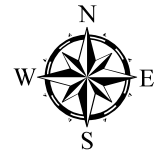




Stormwater Management Plan Soils Map

Denali State 5N67W13 1-23 PAD



Date: 1/27/2023
0 0.275 0.55
Miles
1:16,890



Prepared by:

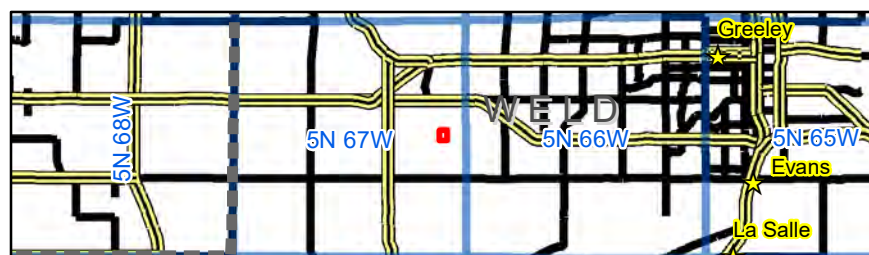
Construction Boundary

Map Unit Name

- Aquolls and Aquepts, flooded | 95219
- Colby loam, 1 to 3 percent slopes | 95192
- Colby-Adena loams, 3 to 9 percent slopes | 95195
- Haverson loam, 1 to 3 percent slopes | 95204
- Kim loam, 3 to 5 percent slopes | 95212
- Loup-Boel loamy sands, 0 to 3 percent slopes | 95214
- Nelson fine sandy loam, 3 to 9 percent slopes | 95217
- Olney fine sandy loam, 1 to 3 percent slopes | 95227
- Olney fine sandy loam, 3 to 5 percent slopes | 95228
- Olney loamy sand, 1 to 3 percent slopes | 95224
- Otero sandy loam, 5 to 9 percent slopes | 95234
- Tassel fine sandy loam, 5 to 20 percent slopes | 95243
- Valent sand, 3 to 9 percent slopes | 95253
- Vona loamy sand, 5 to 9 percent slopes | 95257
- Vona sandy loam, 1 to 3 percent slopes | 95259

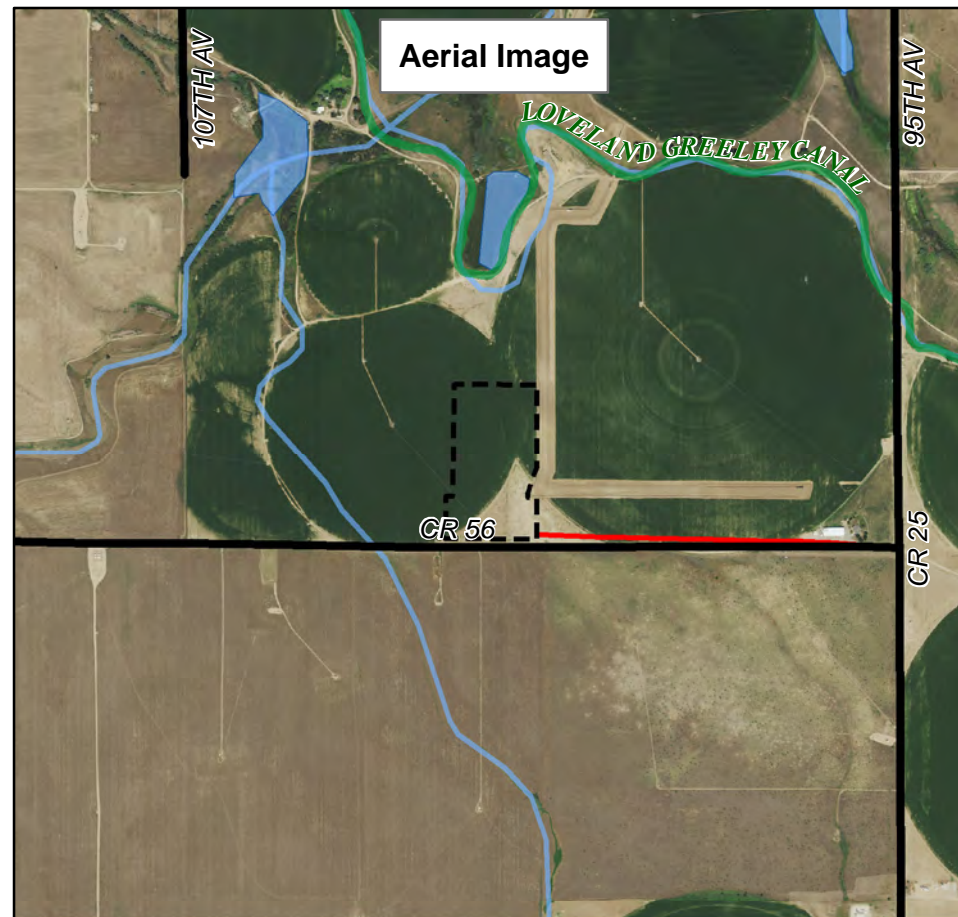
K Factor Value Groupings (Approximate):

