

Book 92 Dr 16

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN

Survey

CO. ROAD "F"

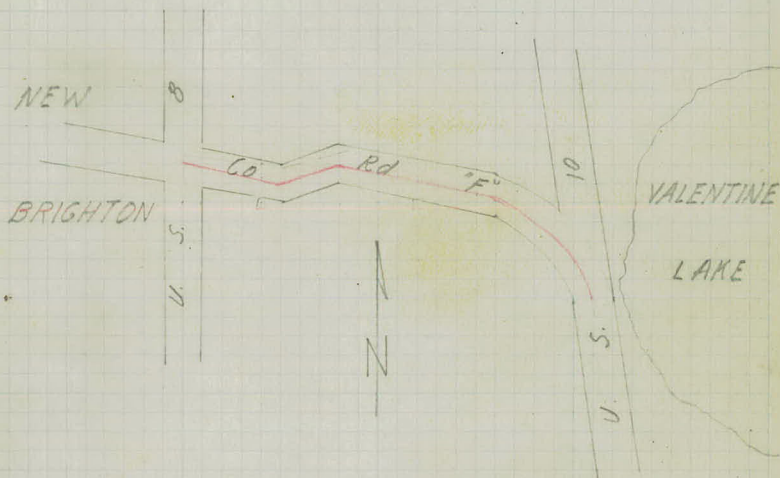
From S.T.H. #8 To S.T.H. #10

Road Acc't. No. 17

Date Filed 1-30-43

File

PLAN SURVEY
CO. RD "F"
S.T.H. 8 to S.T.H. 10



INDEX

Align -	- 1-6
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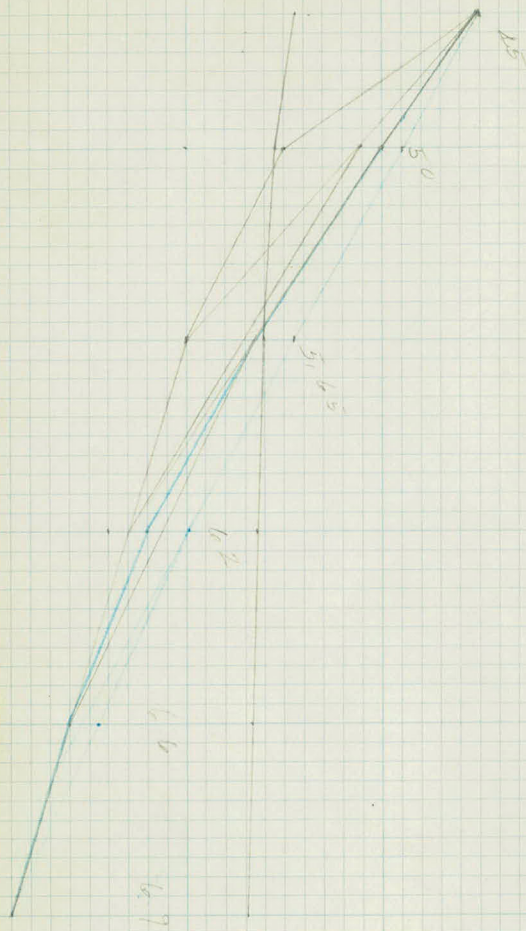
Red 12/3/41

10

50

75

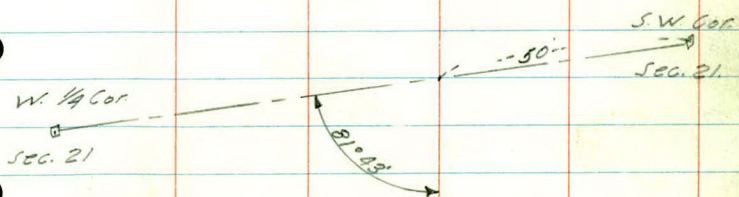
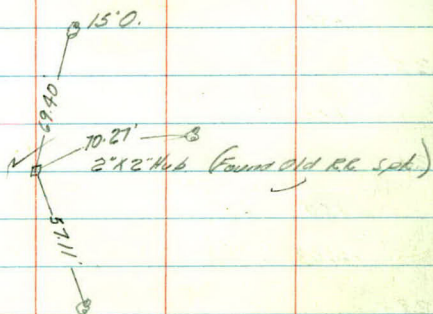
100



Alignment

Sta.	Point	ΔL	ΔR
+62.38	P.T.	16°10'	
+50		15°51.4'	
18		14°36.4'	
+50		13°21.4'	
17		12°06.4'	
+50		10°51.4'	
16		9°36.4'	$\Delta 32°20'$
+50		8°21.4'	D-50-
+48.02	P.I.		T-332.31' ✓
15		7°06.4'	L-646.67' ✓
+50		5°51.4'	R-1146.28' ✓
14		4°36.4'	
+50		3°21.4'	
+17.09	P.O.S.T.		
13		2°06.4'	
+50		0°51.4'	
12	+15.71 P.C.	0°00'	

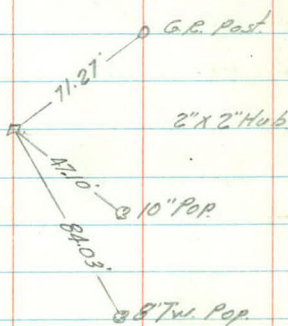
0 +00 = & U.S. Highway B



Drill Hole in Pav.

Sta	Point	ΔL	ΔR	
+48.91	P.T.		17°06.5'	
21			16°08.3'	
+50			15°08.3'	
26			14°08.3'	
+50			13°08.3'	
25			12°08.3'	
+50			11°08.3'	
24			10°08.3'	$\Delta 34^{\circ}13'$
+50			9°08.3'	D-4°-
+34.03	P.I.		T-440.98	✓
23			8°08.3'	L-855.42 ✓
+50			7°08.3'	R-1432.69 ✓
22			6°08.3'	
+50			5°08.3'	
21			4°08.3'	
+50			3°08.3'	
20			2°08.3'	
+50			1°08.3'	
19			0°08.3'	
+19.05	P.C.		0°00'	

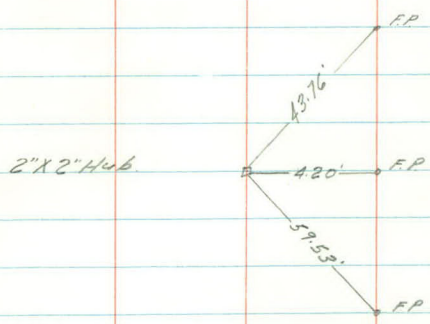
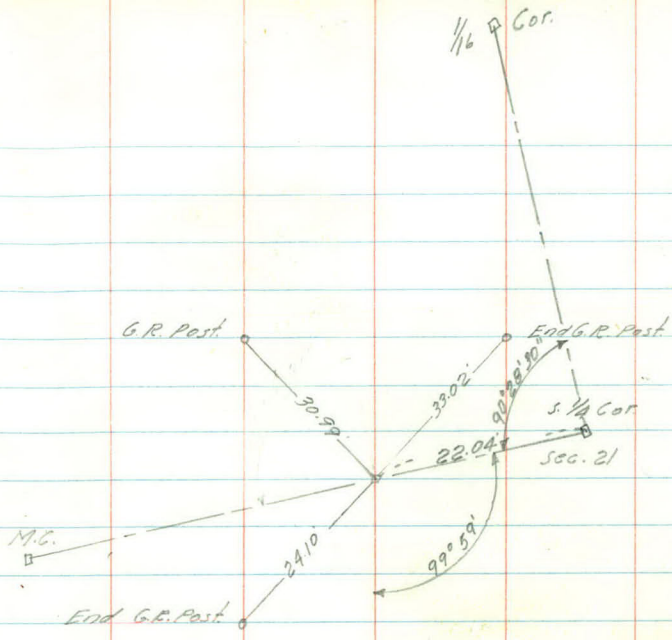
Nail & Disc



Sta.	Point	ΔL	ΔR
------	-------	------------	------------

40	+11.54	P.O.T.	
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32	+00	P.O.T.	
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Sta.	Point	ΔL	ΔR
109.92	P.T.		17°41.5'
54			17°33'
+50			16°48'
53			16°23'
+50			15°18'
52			14°33'
+50			13°48'
51			13°03'
+50			12°18'
50			11°33'
+50			10°48'
49			10°03'
+50			9°18'
48 + 19.70	P.O.C.		8°50.3'
48			8°33'
+50			7°48'
47			7°03'
+50			6°18'
46			5°33'
+50			4°48'
45			4°03'
+50			3°18'
44			2°33'
+50			1°48'
43			1°03'
+50			0°18'
42 + 29.98	P.C.		0°00'

PI-48+19.26

$\Delta-35^{\circ}23'$

D. 3° -

T-609.28

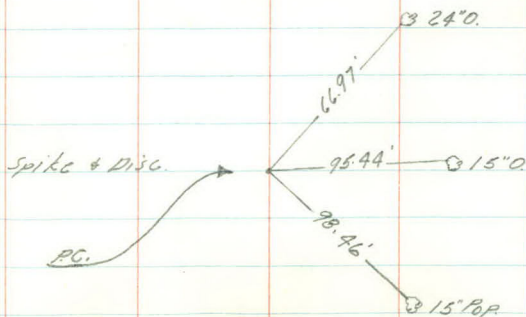
L-1179.44

R-1910.08

✓

✓

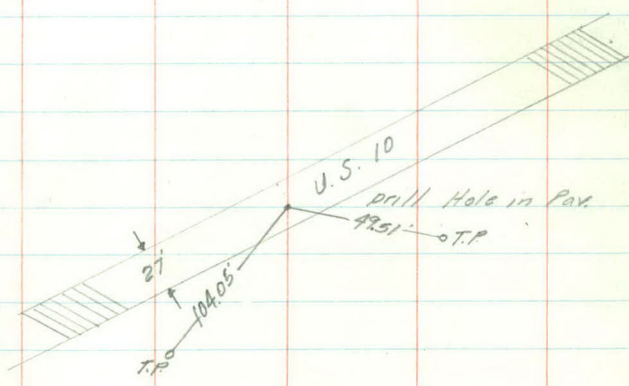
✓

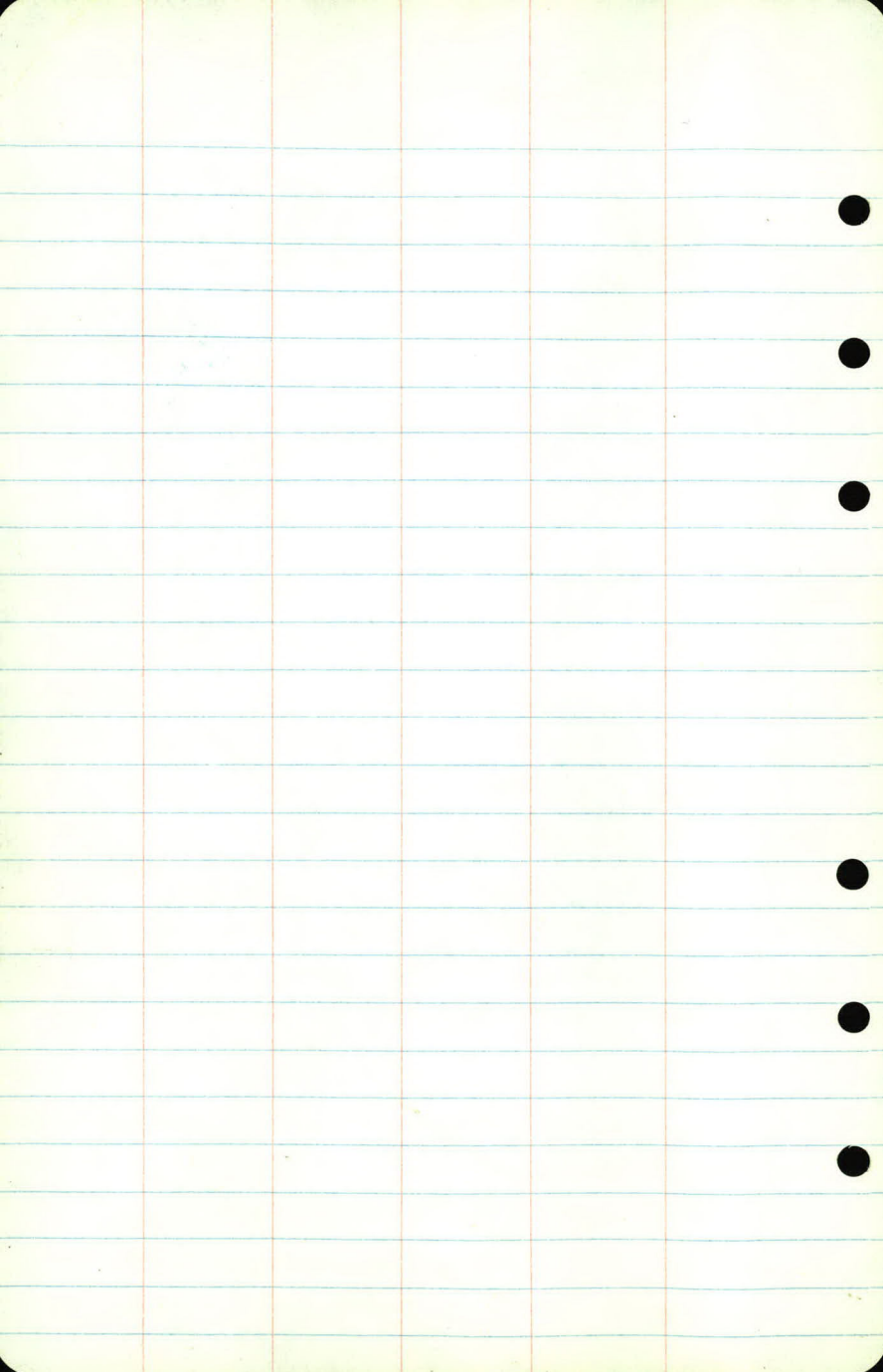


Sta.	Point	ΔLt	ΔRt
------	-------	-------------	-------------

68	+50.95 P.T.		31°30'
			27°56'
	+50		24°26' Δ -63°00'
67			20°56' D -14°-
	+52.37 P.I.		T -251.42' ✓
	+50		17°26' L -450.00' ✓
66			13°56' P -410.28' ✓
	+50		10°26'
65		10'	6°56'
	+50		3°26'
64	+00.95 P.C.		0°00'

586E





Topography

+80-6" Elm - 34'

+48-End - 10" X 14" Vlt - 20'

+20-End G.R. - 27'

5

13'

+102-End G.R. - 14'

7'

+55-End P.C. - 24'

4

G.R. - 27'

13'

7'

G.R. - 14'

+93-Range Tie to Ditch - 4'

+61-End 36" Conc. Culv. - 54'

+55-Cl. 10" wide Rubble Spillway - 27'

+50-P.P. - 23'

+91-Beg P.C. - 30'

+62-End 36" Conc. Culv. - 31.5'

End Curve 7'

+45-End Mason Gutter to Ditch - 43'

+30-Δ in Ditch - 65'

+20-Range Tie to Ditch

+101-Δ in Gutter - 27'

G.R. - 14'

1 Ballast + 3" wide of Top

+94-Beg Mason Gutter - 25'

3

G.R. - 23'

13'

9'

2

G.R. - 28'

12'

11'

+48-Beg G.R. - 14'

+92-End - 15" X 20" C.M. - 23'

+89-Range Tie

+77-Stop - 42'

+89-P.P. - 28'

+46-End - 12" X 20" C.M. - 24'

+29-N.W. Cor. 8' 1/2" - 37'

1

G.R. - 28'

12'

22'

+45-Beg G.R. - 23'

+50 - 9'

+41-Hyd. - 21'

+29-P.P. - 27'

+27-Gate Valve - 18'

+142-Pav. N.E.

