



LODESTAR
ENGINEERING, LLC
FORENSICS, LAND DEVELOPMENT, DRAINAGE, CIVIL

STORMWATER MANAGEMENT PLAN FOR JENISHAY FARMS

July 2020

Prepared for:

Phillip & Jennifer Miles
15630 Fox Creek
Colorado Springs, CO 80908

Prepared by:

Lodestar Engineering, LLC
P.O. Box 88461
Colorado Springs, CO 80908

Qualified Stormwater Manager

Name: Shay Miles, P.E.

Company: Lodestar Engineering, LLC

Address: P.O. Box 88461, Colorado Springs,
CO 80908

Contractor

Name: _____

Company: _____

Address: _____

PCD File #: SP209



STORMWATER MANAGEMENT PLAN JENISHAY FARMS

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- Federal, State, or Local Storm water or other Environmental Inspector Site Visit Log

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 - Port-o-Let Detail
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 - Stabilized Staging Area
 - Inlet Protection
 - Bale Barrier
 - Temporary Outlet Protection

Not attached to SWMP.
Attach applicable details.

Or will these details just be physically attached in the SWMP binder onsite (because they are not attached to this SWMP doc)? Otherwise remove from TOC or just change to "GEC Plan" instead of listing every detail.

PURPOSE

The following storm water management plan (SWMP) is a detailed account of the requirements for the CDPS permit. The primary objective of this plan is to prevent storm water contamination during construction activity.

It is estimated that clearing, grading, roadway construction will impact 3.6 acres of the 52.6-acre site. Grading operations will require approximately 8000 CY of earth be moved. Grading operations are anticipated to commence in Summer, 2021 with final site stabilization proposed in Fall, 2021.

Note that is likely not feasible to accomplish within several months, final stabilization usually takes much longer in our climate. Consider revising.

This document must be kept at the construction site at all times, and be made available to the public and any representative of the Colorado Department of Health - Water Quality Control Division, if requested.

The Grading & Erosion Control Plans are considered part of this SWMP and are included in the appendix. These plans shall be kept at the site at all times. Modifications to the erosion control plan may be occasionally necessary based on site inspections. Any additions or deletions of erosion control measures should be documented on the site copy of the Grading & Erosion Control Plans.

The development ultimately outfalls to East Cherry Creek, and no streams cross the project area. No on-site batch plant is proposed with the development.

Unresolved comment from Review #1: label and show these channels on the GEC Plan

SITE DESCRIPTION

The subject 51.6 acres consists of unplatted & replatted land to be developed into 9 residential lots with extension of Fox Creek Lane. The parcel is located within the Southwest ¼ of Section 29, Township 11 South, Range 65 West of the 6th principal meridian in El Paso County.

The parcel is bounded to the north by Lots 11-13 of Ridgeview Acres, to the west by Lots 4-5 of Whispering Hills Estates and Lot 4 of Terra Ridge Filing No. 1, to the south by Lot 1 of Terra Ridge Filing No. 1 and Lot 1 of Terra Ridge Filing No. 2, and to the east by Lots 148-151 of Wildwood Village.

The parcel generally drains from south to the north at approximately 1.2%. A drainage swale extends from the southwest corner to the northeast corner of the property, and a second channel extends along the eastern property line connect with the other channel at the northeast corner of the property.

Existing soils on the site consist of 68-Peyton-Pring complex, hydrologic soil group B, 92-Tomah-Crowfoot loamy sands, hydrologic soil group "B" as determined by the Natural Resources Conservation Service Web Soil Survey. The site is located within the East Cherry Creek Drainage Basin. The fine grains of the soils are subject to erosion by water; therefore, proper erosion control measure shall be implemented prior to ground disturbing activities.

Soil ID Number	Soil Type	Soil Description	Hydrologic Classification
14	Brusset Loam, 1%-3% slopes	Surface runoff is low, well drained	B
68	Peyton-Pring Complex	Surface runoff is low, well drained	B
92	Tomah-Crowfoot Loamy	Surface Drainage is medium, well drained	B

It is estimated the site exhibits 95% groundcover of native grasses. Sparsely located volunteer trees and shrubs are evident on-site as observed from a visual onsite inspection.

FLOODPLAIN STATEMENT

No portion of the site lies within a F.E.M.A. designated floodplain per FIRM 08041C0305G AND 08041C0315G, effective date of December 7, 2018

BASIC GRADING, EROSION AND STORMWATER QUALITY REQUIREMENTS AND GENERAL PROHIBITIONS

*Information taken from the City of Colorado Springs/ El Paso County Drainage Criteria Manual Volume 2, herein referred to as the "Manual."

