Stormwater Planning and Permitting - Southview Subdivision

Keep up to date on the proposed stormwater improvements necessary to comply with stormwater regulations for Southview in Richmond, VT.

February 28, 2025

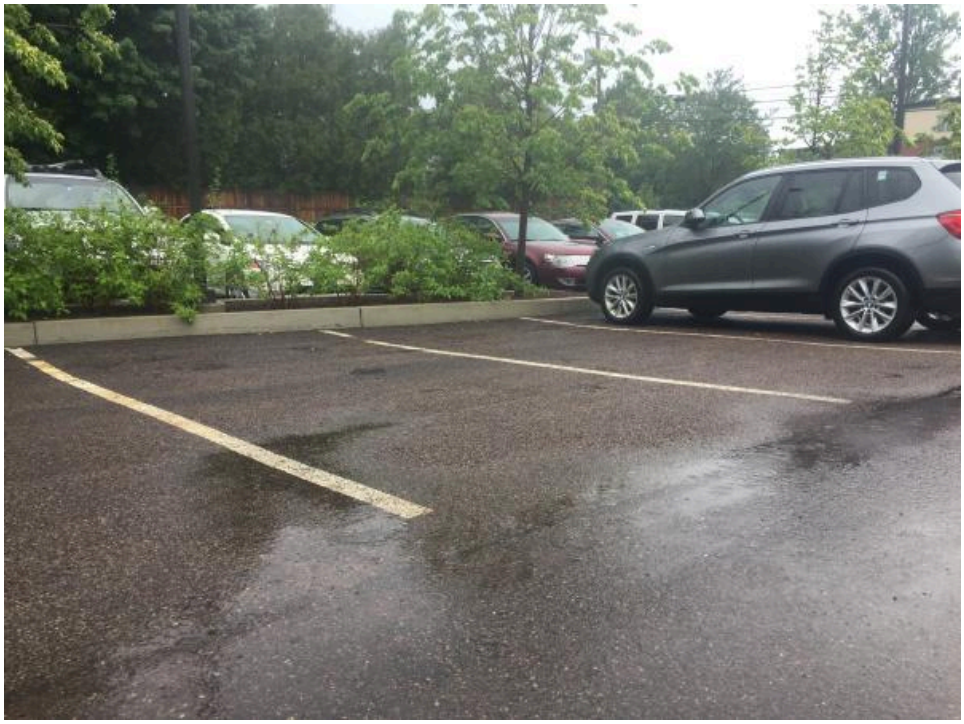
Introduction

In 2020, the State of Vermont issued the "3-acre permit" in an effort to clean up and protect local surface waters by targeting sites with three or more acres of impervious surfaces, including residential developments and commercial sites. Impervious surfaces are those areas that do not allow water to sink into the ground such as roads, parking lots, rooftops, and driveways. Within the Town of Richmond, there are a number of 3-acre sites that must now comply with the 3-acre permit. This means that the sites must make stormwater improvements to comply with the stormwater General Permit 3-9050.

The Southview Subdivision is a 3-acre site with 48 residential properties. The Town is working with Watershed Consulting and their subconsultants to complete the necessary planning and design work to comply with these new State regulations under the 3-acre permit. This work includes analysis to determine how much runoff is occurring and identifying and locating a suite of stormwater best management practices. Additional information on the Southview Subdivision project can be found under the General Project Information and Next Steps sections.

The Town of Richmond understands that these new requirements are complex and may come as a surprise to many homeowners. They are working diligently to commission the necessary work to comply with these State regulations. For more information on the 3-acre permit, please see the General Permit 3-9050 section below.

General Permit 3-9050



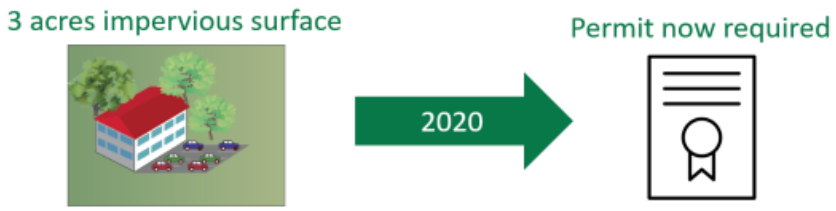
Impervious surfaces such as parking lots do not allow water to sink into the ground as it would in an undeveloped area.

