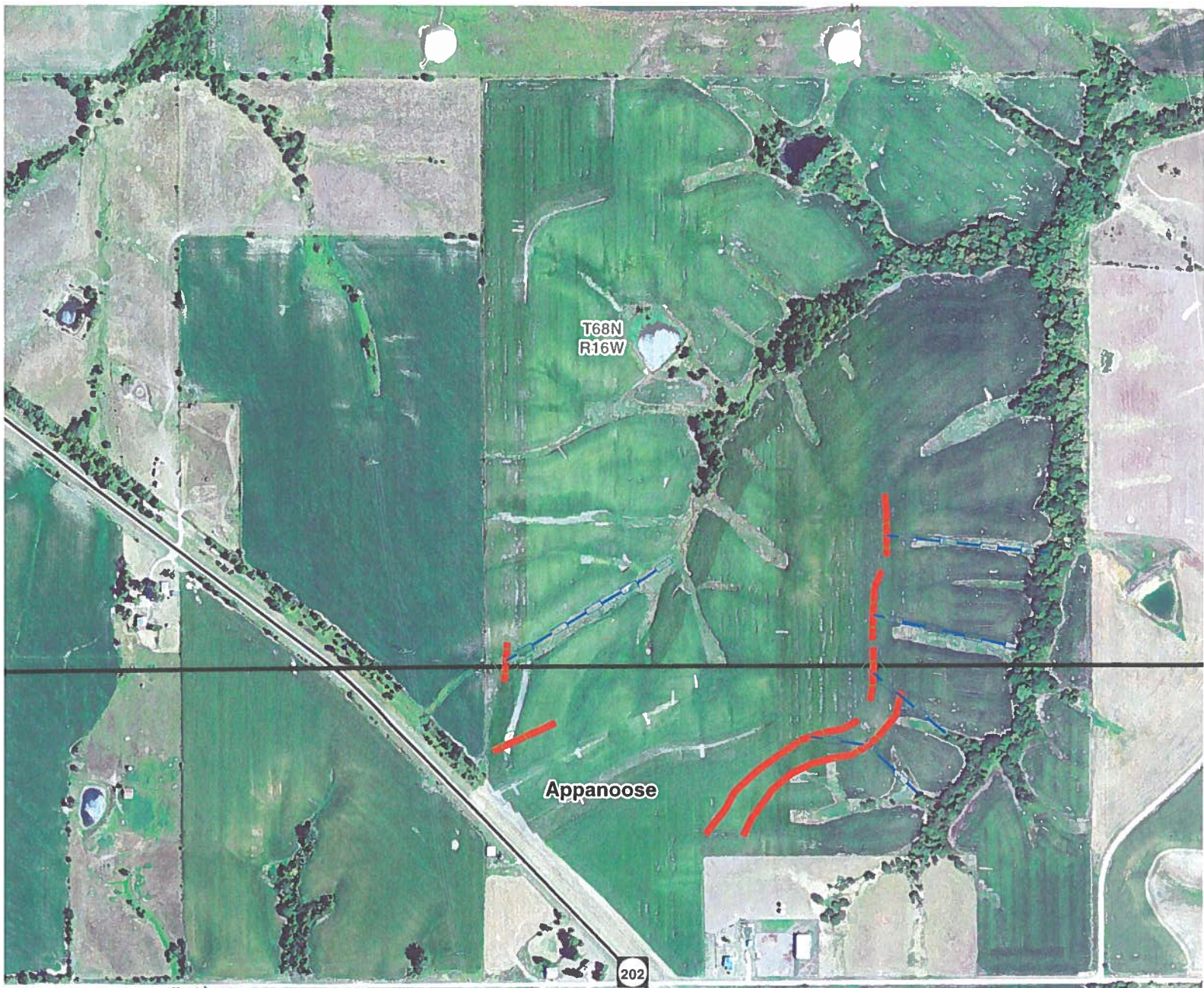


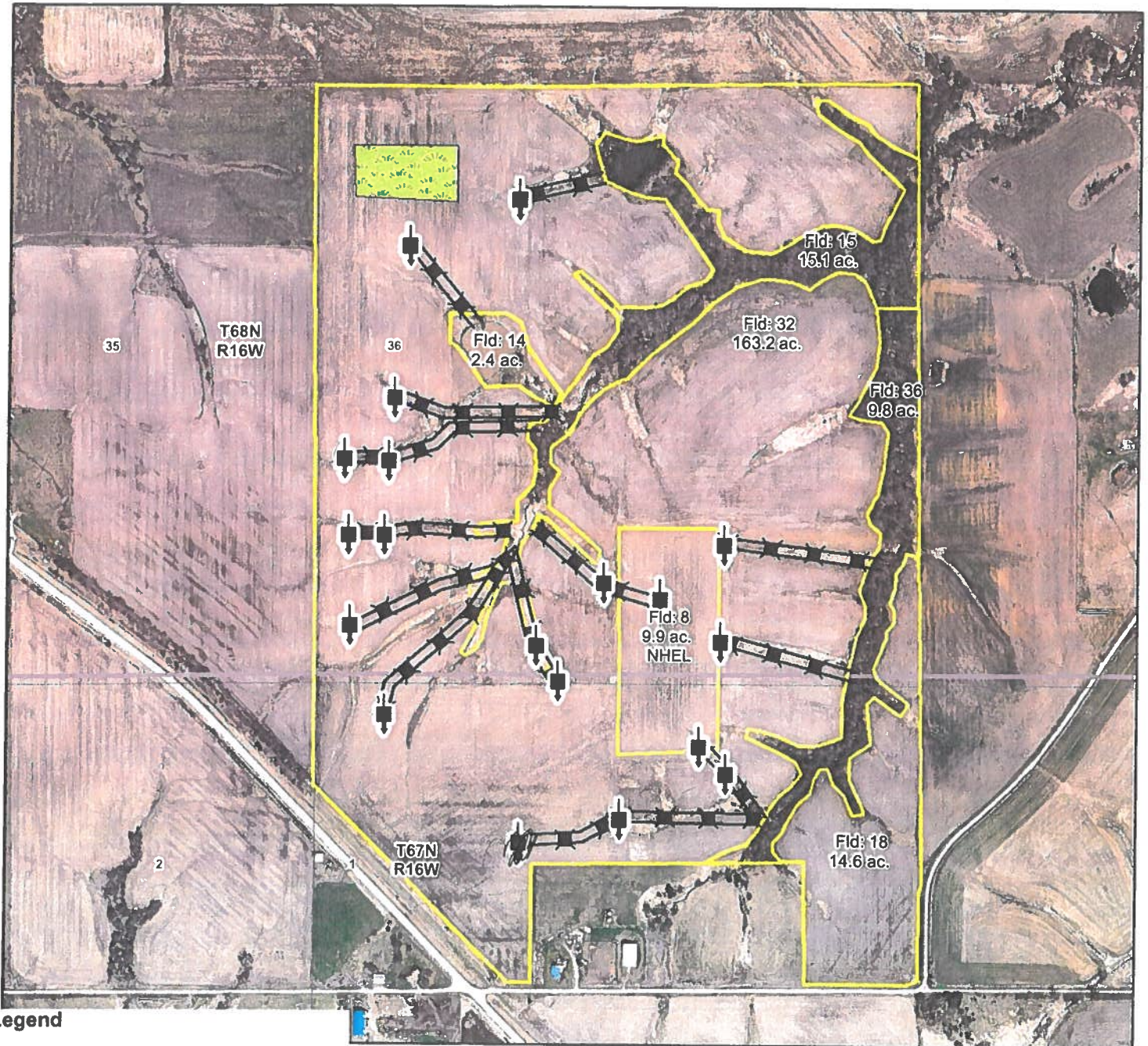


EQIP 2017 Map

Date: 9/19/2017

Customer(s): ACER-1 LLC
 Legal Description: Farm 5177 Tract 4252
 T68N R16W & T67N R16W
 Wells Twn. Sec. 1 & 36
 2016 Imagery

Field Office: CENTERVILLE SERVICE CENTER
 Agency:
 Assisted By: HANNAH GRIMM
 State and County: IA, Appanoose County, Iowa



