

029AA—Hobbs silt loam, frequently flooded

Map Unit Composition

Hobbs: 83 percent
Minor components: 17 percent

Component Descriptions

Hobbs

MLRA: 75 - Central Loess Plains
Landform: Flood plain on alluvial plain
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 12.3 inches)
Shrink-swell potential: Moderate (About 3.9 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:

A1—0 to 9 inches; silt loam
A2—9 to 17 inches; silt loam
C1—17 to 28 inches; stratified silt loam
C2—28 to 60 inches; stratified silt loam

Minor Components

Tobin

Composition: About 15 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe26-30)

Unnamed Hydric Soil

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

Unnamed Hydric Soils

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

029AR—Armo silt loam, 2 to 7 percent slopes

Map Unit Composition

Armo: 75 percent
Minor components: 25 percent

Component Descriptions

Armo

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope, footslope
Parent material: Calcareous loamy colluvium derived from limestone
Slope: 2 to 7 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 4.7 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): 3e

Typical Profile:

Ap—0 to 10 inches; silt loam
Bw—10 to 18 inches; silty clay loam
Bk—18 to 40 inches; silty clay loam
C—40 to 60 inches; silt loam

Minor Components

Hastings

Composition: About 15 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Wakeen

Composition: About 10 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 (pe26-30)

029BA—Hastings-Hobbs complex, 0 to 25 percent slopes

Map Unit Composition

Hastings: 58 percent
Hobbs: 40 percent
Minor components: 2 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 3 to 25 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: High (About 7.4 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe26-30)
Land capability (irrigated): 6e
Land capability (nonirrigated): 6e

Typical Profile:

Ap—0 to 8 inches; silt loam
BA—8 to 14 inches; silty clay loam
Bt—14 to 36 inches; silty clay loam
BC—36 to 42 inches; silty clay loam
C—42 to 60 inches; silt loam

Hobbs

MLRA: 75 - Central Loess Plains
Landform: Flood plain on alluvial plain
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 12.3 inches)
Shrink-swell potential: Moderate (About 3.9 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:

A1—0 to 9 inches; silt loam
A2—9 to 17 inches; silt loam
C1—17 to 28 inches; stratified silt loam
C2—28 to 60 inches; stratified silt loam

Minor Components

Unnamed Hydric Soil

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

Unnamed Hydric Soils

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

029CT—Crete silt loam, 3 to 6 percent slopes

Map Unit Composition

Crete: 80 percent
Minor components: 20 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
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)

029GE—Geary silt loam, 3 to 7 percent slopes

Map Unit Composition

Geary: 70 percent
 Minor components: 30 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.9 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 (pe25-34)
Land capability (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 9 inches; silt loam
 BA—9 to 15 inches; silt loam
 Bt—15 to 24 inches; silty clay loam
 BC—24 to 32 inches; silty clay loam
 C—32 to 60 inches; clay loam

Minor Components

Hastings

Composition: About 15 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)

Longford

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

029GS—Geary silty clay loam, 3 to 7 percent slopes, Severely eroded

Map Unit Composition

Geary: 70 percent
 Minor components: 30 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.6 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 (pe26-30)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 6 inches; silty clay loam
 Bt—6 to 24 inches; silty clay loam
 BC—24 to 32 inches; silty clay loam
 C—32 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)

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)

Longford

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

029LH—Lancaster-Hedville complex, 5 to 30 percent slopes

Map Unit Composition

Lancaster: 55 percent
 Hedville: 28 percent
 Minor components: 17 percent

Component Descriptions

Lancaster

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Fine-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 6.4 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): 6e

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

Hedville

MLRA: 75 - Central Loess Plains
Landform: Hillslope on upland

Hillslope position: Backslope
Parent material: Loamy residuum
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: High
Ecological site: Shallow Sandstone (pe26-30)
Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 14 inches; cobbly loam
 R—14 to 16 inches; unweathered bedrock

Minor Components

Edalgo

Composition: About 10 percent
Geomorphic Position: hillslope on upland
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 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe26-30)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

Unnamed Hydric Soils

Composition: About 1 percent
Drainage class: Poorly drained

029LN—Longford silt loam, 3 to 7 percent slopes

Map Unit Composition

Longford: 65 percent
 Minor components: 35 percent

Component Descriptions

Longford

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: Well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: High (About 10.8 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; silt loam

BA—8 to 14 inches; silty clay loam

Bt—14 to 38 inches; silty clay loam

BC—38 to 45 inches; silty clay loam

C—45 to 60 inches; clay loam

Minor Components

Hastings

Composition: About 15 percent

Geomorphic Position: divide on upland

Slope: 3 to 7 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 (pe25-34)

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)

029SA—Inavale loamy sand, 0 to 3 percent slopes, occasionally flooded

Map Unit Composition

Inavale: 85 percent

Minor components: 15 percent

Component Descriptions

Inavale

MLRA: 75 - Central Loess Plains

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 3 percent

Drainage class: Somewhat excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.9 inches)

Shrink-swell potential: Low (About 0.1 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sandy Lowland (pe20-26)

Land capability (nonirrigated): 3w

Typical Profile:

