

BLACK HAWK CO.

LFM-1106--7X-07

E L A N

Field Book

E 64-8x4

VOORHIES ROAD

STAKING

DT-0659

E	L	A	N	Publishing Co., Inc.
				Meredith, N.H. 03253

VOORHIES ROAD
CONTROL

5:15 AM.
AUG. 12/10

STA	BS	HI	FS	ELEV.
V1 - 2.5" DURA-SPIKE @ SEC. COR. @ B.O.P.				
	3583564.263	/5193015.400	1014.62	
V2 - 12" SPK @ 18+30 (60' ± LT.)				
	3584422.589	/5192949.519	1014.28	
V3 - 12" SPK @ 26+85 ± (80' ± RT.)				
	3585251.567	/5193084.028	1012.13	
V4 - 12" SPK @ N.W. COR. INTERSECTION				
	3586232.556	/5192958.622	1019.39	
V5 - 12" SPK @ 44+00 ± (60' LT.)				
	3586237.874	/5193833.192	1018.56	
V6 - 12" SPK @ 54+30 ± (60' ± LT.)				
	3586241.589	/5194852.738	1023.49	
V7 - 12" SPK @ 64+24 ± (57.0' ± LT.)				
	3586325.207	/5195853.281	1017.20	
V8 - G.P.S. MON. @				
	3586231.541	/5196364.965	1006.33	

REMARK
V9 - 12" SPK @ SE. COR. N. GRAIN BINS
3586428.902 / 5196477.795 1000.38

STAKE R/W

SJM, AN.

AUG. 12/10

STA	BS	HI	FS	ELEV.
10+50.68		100.06	✓	
11+00.30		50.06	✓	
12+00		50.06	✓	
13+50			✓	
15+00			✓	
16+50			✓	
18+00 17+75			✓	
19+50			✓	
21+00			✓	
22+50			✓	
24+00			✓	
25+50			✓	
27+00			✓	
28+50			✓	
30+00		50.06	✓	
31+50			✓	
33+00			✓	
34+49.81		50.06	✓	
34+49.81		33.06	✓	

PLAN
ELEV.

C/F

OFFSET

4

STA	BS	HI	FS	ELEV
-----	----	----	----	------

10+32.06		117.06 RT.	✓	
10+99.60		50.0 RT.	✓	
12+00			✓	
13+50			✓	
15+00			✓	
16+50			✓	
18+00			✓	
19+50			✓	
21+00			✓	
22+50			✓	
24+00			✓	
25+50			✓	
27+00			✓	
28+50			✓	
30+00			✓	
31+50			✓	
33+00			✓	
34+50		50.0 RT	✓	
35+24.50		47.11 RT	✓	

PLAN
ELEV.

C/F

OFFSET

5

STA	BS	HI	FS	ELEV
36+33.95		116.97 LT	✓	
36+53.39		54.15 LT	✓	
38+00		50.0 LT	✓	
39+50			✓	
41+00			✓	
42+50			✓	
44+00			✓	
45+50			✓	
47+00			✓	
48+50			✓	
50+00		50.0 LT	✓	
51+50		50.0 LT	✓	
53+00		50.0 LT	✓	
54+74.63		49.22 LT	✓	
55+80		51.7 LT	✓	
56+87.20		49.22 LT	✓	
58+00		50.1 LT	✓	
59+50		50.2 LT	✓	
61+00		50.4 LT	✓	
62+12.84		55.80 LT	✓	
63+00		51.4 LT	✓	
64+50		50.0 LT	✓	
66+00		50.0 LT	✓	
67+50		50.0 LT	✓	
68+72.07		44.68 LT	✓	

STA	BS	HI	IS	ELEV
36+45.73		47.11 RT	✓	
38+00.0		50.0 RT	✓	
39+50			✓	
41+00			✓	
42+50			✓	
44+00			✓	
45+50			✓	
47+00			✓	
48+50			✓	
50+00		50.6 RT	✓	
51+50		50.0 RT	✓	
53+00		50.0 RT	✓	
54+50		50.5 RT	✓	
55+80.90		55.47 RT	✓	
57+08.07		50.43 RT	✓	
58+00		62.1 RT	✓	
59+50		82.0 RT	✓	
61+00		100.8 RT	✓	
62+02.60		109.89 RT	✓	
62+06.83		44.02 RT	✓	
63+00		48.7 RT	✓	
64+50		50.0 RT	✓	
66+00		50.0 RT	✓	
67+50		50.0 RT	✓	
69+00		62.1 RT	✓	
69+38.48		73.55 RT	✓	

PLAN
ELEV

C/P

OFFSET

SLOPE STAKES

SJM, A.V.

