

# STORMWATER MANAGEMENT PLAN for THE COMMONS AT FALCON FIELD - STOCKPILE

El Paso County, Colorado

December 2024

PCD File No.: CDR2411

Prepared For:

**Proterra Properties** 

1864 Woodmoor Drive Monument, CO 80132 Contact: Steve Rossoll (719) 476-0800

Prepared by:

Drexel, Barrell & Co.

101 Sahwatch St., Suite 100 Colorado Springs, CO 80905 Contact: Tim McConnell, P.E. (719) 260-0887 Qualified Stormwater Manager:

**Raw Land Detailing** 

10475 Accipiter Drive Peyton, CO 80831 Contact: Larry Lee (719) 661-4499

Contractor:

**Dwire Excavating, LLC** 3520 Capital Drive Colorado Springs, CO 80939 (719) 574-7123

# STORMWATER MANAGEMENT PLAN THE COMMONS AT FALCON FIELD - STOCKPILE

#### **TABLE OF CONTENTS**

CONS	TRUCT	ON STORMWATER SITE INSPECTION REPORT	1
1.0	STOR	WWATER QUALITY STATEMENT & OBJECTIVES	2
2.0	SITE D	ESCRIPTION	
	2.1	DESCRIPTION OF CONSTRUCTION ACTIVITIES	3
	2.2	EXISTING SITE CONDITIONS	3
	2.3	ADJACENT AREAS	3
	2.4	SOILS	4
	2.5	CONTROLS AND MEASURES DURING CONSTRUCTION	4
	2.6	POTENTIAL POLLUTION SOURCES	5
	2.7	NON-STORMWATER DISCHARGES	6
	2.8	RECEIVING WATER	6
3.0	CITE A	NAP	-
3.0	SIIEN	NAF	/
3.0 4.0	BMP's	FOR STORMWATER POLLUTION PREVENTION	/ 7
	BMP's 4.1	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES	7
	BMP's	FOR STORMWATER POLLUTION PREVENTION	7
	<b>BMP's</b> 4.1	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES	<b>7</b> 7 8
	<b>BMP's</b> 4.1 4.2	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES  EROSION CONTROL – NON-STRUCTURAL PRACTICES	<b>7</b> 8 9
	<b>BMP's</b> 4.1 4.2 4.3	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES  EROSION CONTROL – NON-STRUCTURAL PRACTICES  MATERIALS HANDLING & SPILL PREVENTION	<b>7</b> 8 9 10
	4.1 4.2 4.3 4.4 4.5	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES  EROSION CONTROL – NON-STRUCTURAL PRACTICES  MATERIALS HANDLING & SPILL PREVENTION  DEDICATED CONCRETE OR ASPHALT BATCH PLANTS	<b>7</b> 8 9 10
4.0	4.1 4.2 4.3 4.4 4.5 TIMIN	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES  EROSION CONTROL – NON-STRUCTURAL PRACTICES  MATERIALS HANDLING & SPILL PREVENTION  DEDICATED CONCRETE OR ASPHALT BATCH PLANTS  GROUNDWATER & STORMWATER DEWATERING	7 8 9 10 10
<b>4.0 5.0</b>	4.1 4.2 4.3 4.4 4.5 TIMIN FINAL	FOR STORMWATER POLLUTION PREVENTION  EROSION CONTROL – STRUCTURAL PRACTICES  EROSION CONTROL – NON-STRUCTURAL PRACTICES  MATERIALS HANDLING & SPILL PREVENTION  DEDICATED CONCRETE OR ASPHALT BATCH PLANTS  GROUNDWATER & STORMWATER DEWATERING  G SCHEDULE	7 8 9 10 10 10

#### **APPENDIX**

**VICINITY MAP** 

**SOILS INFORMATION** 

CONSTRUCTION STORMWATER SITE INSPECTION REPORT

**SITE MAP** 

#### 1.0 STORMWATER QUALITY STATEMENT & OBJECTIVES

Stormwater quality best management practices shall be implemented to minimize soil erosion, sedimentation, increased pollutant loads and changed water flow characteristics resulting from land disturbing activity, to the maximum extent practicable, so as to minimize pollution of receiving waters.

Per Appendix A of the Colorado Department of Health, Water Quality Control Division's (the Division) "General Permit Application for Stormwater Discharge Associated with Construction Activities", the goal of the Stormwater Management Plan (SWMP) is:

"To identify possible pollutant sources that may contribute pollutants to stormwater, and identify Best Management Practices (BMPs) that, when implemented, will reduce or eliminate any possible water quality impacts. The SWMP must be completed and implemented at the time the project breaks ground, and revised if necessary as construction proceeds to accurately reflect the conditions and practices at the site."

This document is not intended to address training, site specific operational procedures, logistics, or other "means and methods" required to construct this project.

This document must be kept at the construction site at all times. Inspections are to be made at least every 14 days and after any precipitation event. El Paso County requires that the inspector be contacted 48 hours prior to initial and final inspections. An inspection log entry shall be completed with each inspection performed. The inspection log shall be kept with the SWMP. The conditions of the SWMP and General Permit for Stormwater Discharges associated with the construction activity will remain in effect until final stabilization is achieved, and a notice of inactivation is sent to CDPHE Stormwater Quality Division. All pertinent records must be kept for at least 3 years from the date the site is stabilized.

Drexel, Barrell & Co. has been retained to provide civil engineering services for the design of this project. Drexel, Barrell & Co. is not responsible for implementation and maintenance of the Stormwater Management Plan.

Item 7. Disturbed acreage should match acreage on ESQCP, please resolve discrepancy in disturbed area acreage.

#### 2.0 SITE DESCRIPTION

#### 2.1 DESCRIPTION OF CONSTRUCTION ACTIVITIES

The project involves the development of The Commons at Falcon Field in El Paso County, CO, as a mixed commercial and residential subdivision. At this time, prior to approval of the Final Plat and overlot grading for the development, import and stockpiling of fill is proposed.

The proposed development consists of approximately 57.7 acres in total. The disturbance area for stockpiling covers 50-acres, but the stockpiling will be centered in strategic areas as determined at the time of construction. The Falcon Creek East Tributary bisects the site, and will remain outside the disturbance area, except as noted below. The actual area of disturbance is required to be updated by the Contractor on the SWMP as changes occur.

