STORMWATER MANAGEMENT PLAN (SWMP) For

ORTON PIT
17710 CO115
El Paso County, Colorado 80926

Prepared For:

Castle Rock Construction Co. of Colorado LLC
6374 South Racine Circle
Centennial, Colorado 80111

Prepared By:

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719-531-6200

Contractor:

Castle Rock Construction Co. of Colorado LLC
6374 South Racine Circle
Centennial, Colorado 80111

SWMP Administrator / Qualified Stormwater Manager:

TBD

Date: July 12, 2022
Revised: August 19, 2022

PCD Filing No.:CDR2211

BASELINE
Engineering · Planning · Surveying

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STORMWATER MANAGEMENT PLAN (SWMP) GENERAL REQUIREMENTS

In compliance with the provisions of the Colorado Water Quality Control Act, (25-8-101 et seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq.; the "Act"), sand and gravel mining and processing operations, and facilities that mine and process other nonmetallic minerals except fuel, are authorized to discharge from authorized locations throughout the State of Colorado to specified surface waters of the State. Such discharges shall be in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

A. COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) GENERAL REQUIREMENTS

Per CDPHE General Permit Stormwater Discharges from Sand and Gravel Mining and Processing (and Other Nonmetallic Minerals Except Fuel) and Authorization to Discharge Under the Colorado Discharge Permit System (CDPS), Permit No. COG500000, effective on October 13, 2016.

- This permit specifically authorizes the entity identified in the certification of this permit to discharge process water and stormwater at the location(s) described in the certification of this permit, to waters of the state as identified in the certification of this permit.
- The SWMP shall be prepared in accordance with good engineering, hydrologic and pollution control practices. The plan need not be prepared by a registered engineer.
- The applicant may demand an adjudicatory hearing within thirty (30) days of the date of issuance of the final permit determination, per the Colorado Discharge Permit System Regulations, 61.7(1). Should the applicant choose to contest any of the effluent limitations, monitoring requirements or other conditions contained herein, the applicant must comply with Section 24-4-104 CRS and the Colorado Discharge Permit System Regulations. Failure to contest any such effluent limitation, monitoring requirement, or other condition, constitutes consent to the condition by the Applicant.
- The permittee must implement the provisions of the SWMP as written and updated, from commencement of construction activity until final stabilization is complete.
- A copy of the SWMP must be retained onsite or be onsite when construction activities are occurring at the site unless the permittee specifies another location and obtains approval from the CDPHE.

B. SIGNATORY REQUIREMENTS FOR DOCUMENTS SUBMITTED TO THE CDPHE

Documents required for submittal to the CDPHE in accordance with the DISCHARGES FROM SAND AND GRAVEL MINING AND PROCESSING Permit, Permit No. COG500000, including applications for permit coverage and other documents as requested by the CDPHE, must include

signatures by both the owner and the operator, except for instances where the duties of the owner and operator are managed by the owner.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

08/19/22

Travis Bell, General Superintendent
Castle Rock Construction Co. of Colorado LLC
(Applicant / Owner)

08/19/22

Travis Bell, General Superintendent
Castle Rock Construction Co. of Colorado LLC
(Operator)

C. CONSISTENCY WITH OTHER PLANS

The permittee may incorporate, by reference, applicable portions of plans prepared for other purposes at their facility. Plans or portions of plans incorporated by reference must be available along with the SWMP. The Erosion Control Plans are located in **Appendix D**.

D. REQUIRED SWMP MODIFICATIONS

At nearly every site, the implemented control measures will have to be modified to adapt to changing site conditions, or to ensure that potential pollutants are consistently and properly managed. The pollutant sources and management practices at a site must be reviewed on an ongoing basis. When control measures or other site conditions change, the SWMP must be modified to accurately reflect the actual field conditions. Examples include, but are not limited to, removal of control measures, identification of new potential pollutant sources, addition of control measures, modification of control measure installation and implementation criteria or maintenance procedures, and changes in items included in the site map and/or description. The plan should be viewed as a living document that is continuously being reviewed and modified as part of the overall process of assessing and managing stormwater quality issues at the site.

The SWMP must be amended when the following occurs:

- A change in design, construction, operation, or maintenance of the site requiring implementation of new or revised control measures;
- The plan proves ineffective in controlling pollutants in stormwater runoff in compliance with the permit conditions;
- Control measures identified in the SWMP are no longer necessary and are removed; and
- Corrective actions are taken onsite that result in a change to the SWMP.

For SWMP revisions made prior to or following a change(s) onsite, including revisions to sections addressing site conditions and control measures, a notation must be included in the plan that identifies:

- The date of the site change, the control measure removed, or modified,
- The locations(s) of those control measures, and
- Any changes to the control measures(s).

The permittee must ensure the site changes are reflected in the SWMP. The permittee is noncompliant with the Construction Stormwater Permit until the plan revisions have been made.

PROJECT DESCRIPTION

LOCATION

The borrow pit site is located on the property addressed 17710 CO115 Colorado Springs, El Paso County, Colorado 80926. Which is approximately 0.5 miles northeast of the El Paso County line along SH 115. The site is located within the NW ¼ of the NW ¼ of Section 18, Township 17 S, Range 67 West of the 6th Principal Meridian. The property is bound to the North by two rural residential properties (RR-5), the East by CO115 Right-of-Way, the South by vacant land, and the West by vacant land on the West limits of El Paso County.

The legal description for the site is as follows:
PART NW4, NW4NE4 SEC 18-17-67 LY SWLY OF C/L OF RED CREEK, NWLY OF NWLY R/W LN OF HWY 115 AND NLY OF NLY LN OF TR CONV IN BK 781-41, ALSO THAT PT OF N2N2 LY NWLY OF NWLY R/W LN OF HWY 115 AND NELY FROM C/L OF RED CRK

SITE DESCRIPTION

The property this project is located on encompasses 93.75 acres, however this project will only disturb a maximum of 10 acres at its Southeast property corner for borrow pit operations. This portion of the site consists of a historic borrow pit and undeveloped land covered by native grasses, trees, and weeds.

CONSTRUCTION ACTIVITIES

Construction activities for this project will include grading and hauling operations within the disturbed area of the borrow pit, installation of temporary BMPs as shown in the GEC plan, and final stabilization as described in the "Final Stabilization" section of this report. Temporary BMPs will be removed when final stabilization of the site is achieved.

PROJECT PHASING AND PROPOSED CONSTRUCTION SEQUENCE

PHASING

Three phases of construction activity are associated with this project, initial, interim, and final. The initial phase will include the installation of initial erosion control BMPs prior to disturbance of the site, which includes perimeter control, vehicle tracking, and staging areas. The interim phase will include installation of the temporary erosion control BMPs that will remain in place until final stabilization of the site. The final phase will be completed after borrow pit operations are terminated, and as described in the "Final Stabilization" section of this report.

CONSTRUCTION SEQUENCE

Construction for this project is anticipated to begin in the summer of 2022 upon approval of applicable documents and permits. It is estimated that construction activities on the borrow site will be in operation for less than 24 months. Final stabilization is expected to be achieved in the summer of 2024. The anticipated construction sequence is as follows:

Initial:

1. Install vehicle tracking control, stabilized staging area
2. Install perimeter silt fence as shown on the GEC Plans

Interim:

1. Site Clearing/Grubbing
2. Install temporary sediment control pond at the downstream end of the site
3. During borrow pit grading operations, continue maintenance on temporary sediment control pond

Final:

1. After completion of borrow pit operations, final stabilize all disturbed areas on site
2. Remove temporary construction BMPs

Refer to the "Disturbed Areas" section of this report for disturbed area quantities anticipated with this project.

FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

The final stabilization and long-term stormwater management of the site occurs when the revegetation of all disturbed areas is completed. Final stabilization of the site will begin after the operation of the borrow pit is completed. Final stabilization of the site will occur once all areas inside of the disturbed limits are revegetated. Final stabilization is achieved when all ground disturbing activities are complete and all disturbed areas either have a uniform vegetative cover with individual plan density of 70 percent of pre-disturbance levels established or equivalent permanent alternative stabilization method is implemented. all temporary sediment and erosion control measures shall be removed upon final stabilization and before permit closure.

The long-term stormwater quality of this site will be the final stabilization after construction operations have been completed. There will be no increase in stormwater flows or decrease in stormwater quality from historic conditions.

DISTURBED AREAS

The site will have approximately 10 acres of disturbance within the project limits. The construction operations consist of grading and hauling operations for the borrow pit, installation of temporary erosion control facilities and revegetation of disturbed areas.