AUG. 12/10

STAKE Culverts
Roadway Culverts P1-

08/19/2010

DR, JK

STA	BS	HI	FS	Elev.
-----	----	----	----	-------

P-1

10+20.28, 44.93' RT	EXIST. INV. 8.43	14.57		
36.15' @ 2.25% 1.13%				
10+55.99, 50.60' RT		8.01		

P-2

12+79.0, 31.75' RT		6.30		
64.33' @ 0.50%				
12+79.0, 32.58' LT		4.40		

P-3

24+39.00, 31.29' RT		9.71		
64.30' @ 1.01%				
24+39.00, 33.01' LT		8.22		

P-4

28+64.0, 29.27' RT		10.13		
60.0' @ 0.43%				
28+64.0, 30.73' LT		9.52		

Plan
Elev.

C/F

OFFSET

08.65

C = 5⁹² Meet Ex. 10' @ Tie-in

07.82

C = 0¹⁹ 10' @ End Apron

05.12

C = 1¹⁸ 10' @ End Apron

04.80

F = 0⁴⁰ 20' @ End Apron

09.15

C = 0⁵⁶ 10' @ End Apron

08.50

F = 0³⁸ 10' @ End Apron

09.46

C = 0⁶⁷ 10' @ End Apron

09.20

C = 0³² 10' @ End Apron

STN	BS	HT	FS	Elev
<u>P-7</u>				
42+71,	29.45' LT			16.86
42+71,	30.81' RT			16.48
<u>P-5</u>				
36+38.56,	39.01' LT			1017.46
35+88.20,	31.59' RT			1014.27
<u>P-6</u>				
38+87,	29.48' LT			1016.58
38+87,	30.68' RT			1016.29
<u>P-8</u>				
73+06.72,	30.83' LT			992.43
3586500,	92/5196565.765			
72+78.61,	32.84' RT			991.26
3586503.09/	5196635.730			

13.

Plan Elev	C/R	OFFSET
16.55	C=0 ³¹	10' @ End Apron
16.10	C=0 ³⁸	10' @ End Apron
1015.63	C=2 ⁴³	10' @ End Apron
1014.36	F=0 ⁰⁹	10' @ End Apron
1015.76	C=0 ⁸²	10' @ End Apron
1015.40	C=0 ⁸⁴	10' @ End Apron
990.25	C=2 ¹³	10' @ End Apron
990.25	C=1 ⁰¹	10' @ End Apron