Import and stockpiling is proposed to be phased, with the initial phase restricted to the area east of the tributary. Once a floodplain permit has been acquired, a haul road will cross the tributary allowing stockpiling on the east side of the property for the second phase.

#### 2.2 EXISTING SITE CONDITIONS

The site is covered in roughly 98% native sparse grasses and shrubs, as determined by visual site inspection. Historically, this site drains to the south and southeast. The Falcon Creek East Tributary bisects the site and will remain outside of the limits of disturbance, except as noted above.

#### 2.3 ADJACENT AREAS

The site is bounded by U.S. Highway 24 to the north and large-lot residential development to the south, east and west. All construction activities are to take place on the site. The surrounding areas will not be affected by the stockpiling and stabilization activities.

#### 2.4 SOILS

From the Natural Resources Conservation Service (NRCS), the soils on the site as mapped by the Soil Conservation Service (SCS) are of the Blakeland sandy loam and Columbine gravelly sandy loam, which are both hydrologic soil group A soils. These soils have an erosion K factor of 0.28, which indicates that they have a moderate erosion potential. Hydrologic Soil Group A soils have a high infiltration rate 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. Potential effects of soil erosion include compaction, loss of soil structure, nutrient degradation, soil salinity and increased sediment load downstream.

2.5 CONTROLS AND MEASURES DURING CONSTRUCTION

Item 6. TSB required for disturbance >1 ac. Include TSB and any associated CMs (e.g. diversion swale, berm, ect) in this discussion.

Stockpiling activities are anticipated to begin in the Winter of 2024. Installation of stabilization measures will be completed in one phase. The general sequence of major construction activities is as follows:

- Temporary Erosion Control Measures Temporary erosion control measures, such as silt fence and construction of the vehicle tracking pad and staging area will be completed prior to any other large scale activity. The vehicle tracking pad will ensure a reduction of tracking of soil on and off the construction site. The staging area will house the materials, petroleum product storage (if any), trash dumpster, sanitary facilities and hazardous spill clean-up areas. These are all potential pollutants that are not sediment related.
- Stockpile Placement & Temporary Haul Road Stockpiles should be located way
  from all drainage system components. Temporary Erosion Control Measures
  (BMPs) shall be placed around the perimeter of the stockpiles, as needed. For
  stockpiles in active use a stabilized designated access point on the upgradient side
  of the stockpile should be provided.
- Permanent Re-vegetation Erosion control blanket will be installed at all areas graded to a 3:1 slope and greater. All disturbed areas will be re-seeded. Vegetation and stabilization of soil will aid in the trapping of sediment and reducing soil erosion.

4. Removal of Temporary BMP's – Temporary erosion control measures may be removed once the site has achieved final 70 percent of pre disturbance levels and vegetation cover is capable of reducing soil erosion. All permanent BMPs shall be cleaned and functioning before any temporary BMPs are removed.

5. Housekeeping – The best BMP for a job site is good housekeeping around the site. Routine site trash pickup and routine BMP inspection and maintenance are paramount for keeping a job site clean and tidy. All petroleum storage areas in the staging area should be checked daily for leaks. Any leaks shall be reported to the site foreman for clean up. All personnel on site should be briefed on spill cleanup and containment procedures, in addition to being notified as to where the spill cleanup materials can be found if a spill should occur. The spill plan shall be produced by the general contractor for the project and remain onsite for the duration of the project. Contractor shall coordinate with the County to obtain the necessary contacts in the case that a spill occurs.

This project does not rely on control measures owned or operated by another entity.

#### 2.6 POTENTIAL POLLUTION SOURCES

Any substances with the potential to contaminate either the ground or ground surface water shall be cleanup up immediately following discovery, or contained until appropriate cleanup methods can be employed. Manufacturer's recommended methods for cleanup shall be followed, along with proper disposal methods. All waste and debris created by construction at the site or removed from the site shall be disposed of in accordance with all laws, regulations and ordinances of the Federal, State and local agencies. The following is a summary of potential pollution sources and their associated measures intended to minimize the risk of pollution for this project.

- 1) Disturbed and stored soils: Straw waddles/fiber rolls, straw bale check dams and gravel bag check dams.
- 2) Vehicle tracking and sediments: VTC and Street Sweeping

- 3) Vehicle and equipment maintenance and fueling: Spill prevention procedures.
- 4) Dust or particulate generation from earthmoving activities and vehicle movement: water trucks for site watering.
- 5) On site waste management of solid wastes (construction debris): Waste container placement, covering and disposal.
- 6) Worker trash and portable toilets: Container placement, covering and disposal.
- 7) Equipment repair or maintenance beyond normal fueling operations: Spill prevention procedures.

The following items are not anticipated to be potential pollution sources for this project:

- 1) Management of contaminated soils.
- 2) Outdoor storage of fertilizers, chemicals or potentially polluting construction material.
- 3) Dedicated asphalt or concrete batch plants.

#### 2.7 NON-STORMWATER DISCHARGES

Non-stormwater discharges possibly encountered during construction may include: watering down of the site to minimize dust, construction staging area, and excess dirt storage during high winds to minimize wind erosion and water utilized in soil compaction efforts.

#### 2.8 RECEIVING WATER

Ultimate receiving water is Black Squirrel Creek.

Item 14. These are not allowable non-stormwater discharges under COR400000. Refer to COR400000 A.1.b for list of allowable non-stormwater discharges

#### 3.0 SITE MAP

Attached as part of this plan is a Stockpile Erosion Control Plan (See Appendix C). The drawing identifies the following:

- 1) Project area boundary
- 2) Area used for staging area
- 3) Location of erosion control facilities or structures (BMP's)
- 4) Boundaries of 100-year floodplains (if applicable)

The following items may not be indicated on the attached drawings, but will be determined by the individual contractors prior to and during construction activities:

- 1) Areas used for storage of construction materials, soils, or wastes
- 2) Location of portable toilets and waste receptacles (required to be a minimum of 50 feet from state waters. They shall be adequately staked and cleaned on a weekly basis. They will be inspected daily for spills).
- Location of additional BMP's that may become necessary as work progresses

These items shall be added to the Site Map by the Contractor/SWMP Administrator.

