

027CS—Crete silt loam, 1 to 3 percent slopes

Map Unit Composition

Crete: 90 percent
Minor components: 10 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Shoulder, backslope
Parent material: Silty and clayey loess
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.1 inches)
Shrink-swell potential: Very high (About 9.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2e

Typical Profile:

Ap—0 to 6 inches; silty clay loam
BA—6 to 11 inches; silty clay loam
Bt—11 to 27 inches; silty clay
Btk—27 to 40 inches; silty clay loam
BC—40 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 2 percent
Landform: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Benfield

Composition: About 2 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hobbs

Composition: About 2 percent
Slope: 0 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe25-34)

Lancaster

Composition: About 2 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Holder

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

027CX—Crete silty clay loam, 3 to 8 percent slopes, eroded

Map Unit Composition

Crete: 83 percent
Minor components: 17 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 3 to 8 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.8 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 7 inches; silty clay loam
Bt—7 to 31 inches; silty clay
C—31 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 5 percent
Landform: hillslope on upland
Slope: 2 to 7 percent

Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Holder

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Benfield

Composition: About 3 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hobbs

Composition: About 2 percent
Slope: 0 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe25-34)

Lancaster

Composition: About 2 percent
Slope: 5 to 12 percent
Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

027HN—Hobbs silt loam, channeled

Map Unit Composition

Hobbs: 90 percent
 Minor components: 10 percent

Component Descriptions

Hobbs

MLRA: 75 - Central Loess Plains
Landform: Flood plain on meander belt
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60
in/hr)
Available water capacity: High (About 11.9
inches)
Shrink-swell potential: Moderate (About 3.3
LEP)
Flooding hazard: Frequent
Ponding hazard: None

Depth to seasonal water saturation: More than 6
feet

Runoff class: Low

Ecological site: Loamy Lowland (pe25-34)

Land capability (nonirrigated): 5w

Typical Profile:

A—0 to 8 inches; silt loam
 C1—8 to 24 inches; silt loam
 C2—24 to 44 inches; silt loam
 C3—44 to 60 inches; silt loam

Minor Components**Unnamed Hydric Soil (ponding)**

Composition: About 2 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 2 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Crete

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Geary

Composition: About 2 percent
Landform: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Muir

Composition: About 2 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Terrace (pe25-34)

027KS—Kipson-Sogn silty clay loams, 5 to 20 percent slopes

Map Unit Composition

Kipson: 70 percent
 Sogn: 15 percent
 Minor components: 15 percent

Component Descriptions

Kipson

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone and shale
Slope: 5 to 20 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:
A—0 to 8 inches; silty clay loam
AC—8 to 18 inches; silty clay loam
Cr—18 to 22 inches; weathered bedrock

Sogn

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone and shale
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:
A—0 to 12 inches; silty clay loam
R—12 to 16 inches; unweathered bedrock

Minor Components

Tully

Composition: About 5 percent
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Benfield

Composition: About 5 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Geary

Composition: About 2 percent
Landform: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Rock outcrop

Composition: About 1 percent

Crete

Composition: About 1 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

061BE—Benfield-Florence complex, 5 to 30 percent slopes

Map Unit Composition

Benfield: 42 percent
Florence: 28 percent
Minor components: 30 percent

Component Descriptions

Benfield

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey pedisiment derived from limestone and shale over clayey residuum
weathered from calcareous shale
Slope: 5 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.7 inches)

Shrink-swell potential: High (About 8.9 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

A1—0 to 5 inches; silty clay loam
 A2—5 to 10 inches; silty clay loam
 Bt1—10 to 19 inches; gravelly silty clay
 Bt2—19 to 34 inches; silty clay
 2Btk—34 to 38 inches; silty clay
 2Cr—38 to 56 inches; weathered bedrock

Florence

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Gravelly residuum weathered from cherty limestone
Slope: 5 to 15 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 4.6 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

A1—0 to 5 inches; gravelly silt loam
 A2—5 to 14 inches; very gravelly silty clay
 Bt—14 to 48 inches; very cobbly clay
 Btk—48 to 56 inches; extremely cobbly silty clay
 R—56 to 60 inches; unweathered bedrock

Minor Components

Clime

Composition: About 10 percent
Landform: hillslope on upland
Slope: 20 to 40 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Konza

Composition: About 10 percent
Landform: ridge on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Labette

Composition: About 3 percent
Slope: 0 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Irwin

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-36)

Tully

Composition: About 2 percent
Landform: hillslope on upland
Slope: 8 to 15 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Kahola

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Ivan

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Rock outcrop

Composition: About 1 percent

061CF—Clime-Sogn silty clay loams, 5 to 20 percent slopes

Map Unit Composition

Clime: 60 percent
 Sogn: 20 percent
 Minor components: 20 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: High (About 8.4 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 12 inches; silty clay loam
 Bw—12 to 26 inches; silty clay
 C—26 to 30 inches; silty clay
 Cr—30 to 34 inches; weathered bedrock

Sogn

MLRA: 76 - Bluestem Hills
Landform: Hillslope, upland
Parent material: Loamy residuum weathered from limestone, unspecified
Slope: 1 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.0 inches)
Shrink-swell potential: Moderate (About 4.9 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe30-36)
Land capability (nonirrigated): 6s

Typical Profile:

A—0 to 9 inches; silty clay loam
 R—9 to 13 inches; unweathered bedrock

Minor Components

Tully

Composition: About 12 percent
Landform: hillslope on upland
Slope: 8 to 15 percent
Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Tuttle

Composition: About 2 percent
Landform: hillslope on upland
Slope: 20 to 40 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained

Irwin

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-36)

Ivan

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Konza

Composition: About 1 percent
Landform: ridge on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Kahola

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

061CR—Crete silty clay loam, 0 to 1 percent slopes

Map Unit Composition

Crete: 90 percent
 Minor components: 10 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Ridge on upland
Hillslope position: Shoulder, summit

Parent material: Loess
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Very high (About 9.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2s

Typical Profile:

Ap—0 to 6 inches; silty clay loam
 BA—6 to 14 inches; silty clay loam
 Bt—14 to 30 inches; silty clay
 Btk—30 to 42 inches; silty clay loam
 BC—42 to 60 inches; silty clay loam

Minor Components

Holder

Composition: About 5 percent
Landform: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hastings

Composition: About 5 percent
Landform: divide on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

061CS—Crete silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Crete: 90 percent
 Minor components: 10 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Shoulder, backslope
Parent material: Loess
Slope: 1 to 4 percent
Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.1 inches)
Shrink-swell potential: Very high (About 9.5 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2e

