

019DE—Dennis silty clay loam, 3 to 7 percent slopes, eroded

Map Unit Composition

Dennis: 85 percent
Minor components: 5 percent

Component Descriptions

Dennis

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 3 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.2 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-38)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 7 inches; silty clay loam
H2—7 to 12 inches; silty clay loam
H3—12 to 76 inches; silty clay

Minor Components

Dwight

Composition: About 5 percent
Slope: 1 to 3 percent
Drainage class: Moderately well drained
Ecological site: Claypan (pe35-38)

019EC—Eram-Collinsville complex, 1 to 7 percent slopes

Map Unit Composition

Eram: 70 percent
Collinsville: 20 percent
Minor components: 10 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.8 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam
H2—8 to 32 inches; silty clay
Cr—32 to 36 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Shoulder, summit
Parent material: Sandstone residuum
Slope: 1 to 7 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.0 inches)
Shrink-swell potential: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Shallow Sandstone (pe35-38)
Land capability (nonirrigated): 6

Typical Profile:

H1—0 to 12 inches; loam
R—12 to 16 inches; unweathered bedrock

Minor Components

Bates

Composition: About 10 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Well drained
Ecological site: Loamy Upland (pe35-38)

019ST—Steedman stony clay loam, 8 to 20 percent slopes

Map Unit Composition

Steedman: 100 percent

Component Descriptions

Steedman

MLRA: 84A - Cross Timbers
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Clayey residuum weathered from clayey shale
Slope: 8 to 20 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 3.5 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-38)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 6 inches; gravelly clay loam
 H2—6 to 30 inches; clay
 Cr—30 to 34 inches; weathered bedrock

099EO—Eram-Lebo silty clay loams, 4 to 20 percent slopes

Map Unit Composition

Eram: 60 percent
 Lebo: 20 percent
 Minor components: 20 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Upland, hillslope
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 to 12 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 3.7 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 8 inches; silty clay loam
 H2—8 to 28 inches; silty clay
 Cr—28 to 32 inches; weathered bedrock

Lebo

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Parent material: Residuum weathered from shale, clayey
Slope: 8 to 15 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 4.3 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 (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 9 inches; silty clay loam
 H2—9 to 15 inches; silty clay loam
 H3—15 to 22 inches; gravelly silty clay loam
 H4—22 to 32 inches; extremely gravelly silty clay loam
 Cr—32 to 36 inches; weathered bedrock

Minor Components

Zaar

Composition: About 10 percent
Slope: 0 to 2 percent

Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Collinsville

Composition: About 10 percent
Slope: 4 to 15 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Sandstone (pe35-42)

Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

205BH—Bates-Collinsville loams, 3 to 7 percent slopes

099VC—Verdigris silt loam, frequently flooded

Map Unit Composition

Verdigris: 85 percent
 Minor components: 15 percent

Component Descriptions

Verdigris

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: High (About 12.0 inches)
Shrink-swell potential: Low (About 2.2 LEP)
Flooding hazard: Frequent
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 11 inches; silt loam
 H2—11 to 34 inches; silt loam
 H3—34 to 43 inches; silty clay loam
 H4—43 to 60 inches; silty clay loam

Minor Components

Zaar

Composition: About 10 percent
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Eram

Composition: About 5 percent

Map Unit Composition

Bates: 50 percent
 Collinsville: 35 percent
 Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.0 inches)
Shrink-swell potential: Moderate (About 3.1 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 10 inches; loam
 H2—10 to 12 inches; loam
 H3—12 to 19 inches; clay loam
 H4—19 to 27 inches; gravelly clay loam
 Cr—27 to 31 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandstone residuum
Slope: 3 to 7 percent

Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.2 inches)
Shrink-swell potential: Low (About 1.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very low
Ecological site: Shallow Sandstone (pe35-42)
Land capability (nonirrigated): 6s

Typical Profile:

H1—0 to 6 inches; loam
 H2—6 to 14 inches; fine sandy loam
 R—14 to 18 inches; unweathered bedrock

Minor Components

Dennis

Composition: About 8 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 7 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

**205BO—Bates-Collinsville loams,
7 to 20 percent slopes**

Map Unit Composition

Bates: 45 percent
 Collinsville: 40 percent
 Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and

silty residuum weathered from sandstone-shale
Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 4.4 inches)
Shrink-swell potential: Moderate (About 3.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 7 inches; loam
 H2—7 to 13 inches; loam
 H3—13 to 20 inches; clay loam
 H4—20 to 25 inches; gravelly clay loam
 Cr—25 to 29 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Sandstone residuum
Slope: 7 to 20 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately rapid (About 2.00 in/hr)
Available water capacity: Very low (About 2.2 inches)
Shrink-swell potential: Low (About 1.8 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Shallow Sandstone (pe35-42)
Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 6 inches; loam
 H2—6 to 14 inches; fine sandy loam
 R—14 to 18 inches; unweathered bedrock

