

## APPENDIX 1

### Detailed Schedules of Soil Suitability Based Upon Types of Use

- ◆ Prime and Other Important Farmlands
- ◆ Dwellings and Small Commercial Buildings (limiting features)
- ◆ Sewage Disposal (septic tank absorption fields and sewage lagoons)
- ◆ Roads and Streets, Shallow Excavations, and Lawns and Landscaping (limiting features)

The following soil suitability schedules were provided from the  
*Soil Survey of Sioux County, Iowa,*

USDA Natural Resource Conservation Service  
Tabular Data Version 13: Date: 11/22/2006

## Prime and other Important Farmlands

Sioux County, Iowa

Map symbol	Map unit name	Farmland classification
1B3	Ida silt loam, 2 to 5 percent slopes, severely eroded	All areas are prime farmland
8B	Judson silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
26	Kennebec silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
27B	Terril loam, 2 to 5 percent slopes	All areas are prime farmland
78B2	Sac silty clay loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
91	Primghar silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
91B	Primghar silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
108	Wadena loam, 24 to 32 inches to sand and gravel, 0 to 2 percent	All areas are prime farmland
108B	Wadena loam, 24 to 32 inches to sand and gravel, 2 to 5 percent	All areas are prime farmland
116	Graceville silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
203	Cylinder loam, 32 to 40 inches to sand and gravel, 0 to 2 percent slopes	All areas are prime farmland
308	Wadena loam, 32 to 40 inches to sand and gravel, 0 to 2 percent	All areas are prime farmland
308B	Wadena loam, 32 to 40 inches to sand and gravel, 2 to 5 percent	All areas are prime farmland
309	Allendorf silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
309B	Allendorf silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
309B2	Allendorf silty clay loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
310	Galva silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
310B	Galva silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
310B2	Galva silty clay loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
401B3	Crofton silt loam, 2 to 5 percent slopes, severely eroded	All areas are prime farmland
410	Moody silty clay loam, 0 to 2 percent slopes	All areas are prime farmland
410B	Moody silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
410B2	Moody silty clay loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
428B	Ely silty clay loam, 2 to 5 percent slopes	All areas are prime farmland
474	Bolan loam, 0 to 2 percent slopes	All areas are prime farmland
474B	Bolan loam, 2 to 5 percent slopes	All areas are prime farmland
474B2	Bolan loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
486	Davis loam, 0 to 2 percent slopes	All areas are prime farmland
670	Rawles silt loam, 0 to 2 percent slopes	All areas are prime farmland
801B2	Bolan variant loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
810	Galva silty clay loam, benches, 0 to 2 percent slopes	All areas are prime farmland
810B	Galva silty clay loam, benches, 2 to 5 percent slopes	All areas are prime farmland
810B2	Galva silty clay loam, benches, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
812	Moody silty clay loam, benches, 0 to 2 percent slopes	All areas are prime farmland
812B	Moody silty clay loam, benches, 2 to 5 percent slopes	All areas are prime farmland
812B2	Moody silty clay loam, benches, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
878B	Ocheyedan loam, 2 to 5 percent slopes	All areas are prime farmland
878B2	Ocheyedan loam, 2 to 5 percent slopes, moderately eroded	All areas are prime farmland
1C3	Ida silt loam, 5 to 9 percent slopes, severely eroded	Farmland of statewide importance
1D3	Ida silt loam, 9 to 14 percent slopes, severely eroded	Farmland of statewide importance
28B	Dickman sandy loam, 2 to 5 percent slopes	Farmland of statewide importance
28C2	Dickman sandy loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
28D2	Dickman sandy loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
33C2	Steinauer clay loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
33D2	Steinauer clay loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
33E2	Steinauer clay loam, 14 to 18 percent slopes, moderately eroded	Farmland of statewide importance
72	Estherville loam, 0 to 2 percent slopes	Farmland of statewide importance
72B	Estherville loam, 2 to 5 percent slopes	Farmland of statewide importance
72D2	Estherville loam, 5 to 12 percent slopes, moderately eroded	Farmland of statewide importance