#### 4.0 BMP's FOR STORMWATER POLLUTION PREVENTION

Best management practices (BMPs) are to be used throughout the site. Anticipated Structural and Non-Structural BMPs are outlined below, however the Stormwater Manager may modify the planned BMPs based on site conditions, and/or other factors.

#### 4.1 EROSION CONTROL – STRUCTURAL PRACTICES

A list of the Structural BMP's for erosion and sediment control implemented on the site to minimize erosion and sediment are as follows. Refer to the SWMP Drawings for installation and maintenance requirements and location for each structural BMP.

Item 18. TSB required for disturbance >1 ac. Include TSB and any associated CMs (e.g. diversion swale, berm, ect) in this discussion.

- a) Seeding and Mulching (SM): Temporary seeding and mulching can be used to stabilize disturbed areas that will be inactive for an extended period of time.
   Permanent seeding should be used to stabilize areas at final grade that will not otherwise be stabilized.
- b) Silt Fence (SF): A temporary sediment barrier constructed of woven fabric stretched across supporting posts.
- c) Stabilized Staging Area (SSA): Consists of stripping the topsoil and spreading a layer of granular material in the area to be used for a trailer, parking, storage, unloading and loading.
- d) Temporary Stockpile Areas (SP): Temporary stockpiles of excess excavated material and stockpiles for imported materials. Slopes shall not be steeper than 3 to 1.
- e) Vehicle Tracking Control (VTC): Consists of a rock pad that is intended to help strip mud from tires prior to vehicles leaving the construction site. Installed at all entrance/exit points to the site. The number of access points shall be minimized.

Minimal clearing and grubbing may be necessary prior to installing the initial erosion control features.

No clearing, grading, excavation, filling or other land disturbing activities shall be permitted until signoff and acceptance of the Grading and Erosion Control Plan is received from the County.

Once signoff and acceptance are received the approved erosion and sediment control measures must be installed before land-disturbing activities are initiated so that no adverse effect of site alteration will impact surrounding property.

#### 4.2 EROSION CONTROL – NON-STRUCTURAL PRACTICES

Non-structural practices for erosion and sediment control to be used to minimize erosion and sediment transport are:

a) Seeding and mulching of disturbed areas and leaving native vegetation in place when possible.

b) Street sweeping around the construction site will be utilized when tracking of mud occurs on paved streets. The sweeping will be required after any significant tracking has occurred; significant meaning any visible amount that cannot be completely cleaned by hand. The adjacent offsite paved drive surfaces will be cleaned at the end of each day of construction activities. Sweeping efforts will continue as necessary until construction operations are completed.

#### 4.3 MATERIALS HANDLING & SPILL PREVENTION

The SWMP administrator will inspect daily to ensure proper use and disposal of materials on site including building materials, paints, solvents, fertilizers, chemicals, waste materials and equipment maintenance or fueling procedures. All materials stored onsite will be stored in a neat and orderly manner in the original containers with the original manufacturer's label, and if possible under a roof or other enclosure to prevent contact with stormwater. Chemicals should be stored within berms or other secondary containment devices to prevent leaks and spills from contacting stormwater runoff. Before disposing of the container, all of a product will be used up whenever possible and manufacturer's recommendations for proper disposal will be followed according to state and local regulations.

Material and equipment necessary for spill cleanup will be kept in the material storage are on site. Manufacturer's recommendations for spill cleanup will be posted and site personnel will be made aware of the procedures along with the location of the information and cleanup supplies.

The contractor shall have spill prevention and response procedures that include the following:

- a) Notification procedures to be used in the event of an accident. At the very least, the SWMP administrator should be notified. Depending on the nature of the spill and the material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line (877) 518-5608), downstream water users or other agencies may also need to be informed.
- b) Instructions for clean up procedures and identification of spill kit location(s).

- c) Provisions for absorbents to be made available for use in fuel areas and for containers to be available for used absorbents.
- d) Procedures for properly washing out concrete truck chutes and other equipment in a manner and location so that the materials and wash water cannot discharge from the site and never into a storm drain system or stream.

#### 4.4 DEDICATED CONCRETE OR ASPHALT BATCH PLANTS

No dedicated concrete or asphalt batch plants will be used.

#### 4.5 GROUNDWATER & STORMWATER DEWATERING

In the event that groundwater is encountered or stormwater enters an excavation and dewatering is necessary, a separate CDPHE construction discharge (dewatering) permit will be required for groundwater dewatering and shall be obtained by the SWMP administrator. During groundwater or stormwater dewatering, locations and practices to be implemented to control stormwater pollution from excavations, etc., must be noted on the SWMP. Construction dewatering cannot be discharged to surface water or to storm sewer systems without separate permit coverage. The discharge of Construction Dewatering water to the ground, under specific conditions, may be allowed by the Stormwater Construction Permit when appropriate BMP's are implemented. Refer to USDCM Volume III (MHFD) for County acceptable means of dewatering.

#### 5.0 TIMING SCHEDULE

This stockpiling project is anticipated to begin in the Winter of 2024 and be completed by the Spring of 2025. The contractor shall be responsible for producing a schedule that will show at a minimum: start and completion times including site grading operations, utility construction and the removal of the temporary erosion and sediment control measures.

#### 6.0 FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

Final stabilization shall not be considered complete until 70% of new vegetated cover is established on disturbed areas. Temporary sediment and erosion control measures listed in Section 4.0 installed prior to the construction phase will remain in place until this time.

At final stabilization, stormwater pollutants are anticipated to be negligible given the 0%

change in imperviousness.

Item 22. Please describe how final stabilization will be achieved. E.g. seeding (specify drill seed/hydro seed), mulch (specify straw mulch or hydromulch), erosion control blanket, etc.

Item 23. Specify vegetative cover density is to be 70% of pre-disturbance levels

#### 7.0 INSPECTION AND MAINTENANCE

A site inspection of all erosion control facilities will be conducted by the Qualified Stormwater Manager every 14 days and within 24 hours after every precipitation event or snowmelt event that causes surface erosion. The entrance to the construction site shall be inspected daily and existing street cleaned, as necessary, of all materials tracked out of the site.

