Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		54.23		
TP3	4.83	55.33	3.73	50.50
18+00				
20+00				
22+00				
24+00				
TP4	3.97	55.36	3.94	51.39
		(55.4)		
26+00				
28+00				
30+00				
32+00				
TP5	3.42	56.05	2.73	52.63

SCS-ENG-29 (5-70)

GPO : 1970 O-385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Des. Surv.

3

Left ℄ Right

47.2
8.1

50.7 / 4.6 / 20
50.1 / 5.2 / 10
47.5 / 7.8
50.1 / 5.2 / 10
50.6 / 4.7 / 20

Hood-Smith Prop.
E-W Fence

47.7
7.6

Low area in field

50.1 / 5.2 / 20
50.3 / 5.0 / 9
48.0 / 7.3
50.4 / 4.9 / 10
51.2 / 4.1 / 17
50.7 / 4.6 / 365

48.3
7.1

51.4 / 4.0 / 14
50.7 / 4.7 / 8
48.5 / 6.9
50.6 / 4.8 / 8
51.5 / 3.9 / 13

48.7
6.7

51.4 / 4.0 / 14
51.8 / 4.4 / 8
48.8 / 6.6
51.1 / 4.3 / 10
51.7 / 3.7 / 16

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		56.05		
34+00		(56.0)		
36+00				
36+72				
37+40				
BM2	2.99	55.61	3.43	52.62
	23.51		19.99	
	19.99			
	3.52			
	Correct elev. BM2 = 52.60			
	Diff. in elev. BM1 & BM2 = 3.50 OK.			
38+00				
40+00				
TP6	5.62	57.24	3.99	51.62

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Des. Surv.

4

Left ℄ Right

49.2
6.8

51.9	51.6	49.3	51.4	52.0
4.1	4.4	6.7	4.6	4.0
13	8		10	15

Ditch curves left.

Smith-Wiley E-W Boundary fence

20d nail in S. side corn. post in S.W. corn. D.D. Wiley tract El. 52.60

49.3
6.3

52.1	51.7	49.5	51.2	51.9
3.5	3.9	6.1	4.4	3.7
14	7		7	13

Figure 2-7 Sheet 5 of 17

Figure 2-7 Sheet 6 of 17

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		57.24		
40+25	End old ditch.		5.3	51.9
42+00				
44+00				
46+00				
48+00				
TP7	4.46	57.28	4.42	52.82
		(57.3)		
50+00				
52+00				
54+00				
56+00				
TP8	3.26	57.22	3.32	53.96

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Des. Surv.

5

Left	℄	Right
51.9 5.3 10	51.9 5.3	51.8 5.4 10
51.7 5.5 12	51.7 5.5	51.7 5.5 12
Low area in field → 51.2 6.0 275	5.8 5.4	
52.1 6.1 15	52.1 5.1	52.2 6.0 15
	52.1 5.1	
52.6 4.7 15	52.5 4.8	52.4 4.9 15
	52.6 4.7	
52.9 4.4 15	52.8 4.5	52.9 4.4 15
	53.0 4.3	

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.	
		57.22			
58+00					
60+00					
61+77					
BM3			4.19	53.03	
	39.84		35.91		
	35.91				
	3.93				

Correct elev. BM3 = 53.00

Diff. in elev. BM1 & BM3 = 3.90 OK.

Allowable error = $0.1\sqrt{M}$

= $0.1\sqrt{1.2}$

= 0.11

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Des. Surv.

6

Left	℄	Right
53.2 / 4.0 / 15	53.2 / 4.0	53.1 / 4.1 / 15
	53.3 / 3.9	
	54.0 / 3.2	

End of proposed ditch

20d nail in 12" pecan tree 50' W. Sta. 61+77.

Figure 2-7 Sheet 7 of 17

FIGURE 2-7

Engineering Notes for Surface Drainage (Group Ditch)

Construction Layout

To expedite the construction layout survey, the planned elevation of the ditch bottom at each station was determined from the plans and entered on a sheet of paper so it could be referred to conveniently. This made it possible to calculate and record the grade rods rapidly after each instrument set-up.

To save space, the layout notes have been recorded at 200-foot horizontal intervals. However, in actual practice, the slope stakes would be set at not more than 100-foot intervals.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCD Lower E. Blue River Date 3/5/74

Field Office Carthage

Name Rabbit Creek Dr. Assoc.

Individual (Group) Unit of Govt.
(circle one)

Job Main Ditch #1

Design Sur. | Const. Layout ✓

Const. Check | Other

Ident. No. Dr. G. 65 | Field No.

