

029CT—Crete silt loam, 3 to 6 percent slopes**Map Unit Composition**

Crete: 80 percent
 Minor components: 20 percent

Component Descriptions**Crete**

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loess
Slope: 3 to 6 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 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe26-30)
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 8 inches; silt loam
 BA—8 to 12 inches; silty clay loam
 Bt—12 to 34 inches; silty clay
 BC—34 to 40 inches; silty clay loam
 C—40 to 60 inches; silty clay loam

Minor Components**Hastings**

Composition: About 20 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

029LO—Longford silty clay loam, 3 to 7 percent slopes, eroded**Map Unit Composition**

Longford: 65 percent
 Minor components: 35 percent

Component Descriptions**Longford**

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: High (About 7.7 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Loamy Upland (pe26-30)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 8 inches; silty clay loam
 Bt—8 to 32 inches; silty clay loam
 BC—32 to 39 inches; silty clay loam
 C—39 to 60 inches; clay loam

Minor Components**Hastings**

Composition: About 15 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Geary

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Wells

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

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: 75 - Central Loess Plains

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: 75 - Central Loess Plains

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

Geomorphic Position: hillslope on upland

Slope: 8 to 15 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe30-36)

Tuttle

Composition: About 2 percent

Geomorphic Position: 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

Geomorphic Position: 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

Geomorphic Position: 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

143EE—Edalgo-Hedville complex, 5 to 30 percent slopes

Map Unit Composition

Edalgo: 60 percent

Hedville: 40 percent

Component Descriptions

Edalgo

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Upland

Parent material: Residuum

Slope: 5 to 15 percent

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

Drainage class: Well drained

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

Available water capacity: Low (About 5.0 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 (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; loam

H2—10 to 14 inches; silty clay loam

H3—14 to 30 inches; silty clay

Cr—30 to 30 inches; weathered bedrock

Hedville

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Loamy residuum weathered from sandstone and shale

Slope: 5 to 30 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 1.9 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Shallow Sandstone (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 16 inches; stony loam

R—16 to 16 inches; unweathered bedrock

143HO—Hobbs silt loam, frequently flooded

Map Unit Composition

Hobbs: 100 percent

Component Descriptions

Hobbs

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Flood 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: High (About 12.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe26-30)

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 6 inches; silt loam

H2—6 to 60 inches; silt loam

143HP—Hobbs-Geary silt loams, 0 to 15 percent slopes

Map Unit Composition

Hobbs: 55 percent

Geary: 45 percent

Component Descriptions

Hobbs

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Flood 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 12.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silt loam

H2—8 to 60 inches; silt loam

Geary

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Upland

Parent material: Loess

Slope: 2 to 15 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 11.2 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: Loamy Upland (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silt loam

H2—10 to 38 inches; silty clay loam

H3—38 to 60 inches; silty clay loam

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
Geomorphic Position: 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

201LH—Lancaster-Hedville loams, 5 to 30 percent slopes

Map Unit Composition

Lancaster: 50 percent
 Hedville: 35 percent
 Minor components: 15 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 5 to 12 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 4.5 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): 6e

Typical Profile:

H1—0 to 9 inches; loam
 H2—9 to 24 inches; clay loam
 H3—24 to 29 inches; clay loam
 Cr—29 to 33 inches; weathered bedrock

Hedville

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone and shale
Slope: 5 to 30 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 2.5 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: Shallow Sandstone (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; loam
 H2—10 to 15 inches; loam
 R—15 to 19 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)

Edalgo

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: Clay Upland (pe26-30)

Rock outcrop

Composition: About 3 percent
Slope: 15 to 45 percent

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

Be—Benfield silty clay loam, 3 to 7 percent slopes**Map Unit Composition**

Benfield: 89 percent
 Minor components: 11 percent

Component Descriptions**Benfield**

MLRA: 75 - Central Loess Plains
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)
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
Geomorphic Position: 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

