EPC STORMWATER REVIEW COMMENTS
IN ORANGE BOXES WITH BLACK TEXT

STORMWATER MANAGEMENT PLAN
REX ROAD EXTENSION THROUGH FALCON REGIONAL PARK
EL PASO COUNTY, COLORADO
CDPHE PERMIT _____

Prepared For:

GTL DEVELOPMENT, INC.
3575 Kenyon Street
COSan Diego, CA 92110

FEBRUARY 2023

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: _____

Fill out contractor name once the information is available.

Will be provided when contractor is selected.

PCD Project No.: CDR236

Revised

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STORMWATER MANAGEMENT PLAN CONTENTS CHECKLIST

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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
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Areas where industrial activities take place.	Not Applicable – no industrial activities are planned on this site.
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Stormwater Management Plan Contents	SWMP Page # or Location
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1.0 INTRODUCTION

The Rex Road Extension is located within the El Paso County Falcon Regional Park in the unincorporated portion of the County of El Paso and State of Colorado. GTL Development, Inc. is grading and constructing a road platform for the Rex Road extension through 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). Rex Road Extension, a roadway construction extension, is permitted through the State of Colorado Discharge Permit System-Permit _____. The application and permit can be found in Appendix A.

The Rex Road project consists of approximately 5.4 acres of grading and 1,870 LF of roadway construction. The project scope includes grading and the construction of the road, sidewalk and curb through the existing regional park between the existing end of Rex Road and the connection with the existing Eastonville Road. This project does not rely on control measures owned or operated by another entity within the project boundary. Surrounding the project is the Falcon Regional Park owned and maintained by El Paso County.

The project is located in EI 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 the project; however, currently urbanization has occurred in the general vicinity. Most notably, urbanization is occurring to the north with Latigo Trails, to the south and west Meridian Ranch, and to the east the proposed Grandview Development.

The total project site is approximately 5.4 acres. The roadway construction is located east of the existing terminus of Rex Road extending easterly through the Falcon Regional Park ending at Eastonville Rd. 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 Sections 20 & 21, Township 12 South, Range 64 West, of the 6th Principal Meridian.

1.1.b. Proposed Sequence of Major Activities

Construction for will occur over several months to final stabilization. Stage 1 will be the grading of the project area. Stage 2 consists of the construction and installation of the underground utilities including the storm drainage and other dry utilities. Stage 3 consists of the construction of the surface improvements to include the roadway, curb and gutter, and sidewalks. Final Stabilization will complete the project.

Stage	Description	Control Measures	Begin Date	End Date
Stage 1	Grading	Silt fence & VTC Perimeter Control Swale Checks as needed Surface Roughening	June 2023	July 2023
Stage 2	Underground utilities	Perimeter Control	July 2023	August 2023
Stage 3	Surface Improvements	Inlet Protection Perimeter Control Swale Checks as needed	August 2023	November 2023
Final Stabilization	Permit Close	Final Stabilization Permanent Seeding Permanent Measures	November 2023	June 2024

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

The total project site consists of approximately 5.4 disturbed acres. The roadway construction is located east of the existing terminus of Rex Road extending easterly through the Falcon Regional Park ending at Eastonville Rd. The project site is approximately 12 miles northeast of the City of Colorado Springs, 3 miles north of the town of Falcon and immediately north of the Falcon High School in an unincorporated portion of El Paso County and State of Colorado. The property is located in Section 20, Township 12 South, Range 64 West, of the 6th Principal Meridian.

A general location map is Figure 1.

Latitude: 38°59'33" N Longitude: 104°34'05"W

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

Should offsite disturbance occur or become necessary, the SWMP and site map shall be amended by the SWMP Administrator.