0 + 00

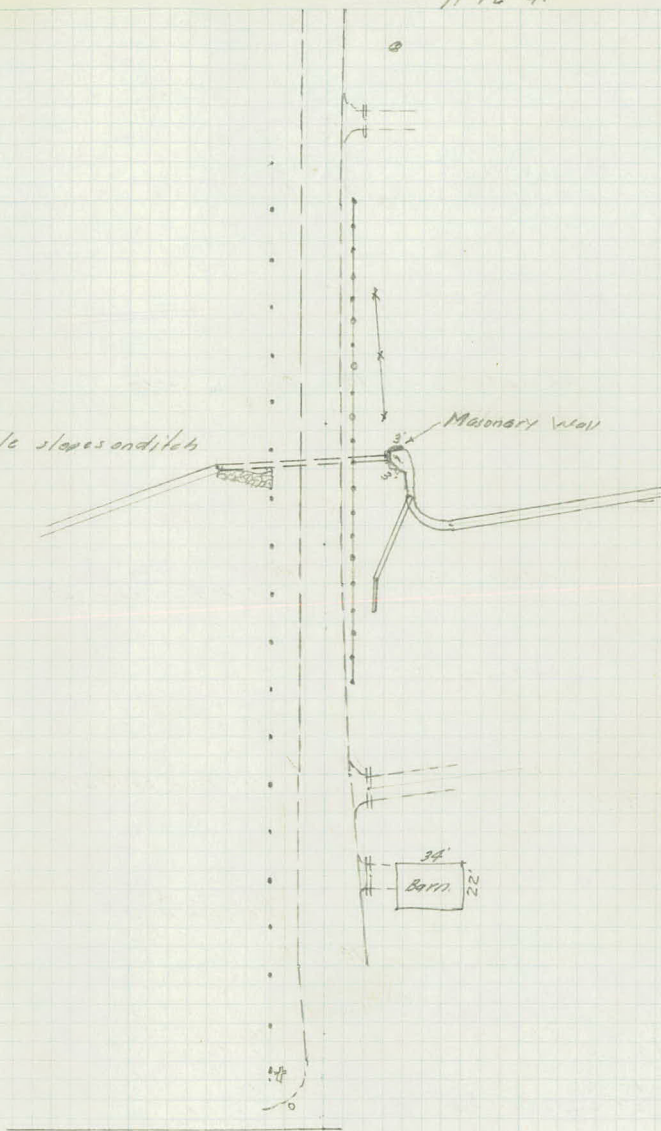
11-12-41

8

Rubble slopes and ditch

Masonry wall

34'
22'
Barr.



100-X Drain - 24" X 44' Conc 21' 23'
 12 Swamp - 31' 10' 10' Swamp - 23'

11 Swamp - 31' 10' 10' Swamp - 23'

10 Swamp - 22' 11' 9'
 190-Bcg. Swamp - 23'

+65-Range Tie-2
 +50-Bcg. Swamp - 24'

+73-Ent.

+52-8" Elm - 25'

+28-N.W. Cor. Mo. - 40'
 +24-8" Elm - 25'

9 12' 9'
 +92-Ent. - 12" X 20' Conc. - 19'

+98-Child, Elm - 27'

8 13' 7'
 +13-6" Pop - 28'
 +10-Cor. Wall - 31' End Wall - 276'
 +04-15" Pop - 35'

+48-Ent.
 +36-End Wall - 35.5' } C' Conc.
 +38-Bcg. Wall - 30'
 +35-8" Elm - 35'
 +25-2" Elm -
 +15-2" Elm -
 +04-3" Elm -
 +09-8-3.5 Conc. Walk } Top Step - 32.4'
 Bottom Step - 245'

+98-Child Conc. Walk - [Top Step - 31.6'
 Bottom Step - 242'
 +71-12" Pop - 35'
 +67-Bcg. Wall - 255' Cor. Wall - 265'
 +57-2" Elm - 34'
 +54-8" Elm - 39'
 +14-Rail - 7'
 +18-2" Elm -

7 14'
 +95-S.W. Cor. Mo. - 53'
 +91-2" Elm - 34'

+95-2" Elm - 34'

+76-Rail - 50'
 +57-Rail - 50'
 +36-P.P. - 26'
 +32-8" Elm - 34'

+21-Hyd - 22'

6 12' 10'
 +03-6" Elm - 34'

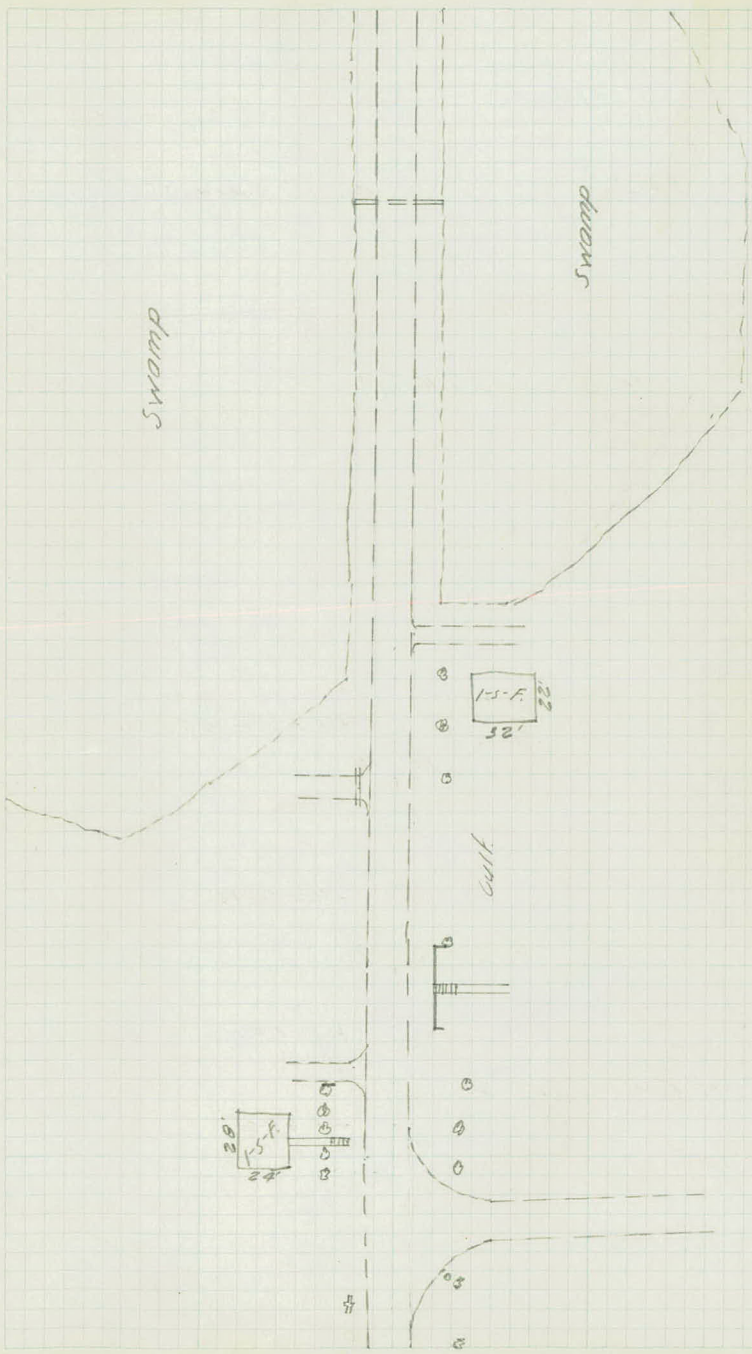
Swamp

Swamp

15'-F.
32' 22'

Cult.

20' 15'-F.
24'



2 Ent - 25'

+99-End Fe. + Beg G.R. - 14'

+95-Fe Cor. - 29'

+74-End - 15'

Fe - 30'

+97-Beg G.R. - 14'

19 Fe - 31'

10' 10' Swamp - 35'

+140-Range Tie 2

+30-Beg Swamp - 26'

18 Fe - 31'

12' 9'

Fe - 35'

17 Fe - 37'

11' 10' Fe - 76'

+120-Beg Fe - 44'

16 Fe - 37'

10' 11'

Fe - 35'

+30-6' D. - 42'

15 Fe - 30'

11' 11'

+65-12' D. - 42'

+35-End Swamp - 25'

14 Fe - 26'

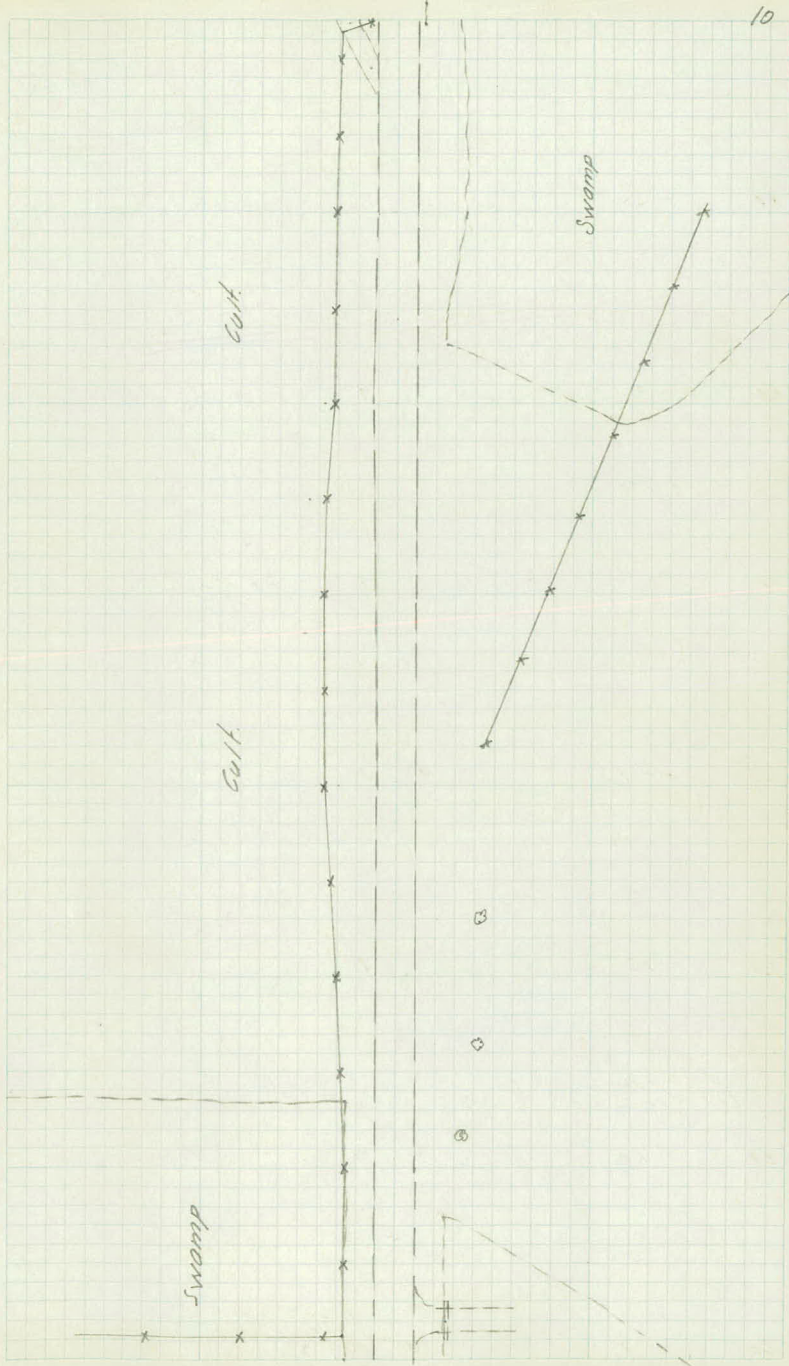
9' 10' +18-15' D. - 36'

+75-End Swamp - 24'

+120-Ent. - 15' +20 C.M. - 26'

13 +12-Fe Cor. - 37'
Swamp - 25'

10' 10'



26 Fe - 28' 13' 7'

+101 - End G.R. - 15'
25 Fe - 30' 12' 8' +198 - End G.R. - 13'

+66 - Beg. Fe - 15.5' Fe Cor 24'

24 G.R. - 15' 11' 9' G.R. - 13'

23 G.R. 15' 11' 9' G.R. - 13.5'
+192 - P.W. Pop - 32' +190 - End Swamp - 40'
+60 - Kangatic

+148 - 6" Quad. Pop - 3.4'
+135 - 6" Trip. Pop - 28'

22 Ent. 38' G.R. - 14' 10' 9' G.R. - 13' Swamp - 32'

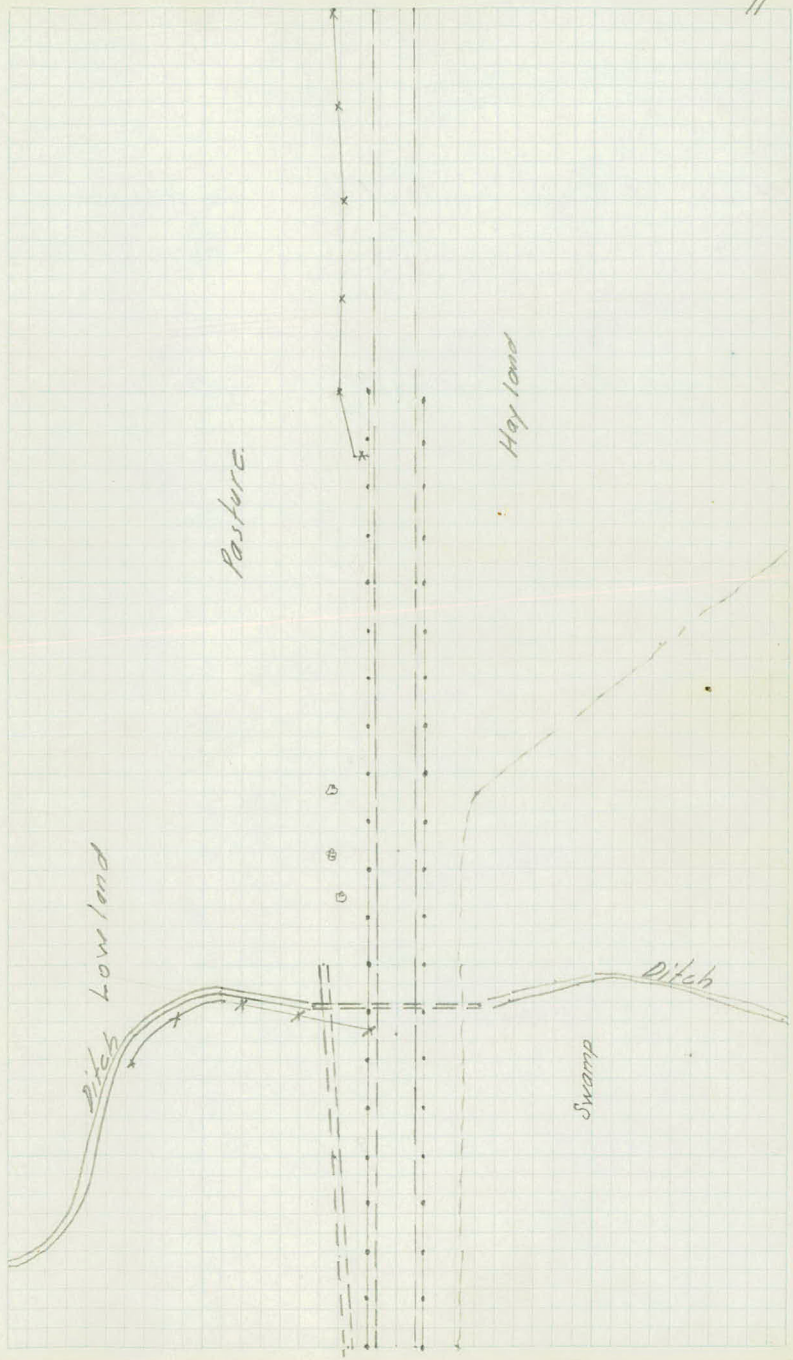
+178 - Drain - 16" X 85.5' Conc. Culvert 43.5' 42'

+66 - Beg. Fe - 14'
+63 - Kangatic

21 G.R. - 14' 10' 9' G.R. - 15' Swamp - 30'
+101 - 32'

G.R. - 14'

20 10' 10' Swamp - 31'



+50 37'-60' Fc-23'

33

37'-58' Fc-16'
+ 98.5 M.H. 102
+ 83 M.H. 102
+ 74.5 N.E. Co. Sch. 135.5

+50 34'-54' Fc-9'

+ 21.2 Co. School 343
+ 13.1 Co. Sch. 138.5
29'-49' Fc-4'

32

+ 19 M.H. 28.5

31

Fc-00 17'-37'

30

Fc-16'

5'-24'

29

Fc-29'

5' 15'

Fc.-34'

+ 20 M.H. 3.6

28

Fc-38'

12' 9'

27

Fc-34'

13' 7'

11-12-41

12

Pasture

Pasture

0
0

1954

New
High
School

Hayland

Swamp-50'

+41-Beg. G.R.-14'
From Sea Line East is
scattered Oaks.

