

4

Trans. To L-B W.O

W0-S

N W03-11-64

BS W03-45-70

FS W05-04-118

(POL SET 10" SRK 4'E. 05
N. E05, KANE RD

DISTO BS FS

FT 1617.95 470.24

M 493.152 143.329

TQ W05-04-118

BS W03-11-64

FS W05-04-119 (L-B END 1/2" R.I.E. @ INT. OF FENCES

BS 000.00.20

D 131-03-54 131-03-34 ✓

BS 180-00-17

R 311-03-58 131-03-91 ✓ 131-03-37.5 ✓

DISTO BS FS

FT 470.24 3585.93

M 143.329 1092.98

BS 00.20.20

D 191-24-01 131-03-31 ✓

BS 240-20-31

R 11-24-13 131-03-42 ✓ 131-03-30.5 ✓

131-03-37

DLC

CPE TNLK

TSD°

25 OCT 99

4

WITNESSES L-B

B. Searched at apparent location of corner and found 1/2" Pipe 3' S. of 3 Way Fern Car (N-E-W) Turned To corner and found pipe to be 25' North & 34' East of Intersection of 1/4 Lines. Removed 1/2" Pipe and found 1 1/4" pipe (very old) beneath. Replaced 1/2" pipe to pipe as perpetuation of corner and replaced 1/2" pipe and capped it.

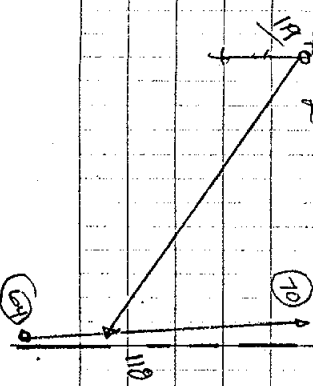
1/2" x 20" Pipe & 2 1/4" Alum Cap.