Ap—0 to 7 inches; loamy sand

C1—7 to 20 inches; loamy sand

C2—20 to 40 inches; stratified loamy sand

C3—40 to 60 inches; stratified sand

Minor Components

Munjoy

Composition: About 14 percent

Slope: 0 to 3 percent

Drainage class: Well drained

Ecological site: Sandy Lowland - Veg. Zone 3

Unnamed Hydric Soil

Composition: About 1 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

029TO—Tobin silt loam, occasionally flooded

Map Unit Composition

Tobin: 78 percent

Minor components: 22 percent

Component Descriptions

Tobin

MLRA: 75 - Central Loess Plains

Landform: Flood plain on alluvial plain

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 4.3 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe26-30)
Land capability (nonirrigated): 2w

Typical Profile:
 A—0 to 24 inches; silt loam
 AC—24 to 44 inches; silty clay loam
 C—44 to 60 inches; silty clay loam

Minor Components

Hobbs
Composition: About 15 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Lowland (pe26-30)

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

Unnamed Hydric Soil (saturation)
Composition: About 2 percent
Slope: 0 to 2 percent
Drainage class: Poorly drained

089AR—Armo loam, 3 to 7 percent slopes

Map Unit Composition

Armo: 100 percent

Component Descriptions

Armo
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Parent material: Calcareous loamy colluvium derived from limestone
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 11.7 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: Limy Upland (pe20-26)
Land capability (nonirrigated): 3e

Typical Profile:
 H1—0 to 16 inches; loam
 H2—16 to 30 inches; loam
 H3—30 to 60 inches; gravelly clay loam

089BA—Bogue-Armo complex, 3 to 15 percent slopes

Map Unit Composition

Bogue: 75 percent
 Armo: 25 percent

Component Descriptions

Bogue
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum
Slope: 3 to 15 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 3.4 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: Blue Shale (pe20-26)
Land capability (nonirrigated): 6e

Typical Profile:
 H1—0 to 8 inches; clay
 H2—8 to 18 inches; clay
 H3—18 to 32 inches; clay
 H4—32 to 36 inches; weathered bedrock

Armo
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland

Parent material: Residuum
Slope: 3 to 13 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.4 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: Limy Upland (pe20-26)
Land capability (nonirrigated): 6e

Typical Profile:
 H1—0 to 10 inches; loam
 H2—10 to 22 inches; loam
 H3—22 to 60 inches; gravelly clay loam

089BB—Bogue-Rock outcrop complex, 10 to 30 percent slopes

Map Unit Composition

Bogue: 80 percent
 Minor components: 20 percent

Component Descriptions

Bogue
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum
Slope: 10 to 30 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Low (About 3.4 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: Blue Shale (pe20-26)
Land capability (nonirrigated): 7e

Typical Profile:
 H1—0 to 8 inches; clay
 H2—8 to 18 inches; clay
 H3—18 to 32 inches; clay
 H4—32 to 36 inches; weathered bedrock

Minor Components

Rock outcrop

Composition: About 20 percent
Geomorphic Position: hillslope on upland

089GN—Gibbon silty clay loam, occasionally flooded

Map Unit Composition

Gibbon: 100 percent

Component Descriptions

Gibbon

MLRA: 73 - Rolling Plains and Breaks
Landform: Flood plain on valley
Parent material: Calcareous alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly 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: Occasional
Depth to seasonal water saturation: About 18 to 36 inches
Runoff class: Low
Ecological site: Loamy Lowland (pe20-26)
Land capability (nonirrigated): 2w

Typical Profile:
 H1—0 to 19 inches; silty clay loam
 H2—19 to 26 inches; silt loam
 H3—26 to 60 inches; stratified fine sandy loam to silt loam

Minor Components

Unnamed Hydric Soil

089HB—Harney silt loam, 1 to 3 percent slopes

Map Unit Composition

Harney: 100 percent

Component Descriptions

Harney

MLRA: 73 - Rolling Plains and Breaks

Landform: Plain on tableland

Parent material: Loess

Slope: 1 to 3 percent

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 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: Medium

Ecological site: Loamy Upland (pe20-26)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 12 inches; silt loam

H2—12 to 36 inches; silty clay loam

H3—36 to 60 inches; silt loam

089HC—Harney silt loam, 3 to 7 percent slopes

Map Unit Composition

Harney: 100 percent

Component Descriptions

Harney

MLRA: 73 - Rolling Plains and Breaks

Landform: Hillslope on upland

Parent material: Loess

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 11.6 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 (pe20-26)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 14 inches; silt loam

H2—14 to 30 inches; silty clay loam

H3—30 to 60 inches; silt loam

089HF—Harney silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Harney: 100 percent

Component Descriptions

Harney

MLRA: 73 - Rolling Plains and Breaks

Landform: Hillslope on upland

Parent material: Loess

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 11.0 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 (pe20-26)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; silty clay loam

H2—6 to 30 inches; silty clay loam

H3—30 to 60 inches; silt loam

089HS—Holdrege And Geary silty clay loams, 6 to 11 percent slopes, eroded

Map Unit Composition

Holdrege: 55 percent

Geary: 45 percent

Component Descriptions

Holdrege

MLRA: 73 - Rolling Plains and Breaks

Landform: Hillslope on upland

Parent material: Calcareous loess

Slope: 6 to 11 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 4.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe20-26)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; silty clay loam

H2—6 to 22 inches; silty clay loam

H3—22 to 30 inches; silty clay loam

H4—30 to 60 inches; silt loam

Geary

MLRA: 73 - Rolling Plains and Breaks

Landform: Upland

Parent material: Loess

Slope: 6 to 11 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 10.8 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: Loamy Upland (pe20-26)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 6 inches; silty clay loam

