

**STORMWATER MANAGEMENT PLAN  
MERIDIAN RANCH HOMEBUILDERS STOCKPILE SITE  
EL PASO COUNTY, COLORADO  
CDPHE PERMIT COR427910**

Prepared For:

**GTL DEVELOPMENT, INC.**

3575 Kenyon Street  
CO San Diego, CA 92110

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Prepared By:  
Tech Contractors  
11886 Stapleton Dr  
Falcon, CO 80831  
719.495.7444

Qualified Stormwater Manager:

Name: Bret Haycock

Company: Tech Contractors

11910 Tourmaline Dr, #130

Falcon, CO 80831

Contractor:

Name: \_\_\_\_\_

Company: \_\_\_\_\_

\_\_\_\_\_

PCD Project No.: CDR255

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## STORMWATER MANAGEMENT PLAN CONTENTS CHECKLIST

Stormwater Management Plan Contents	SWMP Page # or Location
<b>Site Description</b>	
A description of construction activity.	Section 1.0
The proposed sequence for major activities.	Section 1.1, Section 3.1, and Appendices B and C
Estimates of the total area of the site and the area of the site that is expected to undergo clearing, excavation, or grading.	Section 1.1 and Appendices B and C
A description of the soil, soil erosion potential, or the quality of any discharge from the site.	Section 1.1
The location and description of any other potential pollution sources, such as vehicle fueling, storage of fertilizers or chemicals, etc.	Section 1.1, Section 5.0, and Appendix G
The location and description of any anticipated non-stormwater components of the discharge, such as springs and landscape irrigation return flow.	Section 1.1
The name of the receiving water(s) and the location of any outfall or, if the discharge is to a municipal separate storm sewer, the name of that system, the location of the storm sewer discharge, and the ultimate receiving water(s).	Section 1.1, and Appendices A, B, and C
<b>Site Map</b>	
Construction Site Boundaries.	Appendix B and Figure 1
All areas of disturbance.	Appendix B
Areas of cut and fill.	Appendix B
Areas used for storage of building materials, soils or wastes.	Appendix B
Location of any dedicated asphalt or concrete batch plants.	Not Applicable – no dedicated asphalt or concrete batch plants proposed on this site.
Location of major erosion control facilities or structures.	Appendix C
Springs, streams, wetlands, and other surface waters.	Section 1.1, Figure 1, Appendices B and C
Boundaries of 100-year flood plains, if determined.	Figure 1, Appendix C
Drainage ponds for each outfall.	Appendices B and C
Surface water bodies (including dry water courses).	Figure 1 and Appendices B and C
Existing and planned structural stormwater pollution control measures.	Section 1.1, Appendix C
Areas where industrial activities take place.	Not Applicable – no industrial activities are planned on this site.
Paved and unpaved areas where the runoff coefficient may be different.	Appendix C
<b>CONTROL MEASURES (CM) for Stormwater Pollution Prevention</b>	
Structural	Section 3.1 and Appendix C
Non-structural	Section 3.2 and Appendix C

<b>Stormwater Management Plan Contents</b>	<b>SWMP Page # or Location</b>
<b><i>Materials Handling and Spill Prevention</i></b>	
The intensity of the activity.	Section 3
The size of the area over which the activity takes place, the surface type, and other physical characteristics such as slope.	Section 1.1, Section 3, Appendices B and C
Ability of product storage and loading/unloading facilities to contain spills and leaks.	Section 3 and Appendix C
The construction and toxicity of materials which can be expected to be found in the site's stormwater runoff.	Section 3.2.1
The contamination of storage facilities with the substances being stored.	Section 3.2.1
Notification procedures to be used in the event of an accident.	Section 3.2.3, Appendices E and G
Instructions for clean-up procedures.	Section 3.2.3, Appendix E
Provisions for absorbents to be made available for use in fuel areas.	Section 3.2.3, Appendix E
Prohibition of the washing of concrete trucks and other equipment into the storm drainage system.	Section 3.2.1
<b><i>Final Stabilization and Long Term Stormwater Management</i></b>	
A description of measures used to achieve final stabilization	Section 4.0
<b><i>Other Controls</i></b>	
A description of other measures to control pollutants in stormwater discharges, including plans for waste disposal and limiting off site soil tracking.	Appendix E
Records of spills, leaks, overflows, including time and date, weather conditions, etc.	Appendices E and G
Implementation of specific items in the SWMP	Appendices F, G, H, I, J and K
Training events involving materials handling and storage.	Appendix I
Contacts with regulatory agencies and personnel.	Appendices E and J
Notes of employee activities, contact, notifications, etc.	Appendix J
Maintenance and repair of stormwater management controls.	Appendices C, F, J and K
Preventative maintenance activities.	Appendices F and J
Inspection activities.	Appendix F
<b><i>Inspection and Maintenance</i></b>	
A description of procedures to inspect and maintain in good and effective operating condition the vegetation, erosion and sediment control measures and other protective measures identified in the SWMP	Section 5.0 and Appendix F
Identification of equipment, sediment and erosion controls, and site areas that should be inspected.	Section 5.0 and Appendices C, F, J and K
Appropriate and timely maintenance, repair, or replacement of control measures and equipment.	Section 5.0 and Appendices F, J and K
Maintenance of complete records on inspections, equipment, and systems.	Section 5.0 and Appendices F, J and K