Typical Profile:

Ap—0 to 6 inches; silty clay loam
 BA—6 to 11 inches; silty clay loam
 Bt—11 to 27 inches; silty clay
 Btk—27 to 40 inches; silty clay loam
 BC—40 to 60 inches; silty clay loam

Minor Components

Holder

Composition: About 4 percent
Landform: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hastings

Composition: About 4 percent
Landform: divide on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Clime

Composition: About 2 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

061EU—Eudora silt loam, occasionally flooded

Map Unit Composition

Eudora: 85 percent
 Minor components: 15 percent

Component Descriptions

Eudora

MLRA: 75 - Central Loess Plains

Landform: Flood plain on river valley
Parent material: Loamy alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Low (About 2.4 LEP)
Flooding hazard: Occasional
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; silt loam
 A1—7 to 14 inches; silt loam
 A2—14 to 19 inches; silt loam
 C1—19 to 26 inches; silt loam
 C2—26 to 60 inches; very fine sandy loam

Minor Components

Mccook

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe25-34)

Sarpy

Composition: About 3 percent
Slope: 0 to 4 percent
Drainage class: Excessively drained
Ecological site: Sandy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

061HE—Haynie silt loam, frequently flooded

Component Descriptions

Haynie

MLRA: 75 - Central Loess Plains
Landform: Flood plain on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Low (About 2.6 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 5w

Typical Profile:

A—0 to 10 inches; silt loam
 C—10 to 60 inches; very fine sandy loam

Minor Components

Unnamed Stratified Soils (fine-Silty)

Composition: About 33 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained

Unnamed Stratified Soils (fine)

Composition: About 9 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Stratified Soils (sandy)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Excessively drained

Map Unit Composition

Haynie: 55 percent
 Minor components: 45 percent

**061KA—Kahola silt loam,
channeled**

Slope: 0 to 2 percent
Drainage class: Poorly drained

Map Unit Composition

Kahola: 75 percent
 Minor components: 25 percent

Component Descriptions**Kahola**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on meander belt
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.9 inches)
Shrink-swell potential: Moderate (About 4.0 LEP)
Flooding hazard: Frequent
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 5w

Typical Profile:

A1—0 to 24 inches; silt loam
 A2—24 to 36 inches; silt loam
 AC—36 to 44 inches; silt loam
 C—44 to 60 inches; silt loam

Minor Components**Tully**

Composition: About 13 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Ivan

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

**061KB—Kahola silt loam,
occasionally flooded****Map Unit Composition**

Kahola: 75 percent
 Minor components: 25 percent

Component Descriptions**Kahola**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.9 inches)
Shrink-swell potential: Moderate (About 4.0 LEP)
Flooding hazard: Occasional
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

A1—0 to 24 inches; silt loam
 A2—24 to 36 inches; silt loam
 AC—36 to 44 inches; silt loam
 C—44 to 60 inches; silt loam

Minor Components**Ivan**

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Tully

Composition: About 8 percent
Landform: hillslope on upland
Slope: 3 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Reading

Composition: About 5 percent

Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

061RE—Reading silty clay loam, 0 to 2 percent slopes**Map Unit Composition**

Reading: 85 percent
 Minor components: 15 percent

Component Descriptions**Reading**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Moderate (About 5.1 LEP)
Flooding hazard: Rare
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 1

Typical Profile:

Ap—0 to 8 inches; silty clay loam
 A—8 to 20 inches; silty clay loam
 Bt1—20 to 52 inches; silty clay loam
 Bt2—52 to 60 inches; silty clay loam

Minor Components**Tully**

Composition: About 10 percent
Landform: hillslope on upland
Slope: 1 to 4 percent

Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Kahola

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

061TO—Tully silty clay loam, 3 to 8 percent slopes**Map Unit Composition**

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions**Tully**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium
Slope: 3 to 8 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: High (About 8.0 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 12 inches; silty clay loam
 BA—12 to 21 inches; silty clay loam
 Bt1—21 to 31 inches; silty clay
 Bt2—31 to 40 inches; silty clay
 Bt3—40 to 52 inches; silty clay
 BC—52 to 60 inches; silty clay

Minor Components**Kahola**

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 3 percent

Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Benfield

Composition: About 2 percent
Landform: hillslope on upland
Slope: 5 to 15 percent
Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Florence

Composition: About 2 percent
Landform: hillslope on upland
Slope: 5 to 15 percent
Depth to restrictive feature: 40 to 60 inches
to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Clime

Composition: About 2 percent
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Ivan

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

117PA—Pawnee clay loam, 1 to 4 percent slopes**Map Unit Composition**

Pawnee: 88 percent
 Minor components: 12 percent

Component Descriptions**Pawnee**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Clayey drift
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: Medium

Ecological site: Loamy Upland (pe30-37)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 13 inches; clay loam
 H2—13 to 36 inches; clay
 H3—36 to 60 inches; clay loam

Minor Components**Wymore**

Composition: About 3 percent
Landform: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Shelby

Composition: About 3 percent
Slope: 10 to 14 percent
Drainage class: Moderately well drained

Morrill

Composition: About 3 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Kipson

Composition: About 3 percent
Slope: 5 to 25 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Ecological site: Limy Upland (pe30-36)

117PB—Pawnee clay loam, 4 to 8 percent slopes**Map Unit Composition**

Pawnee: 88 percent
 Minor components: 12 percent

Component Descriptions**Pawnee**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Clayey drift
Slope: 4 to 8 percent
Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe30-37)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 13 inches; clay loam
 H2—13 to 36 inches; clay
 H3—36 to 60 inches; clay loam

Minor Components

Wymore

Composition: About 3 percent
Landform: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

Shelby

Composition: About 3 percent
Slope: 10 to 14 percent
Drainage class: Moderately well drained

Morrill

Composition: About 3 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Kipson

Composition: About 3 percent
Slope: 5 to 25 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Ecological site: Limy Upland (pe30-36)

149HS—Haynie-Sarpy complex, occasionally flooded

Map Unit Composition

Haynie: 60 percent
 Sarpy: 25 percent
 Minor components: 15 percent

Component Descriptions

Haynie

MLRA: 76 - Bluestem Hills
Landform: Flood-plain step on river valley
Parent material: Coarse-silty alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-37)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 9 inches; very fine sandy loam
 H2—9 to 60 inches; silt loam

