

## Section 1. Introduction

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### Overview of Section 1

#### 1.0

Section 1 addresses the following introductory topics:

Section 1.1, **The GESC and DESC Permits**, introduces the Town of Castle Rock's Grading, Erosion, and Sediment Control (GESC) Permit Program and the Drainage, Erosion and Sediment Control (DESC) Permit Program.

Section 1.2, **Reasons for the Permit**, points out the need to control the high rates of erosion and sedimentation from construction sites in an effort to protect valuable land and water resources.

Section 1.3, **Legislative Mandate**, summarizes how the GESC Permit Program is mandated by legislation, including the Federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Stormwater Phase II Regulations and the Colorado Water Quality Control Act.

Section 1.4, **Projects Requiring a GESC Permit**, indicates the types of land-disturbing activities within the Town of Castle Rock that require a GESC Permit.

Section 1.5, **Types of GESC Permits**, identifies the following three types of GESC Permits issued by the Town and describes the projects they apply to:

1. *Low Impact GESC Permit,*
2. *Temporary Batch Plant/GESC Permit, and*
3. *Standard GESC Permit.*

The Temporary Batch Plant and Standard GESC Permit are addressed in **Sections 2 through 6** of the *GESC Manual*. The Low Impact GESC Permit is covered in **Section 7**.

Section 1.6, **Who Obtains a GESC Permit**, states that the Property Owner and Contractor, together referred to as "Applicants" before a GESC Permit is issued and "Permittee(s)" afterwards, are the parties who sign the GESC Permit Application form and are legally responsible for complying with the requirements of the GESC Permit.

Section 1.7, **What Steps are Included in the GESC Permit Process?**, outlines the 20 steps involved in the Temporary Batch Plant and Standard

***The Permit Steps.*** Each of the 20 steps in the Temporary Batch Plant and Standard GESC Permit Process is highlighted in Section 2 through Section 6 of the *GESC Manual*. The 10 steps in the Low Impact GESC Permit Process are highlighted in Section 7. Each step is shown in a blue box that looks just like this. A header is provided on each page identifying the step currently being addressed.

GESC Permit Process.

Section 1.8, **Authorization of the *GESC Manual***, states that the *GESC Manual* is authorized by passage and adoption of an ordinance by the Town Council. This section discusses the interpretation and enforcement of the GESC Permit requirements described herein.

**Grading,  
Erosion, and  
Sediment Control  
and  
Drainage,  
Erosion, and  
Sediment Control**



*Rates of erosion increase dramatically during construction.*

**The GESC  
and DESC  
Permits**

**1.1**

The Town of Castle Rock has two permitting programs for erosion and sediment control on public and private construction projects within the limits of the Town. The Drainage, Erosion and Sediment Control (DESC) program covers residential construction on individual lots. The Grading, Erosion and Sediment Control (GESC) program covers all other development and construction projects. This GESC and DESC manual (commonly known as the GESC manual) describes the permitting programs that have been adopted to promote environmentally-sound construction practices in the Town.

**Terminology**

*The Grading, Erosion, and Sediment Control Permit is termed simply the “GESC” Permit for short (“GESC” has a hard “g” and is pronounced like “desk”). The Drainage, Erosion and Sediment Control Permit is termed the “DESC” Permit for short.*

**Reasons for  
the GESC  
and DESC  
Permits**



*Nutrients associated with eroding sediments can lead to undesirable algae blooms.*

**1.2**

The goal of the GESC and DESC Permit Programs is to implement effective erosion and sediment control Best Management Practices (BMPs) as a standard for all land disturbance activities to reduce increases in erosion and sedimentation over pre-development conditions. During the relatively short period of time when undeveloped land is converted to urban uses, a significant amount of sediment can erode from a construction site and be transported to adjacent properties and receiving waters. Erosion caused by construction and downstream sedimentation can damage property and degrade the quality of streams and lakes. Sediment is a transport mechanism for many stormwater pollutants.



*Eroded sediment can clog downstream receiving waters.*

Sediment can disturb riparian and aquatic habitat and, since eroded sediments often contain significant phosphorus, can lead to unwanted algae growth in lakes and reservoirs.

