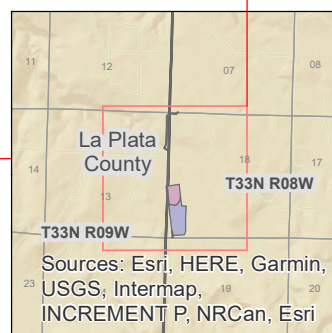
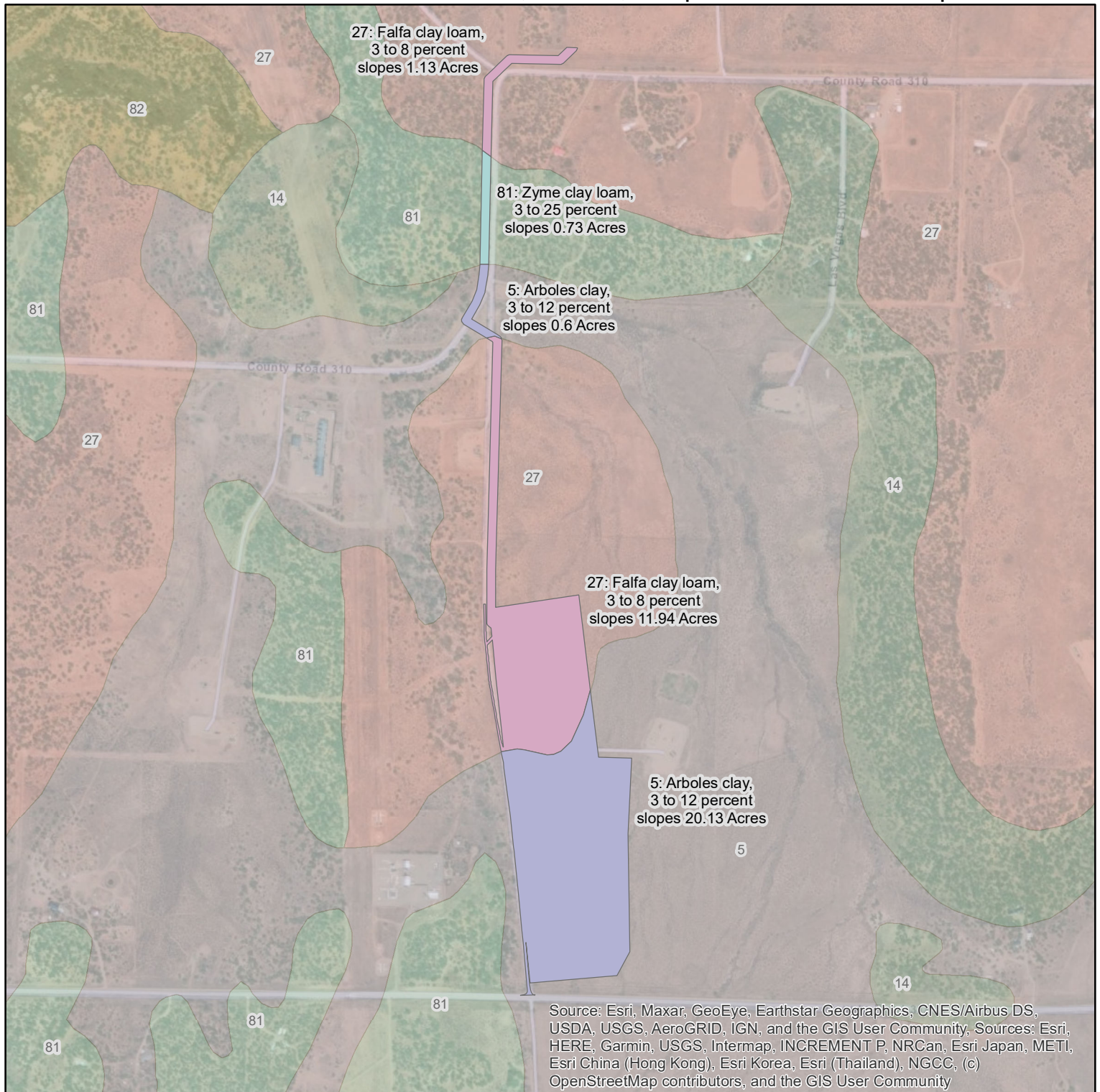


Ardourel 33081718 Well Permit, Access, & Pipeline ROW Soils Map



Ardourel Permit Area, Road, and Pipeline ROW Area Soils:

- 14: Bodot clay, 3 to 10 percent slopes
- 27: Falfa clay loam, 3 to 8 percent slopes
- 5: Arboles clay, 3 to 12 percent slopes
- 81: Zyme clay loam, 3 to 25 percent slopes
- 82: Zyme-Rock outcrop complex, 12 to 65 percent slopes