## Prime and other Important Farmlands

Sioux County, Iowa

Map symbol	Map unit name	Farmland classification
78C2	Sac silty clay loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
78D2	Sac silty clay loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
309C2	Allendorf silty clay loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
310C2	Galva silty clay loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
310D2	Galva silty clay loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
401C3	Crofton silt loam, 5 to 9 percent slopes, severely eroded	Farmland of statewide importance
401D3	Crofton silt loam, 9 to 14 percent slopes, severely eroded	Farmland of statewide importance
401E3	Crofton silt loam, 14 to 18 percent slopes, severely eroded	Farmland of statewide importance
410C2	Moody silty clay loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
410D2	Moody silty clay loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
474C2	Bolan loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
474D2	Bolan loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
801C2	Bolan variant loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
801D2	Bolan variant loam, 9 to 14 percent slopes, moderately eroded	Farmland of statewide importance
878C2	Ocheyedan loam, 5 to 9 percent slopes, moderately eroded	Farmland of statewide importance
11B	Radford-Judson complex, 0 to 5 percent slopes	Prime farmland if drained
31	Afton silty clay loam, 0 to 2 percent slopes	Prime farmland if drained
32	Spicer silty clay loam, 0 to 2 percent slopes	Prime farmland if drained
92	Marcus silty clay loam, 0 to 2 percent slopes	Prime farmland if drained
259	Biscay loam, 32 to 40 inches to sand and gravel, 0 to 2 percent	Prime farmland if drained
54	Zook silty clay loam, 0 to 2 percent slopes	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
133	Colo silty clay loam, 0 to 2 percent slopes	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
733	Calco silty clay loam, 0 to 2 percent slopes	Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
467	Radford silt loam, 0 to 2 percent slopes	Prime farmland if protected from flooding or not frequently flooded during the growing season
485	Spillville loam, 0 to 2 percent slopes	Prime farmland if protected from flooding or not frequently flooded during the growing season
785	Spillco loam, 0 to 2 percent slopes	Prime farmland if protected from flooding or not frequently flooded during the growing season

# Dwellings and Small Commercial Buildings

Sioux County, Iowa

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1B3: Ira, severely eroded	100	Not limited		Not limited		Not limited	
1C3: Ira, severely eroded	95	Not limited		Not limited		Somewhat limited Slope	0.88
1D3: Ira, severely eroded	95	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
8B: Judson	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
11B: Radford, occasionally flooded	50	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00
Judson	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
26: Kennebec, occasionally flooded	95	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.61 0.50	Very limited Flooding Shrink-swell	1.00 0.50
27B: Terril	90	Not limited		Somewhat limited Depth to saturated zone	0.61	Not limited	
28B: Dickman	95	Not limited		Not limited		Not limited	
28C2: Dickman, moderately eroded	95	Not limited		Not limited		Somewhat limited Slope	0.88

# Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>28D2:</b>							
Dickman, moderately eroded	95	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
<b>31:</b>							
Afton, occasionally flooded	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
<b>32:</b>							
Spicer	95	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00	Very limited Depth to saturated zone	1.00
<b>33C2:</b>							
Steinauer, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope	0.88
						Shrink-swell	0.50
<b>33D2:</b>							
Steinauer, moderately eroded	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>33E2:</b>							
Steinauer, moderately eroded	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>33G:</b>							
Steinauer	95	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>54:</b>							
Zook, occasionally flooded	90	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
<b>72:</b>							
Estherville	100	Not limited		Not limited		Not limited	

# Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>72B:</b>							
Estherville	100	Not limited		Not limited		Not limited	
<b>72D2:</b>							
Estherville, moderately eroded	100	Somewhat limited		Somewhat limited		Very limited	
		Slope	0.04	Slope	0.04	Slope	1.00
<b>78B2:</b>							
Sac, moderately eroded	100	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Shrink-swell	0.50
		Depth to saturated zone	0.39			Depth to saturated zone	0.39
<b>78C2:</b>							
Sac, moderately eroded	100	Somewhat limited		Very limited		Somewhat limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Slope	0.88
		Depth to saturated zone	0.39			Shrink-swell	0.50
						Depth to saturated zone	0.39
<b>78D2:</b>							
Sac, moderately eroded	95	Somewhat limited		Very limited		Very limited	
		Shrink-swell	0.50	Depth to saturated zone	1.00	Slope	1.00
		Depth to saturated zone	0.39	Slope	0.37	Shrink-swell	0.50
		Slope	0.37			Depth to saturated zone	0.39
<b>91:</b>							
Primghar	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
<b>91B:</b>							
Primghar	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00
<b>92:</b>							
Marcus	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	1.00	Shrink-swell	1.00	Shrink-swell	1.00

## Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>108:</b>							
Wadena, 24 to 32 inches to sand and gravel	95	Not limited		Not limited		Not limited	
<b>108B:</b>							
Wadena, 24 to 32 inches to sand and gravel	100	Not limited		Not limited		Not limited	
<b>116:</b>							
Graceville	95	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>133:</b>							
Colo, occasionally flooded	90	Very limited		Very limited		Very limited	
		Flooding	1.00	Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>203:</b>							
Cylinder	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
<b>259:</b>							
Biscay	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Shrink-swell	0.50			Shrink-swell	0.50
<b>308:</b>							
Wadena, 32 to 40 inches to sand and gravel	100	Not limited		Not limited		Not limited	
<b>308B:</b>							
Wadena, 32 to 40 inches to sand and gravel	100	Not limited		Not limited		Not limited	
<b>309:</b>							
Allendorf	95	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50
<b>309B:</b>							
Allendorf	95	Somewhat limited		Not limited		Somewhat limited	
		Shrink-swell	0.50			Shrink-swell	0.50

# Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>309B2:</b>							
Allendorf, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell	0.50
<b>309C2:</b>							
Allendorf, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Slope Shrink-swell	0.88 0.50
<b>310:</b>							
Galva	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>310B:</b>							
Galva	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>310B2:</b>							
Galva, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>310C2:</b>							
Galva, moderately eroded	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.88 0.50
<b>310D2:</b>							
Galva, moderately eroded	90	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
<b>401B3:</b>							
Crofton, severely eroded	100	Not limited		Not limited		Not limited	
<b>401C3:</b>							
Crofton, severely eroded	100	Not limited		Not limited		Somewhat limited Slope	0.88
<b>401D3:</b>							
Crofton, severely eroded	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
<b>401E3:</b>							
Crofton, severely eroded	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

## Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
410:							
Moody	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
410B:							
Moody	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
410B2:							
Moody, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
410C2:							
Moody, moderately eroded	95	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Slope Shrink-swell	0.88 0.50
410D2:							
Moody, moderately eroded	90	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Slope Shrink-swell	1.00 0.50
428B:							
Ely	95	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50	Very limited Depth to saturated zone Shrink-swell	1.00 0.50
467:							
Radford, occasionally flooded	95	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone	1.00 1.00
474:							
Bolan	100	Not limited		Not limited		Not limited	
474B:							
Bolan	95	Not limited		Not limited		Not limited	
474B2:							
Bolan, moderately eroded	95	Not limited		Not limited		Not limited	
474C2:							
Bolan, moderately eroded	95	Not limited		Not limited		Somewhat limited Slope	0.88

# Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>474D2:</b>							
Bolan, moderately eroded	95	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
<b>485:</b>							
Spillville, occasionally flooded	95	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
<b>486:</b>							
Davis, rarely flooded	95	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.61 0.50	Very limited Flooding Shrink-swell	1.00 0.50
<b>615:</b>							
Colo, channeled, frequently flooded	60	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
Spillville, channeled	35	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50
<b>670:</b>							
Rawles, occasionally flooded	95	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.61 0.50	Very limited Flooding Shrink-swell	1.00 0.50
<b>733:</b>							
Calco, occasionally flooded	95	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 1.00

## Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>785:</b>							
Spillco, occasionally flooded	95	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
<b>801B2:</b>							
Bolan variant, moderately eroded	95	Not limited		Not limited		Not limited	
<b>801C2:</b>							
Bolan variant, moderately eroded	90	Not limited		Not limited		Somewhat limited Slope	0.88
<b>801D2:</b>							
Bolan variant, moderately eroded	100	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
<b>801F:</b>							
Bolan variant	100	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
<b>810:</b>							
Galva, bench	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>810B:</b>							
Galva, bench	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>810B2:</b>							
Galva, bench, moderately eroded	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>812:</b>							
Moody, bench	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
<b>812B:</b>							
Moody, bench	100	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50

## Dwellings and Small Commercial Buildings

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>812B2:</b>							
Moody, bench, moderately eroded	100	Somewhat limited		Somewhat limited		Somewhat limited	
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
<b>878B:</b>							
Ocheyedan	90	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.61		
<b>878B2:</b>							
Ocheyedan, moderately eroded	90	Not limited		Somewhat limited		Not limited	
				Depth to saturated zone	0.61		
<b>878C2:</b>							
Ocheyedan, moderately eroded	90	Not limited		Somewhat limited		Somewhat limited	
				Depth to saturated zone	0.61	Slope	0.88
<b>5010:</b>							
Pits	100	Not rated		Not rated		Not rated	
<b>5040:</b>							
Orthents	100	Not rated		Not rated		Not rated	
<b>5044:</b>							
Fluvaquents, frequently flooded, ponded	95	Not rated		Not rated		Not rated	
<b>AW:</b>							
Animal waste lagoon	100	Not rated		Not rated		Not rated	
<b>INT:</b>							
Intermittent water	100	Not rated		Not rated		Not rated	
<b>SL:</b>							
Sewage lagoon	100	Not rated		Not rated		Not rated	
<b>W:</b>							
Water	100	Not rated		Not rated		Not rated	

# Sewage Disposal

Sioux County, Iowa

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>1B3:</b>					
1B3: Ida, severely eroded	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>1C3:</b>					
1C3: Ida, severely eroded	95	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
<b>1D3:</b>					
1D3: Ida, severely eroded	95	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
<b>8B:</b>					
8B: Judson	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>11B:</b>					
11B: Radford, occasionally flooded	50	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
11B: Judson	35	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>26:</b>					
26: Kennebec, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50	Seepage	0.50

## Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>27B:</b>					
Terril	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50	Seepage Slope	0.50 0.32
<b>28B:</b>					
Dickman	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage Slope	1.00 0.32
<b>28C2:</b>					
Dickman, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage Slope	1.00 1.00
<b>28D2:</b>					
Dickman, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope Seepage	1.00 1.00
		Slope	0.63		
<b>31:</b>					
Afton, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	1.00	Seepage	0.28
<b>32:</b>					
Spicer	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>33C2:</b>					
Steinauer, moderately eroded	100	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
<b>33D2:</b>					
Steinauer, moderately eroded	100	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	0.63		