## **1.0 INTRODUCTION**

Meridian Ranch Homebuilders Stockpile Site is located in the unincorporated portion of the County of El Paso and State of Colorado. Meridian Ranch Investments, Inc. (owners) has allowed the various homebuilders within Meridian Ranch to temporarily store, stockpile, and remove soil sourced from the various foundation excavations on the property (Parcel Number 4200000451) within the limits of the permit area. This report will identify the areas to be covered under the current permit and to update and track the CONTROL MEASURES (CM) to be used until final stabilization is reached. This document is the Stormwater Management Plan (SWMP) for the Meridian Ranch Homebuilders Stockpile Site, a stockpile/borrow site, was permitted through the State of Colorado Discharge Permit System-Permit COR427910. The application and permit can be found in Appendix A.

Meridian Ranch Homebuilders Stockpile Site is a 2-acre stockpile/borrow site located on a parcel approximately 57 acres. The use includes the transferring, storing and the return of excess soil generated from foundation excavations for home construction within Meridian Ranch. This project does not rely on control measures owned or operated by another entity within the project boundary. Surrounding the project is vacant land to the east of Eastonville Road, completed home sites sold to private homeowners located to the west and north, the Falcon Regional Park also located to the north of the property and the Falcon High School located south of the property owned and maintained by Meridian Ranch Investments, Inc.

The project is located in El Paso County, CO and is within the Geick Ranch Drainage Basin.

This report and all signed reports can be found at 11910 Tourmaline Dr, Ste 130, Peyton 80831, the administrator is Bret Haycock.

### ***1.1.a. Site Description***

Historically, ranching dominated the area surrounding Meridian Ranch; however, currently urbanization has occurred in the general vicinity. Most notably, urbanization has occurred to the north with Latigo Trails, to the south in the Woodmen Hills Subdivision, to the east in Four Way Ranch, to the west in the Falcon Hills subdivision, and to the northwest in the Paint Brush Hills subdivision.

The 2-acre stockpile site is located on property that is approximately 57 acres in size. The Meridian Ranch Homebuilders Stockpile Site is located south of the Falcon Regional Park and north of the Falcon High School and between Lambert Road to the west and Eastonville Road to the east. The project site is approximately 12 miles northeast of the City of Colorado Springs, 3 miles north of the town of Falcon in an unincorporated portion of El Paso County and State of Colorado. The property is located in Section 29, Township 12 South, Range 64 West, of the 6th Principal Meridian.

The property is vacant, undeveloped land and will remain undeveloped until after the stockpile site is no longer necessary.

### ***1.1.b. Proposed Sequence of Major Activities***

There is no planned or anticipated construction to be on the Meridian Ranch Homebuilders Stockpile Site, the property will be used for a number of years until all of Meridian Ranch is near full buildout. Stage 1 will be the import, storage, and export of excess soil generated from homebuilding foundation excavation. Control measures will include perimeter control, occasional leveling of the soil deposits and maintenance of the haul road. Stage 2 will consist of final grading to assure that the site is properly compacted with contouring resembling the original grade as near as possible to ensure

that the historic drainage patterns are nearly the same as prior to the site being used as stockpile. Upon reaching final grade, the disturbed area will receive permanent seeding and monitored until final stabilization is achieved.