N17 West Side 10" Thick North 19.69

N17 NW Side 15" White Oak 5659W 17.30

N17 South Side 48" Maple EAST 17.54

N17 NW Side 8" Hick 5170W 25.75



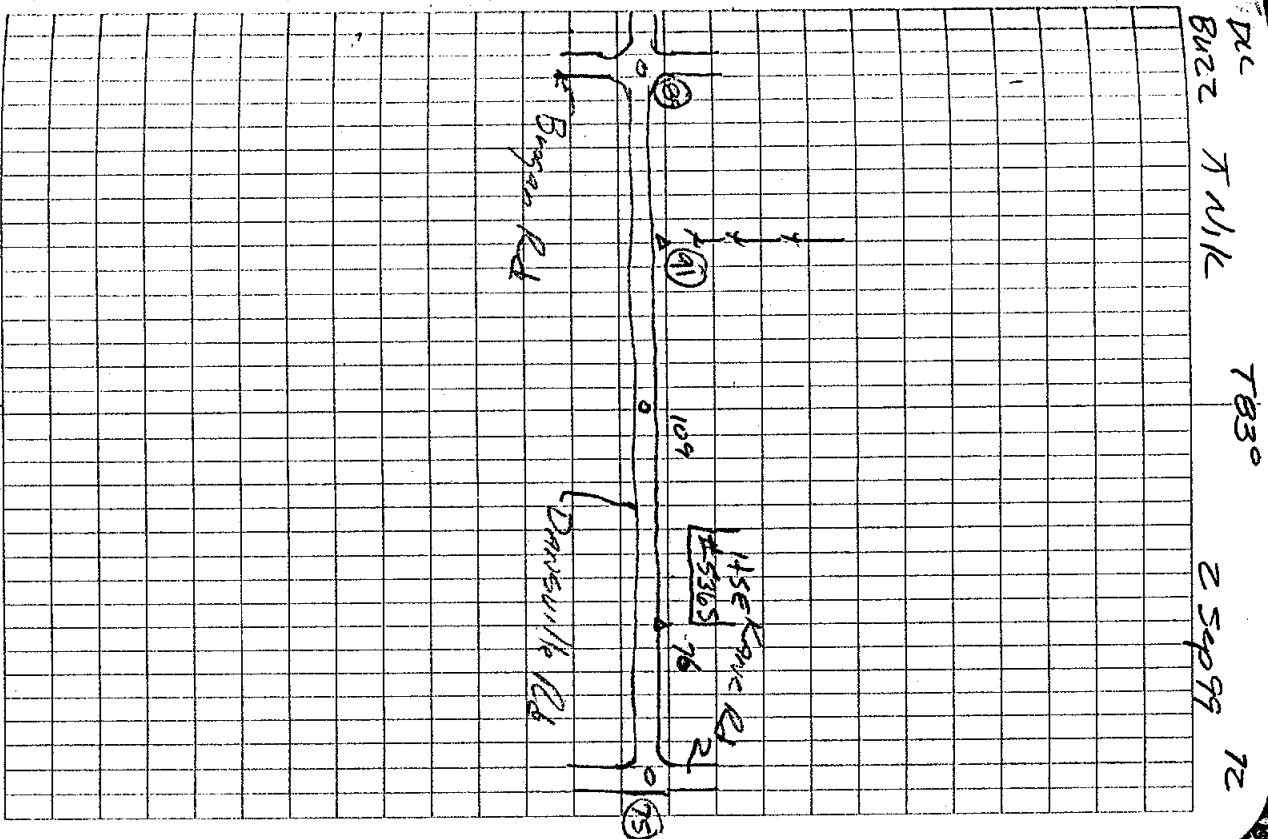
DLC
Buzze
T830
25499
73

INDEX OF CURVE AND REDUCTION TABLES

- Table I-SLOPE STAKE
- Table II-STADIA CORRECTION AND HORIZONTAL DISTANCES
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- Table IV-NATURAL TRIGONOMETRICAL FUNCTIONS
- CURVE FORMULAE
- Table V-TANGENTS AND EXTERNALS TO A 1° CURVE
- USEFUL RELATIONS
- Table VI-INCHES TO DECIMALS OF A FOOT
- Table VII-MINUTES IN DECIMALS OF A DEGREE
- Table VIII-MIDDLE ORDINATES OF RAILS
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- Table X-RODS IN FEET, 10THS AND 100THS OF FEET
- Table XI-LINKS IN FEET, 10THS AND 100THS OF FEET

73	DLC				
π	Bu				
BS		76			
FS	W03-46-75	109	(M-7)		
BS	000-00-20				
D	191-07-31	181-07-11			
BS	180-00-28				
R	1-07-30	181-07-12	181-07-115		
BS	60-20-32				
D	21-27-44	181-07-14			
BS	R 240-20-15				
R	61-27-27	181-07-12	181-07-13	181-07-12	
D	10	BS	109	FS	75
			1563.18		1181.55
			476.458		360.136

72					W03
T	W03-57-91	(Recor. 1/2" B ¹ /C			
B5	W03-56-84	(K-7 1" Recor)			
F5	W03-72-109	(L-7 Sec p 40			
B5	000-00-20				
D	181-13-42	181-13-22 ✓			
B5	180-00-06				
R	1-13-23	181-13-17 181-13-19.5 ✓			
B5	60-20-30				
D	241-33-57	181-13-27 ✓			
B5	240-20-26				
R	61-33-38	181-13-12 181-13-19.5 ✓			
D	1361.05 ✓	1360.74 ✓			
T	414.850	414.753			
B5		91			
F5	W03-47-76	(Recor. 1/2 B ¹ /C			
B5	000-00-20				
D	180-05-26	180-05-06 ✓			
B5	180-00-04				
R	000-05-34	180-05-30 180-05-18 ✓			
B5	60-20-30				
D	240-25-52	180-05-22 ✓			
B5	240-20-11				
R	60-25-45	180-05-34 180-05-28 180-05-23 ✓			
D	1360.73	1563.18 ✓			
	414.151	476.458			