The construction site perimeter, disturbed areas, and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the SWMP shall be observed to ensure that they are operating correctly.

All temporary and permanent erosion and sediment control facilities shall be maintained and repaired per manufacturer's specifications to assure continued performance of their intended function. Repairs should be completed within 24 to 48 hours. Silt fences may require periodic replacement.

Based on the results of the inspection, the description of potential pollutant sources and the pollution prevention and control measures that are identified in this plan shall be revised and modified as appropriate as soon as practicable after such inspection. Modification to control measures shall be implemented in a timely manner, but in no case more than seven (7) calendar days after the inspection.

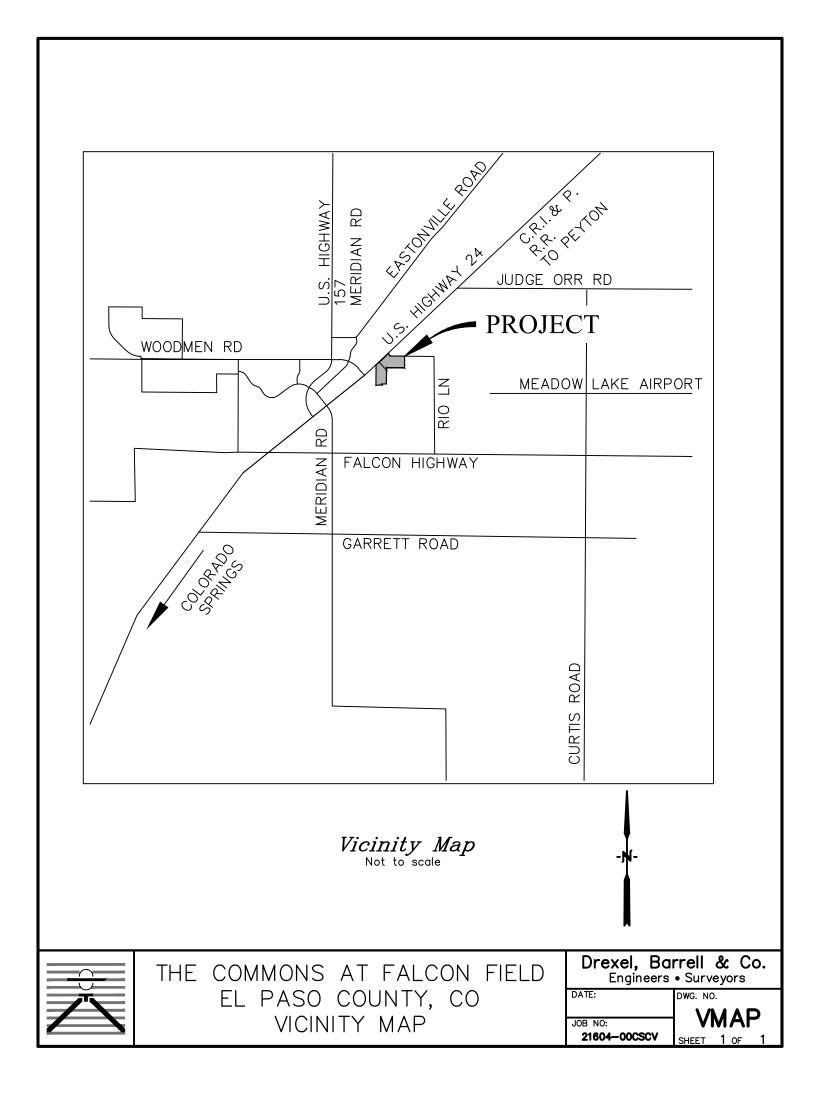
The Qualified Stormwater Manager shall be responsible for documenting inspections, maintaining records and signing the inspection logs. Uncontrolled releases of mud or muddy water or measurable quantities of sediment found off the site shall be recorded with a brief explanation as to the measures taken to prevent future releases as well as any measure taken to clean up the sediment that has left the site. All signed inspection record/logs should be kept on site and made available to the El Paso County or CDPHE personnel upon request. Per ECM Appendix I.5, all inspections will be performed by the Qualified Stormwater Manager. The Qualified Stormwater Manager shall have documentation of their credentials (PE, certified erosion control inspector/specialist, certified in a City-approved inspection training program, etc.), which will be provided and attached to the SWMP once the Qualified Stormwater Manager has been determined.

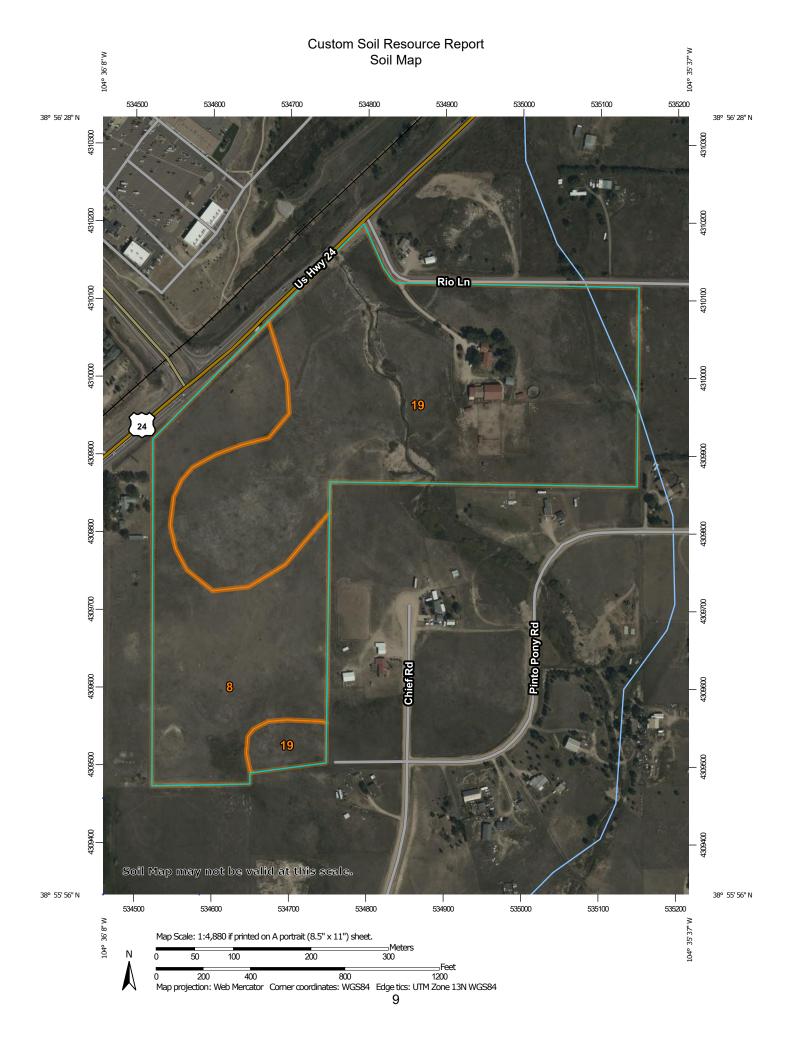
The inspection logs shall be kept with the SWMP onsite (the exact location is TBD). This document is to be viewed as a "living document" and shall be updated regularly and kept currently accurate. It is to be revised and maintained in order to evaluate and manage the ongoing stormwater quality issues at the site. The Qualified Stormwater Manager shall amend the SWMP when there is a change in design, construction, operation or maintenance of the site which would require the implementation of new or revised BMPs or if this document proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges associated with construction activity of when BMPs are no longer necessary and are removed.