Stage	Description	Control Measures	Begin Date	End Date
Stage 1	Import and export of excess soils from homebuilding activities and occasional leveling operations	Silt fence & VTC Temporary Sed. Basins Swale Checks as needed Surface Roughening	June 2025	June 2030
Stage 2 Final Stabilization	Permit Close	Final Stabilization Permanent Seeding	June 2030	

**1.1.c. Project Location and Estimates of Area to be Disturbed**

The 2-acre stockpile site is located on property that is approximately 57 acres in size. The Meridian Ranch Homebuilders Stockpile Site is located south of the Falcon Regional Park and north of the Falcon High School and between Lambert Road to the west and Eastonville Road to the east. The project site is approximately 12 miles northeast of the City of Colorado Springs, 3 miles north of the town of Falcon in an unincorporated portion of El Paso County and State of Colorado. The property is located in Section 29, Township 12 South, Range 64 West, of the 6th Principal Meridian.

A general location map is Figure 1.

Latitude: 38°59'00" N                      Longitude: 104°34'21"W

There are no other planned offsite borrow or disposal activities associated with this site.

Offsite Control Measures: may include but are not limited to; curb socks and inlet protection, street sweeping etc. Offsite CM are detailed later in this SWMP.

Approximate limits of disturbance are indicated on exhibits found in Appendix B and C of this SWMP.

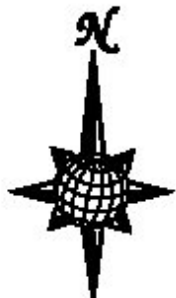
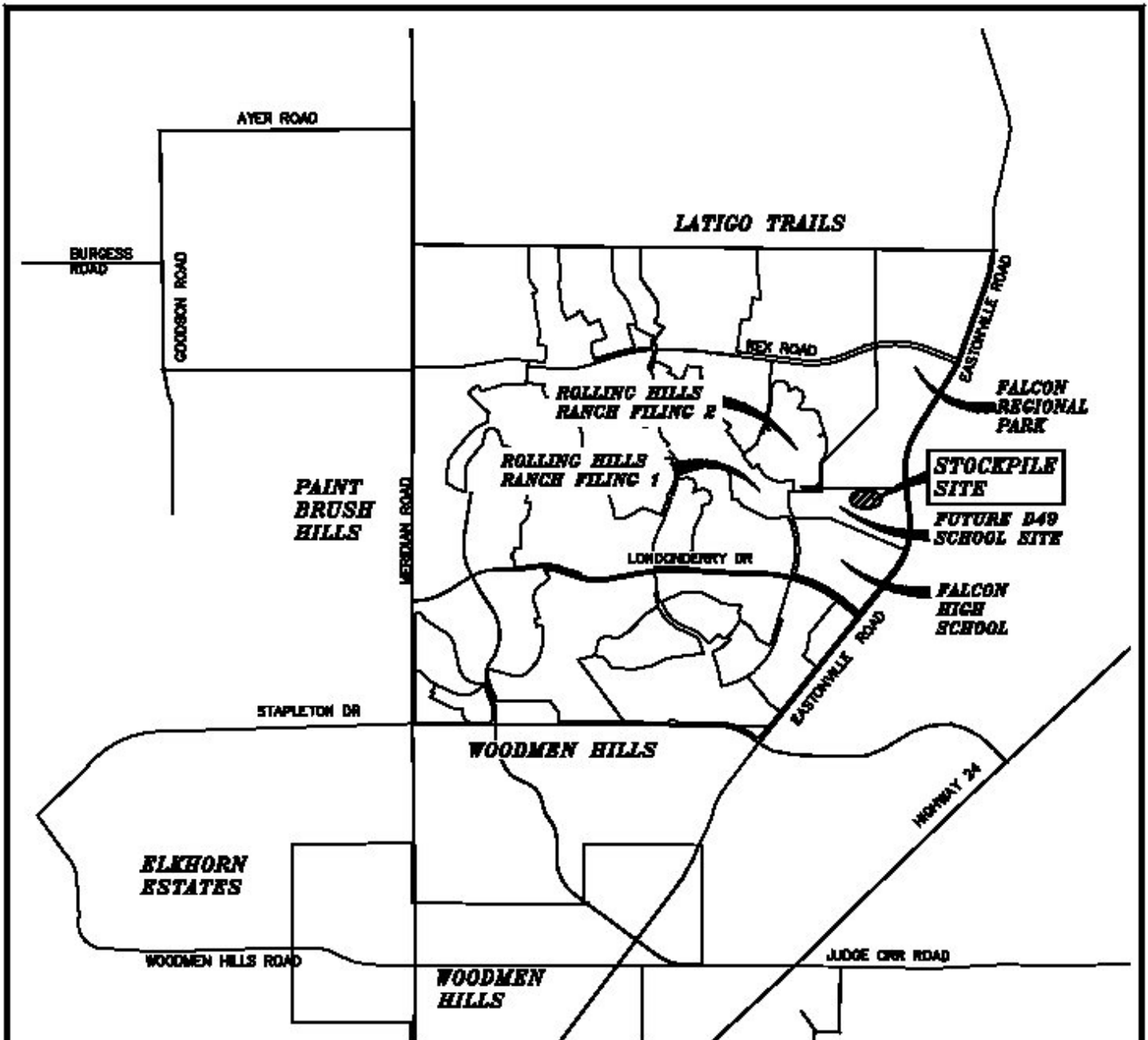
**1.1.d. Data Source for Site CM Plans and Soil Data**