Minor Components

Dennis

Composition: About 8 percent
Geomorphic Position: hillslope on upland
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 7 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Ringo

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

205EB—Eram silt loam, 1 to 3 percent slopes**205RN—Ringo silty clay loam, 15 to 35 percent slopes****Map Unit Composition**

Eram: 90 percent
 Minor components: 10 percent

Map Unit Composition

Ringo: 90 percent
 Minor components: 10 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope, summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.8 inches)
Shrink-swell potential: High (About 8.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 24 inches; silty clay
 H3—24 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components**Bates**

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Component Descriptions**Ringo**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from limestone
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.5 inches)
Shrink-swell potential: High (About 8.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 21 inches; silty clay loam
 H3—21 to 26 inches; silty clay
 Cr—26 to 30 inches; weathered bedrock

Minor Components**Shidler**

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 1 to 8 percent
Depth to restrictive feature: inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Limy (pe35-42)

Eram

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

205RS—Ringo-Shidler silty clay loams, 3 to 15 percent slopes

Map Unit Composition

Ringo: 65 percent
 Shidler: 30 percent
 Minor components: 5 percent

Component Descriptions

Ringo

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Residuum weathered from limestone
Slope: 3 to 15 percent
Depth to restrictive feature: inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.6 inches)
Shrink-swell potential: High (About 8.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 21 inches; silty clay loam
 H3—21 to 26 inches; silty clay
 Cr—26 to 30 inches; weathered bedrock

Shidler

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone
Slope: 3 to 8 percent

Depth to restrictive feature: inches to bedrock (lithic)

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very low (About 2.0 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: Shallow Limy (pe35-42)

Land capability (nonirrigated): 7e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 R—10 to 14 inches; unweathered bedrock

Minor Components**Catoosa**

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

205SC—Shidler-Catoosa complex, 1 to 8 percent slopes

Map Unit Composition

Shidler: 70 percent
 Catoosa: 20 percent
 Minor components: 10 percent

Component Descriptions

Shidler

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Shoulder
Parent material: Residuum weathered from limestone
Slope: 1 to 8 percent
Depth to restrictive feature: inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Very low (About 2.0 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: Shallow Limy (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 10 inches; silty clay loam
 R—10 to 14 inches; unweathered bedrock

Catoosa

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone
Slope: 0 to 2 percent
Depth to restrictive feature: inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderately slow (About 0.20 in/hr)
Available water capacity: Low (About 5.0 inches)
Shrink-swell potential: High (About 6.0 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 8 inches; silt loam
 H2—8 to 26 inches; silty clay loam
 R—26 to 30 inches; unweathered bedrock

Minor Components

Ringo

Composition: About 4 percent
Geomorphic Position: hillslope on upland
Slope: 15 to 35 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Apperson

Composition: About 3 percent
Geomorphic Position: hillslope on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 40 to 60 inches to bedrock (lithic)
Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Girard

Composition: About 3 percent
Slope: 0 to 1 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Poorly drained
Ecological site: Clay Lowland (pe35-42)

AED—Arents, Earthen Dam

Ba—Bates loam, 1 to 3 percent slopes

Map Unit Composition

Bates: 85 percent
 Minor components: 15 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 1 to 3 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: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 15 inches; loam
 H2—15 to 21 inches; clay loam
 H3—21 to 27 inches; gravelly clay loam
 Cr—27 to 31 inches; weathered bedrock

Minor Components**Collinsville**

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe35-42)

Dennis

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Bb—Bates loam, 3 to 6 percent slopes**Map Unit Composition**

Bates: 85 percent
 Minor components: 15 percent

Component Descriptions**Bates**

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Shoulder
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 3 to 6 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: Low (About 1.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: Medium

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 15 inches; loam
 H2—15 to 21 inches; clay loam
 H3—21 to 27 inches; gravelly loam
 Cr—27 to 31 inches; weathered bedrock

Minor Components**Collinsville**

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe35-42)

Dennis

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Bc—Bates loam, 2 to 6 percent slopes, eroded**Map Unit Composition**