#### 8.0 REFERENCES

- [1] <u>General Permit Application and Stormwater Management Plan Preparation Guidance</u> <u>for Stormwater Discharges Associated with Construction Activities</u>. Prepared by the Colorado Department of Health, Water Quality Control Division. Revised 7/2009.
- [2] <u>City of Colorado Springs</u> Drainage Criteria Manual, Volume 2 "Stormwater Quality Procedures and Best Management Practices (BMPs). November 1, 2002, amended August 10, 2010.
- [3] NRCS Web Soil Survey, <u>www.websoilsurvey.nrcs.usda.gov</u>

#### **APPENDIX**





#### MAP LEGEND

#### Area of Interest (AOI)

Area of Interest (AOI)

#### Soils

Soil Map Unit Polygons

-

Soil Map Unit Lines

Soil Map Unit Points

#### **Special Point Features**

(0)

Blowout

 $\boxtimes$ 

Borrow Pit

36

Clay Spot

^

Closed Depression

~

.....

۰

Gravelly Spot

0

Landfill Lava Flow

٨.

Marsh or swamp

@

Mine or Quarry

0

Miscellaneous Water
Perennial Water

0

Rock Outcrop

+

Saline Spot

. .

Sandy Spot

\_

Severely Eroded Spot

Sinkhole

Slide or Slip

Ø.

Sodic Spot

#### 8

Spoil Area



Stony Spot



Very Stony Spot



Wet Spot Other



Special Line Features

#### Water Features

\_

Streams and Canals

#### Transportation

ransp

Rails

~

Interstate Highways

\_

US Routes



Major Roads



Local Roads

#### Background

1

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.

# **Map Unit Legend**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
8	Blakeland loamy sand, 1 to 9 percent slopes	18.8	32.8%
19	Columbine gravelly sandy loam, 0 to 3 percent slopes	38.6	67.2%
Totals for Area of Interest		57.4	100.0%

## **Map Unit Descriptions**

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

#### Custom Soil Resource Report

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An association is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

#### El Paso County Area, Colorado

#### 8—Blakeland loamy sand, 1 to 9 percent slopes

#### **Map Unit Setting**

National map unit symbol: 369v Elevation: 4,600 to 5,800 feet

Mean annual precipitation: 14 to 16 inches
Mean annual air temperature: 46 to 48 degrees F

Frost-free period: 125 to 145 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Blakeland and similar soils: 98 percent

Minor components: 2 percent

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

#### **Description of Blakeland**

#### Setting

Landform: Hills, flats

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

Down-slope shape: Linear Across-slope shape: Linear

Parent material: Alluvium derived from sedimentary rock and/or eolian deposits

derived from sedimentary rock

#### Typical profile

A - 0 to 11 inches: loamy sand AC - 11 to 27 inches: loamy sand C - 27 to 60 inches: sand

### Properties and qualities

Slope: 1 to 9 percent

Depth to restrictive feature: More than 80 inches Drainage class: Somewhat excessively drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95

to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Available water supply, 0 to 60 inches: Low (about 4.5 inches)

#### Interpretive groups

Land capability classification (irrigated): 3e Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R049XB210CO - Sandy Foothill

Hydric soil rating: No

#### **Minor Components**

#### Other soils

Percent of map unit: 1 percent

#### Custom Soil Resource Report

Hydric soil rating: No

#### **Pleasant**

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

#### 19—Columbine gravelly sandy loam, 0 to 3 percent slopes

#### **Map Unit Setting**

National map unit symbol: 367p Elevation: 6,500 to 7,300 feet

Mean annual precipitation: 14 to 16 inches Mean annual air temperature: 46 to 50 degrees F

Frost-free period: 125 to 145 days

Farmland classification: Not prime farmland

#### **Map Unit Composition**

Columbine and similar soils: 97 percent

Minor components: 3 percent

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

#### **Description of Columbine**

#### Setting

Landform: Flood plains, fan terraces, fans

Down-slope shape: Linear Across-slope shape: Linear Parent material: Alluvium

#### **Typical profile**

A - 0 to 14 inches: gravelly sandy loam
C - 14 to 60 inches: very gravelly loamy sand

#### **Properties and qualities**

Slope: 0 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 to very high (5.95

to 19.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.5 inches)

#### Interpretive groups

Land capability classification (irrigated): 4e Land capability classification (nonirrigated): 6e

