

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

PERMIT NUMBER _____

APPLICANT INFORMATION

| Applicant Contact Information | |
|--|--------------------------------|
| Owner | Challenger Homes Inc |
| Name (person of responsibility) | Jim Byers, PLA |
| Company/Agency | Challenger Homes |
| Position of Applicant | VP of Community Development |
| Address (physical address, not PO Box) | 8605 Explorer Drive, Suite 250 |
| City | Colorado Springs |
| State | CO |
| Zip Code | 80920 |
| Mailing address, if different from above | |
| Telephone | 719-598-5192 |
| FAX number | |
| Email Address | Jim@ChallengerHomes.com |
| Cellular Phone number | 719-440-0592 |

CONTRACTOR INFORMATION

| Contractor | |
|--|-----|
| Name (person of responsibility) | TBD |
| Company | |
| Address (physical address, not PO Box) | |
| City | |
| State | |
| Zip Code | |
| Mailing address, if different from above | |
| Telephone | |
| FAX number | |
| Email Address | |
| Cellular Phone number | |
| Erosion Control Supervisor (ECS)* | |
| ECS Phone number* | |
| ECS Cellular Phone number* | |

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

PROJECT INFORMATION

| Project Specifications | |
|--|---|
| Project Name | Bent Grass Residential Filing 2 |
| Legal Description | West Half of Section 1, Township 13 South, Range 65 West, of the 6th Principal meridian, County of El Paso, State of Colorado |
| Address (or nearest major cross streets) | Northwest of intersection of Meridian Road and E Woodmen Road |
| Acreage (total and disturbed) | Total: acres 50.8 acres Disturbed: acres 19.8 acres |
| Schedule | Start of Construction: August 2019 Completion of Construction: September 2020 Final Stabilization: October 2020 |
| Project Purpose | Residential Property Development |
| Description of Project | This project is a new residential subdivision including 181 lots. |
| Tax Schedule Number | 5301000021, 5301000020, 5301000019, 5301000037, 5301000036 |

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 BMPs; and
- Signed Private Detention Basin/Stormwater Quality Best Management Practice Maintenance Agreement and Easement, if any permanent Best Management Practices 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

I, as the Applicant or the representative of the Applicant, 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.

I, as the Applicant or the representative of the Applicant, 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. I understand that the Best Management Practices are to be maintained on the site and revised as necessary to protect stormwater quality as the project progresses. I further understand that a Construction Permit must be obtained and all necessary stormwater quality control BMPs are to be installed in accordance with the SWMP and the El Paso County Engineering Criteria Manual and 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. I 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.



Signature of Applicant or Representative

Date: 6/26/19

JAMES BYERS

Print Name of Applicant or Representative

Permit Fee \$ _____

Surcharge \$ _____

Financial Surety \$ _____

Type of Surety _____

Total \$ _____



STORM WATER MANAGEMENT PLAN

BENT GRASS RESIDENTIAL FILING NO. 2

PREPARED FOR:

Challenger Homes Inc
8605 Explorer Drive, Suite 250
Colorado Springs, CO 80920

PREPARED BY:

Galloway & Company, Inc.
1755 Telstar Drive, Suite 107
Colorado Springs, CO 80918

DATE:

June 11, 2019



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Appendices:

- A. Vicinity Map
- B. GESC Plan
- C. BMP Details

I. PROJECT DESCRIPTION

The Bent Grass Residential Filing 2 will consist of 181 single family residential lots and the associated sidewalks, parking, open space and landscaping on approximately 50.8 ac.

II. EXISTING SITE CONDITIONS

LOCATION

The Bent Grass Residential Filing No. 2 project site is in the West half of Section 1, Township 13 South, Range 65 West of the 6th Principle Meridian, County of El Paso, State of Colorado. The project site is bounded East by Bent Grass Residential Filing No. 1, North by The Meadows Filing No. 2, West, by The Meadows Filing No. 3, and South by Latigo Business Center Filing No. 1.

DESCRIPTION OF PROPERTY

Bent Grass Residential Filing 2 is approximately 50.8 acres and is comprised of undeveloped land covered mostly by native grasses and weeds. This site is a portion of the larger 180-acre Bent Grass Development. The Bent Grass Residential Filing No. 2 plat will create 177 lots.

III. RECEIVING WATERS

The project site is located within the Falcon Drainage Basin. Stormwater from this site drains to an existing unnamed tributary to Black Squirrel Creek No. 2 that routes to a regional detention pond designated as Detention Pond WU South. The detention pond outfalls back into the unnamed tributary to Black Squirrel Creek No. 2 that then continues to flow into Black Squirrel Creek.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map Number 08041C0553G, effective date March 17, 1997, revised December 7, 2018, the project area lies outside of the 100-year floodplain, however the future development site contains an area that is within the 100-year floodplain.