**Legislative  
Mandate**

**1.3**

**1.3.1 NPDES Regulations.** The development, implementation, and enforcement of the Town of Castle Rock GESC Permit Program is mandated by both the Federal Government and the State of Colorado. The Federal Clean Water Act's National Pollutant Discharge Elimination System (NPDES) Stormwater Regulations require that stormwater discharges from certain types of facilities be authorized under discharge permits (40 C.F.R., 122.26). The goal of the NPDES stormwater permits program is to reduce the amount of pollutants entering streams, lakes, and rivers as a result of stormwater runoff from residential, commercial, and industrial areas.

The original 1990 regulation (**Phase I**) covered municipal (i.e., publicly-owned) storm sewer systems for municipalities over 100,000 population. The regulation was expanded in 1999 to include smaller municipalities, as well as some counties, including the Town of Castle Rock. This expansion of the program is referred to as **Phase II**.

In Colorado, stormwater discharge permits are issued by the Colorado Department of Public Health and Environment, Water Quality Control Division ("Division"). Such permits are part of the Colorado Discharge Permit System, or CDPS, under Regulation No. 61. Regulation No. 61 was promulgated to assist the Division in implementing its stormwater permits program. The Phase II municipal separate storm sewer systems (MS4s) are covered under a general permit for stormwater discharges from MS4s. As per the Division's regulation, the main requirement of this general permit will be for the Town of Castle Rock to develop and implement six stormwater management programs, or minimum control measures. One of these six measures is **construction site storm-water runoff control**.

Regulation No. 61 states that the Town must "develop, implement, and enforce a stormwater management program designed to reduce the discharge of pollutants from lands in the Town to the Maximum Extent Practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the Colorado Water Quality Control Act (CWQCA) (Colorado Code of Regulations (CCR) 61.8(11)(a)(i))."



*Control of construction site erosion in the Town of Castle Rock is mandated by Federal and State law.*

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### **Legislative Mandate, continued**

In short, the Town must develop a stormwater management program that meets the requirements of the six minimum control measures and protects state waters from pollution, contamination, and/or degradation.

### **Requirements of the Colorado Water Quality Control Act (CCR 61.8(11)(a)(ii)(D))**

#### **The Town of Castle Rock is required to:**

*“...develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of pollutants in stormwater discharges from construction activity disturbing less than one acre must be included in the program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more. The program must be developed and implemented to assure adequate design, implementation, and maintenance of best management practices (BMPs) at construction sites within the MS4 (Town of Castle Rock) to reduce pollutant discharges and protect water quality. The program must include the development and implementation of, at a minimum:*

- ◆ *An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State or Local law;*
- ◆ *Requirements for construction site operators to implement appropriate erosion and sediment control BMPs;*
- ◆ *Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;*
- ◆ *Procedures for site plan review which incorporate consideration of potential water quality impacts;*
- ◆ *Procedures for receipt and consideration of information submitted by the public; and*
- ◆ *Procedures for site inspection and enforcement of control measures.”*

#### **The GESC Permit Program complies with these requirements.**

**1.3.2 Cherry Creek Reservoir Control Regulation No. 72.** In addition to the CDPS program requirements, the Town of Castle Rock is responsible for complying with Cherry Creek Reservoir Control Regulation No. 72, promulgated by the Division pursuant to the CWQCA, Sections 25-8-202(1)(c) and 25-8-205, *et seq.*, CRS. This regulation, affecting the eastern part of Castle Rock within the Cherry Creek Watershed, identifies specific requirements for erosion and sediment control BMPs on construction sites, including placing limits on the area of land that can be disturbed at any one time. The intent of the regulation is to protect the water quality of Cherry Creek Reservoir.

**1.3.3 Chatfield Reservoir Control Regulation No. 73.** The Town of Castle Rock is also responsible for complying with Chatfield Reservoir Control Regulation No. 73, promulgated by the Division pursuant to the CWQCA, Section 25-8-205, *et seq.*, CRS. This regulation applies to the Plum Creek Watershed and requires the Town of Castle Rock to implement construction erosion and sediment control BMPs.