Bates: 90 percent
 Minor components: 10 percent

Component Descriptions**Bates**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Shoulder
Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and silty residuum weathered from sandstone-shale
Slope: 2 to 6 percent
Depth to restrictive feature: 16 to 36 inches to bedrock (paralithic)
Drainage class: Well drained

Slowest permeability: Moderate (About 0.60 in/hr)

Available water capacity: Low (About 3.2 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 5 inches; loam

H2—5 to 21 inches; gravelly clay loam

Cr—21 to 25 inches; weathered bedrock

Minor Components

Collinsville

Composition: About 5 percent

Slope: 1 to 4 percent

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

Drainage class: Somewhat excessively drained

Ecological site: Shallow Sandstone (pe35-42)

Eram

Composition: About 5 percent

Slope: 1 to 4 percent

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

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Bf—Bates-Collinsville complex, 1 to 4 percent slopes

Map Unit Composition

Bates: 50 percent

Collinsville: 40 percent

Minor components: 10 percent

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Summit

Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and

silty residuum weathered from sandstone-shale

Slope: 1 to 4 percent

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

Drainage class: Well drained

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

Available water capacity: Low (About 5.4 inches)

Shrink-swell potential: Moderate (About 3.0 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 9 inches; loam

H2—9 to 15 inches; loam

H3—15 to 31 inches; clay loam

Cr—31 to 35 inches; weathered bedrock

Collinsville

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Backslope

Parent material: Sandstone residuum

Slope: 1 to 4 percent

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

Drainage class: Well drained

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

Available water capacity: Very low (About 2.1 inches)

Shrink-swell potential: Low (About 1.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very low

Ecological site: Shallow Sandstone (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; fine sandy loam

H2—11 to 17 inches; fine sandy loam

R—17 to 21 inches; unweathered bedrock

Minor Components

Eram

Composition: About 5 percent

Geomorphic Position: ridge on upland

Slope: 1 to 4 percent

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

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Talihina

Composition: About 5 percent
Geomorphic Position: upland ridge
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Parent material: Sandstone residuum

Slope: 4 to 20 percent

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

Drainage class: Well drained

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

Available water capacity: Very low (About 2.1 inches)

Shrink-swell potential: Low (About 1.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Shallow Sandstone (pe35-42)

Land capability (nonirrigated): 7s

Bg—Bates-Collinsville complex, 4 to 20 percent slopes

Map Unit Composition

Bates: 45 percent
 Collinsville: 40 percent
 Minor components: 15 percent

Typical Profile:

H1—0 to 11 inches; fine sandy loam

H2—11 to 17 inches; fine sandy loam

R—17 to 21 inches; unweathered bedrock

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Summit

Parent material: Sandy and silty residuum weathered from sandstone, unspecified over sandy and

silty residuum weathered from sandstone-shale

Slope: 4 to 8 percent

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

Drainage class: Well drained

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

Available water capacity: Low (About 6.0 inches)

Shrink-swell potential: Low (About 2.9 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Medium

Ecological site: Loamy Upland (pe35-42)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 15 inches; loam

H2—15 to 27 inches; loam

H3—27 to 31 inches; clay loam

Cr—31 to 35 inches; weathered bedrock

Minor Components**Dennis**

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 4 to 7 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 4 to 7 percent

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

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Talihina

Composition: About 5 percent

Geomorphic Position: hillslope on upland

Slope: 6 to 20 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Well drained

Ecological site: Clay Upland (pe35-42)

Bu—Bates-Urban land complex, 2 to 6 percent slopes

Map Unit Composition

Bates: 50 percent

Urban land: 35 percent

Collinsville

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Backslope

Minor components: 15 percent

Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Component Descriptions

Bates

MLRA: 112 - Cherokee Prairies

Landform: Hillslope on upland

Hillslope position: Backslope

Parent material: Sandy and silty residuum
weathered from sandstone, unspecified over
sandy and

silty residuum weathered from sandstone-shale

Slope: 2 to 6 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 6.0 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6
feet

Runoff class: Low

Land capability (nonirrigated): 3

Typical Profile:

H1—0 to 15 inches; loam

H2—15 to 27 inches; clay loam

H3—27 to 31 inches; gravelly clay loam

Cr—31 to 35 inches; weathered bedrock

Urban land

MLRA: 112 - Cherokee Prairies

Depth to seasonal water saturation: More than 6
feet

Minor Components

Collinsville

Composition: About 5 percent

Slope: 1 to 4 percent

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

Drainage class: Somewhat excessively
drained

Ecological site: Shallow Sandstone (pe35-
42)