H2—6 to 34 inches; silty clay loam

H3—34 to 60 inches; silty clay loam

Minor Components

Unnamed Hydric Soil

Drainage class: Poorly drained

089HU—Hord silt loam, rarely flooded

Map Unit Composition

Hord: 100 percent

Component Descriptions

Hord

MLRA: 73 - Rolling Plains and Breaks

Landform: Upland

Parent material: Loess

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: Low (About 1.5 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Terrace (pe26-30)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 18 inches; silt loam

H2—18 to 43 inches; silty clay loam

H3—43 to 60 inches; silt loam

Minor Components

Unnamed Hydric Soil

089MC—Mccook silt loam, rarely flooded

Map Unit Composition

Mccook: 100 percent

Component Descriptions

Mccook

MLRA: 73 - Rolling Plains and Breaks

Landform: Flood plain on river valley

Parent material: Alluvium

Slope: 0 to 1 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 11.7 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Terrace (pe20-26)
Land capability (nonirrigated): 1

Typical Profile:
 H1—0 to 16 inches; silt loam
 H2—16 to 60 inches; silt loam

Minor Components
Unnamed Hydric Soils
Slope: 0 to 1 percent
Drainage class: Poorly drained

Unnamed Hydric Soil
Slope: 0 to 1 percent
Drainage class: Poorly drained

089NC—New Cambria silty clay, rarely flooded

Map Unit Composition

New Cambria: 100 percent

Component Descriptions

New Cambria
MLRA: 73 - Rolling Plains and Breaks
Landform: Stream terrace on river valley
Parent material: Alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Impermeable (About 0.00 in/hr)
Available water capacity: Moderate (About 8.6 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Clay Terrace (pe20-26)
Land capability (nonirrigated): 2s

Typical Profile:
 H1—0 to 12 inches; silty clay
 H2—12 to 34 inches; silty clay
 H3—34 to 60 inches; silty clay

Minor Components
Unnamed Hydric Soils

Unnamed Hydric Soils

089ND—Nibson silt loam, 5 to 25 percent slopes

Map Unit Composition

Nibson: 100 percent

Component Descriptions

Nibson
MLRA: 73 - Rolling Plains and Breaks
Landform: Hillslope on upland
Parent material: Residuum
Slope: 5 to 25 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Somewhat excessively drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Low (About 4.0 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 (pe20-26)
Land capability (nonirrigated): 6e

Typical Profile:
 H1—0 to 10 inches; silt loam
 H2—10 to 19 inches; silty clay loam
 Cr—19 to 19 inches; weathered bedrock

089NR—Nuckolls-Roxbury silt loams, 0 to 30 percent slopes

Map Unit Composition

Nuckolls: 80 percent
 Roxbury: 20 percent

Component Descriptions

Nuckolls

MLRA: 73 - Rolling Plains and Breaks

Landform: Hillslope on upland

Parent material: Loess

Slope: 3 to 30 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: High (About 11.8 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: Loamy Upland (pe20-26)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 14 inches; silt loam

H2—14 to 34 inches; silty clay loam

H3—34 to 60 inches; silt loam

Roxbury

MLRA: 73 - Rolling Plains and Breaks

Landform: Flood plain on river 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 12.5 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 (pe20-26)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 24 inches; silt loam

H2—24 to 42 inches; silt loam

H3—42 to 60 inches; silt loam

Minor Components

Unnamed Hydric Soil

Drainage class: Poorly drained

089RB—Roxbury silt loam, channeled

Map Unit Composition

Roxbury: 100 percent

Component Descriptions

Roxbury

MLRA: 73 - Rolling Plains and Breaks

Landform: Flood plain on river 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: Frequent

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Loamy Lowland (pe20-26)

Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 24 inches; silt loam

H2—24 to 42 inches; silt loam

H3—42 to 60 inches; silt loam

Minor Components

Unnamed Hydric Soils

Slope: 0 to 1 percent

Drainage class: Poorly drained

Unnamed Hydric Soil

Slope: 0 to 2 percent

Drainage class: Poorly drained

089RC—Roxbury silt loam, occasionally flooded

Map Unit Composition

Roxbury: 100 percent

Component Descriptions

Roxbury

MLRA: 73 - Rolling Plains and Breaks
Landform: Flood plain on river 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 (pe20-26)
Land capability (nonirrigated): 2w

Typical Profile:
 H1—0 to 24 inches; silt loam
 H2—24 to 42 inches; silt loam
 H3—42 to 60 inches; silt loam

Minor Components

Unnamed Hydric Soils

Slope: 0 to 2 percent
Drainage class: Poorly drained

Unnamed Hydric Soil

Slope: 0 to 2 percent
Drainage class: Poorly drained

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

Map Unit Composition

Crete: 95 percent
 Minor components: 5 percent

Component Descriptions

Crete

MLRA: 74 - Central Kansas Sandstone Hills
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)

201KP—Kipson silty clay loam, 5 to 30 percent slopes

Map Unit Composition

Kipson: 90 percent
 Minor components: 10 percent

Component Descriptions

Kipson

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Calcareous loamy residuum weathered from 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 (pe25-34)
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

Minor Components

Rock outcrop

Composition: About 4 percent
Slope: 15 to 45 percent

Crete

Composition: About 2 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe26-30)

Tully

Composition: About 2 percent
Geomorphic Position: hillslope on upland
Slope: 5 to 12 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe26-30)

Sogn

Composition: About 2 percent
Geomorphic Position: hillslope on upland
Slope: 5 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Limy (pe26-30)