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### **Projects Requiring a GESC Permit**

#### **1.4**

**1.4.1 Projects that Require a GESC Permit.** The Town of Castle Rock requires that a GESC Permit be obtained prior to the start of the following land-disturbing activities within the Town:

#### **Projects Requiring a Standard GESC Permit**

- ◆ *New development and redevelopment, including residential projects. (Refer to Section 8 for Residential DESC Permitting)*
- ◆ *Installation of utility lines in excess of 1000 linear feet. (outside of the Town Right-of-Way).*
- ◆ *Installation of utilities for a new development, prior to the start of overlot clearing or grading.*
- ◆ *Any clearing, grubbing, grading or filling operations located within 100 feet of a drainageway.*
- ◆ *Fill or excavation of 50 or more cubic yards of material, not related to building of a detached single family residential unit.*
- ◆ *Mining projects, even when subject to a State mining permit.*
- ◆ *Drilling sites, excluding wells that serve a stand-alone detached single-family residential unit.*
- ◆ *Temporary batch plants.*
- ◆ *Any project that the Town determines to have a potential impact to the health, safety and welfare of people and/or the environment.*

**1.4.2 Projects that Do Not Require a GESC Permit.** Some types of projects, listed below, are automatically exempt from the GESC Permit Program.

#### **Projects that Do Not Require a GESC Permit**

- ◆ *Routine agricultural practices, including tilling, planting, harvesting, or livestock operations. (Activities not considered as routine agricultural practices, and therefore requiring a GESC Permit, include land grading and work in or adjacent to streams and drainage channels.)*
- ◆ *Pavement repair, resurfacing, graveling, or re-grading that does not materially change the original vertical or horizontal alignment or original width of public and private roadways and drive-ways. (Although a GESC Permit is not required, erosion and sediment control BMPs and a Right-of-Way Use and Construction Permit, for public roadways are required.)*
- ◆ *Emergency situations that pose an imminent risk to life or property, such as hazardous waste clean-up operations and fire.*
- ◆ *Livestock grazing.*
- ◆ *Mowing.*
- ◆ *Weed control.*
- ◆ *Burning.*
- ◆ *Irrigation and associated activities (including: operation and maintenance of irrigation facilities; ditch maintenance and pumping; and maintenance, operation and construction of diversions and headgate structures).*
- ◆ *Fencing and maintenance of existing fencing.*
- ◆ *Routine maintenance activities that are performed to maintain the original line and grade, hydraulic capacity, or original purpose of constructed ditches, constructed channels and constructed ponds.*

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### **Projects Requiring a GESC Permit, continued**

**Important!** *The projects shown that do not need a GESC Permit are not free from the obligation to control erosion and sediment; BMPs shall still be required in accordance with the information shown in the GESC Manual.*

The projects shown that do not need a GESC Permit are not free from the obligation to control erosion and sediment; BMPs shall still be required in accordance with the information shown in the *GESC Manual*.

#### **1.4.3 Projects Covered Under Other Permits.**

GESC Permits are required for projects meeting the criteria identified herein even if a Federal or State agency or another jurisdiction has approved the project and issued a permit for the work. Examples include mining projects possessing a State mining permit and projects for which a Nationwide or Individual Section 404 Permit has been obtained from the Corps of Engineers.

*The Town of Castle Rock GESC Permits are required even for projects covered under a State or Federal permit.*

#### **1.4.4 Permitting for Residential Projects.**

Three Town divisions have authority over the construction of residential projects. The Utilities Department, through the GESC Permit Program, and the Public Works Department, through the Construction Permit Program, act as the regulatory authorities for the project from the start of grading operations through Initial Close-out Acceptance (discussed in Section 6). When a phase or project is issued Initial Close-out Acceptance by the Town's GESC and Public Works Inspectors, the GESC Permit remains in effect until final close-out acceptance (after vegetation is established) for that phase or project. New disturbances associated with residential lot construction are required to be permitted through the residential Drainage, Erosion and Sediment Control (DESC) Program. The Utilities Department, through the Stormwater Engineering Division, acts as the DESC regulatory authority through the construction of residential properties. The developer, owner or builder follows the guidelines as set forth in Sections 2 and 8 of this manual.