Dennis

Composition: About 5 percent

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent

Slope: 1 to 4 percent

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

Ca—Catoosa silt loam, 0 to 2 percent slopes

Map Unit Composition

Catoosa: 85 percent

Minor components: 15 percent

Component Descriptions

Catoosa

MLRA: 112 - Cherokee Prairies

Landform: Ridge on upland

Hillslope position: Summit

Parent material: Residuum weathered from
limestone

Slope: 0 to 2 percent

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

Drainage class: Well drained

Slowest permeability: Moderate (About 0.60
in/hr)

Available water capacity: Low (About 5.9 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 (pe35-42)

Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 10 inches; silt loam

H2—10 to 15 inches; silty clay loam

H3—15 to 31 inches; silty clay loam

R—31 to 35 inches; unweathered bedrock

Minor Components

Kenoma

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Clay Upland (pe35-42)

Shidler

Composition: About 5 percent

Slope: 1 to 4 percent

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

Drainage class: Well drained

Ecological site: Shallow Limy (pe35-42)

Zaar

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Db—Dennis silt loam, 1 to 4 percent slopes**Map Unit Composition**

Dennis: 90 percent
 Minor components: 10 percent

Component Descriptions**Dennis**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 4 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: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 2e

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 19 inches; silty clay loam
 H3—19 to 60 inches; silty clay

Minor Components**Bates**

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Eram

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Dc—Dennis silt loam, 4 to 7 percent slopes**Map Unit Composition**

Dennis: 90 percent
 Minor components: 10 percent

Component Descriptions**Dennis**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 to 7 percent
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.4 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 12 to 18 inches
Runoff class: Very high
Ecological site: Loamy Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 13 inches; silt loam
 H2—13 to 19 inches; silty clay loam
 H3—19 to 60 inches; silty clay

Minor Components**Eram**

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Bates

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Eb—Eram silty clay loam, 1 to 4 percent slopes**Map Unit Composition**

Eram: 90 percent
 Minor components: 10 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Hillslope on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components**Bates**

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Talihina

Composition: About 5 percent
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Ec—Eram silty clay loam, 2 to 6 percent slopes, eroded**Map Unit Composition**

Eram: 90 percent
 Minor components: 10 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 2 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components**Talihina**

Composition: About 5 percent
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Bates

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Ef—Eram silty clay loam, 4 to 7 percent slopes**Map Unit Composition**

Eram: 90 percent
 Minor components: 10 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Upland, hillslope
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 4 to 7 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.7 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 4e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Minor Components**Bates**

Composition: About 5 percent
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Talihina

Composition: About 5 percent
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Et—Eram-Talihina silty clay loams, 6 to 20 percent slopes**Map Unit Composition**

Eram: 50 percent
 Talihina: 35 percent
 Minor components: 15 percent

Component Descriptions**Eram**

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 6 to 8 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.9 inches)
Shrink-swell potential: High (About 7.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 28 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; silty clay loam
 H2—11 to 32 inches; silty clay
 Cr—32 to 36 inches; weathered bedrock

Talihina

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Shoulder
Parent material: Residuum weathered from shale
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Very low (About 2.9 inches)
Shrink-swell potential: High (About 8.3 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 28 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 7 inches; silty clay loam
H2—7 to 14 inches; silty clay
H3—14 to 17 inches; silty clay
Cr—17 to 21 inches; weathered bedrock

Minor Components

Bates

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 3 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Collinsville

Composition: About 5 percent
Geomorphic Position: ridge on upland
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Somewhat excessively drained
Ecological site: Shallow Sandstone (pe35-42)

Dennis

Composition: About 5 percent
Geomorphic Position: hillslope on upland
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Eu—Eram-Urban land complex, 2 to 6 percent slopes

Map Unit Composition

Eram: 50 percent
Urban land: 35 percent
Minor components: 15 percent

Component Descriptions

Eram

MLRA: 112 - Cherokee Prairies
Landform: Upland, hillslope
Hillslope position: Backslope
Parent material: Silty and clayey residuum weathered from shale, unspecified
Slope: 2 to 6 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)

Drainage class: Moderately well drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: Low (About 4.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Land capability (nonirrigated): 4

Typical Profile:

H1—0 to 11 inches; silty clay loam
H2—11 to 32 inches; silty clay
Cr—32 to 36 inches; weathered bedrock

Urban land

MLRA: 112 - Cherokee Prairies
Depth to seasonal water saturation: More than 6 feet

Minor Components

Dennis

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Moderately well drained
Ecological site: Loamy Upland (pe35-42)

Talihina

Composition: About 5 percent
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Bates

Composition: About 5 percent
Slope: 1 to 3 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

INT—Aquolls

General Considerations: This map unit was formerly labeled as an Intermittent Water spot symbol. These depressional areas contain soils that are occasionally ponded for long duration.