- Low susceptibility to erosion/runoff: ≤ 0.2
- Moderate susceptibility to erosion/runoff: $> 0.2 - 0.4$
- High susceptibility to erosion/runoff: > 0.4

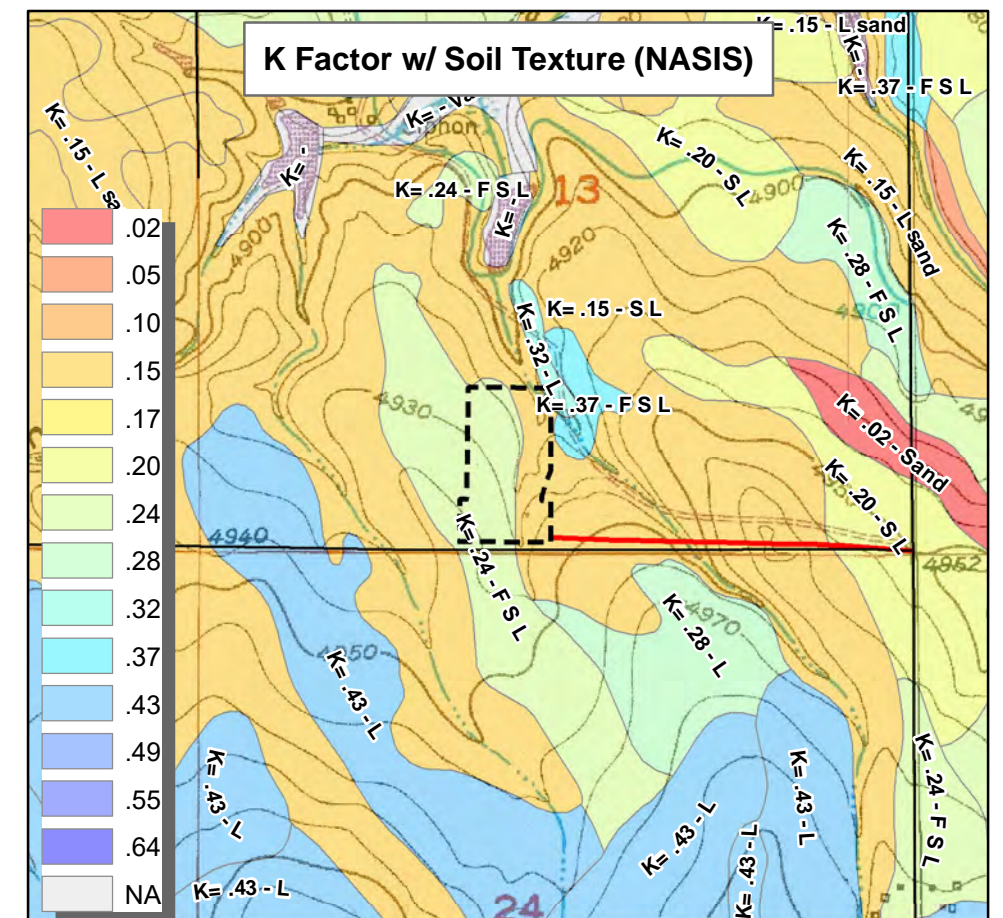
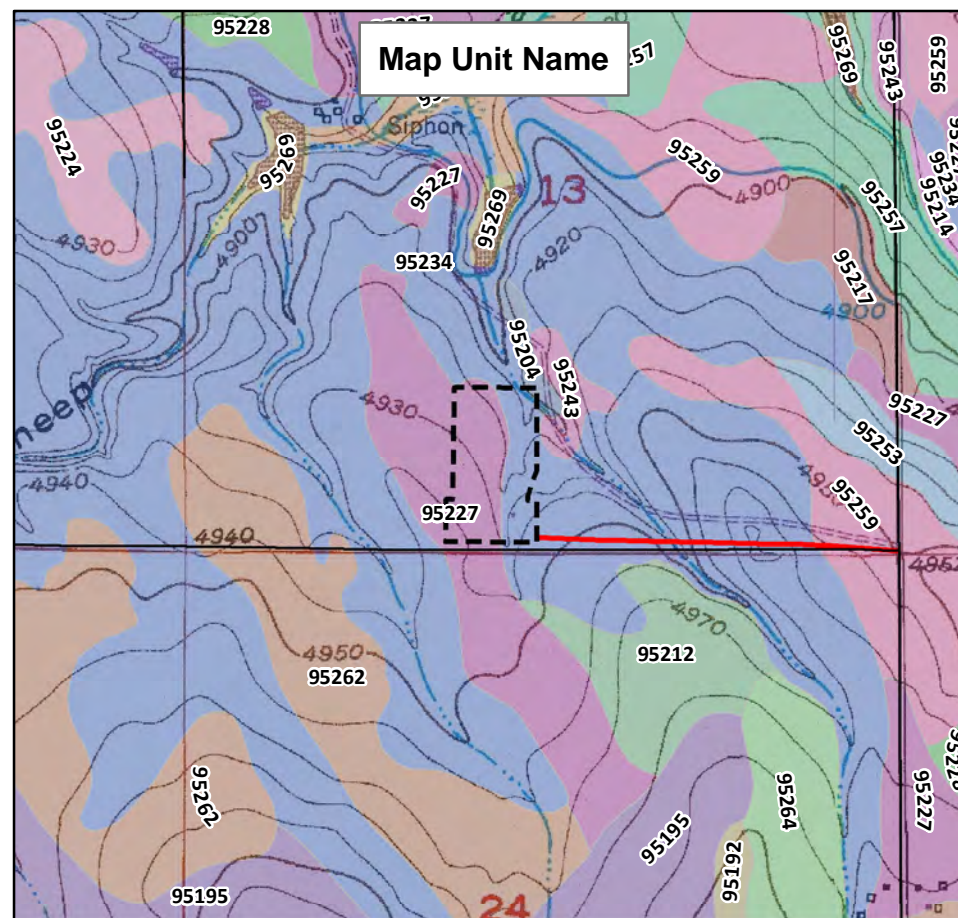
