



CITY OF CASTLE PINES • 7437 VILLAGE SQUARE DR, SUITE 200 • CASTLE PINES, CO 80108

GRADING, EROSION, AND SEDIMENT CONTROL PLAN (GESC) REVIEW CHECKLIST

PROJECT INFORMATION				
1. Project Name				2. GESC Permit #:
3. Location/Address:				4. Applicant Name:
5. Submittal Date:	(1)	(2)	(3)	(4)
6. a. Total Lot Size or Project Size (Acres): _____		b. Total Disturbed Area (Acres): _____		
7. Submitted by:		Firm: _____		
		Contact: _____		
		Phone: _____		
8. GESC Manager: _____				
9. Overlot grading only? _____ YES _____ NO (variance required if Yes)				
SUBMITTAL REQUIREMENTS				

1. GESC Drawings Cover Sheet

ITEM	Applicant to complete (Y, N, NA or Variance*)	MS4 Reviewer to complete (Y, N, NA or Variance)
a. Project name		
b. Project address (if applicable)		
c. Owner address		
d. Design firm's name and address		
e. Plan sheet index		
f. Designer Engineer Signature Block		
g. The following note: THE GRADING, EROSION, AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PLACED IN THE CITY OF CASTLE PINES FILE FOR THIS PROJECT AND APPEARS TO FULFILL APPLICABLE CASTLE PINES GRADING, EROSION AND SEDIMENT CONTROL CRITERIA, AS AMENDED. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE		

<p>PERMITTEE(S) DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED GESC PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS GESC PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE PERMITTEE(S), UNTIL SUCH TIME AS THE GESC PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED. ACCEPTANCE OF THESE DOCUMENTS DOES NOT RESOLVE THE PERMITTEE FROM INSTALLING ADDITIONAL CONTROL MEASURES AS NEEDED.</p> <p>TOPSOIL WILL BE SALVAGED UNLESS INFEASIBLE.</p>		
<p>h. GESC Drawing Designer Engineer's signature block with name, date, and Professional Engineer registration number. Signature block shall include the following note:</p> <p>THE GRADING, EROSION AND SEDIMENT CONTROL PLAN INCLUDED HEREIN HAS BEEN PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE REQUIREMENTS OF THE GRADING, EROSION AND SEDIMENT CONTROL (GESC) CRITERIA MANUAL OF DOUGLAS COUNTY, AS AMENDED BY DOUGLAS COUNTY AND THE CITY OF CASTLE PINES.</p>		
<p>i. The City of Castle Pines acceptance block with the following note:</p> <p>THESE GESC PLANS HAVE BEEN REVIEWED AND ACCEPTED BY THE CITY OF CASTLE PINES FOR GRADING, EROSION AND SEDIMENT CONTROL ONLY.</p>		
<p>j. General location Map at a scale of 1 inch to 1,000 feet to 8,000 feet indicating:</p> <ul style="list-style-type: none"> • General vicinity of the site location. • Major roadway names • North arrow and scale 		

***If variance provide variance request**

City Reviewer Comments: _____

2. Initial GESC Drawing Requirements

ITEM	Applicant to complete (Y, N, NA or Variance*)	MS4 Reviewer to complete: (Y, N, NA or Variance)
a. Property lines		
b. Existing and proposed easements		
c. Existing topography at 1- or 2-foot contour intervals, extending a minimum of 100 feet beyond the property line (a larger scale map may be used for the areas off the property upon approval by the GESC reviewer). Limited projects due to the nature of their construction may request an alternative scale from the GESC reviewer.		
d. Location of any existing structures or hydrologic features within mapping limits. Streams and FEMA mapped floodplains should be labeled.		