Ka—Kenoma silt loam, 0 to 2 percent slopes**Map Unit Composition**

Kenoma: 90 percent
 Minor components: 10 percent

Component Descriptions**Kenoma**

MLRA: 112 - Cherokee Prairies
Landform: Upland, -- error in exists on --
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and shale
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 8.9 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 60 inches; silty clay

Minor Components**Zaar**

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Catoosa

Composition: About 5 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

KE—Kenoma silt loam, 1 to 3 percent slopes**Map Unit Composition**

Kenoma: 91 percent
 Minor components: 9 percent

Component Descriptions**Kenoma**

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from limestone and shale
Slope: 1 to 3 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: High (About 8.7 LEP)
Flooding hazard: None
Depth to seasonal water saturation: More than 6 feet
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 9 inches; silt loam
 H2—9 to 25 inches; silty clay
 H3—25 to 41 inches; silty clay
 H4—41 to 60 inches; silty clay

Minor Components**Catoosa**

Composition: About 3 percent
Geomorphic Position: ridge on upland
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Dwight

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

Olpe

Composition: About 3 percent
Geomorphic Position: ridge on paleoterrace on upland
Slope: 2 to 7 percent
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

La—Lanton silty clay loam, occasionally flooded**Map Unit Composition**

Lanton: 95 percent
 Minor components: 5 percent

Component Descriptions**Lanton**

MLRA: 112 - Cherokee Prairies
Landform: River valley, flood plain
Parent material: Silty and clayey alluvium
Slope: 0 to 2 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 10.5 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: High
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 12 inches; silty clay loam
 H2—12 to 32 inches; silty clay loam
 H3—32 to 60 inches; silty clay loam

Minor Components**Osage**

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

LN—Lanton silt loam, occasionally flooded**Map Unit Composition**

Lanton: 95 percent
 Minor components: 5 percent

Component Descriptions**Lanton**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty and clayey alluvium
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Slow (About 0.06 in/hr)
Available water capacity: High (About 9.9 inches)
Shrink-swell potential: Moderate (About 4.3 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: High
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 7 inches; silt loam
 H2—7 to 21 inches; silt loam
 H3—21 to 39 inches; silty clay loam
 H4—39 to 60 inches; silty clay

Minor Components**Osage**

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

M-W—Miscellaneous Water**Ma—Mason silt loam, rarely flooded****Map Unit Composition**

Mason: 95 percent
 Minor components: 5 percent

Component Descriptions

Mason

MLRA: 112 - Cherokee Prairies

Landform: Flood plain on river valley

Parent material: Silty alluvium

Slope: 0 to 2 percent

Drainage class: Well drained

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

Available water capacity: High (About 10.6 inches)

Shrink-swell potential: Moderate (About 4.5 LEP)

Flooding hazard: Rare

Depth to seasonal water saturation: More than 6 feet

Runoff class: Low

Ecological site: Loamy Lowland (pe35-42)

Land capability (nonirrigated): 1

Typical Profile:

H1—0 to 18 inches; silt loam

H2—18 to 60 inches; silty clay loam

Minor Components

Osage

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Poorly drained

Ecological site: Clay Lowland (pe35-42)

Nd—Niotaze-Darnell complex, 8 to 20 percent slopes

Map Unit Composition

Niotaze: 55 percent

Darnell: 35 percent

Minor components: 10 percent

Component Descriptions

Niotaze

MLRA: 84A - Cross Timbers

Landform: Hillslope, upland

Hillslope position: Backslope

Parent material: Residuum weathered from sandstone over residuum weathered from shale

Slope: 8 to 20 percent

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

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Low (About 4.1 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches

Runoff class: Very high

Ecological site: Savannah (pe35-38)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; cobbly fine sandy loam

H2—11 to 32 inches; silty clay

Cr—32 to 36 inches; weathered bedrock

Darnell

MLRA: 84A - Cross Timbers

Landform: Upland, hillslope

Hillslope position: Backslope

Parent material: Residuum weathered from sandstone

Slope: 8 to 15 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Somewhat excessively drained

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

Available water capacity: Very low (About 2.3 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: Shallow Savannah (pe35-38)

Land capability (nonirrigated): 6

Typical Profile:

H1—0 to 6 inches; fine sandy loam

H2—6 to 16 inches; fine sandy loam

Cr—16 to 20 inches; weathered bedrock

Minor Components

Dennis

Composition: About 5 percent

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Rock outcrop

Composition: About 5 percent

Drainage class: Well drained

Oa—Oil Waste Land*Runoff class:* High*Ecological site:* Loamy Upland (pe35-42)*Land capability (nonirrigated):* 3e**Od—Olpe-Dennis complex, 2 to 6 percent slopes***Typical Profile:*

H1—0 to 13 inches; silt loam

H2—13 to 19 inches; silty clay loam

H3—19 to 60 inches; silty clay

Map Unit Composition

Olpe: 55 percent

Dennis: 35 percent

Minor components: 10 percent

Component Descriptions**Olpe***MLRA:* 112 - Cherokee Prairies*Landform:* Paleoterrace on upland*Hillslope position:* Shoulder*Parent material:* Clayey alluvium*Slope:* 2 to 6 percent*Drainage class:* Well drained*Slowest permeability:* Slow (About 0.06 in/hr)*Available water capacity:* Very low (About 1.7 inches)*Shrink-swell potential:* Moderate (About 4.3 LEP)*Flooding hazard:* None*Depth to seasonal water saturation:* More than 6 feet*Runoff class:* Medium*Ecological site:* Loamy Upland (pe35-42)*Land capability (nonirrigated):* 6e*Typical Profile:*

H1—0 to 16 inches; gravelly silt loam

H2—16 to 21 inches; very gravelly silty clay loam

H3—21 to 60 inches; very gravelly silty clay

Dennis*MLRA:* 112 - Cherokee Prairies*Landform:* Hillslope on upland*Hillslope position:* Footslope*Parent material:* Silty and clayey residuum weathered from shale, unspecified*Slope:* 2 to 6 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:* High (About 7.5 LEP)*Flooding hazard:* None*Depth to seasonal water saturation:* About 12 to 28 inches**Minor Components****Bates***Composition:* About 5 percent*Geomorphic Position:* hillslope on upland*Slope:* 1 to 3 percent*Depth to restrictive feature:* 20 to 40 inches to bedrock (paralithic)*Drainage class:* Well drained*Ecological site:* Loamy Upland (pe35-42)**Rock outcrop***Composition:* About 5 percent*Geomorphic Position:* hillslope upland*Drainage class:* Well drained**Or—Orthents, Clayey****Map Unit Composition**

Orthents: 100 percent

Component Descriptions**Orthents***MLRA:* 112 - Cherokee Prairies*Landform:* Hillslope on upland, flood plain on river valley*Parent material:* Mine spoil or earthy fill*Slope:* 0 to 8 percent*Drainage class:* Well drained*Slowest permeability:* Slow (About 0.06 in/hr)*Available water capacity:* Moderate (About 7.0 inches)*Shrink-swell potential:* High (About 7.5 LEP)*Flooding hazard:* None*Depth to seasonal water saturation:* More than 6 feet*Land capability (nonirrigated):* 6s*Typical Profile:*

H1—0 to 8 inches; silty clay loam

H2—8 to 60 inches; silty clay

Os—Osage silty clay, occasionally flooded**Map Unit Composition**

Osage: 90 percent
 Minor components: 10 percent

Component Descriptions**Osage**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Clayey alluvium
Slope: 0 to 2 percent
Drainage class: Poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 6.4 inches)
Shrink-swell potential: Very high (About 12.5 LEP)
Flooding hazard: Occasional
Ponding hazard: Occasional
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: Negligible
Ecological site: Clay Lowland (pe35-42)
Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 6 inches; silty clay
 H2—6 to 17 inches; silty clay
 H3—17 to 60 inches; clay

Minor Components**Lanton**

Composition: About 5 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Loamy Lowland (pe35-42)

Verdigris

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

Pa—Parsons silt loam, 0 to 1 percent slopes**Map Unit Composition**

Parsons: 95 percent
 Minor components: 5 percent

Component Descriptions**Parsons**

MLRA: 112 - Cherokee Prairies
Landform: Paleoterrace, upland
Parent material: Loess over ancient clayey alluvium and/or residuum weathered from shale
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Slowest permeability: Very slow (About 0.00 in/hr)
Available water capacity: Moderate (About 9.0 inches)
Shrink-swell potential: High (About 7.5 LEP)
Flooding hazard: None
Depth to seasonal water saturation: About 6 to 18 inches
Runoff class: High
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 12 inches; silt loam
 H2—12 to 80 inches; silty clay

Minor Components**Zaar**

Composition: About 5 percent
Slope: 1 to 4 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Qu—Pits, Quarries

General Considerations: Pits are open excavations from which soil and commonly underlying material have been removed, exposing either rock or other material. Kinds include Pits, mine; Pits, gravel; and Pits, quarry. Commonly, pits are closely associated with Dumps.