Cb—Calco silty clay loam, frequently flooded**Map Unit Composition**

Calco: 90 percent
 Minor components: 10 percent

Component Descriptions**Calco**

MLRA: 75 - Central Loess Plains
Landform: Flood plain on river valley
Parent material: Stratified silty alluvium
Slope: 0 to 1 percent
Drainage class: Poorly drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.1 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 0 to 36 inches
Runoff class: Low
Ecological site: Subirrigated (pe25-34)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 30 inches; silty clay loam
 H2—30 to 60 inches; silt loam

Minor Components**Unnamed Stratified Soils (fine)**

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

Unnamed Stratified Soils (sandy)

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

Cg—Cass fine sandy loam, occasionally flooded**Map Unit Composition**

Cass: 89 percent
 Minor components: 11 percent

Component Descriptions

Cass*MLRA:* 74 - Central Kansas Sandstone Hills*Landform:* Flood plain on river valley*Parent material:* Loamy alluvium over sandy alluvium*Slope:* 0 to 2 percent*Drainage class:* Well drained*Slowest permeability:* Moderately rapid (About 2.00 in/hr)*Available water capacity:* Moderate (About 7.3 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 (pe26-30)*Land capability (nonirrigated):* 2w*Typical Profile:*

A—0 to 7 inches; fine sandy loam

AC—7 to 28 inches; fine sandy loam

C—28 to 60 inches; fine sand

Minor Components**Eudora***Composition:* About 5 percent*Slope:* 0 to 2 percent*Drainage class:* Well drained*Ecological site:* Loamy Lowland (pe25-34)**Muir***Composition:* About 3 percent*Slope:* 0 to 2 percent*Drainage class:* Well drained*Ecological site:* Loamy Terrace (pe25-34)**Sarpy***Composition:* About 2 percent*Slope:* 0 to 3 percent*Drainage class:* Excessively drained*Ecological site:* Sandy Lowland (pe25-34)**Haynie***Composition:* About 1 percent*Slope:* 0 to 2 percent*Drainage class:* Well drained*Ecological site:* Loamy Lowland (pe25-34)**Cr—Crete silt loam, 0 to 1 percent slopes****Map Unit Composition**

Crete: 95 percent

Minor components: 5 percent

Component Descriptions**Crete***MLRA:* 75 - Central Loess Plains*Landform:* Ridge on upland*Parent material:* Silty and clayey loess*Slope:* 0 to 1 percent*Drainage class:* Moderately well drained*Slowest permeability:* Impermeable (About 0.00 in/hr)*Available water capacity:* High (About 11.2 inches)*Shrink-swell potential:* High (About 7.5 LEP)*Flooding 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 7 inches; silt loam

BA—7 to 12 inches; silty clay loam

Bt—12 to 36 inches; silty clay

BC—36 to 60 inches; silty clay loam

Minor Components**Holder***Composition:* About 5 percent*Geomorphic Position:* hillslope on upland*Slope:* 3 to 7 percent*Drainage class:* Well drained*Ecological site:* Loamy Upland (pe25-34)**Cs—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:* Backslope, shoulder*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

Geomorphic Position: 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

Geomorphic Position: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

CSS—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: Impermeable (About 0.00 in/hr)

Available water capacity: High (About 11.1 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 (pe26-30)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 9 inches; silty clay loam

H2—9 to 32 inches; silty clay

H3—32 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)

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

Holder

Composition: About 5 percent
Geomorphic Position: 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)

Cx—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
Geomorphic Position: hillslope on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Holder

Composition: About 5 percent
Geomorphic Position: 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)

Ed—Edalgo silty clay loam, 4 to 8 percent slopes

Map Unit Composition

Edalgo: 88 percent

Minor components: 12 percent

Component Descriptions

Edalgo

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Hillslope on upland

Parent material: Clayey residuum weathered from sandstone and shale

Slope: 4 to 8 percent

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

Drainage class: Well drained

Slowest permeability: Impermeable (About 0.00 in/hr)

Available water capacity: Low (About 5.0 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 (pe26-30)

Land capability (nonirrigated): 4e

Typical Profile:

A—0 to 10 inches; silty clay loam

Bt—10 to 34 inches; silty clay

Cr—34 to 34 inches; weathered bedrock

Minor Components

Crete

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 3 to 7 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe25-34)

Lancaster

Composition: About 5 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)