201LC—Lancaster loam, 3 to 7 percent slopes

Map Unit Composition

Lancaster: 100 percent

Component Descriptions

Lancaster

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Parent material: Residuum
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 5.4 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: Loamy Upland (pe26-30)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; loam
H2—9 to 24 inches; clay loam
H3—24 to 30 inches; sandy clay loam
Cr—30 to 30 inches; weathered bedrock

201TY—Tully silty clay loam, 5 to 12 percent slopes

Map Unit Composition

Tully: 85 percent
Minor components: 15 percent

Component Descriptions

Tully

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Footslope
Parent material: Silty and clayey colluvium
Slope: 5 to 12 percent
Drainage class: Well drained
Slowest permeability: Slow (About 0.06 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: Loamy Upland (pe26-30)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 15 inches; silty clay loam
H2—15 to 47 inches; silty clay
H3—47 to 60 inches; silty clay loam

Minor Components

Crete

Composition: About 15 percent
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe26-30)

201WE—Wells loam, 3 to 7 percent slopes

Map Unit Composition

Wells: 100 percent

Component Descriptions

Wells

MLRA: 74 - Central Kansas Sandstone Hills

Landform: Hillslope on upland

Hillslope position: Backslope

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 10.1 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 Upland (pe26-30)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 10 inches; loam

H2—10 to 16 inches; clay loam

H3—16 to 40 inches; clay loam

H4—40 to 60 inches; clay loam

Minor Components

Unnamed Hydric Soil

Drainage class: Poorly drained

Bk—Geary-Hobbs silt loams, 0 to 30 percent slopes

Map Unit Composition

Geary: 55 percent

Hobbs: 29 percent

Minor components: 16 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains

Landform: Hillside on upland

Hillslope position: Backslope

Parent material: Loamy loess

Slope: 5 to 30 percent

Drainage class: Well drained

Slowest permeability: Moderately slow (About 0.20 in/hr)

Available water capacity: High (About 11.0 inches)

Shrink-swell potential: Moderate (About 5.6 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): 6e

Typical Profile:

A—0 to 12 inches; silt loam

BA—12 to 22 inches; silty clay loam

Bt—22 to 36 inches; silty clay loam

BC—36 to 48 inches; silty clay loam

2C—48 to 60 inches; sandy clay loam

Hobbs

MLRA: 75 - Central Loess Plains

Landform: Flood plain on valley

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 12.0 inches)

Shrink-swell potential: Moderate (About 4.7 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): 2w

Typical Profile:

A—0 to 7 inches; silt loam

C—7 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 15 percent

Geomorphic Position: hillside on upland

Slope: 5 to 30 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

Unnamed Hydric Soils

Composition: About 1 percent

BOP—Borrow Pits

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

Bu—Butler silt loam, 0 to 1 percent slopes

Map Unit Composition

Butler: 84 percent
Minor components: 16 percent

Component Descriptions

Butler

MLRA: 75 - Central Loess Plains
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Clayey loess
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Very high (About 10.4 LEP)
Flooding hazard: None
Ponding hazard: Occasional
Depth to seasonal water saturation: About 6 to 12 inches
Runoff class: Medium
Ecological site: Clay Upland (pe25-34)
Land capability (nonirrigated): 2s

Typical Profile:

Ap—0 to 9 inches; silt loam
Bt—9 to 24 inches; silty clay
BC—24 to 38 inches; silty clay loam
C—38 to 60 inches; silty clay loam

Minor Components

Crete

Composition: About 15 percent
Geomorphic Position: hillside on upland
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Unnamed Hydric Soil

Composition: About 1 percent
Drainage class: Poorly drained

Ca—Cozad-Cass Soils, occasionally flooded

Map Unit Composition

Cozad: 50 percent
Cass: 25 percent

Minor components: 25 percent

Component Descriptions

Cozad

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: High (About 10.5 inches)
Shrink-swell potential: Low (About 2.8 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Silty Lowland - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 8 inches; silt loam
A—8 to 15 inches; silt loam
AC—15 to 19 inches; silt loam
C1—19 to 50 inches; very fine sandy loam
C2—50 to 60 inches; stratified fine sand

Cass

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: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 6.6 inches)
Shrink-swell potential: Low (About 0.9 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy Lowland - Veg. Zone 3
Land capability (irrigated): 2w
Land capability (nonirrigated): 2w

Typical Profile:

Ap—0 to 7 inches; fine sandy loam
A—7 to 13 inches; fine sandy loam
C1—13 to 25 inches; sandy loam
C2—25 to 39 inches; loamy fine sand
C3—39 to 61 inches; sand

Minor Components

Mccook

Composition: About 14 percent

Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Silty Lowland - Veg. Zone 1

Munjoy

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Sandy Lowland - Veg. Zone 3

Unnamed Hydric Soil

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

Ce—Crete silt loam, 0 to 1 percent slopes

Map Unit Composition

Crete: 84 percent
 Minor components: 16 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.6 inches)
Shrink-swell potential: Very high (About 9.2 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Clay Upland (pe25-34)
Land capability (irrigated): 2s
Land capability (nonirrigated): 2s

Typical Profile:

Ap—0 to 8 inches; silt loam
 BA—8 to 14 inches; silty clay loam
 Bt—14 to 30 inches; silty clay
 BC—30 to 36 inches; silty clay loam
 C—36 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 10 percent

Geomorphic Position: hillside on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Butler

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Unnamed Hydric Soils

Composition: About 1 percent

Cf—Crete silt loam, 1 to 3 percent slopes

Map Unit Composition

Crete: 79 percent
 Minor components: 1 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillside on upland
Hillslope position: 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 10.6 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 (pe25-34)
Land capability (irrigated): 2e
Land capability (nonirrigated): 2e