63

W03

T

97

B5

96

FS

W03-63-99

EP Sat 1/2" BSC of
 E. EOM Bypass 3 Turn Pipes
 to HSE #1585 HSE #125

B.S.D

10-00-80

E.S.D

202-34-19 202-33-591

B.S.R

140-00-14

E.S.R

22-33-54 202-33-40 202-33-495

B.S.D

60-20-30

E.S.D

202-54-27 202-33-571

B.S.R

240-20-20

E.S.R

82-54-07 202-33-47 202-33-52

202-33-51

D.S.T

B.S. 96

FS 98

FT

421.12

740.98

M

128.356

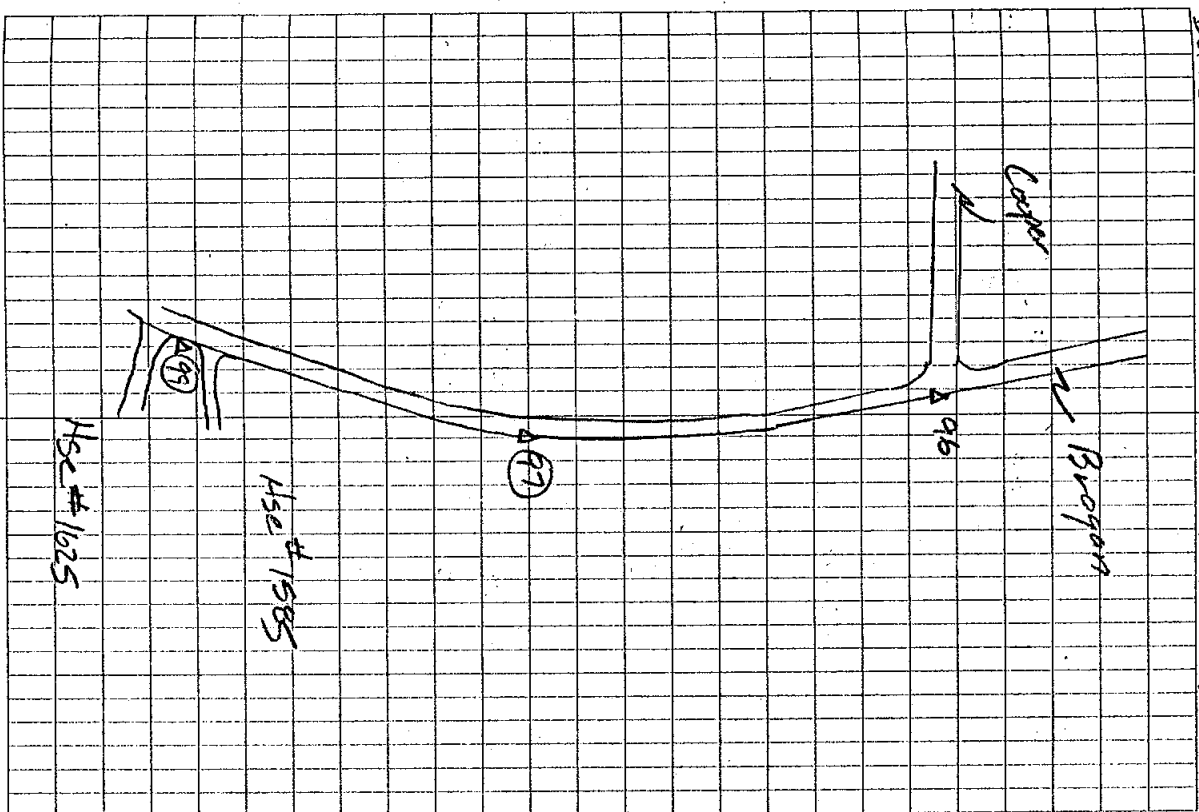
225.852

DLC
BUTZ T.M.L

TMS

31 Aug 99

63



61

W03

D.C.
Burr

T750

31 Aug 99

T

95

B5

94

FS W03-61-96 (R.P. Set 1/2" BSC on E. Elm
Brogan on 2 Cooper Rd
To W035)

B50 00-00-20

D 181-24-26 181-24-06

B52 180-00-12

R 1-24-13 181-24-01 181-24-05

B50 60-20-30

D 241-44-44 181-24-14

B52 240-20-26

R 61-44-31 181-24-05 181-24-05
181-24-06.5

Dist To B594

FS 96

1342.19

1134.08

409.102

345.667

Cooper Rd

Brogan

59

W03

DC
Buez T N/L

T 750

31 Aug 99

59

T

93

B5

92

FS W03-59-94 (E.P. Set 1/2" BSC 2" E.S. EOM Bugman Halt way

B5D 000-00-20 B5D Drives To HSE #273

FSB 139-25-29 139-25-09 ✓

FSR 180-00-15

FSR 319-25-09 139-24-54 139-25-01.5

B5D 60-20-30

D 199-45-37 139-25-07

B5R 240-20-26

FSR 19-45-10 139-24-52 139-24-59.5

139-25-00.5

D.S.T.B B5R

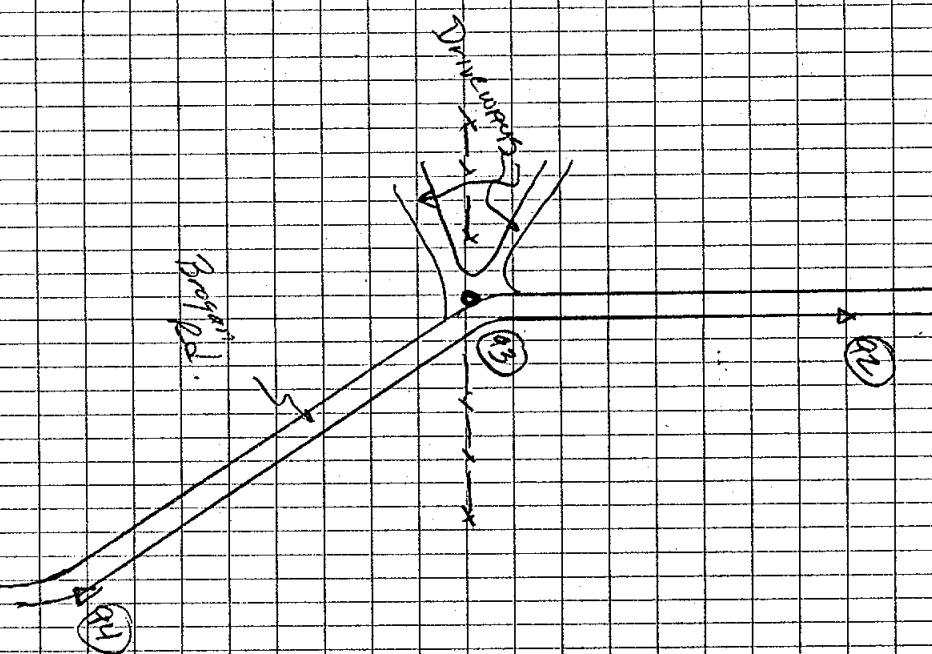
FS94

1252.96

716.47

341.902

218.380



58

W03

DL Buzz Tail

7:50

31 Aug 99 58

T

92

B5

89

F5

W03-58-93 (K-8 570 BLC
see pg 40)

