



COMMITTEE OF THE WHOLE

ITEM NUMBER 4B

DATE: September 7, 2021

SUBJECT: DISCUSSION: A discussion regarding the Stormwater Utility Formation Feasibility Study.

SUBMITTED BY: Peter Riggs, Director of Public Works

BACKGROUND/HISTORY:

For the last six months, staff and Kapur & Associates have been working on the feasibility of a stormwater utility. This evening's discussion is regarding the study completed by Kapur and Associates for the Stormwater Utility Formation. Greg Governatori of Kapur and Associates will present the findings and research assembled into the Stormwater Utility Feasibility Study. Feedback from this discussion will provide direction for Staff and Kapur on the structure for the ordinance that will be presented to the Council for future consideration to form a Stormwater Utility.

BUDGET/FISCAL IMPACT:

This item is for discussion purposes only. Stormwater Utility formation will have impacts on future budgets, but this discussion does not contain any actionable items with direct financial impacts.

RECOMMENDATION:

No recommendations are required for this discussion.

TIMING/IMPLEMENTATION:

This item is scheduled for discussion at the September 7, 2021 Committee of the Whole Meeting.

A related ordinance will be drafted and presented at the September 21, 2021 Committee of the Whole Meeting. That ordinance is then scheduled for final consideration at the October 5, 2021 Common Council meeting.

Attachments

Draft Feasibility Study
Adjustment Application

CITY OF BURLINGTON

8/31/2021

DRAFT



CITY OF BURLINGTON
STORM WATER UTILITY
FEASIBILITY STUDY



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Storm Water Utility Feasibility Study

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Section 1 – Introduction

The City of Burlington operates and maintains over 30 miles of storm sewer, 867 manholes, 1330 catch basins, and over 250,000 linear of curb and gutter, multiple storm water ponds, drainage swales, and additional storm water infrastructure. The City's intent is to preserve and protect our natural resource areas including Echo Lake, Fox River, White River, Spring Brook Creek, nearby Browns lake, and the many wetlands and environmental corridors.

The management of stormwater and other surface water discharges is a matter that affects the health, safety and welfare of the city, its citizens and businesses. Surface water runoff causes erosion of lands, damage to businesses and residences, sedimentation, as well as environmental damage. Failure to effectively manage stormwater also affects utility operations increasing infiltration to the sanitary sewer.

Along with 245, other municipalities around the state, the City of Burlington, is required to have a Municipal Separate Storm Sewer System (MS4) permit. This permit requires the city to increase storm water runoff quality by implementing storm water management programs with best management practices and have established public education and outreach programs about stormwater management. Storm water costs are currently funded by the Tax Levy. State imposed Levy Limits do not allow increases to occur to compensate for the costs mandated by the MS4 permitting. Redirecting levy dollars to pay for increased storm water costs would also move dollars away from other current services.

The costs of managing, maintaining, and operating the municipal storm sewer system, as well as meeting regulatory compliance are incurred due to the discharge of stormwater and surface water from properties within the City. It is appropriate for these costs to be reasonably allocated to those properties which result in stormwater and surface water discharges.

The cost to maintain, operate, meet regulatory compliance, and expand the storm water infrastructure comes from the City's General Fund. The General Funds are also used to maintain streets, sidewalks, bike paths, pay government staff, provide health and human services, and provide conservation programs. Storm water management has a limited budget within the General Fund, and with increasing storm water regulation and more frequent and larger storm events, there is a need to have a designated revenue source to operate, maintain and improve the storm water system.

To address this issue, the City will create a Storm Water Utility. State Statute 66.0821 allows the City to create a public utility to fund costs to maintain and operate the City's utility infrastructure. The storm water utility user fees are based on each property's contribution of storm water runoff to the storm water system. This is an equitable method to fund a storm water utility. A Storm Water Utility also allows user fees to pay for mandated MS4 increases in services/expenses and not be dependent on the tax levy.

The City will develop a budget each year for all storm water related projects, administrative fees, operating expenses, equipment, and regulatory requirements associated with managing the utility. The budget will be used to determine the user fee for funding the storm water utility.

The user fee is calculated through the Equivalent Runoff Unit (ERU) method. This is the quantitative impact each property has on the storm sewer system. It is based off the average impervious surface area of a single-family property in the City. An impervious surface is any surface that does not allow water to flow freely through it (i.e. pavement, asphalt, rooftops, gravel, etc.). The average impervious surface area of a single-family residential property in the City is 3,669 square feet. The areas were established using the most currently available 2020 aerial imagery and the City's GIS database. The ERU is used as a baseline to determine the user fee for all properties in the City.

As part of the utility creation a storm water utility ordinance will be adopted. The ordinance includes the authority, management, operations, definitions, rates, classifications, adjustments, credit policy, appeals policy, and additional detail.

Section 2 – Storm Water Utility Benefits

2.1 Overview

A storm water utility is a mechanism to fund the costs of municipal services directly related to the control and treatment of storm water. It ensures a dedicated revenue source for the expense of storm water management.

2.2 Economic Benefits

A storm water utility has many economic benefits. In addition to funding the utility, a primary benefit is that it creates additional opportunities for the City to qualify for grants and loans for major storm water improvement projects as it is seen as a cooperative investment for the lender. Large improvement projects will mitigate flooding and improve water quality benefiting the community.

The storm water utility user fee is an equitable fee that is solely based on a property's contribution to storm water runoff. The fee is collected from all parcel owners within the city including tax-exempt users (i.e. churches, government, hospitals, etc.).

2.3 Environmental Benefits

The utility provides resources to maintain and improve the existing storm water infrastructure allowing the City to meet Municipal Separate Storm Sewer System (MS4) and Total Maximum Daily Load (TMDL) requirements. These requirements improve water quality, keeping our lakes, rivers, wetlands, and natural resources clean.

Storm water management practices are encouraged through the implementation of the credit system. Property owners are incentivized to maintain existing storm water ponds and infrastructure.

Section 3 – Storm Water Utility Budget

3.1 General

The storm water utility budget is based on the Cities annual capital improvement plan, developed by City staff, and adopted by the Common Council. The budget includes all associated administrative, project, and regulatory compliance costs. The stormwater projects may include new construction, maintenance or repair projects, drainage projects, flood mitigation projects, erosion projects, maintenance of ditches and ponds, shoreland mitigation, green space restoration, and all projects pertaining to storm water.

3.2 Storm Water Utility Services

The storm water utility budget includes planning, staffing, storm sewer system maintenance, best management practices maintenance, capital improvement projects related to storm water, equipment replacement, management, regulatory compliance, and other expenditures.

Storm water best management practice maintenance activities include, but are not limited to, street sweeping, manhole, pipe and catch basin cleaning, storm water basin management activities, leaf and brush collection, grass clipping management, and televising of existing storm sewer system.

3.3 Storm Water Utility Proposed Budget

The annual storm water utility budget will be established by the common council through their annual budget workshops and adoption schedule.

Section 4 – Impervious Area Analysis

4.1 Purpose

To determine the amount of storm water runoff each property contributes, the impervious surface area of each is established. An impervious surface is any surface that does not allow water to flow freely through it, for example: asphalt or concrete pavement, rooftops, sidewalks, gravel driveways, etc. The water instead flows and gathers over the impervious surface, picking up debris, dirt, metals, pollutants and flows into the storm sewer system. The larger impervious surface area a property has the more volume of storm water and pollutants it contributes to the storm sewer system.

Impervious surface area is considered the most equitable way to determine the proportional storm water utility user fee. The most recent and available aerial imagery is used to calculate the impervious surface areas.

4.2 Data Sources and Impervious Area Measurement Method

The City of Burlington GIS database along with the most recent (2020) aerial imagery available was used to find the impervious surface areas. The impervious surface areas were measured to establish the City's Equivalent Runoff Unit (ERU).

Impervious surface area measurements do not include public transportation systems or areas within the public right-of-way. These include roads, sidewalks, alleys, railroad, bike paths, etc.

4.3 Single-Family Parcels

The City currently has 2,230 developed single-family residential properties. A cross section sample size of approximately 223 properties were measured to determine the average surface area of a single-family parcel within the City. This measurement yielded a result of 3,669 square feet on average for a single-family parcel (See Appendix A for single-family parcels used in sample size). Impervious areas included pavement, roofs, pools, patios, etc. **Figure 1** is an example of the impervious surface area for single-family residential properties. A single-family parcel will be charged a rate of 1 ERU.



Figure 1: Single-Family Residential Properties Impervious Areas

4.4 Duplex and Two Family

Duplex properties and two-family properties will not be charged based on the exact impervious surface area, rather a constant rate based on the number of units in the building. The established rate is .5 ERU/Unit.

4.5 Multi-Family

Multi-family properties (three or more units) will not be charged based on the exact impervious surface area, rather a constant rate based on the number of units in the building. The established rate is .5 ERU/Unit.

4.6 Non-Residential Parcels

All non-residential parcel impervious surface areas were calculated individually using the City of Burlington's GIS database and the best available 2020 aerial imagery. Impervious areas include parking lots, roofs, sidewalks, etc. This also includes City, railroad, and utility owned properties. **Figure 2** is an example of the impervious surface area for a non-residential property. Non-residential parcels will be charged based on their total impervious surface area calculated which is divided by 3,669 to come to the parcels total ERUs.

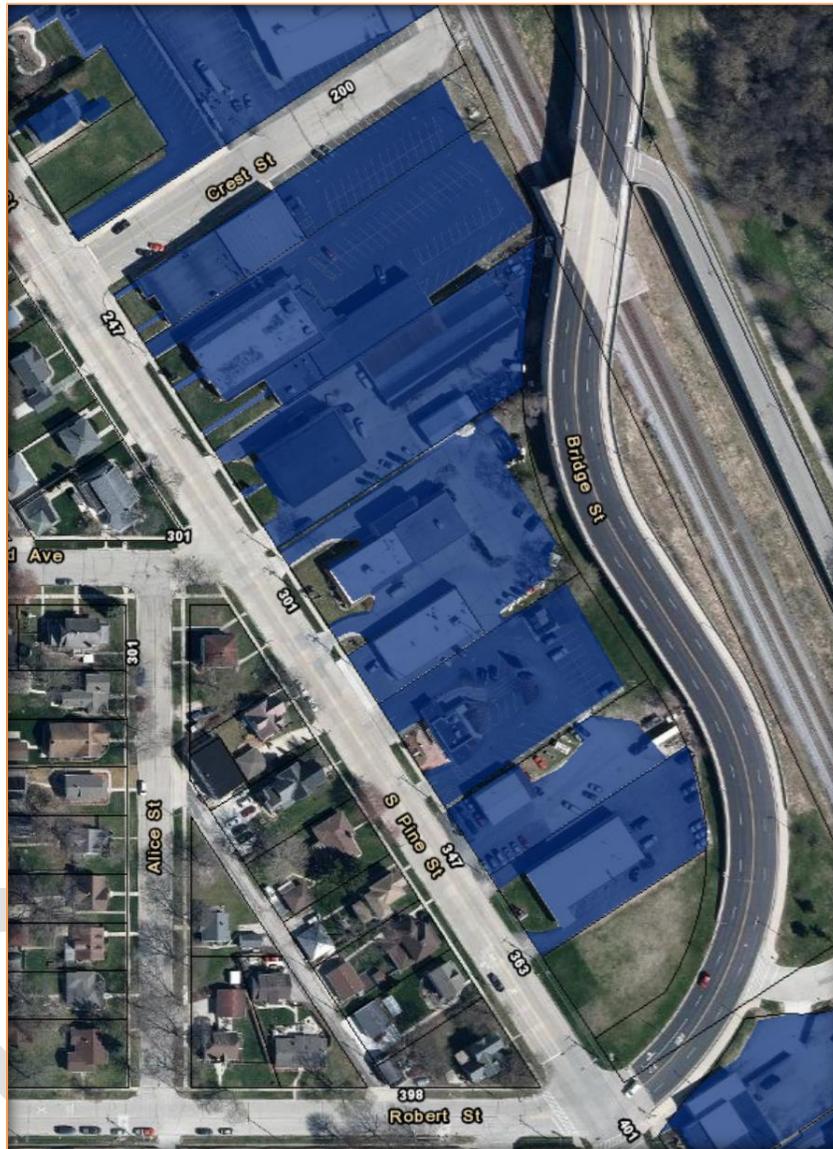


Figure 2: Non-Residential Properties Impervious Areas

4.7 Vacant Properties

A vacant property per city ordinance is defined as a parcel that contains no impervious surface area within the property boundary.

4.8 Property Classification Distribution

Figure 3. shows a graphical breakdown of the property classifications within the city. Residential parcels make up approximately 81.9% of the total parcels within the City.

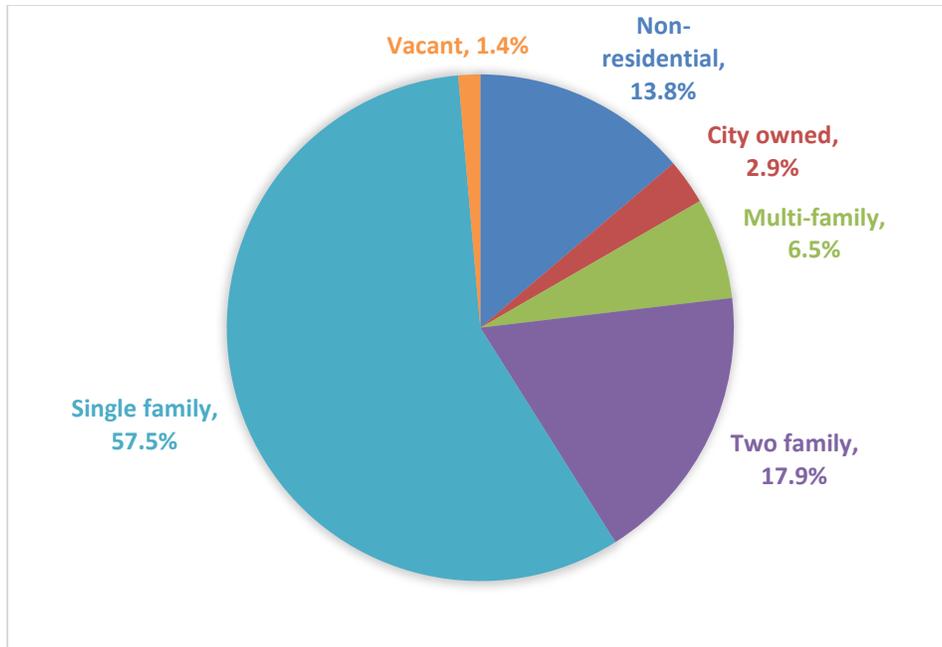


Figure 3: City of Burlington Parcel Breakdown

Section 5 – User Fee Structure

5.1 Purpose

Parcels will be charged based on their classification determined by the City’s Director of Public Works. Total ERU’s a property must pay will be rounded up to the nearest 0.5 ERU.

5.2 Equivalent Runoff Unit (ERU)

The City of Burlington’s ERU based on the average impervious surface area of single-family residential properties is 3,669 SF.

$$1 \text{ ERU} = 3,669 \text{ SF}$$

5.2 Single-Family Parcels

All developed single-family properties will be charged one (1) ERU.

5.3 Duplex

Duplex parcels will be charged based on how many living units there are in the building at a rate of 0.5 ERU per unit. This charge will be made to the property owner to be paid for and distributed at their discretion.

5.3 Multi-Family Parcels

Multi-family parcels will be charged based on how many living units there are in the building at a rate of 0.5 ERU per unit. This charge will be made to the property owner to be paid for and distributed at their discretion.

$$\text{Multi – Family Property with 6 units} = 3 \text{ ERUs}$$

5.4 Non-Residential Parcels

Non-residential properties will be charged based on the impervious surface area of each parcel divided by the established ERU Unit (3,669).

$$\frac{\text{Total Impervious Surface Area}}{\text{ERU Unit}} = \text{Total ERUs}$$

$$\frac{46,380 \text{ SF}}{3,669 \text{ SF}} = 13 \text{ ERUs}$$

5.5 Vacant Lots

A vacant lot is defined as a parcel with no impervious surfaces. Parcels that are not occupied by a resident or business are not considered vacant under this definition. Vacant parcels will not be charged.

5.6 ERU Summary

Based on these formulas, the City of Burlington has a total of 13,093 ERUs. **Figure 4** is the break down based on classification.

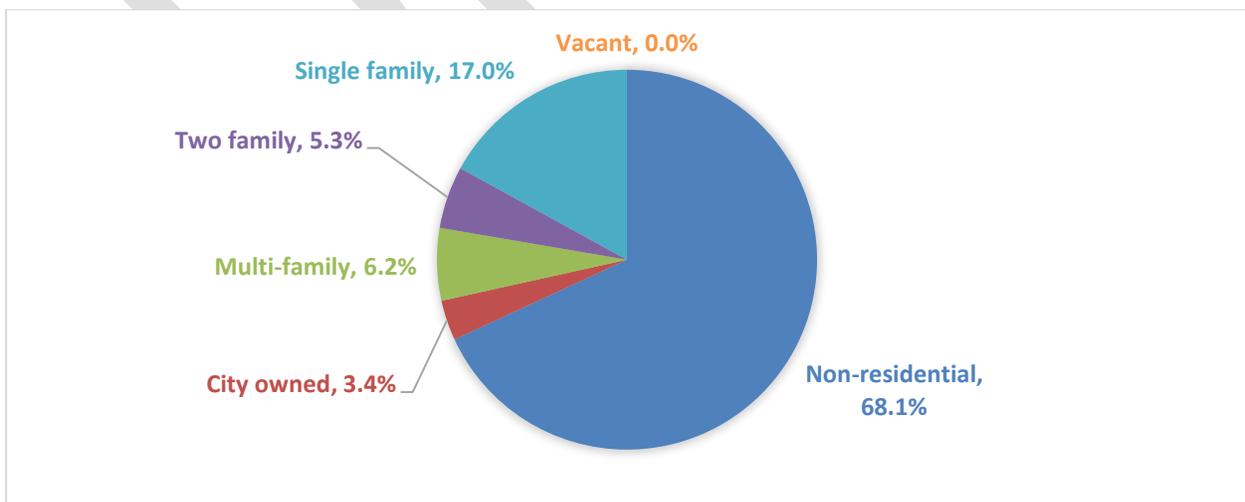


Figure 3: ERU Summary

Non-Residential and government parcels make up 16.7% of the total parcels within the city (See **Figure 3**) but account for 71.5% of the total ERU's – which means 71.5% of the budget will be allocated to non-residential properties with residential accounting for 28.5% of the budget

Section 6 – Ordinance

6.1 Purpose

The City is creating a stormwater utility allowed under State Statute 66.0821 by creating a Stormwater Utility Ordinance which is passed and published (66.0815(c)). This ordinance will detail what the stormwater utility is, establish the ERU, parcel classifications, user fee structure, and detail the credit and adjustment policies.

6.2 Adjustments

An adjustment is a change to the number of ERU's assigned to the parcel based on the availability of more accurate measurements of the amount of impervious surface area on a parcel. There are two types of adjustments.

1. Adjustment Based on Change in Condition: If a parcel experiences a change in development condition through demolition, addition, or new construction of impervious area, an adjustment will be made to appropriately revise the number of ERUs for the property. Changes will be implemented by the City as part of the building permit process. Upon completion of the demolition, addition or construction process, the City will make the fee adjustment for subsequent billings.
2. Adjustment Based on Other Reasons: If a property owner believes their property is eligible for an adjustment or believes the number of ERU's allocated to such a property are incorrect, the owner can apply for an adjustment.
 - a. This type of adjustment requires the resident to fill out an application form provided by the City, which includes a fee, to the Department of Public Works.
 - b. Goes through Department of Public Works Director and/or a designee and typically a decision is issued within 30 days.
 - c. Owner may appeal decision within 30 days.

6.3 Credit Policy

The credit policy is used to incentivize property owners to maintain and practice stormwater management. Credits go towards overall stormwater utility charge when stormwater management facilities are in place that reduce the property's stormwater impact to the City. Non-residential or multi-family classified properties are eligible to apply.

There are three types of credits offered:

1. Riparian Credit: If storm water runoff from a parcel discharges directly into Echo Lake, the White River, the Fox River, Spring Brook Creek, or a tributary to the waterways without crossing another parcel under different ownership or entering any portion of the City's municipal separate storm sewer system (MS4); and the discharge does not result in exceeding federal, state or local water quality standards. (50%)
2. Peak Discharge Credit: Considered for properties for owners who maintain private storm water management facilities that reduce peak discharge. (25%)
3. Water Quality Credit: Considered for properties for owner who maintain private storm water management facilities that improve water quality of runoff from their property that improve water quality. (25%)

A credit application, which includes a fee, is available through the City. The application fee is to cover administrative costs associated with the application. To maintain the credit, a property owner is required to fill out a resubmittal application every 5 years. Extra costs may be incurred during the credit application/resubmission process if site visits are necessary, engineering approval, and inspection.

A property owner can apply for any combination of credit type for a maximum credit of 50% available. All necessary information is gathered at the properties owner's expense and there must be an approved maintenance agreement through the City. The application is then submitted to the Department of Public Works Director and/or a designee and typically a decision is issued within 30 days. The applicant can appeal within 30 days of a decision.

Appendix A: Single Family Parcels Impervious Area Sample Data



Form 1

Adjustment Application

City of Burlington Stormwater Utility

(Only Non-residential)

Please note that Applicants should only submit an application if the proposed adjustment will reduce their ERUs.

1. **Adjustments Applying** (check all that apply): Correction Demolition Land Division Land Combination
2. **Applicant Information:** (Please print or type)

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Contact Person: _____ Email: _____ Telephone: (____) _____ - _____

3. **Property Information:**

Utility Account Number: _____

Parcel Number: _____

Property Location/Address: _____

Current Impervious Area (sq. ft.): _____ Proposed Impervious Area (sq. ft.): _____

Reason for requesting an adjustment: _____

Please indicate the form of supporting documentation submitted with and attached to this application:

- Narratives Site Plans Survey Plat with Topography As-Built Plans Other

4. **Fee:** **\$200 plus any applicable professional fees incurred by the City to evaluate the application**

5. **Certifications:**

The above information is true and correct to the best of my knowledge and belief. This form must be signed by the owner, or the officer, director, partner, or registered agent with authority to execute instruments for the owner. I agree to provide corrected information should there be any change in the information provided herein.

Type or print name

Title or Authority

Signature

Date

Official use only

Date Received _____

Application Number _____

Initials _____



Form 2
Credit Application
City of Burlington Stormwater Utility
 (Only Non-residential or Ownership Customers)

Send Application to:

Department of Public Works
 City of Burlington
 Attn: Director of Public Works
 2200 S Pine St.
 Burlington, WI 53105

Official Use Only	
Date Received	_____
Application Number	_____
Fee Received	_____
Reviewer	_____

Instructions: Please type or print. Read all instructions before completing application.

1. Fee: \$200 for non-single family or ownership customers plus any applicable professional fees incurred by the City to evaluate the application

2. Applicant/Entity Receiving Credit

Name of Applicant: _____
 Contact: First Name: _____ Last Name: _____
 Street (1): _____
 Street (2): _____
 City: _____ State: _____ Zip Code: _____
 Telephone Number: (____) _____
 Fax Number: (____) _____

3. Property Owner

First Name: _____ Last Name: _____
 Street (1): _____
 Street (2): _____
 City: _____ State: _____ Zip Code: _____
 Telephone Number: (____) _____
 Parcel Identification Number(s): _____

4. Engineer

Name of Project: _____
 Name of Firm: _____
 Contact: First Name: _____ Last Name: _____
 Street (1): _____
 Street (2): _____
 City: _____ State: _____ Zip Code: _____
 Telephone Number: (____) _____
 Fax Number: (____) _____

Form 2 (continued)

5. Stormwater Operation and Maintenance Agreement Letter

A Maintenance Plan must be developed for each stormwater management practice. A maintenance agreement must be filed with the City of Burlington prior to any credit being granted and must identify who will be responsible for the maintenance activities and shall also include a maintenance schedule. Failure to provide a maintenance agreement will be grounds for denial of the credit application.

6. Owner's Certifications:

By signing this application, I certify that I am the owner or authorized representative of the owner and have read this application and understand the terms and conditions of the City of Burlington's Credit Policy. I certify that this application and additional materials accurately describe stormwater management practices on the property identified on this application. I hereby grant the City permission to enter this property for the sole purpose of conducting site inspections of the stormwater management practices on my property.

Type or print owner name

Title or Authority

Signature of owner

Date

7. Engineer's Certification:

The above information and the information attached was prepared either by or under the supervision of myself as the qualified professional and is true and correct to the best of my knowledge and belief that the facilities were designed in accordance with the City of Burlington Ordinance.

Type or print name

Professional License Type and Number

Signature

Date

() -

Phone

CREDIT APPROVALS

Applicants must check the appropriate boxes for the amount of credit for the reduction of peak runoff rates and nonpoint source pollutant reductions that are being sought. If renewing credit status check appropriate box and provide all necessary documents.

	Amount of Peak Runoff Credit		Post-Development Runoff Design Storm	Pre-Development Design Release Rate	Official Use Only	
					Approval Signature	Date
<input type="checkbox"/>	25%	<input type="checkbox"/>	100-yr, 24-hr to 10-yr, 24-hr			
		<input type="checkbox"/>	10-yr, 24-hr to 2-yr, 24-hr			
<input type="checkbox"/>	15%	<input type="checkbox"/>	100-yr, 24-hr to 25-yr, 24-hr			
		<input type="checkbox"/>	10-yr, 24-hr to 2-yr, 24-hr			
<input type="checkbox"/>	10 %	<input type="checkbox"/>	100-yr, 24-hr to 50-yr, 24-hr			
	Amount of Pollutant Reduction Credit		Pollutant Reduction		Approval Signature	Date
<input type="checkbox"/>	10%		40%			
<input type="checkbox"/>	15%		60%			
<input type="checkbox"/>	25%		80%			
	Maintenance Plan				Approval Signature	Date
<input type="checkbox"/>	Maintenance Plan indicating individual responsible for the schedule for maintenance activities					
<input type="checkbox"/>	Renewing Credit Status					