EXISTING SITE CONDITIONS & SOILS

EXISTING SOIL TYPE

Soil data for the Orton Borrow pit was taken from the United Stated Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey.

The soil type at the site was identified as Satanta Loam, with slopes ranging from 0-3%, and a hydrologic soil grouping of “B”. Soils associated with hydrologic soil group B have a moderate infiltration rate when thoroughly wet. These are moderately deep, well-draining soils with a moderate rate of water transmission.

The erosion factor “K” was determined for the predominant soil on site to be 0.28. This factor indicating a moderately low susceptibility of erosion by water.

Soil maps used have been provided in the appendix of this report.

EXISTING DRAINAGE CONDITIONS

The existing site drains from the Northwest to the Southeast primarily at slopes between 0-3% into an existing depression on the Northeast side of CO-115. Stormwater will infiltrate into soils at the existing depression, which is a historic borrow pit not in operation. During borrow pit operations, the site will continue to drain to the historic low point, while providing erosion and sediment control for proposed disturbed areas on site.

EXISTING VEGETATION

The percentage of existing vegetative ground cover on the orton pit site will be estimated prior to the start of construction. This estimation will be determined on-site. The site is undeveloped, with the downstream end of the site being a historic borrow pit not in operation. Upon completion of borrow pit operations, the disturbed area will be fully stabilized in compliance with the approved plans.

FLOODPLAIN

According to the FEMA Flood Insurance Rate Map (FIRM) Panel No. 08041C1125G, effective 12/07/2018, this site is located within an area of minimal flood hazard (Zone X). Refer to the appendix for FIRM Map.

POTENTIAL POLLUTION SOURCES & DESCRIPTIONS

Potential pollutant sources for this site include the following:

1. Disturbed and stored soils – to be mitigated by the use of silt fence, seeding and mulching, check dams, and erosion control blankets;
2. Vehicle tracking of sediments – to be mitigated by vehicle tracking control measures at the entrance to the project site as indicated on the Construction Plans;
3. Management of contaminated soils – not anticipated for this site;
4. Loading and unloading operations – to be mitigated by use of a designated Stabilized Staging Area;
5. Outdoor storage activities (building materials, fertilizers, chemicals, etc.) – all hazardous materials used will be mitigated by containment in a designed area within the Stabilized Staging Area, Material Safely Data Sheets (MSDA) will be available for inspection at any point during construction;
6. Vehicle and equipment maintenance and fueling – to be mitigated by utilizing a designated area within the Stabilized Staging Area, however there will be a limited storage of vehicles on site and a secondary berm area shall be constructed surrounding this designated area to contain any spills that may occur;
7. Significant dust or particulate generating processes (e.g., saw cutting material, including dust) – to be mitigated by road watering as needed;
8. Routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc. – to be mitigated by limiting routine maintenance activities to a Chemical Storage Area within the Stabilized Staging Area. If use is conducted outside of this designated area, tarps shall be used as containment to prevent runoff;

9. On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.) – to be mitigated by having a designated location for waste within the Stabilized Staging Area;

10. Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment – not anticipated for this site, however if needed, to be mitigated by having a designated concrete washout area for all concrete wash water and concrete waste collection for proper disposal;

11. Dedicated asphalt, concrete batch plants, and masonry mixing stations – not anticipated for this site, however if needed, to be mitigated by having designated areas with secondary containment berm;

12. Non-industrial waste sources such as worker trash and portable toilets - to be mitigated by having a designated location for waste within the Stabilized Staging Area. Worker trash shall be placed in appropriate trash receptacles and daily site inspection should be conducted to ensure site is free from trash, there are no leaks from trash receptacles, and receptacle storage levels. Trash receptacles will be emptied prior to becoming 90% full or when debris control becomes an issue. All portable toilets will be located a minimum of 10 feet from stormwater inlets and 50 feet from state waters. They will be secured at all four corners to prevent overturning and cleaned on a weekly basis. They will be inspected daily for spills.

13. Other areas or procedures where potential spills can occur:

- N/A.

MATERIAL HANDLING & SPILL PREVENTION/ RESPONSE PROCEDURES

SPILL PREVENTION AND RESPONSE PLAN

Procedures for preventing spills and leaks.

1. Keep work areas clean and well organized.

2. Keep Material Safety Data Sheets (MSDS) available for hazardous chemicals and stock appropriate personal protective equipment.

3. Store containers, drums and bags within at a designated area of the Stabilized Staging Area away from traffic to prevent accidental spills.

4. Inspect storage containers regularly for leakage and keep tight fitting lids.

5. Label storage containers with substance name and type, stock number, expiration date, health hazards, handling instructions and first aid guidance.

6. Avoid spills when transferring materials from one container to another. Use needed equipment or assistance when moving materials to and from a storage area.

7. Do not wash down any outdoor work area unless wastewater is collected and discharged appropriately.

8. Inspect regularly that materials and equipment are being handled, disposed of and stored appropriately.

9. Provide necessary spill kits with equipment and supplies at each work area for potential spills or leaks.

10. Following a spill response, replace any used supplies and repair any equipment that is no longer usable.

Procedures for responding to and reporting spills and leaks. Should any spills occur, the SWMP administrator must take appropriate measures to assure complete, proper and legal cleanup.

1. For non-hazardous materials such as gasoline, paint, or oil that may be spilled in small quantities, the following measures shall be implemented:

   - Personal safety is the primary importance.
   - Use absorbent materials to contain spills and clean the area of residuals.
   - Dispose of the absorbent material, soil, and/or rotomill properly.
   - Do not hose down spill area with water.

2. For non-hazardous materials that qualify as a significant spill, the following measures shall be implemented:

   - Contact the Colorado Department of Public Health and Environment (CDPHE) 24-hour Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to CDPHE is necessary within 5 days.
   - Contact the Qualified Stormwater Manager.
   - Clean up spills immediately. Use absorbent materials if the spill is on an impermeable surface. Construct a slightly compacted earth dike to contain a spill on dirt areas. If rainfall is present at the time of the spill, cover the spill with a tarp to prevent contaminating runoff.

3. For spills involving hazardous materials, the following measures shall be implemented:

- Personal safety is the primary importance. Stay upwind and at a safe distance/secure the area from anyone being harmed.
- Contact the local emergency response team by dialing 911.
- Contact the Colorado Department of Public Health and Environment (CDPHE) 24-hour Environmental Emergency Spill Reporting Line (1-877-518-5608) within 24 hours of the spill event. A written notification to CDPHE is necessary within 5 days.
- Contact the Qualified Stormwater Manager.

A licensed contractor or a Hazmat team shall be used to properly clean up spills

There are no anticipated non-stormwater discharges that will be permitted at this site.

MATERIALS HANDLING

Control measures implemented at the site to minimize impacts from handling significant materials that could contribute pollutants to runoff:

1. Good Housekeeping Practices – including Spill Prevention and Control, Material Use, Material Delivery and Storage, Solid Waste Management, Hazardous Waste Management, Sanitary/Septic Waste Management, Maintenance and Cleaning.
2. Stabilized Staging Area (SSA) – a designated area on site for construction equipment, vehicles, stockpiles, waste collection and material storage.
3. Stockpile Management (SM) – practices to limit erosion and to control sediment from stockpiles including appropriate placement of the stockpile and control measures surrounding the stockpile such as silt fencing.
4. Concrete Washout Area (CWA) – area for collection of concrete wash water and waste associated with concrete paving and appropriate disposal. Not to be located near drainageways or areas with high water table.

Implementation of Control Measures

1. Structural Practices for Erosion and Sediment Control:
    a. Silt Fence (SF) – a sediment barrier designed to intercept sheet flow runoff from disturbed areas.
2. Non-Structural Practices for Erosion and Sediment Control:

a. Seeding and Mulching (SM) – an erosion control method used to stabilize disturbed areas that will be inactive for an extended period or are at final grade and will not be otherwise stabilized.

b. Erosion Control Blanket (ECB) – if necessary, manufactured products, made of biodegradable natural materials, designed to control erosion and enhance vegetation establishment and survivability on slopes.

c. Sediment Basin (SB) – a temporary pond built on site to capture eroded or disturbed soil transported in storm runoff prior to discharge from the site.

3. Phased Implementation

   a. Pre-disturbance and Site Access Phase (Initial Phase) includes silt fence installation and vehicle tracking control at site entrances.

   b. Site Clearing and Grubbing Phase (Initial Phase) includes the installation of stabilized staging area, sediment basin.

   c. Operation Phase (Interim Phase) includes slope protection, including erosion control blanket placement if necessary.

   d. Final Stabilization Phase (Final Phase) includes seeding and mulching and removing all temporary control measures (VTC, SSA, SF, SB) when site has reached final stabilization.