Data Sources:
BLM, ESRI, USDA

0 500 1,000 Feet

1:9,500

Author: MM (EIS LLC)

Date: 10/14/2021

NAD 1983 State Plane
Colorado South FIPS 0503 Feet

La Plata County Area, Colorado

5—Arboles clay, 3 to 12 percent slopes

Map Unit Setting

National map unit symbol: 1yp0

Elevation: 6,000 to 7,000 feet

Mean annual precipitation: 14 to 18 inches

Mean annual air temperature: 47 to 50 degrees F

Frost-free period: 110 to 130 days

Farmland classification: Not prime farmland

Map Unit Composition

Arboles and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arboles

Setting

Landform: Valleys

Landform position (three-dimensional): Side slope, base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Fine-textured alluvium derived from shale

Typical profile

H1 - 0 to 6 inches: clay

H2 - 6 to 30 inches: clay, silty clay

H2 - 6 to 30 inches: clay loam, silty clay loam, clay

H3 - 30 to 60 inches:

H3 - 30 to 60 inches:

H3 - 30 to 60 inches:

Properties and qualities

Slope: 3 to 12 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 23.0 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R036XY289CO - Clayey Foothills

Hydric soil rating: No

Minor Components

Bodot

Percent of map unit: 15 percent

Hydric soil rating: No

Other soils

Percent of map unit: 4 percent

Hydric soil rating: No

Aquents

Percent of map unit: 1 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: La Plata County Area, Colorado

Survey Area Data: Version 19, Sep 1, 2021

La Plata County Area, Colorado

27—Falfa clay loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 1yn6

Elevation: 6,500 to 7,000 feet

Mean annual precipitation: 15 to 18 inches

Mean annual air temperature: 48 to 49 degrees F

Frost-free period: 100 to 120 days

Farmland classification: Not prime farmland

Map Unit Composition

Falfa and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Falfa

Setting

Landform: Mesas

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous loess

Typical profile

H1 - 0 to 9 inches: clay loam

H2 - 9 to 34 inches: clay, silty clay, clay loam

H2 - 9 to 34 inches: clay, silty clay, clay loam

H2 - 9 to 34 inches: loam, clay loam

H3 - 34 to 57 inches:

H3 - 34 to 57 inches:

H3 - 34 to 57 inches:

H4 - 57 to 60 inches:

H4 - 57 to 60 inches:

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Very high (about 25.9 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: C

Ecological site: R036XY289CO - Clayey Foothills

Other vegetative classification: Loamy Foothill (048AY284CO)

Hydric soil rating: No

Minor Components

Other soils

Percent of map unit: 10 percent

Hydric soil rating: No

Corta

Percent of map unit: 8 percent

Hydric soil rating: No

Aquents

Percent of map unit: 2 percent

Landform: Depressions

Hydric soil rating: Yes

Data Source Information

Soil Survey Area: La Plata County Area, Colorado

Survey Area Data: Version 19, Sep 1, 2021

La Plata County Area, Colorado

81—Zyme clay loam, 3 to 25 percent slopes

Map Unit Setting

National map unit symbol: 1yq4

Elevation: 6,000 to 7,000 feet

Mean annual precipitation: 14 to 18 inches

Mean annual air temperature: 45 to 50 degrees F

Frost-free period: 110 to 130 days

Farmland classification: Not prime farmland

Map Unit Composition

Zyme and similar soils: 70 percent

Minor components: 30 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Zyme

Setting

Landform: Ridges, hills

Landform position (three-dimensional): Crest, side slope, base slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Residuum weathered from shale

Typical profile

H1 - 0 to 4 inches: clay loam

H2 - 4 to 10 inches: silty clay loam, clay, clay loam

H2 - 4 to 10 inches: weathered bedrock

H2 - 4 to 10 inches:

H3 - 10 to 14 inches:

Properties and qualities

Slope: 3 to 25 percent

Depth to restrictive feature: 6 to 20 inches to paralithic bedrock

Drainage class: Well drained

Runoff class: High

Capacity of the most limiting layer to transmit water

(Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 6e
Hydrologic Soil Group: D
Ecological site: R036XY446CO - Southwestern Mountain -
(Pinyon-Juniper)
Hydric soil rating: No

Minor Components

Bodot

Percent of map unit: 15 percent
Hydric soil rating: No

Arboles

Percent of map unit: 10 percent
Hydric soil rating: No

Other soils

Percent of map unit: 5 percent
Hydric soil rating: No

Data Source Information

Soil Survey Area: La Plata County Area, Colorado
Survey Area Data: Version 19, Sep 1, 2021