Sarpy

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 3 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe30-37)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 6 inches; fine sand
 H2—6 to 60 inches; sand

Minor Components

Eudora

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Kimo

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-37)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

149PS—Paxico silt loam, frequently flooded**Map Unit Composition**

Paxico: 90 percent
 Minor components: 10 percent

Component Descriptions**Paxico**

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Loamy alluvium over sandy alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Very Rare
Depth to seasonal water saturation: About 18 to 36 inches
Runoff class: Low
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 42 inches; silt loam
 H2—42 to 60 inches; loamy fine sand

Minor Components**Haynie**

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Sarpy

Composition: About 5 percent
Slope: 0 to 3 percent
Drainage class: Excessively drained
Ecological site: Sandy Lowland (pe30-37)

149SF—Sarpy sand, frequently flooded**Map Unit Composition**

Sarpy: 90 percent
 Minor components: 10 percent

Component Descriptions**Sarpy**

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Sandy alluvium
Slope: 0 to 2 percent
Drainage class: Excessively drained
Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.1 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe30-37)
Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 6 inches; sand
 H2—6 to 60 inches; sand

Minor Components**Eudora**

Composition: About 4 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Haynie

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-37)

Kimo

Composition: About 3 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-37)

197CM—Clime silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Clime: 85 percent
Minor components: 15 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from calcareous shale
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.7 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 5 inches; silty clay loam
H2—5 to 18 inches; silty clay
H3—18 to 32 inches; silty clay
Cr—32 to 36 inches; weathered bedrock

Minor Components

Sogn

Composition: About 5 percent
Landform: hillslope on upland
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Wamego

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-37)

Martin

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

197FL—Florence-Labette complex, 3 to 15 percent slopes

Map Unit Composition

Florence: 40 percent
Labette: 30 percent
Minor components: 30 percent

Component Descriptions

Florence

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey residuum weathered from cherty limestone
Slope: 3 to 15 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.3 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 14 inches; gravelly silt loam
H2—14 to 18 inches; gravelly silty clay loam
H3—18 to 56 inches; very gravelly clay
R—56 to 60 inches; unweathered bedrock

Labette

MLRA: 76 - Bluestem Hills
Landform: Ridge on upland
Hillslope position: Shoulder
Parent material: Silty and clayey residuum weathered from limestone and shale
Slope: 3 to 5 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; silt loam
 H2—7 to 35 inches; silty clay
 R—35 to 39 inches; unweathered bedrock

Minor Components

Clime

Composition: About 10 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Martin

Composition: About 10 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Sogn

Composition: About 5 percent
Landform: hillslope on upland
Slope: 5 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Irwin

Composition: About 5 percent
Landform: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-36)

1971B—Irwin silty clay loam, 1 to 3 percent slopes

Map Unit Composition

Irwin: 80 percent
 Minor components: 20 percent

Component Descriptions

Irwin

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Shoulder
Parent material: Silty and clayey residuum weathered from clayey shale
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.6 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 12 inches; silty clay loam
 H2—12 to 42 inches; clay, silty clay
 H3—42 to 60 inches; clay

Minor Components

Ladysmith

Composition: About 10 percent
Landform: divide on upland
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe30-36)

Dwight

Composition: About 10 percent
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe35-42)

1971D—Irwin silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Irwin: 85 percent
 Minor components: 15 percent

Component Descriptions

Irwin

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey alluvium over clayey residuum weathered from limestone and shale
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.7 inches)
Shrink-swell potential: High (About 8.9 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

A—0 to 6 inches; silty clay loam
 BA—6 to 13 inches; silty clay loam
 Bt1—13 to 30 inches; silty clay
 Btk—30 to 41 inches; silty clay
 2Bt2—41 to 72 inches; silty clay

Minor Components

Konza

Composition: About 10 percent
Landform: ridge on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe30-36)

Florence

Composition: About 2 percent
Landform: hillslope on upland
Slope: 5 to 10 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Clime

Composition: About 2 percent
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

1971V—Ivan silt loam, occasionally flooded

Map Unit Composition

Ivan: 90 percent
 Minor components: 10 percent

Component Descriptions

Ivan

MLRA: 76 - Bluestem Hills
Landform: Flood plain on valley
Parent material: Calcareous fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 13.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 36 inches; silt loam
 H2—36 to 60 inches; silt loam

Minor Components

Chase

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe35-42)

Reading

Composition: About 4 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

197IX—Ivan silty clay loam, channeled

Map Unit Composition

Ivan: 80 percent

Minor components: 20 percent

Component Descriptions

Ivan

MLRA: 76 - Bluestem Hills

Landform: Flood plain on valley

Parent material: Calcareous fine-silty alluvium

Slope: 0 to 2 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.8 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 40 inches; silty clay loam

H2—40 to 60 inches; silt loam

Minor Components

Martin

Composition: About 10 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe30-36)

Reading

Composition: About 10 percent

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil

Slope: 0 to 2 percent

Drainage class: Poorly drained

197PN—Pawnee clay loam, 3 to 7 percent slopes

Map Unit Composition

Pawnee: 85 percent

Minor components: 15 percent

Component Descriptions

Pawnee

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Clayey drift

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 8.3 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 9 to 14 inches

Runoff class: High

Ecological site: Clay Upland (pe30-37)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 14 inches; clay loam

H2—14 to 34 inches; clay

H3—34 to 72 inches; sandy clay loam

Minor Components

Oska

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 6 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)

Drainage class: Well drained

Ecological site: Loamy Upland (pe35-42)

Morrill

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-37)

Martin

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Slope: 6 to 12 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe30-37)

197WE—Wamego silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Wamego: 90 percent
 Minor components: 10 percent

Component Descriptions

Wamego

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandy and silty residuum weathered from shale, unspecified
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.6 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe30-37)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 9 inches; silty clay loam
 Bt—9 to 20 inches; silty clay loam
 BC—20 to 25 inches; silty clay loam
 Cr—25 to 36 inches; weathered bedrock

Minor Components**Olmitz**

Composition: About 5 percent
Landform: fan terrace on upland
Slope: 2 to 5 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe30-37)

Pawnee

Composition: About 5 percent
Landform: hillslope on upland

201CS—Crete silty clay loam, 1 to 3 percent slopes

Map Unit Composition

Crete: 95 percent
 Minor components: 5 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey loess
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.0 inches)
Shrink-swell potential: Very high (About 9.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe26-30)
Land capability (nonirrigated): 2e

Typical Profile:

Ap—0 to 6 inches; silty clay loam
 BA—6 to 9 inches; silty clay loam
 Bt—9 to 32 inches; silty clay
 Btk—32 to 40 inches; silty clay loam
 BC—40 to 60 inches; silty clay loam

Minor Components**Hobbs**

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe26-30)

201CX—Crete silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Crete: 90 percent
Minor components: 10 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey loess
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Impermeable (About 0.00 in/hr)
Available water capacity: High (About 10.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe26-30)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 5 inches; silty clay loam
Bt—5 to 30 inches; silty clay
BC—30 to 60 inches; silt loam

Minor Components

Hobbs

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe26-30)

Longford

Composition: About 5 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

201KS—Kipson-Sogn complex, 5 to 30 percent slopes

Map Unit Composition

Kipson: 70 percent
Sogn: 15 percent

Minor components: 15 percent

Component Descriptions

Kipson

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from limestone and shale
Slope: 5 to 30 percent
Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Limy Upland (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 12 inches; silty clay loam
H2—12 to 18 inches; silty clay loam
Cr—18 to 22 inches; weathered bedrock

Sogn

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Shoulder
Parent material: Loamy residuum weathered from limestone
Slope: 5 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 3.1 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silt loam
H2—8 to 16 inches; channery silt loam
H3—16 to 20 inches; unweathered bedrock

Minor Components**Crete**

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe26-30)

Tully

Composition: About 5 percent
Landform: hillslope on upland
Slope: 5 to 12 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Rock outcrop

Composition: About 3 percent
Slope: 15 to 45 percent

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

Unnamed Hydric Soils

Composition: About 1 percent
Drainage class: Poorly drained

201LC—Lancaster loam, 3 to 7 percent slopes**Map Unit Composition**

Lancaster: 85 percent
 Minor components: 15 percent

Component Descriptions**Lancaster**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 5.2 inches)
Shrink-swell potential: Moderate (About 4.1 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium

Ecological site: Loamy Upland (pe26-30)
Land capability (nonirrigated): 4e

Typical Profile:

A—0 to 9 inches; loam
 Bt—9 to 24 inches; clay loam
 BC—24 to 29 inches; sandy clay loam
 Cr—29 to 29 inches; weathered bedrock

Minor Components**Crete**

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Wells

Composition: About 5 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Longford

Composition: About 3 percent
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Hedville

Composition: About 1 percent
Landform: hillslope on upland
Slope: 5 to 30 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

Edalgo

Composition: About 1 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe26-30)

Ad—Ivan silt loam, channeled**Map Unit Composition**

Ivan: 99 percent
 Minor components: 1 percent

Component Descriptions

Ivan

MLRA: 75 - Central Loess Plains

Landform: Flood plain on alluvial plain

Parent material: Loamy alluvium

Slope: 0 to 3 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.3 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe25-34)

Land capability (nonirrigated): 5w

Typical Profile:

A1—0 to 7 inches; silt loam

A2—7 to 26 inches; silty clay loam

AC—26 to 39 inches; silty clay loam

C—39 to 64 inches; silty clay loam

Minor Components

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Drainage class: Well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Low (About 5.8 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 4e

Typical Profile:

A—0 to 10 inches; silty clay loam

Bt—10 to 32 inches; silty clay

2Cr—32 to 36 inches; weathered bedrock

Minor Components

Crete

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Kipson

Composition: About 5 percent

Slope: 5 to 20 percent

Depth to restrictive feature: 7 to 20 inches to bedrock (paralithic)

Drainage class: Somewhat excessively drained

Ecological site: Limy Upland (pe25-34)

Rock outcrop

Composition: About 1 percent

AED—Arents, Earthen Dam

BE—Benfield silty clay loam, 3 to 7 percent slopes

Map Unit Composition

Benfield: 89 percent

Minor components: 11 percent

Component Descriptions

Benfield

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Parent material: Silty loess over clayey residuum

Slope: 3 to 7 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Bf—Benfield-Florence complex, 5 to 20 percent slopes

Map Unit Composition

Benfield: 45 percent

Florence: 30 percent

Minor components: 25 percent

Component Descriptions

Benfield

MLRA: 76 - Bluestem Hills

Landform: Hillslope on upland

Parent material: Clayey residuum weathered from limestone and shale

Slope: 5 to 20 percent

Depth to restrictive feature: 22 to 39 inches to bedrock (paralithic)

Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 6 inches; silty clay loam
 H2—6 to 30 inches; silty clay
 H3—30 to 35 inches; silty clay loam
 Cr—35 to 39 inches; weathered bedrock

Florence

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Clayey residuum weathered from cherty limestone
Slope: 5 to 15 percent
Depth to restrictive feature: 24 to 39 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Very low (About 2.8 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 5 inches; gravelly silt loam
 H2—5 to 10 inches; very gravelly silty clay loam
 H3—10 to 14 inches; very gravelly silty clay loam
 H4—14 to 30 inches; gravelly clay
 R—30 to 34 inches; unweathered bedrock

Minor Components

Cline

Composition: About 10 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Sogn

Composition: About 5 percent
Slope: 5 to 8 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Dwight

Composition: About 4 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Ecological site: Clay Pan (pe25-34)

Irwin

Composition: About 3 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Tully

Composition: About 3 percent
Landform: hillslope on upland
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

**Bk—Wymore-Kennebec complex,
0 to 17 percent slopes**

Map Unit Composition

Wymore: 60 percent
 Kennebec: 45 percent
 Minor components: 5 percent

Component Descriptions

Wymore

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey loess over clayey pedisidiment
Slope: 11 to 17 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None

Depth to seasonal water saturation: About 12 to 36 inches

Runoff class: Very high

Ecological site: Clay Upland (pe25-34)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 13 inches; silty clay loam

H2—13 to 33 inches; silty clay

H3—33 to 64 inches; silty clay loam

Kennebec

MLRA: 75 - Central Loess Plains

Landform: Flood plain on alluvial plain

Parent material: Fine-silty alluvium

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.8 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 36 to 60 inches

Runoff class: Low

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 18 inches; silt loam

H2—18 to 60 inches; silty clay loam

Minor Components

Ivan

Composition: About 3 percent

Slope: 0 to 2 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

BOP—Borrow Pits

General Considerations: An open excavation from which soil and underlying material have been removed usually for construction purposes.