Legend

Practice name

Critical Area Planting

Practice name

Water and Sediment Control Basin

Practice name

Underground Outlet

Consplan-T4252

Prepared with assistance from USDA-Natural Resources Conservation Service

660 0 660
 Feet





T68N
R16W

Appanoose

T67N
R16W

202

Acer basins 30-34

Agency: NRCS

Assisted By: dustin moss



Prepared with assistance from USDA-Natural Resources Conservation Service



Acer 30-35

35
Line 35

T68N
R16W

Appanoose

34
Line 34

Line 31

33
33

30
30

Line 30

202

T67N
R16W

Acer 20-23

T68N
R16W

Appanoose

T67N
R16W

Line
22
560

725

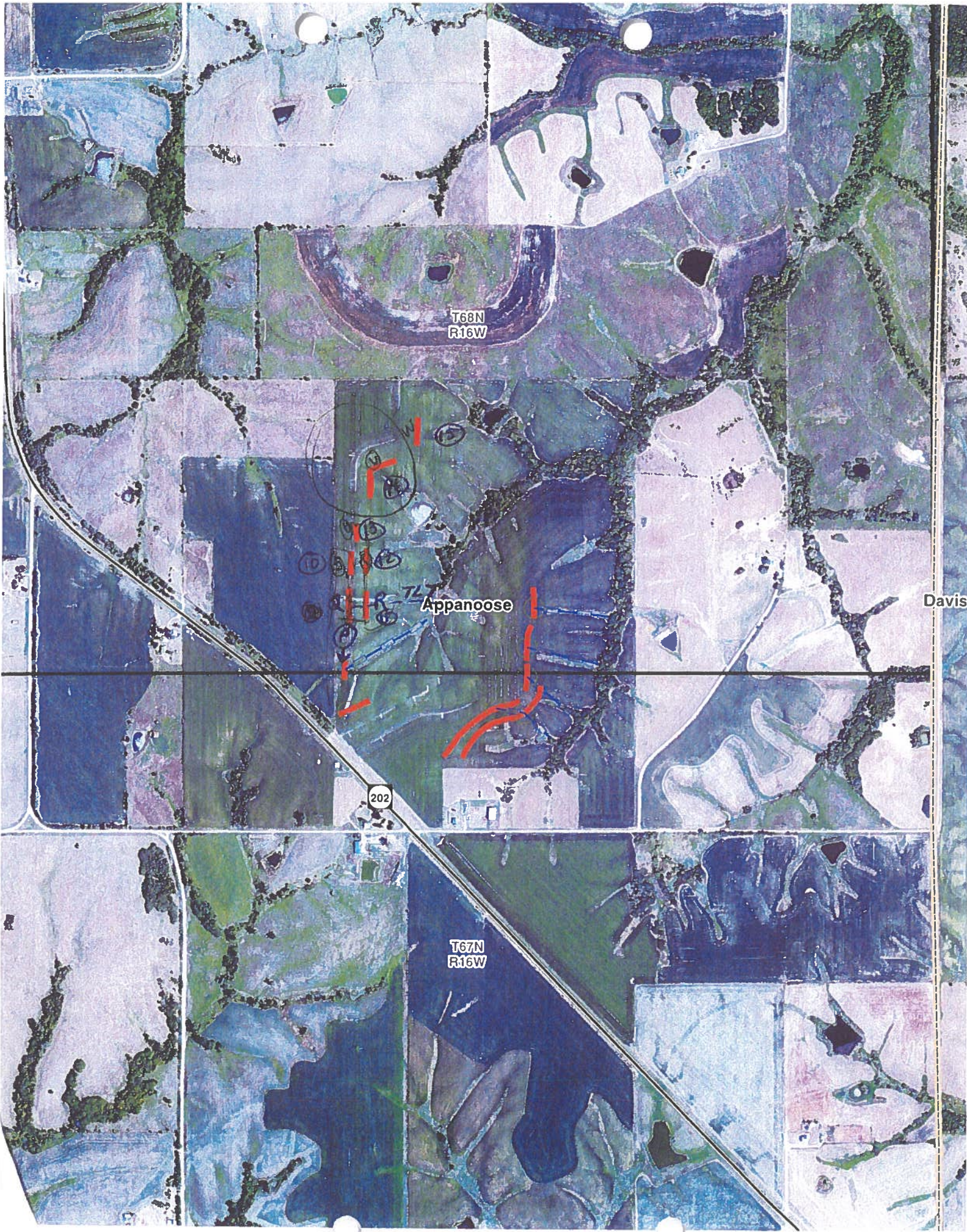
Line 20

23

21

22

20



T68N
R16W

Appanoose

Davis

202

T67N
R16W

tile

Agency:



Prepared with assistance from USDA-Natural Resources Conservation Service



380 0 380 760 1,140 1,520 Feet



INLET DESIGN

					A	B	C	D	E	F	G	
Intake No.	Drainage Area (acres)	Intake Capacity (ac-in/day)		Water Depth at Intake (ft)	Orifice Diam.	Offset Diam.	Intake Diam. (in.)	Intake Hole Dimensions		Intake Height	Additional Drain Tubing	
		Req'd	Provided		(in.)	(in.)		Diam. or Slot size (in.)	#/ft.	(ft.)	Diam. (in.)	Length (ft.)
A	2.6	5.2	5.35	2.7	2.5	5"	5"	1"	24	2.5		
B	1.3	2.6	5.35	2.7	2.5			1"	24			
C	1.2	2.4	4.72	2.1	2.5			1"	24			
D	1.0	2.0	4.93	2.3	2.5			1"	24			
E	2.8	5.6	6.35	2.6	2.75			1"	24			
G	1.9	3.8	5.75	3.1	2.5			1"	24			
PH	4.0	8.0	8.0	6.0	2.5			1" x 1/4"	18	3		
P	3.0	6.0	7.44	5.2	2.5			1"	24			

UNDERGROUND OUTLET DESIGN

Line No.	Reach No.	Station to Station		Conduit Capacity (ac-in/day)		Length of Conduit (ft.)		Conduit Dia. (in.)	Conduit Material Specs.	Conduit Grade (%)		Conduit Cover (ft.)	
		Req'd	Design	Design	Install	Design	Material Type and Classification	Design	Install	Min. Req'd	Max. Allowed		
1	1	int A	int E	2.6	11.0	210	5"	PE ASTM 405	2%			2.2	11.2
	2	int E	outlet	17.35	22.0	300	6"	PE ASTM 405	3%			2.2	11.2
2	1	int B	outlet	5.35	11.0	550	5"	PE ASTM 405	2% Min			2.2	11.2
3	8	int C	outlet	4.72	11.0	625	5"	PE ASTM 405				2.2	11.2
4	1	int D	outlet	4.93	11.0	625	5"	PEASTM 405				2.2	11.2
5	1	int G	erbtions line	5.75	11.0	20	5"					2.2	11.2
6	1	int H	outlet	8.0	17.0	1000	6"					2.2	11.2

☐ Contractor shall fill out shaded columns.

Type of Outlet:

- ☒ Open ditch
☐ Existing tile
☐ _____

RELIEF WELL

Line No.	Station	Riser Dia. (in.)

STANDARD DWG. IA-1501

DATE Oct. 2008 PAGE 2 OF 2

UNDERGROUND OUTLET

Owner: Acer LLC
 Location: Sec _____, T _____ N, R _____
 _____ Township
 Annonose County, Iowa

Designed _____ Date _____ File Name _____
 Drawn _____ Drawing Name _____
 Checked _____
 Approved _____



Natural Resources Conservation Service
 United States Department of Agriculture

INLET DESIGN

					A	B	C	D	E	F	G	
Intake No.	Drainage Area (acres)	Intake Capacity (ac-in/day)		Water Depth at Intake (ft)	Orifice Diam.	Offset Diam.	Intake Diam. (in.)	Intake Hole Dimensions		Intake Height (ft.)	Additional Drain Tubing	
		Req'd	Provided		(in.)	(in.)		Diam. or Slot size (in.)	#/ft.		Diam. (in.)	Length (ft.)
30	4.7	9.4	9.43	5.7	2.75	6	6"	1"	40	2.5		
31	2.4	4.8	6.61	4.1	2.50		6"	1"	40	2.5		
32	1.1	2.2	5.75	3.1	2.50		5"	1"	24	2.5		
33	0.5	1.0	5.45	2.8	2.50		5"	1"	24	2.5		
34	2.0	4.0	6.6	4.0	2.50		5"	1	24	2.5		
35	1.1	2.2	5.81	3.3	2.50		5"	1	24	2.5		