B5D

W0-00-20

C5D

W1-30-11

181-29-51

B5R

180-00-09

F5R

1-29-55

181-29-46 181-29-485
2.73

B5D

60-20-30

93D

241-50-26 181-29-56

B5R

240-20-23

93L

61-50-75

181-29-52 181-29-54

181-29-51

Dist to

B5 89

F5 93

1412.52

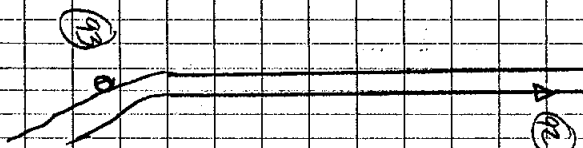
1252.97

430.538

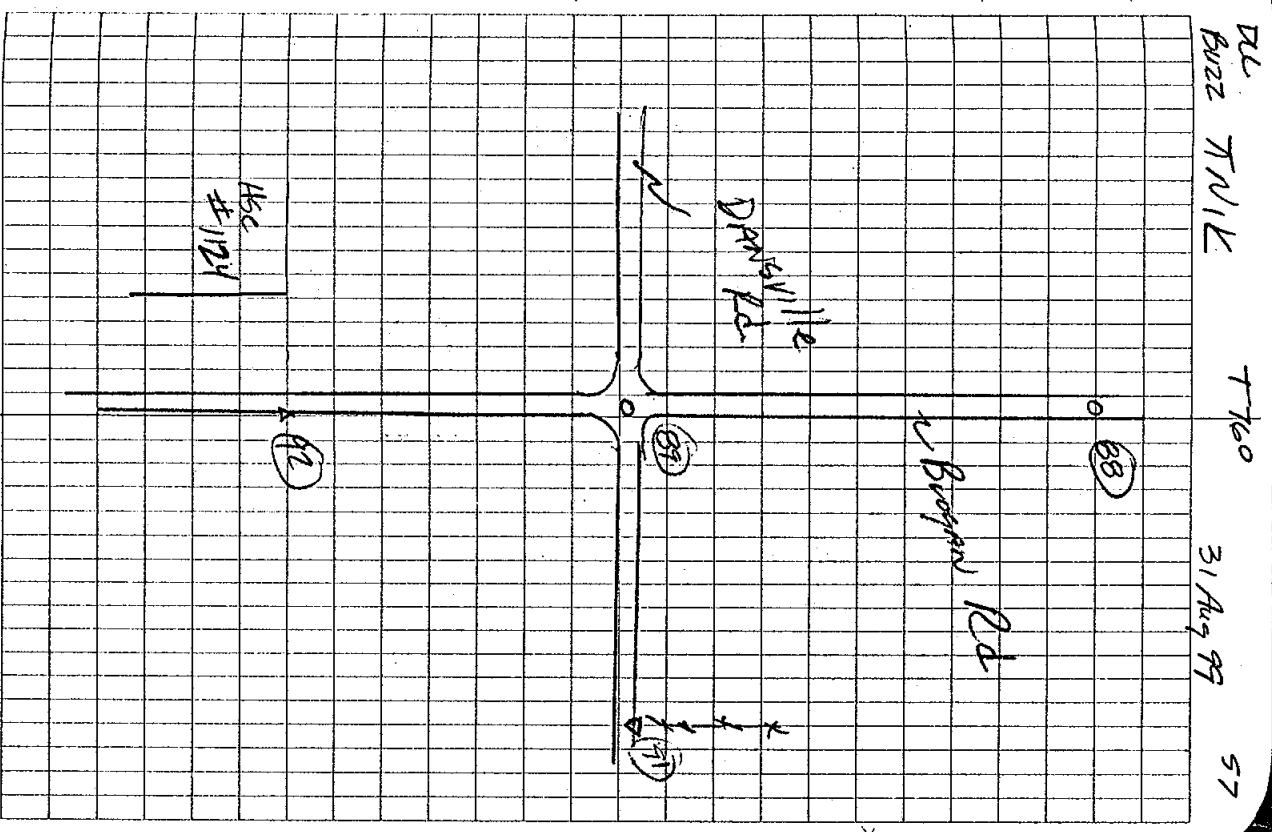
381.905

Bogus Rd 2

181-29-46
Dariusville Rd



57				W03
T		89		
B5		88		
F5 ₉₁	W03-57-91	(R.P. Set 1/2" B&C 2' N. of N. E. of D. and S. VILLAGE Rd. on Og Line)		
F5	W03-57-92	(R.P. Set 1/2" B&C 2' W. of E. E. of D. and S. VILLAGE Rd. on Og Line)		
B5D	00-00-20	Well Line H&C #1124		
91D	92-10-51	92-10-31		
92D	178-16-40	178-16-22		
B5R	140-00-00			
91R	872-10-48	92-10-40	92-10-35.5	
92R	358-16-32	178-16-32	178-16-26	
B5D	60-20-30			
91D	152-31-22	90-10-52		
92D	238-31-11	178-16-41		
B5R	240-20-58			
91R	332-31-28	92-10-30	92-10-41	92-10-38
92R	58-37-17	178-16-21	178-16-31	178-16-28.5
Dist to	B.S. 88	F.S. 91	F.S. 92	
FT	8668.27	1361.05	1412.52	
M	813.291	414.849	430.537	



Wb 3

8

22

UJ03-56-89

W03-56-90

(K-7 1" Bor Sec ps. 39
1/8 Cor 5/8" BSC over the
well point Sec ps 42

10-00-20

180-29-	27	180-29-07
---------	----	-----------

180-00-13

0-29-03 130-28-504

60-20-30

240-49-31 180-29-01

240-20-22

60-49-14	180-78-574	180-78-574	180-78-574
----------	------------	------------	------------