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>33E2:</b>					
Steinauer, moderately eroded	95	Very limited		Very limited	
		Slow water movement	1.00	Slope	1.00
		Slope	1.00		
<b>33G:</b>					
Steinauer	95	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Slow water movement	1.00		
<b>54:</b>					
Zook, occasionally flooded	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Slow water movement	1.00	Depth to saturated zone	1.00
		Depth to saturated zone	1.00		
<b>72:</b>					
Estherville	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00		
<b>72B:</b>					
Estherville	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	0.32
<b>72D2:</b>					
Estherville, moderately eroded	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Filtering capacity	1.00	Slope	1.00
		Slope	0.04		
<b>78B2:</b>					
Sac, moderately eroded	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>78C2:</b>					
Sac, moderately eroded	100	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.46	Slope Seepage	1.00 0.53
<b>78D2:</b>					
Sac, moderately eroded	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Slope	1.00
		Slow water movement	0.46	Depth to saturated zone	1.00
		Slope	0.37	Seepage	0.53
<b>91:</b>					
Primghar	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>91B:</b>					
Primghar	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>92:</b>					
Marcus	95	Very limited		Not rated	
		Depth to saturated zone	1.00		
		Slow water movement	1.00		
<b>108:</b>					
Wadena, 24 to 32 inches to sand and gravel	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>108B:</b>					
Wadena, 24 to 32 inches to sand and gravel	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
<b>116:</b>					
Graceville	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
<b>133:</b>					
Colo, occasionally flooded	90	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>203:</b>					
Cylinder	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
<b>259:</b>					
Biscay	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Seepage	1.00
		Seepage, bottom layer	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50		
<b>308:</b>					
Wadena, 32 to 40 inches to sand and gravel	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>308B:</b>					
Wadena, 32 to 40 inches to sand and gravel	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
<b>309:</b>					
Allendorf	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
<b>309B:</b>					
Allendorf	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
<b>309B2:</b>					
Allendorf, moderately eroded	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
<b>309C2:</b>					
Allendorf, moderately eroded	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
<b>310:</b>					
Galva	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
<b>310B:</b>					
Galva	95	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>310B2:</b>					
Galva, moderately eroded	100	Somewhat limited Slow water movement	0.46	Somewhat limited Seepage Slope	0.53 0.32
<b>310C2:</b>					
Galva, moderately eroded	95	Somewhat limited Slow water movement	0.46	Very limited Slope Seepage	1.00 0.53
<b>310D2:</b>					
Galva, moderately eroded	90	Somewhat limited Slope Slow water movement	0.63 0.46	Very limited Slope Seepage	1.00 0.53
<b>401B3:</b>					
Crofton, severely eroded	100	Somewhat limited Slow water movement	0.50	Somewhat limited Seepage Slope	0.50 0.32
<b>401C3:</b>					
Crofton, severely eroded	100	Somewhat limited Slow water movement	0.50	Very limited Slope Seepage	1.00 0.50
<b>401D3:</b>					
Crofton, severely eroded	100	Somewhat limited Slope Slow water movement	0.63 0.50	Very limited Slope Seepage	1.00 0.50
<b>401E3:</b>					
Crofton, severely eroded	100	Very limited Slope Slow water movement	1.00 0.50	Very limited Slope Seepage	1.00 0.50
<b>410:</b>					
Moody	100	Somewhat limited Slow water movement	0.50	Somewhat limited Seepage	0.50
<b>410B:</b>					
Moody	100	Somewhat limited Slow water movement	0.50	Somewhat limited Seepage Slope	0.50 0.32

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>410B2:</b>					
Moody, moderately eroded	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>410C2:</b>					
Moody, moderately eroded	95	Somewhat limited		Very limited	
		Slow water movement	0.50	Slope	1.00
				Seepage	0.50
<b>410D2:</b>					
Moody, moderately eroded	90	Somewhat limited		Very limited	
		Slope	0.63	Slope	1.00
		Slow water movement	0.50	Seepage	0.50
<b>428B:</b>					
Ely	95	Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>467:</b>					
Radford, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>474:</b>					
Bolan	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
<b>474B:</b>					
Bolan	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>474B2:</b>					
Bolton, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	0.32
<b>474C2:</b>					
Bolton, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50	Slope	1.00
<b>474D2:</b>					
Bolton, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
		Slow water movement	0.50		
<b>485:</b>					
Spillville, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
<b>486:</b>					
Davis, rarely flooded	95	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50	Seepage	0.50
		Flooding	0.40	Flooding	0.40
<b>615:</b>					
Colo, channeled, frequently flooded	60	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>615:</b>					
Spillville, channeled	35	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
		Slow water movement	0.50		
<b>670:</b>					
Rawles, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.50	Seepage	0.50
<b>733:</b>					
Calco, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>785:</b>					
Spillco, occasionally flooded	95	Very limited		Very limited	
		Flooding	1.00	Flooding	1.00
		Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Slow water movement	0.50	Seepage	0.50
<b>801B2:</b>					
Bolan variant, moderately eroded	95	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage Slope	1.00 0.32
<b>801C2:</b>					
Bolan variant, moderately eroded	90	Very limited		Very limited	
		Seepage, bottom layer	1.00	Seepage Slope	1.00 1.00