e. USGS Benchmark used for project		
f. Limits of Construction encompassing all areas of work, access points, storage and staging areas, borrow areas, stockpiles, and utility tie-in locations in on-site and off-site locations. Stream corridors and other resource areas to be preserved and all other areas outside the Limits of Construction shall be lightly shaded to clearly show area not to be disturbed		
g. Limits of disturbance		
h. Location of stockpiles, including topsoil, imported aggregates, and excess material		
i. Location of storage and staging areas for equipment, fuel, lubricant, chemical (and other materials) and waste storage		
j. Location of borrow or disposal areas		
k. Location of temporary roads and stream crossings		
l. Location, map symbol, and letter callouts of all initial erosion and sediment control measures, flow arrows		
m. Information to be specified for each control measure, such as type and dimensions, as called for in the GESC Standard Notes and Details		
n. Identification of immediate and ultimate receiving waters		
o. Protection of pre-existing vegetation or equivalent control measures within 50-feet of a receiving water		
p. The following note: SEE COVER SHEET OF THE CITY OF CASTLE PINES GESC STANDARD NOTES AND DETAILS (SHEET 1) FOR LEGEND OF CONTROL MEASURE NAMES AND SYMBOLS		
q. The City of Castle Pines acceptance block with the following note: THE GESC DRAWINGS HAVE BEEN REVIEWED BY THE CITY OF CASTLE PINES FOR GRADING, EROSION AND SEDIMENT CONTROL ONLY.		
r. Other information as may be reasonably required by the City of Castle Pines		
s. Design Engineer sign off block		

***If variance provide variance request**

City Reviewer Comments: _____

3. Interim GESC Drawing Requirements

ITEM	Applicant to complete (Y, N, NA or Variance*)	MS4 Reviewer to complete: (Y, N, NA or Variance)
a. Existing topography, as shown on the Initial GESC Drawing. These contours shall be screened.		
b. Location of all existing erosion and sediment control measures on site, as shown on the Initial GESC Drawing Sheet . These control		

measures shall be shaded. Dimension information for initial stage control measures shall not be shown.		
c. <i>Items a-o from the Initial GESC Drawing requirements</i> should be evaluated for the interim drawings and any additional control measures for these pollutant sources should be added if they are not already included on the initial drawings.		
In addition, the Interim GESC Drawing shall include the following:		
d. Proposed topography at 1- or 2-foot contour intervals, showing elevations, dimensions, locations, and slope of all proposed grading		
e. Outlines of cut and fill areas		
f. Location of all interim erosion and sediment controls, designed in conjunction with the proposed site topography, but also considering the controls designed in the initial GESC Drawing. If multilot construction provide typical lot detail or plans showing control measures and lot drainage.		
g. Locations of all buildings, drainage features and facilities, paved areas, retaining walls, curbing, water quality facilities, or other permanent features to be constructed in connection with, or as a part, of, the proposed work, per approved plat, SIP or other improvement plan		
h. The following notes: <ul style="list-style-type: none"> SEE COVER SHEET OF THE CITY OF CASTLE PINES GESC STANDARD NOTES AND DETAILS (SHEET 1) FOR LEGEND OF CONTROL MEASURE NAMES AND SYMBOLS. CONTROL MEASURES THAT WERE INSTALLED IN INITIAL STAGE TO BE SHADED AND SHALL BE LEFT IN PLACE IN INTERIM STAGE UNLESS OTHERWISE NOTED. ALL INTERIM EROSION AND SEDIMENT CONTROL MEASURES INCLUDING DRILL SEEDING AND CRIMP MULCHING OF DISTURBED AREAS, MUST BE INSTALLED, INSPECTED, AND APPROVED BY THE CITY PRIOR TO THE ISSUANCE OF A RIGHT-OF-WAY USE AND CONSTRUCTION PERMIT FOR THE PURPOSE OF PAVING OR INSTALLATION OF CURB AND GUTTER. SOIL COMPACTION WILL BE MINIMIZED IN AREAS THAT WILL BE REVEGETATED AT THE END OF CONSTRUCTION UNLESS INFEASIBLE. IF INFEASIBLE, SOIL WILL BE SCARIFIED TO REMOVE EFFECTS OF COMPACTION TO THE EXTENT PRACTABLE BEFORE RESEEDING. SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES SUCH AS DETENTION FACILITIES, WATER QUALITY FACILITIES, CULVERTS, STORM DRAINS, AND OUTLET PROTECTION. 		
i. Summary of cut and fill volumes showing how earthwork balances on site.		
j. The City of Castle Pines acceptance block with the following note: THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED AND ACCEPTED BY THE CITY OF CASTLE PINES FOR GRADING, EROSION AND SEDIMENT CONTROL ONLY.		
k. Design Engineer sign off block		