The National Resources Conservation Service (NRCS) soil survey records indicate that the service area is predominately covered by soils classified in the Columbine (65 ac.) and Stapleton series (188 ac.). These series are categorized in the Hydrological Soil Groups A & B.

The Columbine (19) gravelly sandy loam is a deep, well-drained to excessively drained soil formed in coarse textured material on alluvial terraces, fans and flood plains. Permeability of this soil is very rapid. Available water capacity is low to moderate, surface runoff is slow, and the hazard of erosion is slight to moderate. The Columbine series is categorized as a Hydrological Soil Group A.

This soil is used mainly for grazing livestock, for wildlife habitat and for home sites. The main limitation of this soil for urban development is a hazard of flooding in some areas.

The Stapleton (83) sandy loam is a deep, non-calcareous, well-drained soil formed in alluvium derived from arkosic bedrock on uplands. Permeability of this soil is rapid. Available water capacity is moderate, surface runoff is slow, and the hazard of erosion and soil blowing is moderate. The Stapleton series is categorized as a Hydrological Soil Group B.



N.T.S.

HOME BUILDERS'  
 STOCKPILE SITE  
 VICINITY MAP

TECH CONTRACTORS  
 11886 STAPLETON DR  
 FALCON, CO 80831  
 TELEPHONE: 719.485.7444

This soil is suited to habitat for open land and rangeland wildlife. The main limitation of this soil for urban development is frost-action potential.

Typically, these soils are well-drained, gravelly sandy loams that form on alluvial terraces and fans and exhibit high permeability and low available water capacity with depth to bedrock greater than 6 feet.

**1.1.e. Existing Vegetative Cover**

Existing vegetation in surrounding areas consists of a mixture of native prairieland grasses and weeds with coverage similar to that found in surrounding areas at approximately 50% density, as determined by visual inspection.

**Table 1 - Onsite Vegetation**

Type of Grass/Vegetation	Approximate Density %	Site Coverage (Total = 100%)
Native Grass/Weeds	50% Native Cover 0% on re-seed areas	85
Brush	0	0
Trees	0	0
No Vegetation – Soil	0	15
No Vegetation – Pavement/Structure	0	0
Rock	0	0

Disturbed areas will be seeded to establish permanent vegetation upon final stabilization.

Past land Use: Prior to development the area was pasture, ranch or farmland.

**1.1.f. Potential Pollution Sources**

Potential pollution sources are those sources that have the potential to impact Storm Water runoff. Potential pollution sources were evaluated for this site and are detailed in this section. Sources and locations may change throughout the construction project. The SWMP Administrator should make appropriate modifications to this section as changes occur.