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>801D2:</b>					
Bolan variant, moderately eroded	100	Very limited		Very limited	
		Seepage, bottom layer	1.00	Slope	1.00
		Slope	0.63	Seepage	1.00
<b>801F:</b>					
Bolan variant	100	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Seepage, bottom layer	1.00	Seepage	1.00
<b>810:</b>					
Galva, bench	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
<b>810B:</b>					
Galva, bench	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
<b>810B2:</b>					
Galva, bench, moderately eroded	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
<b>812:</b>					
Moody, bench	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
<b>812B:</b>					
Moody, bench	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32
<b>812B2:</b>					
Moody, bench, moderately eroded	100	Somewhat limited		Somewhat limited	
		Slow water movement	0.50	Seepage	0.50
				Slope	0.32

# Sewage Disposal

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
<b>878B:</b>					
Ocheyedan	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
<b>878B2:</b>					
Ocheyedan, moderately eroded	90	Somewhat limited		Somewhat limited	
		Depth to saturated zone	0.99	Depth to saturated zone	0.71
		Slow water movement	0.46	Seepage	0.53
				Slope	0.32
<b>878C2:</b>					
Ocheyedan, moderately eroded	90	Somewhat limited		Very limited	
		Depth to saturated zone	0.99	Slope	1.00
		Slow water movement	0.46	Depth to saturated zone	0.71
				Seepage	0.53
<b>5010:</b>					
Pits	100	Not rated		Not rated	
<b>5040:</b>					
Orthents	100	Not rated		Not rated	
<b>5044:</b>					
Fluvaquents, frequently flooded, ponded	95	Not rated		Not rated	
<b>AW:</b>					
Animal waste lagoon	100	Not rated		Not rated	
<b>INT:</b>					
Intermittent water	100	Not rated		Not rated	
<b>SL:</b>					
Sewage lagoon	100	Not rated		Not rated	
<b>W:</b>					
Water	100	Not rated		Not rated	

# Roads and Streets, Shallow Excavations, and Lawns and Landscaping (IA)

Sioux County, Iowa

[The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations (IA)		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>1B3:</b>							
Ira, severely eroded	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
<b>1C3:</b>							
Ira, severely eroded	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
<b>1D3:</b>							
Ira, severely eroded	95	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.63	Slope	0.63
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	0.63				
<b>8B:</b>							
Judson	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>11B:</b>							
Radford, occasionally flooded	50	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
Judson	35	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>26:</b>							
Kennebec, occasionally flooded	95	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	0.61	Flooding	0.60
		Flooding	1.00	Flooding	0.60		
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				

# Roads and Streets, Shallow Excavations, and Lawns and Landscaping (IA)

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations (IA)		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>27B:</b>							
Terril	90	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.61		
		Frost action	0.50	Cutbanks cave	0.10		
<b>28B:</b>							
Dickman	95	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
<b>28C2:</b>							
Dickman, moderately eroded	95	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
<b>28D2:</b>							
Dickman, moderately eroded	95	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
				Slope	0.63		
<b>31:</b>							
Afton, occasionally flooded	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	1.00				
<b>32:</b>							
Spicer	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
<b>33C2:</b>							
Steinauer, moderately eroded	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>33D2:</b>							
Steinauer, moderately eroded	100	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.63	Slope	0.63
		Slope	0.63	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				