Hedville

Composition: About 2 percent

Geomorphic Position: hillslope on upland

Slope: 10 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)

Er—Eudora very fine sandy loam, 2 to 5 percent slopes

Map Unit Composition

Eudora: 95 percent

Minor components: 5 percent

Component Descriptions

Eudora

MLRA: 75 - Central Loess Plains

Landform: Escarpment on terrace on river valley

Parent material: Coarse-silty alluvium

Slope: 2 to 5 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: 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 Terrace (pe25-34)

Land capability (nonirrigated): 2e

Typical Profile:

A—0 to 7 inches; very fine sandy loam

C—7 to 60 inches; very fine sandy loam

Minor Components

Haynie

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

Sarpy

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

Eu—Eudora loam, occasionally flooded**Map Unit Composition**

Eudora: 85 percent
 Minor components: 16 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: High (About 11.5 inches)
Shrink-swell potential: Low (About 1.4 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe25-34)
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; loam
 A—7 to 10 inches; loam
 C1—10 to 28 inches; silt loam
 C2—28 to 60 inches; very fine sandy loam

Minor Components**Cass**

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Sandy Lowland (pe26-30)

Sarpy

Composition: About 5 percent

Slope: 0 to 4 percent
Drainage class: Excessively drained
Ecological site: Sandy Lowland (pe25-34)

Unnamed Hydric Soil (ponding)

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

Gc—Geary silt loam, 2 to 7 percent slopes**Map Unit Composition**

Geary: 83 percent
 Minor components: 17 percent

Component Descriptions**Geary**

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 2 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 8.0 inches)
Shrink-swell potential: Moderate (About 5.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

A1—0 to 8 inches; silt loam
 A2—8 to 13 inches; silt loam
 Bt—13 to 25 inches; silty clay loam
 BC—43 to 52 inches; silty clay loam
 C—52 to 60 inches; silty clay loam

Minor Components**Crete**

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

Holder

Composition: About 5 percent
Geomorphic Position: hillslope on upland

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

Wells

Composition: About 5 percent
Slope: 3 to 7 percent
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)

Gf—Geary silt loam, 9 to 15 percent slopes

Map Unit Composition

Geary: 85 percent
 Minor components: 15 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 9 to 15 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: Moderate (About 5.6 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): 6e

Typical Profile:

Ap—0 to 7 inches; silt loam
 BA—7 to 10 inches; silt loam
 Bt—10 to 32 inches; silty clay loam
 BC—32 to 38 inches; silty clay loam
 C—38 to 60 inches; silty clay loam

Minor Components**Crete**

Composition: About 5 percent

Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Holder

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

Kipson

Composition: About 4 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

Gh—Geary silty clay loam, 4 to 9 percent slopes, eroded

Map Unit Composition

Geary: 85 percent
 Minor components: 15 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty loess
Slope: 4 to 9 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.9 inches)
Shrink-swell potential: Moderate (About 5.6 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:

Ap—0 to 7 inches; silty clay loam
 Bt—7 to 32 inches; silty clay loam
 BC—32 to 52 inches; silty clay loam

C—52 to 60 inches; silty clay loam

Minor Components

Crete

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

Holder

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

Hobbs

Composition: About 4 percent
Slope: 0 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe25-34)

Unnamed Hydric Soil (saturation)

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

Gm—Gibbon loam, occasionally flooded

Map Unit Composition

Gibbon: 95 percent
 Minor components: 5 percent

Component Descriptions

Gibbon

MLRA: 75 - Central Loess Plains
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 0.57 in/hr)
Available water capacity: High (About 10.3 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 18 to 36 inches
Runoff class: Low
Ecological site: Subirrigated (pe25-34)
Land capability (nonirrigated): 2w

Typical Profile:

A—0 to 14 inches; loam
 Bk—14 to 50 inches; stratified fine sandy loam to silt loam
 C—50 to 60 inches; fine sand

Minor Components

Eudora

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

Unnamed Hydric Soil (saturation)

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

Cass

Composition: About 1 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Sandy Lowland (pe26-30)