**Table 2 - Potential Pollutant Sources**

Material/ Chemical/ Activity	Stormwater Potential Pollutants	Location
All Disturbed and Stored Soils	Sediment, erosion	Entire stockpile site, all disturbed areas, soil will be stored as indicated on the maps.
Vehicle tracking of sediment	Sediment	Access location of the site as shown on the approved Grading and Erosion Control plan set for traffic.
Management of contaminated soils	Fuel, oil, paints, solvents, and other chemical pollutants	There should no fueling or storage of other materials on or adjacent to the stockpile location.
Vehicle equipment maintenance and fueling	Fuels, oils, solvents, grease	Vehicle and equipment maintenance will not be permitted at this location.
Significant dust	Airborne particles (fugitive dust)	Disturbed areas, stockpiles and street sweeping activities.
Concrete truck/equipment washing	Liquid and solid concrete	Vehicle and equipment washing will not be permitted at this location

Dedicated concrete and asphalt batch plants	Concrete/asphalt waste and associated chemicals	N/A – will not be permitted at this location.
Non-industrial waste	Worker trash and portable toilets	N/A – will not be permitted at this location.
Adjacent off-site activities with run-on potential	Sediment, erosion	N/A – not anticipated for this site.

**1.1.g. Allowable Non-Stormwater Discharges**

Only those discharges specifically authorized by the permit are allowed from a construction site. Authorized discharges include all Stormwater runoff as well as the non-Stormwater discharges detailed in this section. Additional permits may be necessary for activities not covered by this section.

1. Emergency firefighting activities
2. Release from uncontaminated springs
  - There are no known springs or sources of ground water associated with this site.
3. Construction Dewatering
  - If necessary, Stormwater accumulations may be pumped out of excavation areas and conveyed over the project in a non-erosive manner. Waters should either infiltrate or be discharged to a sediment trap or similar structure. If the discharge waters are turbid, a filter bag or similar filtering device must be used.
  - Discharges from this activity may not leave the site as surface runoff or enter a water of the state.
  - Discharges may not be made to the street or storm drain system at the site.
  - Other dewatering activities may require a dewatering permit.

**1.1.h. Receiving Waters**

The ultimate receiving water for this project is Black Squirrel Creek located more than five miles east of the property.

Stormwater that will pass through the property to an existing natural drainage course and continues overland via a natural drainage course to Eastonville Road, eventually flowing southeasterly through un-named tributaries of Black Squirrel Creek.

- **MS4:** The storm drain system is part of the El Paso County MS4 permit
- **Wetlands:** Wetlands are not directly associated with this project
- **Sec 404:** Current activities on this site do not require a 404 permit.

There is no anticipated construction stream crossings associated with this project.

**1.2 Adjacent Construction Activities & Land Use**

There is no active construction adjacent to the site.

If adjacent activities change during the course of this project, the site map shall be updated by the SWMP Administrator to reflect changes.

### ***1.3 Threatened and Endangered Species***

The US Fish & Wildlife Service indicates that there are no critical habitats at this location. This project is not expected to impact any of the listed Threatened or Endangered Species on the national registry. This site is not expected to encroach on any habitat areas. The site should be observed on a regular basis. If a species from the list is found on site, work should be stopped and the Department of Fish and Wildlife contacted before continuing activities. Additional information regarding species identification, location and the process for notification can be found on the web at:

<https://ipac.ecosphere.fws.gov/location/TEYXXCBGQBGT5LGN2OC7VX5U7Q/resources>

### ***1.4 Historic and Preservation Sites***

This project is not in proximity to any of the listed protected or historic sites. For additional information visit:

<https://www.historycolorado.org/office-archaeology-historic-preservation>

### ***1.5 Offsite CM***

The permittee is responsible for offsite impacts and insuring the operation of offsite CM which are affected by runoff from the permitted site. An example would be where the permittee owns or operates a lot or pad site only. Runoff flows from the site enter the street leading to an inlet with inlet protection continuing on to a shared detention basin. In this example the permittee would have shared responsibility to maintain the effectiveness of the offsite Control Measures. The site would also need to implement a series of CM at the site to minimize offsite impact.

#### **Offsite Control Measures for this site consist of the following:**

Street Sweeping: Street sweeping shall be utilized on the adjacent streets and paved areas to minimize offsite tracking of sediment. The activity will be scheduled as needed to reasonably control offsite impact.

### ***1.6 Upstream Run-on Potential***

Upstream run-on potential is not expected to impact this project. Observations of the area will be made as a part of the regular site inspections. Updates should be made to the SWMP and site map if conditions change. There is little to no impact anticipated from stormwater run-on to the site.