1. Storm water discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation of State Waters.
2. Concrete wash water shall not be discharged to or allowed to runoff to the Municipal Separate Sewer System (MS4).
3. Building, construction, excavation, or other waste materials shall not be temporarily placed or stored in the street, alley, or other public way, unless in accordance with an approved Traffic Control Plan. BMPs may be required by the MS4 Permittee if deemed necessary, based on specific conditions and circumstances (e.g., estimated time of exposure, season of the year, etc.).
4. Vehicle tracking of soils off-site shall be minimized.
5. All wastes composed of building materials must be removed from the construction site for disposal in accordance with local and state regulatory requirements. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.
6. No chemicals are to be added to the discharge unless permission for the use of a specific chemical is granted by the state. In granting the use of such chemicals, special conditions and monitoring may be required.
7. Bulk storage structures for petroleum products and other chemicals shall have secondary containment or equivalent adequate protection so as to contain all spills

and prevent any spilled material from entering the MS4, including any surface or subsurface storm drainage system or facilities.

8. All persons engaged in earth disturbance shall implement and maintain acceptable soil erosion and sediment control measures including BMPs in conformance with the erosion control technical standards of the Drainage Criteria Manual, Volume 2 and in accordance with the approved Erosion and Stormwater Quality Control Plan approved by the MS4 permittee, if required.
9. All temporary erosion control facilities including BMPs and all permanent facilities intended to control erosion of any earth disturbance operations shall be installed as defined in the approved Erosion and Stormwater Quality Control Plan and the Drainage Criteria Manual, Volume 2 and maintained throughout the duration of the earth disturbance operation. The installation of the first level of temporary erosion control facilities and BMPs shall be installed and inspected prior to any earth disturbance operations taking place.
10. Any earth disturbance shall be conducted in such a manner so as to effectively reduce accelerated soil erosion and resulting sedimentation.
11. All earth disturbances shall be designed, constructed, and completed in such a manner so that the exposed area of any disturbed land shall be limited to the shortest practical period of time.
12. All work and earth disturbance shall be done in a manner that minimizes pollution of any on-site or off-site waters, including wetlands.
13. Suspended sediment caused by accelerated soil erosion shall be minimized in runoff water before it leaves the site of the earth disturbance.
14. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive velocity.
15. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to the standards and specifications prescribed in the Drainage Criteria Manual, Volume 2, and in accordance with the permanent erosion control features shown on the approved Erosion and Stormwater Quality Control Plans approved by the City of Colorado Springs/El Paso County, if required.
16. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within twenty-one (21) calendar days after final grading, or final earth disturbance, has been completed. Disturbed areas and stockpiles which are not at final grade but will remain dormant for longer than 30 days shall also be mulched within 21 days after interim grading. An area that is going to remain in an interim state for more than 60 days shall also be seeded. On a case-by-case basis, the MS4 permittee may allow appropriate BMP to be in place that prevents sediment from leaving the site. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented.
17. No person shall cause, permit, or contribute to the discharge into the municipal separate storm sewer pollutants that could cause the MS4 permittee to be in violation of its Colorado Discharge Permit System MS4 Permit.
18. The owner, site developer, contractor, and/or their authorized agents shall be responsible for the removal of all construction debris, dirt, trash, rock, sediment, and sand that may accumulate in the storm sewer or other drainage conveyance system and stormwater appurtenances as a result of site development.

19. No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter, including the temporary or permanent ramping with materials for vehicle access.
20. Individuals shall comply with the “Colorado Water Quality Control Act” (Title 25, Article 8, CRS), and the “Clean Water Act” (33 USC 1344), regulations promulgated, certifications or permits issued, in addition to the requirements included in the Drainage Criteria Manual, Volume 2. In the event of conflicts between these requirements and water quality control laws, rules, or regulations of other Federal or State agencies, the more restrictive laws, rules, or regulations shall apply.
21. 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. Materials shall not be stored in a location where they may be carried by stormwater runoff into the MS4 at any time.
22. Spill prevention and containment measures shall be used at storage, and equipment fueling and servicing areas to prevent pollution from discharging to the MS4. All spills shall be cleaned up immediately after discovery, or contained until appropriate cleanup methods can be employed. Manufacturer’s recommended methods for spill cleanup shall be followed, along with proper disposal methods.

CONSTRUCTION ACTIVITIES

The following is a list of major construction activities and the anticipated order of construction.

- 1) “Overlot” grading of undeveloped portions of site. **Installed in Summer of 2021.**
 - a) Install initial erosion control measures.
 - i) Develop Stabilized Staging Area
 - ii) Vehicle tracking control.
 - iii) Perimeter silt fence.
 - b) Overlot grade portions of the site.
 - i) Strip and stockpile topsoil.
 - (1) Install silt fence around topsoil stockpile.
 - ii) Overlot grade site.
 - c) Temporary Sediment Basin
 - d) Concrete washout
 - e) Straw bale barriers
 - f) Inlet Protection
 - g) Install remaining site erosion control measures.
 - i) Additional silt fence.
 - ii) Seed, Crimp & mulch.
 - iii) Straw bale ditch checks
 - iv) Seed exposed areas not intended for further development
- 2) Site construction
 - a) Storm Sewer.
 - i) Install pipe culverts
 - ii) Install riprap protection at surface discharge points.