CENTERLINE STAKES

MF

8-27-10

STA	BS	HI	FS	ELEV
-----	----	----	----	------

10+00

20+00

30+00

40+00

50+00

60+00

TOP DIRT 1.08' Below
FINISH

PIN ELEV	CIF	OFFSET
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1014.67

1017.89

1014.36

1020.48

1025.36

1021.07



BLUE TOPS

SIM, TF, AN

SEPT. 1/10

35+79.41 (58.77 LT.) 18.28 ✓

35+85.12 (50.10 LT.) 18.69 ✓

35+91.44 (41.77 LT.) 18.67 ✓

35+90.70 (76.50 LT.) 19.58 ✓

35+96.35 (68.64 LT.) 19.93 ✓

36+10.47 (67.25 LT.) 19.61 ✓

36+00.08 (95.67 LT.) 19.94 ✓

36+05.54 (88.51 LT.) 20.24 ✓

36+18.98 (91.94 LT.) 20.06 ✓

36+14.45 (42.02 LT.) 19.11

36+29.39 (24.49 LT.) 18.66

STA BS HI FS ELEV

11+00

20+00

30+00

34+90.59

36+00

36+79.64

45+00

52+94.33

53+60.83

LT

RT

✓
11.16
12

✓
17.07
12

✓
13.54
12

✓
17.64
12

✓
18.5247
12

✓
18.98
12

✓
21.07
12

✓
26.17
12

✓
26.11
12

✓
11.40
0

✓
17.31
0

✓
13.78
0

✓
17.98
0

✓
18.77
0

✓
19.22
0

✓
21.31
0

✓
26.41
0

✓
26.35
0

✓
11.16
12

✓
17.07
12

✓
13.54
12

✓
17.64
12

✓
18.53
12

✓
18.98
12

✓
21.07
12

✓
26.17
12

✓
26.35
12

STA BS HI FS ELEV

54+27.33

54+93.83

56+67.98

57+34.48

58+00.98

58+67.48

59+25.65

59+92.15

LT

✓
22.17
12

✓
25.06
12

✓
23.74
12

✓
23.41
12

✓
22.59
12

✓
21.75
12

✓
21.03
12

✓
20.57
12

✓
25.41
0

✓
25.66
0

✓
24.34
0

✓
23.65
0

✓
22.83
0

✓
21.99
0

✓
21.27
0

✓
20.57
0

RT

✓
22.65
12

✓
26.26
12

✓
24.94
12

✓
23.89
12

✓
22.83
12

✓
21.75
12

✓
21.03
12

✓
20.33
12

STA	BS	HI	FS	ELEV
60+58.65				
61+25.15				
63+04.85				
63+71.35				
64+37.85				
65+04.35				
67+20.52				
67+58.52				

LT		RT
✓	✓	✓
20.22	19.98	19.74
12	0	12
✓	✓	✓
20.07	19.47	18.87
12	0	12
✓	✓	✓
18.68	18.08	17.48
12	0	12
✓	✓	✓
17.56	17.32	17.08
12	0	12
✓	✓	✓
16.34	16.34	16.10
12	0	12
✓	✓	✓
14.94	15.18	14.94
12	0	12
✓	✓	✓
11.13	11.37	11.13
12	0	12
✓	✓	✓
10.47	10.71	10.71
12	0	12

STA BS HI R CIPV

67+96.52

68+49.52

70+18.47

70+72.47

71+10.47

71+48.47

71+72.11

72+99.70

75+98.0
50

LT

RT

✓
 $\frac{09.80}{12}$

✓
 $\frac{10.04}{0}$

✓
 $\frac{10.28}{12}$

✓
 $\frac{8.35}{12}$

✓
 $\frac{8.95}{0}$

✓
 $\frac{9.55}{12}$

✓
 $\frac{01.72}{12}$

✓
 $\frac{02.32}{0}$

✓
 $\frac{02.92}{12}$

✓
 $\frac{98.94}{12}$

✓
 $\frac{99.18}{0}$

✓
 $\frac{99.42}{12}$

✓
 $\frac{96.49}{12}$

✓
 $\frac{96.73}{0}$

✓
 $\frac{96.73}{12}$

✓
 $\frac{94.17}{12}$

✓
 $\frac{94.41}{0}$

✓
 $\frac{94.17}{12}$

✓
 $\frac{93.18}{12}$

✓
 $\frac{93.42}{0}$

✓
 $\frac{93.18}{12}$

✓
 $\frac{93.29}{12}$

✓
 $\frac{93.53}{0}$

✓
 $\frac{93.29}{12}$

✓
 $\frac{97.59}{12}$

✓
 $\frac{97.83}{0}$

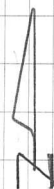
✓
 $\frac{97.59}{12}$

RESET SECTION CORNERS

MF

10-04-2010

SUNNY - 60°

W $\frac{1}{4}$ COR SEC 21-T87N-R14W 5TH P.M.

GIBSON RD

SET 5" X $\frac{1}{2}$ " DIA REBAR/
YELLOW PLASTIC CAP
NO. 8505 OVER
S.C.M.

NAIL/YELLOW SURVEY
MARKER IN P.O. PO.

FACE OF
STREET SIGN

33.67

38.95

VOORNIES RD

107.15

PROJECT COOR.

3586208.2862

5192993.9016

PROJECT NO.