4. Vehicle Tracking Control will be implemented during the initial phase at the site entrance to help remove sediment from vehicles, reducing tracking onto paved surfaces.

5. Wind Erosion / Dust Control – site watering will be utilized throughout construction to keep soil particles from entering the air.

6. Groundwater and Stormwater Dewatering – not anticipated for this site.

RECEIVING WATERS & ADJACENT STREAM CROSSINGS

This project is within the Red Creek Drainage Basin. Stormwater from this site drains from the Northwest to the Southeast into an existing depression on the Northeast side of CO-115. The nearest receiving water for the site is Red Creek, and with the ultimate receiving water being the Arkansas River (COARUA14d_C). Under normal conditions runoff does not leave the site.

Stream Crossings: There are no stream crossings within the boundary of this construction project.

INSPECTIONS & RECORD KEEPING

Inspection and maintenance should be performed on all control measures periodically and after every significant storm event. The minimum inspection schedule of the stormwater management system must be performed and documented at least every 7 days, and within 24 hours of any precipitation or snowmelt event. If more frequent inspections are required to ensure that control measures are properly maintained and operated, the inspection schedule must be modified to meet this need. A Site Inspection Report must be completed for each inspection, this report is included in Appendix C of this report. A signature on inspection logs must be provided.

APPENDIX

APPENDIX A: VICINITY MAP

APPENDIX B: SOIL DATA, FLOODPLAIN MAP

APPENDIX C: INSPECTION REPORT

APPENDIX D: SITE MAP

APPENDIX A

BASELINE

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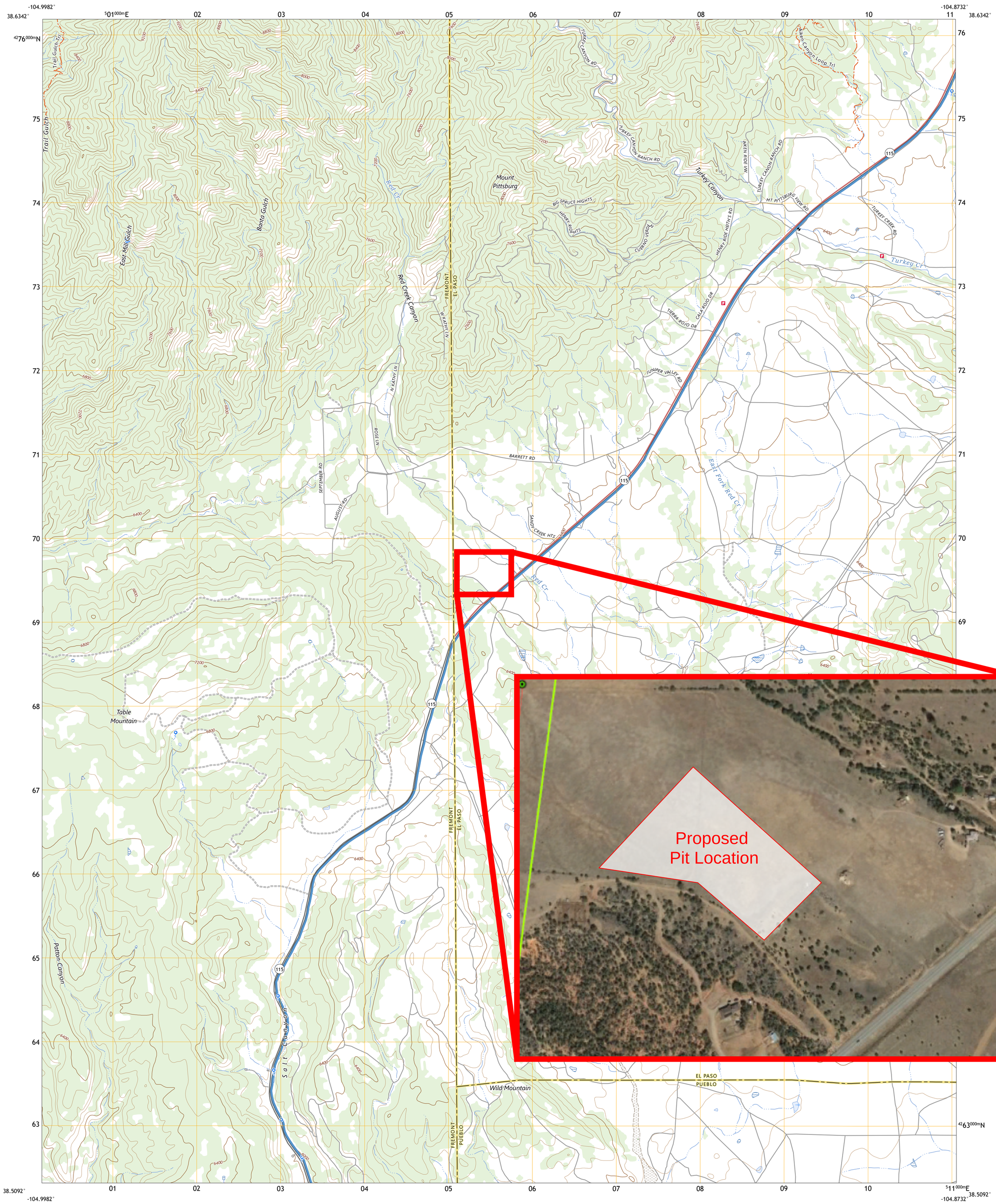
Orton Pit Vicinity Map

7.5-MINUTE TOPO 2 QUADRANGLE
Custom Extent
7.5-MINUTE TOPO



Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 13S

Data is provided by The National Map (TNM), is the best available at the time of map generation, and includes data content from supporting themes of Elevation, Hydrography, Geographic Names, Boundaries, Transportation, Structures, Land Cover, and Orthoimagery. Refer to associated Federal Geographic Data Committee (FGDC) Metadata for additional source data information.

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands. Temporal changes may have occurred since these data were collected and some data may no longer represent actual surface conditions.

Learn About The National Map: https://nationalmap.gov

MN
GN
7°45'
138 MILS
0°2'
1 MILS

UTM GRID AND 2021 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
EC
Grid Zone Designation 13S

SCALE 1:24 000

KILOMETERS: 1 0.5 0 1 2
METERS: 1000 500 0 1000 2000
MILES: 1 0.5 0 1
FEET: 1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

CONTOUR INTERVAL 80 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988
CONTOUR SMOOTHNESS = Medium