Unresolved comment from Review #1:

Item 6 - show anticipated schedule of proposed construction activities.

Review #2 follow-up comment: provide estimated schedule for item #2 here as well.

b) Dry utility installation (trench & backfill)

It is ultimately the property owner’s responsibility to ensure that the work at the site is in compliance with this SWMP, the Grading and Erosion Control Plan, and all applicable statutes and ordinances. For this project the overall property owner is responsible for installing, inspecting, and maintaining all erosion control measures and BMP’s during the overlot grading process. Catamount Engineering recommends that the responsibility for compliance be transferred with property ownership to the buyer of any individual lot or other portion of this site. For example, if a retail developer purchases a lot, then that developer should become responsible for compliance with this SWMP and all applicable statutes and ordinances on that lot. Catamount Engineering recommends that the current overall property owner establish an agreement with potential buyers to knowingly transfer this responsibility with property ownership.

The main potential pollutant to Stormwater on this site is sediment.

Other known potential sources of pollution:

	<u>Notes</u>
<input type="checkbox"/> Vehicle fueling.....	Yes See Below
<input type="checkbox"/> Vehicle tracking.....	Yes See Below
<input type="checkbox"/> Vehicle washing.....	No
<input type="checkbox"/> Vehicle maintenance.....	Yes See Below
<input type="checkbox"/> Waste incineration, treatment, storage, or disposal.....	No
<input type="checkbox"/> Storage of chemical/fertilizers.....	No
<input type="checkbox"/> Concrete washout	Yes See Below
<input type="checkbox"/> Other (specify) – Portable Toilets.....	Yes See Below
<input type="checkbox"/> On-Site Batch plant for construction activities	No

Non-stormwater components of discharge:

	<u>Notes</u>
<input type="checkbox"/> Landscape irrigation return flow.....	No
<input type="checkbox"/> Springs.....	No
<input type="checkbox"/> Other (specify).....	No

Notes:

- Vehicle Fueling – there is no known vehicle fueling station to be installed or used on this site. However, it is anticipated that construction equipment may be refueled during construction. Spill prevention and containment measures shall be used at equipment fueling and servicing areas to prevent the pollution of any state waters, including wetlands. A sample spill report form is included in the Appendix of this report. All spills shall be cleaned up immediately after discovery or contained until appropriate cleanup methods can be employed. Manufacturer’s recommended methods for spill cleanup shall be followed, along with proper disposal methods. The contractor shall follow the recommendations of the appropriate Hazard Communication Plan of the site construction manager, general contractor, or site superintendent. Vehicle refueling should be done in an area surrounded by an earthen berm to contain any fuel spills. Containment berming should be of sufficient size to safely contain a spill from the largest tank truck or other containment device located inside the possible spill area. In the event of a spill, a method of removal must be provided, such as application of absorbent materials and the use of a pump or vacuum truck. Any material removed from the spill site must be disposed of according to local, state, and federal standards. Stormwater and snowmelt runoff shall be diverted away from the containment berming area. Water that collects within the

berming due to rainfall or snowmelt must be treated to meet standards before release from the spill area.

- Vehicle Tracking – the transporting or tracking of sediments from the site is possible particularly when moist soils conditions occur. In an effort to prevent sediments from being transported off-site during navigation from the site, a rock tracking pad shall be installed. Constant inspection is required to maintain the tracking pad in the proper condition. The rock of the tracking pas shall be cleaned or replaced as needed.
- Vehicle Maintenance – from time to time it may be necessary for the contractor to perform maintenance on the construction equipment being used on the site. If possible, major repairs to construction equipment shall be done off-site. Basic vehicle maintenance shall be performed in the vehicle fueling area and all recommendations listed above shall be followed.
- Concrete wash water shall not be discharged to or allowed to runoff to State Waters, including any surface or subsurface storm drainage system or facilities. Any concrete wash water shall be done in a temporary pit on site. The area around this pit shall be protected per the detail provided and concrete inside the pit shall be removed when done.
- Portable toilets will be located a minimum of 10 feet from stormwater inlets and 50 feet from state waters. They will be secured at all four corners to prevent overturning and cleaned on a weekly basis. They will be inspected daily for spills.
- This project does not rely on control measures owned or operated by another entity.

SITE MAP

See attached plans.

BMP EROSION CONTROL MEASURES

Steps to prevent sediment from entering the Stormwater discharge system are listed below.