Ca—Carr-Sarpy complex, occasionally flooded

Map Unit Composition

Carr: 45 percent

Sarpy: 40 percent

Minor components: 15 percent

Component Descriptions

Carr

MLRA: 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Loamy alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

Slowest permeability: Moderately rapid (About 2.00 in/hr)

Available water capacity: High (About 9.9 inches)

Shrink-swell potential: Low (About 0.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sandy Lowland (pe30-36)

Land capability (nonirrigated): 3w

Typical Profile:

A1—0 to 9 inches; fine sandy loam

A2—9 to 17 inches; fine sandy loam

AC—17 to 28 inches; fine sandy loam

C—28 to 60 inches; very fine sandy loam

Sarpy

MLRA: 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 1 percent

Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.3 inches)

Shrink-swell potential: Low (About 0.0 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sands (pe30-36)

Land capability (nonirrigated): 3w

Typical Profile:

A—0 to 5 inches; loamy fine sand

C—5 to 60 inches; fine sand

Minor Components**Haynie**

Composition: About 13 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Ch—Chase silty clay loam, rarely flooded**Map Unit Composition**

Chase: 84 percent
 Minor components: 15 percent

Component Descriptions**Chase**

MLRA: 76 - Bluestem Hills
Landform: Terrace on river valley
Parent material: Silty and clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.2 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: About 24 to 48 inches
Runoff class: High
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; silty clay loam
 AB—7 to 13 inches; silty clay loam
 Bt—13 to 40 inches; silty clay
 BC—40 to 50 inches; silty clay
 C—50 to 60 inches; silty clay

Minor Components**Reading**

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Sutphen

Composition: About 4 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe26-30)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Cs—Clime-Sogn complex, 5 to 20 percent slopes**Map Unit Composition**

Clime: 50 percent
 Sogn: 30 percent
 Minor components: 20 percent

Component Descriptions**Clime**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.3 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 12 inches; silty clay loam
 H2—12 to 30 inches; silty clay
 Cr—30 to 34 inches; weathered bedrock

Sogn

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from limestone, unspecified

Slope: 5 to 8 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 1.8 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Limy (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 9 inches; silty clay loam
 R—9 to 13 inches; unweathered bedrock

Minor Components**Unnamed Soil**

Composition: About 10 percent
Slope: 5 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Irwin

Composition: About 3 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Unnamed Hydric Soils

Composition: About 1 percent
Drainage class: Poorly drained

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

CT—Crete silty clay loam, 3 to 7 percent slopes**Map Unit Composition**

Crete: 83 percent
 Minor components: 17 percent

Component Descriptions**Crete**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.1 inches)
Shrink-swell potential: Very high (About 9.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 7 inches; silty clay loam
 BA—7 to 11 inches; silty clay loam
 Bt—11 to 30 inches; silty clay
 BCk—30 to 40 inches; silty clay loam
 C—40 to 60 inches; silty clay loam

Minor Components**Geary**

Composition: About 5 percent
Landform: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Holder

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Benfield

Composition: About 3 percent
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hobbs

Composition: About 2 percent
Slope: 0 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe25-34)

Lancaster

Composition: About 2 percent
Slope: 5 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Dr—Dwight-Irwin complex, 1 to 4 percent slopes**Map Unit Composition**

Dwight: 45 percent
 Irwin: 40 percent
 Minor components: 15 percent

Component Descriptions**Dwight**

MLRA: 75 - Central Loess Plains
Landform: Depression on ridge on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from limestone, cherty
Slope: 1 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 5.6 inches)
Shrink-swell potential: Very high (About 9.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 4 inches; silt loam
 Bt—4 to 17 inches; silty clay
 BC—17 to 43 inches; silty clay
 R—43 to 43 inches; unweathered bedrock

Irwin

MLRA: 75 - Central Loess Plains
Landform: Ridge on upland
Parent material: Clayey pedisidiment derived from limestone and shale
Slope: 1 to 4 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.0 inches)
Shrink-swell potential: Very high (About 9.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 7 inches; silty clay loam
 AB—7 to 11 inches; silty clay loam
 Bt—11 to 35 inches; silty clay
 BC—35 to 50 inches; silty clay
 C—50 to 55 inches; silty clay
 Cr—55 to 55 inches; unweathered bedrock

Minor Components**Clime**

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Wymore

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe25-34)

Dw—Dwight-Irwin complex, 1 to 4 percent slopes, eroded

Map Unit Composition

Dwight: 45 percent
Irwin: 40 percent
Minor components: 15 percent

Component Descriptions

Dwight

MLRA: 75 - Central Loess Plains
Landform: Depression on divide on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from limestone, cherty
Slope: 1 to 3 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 5.6 inches)
Shrink-swell potential: Very high (About 9.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Pan (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 4 inches; silt loam
Bt—4 to 17 inches; silty clay
BC—17 to 43 inches; silty clay
R—43 to 43 inches; unweathered bedrock

Irwin

MLRA: 75 - Central Loess Plains
Landform: Divide on upland
Hillslope position: Summit
Parent material: Clayey pedisidiment derived from limestone and shale
Slope: 1 to 4 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 6.6 inches)
Shrink-swell potential: Very high (About 9.9 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Clay Upland (pe25-34)

Land capability (nonirrigated): 4e

Typical Profile:

Ap—0 to 8 inches; silty clay loam
Bt—8 to 35 inches; silty clay
BC—35 to 50 inches; silty clay
C—50 to 55 inches; silty clay
Cr—55 to 55 inches; unweathered bedrock

Minor Components

Clime

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Wymore

Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe25-34)

Em—Elmont silt loam, 3 to 8 percent slopes

Map Unit Composition

Elmont: 74 percent
Minor components: 26 percent

Component Descriptions

Elmont

MLRA: 76 - Bluestem Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale-siltstone
Slope: 3 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Moderate (About 8.4 inches)
Shrink-swell potential: Moderate (About 5.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 10 inches; silt loam
 BA—10 to 18 inches; silty clay loam
 Bt—18 to 28 inches; silty clay loam
 BC—28 to 33 inches; silty clay loam
 C—33 to 44 inches; clay loam
 R—44 to 44 inches; weathered bedrock

Minor Components

Unnamed Soil (moderately Deep)

Composition: About 25 percent
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Rock outcrop

Composition: About 1 percent

En—Elmont-Clime complex, 5 to 15 percent slopes

Map Unit Composition

Elmont: 35 percent
 Clime: 30 percent
 Minor components: 35 percent

Component Descriptions

Elmont

MLRA: 76 - Bluestem Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale-siltstone
Slope: 5 to 12 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: Moderate (About 8.4 inches)
Shrink-swell potential: Moderate (About 5.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 10 inches; silt loam
 BA—10 to 18 inches; silty clay loam
 Bt—18 to 28 inches; silty clay loam
 BC—28 to 33 inches; silty clay loam
 C—33 to 44 inches; clay loam
 R—44 to 44 inches; weathered bedrock