# Roads and Streets, Shallow Excavations, and Lawns and Landscaping (IA)

Sioux County, Iowa

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations (IA)		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
<b>33E2:</b>							
Steinauer, moderately eroded	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>33G:</b>							
Steinauer	95	Very limited		Very limited		Very limited	
		Slope	1.00	Slope	1.00	Slope	1.00
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>54:</b>							
Zook, occasionally flooded	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00	Too clayey	0.01		
		Shrink-swell	1.00				
<b>72:</b>							
Estherville	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.10
<b>72B:</b>							
Estherville	100	Not limited		Very limited		Somewhat limited	
				Cutbanks cave	1.00	Droughty	0.10
<b>72D2:</b>							
Estherville, moderately eroded	100	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.04	Cutbanks cave	1.00	Droughty	0.10
				Slope	0.04	Slope	0.04
<b>78B2:</b>							
Sac, moderately eroded	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Depth to saturated zone	0.19				

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<b>78C2:</b>							
Sac, moderately eroded	100	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Depth to saturated zone	0.19
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Depth to saturated zone	0.19				
<b>78D2:</b>							
Sac, moderately eroded	95	Very limited		Very limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	1.00	Slope	0.37
		Low strength	1.00	Slope	0.37	Depth to saturated zone	0.19
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Slope	0.37				
		Depth to saturated zone	0.19				
<b>91:</b>							
Primghar	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	1.00				
<b>91B:</b>							
Primghar	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	1.00				
<b>92:</b>							
Marcus	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Shrink-swell	1.00				
<b>108:</b>							
Wadena, 24 to 32 inches to sand and gravel	95	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
<b>108B:</b>							
Wadena, 24 to 32 inches to sand and gravel	100	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		

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<b>116:</b>							
Graceville	95	Very limited		Very limited		Not limited	
		Frost action	1.00	Cutbanks cave	1.00		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>133:</b>							
Colo, occasionally flooded	90	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>203:</b>							
Cylinder	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to saturated zone	1.00		
<b>259:</b>							
Biscay	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Cutbanks cave	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Depth to saturated zone	1.00		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>308:</b>							
Wadena, 32 to 40 inches to sand and gravel	100	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
<b>308B:</b>							
Wadena, 32 to 40 inches to sand and gravel	100	Not limited		Very limited		Not limited	
				Cutbanks cave	1.00		
<b>309:</b>							
Allendorf	95	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				

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<b>309B:</b>							
Allendorf	95	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>309B2:</b>							
Allendorf, moderately eroded	100	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>309C2:</b>							
Allendorf, moderately eroded	100	Very limited		Very limited		Not limited	
		Low strength	1.00	Cutbanks cave	1.00		
		Shrink-swell	0.50				
		Frost action	0.50				
<b>310:</b>							
Galva	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>310B:</b>							
Galva	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>310B2:</b>							
Galva, moderately eroded	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>310C2:</b>							
Galva, moderately eroded	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

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<b>310D2:</b>							
Galva, moderately eroded	90	Very limited		Somewhat limited		Somewhat limited:	
		Frost action	1.00	Slope	0.63	Slope	0.63
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	0.63				
		Shrink-swell	0.50				
<b>401B3:</b>							
Crofton, severely eroded	100	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
<b>401C3:</b>							
Crofton, severely eroded	100	Very limited		Somewhat limited		Not limited:	
		Low strength	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
<b>401D3:</b>							
Crofton, severely eroded	100	Very limited		Somewhat limited		Somewhat limited	
		Low strength	1.00	Slope	0.63	Slope	0.63
		Slope	0.63	Cutbanks cave	0.10		
		Frost action	0.50				
<b>401E3:</b>							
Crofton, severely eroded	100	Very limited		Very limited		Very limited	
		Low strength	1.00	Slope	1.00	Slope	1.00
		Slope	1.00	Cutbanks cave	0.10		
		Frost action	0.50				
<b>410:</b>							
Moody	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>410B:</b>							
Moody	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>410B2:</b>							
Moody, moderately eroded	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

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<b>410C2:</b>							
Moody, moderately eroded	95	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>410D2:</b>							
Moody, moderately eroded	90	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Slope	0.63	Slope	0.63
		Low strength	1.00	Cutbanks cave	0.10		
		Slope	0.63				
		Shrink-swell	0.50				
<b>428B:</b>							
Ely	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>467:</b>							
Radford, occasionally flooded	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
<b>474:</b>							
Bolan	100	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
<b>474B:</b>							
Bolan	95	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
<b>474B2:</b>							
Bolan, moderately eroded	95	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
<b>474C2:</b>							
Bolan, moderately eroded	95	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		

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474D2:							
Bolan, moderately eroded	95	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
485:							
Spillville, occasionally flooded	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
486:							
Davis, rarely flooded	95	Very limited		Somewhat limited		Not limited	
		Low strength	1.00	Depth to saturated zone	0.61		
		Shrink-swell	0.50	Cutbanks cave	0.10		
		Frost action	0.50				
		Flooding	0.40				
615:							
Colo, channeled, frequently flooded	60	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Flooding	1.00
		Frost action	1.00	Flooding	0.80	Depth to saturated zone	1.00
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
615:							
Spillville, channeled	35	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Flooding	1.00	Flooding	0.60	Flooding	0.60
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				
		Frost action	0.50				
670:							
Rawles, occasionally flooded	95	Very limited		Somewhat limited		Somewhat limited	
		Frost action	1.00	Depth to saturated zone	0.61	Flooding	0.60
		Flooding	1.00	Flooding	0.60		
		Low strength	1.00	Cutbanks cave	0.10		
		Shrink-swell	0.50				

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<b>733:</b>							
Calco, occasionally flooded	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	1.00				
<b>785:</b>							
Spilco, occasionally flooded	95	Very limited		Very limited		Very limited	
		Depth to saturated zone	1.00	Depth to saturated zone	1.00	Depth to saturated zone	1.00
		Frost action	1.00	Flooding	0.60	Flooding	0.60
		Flooding	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
<b>801B2:</b>							
Bolan variant, moderately eroded	95	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
<b>801C2:</b>							
Bolan variant, moderately eroded	90	Somewhat limited		Very limited		Not limited	
		Frost action	0.50	Cutbanks cave	1.00		
<b>801D2:</b>							
Bolan variant, moderately eroded	100	Somewhat limited		Very limited		Somewhat limited	
		Slope	0.63	Cutbanks cave	1.00	Slope	0.63
		Frost action	0.50	Slope	0.63		
<b>801F:</b>							
Bolan variant	100	Very limited		Very limited		Very limited	
		Slope	1.00	Cutbanks cave	1.00	Slope	1.00
		Frost action	0.50	Slope	1.00		
<b>810:</b>							
Galva, bench	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				

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<b>810B:</b>							
Galva, bench	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>810B2:</b>							
Galva, bench, moderately eroded	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>812:</b>							
Moody, bench	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>812B:</b>							
Moody, bench	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>812B2:</b>							
Moody, bench, moderately eroded	100	Very limited		Somewhat limited		Not limited	
		Frost action	1.00	Cutbanks cave	0.10		
		Low strength	1.00				
		Shrink-swell	0.50				
<b>878B:</b>							
Ocheyedan	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Depth to saturated zone	0.61		
				Cutbanks cave	0.10		
<b>878B2:</b>							
Ocheyedan, moderately eroded	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Depth to saturated zone	0.61		
				Cutbanks cave	0.10		

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<b>878C2:</b>							
Ocheyedan, moderately eroded	90	Somewhat limited		Somewhat limited		Not limited	
		Frost action	0.50	Depth to saturated zone	0.61		
				Cutbanks cave	0.10		
<b>5010:</b>							
Pits	100	Not rated		Not rated		Not rated	
<b>5040:</b>							
Orthents	100	Not rated		Not rated		Not rated	
<b>5044:</b>							
Fluvaquents, frequently flooded, ponded	95	Not rated		Not rated		Not rated	
<b>AW:</b>							
Animal waste lagoon	100	Not rated		Not rated		Not rated	
<b>INT:</b>							
Intermittent water	100	Not rated		Not rated		Not rated	
<b>SL:</b>							
Sewage lagoon	100	Not rated		Not rated		Not rated	
<b>W:</b>							
Water	100	Not rated		Not rated		Not rated	