Structural Practices:

Structural sediment control measures include the following:

1. Use of filter fabric silt fencing at site perimeter locations and throughout the site (before commencement of construction activities). Silt fence shall also be located around homesites and dirt stockpiles during home building operations. Erosion control measures on individual home sites are the responsibility of the homebuilder. This responsibility should be transferred to the homebuilder with the purchase of any lot. The transfer of erosion control responsibility should be clearly stated in the purchase contract for any lot(s).
2. Straw bale barriers to protect ditches, swales and detention pond outfalls (immediately after construction of each item).
3. Vehicle tracking control devices at construction traffic ingress/egress points to prevent sediment tracking onto surrounding streets (before commencement of construction activities).
4. All disturbed areas shall have crimped straw installed and shall be reseeded if area will be dormant for more than 60 days. A recommended seed mix and application rate is included below.

5. All slopes not covered with slope protection erosion control blankets shall be roughened. Roughening shall be performed to follow the contour of the slope, that is, the roughening shall be perpendicular to surface runoff flow direction.
6. Water quality volume and outfall structures in the detention pond can be used as a sedimentation basin (at beginning of pond construction). Details of the water quality outfall structures are included in the Appendix of this report. Temporary sedimentation basins shall have straw bale barriers installed in front of the water quality outfall structures during site construction. The contractor should be aware that the sedimentation basins are considered a last line of defense and that the majority of sediment should be contained on the site near the source of the erosion using the other structural sediment control measures described in this report. The contractor shall remove any accumulated sediment prior to landscaping or seeding the ponds and ensure final grades meet the design grades following construction.
7. It is recommended that construction haul roads, if used on this site, have small stormwater diversions installed at intermittent locations and low points to prevent rutting and erosion on the roads.

See attached Grading and Erosion Control, and Detail sheets in the Appendix for locations and technical drawings for structural BMP's.

Recommended Seed Mix:
35 lbs/ acre - drilled

- 20% Big Bluestem
- 10% Blue Gramma
- 10% Green Needlegrass
- 20% Western Wheatgrass
- 10% Sideoats Grama
- 10% Switchgrass
- 10% Prairie Sandreed
- 10% Yellow Indiangrass

Nonstructural Practices:

Temporary or permanent seeding will be employed in all areas disturbed by construction activities. Should excessive blowing of sediment become apparent, then the contractor shall water the site for dust control.

Other Controls:

Contractors shall take steps to keep the site reasonably free from large amounts of construction debris during construction. All waste materials generated by construction activities shall be removed from the site. All wastes composed of building materials must be removed from the construction site for disposal in accordance with local and state regulatory requirements. No building material wastes or unused building materials shall be buried, dumped, or discharged at the site.

Spill prevention and containment measures shall be used at storage, and equipment fueling and servicing areas to prevent the pollution of any state waters, including wetlands. A sample of the spill report form is included in the Appendix of this report. All spills shall be cleaned up immediately after discovery or contained until appropriate cleanup methods can be employed. Manufacturer's recommended methods for spill cleanup shall be

followed, along with proper disposal methods. The contractor shall follow the recommendations of the appropriate Hazard Communication Plan of the site construction manager, general contractor, or site superintendent.

Final Stabilization and Long-Term Stormwater Quality:

Permanent sediment control measures include paving of the streets, installation of riprap, and the installation of landscaping and reseeded with a native grass seed mix. The contractor shall consult the approved Landscape Plan for the proper location, species, and installation methods for landscaping on the site. If the owner reasonably maintains the landscaping and reseeded, then it will provide good soil stability and sediment control. After these permanent measures are installed and final stabilization is achieved, then temporary measures can be removed. Final stabilization is considered achieved when all earth disturbing activities at the site have been completed and uniform vegetative cover has been established with a density of at least 70% of pre-disturbance levels and such cover is capable of adequately controlling soil erosion.

Inspection and Maintenance:

The site construction manager or site inspector responsible for these measures shall inspect them every 14 days and after every storm event and/or snow event that causes surface erosion. This report recommends that all erosion control measures on the site are inspected a minimum of once every 7 days, except during winter snowpack conditions where no melting is occurring or when all construction activities are completed. Repairs shall be made within a reasonable timeframe after deficiencies are discovered. A record of all inspections made shall be kept with the SWMP Report for a minimum of 3 years. A sample BMP Checklist is included in the Appendix of this report. See attached Detail sheet for specific maintenance requirements for individual BMP's. The inspection logs shall include the signature of the QSM.

SWMP Revision Procedures:

The site construction manager or site inspector responsible for updating the on-site SWMP report to reflect field conditions and project phasing. Upon determination that addition, modification, or deletion of proposed erosion control measures the site construction manager will notify the El Paso County Inspector and the project engineer of proposed modifications. Any field modifications shall be reflected within the on-site copy upon completion of modifications. The SWMP shall be viewed as a "living document" that is continuously being reviewed and modified as a part of the overall process of evaluating and managing stormwater quality issues at the site.