Clime

MLRA: 76 - Bluestem Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 5 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.9 inches)
Shrink-swell potential: High (About 6.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 6e

Typical Profile:

A1—0 to 8 inches; silty clay loam
 A2—8 to 12 inches; silty clay loam
 Bw—12 to 20 inches; silty clay loam
 C—20 to 30 inches; silty clay loam
 Cr—30 to 30 inches; weathered bedrock

Minor Components

Unnamed Soil (moderately Deep)

Composition: About 20 percent
Slope: 5 to 12 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Irwin

Composition: About 10 percent
Slope: 4 to 8 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Sogn

Composition: About 5 percent
Slope: 5 to 8 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Eu—Eudora silt loam, rarely flooded**Map Unit Composition**

Eudora: 88 percent
 Minor components: 12 percent

Component Descriptions**Eudora**

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Loamy alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: Low (About 2.4 LEP)
Flooding hazard: Occasional
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; silt loam
 A1—7 to 14 inches; silt loam
 A2—14 to 19 inches; silt loam
 C1—19 to 26 inches; silt loam
 C2—26 to 60 inches; very fine sandy loam

Minor Components**Muir**

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Terrace (pe25-34)

Haynie

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Ga—Geary silt loam, 1 to 4 percent slopes**Map Unit Composition**

Geary: 90 percent
 Minor components: 10 percent

Component Descriptions**Geary**

MLRA: 76 - Bluestem Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Moderate (About 5.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 2e

Typical Profile:

A—0 to 8 inches; silt loam
 BA—8 to 13 inches; silty clay loam
 Bt—13 to 29 inches; silty clay loam
 BC—29 to 42 inches; silty clay loam
 C—42 to 60 inches; silty clay loam

Minor Components**Smolan**

Composition: About 10 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe30-36)

Ecological site: Loamy Upland (pe30-36)

Ha—Haynie very fine sandy loam, occasionally flooded**Ge—Geary silt loam, 4 to 8 percent slopes****Map Unit Composition**

Haynie: 90 percent
 Minor components: 10 percent

Map Unit Composition

Geary: 90 percent
 Minor components: 10 percent

Component Descriptions**Haynie**

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Low (About 0.9 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 1

Component Descriptions**Geary**

MLRA: 76 - Bluestem Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Moderate (About 5.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 10 inches; very fine sandy loam
 C—10 to 20 inches; very fine sandy loam
 Ab—20 to 30 inches; very fine sandy loam
 ACb—30 to 41 inches; very fine sandy loam
 2C—41 to 60 inches; silty clay loam

Typical Profile:

A—0 to 8 inches; silt loam
 BA—8 to 13 inches; silty clay loam
 Bt—13 to 29 inches; silty clay loam
 BC—29 to 42 inches; silty clay loam
 C—42 to 60 inches; silty clay loam

Minor Components**Carr**

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Sandy Lowland (pe30-36)

Minor Components**Kenesaw**

Composition: About 5 percent
Slope: 2 to 6 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Eudora

Composition: About 4 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Smolan

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

HO—Hobbs silt loam, occasionally flooded**Map Unit Composition**

Hobbs: 89 percent
 Minor components: 11 percent

Component Descriptions**Hobbs**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on alluvial plain
Parent material: Fine-silty alluvium
Slope: 0 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Moderate (About 3.3 LEP)
Flooding hazard: Occasional
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe25-34)
Land capability (nonirrigated): 2w

Typical Profile:

A—0 to 8 inches; silt loam
 C1—8 to 16 inches; silt loam
 C2—16 to 40 inches; silt loam
 C3—40 to 60 inches; silt loam

Minor Components**Sutphen**

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Lowland (pe30-36)

Crete

Composition: About 2 percent
Landform: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Geary

Composition: About 2 percent
Landform: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Ic—Irwin silty clay loam, 4 to 8 percent slopes**Map Unit Composition**

Irwin: 85 percent
 Minor components: 15 percent

Component Descriptions**Irwin**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Clayey pedisegment derived from shale
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 55 inches; silty clay
 Cr—55 to 59 inches; unweathered bedrock

Minor Components**Clime**

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained

Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Wymore

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe25-34)

Id—Irwin silty clay loam, 4 to 8 percent slopes, eroded

Map Unit Composition

Irwin: 85 percent

Minor components: 15 percent

Component Descriptions

Irwin

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Clayey pedisegment derived from shale

Slope: 4 to 8 percent

Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Slowest permeability: Very slow (About 0.00 in/hr)

Available water capacity: Moderate (About 8.0 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Clay Upland (pe25-34)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 11 inches; silty clay loam

H2—11 to 55 inches; silty clay

Cr—55 to 59 inches; unweathered bedrock

Minor Components

Cline

Phase: Eroded

Composition: About 5 percent

Slope: 3 to 6 percent

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Wymore

Phase: Eroded

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe25-34)

Ie—Ivan silty clay loam, 1 to 3 percent slopes

Map Unit Composition

Ivan: 88 percent

Minor components: 12 percent

Component Descriptions

Ivan

MLRA: 76 - Bluestem Hills

Landform: Flood plain on valley

Parent material: Calcareous fine-silty colluvium

Slope: 1 to 3 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.5 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 7 inches; silty clay loam

H2—7 to 64 inches; silty clay loam

Minor Components

Reading

Composition: About 10 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Iv—Ivan and Kennebec silt loams, occasionally flooded

Map Unit Composition

Ivan: 45 percent

Kennebec: 45 percent

Minor components: 10 percent

Component Descriptions

Ivan

MLRA: 76 - Bluestem Hills

Landform: Flood plain on valley

Parent material: Calcareous fine-silty alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.5 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 7 inches; silt loam

H2—7 to 64 inches; silty clay loam

Kennebec

MLRA: 76 - Bluestem Hills

Landform: Flood plain on valley

Parent material: Fine-silty alluvium

Slope: 0 to 1 percent

Drainage class: Moderately well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.8 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: About 36 to 60 inches

Runoff class: Low

Ecological site: Loamy Lowland (pe30-36)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 18 inches; silt loam