Along Sea Line 2

+08-Fc Cor-27'

40 Swamp-71'

+92-Beg. G.R.-14'

11' 10'

Fc-39'

Fc-31'

12' 9'

39 Swamp-100' Fc-31'

12'

+16-10'-0-40'
Fc-41'
+95-Swamp-31'
+83-8" Oak-43'

Fc-27'

10' 12'

38 Swamp-82' Fc-20

7' 14'

+97-End G.R.-10'

Fc-12'

G.R. 5'

1'

+56-End G.R.-26'

Swamp-65'

37 Fc-4' G.R.-00

+12-Range Tie to Lowland

G.R.-25' G.R.-39'

+95-End 29' Long Cuts-49'

+00-End 24' Long Cuts-175'

+174 24' Pop-72'

+50

Lowland-64'
12-32' Fc-3' G.R.-8'-56'

36

21'-41' Fc-10' - Lumber-63' G.R.-13'-45'

+50

28'-48' Fc-16' G.R.-52' (Lowland 75')

+08-Beg. G.R.-25'

+55-Range Tie 2

(Lowland 74')

35

93'-53' Fc-11' G.R.-57' Fc-114'

+50

36'-56'

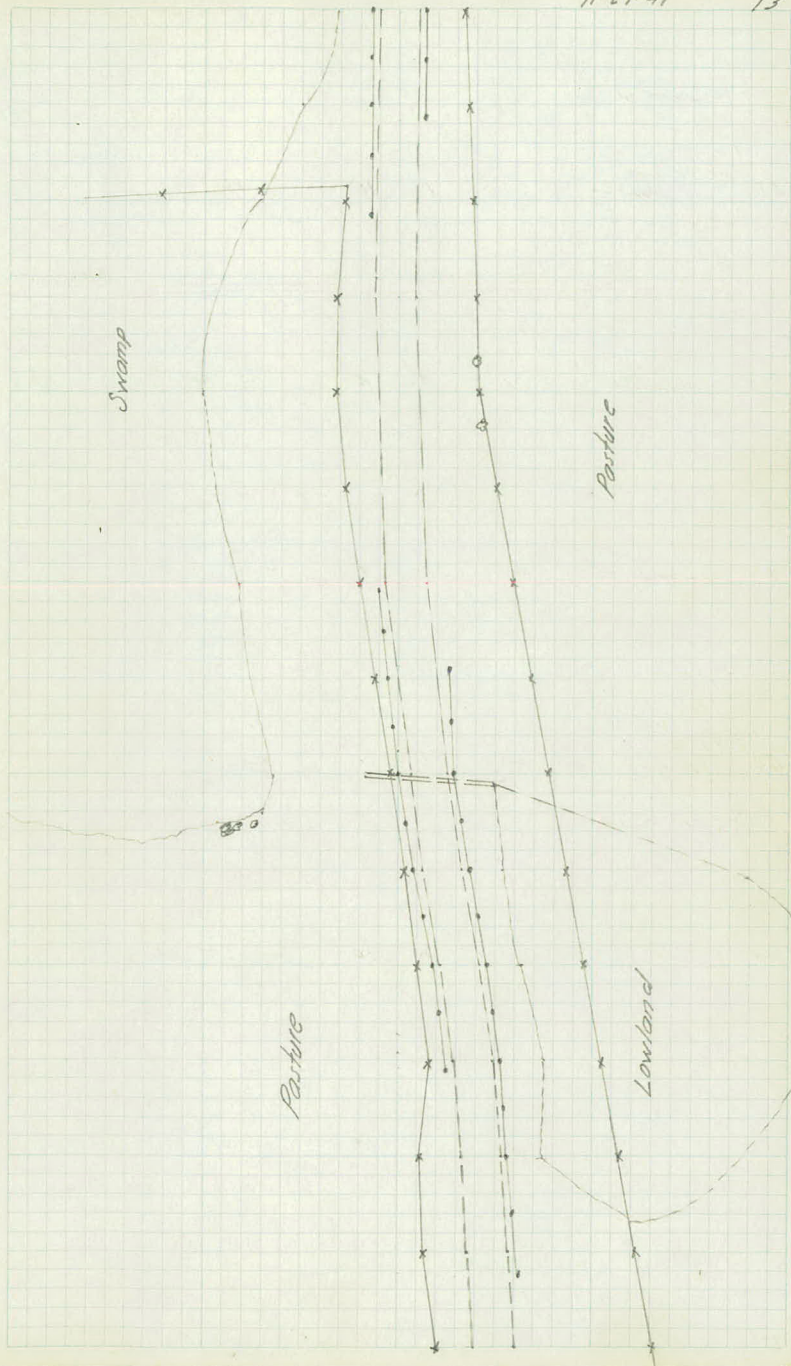
Fc-14'

+37-Beg. G.R.-62'

34

39'-60'

Fc-20'



+50-Swamp-25

47 Swamp-25' G.R.-14' 9' 11' FC-33'

+90-Ctr. Pothole-190' 100' Dia.

+19-X Drain-24"X43' Cont. Culv. 23' 20'
46 Swamp-31' G.R.-14' 9' 12' FC-33'

+15-15'0'-35'
45 Swamp-46' G.R.-14' 10' 11' FC-35'

+59-80' G.R.-14'

+50-Swamp-65'

+45-2-10'0'-40-44'

+31-10'0'-32'

+18-5'0'-34'

+08-15'0'-49'

44 Swamp-24' slp-44' 11' 11' FC-34'

+95-10'0'-41'

+81-10'0'-35'

+58-12'0'-37'

43 Swamp-165' 10' 12' FC-33'

+56-End G.R.-14'

+46-End G.R.-15'

42 Swamp-150' G.R.-14' 10' 10' G.R.-14' FC-33'

+43-X Drains 24"X54' Cont. Culv. 28' 26'

+25-Swamp-80'

41 Swamp-33' G.R.-14' 10' 10' G.R.-14' FC-34

Swamp

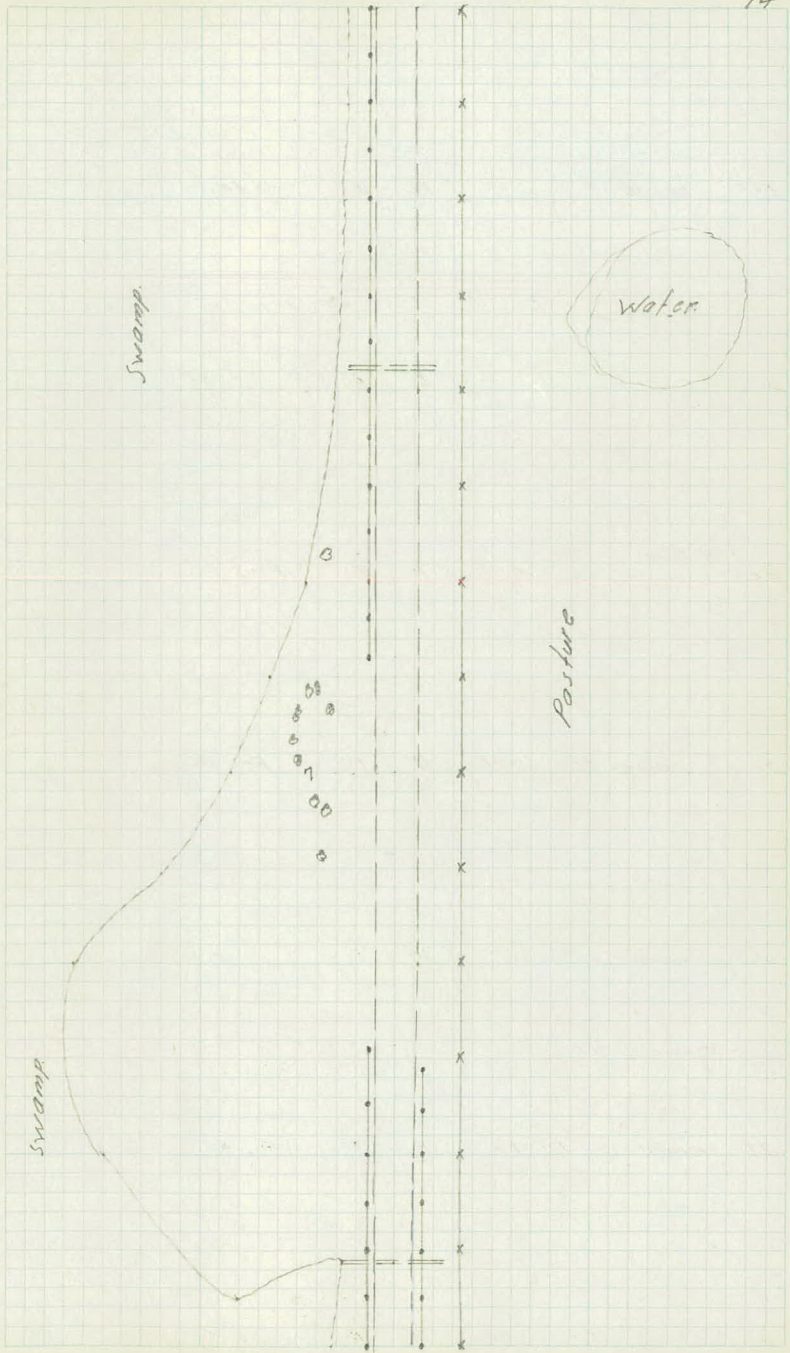
Swamp

Pasture

Water

Swamp

B



Big scattered Oaks
and stumps of sks

34 Fe-30 11' 10' Fe-33'

53 Fe-29' 10' 10' Fe-33'

+47-End G.R.-14'

+16-Fe Cor-28' 9"

+33-End G.R.-14'

+104-Range Tie G.R.-14' 10' 9' G.R. 14 Fe-30'

+85-Swamp-23' 9"

+80-Swamp-27'

+67-Range Tie

51 Swamp-26' G.R.-14' 11' 9' Fe-33' Swamp 26' G.R.-14'

+41-X Drain 24' X 49' Conc. Culvert 27' 22'

50 Swamp-26' G.R.-14' 11' 9' H15-Range Tie to Swamp Fe-33'

H11-Beg G.R.-14'

+72-Beg G.R.-15'

+50-Swamp-90'

+25-Slo-37'

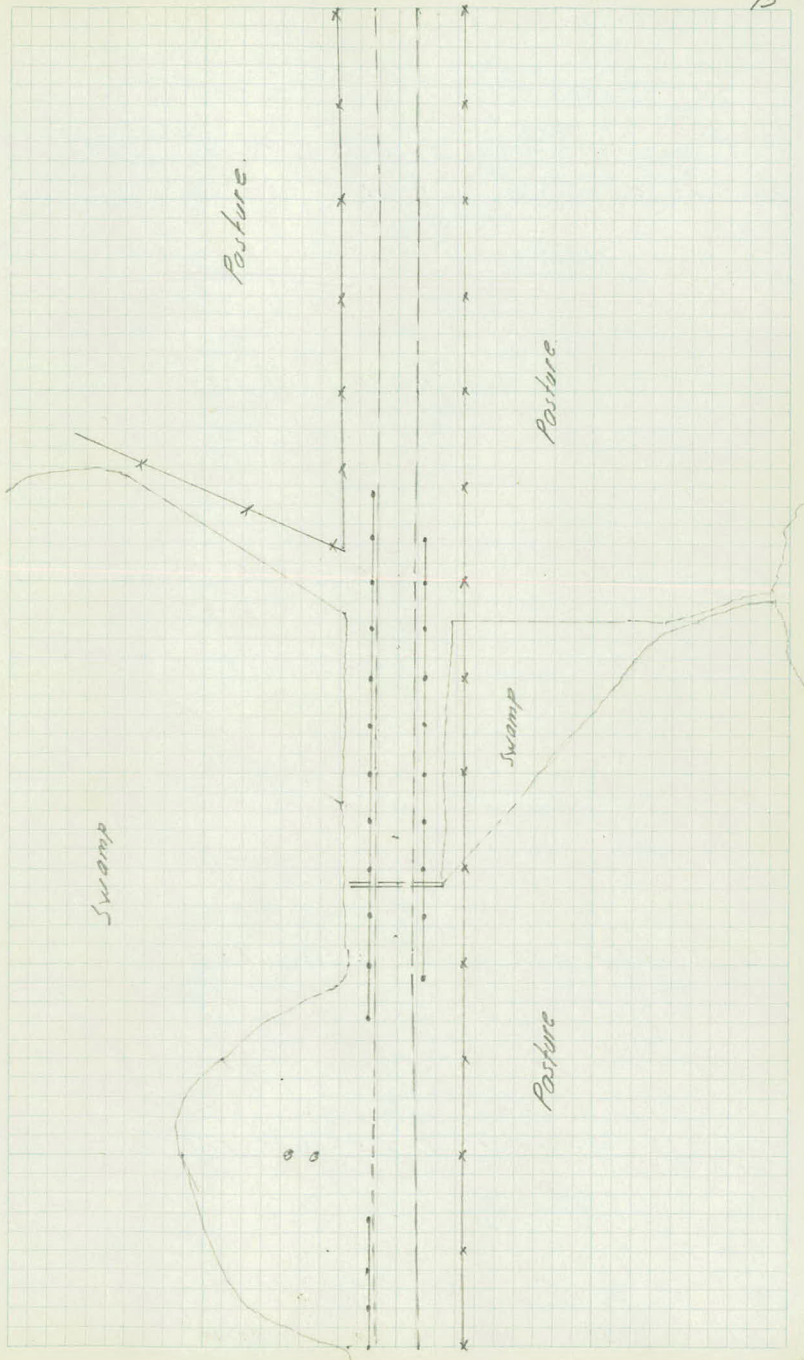
49 Swamp/110' 150'-41'-55' 11' 10' Fe-34'

+68-End G.R.-14'

+50-Swamp-35'

48 Swamp-25' G.R.-14' 10' 11' Fe-34'

End Scattered Oaks



+65 End Ditch - 28'

End scattered Cobble at Sta.