Self-Monitoring Inspections – The QSM shall provide their credentials and/or state: "The QSM will be sufficiently qualified for the required duties per the ECM Appendix I.5.2.A."

APPENDIX

VICINITY MAP



**EROSION AND STORMWATER QUALITY CONTROL PERMIT
(ESQCP)
EL PASO COUNTY APPLICATION AND PERMIT**

APPLICANT INFORMATION

PERMIT NUMBER ____

Owner Information	
Owner	Phillip S. and Jennifer Miles
Name (person of responsibility)	Shay Miles
Company/Agency	Milestone Grading & Drainage
Position of Applicant	Owner
Address (physical address, not PO Box)	15630 Fox Creek Lane
City	Colorado Springs
State	CO
Zip Code	80908
Mailing address, if different from above	
Telephone	719-352-8886
FAX number	
Email Address	shay@milestoneeng.org
Cellular Phone number	
Contractor/Operator Information	
Name (person of responsibility)	Shay Miles
Company	Milestone Grading & Drainage
Address (physical address, not PO Box)	15630 Fox Creek Lane
City	Colorado Springs
State	CO
Zip Code	80908
Mailing address, if different from above	
Telephone	719-352-8886
FAX number	
Email Address	shay@milestoneeng.org
Cellular Phone number	
Erosion Control Supervisor (ECS)*	Shay Miles
ECS Phone number*	719-352-8886
ECS Cellular Phone number*	719-352-8886

*Required for all applicants. May be provided at later date pending securing a contract when applicable.

Project Information	
Project Name	JeniShay Farms
Legal Description	<p>Lots 5 and 6 in Terra Ridge Filing No. 1, County of El Paso, State of Colorado and a portion of the Southwest Quarter of Section 29, Township 11 South, Range 65 West of the 6th P.M., County of El Paso, State of Colorado, more particularly described as follows:</p> <p>Beginning at the Northwest corner of the Southwest Quarter of said Southwest Quarter; thence S89°46'29"E along the South line of Whispering Hills Estates as recorded in Plat Book Z-2 at Page 2 of said county records, 1407.75 feet to the Southeast corner thereof; thence N00°58'34"E, 1327.96 feet to the Northeast corner thereof; thence S89°47'26"E, 1245.16 feet to the Northeast corner of said Southwest Quarter, said Northeast corner also being on the West line of Wildwood Village Unit 3 as recorded in Plat Book H-3 at Page 57 of said county records; thence S00°59'16"W along the East line of said Southwest Quarter and the West Line of said Wildwood Village Unit 3 and Wildwood Village Unit 4 as recorded in Plat Book M-3 at Page 46 of said county records, 1366.91 feet; thence N89°46'29"W, 945.48 feet; thence N00°58'34"E, 8.50 feet; thence N89°46'29"W, 1708.14 feet to a point on the west line of said Southwest Quarter; thence N00°58'34E, 30.00 feet to the point of beginning, County of El Paso, State of Colorado., said described tract contains 52.63 Acres +/-</p>
Address (or nearest major cross streets)	15630 Fox Creek Lane, Colorado Springs, CO 80908
Acreage (total and disturbed)	Total: 52.63 acres Disturbed: 3.0 acres
Schedule	Start of Construction: Completion of Construction: Final Stabilization:
Project Purpose	New subdivision
Description of Project	Create 7 new lots
Tax Schedule Number	51293-00-00

PROJECT INFORMATION

FOR OFFICE USE ONLY

The following signature from the ECM Administrator signifies the approval of this ESQCP. All work shall be performed in accordance with the permit, the El Paso County Engineering Criteria Manual (ECM) Standards, City of Colorado Springs Drainage Criteria Manual, Volume 2 (DCM2) as adopted by El Paso County Addendum, approved plans, and any attached conditions. The approved plans are an enforceable part of the

ESQCP. Construction activity, except for the installation of initial construction BMPs is not permitted until issuance of a Construction permit and Notice to Proceed.

Signature of ECM Administrator: _____

Date _____

1.1 REQUIRED SUBMISSIONS

In addition to this completed and signed application, the following items must be submitted to obtain an ESQCP:

- Permit fees
- Stormwater Management Plan (SWMP) meeting the requirements of DCM2 and ECM either as part of the plan set or as a separate document;
- Cost estimates of construction and maintenance of construction and permanent stormwater control measures (Cost estimates shall be provided on a unit cost basis for all stormwater BMPs);
- Financial surety in an amount agreeable to the ECM Administrator based on the cost estimates of the stormwater quality protection measures provided. The financial surety shall be provided in the form of a Letter of Credit, Surety with a Bonding Company, or other forms acceptable to El Paso County;
- Operation and Maintenance Plan for any proposed permanent stormwater control measures; and
- Signed Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, if any permanent stormwater control measures are to be located on site.