COLORADO

QUADRANGLE LOCATION

Mount Big Chief	Cheyenne Mountain
Mount Pittsburg	Timber Mountain

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

7.5-MINUTE TOPO 2, CO
2022

APPENDIX B

BASELINE

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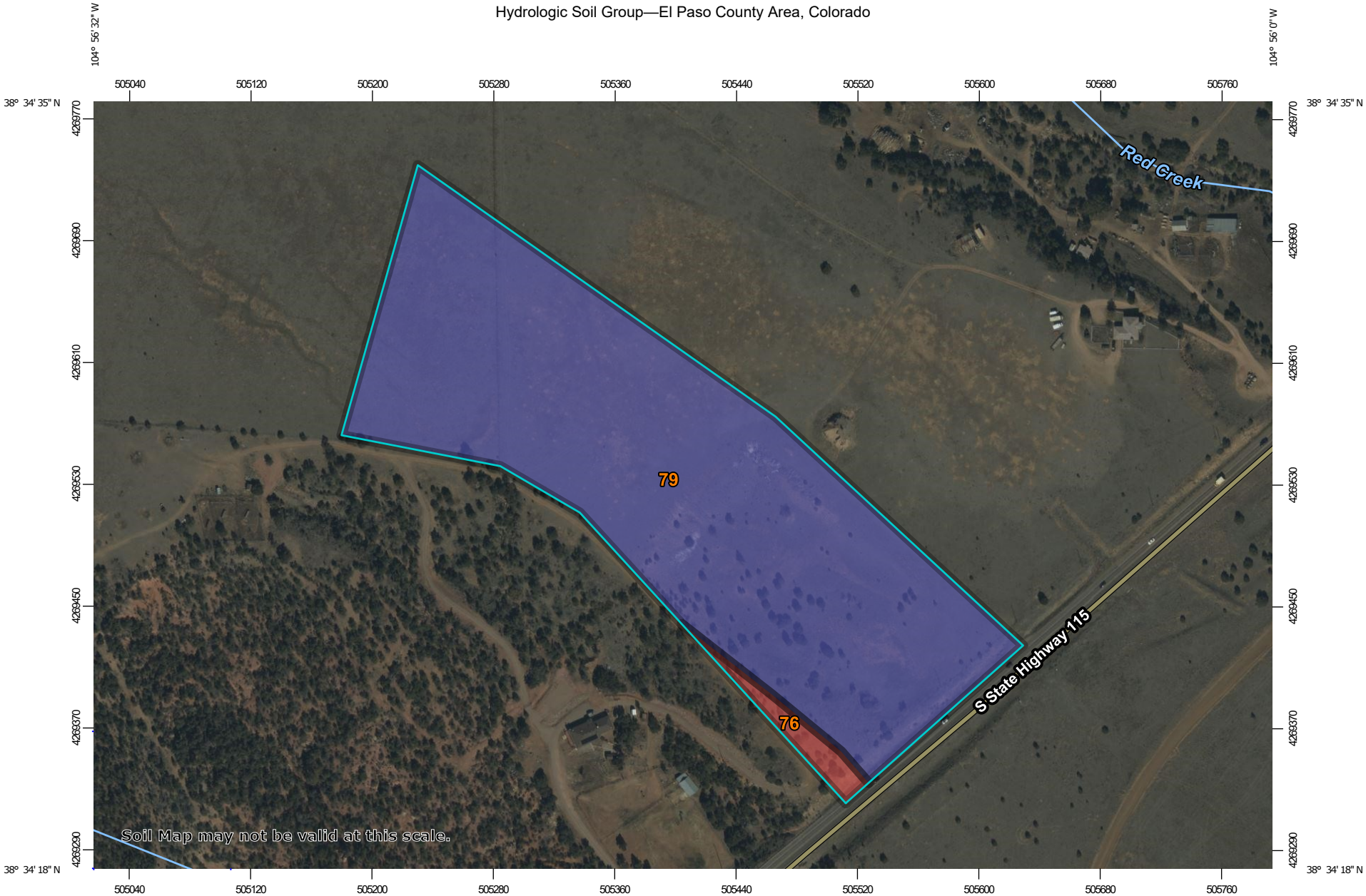


Map Scale: 1:3,550 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 150 300 600 900

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points

- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features

Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: El Paso County Area, Colorado
Survey Area Data: Version 19, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2018—Oct 20, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
76	Rizozo-Neville complex, 3 to 30 percent slopes	D	0.5	3.0%
79	Satanta loam, 0 to 3 percent slopes	B	16.2	97.0%
Totals for Area of Interest			**16.7**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

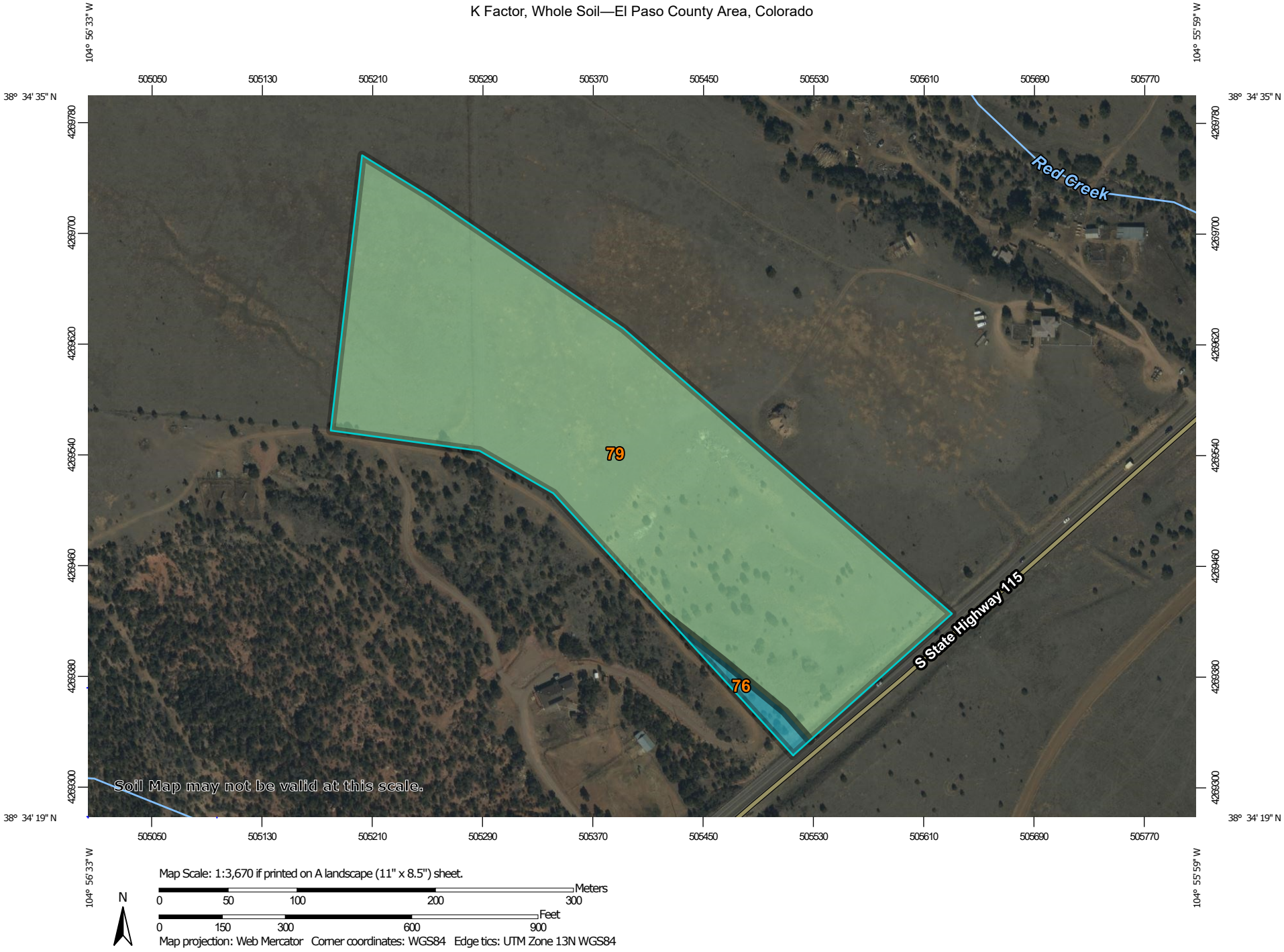
Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

K Factor, Whole Soil—El Paso County Area, Colorado



MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Lines

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Soil Rating Points

.02
.05
.10
.15
.17
.20
.24
.28
.32
.37
.43
.49
.55
.64
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

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K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
76	Rizozo-Neville complex, 3 to 30 percent slopes	.37	0.4	2.1%
79	Satanta loam, 0 to 3 percent slopes	.28	16.8	97.9%
Totals for Area of Interest			**17.2**	**100.0%**