61 FC-29' GR-14' 10' 11' FC-33' Ditch-66' +
+98-Bog GR-14'

+98-Ent-

+52-Ent-15x20 CM-21'

+90-Ditch-67'

+25-Ditch-55'

60 FC-27' 9' 12' FC-33'

+89-Bog GR-14'

+ Ditch-55'

+15-Gauge Tie Rod in Ditch

59 FC-30' 10' 10' FC-33' Ditch-27'

+52-Ditch-95' 2' Bottom

58 FC-32' 10' 12' FC-34'

57 FC-34' 11' 12' FC-33'

800 Scattered s.s. + shales

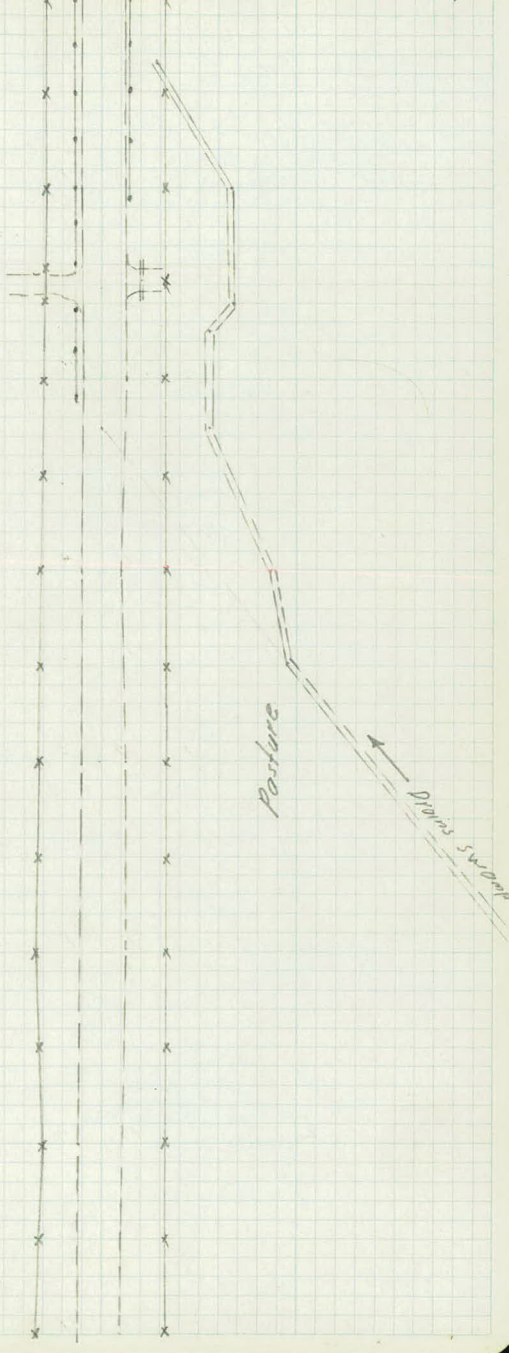
56 FC-30' 12' 10' FC-34'

55 FC-32' 12' 9' FC-33'

Pasture

Pasture

Drains swamp



+50.95' Fe-52'

68 13' Fe-48'

+64.7 P-37'
+57' Correc TIS to Swamp.
15' End Swamp - 27' Fe-40'

67 15' Swamp - 25 Fe-35'

+50-Edge Pav - 41.5' +62- 20'
+20-FF- 21' T.P. 9' 16' Swamp - 25' Fe-34'
+45-End G.R. 14'
61' X Drains Under Highway
+01-End 30' Conc. Cule. 53'
66 G.R. 14' 7' 14' Swamp - 27' Fe-33'
+94-X Drains 20" X 49' Conc. Cule. 26' 23'
+94-End G.R. 17'
G.R. 14' 8' 12' G.R. 17' Swamp - 27 Fe-34'

65 G.R. 14' 8' 12' G.R. 17' Swamp - 27 Fe-34'

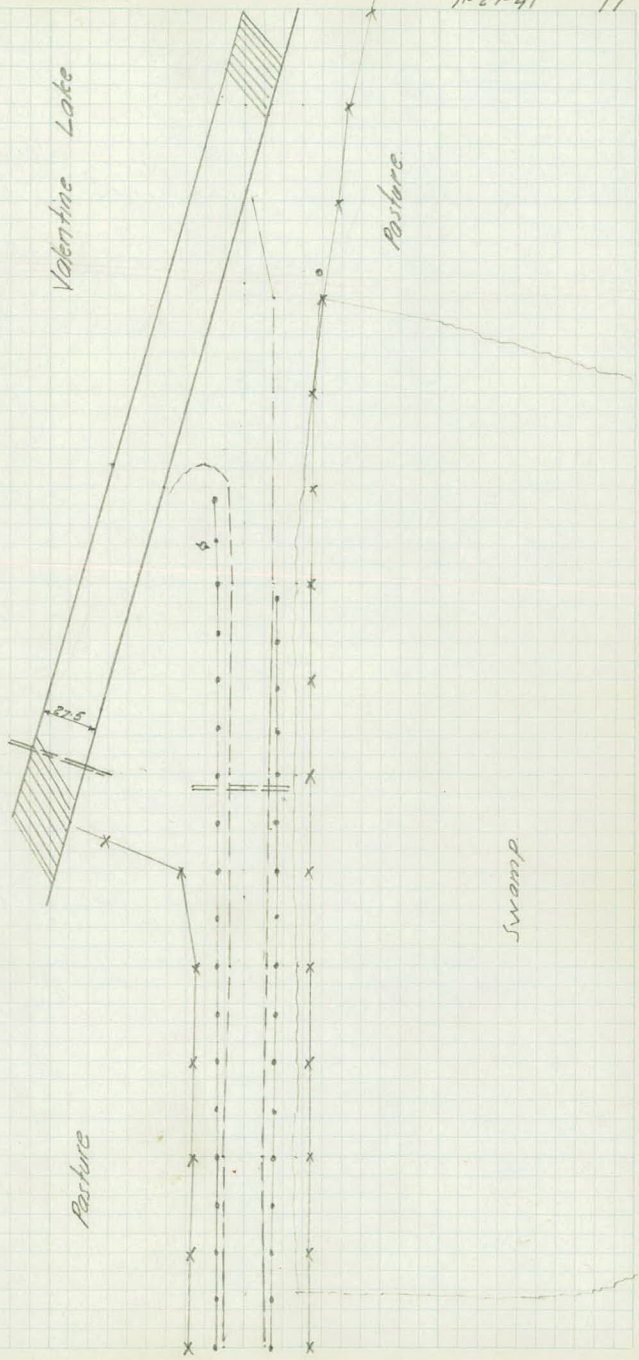
+50-Fe. Cor. - 32' G.R. 14' 8' 12' G.R. 17' Swamp - 28 Fe-34'
+36 Range TIS to Fe.

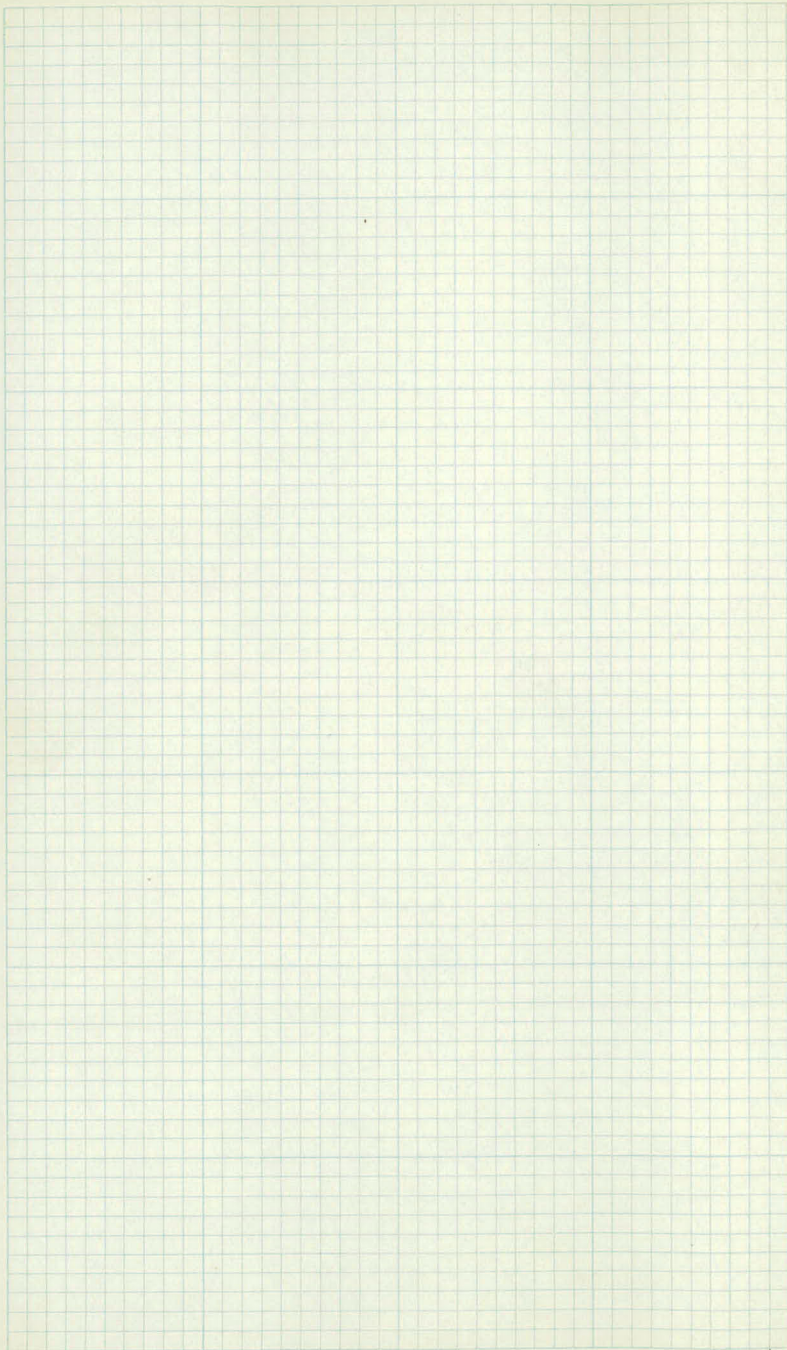
64 Fe-24' G.R. 14' 8' 11' G.R. 15 Swamp 26' Fe-33'

63 Fe-26 G.R. 14' 10' 10' Fe-32' G.R. Swamp - 36'

+29-X Drains - 20" X 55' Conc. Cule. 27.5' 27.5' = Beg Swamp.

62 Fe-29 G.R. 14' 10' 10' Fe-33' G.R. 14'





Bench Levels

Sta	+	-	Elev
B.M.	0.96	886.68	885.72
T.P.	3.87	882.80	878.93
T.P.	4.06	878.81	874.75
B.M.	5.22	881.60	876.38
T.P.	7.85	882.62	874.77
T.P.	12.02	894.32	882.30
T.P.	13.00	906.48	893.78
T.P.	13.56	920.28	906.72
T.P.	7.10	925.38	918.28
B.M.		2.34	923.04
T.P.	2.60	917.47	914.87
T.P.	2.55	914.28	911.73
B.M.		8.05	906.23
T.P.	2.95	911.33	908.38
T.P.	5.74	911.86	906.12
T.P.	4.07	914.95	910.88
B.M.		3.44	911.51
T.P.	0.41	902.62	902.15
T.P.	0.29	890.15	889.86
T.P.	3.94	886.15	882.21
B.M.		2.89	883.26

Description

Top Hyd. N.E. Cor. U.S. Highway 8 + Co. Rd. "F"

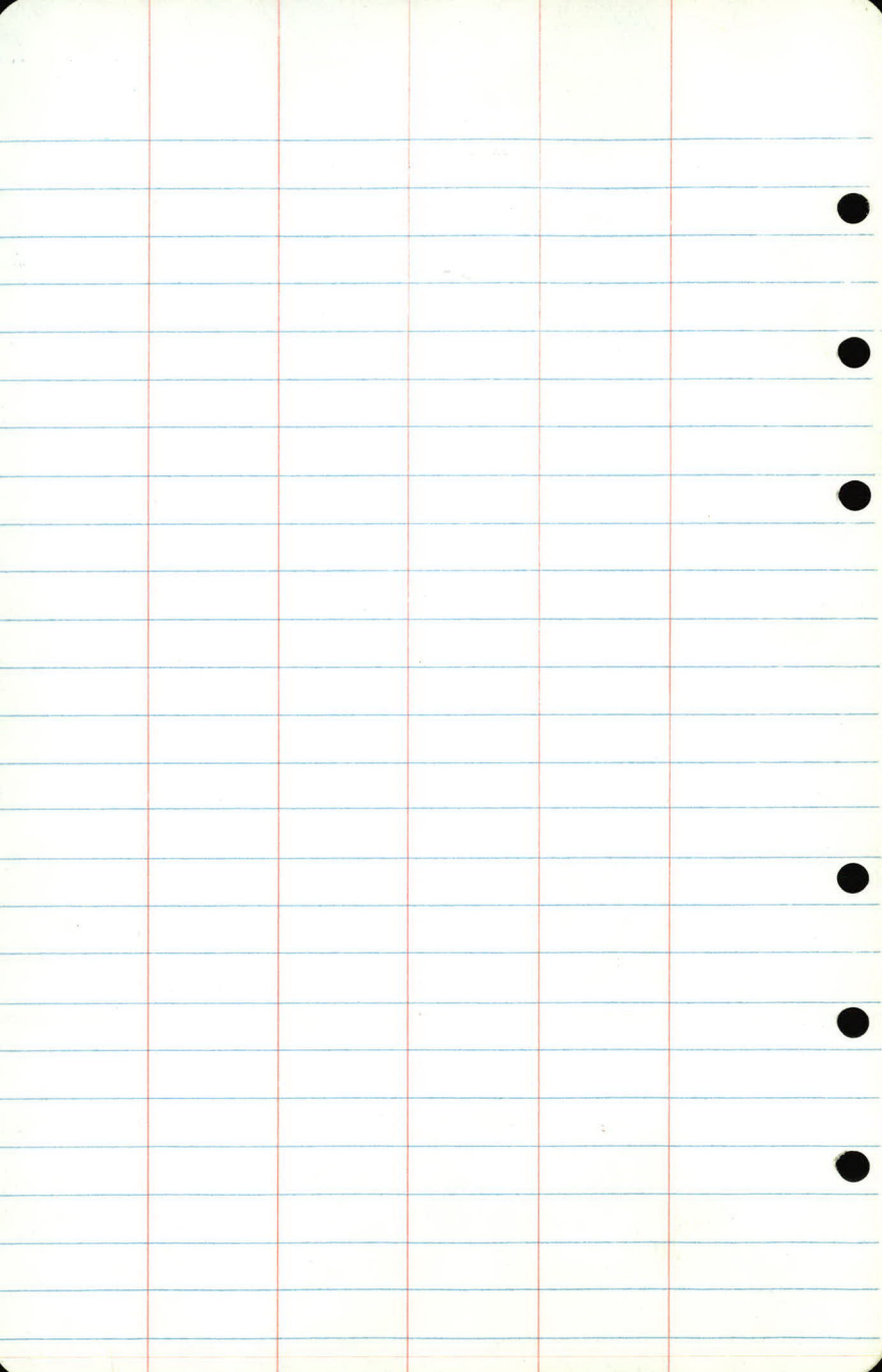
SPK. in 16" O. 36' RT. Sta. 13+18

SPK. in 20" O. 150' RT. Sta. 32+00

SPK. in 15" O. 50' RT. Sta. 42+35

SPK. in 20" O. 75' RT. Sta. 56+35

R.R. SPK. in 10" O. 57' RT. Sta. 68+25



X Sections

Sections out 75' From &

sta 0 to sta 5 Lt

sta 15 to sta 17+40 Rt + Lt

sta 21+50 to sta 24+00 Rt + Lt

sta 26 to sta 29 Rt

Sta.	+	π	-	Elev.
B.M.	4.52	890.24		885.72

0	+00		576	
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+14.2

+57

+62

+81

+81

1

+50

Lt

L

Rt

Top Hyd. N.E. Cor. U.S. R & Co. Rd. "F"

