. end 42" pipe			7.55	800.46
⊙	3.02	804.48	6.55	
0+34 Inv. S. end 42" pipe			4.56	799.92
0+56		798.43	799.06	799.03 799.49
⊙+56		<u>6.95</u>	<u>5.42</u>	<u>5.45</u> <u>4.99</u>
		150	100	84 53
1+00				
⊙+0	4.24	803.68	5.04	

Left

±

Rt.

1. F.C. ± W.R.C. B.M. HND-14 1150' ± N. of Point 26

R.R. spk. (on head) in pwr. pole 16' SE of Point 26

799.84	800.28	801.19	800.31	799.89	800.08	799.93	800.58	801.48	803.98
<u>4.64</u>	<u>4.20</u>	<u>3.79</u>	<u>4.17</u>	<u>4.59</u>	<u>4.40</u>	<u>4.55</u>	<u>3.90</u>	<u>3.00</u>	<u>0.50</u>
39	22	9	6	4	0	4	5	9	17
799.83	800.39	800.60	799.60	799.45	800.01	800.49	801.24	801.68	802.98
<u>4.65</u>	<u>4.09</u>	<u>3.88</u>	<u>4.88</u>	<u>5.03</u>	<u>4.47</u>	<u>3.99</u>	<u>3.24</u>	<u>2.80</u>	<u>1.50</u>
20	12	5	3	0	2	6	8	16	20

* Adjusted for circuit closed

1+40

797.67	798.16	798.46	798.48	798.93	799.16
<u>6.01</u>	<u>5.52</u>	<u>5.22</u>	<u>5.20</u>	<u>4.75</u>	<u>4.52</u>
200	150	100	80	60	42

2+00

799.22
<u>4.46</u>
25

⊙

5.63+ 804.15

5.16

B.M. #2

3.36	800.79
	800.784

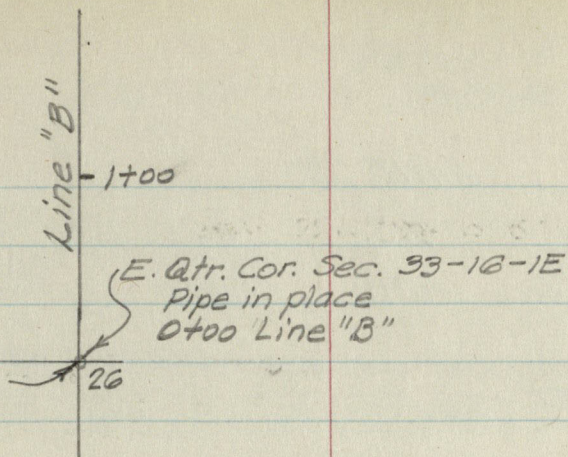
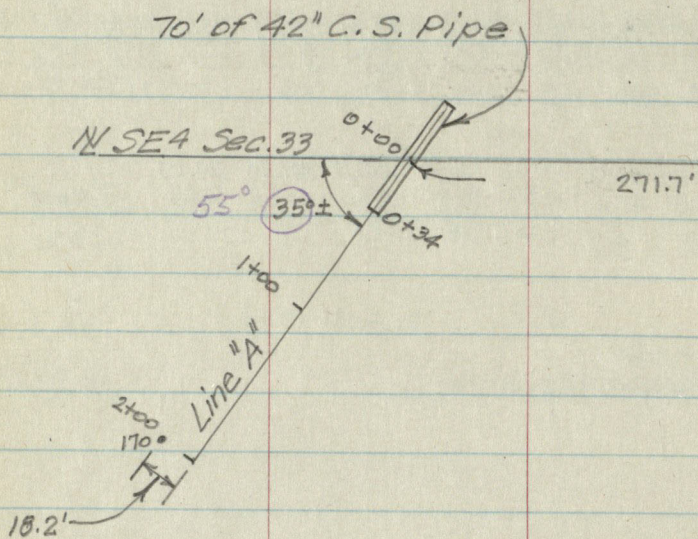
②

799.34	799.78	800.31	800.21	799.74	799.24	799.45	800.90	801.78	803.28
<u>4.34</u>	<u>3.90</u>	<u>3.37</u>	<u>3.47</u>	<u>3.94</u>	<u>4.44</u>	<u>4.23</u>	<u>2.78</u>	<u>1.90</u>	<u>0.40</u>
32	16	9	2	0	2	7	11	16	20

800.11	798.92	798.72	798.90	800.18	801.39	803.03	T post *
<u>3.57</u>	<u>4.76</u>	<u>4.96</u>	<u>4.78</u>	<u>3.50</u>	<u>2.29</u>	<u>0.65</u>	
12	9	6	4	0	5	10	18.2

0.006' closure error

* Point 170



LINE "B"

Sta.	B.S.	H.I.	F.S.	EL.
B.M. #2	4.771	805.554 805.555		800.783 800.784

0+00

800.84	800.96
<u>4.72</u>	<u>4.59</u>
42' EP	20

799.80	799.60	799.44	799.40	799.16	798.94	798.88	799.06
<u>5.75</u>	<u>5.96</u>	<u>6.12</u>	<u>6.16</u>	<u>6.40</u>	<u>6.62</u>	<u>6.67</u>	<u>6.50</u>
0	15	25	35	45	75	100	150

1+00.

800.56	800.84
<u>4.99</u>	<u>4.72</u>
12' FL	7 EP

801.14	800.44	800.08	799.58	799.62	799.54	799.42	799.24	799.14
<u>4.42</u>	<u>5.12</u>	<u>5.47</u>	<u>5.97</u>	<u>5.93</u>	<u>6.02</u>	<u>6.14</u>	<u>6.32</u>	<u>6.42</u>
0	12 EP	20	25	40	55	75	100	115

2+00

800.44	801.04
<u>5.11</u>	<u>4.52</u>
13	7 EP

801.12	801.04	800.68	801.14	800.26	800.06	799.94	799.62	799.42	799.24
<u>4.44</u>	<u>4.52</u>	<u>4.88</u>	<u>5.42</u>	<u>5.30</u>	<u>5.50</u>	<u>5.62</u>	<u>5.93</u>	<u>6.14</u>	<u>6.32</u>
0	12 EP	20	22	35	50	65	85	105	115

0

4.371

~~805.146~~
805.148

4.779

2+79

799.49
799.43

5.66 on inv. W. end	} 12" C.I. S. Pipe
5.72 " " E. "	

3+00

800.31	800.71
<u>4.84</u>	<u>4.44</u>
12	9' EP

801.00	800.68	800.49	799.41	799.85	799.63	799.51	799.10	798.99
<u>4.15</u>	<u>4.47</u>	<u>4.66</u>	<u>5.74</u>	<u>5.30</u>	<u>5.52</u>	<u>5.64</u>	<u>6.05</u>	<u>6.16</u>
0	10 EP	14	16	19	40	60	90	115

66

6

+96, 17.4' Pwr.P.

5+89 Line "B"

= 0+00 Line "C"

 $\Delta = 47^{\circ}10'$ Rt.

5

+39, 17.4' Pwr.P.

4

3

+79, 16.7' Pwp.P.
+68, 12" C.S. Pipe

2

1

0

BEG. LINE "B"

11+37

11

10

9

8

7

6

67

+37 edge of water
& S. end handrail
of culvert

+15, 19.0' Pwr.P.

+38, 18.2' Pwp.P.

47°10'
swale
Line "C"

H.I. = 805.148'

4+00

800.23	800.78
<u>4.92</u>	<u>4.37</u>
16	11' EP

801.11	800.69	800.26	800.44	800.08	800.08	800.02	799.73	799.84
<u>4.04</u>	<u>4.46</u>	<u>4.89</u>	<u>4.71</u>	<u>5.07</u>	<u>5.07</u>	<u>5.13</u>	<u>5.42</u>	<u>5.31</u>
0	9' EP	12	15	25	45	70	95	115

5+00

800.65	801.39
<u>4.50</u>	<u>3.76</u>
16	11' EP

801.51	801.14	800.70	800.91	800.12	800.55	800.34	800.37	800.38	800.56
<u>3.64</u>	<u>4.01</u>	<u>4.45</u>	<u>4.24</u>	<u>5.03</u>	<u>4.60</u>	<u>4.81</u>	<u>4.78</u>	<u>4.77</u>	<u>4.59</u>
0	8' EP	12	15	20	25	40	65	85	115

⊙

5.460	807.993	2.615
	807.991	

B.M.#1

5.10	807.79	5.302	802.691
			802.689

0.002' closure error

6+00

801.36	801.70
<u>6.43</u>	<u>6.09</u>
18.5	10.5' EP

801.98	801.44	801.15	801.62	800.97	800.71	800.46	800.15	800.19
<u>5.81</u>	<u>6.35</u>	<u>6.64</u>	<u>6.17</u>	<u>6.82</u>	<u>7.08</u>	<u>7.33</u>	<u>7.64</u>	<u>7.60</u>
0	8' EP	11	15	20	45	70	100	115

7+00

803.07	803.29
<u>4.72</u>	<u>4.50</u>
14.5	9.5' EP

803.29	802.72	802.48	802.92	802.31	802.80	802.69	801.92	801.42
<u>4.50</u>	<u>5.07</u>	<u>5.31</u>	<u>4.87</u>	<u>4.98</u>	<u>4.99</u>	<u>5.11</u>	<u>5.87</u>	<u>6.37</u>
0	8' EP	11	15	20	40	70	95	115

8+00

802.91	803.70
<u>4.88</u>	<u>4.09</u>
16	10' EP

803.92	803.41	803.84	803.87	803.31	803.43	803.70	803.70	802.67
<u>3.87</u>	<u>4.38</u>	<u>3.95</u>	<u>3.92</u>	<u>4.48</u>	<u>4.36</u>	<u>4.09</u>	<u>4.09</u>	<u>4.12</u>
0	8' EP	12	16	20	45	70	95	115

B.S.

H.I.

807.79

9+00

803.16	803.45	803.55	803.05	803.46	803.56	803.21	802.23	802.40	803.41	803.32
<u>4.63</u>	<u>4.34</u>	<u>4.24</u>	<u>4.74</u>	<u>4.33</u>	<u>4.23</u>	<u>4.58</u>	<u>4.56</u>	<u>4.39</u>	<u>4.38</u>	<u>4.47</u>
17	10.5'EP	0	7'EP	12	17	25	50	80	100	115

10+00

802.86	803.10	803.12	802.70	802.71	803.77	802.48	802.69	802.51	802.3P	802.81	802.97
<u>4.93</u>	<u>4.69</u>	<u>4.67</u>	<u>5.09</u>	<u>5.08</u>	<u>4.02</u>	<u>4.31</u>	<u>5.10</u>	<u>5.28</u>	<u>5.41</u>	<u>4.98</u>	<u>4.82</u>
17	11'EP	0	6'EP	10	15	18	22	40	65	95	115

10+51

802.87	801.97	802.29	802.51**	802.86	803.17
<u>5.42</u>	<u>5.82</u>	<u>5.50</u>	<u>5.28</u>	<u>4.83</u>	<u>4.62</u>
0	6'EP	15	25	40	45

swale @ 5+89

801.90	801.29	801.56	801.30	801.32	801.28	801.03	801.40	801.24
<u>5.89</u>	<u>6.50</u>	<u>6.23</u>	<u>6.49</u>	<u>6.47</u>	<u>6.51</u>	<u>6.76</u>	<u>6.38</u>	<u>6.55</u>
0+00	0+11EP	0+20	0+30	0+60	0+90	1+00	2+00	3+00

B.M.#1

3.38

806.07

802.69	802.27	801.89	801.74	800.71	799.68	800.76	800.89	800.89
<u>3.80</u>	<u>4.18</u>	<u>4.33</u>	<u>5.36</u>	<u>6.39</u>	<u>5.31</u>	<u>5.18</u>	<u>5.18</u>	
0	6'EP	11	15	20	35	45	60	

10+62

B.M.#1

3.57

806.26

802.69	802.22	801.97	801.80	801.18	800.60	799.67	799.59	799.41	799.04
<u>4.04</u>	<u>4.29</u>	<u>4.46</u>	<u>5.08</u>	<u>5.66</u>	<u>6.59</u>	<u>6.67</u>	<u>6.85</u>	<u>7.22</u>	
0	5.5'EP	11	15	18	30	40	65	70	

11+00

* 3.7' to bedrock

** ' to bedrock

B.S.

H.I.

B.M.# 1

4.86

807.55

11+27

802.69

802.67

802.51

802.20

801.46

799.65

799.25

798.71

798.66

798.57

4.885.045.356.097.908.308.848.898.98

0

4.5 EP

8

12

15

22

30

38

48

802.78

802.64

802.41

800.07

798.21

795.49

794.27

794.00

793.89

4.774.915.147.489.3412.0613.2813.5513.66

0

4.5 EP

8

12

15

22

30

38

48

11+31

Line "D"

0+00 \pm C.R. 150 N.

