## Groundwater Dewatering System Permitting Requirements

| Authority: | Denver Revised Municipal Code (D.R.M.C.) of the City and County of Denver, Chapter 56, Sections 56-111 and 56-102 (h). |
| Purpose: | The regulation of groundwater dewatering systems in order to protect public and private property. |
| Document Date: | May 25, 2016 |
| Customer Interface: | Permits are issued by Wastewater Permits: wastewaterpermits@denvergov.org or 720-865-3060. Enforcement of dewatering system compliance is performed by Neighborhood Inspection Services (NIS): Building.Inspectionservice@denvergov.org or 720-865-2505. |
| Definition: | A groundwater dewatering system is defined as a foundation perimeter drain or similar system that experiences continuous or semi-continuous discharge of groundwater. |
| Permitting Requirements: | A Sewer Use and Drainage Permit (SUDP) must be obtained for any proposed groundwater dewatering system. The SUDP Application may be found here: [https://www.denvergov.org/content/denvergov/en/denver-development-services/help-me-find-/sewer-use-and-drainage-permits.html](https://www.denvergov.org/content/denvergov/en/denver-development-services/help-me-find-/sewer-use-and-drainage-permits.html). Please be sure to mark the “Groundwater Dewatering System” check box when completing the SUDP Application. 

The SUDP submittal must include a Groundwater Management Plan, prepared by a geotechnical engineer licensed in the State of Colorado, and must include the following:

a) existing groundwater depth (Must be current within 6 months of application date)  
b) anticipated post-construction groundwater depth  
c) anticipated frequency of discharge  
d) designed discharge rate (in gallons per minute or cubic feet per second), not to exceed the maximum allowable rate as defined below in the discharge criteria  
e) plans and details of the system, in conformance with the GROUNDWATER DISCHARGE CRITERIA (see below).  
f) a recorded Groundwater Dewatering System notification, informing all future owners of the property that a groundwater dewatering system is present and that maintenance is necessary in order to ensure proper functioning of the system. The applicant must submit a draft of the notification document to the SUDP reviewer for review and approval. Upon approval, the applicant must record the approved notification with Denver's Clerk and Recorder's office and provide a copy of the recorded document to the SUDP reviewer prior to SUDP issuance. |

| Criteria: | GROUNDWATER DISCHARGE CRITERIA: 

Groundwater Discharge Methods: All pumped groundwater must discharge either (A) to a storm sewer system via an underground hard-piped system, (B) to a drywell, or (C) to the surface within the property. Whichever method is chosen, no discharge will be allowed to cross the property lines and impact adjacent private property or the public Right-of-Way, except the installation of a hard-piped system within public Right-of-Way as approved by Public Works. If the requirement for no impact to adjacent property or Right-of-Way cannot be met using any of the approved methods, a groundwater pumping system may not be installed, and the depth of the foundation shall be designed so that it will be above the water table for the life of the structure, or the foundation shall be designed to allow for a high water table without the need to dewater. 

A) Discharge of groundwater to a storm sewer system 

If an existing public storm sewer or major drainage channel is located in close proximity, the sump pump may discharge directly to the public storm sewer system, and must be in a manner acceptable to Public Works. Depending on the site, this might require connection to a public pipe, manhole, inlet, box culvert, or open channel. Or, this might instead involve obtaining permission to connect to and discharging to a private storm sewer then discharges to a public system. Discharge rate to a public storm sewer system may not exceed 0.50 cubic feet per second (224.4 gallons per minute). 

B) Discharge of groundwater to a drywell  

The groundwater dewatering system may discharge to a drywell, as long as it is demonstrated that the design will not result in surface flows to any adjacent property or public Right-of-Way or cause a rise in... |
the water table of neighboring property, for the duration of the life of the structure. An example drywell detail, including certain minimum requirements, is shown below.

C) Discharge of groundwater to the surface
The groundwater dewatering system may discharge to the surface, as long as it is demonstrated that the design will not result in surface flows to any adjacent property or public Right-of-Way for the duration of the life of the structure.

Storm Water: No storm water shall be allowed to enter a groundwater dewatering system. Storm water shall be discharged from the property by alternate means that meet Wastewater requirements and standards for storm drainage. For example, roof drains may not discharge from the property through this system, and downspouts/splash blocks shall be designed in a way to minimize this storm water from reaching the underground building perimeter drain. Exception: Overflow drains within non-hardscaped window wells may drain to the groundwater dewatering system.

Sanitary Sewer: In no case may ground water be discharged to the sanitary sewer system.

Fees:
- Checks are to be made payable to Manager of Finance.
- Application fee: $100.00, collected at time of permit issuance.
- Required Inspections: $55.00 each, collected at time of permit issuance.
- Sanitary connection fees will be calculated according to the current Public Works Wastewater fee schedule. Fee schedule can be located at Development Services/SUDP.