Description

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

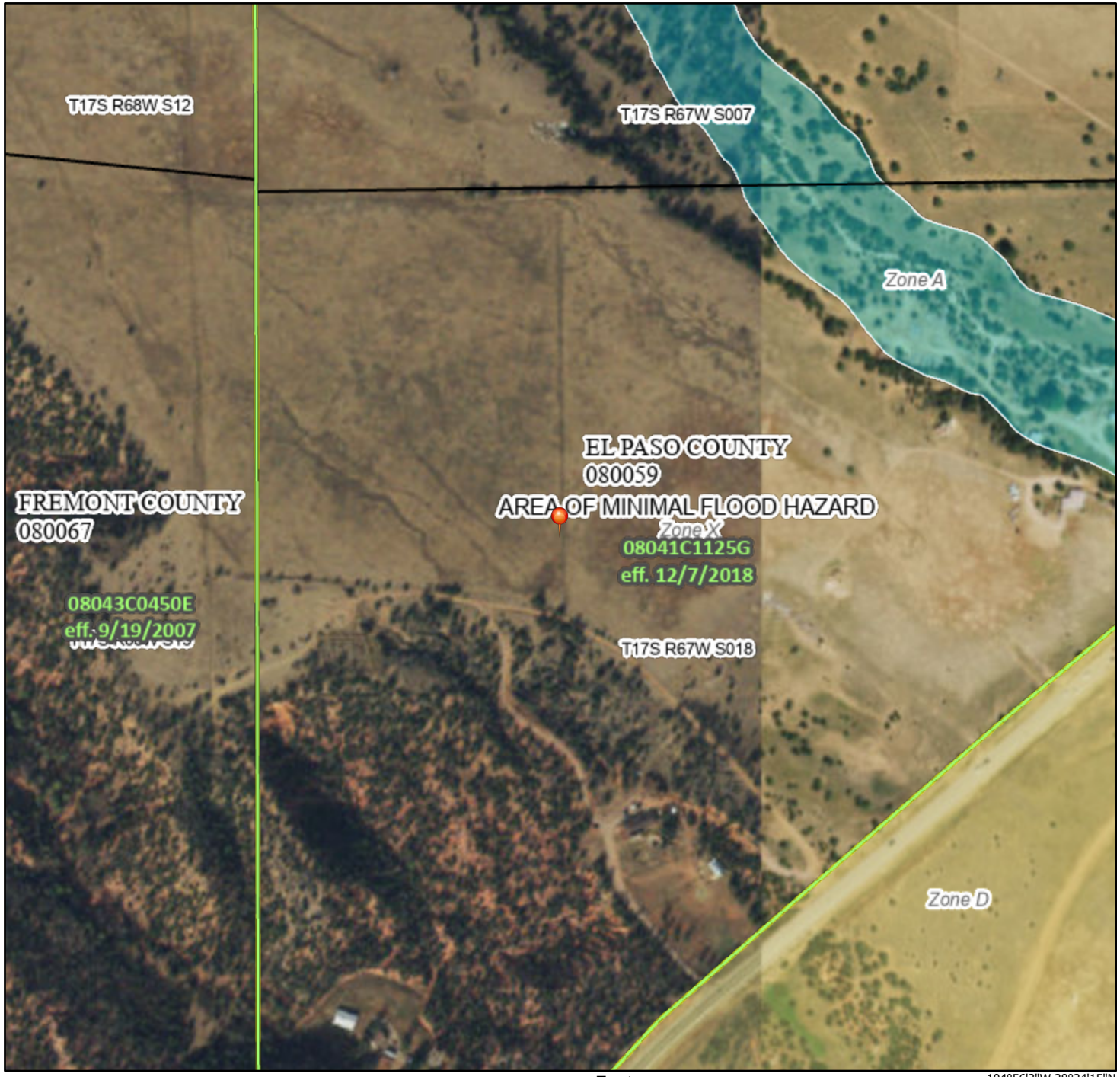
Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

National Flood Hazard Layer FIRMette

FEMA

104°56'40"W 38°34'44"N



104°56'3"W 38°34'15"N

Feet 1:6,000

0 250 500 1,000 1,500 2,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- B 20.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- 8 Coastal Transect
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/20/2022 at 11:41 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX C

BASELINE

Engineering · Planning · Surveying

CONSTRUCTION STORMWATER SITE INSPECTION REPORT

Facility Name		Permittee	
Date of Inspection		Weather Conditions	
Permit Certification #		Disturbed Acreage	
Phase of Construction		Inspector Title	
Inspector Name			

	YES	NO
Is the above inspector a qualified stormwater manager? (permittee is responsible for ensuring that the inspector is a qualified stormwater manager)	☐	☐

INSPECTION FREQUENCY	
Check the box that describes the minimum inspection frequency utilized when conducting each inspection	
At least one inspection every 7 calendar days	☐
At least one inspection every 14 calendar days, with post-storm event inspections conducted within 24 hours after the end of any precipitation or snowmelt event that causes surface erosions	☐
• This is this a post-storm event inspection. Event Date: _____	☐
Reduced inspection frequency - Include site conditions that warrant reduced inspection frequency	☐
• Post-storm inspections at temporarily idle sites	☐
• Inspections at completed sites/area	☐
• Winter conditions exclusion	☐
Have there been any deviations from the minimum inspection schedule? If yes, describe below.	YES ☐ NO ☐

INSPECTION REQUIREMENTS*
i. Visually verify all implemented control measures are in effective operational condition and are working as designed in the specifications
ii. Determine if there are new potential sources of pollutants
iii. Assess the adequacy of control measures at the site to identify areas requiring new or modified control measures to minimize pollutant discharges
iv. Identify all areas of non-compliance with the permit requirements, and if necessary, implement corrective action
*Use the attached **Control Measures Requiring Routine Maintenance** and **Inadequate Control Measures Requiring Corrective Action** forms to document results of this assessment that trigger either maintenance or corrective actions

AREAS TO BE INSPECTED			
Is there evidence of, or the potential for, pollutants leaving the construction site boundaries, entering the stormwater drainage system or discharging to state waters at the following locations?			
	NO	YES	If "YES" describe discharge or potential for discharge below. Document related maintenance, inadequate control measures and corrective actions **Inadequate Control Measures Requiring Corrective Action** form
Construction site perimeter	☐	☐	
All disturbed areas	☐	☐	
Designated haul routes	☐	☐	
Material and waste storage areas exposed to precipitation	☐	☐	
Locations where stormwater has the potential to discharge offsite	☐	☐	
Locations where vehicles exit the site	☐	☐	
Other: _____	☐	☐	

CONTROL MEASURES REQUIRING ROUTINE MAINTENANCE

Definition: Any control measure that is still operating in accordance with its design and the requirements of the permit, but requires maintenance to prevent a breach of the control measure. These items are not subject to the corrective action requirements as specified in Part I.B.1.c of the permit.

Are there control measures requiring maintenance?	NO	YES	
	☐	☐	If "YES" document below

Date Observed	Location	Control Measure	Maintenance Required	Date Completed

INADEQUATE CONTROL MEASURES REQUIRING CORRECTIVE ACTION

Definition: Any control measure that is not designed or implemented in accordance with the requirements of the permit and/or any control measure that is not implemented to operate in accordance with its design. This includes control measures that have not been implemented for pollutant sources. If it is infeasible to install or repair the control measure immediately after discovering the deficiency the reason must be documented and a schedule included to return the control measure to effective operating condition as possible.

Are there inadequate control measures requiring corrective action?	NO	YES	
	☐	☐	If "YES" document below

Are there additional control measures needed that were not in place at the time of inspection?	NO	YES	
	☐	☐	If "YES" document below

Date Discovered	Location	Description of Inadequate Control Measure	Description of Corrective Action	Was deficiency corrected when discovered? YES/NO if "NO" provide reason and schedule to correct	Date Corrected

REPORTING REQUIREMENTS

The permittee shall report the following circumstances orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances, and shall mail to the division a written report containing the information requested within five (5) working days after becoming aware of the following circumstances. The division may waive the written report required if the oral report has been received within 24 hours.

All Noncompliance Requiring 24-Hour Notification per Part II.L.6 of the Permit

a. Endangerment to Health or the Environment

Circumstances leading to any noncompliance which may endanger health or the environment regardless of the cause of the incident (See Part II.L.6.a of the Permit)

This category would primarily result from the discharge of pollutants in violation of the permit

b. Numeric Effluent Limit Violations

- Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)
- Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)
- Daily maximum violations (See Part II.L.6.d of the Permit)

Numeric effluent limits are very uncommon in certifications under the COR400000 general permit. This category of noncompliance only applies if numeric effluent limits are included in a permit certification.

Has there been an incident of noncompliance requiring 24-hour notification?	NO	YES	
	☐	☐	If "YES" document below

Date and Time of Incident	Location	Description of Noncompliance	Description of Corrective Action	Date and Time of 24 Hour Oral Notification	Date of 5 Day Written Notification *

*Attach copy of 5 day written notification to report. Indicate if written notification was waived, including the name of the division personnel who granted waiver.

After adequate corrective action(s) and maintenance have been taken, or where a report does not identify any incidents requiring corrective action or maintenance, the individual(s) designated as the Qualified Stormwater Manager, shall sign and certify the below statement:

"I verify that, to the best of my knowledge and belief, all corrective action and maintenance items identified during the inspection are complete, and the site is currently in compliance with the permit."

Name of Qualified Stormwater Manager	Title of Qualified Stormwater Manager
Signature of Qualified Stormwater Manager	Date

Notes/Comments

Description

Describe the control measure and what pollutant sources it will provide effective treatment for (part I.C.2.a.iv of the permit). Include the mechanism used for treatment of the pollutant source.

Implementation

Describe how the control measure will be implemented in accordance with good engineering, hydrologic and pollution control practices. Include the phase(s) of construction the control measure will be implemented for.

Installation Procedures

Describe the process required to install the control measure and have it adequately treat the intended pollutant source. Include specific depths, lengths, materials, and any other applicable information necessary to properly install the control measure.

Inspection Expectations

Describe how often the control measure will be inspected and what key features should be checked during each inspection (is the silt fence tail entrenched, are the straw wattles staked ever 4 feet, etc.)