Typical Profile:

Ap—0 to 8 inches; silt loam
 BA—8 to 14 inches; silty clay loam
 Bt—14 to 30 inches; silty clay
 BC—30 to 36 inches; silty clay loam
 C—36 to 60 inches; silty clay loam

Minor Components

Unnamed Hydric Soils

Composition: About 1 percent

Hastings

Geomorphic Position: hillside on upland
Slope: 1 to 3 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

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

Ch—Crete silty clay loam, 3 to 7 percent slopes

Cr—Crete silty clay loam, 2 to 5 percent slopes, eroded

Map Unit Composition

Crete: 75 percent
 Minor components: 25 percent

Map Unit Composition

Crete: 75 percent
 Minor components: 25 percent

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillside 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 10.6 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 (irrigated): 3e
Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 8 inches; silt loam
 BA—8 to 14 inches; silty clay loam
 Bt—14 to 30 inches; silty clay
 BC—30 to 36 inches; silty clay loam
 C—36 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 20 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Geary

Composition: About 5 percent
Geomorphic Position: hillside on upland

Component Descriptions

Crete

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess
Slope: 2 to 5 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: 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; silty clay loam
 Bt—8 to 26 inches; silty clay
 BC—26 to 31 inches; silty clay loam
 C—31 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 20 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Geary

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

Dt—Detroit silty clay loam, rarely flooded

Map Unit Composition

Detroit: 89 percent
Minor components: 11 percent

Component Descriptions

Detroit

MLRA: 75 - Central Loess Plains
Landform: Terrace on river valley
Parent material: Loamy alluvium
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.2 inches)
Shrink-swell potential: High (About 7.9 LEP)
Flooding hazard: Rare
Ponding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Terrace (pe26-30)
Land capability (nonirrigated): 1

Typical Profile:

Ap—0 to 6 inches; silty clay loam
A—6 to 12 inches; silty clay loam
Bt—12 to 32 inches; silty clay
BC—32 to 38 inches; silty clay loam
C—38 to 60 inches; silty clay loam

Minor Components

Muir

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

Unnamed Hydric Soils

Composition: About 1 percent

Ed—Eudora loam, 0 to 2 percent slopes, rarely flooded

Map Unit Composition

Eudora: 90 percent

Minor components: 10 percent

Component Descriptions

Eudora

MLRA: 75 - Central Loess Plains
Landform: Terrace 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 11.1 inches)
Shrink-swell potential: Low (About 1.4 LEP)
Flooding hazard: Rare
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 6 inches; loam
A—6 to 10 inches; loam
AC—10 to 18 inches; loam
C—18 to 40 inches; very fine sandy loam
Ab—40 to 60 inches; silt loam

Minor Components

Muir

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

Eu—Eudora loam, 2 to 8 percent slopes, rarely flooded

Map Unit Composition

Eudora: 90 percent
Minor components: 10 percent

Component Descriptions

Eudora

MLRA: 75 - Central Loess Plains
Landform: Terrace on river valley
Parent material: Loamy alluvium
Slope: 2 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 11.0 inches)

Shrink-swell potential: Low (About 1.4 LEP)
Flooding hazard: Rare
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Terrace (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 8 inches; loam
 AC—8 to 14 inches; loam
 C—14 to 40 inches; very fine sandy loam
 Ab—40 to 60 inches; silt loam

Minor Components

Muir

Composition: About 10 percent
Slope: 2 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Terrace (pe25-34)

Gc—Geary silt loam, 3 to 7 percent slopes

Map Unit Composition

Geary: 70 percent
 Minor components: 30 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Loamy loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.0 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:

A—0 to 12 inches; silt loam
 BA—12 to 22 inches; silty clay loam
 Bt—22 to 36 inches; silty clay loam
 BC—36 to 48 inches; silty clay loam

2C—48 to 60 inches; sandy clay loam

Minor Components

Wells

Composition: About 15 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Crete

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

Gr—Geary silty clay loam, 3 to 7 percent slopes, Severely eroded

Map Unit Composition

Geary: 70 percent
 Minor components: 30 percent

Component Descriptions

Geary

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Loamy loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.2 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): 4e

Typical Profile:

Ap—0 to 6 inches; silty clay loam

Bt—6 to 20 inches; silty clay loam
BC—20 to 32 inches; silty clay loam
2C—32 to 60 inches; sandy clay loam

Minor Components

Hastings

Composition: About 15 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Wells

Composition: About 15 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Ha—Hastings silt loam, 0 to 1 percent slopes

Map Unit Composition

Hastings: 79 percent
Minor components: 21 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Summit
Parent material: Silty loess
Slope: 0 to 1 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: High (About 7.4 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): 1

Typical Profile:

Ap—0 to 8 inches; silt loam
A—8 to 12 inches; silt loam
BA—12 to 18 inches; silty clay loam
Bt—18 to 34 inches; silty clay loam
BC—34 to 46 inches; silty clay loam
C—46 to 60 inches; silty clay loam

Minor Components

Crete

Composition: About 15 percent
Geomorphic Position: hillside on upland
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Butler

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Unnamed Hydric Soils

Composition: About 1 percent

Hb—Hastings silt loam, 1 to 3 percent slopes

Map Unit Composition

Hastings: 80 percent
Minor components: 20 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Summit, backslope
Parent material: Silty loess
Slope: 1 to 3 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: High (About 7.4 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): 2e