*A DESC Plan is required for construction of residential units.*

Often, a stand-alone detached single-family residential unit is not required to obtain a GESC Permit and is regulated only by the Town's DESC program. However, the Town, on a case-by-case basis, may require a GESC Permit for these projects if it is determined that the site issues involved merit the engineering oversight that comes with a GESC Permit. If a GESC Permit is required, regulatory authority resides with the Utilities Department.

GESC Permits are issued through the Development Services Department, then are turned over to the Utilities Department for inspection and close-out.

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### Projects Requiring a GESC Permit, continued

### Types of GESC Permits

*The permit applications for the Temporary Batch Plant, Standard, and Low Impact/ GESC Permits are provided in Appendices J, K, and M, respectively.*

### Who Obtains a GESC Permit?

Attached single-family and multi-family residential projects are subject to the regulatory authority of the Utilities GESC Permit Program from the start of grading operations through Final Close-out Acceptance (discussed in Section 6). Refer to Sections 2 and 8 for details regarding the DESC Program.

#### 1.5

The following three types of GESC Permits are issued by the Town of Castle Rock:

1. *Low Impact GESC Permit,*
2. *Temporary Batch Plant/GESC Permit, and*
3. *Standard GESC Permit.*

**i** **Low Impact GESC Permits have a streamlined permitting and inspection process as described in Section 7**

**Information**

**1.5.1 Low Impact GESC Permit.** Some land-disturbing activities may have a negligible negative impact on adjacent properties and downstream receiving waters. For projects with a disturbed area less than one acre that do not require re-establishment of native vegetation and where insignificant negative impact can be adequately demonstrated to the Town, streamlined submittal requirements apply. If, after reviewing the submitted information, Town staff concur that there is low impact, a Low Impact GESC Permit will be designated for the project.

#### 1.5.2 Temporary Batch Plant/ GESC Permit.



*A Temporary Batch Plant requires its own GESC Permit.*

Because of their potential impact on land, vegetation, and receiving waters, temporary batch plants require a Temporary Batch Plant/GESC Permit (even if the plant is to be located inside the limits of construction of a GESC-permitted project).

In addition to other submittal documents, the Temporary Batch Plant/ GESC Permit requires a copy of the Lease

Agreement between the Property Owner and the Batch Plant Operator.

**1.5.3 Standard GESC Permit.** A Standard GESC Permit is required for all of the land-disturbing activities identified in Section 1.4.1 other than the activities qualifying for a Low Impact GESC Permit or a Temporary Batch Plant/GESC Permit.

#### 1.6

Typically, GESC Permits are signed by both the Project Owner and the Contractor. Prior to issuance of a GESC Permit, the Owner and the Contractor are referred to as "Applicants". After the Permit is issued, both are considered "Permittee(s)".

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### ***Who Obtains a GESC Permit?, continued***

A Permittee is defined as “any person who is issued a GESC Permit by the Town”. The Permittee(s) shall be legally responsible for compliance with the GESC Permit. If an Applicant is a corporation, a manager or officer of the corporation or other authorized person must sign the permit as the Permittee.

Permittee(s) (Owners and Contractors) undertaking land-disturbing activities are responsible for meeting all of the requirements of the Town’s GESC Permit Program that are summarized in Section 1.5 and described in detail within the *GESC Manual*. Failure to meet the requirements of the GESC Permit may lead to enforcement action, as described in Section 5.

**Important!** *Failure to meet the requirements of a GESC Permit may lead to enforcement action against the Permittee(s).*

### ***What Steps are Included in the GESC Permit Process?***

#### **1.7**

A flow chart of the Town’s Development Review Process is shown on Figures 1-1. The 20 Steps involved in the Town’s GESC Permit Process for the Temporary Batch Plant and Standard GESC Permits are shown in Figure 1-2.