He—Haynie-Sarpy complex, occasionally flooded

Map Unit Composition

Haynie: 65 percent
 Sarpy: 34 percent
 Minor components: 1 percent

Component Descriptions

Haynie

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: High (About 10.9 inches)
Shrink-swell potential: Low (About 2.6 LEP)
Flooding hazard: Occasional
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 6 inches; silt loam
C—6 to 60 inches; very fine sandy loam

Sarpy

MLRA: 75 - Central Loess Plains

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 4.9 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: Sandy Lowland (pe25-34)

Land capability (nonirrigated): 5w

Typical Profile:

A—0 to 6 inches; loamy fine sand
C1—6 to 26 inches; loamy fine sand
C2—26 to 50 inches; fine sand
C3—50 to 60 inches; loamy fine sand

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

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe25-34)

Land capability (nonirrigated): 5w

Typical Profile:

Ap—0 to 7 inches; silt loam

C—7 to 40 inches; silt loam

Ab—40 to 60 inches; silt loam

Minor Components**Muir**

Composition: About 5 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

Ho—Hobbs silt loam, occasionally flooded**Hn—Hobbs silt loam, channeled****Map Unit Composition**

Hobbs: 93 percent

Minor components: 7 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: Very high (About 12.5 inches)

Shrink-swell potential: Moderate (About 3.0 LEP)

Flooding hazard: Frequent

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
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Geary

Composition: About 2 percent
Geomorphic Position: 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

Hr—Holder silt loam, 3 to 7 percent slopes

Map Unit Composition

Holder: 90 percent
 Minor components: 10 percent

Component Descriptions

Holder

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 3 to 7 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 5.1 LEP)

Flooding hazard: None

Ponding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 12 inches; silt loam
 BA—12 to 18 inches; silt loam
 Bt—18 to 36 inches; silty clay loam
 BC—36 to 50 inches; silty clay loam
 Ck—50 to 60 inches; silt loam

Minor Components

Crete

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

Geary

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

Ks—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
Geomorphic Position: 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
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Lc—Lancaster loam, 3 to 7 percent slopes

Map Unit Composition

Lancaster: 90 percent
 Minor components: 10 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Loamy residuum weathered from sandstone
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: Moderate (About 6.4 inches)
Shrink-swell potential: Moderate (About 5.1 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
 BA—9 to 18 inches; clay loam
 Bt—18 to 26 inches; sandy clay loam
 BC—26 to 35 inches; sandy clay loam
 Cr—35 to 35 inches; weathered bedrock

Minor Components

Wells

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

Edalgo

Composition: About 2 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe26-30)

Crete

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

Hedville

Composition: About 1 percent
Slope: 4 to 8 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe26-30)

Lh—Lancaster-Hedville complex, 5 to 30 percent slopes

Map Unit Composition

Lancaster: 55 percent
 Hedville: 30 percent
 Minor components: 15 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland

Parent material: Loamy residuum weathered from sandstone and shale

Slope: 5 to 12 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: Moderate (About 6.2 inches)

Shrink-swell potential: Moderate (About 4.1 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: High

Ecological site: Loamy Upland (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 9 inches; loam
 Bt—9 to 26 inches; clay loam
 BC—26 to 35 inches; sandy clay loam
 Cr—35 to 35 inches; weathered bedrock

Hedville

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Loamy residuum weathered from sandstone and shale

Slope: 10 to 30 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 2.8 inches)

Shrink-swell potential: Low (About 1.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very high

Ecological site: Shallow Sandstone (pe26-30)

Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 7 inches; loam
 C—7 to 14 inches; fine sandy loam
 R—14 to 14 inches; unweathered bedrock

Minor Components

Edalgo

Composition: About 5 percent
Slope: 4 to 8 percent

Depth to restrictive feature: 20 to 40 inches
to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe26-30)

Wells

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

Crete

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

Unnamed Hydric Soil (saturation)

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

Unnamed Hydric Soil (ponding)

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

Rock outcrop

Composition: About 1 percent

LN—Longford silt loam, 3 to 7 percent slopes**Map Unit Composition**

Longford: 85 percent
Minor components: 15 percent

Component Descriptions**Longford**

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Silty and clayey loess over loamy pedisidiment
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.1 inches)
Shrink-swell potential: High (About 7.5 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): 3e