H2—18 to 60 inches; silty clay loam

Minor Components

Reading

Composition: About 4 percent

Slope: 0 to 1 percent

Drainage class: Well drained

Ecological site: Loamy Lowland (pe30-36)

Muir

Composition: About 4 percent

Slope: 0 to 2 percent

Drainage class: Well drained

Ecological site: Loamy Terrace (pe25-34)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Ka—Kahola silt loam, rarely flooded

Map Unit Composition

Kahola: 85 percent

Minor components: 15 percent

Component Descriptions

Kahola

MLRA: 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Fine-silty alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.2 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 1

Typical Profile:
 H1—0 to 13 inches; silt loam
 H2—13 to 60 inches; silty clay loam

Minor Components

Eudora

Composition: About 7 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-37)

Haynie

Composition: About 6 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

Ke—Kenesaw silt loam, 2 to 6 percent slopes

Map Unit Composition

Kenesaw: 90 percent
 Minor components: 10 percent

Component Descriptions

Kenesaw

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Coarse-silty loess
Slope: 2 to 6 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 36 inches; silt loam
 H3—36 to 60 inches; silt loam

Minor Components

Geary

Composition: About 10 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Kf—Kenesaw silt loam, 6 to 10 percent slopes

Map Unit Composition

Kenesaw: 85 percent
 Minor components: 15 percent

Component Descriptions

Kenesaw

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Parent material: Coarse-silty loess
Slope: 6 to 10 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 36 inches; silt loam
 H3—36 to 60 inches; silt loam

Minor Components**Geary**

Composition: About 15 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

KN—Kennebec silt loam, occasionally flooded**Map Unit Composition**

Kennebec: 95 percent
 Minor components: 5 percent

Component Descriptions**Kennebec**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on valley
Parent material: Fine-silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 13.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 40 to 44 inches
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 48 inches; silt loam
 H2—48 to 60 inches; silt loam

Minor Components**Wabash**

Composition: About 4 percent
Slope: 0 to 1 percent
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe30-37)

Unnamed Hydric Soil

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

M-W—Miscellaneous Water**Ma—Mayberry clay loam, 2 to 6 percent slopes****Map Unit Composition**

Mayberry: 95 percent
 Minor components: 5 percent

Component Descriptions**Mayberry**

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Till, unspecified
Slope: 2 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 7.0 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 9 to 14 inches
Runoff class: High
Ecological site: Clay Upland (pe30-37)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 7 inches; clay loam
 AB—7 to 13 inches; clay loam
 Bt—13 to 43 inches; clay
 BC—43 to 57 inches; clay
 C—57 to 64 inches; clay loam

Minor Components**Irwin**

Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Mb—Mayberry clay loam, 2 to 6 percent slopes, eroded

Map Unit Composition

Mayberry: 95 percent
Minor components: 5 percent

Component Descriptions

Mayberry

MLRA: 76 - Bluestem Hills
Landform: Upland on hillslope
Parent material: Clayey till
Slope: 2 to 6 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 6.8 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe30-36)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 7 inches; clay loam
Bt—7 to 37 inches; clay
BC—37 to 51 inches; clay
C—51 to 64 inches; clay loam

Minor Components

Irwin

Phase: Eroded
Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Mu—Muir silt loam, rarely flooded

Map Unit Composition

Muir: 84 percent
Minor components: 16 percent

Component Descriptions

Muir

MLRA: 76 - Bluestem Hills
Landform: Flood plain on alluvial plain
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 3.0 LEP)
Flooding hazard: Rare
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Terrace (pe25-34)
Land capability (nonirrigated): 1

Typical Profile:

Ap—0 to 7 inches; silt loam
A—7 to 18 inches; silt loam
Bw1—18 to 24 inches; silt loam
Bw2—24 to 42 inches; silt loam
C—42 to 60 inches; silt loam

Minor Components

Sutphen

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Lowland (pe30-36)

Eudora

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Unnamed Hydric Soil (ponding)

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

QUA—Quarries

Rd—Reading silt loam, 0 to 1 percent slopes, rarely flooded**Map Unit Composition**

Reading: 90 percent
 Minor components: 10 percent

Component Descriptions**Reading**

MLRA: 76 - Bluestem Hills
Landform: Terrace on river valley
Parent material: Fine-silty alluvium
Slope: 0 to 1 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 11 inches; silt loam
 H2—11 to 52 inches; silty clay loam
 H3—52 to 60 inches; silty clay loam

Minor Components**Muir**

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Terrace (pe25-34)

Chase

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe30-36)

Re—Reading silt loam, 1 to 3 percent slopes, rarely flooded**Map Unit Composition**

Reading: 90 percent
 Minor components: 10 percent

Component Descriptions**Reading**

MLRA: 76 - Bluestem Hills
Landform: Alluvial fan on river valley
Parent material: Fine-silty alluvium
Slope: 1 to 3 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Lowland (pe30-36)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 11 inches; silt loam
 H2—11 to 52 inches; silty clay loam
 H3—52 to 60 inches; silty clay loam

Minor Components**Tully**

Composition: About 10 percent
Landform: hillslope on upland
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Sa—Sarpy loamy fine sand, 0 to 4 percent slopes, occasionally flooded**Map Unit Composition**

Sarpy: 98 percent
 Minor components: 2 percent

Component Descriptions

Sarpy

MLRA: 76 - Bluestem Hills

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 5 percent

Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.1 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sands (pe30-36)

Land capability (nonirrigated): 4s

Typical Profile:

H1—0 to 5 inches; loamy fine sand

H2—5 to 60 inches; fine sand

Minor Components

Unnamed Hydric Soil (ponding)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Sm—Smolan silt loam, 1 to 4 percent slopes

Map Unit Composition

Smolan: 90 percent

Minor components: 10 percent

Component Descriptions

Smolan

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Silty and clayey loess

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.5 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Loamy Upland (pe30-36)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 8 inches; silt loam

H2—8 to 17 inches; silty clay loam

H3—17 to 51 inches; silty clay loam

H4—51 to 60 inches; silty clay loam

Minor Components

Wymore

Composition: About 5 percent

Landform: hillslope on upland

Slope: 3 to 6 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe25-34)

Geary

Composition: About 5 percent

Slope: 4 to 8 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Sn—Smolan silt loam, 4 to 8 percent slopes

Map Unit Composition

Smolan: 75 percent

Minor components: 25 percent

Component Descriptions

Smolan

MLRA: 75 - Central Loess Plains

Landform: Hillslope on upland

Parent material: Silty and clayey loess

Slope: 4 to 8 percent

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.5 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Loamy Upland (pe30-36)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 8 inches; silt loam