***If variance provide variance request**

City Reviewer Comments: _____

4. Final GESC Drawing Requirements

ITEM	Applicant to complete (Y, N, NA or Variance*)	MS4 Reviewer to complete: (Y, N, NA or Variance)
a. Existing topography in areas of proposed contours need not be shown.		
b. Existing Initial and Interim control measures shall be shown, (Screened) . Dimension information shall not be shown. In addition, the following information shall be shown:		
c. Directional flow arrows on all drainage features.		
d. Any Initial or Interim control measures that are to be removed and any resulting disturbed area to be stabilized.		
e. Location of all Final erosion and sediment control measures, permanent landscaping, and measures necessary to minimize the movement of sediment off site until permanent vegetation can be established		
f. Show limits of building, pavement, sod, and permanent landscaping (define types) per accepted plat, SIP, or other improvement plan.		
g. Show Seeding and Mulching (SM) everywhere except buildings, pavement areas, and permanent landscaping areas.		
h. Show other control measures considered by the Design Engineer to be appropriate		
i. Show the following control measures to be removed at the end of construction: <ul style="list-style-type: none"> • Indicate Dewatering (DW) to be removed • Indicate Temporary Stream Crossing (TSC) to be removed • Indicate Stabilized Staging Area (SSA) to be removed • Indicate Vehicle Tracking Control (VTC) to be removed • Indicate Construction Fence (CF) to be removed 		
j. Include the following notes: <ul style="list-style-type: none"> • SEE COVER SHEET OF THE CITY OF CASTLE PINES GESC STANDARD NOTES AND DETAILS (SHEET 1) FOR LEGEND OF CONTROL MEASURES NAME AND SYMBOLS • SHADED CONTROL MEASURES WERE INSTALLED IN INITIAL OR INTERIM GESC DRAWING AND, UNLESS OTHERWISE INDICATED, SHALL BE LEFT IN PLACE UNTIL REVEGETATION ESTABLISHMENT IS APPROVED BY THE CITY • SEE CONSTRUCTION PLANS FOR DETAILS OF PERMANENT DRAINAGE FACILITIES, CULVERTS, STORM DRAINS AND OUTLET PROTECTION 		
k. The City of Castle Pines acceptance block with the following note:		

THESE CONSTRUCTION DRAWINGS HAVE BEEN REVIEWED AND ACCEPTED BY THE CITY OF CASTLE PINES FOR GRADING, EROSION AND SEDIMENT CONTROL ONLY.		
I. Design Engineer sign off block		

***If variance provide variance request**

City Reviewer Comments: _____

5. GESC Narrative Report Checklist

Note: A Stormwater Management Plan may be submitted in place of the GESC narrative.

ITEM	Applicant to complete (Y, N, NA or Variance*)	MS4 Reviewer to complete: (Y, N, NA or Variance)
a. Name, address, and telephone number of the applicant. The name, address, and telephone number of the Professional Engineer preparing (or supervising the preparation of) the GESC Plan shall also be included, if different from the Applicants.		
b. Project description – A brief description of the nature and purpose of the land disturbing activity, the total area of the site, the area of disturbance involved, and project location including township, range, section, and quarter-section, or the latitude and longitude, of the approximate center of the project.		
c. Existing site conditions – a description of existing topography, vegetation, and drainage; a description of any wetlands on the site; and any other unique features of the property.		
d. Adjacent areas – A description of neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance		
e. Soils – a brief description of the soils on the site including information on soil type and names, mapping unit, erodibility, permeability, hydrologic soil group, depth, texture, and soil structure (this information may be obtained from the soil report for the site, for the adjacent sites if acceptable by the City, or the applicable Soil Survey prepared by the Natural Resources Conservation Service)		
f. Description of vegetation including percent cover/density and methodology for determining coverage.		
g. Areas and volumes – An estimate of the quantity (in cubic yards) of excavation and fill involved (indicating a balance on site), and the surface area (in acres) of the proposed disturbance		
h. Erosion and sediment control measures – A description of the methods presented in the GESC Manual that will be used to control erosion and sediment on the site		
i. Potential Pollutant Sources – the following must be evaluated and stated if source for the project and if so, describe control measures to be utilized.		
o All disturbed and stored soils		