Dist to B.S

FS	07
----	----

FS 90

930.37 ✓

2668.27 ✓

1334.14 ✓

283.577

813.289

406.646

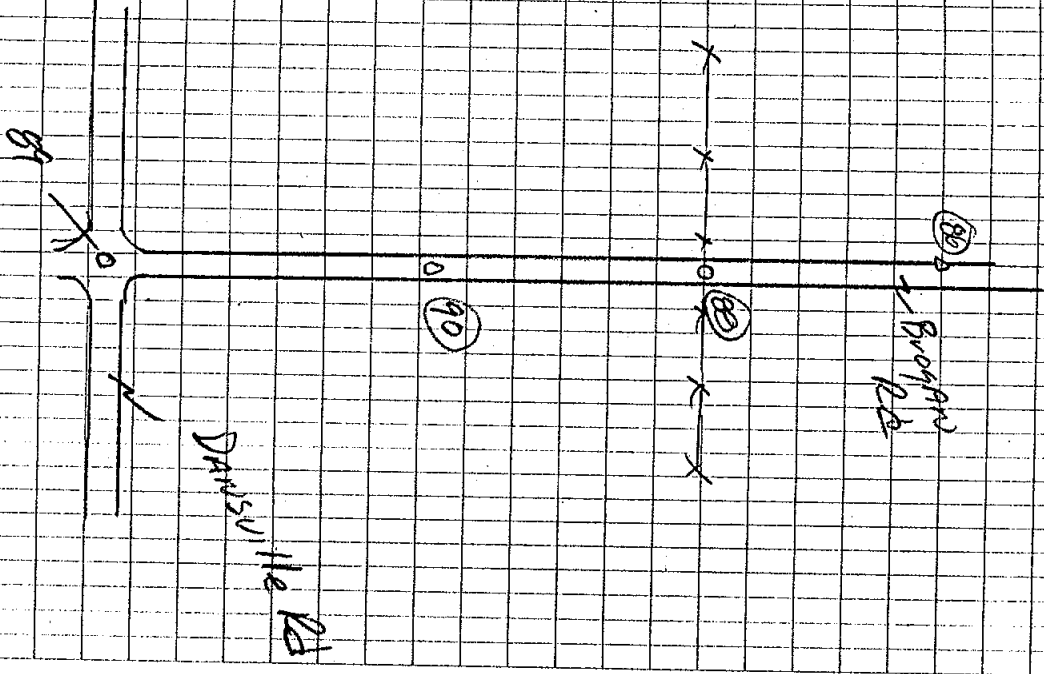
DL

Quiz 1 NIK

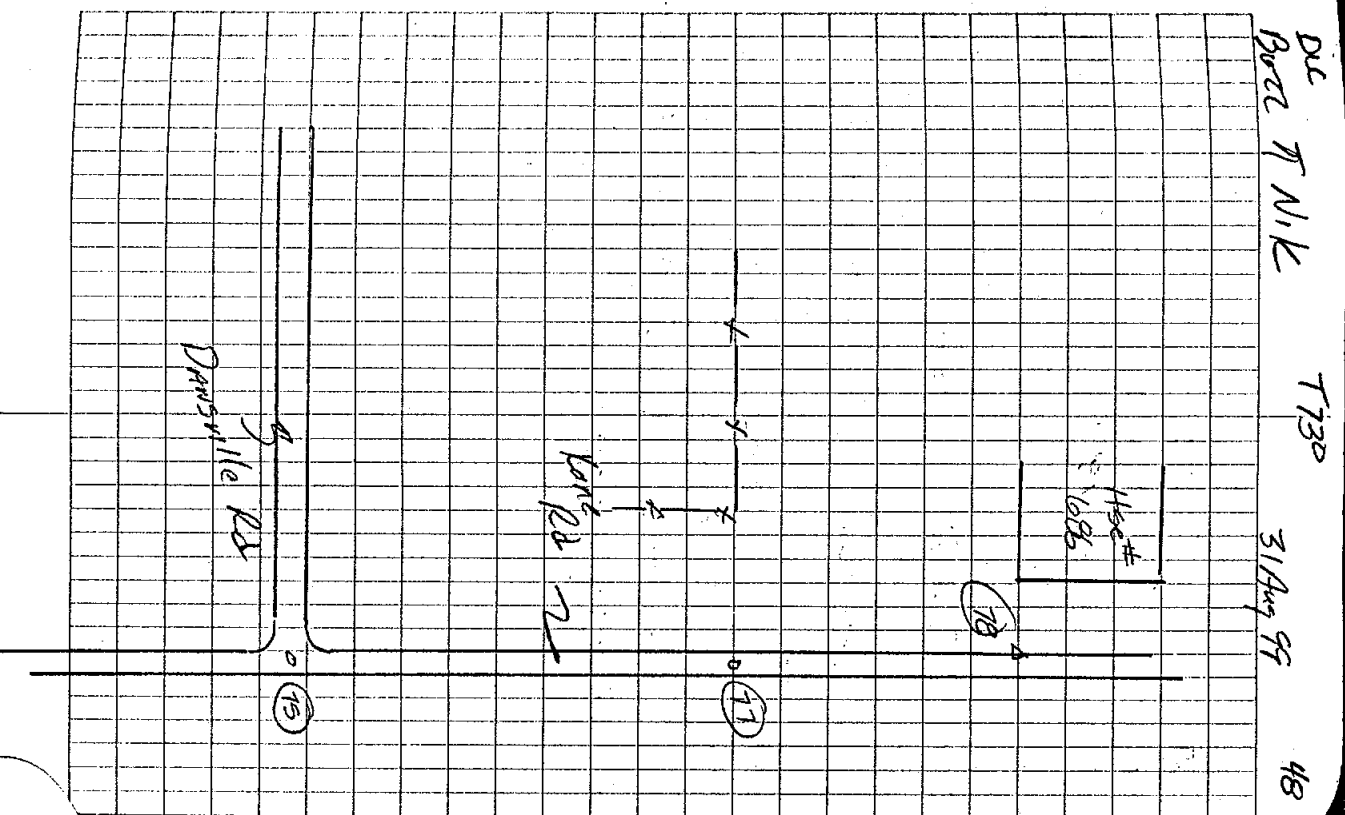
T750

31 Aug 99

56



48					W03
T		77			
B5		75			
F5	W03-48-78				R.P. Sec 1/2 B5C 3'E of (U.E. Kane Rd on S.W. 1/4) Line Hsec # 686 To West
B.S.D	00-00-20				
E.S.D	179-11-33	179-11-13v			
B.S.R	140-00-16				
E.S.R	359-11-20	179-11-14v	79-11-135		
B.S.D	60-20-30				
E.S.D	239-31-44	179-11-14v			
B.S.R	240-20-27				
E.S.R	59-31-30	179-11-03v	79-11-085	179-11-11v	
Dist to	8.575	E.S.78			
S	2656.98	✓	655.50v		
m	809.849	199.796			



47

No 75

BS 72

FS 1003-47-76

FS 1003-47-77

BS 100-00-20

D 96-07-40

D 180-10-43

BSR 180-00-09

R 276-07-36

R 600-10-42

BS 100-20-30

D 156-27-49

D 240-30-53

BSR 240-20-23

R 336-27-52

R 60-30-52

Dist To BS

FS 76

FS 77

FT 1858.82

M 546.569

1003

DL
CEE X Nikon

47
30 AUG 99

1400#
9305

TRANSVILLE Rd.

1400#
1170

Barn

LANE Rd.

Coon
Lake
Rd

60

46

W03

No 71

BS 70

FS W03-46-72

(2P SET E' BEC 6' WJ OF E EOG
KANE RD OPEN WALLINE OF BARN OFF
M-8 STAND 36C
See Pg 36
HSE 1170

FS W03-46-73

FS W03-46-74 (A-B FND E' BEC

BS 000-00-20

See Pg 47 for Sketch

P 177-14-11

177-13-51 ✓

P 177-15-01

177-14-41 ✓

P 176-43-30

176-43-10 ✓

BS 180-00-04

R 357-14-09

177-14-05 ✓

177-13-58 ✓

R 357-14-47

177-14-43 ✓

177-14-42 ✓

R 356-43-33

176-43-29 ✓

176-43-19 ✓

BS 60-20-30