### ***1.7 Responsibilities***

Ultimately the owner or operator holding the permit is responsible for activities associated with this construction project. The permittee must comply with the most stringent of the regulations from the federal and state programs as well as any local requirements. The SWMP Administrator is responsible for the day-to-day SWMP maintenance and updates.

The permittee may elect to share or delegate responsibility of certain compliance items to other parties such as contractors or third-party consultants.

## **2.0 SOURCES OF INFORMATION**

The site is located in unincorporated County of El Paso in the State of Colorado. This Storm Water Management Plan (SWMP) is produced in compliance with the Colorado Water Quality Act, (15-8-101 et. seq., CRS, 1973 as amended) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et. seq.; the "Act), and covered under General Permit for Stormwater Discharges Associated with Construction Activity.

This SWMP is based on regulations developed by El Paso County for erosion and sedimentation control and a proposed practice for Materials Handling and Spill Prevention.

## **3.0 CONTROL MEASURES FOR STORMWATER CONTROL**

Erosion control measures and CM accepted by the County of El Paso will include those that are outlined in the Drainage Criteria Manual Volume 2. Two types of Control Measures are recognized to prevent potential pollutants from being discharged as a result of construction activities: structural and non-structural. Structural CM include engineered controls and non-structural CM include maintenance, training, and good housekeeping practices. Once these Control Measures are installed and/or implemented, the developer is responsible for their effective use and maintenance on the construction site.

### **3.1 STRUCTURAL CONTROL MEASURES**

The Meridian Ranch Homebuilders Stockpile Site will progress through two stages. Stage 1 consists of import and export of soil generated from excavations of foundations and occasional leveling soil mounds. Stage 2 is permanent seeding and final stabilization. This project does not rely on control measures owned or operated by another entity within the project boundary.

#### **3.1.1 Stage 1**

Stage 1 consists of import and export of soil generated from excavations of foundations and occasional leveling soil mounds. The location of each erosion control measure is outlined on Approved Grading and Erosion Control Plans. The plan is located in Appendix C and will be updated as necessary. Erosion control measures provided on the plans are summarized below.

Erosion control measures and other CM may be changed as field conditions warrant (see Section 6.0).

#### **INITIAL INSTALL**

- Install silt perimeter control as specified in the Approved Grading and Erosion Control Plans.
- Install vehicle tracking control as specified in the Approved Grading and Erosion Control Plans.

#### **MAINTENANCE**

- Maintain perimeter control.
- Maintain Vehicle Tracking Control.

### **3.1.2 Stage 2**

Stage 2 consists of final grading of the site to ensure drainage does not adversely affect adjacent property, permanent seed and mulch disturbed areas and remove Vehicle Tracking Control. Erosion control measures shown on these plans are summarized below. Control Measures may be changed as field conditions warrant (see Section 6.0).

#### **INITIAL INSTALL & REMOVAL OF CM NOT NEEDED**

- Seed and mulch disturbed areas.
- Remove Vehicle Tracking Control after import and export is complete.

#### **MAINTENANCE**

- Maintain perimeter control.
- Maintain Vehicle Tracking Control until import/export is complete.

### **3.2 NON-STRUCTURAL CONTROL MEASURES**

Materials management and spill prevention techniques are essential to prevent pollution of receiving drainages defined as Waters of the State. Once pollution prevention measures are implemented, the contractor is responsible for maintaining good housekeeping practices on the construction site. This section discusses the specific Control Measures that are most critical to prevent stormwater pollutant discharges to receiving waters. Specification Sheets for specific Control Measures are provided in Appendix D to aid the contractor in implementing and maintaining these practices.

#### **3.2.1 Materials Handling**

The best way to avoid potential pollution to stormwater is to prevent it at its source. This may be accomplished with management and maintenance.

- No waste shall be buried on site.
- Proper clean-up procedures are to be used for spilled materials.
- Mark locations for spill clean-up equipment and materials.
- Clean-up of drips and/or leaks from equipment or machinery at the site.
- Refueling activity is not permitted at this location.
- Vehicle maintenance is not permitted at this location.
- Storage of materials is not permitted at this location.
- Fertilizers and other chemicals to be applied in only the quantity required.

#### **3.2.2 Training**

Training is a constant non structural CM that will be used on this jobsite. Training will be conducted to ensure all employees (personnel, sub-contractors, vendors, suppliers and others) that have an impact on stormwater and erosion control are trained.