Maintenance Requirements

Describe maintenance requirements, such as how to repair damaged sections, what qualifies as a failed control measure and when it needs to be replaced. Also include criteria that would trigger maintenance (i.e. 50% capacity of the control measure has been reached).

Control Measure Diagram

APPENDIX D

BASELINE

Engineering · Planning · Surveying

GRADING AND EROSION CONTROL PLAN
ORTON PIT SITE

LOCATED IN THE NORTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 18
TOWNSHIP 17 SOUTH, RANGE 67 WEST OF THE 6th PRINCIPAL MERIDIAN
EL PASO COUNTY, COLORADO

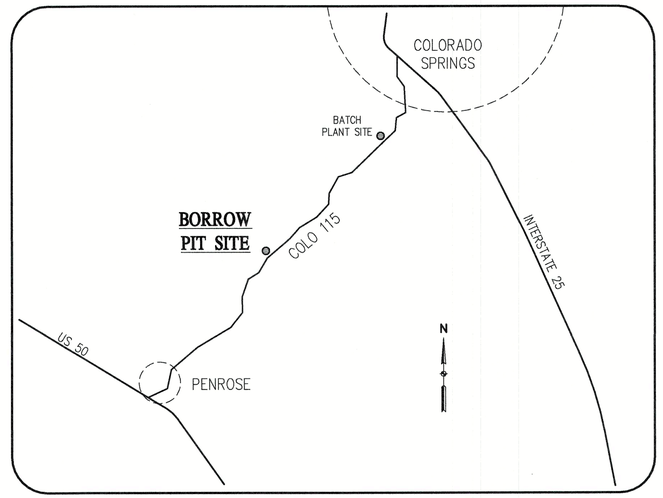
STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

REVISED JULY 2019

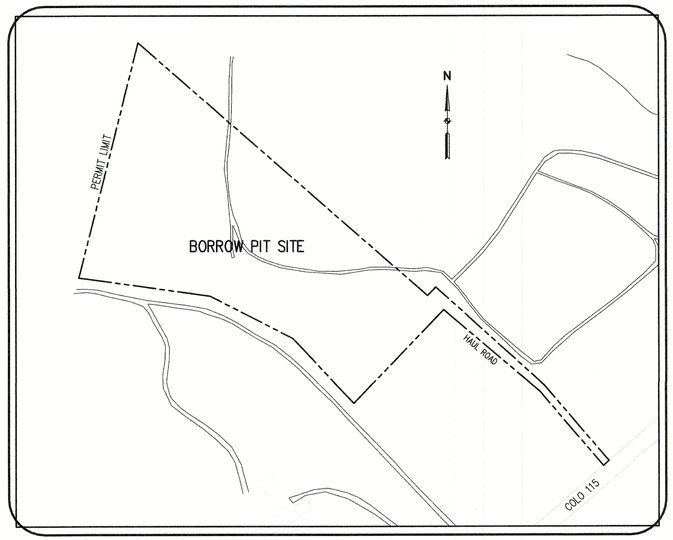
1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFFSITE WATERS, INCLUDING WETLANDS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
14. DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.
15. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTE FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATLY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE.
24. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT"(TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT"(33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY TRAVIS BELL (CRC OF COLO LLC) IN COOPERATION WITH GROUND ENGINEERING DATED 5/24/22 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD -PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

811
Know what's **below.**
Call before you dig.



VICINITY MAP
NOT TO SCALE



SITE MAP
SCALE: 1" = 200'
GRAPHIC SCALE
(IN FEET)
1 INCH = 200 FT

SHEET INDEX

GEC-1	COVER SHEET
GEC-2	INITIAL PHASE PLAN
GEC-3	INTERIM PHASE PLAN
GEC-4	FINAL PHASE PLAN
GEC-5	DETAILS

PROJECT CONTACTS

OWNER:
GLENN ORTON
17710 STATE HIGHWAY 115
COLORADO SPRINGS, CO 80926-9547

APPLICANT:
CASTLE ROCK CONSTRUCTION OF COLORADO, LLC
6374 S. RACINE CIRCLE
CENTENNIAL, CO 80111
ATTN: TRAVIS BELL
303-688-6611
TBELL@CRCCLLC.COM

ENGINEER:
BASELINE ENGINEERING CORPORATION
1046 ELKTON DRIVE
COLORADO SPRINGS, CO 80907
ATTN: STEVEN BAGGS, P.E.
719-531-6200
STEVEN.BAGGS@BASELINECORP.COM

ENGINEER'S STATEMENT

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

STEVEN G. BAGGS, P.E. DATE 8/19/22
COLO PE NO. 26020

OWNER'S STATEMENT

I, THE OWNER/DEVELOPER, HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER SIGNATURE DATE

EL PASO COUNTY

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH THE COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JOSHUA PALMER, P.E. DATE
COUNTY ENGINEER/ECM ADMINISTRATOR

PCD FILE NO.: CDR2211

BASELINE
Engineering · Planning · Surveying
1046 ELKTON DRIVE · COLORADO SPRINGS, COLORADO 80907
P: 719.531.6200 · F: 719.531.6266 · www.baselinecorp.com

PREPARED BY	DATE
SPC	08/19/22

DESIGNED BY SPC
DRAWN BY LJA
CHECKED BY SGB

REVISION DESCRIPTION
REVISED PER COUNTY COMMENTS

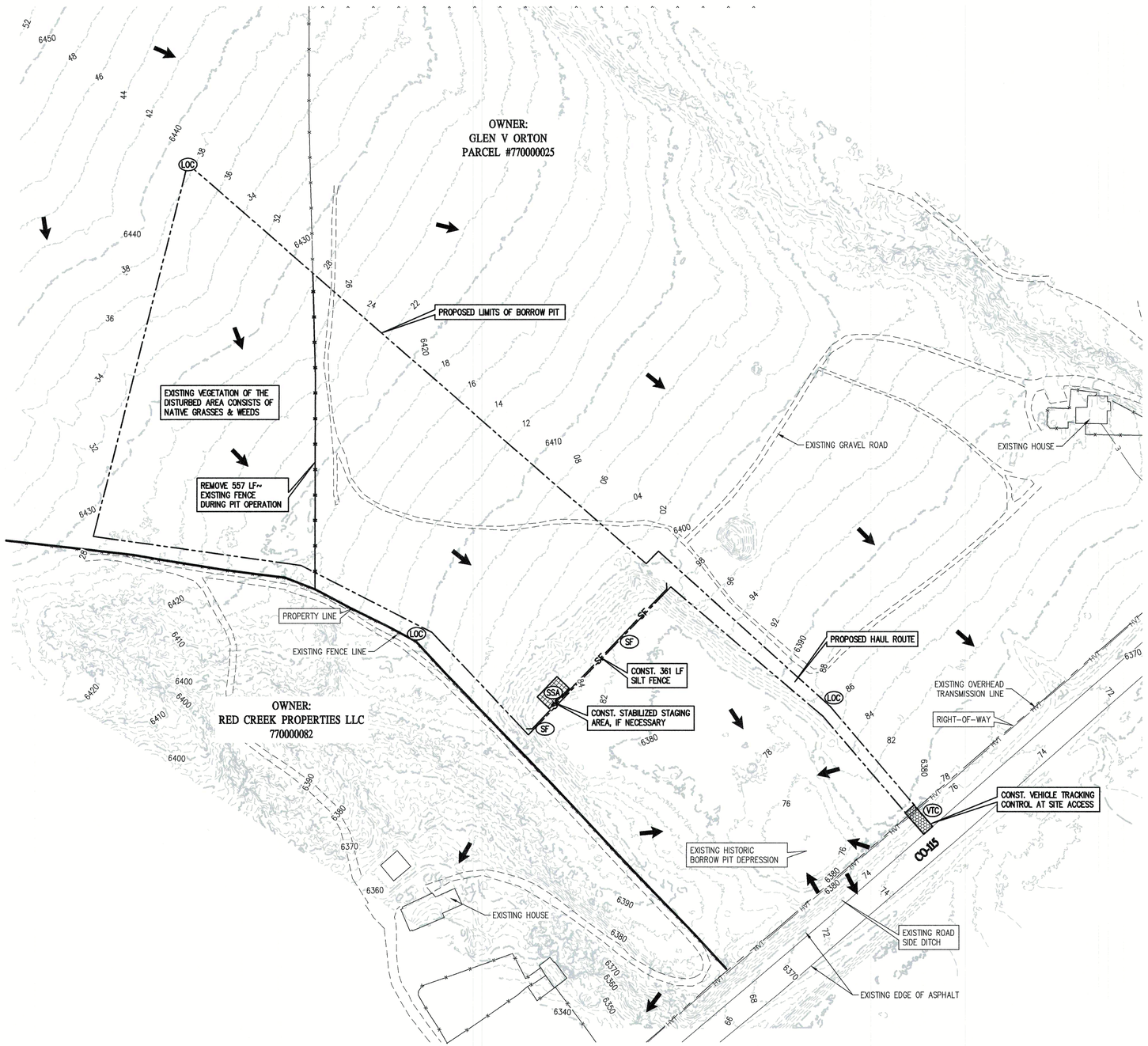
CASTLE ROCK CONSTRUCTION COMPANY
ORTON PIT SITE
17710 COLO 115
COVER SHEET
EL PASO COUNTY
UNINCORPORATED