P 237-34-28

177-13-58 ✓

BS 240-20-27

R 57-34-29

177-14-02 ✓

177-14-00 ✓

177-13-59 ✓

DIST TO BS

FS₇₂FS₇₃FS₇₄

FT 815.96 ✓

1001.65 ✓

203.63 ✓

105.62 ✓

M 248.705

305.303

62.065

32.194

DL
CFC K NIKON

30 AUG 95

46

No 72

BS 71

FS W03-46-75

(M-7
FND STAND BEC 44 KANE & DUNSMUIR RD
* See Pg 47 for Sketch

BS 000-00-20

P 178-38-41

178-38-21 ✓

BS 180-00-19

R 358-38-25

178-38-06 ✓

178-38-13 ✓

BS 60-20-30

P 238-58-49

178-38-19 ✓

BS 240-20-28

R 58-58-34

178-38-06 ✓

178-38-12 ✓

R 58-58-34

178-38-06 ✓

178-38-13 ✓

DIST TO

BS

FS

FT 1001.64 ✓

1858.82 ✓

M 305.301

566.570

45

W03

T W03-11-64 (Recov. Str. BSC M-9
 SEE Pg. B
 BS W03-10-60 (Recov. 1/2" BSC
 FS W03-45-70 (R. 35-1/2" BSC W. EOG
 KAME RD OFF & DOWN LK RD TO E.
 * See Pg 47 For Sketch)
 BS 000-00-20
 P 179-40-41 179-40-21 ✓
 BS 180-00-17
 R 359-40-25 179-40-08 ✓ 179-40-14.5 ✓
 BS 60-20-30
 P 240-00-48 179-40-18 ✓
 BS 240-20-28
 R 60-00-33 179-40-10 ✓ 179-40-14 ✓ 179-40-14 ✓

DISTO BS FS

F 1129.24 1417.94 ✓
 M 344.194 493.148

DL CRE T NIKON

30 AUG. 99

45

TQ 70
 BS 64
 FS W03-45-71 (RP SET 1/2" BSC E. EOG, KAME RD
 OFF N. LK RD LUNG HSE # 1266
 BS 000-00-20 See Pg 47 For Sketch
 P 183-13-01 183-12-41 ✓
 BS 180-00-19
 R 003-12-56 183-12-37 ✓ 183-12-39 ✓
 BS 60-20-30
 P 243-32-59 183-12-29 ✓
 BS 240-20-17
 R 63-32-54 183-12-37 ✓ 183-12-33 ✓ 183-12-36 ✓

DISTO BS FS

F 1417.94 815.96 ✓
 M 493.150 248.704

43

Sketch of Trail.