"3-acre Permit"

Issued on September 1, 2020, General Permit 3-9050 is a Vermont state permit for stormwater runoff from impervious surfaces.

This permit was an important part of the Vermont Clean Water Act of 2015 (Act 64) and intends to help clean up Lake Champlain, Lake Memphremagog, and other stormwater-impaired surface waters. It also intends to protect Vermont's high quality surface waters.

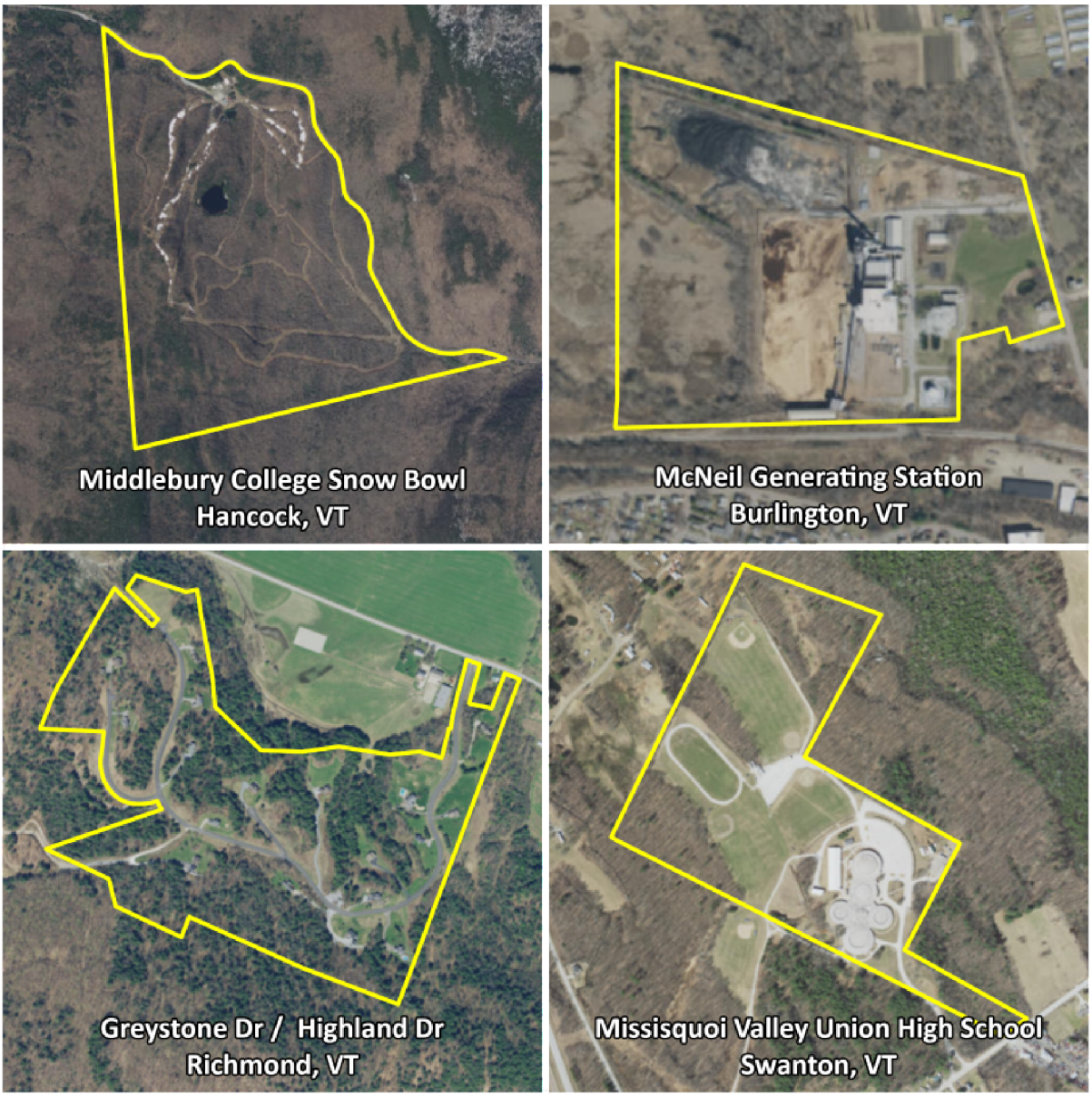
The permit applies to parcels that have 3 or more acres of impervious surfaces that lack a current stormwater permit that meets the 2002 or 2017 Vermont Stormwater Management manual requirements. For this reason General Permit 3-9050 is often referred to as the "3-acre permit". More information on the 3-acre permit can be found on the VT ANR website.