UNDERGROUND OUTLET DESIGN

Line No.	Reach No.	Station to Station		Conduit Capacity (ac-in/day)		Length of Conduit (ft.)		Conduit Dia. (in.)	Conduit Material Specs.	Conduit Grade (%)		Conduit Cover (ft.)	
		Req'd	Design	Design	Install	Design	Material Type and Classification	Design	Install	Min. Req'd	Max. Allowed		
30	1	int 30	int 32	9.43	17.5	130	130	6"	PE ASTM 405	2%		2.2	11.2
	2	int 32	outlet	23.25	36.0	680	680	8"	PE ASTM 405	2%		2.2	11.2
							PE ASTM 405					2.2	11.2
31	1	int 31	int 33	6.61	11.5	130	130	5"	PE ASTM 405			2.2	11.2
	2	int 33	outlet	16.95	36.0	810	810	8"	PEASTM 405				
34	1	int 34	outlet	6.61	11.5	805	805	5"					
35	1	int 35	outlet pond	5.81	11.5	650	650	5"					

☐ Contractor shall fill out shaded columns.

Type of Outlet:

- ☒ Open ditch
☐ Existing tile
☐ _____

RELIEF WELL

Line No.	Station	Riser Dia. (in.)

STANDARD DWG. IA-1501

DATE Oct. 2008 PAGE 2 OF 2



Natural Resources Conservation Service
United States Department of Agriculture

UNDERGROUND OUTLET

Owner: Acer 1 LLC

Location: Sec _____, T _____ N, R _____

_____ Township

Adrian County Iowa

Designed AM

Drawn AM

Checked AM

Approved AM

Date

File Name

Drawing Name

INLET DESIGN

0.4
0.5
0.9
1.0
0.5
0.4
0.5
0.3

INLET DESIGN												
Intake No.	Drainage Area (acres)	Intake Capacity (ac-in/day)		Water Depth at Intake (ft)	A	B	C	D	E	F	G	
		Req'd	Provided		Orifice Diam.	Offset Diam.	Intake Diam. (in.)	Intake Hole Dimensions		Intake Height	Additional Drain Tubing	
					(in.)	(in.)		Diam. or Slot size (in.)	#/ft.	(ft.)	Diam. (in.)	Length (ft.)
A	2.6	5.2	5.35	2.7	2.5	5"	5"	1"	24	2.5		
B	1.3	2.6	5.35	2.7	2.5			1"	24			
C	1.2	2.4	4.72	2.1	2.5			1"	24			
D	1.0	2.0	4.90	2.3	2.5			1"	24			
E	2.8	5.6	6.35	2.6	2.75			1"	24			
G	1.9	3.8	5.75	3.1	2.5			1"	24			
PH	4.0	8.0	8.0	6.0	2.5			1" 1"	24			
P	3.0	6.0	7.44	5.2	2.5			1" 1 1/4"	18			
								1"	24			

UNDERGROUND OUTLET DESIGN

Line No.	Reach No.	Station to Station	Conduit Capacity (ac-in/day)		Length of Conduit (ft.)		Conduit Dia (in.)	Conduit Material Specs.	Conduit Grade (%)		Conduit Cover (ft.)	
			Req'd	Design	Design	Install			Design	Install	Min. Req'd	Max. Allowed
1	1	A	2.6	11.0	210	218	5"	PE ASTM 405	2%	22	2.2	11.2
2	2	outlet	5.35	11.0	550	428	5"	PE ASTM 405	2%	22	2.2	11.2
3	3	outlet	4.72	11.0	625	667	5"	PE ASTM 405	2%	22	2.2	11.2
4	4	outlet	4.93	11.0	625	665	5"	PEASTM 405	2%	22	2.2	11.2
5	5	outlet	5.75	11.0	20	18	5"		2%	22	2.2	11.2
6	6	outlet	8.0	17.0	1000	920	6"		2%	22	2.2	11.2

Contractor shall fill out shaded columns.

Type of Outlet:

- ☒ Open ditch
☐ Existing tile
☐

RELIEF WELL

Line No.	Station	Riser Dia. (in.)