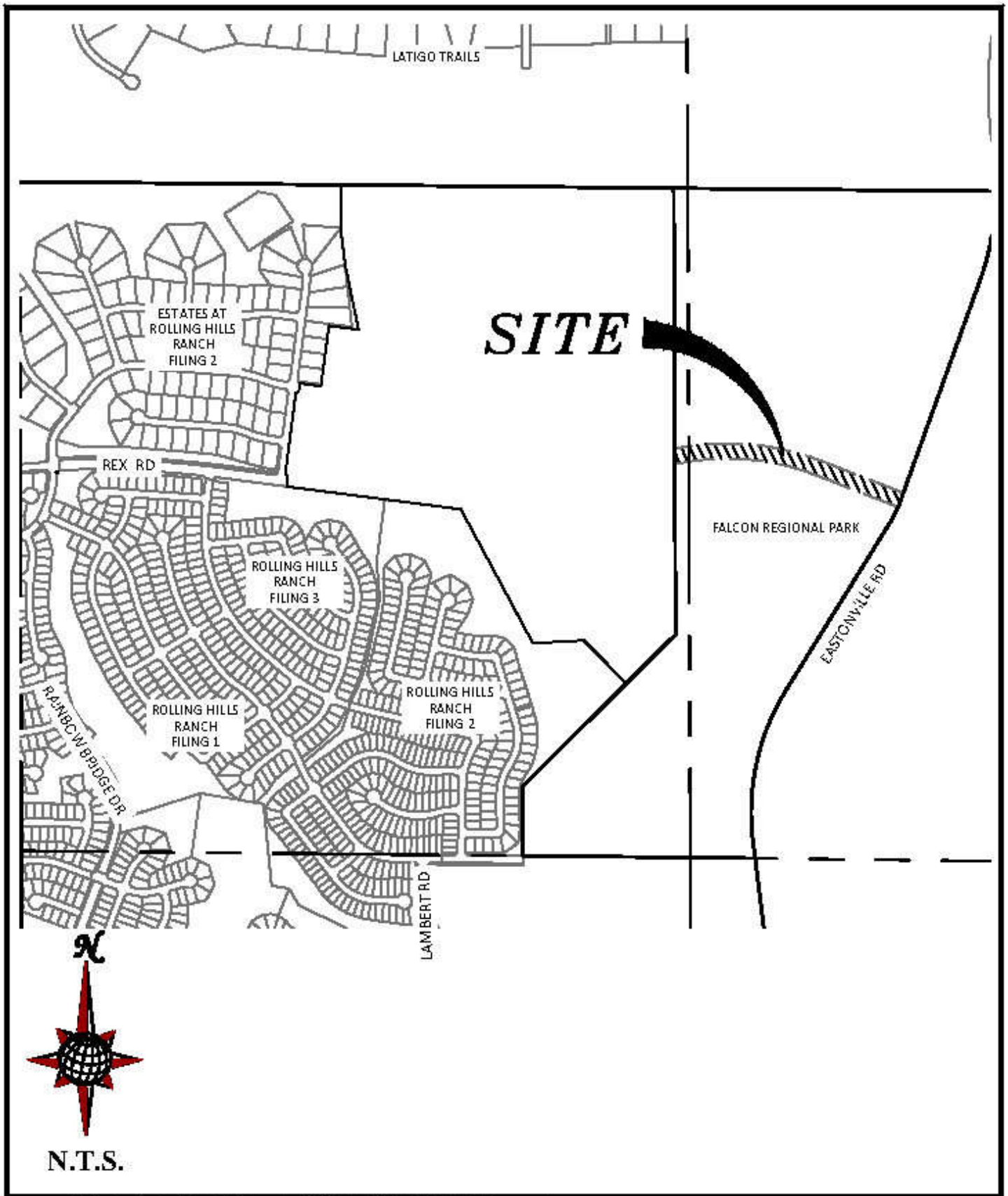
Offsite Control Measures: may include but are not limited to; curb socks and inlet protection, street sweeping etc. Offsite CM are detailed later in this SWMP.

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 (3.6 ac.) and Stapleton series (1.8 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.



REX ROAD EXTENSION
FALCON REGIONAL PARK

LOCATION MAP

FIGURE 1

TECH CONTRACTORS
11910 TOURMALINE DR #130
FALCON, CO 80831
TELEPHONE: 719.495.7444

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.

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	60% Native Cover 0% on re-seed areas	90
Brush	0	0
Trees	0	0
No Vegetation – Soil	0	10
No Vegetation – Pavement/Structure	0	0
Rock	0	0

Areas not planned for road or home construction will be seeded to establish permanent vegetation while the remaining areas where future home construction will take place were seeded to establish temporary vegetation.