1.2 RESPONSIBILITY FOR DAMAGE

The County and its officers and employees, including but not limited to the ECM Administrator, shall not be answerable or accountable in any manner, for injury to or death of any person, including but not limited to a permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder, or for damage to property resulting from any activities undertaken by a permit holder or under the direction of a permit holder. The permit holder shall be responsible for any liability imposed by law and for injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder, or damage to property arising out of work or other activity permitted and done by the permit holder under a permit, or arising out of the failure on the permit holder's part to perform the obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity, or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit.

To the extent allowed by law, the permit holder shall indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to the permit holder, persons employed by the permit holder, persons acting in behalf of the permit holder and the public, or damage to property resulting from the performance of work or other activity under the permit, or arising out of the failure on the permit holder's part to perform his obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the permit, except as otherwise provided by state law. The permit holder waives any and all rights to any type of expressed or implied indemnity against the County, its officers or employees.

1.3 APPLICATION CERTIFICATION

We, as the Applicants or the representative of the Applicants, hereby certify that this application is correct and complete as per the requirements presented in this application and the El Paso County Engineering Criteria Manual and Drainage Criteria Manual, Volume 2 and El Paso County Addendum.

We, as the Applicants or the representatives of the Applicants, have read and will comply with all of the requirements of the specified Stormwater Management Plan and any other documents specifying stormwater best management practices to be used on the site including permit conditions that may be required by the ECM Administrator. We understand that the stormwater control measures are to be maintained on the site and revised as necessary to protect stormwater quality as the project progresses. We further understand that a Construction Permit must be obtained and all necessary stormwater quality control measures are to be installed in accordance with the SWMP, the El Paso County Engineering Criteria Manual, Drainage Criteria Manual, Volume 2 and El Paso County Addendum before land disturbance begins and that failure to comply will result in a Stop Work Order and may result in other penalties as allowed by law. We further understand and agree to indemnify, save, and hold harmless the County and its officers and employees, including but not limited to the BOCC and ECM Administrator, from all claims, suits or actions of every name, kind and description as outlined in Section 1.2 Responsibility for Damage.

_____ Date: _____
Signature of Owner or Representative

Print Name of Owner or Representative

_____ Date: _____
Signature of Operator or Representative

Print Name of Operator or Representative

Permit Fee	\$ _____	
Surcharge	\$ _____	
Financial Surety	\$ _____	Type of Surety _____

Total \$ _____

**RECOMMENDED BMP MAINTENANCE INSPECTION
CHECKLIST**



2880 International Circle, Suite 110
 Colorado Springs, CO 80910
 Phone 719-520-6300
 Fax 719-520-6695
 www.elpasoco.com

**EL PASO COUNTY PLANNING AND
 COMMUNITY DEVELOPMENT
 DEPARTMENT**

STORMWATER MANAGEMENT PLAN CHECKLIST

Revised: July 2019

		Applicant	PCD
1. STORMWATER MANAGEMENT PLAN (SWMP)			
1	Applicant (owner/designated operator), SWMP Preparer, Qualified Stormwater Manager, and Contractor Information. (On cover/title sheet)		
2	Table of Contents		
3	Site description and location to include: vicinity map with nearest street/crossroads description.		
4	Narrative description of construction activities proposed (e.g., may include clearing and grubbing, temporary stabilization, road grading, utility / storm installation, final grading, final stabilization, and removal of temporary control measures)		
5	Phasing plan – may require separate drawings indicating initial, interim, and final site phases for larger projects. Provide “living maps” that can be revised in the field as conditions dictate.		
6	Proposed sequence for major activities: Provide a construction schedule of anticipated starting and completion dates for each stage of land-disturbing activity depicting conservation measures anticipated, including the expected date on which the final stabilization will be completed.		
7	Estimates of the total site area and area to undergo disturbance; current area of disturbance must be updated on the SWMP as changes occur.		
8	Soil erosion potential and impacts on discharge that includes a summary of the data used to determine soil erosion potential		
9	A description of existing vegetation at the site and percent ground cover and method used to determine ground cover		
10	Location and description of all potential pollution sources including but not limited to: disturbed and stored soils; vehicle tracking; management of contaminated soils; loading and unloading operations; outdoor storage of materials; vehicle and equipment maintenance and fueling; significant dust generating process; routine maintenance activities involving fertilizers, pesticides, herbicides, detergents, fuels, solvents, oils, etc.; on-site waste management; concrete truck/equipment washing; dedicated asphalt, concrete batch plants and masonry mixing stations; non-industrial waste such as trash and portable toilets		
11	Material handling to include spill prevention and response plan and procedures.		
12	Spill prevention and pollution controls for dedicated batch plants		
13	Other SW pollutant control measures to include waste disposal and off site soil tracking		
14	Location and description of any anticipated allowable non-stormwater discharge (ground water, springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.)		
15	Name(s) of ultimate receiving waters; size, type and location of stormwater outfall or storm sewer system discharge		
16	Description of all stream crossings located within the project area or statement that no streams cross the project area		