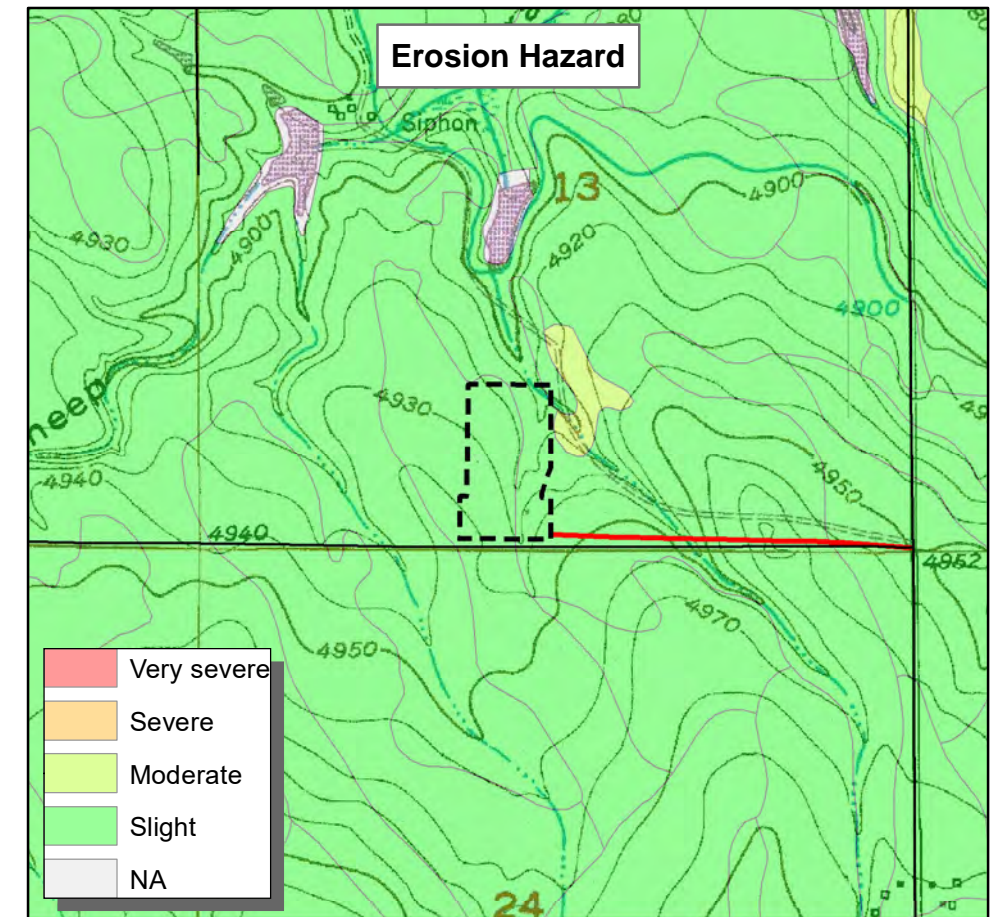


Document Name: PDC_Soils_V8

User Name: nwilson



All data is from the NRCS soil surveys and is useful for overview purposes only. Onsite verifications are required to confirm accuracy when used for planning.