Hydrologic Soil Group: A

Ecological site: R049XY214CO - Gravelly Foothill

#### Custom Soil Resource Report

Hydric soil rating: No

#### **Minor Components**

#### Fluvaquentic haplaquolls

Percent of map unit: 1 percent Landform: Swales Hydric soil rating: Yes

#### Other soils

Percent of map unit: 1 percent Hydric soil rating: No

#### **Pleasant**

Percent of map unit: 1 percent Landform: Depressions Hydric soil rating: Yes

# CONSTRUCTION STORMWATER SITE INSPECTION REPORT

Facility Name			Permittee			
Date of Inspection			Weather Conditions			
Permit Certification #			Disturbed Acreage			
Phase of Construction			Inspector Title			
Inspector Name						
Is the above inspector a qualified storm					YES	NO
(permittee is responsible for ensuring t	hat the ir	spector	is a qualified stormwater r	nanager)		
INSPECTION FREQUENCY						
Check the box that describes the minim	num inspe	ection fre	equency utilized when cond	ducting each insp	ection	
At least one inspection every 7 calenda	•					
At least one inspection every 14 calendary					Г	7
24 hours after the end of any precipitat	tion or sn	owmelt	event that causes surface e	erosions	L	_
<ul> <li>This is this a post-storm event i</li> </ul>	nspection	n. Event	Date:			
Reduced inspection frequency - Include	site cond	ditions t	hat warrant reduced inspec	ction frequency	Г	
Post-storm inspections at temporary	orarily idl	e sites			F	<u>-</u>
<ul> <li>Inspections at completed sites/</li> </ul>						<u>-</u>
Winter conditions exclusion	area					
Have there been any deviations from the	ne minimu	ım inspe	ection schedule?		YES	NO
If yes, describe below.					Ш	
INSPECTION REQUIREMENTS*						
<ul> <li>i. Visually verify all implemented co designed in the specifications</li> </ul>	ontrol me	asures a	re in effective operational	condition and ar	e working	as
ii. Determine if there are new poter	itial sourc	es of no	Hutants			
iii. Assess the adequacy of control materials				a new or modifie	d control	measures
to minimize pollutant discharges	cusui es u	t the site	e to identify dreas requiring	g new or mounte	a control	measures
iv. Identify all areas of non-complian	ce with t	he perm	it requirements, and if neo	essary, impleme	nt correct	ive action
*Use the attached Control Measures		•				
Corrective Action forms to document re				-		-
To the second se		1113 4336.	sometic that thigger entirer h	inamice or c		300.01.3
AREAS TO BE INSPECTED						
Is there evidence of, or the potential f				ooundaries, ente	ring the st	tormwater
drainage system or discharging to state	waters a	t the fol				
			If "YES" describe discharç			
	NO	YES	Document related mainte			
			and corrective actions	•	Control	Measures
Construction site perimeter			Requiring Corrective Act	tion form		
All disturbed areas						
Designated haul routes						
<u> </u>		Ш				
Material and waste storage areas exposed to precipitation						
Locations where stormwater has the						
potential to discharge offsite						
Locations where vehicles exit the site						
Other:		1 Ш				

#### 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	
Are there control measures requiring maintenance:			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	
Are there madequate control measures requiring corrective action:			If "YES" document below
Are there additional control measures needed that were not in place at the time of inspection?	NO	YES	
Are there additional control measures needed that were not in place at the time of inspections			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
<ul> <li>b. Numeric Effluent Limit Violations</li> <li>Circumstances leading to any unanticipated bypass which exceeds any effluent limitations (See Part II.L.6.b of the Permit)</li> <li>Circumstances leading to any upset which causes an exceedance of any effluent limitation (See Part II.L.6.c of the Permit)</li> <li>Daily maximum violations (See Part II.L.6.d of the Permit)</li> <li>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.</li> </ul>

				110	1/50	
Has thoro hoo	on an incident of	noncompliance requiring 24-h	our notification?	NO	YES	
nas there bee		ioncompliance requiring 24-ii	our notification:		☐ If	"YES" document below
Date and Time of	Location	Description of Noncompliance	Description of Corrective Action	24 I	and Time o Hour Oral	Date of 5 Day Written Notification *

Time of Incident	Location	Noncompliance	Description of Corrective Action	24 Hour Oral Notification	Notification *

<sup>\*</sup>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.

	nce have been taken, or where a report does not identify ntenance, the individual(s) designated as the Qualified ow statement:
"I verify that, to the best of my knowledge and bell during the inspection are complete, and the site is	ief, all corrective action and maintenance items identified currently in compliance with the permit."
Name of Qualified Stormwater Manager	Title of Qualified Stormwater Manager
Signature of Qualified Stormwater Manager	Date
Notes/Comments	

# STOCKPILE EROSION CONTROL PLANS

# THE COMMONS AT FALCON FIELD

SECTION 7, TOWNSHIP 13 SOUTH, RANGE 64 WEST OF THE 6TH P.M.

PEYTON, EL PASO COUNTY, COLORADO

# STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- . 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 OFF SITE 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. MANAGEMENT OF THE SWMP DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP 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 COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED 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 ARE 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.
- 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.
- 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 PLANT 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 DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
- 10. EARTH DISTURBANCES 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 SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
- 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 MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
- 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 SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
- 14. DURING DEWATERING OPERATIONS, UNCONTAMINATED GROUNDWATER MAY BE DISCHARGED ON—SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
- 15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
- 16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES 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. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES 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.

# WOODMEN RD WEADOW LAKE AIRPORT OR WEADOW LAKE AIRPORT OR GARRETT ROAD GARRETT ROAD

# **VICINITY MAP**

NTS

# STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- 18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF—SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF—SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
- 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 CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ON—SITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
- 22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ON—SITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
- 23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
- 24. OWNER/DEVELOPER AND THEIR AGENTS 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 OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
- 25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
- 26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- 27. A WATER SOURCE SHALL BE AVAILABLE ON-SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- 28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY ENTECH ENGINEERING, INCORPERATED, JANUARY 20, 2021 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
- 29. AT LEAST TEN 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

## SHEET INDEX

CVR — COVER SHEET
EC1 — STOCKPILE EROSION CONTROL PLAN
DT — EROSION CONTROL DETAILS

# BENCHMARK:

TBD

# **ENGINEER'S STATEMENT**

THIS EROSION CONTROL/GRADING 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 NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS REPORT.