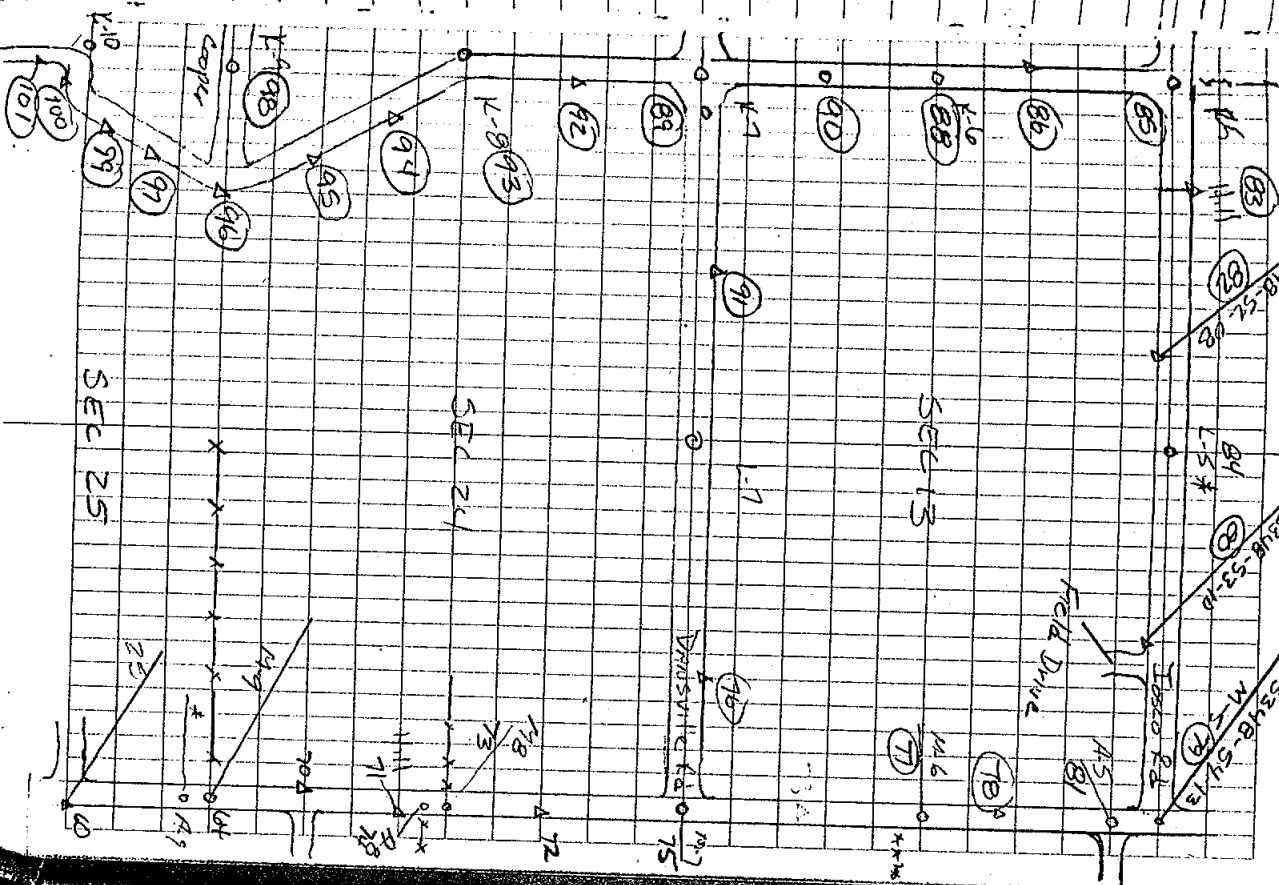
Sec 13, 24, 25

White Oak
Twp.

Sec 13
Rd.

(87)

30 Aug 99 43



42

K-6

T

B5

F5

B5D

D

B5R

R

W03

DLC
Bu22

TN/LK

75

21 Aug 99

W03-42-90 (Edwell point)

W03-42.89 (K-7 1st Rebar)

W03-42.88 (K-6?)

000-00-20

180-00-23 180-00-03

180-00-20

000-00-22 180-00-02 180-00-02.5

Dist To

B5

F5

1334.14

1334.14

406.645

406.646

52

1332.21

51

50

DANBYVILLE RD.

41

W103

K-9

B. Searched at apparent location of corner and found 1/4" type fence post 4' S. of d Cooper Rd. Excavated 2' Dia Hole 3' Deep and hit conc. Base of fence post. Accepted fence post as corner and set 3/4" x 24" Rebar above it.

C. 3/4" x 24" Rebar w/ 2 1/4" Cap.

N5T 28414 S Side 20' Apple Tree N58°E 71.31'
 N5T 28409 S Side 24' Oak N 82°E 118.33'
 N3T 28409 S Side 14" Hick N 86°E 129.78'
 N1T 28414 E Side Cable Post N 50° W 59.22'

SW

T 750

41

Box 22

26 Aug 99

L-9

B. Searched at apparent location of corner and found 1 1/4" 3/4" 17640 in old orchard w/ Bobb's hit witness to N.E. corner a stump. Excavated 3' Dia Hole 2' Deep and found fence 1 1/4" type beneath bar. (Bobb's favorite choice of iron) Accepted type as best evidence of corner and set 3/8" x 24" Rebar w/ cap in it.

C.

N5T 28409 W Side S' Oak N 22°E 11.25'
 NE Side S' Maple S 40°E 10.65'
 S Side 21' Oak S 68°W 79.08'
 E Side 17' Oak N 55°W 75.43'

40

L-7

B Searched at apparent location of corner and found $\frac{1}{2}$ " Pipe on 4 Danville Rd. matching all of Bus's witnesses All Rd Comm. witnesses 1' South of Robb's witnesses. Excavated 2' Dia Hole 3' Deep Centered on 1000. Found $\frac{1}{4}$ " Pipe directly beneath $\frac{1}{2}$ " Pipe. Accepted pipe as best evidence of corner and reset and capped it $2\frac{1}{4}$ " Alum. Cap.