PREPARED UNDER THE DIRECT SUPERVISION OF
COLORADO LICENSED STEVEN G. BAGGS 26020 PROFESSIONAL ENGINEER 8/19/22

FOR AND ON BEHALF OF BASELINE CORPORATION

INITIAL SUBMITTAL	07/12/22
DRAWING SIZE	24" X 36"
SURVEY FIRM UNKNOWN	SURVEY DATE
JOB NO.	35059
DRAWING NAME 35059 GEC1-Plt.dwg	
SHEET 1 OF 5	

GEC-1



LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	
		PROPERTY BOUNDARY
		RIGHT-OF-WAY
81	81	MINOR CONTOUR (2' INTERVAL)
5280	5280	MAJOR CONTOUR (10' INTERVAL)
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		WIRE FENCE
HVT	HVT	HIGH VOLTAGE TRANSMISSION

EXISTING SYMBOLS	PROPOSED SYMBOLS	
3:1	3:1	NOMINAL SLOPE ON CUT OR FILL
		FLOW DIRECTION

GEC LEGEND

PHASE	PROPOSED SYMBOLS	
		LOC LIMITS OF CONSTRUCTION/DISTURBANCE
INITIAL/INTERIM		VTC VEHICLE TRACKING CONTROL
INITIAL/INTERIM		SF SILT FENCE
INITIAL/INTERIM		TSB TEMP. SEDIMENT BASIN
INITIAL/INTERIM		SSA STABILIZED STAGING AREA
FINAL		SM NATIVE SEEDING & MULCHING

GRAPHIC SCALE
100 0 100 200
(IN FEET)
1 INCH = 100 FT

N

1
GEC2 GEC2
INITIAL PHASE

BASELINE
Engineering · Planning · Surveying
1046 ELKTON DRIVE · COLORADO SPRINGS, COLORADO 80907
P: 719.531.5200 · F: 719.531.5238 · www.baselinecorp.com

DESIGNED BY SPC
DRAWN BY LJA
CHECKED BY SGB

REVISION DESCRIPTION	PREPARED BY	DATE
REVISED PER COUNTY COMMENTS	SPC	08/19/22

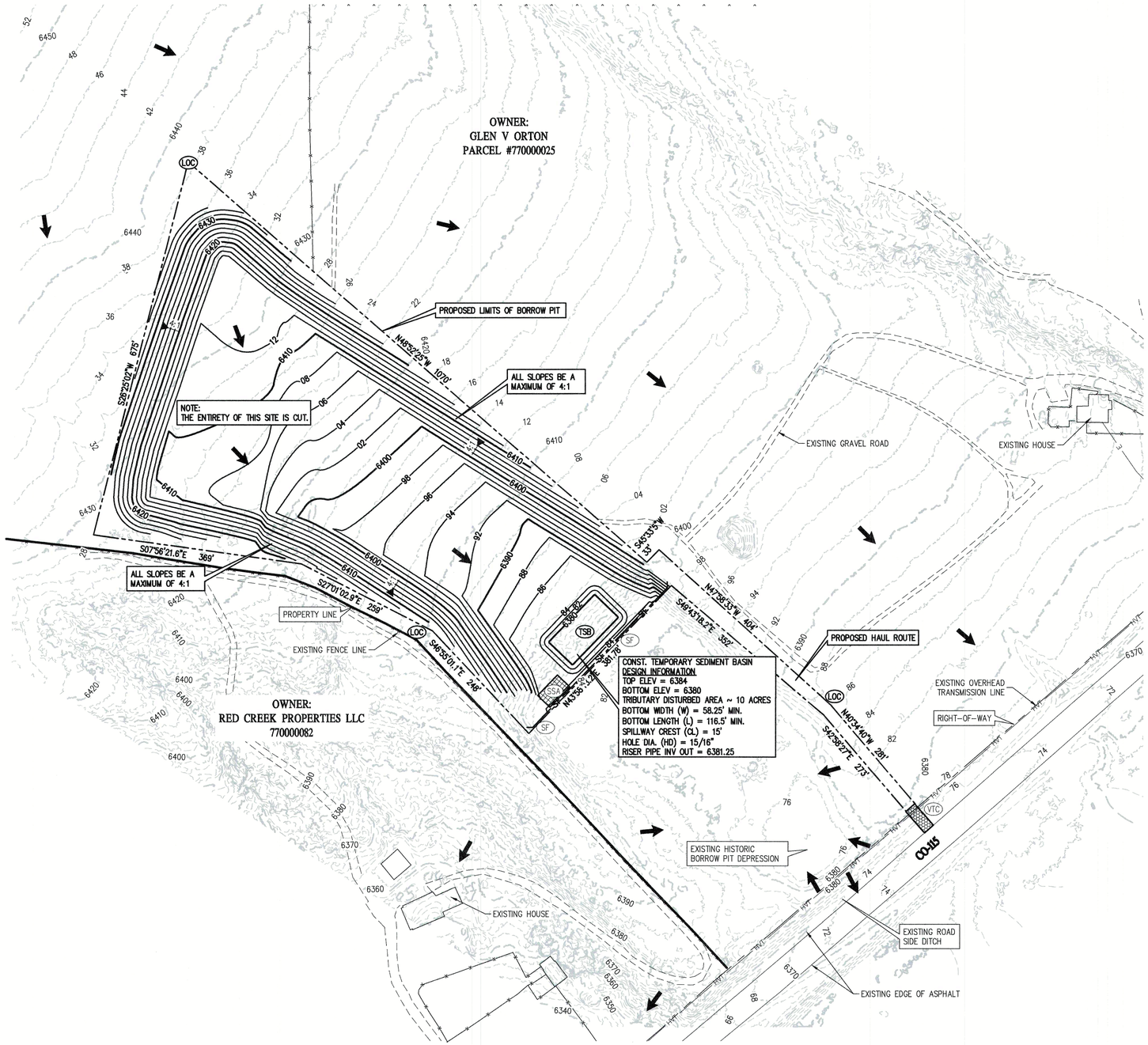
CASTLE ROCK CONSTRUCTION COMPANY
UNINCORPORATED
EL PASO COUNTY

ORTON PIT SITE
17710 COLO 115
INITIAL PHASE

PREPARED UNDER THE DIRECT SUPERVISION OF
COLORADO LICENSED PROFESSIONAL ENGINEER 26020 SEAN G. BALLARD
FOR AND ON BEHALF OF BASELINE CORPORATION

INITIAL SUBMITTAL	07/12/22
DRAWING SIZE	24" X 36"
SURVEY FIRM UNKNOWN	SURVEY DATE
JOB NO.	35059
DRAWING NAME GEC2-5 Pit.dwg	
SHEET 2 OF 5	

GEC2



LEGEND

EXISTING LINETYPES	PROPOSED LINETYPES	
		PROPERTY BOUNDARY
		RIGHT-OF-WAY
81	81	MINOR CONTOUR (2' INTERVAL)
5280	5280	MAJOR CONTOUR (10' INTERVAL)
		EDGE OF ASPHALT
		EDGE OF GRAVEL
		WIRE FENCE
HVT HVT	HVT	HIGH VOLTAGE TRANSMISSION

EXISTING SYMBOLS	PROPOSED SYMBOLS	
3:1	3:1	NOMINAL SLOPE ON CUT OR FILL
		FLOW DIRECTION

GEC LEGEND

PHASE	PROPOSED SYMBOLS	
		LOC LIMITS OF CONSTRUCTION/DISTURBANCE
INITIAL/INTERIM		VTC VEHICLE TRACKING CONTROL
INITIAL/INTERIM		SF SILT FENCE
INITIAL/INTERIM		TSB TEMP. SEDIMENT BASIN
INITIAL/INTERIM		SSA STABILIZED STAGING AREA
FINAL		SM NATIVE SEEDING & MULCHING