o. Vehicle tracking of sediments		
o. Management of contaminated soils		
o. Loading and unloading operations		
o. Outdoor storage activities (building materials, fertilizers, chemicals, etc.)		
o. Vehicle and equipment maintenance and fueling		
o. Significant dust or particulate generating processes (e.g., saw cutting material, including dust)		
o. Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.		
o. On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)		
o. Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment. <i>Note there must be adequate buffering capacity for excavated washouts.</i>		
o. Dedicated asphalt or concrete batch plants, and masonry mixing stations.		
o. Non-industrial waste sources that may be significant such as worker trash and portable toilets		
m. Description of non-stormwater discharges (including but not limited to construction dewatering and allowable non-stormwater discharges)		
n. Maintenance – Any maintenance requirements over and above what is identified in the GESC Standard Notes and Details		
o. Description of inspection frequency		
p. Material handling: Does the SWMP describe and locate all control measures implemented at the site to minimize impacts from handling significant materials (e.g., paints, concrete, trash, etc.) that could contribute pollutants to runoff?		
q. Spill Prevention and Response Plan - Does the SWMP have a spill prevention and response plan that includes providing secondary containment for 55 gallon or greater bulk storage of petroleum products and other liquid chemicals?		
r. Opinion of Probable Cost for installation and maintenance of controls – An Opinion of Probable Costs for erosion and sediment control, including anticipated maintenance during the construction phase, shall be submitted with the GESC Drawing. This will be reviewed by City staff and used as a basis for fiscal security. A copy of a spreadsheet to be used for preparing the Opinion of Probable Costs for erosion and sediment control is included in Appendix I of the GESC Manual. An electronic copy of the spreadsheet is available from the City of Castle Pines Engineering Division. Unit costs used to develop probable erosion and sediment control costs shall be shown in the spreadsheet		
s. Calculations – Any calculations made for the design of such items as Sediment Basins or Erosion Control Blanket selection		
t. Other information of data – As may be reasonably required by the City of Castle Pines		
u. The following note:		

<p>THIS GRADING, EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PLACED IN THE CITY OF CASTLE PINES FILE FOR THIS PROJECT AND APPEARS TO FULFILL THE APPLICABLE CASTLE PINES GRADING, EROSION AND SEDIMENT CONTROL CRITERIA. ADDITIONAL GRADING, EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED OF THE OWNER OR HIS/HER AGENTS, DUE TO UNFORESEEN EROSION PROBLEMS OR IF THE SUBMITTED PLAN DOES NOT FUNCTION AS INTENDED. THE REQUIREMENTS OF THIS PLAN SHALL RUN WITH THE LAND AND BE THE OBLIGATION OF THE LAND OWNER, OR HIS/HER DESIGNATED REPRESENTATIVE(S) UNTIL SUCH TIME AS THE PLAN IS PROPERLY COMPLETED, MODIFIED OR VOIDED.</p>		
<p>v. Signature Page – For Permittees acknowledging the review and acceptance of responsibility, and a statement by the Professional Engineer acknowledging responsibility for the preparation of the GESC Plan</p>		

***If variance provide variance request**

City Reviewer Comments: _____

Additional City Reviewer Comments: _____

Does the GESC meet the City's requirements?

GESC initial review on:

Date of final acceptance SWMP:

Reviewer's Name:

Reviewer's Signature:

Note: The City of Castle Pines has reviewed the Grading, Erosion, and Sediment Control Plan as part of the above referenced GESC Permit submittal. The GESC was reviewed for local-level purposes, including conformance with the Douglas County GESC Manual and Urban Drainage Storm Criteria Manual (UDSCM) pertaining to erosion and sediment control. Importantly, the GESC was not reviewed for conformance with the Colorado Discharge Permit System (CDPS) general permit for *Stormwater Discharges Associated with Construction Activities* (state stormwater discharge permit); therefore, The City's review does not ensure compliance with the state stormwater discharge permit or the required Stormwater Management Plan (SWMP) contents. Additional control measures may be requested in the field if the reviewed control measures are not adequate for field conditions.