666	617	591	560
50	18		33

144	79	72	69	67	67	589	533
50	35	27	8		18	29	38

154	77	71	68	68	65	516	492
50	33	8		18	29	29	38

160	79	78	73	71	72	690	638	511	515
50	33	22	9		17	27	29	29	38

690	638	644
27	29	38

161	80	81	78	72	76	66	63
50	32	21	11		22	43	50

160	87	87	84	79	83	83	105	62
50	32	22	12		15	19	24	31

Sta	+	π	-	Elev
B.M.	1.95	887.67		885.72

0 +57

+62

+81

1

+50

+93 Profile of Alley only

2

T.P.	2.18	883.07	6.78	880.89
------	------	--------	------	--------

+45

Lt

t

Rt

17.8 14.8 14.2
75 67 55

17.6 14.0
75 55

17.8 15.2
75 62

18.2 16.8
75 61

18.1 15.7
75 61

58 6.0 5.0 4.7 4.7
9 19 38 50

15.8 15.0 12.0 7.1 6.6 6.6 6.4 5.9 6.1 5.8 7.5 5.1 4.3 4.3
75 61 45 34 28 21 11 10 20 24 27 32 50

8.9 8.0 6.0 2.4 2.3 1.7 1.9 2.0 1.6 2.0 3.4 1.5 0.6
75 64 43 33 12 8 13 14 19 23 28 50

Sta	+	π	-	Elev
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		883.09		
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2	+84			
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3				
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	+30			
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	+47			
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	+64			
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	+78			
--	-----	--	--	--

4				
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Lt

E

Rt

117 99 72 56 32 26 20 23 23 48 57 58 48 26 2.5
 75 66 59 42 36 12 8 15 24 25 26 27 2 31 50

Narrow
Gutter

111 82 65 58 33 27 23 25 23 61 72 72 63 60
 75 61 50 43 35 12 9 14 24 26 27 28 50

Gutter

104 82 36 31 26 28 28 25 28 90 101 101 92 130 150 190
 75 47 33 12 8 12 14 16 35 37 38 39 53 56 75

Gutter

Ditch

111 82 43 35 32 27 30 30 27 43 113 155 155 74 70
 75 46 34 27 11 8 12 15 20 36 43 46 62 75

Ditch

158 166 145 38 34 30 32 33 31 113 113 155 150 135 76 74 38
 75 55 52 34 13 7 11 15 30 31 4 32 39 40 53 66 75

Culm

Hwy Culm

92 92 78 38 34 31 32 34 32 38 72 76
 75 55 43 33 13 6 11 14 17 24 50

123 140 38 35 31 34 31 86 88
 75 48 34 13 12 14 27 50

123 115 85 40 37 32 37 35 71 77 76
 75 68 44 34 13 12 14 23 34 50

Sta	+	π	-	Elev.
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		883.09		
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5

B.M.	6.23	887.34	1.98	881.11
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+25

+50

+55

6

+31

+50

+84

Lt.

2

Rt.

7.7 8.9 7.9 4.2 3.9 3.4 3.8 3.6 5.4 5.7 7.0 4.8
 7.5 5.0 4.3 3.2 11 11 14 19 29 4.3 5.0

Top Hyd. N. side of int. of Co. Rd. "F" and 3rd Ave.

T

10.2 9.8 9.0 8.3 8.2 7.8 8.1 8.0 9.1 9.9 10.3
 5.0 4.3 3.8 2.6 1.2 1.2 1.6 2.0 3.6 5.0

7.4 6.7 6.9 8.8 8.2 7.8 8.1 7.6 8.9 8.9 7.5 7.7 8.2
 5.0 3.7 2.7 2.0 1.2 1.2 1.7 2.0 2.1 2.3 3.4 5.0

7.0 6.3 6.4 8.8 8.2 7.8 8.1 7.7 8.8 8.3 5.1 5.1
 5.0 3.7 2.6 2.0 1.1 1.2 1.6 2.0 2.5 2.9 5.0

S.S. 3.1 2.6 2.1 8.9 8.5 7.9 8.2 8.7 8.2 5.2 4.6
 5.0 4.4 3.4 2.1 1.6 1.2 1.9 2.4 2.9 5.0

S.S. 1.3 0.8 8.5 8.4 8.3 8.1 8.5 8.0 5.0 4.5
 5.0 4.0 2.6 1.9 1.0 1.1 2.5 2.9 5.0

S.S. 1.8 1.5 0.5 8.6 8.5 8.2 7.9 7.9 6.7
 5.0 4.5 3.8 2.3 1.1 1.7 3.4 5.0

3.5 2.4 8.7 8.7 8.4 8.0 6.3
 5.0 3.5 2.2 1.1 2.8 5.0

Sta.	+	π	-	Elev
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		887.34		
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6	+87			
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7				
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	+34			
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	+60			
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	+67			
--	-----	--	--	--

	+67			
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8	+10			
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	+10			
--	-----	--	--	--

Lt

E

Rt

61 61 91 87 84 84 83 ~~82~~ ⁶³
 50 33 22 11 10 22 50

62 62 88 93 89 85 87 81 80 62 52
 50 34 25 20 13 12 17 25 28 50

62 63 89 86 92 88 89 83 57 47 30
 50 34 26 20 13 6 22 27 44 50

61 52 88 102 97 91 90 94 85 79 45 32
 50 38 32 26 17 13 10 17 22 32 50

64 53 88 91 103 97 92 91 93 84 07 02
 50 38 32 25 18 17 13 11 21.5 33 50

84 47 07 02
 21.5 21.5 33 50

Shoring Wall

91 48 10 08
 21 21 32 50

73 64 87 92 104 101 95 96 91 48 10 08
 50 38 33 22 21 8 6 21 28 32 50

sta	+	π	-	Elev.
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		887.34		
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8	+40			
---	-----	--	--	--

	+58			
--	-----	--	--	--

9				
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T.P.	1.19	878.28	10.25	877.09
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	+50			
--	-----	--	--	--

	+83			
--	-----	--	--	--

	+90			
--	-----	--	--	--

10				
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	+50			
--	-----	--	--	--

Lt

Z

Rt

9.9 7.8 9.1 9.5 10.9 10.1 9.8 9.9 10.5 9.9 5.5 4.5
50 36 32 25 20 12 14 16 23 30 50

11.9 9.1 8.6 10.7 11.0 10.2 9.9 10.1 10.3 9.8 6.9 5.7
50 36 25 20 18 12 12 17 24 29 50

14.0 13.0 12.0 11.0 10.5 10.3 10.5 9.2 8.8
50 32 19 16 12 18 26 50

6.5 5.7 2.9 2.3 1.8 2.0 1.7 1.5
50 23 18 12 13 29 50

6.8 6.2 3.4 2.6 2.3 2.4 2.1 2.1
50 24 18 11 9 25 50

6.8 6.3 3.4 2.7 2.4 2.5 2.5 4.9 4.6
50 24 17 11 9 18 27 50

7.1 6.1 3.4 2.8 2.5 2.6 2.7 5.4 5.2
50 23 18 11 9 15 23 50

7.6 7.1 4.1 3.6 3.4 3.7 3.8 6.8 6.4
50 23 16 11 9 16 23 50

Sta + A - Elev

878.28

11

+50

12

+50

13

+50

14

B.M

11.07

887.45

1.87

876.41

(876.38)

+50

Lt.

L

Rt.

7.9 7.8 5.7 4.8 4.5 4.8 4.8 7.8 7.2
50 23 17 9 9 16 24 50

7.8 7.9 5.6 5.1 5.2 7.8 7.2
50 22 16 15 22 50

F.L. Colv.

↓

9.00
21

7.7 7.7 5.5 5.2 4.8 4.9 4.7 7.3 6.7
50 21 16 9 9 16 23 50

F.L. Colv.

↓

8.33
23

7.7 7.7 4.6 4.8 4.5 4.4 6.7 6.9
50 22 15 8 16 22 50

7.7 7.0 5.2 4.0 ~~3.7~~ 3.9 3.9 6.1 6.1
50 20 15 14 19 19 24 50

7.0 6.1 4.7 3.9 3.4 3.2 5.4 4.9
50 21 17 9 16 22 50

6.3 50 5.8 5.8 4.0 3.6 2.9 2.8 2.8 4.4 5.1 4.0 3.2 2.4
50 4.6 2.4 2.0 1.5 8 9 1.8 2.3 2.8 3.9 4.3 50

Spk. in 16' O. 34' Rt. Sta. 13+1.8

158 144 139 147 148 134 128 123 115 111 111 123 123 98 84
50 29 26 23 20 18 13 8 13 18 20 24 28 50

Sta	+	π	-	Elev.
		887.45		

15

+28

+68

+97

16 +16

+50

17

+40

T.P.

4.69

880.69

11.45

876.00
886.00

Lt

K

Rt

135 125 114 139 137 124 119 111 108 108 118 111 49 50 60
 50 36 28 23 20 16 10 11 18 22 27 35 50 75

144 124 103 86 135 138 125 121 111 106 105 112 102 25 91 38
 50 50 38 31 24 21 18 10 9 19 21 29 38 50 75

133 105 93 82 135 140 129 122 110 105 103 115 102 21 20 21
 75 50 42 36 25 21 19 12 8 17 21 29 38 50 75

130 103 86 73 135 140 130 120 112 108 105 113 105 21 21 17
 75 56 45 36 25 21 19 9 8 18 22 28 38 50 75

126 100 80 67 137 143 131 121 112 108 108 116 112 40 37 87
 75 59 47 36 26 21 19 10 9 19 22 27 36 50 75

125 94 70 61 134 142 128 123 115 111 107 117 113 55 59 56
 75 59 44 36 25 20 17 11 10 18 21 27 34 50 75

127 63 69 128 141 132 122 114 109 109 118 116 71 77
 75 46 35 28 20 18 9 11 17 19 24 32 50

132 80 76 138 146 136 130 126 118 114 113 122 125 103 112
 75 42 34 26 21 20 17 10 8 17 19 22 26 50

Sta	+	π	-	Elev.
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		880.69		
--	--	--------	--	--

17	+79			
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18				
----	--	--	--	--

	+50			
--	-----	--	--	--

19				
----	--	--	--	--

	+50			
--	-----	--	--	--

	+75			
--	-----	--	--	--

20				
----	--	--	--	--

	+50			
--	-----	--	--	--

Lt

E

Rt

54 49 44 78 76 65 60 52 52 50 66 74
50 45 30 26 22 20 12 9 17 23 50

60 54 56 80 78 65 59 55 54 52 78 92
50 42 30 26 23 20 10 8 17 25 50

66 63 55 82 76 66 61 58 60 59 105 109
50 39 31 26 21 19 11 8 17 27 50

72 71 63 85 84 66 62 61 64 66 84 98 111
50 34 29 25 21 17 9 9 16 21 31 50

82 73 77 70 80 78 63 62 61 66 69 83 90 105 112
50 40 33 28 25 18 15 8 10 15 20 28 38 50

82 79 83 80 69 68 62 62 62 68 84 100 113
50 38 34 31 26 19 15 9 19 19 50 50

84 81 86 80 77 54 58
50 37 32 30 21 15 14

60 66 66 92 106 115
9 14 20 33 50

90 89 43 48 52 60 60 93 110 118
50 25 14 13 9 15 20 31 50

Sta	+	π	-	Elev
		880.69		

21

+50

+78 For X-Drain and Profile of Ditch

22

+50

23

+50

24

T.P.	12.54	893.23	0.00	880.69
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Lt

E

Rt

94 98 99 34 37 41 51 48 50 100 113 120
50 42 29 16 13 10 12 16 24 31 60

97 103 94 21 20 24 28 38 36 107 116 120
75 40 30 17 15 13 9 14 26 35 75

13.57 13.8 137 136 132 101 96 12 11 17 20 30 28 94 101 130 L.O.
435 200 150 100 425 40 30 17 15 14 10 14 23 33 92

13.82
42
Culv
13.82
42

108 108 97 12 09
75 50 31 18 14

13 23 22 11.1 11.5 120
9 14 29 37 75

98 99 95 70 107 114 114
75 36 25 25 34 41 75

93 93 86 39 38 90 100 104
75 56 39 28 25 38 45 75

84 85 80 66 75 85
75 58 41 37 43 75

66 52 41 40 47 52
75 38 36 42 64 75

Cont. on next page.

Sta	+	π	-	Elev.
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		893.23		
--	--	--------	--	--

22	+50			
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23				
----	--	--	--	--

	+50			
--	-----	--	--	--

24				
----	--	--	--	--

	+32			
--	-----	--	--	--

	+50			
--	-----	--	--	--

	+75			
--	-----	--	--	--

T.P.	12.95	905.85	0.33	892.90
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25				
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Lt

E

Rt

11.5 11.6 11.9 12.9 13.0
16 11 9 14

9.3 9.9 9.5 10.6 10.6
17 11 11 14

7.1 7.0 7.1 8.1 8.1
16 11 11 15

4.6 4.6 4.7 5.7 5.7
16 12 10 16

10.5 10.3 3.3 2.7 3.1 3.9 4.1 11.1 13.5
50 29 18 15 10 16 29 50

7.5 6.7 3.2 1.6 2.1 3.1 2.5 3.6 8.7 11.4
50 26 19 16 11 12 16 26 50

4.1 3.9 0.5 0.3 0.7 1.8 1.3 2.2 4.3 7.8
50 24 18 15 11 13 15 20 50

13.8 13.3 13.4 11.7 11.7 12.0 13.0 12.6 14.7 14.9 17.1
50 34 22 16 12 10 13 18 25 50

Sta	+	π	-	Elev
		905.85		

25 +25

+50

+75

26

+25

+50

+75

27

T.P.	13.16	918.45	0.56	905.29
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Lt

Z

Rt

11.0 10.7 11.2 12.6 12.3 10.7 10.5 10.7 11.7 11.8 13.2 13.4 11.8 12.2 13.2
 50 33 29 26 22 19 12 11 14 18 24 26 36 50

9.8 9.5 11.2 9.4 9.2 9.5 10.0 10.5 11.6 11.5 7.5 9.3
 50 28 22 19 12 7 13 16 24 30 50

10.1 9.9 9.1 9.5 9.1 8.2 8.0 8.4 9.7 11.0 10.7 3.7 5.1
 50 35 26 23 20 18 12 15 18 24 34 50

10.6 9.4 8.8 8.5 8.0 7.7 6.7 6.7 7.2 9.5 10.5 10.5 6.0 0.6 1.3 3.9
 50 38 31 30 26 20 18 13 15 20 24 29 37 55 75

9.4 7.0 6.2 6.0 6.6 6.5 5.6 6.0 7.2 9.1 9.2 11.3 11.0 1.7
 50 31 29 27 25 20 18 16 19 24 38 57 75

7.2 4.8 3.3 5.2 5.1 4.4 4.7 6.3 7.9 7.7
 50 34 28 25 20 18 16 18 25

3.8 1.3 0.0 4.0 4.1 3.3 3.0 3.5 4.7 5.0 6.7 6.6
 50 35 31 25 21 19 12 11 16 20 24

0.1 1.3 1.2 3.1 2.9 2.2 1.9 2.3 3.4 3.4 5.4 4.9
 50 38 33 23 20 19 10 13 15 21 25

Cont. next page

Sta

+

 π

-

Elev.