Location

N

SCS-ENG-28A REV. 5-75

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
BM1	4.53	53.63		49.10
TP1	5.00	54.84 (54.8)	3.79	49.84
Old ditch adequate Sta. 0+00 to 9+00				
9+00			+10.8	44.0
10+00			+10.7	44.1
12+00			+10.5	44.3
14+00			+10.3	44.5
16+00			+10.0	44.8
TP2	3.84	55.02	3.66	51.18
18+00			+10.0	45.0
20+00			+9.8	45.2

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr Dr Assoc. R. Ryals
Main Ditch #1 O. Brown
Const. Layout CH. C. Smith 3/5/74

Bottom Width 4.0' S.S. 2:1

Left ℄ Right

20d nail in 8" pecan tree blazed 4.40' W. & 75' N. Sta. 0+00

C=5.1 5.7 12.2	C=0 10.9 0.0	C=5.0 5.8 12.0
C=4.9 5.8 11.8	C=0.6 10.1 0.0	C=4.8 5.9 11.6
C=5.2 5.3 12.4	C=2.3 8.2 0.0	C=5.3 5.2 12.6
C=4.8 5.5 11.6	C=2.2 8.1 0.0	C=5.0 5.3 12.0
C=4.5 6.5 11.0	C=2.4 7.6 0.0	C=4.6 5.9 11.2
C=6.0 5.0 12.0	C=2.2 7.8 0.0	C=5.2 4.8 12.4
C=5.3 4.5 12.6	C=2.3 7.5 0.0	C=5.1 4.7 12.2

Figure 2-7 Sheet 9 of 17

Figure 2-7 Sheet 10 of 17

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		55.02		
22+00			+9.5	45.5
24+00			+9.2	45.8
TP3	4.57	55.47	4.12	50.90
		(55.5)		
26+00			+9.5	46.0
28+00			+9.2	46.3
30+00			+8.9	46.6
32+00			+8.6	46.9
TP4	6.38	56.42	5.43	50.04
		(56.4)		
34+00			+9.2	47.2
36+00			+9.0	47.4

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Const. Layout

2

Left	℄	Right
C=5.0 4.5 12.0	C=2.2 7.3 0.0	C=5.1 4.4 12.2
C=4.4 4.8 10.8	C=2.2 7.0 0.0	C=5.0 4.2 12.0
C=5.1 4.4 12.2	C=2.3 7.2 0.0	C=4.8 4.7 11.6
C=5.0 4.2 12.0	C=2.2 7.0 0.0	C=5.1 4.1 12.2
C=4.6 4.3 11.2	C=2.1 6.8 0.0	C=4.8 4.1 11.6
C=4.4 4.2 10.8	C=1.9 6.7 0.0	C=4.6 4.0 11.2
C=4.2 5.0 10.4	C=2.0 7.2 0.0	C=4.0 5.2 10.0
C=4.4 4.6 10.8	C=1.9 7.1 0.0	C=4.2 4.8 10.4

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		56.42		
BM2			3.84	52.58
	24.32		20.84	
	20.84			
	3.48			
Correct elev. BM2 = 52.60				
Diff. in elev. BM1 & BM2 = 3.50 Check OK				
38+00			+8.7	47.7
40+00			+8.4	48.0
TP5	5.19	56.50	5.11	51.31
40+30	old ditch ends		+8.5	48.0
42+00			+8.2	48.3
44+00			+8.0	48.5
46+00			+7.7	48.8
48+00			+7.4	49.1

SCS-ENG-29 (5-70)

GPO : 1970 O—388-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Const. Layout

3

Left	℄	Right
C=4.3	C=1.6	C=4.1
4.4	7.1	4.6
10.6	0.0	10.2
C=3.6	C=1.5	C=3.5
4.8	6.9	4.9
9.2	0.0	9.0
C=3.8	C=3.9	C=3.8
4.7	4.6	4.7
9.6	0.0	9.6
C=3.4	C=3.4	C=3.6
4.8	4.8	4.6
8.8	0.0	9.2
C=3.3	C=3.3	C=3.3
4.7	4.7	4.7
8.6	0.0	8.6
C=3.4	C=3.2	C=3.3
4.3	4.5	4.4
8.8	0.0	8.6
C=3.0	C=3.0	C=2.9
4.4	4.4	4.5
8.0	0.0	7.8

Figure 2-7 Sheet 11 of 17

Figure 2-7 Sheet 12 of 17

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
		56.50		
TP6	5.03	57.32	4.21	52.29
		(57.3)		
50+00			+7.9	49.4
52+00			+7.6	49.7
54+00			+7.3	50.0
56+00			+7.0	50.3
TP7	5.08	57.30	5.10	52.22
58+00			+6.8	50.5
60+00			+6.5	50.8
61+82			+6.3	51.0
BM3			4.33	52.97
	39.62		35.75	
	35.75			
	3.87			

Correct elev. BM3 = 53.00
Diff. in elev. BM1 & BM3 = 3.90
Check OK.