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 site, all disturbed areas, top soil will be stored as indicated on the CM Maps as identified by the grading contractor.
Vehicle tracking of sediment	Sediment	Entrance and exit points from the site as shown on the CM map and the approved Grading and Erosion Control plan set for the construction and delivery traffic.
Management of contaminated soils	Fuel, oil, paints, solvents, and other chemical pollutants	Re-fueling areas, material storage areas and adjacent to active construction.
Loading and unloading operations	Sediment, fuels, oils	Re-fueling areas, material storage areas and adjacent to active construction.
Outdoor storage activities	Fuel, oil, paints, solvents, and other chemical pollutants	Designated Material Storage Area and designated areas located near active construction.
Vehicle equipment maintenance and fueling	Fuels, oils, solvents, grease	Material storage and staging area or other designated area near active construction.
Significant dust or particulate generating process	Airborne particles (fugitive dust)	Disturbed areas, stockpiles and street sweeping activities.
Routine maintenance activities	Fertilizers, pesticides, fuels, oils	Materials storage areas and landscaped area maintenance.
On-site waste management	Trash, liquid and solid waste	Dumpsters located in material storage area and/or near active construction. Maintenance and location the responsibility of individual home builders and on-site contractors.
Concrete truck/equipment washing	Liquid and solid concrete	Designated concrete washout areas as shown at various locations on map. Concrete truck washouts areas identified as home builder washouts are the responsibility of the identified home builder.
Dedicated concrete and asphalt batch plants	Concrete/asphalt waste and associated chemicals	N/A – not anticipated for this site.
Non-industrial waste	Worker trash and portable toilets	Waste receptacles at or near material storage area and active construction. Portable toilets located near active construction. The placement and maintenance are the responsibility of the individual home builders.
Adjacent off-site activities with run-on potential	Sediment, erosion	N/A – not anticipated for this site.
Off-site borrow or stockpile areas	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. Landscape irrigation return flow
    - Landscape irrigation return flow is expected to occur once landscape and final stabilization practices have been implemented. CM should be kept in place as needed to reduce erosion and the transport of sediment.

4. Construction Dewatering
    - Construction dewatering may be necessary if Stormwater accumulates in an excavation area. No other dewatering activities are anticipated at this time.
    - 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.
5. Discharges to the ground of concrete wash waters
    - Concrete wash waters are anticipated to occur on this site. Appropriate measures shall be taken to control concrete wash waters in accordance with the permit.
    - Designate a concrete washout area and install per specification. (see Appendix D for specification details)
    - Wash waters are allowed to evaporate or infiltrate into the ground at the wash site. A high water table is not anticipated at this site. If a high water table is discovered or the site is near surface water a poly liner may be necessary to prevent discharge.
    - Concrete wash waters are at no time allowed to be discharged as surface runoff, to existing surface waters, to the street or paved areas or to Stormwater detention/storage facilities.

1.1.h. Receiving Waters

The ultimate receiving water for this project is Black Squirrel Creek located more than five miles downstream of the project area. Stormwater from this project will be directed to a existing natural drainage course crossing under Eastonville Rd.

Stormwater that will pass through the project site via natural drainage courses or the roadway surface will receive water quality enhancement via an existing natural grass lined drainage course and continues to Eastonville Road, eventually flowing southeasterly through un-named tributaries of Black Squirrel Creek.

- **MS4:** The project is located within part of the El Paso County MS4 permit
- **Wetlands:** Wetlands are not directly associated with this project
- **Sec. 303d:** The waterways associated with this project are not on the state 303d list of impaired water ways.
- **Sec 404:** Current activities on this site do not require a 404 permit.

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

1.2 Adjacent Construction Activities & Land Use

The project is directly adjacent to the Falcon Regional Park, no other active construction is anticipated in the adjacent park at the time of this construction. Other nearby areas include residential construction, ranch land pastures and open space tracts.

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/ZZDKMAJLLZC4LAI2V5BY5LYHRI/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 ensuring 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.

There are no offsite Control Measures proposed for this project.

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. Upstream stormwater flow is expected to pass through the project with 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 EI 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 EI 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. Material storage, topsoil stockpiles, staging, concrete washout and waste areas shall be identified by the contractor prior to start of construction activities and adjusted as necessary.