Sc—Shidler-Catoosa silt loams, 1 to 4 percent slopes

Map Unit Composition

Shidler: 50 percent
Catoosa: 40 percent
Minor components: 10 percent

Component Descriptions

Shidler

MLRA: 112 - Cherokee Prairies
Landform: Rim on upland
Hillslope position: Backslope
Parent material: Residuum weathered from limestone
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very low (About 2.2 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: Shallow Flats (pe35-42)
Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 11 inches; silt loam
R—11 to 15 inches; unweathered bedrock

Catoosa

MLRA: 112 - Cherokee Prairies
Landform: Ridge on upland
Hillslope position: Summit
Parent material: Residuum weathered from limestone
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Moderate (About 6.0 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 (pe35-42)

Land capability (nonirrigated): 2

Typical Profile:

H1—0 to 10 inches; silt loam
H2—10 to 31 inches; silty clay loam
R—31 to 35 inches; unweathered bedrock

Minor Components

Talihina

Composition: About 5 percent
Slope: 6 to 20 percent
Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)
Drainage class: Well drained
Ecological site: Clay Upland (pe35-42)

Rock outcrop

Composition: About 5 percent
Drainage class: Well drained

Sd—Stephenville-Darnell fine sandy loams, 1 to 5 percent slopes

Map Unit Composition

Stephenville: 50 percent
Darnell: 40 percent
Minor components: 10 percent

Component Descriptions

Stephenville

MLRA: 84A - Cross Timbers
Landform: Ridge, upland
Hillslope position: Shoulder
Parent material: Residuum weathered from sandstone
Slope: 1 to 5 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 4.0 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: Savannah (pe35-38)

Land capability (nonirrigated): 6e

Typical Profile:

H1—0 to 17 inches; fine sandy loam
H2—17 to 30 inches; sandy clay loam
Cr—30 to 34 inches; weathered bedrock

Darnell

MLRA: 84A - Cross Timbers

Landform: Upland, ridge

Hillslope position: Shoulder

Parent material: Residuum weathered from sandstone

Slope: 1 to 5 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Somewhat excessively drained

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

Available water capacity: Very low (About 2.3 inches)

Shrink-swell potential: Low (About 1.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: More than 6 feet

Runoff class: Very low

Ecological site: Shallow Savannah (pe35-38)

Land capability (nonirrigated): 4

Typical Profile:

H1—0 to 6 inches; fine sandy loam
H2—6 to 16 inches; fine sandy loam
Cr—16 to 20 inches; weathered bedrock

Minor Components

Dennis

Composition: About 5 percent

Slope: 1 to 4 percent

Drainage class: Moderately well drained

Ecological site: Loamy Upland (pe35-42)

Niotaze

Composition: About 5 percent

Slope: 8 to 20 percent

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

Drainage class: Somewhat poorly drained

Ecological site: Savannah (pe35-38)

Ts—Talihina-Shale Outcrop complex, 10 to 50 percent slopes

Map Unit Composition

Talihina: 60 percent

Shale Outcrop: 25 percent

Minor components: 15 percent

Component Descriptions

Talihina

MLRA: 112 - Cherokee Prairies

Landform: Upland, ridge

Hillslope position: Shoulder

Parent material: Residuum weathered from shale

Slope: 10 to 30 percent

Depth to restrictive feature: 10 to 20 inches to bedrock (paralithic)

Drainage class: Moderately well drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Very low (About 2.9 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 6 to 24 inches

Runoff class: Very high

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 7s

Typical Profile:

H1—0 to 17 inches; silty clay loam
Cr—17 to 21 inches; weathered bedrock

Shale Outcrop

MLRA: 112 - Cherokee Prairies

Drainage class: Somewhat excessively drained

Depth to seasonal water saturation: More than 6 feet

Minor Components

Collinsville

Composition: About 5 percent

Slope: 1 to 4 percent

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

Drainage class: Somewhat excessively drained

Ecological site: Shallow Sandstone (pe35-42)

Eram

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (paralithic)
Drainage class: Moderately well drained
Ecological site: Clay Upland (pe35-42)

Shidler

Composition: About 5 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Flats (pe35-42)