***Each page of Sections 2 through 7 of the GESC Manual provides a header (appearing at the top right side of the page) identifying the Permit Step currently being addressed. An overview page at the beginning of each section summarizes the GESC Permit Steps covered in the section and relates each subsection to one of the GESC Permit Steps.***

The Ten Steps involved in the Low Impact GESC Permit are outlined in Section 7.

Although the GESC Permit Process is organized into the distinct steps shown in the flowcharts, the process as a whole is intended to be dynamic, responding to individual site conditions to provide effective erosion and sediment control during construction.

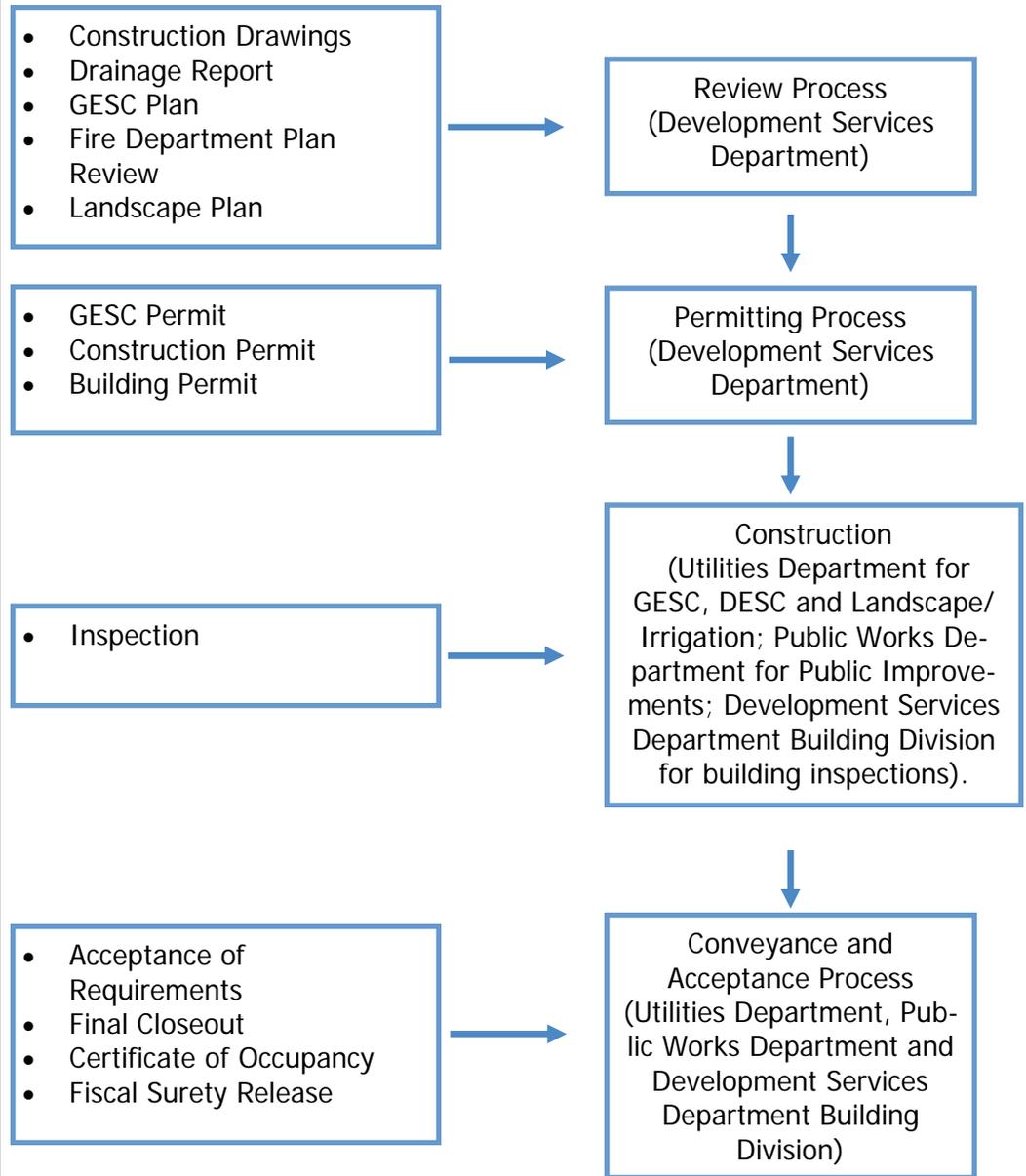


**Information**

*The GESC Permit Process is a dynamic, not static, process. The Permittee(s) are responsible to adapt the original GESC Plan so as to effectively reduce erosion and sediment and comply with any modifications to the GESC Plan required by the Town of Castle Rock.*

*Stages of Development Process*

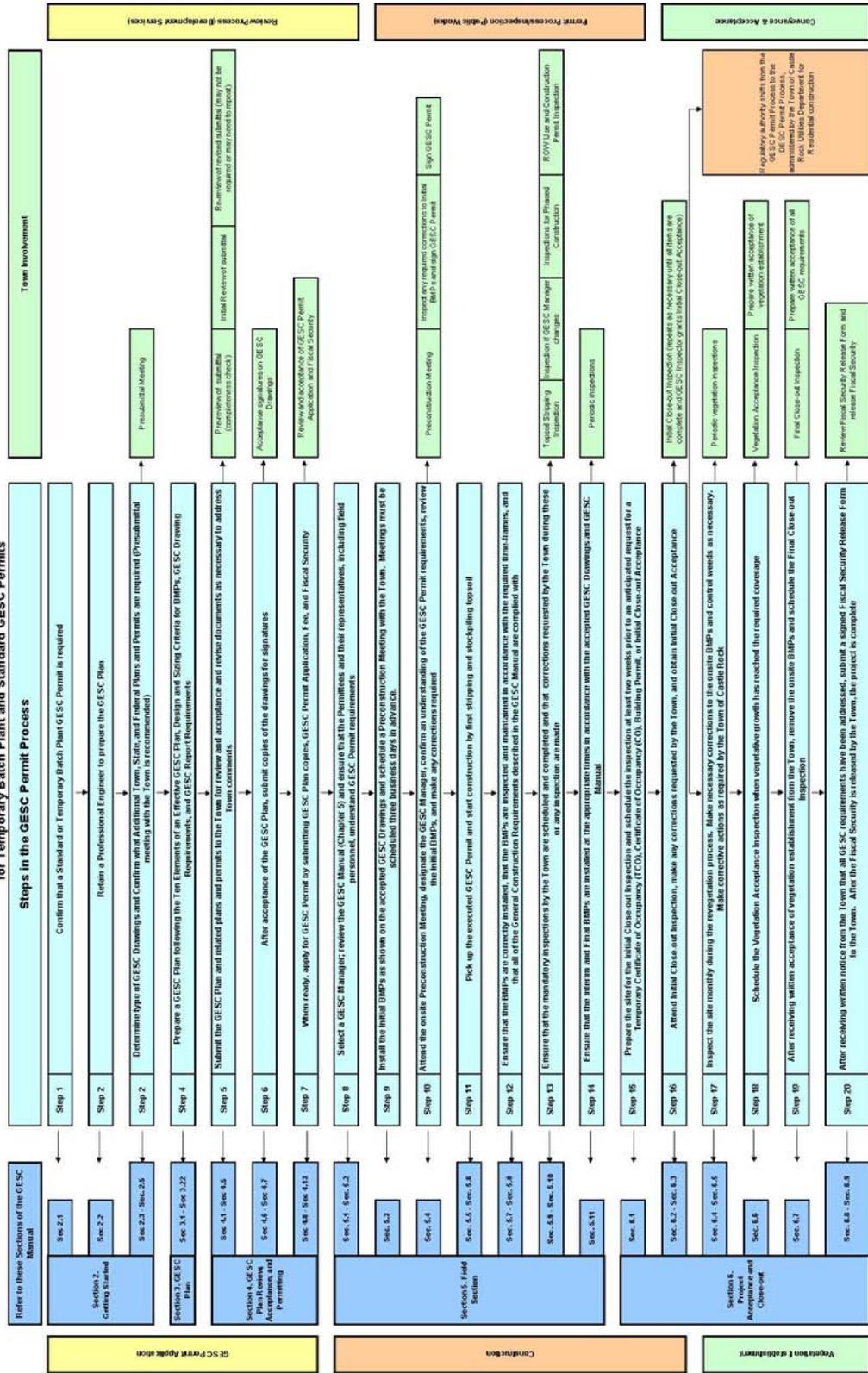
**Town of Castle Rock  
Stages of Development Process  
Figure 1-1**