Typical Profile:

Ap—0 to 8 inches; silt loam
AB—8 to 14 inches; silty clay loam
Bt—14 to 30 inches; silty clay loam
BC—30 to 42 inches; silty clay loam
C—42 to 60 inches; silty clay loam

Minor Components

Crete

Composition: About 20 percent

Geomorphic Position: hillside on upland
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe25-34)

Hd—Hastings silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Hastings: 85 percent
 Minor components: 15 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.6 inches)
Shrink-swell potential: High (About 7.4 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:

Ap—0 to 8 inches; silty clay loam
 Bt—8 to 23 inches; silty clay loam
 BC—23 to 35 inches; silty clay loam
 C—35 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Crete

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

Hc—Hastings silt loam, 3 to 7 percent slopes

Map Unit Composition

Hastings: 85 percent
 Minor components: 15 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 3 to 7 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: High (About 7.4 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 8 inches; silt loam
 AB—8 to 14 inches; silty clay loam
 Bt—14 to 30 inches; silty clay loam
 BC—30 to 42 inches; silty clay loam
 C—42 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Crete

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

He—Hastings silty clay loam, 3 to 7 percent slopes, Severely eroded

Map Unit Composition

Hastings: 90 percent
Minor components: 10 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 3 to 7 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: High (About 7.4 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 5 inches; silty clay loam
Bt—5 to 20 inches; silty clay loam
BC—20 to 31 inches; silty clay loam
C—31 to 60 inches; silty clay loam

Minor Components

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hf—Hastings-Ortello fine sandy loams, 1 to 4 percent slopes, eroded

Map Unit Composition

Hastings: 70 percent
Ortello: 30 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope, summit
Parent material: Silty loess
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.0 inches)
Shrink-swell potential: High (About 7.4 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:

Ap—0 to 8 inches; fine sandy loam
A—8 to 14 inches; fine sandy loam
Bt—14 to 30 inches; silty clay loam
BC—30 to 42 inches; silty clay loam
C—42 to 60 inches; silty clay loam

Ortello

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Loamy alluvium
Slope: 1 to 4 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: High (About 9.1 inches)
Shrink-swell potential: Low (About 0.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Sandy (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 6 inches; fine sandy loam
A—6 to 10 inches; fine sandy loam
AB—10 to 22 inches; fine sandy loam
Bw—22 to 36 inches; loam
C—36 to 60 inches; fine sandy loam

Ho—Hastings-Ortello fine sandy loams, 4 to 8 percent slopes, eroded

Map Unit Composition

Hastings: 70 percent
Ortello: 30 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope, summit
Parent material: Silty loess
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.0 inches)
Shrink-swell potential: High (About 7.4 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:

Ap—0 to 6 inches; fine sandy loam
BA—6 to 12 inches; fine sandy loam
Bt—12 to 30 inches; silty clay loam
BC—30 to 42 inches; silty clay loam
C—42 to 60 inches; silty clay loam

Ortello

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Loamy alluvium
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Moderate (About 9.0 inches)
Shrink-swell potential: Low (About 0.9 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Sandy (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 6 inches; fine sandy loam
BA—6 to 16 inches; fine sandy loam
Bw—16 to 32 inches; loam
C—32 to 60 inches; fine sandy loam

Hp—Hastings-Hobbs complex, 0 to 8 percent slopes

Map Unit Composition

Hastings: 70 percent
Hobbs: 28 percent
Minor components: 2 percent

Component Descriptions

Hastings

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.6 inches)
Shrink-swell potential: High (About 7.4 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 8 inches; silty clay loam
Bt—8 to 23 inches; silty clay loam
BC—23 to 35 inches; silty clay loam
C—35 to 60 inches; silty clay loam

Hobbs

MLRA: 75 - Central Loess Plains
Landform: Flood plain
Parent material: 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: Moderate (About 4.7 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:
 A—0 to 7 inches; silt loam
 C—7 to 60 inches; silty clay loam

Minor Components

Unnamed Hydric Soil

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

Unnamed Hydric Soils

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

Hs—Hobbs silt loam, occasionally flooded

Map Unit Composition

Hobbs: 88 percent
 Minor components: 12 percent

Component Descriptions

Hobbs

MLRA: 75 - Central Loess Plains
Landform: Flood plain on 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 12.0 inches)
Shrink-swell potential: Moderate (About 4.7 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:
 A—0 to 7 inches; silt loam
 C—7 to 60 inches; silty clay loam

Minor Components

Muir

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Loamy Terrace (pe25-34)

Unnamed Hydric Soils

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

Unnamed Hydric Soil

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

Ht—Humbarger clay loam, occasionally flooded

Map Unit Composition

Humbarger: 69 percent
 Minor components: 31 percent

Component Descriptions

Humbarger

MLRA: 75 - Central Loess Plains
Landform: Flood plain on river valley
Parent material: Loamy alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 10.1 inches)
Shrink-swell potential: Moderate (About 4.7 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; clay loam
 AC—7 to 30 inches; clay loam
 C—30 to 48 inches; silt loam
 2C—48 to 60 inches; loamy fine sand