Vb—Verdigris silt loam, occasionally flooded**Map Unit Composition**

Verdigris: 95 percent
 Minor components: 5 percent

Component Descriptions**Verdigris**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 inches)
Shrink-swell potential: Moderate (About 4.5 LEP)
Flooding hazard: Occasional
Depth to seasonal water saturation: More than 6 feet
Runoff class: Low
Ecological site: Loamy Lowland (pe35-42)
Land capability (nonirrigated): 2w

Typical Profile:

H1—0 to 28 inches; silt loam
 H2—28 to 60 inches; silt loam

Minor Components**Osage**

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

Vc—Verdigris silt loam, channeled**Map Unit Composition**

Verdigris: 95 percent
 Minor components: 5 percent

Component Descriptions**Verdigris**

MLRA: 112 - Cherokee Prairies
Landform: Flood plain on river valley
Parent material: Silty alluvium
Slope: 0 to 2 percent
Drainage class: Moderately well drained
Slowest permeability: Moderate (About 0.60 in/hr)
Available water capacity: Very high (About 12.4 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 (pe35-42)
Land capability (nonirrigated): 5w

Typical Profile:

H1—0 to 28 inches; silt loam
 H2—28 to 60 inches; silt loam

Minor Components**Osage**

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

W—Water**Wo—Woodson silt loam, 0 to 1 percent slopes****Map Unit Composition**

Woodson: 90 percent
 Minor components: 10 percent

Component Descriptions

Woodson

MLRA: 112 - Cherokee Prairies

Landform: Paleoterrace on upland

Parent material: Loess over clayey alluvium and/or clayey residuum weathered from clayey shale

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Slowest permeability: Slow (About 0.06 in/hr)

Available water capacity: Moderate (About 8.7 inches)

Shrink-swell potential: Very high (About 10.6 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 6 to 24 inches

Runoff class: High

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 2s

Typical Profile:

H1—0 to 8 inches; silt loam

H2—8 to 19 inches; silty clay

H3—19 to 30 inches; silty clay

H4—30 to 43 inches; silty clay

H5—43 to 60 inches; silty clay

Minor Components

Zaar

Composition: About 10 percent

Slope: 0 to 2 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Upland (pe35-42)

Za—Zaar silty clay, 0 to 1 percent slopes

Map Unit Composition

Zaar: 90 percent

Minor components: 10 percent

Component Descriptions

Zaar

MLRA: 112 - Cherokee Prairies

Landform: Hillslope, upland

Hillslope position: Footslope

Parent material: Ancient alluvium and/or clayey colluvium and/or residuum weathered from shale

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

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

Available water capacity: Moderate (About 8.6 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches

Runoff class: Very high

Ecological site: Clay Upland (pe35-42)

Land capability (nonirrigated): 3w

Typical Profile:

H1—0 to 14 inches; silty clay

H2—14 to 60 inches; silty clay

Minor Components

Verdigris

Composition: About 5 percent

Slope: 0 to 2 percent

Drainage class: Moderately well drained

Ecological site: Loamy Lowland (pe35-42)

Woodson

Composition: About 5 percent

Slope: 0 to 1 percent

Drainage class: Somewhat poorly drained

Ecological site: Clay Upland (pe35-42)

Zb—Zaar silty clay, 1 to 4 percent slopes

Map Unit Composition

Zaar: 92 percent

Minor components: 8 percent

Component Descriptions

Zaar

MLRA: 112 - Cherokee Prairies

Landform: Hillslope, upland

Hillslope position: Footslope

Parent material: Ancient alluvium and/or clayey colluvium and/or residuum weathered from shale

Slope: 1 to 4 percent

Drainage class: Somewhat poorly drained

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

Available water capacity: Moderate (About 8.6 inches)

Shrink-swell potential: High (About 7.5 LEP)

Flooding hazard: None

Depth to seasonal water saturation: About 12 to 24 inches
Runoff class: Very high
Ecological site: Clay Upland (pe35-42)
Land capability (nonirrigated): 3e

Typical Profile:

H1—0 to 14 inches; silty clay
H2—14 to 60 inches; silty clay

Minor Components

Woodson

Composition: About 2 percent
Slope: 0 to 1 percent
Drainage class: Somewhat poorly drained
Ecological site: Clay Upland (pe35-42)

Verdigris

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

Catoosa

Composition: About 2 percent
Slope: 0 to 2 percent
Depth to restrictive feature: 20 to 40 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Loamy Upland (pe35-42)

Shidler

Composition: About 2 percent
Slope: 1 to 4 percent
Depth to restrictive feature: 4 to 20 inches to bedrock (lithic)
Drainage class: Well drained
Ecological site: Shallow Limy (pe35-42)