WG. IA-1501

PAGE 2 OF 2



UNDERGROUND OUTLET

Owner: Acer LLC
 Location: Sec _____, T _____ N, R _____
 _____ Township
 Appanoose County, Iowa

Designed _____ Date _____
 Drawn _____
 Checked _____
 Approved _____

File Name

Drawing Name

EQIP 2018 Conservation Program Applications for Fiscal Year 2019
Appanoose
Iowa

County	Fund Code	Ranking Score	Priority	Tracking Code	Signup Number	Contract Number	Applicant	Current Status	New Status	Appendix & CPA-1202 Signed	Adequacy Status	Obligation Status	Estimated Cost	Cumulative Estimated Cost	State
Appanoose	Ephemeral Gully Control on HEL	189.45	High	47465	1	746114191FK	PERRY VAN DAUGHERTY	Eligible		Not Signed			\$45,000.00	\$45,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	179.45	High	51384	2	746114193QS	JOHN DAVID MATKOVICH	Eligible		Not Signed			\$25,000.00	\$70,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	179.45	High	44669	1	746114191FL	TIMOTHY A KITTEL	Eligible		Not Signed			\$25,000.00	\$95,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	High	99435	1	746114193JC	THOMAS A WITTERHOLT	Eligible		Not Signed			\$15,000.00	\$110,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	High	87728	1	746114191FM	LARRY G LYNCH	Eligible		Not Signed			\$45,000.00	\$155,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	High	85457	1	746114191FN	SCOTT L MCCOY	Eligible		Not Signed			\$15,000.00	\$170,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	High	71277	1	746114191FJ	CRYSTAL E BROWN	Eligible		Not Signed			\$20,000.00	\$190,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	High	35974	1	746114191FA	ROBERT D WHITE	Eligible		Not Signed			\$130,000.00	\$320,000.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	130.16	High	4761	1	746114191DL	ROGER ALLEN MORROW	Eligible		Not Signed			\$15,100.00	\$335,100.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	169.45	Low	21155	1	746114191FF	MARK A BATCHELDER	Eligible		Not Signed			\$14,927.00	\$350,027.00	Iowa
Appanoose	Ephemeral Gully Control on HEL	140.03	Low	94511	1	746114191FY	CLINTON MATTHEW WELLS	Eligible		Not Signed			\$15,055.00	\$365,082.00	Iowa
						Appanoose Totals				Total Contracts	11		Total Cost	\$365,082.00	

Category	RUNNING AVG. COST DATA		4/1/19	
	Description	District estimated total cost Rates approved 2- 28-19		
earthwork	terrace/ basin in cropland(cu yd)	\$3.06		
	w&s basin in pasture(cu yd)	\$2.04		
	pond/structure earthwork(cu yd)	\$2.28		
	clearing/shaping(hr)	\$150.00		
waterway	ft waterway <30' wide	\$1.38		
	ft waterway >30<40 ft wide	\$1.53		
	ft waterway . >40<50' wide	\$1.59		
	ft waterway >50<60 wide	\$1.85		
	ft waterway > 60' wide	\$2.26		
crossing	2-10" rock(ton)	\$32.00		
	road rock(ton)	\$24.00		
	geomat(sq yd)	\$2.63		
fence	ft electric 2 strand HT	\$1.18		
	5 barb fence(ft)	\$3.08		
pond Pipe	6" smp	\$15.00		
	8" smp(ft)	\$20.00		
	10" smp(ft)	\$22.00		
	12" smp(ft)	\$27.68		
	15" smp(ft)	\$30.07		
	16" smp(ft)	\$33.85		
	18-22" smp(ft)	\$33.00		
	24" smp(ft)	\$52.56		
	30" smp(ft)	\$69.07		
	36" smp(ft)	\$108.60		
	Trashrack	\$320.00		
	tile for pond(job)	\$850.00		
tile	5" tile(ft)	\$1.80		
	6" tile(ft)	\$2.21		
	8" tile(ft)	\$2.98		
	10" tile(ft)	\$4.81		
	12" tile(ft)	\$6.24		
intakes	5" intake(ea)	\$100.00		
	6" intake(ea)	\$118.00		
	8" intake(ea)	\$170.00		
	10" intake(ea)	\$170.00		
	12" intake	\$225.00		
Tile Outlets	6" outlet 20ft	\$120.00		
	8" outlet 20ft	\$138.00		
	10" outlet 20 ft	\$150.00		
	12" outlet 20 ft	\$180.00		
	relief well(ea)	\$300.00		
	tile marker(ea)	\$12.00		
seedings	structure/basin seeding(ac)	\$366.00		
	seeding with mulch(ac)	\$564.00		
tanks	concrete tank(ea)	\$884.00		
	cobett tank(ea)	\$815.00		
	1.25" buried stockpipe(ft)	\$2.30		