3.1 STRUCTURAL CONTROL MEASURES

Construction for Rex Road will occur in three major stages. Stage 1 consists of grading. Stage 2 consists of the construction of utility improvements. Stage 3 consists of the construction of the roadway, sidewalk, curb and gutter. This section discusses the structural CM to be implemented for each phase of construction. Structural CM are industry-tested and are the best defense to prevent pollutants, such as sediment and hazardous wastes, from discharging from the site. 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 of development consists of grading for the roadway platform. The location of each erosion control measure is outlined on Approved Grading and Erosion Control Plans. These sheets are located in Appendix C and will be updated as necessary. Erosion control measures provided on these plans are summarized below.

Erosion control measures 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.
- Surface roughening of exposed soil areas that will be exposed for a period greater than 30 days prior to the start of future stages can be used to provide better management of sediment transport internal to the site.

- Soil stockpiles shall have adequate protection either adjacent to the stockpile or sediment perimeter controls to prevent sediment transport from leaving the project boundary. Any soil stockpile remaining after 30 days shall be properly protected.

MAINTENANCE

- Maintain perimeter control.
- Maintain Vehicle Tracking Control.
- Maintain Inlet Protection (if installed).
- Maintain Concrete Washout Area (if installed).

3.1.2 Stage 2

During Stage 2 of construction, the site utilities will be installed. Storm drains and other utilities will be placed under ground prior to the roadway construction in Stage 3. Inlet protection will be installed as required. The location of each erosion control measure is outlined on the Approved Grading and Erosion Control Plans. These sheets are located in Appendix C and will be updated as necessary. Erosion control measures shown on these plans are summarized below. Control Measures may be changed as field conditions warrant (see Section 6.0).

INTIAL INSTALL & REMOVAL OF CM NOT NEEDED

- Seed and mulch disturbed areas.
- Install a Concrete Washout Area and Stabilized Staging Area.
- Install silt fence or wattles as perimeter control along downstream right-of-way and disturbed areas.
- Re-seed all areas disturbed by construction, particularly on graded areas within the Regional Park.

MAINTENANCE

- Maintain perimeter control.
- Maintain any temporary diversion dikes or temporary sediment basins installed during Stage 1.
- Maintain Vehicle Tracking Control until road construction is complete.
- Maintain Inlet Protection and curb checks.
- Maintain controls along the right-of-way.
- Maintain Concrete Washout Area.

3.1.3 Stage 3

Stage 3 consists of the constructing the roadway surface improvements. Pavement, curb and gutter and sidewalks will be installed during this stage The location of each erosion control measure is outlined on the Approved Grading and Erosion Control Plans. These sheets are located in Appendix C and will be updated as necessary. Erosion control measures shown on these plans are summarized below.

MAINTENANCE

- Maintain perimeter protection.
- Maintain Vehicle Tracking Control until road construction is complete.
- Remove Vehicle Tracking Control after paving is complete.
- Maintain Concrete Washout Area.
- Maintain Inlet Protection and curb checks.

REMOVAL OF CM NO LONGER NEEDED

- Remove Concrete Washout Area once it is no longer required.
- Remove Stabilized Staging Area and revegetate once it is no longer needed.

3.2 NONSTRUCTURAL 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 of materials storage areas.

- Garbage/trash/construction debris should be removed on a regular basis to avoid overflowing of trash receptacles. Trash receptacles shall be stored away from drainage areas. The placement and maintenance the responsibility of the individual home builders.
- Washing concrete trucks and other equipment into the storm drainage system is prohibited.
- 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 must occur in the designated area. Following recommended CM is the responsibility of the contractor. Recommended refueling areas include open spaces or park areas near the official site construction entrance.
- Vehicle maintenance should occur over impermeable surfaces, preferably in the refueling area or over drip pans specifically provided for vehicle maintenance. Maintenance, refueling, and waste materials should be stored and disposed of appropriately.
- Minimize the amount of unneeded materials stored on site.
- Fertilizers and other chemicals to be applied in only the quantity required. Storing these materials should be conducted in a safe and appropriate manner.

