POTASH BROOK FLOW RESTORATION PLAN

City of South Burlington, Vermont

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Updated by:
City of South Burlington
104 Landfill Road, South Burlington, VT 05403

southburlington
PUBLIC WORKS

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1. Executive Summary

This Flow Restoration Plan (FRP) for the Potash Brook watershed was developed in accordance with requirements in the Municipal Separate Storm Sewer System (MS4) General Permit #3-9014 (2018). On July 27, 2018 the Vermont Department of Environmental Conservation (VTDEC) approved an update to the MS4 General Permit (3-9014), at which time the Potash Brook FRP became part of the Stormwater Management Plans (SWMP) prepared by the MS4 permittees in the Potash Brook watershed. This includes the City of South Burlington, the Vermont Agency of Transportation (VTrans), the City of Burlington, Burlington International Airport (BTV) and the University of Vermont (UVM). The Potash Brook FRP will act as a guidance document for the MS4 entities as they implement the stormwater Best Management Practices (BMPs) necessary to attain the flow restoration targets established by the Potash Brook Total Maximum Daily Load (TMDL). The Potash Brook TMDL was approved by the U.S. Environmental Protection Agency (EPA) on December 19, 2006. The TMDL requires a 16.5% reduction in stream flow during high flow conditions (established as the 1-year storm event).

Development of the Potash Brook FRP was an iterative process that utilized the Vermont Best Management Practice Decision Support System (BMPDSS) model maintained by VTDEC. This model was created by VTDEC and its partners as part of the initial TMDL development. The BMPDSS model allows the user to add, remove, or modify information related to the existing and proposed stormwater BMPs in the watershed. The BMPDSS then predicts the impacts that these changes will have on stream flow. In 2002, VTDEC provided a "Baseline Condition" BMPDSS model for Potash Brook. This version of the BMPDSS model, also referred to as the Pre-2002 model, included all stormwater BMPs that existed in the watershed prior to 2002 and provided an estimated stream flow during the 1-year storm event. The goal of the FRP, as established by the Potash Brook TMDL[1], is to reduce stream flow by 16.5% during this target storm event.

In May 2015, at the request of the City of South Burlington, the Chittenden County Regional Planning Commission (CCRPC)[2] completed a study to estimate the expected non-jurisdictional impervious area growth[3] in the Potash Brook watershed over the next 20 years. The original TMDL assigned a non-jurisdictional impervious growth of 30 acres, whereas the CCRPC study estimated 22 acres based on the actual non-jurisdictional growth rate from 2003 to 2010. With the revised future growth, the high-flow target (Q0.3%) would be reduced from 16.5% to 16.0%.

The BMPDSS Baseline Condition model was provided to the City and updated to include all BMPs that were constructed in the watershed after 2002. This version of the model became known as the "Existing Condition", or Post-2002, model run. Finally, existing BMPs were evaluated to determine if they could be retrofit to provide improved treatment and detention of stormwater runoff and new BMPs were added to the BMPDSS model until the required stream flow reduction target was achieved. This version of the model became known as the "Proposed Condition" model, or Credit Model run[4].
The current Proposed Condition BMPDSS model run that meets the required 16.5% reduction in stream flow during the 1-year storm event includes a total of 107 sites; forty-two (42) retrofits to existing BMPs, twenty-five (25) new detention systems, seventeen (17) new infiltration systems, twenty-two (22) new

[1] VT DEC. 2006. Total Maximum Daily Load to Address Biological Impairment in Potash Brook (VT05-11).
[2] Chittenden County Regional Planning Commission (CCRPC). 2015. Non Jurisdictional Impervious Surface Analysis for the Potash Brook Watershed.
[3] "Non-jurisdictional" refers to new imperious surfaces where the parcel's total impervious area is less than 1 acre and not required to obtain a State stormwater permit.
[4] Refer to original Potash Brook Flow Restoration Plan dated October 1, 2016 for additional detail on the iterative process to identify proposed projects.

gravel wetlands, and one (1) new median filter system. The total cost for implementation of these BMPs is estimated at approximately $21,362,000.

The final list of proposed BMPs were ranked based on best value and feasibility. The MS4 permit requires that the BMPs identified in the FRP be constructed within 20 years of the effective date of the 2012 MS4 permit, which results in a December 5, 2032 deadline. The MS4s involved in the Potash Brook FRP worked together to develop an implementation schedule for Potash Brook. BMPs that are currently covered by expired State of Vermont stormwater permits were included at the front of the schedule, so that the associated properties could complete the required stormwater improvements and achieve permit compliance. Other BMPs located on land owned or controlled by the MS4 entities were given priority over those that were located on private property. The remaining projects were scheduled based on their ability to contribute to stream flow reductions, cost effectiveness, and constructability.

A financial plan was also developed in conjunction with the implementation schedule. The City of South Burlington has been financing the required stormwater BMPs by utilizing funds raised by stormwater utility fees, State and Federal grants, as well as low interest loan programs.

2. Background

Potash Brook and its watershed are located in Chittenden County, principally in the City of South Burlington, and encompass an area of approximately 7.13 square miles. The main stem of Potash Brook flows to its mouth at Shelburne Bay in Lake Champlain. Several major tributaries flow to the main stem and drain significant portions of the watershed north and south. The entire stream and its tributaries are Class B waters designated as cold water fish habitat pursuant to the Vermont Water Quality Standards.

Potash Brook has been identified as not attaining water quality standards and has been placed on the list of impaired waters in accordance with Section 303(d) of the Federal Clean Water Act. In 2006, the EPA approved the Potash Brook Stormwater TMDL[1]. This TMDL requires reductions in stormwater flows during high flow conditions. Increases in stream base flow were also recommended, but are not required under the TMDL. The flow targets are the basis for the FRP, developed in accordance with the Municipal Separate Storm Sewer System (MS4) General Permit Subpart IV.C.1 as a required part of the MS4s Stormwater Management Program (SWMP).

The purpose of this Flow Restoration Plan (FRP) is to outline a plan for the retrofit of existing impervious surfaces with stormwater management Best Management Practices (BMPs) (e.g. gravel wetlands, infiltration basins, etc.) to meet the TMDL flow targets. The TMDL required that watershed hydrology must be controlled in the Potash Brook Watershed to reduce high flow discharges, in order to restore degraded water quality and achieve compliance with the Vermont Water Quality Standards (VWQS).

Five (5) MS4s including the City South Burlington, the City of Burlington, Burlington International Airport (BTV), the University of Vermont (UVM), and the Vermont Agency of Transportation (VTRANS) own impervious cover within the Potash Brook impaired watershed.

[1] The EPA approval of the Potash Brook TMDL can be viewed at the following links:
http://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/SWImpaired/sw_pot_tmdl_finalapproved.pdf
http://dec.vermont.gov/sites/dec/files/wsm/stormwater/docs/SWImpaired/sw_potashTMDLappovaldoc.pdf

2.1. Potash Brook Total Maximum Daily Load (TMDL)

In response to Potash Brook not meeting the Vermont water quality standards, it was placed on the list of impaired waters in accordance with Section 303(d) of the Federal Clean Water Act. The VTDEC developed TMDLs for impaired watersheds using flow as a surrogate for pollutant loading[1]. The basis for the TMDL development was the comparison of modeled Flow Duration Curves (FDCs) between impaired and attainment watersheds. The Program for Predicting Polluting Particles Passage through Pits, Puddles, and Ponds, Urban Catchment Model (P8) was used to model gauged and ungauged watersheds in Vermont and develop Flow Duration Curves (FDCs) from which a normalized high flow and low flow per drainage area in square miles (cfs/sq.mi.) were extracted. FDCs were developed for both impaired and attainment streams and the relative difference between the two was used to establish the flows needed to restore the stream's hydrology.[2]

The Potash Brook was designated as impaired on the 2004 Vermont 303(d) List from its mouth at Lake Champlain to a point upstream 5.2 miles due to non-support of aquatic life designated uses. The TMDL concluded that since all tributaries and the main stem drain to the impaired lower portion of the stream, the entire Potash Brook watershed was considered to contribute to its impairment. The source of the impairment was considered to be multiple impacts associated with unmanaged stormwater runoff including runoff from both urban and developed areas, as well as from agricultural and open areas. The high flow target required a total 17.9% reduction in watershed flow allocation during the 1-year storm event (16.5% wasteload allocation for urban/developed areas).

As part of the FRP development, the Chittenden County Regional Planning Commission (CCRPC) completed a study to estimate the expected non-jurisdictional impervious area growth in the Potash Brook watershed over the next 20 years. Non-jurisdictional growth by definition the impervious area that does not require a stormwater permit, and is therefore important to account for within the 20 year management plan. The original TMDL assigned a non-jurisdictional impervious growth of 30 acres, whereas the CCRPC study estimated 22 acres based on the actual non-jurisdictional growth rate from 2003 to 2010. With the revised future growth, the high-flow target (Q0.3%) would be reduced from 16.5% to 16.0%[1] as summarized in Table 1 below. The modified flow target was considered, but ultimately the original (unmodified) flow target of 16.5%, was incorporated into the FRP planning process and proposed BMP implementation scenario.

Table 1: TMDL Flow Target and modified target with revised future growth

Flow Target	Target High Flow Q 0.3(± %) Reduction
TMDL Target from current Urban/Developed areas	-14.6%
TMDL Targets with **30 acres** of Non-Jurisdictional Future Growth	-16.5%
TMDL *Modified* Targets with **22 acres** of Non-Jurisdictional Future Growth[1]	-16.0%
1 Modified target was calculated as: -[(14.6%) + (16.5% - 14.6%)*(22 ac/30 ac)] = -16.0%	

[1] VTDEC. 2006. Potash Brook TMDL.
[2] "Stormwater Modeling for Flow Duration Curve Development in Vermont" (Tetra Tech, 2005).

2.2 MS4 Permit Background and Requirements

On December 5, 2012, Vermont's revised MS4 Permit was issued. Included in the 2012 MS4 permit issuance were new requirements for municipalities to develop FRPs to implement the stormwater TMDLs. The FRPs were required to be developed for each impaired watershed by October 1, 2016, and include the following elements:

1) An identification of the required controls
2) A design and construction schedule
3) A financial plan
4) A regulatory analysis
5) The identification of regulatory assistance, and
6) Identification of any third party implementation.

The schedule required implementation of the required BMPs as soon as possible, but no later than 20 years from the effective date of the permit, before December 5, 2032. In 2018 the State revised the MS4 Permit to include additional requirements to address the Lake Champlain Phosphorous TMDL. As part of the permit renewal, each MS4 was required to submit an updated Notice of Intent (NOI) and Stormwater Management Program (SWMP), including updated Flow Restoration Plans.

3. BMPDSS Model

In an effort to implement the Vermont Stormwater TMDLs, the VTDEC worked with an external consultant (TetraTech) to develop the computer-based VT BMPDSS, a VT-specific hydrologic BMP assessment model. This modeling tool was developed by TetraTech, Inc., with considerable investment from EPA Region 3 and Prince George's County, Maryland, and was adapted for use in Vermont using funding from the Vermont Agency of Natural Resources (ANR). The purpose of the modeling tool was to predict progress toward the TMDL flow targets based on proposed BMP implementation scenarios to help MS4 communities identify different BMP options and associated costs.

The information for each BMP entered into the BMPDSS model includes: drainage area, storage volume, outlet control structures and geographic location. The remaining data needed to calculate flow simulations is built into the model and includes: topography, soil types, impervious cover, and rainfall data.

In order to complete a flow target assessment, VTDEC developed three model scenarios for each impaired watershed, including a Baseline Condition Model (Pre-2002), an Existing Condition Model (Post-2002), and a Proposed Condition Model (Credit).

3.1. Baseline Condition Model (Pre-2002)

The Baseline Scenario Model includes all stormwater BMPs installed prior to issuance of the VT Stormwater Design Standards in 2002. The purpose of this model was to quantify the flows in the stream prior to beginning the Flow Restoration Planning process and establish a baseline from which to measure.

3.2. Existing Condition Model (Post-2002)

The Existing Condition Model includes all existing BMPs in the Baseline Condition Model, as well as the addition of any BMPs that have been constructed since 2002 in the Potash Brook watershed. The purpose of the model is to show current flows in Potash Brook. This allows the State and MS4 communities to track progress toward the high flow attainment target. On a routine basis, the Existing Condition BMPDSS model is revised to include any recently constructed BMPs, including BMPs designed and constructed by the MS4s, as well as BMPs constructed as part of commercial development and redevelopment. Additionally, the Existing Conditions Model is updated to reflect any changes to existing BMPs, such as revised drainage areas, modification of outlet control structures, or changes in storage volumes. The results of the Existing Condition Model are compared to the Baseline Condition Model to determine if the 16.5% reduction in high flow has been achieved.

The Proposed Condition Model includes all BMPs in the Existing Condition Model, which in turn includes all BMPs from the Baseline Condition Model, as well as a collection of proposed BMPs that can achieve the high flow reduction target in the Potash Brook watershed. The iterative process of developing the list of proposed BMPs is detailed further in the original Potash Brook FRP, dated October 1, 2016.

3.3. Proposed Condition Model (Credit)

The Proposed Condition Model includes a total of 107 sites; forty (40) retrofits to existing BMPs, forty (40) new detention systems, eighteen (18) new infiltration systems, six (6) new gravel wetlands, two (2) new bioretention systems, and one (1) new median filter system. Credit toward the flow target is also provided by stormwater BMPs from the Existing Condition Model. A summary table of the proposed BMPs is included in Appendix B, along with a map of the proposed BMP locations and individual summary sheets describing each proposed BMP the Potash Brook FRP.

A summary table of the BMPDSS Model Results is shown below in Table 2. The final number of proposed BMPs differs from the number of BMPS added to the model runs shown on Table 3 because some BMPs were initially included in the model as two separate sites and then later combined into one project in a subsequent model run.

Table 2: Summary of BMPDSS Model Results

Description	Q0.3		# of BMPs Added for Model Runs	Impervious Area Managed (acres)*
	Area adjusted (cfs/sq.mi.)	Unadjusted flow (cfs)		
Baseline Condition	18.570	131.020		
Existing Condition	17.697	124.677	93	254.3
% Change vs Base		-4.8%		
Proposed Condition	15.558	109.280	116	601.6
% Change vs Base		**-16.6%**		

3.4. Project Ranking

All proposed BMPs identified as part of FRP development in the five stormwater impaired watersheds of Potash, Bartlett, Englesby, Centennial, and Munroe Brook were ranked and a project prioritization was created. Considerations that factored into the ranking of BMP projects include the estimated benefit of a BMP towards the FRP's flow restoration targets, and the amount of impervious area treated. The comprehensive ranking matrix ranked the proposed BMP projects based on the following criteria, which were grouped into four general categories as shown in Table 3.

Table 3: Project Ranking Matrix

Category	ID	Criteria
Cost/Operations	A	Project Cost per Impervious Acre
Project Design Metrics	B	Impervious Acres Managed (ac)
	C	Channel Protection Volume (CPv) Mitigated, (ie. 1-year Storm)
	D	Volume Infiltrated (ac-ft)
Project Implementation	E	Permits
	F	Land Availability
Other Project Benefits/Constraints	G	Flood Mitigation (Is existing flooding issue mitigated by project?)
	H	TMDL Flow Target Addressed (Q03, Q95)
	I	Lake Champlain Phosphorus TMDL
	J	Other Project Benefits/Constraints

Values for each criteria were identified and assigned a relative score, so that proposed BMP projects could be ranked based on a total score. A full description of the ranking criteria is presented in Table D-1 in Appendix C, and a scoring key is presented in Table D-2 in Appendix C. The final scoring of proposed BMP projects in the Potash Brook Watershed is presented Table E-2 in Appendix D.

4. Design and Construction Schedule

A Design and Construction (D&C) schedule is a required element of the final FRP. This schedule must show how the proposed BMPs included in the FRP can be implemented over a timeframe of less than 20 years from the date of MS4 permit issuance. This means that all BMPs associated with FRPs must be implemented prior to December 5, 2032. The City of South Burlington owns impervious surface in five stormwater impaired watersheds; Bartlett, Englesby, Centennial, Munroe, and Potash Brook. Therefore, proposed stormwater BMPs in all five watersheds were considered when developing a realistic D&C schedule for the City. However, only the projects located within the Potash Brook watershed are presented in the implementation schedule in Appendix D.

In addition to a project's score within the BMP ranking matrix, development of a BMP implementation schedule required the consideration of additional factors, such as expired State of Vermont stormwater permits, properties containing more than 3 acres of impervious area, and land owned or controlled by the MS4 entities. Additionally, private property redevelopment and development of the City's Phosphorus

Control Plan (PCP) may cause certain projects to gain or lose priority within the implementation schedule in the future.

5. Financial Plan

Subject to the requirements of the MS4 permit, a financial plan is required as part of the FRP. This plan must provide initial BMP cost estimates and demonstrate the means by which BMP implementation will be financed. The financial plan must also include the steps that each MS4 will take to implement the finance plan. Initial BMP cost estimates were calculated in 2014 using cost values that were current at that time. Once projects were scheduled over the 20 year implementation schedule, an annual 3% inflation rate (based on historic trends in the construction cost index[1]) was applied. Table E-1 in Appendix D presents inflation adjusted project costs for each BMP project. Applying this inflation rate provides a more accurate annual cost for BMP construction in the later years of the schedule.

5.1. City of South Burlington Financial Plan

In 2005, the City of South Burlington created Vermont's first stormwater utility. Under the stormwater utility system, all developed properties in the City pay an impervious area-based stormwater fee using an Equivalent Residential Unit (ERU) system. These stormwater fees provide the City with a stable funding source that is used to comply with State and Federal stormwater regulations and maintain stormwater infrastructure throughout the City. The stormwater utility was created with the understanding that there would be future stormwater costs related to the five stormwater impaired watersheds located in South Burlington, as well as costs related to future implementation of projects required by the Lake Champlain Phosphorous TMDL. The City is currently utilizing funds generated from stormwater utility fees to fund FRP related costs.

Once the BMP cost and implementation schedule was developed, the City of South Burlington Stormwater Utility was able to incorporate this information into its existing stormwater rate model. The City evaluated two different scenarios for funding the BMPs included in the FRP. The first scenario assumed that there would be no grant funding available to assist with implementation. The second scenario assumed that grant funding of approximately $250,000 per year would be available in 2018 through 2029, and that this amount would increase to $500,000 in 2030, 2031, and 2032. The resulting annual cost to a single family residential property and commercial property owner containing 1 acre of impervious area is summarized in Table 5. Calculations for "Commercial Property Containing 1 Acre Impervious Area" in Table 4 assume an Equivalent Residential Unit (ERU) rate of 17 and do not take into account the City's relative tier factors based on percent impervious cover.

[1] RSMeans. "Historical Cost Indexes." https://www.rsmeansonline.com/references/unit/refpdf/hci.pdf

Table 4: Annual Stormwater Fee Paid by Property Owners Under Different FRP Funding Scenarios

Fiscal Year	Funding Scenario 1 - Receive No Grants		Funding Scenario 2 - Receive $250,000 in Grants Annually	
	Single Family Residential Property	Commercial Property Containing 1 Acre Impervious Area	Single Family Residential Property	Commercial Property Containing 1 Acre Impervious Area
2018	$80.28	$1,364.76	$80.28	$1,364.76
2019	$82.44	$1,401.48	$82.08	$1,395.36
2020	$84.60	$1,438.20	$83.88	$1,425.96
2021	$87.12	$1,481.04	$85.68	$1,456.56
2022	$90.00	$1,530.00	$87.48	$1,487.16
2023	$93.24	$1,585.08	$89.28	$1,517.76
2024	$96.84	$1,646.28	$91.08	$1,548.36
2025	$100.80	$1,713.60	$92.88	$1,578.96
2026	$105.12	$1,787.04	$94.68	$1,609.56
2027	$109.80	$1,866.60	$96.48	$1,640.16
2028	$114.84	$1,952.28	$98.28	$1,670.76
2029	$119.88	$2,037.96	$100.08	$1,701.36
2030	$124.92	$2,123.64	$101.88	$1,731.96
2031	$129.96	$2,209.32	$103.68	$1,762.56
2032	$135.00	$2,295.00	$105.48	$1,793.16

It is the City's expectation that significant funding from the State of Vermont and other Federal sources will be available to help with the cost of stormwater TMDL implementation. The State of Vermont has already taken initial steps towards providing this funding. In 2015, the Vermont legislature created the Clean Water Fund (CWF). The CWF was provided with $2,005,000 in 2016 and $7,688,000 in 2016. While these initial investments are not at the level necessary to provide significant funding to the MS4 communities subject to stormwater TMDLs, it is our understanding that the State is working to provide additional funding to the CWF in the future. The City of South Burlington intends to work closely with our legislative representatives to ensure that funding is made available for the stormwater improvements included in the FRPs. The City of South Burlington will also pursue funding from existing and new grant sources from other organizations including, but not limited to, VTDEC, the Vermont Agency of Transportation, and the Lake Champlain Basin Program.

5.2 City of Burlington Financial Plan

In 2009, the City of Burlington followed the example of the City of South Burlington in implementing an impervious area based stormwater fee to provide the City of Burlington with a stable funding source to maintain stormwater infrastructure throughout the City and to comply with numerous State and Federal stormwater regulations including the Stormwater TMDLs, Lake Champlain TMDL and Combined Sewer requirements. Implementation of retrofits for which the City is responsible will ultimately be the responsibility of the stormwater ratepayers. In order to limit the impact to the ratepayers, the City intends to leverage existing and new grant and loan sources, as they are available. In the case of Potash Brook, the two retrofits identified within Burlington City limits are on private property. Later analyses will determine whether additional retrofit financial obligations (i.e. paying

into project completed elsewhere in the watershed) will be necessary for the City to meet its obligations in Potash Brook. As part of its Integrated Planning effort, the City of Burlington will also be evaluating possible mechanisms for incentivizing the construction of retrofits identified on private property, particularly if the City can get improvements that go above the Flow Restoration Plan requirements and make gains in phosphorus control. Additionally, as part of the Integrated Planning effort, the City will be completing a financial capability assessment (FCA) to evaluate the long-term ability of ratepayers to fund these and other Clean Water Act obligations. An FCA won't mean that Clean Water Act obligations won't be met – but may point to an adjustment of the overall schedule of implementation of all of the City of Burlington's obligations, including implementation of this and other Flow Restoration Plan projects, in order to mitigate the impact of stormwater and wastewater rates increasing at an unsustainable rate for the Burlington community. This FRP and SWMP will be amended with an updated financial plan, including stormwater rate projections for this and other Clean Water Act obligations once the FCA under the Integrated Plan is completed.

5.3 University of Vermont Financial Plan

Under the current budgeting process, the University would establish project funds to fulfill the University of Vermont's obligation. We would endeavor to pursue federal and state stormwater grant opportunities.

5.4 Vermont Agency of Transportation Financial Plan

Planning level costs were independently estimated for each VTrans project using a consistent spreadsheet-based method for all projects. As such, some cost estimates may differ slightly from those presented in other FRP documents. VTrans will request state and federal funding for the appropriate amount to implement the BMPs as outlined in their design and construction schedule. For those projects that will require a joint effort with another municipality, VTrans will request funding for their portion of the cost share. In watersheds where VTrans is either not meeting or exceeding their allocated target there may be cost sharing between MS4s.

5.5 Burlington International Airport Financial Plan

A financial plan that estimates the costs for implementing the BMPs and describes a strategy for financing is a required element of the FRP. The financing plan includes the steps each permittee will take to implement the financing plan. The City of South Burlington Potash Brook and Centennial Brook FRPs include cost estimates for each of the BMPs, using 2014 cost estimates with an annual 3% inflation rate as noted above. The VTDEC and the contributing MS4 permittees within these watersheds have signed a Memorandum of Agreement (MOA) to perform monitoring and other data collection required under the MS4 permitting program. Each MS4 permittee, including BTV, has been assigned a percentage of the total cost of the contracted work over a five-year timeframe. This type of collaborative arrangement will also apply to implementation and financing of the BMPs.

As described in the FRPs, it is BTV's expectation that significant funding from the State of Vermont and other Federal sources will be available to help with the cost of stormwater TMDL implementation. In 2015, the Vermont legislature created the Clean Water Fund (CWF). This fund was provided with $2,005,000 in 2015 and $7,688,000 in 2016, and will likely receive additional funding in the years to come. The City of South Burlington and Burlington Airport intend to work closely with legislative

representatives to ensure that this funding is made available for the stormwater improvements included in the FRPs.

The Burlington Airport also intends to seek funding for implementing its commensurate share of the BMPs within the watersheds, including requests from the CWF and other sources. BTV is committed to participating in a cost share with the City of South Burlington to implement its FRP in a manner that is fair and reasonable for the airport. It is also noted that BTV reserves the right to achieve its FRP commitments through implementing projects of its own choosing that may not be identified on South Burlington's present list of proposed watershed improvement projects.

5.6 Proposed BMP Cost Estimates

The Proposed Condition Model that achieved the required 16.5% reduction in stream flow during the 1-year storm event included 107 BMPs costing approximately $16,700,000. Cost estimates were developed based on a simple spreadsheet method that calculated base construction cost as a product of the design control volume, the unit cost, and the site adjustment factor, as outlined in Table 5 below[1]. Additionally, permitting, engineering, land acquisition, and O&M costs were factored into the total cost estimate.

Table 5: Proposed BMP Unit Costs and Adjustment Factors

BMP	Base Cost ($/ft3)
Detention Basin	$2
Infiltration Basin	$4
Underground Chamber (infiltration or detention)	$12
Bioretention	$10
Green Infrastructure/ Underground Chamber Combo	$22
Site Type	Cost Multiplier
Existing BMP retrofit	0.25
New BMP in undeveloped area	1
New BMP in partially developed area	1.5
New BMP in developed area	2
Adjustment factor for large aboveground basin projects	0.5

A summary of all project costs for each proposed BMP in the Potash Brook Watershed are included in Table E-1 in Appendix D.

[1] Methodology based on Horsley Witten Group Memorandum (Page 11). Included in Appendix D.

6. Regulatory Analysis

In accordance with the MS4 permit, an FRP requires a regulatory analysis that identifies and describes what, if any additional regulatory authorities that the permittees will need in order to effectively implement the FRP.

Currently, stormwater runoff within the Potash Brook watershed is regulated primarily by the VTDEC, City of South Burlington, City of Burlington, and VTrans. VTDEC regulates new developments through issuance of Stormwater Discharge Permits with technical requirements as outlined in the 2017 Vermont Stormwater Management Manual. The City of South Burlington and City of Burlington require improved stormwater practices and low impact development for new developments through their stormwater ordinances and Land Development Regulations (LDRs). VTrans regulates stormwater discharges to the state Right of Way through 19 V.S.A.§1111 "Permitted use of the right-of-way".

The City of South Burlington updated the stormwater requirements in its LDRs in June 2016.[1] The revised LDRs require that any project resulting in ½ acre or more of impervious area implement stormwater controls that prioritize infiltration. The revised LDRs also contain new requirements for properties that are being redeveloped. It is the City's expectation that these changes will result in gradual improvements in stormwater management over the course of the 20 year BMP implementation schedule.

The City of South Burlington also revised its "Ordinance Regulating the Use of Public and Private Sanitary Sewerage and Stormwater Systems" in October 2015.[2] The ordinance provides a policy regarding the handling of expired VTDEC stormwater permits located in South Burlington. The City will continue to take over responsibility for exclusively residential stormwater systems that complete upgrades. In addition, the revised ordinance allows commercial properties with expired permits to obtain coverage under the City's MS4 permit if upgrades to the stormwater system are completed. These properties will still be responsible for maintaining their systems, but the permit coverage required by the State of Vermont can now be provided through the City's MS4 permit instead of obtaining coverage under one of VTDEC's other permit programs.

A full list of the expired State of Vermont permits with discharges to Potash Brook is presented in Table 6 in Section 7.

[1] Section 12.03 – Stormwater Management Standards, "South Burlington Land Development Regulations," dated 8/6/18, can be viewed at the following link: http://www.southburlingtonvt.gov/Planning/LDR%20Amendments/2018-5/LDRs%20Complete%20Effective%208-6-2018%20reduced.pdf

[2] South Burlington's "Ordinance Regulating the Use of Public and Private Sanitary Sewerage and Stormwater Systems," dated 10/5/15, can be viewed at the following link: http://www.southburlingtonvt.gov/document_center/planning/Sewerage__Stormwater_Systems.pdf

7. Third Party Implementation

In accordance with the MS4 permit, a FRP requires identification of the name of any party, other than the permittee, that is responsible for implementing any portion of the FRP. A full list of VTDEC permits discharging to the Potash Brook and the type of system covered under the permit is included in Table 6. Several of the expired permits obtained new permit coverage under a Residual Designation Authority (RDA) permit from VTDEC.

Table 6: **Existing VTDEC Permits**

Permit Number	RDA/Other[1]	Project Name Where Permit is Located	Permittee	Permit Expiration Date	Existing Manner of Discharge[2]
1-0239	6285-9030	Ridgewood Estates	Ridgewood Estates Homeowners Association	11/19/2014; 8/26/2013	CB, 2 DP (new), 1 DP upgrade
1-0464		Oak Creek Village	Butler Farms Inc.	12/31/1991	OF, GS, CB, (2) DP
1-0526	6279-9030	Woodlands Industrial Park	Woodland Commons Condominium Association	11/19/2014	DP
1-0538	7294-INDS; 7294-INDO	Price Chopper Pond	Pomerleau Real Estate Corp	3/31/1992	DP, GS
1-0647		Village at Dorset Park	Village at Dorset Park Community Assoc.	6/30/1993	(3) DP, CB
1-1020		Park Place	David Dubrul	3/31/1996	GS, OF
1-1033		Dorset Park Pond	City of South Burlington	3/31/1998	DP, GS
1-1155		Pinnacle at Spear	John Larkin; L&M Partnership	12/31/2003	CB, OF
1-1337	4442-9003	The Lane Press	The Lane Press	6/30/2003; 8/18/2011	IB
1-1380		South Burlington Community Housing	South Burlington Community Housing	9/30/2004	PP, IG
1-1391/ 1-1270/ 1-0839		Burlington International Airport	Heather Kendrew; Burlington International Airport	9/30/2004	IG, CB
1-1520		O'Brien Home Farm	Daniel and Leo O'Brien Jr.; dba Forest Park Realty Corp	10/9/2007	(3) DP, CB, GS
2-0100	7220-9020	Stonehedge	BAM Property Management	7/1/1985; 7/7/2016	DP, BR
2-0140		1 Kennedy Drive	Merv Brown	7/1/1987	PP, SF for 1st 1/2" only
2-0195		Healthy Living Wetland Pond	Mings Inc.	11/17/1983	OF, GS
2-0825		Twin Oaks Pond	Property Management Associates	6/30/1980	SF and RP for 1st 1/2" runoff
2-0909		South Burlington City Hall	City of South Burlington	7/1/1985	SF for 1st 1/2" runoff - NOT BUILT
2-0988	6391-INDS	Winding Brook	Winding Brook Homeowner's Association	7/1/1985; 12/7/2015	DP

Permit Number	RDA/Other[1]	Project Name Where Permit is Located	Permittee	Permit Expiration Date	Existing Manner of Discharge[2]
6170-9020		Summerfield	John O'Brien; Buckthorm Group	8/12/2013	DP
6174-INDS.A		South Burlington High School	South Burlington School District	10/18/2015	(2) IB
1-1214		Shopping Center - Hannaford - Lowe's	Southland Plaza	9/30/2005	(2) DP, RS, GS
6204-9020		Fay Dr Pond	Allen Road Land Company, Inc	4/23/2014	DP
1-1254	4113-INDS	Technology Park Lot 8A	Technology Park Associates	9/30/2001	DP
1-0233		Key Bank	ICV Construction Inc.	5/1/1982	CB
1-0234	6322-9030	Quarry Hill South	Horizon Heights Condominiums Association	11/19/2014	CB
1-0237; 1-1013; 1-1290		Kennedy Dr. P4 Expansion	CPA Partnership	7/1/1982; 3/31/1996; 3/30/2002	CB, OF, OGS, GS
1-0242		Dorset Commons	Veve Associates	8/1/1982	CB
1-0503	6282-9030	UMall	University Mall Realty Trust	9/30/2003; 11/19/2014	(2) DP, (2) IG
1-0618	6853-9003; 6853-INDS	Dynapower	Burlington Properties LTD	12/31/1992	OF, GS, CB, (2) DP
1-0661		South Meadows Pond	c/o Richard Feeley; South Meadow Housing Associates	6/30/1993	CB, DP
1-0969	6295-9030	INS Building	INS	9/30/1995	(2) DP
1-0998		Retina Center	Daniel and Eugene Morrissey	12/31/1995	OF, GS, CB
1-1000	6291-9030	Adelphia Cable Communications	Comcast Cable	12/31/1995; 11/19/2014	DP, CB, GS
1-1015		Pillsbury Manor	John P Larkin	3/31/1996	DP
1-1117		The Pines	Pines Housing LP	12/31/1997	DP, CB
1-1269	4290-INDS	Meadowland	Attn: Mark R. Neagley; Summer Ice Joint Ventures	9/30/2001; 1/16/2013; 9/30/2015	(8) DP
1-1438		Farrell/ Eastwood Commons	D Farrell; S McConaughy & New Enterprises Inc.	9/30/2005	DP, CB
1-1452		Olympiad Apartments	Dan Morrissey; Sixty Farrell Street Associates	12/31/2005	DP
1-1458		Technology Park	Technology Park Partners	3/31/2006	DP, PW
1-1504		110 Kimball Ave	James Foster; 110-120 Kimball LLC	9/18/2006	(2) IB
1-1526	6269-9030	30 Kimball Ave	Kimball Partners, LLC	11/19/2014	DP
1-1582		Kennedy Dr	City of South Burlington	5/29/2008	(7) DP
2-0101		Ashbrook Dr	Ashbrook Park H.O. Assoc	7/1/1985	CB, GS
2-0144		Outback	Merv Brown	7/1/1985	IT for 1st 1/2", ST, GS
2-0167		Easy Self Storage	Easy Self Storage	7/1/1985	CB
2-0212		Fairpoint Communications	Gregory Myka; Verizon	7/1/1985	CB, OF, GS

Permit Number	RDA/Other[1]	Project Name Where Permit is Located	Permittee	Permit Expiration Date	Existing Manner of Discharge[2]
2-0220		Dubois Dr	City of South Burlington	7/1/1985	CB, GS
2-0238; 2-0737		Grandview Dr	Carol Gamsby; CGPM Inc.	7/1/1985; 9/1/1983	CB, SF for 1st 1/2"
2-0312		Adirondack St	Butler Farms Inc	7/1/1986; 6/232013	CB
2-0619		Dorset Street Expansion	City of South Burlington	12/31/1992	CB, OF
2-0767	6553-INDO	Chelsea Cir	Art Dudek, President; Foxcroft Condominium Assoc.	6/30/1980; 4/22/2015	CB
2-0794		Brookwood Dr	Brookwood LTD	7/1/1980	CB
2-0811		Ace Hardware	LNP, Inc.	7/1/1980	ST
2-0824		Windridge Ct	Dan and Leo O'Brien; O'Brien Family Partnership	7/1/1980	CB
2-0878		Sugartree Ln	Dan Zang; SugarTree Condominium Association	6/30/1985	SF for 1st 1/2" runoff
2-0939	6275-9030; 6269-9030	Business Park North	Alan Palmer	7/1/1986; 11/19/2014	CB, OF, GS
2-1023; 2-0219		Wellesley Grove	Wellesley Grove Condominium Assoc.	7/1/1986; 7/1/1985	PP
2-1069		One Twin Oaks Assoc.	c/o Stephen Pitman; One Twin Oaks Assoc.	7/1/1987	IT for 1st 1/2" of runoff.
2-1171		Merchants Bank	Merchants Bank	7/1/1988	CB
2-0228	6293-9030	Vermont Gas Systems	James Mullowney; Vermont Gas Systems, Inc	7/1/1988; 11/19/2014	CB, OF, GS
2-0179	6318-9030	Church of Jesus Christ of Latter-Day Saints	The Church of Jesus Christ of Latter-Day Saints	7/1/1985; 11/19/2014	GS
1-1241	4049-9030; 4049-9030.1	Vt National Country Club	Vermont National Country Club	3/31/2001	(3) DP, CB, GS
1 - RDA: Residual Designation Authority- Private Permittees requests to have their expired stormwater system covered under an RDA permit, which overwrites their expired permit.					
2 - Manner of Discharge: CB: Catch Basin, GS: Grass Swale, RS: Retention Swale, ST: Settling Tank, OF: Control orifice, IB: Infiltration Basin, DP: Detention Pond, DW: Dry Well, IG: Infiltration Gallery, SF: Sand Filter, BR: Bioretention.					