IV. SOILS

Soil data for Bent Grass Residential was obtained from the United States Department of Agriculture Natural Resources Conservation Service (NRCS) Web Soil Survey. Soils within the site are Blakeland loamy sand with soil classification A, Blakeland-Fluvaquentic Haplaquolls (A) and Columbine gravelly sandy loam (A).

V. DESCRIPTION OF POTENTIAL POLLUTANTS

There are no industrial or chemical uses planned for the site. The potential pollutants during construction are listed below along with how they will be managed by BMPs

| Pollution | Control Measure (BMP's) |
|-----------------------|---|
| Sediments | Silt Fence/Rock Socks |
| Concrete/Masonry Wash | Concrete Washout Area |
| Solvents | Silt Fence/Rock Socks |
| Paints | Materials Handling and Spill Cleanup Kits |
| Saw Cutting | Silt Fence/Rock Socks |
| Fertilizers | Silt Fence/Rock Socks |
| Fire Fighting | Perimeter Control |
| Vehicle Tracking | Vehicle Tracking Device |
| Vehicle Washing | Vehicle Tracking Device/Concrete Washout Area |
| Stored Soils | Temporary Stabilization/Stockpile Areas with Silt Fence |

There are no major potential pollutants anticipated to be used on the site.

VI. AREAS AND VOLUMES

The site consists of 50.8 acres. 19.8 acres are expected to be disturbed.

The unadjusted cut and fill quantities as of the writing of this report are listed below:

Cut Volume = 83,838 Cubic Yards

Fill Volume = 87,889 Cubic Yards

Total Volume = 4,051 Cubic Yards (Fill)

VII. APPROPRIATE CONTROLS AND MEASURES

Initially, construction fence and silt fence will be installed around the perimeter of the site. The silt fence will be installed on the downslopes to keep sediment runoff on the site. Rock socks will be installed periodically throughout the site, specifically at curb cut locations to prevent sediments from leaving the site. Silt fence will specifically be used at the perimeter of the disturbed area to control localized sediment loading.

There will be one vehicle tracking device installed and utilized at the main entry point into the site from the east on Bent Grass Meadows Dr. Vehicle tracking will be utilized to prevent tracking mud, and other soils, onto Bent Grass Meadows Dr. and the other surrounding roadways. The vehicle tracking device will remain in place until the drive aisle has been graded, and asphalt placement is to commence.

One concrete washout area will be installed to the south of the vehicle tracking device. This concrete washout area will be used to clean and wash out concrete trucks before they exit the site. This area will prevent spillage from the back of concrete trucks onto the roadways. The concrete washout area will be installed prior to placement of concrete and will be left in place until placement of concrete is complete.

A stabilized staging area will be installed to the north of the vehicle tracking device. This area will be used to store construction materials, as well as provides vehicle and onsite construction parking. The stabilized staging area should be installed prior to other construction activities beginning on site.

All clearing and grubbing shall occur at the beginning of the site, after perimeter control measures have been installed. Utilities and storm sewers shall be installed after the site has been rough graded.

Once Storm sewer lines with associated inlets have been installed, Inlet Protection shall be installed around each inlet to prevent sediment associated with construction to enter and clog the system.

Final grading will commence once all utilities have been installed. When construction is complete on roads, sidewalks and landscape areas, all temporary BMPs shall be removed.

No batch plants are used for this project.

All BMPs shall be installed and maintained in accordance with the most recent Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual.

VIII. MATERIALS HANDLING AND SPILL PREVENTION

All potential pollutants other than sediment will be handled and disposed of in a manner that does not cause contamination of storm water. Non-sediment pollutants that may be present during construction activities include petroleum products including fuel, lubricants, hydraulic fluids, and form oils, concrete, paints, and fertilizers. These materials, and other materials used during construction with the potential to impact storm water, will be stored, managed, used, and disposed of in a manner that minimizes the potential for releases to the environment and especially into storm water. Specific materials handling shall follow the guidelines outlined below:

- All pollutants, including waste materials and demolition debris, that occur on-site during construction will be handled in a way that does not contaminate storm water.
- All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored on site will be covered and contained and protected from vandalism.
- Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants, will be conducted

under cover during wet weather and on an impervious surface surrounded by impervious berms to prevent the release of contaminants onto the ground. Where this is not possible, use pads designed to contain the pollutants which may leak or spill during maintenance operations. Impervious pads are particularly important on sandy and other coarse soils where spilled materials can easily leach into the groundwater.