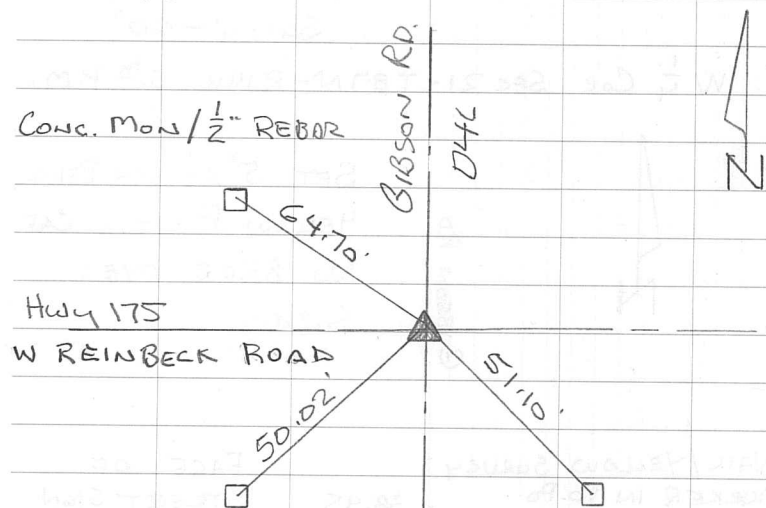
LFM-1106--7X-07

HEAD GAD SPIKE
IN YARD LIGHT
POLE

SW COR SEC. 21-T87N-R14W 5TH PM.

FND 5/8" REBAR

CONC. MON / 1/2" REBAR



CONC MON / 1/2" REBAR

CONC MON / 1/2" REBAR

PROJECT COOR

3583564.2262

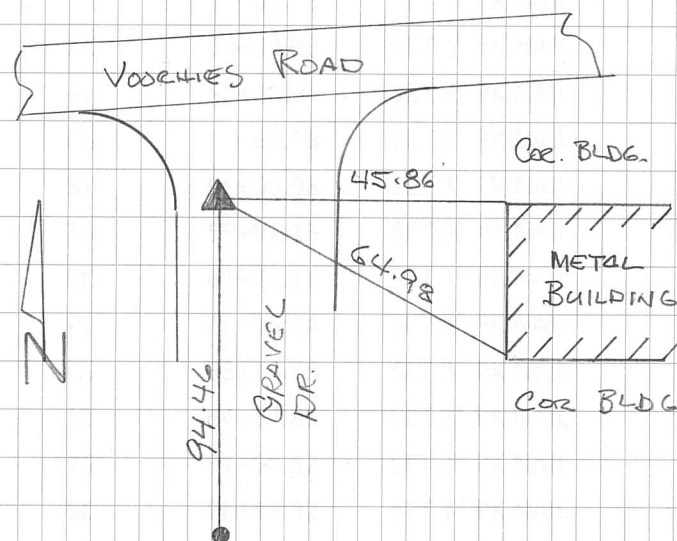
5193015.4349

PROJECT NO

LFM-1106--7X-07

CENTER SEC. 21-T87N-R14W 5TH PM

FND 5/8" REBAR / ALUM CAP



5/8" REBAR - MARKED
WITH PLASTIC SIGN
(SURVEY REF POINT)

PROJECT COOR.

3586217.8895

5195640.1452

PROJECT NO

LFM-1106--7X-07

CENTERLINE POINTS FOUND OR RESET

POT	10+00.00	FOUND 5/8" REBAR
PC	34+90.59	SET 3" PK NAIL
PI	36+11.15	SET 3" PK NAIL
PT	36+79.64	SET 3" PK NAIL
TS	53+60.83	SET 3" PK NAIL
SC	54+93.93	SET 3" PK NAIL
PI	55+80.94	SET 3" PK NAIL
CS	56+67.98	SET 3" PK NAIL
ST	58+00.98	SET 3" PK NAIL
TS	59+92.15	SET 3" PK NAIL
SC	61+25.15	SET 3" PK NAIL
PI	62+15.04	SET 3" PK NAIL
CS	63+14.85	SET 3" PK NAIL
ST	64+37.85	SET 3" PK NAIL
TS	67+58.52	SET 3" PK NAIL
SC	68+49.52	SET 3" PK NAIL
PI	69+35.49	SET 3" PK NAIL
CS	70+19.47	SET 3" PK NAIL
ST	71+10.47	SET 3" PK NAIL
PC	71+72.11	SET 3" PK NAIL
PI	72+53.47	SET 3" PK NAIL
PT	72+99.70	SET 3" PK NAIL
POT	75+95.00	SET 3" PK NAIL