918.45

26 +50

+75

27

+48.47

+75

28

+50

29

T.P

11.66

926.45

3.66

914.79

LT

E

RT

9.4 10.0 12.6 13.4
38 48 70 75

8.6 10.1 12.6
39 59 75

7.0 10.0
38 75

6.0 5.5 12.9 13.3 12.6 12.2 12.2 18.5 15.7 15.3 5.1 5.2 4.2
50 36 26 22 19 12 15 20 24 37 54 75

3.7 3.6 12.2 12.0 11.4 10.8 10.9 12.0 14.4 14.2 3.9 1.8
50 37 25 21 18 12 15 19 23 38 75

2.5 2.0 11.0 11.1 10.0 9.5 9.6 10.9 13.0 13.0 2.4 0.2
50 37 24 20 18 11 16 20 25 39 75

10.3 0.4 8.2 8.4 7.7 7.3 7.3 7.8 8.5 10.1 10.0 10.1 10.7 10.9
50 33 21 20 15 9 11 19 22 27 41 57 75

0.3 0.0 6.3 6.3 5.5
50 28 18 14 11

5.2 5.7 6.3 7.9 7.3 13.0 12.0
14 22 26 31 46 75

Sta	+	π	-	Elev.
-----	---	-------	---	-------

		926.45		
--	--	--------	--	--

29	+50			
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	+83			
--	-----	--	--	--

30	***			
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		15.7		
--	--	------	--	--

	+18			
--	-----	--	--	--

	+34			
--	-----	--	--	--

		15.5		
--	--	------	--	--

	+65			
--	-----	--	--	--

		16.0		
--	--	------	--	--

	+85			
--	-----	--	--	--

31				
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		17.6		
--	--	------	--	--

Lt

Z

Rt

7.9 7.5 6.5 12.8 12.8 12.0 11.5 11.5 12.2 14.0 14.0 5.7 6.0
 50 38 22 13 9 8 11 27 31 36 47 50

6.3 6.3 5.8 5.0 11.9 12.0 11.1 11.0 10.5 11.1 12.5 12.4 6.4 6.1
 50 32 22 18 10 6 3 15 32 35 40 49 60

6.0 5.6 6.0 5.6 5.7 11.4 11.5 10.7 10.7 10.1 10.6 11.8 11.8 10.9 6.2 5.6
 50 35 23 19 15 7 3 2 16 34 36 39 43 50 60

6.6 7.3 7.3 6.9 7.2 10.7 11.4 10.3 9.6 10.1 11.4 10.4 5.4
 50 27 19 16 12 7 2 20 36 39 44 50

8.0 8.0 8.4 7.7 8.0 10.9 10.9 8.9 9.2 9.9 10.8 10.2 5.3
 50 34 17 16 8 4 2 18 38 40 45 50

9.0 9.2 8.9
 50 27 3

10.4 10.5 9.3 8.5 8.8 9.3 10.4 9.5
 4 7 22 34 41 43 50

8.8 9.2 8.9 10.0 10.2 9.0 8.0 8.3 8.9 9.8 9.9
 50 28 2 6 9 24 36 43 45 50

8.5 8.7 8.8 8.9 10.2 10.0 9.0 8.2 7.8 8.4 9.8 9.7
 50 26 3 4 8 10 17 27 42 46 50

Sta	+	π	-	Elev	
		926.45			
31	+30		19.0		
	+63		21.2		
	+83				
32			23.0		
B.M.	3:38	926.42	3:38	923.07	923.04
	+22				
	+50		22.2		
	+75				
33			16.7		

Lt

2

Et

7.3 7.7 7.4 7.6 10.1 10.3 8.7 7.8 8.3 9.8
50 19 9 8 12 19 29 46 50

3.4 4.4 5.8 5.3 5.2
50 25 9 6

5.5 10.0 10.0 8.8 8.1 8.4
5 10 14 17 34 50

2.2 3.0 3.8 4.4 4.1
50 29 13 10

4.7 10.2 10.2 9.0 8.2 8.3
5 11 17 20 36 50

2.6 2.9 2.9 3.7 3.4 4.0 10.1 10.5 9.0 8.2 8.3
50 26 13 7 6 12 18 21 39 50

Spk. in 20" 0.150 rt sta 31+90

3.4 3.5 3.1 3.0 3.5 3.1
50 27 22 14 6

3.7 9.6 10.6 9.3 8.3 8.3
7 14 21 23 40 50

5.1 4.1 4.6 4.2
50 14 5 2

4.2 4.3 9.6 10.7 10.2 9.4 8.5 8.5
10 16 20 24 25 43 50

7.5 7.1 6.1 6.0 6.6 6.5
50 37 19 9 4

6.0 10.9 11.0 10.8 9.8 9.5 8.7
13 20 23 25 27 35 50

12.4 11.3 9.6 9.9
50 33 6 2

9.1 8.0 8.1 10.8 11.6 10.3 9.1
14 18 22 25 30 50
9.2

Sta	+	π	-	Elev.
		926.42		

33	+29		13.0	
	0.45	920.52		
T.P.	24	920.54	6.35	920.07
	set. Hcd.			

	+64		10.6	
--	-----	--	------	--

34	+21		09.9	
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	+21			
--	-----	--	--	--

	+56		14.8	
--	-----	--	------	--

	+75			
--	-----	--	--	--

	+87			
--	-----	--	--	--

35			18.2	
----	--	--	------	--

LT

E

RT

917.0

17.2	15.8	14.0	13.4	11.9	10.6	12.1	12.0	10.7	9.6
50	36	15		11	23	26	29	32	50

Top 1000 RL to 38+90

13.9	11.8	9.9	9.3	7.6	7.3	7.0	5.8	4.9
50	27		7	23	26	31	34	50

12.9	12.0	10.6	9.0	8.5	7.6	6.5	5.2
50	27		20	28	30	33	50

10.6	10.3	9.4	8.8	7.7	8.7	8.3	6.7	5.6
50	20		7	19	23	28	31	50

6.7	6.3	5.7	5.6	4.5	5.0	8.0	8.6	8.0	6.9	6.0
50	22		6	14	16	22	25	28	30	50

1.8	1.8	2.1	2.2	2.7	7.7	8.4	7.0	6.3	6.3
50	24		10	12	19	25	28	44	50

0.8	0.5	0.9	1.5	1.6	2.1	2.1	2.7	8.1	8.7	7.1	6.5	6.5
50	25	13	8		4	9	12	19	24	27	43	40

914.2

0.8	0.5	1.0	1.8	2.3	2.7	2.7	3.2	8.2	9.0	7.4	6.7	6.7
50	27	15	9		4	9	12	18	22	26	43	50

Sta.	+	π	-	Elev.
		920.54		
35	+21			
	+58		09.9	
36			06.2	
T.P.	4.95	917.15	8.34	912.20
	+22			
	+60		08.0	
+95	Flow Line Gully Rt.			
37			12.2	
	+27			

LH

R

RH

3.2	26	3.3	4.0	4.5	4.3	4.9	9.1	9.1	8.3	7.5	7.0	7.1
50	35	12		3	10	13	18	21	24	28	42	50

9.6	9.1	9.6	9.9	10.6	10.3	10.9	10.0	7.6	8.6	7.6	7.5
50	41	30	13		7	14	18	25	26	39	50

12.8	14.0	14.3	13.9	8.2	8.5	8.1	8.4	8.2	17.0
50	22		5	17	20	32	43	46	65

10.8	11.8	12.3	11.5	4.7	5.2	4.9	5.1	4.7	12.5
50	30	8		13	16	29	39	42	58

12.9	12.9	11.3	9.2	5.0	5.3	5.1	5.3	5.0	11.8	12.6
50	14	3		6	9	22	34	36	52	60

15.5
49

culv.

N.G.

15.5	15.7	16.0	13.6	5.0	5.3	5.3	5.9	8.7	11.9	12.8
50	28	18	15		2	15	29	36	43	50

Ditch shafts.

14.6	13.3	12.3	4.8	5.1	5.4	6.0	5.9	11.1	12.4
50	24	16	4		12	23	27	36	50

Sta	+	π	-	Elev
		917.15		
37	+60		12.1	
38			12.0	
T.P.	9.69	921.41	5.43	911.72

+50

39

+50

40

T.P.	3.21	913.84	10.78	910.63
------	------	--------	-------	--------

+36

+69

Lt

2

Rt

131 106 107 92 48 46 5.0 51 5.5 61 58 83 96
50 25 21 17 9 6 50 9 20 22 29 50

112 89 7.0 67 46 50 52 69 63 7.5 78 69 32 40
50 36 20 15 10 9 18 20 22 27 30 36 50

111 93 81 77 94 105 96 97 10.4 10.8 118 120 109 45 43 3.5 4.0
50 40 29 26 24 19 16 11 17 21 23 30 38 42 48

105 75 69 97 108 100
50 36 29 25 20 17

100 112 123 124 105 25 2.7
16 20 24 30 40 50

127 93 88 114 116 104 103 112 125 125 115 102 46 46
50 38 30 25 21 17 15 19 20 27 31 37 50

16.0 123 128 123 106 108 107 116 127 126 89 89 7.2 67 63
50 26 23 20 15 12 17 19 25 31 34 36 38 50

112 94 95 39 35 40 38 5.8 57 53 46 4.3
50 28 15 12 13 14 21 24 25 36 50

124 108 9.0 4.3
50 28 13 13

37 44 41 7.8 8.1 77 77
13 14 26 32 38 50

Sta.	+	π	-	Elev
------	---	-------	---	------

		913.84		
--	--	--------	--	--

41

+43 XDrain

+68

42

B.M.

7.61

906.23

906.23

+50

43

+50

44

Lt

R

Rt

91 91 8 123 114 44 45 43 47 43 53 89 91 91
 50 50 23 50 29 14 12 13 14 18 28 24 50

Cult.

↓

11.05

28

105 100 44 46 46 50 48 60 84 97 97
 50 26 15 12 13 15 18 23 27 50

Cult.

↓

10.82

27

8.8 91 45 48 48 54 50 100 105 L.O.
 50 25 15 12 13 15 26 31

65 71 81 79 93 98 50 57 52 52 91 99 L.O.
 50 40 30 22 15 12 13 14 15 23 32

Spk. in 20" O. 40" Rt slo. 42+35

61 67 72 43 49 50 57 53 76 82 87
 50 37 21 15 12 13 16 20 33 50

52 59 71 67 52
 50 26 23 19 17

51 60 70 70 47
 15 19 24 28

46 52
 33 50

60 52 71 71 53 52 62 64 72 72 25
 50 24 22 19 15 15 17 20 23 31

1.9
 50

81 46 69 69 55 55
 50 27 22 20 17

6.8 48 76 13 05
 14 18 23 32 50

Sta	+	π	-	Elev
-----	---	-------	---	------

		913.84		
--	--	--------	--	--

44	+50			
----	-----	--	--	--

	+78			
--	-----	--	--	--

45				
----	--	--	--	--

T.P.	1.31	911.30	3.85	909.99
------	------	--------	------	--------

	+50			
--	-----	--	--	--

46				
----	--	--	--	--

+13	Flow Line X Drain			
-----	-------------------	--	--	--

	+50			
--	-----	--	--	--

47				
----	--	--	--	--

Lt.

E

Rt.

115	7.3	7.3	5.3	5.7	5.8	6.7	7.6	7.1	10.1	10.9
50	25	21	16	13		16	20	24	33	50

120	96	56		6.0		6.0	7.1	7.6	8.0	8.0	1.2	10.3
50	27	15		13			16	18	19	21	31	50

123	104	95	58	62	61		7.2	7.5	8.0	8.4	3.2	1.7
50	35	22	15	13			15	18	20	23	30	50

95	7.7	36	40	41	5.1	5.0	6.4	6.2	3.5	3.0	1.8
50	22	15	13		14	16	21	24	27	34	50

100	9.9	40	4.7		4.5	5.5	5.5	7.5	7.7	5.3	5.0	4.4
50	28	15	12			15	16	21	24	27	33	50

960
23

856
20

100	10.1	9.2	4.7	5.0	5.0	5.9	7.3	7.4	5.3	4.1	3.7
50	29	24	15	12		16	20	23	26	40	50

10.9	9.7	6.3	5.3	5.5		5.3	6.1	7.5	7.7	5.5	2.6	1.8
50	26	19	15	13			16	20	22	26	41	50

Sta + π - Elev

911.30

47 +50

48

+50

49

+25

+50

+75

50

Lt

L

Rt.

10.4 99 50 55 53 59 64 78 78 6.0 21 1.2
 50 23 15 13 11 16 20 24 26 42 50

10.0 9.5 49 53 54 60 65 79 78 78 46 22 1.5
 50 23 15 13 14 18 20 23 25 29 42 50

10.0 9.4 52 46 50 52 60 62 74 76 50 27 14
 50 25 17 14 13 14 16 19 23 28 30 50

63 36 50 62 62 50 52 60 76 76 12 1.6
 50 28 26 22 19 17 15 19 22 32 50

39 26 44 61 61 51 53 61 77 77 6.5 2.0 21
 50 29 27 22 19 16 15 19 21 25 31 50

47 44 40 54 65 65 51 54 61 79 79 64 38 35
 50 40 29 27 22 20 16 14 20 23 26 30 50

8.4 75 7.1 49 54 55 63 60 60 8.1 8.1 62 47 4.1 38
 50 36 20 15 13 11 13 14 20 23 26 29 32 50

99 9.5 91 82 49 53 57 63 61 59 77 78 66 47
 50 33 26 21 15 13 11 12 14 18 25 27 50

Sta	+	π	-	Elev
-----	---	-------	---	------

		911.30		
--	--	--------	--	--

50	+41	X Drain		
----	-----	---------	--	--

	+75			
--	-----	--	--	--

51				
----	--	--	--	--

	+50			
--	-----	--	--	--

52				
----	--	--	--	--

T.P.	8.75	915.94	4.11	907.19
------	------	--------	------	--------

	+35			
--	-----	--	--	--

	+65			
--	-----	--	--	--

	+86			
--	-----	--	--	--

Lt.

L

Rt.

Culv



L.O. 1110 49 56 59 65 60 99 99 91 81
27 15 13 11 14 25 29 35 50

Culv

↓
11.06
22

L.O. 108 103 68 51 57 59 64 61 65 100 100 98
31 26 20 15 14 11 13 15 24 33 50

L.O. 106 105 51 55 58 63 59 63 105 L.O.
32 28 15 13 12 13 15 26

L.O. 106 101 55 49 49 52 57 53 58 103 106
31 27 18 15 14 11 14 15 24 50

95 94 86 37 34 39 41 49 47 58 81 86 86
50 30 24 16 14 14 12 14 17 23 41 50

118 112 105 105 80 74 78 80 88 87 102 102 78 80 82
50 30 26 23 17 15 13 12 15 18 21 26 32 50

60 46 39 75 82 71
50 41 29 23 18 16

75 84 96 95 32 44
14 17 21 30 50

63 52 48 74 82 69 72 81 93 91 28 36
50 39 28 23 20 17 15 18 22 32 50

Sta	t	π	-	Elev
-----	---	-------	---	------

		91594		
--	--	-------	--	--

53				
----	--	--	--	--

	+35			
--	-----	--	--	--

	+56			
--	-----	--	--	--

54				
----	--	--	--	--

	+40			
--	-----	--	--	--

	+75			
--	-----	--	--	--

55				
----	--	--	--	--

	+50			
--	-----	--	--	--

Lt

E

Rt

7.0	6.3	5.8	7.9	8.2	8.4	7.0	8.0	9.1	9.5	8.8	3.6	4.1	4.6
50	40	28	23	20	19	16	15	18	21	24	33	43	50

10.0	9.4	8.5	7.4	6.4	6.5	7.6	8.8	9.2	8.1	7.4	7.9
50	41	27	19	15		15	18	23	26	30	50

9.2	8.1	8.2	7.8	6.2	6.3	7.4	8.7	9.1	8.5	8.7	9.0
50	31	26	20	16		15	18	23	25	33	50

5.0	4.9	4.7	4.7	5.6	5.6	6.6	8.0	8.2	7.8	7.6	8.7
50	29	23	19	17		14	19	23	26	33	50

2.6	2.6	4.4	4.3	6.3	5.4	5.1	5.9	7.0	7.4	6.2	6.6	7.8
50	31	29	24	19	16		15	18	23	25	33	50

2.3	1.7	5.4	6.1	5.2	4.7	5.3	6.5	6.8	5.4	5.5	6.7
50	30	24	19	16		15	19	22	26	33	50

						5.2					
1.8	1.9	5.6	6.1	5.2	4.6	5.2	6.6	6.4	5.1	5.0	5.3
50	31	24	19	17		16	19	23	27	33	50

4.1	3.2	3.2	6.2	6.2	5.2	4.6	5.5	6.8	6.8	4.6	4.6
50	36	29	23	19	17		17	20	24	29	50

Sta	+	π	-	Elev
-----	---	-------	---	------

		915.94		
--	--	--------	--	--

56

B.M.