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**EL PASO COUNTY PLANNING AND
 COMMUNITY DEVELOPMENT
 DEPARTMENT**

STORMWATER MANAGEMENT PLAN CHECKLIST

Revised: July 2019		Applicant	PCD
17	SWMP Map to include:		
17a	construction site boundaries		
17b	flow arrows to depict stormwater flow directions		
17c	all areas of disturbance		
17d	areas of cut and fill		
17e	areas used for storage of building materials, soils (stockpiles) or wastes		
17f	location of any dedicated asphalt / concrete batch plants		
17g	location of all structural control measures		
17h	location of all non-structural control measures		
17i	springs, streams, wetlands and other surface waters, including areas that require maintenance of pre-existing vegetation within 50 feet of a receiving water		
18	Narrative description of all structural control measures to be used. Modifications to EPC standard control measures must meet or exceed County-approved details.		
19	Description of all non-structural control measures to be used including seeding, mulching, protection of existing vegetation, site watering, sod placement, etc.		
20	Technical drawing details for all control measure installation and maintenance; custom or other jurisdiction's details used must meet or exceed EPC standards		
21	Procedure describing how the SWMP is to be revised		
22	Description of Final Stabilization and Long-term Stormwater Quality (describe nonstructural and structural measures to control SW pollutants after construction operations have been completed, including detention, water quality control measure etc.)		
23	Specification that final vegetative cover density is to be 70% of pre-disturbed levels		
24	Outline of permit holder inspection procedures to install, maintain, and effectively operate control measures to manage erosion and sediment		
25	Record keeping procedures identified to include signature on inspection logs and location of SWMP records on-site		
26	If this project relies on control measures owned or operated by another entity, a documented agreement must be included in the SWMP that identifies location, installation and design specifications, and maintenance requirements and responsibility of the control measure(s).		
	Please note: all items above must be addressed. If not applicable, explain why, simply identifying "not applicable" will not satisfy CDPHE requirement of explanation.		
2. ADDITIONAL REPORTS/PERMITS/DOCUMENTS			
a	Grading and Erosion Control Plan (signed)		
b	Erosion and Stormwater Quality Control Permit (ESQCP) (signed)		
3. Applicant Comments:			
a			



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		Applicant	PCD
b			
c			
4. Checklist Review Certifications:			
a	<p>Engineer of Record: The Stormwater Management 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 and State for Stormwater Management Plans.</p> <p>_____ Date _____ Engineer of Record Signature</p>		
b	<p>Review Engineer: The Stormwater Management Plan was reviewed and found to meet the checklist requirements except where otherwise noted or allowed by an approved deviation request.</p> <p>_____ Date _____ Review Engineer</p>		