- Materials spilled during maintenance operations will be cleaned up immediately and properly disposed of.
- Potential pollutants will be stored and used in a manner consistent with the manufacturer's instructions in a secure location. To the extent practicable, material storage areas should not be located near storm drain inlets and should be equipped with covers, roofs, or secondary containment as needed to prevent storm water from contacting stored materials. Chemicals that are not compatible (such as sodium bicarbonate and hydrochloric acid) shall be stored in segregated areas so that spilled materials cannot combine and react.
- Materials disposal will be in accordance with the manufacturer's instructions and applicable local, state, and federal regulations.
- Materials no longer required for construction will be removed from the site as soon as practicable.
- Adequate garbage, construction waste, and sanitary waste handling and disposal facilities will be provided to the extent necessary to keep the site clear of obstruction and BMPs clear and functional.

IX. TIMING/PHASING SCHEDULE

Construction for the development of this project is currently projected to begin in or around August of 2019. The initial/interim stage will include the installation of initial BMPs, clearing and grubbing the site, rough grading the site, site construction and site revegetation. The final stage will include the final stabilization of the site and removing the initial BMPs such as vehicle tracking, construction and silt fence, stabilized staging area, rock socks, and concrete washout area. It is estimated that construction activities will be completed by September 2020. Refer to GESC plans for location of all BMPs.

X. FINAL STABILIZATION

Final site stabilization will be achieved when all final landscaping and paving is complete and when vegetation density is greater than 70 percent of pre-disturbance density over its entire area. The remainder of the site will consist of hardscape (drives and walks) or be a part of the building footprint. All final stabilization on the site will be of a permanent nature. All BMPs will be removed upon completion of construction. It is the responsibility of the contractor to remove all dirt and garbage from the site.

XI. OWNER INSPECTION AND MAINTENANCE OF CONTRUCTION BMP'S

The project is subject to inspections by the Colorado Division of Public Health and Environment (CDPHE), the Environmental Protection Agency (EPA), and El Paso County at any time.

Inspection of the stormwater management system shall be performed, by the SWMP Administrator, at least every 14 calendar days and after the occurrence of precipitation or snow melt event that may cause noticeable erosion or run-off. Time span greater than 14 calendar days is a violation of the CDPS permit.

SWMP Administrator

The individual(s), position, or title responsible for developing, implementing, maintaining, and revising the SWMP is to be determined upon award of the project. The individual listed as the Erosion Control Supervisor shall fill out the information below and place in the on-site copy before beginning installation of the BMPs for this site and notify the County of the appropriate contact information.

SWMP Administrator Name:

Cell Phone:

Office Phone:

Email:

Inspection Schedules

Inspections of the stormwater management system are required at least every 14 calendar days and within 24 hours after any precipitation or snowmelt event that causes surface runoff. A more frequent inspection schedule may be necessary to ensure that BMPs continue to operate as designed.

Differences or modifications in the field from the approved SWMP are required to be made within 72 hours site changes are observed. The SWMP shall be onsite at all times when onsite construction activity is occurring.

Inspection Scope

The construction site perimeter, all disturbed areas, material and/or waste storage areas that are exposed to precipitation, discharge locations, and locations where vehicles access the site shall be inspected for evidence of, or the potential for pollutants leaving the construction site boundaries or discharging to State Waters. All erosion and sediment control practices identified in the SWMP shall be evaluated to ensure that they are maintained and operating correctly.

Inspection Report

A thorough record of inspection shall be maintained and identify any incidents of non-compliance with the SWMP. Inspection records shall be retained for three years from expiration or inactivation of permit coverage. Federal, State, local authority reserves the right to request that a copy of the inspection reports be submitted. At a minimum, the inspection report shall include the following:

- a. Inspection date
- b. Name(s) and title(s) of personnel making the inspection
- c. Location(s) of discharges of sediment or other pollutants from the site
- d. Location(s) of BMPs that need to be maintained
- e. Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location
- f. Location(s) where additional BMPs are needed or were not in place at the time of inspection
- g. Deviations from the minimum inspection schedule

- h. Description of corrective action for items c, d, e and f above, dates corrective action(s) taken, and measures taken to prevent future violations, including requisite changes to the SWMP, as necessary
- i. After adequate corrective action(s) have been taken, or where a report does not identify any incidents requiring corrective action, the report shall contain a signed statement indicating the site is in compliance with the permit to the best of the signer's knowledge and belief
- j. The date and amount of storm or snowmelt events that cause erosion.