0+34 S. end 42" C.S. Pipe

3+36 P.I. 22' E. of T. post

6+51.5 P.I. $\Delta = 58^\circ 30'$ Lt. to point 3' E. of 9+40

9+40 End of line

Line "D"

Sta.	B.S.	H.I.	F.S.	EL
B.M. #2	2.25	803.03		800.784
F.L. ditch @ sec. line			10.20	792.83
⊙	3.26	803.16	3.13	799.90
1+00			2.88	800.28
2+00			4.32	798.84
3+00			4.84	798.32
P.I. 3+36.0			4.81	798.35
⊙	0.93	801.12	2.97	800.19
4+00			3.55	797.57
5+00			4.20	796.92
P.I. 6+06.5			4.42	796.70
P.I. 6+51.5			4.58	796.54
⊙	3.48	799.98	4.62	796.50
7+00			4.39	795.59
8+00			4.75	795.23
9+00			5.72	794.26
9+40			7.19	792.79

Sta.	B.S.	H.I.	F.S.	EL.
B.M. #2	7.23	808.01		800.784

0+00

798.41	798.77	799.12	799.42	799.80
<u>9.60</u>	<u>9.22</u>	<u>8.89</u>	<u>8.59</u>	<u>8.21</u>
100	70	40	15	0

0+50

798.67	798.98	799.37	799.60	800.91	800.72	800.79
<u>9.34</u>	<u>9.03</u>	<u>8.64</u>	<u>8.41</u>	<u>7.10</u>	<u>7.29</u>	<u>7.22</u>
100	80	50	20	10	3'EP	0

1+00.

799.21	799.39	799.65	799.93	800.69	800.84	801.05
<u>8.80</u>	<u>8.62</u>	<u>8.36</u>	<u>8.08</u>	<u>7.32</u>	<u>7.17</u>	<u>6.96</u>
90	75	50	20	15	9'EP	0

1+50

799.23	799.39	799.61	799.79	800.70	801.29	801.68
<u>8.78</u>	<u>8.62</u>	<u>8.40</u>	<u>8.22</u>	<u>7.31</u>	<u>6.72</u>	<u>6.33</u>
85	70	50	30	15	8'EP	0

2+00

798.81	799.05	799.51	799.87	801.20	802.66	803.00	803.48
<u>9.20</u>	<u>8.96</u>	<u>8.50</u>	<u>8.14</u>	<u>6.81</u>	<u>5.35</u>	<u>5.01</u>	<u>4.53</u>
100	80	50	30	15	11	8'EP	0

2+50

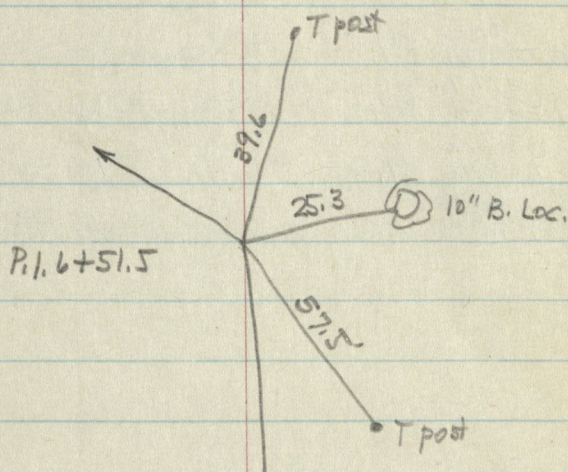
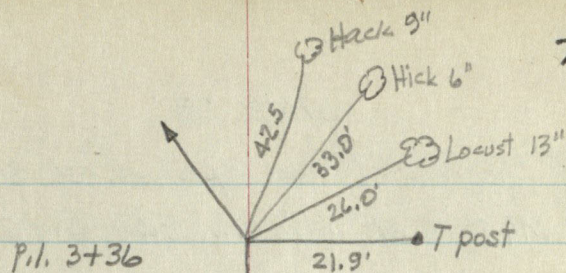
798.92	799.33	799.49	800.10	800.61	806.55	806.92	807.30
<u>9.09</u>	<u>8.68</u>	<u>8.52</u>	<u>7.91</u>	<u>7.40</u>	<u>1.46</u>	<u>1.09</u>	<u>0.71</u>
100	80	55	40	30	12	9'EP	0

78

Line "D"

Sta.	B.S.	H.I.	F.S.	EL.
9+40	4.69	797.48		792.79
10+40			6.04	791.44
11+40			7.09	790.39

79



LINE "E"

☒ tile drain from open ditch 744.24'S
 ☒ 244.82'E of W $\frac{1}{2}$ Mi. 34-16-1E N'ward
 to point 970' N. ☒ 300'E. of W $\frac{1}{2}$ Mi. 34

	Az.
0 to open ditch	1°21'31"
^{71.0} 1+74 P.I.	24°10'16"
^{48.1} 4+47.7 P.I.	0°00'00"
^{38.1} 5+37.1 P.I.	346°36'15"
^{66.7} 6+65.7 P.I.	0°00'00"
^{71.7} 7+70.7 P.I.	341°33'54"
^{66.6} 8+65.6 P.I.	0°00'00"
^{17+46.6} 17+45.6 P.O.T. end of drain	

WNW⁴
 Sec 34
 = Az
 0°00'00"

Parsons & Shurtle
 11-22-86

Traverse based on boundary survey
 brg. system:

N 2°05'53"E	177.0'
N 24°54'38"E	271.1
N 0°44'22"E	90.0
N 12°45'23"W	128.6
N 0°44'22"E	105.0
N 17°41'44"W	94.9
N 0°44'22"E	880.0

	B.S.	H.I.	F.S.	EL.
B.M. #2	0.8	801.6		800.784
0	9.6	802.2	9.0	793.6
0+00			12.1	790.1
0+03			11.8	790.4
0+13			8.3	793.9
0+31			9.2	793.0
0+50			9.3	792.9

1+00

$$\frac{9.0}{0} \quad 793.2$$

1+50

P.L. 1+77

L (west) \pm R (east)

793.6	793.2	792.6	793.3
8.6	9.0	9.6	8.9
100	0	100	170

$$\begin{array}{r} 793.6 \\ 8.6 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 793.7 \\ 8.5 \\ \hline 0 \end{array}$$