C $\frac{1}{2}$ " x 10" Pipe & $2\frac{1}{4}$ " Alum Cap Stripped

PA 345 Ingham Co. 25837

N1T 28409 S. Side 37" Oak N 75°E 74.88'

E. Side 17" Hick 5 25°E 21.55'

N. Side 21" Oak 5 68°W 38.55'

S. Side 52" Oak N 65°W 64.10'

V E. Side 19" Hick N 50°E 27.02'

DL
Buzc

725°

26 Aug 99

40

L-8

B Searched at apparent location of corner and found $\frac{1}{2}$ " Sand Cap #10989. Excavated 1' Diameter Hole 14" and found $\frac{1}{4}$ " Pipe w/ Stone on S. Side and broke on N. Accepted $\frac{1}{4}$ " Pipe as corner and Dred 34" Rebar in center and place $2\frac{1}{4}$ " Alum Cap

C $3\frac{1}{4}$ x 24" Rebar w/ $2\frac{1}{4}$ " Alum. Cap

N1T 28406 W. Side 16" Hick N 25°E 85.50'

N1T 28409 N. Side 10" Hick N 70°E 55.71'

N1T 28414 N. Side 12" Hick N 85°E 49.94'

N1T 28415 N. Side 12" Hick 580°E 56.53'

N1T 28414 W. Side 17" Hick 525°E 48.98'

N1T 28409 W. Side 16" Torn Wood w/ N 28°W 44.39'

35

W03

K-6

3. Searched at apparent location of corner and found 1/2" Bar MATCHING Ross! Potowski witnesses but not Callkins witnesses which still stand. EXCAVATED 18" Dia. Hole 2' Deep into natural ground. Did not find any evidence of corner probably due to about a 3' Rd. Cut. Searched for & recovered CALLINS Well point at 1/8 corner 1/4 mile South. Reestablished position of corner by using Callkins distance to determining said location (Aug 42) Set 5/8" Re bar, 2 1/4" Alum. Cap & Mon Box

C.

NIT 28414 E. Side 7 1/4" Hick N 35° E 41.08'
 Box END NIT W. Side 2 1/4" Hick S 40° E 34.58'
 NIT 28409 E. Side 3 1/4" Oak S 41.50'
 NIT 28414 E. Side 4" Maple S 40° W 38.56'
 NIT 28414 S. Side 3 1/2" Oak N 70° W 27.55'
 1/2" Bar N 65° W 2.1'
 & STUMP 3 1/2" Oak S 65° W 32.2'

DLC

Bar

T. 700

26 Aug 99

39

K-7

3. Searched at apparent location of corner and found 1" Round on & Darius 1 1/2" Rd. 1.5' N. of & Brogan Rd. MATCHING Ross witnesses to 3 1/4" tree, 1/8 Rd. Corner Nit to Born & Hse (Now only Felling apart stone FDN's) Early Rd. Corner witnesses to being Hse, Maple & Poplar & Callkins witnesses to Hse Fdn. EXCAVATED 18" Dia. Hole around bar 18" Deep and Found Brick completely surrounding Bar. Dug Down 3' around bar and could not move it at all. Accepted Bar as per location of corner and STAMPED 25837 in Top and Set mon box

C. 1" Re bar STAMPED 25837

NIT 28414 W. Side 2 1/4" Maple N 20° E 78.17
 NIT 28037 SE Side 5 1" Poplar N 38° E 47.82
 NIT 28409 W. Side 1 1/2" Walnut S 150° E 263.50
 & END 12" CMP S 60° W 32.20
 NIT 28414 E. Side Co Fen Bar N 45° W 47.84

36

M7

B. Searched at apparent location of corner and found $1\frac{1}{2}$ " Bar matching 3 of Boss's WITNESSES. EXCAVATES 4' Square. Hole 3' Deep Through 2' of Road Grav. into Natural Ground. Found no further Evidence of corner. Accepted $1\frac{1}{2}$ " Bar as best evidence of corner location and replaced it with $3\frac{1}{4}$ " rebar $\pm 2\frac{1}{4}$ " Alum. cap

C. M-7 T2N R2W

 $3\frac{1}{4}$ " Rebar $\pm 2\frac{1}{4}$ " Alum. Cap

Boss EN4 N5T W. Side 23" OAK N15E 86.27'

W. Side 29" OAK S48E 39.18'

E. Side 25" Hick S10°W 112.30'

V S. Side 26" Hick N65°W 77.20'

N5T 28409 E. Side 29" Hick N16°W 110.35'

24 Aug 99 36

M-8

B. Searched at apparent location of corner and found $1\frac{1}{2}$ " Bar on E. Kane Rd on Fence line to East ^{NE} matching all of Boss witnesses and Robb's Yellow Oak WITNESS To NE. No EXCAVATE Because possibility of finding historical evidence is nil due to 4' Road Cut. Traversed section and accepted

C. $5\frac{1}{8}$ " x $2\frac{1}{4}$ " Rebar $\pm 2\frac{1}{4}$ " Alum. CapNail 4T₉ 28409 W. Side 50' Y. OAK N100E 102.0'

Boss EN4 N5T N. Side 8" Maple 580 E 19.90'

SW Side 10" Maple 525 E 39.68'

SE Side 21" Maple 545 W 36.15'

S.W. Side 18" Hick N50 W 24.35'