Minor Components

Mccook

Composition: About 15 percent
Slope: 0 to 2 percent

Drainage class: Well drained
Ecological site: Silty Lowland - Veg. Zone 1

Cozad

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Silty Lowland - Veg. Zone 3

Cass

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Sandy Lowland - Veg. Zone 3

Unnamed Hydric Soils

Composition: About 1 percent

**Hu—Humbarger loam,
occasionally flooded**

Map Unit Composition

Humbarger: 69 percent
Minor components: 31 percent

Component Descriptions

Humbarger

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 10.7 inches)
Shrink-swell potential: Moderate (About 3.5 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
AC—7 to 30 inches; silt loam
C—30 to 48 inches; silt loam
2C—48 to 60 inches; loamy fine sand

Minor Components

Mccook

Composition: About 15 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Silty Lowland - Veg. Zone 1

Cozad

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Silty Lowland - Veg. Zone 3

Cass

Composition: About 5 percent
Slope: 0 to 2 percent
Drainage class: Well drained
Ecological site: Sandy Lowland - Veg. Zone 3

Unnamed Hydric Soils

Composition: About 1 percent

**Ke—Kenesaw silt loam, 5 to 12
percent slopes**

Map Unit Composition

Kenesaw: 90 percent
Minor components: 10 percent

Component Descriptions

Kenesaw

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 5 to 11 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: Low (About 2.0 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): 4e

Typical Profile:

A—0 to 7 inches; silt loam
AB—7 to 13 inches; silt loam
Bw—13 to 25 inches; silt loam
C—25 to 60 inches; silt loam

Minor Components

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 5 to 11 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Kn—Kenesaw silt loam, 5 to 12 percent slopes, eroded

Map Unit Composition

Kenesaw: 90 percent
 Minor components: 10 percent

Component Descriptions

Kenesaw

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Silty loess
Slope: 5 to 12 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: Low (About 2.0 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): 4e

Typical Profile:

Ap—0 to 7 inches; silt loam
 Bw—7 to 19 inches; silt loam
 C—19 to 60 inches; silt loam

Minor Components

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 5 to 12 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Kp—Kipson Soils, 11 to 30 percent slopes

Map Unit Composition

Kipson: 85 percent
 Minor components: 15 percent

Component Descriptions

Kipson

MLRA: 75 - Central Loess Plains
Landform: Hillside on upland
Hillslope position: Backslope
Parent material: Calcareous loamy residuum weathered from shale
Slope: 11 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: Very low (About 2.9 inches)
Shrink-swell potential: Moderate (About 3.7 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 10 inches; loam
 C—10 to 20 inches; channery loam
 Cr—20 to 20 inches; weathered bedrock

Minor Components

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 1 to 8 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hobbs

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

La—Wells loam, 4 to 8 percent slopes

Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Map Unit Composition

Wells: 70 percent
 Minor components: 30 percent

Component Descriptions

Wells

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 9.0 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 (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

A—0 to 10 inches; loam
 BA—10 to 15 inches; clay loam
 Bt—15 to 34 inches; clay loam
 BC—34 to 42 inches; clay loam
 C—42 to 50 inches; loam
 R—50 to 60 inches; weathered bedrock

Minor Components

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Lancaster

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 4 to 10 percent

Lc—Wells loam, 4 to 8 percent slopes, eroded

Wells: 70 percent
 Minor components: 30 percent

Map Unit Composition

Component Descriptions

Wells

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum
Slope: 4 to 8 percent
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 7.8 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 (pe25-34)
Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 7 inches; loam
 Bt—7 to 22 inches; clay loam
 BC—22 to 30 inches; clay loam
 C—30 to 44 inches; loam
 R—44 to 60 inches; weathered bedrock

Minor Components

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Hastings

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

Lancaster

Composition: About 10 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 10 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Lh—Lancaster-Hedville loams, 5 to 25 percent slopes

Map Unit Composition

Lancaster: 50 percent
 Hedville: 28 percent
 Minor components: 22 percent

Component Descriptions

Lancaster

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Loamy residuum
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 5.4 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 (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 9 inches; loam
 BA—9 to 16 inches; clay loam
 Bt1—16 to 24 inches; clay loam
 Bt2—24 to 30 inches; clay loam
 Cr—30 to 30 inches; weathered bedrock

Hedville

MLRA: 75 - Central Loess Plains, 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Shoulder, backslope

Parent material: Loamy residuum weathered from sandstone and shale

Slope: 5 to 25 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: Low (About 1.6 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Shallow Sandstone (pe25-34)
Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 10 inches; loam
 C—10 to 14 inches; loam
 R—14 to 14 inches; unweathered bedrock

Minor Components

Wells

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

Geary

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

Hastings

Composition: About 5 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy 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

LOO—Longford silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Longford: 90 percent
Minor components: 10 percent

Component Descriptions

Longford

MLRA: 74 - Central Kansas Sandstone Hills
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey loess over loamy pedisement
Slope: 3 to 7 percent
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 10.1 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): 4e

Typical Profile:

H1—0 to 6 inches; silty clay loam
H2—6 to 31 inches; silty clay loam
H3—31 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)

Lancaster

Composition: About 3 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)

Wells

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

Mr—Muir silt loam, 0 to 1 percent slopes

Map Unit Composition

Muir: 89 percent
Minor components: 11 percent

Component Descriptions

Muir

MLRA: 75 - Central Loess Plains
Landform: Terrace on river valley
Parent material: 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 12.6 inches)
Shrink-swell potential: Moderate (About 3.9 LEP)
Flooding hazard: Rare
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 8 inches; silt loam
A—8 to 22 inches; silt loam
Bw—22 to 44 inches; silt loam
C—44 to 60 inches; silt loam

Minor Components

Detroit

Composition: About 10 percent
Slope: 0 to 1 percent
Drainage class: Moderately well drained
Ecological site: Loamy Terrace (pe26-30)