TIM D	McCONNELL.	DE			

DATE

# OWNER'S STATEMENT

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

OWNER/DEVELOPER	
-----------------	--

# EL PASO COUNTY

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENTS 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, 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,	COUNTY	ENGINEER

DATE



PREPARED BY:



DREXEL, BARRELL & CO Engineers • Surveyors 101 SAHWATCH ST. #100 COLORADO SPGS, COLORADO 8090 CONTACT: TIM D. McCONNELL, P.: (719)260-0887 COLORADO SPRINGS • LAFAYETTE

CLIENT:

PROTERRA PROPERTIES

1864 WOODMOOR DR, STE 100 MONUMENT, CO 80132

THE COMMONS AT
FALCON FIELD

ISSUE DATE
INITIAL ISSUE 12/4/24

124 EY

DESIGNED BY: KGV
DRAWN BY: CGH
CHECKED BY: TDM
FILE NAME: 21604—EC1

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

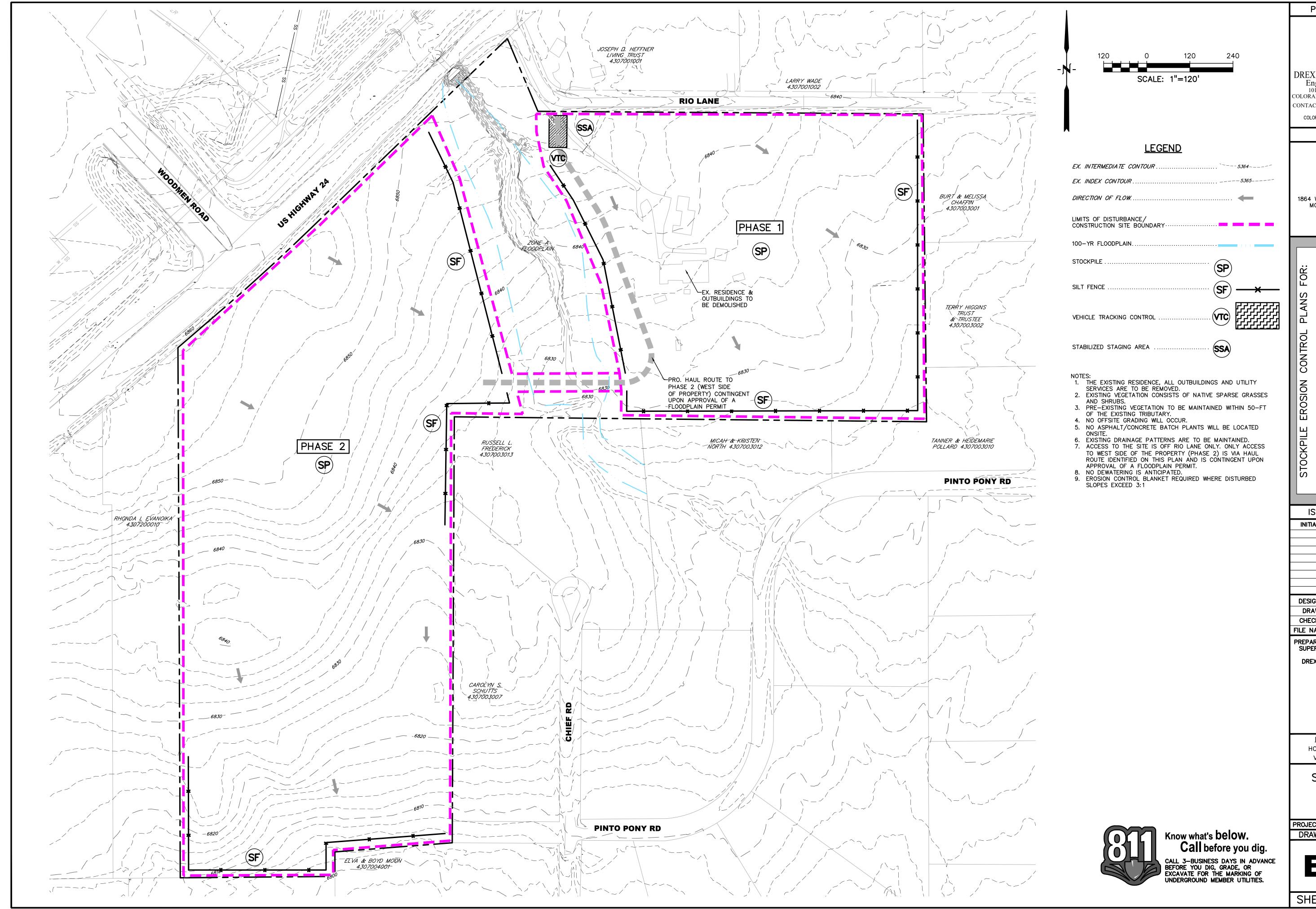
DRAWING SCALE:
HORIZONTAL: N/A
VERTICAL: N/A

COVER

PROJECT NO. 21604-00CSCV



SHEET: 1 OF 3



PREPARED BY:

DREXEL, BARRELL & CO. Engineers • Surveyors
101 SAHWATCH ST. #100
COLORADO SPGS, COLORADO 80903 CONTACT: TIM D. McCONNELL, P.E (719)260-0887 COLORADO SPRINGS • LAFAYETTE

CLIENT:

PROTERRA

PROPERTIES

1864 WOODMOOR DR, STE 100 MONUMENT, CO 80132

ISSUE	DATE		
INITIAL ISSU	12/4/24		
DESIGNED BY:		KGV	
DRAWN BY	CGH		
CHECKED B	Y:	TDM	
FILE NAME:	21604-EC1		

1244() EYTC

PREPARED UNDER MY DIRECT SUPERVISION FOR AND ON BEHALF OF DREXEL, BARRELL & CO.

DRAWING SCALE: HORIZONTAL: 1'' = 60'VERTICAL: N/A

STOCKPILE PLAN

PROJECT NO. 21604-00CSCV DRAWING NO.

SHEET: 2 OF 3

1. SILT FENCE MUST BE PLACED AWAY 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

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

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').

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

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

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

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

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.

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.

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

Urban Drainage and Flood Control District

ONSITE
CONSTRUCTIO
VEHICLE
PARKING (1F
NEEDED)

\_\_ SF/CF \_\_\_\_ SF/CF \_

SSA-1. STABILIZED STAGING AREA

-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.

SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

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

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT

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

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

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.