Vermont's 3-acre sites

Vermont has "3-acre sites" spread across the state. **682 of these sites are within the Lake Champlain basin**.

Land use for these sites varies significantly. Some 3-acre sites are smaller parcels with a high percentage of impervious surfaces (e.g., shopping centers or industrial sites). Others are much larger parcels with more distributed impervious surfaces that, in total, amount to three of more acres (e.g., ski areas or cemeteries). Residential, commercial, and industrial developments that were constructed under a stormwater permit issued prior to 2002 are considered 3-acre sites if they collectively have more than 3 acres of impervious surfaces, even if the parcel was later subdivided. This is the case with the Southview subdivision.



Examples of various 3-acre sites throughout Vermont

Project Overview

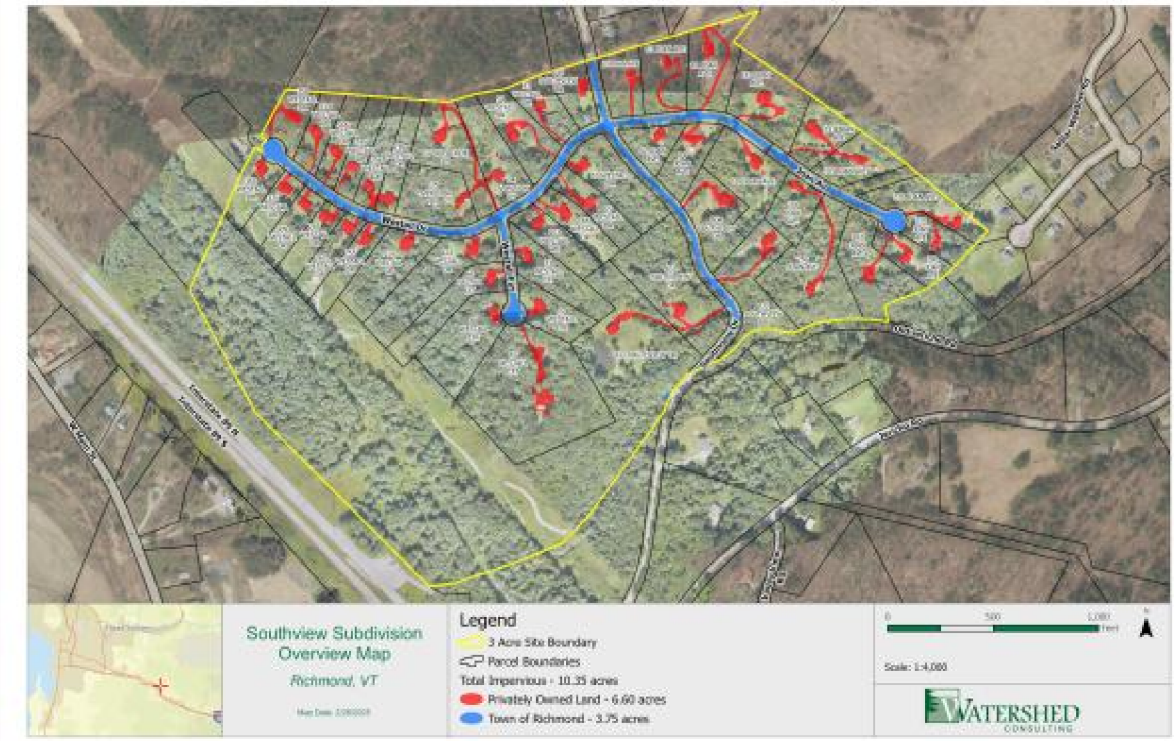
The Southview Subdivision is a residential 3-acre site consisting of 48 privately owned residential properties spread throughout the middle section of Southview Drive, Westall Drive, Westall Extension, Overlook Lane, and Joan Avenue. The corresponding roads are included as well. A map of the 3-acre site is provided below.

Drone imagery collected in August 2023

The 3-acre site boundary shown on the map was confirmed by the State in December 2024.