Sta.	B.S.	H.I.	F.S.	EL.
------	------	------	------	-----

2+00

2+50

3+00

3+50

4+00

P.I. 4+48.1

5+00

P.I. 5+38.1

6+00

6+66.7

L

R

795.0	794.9	794.0	793.8
<u>7.2</u>	<u>7.3</u>	<u>8.2</u>	<u>8.4</u>
200	100	0	100

$$\begin{array}{r} 795.1 \\ \underline{7.1} \\ 0 \end{array}$$

795.7	795.8	795.9	797.4	796.6
<u>6.5</u>	<u>6.4</u>	<u>6.3</u>	<u>4.8</u>	<u>5.6</u>
200	100	0	90	145

$$\begin{array}{r} 796.8 \\ \underline{5.4} \\ 0 \end{array}$$

796.7	796.4	797.7	797.8	798.1	797.0
<u>5.5</u>	<u>5.8</u>	<u>4.5</u>	<u>4.4</u>	<u>4.1</u>	<u>5.2</u>
300	200	100	0	100	150

$$\begin{array}{r} 798.5 \\ \underline{3.7} \\ 0 \end{array}$$

796.3	797.9	798.1	797.4	796.7	794.0
<u>5.9</u>	<u>4.3</u>	<u>4.1</u>	<u>4.8</u>	<u>5.5</u>	<u>8.2</u>
200	100	0	100	170	200

$$\begin{array}{r} 796.9 \\ \underline{5.3} \\ 0 \end{array}$$

796.8	796.5	797.7	798.6	795.8
<u>5.4</u>	<u>5.7</u>	<u>4.5</u>	<u>3.6</u>	<u>6.4</u>
100	0	100	200	300

$$\begin{array}{r} 796.8 \\ \underline{5.4} \\ 0 \end{array}$$

Sta.	B.S.	H.I.	F.S.	EL.
7+00				
7+50				
8+00				
P.I. 8+66.7				
9+00				
⊙	7.1	805.2	4.1	798.1
9+50				
10+00				
10+50				
11+00				

L			R			
798.2	798.3	796.9	797.4	798.6	794.0	
<u>4.0</u>	<u>3.9</u>	<u>5.3</u>	<u>4.8</u>	<u>3.6</u>	<u>8.2</u>	
200	100	0	100	200	300	
		797.5				
		<u>4.7</u>				
		0				
799.4	798.5	797.6	799.0	798.4	794.9	
<u>2.8</u>	<u>3.7</u>	<u>4.6</u>	<u>3.2</u>	<u>3.8</u>	<u>7.3</u>	
100	0	100	200	300	400	
		798.3				
		<u>3.9</u>				
		0				
798.7	798.0	797.5	799.2			
<u>3.5</u>	<u>4.2</u>	<u>4.7</u>	<u>3.0</u>			
100	0	100	200			
		797.8				
		<u>7.4</u>				
		0				
798.4	797.6	799.0	799.5	797.7	795.2	
<u>6.8</u>	<u>7.6</u>	<u>6.2</u>	<u>5.7</u>	<u>7.5</u>	<u>10.0</u>	
100	0	100	200	300	400	
		797.7				
		<u>7.5</u>				
		0				
798.5	797.8	799.1	800.7	798.0	795.9	
<u>6.7</u>	<u>7.4</u>	<u>6.1</u>	<u>4.5</u>	<u>7.2</u>	<u>9.3</u>	
100	0	100	200	300	400	

Sta.

11+50

12+00

12+50

13+00

13+50

14+00

14+50

15+00

15+50

16+00

798.5

$$\frac{6.7}{0}$$

799.8	799.3	799.5	800.4	798.0	796.8
$\frac{5.4}{100}$	$\frac{5.9}{0}$	$\frac{5.7}{100}$	$\frac{4.8}{200}$	$\frac{7.2}{300}$	$\frac{8.4}{400}$

799.7

$$\frac{5.5}{0}$$

800.5	800.0	800.6	800.3	798.1	798.0
$\frac{4.7}{100}$	$\frac{5.2}{0}$	$\frac{4.6}{100}$	$\frac{4.9}{200}$	$\frac{7.1}{300}$	$\frac{7.2}{390}$

800.5

$$\frac{4.7}{0}$$

800.5	800.7	800.8	800.8	799.3
$\frac{4.7}{100}$	$\frac{4.5}{0}$	$\frac{4.4}{100}$	$\frac{4.4}{200}$	$\frac{5.9}{275}$

800.7

$$\frac{4.5}{0}$$

800.6	801.2	800.6	801.5
$\frac{4.6}{100}$	$\frac{4.0}{0}$	$\frac{4.6}{100}$	$\frac{3.7}{200}$

801.3

$$\frac{3.9}{0}$$

802.3	801.4	801.4
$\frac{2.9}{100}$	$\frac{3.8}{0}$	$\frac{3.8}{100}$

	B.S.	H.I.	F.S.	EL			
16+50						801.9	
						$\frac{3.3}{0}$	
17+00						804.5	802.8
						$\frac{0.7}{100}$	$\frac{2.4}{0}$
							$\frac{1.9}{50}$
17+46.6						804.3	804.3
						$\frac{0.9}{100}$	$\frac{0.9}{0}$

6+00 Line "B"

3.18	801.98'	← correct
	802.02'	← closing elev.
	$\frac{0.04}{}$	← diff.

Line "E"
Hard bottoms (probably shale
 bedrock)

Sta.	Depth
5+90	5.6
6+00	4.8'
6+11	5.0'
6+50	none to 5.0'
7+00	" " 5.1'
7+50	5.3
7+71.7	none to 5.5'
7+90	" " 5.3'
8+00	4.5
8+10	4.3
8+30	3.7
8+30, 1'R.	4.5
8+30, 1'L.	4.2
8+52	4.9
8+67	4.6
8+85	4.3
9+00	4.2
9+25	4.3
9+50	4.5
9+75	4.5

Sta.	Depth	Sta.	Depth
10+00	5.1'	14+50	5.5'
10+25	4.8	14+75	6.4
10+50	4.8	15+00	6.0
10+75	4.1	15+25	5.7
11+00	4.6	15+50	5.4
11+25	3.6	15+75	4.8
11+50	3.0	16+00	3.7
11+75	3.4	16+25	3.1
12+00	4.5	16+50	3.2
12+25	4.1	16+75	3.8
12+50	3.3	17+00	4.8
12+75	3.9	17+46.6	5.2
13+00	3.8		
13+25	3.7		
13+50	4.6		
13+75	5.1		
14+00	5.6		
14+25	5.6		

94

95

Line "F"

Sta.	B.S.	H.I.	F.S.	EL.
B.M. #2	3.1	803.9		800.784
0+00			4.1	799.8
1+00			5.4	798.5
2+00			6.9	797.0
3+00			8.0	795.9
4+00			7.6	796.3
5+00			8.5	795.4
5+75.5 = 2+46.3"E"			8.8	795.1
1+77 "E"			10.1	793.8
test pit #1 Lot 10			6.3	797.6
" " #2 " "			7.1	796.8
" " Lot 11			6.2	797.7
400' S of 100' W of 1/4 cor.			7.2	796.7
200' S of 1/4 cor.			6.6	797.3
400' " " "			8.0	795.9

Line "F" = ditch along NE bdy.
Lot 10; 0+00 about 32' SW from
E 1/2 Mi. 33-16-E

BENCH LEVELS - B.M.#2 to B.M.#3

Sta.	B.S.	H.I.	F.S.	EL.
B.M.#2	1.322	802.106		800.784
⊙	4.199	799.978	6.327	795.779
⊙	4.675	798.050	6.603	793.375
⊙	9.098	806.581	0.567	797.483
House site Lot 15			4.51	802.07
" " " 14			7.33	799.25
B.M.#3	1.821	806.476	1.926	804.658 804.655
⊙	2.278	798.141	10.613	795.863
⊙	4.567	799.138	3.570	794.571
⊙	5.530	801.989	2.679	796.459
B.M.#2			1.210	800.779 800.784
				error of closure = - 0.005'
B.M.#3	2.38	807.04		804.66
♀ C.R. 600E @ 12 IN			2.65	804.39
In Lot 12 at house site			12.52	794.52

adjusted for closure error

SW cor. corr. step to Fr. porch Brunner res. on Lot 13

3-wire bench levels from NGS Bench

Mark RBC, 1946, Elev. 851.396' = B.M.#1

B.S.