GRAPHIC SCALE
100 0 100 200
(IN FEET)
1 INCH = 100 FT

N

1 GEC3 GEC3 INTERIM PHASE

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1046 ELKTON DRIVE · COLORADO SPRINGS, COLORADO 80907
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DESIGNED BY	SPC
DRAWN BY	LJA
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CASTLE ROCK CONSTRUCTION COMPANY
EL PASO COUNTY
UNINCORPORATED
ORTON PIT SITE
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INTERIM PHASE

PREPARED UNDER THE DIRECT SUPERVISION OF
COLORADO LICENSED PROFESSIONAL ENGINEER
STEVEN G. BAGLEY
26020

FOR AND ON BEHALF OF BASELINE CORPORATION

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JOB NO.	35059
DRAWING NAME	GEC2-5 Pit.dwg
SHEET	3 OF 5

GEC3

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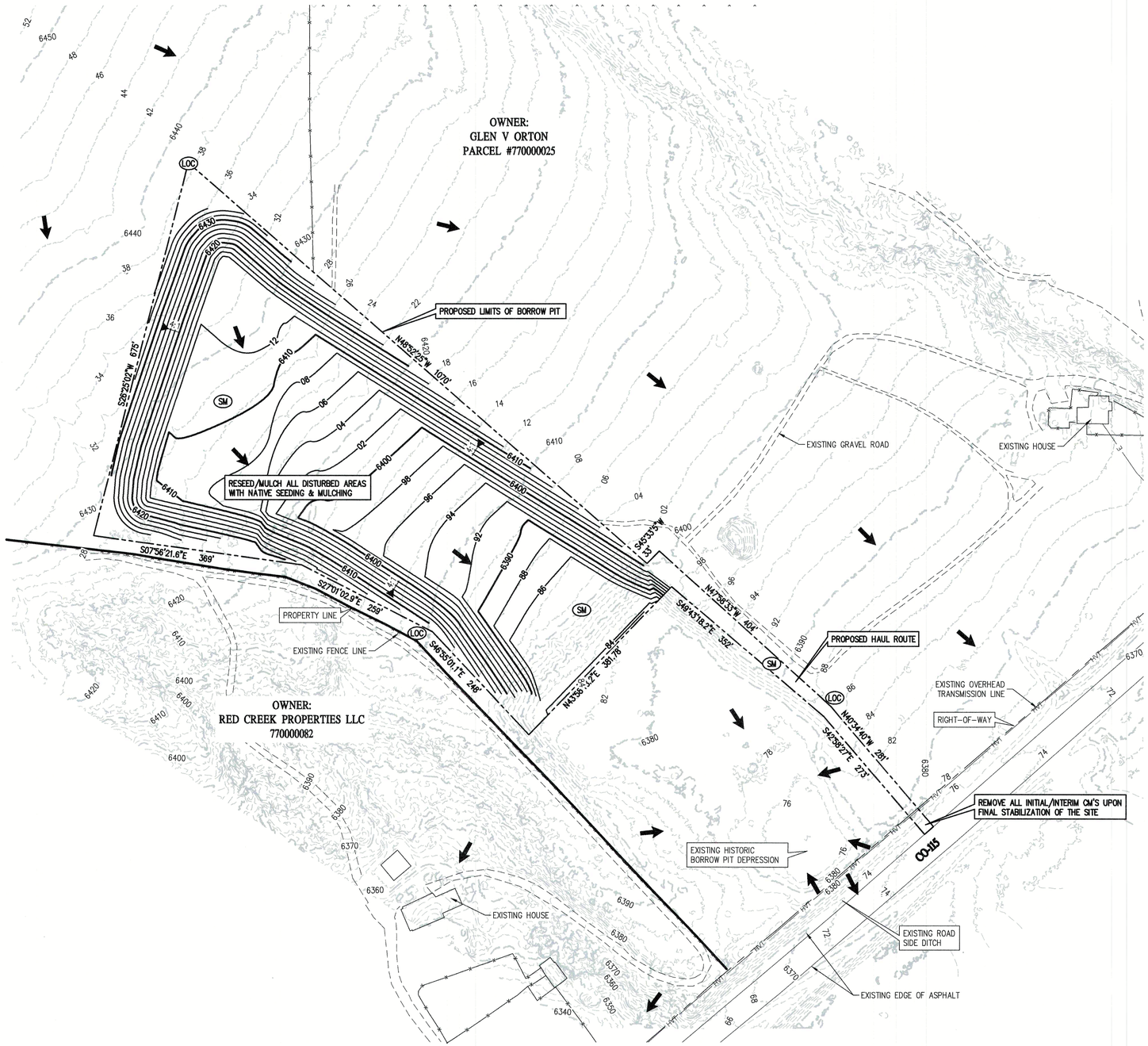

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GEC LEGEND

PHASE	PROPOSED SYMBOLS	
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INITIAL/INTERIM		SF SILT FENCE
INITIAL/INTERIM		TSB TEMP. SEDIMENT BASIN
INITIAL/INTERIM		SSA STABILIZED STAGING AREA
FINAL		SM NATIVE SEEDING & MULCHING

GRAPHIC SCALE
100 0 100 200
(IN FEET)
1 INCH = 100 FT

N

1
GEC4 GEC4
FINAL PHASE

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SHEET	4 OF 5

GEC4

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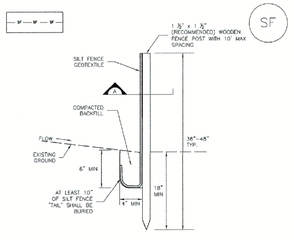
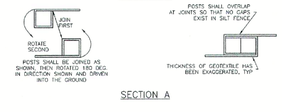
Silt Fence (SF) SC-1





SF-1. SILT FENCE

SC-1 Silt Fence (SF)

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED ARMY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK". THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

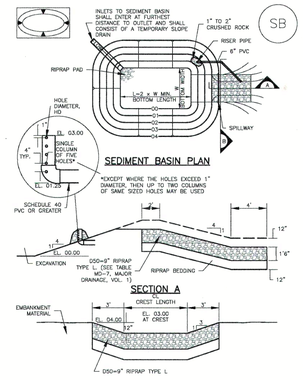
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Sediment Basin (SB) SC-7



SC-7 Sediment Basin (SB)

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	3/32
2	18 ½	3	1/8
3	24	3	5/16
4	33 ½	5	5/8
5	38 ½	6	15/32
6	43	9	13/32
7	47 ½	11	25/32
8	51	12	13/16
9	54	13	7/8
10	58 ½	13	15/16
11	61	16	29/32
12	64	18	1
13	67 ½	19	1 1/32
14	70 ½	21	1 1/8
15	73 ½	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF SEDIMENT BASIN.
   –TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
   –FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER HD.
   –FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND–DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AN A SEDIMENTATION CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

Sediment Basin (SB) SC-7

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

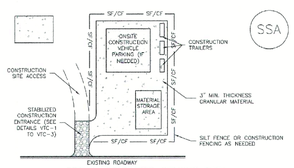
5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.

6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

SM-6 Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, RELOCATED TO ANOTHER SITE. THE AREA SHALL BE FINE GRADED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

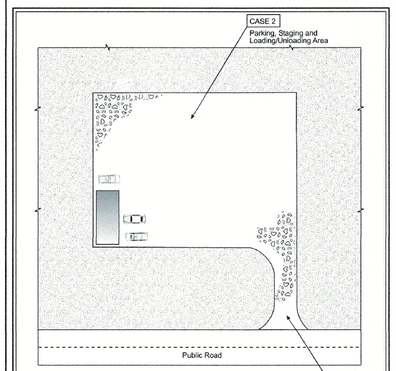
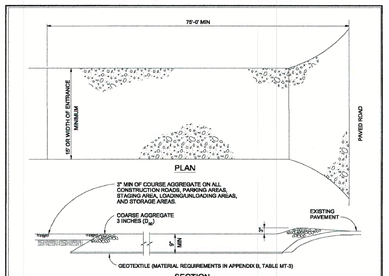


Table VT-1

	Case 1	Case 2
Gravel Thickness	9"	3"
Filter Fabric	YES	NO

City of Colorado Springs Storm Water Quality

Figure VT-1
Vehicle Tracking
Application Examples



VEHICLE TRACKING
NTS

VEHICLE TRACKING NOTES

INSTALLATION REQUIREMENTS

1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.

2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.

3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.

4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.

5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.

2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.

3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT MUST NOT BE WASHED DOWN STORM SEWER DRAINS.

4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.

5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs Stormwater Quality

Figure VT-2
Vehicle Tracking
Application Examples

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