The site has a total of 10.35 acres of impervious surfaces, at least 50% of which must be treated by a stormwater practice. Impervious surface types primarily consist of road, sidewalks, driveways, rooftops, and sheds.

To meet State regulations, stormwater practices will be designed for one or more locations within the subdivision and a permit application will be submitted to the Vermont DEC by the consultant team. Work on this project will be continue through the calendar year 2025.



Draft impervious map of the Southview Subdivision in Richmond

General Project Information

Letters to Homeowners

When letters are mailed to residents of the Southview Subdivision, they will be posted below.

Homeowner Survey

In Spring 2025, a survey will be sent to all residents of Southview Subdivision. The purpose of the survey is to collect information on drainage patterns, stormwater infrastructure, and drainage related issues that residents may encounter. Results of the survey will be shared at a later date.

The survey can be accessed below.

Southview Survey

Soil Testing

In January 2025, initial soils testing was completed by Watershed Consulting and Sierra Environmental Drilling. A GeoProbe was used to drill 2"-diameter soil borings to at least the depth of groundwater or auger refusal at three locations throughout the subdivision. The borings were located in the town Right-Of-Way and had minimal disturbance to the ground.

In Spring or Summer of 2025, infiltration testing will be completed to assess the drainage capabilities of the soil. The testing will take place in the town Right-Of-Way and have minimal disturbance to the ground. Additional drilling with a GeoProbe may occur if deemed necessary.

Disconnection Area Mapping

To count towards the impervious surface treatment goal for the 3-acre permit, select surfaces can be classified as '**Disconnection**' areas if they meet certain criteria. The purpose of these disconnections is to lower the area of impervious that needs to be treated through structural BMPs.

Simple disconnections include residential rooftops and driveways. In Spring 2025, consultants will be on site assessing drainage patterns of these areas, recording relevant information, and taking photos of

notable features. Each property assessment will take no longer than 10 minutes.

More information on Disconnections can be found in Section 4.2.2 of the Vermont Stormwater Management Manual.

Unmanned Aerial Systems (UAS) Flight

In August 2023, members of Watershed Consulting completed a drone flight to capture high-resolution aerial imagery of the subdivision. The imagery was used to refine the impervious cover and focus on stormwater data related to the 3-acre permitting process, not personal property or activities. The imagery can be viewed on the impervious map.

Southview Subdivision Overview Map

An overview map of the Southview Subdivision is shown above. The yellow polygon outlines the area subject to the 3-acre permit. The pink and orange colors depict the impervious cover in the neighborhood. The pink areas are privately owned and the road network shown in orange is owned by the Town of Richmond. Stormwater infrastructure including culverts and swales are depicted as well.

Next Steps

Additional Field Work

During the project time frame, consultants will occasionally be on-site during normal business hours to verify and locate existing property lines, underground utilities, and place flags at wetland limits. Remaining field work will include a Disconnection Analysis and additional soil testing. Temporary flags, stakes, or other field markers may be installed, and these may not necessarily reflect right-of-way limits or property lines and should not be confused with surveyed corners and pins or other property line monuments.

Field work will primarily occur within the town Right-Of-Way, but should consultants need to access private property, landowners will be contacted. Site contractors may briefly enter your property to gather information and measure your corners and other points on your property. Please do not hesitate to contact the Town office if you object to this limited access or would like to meet with one or more project managers before contractors enter your property.

Engineering Plans

An **engineering feasibility analysis** will be completed to determine the stormwater upgrades that are feasible given the site conditions and constraints. **Engineering plans and details** will be created for the proposed stormwater upgrades.

General Permit 3-9050 Submission

The 3-9050 permit application will be completed and submitted to the Vermont DEC by the consultants. Related permit application materials that may be required for the project include a State or ACOE wetland delineation, Act 250 amendment, and local approval.

Contact Information

Josh Arneson, Town of Richmond

The Town's contact for this project is Josh Arneson, who may be reached at **(802) 434-4170** or **jarneson@richmondvt.gov**. Please send any written comments to **Josh Arneson, PO Box 285, Richmond, VT 05477**.

Andres Torizzo, Watershed Consulting

If you have questions regarding the information on this Stormwater Planning website, please reach out to Andres at **(802) 497-2367** or **andres@watershedca.com**.

Town of Richmond