F.S.

3.506
1.9922.478
0.9412.514
1.9811.537
0.938

1.525

0.599

5.045
0.9442.739
0.44.101
0.9431.735
0.3

3.158

0.732

2.092
0.9665.882
0.963

1.126

4.919
0.9610.163
0.963

3.958

5.787
1.2433.045
0.0444.544
1.2413.001
0.046

3.303

2.955

} sideshot
B.M. #2
RR spt 3 side
Dsh 18" 3' ± S of
NE cor prop.

Adjusted elev. = 852.488'

B.S.

F.S.

3.219
0.9552.264
0.957

1.307

3.187⁶
~~0.959~~ 0.9574.328
0.9382.228⁶
~~0.954~~ 0.958

3.390

1.274¹
2.452 0.9385.908
1.0446.907
0.9394.864
1.0455.968
0.936

3.819

5.032

4.708
0.3873.854
0.0804.321
0.3893.774
0.080

3.932

3.694

0.614
0.0887.738
0.0640.526
0.0867.674
0.067

0.440

7.607

B.M. #3 R.R. spt N
side Cherry 14" 27' ±
S of rd prop.
Adj. Elev. 851.503'

0.593		8.116	0.080
0.556	0.037	8.036	0.080
0.523	0.033	7.956	

1.300	0.064	8.247	0.032
1.236	0.062	8.215	0.033
1.174		8.182	

0.977		6.710	0.488
0.912	0.065	6.222	0.488
0.845	0.067	5.734	

6.145	0.383	4.345	0.248	B.M. #4 on stone at cen Sec. 34-16-1E Adj. Elev. = 826.273'
5.762	0.383	4.077	1.268	
5.379		3.809		

4.744		1.528	0.681
4.446	0.298	0.847	0.681
4.151	0.295	0.166	

7.510	0.106	1.580	0.116
7.404	0.108	1.464	0.117
7.296		1.347	

7.574	0.117	1.044	0.091
7.457	0.114	0.953	0.091
7.343		0.862	

8.127	0.093	2.482	0.405
8.034	0.093	2.077	0.406
7.941		1.671	

7.658	0.806	3.869	
6.852	0.803	3.517	0.936
6.049		2.933	2.584
		1.999	0.934

5.243	1.019	6.243	0.953
4.224	1.018	5.290	0.955
3.206		4.335	

7.145	0.946	5.667	
6.199	0.944	4.830	0.837
5.255		3.994	0.836

B.M.#2
852.488'

6.064
5.192
4.324

0.872
.868

3.800
2.924
2.045

0.876
0.879

5.754
4.780
3.804

.974
.974

5.550
5.034
4.515

0.516
0.519

2.256
2.070
1.884

.186
.186

B.M.#5
RR spk
in bur
oak 28"
forked
Adj. El.
853.239'

4.441
3.513
2.619

.898
.894

4.439
3.539
2.639

.900
.900

5.550
2.706
1.866

.844
.840

5.640
4.732
3.824

.908
.908

6.035
5.159
4.287

.876
.872

5.503
4.602
3.699

.901
.903

3.578
2.688
1.798

.880
.890

5.826
5.075
4.321

.751
.754

5.477
4.842
4.206

.635
.636

3.490
2.805
2.119

.685
.686

on B.M.#1
851.396'

106

107

Parsons & Shurtle
2-20-87 42°

BENCH LEVELS FOR CLOVERLEAF
PROPERTIES IN E² SW⁴ 36-15-1E

When F. Hyd. is employed as a bench mark,
the top of the bolt head between MUE
and LER in MUELLER on the top flange
is the mark used.

B.M. # 1 (Elev. 733.306') is DNR's 1981
Clark's Creek TBM # 5 (3rd order) on a
□ chiseled at the NE part of the conc.
bridge carrying Stanley Road over Clark's
Creek.

B.S.		F.S.	
5.403	} B.M. # 1 733.306'	3.199	.021
4.462		2.172	.057
3.519		1.150	.022

B.M. elevations shown are
adjusted for circuit closure.

6.723	.696	1.370	.508
6.027	.696	0.862	.510
5.331		0.352	

6.922	.722	3.831	.985
6.200		2.846	.987
5.478	.722	1.857	

B.M. # 2
744.112'
F. Hyd. NE cor.
Stanley Rd. & Chad
Ct.

3.810	.952	7.273	.807
2.858		6.466	.805
1.906	.952	5.661	

1.540	.566	6.704	.709
0.974		5.995	.711
0.409	.565	5.284	

3.514	.863	5.891	.065
2.651	.864	4.826	.064
1.787		3.762	

B.M. # 1
733.306'

2.285	.496	} B.M.#2 on F.Hyd. 744.112'	6.516	.768
1.789	.498		5.748	.769
1.291			4.979	

4.554	.087	5.680	.896
3.467	.083	4.784	.896
2.384		3.888	

5.848	1.115	} B.M.#3 on F.Hyd. 742.128' SW side of Chad Ct. cul de sac.	2.590	1.146
4.733	1.111		1.444	1.144
3.622			0.300	

5.700	.201	5.351	.053
4.499	.204	4.298	.055
3.295		3.243	

6.799		3.820	
5.849	.950	2.843	.977
4.899	.950	1.864	.979

6.209		3.789		} B.M.#4 "d" Forked Schumard Oak 747.605'
5.349	.860	3.082	.707	
4.493	.856	2.372	.710	

4.099		5.425	
3.143	.956	4.489	.936
2.189	.954	3.550	.939

5.834		5.365	
4.764	.070	4.513	.852
3.695	.069	3.661	.852

6.084		3.348		} B.M.#5 F.Hyd. 749.127 N. side of Stafford Rd. 1 block W. of S.R. 267
5.508	.576	2.896	.452	
4.933	.575	2.441	.455	