Unnamed Hydric Soils

Composition: About 1 percent

Mu—Muir silt loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Muir: 100 percent

Component Descriptions

Muir

MLRA: 75 - Central Loess Plains

Landform: Terrace on river valley

Parent material: Silty alluvium

Slope: 3 to 7 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.6 inches)

Shrink-swell potential: Moderate (About 3.9 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Terrace (pe25-34)

Land capability (nonirrigated): 3e

Typical Profile:

Ap—0 to 8 inches; silt loam

Bw—8 to 30 inches; silt loam

C—30 to 60 inches; silt loam

Ro—Coly silt loam, 25 to 40 percent slopes

Map Unit Composition

Coly: 100 percent

Component Descriptions

Coly

MLRA: 75 - Central Loess Plains

Landform: Hillside on upland

Hillslope position: Backslope

Parent material: Silty calcareous loess

Slope: 25 to 40 percent

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very high (About 12.6 inches)

Shrink-swell potential: Low (About 2.8 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): 7e

Typical Profile:

A—0 to 4 inches; silt loam

AC—4 to 10 inches; silt loam

C—10 to 60 inches; silt loam

Sa—Inavale loamy sand, 0 to 3 percent slopes, occasionally flooded

Map Unit Composition

Inavale: 85 percent

Minor components: 15 percent

Component Descriptions

Inavale

MLRA: 75 - Central Loess Plains

Landform: Flood plain on river valley

Parent material: Sandy alluvium

Slope: 0 to 3 percent

Drainage class: Somewhat excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.9 inches)

Shrink-swell potential: Low (About 0.1 LEP)

Flooding hazard: Occasional

Depth to seasonal water saturation: More than 6 feet

Runoff class: Negligible

Ecological site: Sandy Lowland (pe20-26)

Land capability (nonirrigated): 3w

Typical Profile:

Ap—0 to 7 inches; loamy sand

C1—7 to 20 inches; loamy sand

C2—20 to 40 inches; stratified loamy sand

C3—40 to 60 inches; stratified sand

Minor Components

Munjoy

Composition: About 14 percent

Slope: 0 to 3 percent

Drainage class: Well drained

Ecological site: Sandy Lowland - Veg. Zone 3

Unnamed Hydric Soil

Composition: About 1 percent

Slope: 0 to 1 percent

Drainage class: Poorly drained

SAN—Sand and Gravel Pits

Sd—Inavale loamy sand, 3 to 12 percent slopes

Map Unit Composition

Inavale: 100 percent

Component Descriptions

Inavale

MLRA: 75 - Central Loess Plains

Landform: Dune on river valley

Parent material: Sandy alluvium

Slope: 3 to 12 percent

Drainage class: Somewhat excessively drained

Slowest permeability: Rapid (About 5.95 in/hr)

Available water capacity: Low (About 4.9 inches)

Shrink-swell potential: Low (About 0.1 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very low

Ecological site: Sandy Lowland (pe20-26)

Land capability (nonirrigated): 6e

Typical Profile:

A—0 to 7 inches; loamy sand

C1—7 to 20 inches; loamy sand

C2—20 to 40 inches; stratified loamy sand

C3—40 to 60 inches; stratified sand

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

Map Unit Composition

Tully: 75 percent

Minor components: 25 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains

Landform: Hillside on upland

Hillslope position: Backslope, 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: High (About 11.3 inches)

Shrink-swell potential: High (About 6.6 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:

A—0 to 12 inches; silty clay loam

BA—12 to 20 inches; silty clay loam

Bt—20 to 44 inches; silty clay loam

BC—44 to 52 inches; silty clay loam

C—52 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 15 percent

Geomorphic Position: hillside on upland

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

Geary

Composition: About 10 percent

Geomorphic Position: hillside on upland

Slope: 3 to 7 percent

Drainage class: Well drained

Ecological site: Loamy Upland (pe25-34)

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

Map Unit Composition

Tully: 75 percent

Minor components: 25 percent

Component Descriptions

Tully

MLRA: 75 - Central Loess Plains

Landform: Hillside on upland

Hillslope position: Backslope, 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: High (About 11.2 inches)

Shrink-swell potential: High (About 6.6 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:

Ap—0 to 7 inches; silty clay loam
 Bt—7 to 29 inches; silty clay loam
 BC—29 to 37 inches; silty clay loam
 C—37 to 60 inches; silty clay loam

Minor Components

Hastings

Composition: About 15 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

Geary

Composition: About 10 percent
Geomorphic Position: hillside on upland
Slope: 3 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe25-34)

W—Water

Wa—Saltine silty clay loam, frequently flooded

Map Unit Composition

Saltine: 98 percent
 Minor components: 2 percent

Component Descriptions

Saltine

MLRA: 75 - Central Loess Plains
Landform: Flood plain on valley
Parent material: Silty and clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: High (About 11.4 inches)
Shrink-swell potential: Moderate (About 4.7 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: About 24 to 36 inches
Runoff class: Low
Ecological site: Saline Lowland (pe26-30)
Land capability (irrigated): 5w
Land capability (nonirrigated): 5w

Typical Profile:

A—0 to 7 inches; silty clay loam
 Bw1—7 to 16 inches; silty clay loam
 Bw2—16 to 30 inches; silty clay loam
 Bw3—30 to 50 inches; silty clay loam
 C—50 to 63 inches; silty clay loam

Minor Components

Unnamed Hydric Soil

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

Unnamed Hydric Soils

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