### **Stormwater Management Plan (SWMP)**

New employees should be familiar with the overall approach to stormwater management on the jobsite. This discussion will cover the following topics:

- Federal Clean Water Act
- State Permit Requirements
- Local jurisdiction
- Penalties that could be levied from the regulators
- Overview of SWMP for the jobsite

### **Introduction to Control Measures (CM)**

The discussion should be a broad overview of all CM, but focus on the CM that will be used on the jobsite. The following questions should be answered.

- What is a CM?
- What does the CM do?
- Who is responsible for maintaining the CM?

### **Spill Prevention**

Spill prevention is an essential Control Measure (CM) to protect receiving waters from stormwater pollution and discharge. CM for spill prevention include employee training and good materials management practices.

All hazardous and non-hazardous materials stored on the property should be stored in a designated area and in a manner that is consistent with their physical properties. All inlets will be protected prior to commencement of construction activities. A spill kit will be located on site, managed, supplied by the contractors and at a location known by all contractors.

All employees working with these materials should be aware of their flammability, reactivity, human health effects, and other characteristics such as corrosivity. This information can be easily provided for employees through the provision of MSDSs, including the information review and awareness training. The MSDS Sheets will be made available onsite to employees.

Instructions and materials/equipment for spill clean-up procedures shall be readily available on the construction site. This includes spill kits, employee training records involving spill clean-up procedures, and appropriate countermeasures.

## **4.0 FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT**

Disturbed areas will be stabilized with seeding and mulching. This vegetation will establish the final stabilization of soils and reduce sediment transport at the property. The contractor is required to maintain the new landscaping until vegetation is finally rooted and a healthy growth has occurred. The guideline for establishing healthy vegetative growth, established by the CDPHE, is defined as vegetation that covers 70 percent of the pre-disturbance levels.

## Final Stabilization Requirements and Definitions

This section describes final stabilization requirements and clarifies the definitions of uniform vegetative cover, individual plant density, and pre-disturbance levels.

In accordance with Part 1.B.1.a of the CDPS General Permit for Stormwater Discharges Associated with Construction Activity (COR400000) (the stormwater permit):

*“Final stabilization is reached when all ground surface disturbing activities at the construction site are complete; and, for all areas of ground surface disturbing activities, either a **uniform vegetative cover** with an **individual plant density** of at least 70 percent of **pre-disturbance levels** is established, or equivalent permanent alternative stabilization methods are implemented.*

- **Final Stabilization** - The condition reached when all ground surface disturbing activities at the site have been completed, and for all areas of ground surface disturbing activities where a uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.
- **Uniform Vegetative Cover** – Uniform vegetative cover means that where vegetative cover is used for final stabilization, an individual plant density (# of plants/unit area) of 70% of pre-disturbance levels should be established on all areas that were previously disturbed. The intent of this language is to ensure that vegetative coverage is established on all disturbed areas.
- **Individual Plant Density** - Permit language regarding density of vegetation requires that individual plant density, as opposed to canopy cover, be used in evaluating whether final stabilization efforts have achieved 70 percent of the pre-disturbance levels criteria. Individual plant density data must be collected and documented as a measure of # of plants per unit area.
- **Pre-disturbance levels** – Pre-disturbance levels refers to pre-disturbance vegetation that would represent the naturally supported vegetation density in the area. If information directly related to the pre-disturbance or pre-existing natural vegetation for a site is not known, this information can be based on available information of natural vegetation densities in the area, or on conditions at a similar site in the area that is undisturbed or that has established non-irrigated and stable vegetation.

In the event that the permit holder no longer has control of a specific portion of a permitted site, through either ownership or contract, and wishes to transfer coverage of that portion of the site to a second party that does not currently have coverage under the Construction General Permit, a "Notice of Transfer and Acceptance of Terms of a Stormwater Discharge General Permit Certification," should be completed and submitted to the CDPHE (Appendix H). If both parties involved currently have permit coverage, then a "Notice of Reassignment of Permit Coverage for a Portion of a Permitted Area and General Permit Application," should be completed and submitted to the CDPHE (Appendix H). Upon completion of construction and once vegetation has been reestablished at 70 percent of original vegetation for the disturbed acreage or upon transfer of ownership has been completed, an "Inactivation Notice for Construction Stormwater Discharge General Permit Certification" should be submitted to the CDPHE to inactivate the existing permit (Appendix H).