H2—8 to 17 inches; silty clay loam
 H3—17 to 51 inches; silty clay loam
 H4—51 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 20 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

So—Smolan silty clay loam, 4 to 8 percent slopes, eroded

Map Unit Composition

Smolan: 80 percent
 Minor components: 20 percent

Component Descriptions

Smolan

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey loess
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.7 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe30-36)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 51 inches; silty clay loam
 H3—51 to 60 inches; silty clay loam

Minor Components

Geary

Phase: Eroded
Composition: About 20 percent
Slope: 4 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

St—Clime silty clay loam, 20 to 40 percent slopes, stony

Map Unit Composition

Clime: 75 percent
 Minor components: 25 percent

Component Descriptions

Clime

MLRA: 76 - Bluestem Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, calcareous
Slope: 20 to 40 percent
Surface fragments: About 0 to 3 percent angular (shape or size unspecified)
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 5.3 inches)
Shrink-swell potential: High (About 8.4 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Limy Upland (pe30-36)
Land capability (nonirrigated): 7e

Typical Profile:

A1—0 to 2 inches; silty clay loam
 A2—2 to 9 inches; silty clay
 Bw—9 to 27 inches; silty clay
 C—27 to 33 inches; silty clay
 Cr—33 to 37 inches; weathered bedrock

Minor Components

Tuttle

Composition: About 10 percent
Landform: hillslope on upland
Slope: 20 to 40 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained

Tully

Composition: About 8 percent
Landform: hillslope on upland
Slope: 8 to 15 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Rock outcrop

Composition: About 4 percent
Slope: 30 to 50 percent

Ivan

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Kahola

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Sogn

Composition: About 1 percent
Slope: 1 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe30-36)

Su—Sutphen silty clay, occasionally flooded**Map Unit Composition**

Sutphen: 100 percent

Component Descriptions**Sutphen**

MLRA: 76 - Bluestem Hills
Landform: Flood plain on river valley
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 7.7 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Lowland (pe26-30)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 8 inches; silty clay
H2—8 to 32 inches; silty clay
H3—32 to 60 inches; silty clay loam

Minor Components**Unnamed Hydric Soils****Unnamed Hydric Soil****Ts—Tully silty clay loam, 1 to 4 percent slopes****Map Unit Composition**

Tully: 85 percent
Minor components: 15 percent

Component Descriptions**Tully**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: High (About 8.0 LEP)
Flooding hazard: None
Ponding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe30-36)
Land capability (nonirrigated): 2e

Typical Profile:

A—0 to 12 inches; silty clay loam
BA—12 to 21 inches; silty clay loam
Bt1—21 to 31 inches; silty clay
Bt2—31 to 40 inches; silty clay
Bt3—40 to 52 inches; silty clay
BC—52 to 60 inches; silty clay

Minor Components**Kahola**

Composition: About 6 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Reading

Composition: About 5 percent

Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Florence

Composition: About 2 percent
Landform: hillslope on upland
Slope: 5 to 8 percent
Depth to restrictive feature: 40 to 60 inches
to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe30-36)

Clime

Composition: About 2 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Tt—Tully silty clay loam, 1 to 4 percent slopes, eroded

Map Unit Composition

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 51 inches; silty clay
 H3—51 to 60 inches; silty clay

Minor Components**Irwin**

Phase: Eroded
Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 40 to 60 inches
to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Wymore

Phase: Eroded
Composition: About 5 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe25-34)

Reading

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe30-36)

Tu—Tully silty clay loam, 4 to 8 percent slopes

Map Unit Composition

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.3 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 H2—10 to 51 inches; silty clay

H3—51 to 60 inches; silty clay

Minor Components

Irwin

Composition: About 8 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Wymore

Composition: About 6 percent
Landform: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe25-34)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

Minor Components

Clime

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Limy Upland (pe30-36)

Rock outcrop

Composition: About 5 percent

Irwin

Phase: Eroded
Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Tv—Tully silty clay loam, 4 to 8 percent slopes, eroded

Map Unit Composition

Tully: 85 percent
 Minor components: 15 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Clayey colluvium
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Moderate (About 8.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 51 inches; silty clay
 H3—51 to 60 inches; silty clay

W—Water

Wm—Wymore silty clay loam, 0 to 1 percent slopes

Map Unit Composition

Wymore: 100 percent

Component Descriptions

Wymore

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Silty and clayey loess over clayey pedisegment
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Medium
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 13 inches; silty clay loam
 H2—13 to 33 inches; silty clay
 H3—33 to 64 inches; silty clay loam

Wn—Wymore silty clay loam, 1 to 4 percent slopes

Map Unit Composition

Wymore: 90 percent
 Minor components: 10 percent

Component Descriptions

Wymore

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope, shoulder
Parent material: Silty and clayey loess over clayey pedisodiment
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: High
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 13 inches; silty clay loam
 H2—13 to 33 inches; silty clay
 H3—33 to 64 inches; silty clay loam

Minor Components

Rock outcrop

Composition: About 5 percent

Irwin

Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Wo—Wymore silty clay loam, 1 to 4 percent slopes, eroded

Map Unit Composition

Wymore: 90 percent
 Minor components: 10 percent

Component Descriptions

Wymore

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess over clayey pedisodiment
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: High
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 33 inches; silty clay
 H3—33 to 64 inches; silty clay loam

Minor Components

Rock outcrop

Composition: About 5 percent

Irwin

Phase: Eroded
Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Wr—Wymore silty clay loam, 4 to 8 percent slopes**Map Unit Composition**

Wymore: 90 percent
 Minor components: 10 percent

Component Descriptions**Wymore**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess over clayey pedisodiment
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 13 inches; silty clay loam
 H2—13 to 33 inches; silty clay
 H3—33 to 64 inches; silty clay loam

Minor Components**Rock outcrop**

Composition: About 5 percent

Irwin

Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Ws—Wymore silty clay loam, 4 to 8 percent slopes, eroded**Map Unit Composition**

Wymore: 90 percent
 Minor components: 10 percent

Component Descriptions**Wymore**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess over clayey pedisodiment
Slope: 4 to 8 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 36 inches
Runoff class: Very high
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 7 inches; silty clay loam
 H2—7 to 33 inches; silty clay
 H3—33 to 60 inches; silty clay loam

Minor Components**Irwin**

Phase: Eroded
Composition: About 5 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Rock outcrop

Composition: About 5 percent