7.1 Expired Permit Proposed Retrofits

All expired permit holders in the Potash Brook watershed will be required to obtain valid State stormwater permit coverage. This can be accomplished through a process that the State has identified in their current draft Stormwater Permitting Rule, or through the City's Stormwater Upgrade Feasibility Analysis (SUFA) process. Refer to sburlstormwater.com/download-material/ for the latest available version of the City's Stormwater Upgrade Feasibility Analysis (SUFA) document.

As noted in the SUFA, "FRPs for the stormwater impaired watersheds located in the City contain a preliminary assessment of the stormwater treatment potential of some sites. If an FRP identifies an STP on a site, then the site must install either the specified STP or an STP that provides equivalent or greater

treatment. In addition, final FRPs will contain a schedule indicating when various retrofits must occur. Properties that choose to construct STPs must do so before November 15, 2023, or the date specified in the FRP, whichever is sooner." The City may revise the date included in the ordinance depending upon the dates included in the final version of State of Vermont Stormwater Permitting Rule. The City expects that VTDEC will finalize the rule in 2019. This will provide the City with sufficient time to update its ordinance.

The City has identified specific retrofit projects for BMPs with expired State of Vermont permits. These projects are included in Table C-1: Final Proposed BMPs for Potash Brook FRP in Appendix B. All other expired permits in the Potash Brook Watershed will be required to complete upgrades as determined by the technical standards included in the City's SUFA.

8. Appendices

Appendix A - Existing Potash Brook Watershed BMPs

Table A-2: Post BMPDSS Model Existing Stormwater BMP List

Map A-1: Existing Stormwater BMP

Appendix B – Potash Brook FRP Proposed BMPs

Table C-1: Final Proposed BMPs for Potash Brook FRP

Map C-1: Existing and Proposed Potash Brook FRP BMPs

Potash Brook FRP BMP Summary Sheets

Appendix C – Project Ranking

Table D-1: BMP Ranking Criteria Key

Table D-2: BMP Ranking Scoring Key

Appendix D – Proposed BMP Cost Estimates, Prioritization Ranking, and Implementation Schedule

Table E-1: Potash Brook Watershed BMP Project Cost Estimates

Table E-2: Potash Brook Watershed BMP Project Scoring

Table E-3: Potash Brook Watershed BMP Project Implementation Schedule

APPENDIX A

EXISTING POTASH BROOK WATERSHED BMPs

Potash Brook FRP Phase I
Table A-2: Post2002 BMPDSS Model Existing SW BMP List
as of 7-11-16

Table A-2: Post2002 BMPDSS Model Existing Stormwater BMP List

#	Model	MS4	Pond Name	BMP Type	Current Permit Number	RDA/ Renewed/ Related Permit	Location (Cross Streets)	BMP Drainage Area (acres)
Burlington Airport								
1	Base	BTV	I3_South	Infiltration Gallery	1-0839	n/a	1200 Airport Dr.	6.02
2	Base	BTV	1-1391 Infiltration System	Infiltration Gallery	1-1391	n/a	1200 Airport Dr.	3.11
3	Base	BTV	I3_North	Infiltration Gallery	No Permit	n/a	1200 Airport Dr.	19.88
4	Base-new	BTV	BTV I4 North Infiltration	Infiltration Field	3028-INDS.A	n/a	1200 Airport Dr.	2.08
5	Base-new	BTV	BTV I4 South Infiltration	Infiltration Field	3028-INDS.A	n/a	1200 Airport Dr.	13.42
City of Burlington								
6	Base	Burlington	South Meadows Pond	Detention Pond	1-0661	n/a	Baird St/ S. Meadow Dr.	10.10
7	Post 2002	Burlington	Howard Center	Wet Pond	7372-9020	n/a	Bard St. / Pine St.	5.29
City of South Burlington								
8	Base	South Burlington	110 Kimball Ave - South IB	Infiltration Basin	1-1504	n/a	Kimball Ave/Comcast Wy	1.42
9	Base	South Burlington	110 Kimball Ave - North IB	Infiltration Basin	1-1504	n/a	Kimball Ave/Comcast Wy	1.43
10	Base	South Burlington	30 Kimball Ave Detention	Detention Swale	6269-9030	1-1526	30 Kimball Avenue	1.27
11	Base	South Burlington	Adelphia Cable Communications	Detention Pond	6291-9030	1-1000	Comcast Wy/Kimball Ave.	1.91
12	Base	South Burlington	Dynapower	Detention Pond	6853-INDS	1-0618	85 Meadowland Dr.	5.81
13	Base	South Burlington	Economou Farm Pond	Detention Pond	4049-9030	1-1241	Swift St. / Economou Farm Rd.	6.37
14	Base	South Burlington	Farrell/Eastwood Commons	Detention Pond	1-1438	n/a	Farrell St.	20.95
15	Base	South Burlington	INS Building Pond a	Detention Pond	1-0969	6295-9030 (abandoned)	70 Kimball Ave	2.11
16	Base	South Burlington	INS Building Pond b	Detention Pond	1-0969	6295-9030 (abandoned)	70 Kimball Ave	1.44
17	Base	South Burlington	Lane Press Printing Facility IB	Infiltration Basin	1-1337	n/a	Meadowland Dr.	4.17
18	Base	South Burlington	Meadowland Lot 4 Pond	Detention Pond	1-1269	1-1269	Meadowland Dr. /Bowdoin St.	2.76
19	Base	South Burlington	Olympiad Apartments	Detention Pond	1-1452	n/a	Farrell St./ Eastwood Dr.	9.65
20	Base	South Burlington	Pillsbury Manor	Detention Pond	1-1015	n/a	Williston Rd/ Pillsbury Manor N.	1.06
21	Base	South Burlington	S. Burlington Community Housing	Infiltration Gallery	1-1380	n/a	Anderson Pwky/ Williston Rd.	6.92
22	Base	South Burlington	Swift Estates Pond	Pond	Swift Estates	n/a	Meadowood Dr.	18.52
23	Base	South Burlington	Technology Park Culvert Detention P4	Detention Area	1-1458 P4	n/a	Kimball Ave/Community Drive	8.05
24	Base	South Burlington	Technology Park Field Detention P3	Detention Area	1-1458 P3	n/a	Kimball Ave/Community Drive	15.12
25	Base	South Burlington	The Pines	Detention Pond	1-1117	n/a	Aspen Dr./Dorset Dr.	12.67
26	Base	South Burlington	UMall SN 001 Underground Infiltration	Infiltration Gallery	1-0503	6282-9030	Dorset St	17.15
27	Base	South Burlington	UMall SN 002 Undergrond Infiltration	Infiltration Gallery	1-0503	6282-9030	Dorset St	5.61
28	Base	South Burlington	UMall SN 003 Detention Pond	Detention Pond	1-0503	6282-9030	Dorset St	16.90
29	Base	South Burlington	UMall SN 005 Sears Automotive Pond	Detention Pond	1-0503	6282-9030	Dorset St	1.15
30	Base	South Burlington	Vermont National Country Club Pond b	Detention Pond	4049-9030	1-1241	Golf Course Rd. (Near 13th Tee)	36.03
31	Base	South Burlington	Vermont National Country Club Pond c	Detention Pond	4049-9030	1-1241	Swift St. / Economou Farm Rd.	9.94
32	Base	South Burlington	Woodlands Industrial Park	Detention Pond	6279-9030	6279-9030	102 Kimball Ave. (Woodland Commons)	2.39
33	Base-new	South Burlington	Shunpike Infiltration Basin	Infiltration Basin	No Permit	n/a	Shunpike Rd/ Kimball Ave	0.78
34	Base-new	South Burlington	UVM Forestry Research Center	Dry Well	No Permit	n/a	Spear St	1.02
35	Base-new	South Burlington	Panurgy Infiltration Basin	Infiltration Basin	No Permit	n/a	Shunpike Rd/ Kimball Ave	1.33
36	Existing BMP Retrofit	South Burlington	Mountain View Business Park - Lot A	Detention Pond	5395-INDS	1-1536	62 Tilley Drive	6.05
37	Existing BMP Retrofit	South Burlington	Winding Brook Pond	Detention Pond	6391-INDS	2-0988	Winding Brook Drive	9.11
38	Existing BMP Retrofit-new	South Burlington	Dorset Park Pond	Detention Pond	1-1033	n/a	Swift St./Dorset St.	26.07
39	Existing BMP Retrofit-new	South Burlington	Foxcroft Pond	Detention Pond	6553-INDO upgrades	2-0848	Kinsington St./ Hayes Ave.	5.38
40	Existing BMP Retrofit-new	South Burlington	Hayes Avenue Pond	Detention Pond	6553-INDO upgrades	2-0848	Kinsington St./ Hayes Ave.	12.66
41	Existing BMP Retrofit-new	South Burlington	Meadowland P1	Detention Pond	4290-9020.1 Lot 1b	1-1269 lot 1b	Meadowland Dr.	30.58
42	Existing BMP Retrofit-new	South Burlington	Oak Creek Village Flow Splitter to Pond 2	Flow Splitter	1-0464	n/a	Moss Glen Lane/Hinesburg Rd.	5.28
43	Existing BMP Retrofit-new	South Burlington	Oak Creek Village Pond 2	Detention Pond	1-0464	n/a	Moss Glen Lane/Hinesburg Rd.	16.75
44	Existing BMP Retrofit-new	South Burlington	Oak Creek Village Pond 3	Detention Pond	1-0464	n/a	Moss Glen Lane/Hinesburg Rd.	7.78

#	Model	MS4	Pond Name	BMP Type	Current Permit Number	RDA/ Renewed/ Related Permit	Location (Cross Streets)	BMP Drainage Area (acres)
45	Existing BMP Retrofit-new	South Burlington	Price Chopper Pond	Detention Pond	7294-9020	1-0538	End of Midas Dr./Williston Rd.	99.49
46	Existing BMP Retrofit-new	South Burlington	Ridgewood Pond	In stream pond.	1-0239/6285-9030	n/a	Corner of Dorset St & Swift Street	38.40
47	Existing BMP Retrofit-new	South Burlington	Technology Park Pond 1	Detention Pond	4113-INDS	1-1254	Community Dr.	8.96
48	Existing BMP Retrofit-new	South Burlington	Village at Dorset Park Pond a	Detention Pond	1-0647	n/a	Swift St/Brand Farm Dr.	16.31
49	Existing BMP Retrofit-new	South Burlington	Village at Dorset Park Pond b	Detention Pond	1-0647	n/a	Swift St/Brand Farm Dr.	8.27
50	Existing BMP Retrofit-new	South Burlington	Village at Dorset Park Pond c	Detention Pond	1-0647	n/a	Swift St/Brand Farm Dr.	20.48
51	post 2002	South Burlington	Double Tree Pond	Detention Pond	No Permit	n/a	Williston Rd.	5.78
52	post 2002	South Burlington	East Mountain View Pond	Detention Pond	5042-INDS	n/a	1100 Hinesburg Road	2.44
53	post 2002	South Burlington	Farrell Street Bioretention	Bioretention	5080-INDS	n/a	19 Farrell Street	0.35
54	post 2002	South Burlington	Farrell Street Pond	Detention Pond	5080-INDS	n/a	19 Farrell Street	32.96
55	post 2002	South Burlington	Fay Dr. Pond	Detention Pond	6204-9020	n/a	725 Hinesburg Road	2.81
56	post 2002	South Burlington	Hannafords Pond	Detention Pond	1-1214	n/a	Hannaford Dr	14.71
57	post 2002	South Burlington	Healthy Living Wet Pond #1	Detention Pond	4461-INDS.A	n/a	222, 200, 196 & 192 Dorset Street	3.36
58	post 2002	South Burlington	Healthy Living Wetland Pond	Wetland Pond Area	4461-INDS.A	n/a	222, 200, 196, &192 Dorset St.	15.35
59	post 2002	South Burlington	Heatherfield P1	Detention Pond	3658-INDS	n/a	885 Dorset St.	1.40
60	post 2002	South Burlington	Heatherfield P2	Detention Pond	3658-INDS	n/a	885 Dorset St.	10.76
61	post 2002	South Burlington	Heatherfield P3	Detention Pond	3658-INDS	n/a	885 Dorset St.	4.30
62	post 2002	South Burlington	Heatherfield Offset Pond	Detention Pond	3864-NDO	n/a	Dorset and Spear St.	23.93
63	post 2002	South Burlington	Kennedy Dr. P1	Detention Pond	1-1582	n/a	Kennedy Drive	1.47
64	post 2002	South Burlington	Kennedy Dr. P2	Detention Pond	1-1582	n/a	Kennedy Drive	2.16
65	post 2002	South Burlington	Kennedy Dr. P3	Detention Pond	1-1582	n/a	Kennedy Drive	2.11
66	post 2002	South Burlington	Kennedy Dr. P4	Detention Pond	1-1582	n/a	Kennedy Drive	1.41
67	post 2002	South Burlington	Kennedy Dr. P5	Detention Pond	1-1582	n/a	Kennedy Drive	0.70
68	post 2002	South Burlington	Kennedy Dr. P6	Detention Pond	1-1582	n/a	Kennedy Drive	0.66
69	post 2002	South Burlington	Kennedy Dr. P7	Detention Pond	1-1582	n/a	Kennedy Drive	1.82
70	post 2002	South Burlington	K-Mart Retrofit IB	Infiltration Gallery	5406-9020	n/a	Hannaford Drive	1.70
71	post 2002	South Burlington	Lot 1 Mountainview Pond	Detention Pond	3805-INDS.2	n/a	Tilley Drive, off of Rt. 116 (Hinesburg Rd)	3.92
72	post 2002	South Burlington	Lot 3 Mountainview Pond	Detention Pond	3805-INDS.3	n/a	Tilley Drive, off of Rt. 116 (Hinesburg Rd)	2.11
73	post 2002	South Burlington	Lot 4 Mountainview P1	Detention Pond	3805-INDS.1	n/a	Tilley Drive, off of Rt. 116 (Hinesburg Rd)	2.27
74	post 2002	South Burlington	Lot 4 Mountainview P2	Detention Pond	3805-INDS.1	n/a	Tilley Drive, off of Rt. 116 (Hinesburg Rd)	1.81
75	post 2002	South Burlington	Lowes Pond	Detention Pond	1-1214	n/a	Hannaford Dr.	12.73
76	post 2002	South Burlington	Meadowland Lot 2 Pond	Detention Pond	4290-INDC lot 2	1-1269	472 Meadowland Drive, 66 Bowdoin St.	5.85
77	post 2002	South Burlington	Meadowland Lot 8&9 Filter	Filter	5913-9020.1	1-1269	65 and 103 Bowdoin Street	0.22
78	post 2002	South Burlington	Meadowland Lot 8&9 North Pond	Detention Pond	5913-9020.1	1-1269	65 and 103 Bowdoin Street	1.29
79	post 2002	South Burlington	Meadowland Lot 8&9 South Pond	Detention Pond	5913-9020.1	1-1269	65 and 103 Bowdoin Street	1.73
80	post 2002	South Burlington	Meadowland Bus. Park Pond #2	Detention Pond	4290-9020.3 Lot 10	1-1269	472 Meadowland Dr	13.46
81	post 2002	South Burlington	Mountain View Business Park, Lot B	Detention Pond	3622-INDS	n/a	116 Hinesburg Rd.	2.33
82	post 2002	South Burlington	Mountain View Office Park Pond b	Detention Pond	3805-INDS	n/a	Tilley Drive, off of Rt. 116 (Hinesburg Rd)	0.90
83	post 2002	South Burlington	Oak Creek Village Micropool	Detention Pond	6009-9020	n/a	Hinesburg Road, Butler Drive, Fox Run Lane	5.80
84	post 2002	South Burlington	Obrien Pond a	Detention Pond	1-1520	n/a	Stonington Circle & Eldredge Street	31.76
85	post 2002	South Burlington	Obrien Pond b	Detention Pond	1-1520	n/a	Stonington Circle & Eldredge Street	3.08
86	post 2002	South Burlington	Obrien Pond c	Detention Pond	1-1520	n/a	Stonington Circle & Eldredge Street	4.06
87	post 2002	South Burlington	Quarry Hill Pond	Detention Pond	3602-INDS	n/a	Quarry Hill Road	21.75
88	post 2002	South Burlington	SBHS IB North	Infiltration Basin	6174-INDS.A	n/a	Dorset St.	0.21
89	post 2002	South Burlington	SBHS IB South	Infiltration Basin	6174-INDS.A	n/a	Dorset St.	0.46
90	post 2002	South Burlington	St. John Vianney Church IB	Infiltration Basin	3745-INDS	n/a	160 Hinesburg Road	4.17
91	post 2002	South Burlington	Technology Park Lot 2 PW	Pocket Wetland	1-1458	n/a	Kimball Ave/Community Drive	2.66
92	post 2002	South Burlington	Technology Park Lot 3 PW	Pocket Wetland	1-1458	n/a	Kimball Ave/Community Drive	3.85
93	post 2002	South Burlington	The Rock Pond A	detention pond	4207-INDC	1-1269	Meadowland Business Park	1.12
94	post 2002	South Burlington	The Rock Pond B	Detention Pond	4207-INDC	1-1269	Meadowland Business Park	1.85
95	post 2002	South Burlington	Trader Joes Median Swale	Infiltration Swale	4461-INDS.A	n/a	222, 200, 196, &192 Dorset St.	0.56
96	post 2002	South Burlington	Trader Joes Wet Pond #2	Wet Pond	4461-INDS.A	n/a	222, 200, 196, &192 Dorset St.	1.72
97	post 2002	South Burlington	Twin Oaks Pond	Detention Pond	5358-9020	2-0825	Twin Oaks Terrace, Kennedy Drive	19.81
98	post 2002	South Burlington	Vt Assoc. for the Blind- IG 1	Infitration Gallery	5717-INDS	n/a	Kimball Avenue	1.19
99	post 2002	South Burlington	Vt Assoc. for the Blind- IG 2	Infitration Gallery	5717-INDS	n/a	Kimball Avenue	0.56
100	post 2002 new	South Burlington	1060 Hinesburg Rd Parking lot	Detention Pond	6499-9020	n/a	1060, 1070 and 1080 Route 116	2.87

#	Model	MS4	Pond Name	BMP Type	Current Permit Number	RDA/ Renewed/ Related Permit	Location (Cross Streets)	BMP Drainage Area (acres)
101	post 2002 new	South Burlington	Butler Farms Pond	Detention Pond	6660-9020	n/a	Route 116, Butler Drive, Marcy Street	33.56
102	post 2002 new	South Burlington	City Hall Bioretention	Bioretention Basin	2-0909	n/a	575 Dorset St.	0.82
103	post 2002 new	South Burlington	City Hall Underground Storage	Underground Storage	2-0909	n/a	575 Dorset St.	2.43
104	post 2002 new	South Burlington	Dorset St Hotel Pond #1	Wet Pond	6970-9020	n/a	5 Dorset St.	2.97
105	post 2002 new	South Burlington	Dorset St Hotel Pond #2	Wet Pond	6970-9020	n/a	5 Dorset St.	1.01
106	post 2002 new	South Burlington	Elsom Pkwy System	Perforated Pipe	Mayfair Park Improvement	n/a	Elsom Pkwy	6.98
107	post 2002 new	South Burlington	Farrell Park Constructed Wetland	Constructed Wetland	No Permit	n/a	Swift St. / Farrell St.	1.37
108	post 2002 new	South Burlington	Hayes Apartments Stormwater Pond	Detention Pond	1-0839	n/a	635 Hinesburg Rd	1.98
109	post 2002 new	South Burlington	Indian Creek Dry Detention Basin 1	Detention Pond	1-0239/6285-9030	n/a	Corner of Dorset St & Swift Street	6.13
110	post 2002 new	South Burlington	Indian Creek Dry Detention Basin 2	cul-de-sac pond	1-0239/6285-9030	n/a	Corner of Dorset St & Swift Street	8.98
111	post 2002 new	South Burlington	Mayfair St System	Perforated Pipe	Mayfair Park Improvement	n/a	Elsom Pkwy	8.42
112	post 2002 new	South Burlington	Meadowland Bus. Park Lot 5 Pond	Detention Pond	4290-9020.2 Lot 5	1-1269	472 Meadowland Dr	2.71
113	post 2002 new	South Burlington	Meadowland Bus. Park Lot 6 Pond	Detention Pond	4319-INDC lot 6	1-1269	104 Bowdoin St	2.40
114	post 2002 new	South Burlington	Meadowlands Business Complex Lot 1C	Future Detention Pond	4290-9020.4 Lot 1C	n/a	472 Meadowland Drive, 66 Bowdoin St	2.70
115	post 2002 new	South Burlington	North West Bioretention	Bioretention Basin	7220-9020	n/a	Stonehedge Drive	5.74
116	post 2002 new	South Burlington	Ryes Associates - Dry Pond	Dry Pond	7017-INDS	n/a	Hinesburg Rd/Fox Run Lane	3.12
117	post 2002 new	South Burlington	Ryes Associates - Pond #1	Wet Pond	7017-INDS	n/a	Hinesburg Rd/Fox Run Lane	9.99
118	post 2002 new	South Burlington	Ryes Associates - Pond #2	Wet Pond	7017-INDS	n/a	Hinesburg Rd/Fox Run Lane	2.67
119	post 2002 new	South Burlington	South East Bioretention	Bioretention Basin	7220-9020	n/a	Stonehedge Drive	0.82
120	post 2002 new	South Burlington	South West Bioretention	Bioretention Basin	7220-9020	n/a	Stonehedge Drive	3.92
121	post 2002 new	South Burlington	Stonehedge Detention Pond	Detention Pond-Future	7220-9020	n/a	Stonehedge Drive	40.18
122	post 2002 new	South Burlington	Summerfield Pond	Detention Pond	6170-9020	n/a	1404 Hinesburg Rd.	4.26
123	post 2002 new	South Burlington	UVM Dialysis Center Bioretetion	Bioretention	7317-INDS	n/a	35 Joy Dr.	0.45
124	post 2002 new	South Burlington	UVM Dialysis Center Infiltration	Infiltration Basin	7317-INDS	n/a	35 Joy Dr.	0.19
125	post 2002 new	South Burlington	Happy Tails	Grassed Channel	No Permit	n/a	1045 Hinesburg Road	1.06
126	post 2002 new	South Burlington	Blackbay Ventures Inf Chamber 1	Underground Storage	No Permit	n/a	135 Hinesburg Road	0.33
127	post 2002 new	South Burlington	Blackbay Ventures Inf Chamber 2	Underground Storage	No Permit	n/a	135 Hinesburg Road	0.22
127	post 2002 new	South Burlington	Market Street East Pond	Detention Pond	7483-INDS	n/a	Market Street	1.05
128	post 2002 new	South Burlington	Market Street West Pond	Detention Pond	7483-INDS	n/a	Market Street	3.24

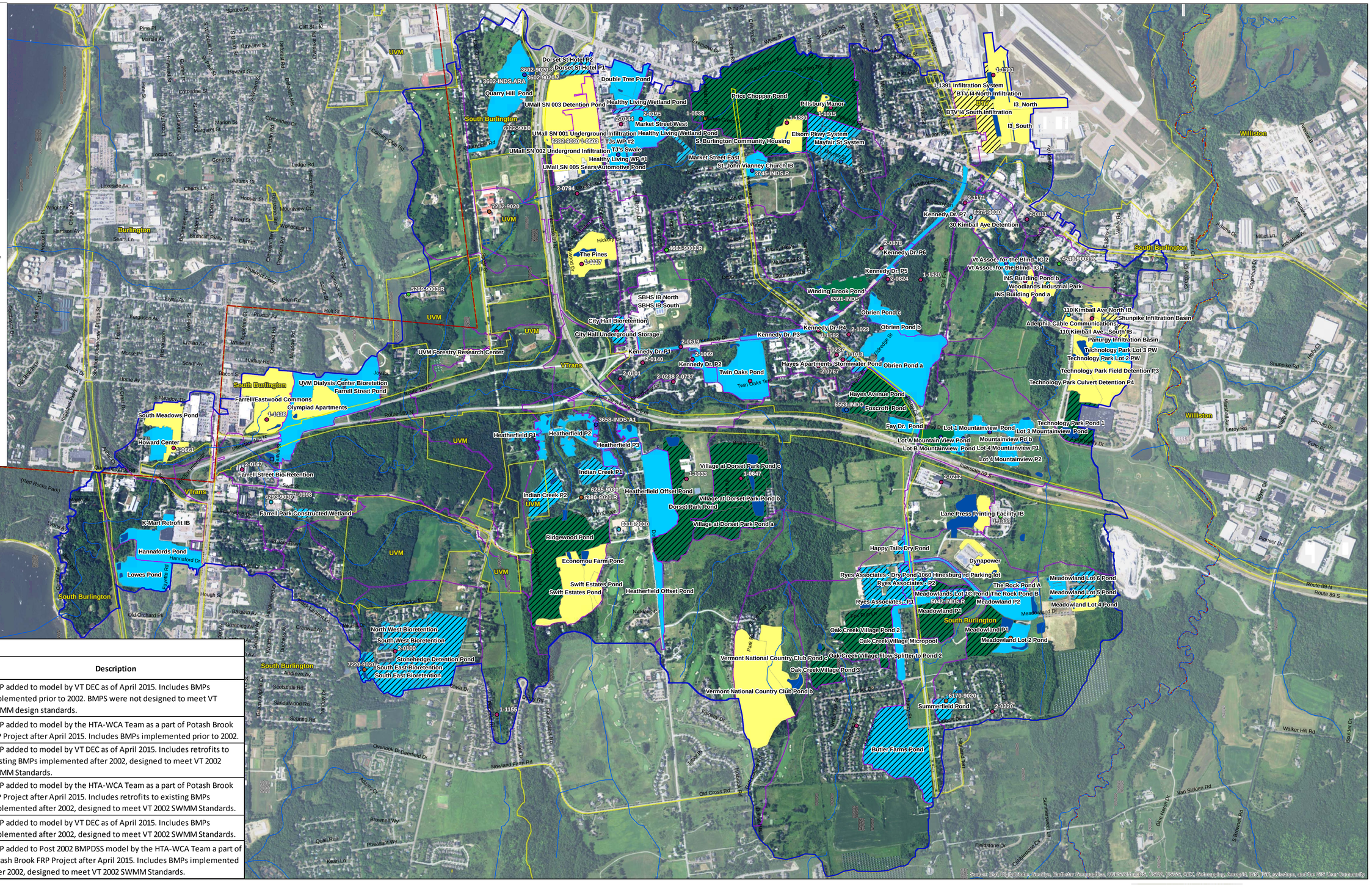


Table 1: Drainage Area Scenario Groupings

Grouping ID	BMPDSS Model Scenario	Description
Base	Pre-2002	BMP added to model by VT DEC as of April 2015. Includes BMPs implemented prior to 2002. BMPS were not designed to meet VT SWMM design standards.
Base - new	Pre-2002	BMP added to model by the HTA-WCA Team as a part of Potash Brook FRP Project after April 2015. Includes BMPs implemented prior to 2002.
Existing BMP Retrofit	Post-2002	BMP added to model by VT DEC as of April 2015. Includes retrofits to existing BMPs implemented after 2002, designed to meet VT 2002 SWMM Standards.
Existing BMP Retrofit - new	Post-2002	BMP added to model by the HTA-WCA Team as a part of Potash Brook FRP Project after April 2015. Includes retrofits to existing BMPs implemented after 2002, designed to meet VT 2002 SWMM Standards.
Post 2002	Post-2002	BMP added to model by VT DEC as of April 2015. Includes BMPs implemented after 2002, designed to meet VT 2002 SWMM Standards.
Post 2002 - new	Post-2002	BMP added to Post 2002 BMPDSS model by the HTA-WCA Team a part of Potash Brook FRP Project after April 2015. Includes BMPs implemented after 2002, designed to meet VT 2002 SWMM Standards.

N

0 1,750 3,500 ft

Map A-1 - Existing Stormwater BMPs

Potash Brook Watershed
South Burlington, VT

Hoyle, Tanner & Associates, Inc.

WATERSHED CONSULTING ASSOCIATES, LLC

Map Produced: 11-28-2017

APPENDIX B

POTASH BROOK FRP PROPOSED BMPs

Potash Brook FRP
Table C-1: Final Proposed BMPs for the Potash Brook FRP

Proposed BMP ID #	Project Name	BMP Address	BMP Landowner	MS4s with Impervious Area	New or Existing	BMP Type	BMP Description	Expired Permit #	Drainage Area (acres)	Impervious Area Managed (acres)	Impervious %	CPv Managed (ac-ft)	Volume Infiltrated (ac-ft)	WQ Volume controlled (%)
PB0001	1050 Hinesburg Road	1050 Hinesburg Rd, South Burlington	Private	South Burlington, VTrans	New	GW	There is an existing wet depression here where stormwater is already routed. Propose gravel wetland and meet CPv standards.	No Permit	1.43	0.74	52%	0.111	0	100%
PB0002	110 Kimball Ave - North Infiltration Basin	110 Kimball Ave, South Burlington	Private	South Burlington	Existing	IB	Runoff is bypassing infiltration basin with direct discharge to the brook. Add trench along west edge of parking lot to direct runoff to infiltration basin. Expand basin to accommodate increased volume.	1-1504a	1.51	0.58	38%	0.024	0.04	100%
PB0003	110 Kimball Ave - South Infiltration Basin	110 Kimball Ave, South Burlington	Private	South Burlington	Existing	IB	Retrofit outlet structure and add proposed outlet control riser that was not constructed.	1-1504b	1.42	0.94	66%	0.053	0.06	100%
PB0004	189 Cloverleaf Detention Pond	Shelburne Rd and Queen City Pkwy, South Burlington	MS4 Owned	South Burlington, VTrans, Burlington	New	DP	Add outlet structure to area that is already depressed to detain stormwater. Reroute stormline from Shelburne Rd to this area.	No Permit	21.25	12.14	57%	1.129	0	100%
PB0005	189 Ramp Detention Pond	Dorset St and 189 Ramps, South Burlington	MS4 Owned	South Burlington, VTrans	New	GW	Detain stormwater from a large section of Dorset St. Intercept stormline near Kennedy Dr and reroute to the area between 189 ramps. Treat with gravel wetland.	2-0619	9.36	5.78	62%	0.348	0	100%
PB0006	30 Kimball Ave Swale Retrofit	30 Kimball Ave, South Burlington	Private	South Burlington	Existing	DS	Retrofit existing swale detention to meet CPv. Expand swale to accommodate modified outlet structure.	1-1526; 6269-9030	1.27	1.05	82%	0.025	0	100%
PB0007	Adelphia Cable Pond Retrofit	Kimball Ave and Adelphia Dr, South Burlington	Private	South Burlington	Existing	GW	Reroute drainage from Kimball Ave to this detention pond behind Adelphia Cable. Retrofit and expand existing pond into a gravel wetland to detain CPv.	1-1000; 6291-9030	4.15	2.66	64%	0.086	0	100%
PB0008	Adirondack Street	Adirondack St and Butler Dr, South Burlington	Private	South Burlington	New	UD	Construct underground detention chambers under ROW and grassed shoulder.	2-0312	11.95	3.52	29%	0.580	0	100%
PB0009	Airport Drive	Airport Dr and Airport Rd, South Burlington	MS4 Owned	South Burlington, BTV	New	IG	Construct subsurface infiltration chambers in southernmost lot where houses will be removed. Intercept stormline running south down Airport Dr.	No Permit	9.65	2.70	28%	0.455	0.46	100%
PB0010	Ashbrook Drive	Ashbrook Dr and Dorset St, South Burlington	Private	South Burlington	New	GW	Reroute stormwater to gravel wetland southwest of Dorset St behind apartment buildings.	2-0101	2.49	0.88	35%	0.178	0	100%
PB0011	Blue Mall Infiltration	Dorset St south of Market St, South Burlington	Private	South Burlington	New	IG	Construct underground infiltration chambers in the southwest edge of parking lot. Overflow to existing stormline that flows to Dorset St.	2-0144	2.49	2.40	97%	0.367	0.37	100%
PB0012	Brookwood Drive Pond	Brookwood Dr off of Dorset St, South Burlington	Private	South Burlington	New	DP	Construct new detention pond to detain this large outfall. Forebay to be located in empty lot near Brookwood Dr.	2-0794; 2-0619	41.24	24.49	59%	1.998	0	100%
PB0013	Burlington Price Chopper	Shelburne Rd, Burlington	Private	Burlington	New	GW	Construct new gravel wetland in area between parking lot and stream to the south of parking lot.	No Permit	12.69	11.48	90%	1.229	0	100%
PB0014	Chelsea Circle	Chelsea Cir and Hayes Ave, South Burlington	Private	South Burlington	New	IB	Construct new infiltration basin constructed to south of existing swale, which receives flow from Chelsea Cir condos and Timberlane Dental parking lot. Neighborhood icing and flooding issues can be mitigated with this project.	2-0767	3.28	1.82	56%	0.292	0.29	100%
PB0015	Church of Jesus Christ of Latterday Saints	Swift St and Dorset St, South Burlington	Private	South Burlington	New	DS	Add detention to swale to the west of parking area with outlet control to detain CPv	2-0179; 6318-9030	3.12	1.58	51%	0.099	0	100%
PB0016	Community Bible Church Infiltration	Williston Rd and Millham Ct, South Burlington	Private	South Burlington	New	IT	Construct linear infiltration trench (perforated pipe) along back of several businesses.	No Permit	10.34	6.17	60%	0.912	0.91	100%
PB0017	Domino's	Swift St and Farrell St, South Burlington	Private	South Burlington	New	GW	Construct a gravel wetland pond behind parking area. Add catchbasin along Swift St to also capture half of the road drainage.	No Permit	2.30	1.34	58%	0.231	0	100%
PB0018	Dorset Commons Pond	Dorset St and Town Square Dr, South Burlington	Private	South Burlington	New	DP	Construct new detention pond in wooded area behind Dorset Commons.	1-0242	17.54	5.01	29%	0.602	0	100%
PB0019	Dumont Park Stormwater Project	Barrett St and Obrien Dr, South Burlington	Private	South Burlington, VTrans	New	DP	Construct new detention pond to the north of Barrett St where two stormlines converge.	No Permit	9.56	4.16	43%	0.269	0	100%
PB0020	Dynapower	Hinesburg Rd and Meadowland Dr, South Burlington	Private	South Burlington	Existing	GW	Reroute roof drainage to existing detention pond. Retrofit to gravel wetland and detain CPv.	1-0618	12.20	6.50	53%	0.952	0	100%

Proposed BMP ID #	Project Name	BMP Address	BMP Landowner	MS4s with Impervious Area	New or Existing	BMP Type	BMP Description	Expired Permit #	Drainage Area (acres)	Impervious Area Managed (acres)	Impervious %	CPv Managed (ac-ft)	Volume Infiltrated (ac-ft)	WQ Volume controlled (%)
PB0021	East Terrace Detention Pond	East Terrace, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland near the outfall to the east side of East Terrace.	No Permit	6.36	2.28	36%	0.344	0	100%
PB0022	Eastwood Commons Pond Expansion	Farrell St, South Burlington	Private	South Burlington	Existing	DP	Reroute area to the west of existing pond (eastern side of Shaw's plaza) to this pond. Add a new connection between these stormwater systems to the east of the Shaw's property. Expand pond and modify outlet structure to accommodate additional drainage.	1-1438	28.39	20.78	73%	0.728	0	100%
PB0023	Easy Self Storage	Swift St and Shelburne Rd, South Burlington	Private	South Burlington	New	GW	Create new gravel wetland to the north of the storage area.	2-0167	1.87	1.21	65%	0.203	0	100%
PB0024	Economou Farm Pond	Economou Farm Rd, South Burlington	Private	South Burlington	Existing	GW	Retrofit existing dry pond to gravel wetland to detain CPv. Expand and add forebay.	1-1241d	6.37	1.46	23%	0.669	0	100%
PB0025	Exit 13 Gravel Wetland	I-89 Exit 13, South Burlington	MS4 Owned	VTrans	New	GW	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	No Permit	16.72	5.57	33%	0.567	0	100%
PB0026	Exit 14 Gravel Wetland	I-89 Exit 14, South Burlington	MS4 Owned	VTrans	New	GW	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	No Permit	4.91	1.93	39%	0.294	0	100%
PB0027	Fairpoint Communications	Hinesburg Rd south of I-89, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland to the east of property in grassed area. Two outfalls on site drain to wetland swales that need to be rerouted to the east.	2-0212	8.75	4.76	54%	0.591	0	100%
PB0028	Faith United Methodist Church	Dorset St south of Songbird Ln, South Burlington	Private	South Burlington	New	UD	Construct new underground detention behind church (northwest) in grassy area. Current outfall is eroded.	No Permit	1.68	1.03	61%	0.149	0	100%
PB0029	Golf Course Road South	Golf Course Rd and Old Cross Rd, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland at the end of pipe before it enters the golf course. Existing infrastructure already drains to swale.	1-1241	5.19	1.67	32%	0.232	0	100%
PB0030	Gonzo's Underground	Williston Rd east of Kennedy Dr, South Burlington	Private	South Burlington, VTrans	New	UD	Propose to intercept stormline that flows west along Williston Rd to underground detention chambers under grassed area in front of Budget Car Rental / Gonzo's plaza.	2-0811	13.62	8.72	64%	0.451	0	100%
PB0031	Grandview Drive North Detention Pond	Grandview Dr and W Twin Oaks Terr, South Burlington	Private	South Burlington	New	DP	Construct new surface detention BMP following outfall, which is currently broken and experiencing significant erosion.	2-0238; 2-0737	3.02	1.38	46%	0.142	0	100%
PB0032	Grandview Drive West Detention Pond	Grandview Dr and Dorset St, South Burlington	Private	South Burlington	New	DP	Construct new surface detention basin to the west of Dorset St. Reroute stormline away from brook to new BMP.	2-0238; 2-0737	3.14	1.89	60%	0.179	0	100%
PB0033	Hawthorne Circle Detention Pond	Hawthorne Cir and Kennedy Dr, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland in greenspace formed in the triangle between three garages.	No Permit	4.95	2.55	51%	0.150	0	100%
PB0034	Helen Ave Cul De Sac	Helen Ave, South Burlington	Private	South Burlington	New	IB	Construct new infiltration basin in the cul de sac at the end of Helen Ave, which would provide significant water quality benefit.	No Permit	5.70	2.15	38%	0.354	0.35	100%
PB0035	Hinesburg Road	Hinesburg Rd and Deane St, South Burlington	Private	South Burlington, VTrans	New	DP	Reroute stormwater to existing catchbasin on Deane St and detain to the west of Hinesburg Rd to the south of existing houses.	No Permit	3.53	1.27	36%	0.138	0	100%
PB0036	I-89 Swale	Between I-89 N and S lanes west of Hinesburg Rd, South Burlington	MS4 Owned	VTrans	New	MF	Construct median filter in depressed area between north and south I-89 lanes. Reroute several culverts.	No Permit	6.28	1.91	30%	0.531	0	100%
PB0037	Iby Gravel Wetland	Iby St off of Hinesburg Rd, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland at the end of Iby St to capture stormwater for the street.	No Permit	2.82	1.14	40%	0.067	0	100%
PB0038	INS Building Pond A Retrofit	Kimball Ave west of Community Dr, South Burlington	Private	South Burlington	Existing	GW	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	1-0969	2.11	0.98	47%	0.040	0	100%
PB0039	INS Building Pond B Retrofit	Kimball Ave west of Community Dr, South Burlington	Private	South Burlington	Existing	GW	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	1-0969b	1.44	0.61	42%	0.040	0	100%
PB0040	Joy Dr Detention Pond	Joy Dr, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland area in adjacent flat area near the Green Mountain Power transmission corridor.	No Permit	3.07	1.34	44%	0.210	0	100%
PB0041	Kennedy Dr Pond 2 Expansion	Kennedy Dr and W Twin Oaks Terr, South Burlington	MS4 Owned	South Burlington	Existing	GW	Retrofit existing detention pond to accommodate additional drainage from The Edge and 1 Twin Oaks.	1-1582b; 2-1069	3.89	2.36	61%	0.159	0	100%

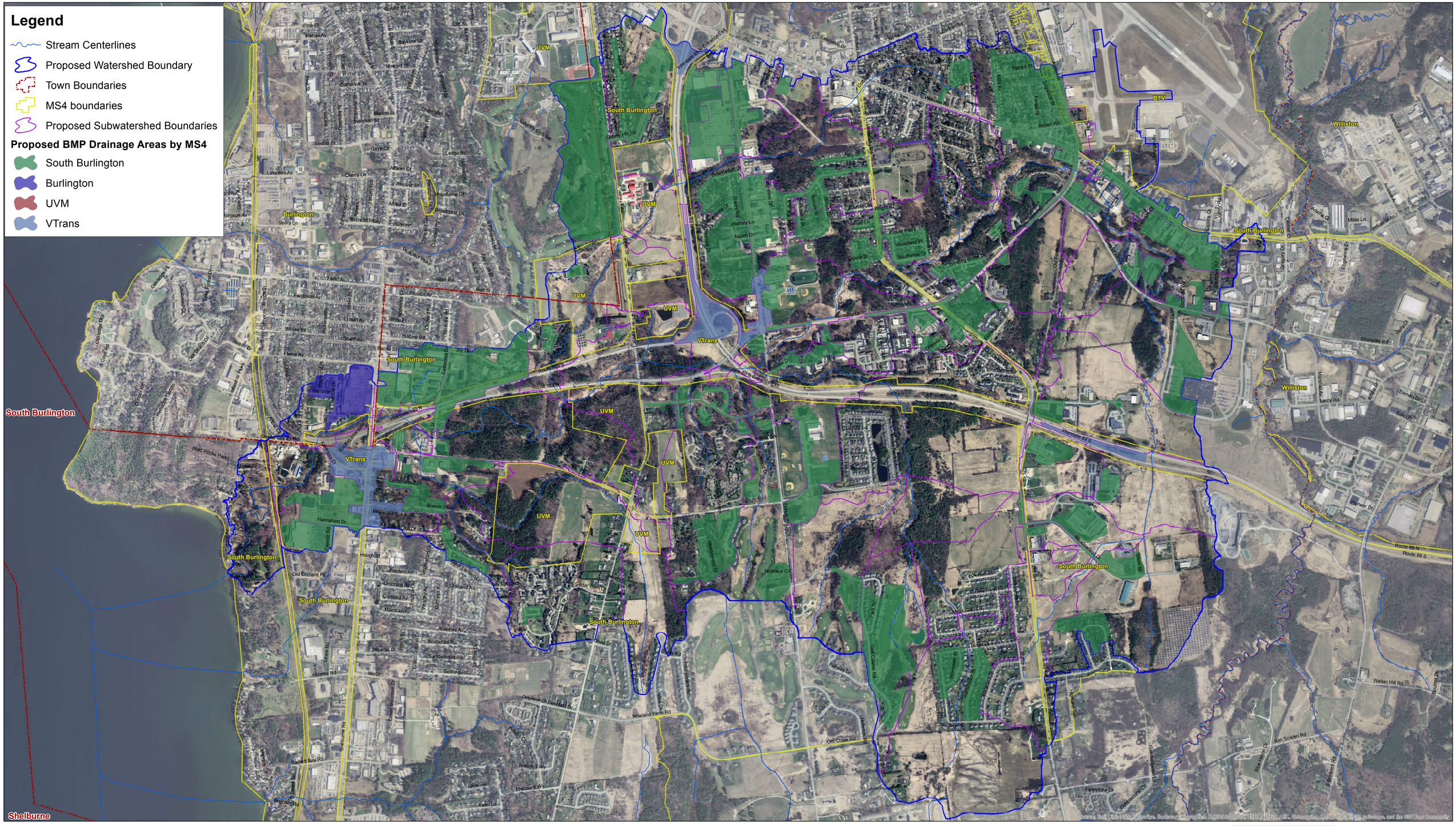
Proposed BMP ID #	Project Name	BMP Address	BMP Landowner	MS4s with Impervious Area	New or Existing	BMP Type	BMP Description	Expired Permit #	Drainage Area (acres)	Impervious Area Managed (acres)	Impervious %	CPv Managed (ac-ft)	Volume Infiltrated (ac-ft)	WQ Volume controlled (%)
PB0042	Kennedy Dr Pond 3 Expansion	Kennedy Dr west of Timber Ln, South Burlington	MS4 Owned	South Burlington	Existing	GW	Reroute culvert that crosses under access ramp to pond, expand footprint and retrofit to gravel wetland	1-1582c	6.39	4.82	75%	0.175	0	100%
PB0043	Kennedy Dr Pond 4 Expansion	Kennedy Dr and Hinesburg Rd, South Burlington	MS4 Owned	South Burlington, VTrans	Existing	DP	Reroute stormline from Chatham Green and swale along Hinesburg Rd to existing detention pond. Expand pond to accommodate additional drainage area and detain CPv.	1-1582d; 1-0237; 1-1023; 1-1290	10.07	4.78	47%	0.252	0	100%
PB0044	Kennedy Dr Pond 7 Expansion	Kennedy Dr north of Kimball Ave, South Burlington	MS4 Owned	South Burlington	Existing	DP	Reroute stormline that currently outfalls behind Key Bank to existing detention pond. Add CMAC valve to detain CPv.	1-1582g; 1-0233	11.24	8.67	77%	0.583	0	100%
PB0045	K-Mart Plaza Infiltration	Shelburne Rd north of Hannaford Dr, South Burlington	Private	South Burlington	New	IG	Construct new underground infiltration chambers in K-Mart parking lot.	No Permit	8.86	7.68	87%	0.863	0.10	100%
PB0046	Knoll Circle	Knoll Cir north of Dubois Dr, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland with swale inlet. Current stormline draining subdivision already enters swale, which also drains area to the west.	2-0220	12.16	2.16	18%	0.802	0	100%
PB0047	Lane Press Roof	Meadowland Dr, South Burlington	Private	South Burlington	New	IB	Capture roof drainage in a new infiltration basin. Roof drains already flows to grassed area where treatment is proposed.	1-1337	5.57	4.17	75%	0.691	0.69	100%
PB0048	Laurel Hill Drive	Laurel Hill Dr off of Shelburne Rd, South Burlington	Private	South Burlington	New	IB	Construct new infiltration basin to the north of houses before stormline pipe enters riparian buffer.	No Permit	6.50	1.84	28%	0.405	0.41	100%
PB0049	Lilac Ln Infiltration Basin	Lilac Ln off of Hinesburg Rd, South Burlington	Private	South Burlington	New	IB	Formalize infiltration basin in depressed area at the end of Lilac Ln.	No Permit	1.46	0.85	58%	0.131	0.13	100%
PB0050	Lindenwood Drive Detention Pond	Lindenwood Dr off of Shelburne Rd, South Burlington	Private	South Burlington	New	DP	Add catchbasins and infrastructure to reroute stormwater to the east of Lindenwood Dr. Part of Brewer Pkwy drains to this area as well. Propose to create one detention basin to detain drainage from both streets. Lindenwood Dr has existing puddling and icing issues. This BMP would also mitigate those issues.	No Permit	10.57	2.19	21%	0.205	0	100%
PB0051	Logwood Neighborhood Detention Pond	Williston Rd south of intersection with Airport Rd, South Burlington	Private	South Burlington	New	DP	Construct new end of pipe surface impoundment BMP behind Lean Dental Group. Outfall is currently eroded.	No Permit	44.81	18.44	41%	0.606	0	100%
PB0052	Marcotte Central School	Market St near Dorset St intersection, South Burlington	MS4 Owned	South Burlington	New	GW	Construct new gravel wetland in wooded area directly south of school parking lot. Route outfall to existing stormline. Potential educational benefit.	No Permit	2.11	1.83	87%	0.186	0	100%
PB0053	Marine Connection	Williston Rd and Shunpike Rd, South Burlington	Private	South Burlington	New	DS	Add detention to existing swale near the back of the large Marine Connection building. Expand swale to accommodate additional volume.	No Permit	10.79	4.73	44%	0.214	0	100%
PB0054	Meadowland Business Park Pond 2	Meadowland Dr, South Burlington	Private	South Burlington, VTrans	Existing	DP	Retrofit existing detention pond. Add forebay and CMAC valve to detain CPv.	1-1269_4290-9020.3 Lot 10	13.46	5.13	38%	1.704	0	100%
PB0055	Merchant's Bank Detention Pond	Kimball Ave and Kennedy Dr, South Burlington	Private	South Burlington	New	DP	Route stormwater from Allstate Insurance west to Merchant's Bank and provide detention in grassed area	2-1171; 6275-9030; 6269-9030; 2-0939	4.36	3.17	73%	0.228	0	100%
PB0056	Spear St	Spear St north of I-89, South Burlington	MS4 Owned	South Burlington, Burlington, UVM	New	GW	Install gravel wetland at the end of the drainage system along Spear Street.	No Permit	79.01	4.90	6%	2.140	0	100%
PB0057	Nicklaus Circle	Nicklaus Cir off of Dorset St, South Burlington	Private	South Burlington	New	GW	Construct new gravel wetland feature to the north of Nicklaus Cir where the stormline and swale converge.	1-1241, 4049-9030	9.25	2.23	24%	0.537	0	100%
PB0058	North Country Credit North West Infiltration	Swift St west of Shelburne Rd, South Burlington	Private	South Burlington	New	IT	Install perforated pipe to the north of parking lot in grassed area to infiltrate stormwater.	No Permit	0.25	0.21	84%	0.026	0.03	100%
PB0059	North Country Credit South Infiltration	Swift St west of Shelburne Rd, South Burlington	Private	South Burlington	New	IG	Construct underground infiltration chambers in the southeast corner of parking lot. Overflow to existing stormline.	No Permit	0.76	0.62	81%	0.119	0.12	100%
PB0060	O'Brien Drive Underground Detention	Obrien Dr, South Burlington	Private	South Burlington	New	UD	Construct underground storage chambers in open lot between existing houses.	No Permit	8.47	2.87	34%	0.536	0.54	100%

Proposed BMP ID #	Project Name	BMP Address	BMP Landowner	MS4s with Impervious Area	New or Existing	BMP Type	BMP Description	Expired Permit #	Drainage Area (acres)	Impervious Area Managed (acres)	Impervious %	CPv Managed (ac-ft)	Volume Infiltrated (ac-ft)	WQ Volume controlled (%)
PB0061	Olympiad Apartments & Office Building Pond Retrofit	Farrell St south of Eastwood Dr, South Burlington	Private	South Burlington	Existing	GW	Retrofit detention basin to gravel wetland. Add forebay and ensure pond detains CPv.	1-1452	9.65	3.68	38%	0.055	0	100%
PB0062	Panurgy Infiltration Basin	Kimball Ave and Shunpike Rd, South Burlington	Private	South Burlington	Existing	IB	Retrofit and expand existing infiltration basin to infiltrate the CPv.	3409-9010	1.33	0.8	60%	0.081	0.14	100%
PB0063	Park Road Detention Pond	Park Rd off of Dorset St, South Burlington	Private	South Burlington	New	DP	Propose to reroute swale on southern side of Park Rd to the north and detain in wooded area.	1-1241	6.96	1.27	18%	0.421	0	100%
PB0064	Pillsbury Manor Infiltration Basin Retrofit	Pillsbury Manor N and Williston Rd, South Burlington	Private	South Burlington	Existing	IB	Retrofit existing pond to infiltration basin. Overflow to existing culvert.	1-1015	1.06	0.40	38%	0.068	0.07	100%
PB0065	Quarry Hill South	Quarry Hill Rd off of Spear St, South Burlington	Private	South Burlington	New	DS	Add detention to existing swale running northeast behind garages.	6322-9030	5.62	2.52	45%	0.478	0	100%
PB0066	Queen City Park Road Detention Pond	Queen City Park Rd off of Shelburne Rd, South Burlington	MS4 Owned	South Burlington, VTrans	New	DP	Add detention to existing depressed area where stormlines already outfall. Drainage from Shelburne Rd is assumed to be already rerouted to larger depression to the north (see project entitled 189 Cloverleaf).	No Permit	6.51	2.98	46%	0.452	0	100%
PB0067	Shaws West	Shelburne Rd north of 189, South Burlington	Private	South Burlington	New	UD	Construct underground detention in vegetated island along west side of parking lot. Reroute last catchbasin in southwest corner of parking to this area.	No Permit	1.85	1.71	93%	0.157	0	100%
PB0068	South Burlington High School Infiltration	Dorset St north of Kennedy Dr, South Burlington	MS4 Owned	South Burlington	New	IB	Construct new infiltration basin to the southeast of sports field in currently wooded area.	No Permit	3.57	3.10	87%	0.443	0.443	100%
PB0069	South Burlington High School North	Dorset St north of Kennedy Dr, South Burlington	MS4 Owned	South Burlington	New	IG	Construct dry wells to infiltrate stormwater from the high school parking lot and middle school roof. Potential educational benefit.	6174-INDS.A	5.77	4.26	74%	0.689	0.69	100%
PB0070	South Meadows Pond	Farrell St, South Burlington	Private	Burlington	Existing	DP	Retrofit existing detention pond to meet CPv standards. Add forebay and expand pond. Upgrade outlet structure.	1-0661	10.10	4.73	47%	0.370	0	100%
PB0071	Southview Drive	Southview Dr off of Prouty Pkwy, South Burlington	Private	South Burlington	New	UD	Construct underground detention chambers in ROW and grassed area. Road is 30ft wide and could be narrowed for storage.	No Permit	12.26	4.81	39%	0.711	0.04	100%
PB0072	Staples Plaza Underground Detention	Williston Rd west of I-89, South Burlington	Private	South Burlington, VTrans	New	UD	Construct underground detention chambers in southeast corner of parking lot.	No Permit	1.70	1.64	97%	0.198	0.03	100%
PB0073	Stonehedge Circle	Stonehedge Dr off of Spear St, South Burlington	Private	South Burlington	New	DP	Construct bioretention along road in grassed area with discharge to existing catchbasin.	2-0100	2.48	1.26	51%	0.203	0	100%
PB0074	Sugartree Lane	Sugartree Ln off of Kennedy Dr, South Burlington	Private	South Burlington	New	GW	Expand existing depressed area at the end of Sugartree Ln , which appears to be an abandoned detention area, into a gravel wetland. Reroute catchbasins to pond. Upgrade outlet.	2-0878	1.54	1.05	69%	0.115	0	100%
PB0075	Swift Estates Pond	Meadowood Dr and Swift St, South Burlington	Private	South Burlington	Existing	DP	Retrofit existing detention pond to meet CPv standards. Add forebay and upgrade outlet structure.	No Permit	18.52	3.57	19%	0.326	0	100%
PB0076	Technology Park Pond Retrofit	Community Dr off of Kimball Ave, South Burlington	Private	South Burlington	Existing	GW	Retrofit existing detention pond to gravel wetland and meet CPv standards. Upgrade outlet structure and expand accommodate additional storage.	1-1458 P4	8.05	0.03	0%	0.271	0	100%
PB0077	Temple Detention Pond	Swift St and Dorset St, South Burlington	Private	South Burlington	New	GW	Propose new gravel wetland in depressed area in front of Temple by intersection of Dorset St and Swift St. Stormwater already collects in this area.	No Permit	1.81	0.92	51%	0.192	0	100%
PB0078	The Pines	Oakwood Dr, South Burlington	Private	South Burlington	Existing	GW	Retrofit existing detention pond to gravel wetland. Add forebay and CMAC valve to detain CPv.	1-1117	12.67	5.85	46%	0.215	0	100%
PB0079	UMall Detention Pond	Dorset St (University Mall), South Burlington	Private	South Burlington	Existing	DP	Retrofit existing detention pond to detain CPv. Upgrade outlet structure and expand pond.	1-0503c; 6282-9030	16.90	14.96	89%	0.909	0	100%
PB0080	UMall Infiltration 1	Dorset St (University Mall), South Burlington	Private	South Burlington	Existing	IG	Retrofit existing infiltration gallery to infiltrate the CPv.	1-0503b; 6282-9030	17.15	15.30	89%	0.032	0.18	100%
PB0081	UMall Infiltration 2	Dorset St (University Mall), South Burlington	Private	South Burlington	Existing	IG	Retrofit existing infiltration gallery to infiltrate the CPv.	1-0503a; 6282-9030	5.61	5.55	99%	0.311	2.17	100%

Proposed BMP ID #	Project Name	BMP Address	BMP Landowner	MS4s with Impervious Area	New or Existing	BMP Type	BMP Description	Expired Permit #	Drainage Area (acres)	Impervious Area Managed (acres)	Impervious %	CPv Managed (ac-ft)	Volume Infiltrated (ac-ft)	WQ Volume controlled (%)
PB0082	UMall Sears Auto Pond	Dorset St (University Mall), South Burlington	Private	South Burlington	Existing	GW	Construct gravel wetland in unused section of parking lot in Umall (to the east of the party store). Reroute Dorset St stormline here.	1-0503d; 6282-9030; 2-0619	11.62	9.29	80%	0.612	0	100%
PB0083	UVM Bio Research Complex	Spear St north of I-89, South Burlington	MS4 Owned	UVM	New	DP	Construct bioretention to treat stormwater in grassed area near the center of complex. Potential educational benefit.	5269-9003.R	1.85	0.92	50%	0.199	0	100%
PB0084	UVM Forestry Research Center - East Roof	Spear St north of I-89, South Burlington	MS4 Owned	UVM	New	IG	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	No Permit	0.42	0.41	98%	0.055	0.01	100%
PB0085	UVM Forestry Research Center - West Roof	Spear St north of I-89, South Burlington	MS4 Owned	UVM	New	IG	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	No Permit	0.12	0.12	100%	0.016	0.01	100%
PB0086	Vermont National Country Club Pond B	Golf Course Rd and Park Rd, South Burlington	Private	South Burlington	Existing	DP	Retrofit existing detention pond. Add forebay and expand pond.	1-1241b	35.72	8.63	24%	0.427	0	100%
PB0087	Vermont National Country Club Pond C	Golf Course Rd and Park Rd, South Burlington	Private	South Burlington	Existing	DP	Retrofit existing detention pond. Add forebay and expand pond.	1-1241c	9.94	0.47	5%	0.848	0	100%
PB0088	VT Gas Detention Pond	Swift St and Farrell St, South Burlington	Private	South Burlington	New	GW	Reroute stormline from Swift St to grassed area to the north of VT Gas property and construct new gravel wetland.	2-0228; 6293-9030	7.57	3.09	41%	0.172	0	100%
PB0089	Wellesley Grove	Georgetown off of Kennedy Dr, South Burlington	Private	South Burlington	New	GW	Add outlet control to existing depression to detain stormwater, construct new gravel wetland. Repair outfall erosion.	2-1023	8.85	2.15	24%	0.269	0	100%
PB0090	Windridge Court	Windridge Ct and Kennedy Dr, South Burlington	Private	South Burlington	New	IB	Construct new infiltration basin to infiltrate stormwater to the west of this small development.	2-0824	1.04	0.58	55%	0.099	0.10	100%
PB0091	Woodcrest Drive	Woodcrest Dr and Deane St, South Burlington	MS4 Owned	South Burlington, VTrans	New	IB	Infiltrate stormwater to the southwest of drainage area. Reroute stormline south to new BMP. Construct new swale to drain the end of Woodcrest Dr, which is currently eroding slope following road.	No Permit	7.46	2.38	32%	0.496	0.50	100%
PB0092	Woodlands Industrial Park	Kimball Ave west of Community Dr, South Burlington	Private	South Burlington	Existing	GW	Reroute roof drainage to existing detention pond. Retrofit pond to gravel wetland and expand to accommodate additional volume and detain CPv.	1-0526/ 6279-9030	4.40	3.89	88%	0.371	0	100%
PB0093	Worcester Street	Adirondack St and Butler Dr, South Burlington	Private	South Burlington	New	UD	Construct underground detention chambers under ROW and grassed shoulder.	2-0312	10.84	3.82	35%	0.560	0	100%
PB0094	Dorset Park Pond	Dorset St and Swift St, South Burlington	MS4 Owned	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1033	26.07	5.95	23%	0.30	0	100%
PB0095	Hannaford's Pond	Hannaford Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1214	14.71	7.75	53%	0.34	0	100%
PB0096	Lowes Pond	Hannaford Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1214	12.73	10.05	79%	0.196	0	100%
PB0097	Vermont National Country Club Pond B	Golf Course Rd, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1241b	35.72	8.63	24%	0.92	0	100%
PB0098	Technology Park Pond 1	Community Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1254	8.96	3.78	42%	0.37	0	100%
PB0099	Lot A Mountain View Pond	Tilley Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1536	6.05	2.55	42%	0.02	0	100%
PB0100	Kennedy Dr Pond 1	Kennedy Dr, South Burlington	MS4 Owned	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	1-1582a	1.47	1.33	91%	0.05	0	100%
PB0101	Quarry Hill Pond	Quarry Hill Rd off of Spear St, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3602-INDS	21.75	6.19	28%	0.00	0	100%
PB0102	Heatherfield P1	Off of Spear St, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3658a	1.40	0.90	64%	0.00	0	100%
PB0103	Heatherfield P2	Off of Spear St, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3658b	10.76	7.08	66%	0.03	0	100%
PB0104	Heatherfield P3	Off of Spear St, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3658c	4.30	2.71	63%	0.05	0	100%
PB0105	Winding Brook	Winding Brook Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3691-INDS	9.11	3.32	36%	0.11	0	100%
PB0106	Mountainview Pond b	Tilley Dr, South Burlington	Private	South Burlington	Existing	DP	Retrofit pond with CMAC valve.	3805-INDS	0.90	0.61	68%	0.08	0	100%
PB0107	Farrell St Pond	Farrell St, South Burlington	MS4 Owned	South Burlington, VTrans	Existing	DP	Retrofit pond with CMAC valve.	5080-INDO	32.96	11.03	33%	0.05	0	100%

Notes:

1. **BMP Type Abbreviations**: GW: Gravel Wetland, GS: Grass Swale, RS: Retention Swale, ST: Settling Tank, OF: Control orifice, IB: Infiltration Basin, IT: Infiltration Trench, DP: Detention Pond, UD: Underground Detention, RP: Retention Pond, DS: Detention Swale, DW: Dry Well, IG: Infiltration Gallery, SF: Sand Filter, BR: Bioretention, MF: Median Filter.



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Map C-1 – Proposed Stormwater BMPs

Potash Brook Watershed
South Burlington, VT

Hoyle, Tanner & Associates, Inc.

WATERSHED CONSULTING ASSOCIATES, LLC

Map Produced: 07-13-2016

Potash Brook FRP BMP Summary Sheet

Site name:	1050 Hinesburg Road	**South Burlington ID:**	PB0001		
Approximate address:	1050 Hinesburg Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$106,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	1.43		
Impervious acres managed	0.74	Primary land use in drainage area	Commercial
% Impervious	52%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.11
BMP Footprint Size (acres)	0.07	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
There is an existing wet depression here where stormwater is already routed. Propose gravel wetland and meet CPv standards.	

Potash Brook FRP BMP Summary Sheet

Site name:	110 Kimball Ave - North Infiltration Basin	**South Burlington ID:**	PB0002		
Approximate address:	110 Kimball Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Infiltration Basin				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.51		
Impervious acres managed	0.58	Primary land use in drainage	Commercial
% Impervious	38%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.02
BMP Footprint Size (acres)	0.15	Volume infiltrated (ac-ft)	0.04
BMP Depth (feet)	1.50	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-1504a

Proposed BMP description:	**Feasibility concerns:**
Runoff is bypassing infiltration basin and sheet flowing to a swale with direct discharge to the brook. Add trench along west edge of parking lot to direct runoff to infiltration basin. Expand basin to accommodate increased volume.	

Potash Brook FRP BMP Summary Sheet					
Site name:	110 Kimball Ave - South Infiltration Basin	**South Burlington ID:**	PB0003		
Approximate address:	110 Kimball Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Infiltration Basin				

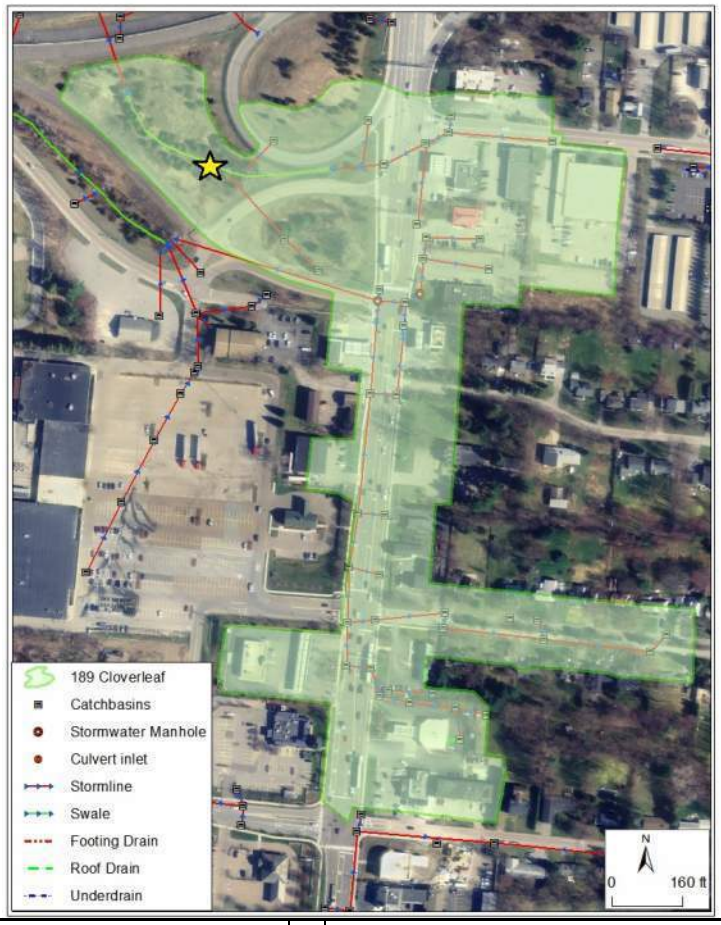
Estimated project cost	$10,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.42		
Impervious acres managed	0.94	Primary land use in drainage	Commercial
% Impervious	66%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.05
BMP Footprint Size (acres)	0.14	Volume infiltrated (ac-ft)	0.06
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	1-1504b

Proposed BMP description:	Feasibility concerns:
Retrofit outlet structure and add proposed outlet control riser that was not constructed.	

Potash Brook FRP BMP Summary Sheet

Site name:	189 Cloverleaf Detention Pond	**South Burlington ID:**	PB0004

Approximate address:	Shelburne Rd and Queen City Pkwy, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				



Estimated project cost	$59,000	MS4s contributing drainage to BMP	South Burlington, VTrans, Burlington
Drainage area (acres)	21.25		
Impervious acres managed	12.14	Primary land use in drainage	Commercial
% Impervious	57%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	1.13
BMP Footprint Size (acres)	1.19	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	16.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Add outlet structure to area that is already depressed to detain stormwater. Reroute stormline from Shelburne Rd to this area.	Wetlands concerns.

Potash Brook FRP BMP Summary Sheet

Site name:	189 Ramp Detention Pond	**South Burlington ID:**	PB0005		
Approximate address:	Dorset St and 189 Ramps, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$347,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	9.36		
Impervious acres managed	5.78	Primary land use in drainage area	Commercial
% Impervious	62%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.35
BMP Footprint Size (acres)	0.33	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0619

Proposed BMP description:	**Feasibility concerns:**
Detain stormwater from a large section of Dorset St. Intercept stormline near Kennedy Dr and reroute to the area between 189 ramps. Treat with gravel wetland.	BMP location will need significant earthwork as area is elevated.

Potash Brook FRP BMP Summary Sheet

Site name:	30 Kimball Ave Swale Retrofit	**South Burlington ID:**	PB0006

Approximate address:	30 Kimball Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Swale				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.27		
Impervious acres managed	1.05	Primary land use in drainage	Commercial
% Impervious	82%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.02
BMP Footprint Size (acres)	0.06	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1526; 6269-9030

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing swale detention to meet CPv. Expand swale to accommodate modified outlet structure.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Adelphia Cable Pond Retrofit	**South Burlington ID:**	PB0007		
Approximate address:	Kimball Ave and Adelphia Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	4.15		
Impervious acres managed	2.66	Primary land use in drainage	Commercial
% Impervious	64%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.09
BMP Footprint Size (acres)	0.21	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	1-1000; 6291-9030

Proposed BMP description:	**Feasibility concerns:**
Reroute drainage from Kimball Ave to this detention pond behind Adelphia Cable. Retrofit and expand existing pond into a gravel wetland to detain CPv.	Utilities limited pond expansion to the east.

Potash Brook FRP BMP Summary Sheet

Site name:	Adirondack Street	**South Burlington ID:**	PB0008		
Approximate address:	Adirondack St and Butler Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground detention				

Estimated project cost	$845,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	11.95		
Impervious acres managed	3.52	Primary land use in drainage area	Residential
% Impervious	29%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.58
BMP Footprint Size (acres)	0.22	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.67	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0312

Proposed BMP description:	**Feasibility concerns:**
Construct underground detention chambers under ROW and grassed shoulder.	Space is very limited. Utilities concerns. Unsure how high groundwater table is here.

Potash Brook FRP BMP Summary Sheet					
Site name:	Airport Drive	**South Burlington ID:**	PB0009		
Approximate address:	Airport Dr and Airport Rd, South Burlington	**MS4 where BMP is located:**	BTV	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Gallery				

Estimated project cost	$439,000	MS4s contributing drainage to BMP	South Burlington, BTV
Drainage area (acres)	9.65		
Impervious acres managed	2.71	Primary land use in drainage area	Residential
% Impervious	28%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.46
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.46
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	Feasibility concerns:
Construct subsurface infiltration chambers in southernmost lot where houses will be removed. Intercept stormline running south down Airport Dr.	

Potash Brook FRP BMP Summary Sheet

Site name:	Ashbrook Drive	**South Burlington ID:**	PB0010		
Approximate address:	Ashbrook Dr and Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$168,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.49		
Impervious acres managed	0.88	Primary land use in drainage area	Residential
% Impervious	35%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.18
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0101

Proposed BMP description:	**Feasibility concerns:**
Reroute stormwater to gravel wetland southwest of Dorset St behind apartment buildings.	Space is limited. Potential wetlands concerns.

Potash Brook FRP BMP Summary Sheet

Site name:	Blue Mall Infiltration	**South Burlington ID:**	PB0011		
Approximate address:	Dorset St south of Market St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Gallery				

Estimated project cost	$531,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.49		
Impervious acres managed	2.40	Primary land use in drainage area	Commercial
% Impervious	97%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.37
BMP Footprint Size (acres)	0.11	Volume infiltrated (ac-ft)	0.37
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	2-0144

Proposed BMP description:	**Feasibility concerns:**
Construct underground infiltration chambers in the southwest edge of parking lot. Overflow to existing stormline that flows to Dorset St.	Potential underground utilities.

Potash Brook FRP BMP Summary Sheet

Site name:	Brookwood Drive Pond	**South Burlington ID:**	PB0012		
Approximate address:	Brookwood Dr off of Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$394,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	41.24		
Impervious acres managed	24.49	Primary land use in drainage area	Commercial
% Impervious	59%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	2.00
BMP Footprint Size (acres)	0.34	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	14.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0794; 2-0619

Proposed BMP description:	**Feasibility concerns:**
Construct new detention pond to detain this large outfall. Forebay to be located in empty lot near Brookwood Dr.	Space is limited. Potential wetlands concerns and utility issues.

Potash Brook FRP BMP Summary Sheet

Site name:	Burlington Price Chopper	**South Burlington ID:**	PB0013		
Approximate address:	Shelburne Rd, Burlington	**MS4 where BMP is located:**	Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel wetland				

Estimated project cost	$1,459,000	MS4s contributing drainage to BMP	Burlington
Drainage area (acres)	12.69		
Impervious acres managed	11.48	Primary land use in drainage area	Commercial
% Impervious	90%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	1.23
BMP Footprint Size (acres)	0.11	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	Not Rated	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland in area between parking lot and stream to the south of parking lot.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Chelsea Circle	**South Burlington ID:**	PB0014		
Approximate address:	Chelsea Cir and Hayes Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$115,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.28		
Impervious acres managed	1.82	Primary land use in drainage area	Residential
% Impervious	56%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.29
BMP Footprint Size (acres)	0.20	Volume infiltrated (ac-ft)	0.29
BMP Depth (feet)	4.50	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	2-0767

Proposed BMP description:	**Feasibility concerns:**
Construct new infiltration basin constructed to south of existing swale, which receives flow from Chelsea Cir condos and Timberlane Dental parking lot. Neighborhood icing and flooding issues can be mitigated with this project.	

Potash Brook FRP BMP Summary Sheet

Site name:	Church of Jesus Christ of Latterday Saints	**South Burlington ID:**	PB0015		
Approximate address:	Swift St and Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Swale				

Estimated project cost	$29,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.12		
Impervious acres managed	1.58	Primary land use in drainage	Institutional
% Impervious	51%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.10
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0179; 6318-9030

Proposed BMP description:	**Feasibility concerns:**
Add detention to swale to the west of parking area with outlet control to detain CPv	

Potash Brook FRP BMP Summary Sheet

Site name:	Community Bible Church Infiltration	**South Burlington ID:**	PB0016		
Approximate address:	Williston Rd and Millham Ct, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Trench				

Estimated project cost	$975,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.52		
Impervious acres managed	1.68	Primary land use in drainage	Institutional
% Impervious	67%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.91
BMP Footprint Size (acres)	0.08	Volume infiltrated (ac-ft)	0.91
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct linear infiltration trench (perforated pipe) along back of several businesses.	

Potash Brook FRP BMP Summary Sheet

Site name:	Domino's	**South Burlington ID:**	PB0017		
Approximate address:	Swift St and Farrell St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$199,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.30		
Impervious acres managed	1.34	Primary land use in drainage area	Commercial
% Impervious	58%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.23
BMP Footprint Size (acres)	0.14	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.60	Primary or secondary BMP?	Primary
Hydrologic soil group	C/D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct a gravel wetland pond behind parking area. Add catchbasin along Swift St to also capture half of the road drainage.	Space is limited. Site is in close proximity to Potash Brook.

Potash Brook FRP BMP Summary Sheet

Site name:	Dorset Commons Pond	**South Burlington ID:**	PB0018		
Approximate address:	Dorset St and Town Square Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$168,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	17.54		
Impervious acres managed	5.01	Primary land use in drainage area	Residential
% Impervious	29%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.60
BMP Footprint Size (acres)	0.51	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-0242

Proposed BMP description:	**Feasibility concerns:**
Construct new detention pond in wooded area behind Dorset Commons.	Potential wetlands issues. There is a water transmission main that runs through this area.

Potash Brook FRP BMP Summary Sheet

Site name:	Dumont Park Stormwater Project	**South Burlington ID:**	PB0019

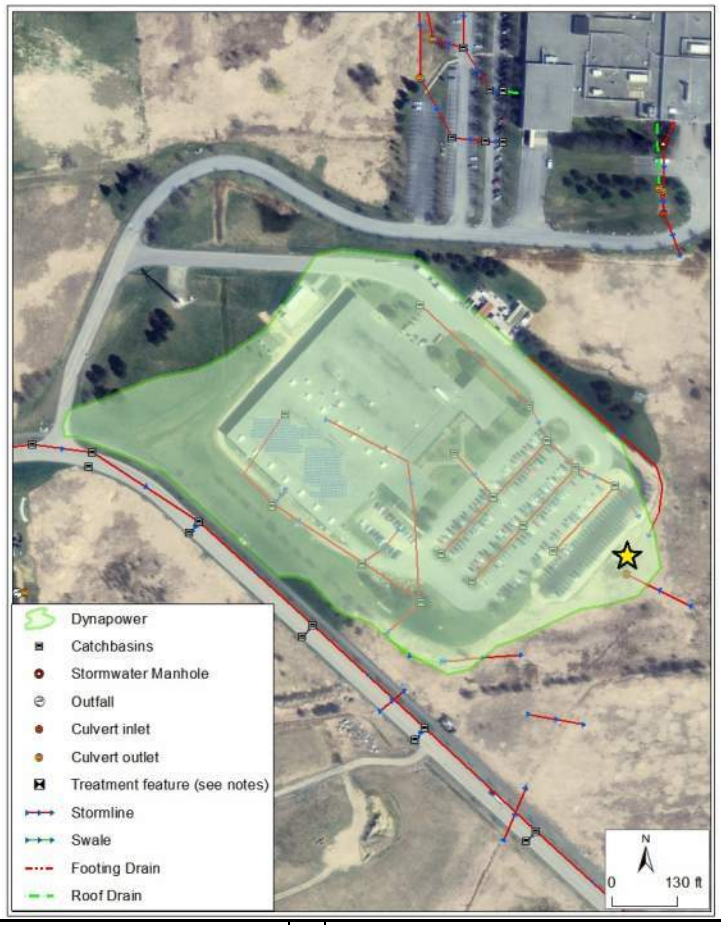
Approximate address:	Barrett St and Obrien Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$69,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	9.56		
Impervious acres managed	4.16	Primary land use in drainage	Residential
% Impervious	43%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.27
BMP Footprint Size (acres)	0.22	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new detention pond to the north of Barrett St where two stormlines converge.	Wetlands concerns. This site is near the future Dumont Park development.

Potash Brook FRP BMP Summary Sheet

Site name:	Dynapower	**South Burlington ID:**	PB0020		
Approximate address:	Hinesburg Rd and Meadowland Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				



Estimated project cost	$124,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	12.20		
Impervious acres managed	6.50	Primary land use in drainage area	Industrial
% Impervious	53%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.95
BMP Footprint Size (acres)	0.27	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.50	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-0618

Proposed BMP description:	**Feasibility concerns:**
Reroute roof drainage to existing detention pond. Retrofit to gravel wetland and detain CPv.	

Potash Brook FRP BMP Summary Sheet

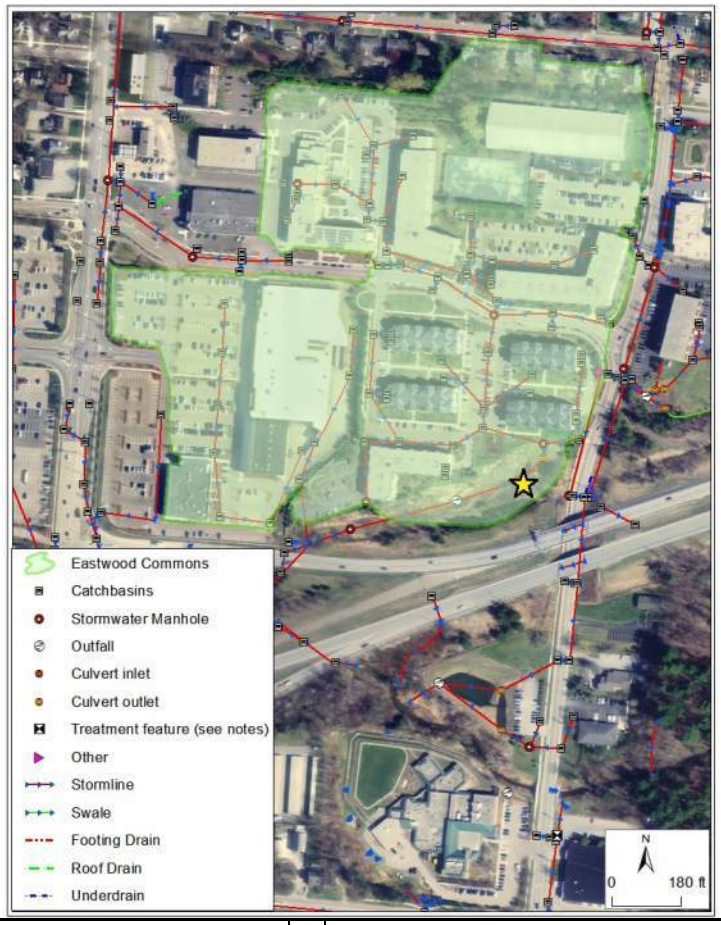
Site name:	East Terrace Detention Pond	**South Burlington ID:**	PB0021		
Approximate address:	East Terrace, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$318,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	6.36		
Impervious acres managed	2.28	Primary land use in drainage	Residential
% Impervious	36%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.34
BMP Footprint Size (acres)	0.40	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland near the outfall to the east side of East Terrace.	Must ensure that BMP is >50 ft from delineated wetlands that exist north of the treatment area.

Potash Brook FRP BMP Summary Sheet

Site name:	Eastwood Commons Pond Expansion	**South Burlington ID:**	PB0022		
Approximate address:	Farrell St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				



Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	28.39		
Impervious acres managed	20.78	Primary land use in drainage	Commercial
% Impervious	73%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.73
BMP Footprint Size (acres)	1.05	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	13.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C/D	Expired permit(s)?	1-1438

Proposed BMP description:	**Feasibility concerns:**
Reroute area to the west of existing pond (eastern side of Shaw's plaza) to this pond. Add a new connection between these stormwater systems to the east of the Shaw's property. Expand pond and modify outlet structure to accommodate additional drainage.	

Potash Brook FRP BMP Summary Sheet

Site name:	Easy Self Storage	**South Burlington ID:**	PB0023		
Approximate address:	Swift St and Shelburne Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$196,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.87		
Impervious acres managed	1.21	Primary land use in drainage area	Commercial
% Impervious	65%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.14	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	2-0167

Proposed BMP description:	**Feasibility concerns:**
Create new gravel wetland to the north of the storage area.	

Potash Brook FRP BMP Summary Sheet

Site name:	Economou Farm Pond	**South Burlington ID:**	PB0024		
Approximate address:	Economou Farm Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$87,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	6.37		
Impervious acres managed	1.46	Primary land use in drainage area	Residential
% Impervious	23%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.67
BMP Footprint Size (acres)	0.87	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	7.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241d

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing dry pond to gravel wetland to detain CPv. Expand and add forebay.	

Potash Brook FRP BMP Summary Sheet

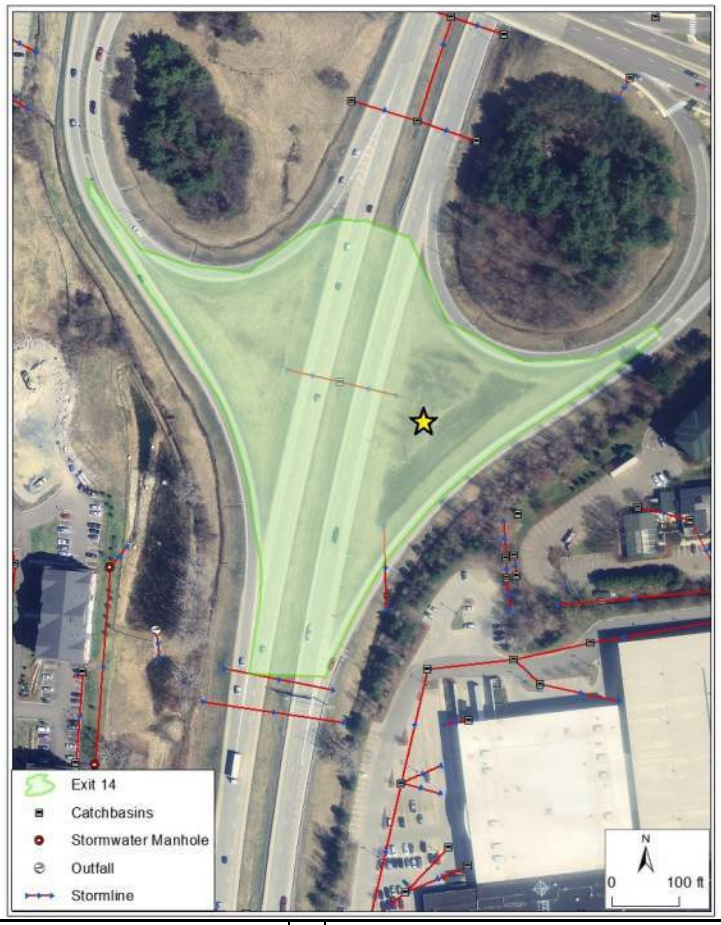
Site name:	Exit 13 Gravel Wetland	**South Burlington ID:**	PB0025		
Approximate address:	I-89 Exit 13, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Gravel wetland				

Estimated project cost	$219,000	MS4s contributing drainage to BMP	VTrans
Drainage area (acres)	16.72		
Impervious acres managed	5.57	Primary land use in drainage area	Transportation
% Impervious	33%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.57
BMP Footprint Size (acres)	0.43	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.50	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	

Potash Brook FRP BMP Summary Sheet

Site name:	Exit 14 Gravel Wetland	**South Burlington ID:**	PB0026		
Approximate address:	I-89 Exit 14, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Gravel wetland				



Estimated project cost	$131,000	MS4s contributing drainage to BMP	VTrans
Drainage area (acres)	4.91		
Impervious acres managed	1.93	Primary land use in drainage area	Transportation
% Impervious	39%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.29
BMP Footprint Size (acres)	0.37	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	Not Rated/B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	Soils are unmapped.

Potash Brook FRP BMP Summary Sheet

Site name:	Fairpoint Communications	**South Burlington ID:**	PB0027		
Approximate address:	Hinesburg Rd south of I-89, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$495,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.75		
Impervious acres managed	4.76	Primary land use in drainage area	Commercial
% Impervious	54%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.59
BMP Footprint Size (acres)	0.26	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	7.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0212

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland to the east of property in grassed area. Two outfalls on site drain to wetland swales that need to be rerouted to the east.	There is bedrock nearby. Ensure that BMP is outside of wetlands buffer.

Potash Brook FRP BMP Summary Sheet

Site name:	Faith United Methodist Church	**South Burlington ID:**	PB0028

Approximate address:	Dorset St south of Songbird Ln, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

Estimated project cost	$49,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.68		
Impervious acres managed	1.03	Primary land use in drainage	Institutional
% Impervious	61%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.15
BMP Footprint Size (acres)	0.12	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new underground detention behind church (northwest) in grassy area. Current outfall is eroded.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Golf Course Road South	**South Burlington ID:**	PB0029		
Approximate address:	Golf Course Rd and Old Cross Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$135,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.19		
Impervious acres managed	1.67	Primary land use in drainage area	Residential
% Impervious	32%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.23
BMP Footprint Size (acres)	0.12	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland at the end of pipe before it enters the golf course. Existing infrastructure already drains to swale.	Space is somewhat limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Gonzo's Underground	**South Burlington ID:**	PB0030		
Approximate address:	Williston Rd east of Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground detention				

Estimated project cost	$662,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	13.62		
Impervious acres managed	8.72	Primary land use in drainage area	Commercial
% Impervious	64%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.45
BMP Footprint Size (acres)	0.21	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.33	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0811

Proposed BMP description:	**Feasibility concerns:**
Propose to intercept stormline that flows west along Williston Rd to underground detention chambers under grassed area in front of Budget Car Rental / Gonzo's plaza.	Space is limited. Buried utilities may be a concern.

Potash Brook FRP BMP Summary Sheet

Site name:	Grandview Drive North Detention Pond	**South Burlington ID:**	PB0031		
Approximate address:	Grandview Dr and W Twin Oaks Terr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$33,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.02		
Impervious acres managed	1.38	Primary land use in drainage	Residential
% Impervious	46%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.14
BMP Footprint Size (acres)	0.07	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.50	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0238; 2-0737

Proposed BMP description:	**Feasibility concerns:**
Construct new surface detention BMP following outfall, which is currently broken and experiencing significant erosion.	Wetlands concerns. There are delineated Class II wetlands downstream of outlet.

Potash Brook FRP BMP Summary Sheet

Site name:	Grandview Drive West Detention Pond	**South Burlington ID:**	PB0032		
Approximate address:	Grandview Dr and Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$36,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.14		
Impervious acres managed	1.89	Primary land use in drainage	Residential
% Impervious	60%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.18
BMP Footprint Size (acres)	0.03	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.20	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0238; 2-0737

Proposed BMP description:	**Feasibility concerns:**
Construct new surface detention basin to the west of Dorset St. Reroute stormline away from brook to new BMP.	Wetlands concerns.

Potash Brook FRP BMP Summary Sheet

Site name:	Hawthorne Circle Detention Pond	**South Burlington ID:**	PB0033		
Approximate address:	Hawthorne Cir and Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$143,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	4.95		
Impervious acres managed	2.55	Primary land use in drainage	Residential
% Impervious	51%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.15
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland in greenspace formed in the triangle between three garages.	Potential underground utilities.

Potash Brook FRP BMP Summary Sheet

Site name:	Helen Ave Cul De Sac	**South Burlington ID:**	PB0034		
Approximate address:	Helen Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$136,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.70		
Impervious acres managed	2.15	Primary land use in drainage area	Residential
% Impervious	38%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.35
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.35
BMP Depth (feet)	6.00	Primary or secondary BMP?	Secondary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new infiltration basin in the cul de sac at the end of Helen Ave, which would provide significant water quality benefit.	Water line and mature tree present in cul-de-sac.

Potash Brook FRP BMP Summary Sheet

Site name:	Hinesburg Road	**South Burlington ID:**	PB0035		
Approximate address:	Hinesburg Rd and Deane St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention pond				

Estimated project cost	$33,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	3.53		
Impervious acres managed	1.27	Primary land use in drainage area	Residential
% Impervious	36%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.14
BMP Footprint Size (acres)	0.07	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Reroute stormwater to existing catchbasin on Deane St and detain to the west of Hinesburg Rd to the south of existing houses.	Must ensure BMP is located outside of river corridor.

Potash Brook FRP BMP Summary Sheet

Site name:	I-89 Swale	**South Burlington ID:**	PB0036		
Approximate address:	Between I-89 N and S lanes west of Hinesburg Rd, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Median Filter				

Estimated project cost	$208,000	MS4s contributing drainage to BMP	VTrans
Drainage area (acres)	6.28		
Impervious acres managed	1.91	Primary land use in drainage area	Transportation
% Impervious	30%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.53
BMP Footprint Size (acres)	0.38	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.50	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct median filter in depressed area between north and south I-89 lanes. Reroute several culverts.	

Potash Brook FRP BMP Summary Sheet

Site name:	Iby Gravel Wetland	**South Burlington ID:**	PB0037		
Approximate address:	Iby St off of Hinesburg Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel wetland				

Estimated project cost	$167,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.31		
Impervious acres managed	1.65	Primary land use in drainage area	Residential
% Impervious	50%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.07
BMP Footprint Size (acres)	0.06	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	3.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland at the end of Iby St to capture stormwater for the street.	Wetlands concerns. This site is near the future Dumont Park development.

Potash Brook FRP BMP Summary Sheet

Site name:	INS Building Pond A Retrofit	**South Burlington ID:**	PB0038		
Approximate address:	Kimball Ave west of Community Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.11		
Impervious acres managed	0.98	Primary land use in drainage area	Governmental
% Impervious	47%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.04
BMP Footprint Size (acres)	0.33	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	2.25	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	1-0969

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	

Potash Brook FRP BMP Summary Sheet

Site name:	INS Building Pond B Retrofit	**South Burlington ID:**	PB0039		
Approximate address:	Kimball Ave west of Community Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.44		
Impervious acres managed	0.61	Primary land use in drainage area	Governmental
% Impervious	42%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.04
BMP Footprint Size (acres)	0.15	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	3.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-0969b

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	

Potash Brook FRP BMP Summary Sheet

Site name:	Joy Dr Detention Pond	**South Burlington ID:**	PB0040		
Approximate address:	Joy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$179,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.07		
Impervious acres managed	1.34	Primary land use in drainage area	Residential
% Impervious	44%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.21
BMP Footprint Size (acres)	0.12	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland area in adjacent flat area near the Green Mountain Power transmission corridor.	Power line corridor is close to proposed BMP.

Potash Brook FRP BMP Summary Sheet

Site name:	Kennedy Dr Pond 2 Expansion	**South Burlington ID:**	PB0041

Approximate address:	Kennedy Dr and W Twin Oaks Terr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$380,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.53		
Impervious acres managed	2.23	Primary land use in drainage	Commercial
% Impervious	63%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.16
BMP Footprint Size (acres)	0.90	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.57	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1582b; 2-1069

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to accommodate additional drainage from The Edge and 1 Twin Oaks.	Space to expand pond is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Kennedy Dr Pond 3 Expansion	**South Burlington ID:**	PB0042		
Approximate address:	Kennedy Dr west of Timber Ln, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

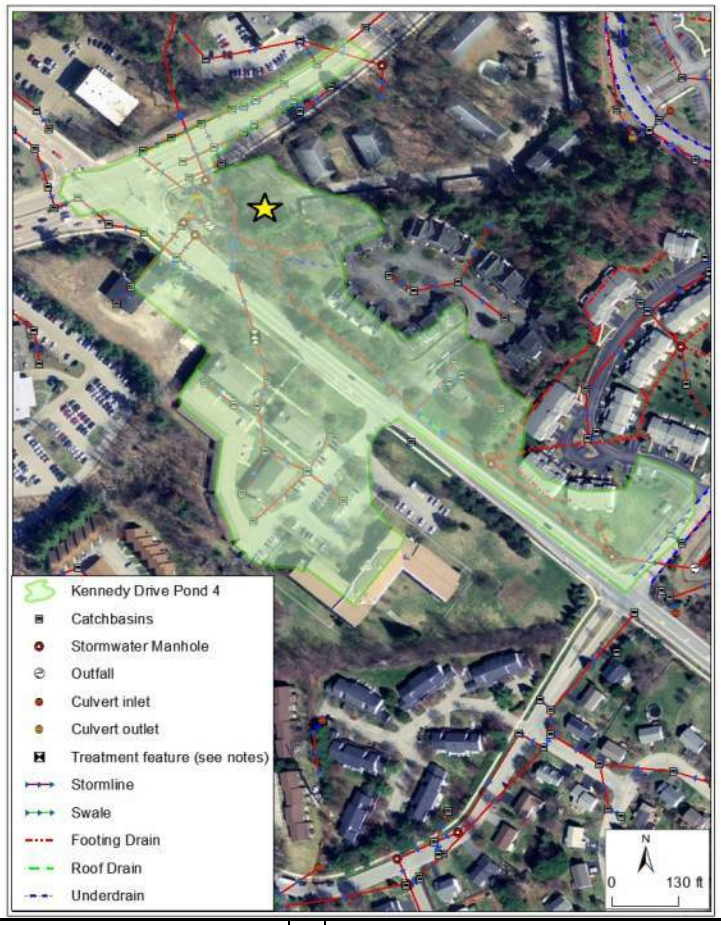
Estimated project cost	$321,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.58		
Impervious acres managed	6.12	Primary land use in drainage	Commercial
% Impervious	71%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.18
BMP Footprint Size (acres)	0.11	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.56	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1582c

Proposed BMP description:	**Feasibility concerns:**
Reroute culvert that crosses under access ramp to pond, expand footprint and retrofit to gravel wetland	Limited area to expand pond.

Potash Brook FRP BMP Summary Sheet

Site name:	Kennedy Dr Pond 4 Expansion	**South Burlington ID:**	PB0043

Approximate address:	Kennedy Dr and Hinesburg Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				

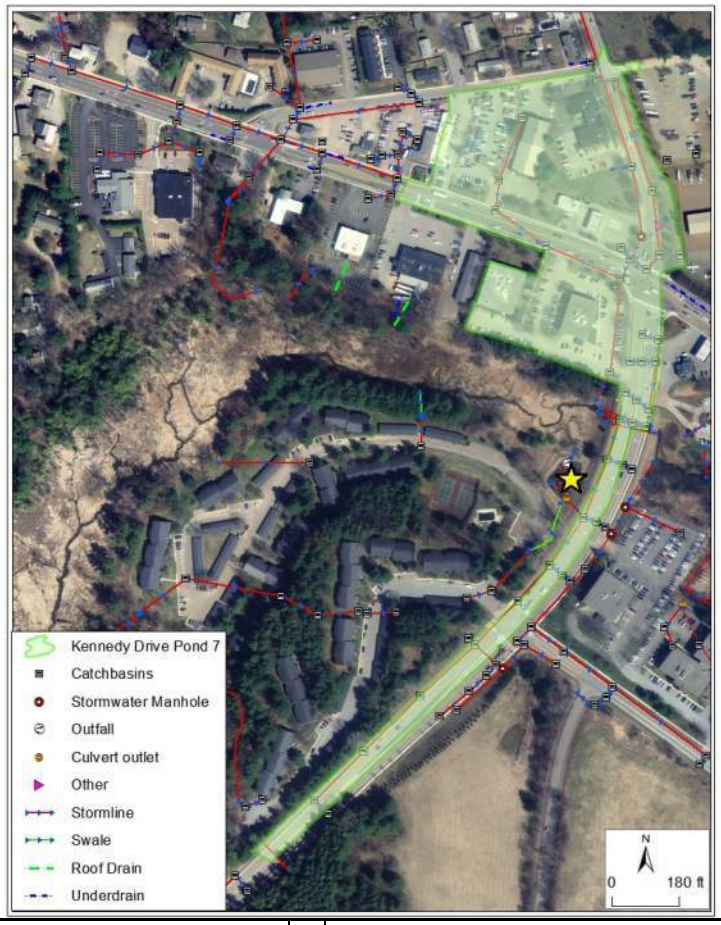


Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	10.07		
Impervious acres managed	4.78	Primary land use in drainage	Residential
% Impervious	47%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.25
BMP Footprint Size (acres)	0.11	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.62	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C	Expired permit(s)?	1-1582d; 1-0237; 1-1023; 1-1300

Proposed BMP description:	**Feasibility concerns:**
Reroute stormline from Chatham Green and swale along Hinesburg Rd to existing detention pond. Expand pond to accommodate additional drainage area and detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Kennedy Dr Pond 7 Expansion	**South Burlington ID:**	PB0044		
Approximate address:	Kennedy Dr north of Kimball Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

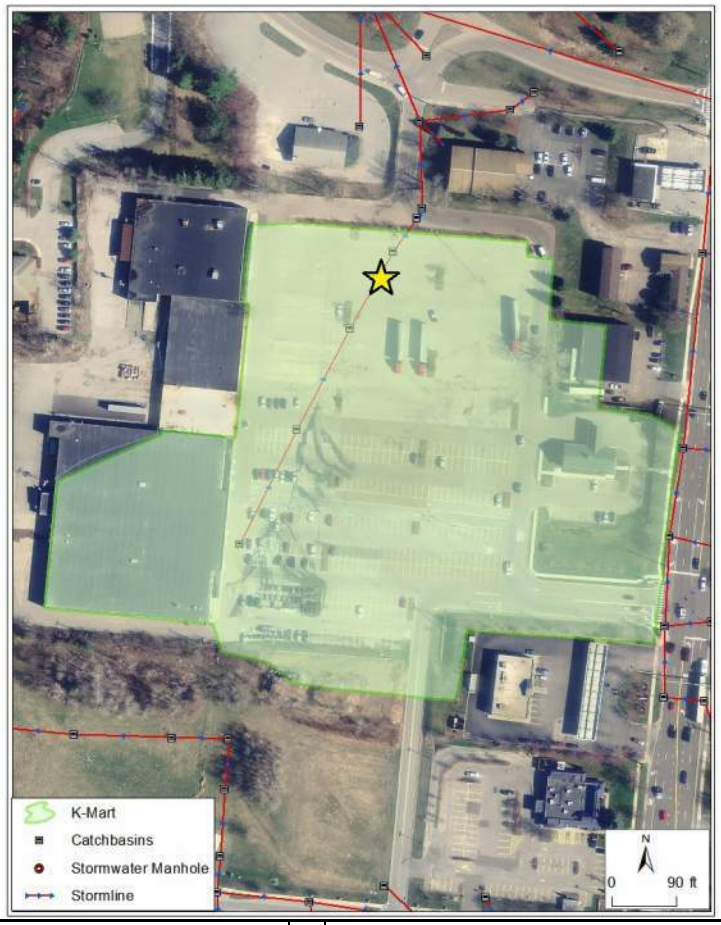


Estimated project cost	$407,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	11.24		
Impervious acres managed	8.67	Primary land use in drainage	Commercial
% Impervious	77%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.58
BMP Footprint Size (acres)	0.30	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	7.95	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	1-1582g; 1-0233

Proposed BMP description:	**Feasibility concerns:**
Reroute stormline that currently outfalls behind Key Bank to existing detention pond. Add CMAC valve to detain CPv.	Elevations of pipes near Key Bank are quite low.

Potash Brook FRP BMP Summary Sheet

Site name:	K-Mart Plaza Infiltration	**South Burlington ID:**	PB0045		
Approximate address:	Shelburne Rd north of Hannaford Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Sand Filter/Detention Gallery				



Estimated project cost	$1,121,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.60		
Impervious acres managed	5.00	Primary land use in drainage area	Commercial
% Impervious	89%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.86
BMP Footprint Size (acres)	0.32	Volume infiltrated (ac-ft)	0.10
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new underground infiltration chambers in K-Mart parking lot.	Unsure what the plans are for this plaza in the future.

Potash Brook FRP BMP Summary Sheet					
Site name:	Knoll Circle	**South Burlington ID:**	PB0046		
Approximate address:	Knoll Cir north of Dubois Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$750,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	12.16		
Impervious acres managed	2.16	Primary land use in drainage area	Residential
% Impervious	18%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.80
BMP Footprint Size (acres)	0.35	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0220

Proposed BMP description:	Feasibility concerns:
Construct new gravel wetland with swale inlet. Current stormline draining subdivision already enters swale, which also drains area to the west.	Proposed BMP is located outside of Knoll Cir residential property.

Potash Brook FRP BMP Summary Sheet

Site name:	Lane Press Roof	**South Burlington ID:**	PB0047		
Approximate address:	Meadowland Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$310,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.57		
Impervious acres managed	4.17	Primary land use in drainage area	Industrial
% Impervious	75%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.69
BMP Footprint Size (acres)	0.55	Volume infiltrated (ac-ft)	0.69
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1337

Proposed BMP description:	**Feasibility concerns:**
Capture roof drainage in a new infiltration basin. Roof drains already flows to grassed area where treatment is proposed.	Soils are mapped as D, but infiltration basin directly to the west seems to be performing well and soils in this area appear similar. Would need to test infiltration rates to confirm that infiltration is possible here. If not, gravel wetland STP could be used.

Potash Brook FRP BMP Summary Sheet

Site name:	Laurel Hill Drive	**South Burlington ID:**	PB0048		
Approximate address:	Laurel Hill Dr off of Shelburne Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$162,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	6.50		
Impervious acres managed	1.84	Primary land use in drainage area	Residential
% Impervious	28%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.41
BMP Footprint Size (acres)	0.16	Volume infiltrated (ac-ft)	0.41
BMP Depth (feet)	4.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new infiltration basin to the north of houses before stormline pipe enters riparian buffer.	Proposed BMP is on private property.

Potash Brook FRP BMP Summary Sheet

Site name:	Lilac Ln Infiltration Basin	**South Burlington ID:**	PB0049		
Approximate address:	Lilac Ln off of Hinesburg Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$44,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.46		
Impervious acres managed	0.85	Primary land use in drainage area	Residential
% Impervious	58%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.13
BMP Footprint Size (acres)	0.03	Volume infiltrated (ac-ft)	0.13
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Formalize infiltration basin in depressed area at the end of Lilac Ln.	

Potash Brook FRP BMP Summary Sheet

Site name:	Lindenwood Drive Detention Pond	**South Burlington ID:**	PB0050

Approximate address:	Lindenwood Dr off of Shelburne Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention pond				

Estimated project cost	$379,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	10.57		
Impervious acres managed	2.19	Primary land use in drainage	Residential
% Impervious	21%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.44	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Add catchbasins and infrastructure to reroute stormwater to the east of Lindenwood Dr. Part of Brewer Pkwy drains to this area as well. Propose to create one detention basin to detain drainage from both streets. Lindenwood Dr has existing puddling and icing issues. This BMP would also mitigate those issues.	BMP will require installing catchbasins and associated infrastructure on Lindenwood Dr. There is a water line running nearby.

Potash Brook FRP BMP Summary Sheet

Site name:	Logwood Neighborhood Detention Pond	**South Burlington ID:**	PB0051

Approximate address:	Williston Rd south of intersection with Airport Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$151,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	44.81		
Impervious acres managed	18.44	Primary land use in drainage	Residential
% Impervious	41%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.61
BMP Footprint Size (acres)	0.47	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.50	Primary or secondary BMP?	Primary
Hydrologic soil group	Not Rated	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new end of pipe surface impoundment BMP behind Lean Dental Group. Outfall is currently eroded.	Proposed BMP is on private property. Soils are unmapped. There are Class II wetlands south of proposed BMP, but BMP area should be well outside of wetlands buffer.

Potash Brook FRP BMP Summary Sheet

Site name:	Marcotte Central School	**South Burlington ID:**	PB0052		
Approximate address:	Market St near Dorset St intersection, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$189,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.11		
Impervious acres managed	1.83	Primary land use in drainage area	Institutional
% Impervious	87%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.19
BMP Footprint Size (acres)	0.20	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.25	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland in wooded area directly south of school parking lot. Route outfall to existing stormline. Potential educational benefit.	Potential wetlands concerns. Future Market St development.

Potash Brook FRP BMP Summary Sheet

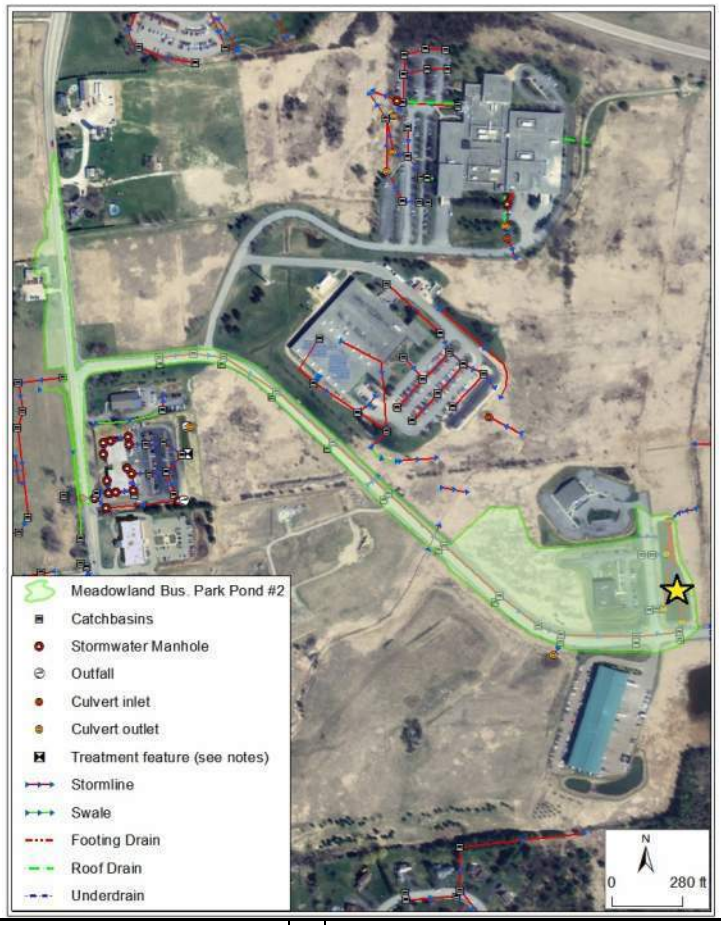
Site name:	Marine Connection	**South Burlington ID:**	PB0053		
Approximate address:	Williston Rd and Shunpike Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Swale				

Estimated project cost	$58,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	10.79		
Impervious acres managed	4.73	Primary land use in drainage area	Commercial
% Impervious	44%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.21
BMP Footprint Size (acres)	0.20	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Add detention to existing swale near the back of the large Marine Connection building. Expand swale to accommodate additional volume.	Potential for future development in greenspace.

Potash Brook FRP BMP Summary Sheet

Site name:	Meadowland Business Park Pond 2	**South Burlington ID:**	PB0054		
Approximate address:	Meadowland Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond and add CMAC Valve				



Estimated project cost	$45,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	13.46		
Impervious acres managed	5.13	Primary land use in drainage	Industrial
% Impervious	38%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	1.70
BMP Footprint Size (acres)	0.89	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1269_4290-9020.3 Lot 10

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond. Add forebay and investigate opportunity to include CMAC valve to detain CPv.	Space is somewhat limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Merchant's Bank Detention Pond	**South Burlington ID:**	PB0055

Approximate address:	Kimball Ave and Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$66,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	4.36		
Impervious acres managed	3.17	Primary land use in drainage	Commercial
% Impervious	73%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.23
BMP Footprint Size (acres)	0.10	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.50	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-1171; 6275-9030; 6260-9030; 2-9030

Proposed BMP description:	**Feasibility concerns:**
Route stormwater from Allstate Insurance west to Merchant's Bank and provide detention in grassed area	Space is limited.

Potash Brook FRP BMP Summary Sheet					
Site name:	Spear Street	**South Burlington ID:**	PB0056		
Approximate address:	Spear St north of I-89, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$653,000	MS4s contributing drainage to BMP	South Burlington, Burlington, VTrans
Drainage area (acres)	71.00		
Impervious acres managed	4.94	Primary land use in drainage area	Golf Course
% Impervious	7%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	2.14
BMP Footprint Size (acres)	0.77	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	Feasibility concerns:
Reroute drainage from swale that runs south down Spear St to the west and create a new gravel wetland to detain flow on Country Club property.	

Potash Brook FRP BMP Summary Sheet

Site name:	Nicklaus Circle	**South Burlington ID:**	PB0057		
Approximate address:	Nicklaus Cir off of Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$667,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	9.25		
Impervious acres managed	2.23	Primary land use in drainage area	Residential
% Impervious	24%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.54
BMP Footprint Size (acres)	0.29	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241, 4049-9030

Proposed BMP description:	**Feasibility concerns:**
Construct new gravel wetland feature to the north of Nicklaus Cir where the stormline and swale converge.	Golf course is adjacent to proposed practice area and may object to large BMP.

Potash Brook FRP BMP Summary Sheet

Site name:	North Country Credit North West Infiltration	**South Burlington ID:**	PB0058

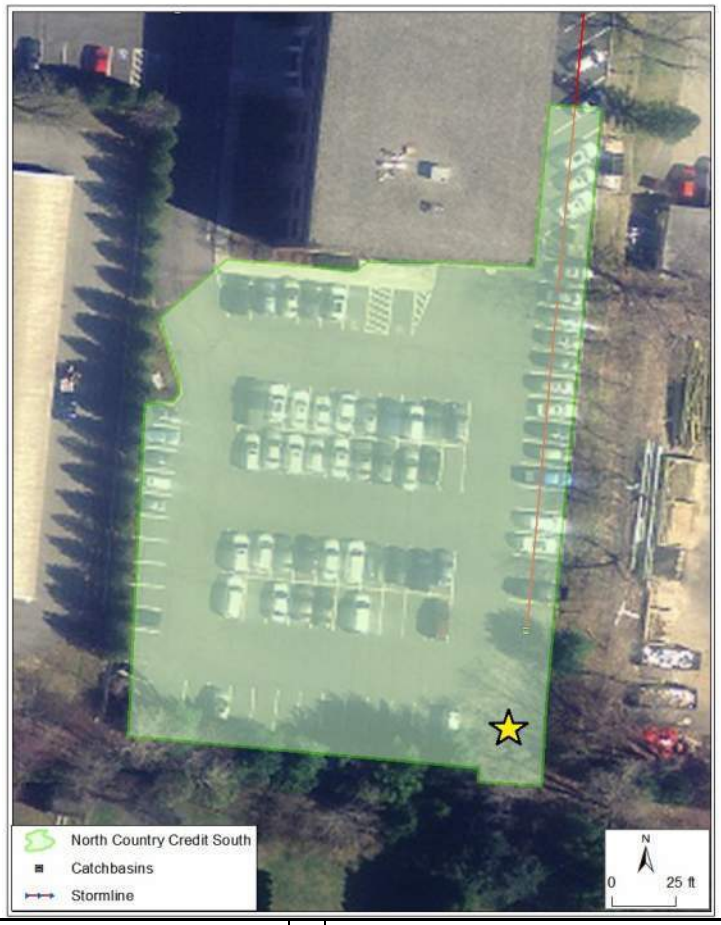
Approximate address:	Swift St west of Shelburne Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Trench				

Estimated project cost	$37,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	0.25		
Impervious acres managed	0.21	Primary land use in drainage	Commercial
% Impervious	84%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.03
BMP Footprint Size (acres)	0.01	Volume infiltrated (ac-ft)	0.03
BMP Depth (feet)	3.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Install perforated pipe to the north of parking lot in grassed area to infiltrate stormwater.	BMP only treats a small impervious area.

Potash Brook FRP BMP Summary Sheet

Site name:	North Country Credit South Infiltration	**South Burlington ID:**	PB0059		
Approximate address:	Swift St west of Shelburne Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Gallery				



Estimated project cost	$129,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	0.76		
Impervious acres managed	0.62	Primary land use in drainage	Commercial
% Impervious	81%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.12
BMP Footprint Size (acres)	0.03	Volume infiltrated (ac-ft)	0.12
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A/B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct underground infiltration chambers in the southeast corner of parking lot. Overflow to existing stormline.	BMP only treats a small impervious area.

Potash Brook FRP BMP Summary Sheet

Site name:	O'Brien Drive Underground Detention	**South Burlington ID:**	PB0060

Approximate address:	Obrien Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

Estimated project cost	$580,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.47		
Impervious acres managed	2.87	Primary land use in drainage	Residential
% Impervious	34%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.54
BMP Footprint Size (acres)	0.11	Volume infiltrated (ac-ft)	0.54
BMP Depth (feet)	3.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct underground storage chambers in open lot between existing houses.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Olympiad Apartments & Office Building Pond Retrofit	**South Burlington ID:**	PB0061

Approximate address:	Farrell St south of Eastwood Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	9.65		
Impervious acres managed	3.68	Primary land use in drainage area	Commercial
% Impervious	38%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.06
BMP Footprint Size (acres)	0.21	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1452

Proposed BMP description:	Feasibility concerns:
Retrofit detention basin to gravel wetland. Add forebay and ensure pond detains CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Panurgy Infiltration Basin	**South Burlington ID:**	PB0062		
Approximate address:	Kimball Ave and Shunpike Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Infiltration Basin				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.33		
Impervious acres managed	0.80	Primary land use in drainage area	Commercial
% Impervious	60%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.08
BMP Footprint Size (acres)	0.06	Volume infiltrated (ac-ft)	0.14
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C	Expired permit(s)?	3409-9010

Proposed BMP description:	**Feasibility concerns:**
Retrofit and expand existing infiltration basin to infiltrate the CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Park Road Detention Pond	**South Burlington ID:**	PB0063		
Approximate address:	Park Rd off of Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				

Estimated project cost	$94,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	6.96		
Impervious acres managed	1.27	Primary land use in drainage area	Residential
% Impervious	18%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.42
BMP Footprint Size (acres)	0.23	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241

Proposed BMP description:	**Feasibility concerns:**
Propose to reroute swale on southern side of Park Rd to the north and detain in wooded area.	Ledge outcroppings were noted nearby.

Potash Brook FRP BMP Summary Sheet

Site name:	Pillsbury Manor Infiltration Basin Retrofit	**South Burlington ID:**	PB0064

Approximate address:	Pillsbury Manor N and Williston Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit to Infiltration Basin				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.06		
Impervious acres managed	0.40	Primary land use in drainage	Commercial
% Impervious	38%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.07
BMP Footprint Size (acres)	0.05	Volume infiltrated (ac-ft)	0.07
BMP Depth (feet)	5.00	Primary or secondary BMP?	Secondary
Hydrologic soil group	A	Expired permit(s)?	1-1015

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing pond to infiltration basin. Overflow to existing culvert.	

Potash Brook FRP BMP Summary Sheet

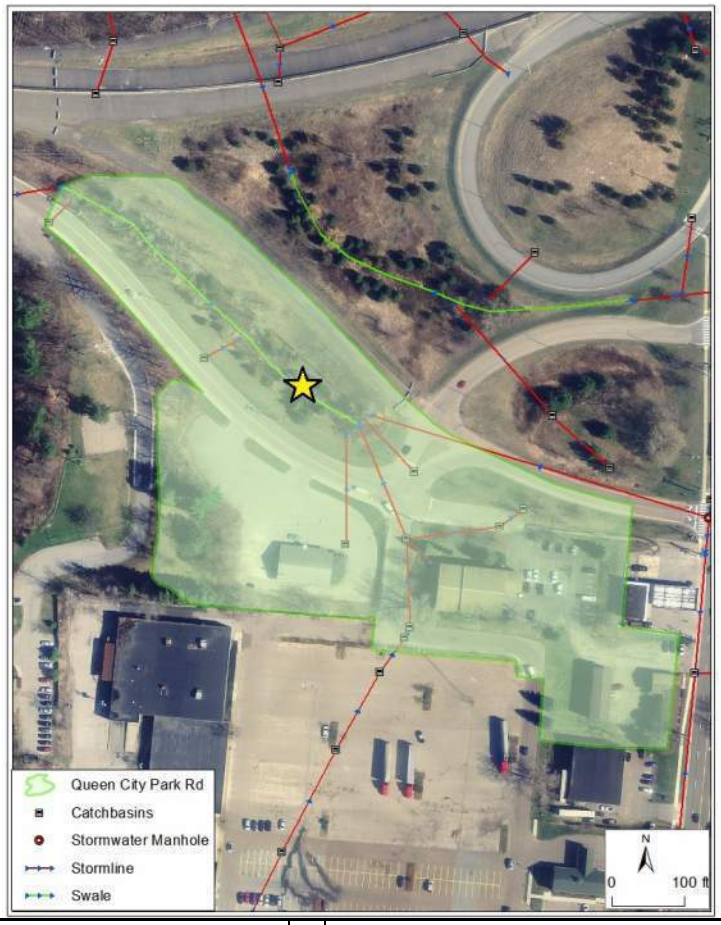
Site name:	Quarry Hill South	**South Burlington ID:**	PB0065		
Approximate address:	Quarry Hill Rd off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Detention Swale				

Estimated project cost	$132,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.62		
Impervious acres managed	2.52	Primary land use in drainage area	Residential
% Impervious	45%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.48
BMP Footprint Size (acres)	0.40	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B/D	Expired permit(s)?	6322-9030

Proposed BMP description:	**Feasibility concerns:**
Add detention to existing swale running northeast behind garages.	The wall slope to the west of the swale is quite steep.

Potash Brook FRP BMP Summary Sheet

Site name:	Queen City Park Road Detention Pond	**South Burlington ID:**	PB0066		
Approximate address:	Queen City Park Rd off of Shelburne Rd, South Burlington	**MS4 where BMP is located:**	VTrans	**New or existing BMP?**	New
Proposed BMP type:	Detention Pond				



Estimated project cost	$99,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	6.51		
Impervious acres managed	2.99	Primary land use in drainage	Commercial
% Impervious	46%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.45
BMP Footprint Size (acres)	0.63	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Add detention to existing depressed area where stormlines already outfall. Drainage from Shelburne Rd is assumed to be already rerouted to larger depression to the north (see project entitled 189 Cloverleaf).	Space is somewhat limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Shaws West	**South Burlington ID:**	PB0067		
Approximate address:	Shelburne Rd north of 189, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

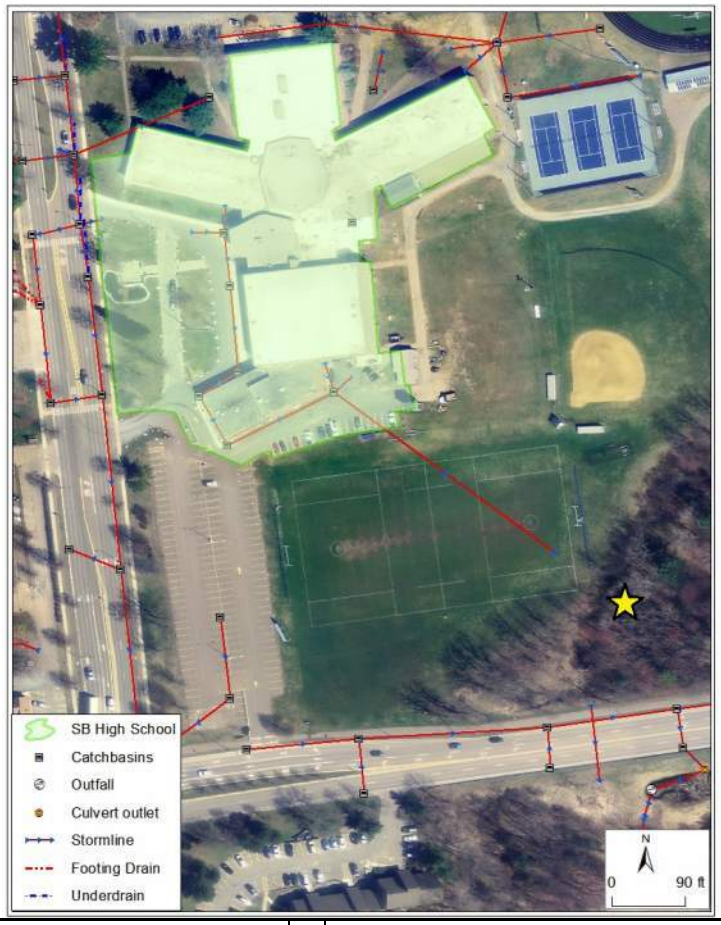
Estimated project cost	$230,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.85		
Impervious acres managed	1.71	Primary land use in drainage area	Commercial
% Impervious	93%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.16
BMP Footprint Size (acres)	0.07	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.83	Primary or secondary BMP?	Primary
Hydrologic soil group	B/D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct underground detention in vegetated island along west side of parking lot. Reroute last catchbasin in southwest corner of parking to this area.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	South Burlington High School Infiltration	**South Burlington ID:**	PB0068

Approximate address:	Dorset St north of Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

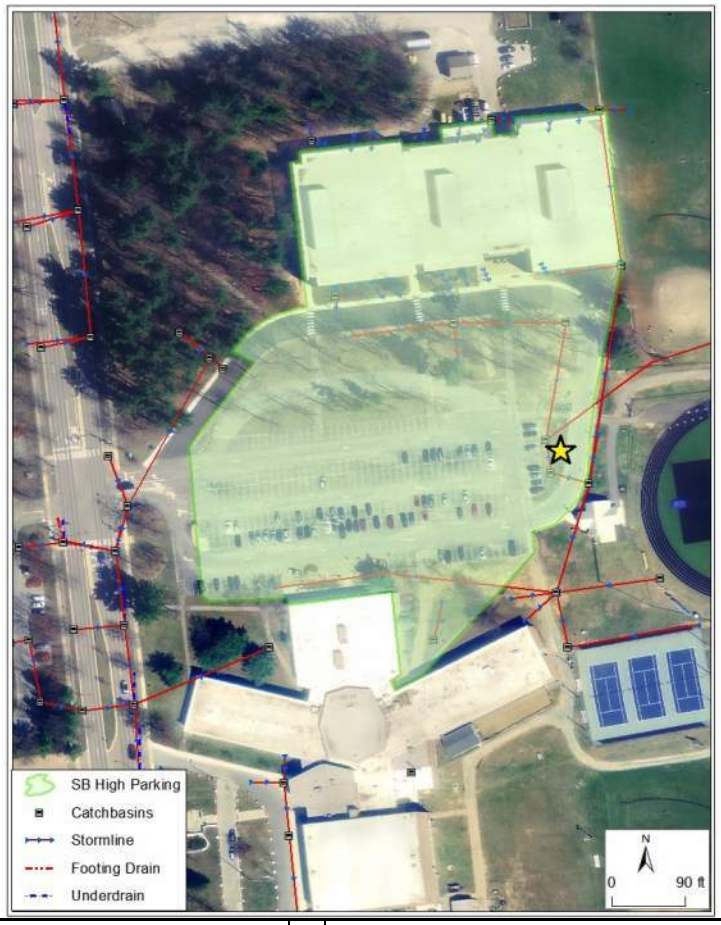


Estimated project cost	$165,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	3.57		
Impervious acres managed	3.10	Primary land use in drainage	Institutional
% Impervious	87%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.44
BMP Footprint Size (acres)	0.22	Volume infiltrated (ac-ft)	0.44
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	No Permit

Proposed BMP description:	Feasibility concerns:
Construct new infiltration basin to the southeast of sports field in currently wooded area.	

Potash Brook FRP BMP Summary Sheet

Site name:	South Burlington High School North	**South Burlington ID:**	PB0069		
Approximate address:	Dorset St north of Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Infiltration				



Estimated project cost	$992,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.77		
Impervious acres managed	4.26	Primary land use in drainage	Institutional
% Impervious	74%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.69
BMP Footprint Size (acres)	0.16	Volume infiltrated (ac-ft)	0.69
BMP Depth (feet)	5.17	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	6174-INDS.A

Proposed BMP description:	**Feasibility concerns:**
Construct dry wells to infiltrate stormwater from the high school parking lot and middle school roof. Potential educational benefit.	

Potash Brook FRP BMP Summary Sheet

Site name:	South Meadows Pond	**South Burlington ID:**	PB0070		
Approximate address:	South Meadow Drive, Burlington	**MS4 where BMP is located:**	Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	Burlington
Drainage area (acres)	10.10		
Impervious acres managed	4.73	Primary land use in drainage area	Residential
% Impervious	47%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.37
BMP Footprint Size (acres)	0.19	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	10.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-0661

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to meet CPv standards. Add forebay and expand pond. Upgrade outlet structure.	Space is limited. Water line runs nearby. Pond is very close to brook.

Potash Brook FRP BMP Summary Sheet

Site name:	Southview Drive	**South Burlington ID:**	PB0071		
Approximate address:	Southview Dr off of Prouty Pkwy, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

Estimated project cost	$1,048,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	12.26		
Impervious acres managed	4.81	Primary land use in drainage area	Residential
% Impervious	39%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.71
BMP Footprint Size (acres)	0.37	Volume infiltrated (ac-ft)	0.04
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct underground detention chambers in ROW and grassed area. Road is 30ft wide and could be narrowed for storage.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Staples Plaza Underground Detention	**South Burlington ID:**	PB0072		
Approximate address:	Williston Rd west of I-89, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

Estimated project cost	$288,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	1.70		
Impervious acres managed	1.64	Primary land use in drainage	Commercial
% Impervious	97%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.07	Volume infiltrated (ac-ft)	0.03
BMP Depth (feet)	5.17	Primary or secondary BMP?	Primary
Hydrologic soil group	Not Rated	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct underground detention chambers in southeast corner of parking lot.	

Potash Brook FRP BMP Summary Sheet

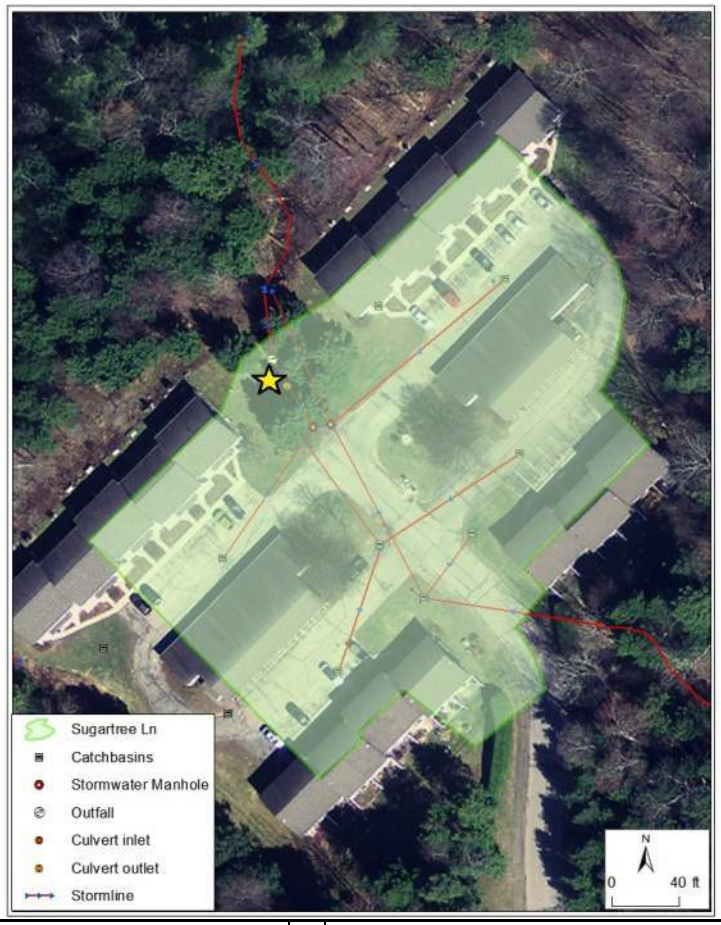
Site name:	Stonehedge Circle	**South Burlington ID:**	PB0073		
Approximate address:	Stonehedge Dr off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Bioretention				

Estimated project cost	$55,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	2.48		
Impervious acres managed	1.26	Primary land use in drainage area	Residential
% Impervious	51%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.16	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	2-0100

Proposed BMP description:	**Feasibility concerns:**
Construct bioretention along road in grassed area with discharge to existing catchbasin.	

Potash Brook FRP BMP Summary Sheet

Site name:	Sugartree Lane	**South Burlington ID:**	PB0074		
Approximate address:	Sugartree Ln off of Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				



Estimated project cost	$96,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.54		
Impervious acres managed	1.05	Primary land use in drainage area	Residential
% Impervious	69%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.12
BMP Footprint Size (acres)	0.05	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0878

Proposed BMP description:	**Feasibility concerns:**
Expand existing depressed area at the end of Sugartree Ln , which appears to be an abandoned detention area, into a gravel wetland. Reroute catchbasins to pond. Upgrade outlet.	Space to expand depressed area is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Swift Estates Pond	**South Burlington ID:**	PB0075		
Approximate address:	Meadowood Dr and Swift St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	18.52		
Impervious acres managed	3.57	Primary land use in drainage area	Residential
% Impervious	19%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.33
BMP Footprint Size (acres)	0.41	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	7.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to meet CPv standards. Add forebay and upgrade outlet structure.	Space is limited to expand pond.

Potash Brook FRP BMP Summary Sheet

Site name:	Technology Park Pond Retrofit	**South Burlington ID:**	PB0076

Approximate address:	Community Dr off of Kimball Ave, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$35,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.05		
Impervious acres managed	0.03	Primary land use in drainage	Industrial
% Impervious	0%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.27
BMP Footprint Size (acres)	1.08	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.50	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1458 P4

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to gravel wetland and meet CPv standards. Upgrade outlet structure and expand accommodate additional storage.	

Potash Brook FRP BMP Summary Sheet

Site name:	Temple Detention Pond	**South Burlington ID:**	PB0077		
Approximate address:	Swift St and Dorset St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$47,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.81		
Impervious acres managed	0.92	Primary land use in drainage area	Institutional
% Impervious	51%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.19
BMP Footprint Size (acres)	0.14	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Propose new gravel wetland in depressed area in front of Temple by intersection of Dorset St and Swift St. Stormwater already collects in this area.	Wetlands concerns.

Potash Brook FRP BMP Summary Sheet

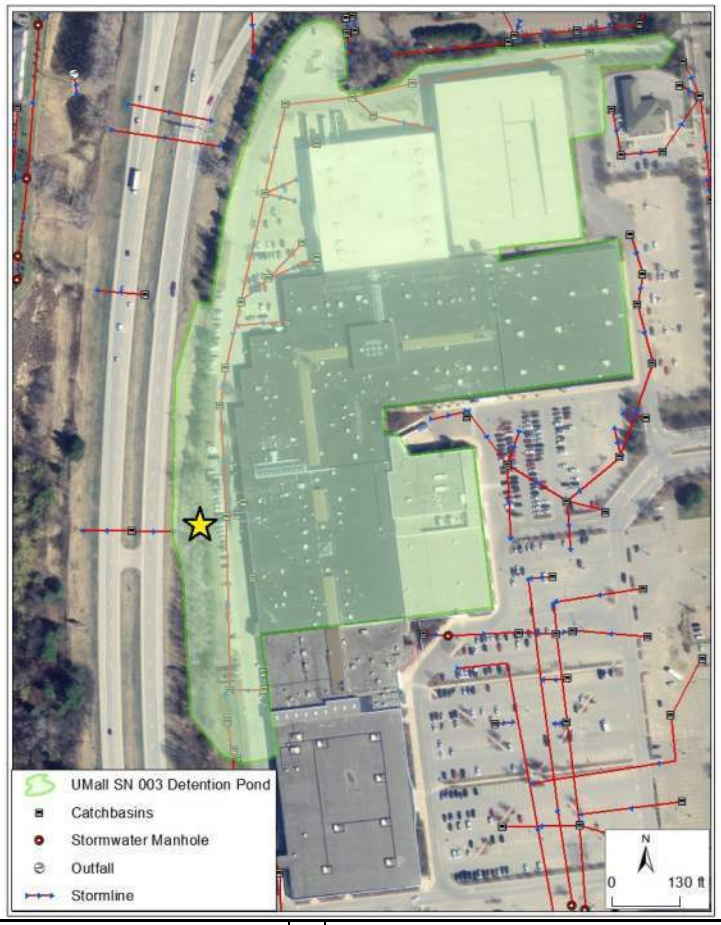
Site name:	The Pines	**South Burlington ID:**	PB0078		
Approximate address:	Oakwood Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	12.67		
Impervious acres managed	5.85	Primary land use in drainage area	Commercial
% Impervious	46%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.21
BMP Footprint Size (acres)	1.14	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1117

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to gravel wetland. Add forebay and CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	UMall Detention Pond	**South Burlington ID:**	PB0079		
Approximate address:	Dorset St (University Mall), South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				



Estimated project cost	$27,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	16.90		
Impervious acres managed	14.96	Primary land use in drainage	Commercial
% Impervious	89%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.91
BMP Footprint Size (acres)	0.34	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-0503c; 6282-9030

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond to detain CPv. Upgrade outlet structure and expand pond.	Space is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	UMall Infiltration 1	**South Burlington ID:**	PB0080		
Approximate address:	Dorset St (University Mall), South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Infiltration Gallery				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	17.15		
Impervious acres managed	15.30	Primary land use in drainage area	Commercial
% Impervious	89%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.03
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.18
BMP Depth (feet)	5.40	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-0503b; 6282-9030

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing infiltration gallery to infiltrate the CPv.	Need to assess capacity for expanding infiltration gallery.

Potash Brook FRP BMP Summary Sheet

Site name:	UMall Infiltration 2	**South Burlington ID:**	PB0081		
Approximate address:	Dorset St (University Mall), South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Infiltration Gallery				

Estimated project cost	$55,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	5.61		
Impervious acres managed	5.55	Primary land use in drainage area	Commercial
% Impervious	99%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.31
BMP Footprint Size (acres)	0.48	Volume infiltrated (ac-ft)	2.17
BMP Depth (feet)	4.72	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-0503a; 6282-9030

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing infiltration gallery to infiltrate the CPv.	Need to assess capacity for expanding infiltration gallery.

Potash Brook FRP BMP Summary Sheet

Site name:	UMall Sears Auto Pond	**South Burlington ID:**	PB0082		
Approximate address:	Dorset St (University Mall), South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Pond to Gravel Wetland				

Estimated project cost	$90,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	11.62		
Impervious acres managed	9.29	Primary land use in drainage area	Commercial
% Impervious	80%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.61
BMP Footprint Size (acres)	0.86	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/B/D	Expired permit(s)?	1-0503d; 6282-9030; 2-0610

Proposed BMP description:	**Feasibility concerns:**
Construct large gravel wetland in unused section of parking lot in Umall (to the east of the party store). Reroute Dorset St stormline here.	Proposed BMP will require reducing parking. Potential buried utilities.

Potash Brook FRP BMP Summary Sheet

Site name:	UVM Bio Research Complex	**South Burlington ID:**	PB0083		
Approximate address:	Spear St north of I-89, South Burlington	**MS4 where BMP is located:**	UVM	**New or existing BMP?**	New
Proposed BMP type:	Bioretention				

Estimated project cost	$176,000	MS4s contributing drainage to BMP	UVM
Drainage area (acres)	1.85		
Impervious acres managed	0.92	Primary land use in drainage area	Institutional
% Impervious	50%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.10	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	5269-9003.R

Proposed BMP description:	**Feasibility concerns:**
Construct bioretention to treat stormwater in grassed area near the center of complex. Potential educational benefit.	Potential buried utilities.

Potash Brook FRP BMP Summary Sheet

Site name:	UVM Forestry Research Center - East Roof	**South Burlington ID:**	PB0084

Approximate address:	Spear St north of I-89, South Burlington	**MS4 where BMP is located:**	UVM	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Gallery				

Estimated project cost	$39,000	MS4s contributing drainage to BMP	UVM
Drainage area (acres)	0.42		
Impervious acres managed	0.41	Primary land use in drainage	Institutional
% Impervious	98%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.06
BMP Footprint Size (acres)	0.01	Volume infiltrated (ac-ft)	0.01
BMP Depth (feet)	3.33	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	

Potash Brook FRP BMP Summary Sheet

Site name:	UVM Forestry Research Center - West Roof	**South Burlington ID:**	PB0085

Approximate address:	Spear St north of I-89, South Burlington	**MS4 where BMP is located:**	UVM	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Gallery				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	UVM
Drainage area (acres)	0.12		
Impervious acres managed	0.11	Primary land use in drainage	Institutional
% Impervious	91%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.02
BMP Footprint Size (acres)	0.03	Volume infiltrated (ac-ft)	0.01
BMP Depth (feet)	3.33	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	

Potash Brook FRP BMP Summary Sheet

Site name:	Vermont National Country Club Pond B	**South Burlington ID:**	PB0086		
Approximate address:	Golf Course Rd and Park Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	35.72		
Impervious acres managed	8.63	Primary land use in drainage	Residential
% Impervious	24%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.43
BMP Footprint Size (acres)	0.47	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	10.50	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241b

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond. Add forebay and expand pond.	

Potash Brook FRP BMP Summary Sheet

Site name:	Vermont National Country Club Pond C	**South Burlington ID:**	PB0087		
Approximate address:	Golf Course Rd and Park Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Retrofit Existing Detention Pond				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	9.94		
Impervious acres managed	0.47	Primary land use in drainage	Golf Course
% Impervious	5%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.85
BMP Footprint Size (acres)	1.78	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	4.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1241c

Proposed BMP description:	**Feasibility concerns:**
Retrofit existing detention pond. Add forebay and expand pond.	

Potash Brook FRP BMP Summary Sheet

Site name:	VT Gas Detention Pond	**South Burlington ID:**	PB0088		
Approximate address:	Swift St and Farrell St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$52,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	7.57		
Impervious acres managed	3.09	Primary land use in drainage area	Commercial
% Impervious	41%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.17
BMP Footprint Size (acres)	0.10	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	2-0228; 6293-9030

Proposed BMP description:	**Feasibility concerns:**
Reroute stormline from Swift St to grassed area to the north of VT Gas property and construct new gravel wetland.	Space is limited. Proposed BMP is in close proximity to brook.

Potash Brook FRP BMP Summary Sheet

Site name:	Wellesley Grove	**South Burlington ID:**	PB0089		
Approximate address:	Georgetown off of Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$77,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.85		
Impervious acres managed	2.15	Primary land use in drainage area	Residential
% Impervious	24%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.27
BMP Footprint Size (acres)	0.29	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C	Expired permit(s)?	2-1023

Proposed BMP description:	**Feasibility concerns:**
Add outlet control to existing depression to detain stormwater, construct new gravel wetland. Repair outfall erosion.	Wetlands concerns.

Potash Brook FRP BMP Summary Sheet

Site name:	Windridge Court	**South Burlington ID:**	PB0090		
Approximate address:	Windridge Ct and Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$45,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.04		
Impervious acres managed	0.58	Primary land use in drainage area	Residential
% Impervious	55%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.10
BMP Footprint Size (acres)	0.09	Volume infiltrated (ac-ft)	0.10
BMP Depth (feet)	4.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	2-0824

Proposed BMP description:	**Feasibility concerns:**
Construct new infiltration basin to infiltrate stormwater to the west of this small development.	

Potash Brook FRP BMP Summary Sheet

Site name:	Woodcrest Drive	**South Burlington ID:**	PB0091		
Approximate address:	Woodcrest Dr and Deane St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Infiltration Basin				

Estimated project cost	$303,000	MS4s contributing drainage to BMP	South Burlington, VTrans
Drainage area (acres)	7.46		
Impervious acres managed	2.38	Primary land use in drainage area	Residential
% Impervious	32%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.50
BMP Footprint Size (acres)	0.22	Volume infiltrated (ac-ft)	0.50
BMP Depth (feet)	5.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C	Expired permit(s)?	No Permit

Proposed BMP description:	**Feasibility concerns:**
Infiltrate stormwater to the southwest of drainage area. Reroute stormline south to new BMP. Construct new swale to drain the end of Woodcrest Dr, which is currently eroding slope following road.	Wetlands exist to the west and south of proposed BMP.

Potash Brook FRP BMP Summary Sheet

Site name:	Woodlands Industrial Park	**South Burlington ID:**	PB0092		
Approximate address:	Kimball Ave west of Community Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Gravel Wetland				

Estimated project cost	$25,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	4.40		
Impervious acres managed	3.89	Primary land use in drainage area	Industrial
% Impervious	88%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.37
BMP Footprint Size (acres)	0.20	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-0526/ 6279-9030

Proposed BMP description:	**Feasibility concerns:**
Reroute roof drainage to existing detention pond. Retrofit pond to gravel wetland and expand to accommodate additional volume and detain CPv.	Space to expand pond is limited.

Potash Brook FRP BMP Summary Sheet

Site name:	Worcester Street	**South Burlington ID:**	PB0093		
Approximate address:	Adirondack St and Butler Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	New
Proposed BMP type:	Underground Detention				

Estimated project cost	$821,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	10.84		
Impervious acres managed	3.82	Primary land use in drainage area	Residential
% Impervious	35%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.56
BMP Footprint Size (acres)	0.26	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.17	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	2-0312

Proposed BMP description:	**Feasibility concerns:**
Construct underground detention chambers under ROW and grassed shoulder.	Space is very limited. Utilities concerns. Unsure how high groundwater table is here.

Potash Brook FRP BMP Summary Sheet

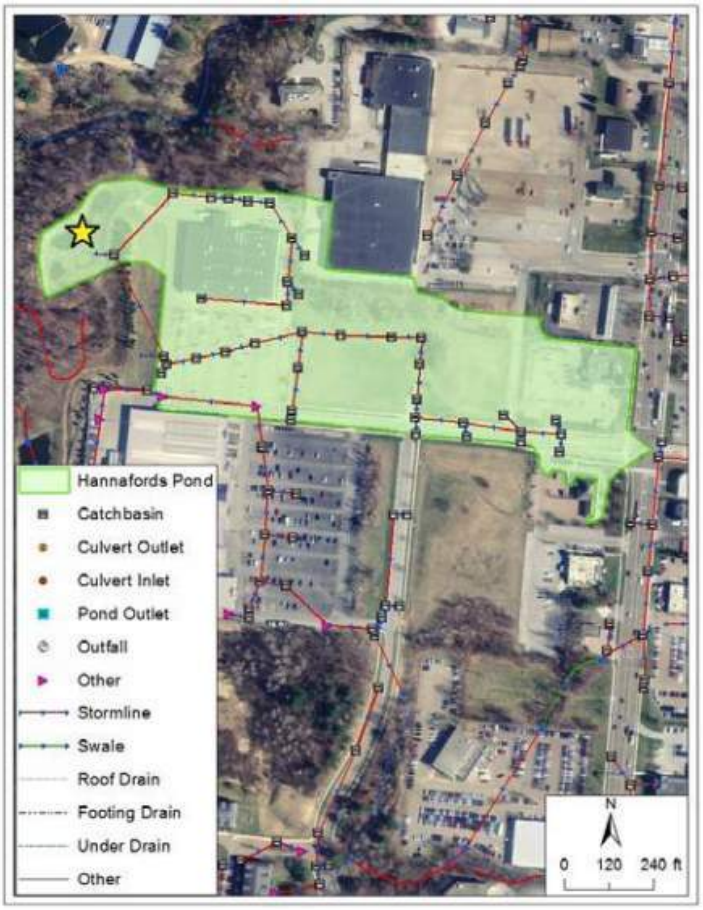
Site name:	Dorset Park Pond	**South Burlington ID:**	PB0094		
Approximate address:	Dorset St and Swift St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$20,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	26.07		
Impervious acres managed	5.95	Primary land use in drainage	Recreational
% Impervious	23%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.30
BMP Footprint Size (acres)	1.18	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.60	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1033

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with under drain and include CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Hannaford's Pond	**South Burlington ID:**	PB0095		
Approximate address:	Hannaford Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				



Estimated project cost	$21,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	14.71		
Impervious acres managed	7.75	Primary land use in drainage area	Commercial
% Impervious	53%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.34
BMP Footprint Size (acres)	0.59	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	10.50	Primary or secondary BMP?	Primary
Hydrologic soil group	B	Expired permit(s)?	1-1214

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Lowes Pond	**South Burlington ID:**	PB0096		
Approximate address:	Hannaford Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$17,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	12.73		
Impervious acres managed	10.05	Primary land use in drainage area	Commercial
% Impervious	79%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.20
BMP Footprint Size (acres)	0.34	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	6.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/D	Expired permit(s)?	1-1214

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

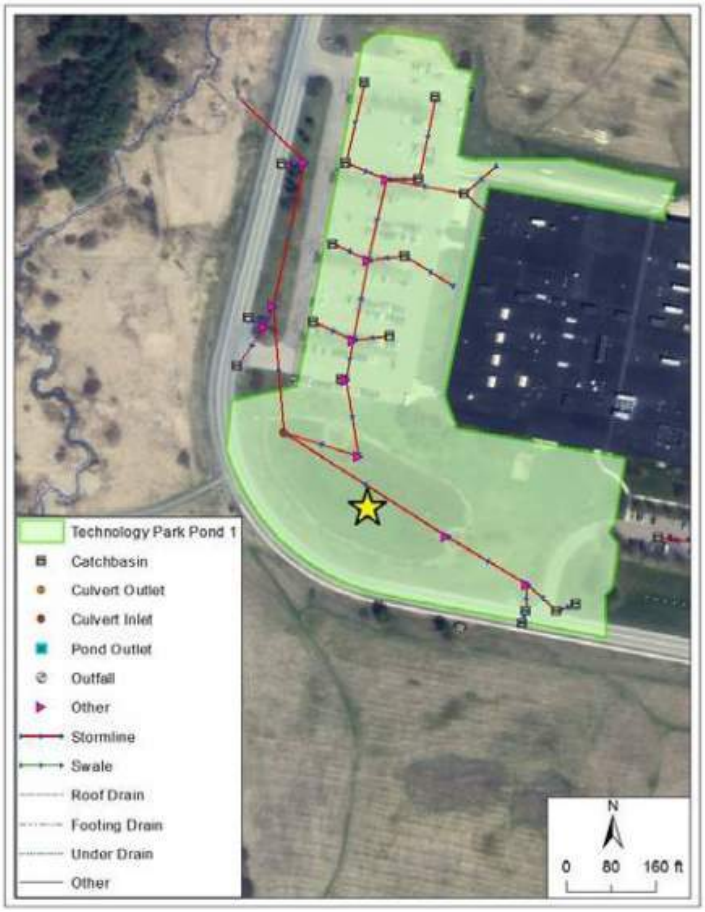
Site name:	Vermont National Country Club Pond B	**South Burlington ID:**	PB0097		
Approximate address:	Golf Course Rd, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$36,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	35.72		
Impervious acres managed	8.63	Primary land use in drainage	Residential
% Impervious	24%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.92
BMP Footprint Size (acres)	0.63	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	12.00	Primary or secondary BMP?	Primary
Hydrologic soil group	C/D	Expired permit(s)?	1-1241b

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Technology Park Pond 1	**South Burlington ID:**	PB0098		
Approximate address:	Community Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				



Estimated project cost	$22,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	8.96		
Impervious acres managed	3.78	Primary land use in drainage area	Industrial
% Impervious	42%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.37
BMP Footprint Size (acres)	0.74	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1254

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Lot A Mountain View Pond	**South Burlington ID:**	PB0099		
Approximate address:	Tilley Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$12,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	6.05		
Impervious acres managed	2.55	Primary land use in drainage area	Commercial
% Impervious	42%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.02
BMP Footprint Size (acres)	0.16	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	14.00	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	1-1536

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

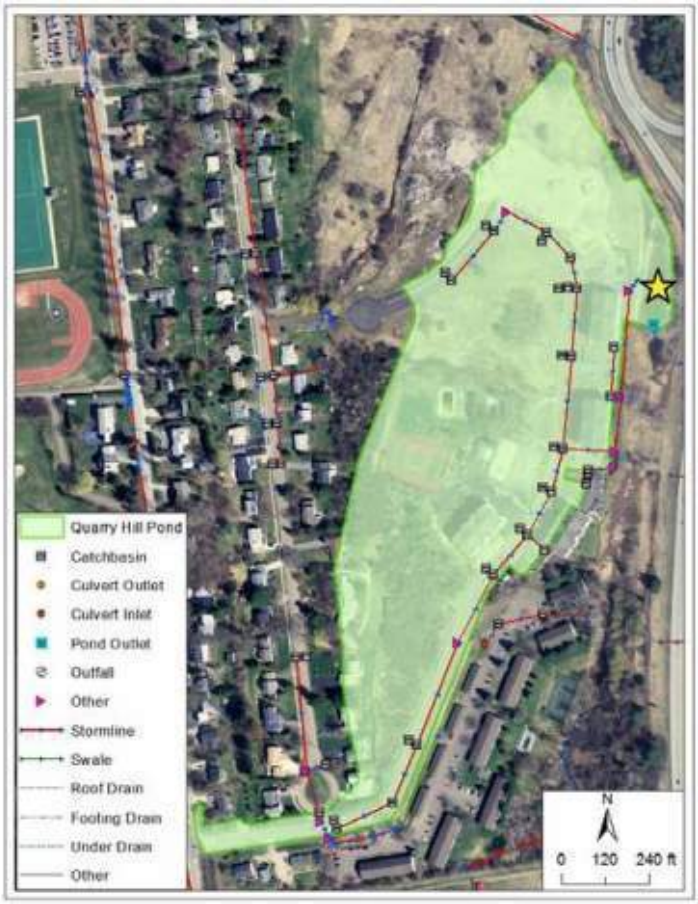
Site name:	Kennedy Dr Pond 1	**South Burlington ID:**	PB0100		
Approximate address:	Kennedy Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$13,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.47		
Impervious acres managed	1.33	Primary land use in drainage	Road
% Impervious	91%	2 or more landowners?	No
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.05
BMP Footprint Size (acres)	0.08	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.91	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	1-1582a

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Quarry Hill Pond	**South Burlington ID:**	PB0101		
Approximate address:	Quarry Hill Rd off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				



Estimated project cost	$12,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	21.75		
Impervious acres managed	6.19	Primary land use in drainage area	Residential
% Impervious	28%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.00
BMP Footprint Size (acres)	0.41	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	5.40	Primary or secondary BMP?	Primary
Hydrologic soil group	B/D	Expired permit(s)?	3602-INDS

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Heatherfield P1	**South Burlington ID:**	PB0102		
Approximate address:	Off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$12,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	1.40		
Impervious acres managed	0.90	Primary land use in drainage	Residential
% Impervious	64%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.00
BMP Footprint Size (acres)	0.05	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	8.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	3658a

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Heatherfield P2	**South Burlington ID:**	PB0103		
Approximate address:	Off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$13,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	10.76		
Impervious acres managed	7.08	Primary land use in drainage	Residential
% Impervious	66%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.03
BMP Footprint Size (acres)	0.26	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	11.00	Primary or secondary BMP?	Primary
Hydrologic soil group	B/C	Expired permit(s)?	3658b

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet					
Site name:	Heatherfield P3	**South Burlington ID:**	PB0104		
Approximate address:	Off of Spear St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$13,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	4.30		
Impervious acres managed	2.71	Primary land use in drainage area	Residential
% Impervious	63%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.05
BMP Footprint Size (acres)	0.10	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	11.50	Primary or secondary BMP?	Primary
Hydrologic soil group	A	Expired permit(s)?	3658c

Proposed BMP description:	Feasibility concerns:
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

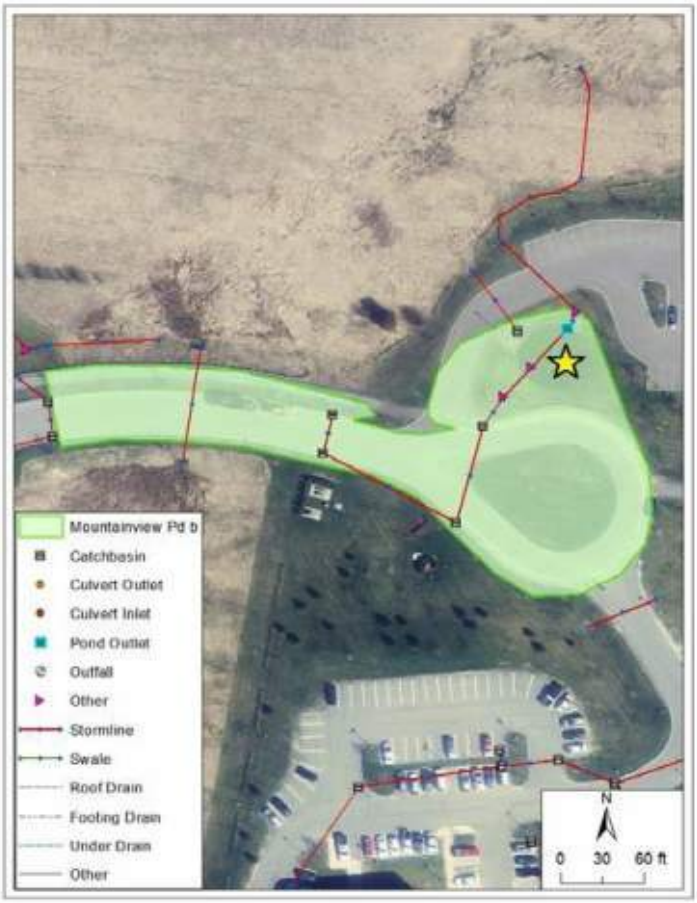
Site name:	Winding Brook	**South Burlington ID:**	PB0105		
Approximate address:	Winding Brook Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$15,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	9.11		
Impervious acres managed	3.32	Primary land use in drainage area	Residential
% Impervious	36%	2 or more landowners?	Yes
Land owner of BMP location	Private	CPv managed (ac-ft)	0.11
BMP Footprint Size (acres)	0.19	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.50	Primary or secondary BMP?	Primary
Hydrologic soil group	C	Expired permit(s)?	3691-INDS

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Mountainview Pond b	**South Burlington ID:**	PB0106		
Approximate address:	Tilley Dr, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				



Estimated project cost	$14,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	0.90		
Impervious acres managed	0.61	Primary land use in drainage	Road
% Impervious	68%	2 or more landowners?	No
Land owner of BMP location	Private	CPv managed (ac-ft)	0.08
BMP Footprint Size (acres)	0.13	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.50	Primary or secondary BMP?	Primary
Hydrologic soil group	D	Expired permit(s)?	3805-INDS

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

Potash Brook FRP BMP Summary Sheet

Site name:	Farrell St Pond	**South Burlington ID:**	PB0107		
Approximate address:	Farrell St, South Burlington	**MS4 where BMP is located:**	South Burlington	**New or existing BMP?**	Existing
Proposed BMP type:	Detention Pond				

Estimated project cost	$13,000	MS4s contributing drainage to BMP	South Burlington
Drainage area (acres)	32.96		
Impervious acres managed	11.03	Primary land use in drainage area	Commercial
% Impervious	33%	2 or more landowners?	Yes
Land owner of BMP location	MS4 Owned	CPv managed (ac-ft)	0.05
BMP Footprint Size (acres)	0.41	Volume infiltrated (ac-ft)	0.00
BMP Depth (feet)	9.00	Primary or secondary BMP?	Primary
Hydrologic soil group	A/C/D	Expired permit(s)?	5080-INDO

Proposed BMP description:	**Feasibility concerns:**
Investigate option to retrofit pond with CMAC valve to detain CPv.	

APPENDIX C

PROJECT RANKING

Potash Brook Flow Restoration Plan

Table D-1: BMP Ranking Criteria Key

Category	ID	Criteria	Technical Description	Description
Cost/Operations	A	Project Cost per Impervious Acre	The project costs per impervious acre were grouped into categories from $2/acre to $500,000/acre based on the range of projects proposed. Cost estimates were developed using the latest unit costs from VTrans as well as local experience. More expensive projects are ranked lower.	Project Costs include additional engineering, permitting, and construction. Transportation and utility conflicts, as well as overall constructability is also reflected in the cost.
Project Design Metrics	B	Impervious Acres Managed (ac)	Natural groupings within the range of impervious managed for the proposed projects were identified. More impervious managed receives a higher score.	The more impervious managed by a project, the higher the potential pollutant reduction. Additionally, the goal of the FRP is to manage existing impervious surfaces.
	C	Channel Protection Volume (CPv) Mitigated, (i.e.. 1-year Storm)	Groupings within the range of CPv volume storage were identified. The largest grouping receives the highest score. The CPv was estimated in HydroCAD, using local rainfall data.	The Channel Protection Volume (CPv) is the volume of stormwater runoff generated from the 1-year design storm (1.98" in Burlington). A BMP which provides CPv storage was determined to reduce the High-flow (Q0.3%), which is the flow rate exceeded 0.3% of the time (output from the State's BMPDSS model). Mitigating the CPv reduces channel erosion and excessive pollutant loading from streams.
	D	Volume Infiltrated (ac-ft)	Natural groupings within the range of volumes infiltrated for the BMPs were identified to which relative points were be assigned. The largest volume infiltrated was assigned the highest score. Volumes were calculated in HydroCAD.	The Volume Infiltrated indicates the amount of stormwater runoff that is infiltrated into the groundwater, and provides baseflow for the stream. The TMDL flow targets include a low-flow target, which is addressed by an infiltration-based BMP.
Project Implementation	E	Permitabilty	Permitabilty is simplified into two categories to reflect the common scenarios in permitting, as 1) minimal permitting, versus 2) Complex permitting issues. An itemized list of permits was included to inform the ranking, but was not used in the scoring.	Permitabilty is a measure of the expected level of effort to permit the project, based on knowledge that each type of permit takes varying amounts of time. Some common permits include Stormwater Construction, Local Zoning, Act 250 amendments, VTRANS ROW, etc.
	F	Land Availability	Public land is preferred, followed by regulated private land, and private land where the owners are known to be open to participate. Private land, in which participation of the owner is unknown is lower priority.	Land availability is critical for BMPs requiring open space for detention and access for the City. Properties owned by the City are ranked the highest, followed by privately owned land that has an expired permit, which provides leverage for owner participation.
	G	Flood Mitigation	Flood mitigation is categorized by the scale of the impact.	Flood mitigation is categorized by the scale of the impact. A neighborhood flooding issue is weighed more heavily than a localized drainage issue.
	H	TMDL Flow Target Addressed (Q03, Q95)	More weight is on BMPs that address both TMDL targets- the high-flow (Q0.3%) and low-flow targets (Q95%). The high-flow target is addressed by detention BMPs which storage the CP volume.	The goal of the FRP is to implement projects which address the TMDL flow targets. The high-flow target is measured as a **reduction** in the stream flow rate exceeded 0.3% of the time, while the low-flow target is an **increase** in the stream flow rate exceeded 95% of the time (baseflow). Projects which address both targets through storage or infiltration of the 1-year design storm are weighted the highest, followed by projects which address just the high-flow. Projects which do not address the full 1-year storm volume are weighted the lowest.
	I	Lake Champlain Phosphorus TMDL	Yes or no whether the proposed practice will provide benefit toward the Lake Champlain Phosphorus TMDL. This will be determined once the TMDL compliance metrics are released.	The Lake Champlain Phosphorus TMDL has been developed in the effort to reduce nutrient loading and consequential toxic algal blooms in Lake Champlain. The TMDL will require stormwater BMPs to meet a certain level of Total Phosphorus reduction. Each BMP will be evaluated against the TMDL compliance metrics, and scored yes or no if the project meets the TMDL standards.
	J	Other Project Benefits/Constraints	This criteria is to account for indirect project benefits like infrastructure improvements (e.g. aging culvert replacement, wetlands enhancement, and if it addresses an expired permit), or potential constraints (e.g. utility issues encountered during construction).	This criteria is to account for indirect project benefits like infrastructure improvements, community benefits, habitat creation, etc, as well as things that might constrain the project such as the potential of encountering utilities during construction.

Potash Brook Flow Restoration Plan
Table D-2: BMP Ranking Scoring Key

Category	ID	Criteria	Quality	Score
Cost/Operations	A	Project Cost per Impervious Acre	$1.00 - $24,999	4
			$25,000 - $49,999	3
			$50,000 - $99,999	2
			$100,000 - $199,999	1
			$200,000 - $499,999	0
			$500,000 +	-1
Project Design Metrics	B	Impervious Acres Managed (ac)	>10 acres	6
			>5-10 acres	5
			>4-5 acres	4
			>2-4 acres	3
			>1-2 acres	2
			≤ 1 acre	1
			0 acres	0
	C	Channel Protection Volume (CPv) Mitigated, (ie. 1-year Storm)	>0.6 ac-ft	5
			>0.4-0.6 ac-ft	4
			>0.2-0.4 ac-ft	3
			>0.05-0.2 ac-ft	2
			>0-0.05 ac-ft	1
			0 ac-ft	0
	D	Volume Infiltrated (ac-ft)	>2 ac-ft	5
			1 - 2 ac-ft	4
			0.5 - 1 ac-ft	3
			0.1 - 0.5 sc-ft	2
			>0.01 - 0.1 ac-ft	1
			no infiltration	0
Project Implementation	E	Permitabilty	Minimal Issues/Concerns or no permits	2
			Complex issues/Potential permit denial	0
	F	Land Availability	City owned	4
			Non City owned regulated (expire permit)	3
			Non City owned/Participatory Owner	2
			Unknown	0
			Not City owned/Non participatory owner	-2
	G	Flood Mitigation (Is existing flooding issue mitigated by project?)	Neighborhood Wide Flooding Issue	3
			Infrastructure damage (e.g. Wet Basement)/Single Property	2
			Nuisance Issue (ie. ponding, puddles, etc).	1
			None	0
	H	TMDL Flow Target Addressed (Q03, Q95)	High and Low Flow Targets	3
			High Flow Target	2
			No target addressed in BMPDSS (just WQ treatment)	1
	I	Lake Champlain Phosphorus TMDL	Addressed TMDL	1
			Does not address TMDL	0
	J	Other Project Benefits/Constraints	Infrastructure Improvement (e.g. Culvert Replacement)	1
			Educational/Functional Benefit	1
			Recreational Benefit	1
			Natural Habitat Creation/Protection	1
			Outfall Erosion Control	1
			Utility Issues/Uncertainty	-1

APPENDIX D

PROPOSED BMP COST ESTIMATES, PRIORITIZATION RANKING, AND IMPLEMENTATION SCHEDULE

Potash Flow Restoration Plan
Table E-1: Project Cost Estimates

BMP ID	Project Name	Retrofit Description	Imp acres	Design Control Volume (ac-ft)	Design Control Volume (cft)	Base Unit Cost ($/cft)	Site Adjustment Factor	Base Construction Cost[1]	Permits & Engineering Contingency	BMP Footprint Area (Acres)	Land Cost	Summed Project Cost	Minimum Project Cost ($10k for simple retrofits; $25k otherwise)	Final Project Cost	Cost/Imp Acre	O&M
PB0001	1050 Hinesburg Road	Gravel Wetland	0.7	0.11	4835	$10	1.5	$72,527	$ 25,385	0.065	$7,800	$ 105,712	$ 25,000	$ 105,712	$ 132,392	$ 2,176
PB0002	110 Kimball Ave - North Infiltration Basin	Retrofit Existing Infiltration Basin	0.58	0.02	1045	$4	0.25	$1,045	$ 366	NA	$0	$ 1,411	$ 25,000	$ 25,000	$ 2,449	$ 31
PB0003	110 Kimball Ave - South Infiltration Basin	Retrofit Existing Infiltration Basin	0.9	0.05	2309	$4	0.25	$2,309	$ 808	NA	$0	$ 3,117	$ 10,000	$ 10,000	$ 3,308	$ 69
PB0004	189 Cloverleaf Detention Pond	Detention Pond	12.1	1.13	49179	$2	0.5	$49,179	$ 9,836	1.19	$0	$ 59,015	$ 25,000	$ 59,015	$ 4,861	$ 1,475
PB0005	189 Ramp Detention Pond	Gravel Wetland	5.8	0.35	15159	$10	1.5	$227,383	$ 79,584	0.33	$39,600	$ 346,567	$ 25,000	$ 346,567	$ 53,134	$ 6,821
PB0006	30 Kimball Ave Swale Retrofit	Retrofit Existing Swale	1.0	0.03	1089	$2	0.25	$545	$ 191	NA	$0	$ 735	$ 25,000	$ 25,000	$ 703	$ 16
PB0007	Adelphia Cable Pond Retrofit	Gravel Wetland	2.7	0.09	3746	$10	0.25	$9,365	$ 3,278	NA	$0	$ 12,643	$ 25,000	$ 25,000	$ 4,753	$ 281
PB0008	Adirondack Street	Underground detention	3.5	0.58	25265	$12	2	$606,355	$ 212,224	0.217	$26,040	$ 844,620	$ 25,000	$ 844,620	$ 232,439	$ 10,000
PB0009	Airport Drive	Infiltration Gallery	3.6	0.46	19820	$12	1.5	$356,756	$ 71,351	0.091	$10,920	$ 439,028	$ 25,000	$ 439,028	$ 118,182	$ 10,000
PB0010	Ashbrook Drive	Gravel Wetland	0.9	0.18	7754	$10	1.5	$116,305	$ 40,707	0.089	$10,680	$ 167,692	$ 25,000	$ 167,692	$ 177,895	$ 3,489
PB0011	Blue Mall Infiltration	Infiltration Gallery	2.4	0.37	15987	$12	2	$383,676	$ 134,287	0.11	$13,015	$ 530,978	$ 25,000	$ 530,978	$ 215,397	$ 10,000
PB0012	Brookwood Drive Pond	Detention Pond	24.5	2.00	87033	$2	1.5	$261,099	$ 91,385	0.344	$41,280	$ 393,763	$ 25,000	$ 393,763	$ 14,392	$ 7,833
PB0013	Burlington Price Chopper	Gravel wetland	11.5	1.23	53550	$10	2	$1,071,002	$ 374,851	0.11	$13,223	$ 1,459,075	$ 25,000	$ 1,459,075	$ 125,945	$ 10,000
PB0014	Chelsea Circle	Infiltration Basin	1.8	0.29	12720	$4	1.5	$76,317	$ 15,263	0.196	$23,520	$ 115,101	$ 25,000	$ 115,101	$ 50,350	$ 2,290
PB0015	Church of Jesus Christ of Latterday Saints	Detention Swale	1.6	0.10	4312	$2	1.5	$12,937	$ 4,528	0.093	$11,160	$ 28,625	$ 25,000	$ 28,625	$ 11,032	$ 388
PB0016	Community Bible Church Infiltration	Infiltration Trench	6.2	0.91	39727	$12	1.5	$715,081	$ 250,278	0.083	$9,960	$ 975,319	$ 25,000	$ 975,319	$ 156,497	$ 10,000
PB0017	Domino's	Gravel Wetland	1.3	0.23	10062	$10	1.5	$150,935	$ 30,187	0.145	$17,400	$ 198,522	$ 25,000	$ 198,522	$ 134,769	$ 4,528
PB0018	Dorset Commons Pond	Detention Pond	5.0	0.60	26223	$2	1.5	$78,669	$ 27,534	0.513	$61,560	$ 167,764	$ 25,000	$ 167,764	$ 21,210	$ 2,360
PB0019	Dumont Park Stormwater Project	Detention Pond	4.2	0.27	11718	$2	1.5	$35,153	$ 7,031	0.223	$26,760	$ 68,944	$ 25,000	$ 68,944	$ 10,143	$ 1,055
PB0020	Dynapower	Gravel Wetland	6.5	0.95	41469	$10	0.25	$103,673	$ 20,735	NA	$0	$ 124,407	$ 25,000	$ 124,407	$ 19,140	$ 3,110
PB0021	East Terrace Detention Pond	Gravel Wetland	2.3	0.34	14985	$10	1.5	$224,770	$ 44,954	0.401	$48,120	$ 317,844	$ 25,000	$ 317,844	$ 118,316	$ 6,743
PB0022	Eastwood Commons Pond Expansion	Retrofit Existing Detention Pond	20.8	0.73	31712	$2	0.25	$15,856	$ 3,171	NA	$0	$ 19,027	$ 25,000	$ 25,000	$ 916	$ 476
PB0023	Easy Self Storage	Gravel Wetland	1.2	0.20	8843	$10	1.5	$132,640	$ 46,424	0.140	$16,800	$ 195,864	$ 25,000	$ 195,864	$ 147,987	$ 3,979
PB0024	Economou Farm Pond	Gravel Wetland	1.5	0.67	29142	$10	0.25	$72,854	$ 14,571	NA	$0	$ 87,425	$ 25,000	$ 87,425	$ 59,762	$ 2,186
PB0025	Exit 13 Gravel Wetland	Gravel wetland	5.6	0.57	24699	$10	0.5	$123,493	$ 43,222	0.434	$52,080	$ 218,795	$ 25,000	$ 218,795	$ 29,931	$ 3,705
PB0026	Exit 14 Gravel Wetland	Gravel wetland	1.9	0.29	12807	$10	0.5	$64,033	$ 22,412	0.372	$44,640	$ 131,085	$ 25,000	$ 131,085	$ 44,790	$ 1,921
PB0027	Fairpoint Communications	Gravel Wetland	4.8	0.59	25744	$10	1.5	$386,159	$ 77,232	0.260	$31,200	$ 494,591	$ 25,000	$ 494,591	$ 97,387	$ 10,000
PB0028	Faith United Methodist Church	Underground Detention	1.0	0.15	6490	$2	2	$25,962	$ 9,087	0.116	$13,920	$ 48,968	$ 25,000	$ 48,968	$ 33,983	$ 779
PB0029	Golf Course Road South	Gravel Wetland	1.7	0.23	10106	$10	1	$101,059	$ 20,212	0.117	$14,040	$ 135,311	$ 25,000	$ 135,311	$ 72,780	$ 3,032
PB0030	Gonzo's Underground	Underground detention	8.7	0.45	19646	$12	2	$471,493	$ 165,023	0.21	$25,026	$ 661,542	$ 25,000	$ 661,542	$ 72,986	$ 10,000
PB0031	Grandview Drive North Detention Pond	Detention Pond	1.4	0.14	6186	$2	1.5	$18,557	$ 6,495	0.066	$7,920	$ 32,971	$ 25,000	$ 32,971	$ 18,141	$ 557
PB0032	Grandview Drive West Detention Pond	Detention Pond	1.9	0.18	7786	$2	1.5	$23,358	$ 8,175	0.034	$4,132	$ 35,666	$ 25,000	$ 35,666	$ 16,704	$ 701
PB0033	Hawthorne Circle Detention Pond	Gravel Wetland	2.5	0.15	6534	$10	1.5	$98,010	$ 34,304	0.093	$11,160	$ 143,474	$ 25,000	$ 143,474	$ 51,891	$ 2,940
PB0034	Helen Ave Cul De Sac	Infiltration Basin	2.2	0.35	15420	$4	1.5	$92,521	$ 32,383	0.093	$11,160	$ 136,064	$ 25,000	$ 136,064	$ 58,071	$ 2,776
PB0035	Hinesburg Road	Detention pond	1.3	0.14	6011	$2	1.5	$18,034	$ 6,312	0.070	$8,400	$ 32,746	$ 25,000	$ 32,746	$ 19,147	$ 541
PB0036	I-89 Swale	Median Filter	1.9	0.53	23130	$5	1.5	$173,478	$ 34,696	NA	$0	$ 208,173	$ 25,000	$ 208,173	$ 108,991	$ 5,204
PB0037	Iby Gravel Wetland	Gravel wetland	1.1	0.07	2919	$10	1.5	$43,778	$ 15,322	0.062	$7,440	$ 66,540	$ 25,000	$ 167,000	$ 51,829	$ 1,313
PB0038	INS Building Pond A Retrofit	Gravel Wetland	1.0	0.04	1742	$10	0.25	$4,356	$ 1,525	NA	$0	$ 5,881	$ 25,000	$ 25,000	$ 5,981	$ 131
PB0039	INS Building Pond B Retrofit	Gravel Wetland	0.6	0.04	1742	$10	0.25	$4,356	$ 1,525	NA	$0	$ 5,881	$ 25,000	$ 25,000	$ 9,632	$ 131
PB0040	Joy Dr Detention Pond	Gravel Wetland	1.3	0.21	9148	$10	1.5	$137,214	$ 27,443	0.119	$14,280	$ 178,937	$ 25,000	$ 178,937	$ 122,928	$ 4,116
PB0041	Kennedy Dr Pond 2 Expansion	Gravel Wetland	2.4	0.16	6926	$10	0.25	$17,315	$ 6,060	NA	$0	$ 23,375	$ 25,000	$ 380,041	$ 9,905	$ 519
PB0042	Kennedy Dr Pond 3 Expansion	Gravel Wetland	4.8	0.18	7623	$10	0.25	$29,058	$ 5,812	NA	$0	$ 34,869	$ 10,000	$ 320,920	$ 7,234	$ 872
PB0043	Kennedy Dr Pond 4 Expansion	Retrofit Existing Detention Pond	4.8	0.25	10977	$2	0.25	$5,489	$ 1,921	NA	$0	$ 7,410	$ 25,000	$ 25,000	$ 1,550	$ 165
PB0044	Kennedy Dr Pond 7 Expansion	Gravel Wetland	8.7	0.58	25395	$10	0.25	$73,489	$ 25,721	NA	$0	$ 99,210	$ 10,000	$ 407,000	$ 11,449	$ 2,205
PB0045	K-Mart Plaza Infiltration	Sand Filter/Detention Gallery	7.7	0.86	37592	$12	2	$902,215	$ 180,443	0.32	$38,400	$ 1,121,058	$ 25,000	$ 1,121,058	$ 140,894	$ 10,000
PB0046	Knoll Circle	Gravel Wetland	2.2	0.80	34935	$10	1.5	$524,027	$ 183,409	0.352	$42,240	$ 749,676	$ 25,000	$ 749,676	$ 327,517	$ 10,000
PB0047	Lane Press Roof	Infiltration Basin	4.2	0.69	30100	$4	1.5	$180,600	$ 63,210	0.55	$66,000	$ 309,810	$ 25,000	$ 309,810	$ 58,468	$ 5,418
PB0048	Laurel Hill Drive	Infiltration Basin	1.8	0.41	17642	$4	1.5	$105,851	$ 37,048	0.16	$19,200	$ 162,099	$ 25,000	$ 162,099	$ 77,662	$ 3,176
PB0049	Lilac Ln Infiltration Basin	Infiltration Basin	0.8	0.13	5706	$4	1.5	$34,238	$ 6,848	0.027	$3,240	$ 44,326	$ 25,000	$ 44,326	$ 48,344	$ 1,027
PB0050	Lindenwood Drive Detention Pond	Detention pond	2.2	0.21	8930	$2	1.5	$26,789	$ 9,376	0.440	$52,800	$ 88,966	$ 25,000	$ 379,468	$ 16,500	$ 804
PB0051	Logwood Neighborhood Detention Pond	Detention Pond	18.4	0.61	26397	$2	1.5	$79,192	$ 15,838	0.47	$56,280	$ 151,310	$ 25,000	$ 151,310	$ 5,154	$ 2,376
PB0052	Marcotte Central School	Gravel Wetland	1.8	0.19	8102	$10	1.5	$121,532	$ 42,536	0.204	$24,480	$ 188,549	$ 25,000	$ 188,549	$ 89,832	$ 3,646
PB0053	Marine Connection	Detention Swale	4.7	0.21	9322	$2	1.5	$27,966	$ 5,593	0.2	$24,000	$ 57,559	$ 25,000	$ 57,559	$ 7,088	$ 839
PB0054	Meadowland Business Park Pond 2	Retrofit Existing Detention Pond and add CMA	2.9	1.70	74226	$2	0.25	$37,113	$ 7,423	NA	$0	$ 44,536	$ 25,000	$ 44,536	$ 15,142	$ 1,113
PB0055	Merchant's Bank Detention Pond	Detention Pond	3.2	0.23	9932	$2	2	$39,727	$ 13,904	0.101	$12,120	$ 65,751	$ 25,000	$ 65,751	$ 16,916	$ 1,192
PB0056	Spear St	Gravel Wetland	4.9	2.14	93393	$10	0.5	$466,963	$ 93,393	0.773	$92,760	$ 653,116	$ 25,000	$ 653,116	$ 113,389	$ 10,000
PB0057	Nicklaus Circle	Gravel Wetland	2.2	0.54	23392	$10	2	$467,834	$ 163,742	0.292	$35,040	$ 666,616	$ 25,000	$ 666,616	$ 283,218	$ 10,000
PB0058	North Country Credit North West Infiltration	Infiltration Trench	0.2	0.03	1133	$12	2	$27,181	$ 9,514	0.006	$720	$ 37,415	$ 25,000	$ 37,415	$ 174,094	$ 815
PB0059	North Country Credit South Infiltration	Infiltration Gallery	0.6	0.12	5184	$12	1.5	$93,306	$ 32,657	0.03	$3,125	$ 129,087	$ 25,000	$ 129,087	$ 203,749	$ 2,799
PB0060	O'Brien Drive Underground Detention	Underground Detention	2.9	0.54	23348	$12	1.5	$420,267	$ 147,093	0.11	$13,015	$ 580,375	$ 25,000	$ 580,375	$ 197,409	$ 10,000
PB0061	Olympiad Apartments & Office Building Pond Retrofit	Gravel Wetland	3.7	0.06	2396	$10	0.25	$5,990	$ 1,198	NA	$0	$ 7,187	$ 25,000	$ 25,000	$ 1,951	$ 180
PB0062	Panurgy Infiltration Basin	Retrofit Existing Infiltration Basin	0.8	0.08	3528	$4	0.25	$3,528	$ 706	NA	$0	$ 4,234	$ 25,000	$ 25,000	$ 5,293	$ 106
PB0063	Park Road Detention Pond	Detention Pond	1.3	0.42	18339	$2	1.5	$55,016	$ 11,003	0.23	$27,600	$ 93,620	$ 25,000	$ 93,620	$ 51,984	$ 1,650
PB0064	Pillsbury Manor Infiltration Basin Retrofit	Retrofit to Infiltration Basin	0.4	0.07	2962	$4	0.25	$2,962	$ 1,037	NA	$0	$ 3,999	$ 25,000	$ 25,000	$ 10,019	$ 89
PB0065	Quarry Hill South	Detention Swale	2.5	0.48	20822	$2	1.5	$62,465	$ 21,863	0.399	$47,880	$ 132,208	$ 25,000	$ 132,208	$ 33,505	$ 1,874
PB0066	Queen City Park Road Detention Pond	Detention Pond	3.0	0.45	19689	$2	0.5	$19,689	$ 3,938	0.63	$75,600	$ 99,227	$ 25,000	$ 99,227	$ 7,929	$ 591
PB0067	Shaws West	Underground Detention	1.7	0.16	6839	$12	2	$164,134	$ 57,447	0.07	$8,447	$ 230,028	$ 25,000	$ 230,028	$ 129,256	$ 4,924
PB0068	South Burlington High School Infiltration	Infiltration Basin	3.1	0.44	19297	$4	1.5	$115,782	$ 23,156	0.22	$26,400	$ 165,339	$ 25,000	$ 165,339	$ 44,851	$ 3,473
PB0069	South Burlington High School North	Underground Infiltration	4.3	0.69	30013	$12	2	$720,308	$ 252,108	0.16	$19,551	$ 991,967	$ 25,000	$ 991,967	$ 228,267	$ 10,000
PB0070	South Meadows Pond	Retrofit Existing Detention Pond	4.7	0.37	16117	$2	0.25	$8,059	$ 1,612	NA	$0	$ 9,670	$ 25,000	$ 25,000	$ 2,044	$ 242
PB0071	Southview Drive	Underground Detention	4.8	0.71	30971	$12	2	$743,308	$ 260,158	0.37	$44,334	$ 1,047,799	$ 25,000	$ 1,047,799	$ 208,801	$ 10,000
PB0072	Staples Plaza Underground Detention	Underground Detention	1.6	0.20	8625	$12	2	$206,997	$ 72,449	0.07	$8,977	$ 288,423	$ 25,000	$ 288,423	$ 170,069	$ 6,210

BMP ID	Project Name	Retrofit Description	Imp acres	Design Control Volume (ac-ft)	Design Control Volume (cft)	Base Unit Cost ($/cft)	Site Adjustment Factor	Base Construction Cost[1]	Permits & Engineering Contingency	BMP Footprint Area (Acres)	Land Cost	Summed Project Cost	Minimum Project Cost ($10k for simple retrofits; $25k otherwise)	Final Project Cost	Cost/Imp Acre	O&M
PB0073	Stonehedge Circle	Bioretention	1.3	0.20	8843	$2	1.5	$26,528	$ 9,285	0.16	$18,720	$ 54,533	$ 25,000	$ 54,533	$ 28,423	$ 796
PB0074	Sugartree Lane	Gravel Wetland	1.1	0.12	5009	$10	1.5	$75,141	$ 15,028	0.05	$6,000	$ 96,169	$ 25,000	$ 96,169	$ 85,538	$ 2,254
PB0075	Swift Estates Pond	Retrofit Existing Detention Pond	3.6	0.33	14201	$2	0.25	$7,100	$ 1,420	NA	$0	$ 8,520	$ 25,000	$ 25,000	$ 2,388	$ 213
PB0076	Technology Park Pond Retrofit	Gravel Wetland	0.03	0.27	11805	$10	0.25	$29,512	$ 5,902	NA	$0	$ 35,414	$ 25,000	$ 35,414	$ 1,193,163	$ 885
PB0077	Temple Detention Pond	Detention Pond	0.9	0.19	8364	$2	1.5	$25,091	$ 5,018	0.14	$16,800	$ 46,909	$ 25,000	$ 46,909	$ 32,727	$ 753
PB0078	The Pines	Retrofit Existing Detention Pond	5.8	0.22	9365	$2	0.25	$4,683	$ 937	NA	$0	$ 5,619	$ 25,000	$ 25,000	$ 961	$ 140
PB0079	UMall Detention Pond	Retrofit Existing Detention Pond	15.0	0.91	39596	$2	0.25	$19,798	$ 6,929	NA	$0	$ 26,727	$ 25,000	$ 26,727	$ 1,786	$ 594
PB0080	UMall Infiltration 1	Retrofit Infiltration Gallery	5.5	0.31	13547	$12	0.25	$40,641	$ 14,225	NA	$0	$ 54,866	$ 25,000	$ 25,000	$ 9,890	$ 1,219
PB0081	UMall Infiltration 2	Retrofit Infiltration Gallery	15.3	0.03	1394	$12	0.25	$4,182	$ 1,464	NA	$0	$ 5,645	$ 25,000	$ 54,866	$ 369	$ 125
PB0082	UMall Sears Auto Pond	Gravel Wetland	9.3	0.61	26670	$10	0.25	$66,674	$ 23,336	NA	$0	$ 90,010	$ 25,000	$ 90,010	$ 9,684	$ 2,000
PB0083	UVM Bio Research Complex	Bioretention	0.9	0.20	8668	$10	1.5	$130,027	$ 45,509	0.104	$0	$ 175,536	$ 25,000	$ 175,536	$ 191,667	$ 3,901
PB0084	UVM Forestry Research Center - East Roof	Infiltration Gallery	0.4	0.06	2396	$12	1	$28,750	$ 10,062	0.011	$0	$ 38,812	$ 25,000	$ 38,812	$ 95,055	$ 862
PB0085	UVM Forestry Research Center - West Roof	Infiltration Gallery	0.1	0.02	697	$12	1	$8,364	$ 2,927	0.034	$0	$ 11,291	$ 25,000	$ 25,000	$ 104,974	$ 251
PB0086	Vermont National Country Club Pond B	Retrofit Existing Detention Pond	8.6	0.43	18600	$2	0.25	$9,300	$ 1,860	NA	$0	$ 11,160	$ 25,000	$ 25,000	$ 1,293	$ 279
PB0087	Vermont National Country Club Pond C	Retrofit Existing Detention Pond	0.5	0.85	36939	$2	0.25	$18,469	$ 3,694	NA	$0	$ 22,163	$ 25,000	$ 25,000	$ 46,732	$ 554
PB0088	VT Gas Detention Pond	Detention pond	3.1	0.17	7492	$2	2	$29,969	$ 10,489	0.099	$11,880	$ 52,339	$ 25,000	$ 52,339	$ 13,093	$ 899
PB0089	Wellesley Grove	Detention pond	2.1	0.27	11718	$2	1.5	$35,153	$ 7,031	0.294	$35,280	$ 77,464	$ 25,000	$ 77,464	$ 19,659	$ 1,055
PB0090	Windridge Court	Infiltration Basin	0.6	0.10	4312	$4	1.5	$25,875	$ 9,056	0.085	$10,200	$ 45,131	$ 25,000	$ 45,131	$ 60,479	$ 776
PB0091	Woodcrest Drive	Infiltration Basin	2.4	0.50	21606	$4	1.5	$129,635	$ 25,927	0.224	$26,880	$ 182,441	$ 25,000	$ 302,500	$ 65,362	$ 3,889
PB0092	Woodlands Industrial Park	Retrofit Existing Detention Pond	3.9	0.37	16161	$2	0.25	$8,080	$ 2,828	NA	$0	$ 10,909	$ 25,000	$ 25,000	$ 2,804	$ 242
PB0093	Worcester Street	Underground Detention	3.8	0.56	24394	$12	2	$585,446	$ 204,906	0.258	$30,905	$ 821,258	$ 25,000	$ 821,258	$ 206,899	$ 10,000
PB0094	Dorset Park Pond	Retrofit pond with CMAC valve.	5.9	0.30	13024	$2	0.25	$16,512	$ 3,302	NA	$0	$ 19,815	$ 10,000	$ 19,815	$ 3,331	$ 495
PB0095	Hannaford's Pond	Retrofit pond with CMAC valve.	7.8	0.34	14723	$2	0.25	$17,362	$ 3,472	NA	$0	$ 20,834	$ 10,000	$ 20,834	$ 2,687	$ 521
PB0096	Lowes Pond	Retrofit pond with CMAC valve.	10.1	0.20	8538	$2	0.25	$14,269	$ 2,854	NA	$0	$ 17,123	$ 10,000	$ 17,123	$ 1,703	$ 428
PB0097	Vermont National Country Club Pond B	Retrofit pond with CMAC valve.	8.6	0.92	40119	$2	0.25	$30,059	$ 6,012	NA	$0	$ 36,071	$ 10,000	$ 36,071	$ 4,181	$ 902
PB0098	Technology Park Pond 1	Retrofit pond with CMAC valve.	3.8	0.37	15987	$2	0.25	$17,993	$ 3,599	NA	$0	$ 21,592	$ 10,000	$ 21,592	$ 5,720	$ 540
PB0099	Lot A Mountain View Pond	Retrofit pond with CMAC valve.	2.6	0.02	784	$2	0.25	$10,392	$ 2,078	NA	$0	$ 12,470	$ 10,000	$ 12,470	$ 4,888	$ 312
PB0100	Kennedy Dr Pond 1	Retrofit pond with CMAC valve.	1.3	0.05	2047	$2	0.25	$11,024	$ 2,205	NA	$0	$ 13,228	$ 10,000	$ 13,228	$ 9,912	$ 331
PB0101	Quarry Hill Pond	Retrofit pond with CMAC valve.	6.2	0.00	0	$2	0.25	$10,000	$ 2,000	NA	$0	$ 12,000	$ 10,000	$ 12,000	$ 1,940	$ 300
PB0102	Heatherfield P1	Retrofit pond with CMAC valve.	0.9	0.00	0	$2	0.25	$10,000	$ 2,000	NA	$0	$ 12,000	$ 10,000	$ 12,000	$ 13,356	$ 300
PB0103	Heatherfield P2	Retrofit pond with CMAC valve.	7.1	0.03	1220	$2	0.25	$10,610	$ 2,122	NA	$0	$ 12,732	$ 10,000	$ 12,732	$ 1,799	$ 318
PB0104	Heatherfield P3	Retrofit pond with CMAC valve.	2.7	0.05	2222	$2	0.25	$11,111	$ 2,222	NA	$0	$ 13,333	$ 10,000	$ 13,333	$ 4,924	$ 333
PB0105	Winding Brook	Retrofit pond with CMAC valve.	3.3	0.11	4661	$2	0.25	$12,330	$ 2,466	NA	$0	$ 14,797	$ 10,000	$ 14,797	$ 4,457	$ 370
PB0106	Mountainview Pond b	Retrofit pond with CMAC valve.	0.6	0.08	3398	$2	0.25	$11,699	$ 2,340	NA	$0	$ 14,039	$ 10,000	$ 14,039	$ 23,024	$ 351
PB0107	Farrell St Pond	Retrofit pond with CMAC valve.	11.0	0.05	2004	$2	0.25	$11,002	$ 2,200	NA	$0	$ 13,202	$ 10,000	$ 13,202	$ 1,197	$ 330

Notes:

1. Project costs are based on the Horsley-Witten Spreadsheet Method
2. $10,000 is added to the base construction cost for a CMAC valve installation.
3. Minimum project costs are $10,000 for simple retrofits and $25,000 otherwise. The "Final Project Cost" is the greater of the "Summed Project Costs" or the "Minimum Project Costs".

Potash Brook Flow Restoration Plan
Table E-2: Potash Brook Watershed BMP Project Scoring

ID #	Project Name	Expired Permit	MS4	BMP Type [1]	Project Cost Estimate [2]	Retrofit Description	Total Score [3]
PB0001	1050 Hinesburg Road	No Permit	South Burlington	GW	$106,000	There is an existing wet depression here where stormwater is already routed. Propose gravel wetland and meet CPv standards.	16
PB0002	110 Kimball Ave - North Infiltration Basin	1-1504a	South Burlington	IB	$25,000	Runoff is bypassing infiltration basin to a swale with direct discharge to the brook. Add trench along west edge of parking lot to direct runoff to infiltration basin. Expand basin.	15
PB0003	110 Kimball Ave - South Infiltration Basin	1-1504b	South Burlington	IB	$10,000	Retrofit outlet structure and add proposed outlet control riser that was not constructed.	17
PB0004	189 Cloverleaf Detention Pond	No Permit	VTrans	DP	$59,000	Add outlet structure to area that is already depressed to detain stormwater. Reroute stormline from Shelburne Rd to this area.	21
PB0005	189 Ramp Detention Pond	2-0619	VTrans	GW	$347,000	Detain stormwater from a large section of Dorset St. Intercept stormline near Kennedy Dr and reroute to the area between 189 ramps. Treat with gravel wetland.	21
PB0006	30 Kimball Ave Swale Retrofit	1-1526; 6269-9030	South Burlington	DS	$25,000	Retrofit existing swale detention to meet CPv. Expand swale to accommodate modified outlet structure.	15
PB0007	Adelphia Cable Pond Retrofit	1-1000; 6291-9030	South Burlington	GW	$25,000	Reroute drainage from Kimball Ave to this detention pond behind Adelphia Cable. Retrofit and expand existing pond into a gravel wetland to detain CPv.	17
PB0008	Adirondack Street	2-0312	South Burlington	UD	$845,000	Construct underground detention chambers under ROW and grassed shoulder.	15
PB0009	Airport Drive	No Permit	BTV	IG	$439,000	Construct subsurface infiltration chambers in southernmost lot where houses will be removed. Intercept stormline running south down Airport Dr.	20
PB0010	Ashbrook Drive	2-0101	South Burlington	GW	$168,000	Reroute stormwater to gravel wetland southwest of Dorset St behind apartment buildings.	14
PB0011	Blue Mall Infiltration	2-0144	South Burlington	IG	$531,000	Construct underground infiltration chambers in the southwest edge of parking lot. Overflow to existing stormline that flows to Dorset St.	16
PB0012	Brookwood Drive Pond	2-0794; 2-0619	South Burlington	DP	$394,000	Construct new detention pond to detain this large outfall. Forebay to be located in empty lot near Brookwood Dr.	22
PB0013	Burlington Price Chopper	No Permit	Burlington	GW	$1,459,000	Construct new gravel wetland in area between parking lot and stream to the south of parking lot.	14
PB0014	Chelsea Circle	2-0767	South Burlington	IB	$115,000	Construct new infiltration basin constructed to south of existing swale, which receives flow from Chelsea Cir condos and Timberlane Dental parking lot. Neighborhood icing and flooding issues can be mitigated with this project.	21
PB0015	Church of Jesus Christ of Latterday Saints	2-0179; 6318-9030	South Burlington	DS	$29,000	Add detention to swale to the west of parking area with outlet control to detain CPv	16
PB0016	Community Bible Church Infiltration	No Permit	South Burlington	IT	$975,000	Construct linear infiltration trench (perforated pipe) along back of several businesses.	20
PB0017	Domino's	No Permit	South Burlington	GW	$199,000	Construct a gravel wetland pond behind parking area. Add catchbasin along Swift St to also capture half of the road drainage.	10
PB0018	Dorset Commons Pond	1-0242	South Burlington	DP	$168,000	Construct new detention pond in wooded area behind Dorset Commons.	21
PB0019	Dumont Park Stormwater Project	No Permit	South Burlington	DP	$69,000	Construct new detention pond to the north of Barrett St where two stormlines converge.	20
PB0020	Dynapower	1-0618	South Burlington	GW	$124,000	Reroute roof drainage to existing detention pond. Retrofit to gravel wetland and detain CPv.	22
PB0021	East Terrace Detention Pond	No Permit	South Burlington	GW	$318,000	Construct new gravel wetland near the outfall to the east side of East Terrace.	14
PB0022	Eastwood Commons Pond Expansion	1-1438	South Burlington	DP	$25,000	Reroute eastern side of Shaw's plaza to this pond. Expand pond and modify outlet structure to accommodate additional drainage.	23
PB0023	Easy Self Storage	2-0167	South Burlington	GW	$196,000	Create new gravel wetland to the north of the storage area.	16
PB0024	Economou Farm Pond	1-1241d	South Burlington	GW	$87,000	Retrofit existing dry pond to gravel wetland to detain CPv. Expand and add forebay.	19

ID #	Project Name	Expired Permit	MS4	BMP Type [1]	Project Cost Estimate [2]	Retrofit Description	Total Score [3]
PB0025	Exit 13 Gravel Wetland	No Permit	VTrans	GW	$219,000	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	25
PB0026	Exit 14 Gravel Wetland	No Permit	VTrans	GW	$131,000	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	20
PB0027	Fairpoint Communications	2-0212	South Burlington	GW	$495,000	Construct new gravel wetland to the east of property in grassed area. Two outfalls on site drain to wetland swales that need to be rerouted to the east.	19
PB0028	Faith United Methodist Church	No Permit	South Burlington	UD	$49,000	Construct new underground detention behind church (northwest) in grassy area. Current outfall is eroded.	13
PB0029	Golf Course Road South	1-1241	South Burlington	GW	$135,000	Construct new gravel wetland at the end of pipe before it enters the golf course. Existing infrastructure already drains to swale.	17
PB0030	Gonzo's Underground	2-0811	South Burlington	UD	$662,000	Propose to intercept stormline that flows west along Williston Rd to underground detention chambers under grassed area in front of Budget Car Rental / Gonzo's plaza.	16
PB0031	Grandview Drive North Detention Pond	2-0238; 2-0737	South Burlington	DP	$33,000	Construct new surface detention BMP following outfall, which is currently broken and experiencing significant erosion.	14
PB0032	Grandview Drive West Detention Pond	2-0238; 2-0737	South Burlington	DP	$36,000	Construct new surface detention basin to the west of Dorset St. Reroute stormline away from brook to new BMP.	13
PB0033	Hawthorne Circle Detention Pond	No Permit	South Burlington	GW	$143,000	Construct new gravel wetland in greenspace formed in the triangle between three garages.	13
PB0034	Helen Ave Cul De Sac	No Permit	South Burlington	IB	$136,000	Construct new infiltration basin in the cul de sac at the end of Helen Ave, which would provide significant water quality benefit.	16
PB0035	Hinesburg Road	No Permit	South Burlington	DP	$33,000	Reroute stormwater to existing catchbasin on Deane St and detain to the west of Hinesburg Rd to the south of existing houses.	16
PB0036	I-89 Swale	No Permit	VTrans	MF	$208,000	Construct median filter in depressed area between north and south I-89 lanes. Reroute several culverts.	21
PB0037	Iby Gravel Wetland	No Permit	South Burlington	GW	$167,000	Construct new gravel wetland at the end of Iby St to capture stormwater for the street.	15
PB0038	INS Building Pond A Retrofit	1-0969	South Burlington	GW	$25,000	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	13
PB0039	INS Building Pond B Retrofit	1-0969b	South Burlington	GW	$25,000	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	13
PB0040	Joy Dr Detention Pond	No Permit	South Burlington	GW	$179,000	Construct new gravel wetland area in adjacent flat area near the Green Mountain Power transmission corridor.	12
PB0041	Kennedy Dr Pond 2 Expansion	1-1582b; 2-1069	South Burlington	GW	$380,000	Retrofit existing detention pond to accommodate additional drainage from The Edge and 1 Twin Oaks.	18
PB0042	Kennedy Dr Pond 3 Expansion	1-1582c	South Burlington	GW	$321,000	Reroute culvert that crosses under access ramp to pond, expand footprint and retrofit to gravel wetland	19
PB0043	Kennedy Dr Pond 4 Expansion	1-1582d; 1-0237; 1-102	South Burlington	DP	$25,000	Reroute stormline from Chatham Green and swale along Hinesburg Rd to existing detention pond. Expand pond to accommodate additional drainage area and detain CPv.	20
PB0044	Kennedy Dr Pond 7 Expansion	1-1582g; 1-0233	South Burlington	DP	$407,000	Reroute stormline that currently outfalls behind Key Bank to existing detention pond. Add CMAC valve to detain CPv.	22
PB0045	K-Mart Plaza Infiltration	No Permit	South Burlington	IG	$1,121,000	Construct new underground infiltration chambers in K-Mart parking lot.	17
PB0046	Knoll Circle	2-0220	South Burlington	GW	$750,000	Construct new gravel wetland with swale inlet. Current stormline draining subdivision already enters swale, which also drains area to the west.	18
PB0047	Lane Press Roof	1-1337	South Burlington	IB	$310,000	Capture roof drainage in a new infiltration basin. Roof drains already flows to grassed area where treatment is proposed.	23

ID #	Project Name	Expired Permit	MS4	BMP Type [1]	Project Cost Estimate [2]	Retrofit Description	Total Score [3]
PB0048	Laurel Hill Drive	No Permit	South Burlington	IB	$162,000	Construct new infiltration basin to the north of houses before stormline pipe enters riparian buffer.	16
PB0049	Lilac Ln Infiltration Basin	No Permit	South Burlington	IB	$44,000	Formalize infiltration basin in depressed area at the end of Lilac Ln.	13
PB0050	Lindenwood Drive Detention Pond	No Permit	South Burlington	DP	$379,000	Add catchbasins to reroute stormwater to the east of Lindenwood Dr. Part of Brewer Pkwy drains to this area as well. Propose to create one detention basin to detain drainage from both streets.	17
PB0051	Logwood Neighborhood Detention Pond	No Permit	South Burlington	DP	$151,000	Construct new end of pipe surface impoundment BMP behind Lean Dental Group. Outfall is currently eroded.	21
PB0052	Marcotte Central School	No Permit	South Burlington	GW	$189,000	Construct new gravel wetland in wooded area directly south of school parking lot. Route outfall to existing stormline. Potential educational benefit.	16
PB0053	Marine Connection	No Permit	South Burlington	DS	$58,000	Add detention to existing swale near the back of the large Marine Connection building. Expand swale to accommodate additional volume.	16
PB0054	Meadowland Business Park Pond 2	1-1269_4290-9020.3 Lo	South Burlington	DP	$45,000	Retrofit existing detention pond. Add forebay and investigate opportunity to include CMAC valve to detain CPv.	22
PB0055	Merchant's Bank Detention Pond	2-1171; 6275-9030; 62	South Burlington	DP	$66,000	Route stormwater from Allstate Insurance west to Merchant's Bank and provide detention in grassed area	18
PB0056	Spear St	No Permit	South Burlington	GW	$653,000	Reroute drainage from swale that runs south down Spear St to the west and create a new gravel wetland to detain flow on Country Club property.	24
PB0057	Nicklaus Circle	1-1241, 4049-9030	South Burlington	GW	$667,000	Construct new gravel wetland feature to the north of Nicklaus Cir where the stormline and swale converge.	17
PB0058	North Country Credit North West Infiltration	No Permit	South Burlington	IT	$37,000	Install perforated pipe to the north of parking lot in grassed area to infiltrate stormwater.	10
PB0059	North Country Credit South Infiltration	No Permit	South Burlington	IG	$129,000	Construct underground infiltration chambers in the southeast corner of parking lot. Overflow to existing stormline.	11
PB0060	O'Brien Drive Underground Detention	No Permit	South Burlington	UD	$580,000	Construct underground storage chambers in open lot between existing houses.	16
PB0061	Olympiad Apartments & Office Building Pond Retrofit	1-1452	South Burlington	GW	$25,000	Retrofit detention basin to gravel wetland. Add forebay and ensure pond detains CPv.	17
PB0062	Panurgy Infiltration Basin	3409-9010	South Burlington	IB	$25,000	Retrofit and expand existing infiltration basin to infiltrate the CPv.	14
PB0063	Park Road Detention Pond	1-1241	South Burlington	DP	$94,000	Propose to reroute swale on southern side of Park Rd to the north and detain in wooded area.	16
PB0064	Pillsbury Manor Infiltration Basin Retrofit	1-1015	South Burlington	IB	$25,000	Retrofit existing pond to infiltration basin. Overflow to existing culvert.	15
PB0065	Quarry Hill South	6322-9030	South Burlington	DS	$132,000	Add detention to existing swale running northeast behind garages.	17
PB0066	Queen City Park Road Detention Pond	No Permit	VTrans	DP	$99,000	Add detention to existing depressed area where stormlines already outfall. Drainage from Shelburne Rd is assumed to be already rerouted to larger depression to the north (see project entitled 189 Cloverleaf).	19
PB0067	Shaws West	No Permit	South Burlington	UD	$230,000	Construct underground detention in vegetated island along west side of parking lot. Reroute last catchbasin in southwest corner of parking to this area.	10
PB0068	South Burlington High School Infiltration	No Permit	South Burlington	IB	$165,000	Construct new infiltration basin to the southeast of sports field in currently wooded area.	21
PB0069	South Burlington High School North	6174-INDS.A	South Burlington	IG	$992,000	Construct dry wells to infiltrate stormwater from the high school parking lot and middle school roof. Potential educational benefit.	23
PB0070	South Meadows Pond	1-0661	Burlington	DP	$25,000	Retrofit existing detention pond to meet CPv standards. Add forebay and expand pond, upgrade outlet structure.	19
PB0071	Southview Drive	No Permit	South Burlington	UD	$1,048,000	Construct underground detention chambers in ROW and grassed area. Road is 30ft wide and could be narrowed for storage.	19
PB0072	Staples Plaza Underground Detention	No Permit	South Burlington	UD	$288,000	Construct underground detention chambers in southeast corner of parking lot.	11

ID #	Project Name	Expired Permit	MS4	BMP Type [1]	Project Cost Estimate [2]	Retrofit Description	Total Score [3]
PB0073	Stonehedge Circle	2-0100	South Burlington	DP	$55,000	Construct bioretention along road in grassed area with discharge to existing catchbasin.	13
PB0074	Sugartree Lane	2-0878	South Burlington	GW	$96,000	Expand existing abandoned detention area, into a gravel wetland. Reroute catchbasins to pond. Upgrade outlet.	16
PB0075	Swift Estates Pond	No Permit	South Burlington	DP	$25,000	Retrofit existing detention pond to meet CPv standards. Add forebay and upgrade outlet structure.	15
PB0076	Technology Park Pond Retrofit	1-1458 P4	South Burlington	GW	$35,000	Retrofit existing detention pond to gravel wetland and meet CPv standards. Upgrade outlet structure and expand accommodate additional storage.	11
PB0077	Temple Detention Pond	No Permit	South Burlington	GW	$47,000	Propose new gravel wetland in depressed area in front of Temple by intersection of Dorset St and Swift St. Stormwater already collects in this area.	9
PB0078	The Pines	1-1117	South Burlington	GW	$25,000	Retrofit existing detention pond to gravel wetland. Add forebay & CMAC valve for CPv.	20
PB0079	UMall Detention Pond	1-0503c; 6282-9030	South Burlington	DP	$27,000	Retrofit existing detention pond to detain CPv. Upgrade outlet structure and expand pond.	23
PB0080	UMall Infiltration 1	1-0503b; 6282-9030	South Burlington	IG	$25,000	Retrofitinfiltration gallery to infiltrate the CPv.	22
PB0081	UMall Infiltration 2	1-0503a; 6282-9030	South Burlington	IG	$55,000	Retrofit infiltration gallery to infiltrate the CPv.	25
PB0082	UMall Sears Auto Pond	1-0503d; 6282-9030; 2	South Burlington	GW	$90,000	Construct large gravel wetland in unused section of parking lot in Umall (to the east of the party store). Reroute Dorset St stormline here.	22
PB0083	UVM Bio Research Complex	5269-9003.R	UVM	DP	$176,000	Construct bioretention to treat stormwater in grassed area near the center of complex. Potential educational benefit.	13
PB0084	UVM Forestry Research Center - East Roof	No Permit	UVM	IG	$39,000	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	15
PB0085	UVM Forestry Research Center - West Roof	No Permit	UVM	IG	$25,000	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	12
PB0086	Vermont National Country Club Pond B	1-1241b	South Burlington	DP	$25,000	Retrofit existing detention pond. Add forebay and expand pond.	21
PB0087	Vermont National Country Club Pond C	1-1241c	South Burlington	DP	$25,000	Retrofit existing detention pond. Add forebay and expand pond.	17
PB0088	VT Gas Detention Pond	2-0228; 6293-9030	South Burlington	GW	$52,000	Reroute stormline from Swift St to grassed area to the north of VT Gas property and construct new gravel wetland.	17
PB0089	Wellesley Grove	2-1023	South Burlington	GW	$77,000	Add outlet control to existing depression to detain stormwater, construct new gravel wetland. Repair outfall erosion.	15
PB0090	Windridge Court	2-0824	South Burlington	IB	$45,000	Construct new infiltration basin to infiltrate stormwater to the west of this small development.	15
PB0091	Woodcrest Drive	No Permit	South Burlington	IB	$303,000	Infiltrate stormwater to the southwest of drainage area. Reroute stormline south to new BMP. Construct new swale to drain the end of Woodcrest Dr, which is currently eroding slope following road.	18
PB0092	Woodlands Industrial Park	1-0526/ 6279-9030	South Burlington	GW	$25,000	Reroute roof drainage to existing detention pond. Retrofit pond to gravel wetland and expand to accommodate additional volume and detain CPv.	18
PB0093	Worcester Street	2-0312	South Burlington	UD	$821,000	Construct underground detention chambers under ROW and grassed shoulder.	15
PB0094	Dorset Park Pond	1-1033	South Burlington	DP	$20,000	Investigate option to retrofit pond with under drain and include CMAC valve to detain CPv.	21
PB0095	Hannaford's Pond	1-1214	South Burlington	DP	$21,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	17
PB0096	Lowes Pond	1-1214	South Burlington	DP	$17,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	17
PB0097	Vermont National Country Club Pond B	1-1241b	South Burlington	DP	$36,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	19
PB0098	Technology Park Pond 1	1-1254	South Burlington	DP	$22,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	15
PB0099	Lot A Mountain View Pond	1-1536	South Burlington	DP	$12,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	13
PB0100	Kennedy Dr Pond 1	1-1582a	South Burlington	DP	$13,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	17
PB0101	Quarry Hill Pond	3602-INDS	South Burlington	DP	$12,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	14

ID #	Project Name	Expired Permit	MS4	BMP Type [1]	Project Cost Estimate [2]	Retrofit Description	Total Score [3]
PB0102	Heatherfield P1	3658a	South Burlington	DP	$12,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	12
PB0103	Heatherfield P2	3658b	South Burlington	DP	$13,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	17
PB0104	Heatherfield P3	3658c	South Burlington	DP	$13,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	16
PB0105	Winding Brook	3691-INDS	South Burlington	DP	$15,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	18
PB0106	Mountainview Pond b	3805-INDS	South Burlington	DP	$14,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	12
PB0107	Farrell St Pond	5080-INDO	South Burlington	DP	$13,000	Investigate option to retrofit pond with CMAC valve to detain CPv.	21

Notes:

1. BMP Type Abbreviations: GW: Gravel Wetland, GS: Grass Swale, RS: Retention Swale, ST: Settling Tank, OF: Control orifice, IB: Infiltration Basin, IT: Infiltration Trench, DP: Detention Pond, UD: Underground Detention, RP: Retention Pond, DS: Detention Swale, DW: Dry Well, IG: Infiltration Gallery, SF: Sand Filter, BR: Bioretention, MF: Median Filter.

2. Project costs estimates are rounded.

3. Total score is based on scoring criteria and scoring key presented in Tables D-1 and D-2 in Appendix D.

Potash Brook Flow Restoration Plan
Table E-3: Potash Brook Watershed BMP Project Implementation Schedule

ID #	Project Name	Expired Permit	BMP Type [1]	Retrofit Description	Implementation Year	Project Cost Estimate [2]	Project Cost Estimate w/ Inflation [3]
PB0002	110 Kimball Ave - North Infiltration Basin	1-1504a	IB	Runoff is bypassing infiltration basin and sheet flowing to a swale with direct discharge to the brook. Add trench along west edge of parking lot to direct runoff to infiltration basin. Expand basin to accommodate increased volume.	2018	$25,000	$28,000
PB0003	110 Kimball Ave - South Infiltration Basin	1-1504b	IB	Retrofit outlet structure and add proposed outlet control riser that was not constructed.	2018	$10,000	$11,000
PB0016	Community Bible Church Infiltration	No Permit	IT	Construct linear infiltration trench (perforated pipe) along back of several businesses.	2018	$975,000	$1,098,000
PB0037	Iby Gravel Wetland	No Permit	GW	Construct new gravel wetland at the end of Iby St to capture stormwater for the street.	2018	$167,000	$172,000
PB0042	Kennedy Dr Pond 3 Expansion	1-1582c	GW	Reroute culvert that crosses under access ramp to pond, expand footprint and retrofit to gravel wetland	2019	$321,000	$331,000
PB0091	Woodcrest Drive	No Permit	IB	Infiltrate stormwater to the southwest of drainage area. Reroute stormline south to new BMP. Construct new swale to drain the end of Woodcrest Dr, which is currently eroding slope following road.	2019	$303,000	$312,000
PB0041	Kennedy Dr Pond 2 Expansion	1-1582b; 2-1069	GW	Retrofit existing detention pond to accommodate additional drainage from The Edge and 1 Twin Oaks.	2020	$380,000	$403,000
PB0022	Eastwood Commons Pond Expansion	1-1438	DP	Reroute area to the west of existing pond (eastern side of Shaw's plaza) to this pond. Add a new connection between these stormwater systems to the east of the Shaw's property. Expand pond and modify outlet structure to accommodate additional drainage.	2021	$25,000	$31,000
PB0024	Economou Farm Pond	1-1241d	GW	Retrofit existing dry pond to gravel wetland to detain CPv. Expand and add forebay.	2021	$87,000	$108,000
PB0029	Golf Course Road South	1-1241	GW	Construct new gravel wetland at the end of pipe before it enters the golf course. Existing infrastructure already drains to swale.	2021	$135,000	$166,000
PB0044	Kennedy Dr Pond 7 Expansion	1-1582g; 1-0233	DP	Reroute stormline that currently outfalls behind Key Bank to existing detention pond. Add CMAC valve to detain CPv.	2021	$407,000	$445,000
PB0050	Lindenwood Drive Detention Pond	No Permit	DP	Add catchbasins and infrastructure to reroute stormwater to the east of Lindenwood Dr. Part of Brewer Pkwy drains to this area as well. Propose to create one detention basin to detain drainage from both streets. Lindenwood Dr has existing puddling and icing issues. This BMP would also mitigate those issues.	2021	$379,000	$415,000
PB0063	Park Road Detention Pond	1-1241	DP	Propose to reroute swale on southern side of Park Rd to the north and detain in wooded area.	2021	$94,000	$115,000
PB0067	Shaws West	No Permit	UD	Construct underground detention in vegetated island along west side of parking lot. Reroute last catchbasin in southwest corner of parking to this area.	2021	$230,000	$283,000
PB0072	Staples Plaza Underground Detention	No Permit	UD	Construct underground detention chambers in southeast corner of parking lot.	2021	$288,000	$355,000
PB0086	Vermont National Country Club Pond B	1-1241b	DP	Retrofit existing detention pond. Add forebay and expand pond.	2021	$25,000	$31,000
PB0087	Vermont National Country Club Pond C	1-1241c	DP	Retrofit existing detention pond. Add forebay and expand pond.	2021	$25,000	$31,000
PB0007	Adelphia Cable Pond Retrofit	1-1000; 6291-9030	GW	Reroute drainage from Kimball Ave to this detention pond behind Adelphia Cable. Retrofit and expand existing pond into a gravel wetland to detain CPv.	2022	$25,000	$32,000
PB0013	Burlington Price Chopper	No Permit	GW	Construct new gravel wetland in area between parking lot and stream to the south of parking lot.	2022	$1,459,000	$1,848,000
PB0019	Dumont Park Stormwater Project	No Permit	DP	Construct new detention pond to the north of Barrett St where two stormlines converge.	2022	$69,000	$87,000
PB0031	Grandview Drive North Detention Pond	2-0238; 2-0737	DP	Construct new surface detention BMP following outfall, which is currently broken and experiencing significant erosion.	2022	$33,000	$42,000

Potash Brook Flow Restoration Plan
Table E-3: Potash Brook Watershed BMP Project Implementation Schedule

ID #	Project Name	Expired Permit	BMP Type [1]	Retrofit Description	Implementation Year	Project Cost Estimate [2]	Project Cost Estimate w/ Inflation [3]
PB0032	Grandview Drive West Detention Pond	2-0238; 2-0737	DP	Construct new surface detention basin to the west of Dorset St. Reroute stormline away from brook to new BMP.	2022	$36,000	$45,000
PB0034	Helen Ave Cul De Sac	No Permit	IB	Construct new infiltration basin in the cul de sac at the end of Helen Ave, which would provide significant water quality benefit.	2022	$136,000	$172,000
PB0056	Spear Street	No Permit	GW	Reroute drainage from swale that runs south down Spear St to the west and create a new gravel wetland to detain flow on Country Club property.	2022	$653,000	$827,000
PB0083	UVM Bio Research Complex	5269-9003.R	DP	Construct bioretention to treat stormwater in grassed area near the center of complex. Potential educational benefit.	2022	$176,000	$222,000
PB0004	189 Cloverleaf Detention Pond	No Permit	DP	Add outlet structure to area that is already depressed to detain stormwater. Reroute stormline from Shelburne Rd to this area.	2023	$59,000	$77,000
PB0006	30 Kimball Ave Swale Retrofit	1-1526; 6269-9030	DS	Retrofit existing swale detention to meet CPv. Expand swale to accommodate modified outlet structure.	2023	$25,000	$33,000
PB0011	Blue Mall Infiltration	2-0144	IG	Construct underground infiltration chambers in the southwest edge of parking lot. Overflow to existing stormline that flows to Dorset St.	2023	$531,000	$693,000
PB0015	Church of Jesus Christ of Latterday Saints	2-0179; 6318-9030	DS	Add detention to swale to the west of parking area with outlet control to detain CPv	2023	$29,000	$37,000
PB0018	Dorset Commons Pond	1-0242	DP	Construct new detention pond in wooded area behind Dorset Commons.	2023	$168,000	$219,000
PB0020	Dynapower	1-0618	GW	Reroute roof drainage to existing detention pond. Retrofit to gravel wetland and detain CPv.	2023	$124,000	$162,000
PB0023	Easy Self Storage	2-0167	GW	Create new gravel wetland to the north of the storage area.	2023	$196,000	$256,000
PB0025	Exit 13 Gravel Wetland	No Permit	GW	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	2023	$219,000	$285,000
PB0026	Exit 14 Gravel Wetland	No Permit	GW	Propose new gravel wetland in depressed triangle greenspace between ramps. Reroute several culverts to this area.	2023	$131,000	$171,000
PB0027	Fairpoint Communications	2-0212	GW	Construct new gravel wetland to the east of property in grassed area. Two outfalls on site drain to wetland swales that need to be rerouted to the east.	2023	$495,000	$645,000
PB0036	I-89 Swale	No Permit	MF	Construct median filter in depressed area between north and south I-89 lanes. Reroute several culverts.	2023	$208,000	$272,000
PB0038	INS Building Pond A Retrofit	1-0969	GW	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	2023	$25,000	$33,000
PB0039	INS Building Pond B Retrofit	1-0969b	GW	Retrofit existing detention pond into gravel wetland. Add forebay and construct outlet structure with low flow orifice to meet CPv standards.	2023	$25,000	$33,000
PB0045	K-Mart Plaza Infiltration	5855-INDS	IG	Construct new underground infiltration chambers in K-Mart parking lot.	2023	$1,121,000	$1,463,000
PB0047	Lane Press Roof	1-1337	IB	Capture roof drainage in a new infiltration basin. Roof drains already flows to grassed area where treatment is proposed.	2023	$310,000	$404,000
PB0055	Merchant's Bank Detention Pond	2-1171; 6275-9030; 6269-9030; 2-0939	DP	Route stormwater from Allstate Insurance west to Merchant's Bank and provide detention in grassed area	2023	$66,000	$86,000
PB0057	Nicklaus Circle	1-1241, 4049-9030	GW	Construct new gravel wetland feature to the north of Nicklaus Cir where the stormline and swale converge.	2023	$667,000	$870,000
PB0061	Olympiad Apartments & Office Building Pond Retrofit	1-1452	GW	Retrofit detention basin to gravel wetland. Add forebay and ensure pond detains CPv.	2023	$25,000	$33,000
PB0062	Panurgy Infiltration Basin	3409-9010	IB	Retrofit and expand existing infiltration basin to infiltrate the CPv.	2023	$25,000	$33,000
PB0064	Pillsbury Manor Infiltration Basin Retrofit	1-1015	IB	Retrofit existing pond to infiltration basin. Overflow to existing culvert.	2023	$25,000	$33,000

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ID #	Project Name	Expired Permit	BMP Type [1]	Retrofit Description	Implementation Year	Project Cost Estimate [2]	Project Cost Estimate w/ Inflation [3]
PB0070	South Meadows Pond	1-0661	DP	Retrofit existing detention pond to meet CPv standards. Add forebay and expand pond. Upgrade outlet structure.	2023	$25,000	$33,000
PB0074	Sugartree Lane	2-0878	GW	Expand existing depressed area at the end of Sugartree Ln , which appears to be an abandoned detention area, into a gravel wetland. Reroute catchbasins to pond. Upgrade outlet.	2023	$96,000	$125,000
PB0076	Technology Park Pond Retrofit	1-1458 P4	GW	Retrofit existing detention pond to gravel wetland and meet CPv standards. Upgrade outlet structure and expand accommodate additional storage.	2023	$35,000	$46,000
PB0078	The Pines	1-1117	GW	Retrofit existing detention pond to gravel wetland. Add forebay and CMAC valve to detain CPv.	2023	$25,000	$33,000
PB0079	UMall Detention Pond	1-0503c; 6282-9030	DP	Retrofit existing detention pond to detain CPv. Upgrade outlet structure and expand pond.	2023	$27,000	$35,000
PB0080	UMall Infiltration 1	1-0503b; 6282-9030	IG	Retrofit existing infiltration gallery to infiltrate the CPv.	2023	$25,000	$33,000
PB0081	UMall Infiltration 2	1-0503a; 6282-9030	IG	Retrofit existing infiltration gallery to infiltrate the CPv.	2023	$55,000	$72,000
PB0089	Wellesley Grove	2-1023	GW	Add outlet control to existing depression to detain stormwater, construct new gravel wetland. Repair outfall erosion.	2023	$77,000	$101,000
PB0090	Windridge Court	2-0824	IB	Construct new infiltration basin to infiltrate stormwater to the west of this small development.	2023	$45,000	$59,000
PB0092	Woodlands Industrial Park	1-0526/ 6279-9030	GW	Reroute roof drainage to existing detention pond. Retrofit pond to gravel wetland and expand to accommodate additional volume and detain CPv.	2023	$25,000	$33,000
PB0010	Ashbrook Drive	2-0101	GW	Reroute stormwater to gravel wetland southwest of Dorset St behind apartment buildings.	2024	$168,000	$225,000
PB0046	Knoll Circle	2-0220	GW	Construct new gravel wetland with swale inlet. Current stormline draining subdivision already enters swale, which also drains area to the west.	2024	$750,000	$1,008,000
PB0082	UMall Sears Auto Pond	1-0503d; 6282-9030; 2-0619	GW	Construct large gravel wetland in unused section of parking lot in Umall (to the east of the party store). Reroute Dorset St stormline here.	2024	$90,000	$121,000
PB0094	Dorset Park Pond	1-1033	DP	Investigate option to retrofit pond with under drain and include CMAC valve to detain CPv.	2024	$20,000	$27,000
PB0105	Winding Brook	3691-INDS	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2024	$15,000	$20,000
PB0107	Farrell St Pond	5080-INDO	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2024	$13,000	$18,000
PB0009	Airport Drive	No Permit	IG	Construct subsurface infiltration chambers in southernmost lot where houses will be removed. Intercept stormline running south down Airport Dr.	2025	$439,000	$608,000
PB0043	Kennedy Dr Pond 4 Expansion	1-1582d; 1-0237; 1-1023; 1-1290	DP	Reroute stormline from Chatham Green and swale along Hinesburg Rd to existing detention pond. Expand pond to accommodate additional drainage area and detain CPv.	2025	$25,000	$35,000
PB0100	Kennedy Dr Pond 1	1-1582a	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2025	$13,000	$18,000
PB0102	Heatherfield P1	3658a	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2025	$12,000	$17,000
PB0103	Heatherfield P2	3658b	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2025	$13,000	$18,000
PB0104	Heatherfield P3	3658c	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2025	$13,000	$18,000
PB0014	Chelsea Circle	2-0767	IB	Construct new infiltration basin constructed to south of existing swale, which receives flow from Chelsea Cir condos and Timberlane Dental parking lot. Neighborhood icing and flooding issues can be mitigated with this project.	2026	$115,000	$164,000

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PB0049	Lilac Ln Infiltration Basin	No Permit	IB	Formalize infiltration basin in depressed area at the end of Lilac Ln.	2026	$44,000	$63,000
PB0054	Meadowland Business Park Pond 2	1-1269_4290-9020.3 Lot 10	DP	Retrofit existing detention pond. Add forebay and investigate opportunity to include CMAC valve to detain CPv.	2026	$45,000	$63,000
PB0065	Quarry Hill South	6322-9030	DS	Add detention to existing swale running northeast behind garages.	2026	$132,000	$188,000
PB0001	1050 Hinesburg Road	No Permit	GW	There is an existing wet depression here where stormwater is already routed. Propose gravel wetland and meet CPv standards.	2027	$106,000	$155,000
PB0017	Domino's	No Permit	GW	Construct a gravel wetland pond behind parking area. Add catchbasin along Swift St to also capture half of the road drainage.	2027	$199,000	$292,000
PB0030	Gonzo's Underground	2-0811	UD	Propose to intercept stormline that flows west along Williston Rd to underground detention chambers under grassed area in front of Budget Car Rental /	2027	$662,000	$971,000
PB0068	South Burlington High School Infiltration	No Permit	IB	Construct new infiltration basin to the southeast of sports field in currently wooded area.	2027	$165,000	$243,000
PB0069	South Burlington High School North	6174-INDS.A	IG	Construct dry wells to infiltrate stormwater from the high school parking lot and middle school roof. Potential educational benefit.	2027	$992,000	$1,457,000
PB0084	UVM Forestry Research Center - East Roof	No Permit	IG	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	2027	$39,000	$57,000
PB0085	UVM Forestry Research Center - West Roof	No Permit	IG	Construct dry well to capture and infiltrate roof drain. Potential educational benefit.	2027	$25,000	$37,000
PB0005	189 Ramp Detention Pond	2-0619	GW	Detain stormwater from a large section of Dorset St. Intercept stormline near Kennedy Dr and reroute to the area between 189 ramps. Treat with gravel wetland.	2028	$347,000	$524,000
PB0033	Hawthorne Circle Detention Pond	No Permit	GW	Construct new gravel wetland in greenspace formed in the triangle between three garages.	2028	$143,000	$217,000
PB0035	Hinesburg Road	No Permit	DP	Reroute stormwater to existing catchbasin on Deane St and detain to the west of Hinesburg Rd to the south of existing houses.	2028	$33,000	$50,000
PB0066	Queen City Park Road Detention Pond	No Permit	DP	Add detention to existing depressed area where stormlines already outfall. Drainage from Shelburne Rd is assumed to be already rerouted to larger depression to the north (see project entitled 189 Cloverleaf).	2028	$99,000	$150,000
PB0095	Hannaford's Pond	1-1214	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$21,000	$32,000
PB0096	Lowes Pond	1-1214	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$17,000	$26,000
PB0097	Vermont National Country Club Pond B	1-1241b	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$36,000	$55,000
PB0098	Technology Park Pond 1	1-1254	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$22,000	$33,000
PB0099	Lot A Mountain View Pond	1-1536	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$12,000	$19,000
PB0101	Quarry Hill Pond	3602-INDS	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$12,000	$18,000
PB0106	Mountainview Pond b	3805-INDS	DP	Investigate option to retrofit pond with CMAC valve to detain CPv.	2028	$14,000	$21,000
PB0008	Adirondack Street	2-0312	UD	Construct underground detention chambers under ROW and grassed shoulder.	2029	$845,000	$1,316,000
PB0051	Logwood Neighborhood Detention Pond	No Permit	DP	Construct new end of pipe surface impoundment BMP behind Lean Dental Group. Outfall is currently eroded.	2029	$151,000	$236,000
PB0093	Worcester Street	2-0312	UD	Construct underground detention chambers under ROW and grassed shoulder.	2029	$821,000	$1,279,000
PB0012	Brookwood Drive Pond	2-0794; 2-0619	DP	Construct new detention pond to detain this large outfall. Forebay to be located in empty lot near Brookwood Dr.	2030	$394,000	$632,000
PB0021	East Terrace Detention Pond	No Permit	GW	Construct new gravel wetland near the outfall to the east side of East Terrace.	2030	$318,000	$510,000
PB0040	Joy Dr Detention Pond	No Permit	GW	Construct new gravel wetland area in adjacent flat area near the Green Mountain Power transmission corridor.	2030	$179,000	$287,000

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PB0052	Marcotte Central School	No Permit	GW	Construct new gravel wetland in wooded area directly south of school parking lot. Route outfall to existing stormline. Potential educational benefit.	2030	$189,000	$303,000
PB0053	Marine Connection	No Permit	DS	Add detention to existing swale near the back of the large Marine Connection building. Expand swale to accommodate additional volume.	2030	$58,000	$92,000
PB0058	North Country Credit North West Infiltration	No Permit	IT	Install perforated pipe to the north of parking lot in grassed area to infiltrate stormwater.	2030	$37,000	$60,000
PB0059	North Country Credit South Infiltration	No Permit	IG	Construct underground infiltration chambers in the southeast corner of parking lot. Overflow to existing stormline.	2030	$129,000	$207,000
PB0060	O'Brien Drive Underground Detention	No Permit	UD	Construct underground storage chambers in open lot between existing houses.	2030	$580,000	$931,000
PB0075	Swift Estates Pond	No Permit	DP	Retrofit existing detention pond to meet CPv standards. Add forebay and upgrade outlet structure.	2030	$25,000	$40,000
PB0088	VT Gas Detention Pond	2-0228; 6293-9030	GW	Reroute stormline from Swift St to grassed area to the north of VT Gas property and construct new gravel wetland.	2030	$52,000	$84,000
PB0071	Southview Drive	No Permit	UD	Construct underground detention chambers in ROW and grassed area. Road is 30ft wide and could be narrowed for storage.	2031	$1,048,000	$1,732,000
PB0028	Faith United Methodist Church	No Permit	UD	Construct new underground detention behind church (northwest) in grassy area. Current outfall is eroded.	2032	$49,000	$83,000
PB0048	Laurel Hill Drive	No Permit	IB	Construct new infiltration basin to the north of houses before stormline pipe enters riparian buffer.	2032	$162,000	$276,000
PB0073	Stonehedge Circle	2-0100	DP	Construct bioretention along road in grassed area with discharge to existing catchbasin.	2032	$55,000	$93,000
PB0077	Temple Detention Pond	No Permit	GW	Propose new gravel wetland in depressed area in front of Temple by intersection of Dorset St and Swift St. Stormwater already collects in this area.	2032	$47,000	$80,000

Notes:

1. BMP Type Abbreviations: GW: Gravel Wetland, GS: Grass Swale, RS: Retention Swale, ST: Settling Tank, OF: Control orifice, IB: Infiltration Basin, IT: Infiltration Trench, DP: Detention Pond, UD: Underground Detention, RP: Retention Pond, DS: Detention Swale, DW: Dry Well, IG: Infiltration Gallery, SF: Sand Filter, BR: Bioretention, MF: Median Filter.

2. Project costs estimates are based on 2014 dollars and are rounded.

3. Project costs have been inflated based on the year of implementation and an annual 3% inflation rate.