During Stage 2 of construction activity as noted in section 3.1.2 the open areas of the site will be surface roughen, drill seeded and crimp mulch.

## **5.0 INSPECTIONS AND PREVENTATIVE MAINTENANCE**

These subsections discuss inspections and implementation of a preventative maintenance program.

### **5.1 INSPECTIONS**

The purpose of regular inspections is to document compliance with the plans, specifications, and the CDPHE construction stormwater regulations. The intent of the construction stormwater regulations is to protect receiving streams from sedimentation and other potential pollutants during construction activities.

The Qualified Stormwater Manager is responsible for ensuring that CM are installed as specified and are installed in accordance with the plans and specifications, and that adequate and compliant inspections of the erosion control and materials management are conducted. This must be documented, and documentation may consist of and/or conform to the Environmental Compliance Site Inspection Report Form provided as Appendix F. Signed copies of the inspection forms must be kept onsite with this SWMP. The Qualified Stormwater Manager shall perform a thorough inspection of the storm water management system every 14-days and after any precipitation or snowmelt event that causes surface erosion, for the duration of construction activities and until all disturbed areas are stabilized. After storm event inspections shall be conducted as soon as practicable, within 24 hours after the storm. Additional inspections during snow melting events may be required if the event consists of an amount that may cause surface erosion. For further information concerning the frequency and length of inspections, refer to the State of Colorado Clean Water Act.

In addition to inspections, follow-up maintenance activities must occur and be adequately documented in the corrective action log. The corrective action must begin as soon as practicable and be completed no longer than seven days from the inspection date. Follow-up maintenance includes repairing CM that have been damaged due to everyday construction activities, stormwater runoff, and/or wind erosion. Maintenance may require the replacement and/or addition of CM in areas where high erosion and/or sedimentation is occurring.

### **5.2 PREVENTATIVE MAINTENANCE**

The contractor shall establish and implement a preventative maintenance program, which shall include the following:

- Identification of sediment and erosion controls that should be inspected on a regular basis.
- Appropriate and timely maintenance, repair, or replacement of control measures and equipment.

The contractor shall maintain a logbook or recordkeeping system of construction activities with respect to the SWMP. The following list of activities and information shall be recorded in the logbook:

- Implementation of specific items in the SWMP and erosion control plan
- Maintenance and repair of stormwater management controls
- Preventative maintenance activities
- Inspection activities

Additional information, such as dated photographs, field notebooks, drawings and maps, should be included where appropriate. It is also the general contractors' responsibility to inform any subcontractors of this plan and ensure implementation and compliance. Contractors and vendors working on the site should be trained to maintain and implement CM when necessary. Appendix I provides a training signature sheet for subcontractor training and recordkeeping purposes. Appendix J provides note pages for additional notes and recordkeeping. This report with all signed inspection forms, photographs and plan markups shall be kept for a minimum of three years after final stabilization is complete.

## **6.0 DEVIATIONS FROM THE PLAN**

All major deviations from this SWMP must be documented and provided with the plan. Deviations generally include the implementation of CM that are different from the plans and specifications or details provided in the CM Specification Sheets (Appendix D). Any deviations in CM should also be documented on the Erosion Control Plan drawings (Appendix B). Deviations may include a relocation or addition of erosion control structures, such as rough-cut grading or outlet protection. Additional sedimentation ponds may need to be added at the contractor's discretion to prevent high sediment loads from entering receiving waters of the state and would be deemed a deviation of the plan. The contractor may also choose to implement a different form of CM, such as straw bales instead of rough-cut grading. These changes may be considered to be a violation of this plan unless they are documented and added to the plan.

Appendix K contains a template form that may be used to document any deviations from this plan. This form may be completed at the construction site by the contractor or after the completion of regularly-scheduled inspections. The deviations need not be typed or formal; hand written legible notes are sufficient. These forms may be attached to Appendix K to document changes to the SWMP to comply with these recording procedures.

## **7.0 REFERENCES**

Colorado Department of Public Health and Environment (CDPHE). 2005. Colorado Discharge Permit Construction Permitting. On-line address: <https://cdphe.colorado.gov/wq-construction-general-permits>

City of Colorado Springs and El Paso County Drainage Criteria Manual Volume