4.39

915.90

4.39

911.55

(911.51)

+50

57

+35

+59

T.P.

4.47

909.78

10.61

905.29

58

+35

+70

Lt

L

Rt

5.2 41 6.9 6.9 5.8

50 28 23 19 16

spk 20'0 75' R1 sta 56 + 35

51 5.8 7.1 7.1 4.0 4.4 4.7

15 21 24 31 42 50

3.2 3.4 7.6 7.6 6.6 5.9 6.6 7.5 7.5 3.7 4.0 4.6

50 31 23 20 17 16 21 24 33 39 50

9.0 1.5 9.0 9.0 7.6 7.1 7.1 8.9 8.9 5.7 6.1 7.0 10.5

50 3.4 2.4 2.0 1.7 16 21 24 30 ~~33~~ 35 50

1.8 2.6 9.6 9.8 8.9 8.2 8.6 9.9 9.9 7.3 8.0 8.7 10.4

50 3.5 2.4 1.9 1.7 15 18 23 28 33 38 50

3.1 3.6 10.1 10.7 10.0

50 3.5 2.4 1.9 1.8

9.1 9.8 10.8 10.9 10.2 11.4 12.9

15 19 24 27 33 50

1.0 1.4 5.6 6.1 5.0 4.5 5.4 8.3 9.3 9.8

50 3.0 2.3 2.0 1.8 18 24 33 50

3.2 4.4 7.5 7.5 6.5

50 2.8 2.3 2.0 1.7

6.0 6.9 9.5 10.2 11.1

18 24 33 50

5.8 7.7 9.8 9.8 8.2 7.1

50 2.7 2.3 1.9 1.6

8.6 9.5 10.2 11.4

16 20 33 50

sta + π - Elev

909.78

59

+17

+58

T.P. 1.86 899.04 12.60 897.18

60

+33

+67

61

T.P. 0.22 888.61 10.65 888.39

+50

Lt

E

Rt

7.7 8.9 10.7 10.9 9.6
50 27 25 20 17

9.1 9.9 10.8 10.8 10.1 10.4 11.7
15 19 23 25 33 50

8.0 8.7 9.3 11.6 11.5 10.3 10.0 10.9 11.9 11.9 10.8 11.2 12.7
50 39 29 25 19 16 17 19 23 25 33 50

9.9 11.7 13.9 13.9 12.3
50 28 24 20 18

12.0 12.7 13.9 13.9 13.4 15.8
16 20 24 25 50

6.8 7.3 6.3 6.1 4.0 4.1 3.6 4.1 4.5 5.2 5.2 4.1 4.5 4.8 6.0
50 37 25 20 15 13 16 18 20 23 25 33 39 50

10.6 10.6 9.9 6.2
50 26 20 15

5.6 6.2 7.2 7.2 6.2 6.1 7.0
18 21 23 24 33 50

12.9 12.3 7.9 7.4 8.1 7.7 9.2 9.1 8.6
50 25 16 12 17 20 33 50

15.6 15.6 14.8 9.9
50 31 25 17

9.2 9.7 9.2 9.3 11.9 11.6 11.0
12 13 16 22 33 50

8.2 8.0 7.3 1.6 1.1 1.5 1.0 1.6 0.7 1.8 4.5 4.7 5.7 5.3 4.2 4.0
50 32 29 16 14 13 12 14 17 23 31 35 40 43 50

Sta	+	T	-	Elev
-----	---	---	---	------

		888.61		
--	--	--------	--	--

62

+29 XPrain

63 +70

63

+50

64

+50

T.P.	4.22	885.88	1.95	881.66
------	------	--------	------	--------

65

Lt

E

Rt

8.9 9.4 8.6 3.9 2.8 3.4 3.2 3.5 2.9 3.3 7.4 7.7 8.1
 50 39 28 18 14 13 12 13 16 26 33 50

Cult

Cult

10.8
 27.5

8.1 9.2 4.8 3.7 4.3 4.1 4.7 4.1 4.4 9.1 10.1 10.0 10.0
 50 29 18 14 12 12 13 15 26 29 32 50

Cult
 10.77
 27.5

8.1 9.6 5.4 4.5 5.3
 50 26 17 14 12

5.3 5.9 5.2 11.0 L.O.
 12 14 26

7.9 9.2 9.6 6.7 5.1 5.8 5.9 6.4 5.9 9.5 10.9 L.O.
 50 34 24 18 14 12 12 14 23 27

7.5 9.0 9.5 7.0 5.6 6.2 6.3 7.0 6.8 7.6 9.8 10.3 10.9 10.9 10.3 L.O.
 50 33 23 18 15 12 12 14 18 24 28 29 32 33

6.5 7.3 9.4 9.3 6.3 5.6 6.3 6.4
 50 42 27 22 16 14 12

7.3 7.2 10.1 10.4 10.9 10.9 10.9 L.O.
 14 17 22 27 28 31 33

4.1 6.8 8.1 8.3 5.4 5.0 6.1
 50 30 26 22 16 14 12

6.5 7.5 7.3 8.1 9.6 10.2 10.7 10.7 10.2
 14 17 19 23 28 29 32 50

1.8 4.7 5.7 4.2 2.3 2.0 3.2 3.8 5.0 4.9 6.0 7.2 7.3 8.1 8.1 7.6 L.O.
 50 43 28 22 17 14 11 15 18 21 25 28 29 32 33

Sta	+	π	-	E/ek
		885.88		

65 +50

+94 XDrain

66 +01

+50

+62

67

+50

68

Lt.

L

Pt.

2.8 5.6 6.4 3.5 2.0 3.4
50 38 29 21 16 11

40 5.2 4.8 7.1 7.5 8.0 8.0 7.4 L.O.
14 16 23 27 28 31 32

Culiv

↓

8.2 7.2 8.8 2.9 2.8 4.1 4.7 5.8 5.6 5.8 7.4 7.7 L.O.
50 43 26 17 14 10 14 15 20 24 33

Culiv

↓

8.90
2.3

Culiv

↓

8.79 8.6 7.3 3.2 3.0 4.5
53 31 26 16 13 9

4.8 5.9 6.2 7.6 7.8 L.O.
15 20 26 33

3.98 4.2 6.0 5.9 4.3 5.4 5.5 6.3 6.5 7.2 7.1 L.O.
3.95 3.4 2.8 2.3 1.6 1.0 1.4 2.0 2.4 3.3

4.29 5.6 6.3 7.0 7.2 L.O.
3.3 2.0 2.5 3.3

4.45 5.0 6.3 7.4 7.4 L.O.
1.5 2.1 2.4 3.4

3.93 4.3 5.6 7.5 7.4 L.O.
1.9 2.1 2.7 3.9

3.27 3.36 3.5 4.2 5.6
1.0 1.7 2.4 4.6

sto + π - E/ok.

885.88

68 +50.95

B.M

2.58

883.30

883.26

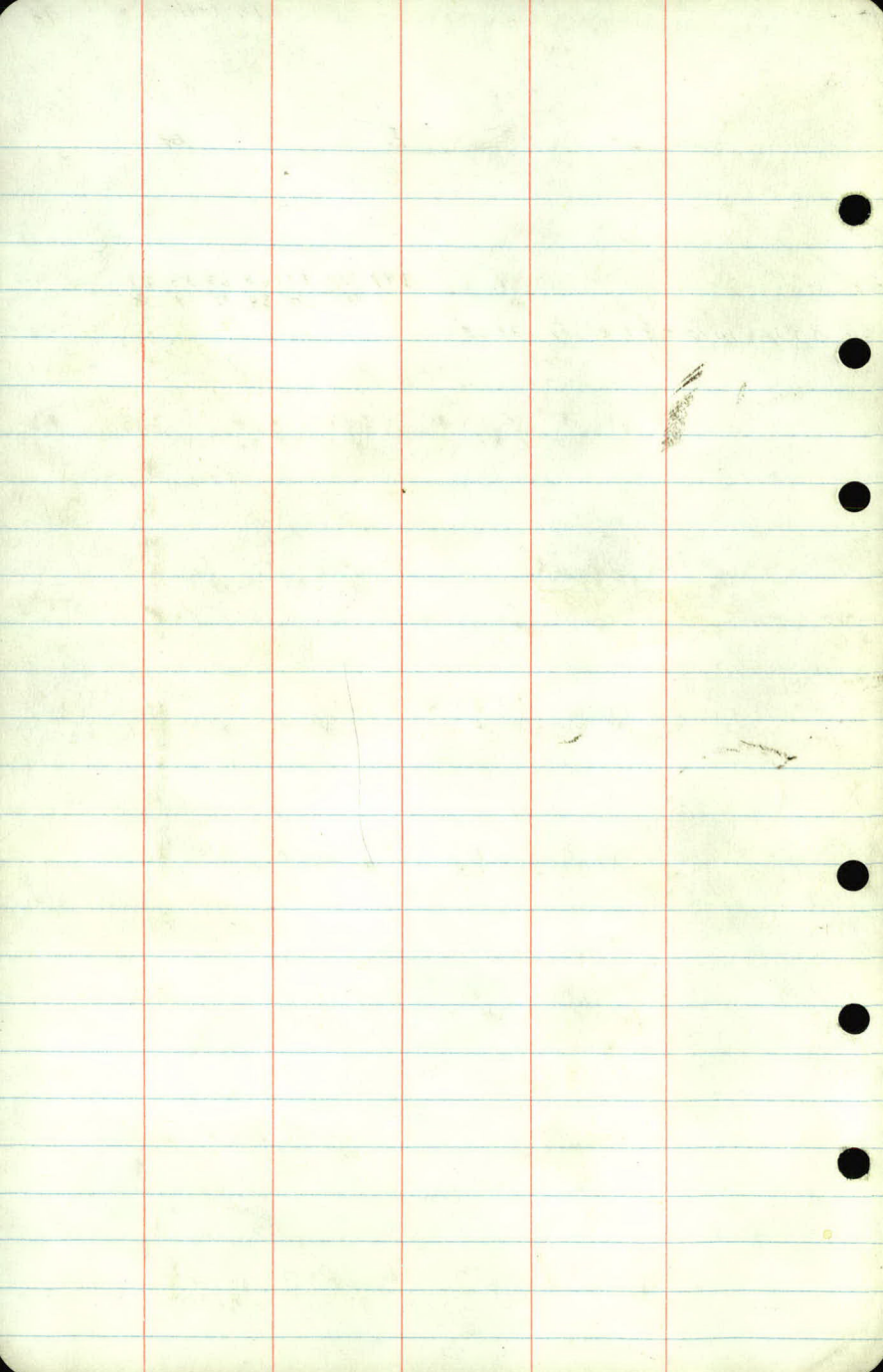
Lt

Z

Rt.

2.99	3/0	3.9	6.9	6.3	3.8	2.7
13.5	20	28	25	49	50	

RR spk. in 10" 0.57 Rt side 68+25



1

Co Rd F.

High School

Elevations

2 pages

Sta	+	π	-	Elev
BM	2.51	908.74		906.23
TP	7.84	915.65	0.93	907.81

31+19 Manhole

32+51.7 Doorway Floor Elev

+83 Manhole

+98.5 Manhole

34

35

33

TP	2.27	910.02	2.90	907.75	26.8
BM			3.79	906.23	906.23

28+20 Manhole 3.6' Rt Elev 903.12

22 Sept 1953

FK
AM
LC
MMc

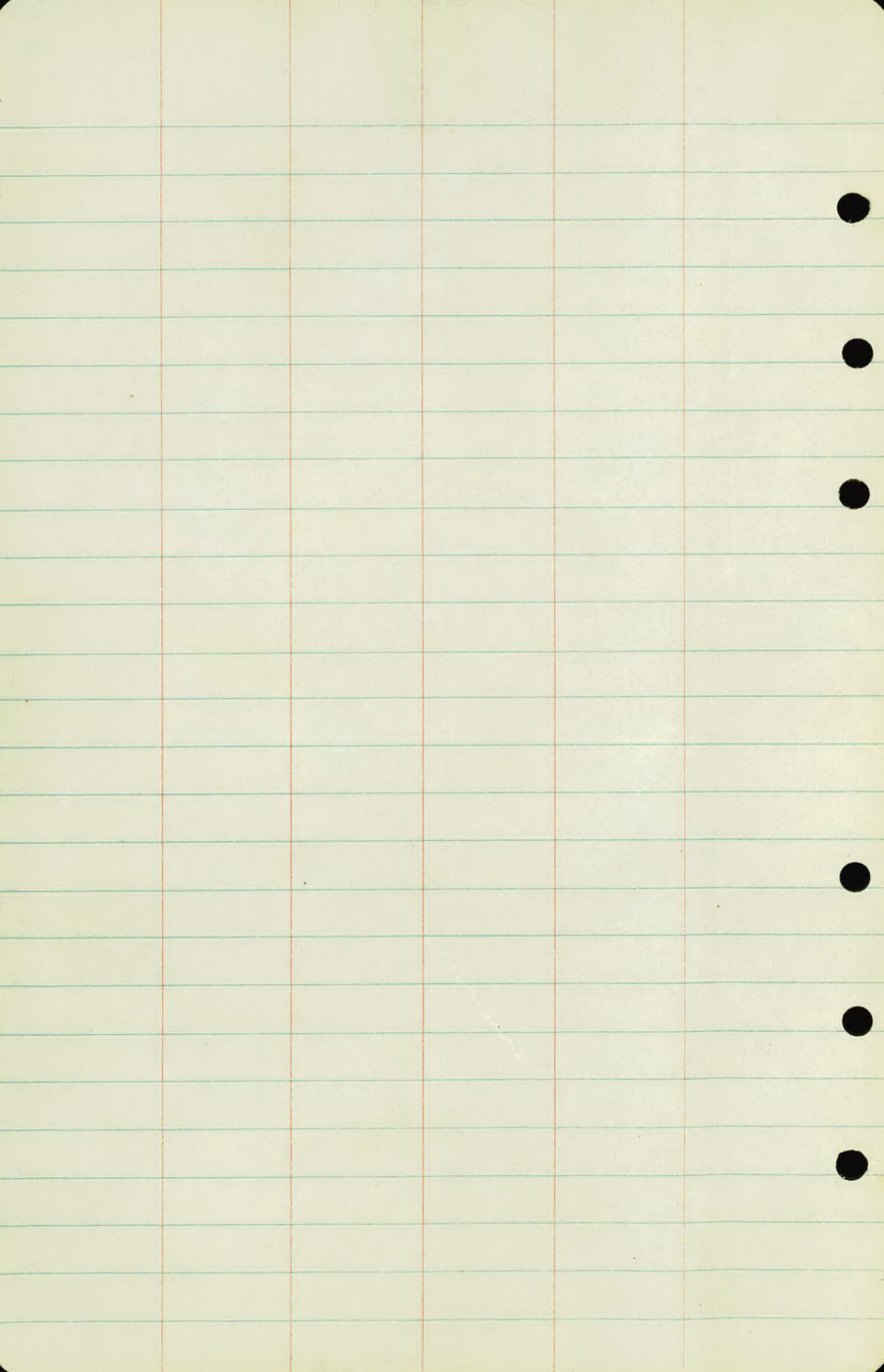
2

2

Spk in 15" Oak 50' RT Sta 42+35

		911.8
		3.85
		28.5
11.5		09.5
4.2		6.15
38		135.0
		07.94
		7.71
		10.2
		MH
	10.7	07.81
5.0		7.84
47		10.2
		MH
03.2	08.7	06.8
12.5	7.0	8.9
	4.7	7.8
11.6	07.1	06.1
4.1	8.5	9.6
	41	64
10.2		
5.5		

Spk in 15" Oak 50' RT Sta 42+35



1

Co Rd F at School

Profile
old Road

3 pages

Rec. 9/28/53

Sta	+	π .	-	Elev
Man Hole	3.78	915.38		911.8

31+50

32

+50

33

+50

34

+50

35

25 Sept 1953

HAW
FK
ANI
LC

14

2

2

RT

Sta 31 + 19 28.5' Rt.