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Rabbit Cr. Dr. Assoc.
Main Ditch #1
Const. Layout

4

Left	℄	Right
C=3.1	C=3.1	C=3.1
4.8	4.8	4.8
8.2	0.0	8.2
C=2.9	C=2.8	C=2.9
4.7	4.8	4.7
7.8	0.0	7.8
C=2.8	C=2.8	C=2.7
4.5	4.5	4.6
7.6	0.0	7.4
C=2.7	C=2.8	C=2.8
4.3	4.2	4.2
7.4	0.0	7.6
C=2.7	C=2.7	C=2.7
4.1	4.1	4.1
7.4	0.0	7.4
C=2.4	C=2.5	C=2.6
4.1	4.0	3.9
6.8	0.0	7.2
C=2.6	C=2.6	C=2.5
3.7	3.7	3.8
7.2	0.0	7.0

FIGURE 2-7

Engineering Notes for Surface Drainage (Group Ditch)

Construction Check

The following check notes are for a ditch that was uniform in appearance. A small trickle of water along the ditch bottom indicated uniform grade except at one or two points. These facts were taken into consideration in deciding how intensively the work should be checked.

Design data from the plan such as bottom width, side slopes and the planned bottom elevation at each station was listed on a sheet of paper so it would be convenient for reference. This was done before starting the survey.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SCD Lower E. Blue River Date 4/30/74
Field Office Carthage
Name Rabbit Creek Dr. Assoc.
Individual (Group) Unit of Govt.
(circle one)
Job Main Ditch #1
Design Sur. Const. Layout
Const. Check ✓ Other Const. Recheck
Ident. No. Dr. G. 65 Field No.
Location

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Figure 2-7 Sheet 13 of 17

Figure 2-7 Sheet 14 of 17

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.
BM1	3.80	52.90		49.10
TP1	4.83	54.72	3.01	49.89
TP2	4.04	54.50	4.26	50.46
9+00			+10.5	44.0
12+00			+10.2	44.3
16+00			+9.7	44.8
TP3	4.28	54.77	4.01	50.49
		54.8		
22+00			+9.3	45.5
TP4	4.46	55.45	3.78	50.99
		(55.4)		
28+00			+9.1	46.3
TP5	4.26	55.69	4.02	51.43

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc. ⊼ R. Ryals 4/30/74
Main Ditch #1 ⊘ O. Brown
Const. Check Ch. R. Jones (farmer)

Left ← Right

20d nail in 8" pecan tree blazed △ 40' W. & 75' N. Sta. 0+00

Design: 4 ft. BW, 2:1 SS, 10' Berm

Berm

5.3 / 24	5.4 / 13	10.6 / 2	10.6	10.5 / 2	5.5 / 12
			10.4		
5.1 / 22	5.2 / 11	9.7 / 2	9.7	9.7 / 2	5.1 / 12
4.0 / 22	4.2 / 12	9.5 / 2	9.3	9.4 / 2	4.2 / 13
			9.3		

Sta.	B.S.	H.I.	F.S. or Grade Rod	Elev. or Planned Elev.	
		55.69			
34+00		(55.7)	+8.5	47.2	
BM2	4.12	56.73	3.08	52.61	OK
	Correct	elev.	BM2 = 52.60		
		(56.7)			
40+00			+8.7	48.0	
42+00			+8.4	48.3	
TP7	4.32	58.04	3.01	53.72	
		(58.0)			
44+00			+9.5	48.5	
46+00			+9.2	48.8	
TP8	4.02	58.95	3.11	54.93	
		(58.9)			
52+00			+9.2	49.7	
54+00			+8.9	50.0	

SCS-ENG-29 (5-70)

GPO : 1970 O—385-053

Rabbit Cr. Dr. Assoc.
Main Ditch #1
Const. Check

2

Left ℄ Right

Berm

4.2/23 4.3/11 8.7/2 8.6 8.6/2 4.6/11

5.1/24 5.3/11 8.8/2 8.8 8.7/2 5.2/10

8.4

High 0.5'

6.2/1.4 8.9/1.5 9.0 9.1/1.7 6.2/7.3

Rework ditch Sta. 42+50 to Sta. 45+50

9.3

6.0/19 6.3/8 9.1/2 9.1 9.0/2 6.2/8

9.0

Figure 2-7 Sheet 15 of 17