BMP Maintenance/Replacement and Failed BMPs

Adequate site assessment shall be performed as part of comprehensive Inspection and Maintenance procedures to assess the adequacy of BMPs at the site and to evaluate the necessity of changes to those BMPs to ensure continued effective performance. Where site assessment results in the determination that new or replacement BMPs are necessary, the BMPs shall be installed to ensure ongoing implementation. Failed BMPs must be addressed as soon as possible, in most cases immediately, to ensure continued performance and minimize the likelihood of pollutant discharge. The SWMP shall be updated once new BMPs are installed or failed BMPs replaced. A specific timeline for implementing maintenance procedures is not included in the State Permit because BMP maintenance is expected to be proactive, not responsive. Observations resulting in BMP maintenance activities can be made during a site inspection, or during general observations of site conditions. BMPs shall be maintained per DCM2 criteria and ECM criteria. Please refer to Appendix C for specific maintenance required for each BMP.

Plan Review and Revisions

- a. The plan must be signed in accordance with the general permit.
- b. The plan must be made available, upon request, to CDPHE, United States Environmental Protection Agency, or operator of the local municipal storm sewer system, if applicable.
- c. The plan must be amended whenever there is a change in design, construction, operation or maintenance that could have a significant effect on the potential for the

discharge of pollutants to State Waters. It also must be amended if it is found to be ineffective in controlling pollutants present in stormwater.

Record Keeping and Documenting of Inspections

The permittee shall retain a copy of the SWMP required by this permit (including a copy of the permit language) at the construction site (or other local location accessible to the Director; a State or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; or the operator of a municipal separate storm sewer receiving discharges from the site) from the date of project initiation to the date of final stabilization. Permittees with day-to-day operational control over SWMP implementation shall have a copy of the SWMP available at a central location on-site for the use of all operators and those identified as having responsibilities under the SWMP whenever they are on the construction site. If minor modifications to the SWMP are required, they shall be recorded on the owner's copy of the SWMP and be available during inspections. Whenever a significant change is made to the SWMP (including changes to design, construction, operation or maintenance), an amended SWMP shall be submitted for review and approval. The following documents must be kept in a field office, trailer, shed or vehicle that is onsite during normal working hours:

- a. A completed and signed copy of the Notice of Intent
- b. The permit coverage letter from the Colorado Department of Public Health and Environment (CDPHE)
- c. The Stormwater Management Plan
- d. Site Inspection Records
- e. A copy of the Colorado General Permit for Stormwater Discharges from Construction Activities

If a reasonable onsite location is not available, then the documents may be retained at a readily available alternative location, preferably with the SWMP plan contact. If the site is inactive, then the documents may be stored at a local office.

All records and information must be kept for at least three years or longer if requested by the Colorado Department of Public Health and Environment or United States Environmental Protection Agency.

Record Keeping

The SWMP is a "living document" that is continuously reviewed and modified. The ECS shall make changes to the SWMP, including but not limited to: additions, deletions, changing locations of BMP's shall be marked in the plans, dated and initialed at time of occurrence.

All inspection and maintenance activities or other repairs will be documented by the ECS and the records kept on the project site.

Records of spill, leaks or overflows that result in the discharge of pollutants will be documented and maintained. The following Information will be recorded for all occurrences:

- a. Time and date
- b. Weather conditions
- c. Reasons for spill
- d. A release of any chemical, oil, petroleum product, sewage, etc., which may enter state waters must be reported.

At 14-day inspections incidents of noncompliance, such as uncontrolled releases of pollutants including mud, muddy water or measurable quantities of sediment found off-site shall be noted, along with a brief explanation as to measures taken to prevent future violations and measures taken to clean up sediment that has left the site.

After measures have been taken to correct any problems and recorded, or where a report does not identify incidents of noncompliance, the report shall contain a signed certification indicating the site is in compliance.

Signature Page:

Engineer's Statement:

The Erosion and Stormwater Quality Control/Grading Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. If such work is performed in accordance with the grading and erosion control plan, the work will not become a hazard to life and limb, endanger property, or adversely affect the safety, use, or stability of public way, drainage channel, or other property.


Grant Dennis

Registered Professional Engineer
State of Colorado No. 51622


Date

Developer's Statement:

The owner will comply with the requirements of the Erosion and Stormwater Quality Control Plan including temporary BMP inspection requirements and final stabilization requirements. I acknowledge the responsibility to determine whether the construction activities on these plans require Colorado Discharge Permit System (CDPS) permitting for Stormwater discharges associated with Construction Activity.

Developer/ Owner Signature: 

Name of Developer/ Owner: Challenger Communities

DBA: _____ Phone: _____

Title: _____ Email: _____

Address: _____ Fax: _____