Weld County, Colorado, Southern Part

47—Olney fine sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 362v

Elevation: 4,600 to 5,200 feet

Mean annual precipitation: 11 to 15 inches

Mean annual air temperature: 46 to 54 degrees F

Frost-free period: 125 to 175 days

Farmland classification: Prime farmland if irrigated and the product of
I (soil erodibility) x C (climate factor) does not exceed 60

Map Unit Composition

Olney and similar soils: 85 percent

Minor components: 15 percent

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

Description of Olney

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Mixed deposit outwash

Typical profile

H1 - 0 to 10 inches: fine sandy loam

H2 - 10 to 20 inches: sandy clay loam

H3 - 20 to 25 inches: sandy clay loam

H4 - 25 to 60 inches: fine sandy loam

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 2.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

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

Available water supply, 0 to 60 inches: Moderate (about 7.0
inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4c

Hydrologic Soil Group: B
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Minor Components

Zigweid

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

Vona

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

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 20, Aug 31, 2021

Weld County, Colorado, Southern Part

26—Haverson loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2tlq0

Elevation: 4,140 to 5,080 feet

Mean annual precipitation: 13 to 17 inches

Mean annual air temperature: 50 to 54 degrees F

Frost-free period: 135 to 160 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Haverson, rarely flooded, and similar soils: 90 percent

Minor components: 10 percent

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

Description of Haverson, Rarely Flooded

Setting

Landform: Terraces, flood plains

Landform position (three-dimensional): Tread

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Stratified alluvium derived from mixed sources

Typical profile

Ap - 0 to 4 inches: loam

A - 4 to 11 inches: loam

C1 - 11 to 19 inches: loam

C2 - 19 to 80 inches: stratified sandy loam to loam

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.20 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: Rare

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Maximum salinity: Nonsaline to very slightly saline (0.1 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 1.0

Available water supply, 0 to 60 inches: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: B
Ecological site: R067BY036CO - Overflow
Hydric soil rating: No

Minor Components

Bijou

Percent of map unit: 10 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R067BY024CO - Sandy Plains
Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 20, Aug 31, 2021

Weld County, Colorado, Southern Part

53—Otero sandy loam, 5 to 9 percent slopes

Map Unit Setting

National map unit symbol: 3632

Elevation: 4,700 to 5,250 feet

Mean annual precipitation: 12 to 15 inches

Mean annual air temperature: 48 to 52 degrees F

Frost-free period: 130 to 180 days

Farmland classification: Not prime farmland

Map Unit Composition

Otero and similar soils: 85 percent

Minor components: 15 percent

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

Description of Otero

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Eolian deposits and/or mixed outwash

Typical profile

H1 - 0 to 12 inches: sandy loam

H2 - 12 to 60 inches: fine sandy loam

Properties and qualities

Slope: 5 to 9 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 5.95 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 slightly saline (0.0 to 4.0 mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): 4e

Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R067BY024CO - Sandy Plains

Hydric soil rating: No

Minor Components

Kim

Percent of map unit: 10 percent

Hydric soil rating: No

Cushman

Percent of map unit: 5 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 20, Aug 31, 2021

Weld County, Colorado, Southern Part

76—Vona sandy loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 363w

Elevation: 4,600 to 5,200 feet

Mean annual precipitation: 13 to 15 inches

Mean annual air temperature: 48 to 55 degrees F

Frost-free period: 130 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Vona and similar soils: 85 percent

Minor components: 15 percent

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

Description of Vona

Setting

Landform: Plains, terraces

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Alluvium and/or eolian deposits

Typical profile

H1 - 0 to 6 inches: sandy loam

H2 - 6 to 28 inches: fine sandy loam

H3 - 28 to 60 inches: sandy loam

Properties and qualities

Slope: 1 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Very low

Capacity of the most limiting layer to transmit water (Ksat): High
(1.98 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 15 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0
mmhos/cm)

Available water supply, 0 to 60 inches: Moderate (about 6.8
inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

Ecological site: R067BY024CO - Sandy Plains

Hydric soil rating: No

Minor Components

Remmit

Percent of map unit: 9 percent

Hydric soil rating: No

Olney

Percent of map unit: 3 percent

Hydric soil rating: No

Julesburg

Percent of map unit: 3 percent

Hydric soil rating: No

Data Source Information

Soil Survey Area: Weld County, Colorado, Southern Part

Survey Area Data: Version 21, Sep 1, 2022