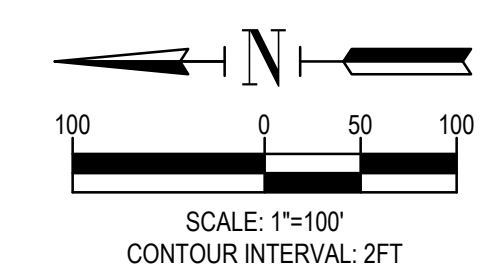
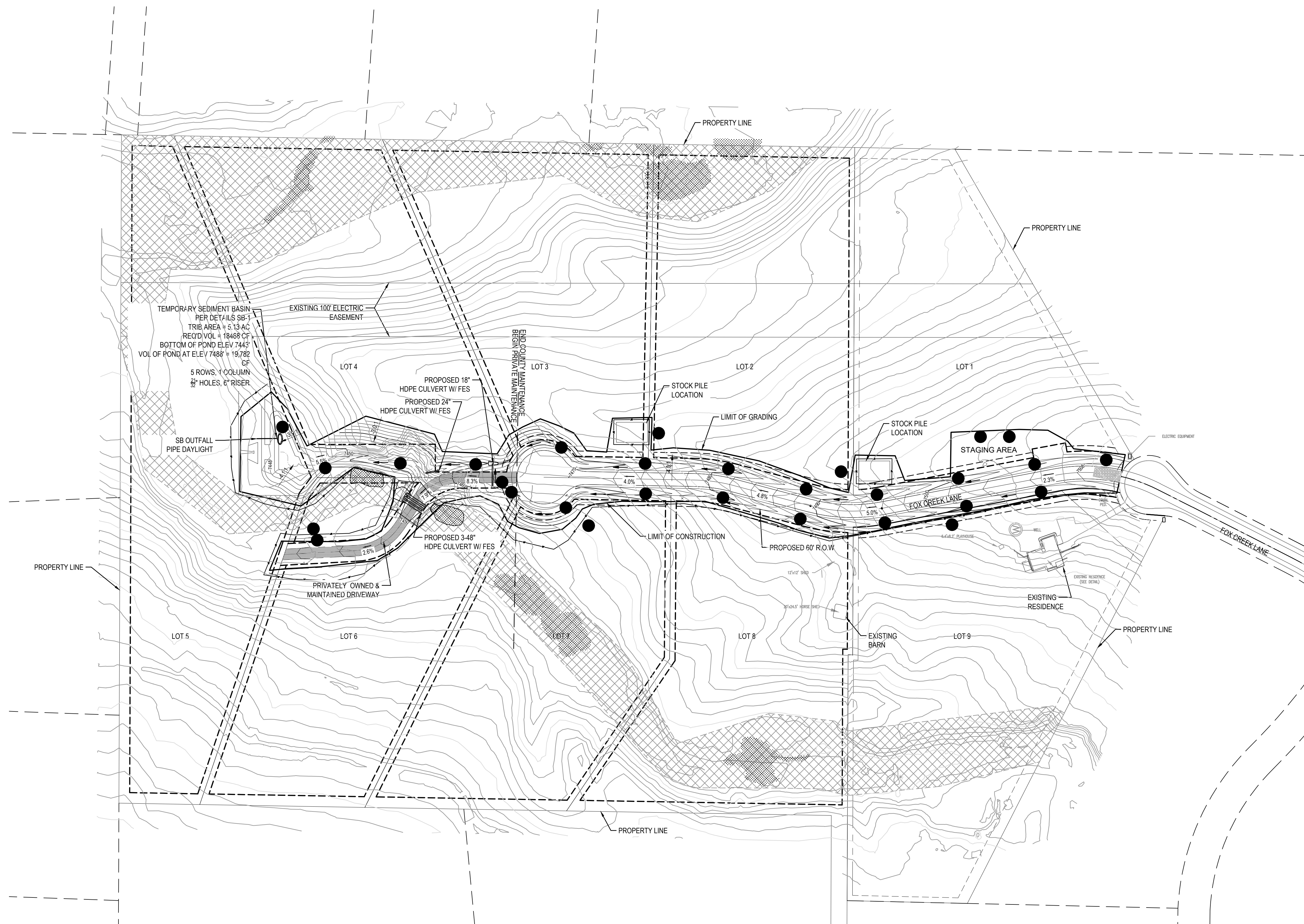
- GENERAL DRAINAGE NOTES:**
1. ALL GRADING OPERATIONS SHALL REMAIN OUTSIDE OF DESIGNATED MOUSE HABITAT AND WETLANDS. DESIGNATED MOUSE HABITAT AND WETLANDS ARE TO REMAIN UNDISTURBED.
 2. ONLY SUBGRADE UNDERCUT GRADING IS PERMITTED WITH THIS PREDEVELOPMENT CONSTRUCTION PLAN SET. ASPHALT AND BASE COURSE SHALL NOT BE CONSTRUCTED WITH THIS PREDEVELOPMENT PLAN.

ESTIMATED EARTHWORK QUANTITY:
 TOTAL CUT: 7,689 CY
 TOTAL FILL: 6,871 CY
 NET (CUT): 818 CY

NOTE: THE ESTIMATED QUANTITIES DO NOT ACCOUNT FOR SOIL LOSS DUE TO COMPACTION OR SHRINKAGE.

KEY NOTES:
 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MATCH INTO EXISTING GRADES WITH 3:1 MAX CUT AND FILL SLOPES AND MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.

- BMP PHASING:**
- INITIAL BMP'S:
- INSTALL VTC, SILT FENCE, TEMP SEDIMENT BASIN, STAGING
- FINAL BMP'S:
- STRAW BALE BARRIERS, CONCRETE WASHOUT, SEEDING & MULCHING



LEGEND

	7464	EXISTING CONTOUR
	7464	PROPOSED CONTOUR
		DRAINAGE SWALE CENTER LINE
		ROAD CENTER LINE
		LIMITS OF CONSTRUCTION
		PROPERTY BOUNDARY
		FLOW DIRECTION
		PROPOSED CULVERT
		INLET PROTECTION
		VEHICLE TRACKING PAD
		CONCRETE WASHOUT AREA
		STRAW BALE BARRIER
		STOCKPILE PROTECTION
		SEDIMENT BASIN
		SILT FENCE
		LIMITS OF CONSTRUCTION
		NO BUILD ZONE

ISSUED	
REVISIONS	

JENISHAY FARMS
 15630 FOX CREEK LANE
 COLORADO SPRINGS, COLORADO

EL PASO COUNTY
 PRE-DEVELOPMENT
 SITE GRADING & EROSION
 CONTROL PLAN

C3
 SHEET NO.