4.108		3.067	
3.280	.828	2.199	.868
2.451	.829	1.328	.871

5.422		4.402		} BM #6 NW cor of lower stop of conc. base for traffic control box 751.187' SW cor. Stafford Rd #S.R. 267	4.307		5.519	
5.012	.910	4.034	.368		3.508	.799	4.707	.812
4.604	.908	3.667	.367		2.711	.797	3.897	.810
5.172	.947	6.106			5.328		5.633	
4.225	.944	5.067	.039	4.478	.850	4.763	.870	
3.281		4.030	.037	3.626	.852	3.893	.870	
3.967		5.466		4.264		5.222		
3.127	.840	4.608	.858	3.417	.847	4.421	.801	
2.288	.839	3.749	.859	2.571	.846	3.619	.802	
3.961		5.481		5.510		6.038		
3.137	.824	4.602	.879	4.655	.855	5.230	.808	
2.313	.824	3.726	.876	3.799	.856	4.422		
3.784		5.452		2.746		2.730		
2.960	.824	4.572	.880	1.501	1.245	1.999	.731	
2.135	.825	3.689	.883	0.259	1.242	1.267	.732	

} BM #7
SE cor
of 1st stop
S. side of
Barker Ave.
744.590'

5.510		6.038	.808
4.655	.855	5.230	.808
3.799	.856	4.422	
2.746		2.730	
1.501	1.245	1.999	.731
0.259	1.242	1.267	.732

B.M. #8
+ near NE cor.
N handrail of
old Stanley Rd.
bridge.
742.230'

0.98²₇
 0.63⁵₈
 0.290

6.950
 6.135
 5.319

.815

.816

7.887
 6.968
 6.053

2.793
 1.893
 0.994

.900

.899

6.603
 6.410
 6.216

3.761
 3.490
 3.222

.271

.268

3.969
 3.687
 3.403

6.427
 5.573
 4.720

.854

.853

6.566
 5.802
 5.041

5.481
 4.667
 3.856

.814

.811

4.356
 3.863
 3.370

.493

.493

4.148
 3.728
 3.305

.420

.423

BM #2
 F. Hyd.
 744.112'

First Circuit Second Circuit

Length (ft.) 1,968.2' 8,269.1'

Closure error +0.004' -0.007'

Typical closures 0.0065√M 0.0056√M

} BM #9
 RR Spike
 in Fence
 Post
 744.727'

116

117

Parsons & Shartle
2-22-87Bench levels continued from p. 105
for Hardin, Webb, & Parsons

10.773	.707	} B.M.#4 826.273'	1.206	.275
10.066	.707		0.931	.276
9.359			0.655	
10.844	.241		0.815	.088
10.633	.242		0.727	.085
10.421			0.642	
9.570		} F.S. on rock 7'5" of fence 5.10' 848.95'	4.604	.813
8.739	.831		3.791	.815
7.903	.834/5		2.976	
4.900	.887		3.743	.777
4.013	.887		2.964	.778
3.126			2.186	
5.326	.875		6.040	.530
4.451	.873		5.510	.526
3.578			4.984	

B.M. elevs.
are adj. for
closure

3.746	.204	8.286	.539
3.542	.202	7.747	.541
3.340		7.206	
8.891	.453	5.587	.737
8.238	.654	4.850	.736
7.584		4.114	
6.690	.858	3.331	.819
5.832	.855	2.512	.817
4.977		1.695	
2.580	.609	7.979	.780
1.971	.605	7.199	.780
1.366		6.419	
2.971	.857	5.498	.632
2.114	.856	4.865	.637
1.258		4.228	

} B.M.#6
} Cen W. Cen.
} Sec. 34
} on stone
(S. side of
top)
846.045'
(Target 2)

7.980

.626

7.35⁴6.73²⁹

.625

5.372

.561

4.811

.560

4.251

1.453

.607

0.846

.606

0.240

12.231

.763

11.468

.763

10.705

4.308

.493

3.815

.494

3.321

(Target 7)

F.S. on target 2.611

site 3.20 .150

847.93'

2.461

.144

2.313

B.M.# 7 R.R. spk.

in 54c. 24"

848.672'

0.825

.152

0.673

.154

0.519

11.539

.840

10.699

.842

9.857

5.045

.813

4.232

.812

3.420

5.782

.812

4.970

.812

4.158

1.901

.128

1.773

.129

1.644

4.660

.075

4.585

.073

4.512

B.M.# 8

R.R. spk in

creek 10"

824.097'

N side CRIBBON

6.170

.645

5.525

.641

4.884

6.175

.858

5.517

.855

4.662

1.831

.193

1.638

.193

1.445

11.140

.949

10.191

.949

9.242

3.782

.709

3.073

.709

2.364

4.310

.853

3.457

.851

2.606

7.995

.169

6.826

.168

5.658

1.274

.492

0.782

.493

0.289

11.240
10.670 .570
10.099 .571

10.999
10.454 .545
9.912 .542

9.317
9.145 .172
8.974 .171

3.423
2.854 .569
2.284 .570

7.139
6.070 .68 .071
4.995 .073

1.019 .336
0.683 .338
0.345

3.249 .154
3.095 .153
2.942

3.457 .528
2.929 .529
2.400

B.M. #9
R.R. spk in
Poplar 18"
845.152'
N side
C.R. 100W.

2.914
1.642 1.272
0.374 1.268

5.790 .830
4.960 .828
4.132

7.001 .991
6.010 .995
5.015

5.605 .826
4.779 .822
3.957

4.315 .916
3.398 .917
2.481

4.611 .9465
3.665 .9412
2.724

5.762 .012
4.750 .015
3.735

6.011 .840
5.171 .839
4.332

4.843
3.916 .927
2.989 .927

6.968 .957
6.011 .957
5.054

3.117 .940
2.177 .938
1.239

6.087 1.013
5.074 1.015
4.059

0.202 - error

8.904 .629
8.275 .627
7.648

2.244 .159
2.085 .158
1.927

} B.M. #10 RR
Spt in B. Wood 18
NW of treatment
plant
849.204'

3.864 .632
3.232 .627
2.605

8.368 .753
7.615 .753
6.862

9.318 1.379
7.939 1.374
6.565

5.785 .828
4.957 .826
4.131

7.564 1.057
6.507 1.057
5.450

F.S. on rock

3.05
851.26'

4.055 .792
3.263 .792
2.471

5.139 .921
4.218 .924
3.294

4.899 .509
4.390 .510
3.880

5.040 .447
4.593 .448
4.145

2.446 .215
2.231 .215
2.016

} B.M. #5
853.239'

126

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Topo levels for Cloverleaf Props.
36-15-1E

Sta.	B.S.	H.I.	F.S.	EL.
B.M.#5	1.10	750.23		749.127'
B			6.21	744.02'
○	1.80	744.10	7.93	742.30
○	5.40	741.89	7.61	736.49
A	2.74	741.77	2.86	739.03
○	7.26	743.80	5.23	736.54
○	7.29	749.59	1.50	742.30
B.M.#5			0.45	749.14
B.M.#6	5.33	756.52		751.187
C			3.85	752.67
D	6.25	756.55	6.22	750.30
C			3.94	752.61
B.M.#6			5.37	751.18

Sta.	B.S.	H.I.	F.S.	EL.
B.M.#7	5.75	750.34		744.590'
F			5.08	745.26
E			2.65	747.69
B.M.#8	0.95	743.18		742.230'
G			5.05	738.13
B.M.#9	3.17	747.90		744.727'
H			4.37	743.53
B.M.#2	3.33	747.44		744.112'
J			5.80	741.64
B.M.#3	1.63	743.76		742.128'
L			4.53	739.23
K			5.65	738.11

Sta.	B.S.	H.I.	F.S.	EL.
B.M.#4	1.62	749.22		747.605
M			3.22	746.00
N			3.09	746.13

Parsons & Shurtle 3-6-87

B.M.#5	0.67	749.80	749.13	depth	Inv.
grate 1+47.5 Lt.			3.15	746.65	5.00' 741.65'
" 1+48 Rt			3.15	746.65	3.44 743.21
" 4+40 Lt.			9.35	740.45	4.79 735.66
" 4+40.5 Rt.			9.42	740.38	3.05 737.33
Inv. lift sta.			25.99	723.81	

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133

Bench levels continued from p. 125
for Hardin, Webb, & Parsons

2.232 .588
1.644 .589
1.055

B.M.#10 3.951 .804
849.204 3.147 .801
(NW of treatment
plant) 2.346

6.020 .525
5.495 .522
4.973

9.900 .504
9.396 .505
8.891

1.082 .500
0.582 .500
0.082

12.220 .309
11.911 .307
11.604

1.133 .118
1.015 .118
0.897

11.965 .315
11.650 .316
11.334

1.108 .281
0.827 .281
0.546

4.915 .392
4.523 .395
4.128
818.141'
B.M.#11 in
Pipak 18" R.R.
spx. (1000' ± E.
of Cen. SW 4
34-16-15)

5.465 .179

Target 8

F.S. on target

2.942

.724

5.286 .177

11.89

811.54'

2.218

.722

5.109

1.496

11.212 .313

0.636 .136

10.899 .315

0.500 .135

10.584

0.365

11.344 .234

1.164 .439

11.110 .235

0.725 .440

10.875

0.285

7.579 .289

1.369

7.290 .288

1.054 .315

7.002

0.739 .315

5.379 .426

6.996 .449

4.953 .426

6.547 .449

4.527

6.100

5.479
4.964 ^{.515}
4.450 ^{.514}

2.924 ^{.549}
2.375 ^{.547}
1.828

B.M.# 10
849.204

Parsons & Shurtle

3-3-87

Sta. B.S.H.I.F.S.EL.

T.B.M. 3.18

854.44'

T.B.M. 851.26' on
rock near SE cor.

Target 10

4.37

850.07'

B.M.#2 3.24

855.73'

B.M.#2 852.49'

Target 5

4.33

851.40'

B.M.#3 4.80

856.30'

B.M.#3 851.50'

Target 4

3.78

852.52'

TBM 4.81

853.76'

TBM rock 848.95'

Target 3

4.90

848.86'

B.M.#6 6.07 852.11

846.04
B.M.#6

⊙ 4.44 846.98

9.57 842.54'

Target 1 8.90 838.08'

B.M.#7 4.86 853.53

848.67'
B.M.#7

Target 6 4.86

target at top
of slope
848.67'

B.M.#8 7.29 831.39

824.10
B.M.#8

⊙ 5.94 826.32 11.01 820.38

Target 11 10.34 815.98

B.M.#8 0.31 824.41

824.10'
B.M.#8

⊙ 0.08 812.17 12.32 812.09

⊙ 4.30 804.59 11.88 800.29

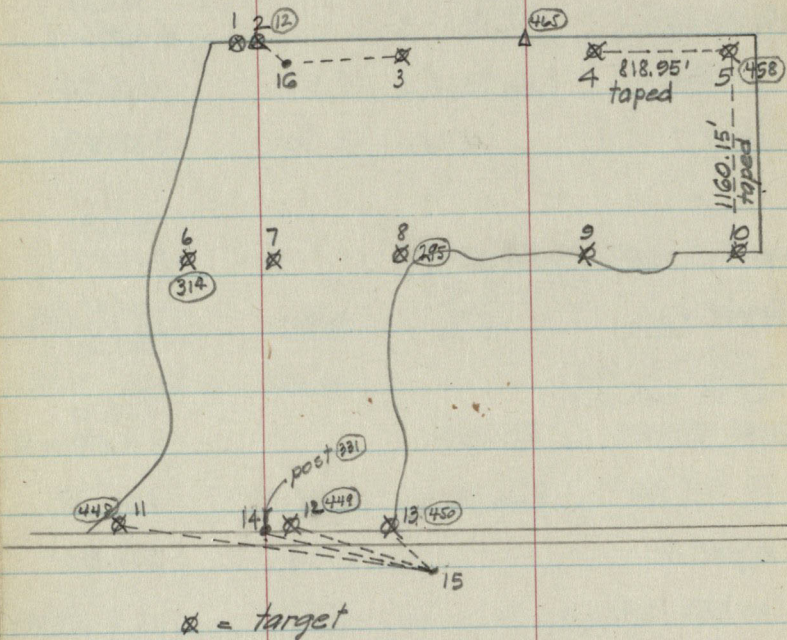
Target 12 5.65 798.94

B.M.#9 2.88 848.03

845.15'
B.M.#9

Target 13 4.35 843.68

Target numbering system:



Point numbers for Sec. 1 are circled

Radial shots to ascertain distances betw. targets 2-3, 11-12, & 12-13:

At 16:

Target Direction ZA slope dist. Hor. dist.

2	$0^{\circ}00'00''$	$91^{\circ}38'44''$	155.615'	155.55'
3	$163^{\circ}55'14''$	$90^{\circ}07'29''$	799.130'	799.13'

At 15

11	$275^{\circ}26'40''$	$90^{\circ}55'16''$	1502.40'	1502.21'
post 281	22 31	92 53 40	740.08'	739.14'
12	282 50 15	93 23 45	693.96'	692.74'
13	318 20 03	90 09 50	113.125'	113.125'

Line Distance

2-3	949.57'
11-12	820.09'
12-13	604.22'
12-14	49.86'

140

B.M.#10 2.02 851.22

849.20

target 9

4.48

846.74

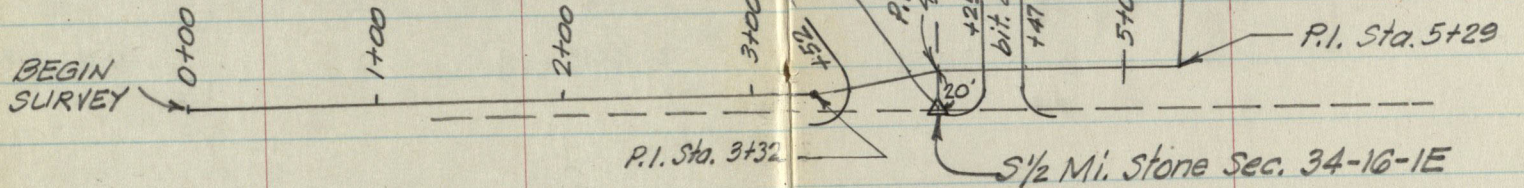
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Parsons }
Shartle } 3-26-87

Levels for Cloverleaf Prop. 36-15-1E

Sta.	B.S.	H.I.	F.S.	Elev.
B.M.#5	0.27	749.40		749.13'
⊙	2.54	743.26	8.68	740.72
M.H. casting	6.66	743.26	6.66+	736.60
⊙	8.60	749.33	2.53	740.73
B.M.#5			0.19-	749.14

OAK BEND ESTATES
Topo for pressure sewer
line.



Parsons
Shattuck 6-25-87

Sta.	B.S.	H.I.	F.S.	Elev.	Sta.	B.S.	H.I.	F.S.	Elev.
B.M. #9	3.21	848.36		845.15'	7+12.5			4.12	847.58
0+00	5.56	851.14	2.78	845.58	B+16 M.H. casting			4.28	847.42
1+00			4.63	846.51	B+16 M.H. at ground			5.31	846.39
2+00			4.00	847.14	B+16 M.H. F.L.			7.38	844.32
3+00			3.60	847.54					
3+32			3.82	847.32					
4+00	4.82	851.70	4.26	846.88					
5+29			4.67	847.03					

146

147

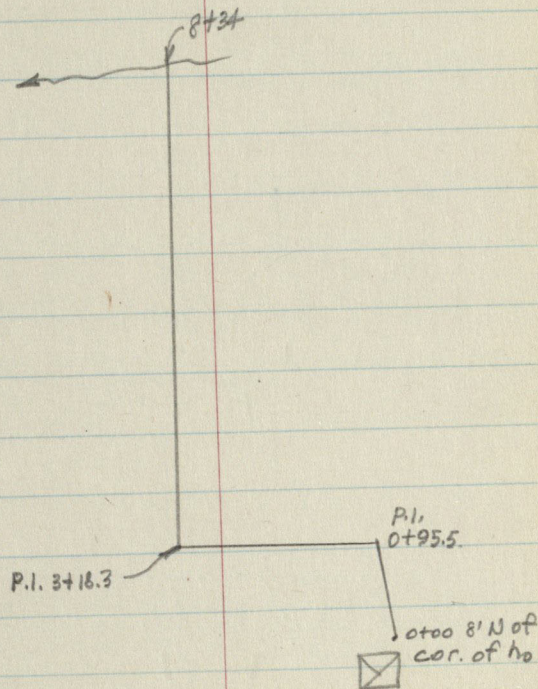
Tom Anderson
SE cor. NE⁴24-15-1E

Sta.	B.S.	H.I.	F.S.	EL
B.M.	1.93	101.93		100.00
0+00			2.99	98.94
0+95.5			3.13	98.80
1+00			3.21	98.72
2+00			3.97	97.96
3+00			5.35	96.58
3+18.3			5.70	96.23
4+00			5.61	96.32
5+00			4.80	97.13
6+00			4.55	97.38
7+00	2.09	99.68	4.34	97.59
7+28			3.18	96.50
7+36			1.14	98.54
7+40			4.94	94.74
7+07.0	3.41	96.06	7.03	92.65
8+00				
8+34				

$$0+00 = 98.94$$

$$\frac{8.50 \text{ cut}}{30.44 \text{ invert of tile}}$$

NW cor. conc. sty at back door



150

7+70

4.91 71.15

8+00

6.02 90.04

8+34

7.71 88.35

151

Oak Bend Est., Sec. 1

Sta.	B.S.	H.I.	F.S.	Elev.
B.M.#	1.71	847.555		845.845'
15+56.84 R.O.D.			9.86	837.695
16+06.84 "			9.745	837.81
16+56.84 "			9.00	838.555
17+06.84 "			7.725	839.83
17+56.84 "			6.28	841.275
10+40 Timb. Clim.	0.145	834.36	13.34	834.215
11+00 " "	0.985	827.965	7.38*	826.98
12+00 " "	1.06+	821.335	7.69	820.275
13+00 " "			6.925	814.41
14+00 " "			9.65	811.685
15+00 " "			10.36	810.975
15+71.58 " "	5.58	816.015	10.90	810.435
B.M.#			5.36+	810.655

Sta.	B.S.	H.I.	F.S.	Elev.
B.M.#7	3.345	852.02		848.672
Str. No 10			5.335	846.68
" " 9			5.415	846.61

* on top of storm sewer pipe; no stake set

154

155

156

157

Prestwick

Sta.	B.S.	H.I.	F.S.	Elev.
B.M.#10	5.13	817.975		812.845'
	7.99		1.86-	
	3.11+		4.95	
	4.845		4.425	
	0.55-		5.77+	
	0.56+		23.68	
	2.39		24.44	
B.M.#11			3.68	768.615

R.R. spk. in ash S. side 100S opposite Ridge Hill Way
entrance - Has tag marked "B.M. WLC 29 1961."
DNR elev. = 812.942'

On stone Cen N. Cen. 16-15-1E

	B.S.		F.S.	
B.M.#10	6.66	5.530	2.135	1.370
	5.53		1.37	
	4.40+		0.605	
	8.25		6.015	
	7.21	7.210	5.02	5.022
	6.17		4.03+	
	3.96	2.898	5.12	4.142
	2.90		4.142	
	1.835		3.16+	

5.74	}	4.756	}	6.87	}	5.868	}	5.870
4.756		4.756		5.868		5.870		
3.772		3.772		4.872		4.872		

2.627	}	1.748	}	24.130	}	23.480	}	23.473
1.748		1.748		23.480		23.473		
0.870		0.870		22.81		22.81		

0.977	}	0.894	}	24.55	}	23.95	}	23.947
0.894		0.894		23.95		23.947		
0.810		0.810		23.34		23.34		

1.776	}	1.449	}	6.938	}	6.065	}	6.065
1.449		1.449		6.065		6.065		
1.121		1.121		5.192		5.192		

5.152	}	5.071	}	4.136	}	3.898	}	3.899	}	768.613
5.071		5.071		3.898		3.899		768.613		
4.990		4.990		3.663		3.663				

BM.#11