- Storage containers, drums, and bags are to be stored away from direct traffic routes to prevent accidental spills.
- Containers are to be stored on pallets or similar devices to prevent corrosion of the containers.
- Chemical substances used in the workplace are to be listed and the Material Safety Data Sheet (MSDS) obtained for each. The MSDSs will be readily available for use by posting at the locations where the materials are stored and handled.
- Unlabeled chemicals and chemicals with deteriorated labels are often disposed of unnecessarily or improperly. To avoid improper disposal, all containers shall be labeled to show the following information (usually found on the MSDS):
    - Name and type of substance
    - Stock number
    - Expiration date
    - Health hazards, including: Corrosivity, Ignitability, Reactivity, Toxicity
    - Suggestions for handling
    - First aid information
- Portable toilet facilities are to be properly located 3 feet behind the curb and 50 feet away from storm inlets, secured from being tipped over, and regularly maintained.

3.2.2 Training

Training is a constant nonstructural 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. The training will consist of the following types:

- Orientation-at the beginning of work on the job
- Scheduled-routine training
- After Spill-to recap what went wrong and how to prevent a future spill

The following is the basic agenda that will be followed during all training:

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.

3.2.3 Spill Prevention Control and Countermeasures

Spill prevention is an essential 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 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.

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. The site superintendent (or designee) will determine notification requirements of all appropriate agencies or departments, such as downstream water users, SWMP Administrator, CDPHE and all other applicable agencies. The reportable quantities have been established by the Federal Environmental Protection Agency.

When a spill occurs, it is the responsibility of the contractor to contain the spill by use of a spill kit or other approved means and notify the site superintendent who will then contact the local authorities, such as the Fire Departments Emergency Response Team for further clean up. The site superintendent

will ensure that the contractor sends the clean up material to the appropriate disposal facility. The site superintendent will acquire a bill of laden from the contractor for documentation of proper disposal.

All spills, leaks and overflows on site will be documented using the Spill Reporting Form that is found in Appendix G of this SWMP. The CM Map will also be updated to reflect the location of the spill in Appendix C.

Reportable Quantities of Spill

The release of hazardous materials from the site will be minimize or prevented using the CM identified in the SWMP for this project. Any release in 24 hours equal to or in excess to the reportable quantities listed in the Code of Federal Regulations-40 CFR 110 (Discharge of Oil), 40 CFR 117 (Determination of Reportable Quantities for Hazardous Quantities) or 40 CFR 302 (Designation, Reportable Quantities, and Notification) will be reported to the National Response Center, Colorado Department of Public Health and Environment, Division of Water Quality and other applicable agencies.

The SWMP will be modified with 3 days of the knowledge of the release. The SWMP will then be reviewed to identify measures to prevent the reoccurrence of such releases.

Agency	Phone Number
National Response Center	800-424-8802
Environmental Emergency Spill Reporting Line	877-518-5608

4.0 FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

Remaining 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.

Long Term Stormwater Management

This project is trib[illegible] owned and maintained by the[illegible]onsible for regular inspections, main[illegible]Paso County Pond Maintenance Agreement and the MSMD O&M Manual.

This paragraph has been revised to state that the El Paso County Parks Department will be responsible for long term maiotenance of stormwater facilities.

The drainage report states that water quality treatment will be achieved by swales - add mention of that here or update other reports to match that the existing regional detention will provide water quality.

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, equipment, and site areas with high pollution potential (chemical and/or equipment storage and washing areas) that should be inspected on a regular basis.
- Appropriate and timely maintenance, repair, or replacement of control measures and equipment.

- Preparation of thorough records for inspections of equipment and systems.

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:

- A record of spills, leaks, or overflows, including time, date, and weather conditions
- Implementation of specific items in the SWMP and erosion control plan
- Training events (given or attended)
- Events involving material storage and handling
- Contacts with regulatory agencies and personnel
- Notes of employee activities, contacts, and notifications
- 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 docum Added es to the SWMP to comply with these recording procedures.

Add text stating that the SWMP should be viewed as a “living document” that is continuously being reviewed and modified as a part of the overall process of evaluating and managing SW quality issues at the site. The QSM shall amend the SWMP when there is a change in design, construction, O&M of the site which would require the implementation of new or revised BMPs or if the SWMP proves to be ineffective in achieving the general objectives of controlling pollutants in SW discharges associated with construction activity or when BMPs are no longer necessary and are removed.

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