

City of Alexandria, Virginia

MEMORANDUM

MEMORANDUM TO INDUSTRY NO. 23-02

ISSUED DATE: MARCH 1, 2023

EFFECTIVE DATE: APRIL 1, 2023

TO: DEVELOPERS, ARCHITECTS, ENGINEERS, AND SURVEYORS

FROM: WILLIAM SKRABAK, DEPUTY DIRECTOR,
INFRASTRUCTURE AND ENVIRONMENTAL QUALITY,
TRANSPORTATION AND ENVIRONMENTAL SERVICES

SUBJECT: NEW DEVELOPMENT REQUIREMENTS FOR THE
COMBINED SEWER SERVICE AREA

APPLICABILITY

For all Concept 1 plans or initial grading plans submitted prior to April 1, 2023, the requirements of Memo to Industry 07-14 shall apply. All Concept 1 plans submitted after April 1st shall meet the requirements herein.

DESCRIPTION OF THE COMBINED SEWER SYSTEM (CSS)

The City of Alexandria (City) owns and operates a collection system as part of a combined sewer system (CSS) serving an area of about 540 acres, which is primarily located east of the railroad corridor and centered in Old Town, Alexandria (Figure 1). The City's CSS is divided into three separate CSS areas: King and West, Royal, and Pendleton as shown on the figure. There are three components of flow in the CSS, municipal wastewater (sanitary sewage), groundwater, and stormwater runoff. During dry weather, sanitary sewage collected and intermittent sump pump discharge of groundwater from homes and business in these CSS areas are conveyed to the Alexandria Renew Enterprises (AlexRenew) Water Resource Recovery Facility (WRRF). During wet

weather periods stormwater runoff is further introduced to the pipe network and the capacity of the CSS may be exceeded with excessive non-wastewater flows. The excess flow, which is a combination of stormwater runoff, groundwater, and sanitary sewage, is discharged directly into Hunting Creek, Hooff's Run or Oronoco Bay; that eventually discharge to the Potomac River through the AlexRenew's four permitted combined sewer outfalls. These outfalls are regulated under the AlexRenew Virginia Pollutant Discharge Elimination System (VPDES) Permit as point source discharges of combined sewer overflow (CSO) from the CSS: Pendleton Street CSO (Outfall 001), Royal Street CSO (Outfall 002), and King and West/Hooff's Run (Outfall 003 and Outfall 004). The City has an agreement with AlexRenew through its Sewer Service Agreement to operate the CSS in compliance with the requirements of the VPDES Permit.

BACKGROUND AND PURPOSE

In 2017, the General Assembly passed legislation that required the City of Alexandria to significantly reduce combined sewer discharges by July 1, 2025 (CSO Law). Following the approval of a Long Term Control Plan which identified projects to meet the CSO Law, the City transferred ownership of its four combined sewer outfalls to AlexRenew. AlexRenew is currently implementing the Long Term Control Plan as part of its RiverRenew program.

The purpose of this Memorandum to Industry is to present the City's CSS Management Policy related to development and redevelopment in the combined sewer area. This policy has been developed to minimize the environmental impacts of CSOs on the receiving waters and to comply with the AlexRenew VPDES permit. This memo provides a path for developers to follow for projects located in the CSS area. The requirements related to development/redevelopment projects in the CSS are presented below.

EXCEPTIONS

The following exceptions only apply to the CSS Management Policy stated in this Memorandum to Industry. All other requirements related to development/redevelopment shall be adhered to.

1. Single family residence not part of a larger redevelopment project.
2. Addition to an existing property that does not increase the amount of wastewater and construction or grading operations or both that do not disturb more than 2,500 square feet of land area.

CSS MANAGEMENT POLICY REQUIREMENTS

The goal of the Combined Sewer System Management Policy is to minimize the impact of combined sewer discharges to the environment. All new development and/or redevelopment projects (not listed in Exceptions) shall be required to implement the Combined Sewer System Management Policy. All applicants will be required to provide onsite separation and implement Option A when connection to a fully separate sewer system is available. Other options will be available if separation is not available or feasible as determined by the Director of Transportation and Environmental Services (T&ES). The requirements are as follows for both wastewater and non-wastewater flows:

Wastewater Flows

- Option A (preferred option): All sanitary sewage from the redevelopment site shall discharge to a fully separated sanitary sewer system (i.e., does not discharge to a combined sewer downstream) if such a system is available as determined by the Director of T&ES. If the developer is able to separate additional offsite areas (either upstream or downstream from the project site), then a credit will be applied to the sewer connection fees per Section 5-6-25.1 of City Code of Ordinances. If this difference is greater than the sewer connection fee, then the sewer connection fee will be waived, and no additional credit or payment will be provided by the City.
- Option B (if Option A is not achievable):

- Provide for offsite separation of sanitary sewers to the satisfaction of the Director of T&ES. The number of units (or non-residential equivalent) separated must be at least the same as the proposed development. City Staff will work with the developer (or developer's representative) to determine which option is most practicable, or;
- Pay a contribution in lieu of offsite separation:
Sanitary Fee = \$1.50 x peak wastewater flow in gallons**
***Peak wastewater flow calculated using flow factors from the Sanitary Sewer Adequate Outfall Memo to Industry No. 06-14*

Non-Wastewater Flow – Stormwater Runoff

- Option A (preferred option): All stormwater from the redevelopment site shall discharge to a fully separated storm sewer system (i.e., does not discharge to a combined sewer downstream) if such a system is available as determined by the Director of T&ES.
- Option B (if Option A is not achievable): Reduce the amount of the stormwater runoff into the CSS by 10 percent for the 10-year 24-hour design storm (i.e., post-development peak runoff equal to or less than 90 percent of the peak runoff for the pre-development condition).

Non-Wastewater Flow – Groundwater

If it is not feasible to make buildings watertight to require no sump pump discharges, then the following requirements will be met for such development projects.

- Option A (preferred option): For projects that require sump pump discharge of groundwater flow, the flow shall be connected to a fully separated storm sewer system if such a system is available as determined by the Director of T&ES.
- Option B (if Option A is not achievable): Provide additional stormwater detention to accommodate the peak flow of groundwater discharge (i.e., post-development

peak combined non-wastewater flow equal to or less than the peak stormwater runoff for the pre-development condition).

Note that there shall be no sump pump discharges of groundwater into stormwater BMPs (Best Management Practices), and the sump pump discharge of contaminated groundwater shall be pretreated to eliminate pollutants or reduce the amount of pollutants to a less harmful state prior to being discharged into the city's sewer system.

FOR ADDITIONAL INFORMATION

If you have any questions about the CSS Management Policy, please contact Erin Bevis-Carver, Division Chief, Sanitary Infrastructure Division, T&ES at 703-746-4154.

Attachments: Figure 1. Map of Combined Sewer System