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Figure 1.2  
TOWN OF CASTLE ROCK GESC PERMIT PROCESS  
for Temporary Batch Plant and Standard GESC Permits



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### ***Authorization of the GESC Manual***

#### **1.8**

The *GESC* and *DESC Manual* is authorized by the Town of Castle Rock Town Council through **Ordinance #2015– 23** adopting the Town of Castle Rock Grading, Erosion and Sediment Control (*GESC*) Manual as a primary code and repealing certain provisions of the Town’s *Public Works Regulations*.

**1.8.1 Jurisdiction.** The *GESC* Permit Program shall apply to all land within the limits of the Town of Castle Rock.

**1.8.2 Amendments and Revisions.** These policies and criteria may be amended and revised as new technology is developed and experience is gained. The Town Council, following the recommendations of the Town Utilities Director, may consider such amendments and revisions. Minor revisions that do not affect policy may be made without the action of the Town Council.

**1.8.3 Enforcement Responsibility.** The Town Council, acting through the Development Services, Utilities and Public Works Departments, shall enforce the provisions of the *GESC Manual*.

**1.8.4 Review and Acceptance.** The Town Development Services Department will manage the review of all *GESC* Plan submittals for general compliance with these criteria contained herein. An acceptance by the Town does not relieve the Permittee(s) or Design Engineer from responsibility of ensuring that calculations, plans, specifications, construction and as-built drawings are in compliance with the criteria contained herein. Additionally, acceptance by the Town of Castle Rock does not alleviate the Permittee(s) or Design Engineer from complying with all other applicable Federal, State, or Local laws and regulations.

**1.8.5 Interpretation.** In the interpretation and application of the provisions of this *GESC Manual*, the following shall govern: These provisions shall be regarded as the minimum requirements for the protection of the public health, safety, comfort, convenience, prosperity, and welfare of the residents of the Town. The *GESC Manual* shall therefore, be regarded as remedial and shall be liberally construed to further its underlying purposes.

Whenever a provision in these criteria and any other provision of the Town of Castle Rock Municipal Code or any provision in any law,



*The GESC Permit Program is designed to fulfill a legislative mandate and significantly reduce construction erosion.*

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### *Authorization of the GESC Manual, continued*

ordinance, resolution, rule or regulation of any kind, contain any restrictions covering any of the same subject matter, **whichever are more restrictive or impose higher standards shall govern.** In the event

that there is a discrepancy in the interpretation of the *GESC Manual*, the Town Utilities Director shall have the final determination of the intent of the *GESC Manual*. Should a person disagree with a final determination by the Director, a written appeal may be submitted to the Town. If the Utilities Commission denies the appeal, the applicant can appeal to Town Council for a final ruling.

The *GESC Manual* shall not abrogate or annul any permits or accepted drainage reports and construction plans issued before the effective date of the *GESC Manual* or any easement or covenant.

**1.8.6 Relationship to Other Standards.** If special districts impose more stringent criteria, differences are not considered conflicts. When differences arise, the more stringent requirements shall apply. If the Federal or State government imposes stricter criteria, standards or requirements, these shall be incorporated into the Town's requirements after due process and public hearing(s) needed to modify Town regulations, standards, and ordinances.

*The GESC Manual shall be considered minimum requirements and the Town of Castle Rock reserves the right to apply more stringent criteria. Additionally, the Town reserves the right to change, modify, or alter these requirements at any time.*