EXISTING ROADWAY

STABILIZED STAGING AREA INSTALLATION NOTES

STABILIZED STAGING AREA MAINTENANCE NOTES

-LOCATION OF STAGING AREA(S).

Urban Storm Drainage Criteria Manual Volume 3

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

SILT FENCE INSTALLATION NOTES

SILT FENCE MAINTENANCE NOTES

DOCUMENTED THOROUGHLY.

SEDIMENTS IS APPROXIMATELY 6".

**Stabilized Staging Area (SSA)** 

STABILIZED CONSTRUCTION

ENTRANCE (SEE DETAILS VTC-

EROSION, AND PERFORM NECESSARY MAINTENANCE.

SIDEWALK OR OTHER PAVED SURFACE

INSTALL ROCK FLUSH WITH OR BELOW TOP OF PAVEMENT

20 FOOT (WIDTH CAN BE LESS IF CONST. VEHICLES ARE PHYSICALLY CONFINED ON

L 9" (MIN.)

UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE COOT SECT. #703, AASHTO #3

NON-WOVEN GEOTEXTILE

COARSE AGGREGATE OR 6" MINUS ROCK

NON-WOVEN GEOTEXTILE FABRIC BETWEEN SOIL AND ROCK

UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, USE CDOT SECT. #703, AASHTO

#3 COARSE AGGREGATE

OR 6" MINUS ROCK

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES 1. SEE PLAN VIEW FOR -LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH,

CONSTRUCTION MAT OR TRM). 2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS. 3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.

DISTURBING ACTIVITIES. 5. A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT 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

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.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED

VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

SECTION A

50 FOOT (MIN.)

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

Urban Drainage and Flood Control District

November 2010

**Stockpile Management (SM)** 

**Stockpile Management (SP)** 

COMPACTED SUBGRADE -

MM-2

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

STOCKPILE PROTECTION MAINTENANCE NOTES

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

SM-4

CLIENT:

PREPARED BY:

 $\overline{\phantom{a}}$ 

DREXEL, BARRELL & CC

Engineers • Surveyors

**PROTERRA** 

**PROPERTIES** 

1864 WOODMOOR DR, STE 100

MONUMENT, CO 80132

ON FIE

ST

**ISSUE** 

INITIAL ISSUE

DESIGNED BY:

CHECKED BY:

**FILE NAME:** 21604–EC1

PREPARED UNDER MY DIRECT

SUPERVISION FOR AND ON

BEHALF OF

DREXEL, BARRELL & CO.

DRAWING SCALE:

HORIZONTAL: 1'' = 60'VERTICAL: N/A

DRAWN BY:

بَا بِي الله

DATE

12/4/24

KGV

CGH

TDM

101 SAHWATCH ST. #100 COLORADO SPGS, COLORADO 8090 CONTACT: TIM D. McCONNELL, P.E (719)260-0887 COLORADO SPRINGS • LAFAYETTE

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND

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

EROSION, AND PERFORM NECESSARY MAINTENANCE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

 $\underline{\text{NOTE}};$  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 CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

MM-2

VTC-3

Urban Storm Drainage Criteria Manual Volume 3

STOCKPILE PROTECTION 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

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

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY. 5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

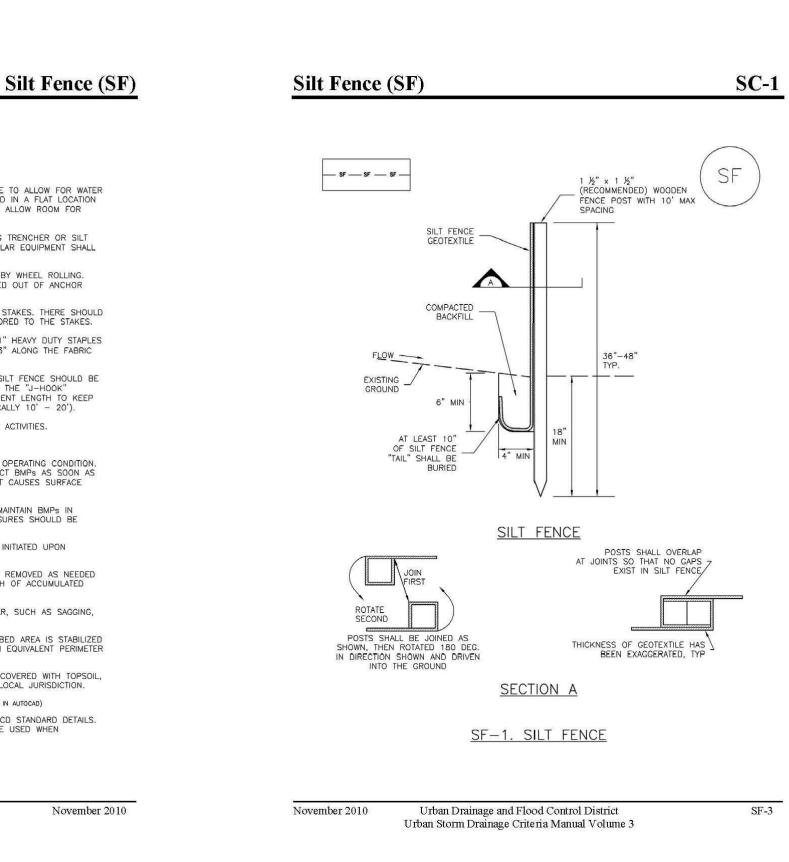
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

**DETAILS** 

PROJECT NO. 21604-00CSCV

DRAWING NO.

SHEET: 3 OF 3



**Stabilized Staging Area (SSA) SM-6** 

> STABILIZED STAGING AREA MAINTENANCE NOTES 5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, 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, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED 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)

STOCKPILE SILT FENCE (SEE SF DETAIL FOR STOCKPILE PROTECTION PLAN SECTION A SP-1. STOCKPILE PROTECTION STOCKPILE PROTECTION INSTALLATION NOTES 1. SEE PLAN VIEW FOR:
-LOCATION OF STOCKPILES.
-TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES, CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS. 3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30-60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

Urban Drainage and Flood Control District

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

**SM-6** 

Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

Urban Storm Drainage Criteria Manual Volume 3

Know what's below. Call before you dig. CALL 3-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.