11.83

3.75

30

11.8

38

35

11.3

43

40

10.7

49

44

09.7

59

46

08.7

6.9

47

07.9

7.7

45

07.2

8.4

41

Sta	+	X	-	Elev
		915.59		

35+50

36

+50

37

+50

38

Man Hole

7.76 907.83 907.81

L4

L

R4

06.2

9.4

34

05.7

9.9

27

05.5

10.1

19

05.2

10.4

12

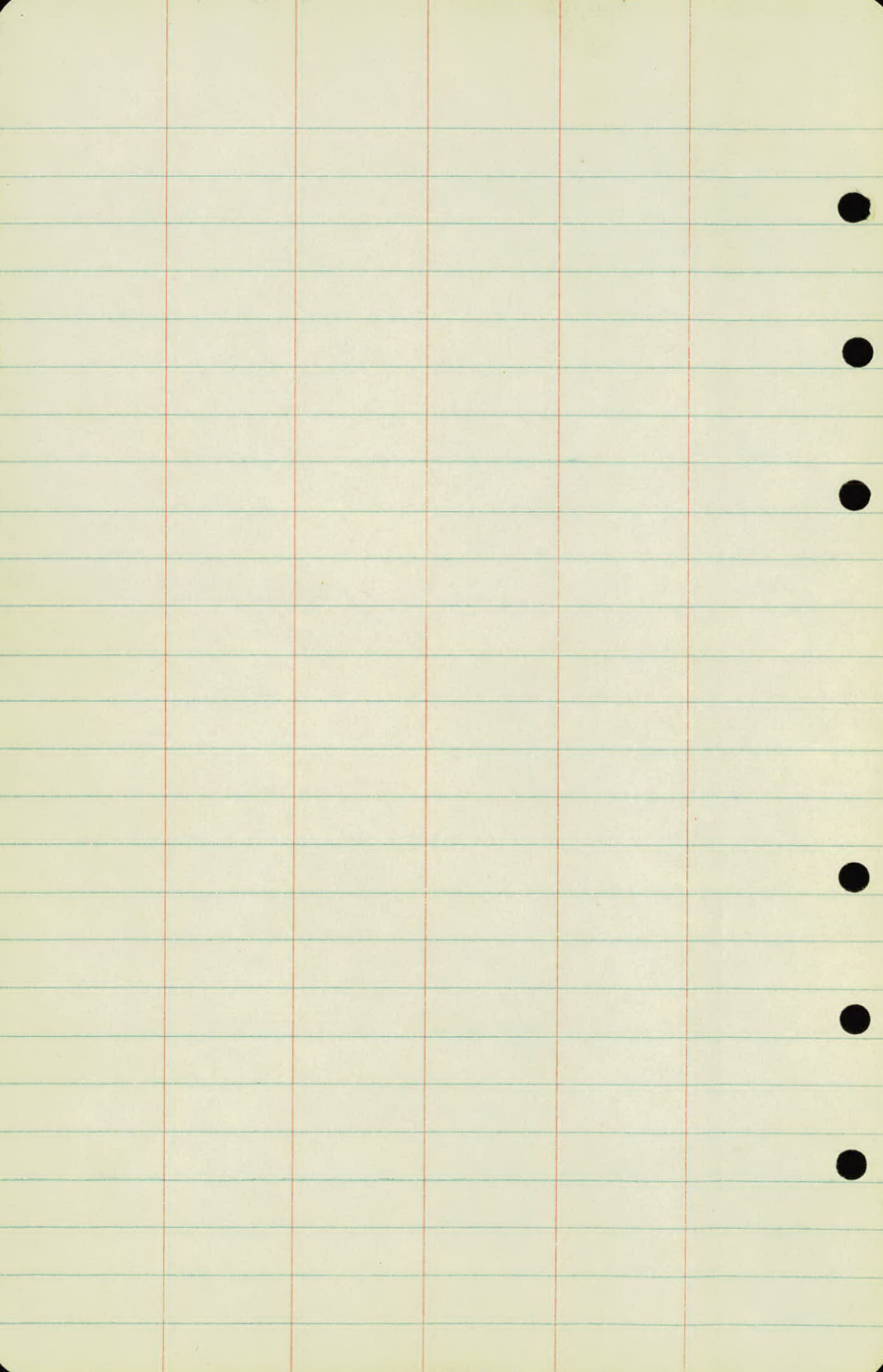
05.1

10.5

05.3

10.3

102' R4 Sta 32+98.5



Co Rd "F"

x-sections

STH #8 to STH #10

⁷
5 Pages

Use 1929 Align.

Proj. 29-17

Sta + π - Elev

BM 6.12 917.92

911.80 ?

29

+50

30

+50

31

8 Oct 1953

FK
AM

LC
MNVc

Lt

♀

RT

2

Top E. Edge Rim Marshale Est 31 + 21

06.2

11.7

07.8

10.1

13.5 12.5 08.9 07.6 09.1 09.2 09.2 09.0 08.0 08.4 ✓

4.4 5.4 9.0 10.3 8.8 8.7 8.7 8.9 9.9 9.5
50 30 19 18 15 13 19 21 24

14.7 14.1 12.7

3.2 3.8 5.2
75 56 32

11.3 10.9 09.6 08.9 10.2 10.3 10.4 10.2 09.3 10.0

6.6 7.0 8.3 9.0 7.7 7.6 7.5 7.7 8.6 7.9 ✓
50 25 19 18 15 13 19 20 25

16.3 16.3 13.8

1.6 1.6 4.1
75 60 31

11.5 11.6 09.8 11.0 11.4

6.4 6.3 8.1 6.9 6.5
50 23 18 16

10.8 09.9 09.9 10.8 ✓

7.1 8.0 8.0 7.1
18 22 24 26

17.5 15.1 13.6

0.4 2.8 4.3
75 50 31

Sta + π - Elev

917.92

31+21 Manhole on E

+50

32

+50

32+88 Manhole

Lt

L

Rt

11.80

612

13.0	12.6	11.0	11.3	11.9	11.8	11.2	12.3	13.0
49	5.3	6.9	6.6	60	6.1	6.7	5.6	4.9 ✓
50	27	17	14		11	22	28	47

15.0	13.9	13.0
29	1.0	1.9 ✓
100	75	59

09.3	09.3	10.4	11.5	11.9	11.1	10.3	10.2	11.8
8.6	8.6	7.5	6.4	60	6.8	7.6	7.7	6.1 ✓
22	21	18	8		30	49	75	100 ✓

09.5	10.3	16.0	16.9	17.1	11.5	11.8
8.4	7.6	1.9	1.0	0.8	6.4	6.1
23	26	33	50	75	17	7

14.9	15.6	15.6	09.5	09.6	11.5	11.4	10.8	09.5	08.6
30	2.3	2.3	8.4	8.3	6.4	6.5	7.1	8.4	9.9 ✓
89	58	33	24	20		9	19	28	43

11.0	10.2
6.9	7.7
10	17

09.4	09.4	08.9
8.5	8.5	9.0 ✓
94	81	63

at School

09.9
10.00
57

Sta + π - Elev

917.92

33+05 Manhole

33

+50

34

TP 3.78 913.12 8.58 909.34

+50

LT

2

RT

07.8
10.10
56

11.8 8.0 8.4 8.6 10.3 10.8

07.6 09.0 09.7 10.7

6.1 8.9 9.5 8.3 7.6 7.1
29 25 22 17 12

10.3 8.9 8.2 7.2
67 79 89 100

10.4 8.0

08.3 10.3 10.8

→ 7.5 9.9
44 75

→ 9.6 7.6 7.1
37 23 15

04.1 06.9 07.3 08.5 09.4 09.7

10.0 09.9 08.9 08.9 10.6

13.8 11.0 10.6 9.4 8.5 8.2
56 37 22 15 5

7.9 8.0 9.0 9.0 7.3
10 17 19 24 27

09.7 08.6 07.5 10.1

8.2 9.3 10.4 7.8
75 55 38 31

04.5 05.8

07.5 08.3 08.8

06.9 07.2 08.3 09.1 09.8

13.4 12.1 10.4 9.6 9.1
32 20 17 9

11.0 10.7 9.6 8.8 8.1
29 35 44 60 75

03.1

08.2 08.3 08.8 09.0

→ 14.8

→ 9.7 9.7 9.1 8.9

Fe 34.8 Left Sta 34+20 Keep Out

27 20 16 6

06.5 07.1 08.3 05.8 06.1 07.1 07.9 08.1 07.7 07.1 06.1 07.1

6.6 6.0 4.8 7.3 7.0 6.0 5.2 5.0 5.4 6.0 7.0 6.0
60 44 32 27 21 15 9 16 21 23 32

09.2 08.5
7.9 4.6
75 48

Sta + P - Elev

913.12

35

+50

36

+50

+94

+94 S End / 24" x 66' SCP X-Drain

275
562
1302

37+10 N End / 24" x 66' SCP X-Drain

B.M

6.89 906.23

130
 06.0 05.1 05.1 06.3 07.0 07.2 07.1 06.3 06.2 07.3 06.0 08.6

7.1 8.0 8.0 6.6 6.1 5.9 6.0 6.8 6.9 5.8 5.1 4.5
 26 23 21 17 10 10 16 21 32 48 73

10.7 11.5 13.0

24 16 0.1
 33 38 62

06.8 06.1 04.3 04.7 05.7 06.3 06.3 06.1 05.0 06.7 07.5

63 70 8.8 8.4 74 6.8 6.8 7.0 8.1 6.4 5.6
 50 30 21 18 16 9 15 19 32 50

00.3 00.6 05.1 05.6 05.8 05.3 05.1 04.6 06.3

12.8 12.5 8.0 7.5 7.3 7.8 8.0 8.5 6.8
 50 25 15 9 13 24 28 50

97.7 98.5 00.3 04.4 05.3 05.4 05.1 03.6 03.0 04.9

15.4 14.6 12.8 8.7 7.8 7.7 8.0 9.5 10.1 8.2
 50 31 25 17 10 14 20 34 50

99.11

14.01

35
 Top Uncompleted
 Surface Dr 14

07.97

5.15

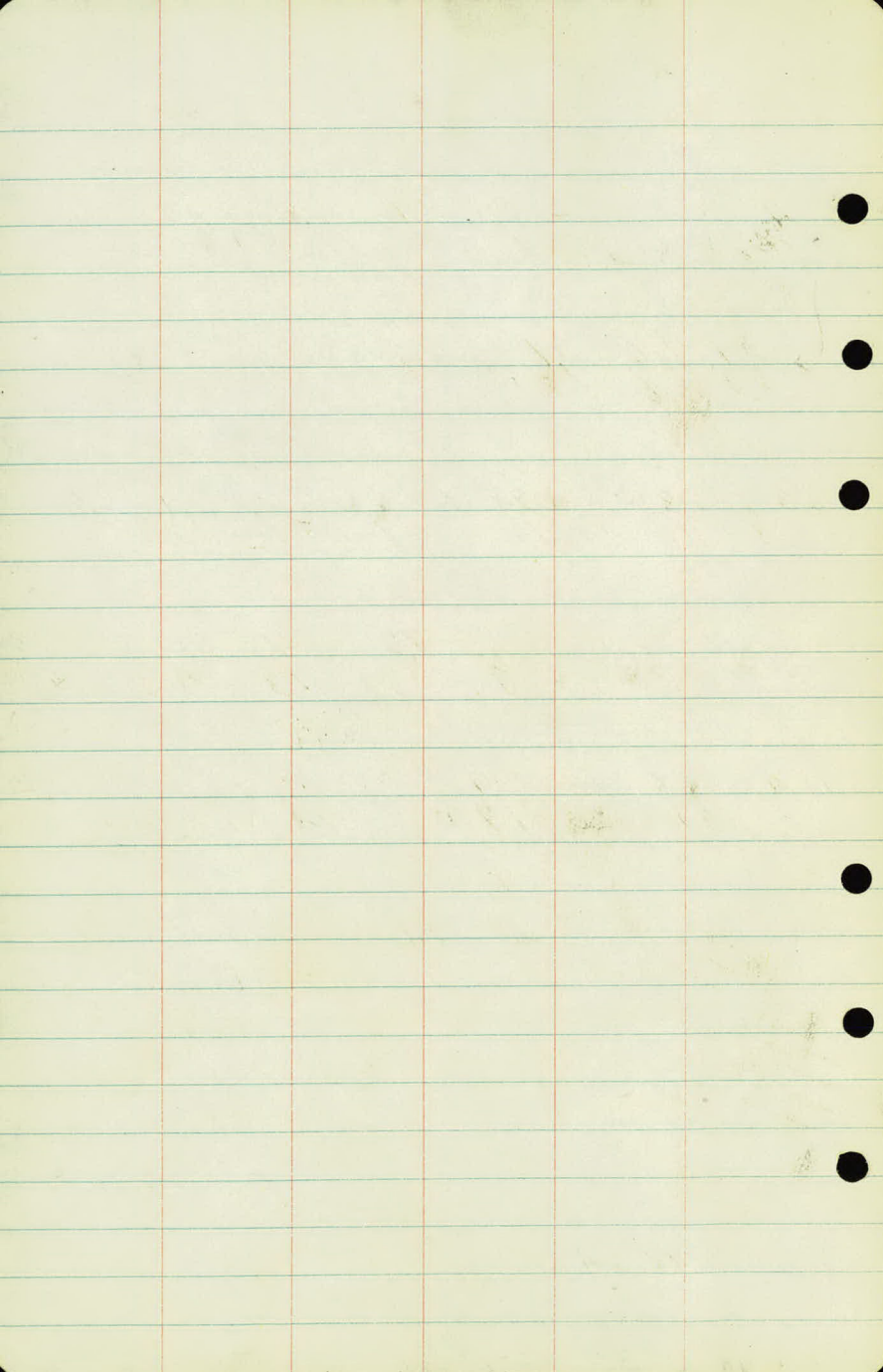
35
 FL 24" SCP

94.48

18.64
 32

FL 24" SCP oak

Spk in 15" ~~CP~~ 50' BT about 40+20



DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
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Locations

New High School

1929 Align

Proj. 29-17

OBJECT

AZI

STADIA

K at Sta 32

to P.I. 34+41.8 0°00'

G 46°00'

F 74°50'

E 79°27'

D 96°10'

C 97°44'

B 99°44'

A 101°14'

K at P.I. Sta 34+41.8

to Sta 32+00 180°00'

F 155°04'

G 149°21'

J 112°35'

M 79°10'

N 78°31'

O 73°49'

196
392

DIST.	VERT. ANGLE	ROD EQUIV.	ROD	DIFF.	ELEV.
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127'

103'

310'

295'

324'

367'

235'

178'

302'

371'

367'

392'

OBJECT

AZ:

STADIA