Typical Profile:

A—0 to 11 inches; silt loam
BA—11 to 18 inches; silty clay loam
Bt—18 to 39 inches; silty clay loam
2C—39 to 60 inches; clay loam

Minor Components**Crete**

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

Wells

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

Hobbs

Composition: About 3 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe26-30)

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)

M-W—Miscellaneous Water**Mu—Muir silt loam, rarely flooded****Map Unit Composition**

Muir: 89 percent
Minor components: 11 percent

Component Descriptions**Muir**

MLRA: 75 - Central Loess Plains
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 12.5 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 22 inches; silt loam
 Bw1—22 to 36 inches; silt loam
 Bw2—36 to 50 inches; silt loam
 C—50 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)

Detroit

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately 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

Sa—Sarpy loamy fine sand, 0 to 5 percent slopes, rarely flooded

Map Unit Composition

Sarpy: 90 percent
 Minor components: 10 percent

Component Descriptions

Sarpy

MLRA: 75 - Central Loess Plains
Landform: Dune on terrace on river valley
Parent material: Eolian sands
Slope: 0 to 4 percent
Drainage class: Excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)
Available water capacity: Low (About 4.4 inches)
Shrink-swell potential: Low (About 0.0 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Negligible
Ecological site: Sandy Lowland (pe25-34)
Land capability (nonirrigated): 4s

Typical Profile:

Ap—0 to 6 inches; loamy fine sand
 C—6 to 60 inches; fine sand

Minor Components

Eudora

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

Cass

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

Su—Sutphen silty clay loam, occasionally flooded

Map Unit Composition

Sutphen: 88 percent
 Minor components: 12 percent

Component Descriptions

Sutphen

MLRA: 75 - Central Loess Plains
Landform: Flood plain on river valley
Parent material: Clayey alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: High (About 9.7 inches)
Shrink-swell potential: Very high (About 9.7 LEP)
Flooding hazard: Occasional
Ponding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: High

Ecological site: Clay Lowland (pe30-36)
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; silty clay loam
 A1—7 to 22 inches; silty clay loam
 A2—22 to 36 inches; silty clay
 AC—36 to 46 inches; silty clay
 C1—46 to 60 inches; silty clay loam

Minor Components

Detroit

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Terrace (pe25-34)

Muir

Composition: About 5 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

Tu—Tully silty clay loam, 2 to 7 percent slopes

Map Unit Composition

Tully: 91 percent
 Minor components: 9 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Parent material: Silty and clayey colluvium
Slope: 2 to 7 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.2 inches)
Shrink-swell potential: High (About 8.0 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): 3e

Typical Profile:

A—0 to 12 inches; silty clay loam
 BA—12 to 20 inches; silty clay loam
 Bt1—20 to 28 inches; silty clay
 Bt2—28 to 47 inches; silty clay
 BC—47 to 57 inches; silty clay
 C—57 to 60 inches; silty clay

Minor Components

Kipson

Composition: About 2 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)

Sogn

Composition: About 2 percent
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 (pe25-34)

Geary

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

Crete

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

Rock outcrop

Composition: About 1 percent

W—Water

We—Wells loam, 3 to 7 percent slopes

Map Unit Composition

Wells: 83 percent
Minor components: 17 percent

Component Descriptions

Wells

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Upland, hillslope

Parent material: Fine-loamy residuum

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 10.3 inches)

Shrink-swell potential: Moderate (About 4.9 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe25-34)

Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 12 inches; loam

BA—12 to 18 inches; loam

Bt1—18 to 28 inches; sandy clay loam

Bt2—28 to 42 inches; sandy clay loam

BC—42 to 60 inches; sandy clay loam

Minor Components

Lancaster

Composition: About 10 percent

Slope: 3 to 12 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 5 percent

Geomorphic Position: hillslope on upland

Slope: 2 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

Hedville

Composition: About 1 percent

Geomorphic Position: hillslope on upland

Slope: 7 to 15 percent

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)

Drainage class: Somewhat excessively drained

Ecological site: Shallow Sandstone (pe25-34)

Unnamed Hydric Soil (saturation)

Composition: About 1 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained